AGENDA
CHASKA PLANNING COMMISSION
CHASKA CITY HALL - COUNCIL CHAMBERS & ZOOM
Wednesday, April 13, 2022
7:00 PM

1. Call to Order
2. Roll Call
3. Adopt Agenda
4. Visitor Presentation
5. Approve Previous Meeting Minutes
   - 5.A. Approve the March 9th, 2022 Planning Commission Meeting Minutes
6. Consent Items
   - 6.A. Recommend Approval of the Final Plat for Reserve at Autumn Woods/Lennar/PC #2022-12
7. Action Items
   - 7.A. PUBLIC HEARING: Recommend Approval of the Preliminary Site & Building Plan, Preliminary Plat and Rezoning for Cantissimo/Anasazi Holdings/PC #2022-01
   - 7.B. PUBLIC HEARING: Recommend Approval of the Preliminary Plat and Rezoning for Oak Creek/DR Horton/PC #2022-20
   - 7.C. PUBLIC HEARING: Recommend Approval of the Preliminary Site & Building Plan and Preliminary Plat for The Gallery Chaska Apartments/Chase Real Estate/PC #2022-21
   - 7.D. PUBLIC HEARING: Recommend Approval of the Preliminary Site & Building Plan, Preliminary Plat, and Rezoning for Clover Ridge Apartments/AV Development/PC #2022-15

7.E. Recommend Approval of the Preliminary Site & Building Plan for Southwest Christian High School/Southwest Christian/PC #2022-19

7.F. Recommend Approval for the Concept Plan of the North Water Treatment Plant

8. Other Business

8.A. Receive Other Meeting Minutes

8.A.i. Receive the Feb 8th 2022 Park Board Meeting Minutes

8.A.ii. Receive the Feb 28, 2022 City Council Meeting Minutes

8.A.iii. Receive the Feb 28th, 2022 EDA Meeting Minutes

9. Adjourn

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CHASKA PLANNING COMMISSION
MINUTES
MARCH 9, 2022

1. Call to Order
Chairperson Dahlke called the meeting to order at 7 pm.

2. Roll Call
Roll call was taken. Members present: Commissioners Brass, Lacey, Olson, Gaare, Urbanski, Baswa, Aasen, and Chairperson Dahlke.

Members absent: Commissioner Rylee.

Also present: Nate Kabat, Community Development Director; and, Liz Hanson, City Planner.

3. Adopt the Agenda
Motion by Commissioner Olson, second by Commissioner Brass to adopt the agenda as presented.
Motion carried.

4. Visitor Presentation
No one appeared under Visitor Presentation.

5. Approve the Minutes of the February 9, 2022 Planning Commission Meeting
Motion by Commissioner Lacey, second by Commissioner Aasen to approve the minutes of the February 9, 2022 Planning Commission meeting.
Motion carried.

6. Consent Agenda
Motion by Commissioner Urbanski, second by Commissioner Brass, to approve the Consent Agenda as follows:

a. Recommend Approval of the Final Site and Building Plan for 212 Medical Center/Ridgeview Medical Center/PC #2022-13

Motion carried.

7. ACTION ITEMS

7.A. PUBLIC HEARING: Recommend Approval of the Preliminary Site & Building Plan, Preliminary Plat and Rezoning for Chaska Creek Industrial Phase 3/Oppidan/PC #2022-14
City Planner Hanson presented the item to the Commission and noted that following a recommendation from the Commission, this item will appear before the City Council on March 21, 2022.

Commissioner Urbanski asked for a quick explanation of where stormwater will be going on this site.

City Planner Hanson noted that there is a large stormwater pond situated on the northwesterly portion and then ponding on the south side. She pointed out the location of the current wetlands and noted that they would not be affected.

Commissioner Brass noted the parking/access/circulation portion of the staff report for the uses and size portions of the table are blacked out.

City Planner Hanson explained that there was nothing blacked out in the table and was just a formatting issue. She stated that the portion of the table that the Commission should look at is on the right side of the table.

Commissioner Olson stated that when it comes to the planting in the southwest corner, he would like to know the likelihood of the success of those plants especially with the berm. He asked if what they were planning would 'take' or if there would have to be a continuous replacement of them because they would die off.

City Planner Hanson noted that this berm is probably much larger than many the City has seen, but under those conditions, trees still do survive.

Community Development Director Kabat noted that one similar example that exists in the City would be Cloverridge near the United Health data center building where there is a pretty significant berm that is heavily planted and those trees have done pretty well.

Commissioner Urbanski asked if there was a requirement to irrigate the berms in order to help the trees survive.

City Planner Hanson explained that they have to irrigate portions where they are sodding and noted that they will probably have their own maintenance schedule in terms of watering.

Chairperson Dahlke opened the public hearing at 7:20 p.m.

Jay Moore, Oppidan Investment Company, explained that Phase I is under construction, with Phase II expected to begin in May. He noted that they had tried to replicate those projects and bring some continuity to the development so it looks like a planned industrial park. He stated that they held a neighborhood meeting and took into consideration things shared during the concept plan and explained that they were not here to disrupt families and homes and are trying to come up with a win/win product. He stated that from Creek Road, the site currently goes up about 14 feet where the building is which will all be dug down and explained that the loading area will be down 15 feet. He noted that they are trying to keep the height of the building as low in that grade as possible. He feels with the berm and the planting, which will be watered, their goal is to screen and shield it as best as they can.

Chair Dahlke asked if it would be the tenant's or building owner's responsibility to maintain the berm and the plantings.

Mr. Moore noted that typically, there is a landscape warranty of one year from the time they are planted and noted that there is even escrow money kept with the City in case something needs to be replanted.

Commissioner Brass stated that he understands it is highly unlikely to land a 90% manufacturing user in this market. He stated that the proof of parking is in the loading area and asked how trucks getting in and out for loading would be handled if everything was converted to parking.

Mr. Moore stated that the site and the parking lot is large enough to handle that amount of cars and employees if the building was converted to that type of use.

Brady Busselman, Sambatek, stated that the most likely scenario would be something in between, so they are parked out for a full manufacturing, but there would be some warehousing.

Commissioner Brass stated that he just wanted to ensure that there was a plan in place to handle loading and unloading in the unlikely event that they did get a manufacturer in this space.

Mr. Moore indicated that this is a 13 acres parcel out of 38 acres and they had tried to keep it as small as possible because they didn't want to disrupt the woods or the wetland in order to keep it as natural as possible, just to have additional parking.

Commissioner Brass confirmed that they were shooting for a primary user of office/warehouse. He asked about plans for trailer stalls.

Mr. Moore stated that they were not planning on any trailer stalls.

Bob Fanning, 11315 Wetzel Lane, noted that while he was pleased with what has been presented, he was not completely satisfied. He stated that when the trees on the berm are mature and have no gaps it will block most of the building, which he thinks is great, but noted that he had concerns about what would happen before they are mature or if they are not overlapping. He stated that if you look at the sight line to the top of the berm, they will be looking from their front door right at the loading docks and the trucks. He stated that he would like them to raise the berm a few additional feet to help with the sight lines. He noted that Commissioner Olson brought up a good point about the possibility of the trees dying. He explained that his other main concern is the western edge because there is no berm and only about 12 trees shown on the plans and it slopes down so the view from the neighborhood of the western side of the building will be unobstructed which he feels makes the screening incomplete. He stated that even if they plant trees, because the ground slopes down so much, it will take a long time before the trees can even be seen. He stated that he is also concerned with the sketch of something that appears to be shown out in the field along Wetzel Lane.

City Planner Hanson stated that she thinks what he is referring to may be a layer from the stormwater pond but noted that there are no plans to do anything in that area.

Mr. Fanning explained that he just wanted to verify that this was not expanding beyond what has already been talked about.

Chairperson Dahlke closed the public hearing at 7:31 p.m.

Commissioner Brass asked about the proposed height of the berm.

City Planner Hanson stated that it approximately 20 feet from the grade of the loading area.

Commissioner Brass asked about the caliper of the trees propose.

City Planner Hanson stated that the ones on this side are proposed to start at 8 feet tall.

Chair Dahlke asked about the building height.

City Planner Hanson explained that the building will be about 37 feet on the back side.

Commissioner Olson stated that he has concerns about the berm and the depth in order to be able to create constant screening. He stated that even if evergreens are put on the berm, there is not enough space to stagger them enough to actually create a screen that will be meaningful for at least the first 5 years. He noted that as it wraps around to the western side, there is not room to do much of anything and does not feel like there is enough of a break between the building and Wetzel Lane.

Commissioner Brass stated that with the berm, he would assume in that location they cannot have one there because of the drainage pond and the road level.

Mr. Busselman explained that this was correct and noted that there will be trees and they are planning, based on a comment, to add more.

Commissioner Brass asked if these trees would also start at 8 feet.

Mr. Busselman believes the install height will be 6-8 feet.

Commissioner Brass noted that he realized it would be expensive to increase the height of the entire berm a few feet and asked if there may be a possibility to just raise it for the sight line mentioned by Mr. Fanning.

Mr. Moore stated that they can work with staff but noted that the Code is very extensive with a lot of trees. He explained that if there was a way to soften the Code with regard to the number of trees so there could be less trees, but make them larger, they would be open to a compromise.

City Planner Hanson stated that she feels that there are ways to bolster the plantings and still meet City Code.

Mr. Moore reminded the Commission that they have met all the setbacks and distances and explained that it was critical that they keep the building dimensions as planned.

Commissioner Brass stated that he thinks this is a great project.

Commissioner Olson stated that it is a continuation of what is over on the north side and the key part is that it is getting closer to residential with this project. He stated that he thinks there are opportunities to refine things to address that as they get further into the details. He asked about the southside of the roundabout and if it would just be driveway width.

City Planner Hanson explained that in the interim with this building being there, it will just be a driveway for their use. She stated that there were not going to construct the full width here until it is needed to the south, so it will be used as kind of a bituminous driveway access into the rear portion of their site.

Community Development Director Kabat noted that the right-of-way really serves to provide a crossing of the ravine as the industrial area to the south develops to a level where the traffic demand warrants it.

Motion by Commissioner Brass, second by Commissioner Urbanski, to recommend to the City Council approval of the Preliminary Site & Building Plan and Preliminary Plat for Chaska Creek Industrial Phase 3, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Title Sheet (pg C1.01), prepared by Sambatek, dated January 4, 2022
    b. Existing Conditions Plan (pg C2.01), prepared by Sambatek, dated February 22, 2022
    c. Site Plan (pg C3.01), prepared by Sambatek, dated February 23, 2022
    d. Site Plan – Proof of Parking (pg C3.02), prepared by Sambatek, dated February 23, 2022
    e. Grading Plan (pg C4.01), prepared by Sambatek, dated February 23, 2022
    f. Grading Plan Notes (pg C4.02), prepared by Sambatek, dated February 23, 2022
    g. Grading Plan – Future Road Improvements (pg C4.03), prepared by Sambatek, dated February 23, 2022
    h. Erosion Control Plan – Phase I (pg C5.01), prepared by Sambatek, dated February 23, 2022
    i. Erosion Control Plan – Phase II (pg C5.02), prepared by Sambatek, dated February 23, 2022
    j. Erosion Control Plan – Notes (pgs C5.03-5.04), prepared by Sambatek, dated February 23, 2022
    k. Erosion Control Plan – SWPPP (pgs C5.05-5.06), prepared by Sambatek, dated February 23, 2022
    l. Utility Plan (pg C6.01), prepared by Sambatek, dated February 23, 2022
    m. Detail Plan (pgs C9.01-9.04), prepared by Sambatek, dated February 23, 2022
    n. Landscape Plan (pg L1.01), prepared by Sambatek, dated February 23, 2022
    o. Shrub Plan (pg L1.02), prepared by Sambatek, dated February 23, 2022
    p. Landscape Details and Notes (pg L1.03), prepared by Sambatek, dated February 23, 2022
    q. Screening Exhibit Plan (pg L1.04), prepared by Sambatek, dated February 22, 2022
    r. Landscape Screening Exhibit (pg L1.03), prepared by Sambatek, dated December 30, 2021
    s. Photometric Plan, prepared by Pulse, dated February 6, 2022

   t. Truck Turning Exhibit (pg EX1.02), prepared by Sambatek, dated February 22, 2022
   u. Preliminary Plat, prepared by Sambatek, dated January 31, 2022
   v. Preliminary City Submittal – Conceptual Floor Plan, prepared by Mohagen Hansen, dated January 3, 2022
   w. Preliminary City Submittal – Conceptual 3D Images, prepared by Mohagen Hansen, dated January 3, 2022
   x. City Submittal – Exterior Elevations, prepared by Mohagen Hansen, dated January 3, 2022
   y. City Submittal – Exterior Materials, prepared by Mohagen Hansen, dated January 3, 2022
2. Adherence with the City Engineer's Memo dated March 9, 2022.
3. For businesses sharing the same façade, the same or a similar method of signing must be used for all parties desiring to place a sign on the façade.
4. Provision of all proposed signs to meet Section 10 of the Zoning Ordinance.
5. Provision that wall signs cannot be internally illuminated on the west and south facades.
6. Mechanical equipment for each building to be fully screened from view and to meet Section 9.11.6 of the zoning ordinance.
7. Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.
8. Compliance with applicable zoning requirements, in particular Chapter 9 (General Requirements).
9. Provision that all wall mount lighting be mounted no higher than 18 feet.
10. Provision that only 3 wall mounts maximum are shown on the west façade, and to be addressed on the lighting plan at final submittal.
11. Provision that all pole lights will be no higher than 25 feet.
12. Provision of a storm water management plan meeting City, Carver County WMO and any other applicable agency standards.
13. Utility connections to each lot to adhere to City standards and be approved by the City Engineer.
14. Provision of sidewalks on both sides of all local streets.
15. Provision of a City trail on the west side of Chaska Creek Boulevard.
16. Provision of a 60 feet Right of Way width for all local streets.
17. Provision of additional coniferous trees be added to the west edge of the site between the stormwater pond and berm, and to be addressed at final submittal.
18. Provision of additional trees around the edge of the retaining wall on the northeast portion of the site, and to be addressed at final submittal.
19. Provision of retaining wall details meeting Section 15.28.100F of the zoning code, and addressed at final submittal.

Motion carried.

Motion by Commissioner Brass, second by Commissioner Aasen, to recommend approval of the rezoning for Chaska Creek Industrial Phase 3 from Rural Residential (RR-2) and Open (O) to Planned Industrial District No. 10 (PID-10).

Motion carried.

7.B. PUBLIC HEARING: Recommend Approval of the Preliminary Plat and Rezoning for Ensconced Woods/Johnson-Reiland Builders and Remodelers/PC #2022-17

City Planner Hanson presented the item to the Commission and noted that following the Planning Commission recommendation this item will be on the City Council agenda on March 21, 2022.

Commissioner Urbanski stated that this project has significant outlots and asked who would be responsible for those after it is built out.

City Planner Hanson stated that the City would be responsible for all of the outlots.

Commissioner Baswa stated that the access road to this property comes from a different property and asked if the construction traffic would come through that access.

City Planner Hanson explained that the construction traffic is proposed off of the existing Carlson driveway so it will be a matter of working with Carver County on the timing of that and how long they would be able to utilize it.

Commissioner Baswa asked if there were any meetings conducted with the other community that is already there to make sure they do not have any concerns because this will be a significant increase in traffic.

City Planner Hanson stated that when they went through the concept plan they conducted a neighborhood meeting and knows that they have had communication with the neighbors and they have been involved in the process.

Commissioner Brass asked about the Robling house that is staying if there would be a wooded area in between.

City Planner Hanson stated that there are a scattering of trees, but not heavy wood cover. She stated that there are some yard trees, but with the utilities that need to come through, those will be removed.

Commissioner Olson stated that one thing that was missing was the tree counts of what is being saved and what will not be saved.

City Planner Hanson stated that there are roughly 2,200 trees that were inventoried on the site, with roughly 1,300 of that total saved and just under 900 to be removed.

Commissioner Olson stated that he would like to know how many of the 1,300 are part of the steep slope.

Chair Dahlke stated that most of the trees that will be eliminated are the post-agricultural scrub.

City Planner Hanson agreed and noted that the non-native area is the critical area of where the street system and utilities need to go. She stated that is the portion where there is little to no

trees being saved and they wanted the priority areas to have preservation since they had more quality.

Commissioner Brass asked how far this is from a tot lot or other playground.

City Planner Hanson stated that she believes the nearest park will be the proposed community park otherwise it would require crossing the County road.

Commissioner Brass confirmed that there would be a park dedication fee with this project.

Chairperson Dahlke opened the public hearing at 8:00 p.m.

Paul Reiland, Reiland Builders, stated that this has been a challenging site which was why they chose it because it will have a lot of interest for the end user. He stated that they have spent a lot of time working with the City to ensure that the drainage will work which meant that some of the trees in certain locations were not able to be preserved so this could be addressed.

Gary Ross, 3863 Founders Path, asked for an explanation of whether the construction traffic would be coming down Founders Path or on the Carlson driveway.

Commissioner Brass stated that it would come off the driveway.

Mr. Ross stated that was his main concern but noted that on page 117 of the packet, within the land use paragraph, it states that the average lot size of Founders Ridge is .25 acres and noted that based on his calculations, it is actually .37 acres. He stated that he would also like to know why the setback was going from 30 to 25 and noted that it may be to save more trees, but explained that he wanted to make sure that they weren't just trying to squeeze too much in.

Chairperson Dahlke closed the public hearing at 8:04 p.m.

Commissioner Olson asked if Outlot B was also going to be a water retention pond.

City Planner Hanson confirmed that it would be used for ponding.

Commissioner Urbanski asked if they would all be wet ponds or if there would be dry areas for overflow.

City Planner Hanson stated that she believes they would be a mix.

Nick Polta, Pioneer Engineering, stated that there will be a mix of basins with some being straight infiltration basins, some wet ponds with filtration basins, and a few rain gardens in order to meet both the City and the County requirements.

Chair Dahlke stated that he likes the look of this neighborhood.

City Planner Hanson noted that there was someone on Zoom who had their hand raised.

Jared Palma, 3860 Founders Path, stated that he has concerns about the amount of traffic that will come from adding 30 additional houses as well as the proposed 90 further west. He stated that he is slightly confused about the lack of a separate entrance.

City Planner Hanson stated that Carver County has jurisdiction over the County Road, so they analyzed this from an access standpoint and, per their policies, there was never an access plan for this portion of the roadway. She explained that the County have reviewed and analyzed this and provided comments to say no additional access on this road.

Commissioner Brass stated that the other development referenced by Mr. Palma of 90 homes will have a separate access, so the increased traffic will only come from this development.

Motion by Commissioner Olson, second by Commissioner Lacey, to recommend to the City Council approval of the of the Ensconced Woods Preliminary Plat for a 29-lot subdivision on 25 acres of land, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Project Narrative (pgs 1-9), prepared by Paul Reiland, Johnson-Reiland Builders and Remodelers, dated January 20, 2022
    b. Cover, prepared by Pioneer Engineering, dated February 17, 2022
    c. Legend, prepared by Pioneer Engineering, dated February 17, 2022
    d. Existing Conditions, prepared by Pioneer Engineering, dated February 17, 2022
    e. Preliminary Plat, prepared by Pioneer Engineering, dated February 17, 2022
    f. Preliminary Removal Plan, prepared by Pioneer Engineering, dated February 17, 2022
    g. Preliminary Overall Site & Construction Access Plan, prepared by Pioneer Engineering, dated February 17, 2022
    h. Preliminary Site Plan (pgs 2.2 & 2.3), prepared by Pioneer Engineering, dated February 17, 2022
    i. Preliminary Overall Grading Plan, prepared by Pioneer Engineering, dated February 17, 2022
    j. Preliminary Grading Plan (pgs 3.2 & 3.3), prepared by Pioneer Engineering, dated February 17, 2022
    k. Preliminary Erosion Control Plan (pgs 4.1 & 4.2), prepared by Pioneer Engineering, dated February 17, 2022
    l. Stormwater Pollution Prevention Plan, prepared by Pioneer Engineering, dated February 17, 2022
    m. Preliminary Seeding Plan, prepared by Pioneer Engineering, dated February 17, 2022
    n. Preliminary Details (pgs 7.1-7.3), prepared by Pioneer Engineering, dated February 17, 2022
    o. Preliminary Overall Utility Plan, prepared by Pioneer Engineering, dated February 17, 2022
    p. Preliminary Sanitary Sewer & Watermain Plan (pgs 9.1 & 9.2), prepared by Pioneer Engineering, dated February 17, 2022
    q. Preliminary Storm Sewer Plan (pgs 10.1-10.3), prepared by Pioneer Engineering, dated February 17, 2022
    r. Landscape Plan, prepared by Pioneer Engineering, dated February 17, 2022
    s. Tree Preservation (pgs T1-T6), prepared by Pioneer Engineering, dated February 17, 2022
2. Adherence with the City Engineer's Memo dated March 9, 2022.
3. Provision that all lot lines are outside of wetland areas and their required buffers.
4. Adherence to the City's Boulevard Tree Policy and local street section design.
5. Provision that boulevard trees are placed between the sidewalk and street.
6. Provision of sidewalks on both sides of all local streets up to the bulb of cul de sacs.
7. Adherence to the following building setbacks:
    a. Front (house): 25 feet
    b. Rear: 25 feet
    c. Side(house/garage): 7.5 feet
    d. Side (corner): 15 feet

8. Adherence to the 125 foot centerline building setback from County Road 44.
9. Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.
10. Compliance with the City's anti-monotony and design requirements zoning ordinance (Section 15.28.290).
11. Preservation of the wooded steep slopes, including 30-foot buffer and a 50-foot setback from that wooded steep slope.
12. Provision of developer responsibility to remove any hazardous trees or limbs on site as determined by the Public Works Director, prior to issuance of a building permit.
13. Provision of a storm water management plan meeting City and Carver County WMO standards.
14. Provision of a construction traffic plan to utilize the existing Carlson driveway and in adherence with Carver County requirements.
15. No direct vehicular access onto County Road 44 will be permitted.
16. Provision that 360-degree architecture shall be provided for all corner lots and all lots whose rear or sides are visible from public right's-of-way or across from open spaces, more specifically for these lots as seen in the preliminary plat of Ensconced Woods dated February 17, 2022:
    a. Lots 1 & 8, Block 1
    b. Lot 2, Block 2
    c. Lot 2, Block 5

Motion carried.

Motion by Commissioner Olson, second by Commissioner Brass, to recommend approval of the rezoning for Ensconced Woods from Low Density Residence (R1) and Open (O) to Planned Residential District No. 81 (PRD-81).

Motion carried.

7.C. PUBLIC HEARING: Recommend Approval of the Preliminary Plat and Rezoning for Rivertown Heights/DR Horton/PC #2022-16

City Planner Hanson presented the item to the Commission and noted that this project will be on the March 21, 2022 City Council meeting.

Commissioner Brass noted that he has displeased that there were no plans for including a playground. He understands that there were will be a big City park there in the future, but as of now, there is nothing there.

Chair Dahlke asked what the plans were with relation to the City park.

Community Development Director Kabat explained that, part of this project has caused the City the need to dive into at least having an understanding of the grading and the water treatment for the park. He noted that he would suspect, with this development occurring it begins to push the need to begin phasing in components of the park. He stated that he did not have a date to put to anything but there will be some fairly significant development in the area in the near future and would say it is probably closer to 5 years out rather than 10 years out.

Commissioner Olson asked about sidewalks, in particular, for Laurel Court in the southern section. He explained that he would like to know where the bulb technically starts because it doesn't look there are any sidewalks in the street at all.

City Planner Hanson stated that from a maintenance standpoint, they don't recommend putting sidewalks through a smaller extension of road like that because it is harder to maintain, especially during snow season.

Commissioner Olson stated that he is concerned that there are 9 houses in that section and there is no sidewalk at all, which seems a bit high to him.

City Planner Hanson stated that the City has other cul-de-sacs with roughly the same amount of houses that also do not have sidewalks. She reiterated that in this instance, there is no benefit and it becomes a maintenance issue.

Commissioner Olson asked about Carver Path and noted that there does not appear to be any kind of divide between the two areas. He asked if there would be any buffer divide between the existing house and the new homes.

City Planner Hanson stated that nothing is shown in the landscape plan, so this would be a question for the developer.

Commissioner Baswa asked about the connection road with Founders Path and Carver Path. He stated that with the previous agenda item there was discussion that the County would not allow any additional entry points other than Founders Path, but this one shows an entry point on Big Woods and one more future one but this still connects the two communities. He asked if the existing community had any concerns about this connection.

City Planner Hanson stated that she cannot speak for the residents, but what makes this development different than the previous one is that they do have two, and ultimately three, points of release from it and would imagine that most of these lots will be coming directly off County Road 44 versus going through the existing development.

Commissioner Brass confirmed with City Planner Hanson that there would be a connection to the future collector road in Phase I.

City Planner Hanson explained that the collector route will be triggered by the community park and the elementary school.

Commissioner Urbanski asked about the back to back ponds in Founders Ridge and if it would be possible to recommend a path from the cul-de-sac in Founders Ridge to where the new road is coming in adjacent to the City park.

City Planner Hanson stated that this area is very challenging from a topographical standpoint because it is basically a creek bed so it is unlikely that there would be a pedestrian crossing through there.

Commissioner Urbanski explained that he was just trying to find a way to get the kids over to the park and the school. He asked if rather than putting two ponds back to back if there was a way to join them and questioned whether that would make things more cost effective for the City with regard to future maintenance.

City Planner Hanson stated that she believes that option was explored and explained that she believes that there was a reason as to why they are not connected.

Commissioner Baswa asked if there were any entries into the proposed new City park from these communities.

Community Development Director Kabat explained that as the City begins a very preliminary look at how the park will lay out, for vehicle access, they are really trying to concentrate that off of the collector road. He stated that they are looking at creating some paths and things for pedestrian access from these areas.

Chairperson Dahlke opened the public hearing at 8:34 p.m.

Deb Ridgeway, DR Horton, stated that they are excited about this new project and are hoping to break ground in the spring with new home construction in the fall.

Commissioner Brass asked about the 4-way intersection where Phase I cuts off and Phase II starts and inquired if there would be a stop sign in this location.

Ms. Ridgeway stated that there probably will be a stop sign for one way.

Commissioner Brass explained that his concern is the length of that road as one long chute with relation to speeding. He stated that he would like to see some sort of speed mitigation in this area.

Ms. Ridgeway stated that as they bring forward their final plans, they will work with staff and the City engineer and see what they recommend for that section of the roadway.

Commissioner Olson asked if there had been any conversations with the house at Carver Path at Block 6, Lots 1 – 3 area regarding screening.

Ms. Ridgeway stated that they had not had any one on one conversations with them. She explained that they have one neighborhood contact who serves as the point person for the neighborhood and can reach out about this when they meet with them again. She stated that they can look at providing some additional trees or screening in this area.

Commissioner Olson stated that he would also like some clarification for the strip of land where the lot does not go all the way to the edge of the development.

Ms. Ridgeway stated that she believed that was for access to that side of the pond.

Commissioner Olson reiterated that he would like clarification for this strip of land because if nobody has ownership, then nobody will take care of it.

Ms. Ridgeway stated that they can work with staff on that when they do the Final Plat.

Commissioner Brass asked about screening between Carver Path and the houses that will face each other.

Ms. Ridgeway stated that they will be providing additional trees back there and noted that they had shared this plan with the neighborhood group prior to tonight's meeting.

Commissioner Olson asked about the drainage issue that was mentioned and whether their grading plans were for natural grading or something else.

Ms. Ridgeway stated that they do have a storm sewer line proposed in that area but they are continuing to work on the final grading plan. She stated that the believe all of the farm land is going that way, so by putting streets in and grading these specific lots, it will help prevent the current drainage issues behind those homes.

Gary Ross, 3863 Founders Path, asked if Shenandoah would be extended in order to connect with Founders Path to give a third option to get out of the neighborhood because the number of houses in this area of the neighborhood will double. He stated that if they did this, they would give the homeowners access to a roundabout.

City Planner Hanson stated that there will be access at this point and believed that Mr. Ross's question was with regard to the timing of this connection.

Mr. Ross asked if that connection could be done with this project in order to alleviate some of the traffic that will result from only having two access points.

Commissioner Brass stated that he believes Mr. Ross is actually referring to Savannah.

Community Development Director Kabat stated that this is something that the City can continue to evaluate, but explained the intent had been that in order to do this in a financially sound way, that there be more development out there in order to support the collector road. He noted that he understands Mr. Ross's idea but believes it will also help that Percheron will be extended as part of this project.

Mr. Ross asked about the two ponds and noted that the one pond that is in the Founders Ridge neighborhood has been used for irrigation of the boulevards in the neighborhood. He explained that the areas between the sidewalk and the street has irrigation piping and the pump is located in the pond.

Commissioner Brass asked if he was understanding correctly that Mr. Ross was saying that there was underground irrigation for his whole neighborhood.

Mr. Ross clarified that it was only done for Phase I but noted that he was not sure if the City was aware of the pump and its purpose. He asked if there could be a 4-way stop at Founders and Percheron and noted that they currently have problems with people speeding along Founders Path. He asked if there would be a walkway to get down to Schram's Haus Brewery, and a pedestrian path to get to the City park as a way to feed to the kids through the park in order to keep them off of the busier streets on their way to school.

Commissioner Brass stated that staff had stated earlier that a pathway would be difficult.

City Planner Hanson stated that staff can take another look, but from what they have seen in the field, it is a steep topographical relief.

Community Development Director Kabat noted that City Planner Hanson is kindly omitting the fact that he fell into that ravine.

Chairperson Dahlke closed the public hearing at 8:48 p.m.

Commissioner Olson stated that in the past there was a question about the possibility of mirroring the island that is on the north side of Percheron and asked about the status of that discussion.

City Planner Hanson stated that from a City standpoint this would be something that is up to the developer if that would be something they would want to include. She noted that it would be a maintenance piece that they would have to undertake but believes their intent right now is not to have an HOA which they would have to have in order to maintain this.

Commissioner Brass reiterated that he is displeased that there are no parks proposed, even though the big City park is coming sometime in the future. He stated that there are also a lot of houses that face other houses, but understands that will be up to the market and the buyers. He stated that he has concerns about houses crammed in facing other houses with no view, which he feels is unpleasant. He explained that he will not vote against this project because of these concerns, because this is a free market.

Commissioner Olson stated that he agreed that this was disappointing. He stated that he thinks it is worth asking about these things because nobody is there yet.

Commissioner Brass stated that he wanted to make sure that all of this information is disclosed and people know what their view will be.

Motion by Commissioner Lacey, second by Commissioner Aasen, to recommend to the City Council approval of the Rivertown Heights Preliminary Plat for a 90-lot subdivision on 40 acres of land, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Preliminary Plat Narrative (pgs 1-3), prepared by DR Horton, dated February 15, 2022
    b. Cover, prepared by Westwood, dated February 16, 2022
    c. Existing Conditions, prepared by Westwood, dated February 16, 2022
    d. Preliminary Plat – Overall & Phasing Plan, prepared by Westwood, dated February 16, 2022
    e. Preliminary Plat (pgs 4-5), prepared by Westwood, dated February 16, 2022

   f. Preliminary Grading, Drainage & Erosion Control – Overall, prepared by Westwood, dated February 16, 2022
   g. Preliminary Grading, Drainage & Erosion Control (pgs 7-11), prepared by Westwood, dated February 16, 2022
   h. Preliminary Utility Plan – North, prepared by Westwood, dated February 16, 2022
   i. Preliminary Utility Plan – South, prepared by Westwood, dated February 16, 2022
   j. Street Profiles (pgs 14-15), prepared by Westwood, dated February 16, 2022
   k. Details (pgs 16-18), prepared by Westwood, dated February 16, 2022
   l. Preliminary Landscape Plan – Overall, prepared by Westwood, dated February 16, 2022
   m. Preliminary Landscape Plan (pgs 20-23), prepared by Westwood, dated February 16, 2022
   n. Preliminary Landscape Notes & Details, prepared by Westwood, dated February 16, 2022
   o. Tree Preservation Plan – Overall, prepared by Westwood, dated February 16, 2022
   p. Tree Preservation Plan (pgs 26-29), prepared by Westwood, dated February 16, 2022
   q. Tree Preservation Data, prepared by Westwood, dated February 16, 2022
   r. Slope Analysis – South, prepared by Westwood, dated March 3, 2022
2. Adherence with the City Engineer's Memo, dated March 9, 2022.
3. Adherence with the Carver County Public Works Memo, dated November 4, 2021.
4. Preservation of the wooded steep slopes, including 30-foot buffer and a 50-foot setback from that wooded steep slope.
5. Provision that all lot lines are outside 30 foot no grade/no mow setback from wooded steep slopes where possible and to be shown on the final submittal.
6. Adherence to the City's Boulevard Tree Policy and local street section design.
7. Provision that boulevard trees are placed between the sidewalk and street.
8. Provision of sidewalks on both sides of all local streets up to the bulb of cul de sacs.
9. Provision to include a sidewalk on the west side of Block 3 between Founders Path and Devonshire Lane, and to be shown on the final plans.
10. Adherence to the following building setbacks:
    a. Front (house): 25 feet
    b. Rear: 20 feet
    c. Side(house/garage): 7.5 feet
    d. Side (corner): 15 feet
11. Adherence to the 125 foot centerline building setback from County Road 44.
12. Adherence to the 100 foot centerline building setback from the future collector road (Savanna Way).
13. Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.
14. Compliance with the City's anti-monotony and design requirements zoning ordinance (Section 9.28).
15. Provision of developer responsibility to remove any hazardous trees or limbs on site as determined by the Public Works Director, prior to issuance of a building permit.
16. Provision of a storm water management plan meeting City and Carver County WMO standards.
17. Provision that adequate maintenance accesses are provided for the stormwater ponds, to be located in separate outlots, and to be shown on the plans at preliminary submittal.
18. No direct vehicular access onto County Road 44 or the future collector road/Savanna Way.
19. Provision of temporary cul de sacs at the two stub streets abutting the Carlson property, and to be reviewed and approved by the City Engineer.
20. Provision of a buffer sign plan along the wooded steep slope no grade/no mow line, and to be addressed at final submittal.

21. Provision of a signage plan that addresses the future ballfields/lights from the community park and to be addressed at final submittal.
22. Provision that 360-degree architecture shall be provided for all corner lots and all lots whose rear or sides are visible from public right's-of-way or across from open spaces, more specifically for these lots as seen in the preliminary plat of Rivertown Heights:
    a. Lots 1-11, Block 1
    b. Lots 1 & 8, Block 2
    c. Lots 1, 7, 9 & 16, Block 3
    d. Lots 1 & 8, Block 4
    e. Lots 1 & 13, Block 5
    f. Lot 3, Block 6
    g. Lot 1, Block 7
    h. Lots 1, 7, 15 & 16, Block 8
    i. Lot 1, Block 9

Motion carried.

Motion by Commissioner Urbanski, second by Commissioner Baswa, to recommend approval of the rezoning for Rivertown Heights from Open (O) to Planned Residential District No. 82 (PRD-82).

Motion carried.

7.D. Recommend Approval of the Concept Plan for Hazeltine Plaza Apartments/Trident Development/PC #2022-18

Community Development Director Kabat presented the item to the Commission and noted that this will be on the City Council agenda for March 21, 2022.

Commissioner Lacey assumes that places like Starbucks and Chipotle will appreciate the additional foot traffic. He stated that this is a big parking lot and asked about the design and if people would travel across that large space either by foot or car. He asked, for example, about a person at Chipotle and if they would have to enter at some sort of portal in order to access the building, because that is their destination.

Community Development Director Kabat stated that he thinks part of what would need to see through this process would be cross accesses. He stated that one thing that will be crucial is making it clear that the parking in place for residential is not there for the commercial uses. He stated that it will be a design issue to ensure there is separation but also cross access.

Commissioner Lacey asked if the exterior of this development was designed to match what is across 41 at Chaska Heights and those developments near the Dairy Queen.

Community Development Director Kabat stated that this would be something for the developer to weigh in on but does not think they have gotten to the point of design renderings for the exterior of this facility but have indicated an interest in incorporating Chaska brick. He stated

that as this moves into Preliminary they will want to see how the design fits into the surrounding area.

Commissioner Gaare stated that the loss of the retail space, if this project moves forward, in an area that was designed for that purpose is concerning. She stated that it appears as though the idea of marketing the space for future use as retail or restaurant space is pessimistic.

Community Development Director Kabat suggested that this be addressed by the developer and the property owner but noted that the retail market has really changed with a larger move towards on-line retail.

Commissioner Gaare stated that the size of the apartment complex appears as though it will dwarf Kohl's which she thinks should be taken into consideration as far as aesthetics. She stated that with relation to parking, she would 'foot stomp' the importance what has already been discussed.

Commissioner Brass stated that his perspective, as a commercial broker, is that this is a very creative idea and he is in support of looking at multi-family in this location. He agreed that the junior box retail area has changed and he did not feel it would happen. He stated that it will be challenging and noted that the current access is a bit of a mess with people sort of shifting and cutting through the area. He stated that his concern would also be the parking and suggested that in the section that touches the Kohl's wall there could be an elevated island with bushes so there isn't foot traffic for people to park there and walk around the corner to the store. He asked about the proposed breezeway and if there was a reason for it beyond it being the developer's signature design element. He reiterated that overall he likes the concept, but just thinks it will be a bit challenging.

Chair Dahlke noted that this space has been a challenge for many years.

Commissioner Brass asked if there had been any feedback from Hazeltine.

Roger Fink, Trident Development, stated that some of the parking input that the Commission have introduced will be fun to solve. He stated that he had been thinking they could do some case studies around Southdale and Galleria area where they have seen apartment complexes popping up and see how they have addressed some of these same type of issues. He stated that the breezeway passes under the building and explained that its purpose was because they had understood from earlier correspondence with Kohl's that they are going to insist on maintaining that access drive. He explained that their thought was to develop around the existing driveway and leave it as it is and build over the top of it which would be a unique feature just for this site. He stated that they have gotten in touch with Kohl's real estate department in Menomonie, WI and have sent them some concepts so they are beginning their review process. He stated that he had spoken with Eric Rule, the General Manager at Hazeltine, a few weeks ago about the possibility of using the clubhouse for a potential neighborhood meeting. He explained that he had given Mr. Rule an overview of their concept and through the conversation, he got the impression that the golf course would not support the idea of this large apartment building right across the road from them. He stated that although Mr. Rule was invited to the neighborhood meeting, he did not attend. He noted that Trident had developed the Chaska Heights Senior Living facility as well as the Lake Jonathan Flats apartments in the City. He stated that this site

appeals to them in terms of employment base, recreation, goods and services, as well as access to 41 and 212.

Commissioner Brass asked if Trident would be long-term owners.

Mr. Fink explained that their business model had always been to build and operate income producing properties for their own portfolio. He stated that they have built 25-30 properties over the last 16 years with somewhere around 5,000 units and for the most part, they still own all of those properties. He noted that they have sold some apartments, for example Lake Jonathan was traded last year. He explained that they have been finding that the capital markets are quite aggressive and have brought offers that are hard to turn down.

Commissioner Brass asked if these would be market rate apartments.

Mr. Fink stated that they were market rate apartments that will be a mix of studios, 1 bedroom, 1 bedroom/dens, and 2 bedrooms. He stated that they will examine the market demand for 3 bedroom units as things move forward which is bit trickier market. He explained that they see this project as appealing to a more affluent renter population, similar to Lake Jonathan population.

Commissioner Brass asked if they were thinking more middle of the market, or more high end.

Mr. Fink stated that he did not think they were going to try to be a high-end, luxury apartment product.

Commissioner Brass reiterated that he thinks this is a good, creative way to use the property and hopes that they can make this work.

Commissioner Urbanski stated that he thinks everyone agrees that parking will be an issue for this project and asked about the plan for 88 indoor spots for 116-124 units. He asked how they would determine who would get a parking spot and who would not.

Mr. Fink stated that for a four-story building with underground parking, you can almost never get 1:1 and noted that they have done some other creative things in the past, like providing at grade parking inside the building, but that eliminates units, so it ends up being a trade-off.

Commissioner Urbanski noted that in a few of the photos provided it appeared that there was some commercial/retail on the main level and asked if that was being planned in this instance.

Mr. Fink stated that one building appeared to have commercial on the first floor, but, similar to their Richfield property, it has the look of a retail store front, but it is actually common area and recreation area. He clarified that they are not proposing any retail or commercial space within their building.

Commissioner Urbanski noted that it may be the perfect spot for the '19th Hole'.

Commissioner Baswa asked about the 88 underground parking stalls and if they would be spread across the entire building.

Mr. Fink stated that they would be situated under the entire footprint of the building. He explained that the Kohl's driveway would essentially drive over the top of the deck of their underground parking structure.

Commissioner Olson asked when this switched in the Comprehensive Plan to Mixed Residential.

Community Development Director Kabat stated that the Mixed Residential guides for both residential and commercial/office and other complementary uses that would fit. He explained that the City is currently operating off of the 2040 Comprehensive Plan but noted that the 2030 Comprehensive Plan provided the same guidance for this site.

Commissioner Olson stated that he is not too keen about this concept. He understands that it has been vacant and they are trying to do some sort of junior box which has not happened, but he did not think this was the right location for a four-story apartment building overlooking Hazeltine as well as other office spaces. He stated that he understands this is a challenging lot, but would say that he is not looking forward to this project moving forward.

Chair Dahlke stated that he thinks this project is perfect for this location.

Commissioner Olson noted that the City will need to change the zoning for this because it doesn't fit the intent of the land, so this is where the City has this type of discussion.

Commissioner Gaare stated that she feels it is key as to see what will happen around it as they go forward.

Commissioner Olson stated that he thinks they need to consider the intent and what impact it will have and reiterated that he was not 'feeling it' for this proposal.

Chair Dahlke encouraged Mr. Fink to continue attempting to communicate with Hazeltine.

Motion by Commissioner Urbanski, second by Commissioner Brass, to recommend to the City Council approval of the Hazeltine Plaza Housing Development - Concept Plan (PC#2022-18), subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Concept Application Narrative Letter Signed (pgs 1-4), submitted by Trident Development, LLC, dated 01/31/2022
    b. Project Summary (pgs 1-6), submitted by Trident Development, LLC, drafted by Kaas Wilson Architects, dated 02/01/2022
2. Approval of an amendment to the zoning (PCD-15), to include multi-family as a permitted use on Block 1, Lot 3 of Hazeltine Plaza.
3. Compliance with the zoning PCD-15 (ord. nos. 802 and 946).
4. Compliance with section 9.11 Building Design/Materials for Multi-Family Residential.
5. Compliance with applicable zoning requirements, in particular Chapter 9 (General Requirements).
6. Provision of 360 degree architecture be used on all facades.

7. Provision of material boards showing the proposed material selections for Hazeltine Plaza Housing Development.
8. Provision that if masonry is used that they are natural stone and/or full face modular brick in order to be considered Class I materials.
9. Provision of adequate sound proofing of the drive-under/breezeway to ensure noise does not conflict with residents.
10. Coordinate with the City Engineer to ensure that adequate site-lines are preserved at all access points to Hundertmark Road.
11. Provision of a landscape plan meeting all applicable requirements of Chapter 9.6 of the Zoning Code.
12. Provision of adequate screening and landscaping along all edges to be addressed at Preliminary submittal.
13. Adherence to the following building setbacks:
    a. Hundertmark Road: 100 feet from centerline
    b. From southernmost property line: 30 feet
    c. From northernmost property line: 25 feet
14. Adherence to the following parking setbacks:
    a. Hundertmark Road: 10 feet from right-of-way
    b. Hazeltine Boulevard: 10 feet from right-of-way
    c. Interior Property Lines: 5 feet
15. Provision of planting islands to be at least 10 feet in width.
16. Provision of lighting specs to be submitted with preliminary site plan submittal.
17. Coordination with the City Engineer for the provision of public utilities to the site.
18. Provision of a storm water management plan meeting City and Carver County WMO standards.
19. Provision of a traffic circulation plan that encourages residents to use the Hundertmark access points as the primary access, limits conflict points with main internal circulation drive aisles for commercial patrons and delivery vehicles, and provides safe pedestrian crossings from residential parking to all apartment building entrances.
20. Provision of parking plan that limits and discourages cross-access parking to ensure residential access.
21. Provision of a construction traffic plan to be coordinated and approved by the City Engineer at preliminary submittal.
22. Provision of review and approval of Kohl's per the existing Reciprocal Easement Agreement.
23. Provision of plan to relocate the existing pylon sign located at the north access to Hundertmark Road in a way that is acceptable to all existing businesses of Hazeltine Plaza and meets City sign ordinance.
24. Provision of a traffic impact study as directed in the body of this report, and to be submitted at preliminary submittal.

Motion carried 7-1 (Commissioner Olson opposed).

8. Other Business

8.A. Receive Other Meeting Minutes

8.A.i. Receive the December 20, 2021 and January 3, 2022 EDA Minutes
8.A.ii. Receive the January 3, January 24, and February 7, 2022 City Council Meeting Minutes
8.A.iii. Receive the January 11, 2022 Park Board Meeting Minutes

Commissioner Aasen
- Shared a bit of information on his background and experience

Chairperson Dahlke
- Welcomed Commissioners Aasen, Baswa, and Gaare to the Commission

10. Adjourn
Motion by Commissioner Urbanski, second by Commissioner Gaare, to adjourn the meeting at 9:45 pm.
Motion carried.

LENNAR®

Reserve at Autumn Woods Final Plat

U.S. Home Corp, dba Lennar, is pleased to submit this request for Final Plat of Reserve at Autumn Woods, a proposed single family community at Audubon Road and Autumn Woods Drive.

Description of Request

Lennar is seeking Final Plat for Reserve at Autumn Woods. The proposed plat covers the entire site including 86 proposed single family lots. The Final Plat is consistent with the approved Preliminary Plat.

Homeowners Association

On October 25th, 2021 U.S. Home Corporation and The Jonathan Association fully executed a Declaration of Development Standards, Covenants, Conditions, Restrictions, and Easements for Reserve at Autumn Woods.

Disposition of Outlots & Maintenance Responsibility

OUTLOT	FUNCTION	OWNERSHIP	ASSOCIATION MAINTENANCE RESPONSIBILITY	CITY MAINTENANCE RESPONSIBILITY
Outlot A	City Park	City	None	Park Facilities
Outlot B	Wetland, Steep Slope, Open Space	Association	Wetland, Steep Slope, Open Space	None
Outlot C	Infiltration Basin, Trail, Steep Slope, Open Space	Association	Trail, Steep Slope, Open Space	Infiltration Basin
Outlot D	Infiltration Basin, Trail, Open Space	Association	Trail, Open Space	Infiltration Basin
Outlot E	Tree Preservation, Wetland, Trail, Steep Slope, Open Space	Association	Tree Preservation, Wetland, Trail, Steep Slope, Open Space	None
Outlot F	Infiltration Basin, Retaining Wall	Association	Retaining Wall	Infiltration Basin
Outlot G	Infiltration Basin, Landscape Buffer, Retaining Wall	Association	Landscape Buffer, Retaining Wall	Infiltration Basin
Outlot H	Monument Sign, Landscaping, Landscape Buffer	Association	Monument Sign, Landscaping, Landscape Buffer	None

Tree Preservation Areas and Landscape Buffers on Private Property

The Reserve at Autumn Woods HOA Declaration requires the following:

If a property is subject to a tree preservation easement or landscape buffer the Owner must comply with all requirements and restrictions of said easement or buffer. In the event any Owner of a property belonging to the Association fails to comply with any tree preservation easement or maintain any landscape buffer the Association may enter upon said property to repair, maintain, and restore the tree preservation easement area or landscape buffer.

Schedule

Land development work (grading) will begin Spring 2022; utility and street construction will begin Summer 2022; construction on model homes estimated to begin late Summer/early Fall 2022. Ideally, we would have a model home ready for the Fall 2022 Parade of Homes. Lennar estimates full occupancy of the community will occur approximately 36 to 48 months from the date sales begin.

Regards,

Josh Metzer
Land Entitlement Manager
Lennar Minnesota

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
04/13/2022

Subject: **Reserve at Autumn Woods (fka Wagner Woods) – Final Plat**

Applicant: Lennar

Location: 9430 Audubon Road; west of Audubon Road (CR 15), south of Autumn Woods Drive

Case No.: 2022-12

Synopsis: Applicant seeks to obtain approval of a 86 lot development on approximately 45 acres of land owned by the Wagner family

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval

BACKGROUND

Autumn Woods and Autumn Woods East abut the subject property. These plats were approved in September 1982 (Autumn Woods) and September 1994 (Autumn Woods East). Autumn Woods East 2nd Addition was approved October 1994, which included Ironwood Boulevard's right-of-way (ROW) stubbing at the southern edge of Wagner's property (9430 Audubon Road). This was with anticipation of the Wagner developing and connecting into such street.

In May 2021, the Concept Plan was approved for Wagner Woods (102 lots). At this time there was significant involvement from the neighboring residents with concerns pertaining to density, lot sizes, traffic/access, trail continuity, and being a part of the Jonathan Association. The City and developer met with the neighbors of Autumn Woods after Concept approval to discuss some changes to the plans. Those changes are reflected below and were incorporated into the Preliminary Plans.

In October 2021, the Preliminary Plat and Rezoning (PRD-79) were approved for Reserve at Autumn Woods.

CONCERNS RAISED IN CONCEPT PLAN AND HOW THE PLANS ADDRESS THESE:

Density: The original concept plan proposed 102 single-family lots. The plan proposes 86 single-family lots; this is a 16 lot decrease from previous. The density changes from 2.57 units/acre to 2.17 units/acre.

Lot Sizes: The original concept plan proposed two different types of lots; 50 foot lots (27 lots) adjacent to Audubon Road, and 65 foot lots (75 lots). The plan proposes 55 foot lots (20 lots) adjacent to Audubon Road, 65 foot lots (52 lots) and 75 foot lots (14 lots). The 75 foot lots are primarily situated on edges that abut existing Autumn Woods lots. In addition to lot sizes, the development will also provide 7.5 foot side setbacks for all lots. Previously 5 feet was shown on the 50 foot wide lots.

Traffic/Access: The original concept plan proposed access onto Autumn Woods Drive to the north, and connecting into Ironwood Boulevard to the south. The plan proposes the same layout, but will also include a direct right-out access onto Audubon Road on the eastern edge of the development. This access has been reviewed and approved by Carver County. In addition, dedicated left and right turn lanes will be added to Autumn Woods Drive at the Audubon Road intersection to improve traffic movement. The south side of the development will also show Ironwood Boulevard tapering in four (4) feet so as to create more traffic calming measures for people traveling along this street. Stop signs will be installed at the Ironwood Boulevard and Butternut Drive intersection. A traffic study was also conducted to evaluate the proposed traffic and accesses into/out of the development as well as all major accesses of Autumn Woods. The study concluded that access from Autumn Woods Drive to the north and Ironwood Boulevard to the south provide the best traffic layout for the site and surrounding roadways; the right-out access will not provide significant decrease in delays at either access point. In addition, it showed that the development and surrounding streets/intersections in Autumn Woods will operate at serviceable levels once the development is fully built.

Trails: The concept plan showed the incorporation of trails to the stormwater ponds. There were comments raised in the concept plan review to show more trails that connect into the Jonathan trail system present in Autumn Woods. The plan proposes to incorporate more trail connections. One trail connection occurs on the south side of the site that will travel adjacent to the wooded area and wetland. Another trail connection is shown in the center of the site between the central block of homes and infiltration basin. This trail will generally line up with the entrance of the public park opening on the Northwest portion of the site. These new trail incorporations will be owned and maintained by the Jonathan Association.

Jonathan Association: Comments in the concept plan review encouraged the development to be a part of the Jonathan Association. The developer has been working with the Jonathan Association to get this development added to their HOA. The Jonathan Association will be owners of the tree preservation areas, trails, ponds, and other common areas. The City will maintain the ponds, however, as that is consistent with the other Autumn Woods developments.

Public Park: The concept plan showed the inclusion of a public park in the Northwest portion of the site totaling 2.65 acres. The plan shows a public park totaling 3.13 acres, which its layout and size is more consistent with Park Board comments received in Concept Plan. A wider opening into this park from the development is also shown, which helps preserve the cluster of trees that were highlighted by staff in the Concept Plan to save. This acreage of park does not satisfy park dedication requirements, and the developer will be required to pay the remaining dedication requirements as a fee.

Reflection of Autumn Woods Characteristics: The concept plan review encouraged the Preliminary Plan to be more reflective of the abutting Autumn Woods developments as it related to trails, streets, open space, and lot layouts. As noted above, more Jonathan trail connections will be incorporated; 3,187 linear feet (1,473 linear feet was shown in Concept). Due to the plan showing less lots than Concept, the street system is now less extensive. Open Space has been increased from Concept Plan to be 18.07 acres of the total site acreage (13.97 acres was shown in Concept). Previously, the Concept Plan showed a total of 22 lots that would directly abut the existing Autumn Woods neighborhoods on the west and south sides. The plan now

shows only 7 lots abutting the western side. These lots that directly abut will be 75 foot wide lots or be separated by a tree preservation area.

Buffer Trees: Buffer trees have been added to the southeasterly edge of the development as it abuts the rear yards of the three Autumn Woods lots on Butternut Drive.

Project Goals
The identified goals in creating this new neighborhood include the following:

- Chaska's High Quality of Life is Enhanced
  This community will offer existing Chaska residents, as well as various demographics of prospective buyers looking to live in Chaska, the opportunity to purchase a new home within the City. This neighborhood will provide homeowners access to retail, dining, golf courses, medical facilities, regional transportation, quality schools, parks and trails, and proximity to downtown Chaska. This community will also include a new City park.

- Taxpayers Perceive they are Getting Cost-Effective Service
  As an infill development, all infrastructure is in place to serve the new homes. The City will receive a significant amount of infrastructure impact fees of which little will be expended with this development. In addition, the new homes will generate tax revenue, a significant increase from the current agricultural status of the property. This will aid the City in providing cost-effective services to Chaska residents.

- Well-Planned and Orderly Community Development is a Priority
  Development of this infill site is highly efficient and desirable from an infrastructure and orderly growth standpoint. It makes efficient use of the significant amount of public infrastructure immediately accessible in public right-of-way. The proposed community with park dedication is consistent with the Low Density Residential and Park land use designations. And as mentioned, Lennar homes include quality materials including stone, vinyl, and LP in varying styles such as lap siding, shakes, and board and batten. Lennar's anti-monotony code will offer additional variation through the use of multiple color packages.

- A Sense of Community and Small Town Values are Maintained
  Adding new residents to this location is ideal from the standpoint of the broader community. These new residents will strengthen and add vibrancy to the nearby restaurants, retail establishments, schools, and City parks and trail system. Downtown businesses are also likely to benefit from the addition of this community.

- A Commitment to Excellence
  Excellence in this community will be evident in many ways:
  - The plan considers tree preservation and wetlands, parkland dedication, and landscape buffering.
  - Views of the neighborhood from the surrounding streets and within the neighborhood.
  - Attractiveness of the homes and quality of home construction.

Comprehensive Plan
The Comprehensive Plan guides this area to be Low Density Residential. The proposal tonight is consistent with this guidance.

CURRENT PROPOSAL
The 86-lot detached single-family proposal on approximately 45-acres of property is located west of County Road 15 (Audubon Road) and south of Autumn Woods Drive. A public park is proposed on the northwest corner of the site. Ironwood Boulevard stubs off on the south edge of the Wagner property, which will provide an access into this site. This new development will be an extension off Ironwood Boulevard, and will ultimately be part of the Autumn Woods development, which surrounds the south, west and northwest sides of the site. Additional access will be provided from Autumn Woods Drive to the north, and a right-out access will be provided to Audubon Road (CR 15) to the east in between Autumn Woods Drive and Butternut Drive.

Adjacent properties
The site is bound on the north by Autumn Woods Drive; to the west by residential (Autumn Woods); the south by residential (Autumn Woods East) and a Jonathan-owned park; and the east by County Road 15 (Audubon Road) and the city of Chanhassen.

City-owned property abuts the north and northwest portion of the site. The site does not have direct frontage on Autumn Woods Drive to the north, but will buy the necessary acreage to have direct frontage.

Existing Conditions
The subject property is located at 9430 Audubon Road on the eastern edge of Chaska, and contains a farmstead with multiple out-buildings (all of which will be removed). The site is 45.47 gross acres in size and is currently farmed agricultural land with wooded areas on the southwest and northwest edges. Five wetlands have been delineated on the site totaling approximately 5 acres in size. There are wooded steep slopes surrounding the wetland on the north edge of the property, as well as a small steep slope area on the southern edge of the property.

Land Use
The proposed 45-acre plan consists of 86 new single family lots. Three lot sizes/products are proposed within this development (dubbed as Lennar's 'Landmark Series' and 'Venture Series'); the Landmark Series; 66 lots) will be 65 and 75 foot wide lots and feature one-story and two-story homes with 3-car or 4-car garages (with basements); the Venture Series (20 lots) will be 55 foot wide lots and feature one-story and two-story homes with 2-car or 3-car garages (basement and slab on grade plans).

The area in question has been rezoned to a more appropriate zoning district, as Planned Residential Development (PRD-79).

Layout
The layout of the site will come from the extension of Ironwood Boulevard to the south from the Autumn Woods development. The road will travel north-south near the easterly portion of the site to connect into Autumn Woods Drive on the north side to provide an additional access

into the development (this connection will require purchasing City-owned land to access Autumn Woods Drive). This street extension will provide access to the 'Venture Series' lots (20 lots) on its east side. A loop street (Sugar Maple Drive) will extend off the west side of the Ironwood Boulevard extension and provide access to the Landmark Series lots (66 lots). In addition, a right-out access will be provided on the east side of the site to connect into Audubon Road (CR 15).

A public park space totaling 3.13 acres is denoted in the northwest portion of the site. A park access is shown between Blocks 3 & 4. This park space will connect into the City-owned property that abut the north and northwest portions of the site.

Transportation/Traffic/ROW/Construction Traffic

The plan proposes to provide for a network of internal residential roadways with connectivity to arterial roadways. Specifically, Ironwood Boulevard is extended to the north to provide access to the development area. This street will connect into Autumn Woods Drive. A right-out access on the east side of the development will provide access out on to County Road 15 (Audubon Road). County Road access will also come from Autumn Woods Drive to the north and Ironwood Boulevard/Butternut Drive to the south. A loop street (Sugar Maple Drive) will extend off the west side of Ironwood Boulevard to access the internal lots.

A traffic impact analysis (TIA) was completed for the preliminary submittal. The traffic study evaluated the impacts of the development on the internal streets as well as looked at all major intersections of Autumn Woods. In brief summary, it concluded that all intersections will operate at a serviceable level with the build-out of the development. It also concluded that the scenario showing access onto Autumn Woods Drive and Ironwood Boulevard extending to the south would be the best traffic scenario for the development and surrounding neighborhoods. The Autumn Woods Drive and Audubon Road intersection will be improved to include a dedicated left and right turn lane on Autumn Woods Drive.

The current plan appears to show road right-of-way widths that are consistent with the City's typical 60 foot wide ROWs as they are matching up with the stub street of Ironwood Boulevard. One area of exception is the width of Ironwood Boulevard near the south side of the development site. This area will taper in a couple feet (4 feet) to help promote traffic calming measures. The incorporation of this is to promote people to slow down as they are coming south and north along Ironwood Boulevard.

Construction traffic is proposed to be accessed off of Autumn Woods Drive to the north of the development. The existing Wagner driveway access on Audubon Road (CR 15) was looked at for a temporary construction access, however, Carver County deemed this access to be unsafe. They suggested that the Autumn Woods Drive access be used instead. The developer will need to continue working with Carver County on this construction access.

Traffic Calming Methods (Inside and Outside of Reserve at Autumn Woods)

Traffic is a major concern with this proposed development and with the existing Autumn Woods neighborhoods. Because of this it seemed imperative to review traffic calming measures inside and outside of the proposed development to see where (if any) improvements can occur. Staff, the developer and residents reviewed the preliminary plans prior to submittal in regards to how to provide better traffic calming measures in the development and outside the development on

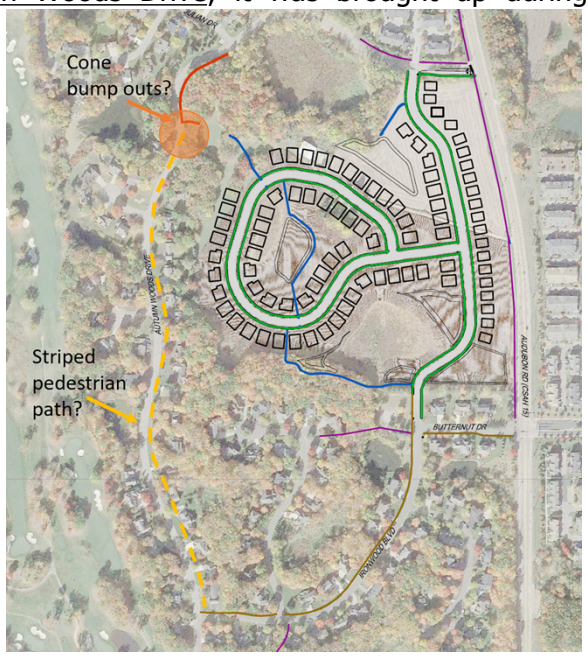
Ironwood Boulevard, Autumn Woods Drive, and Butternut Drive. The traffic calming measures are summarized below indicating what will be installed with this development, and other methods that can continue to be explored moving forward:

Traffic Calming Methods to be Installed with Development:

- Ironwood Blvd Tapering; within the proposed Reserve at Autumn Woods development Ironwood Boulevard will be tapered down four (4) feet on the south side of the development. This will help promote reduced speeds as people are traveling north and south along this road.
- Stop Signs added to Ironwood and Butternut Drive; to better control traffic moving out of the development stop signs will be added on the north and south sides of Ironwood Boulevard as it intersects Butternut Drive.
- Dedicated Turn Lanes on Autumn Woods Drive; there are currently no dedicated turn lanes on Autumn Woods Drive at the Audubon Road intersection. Because of this, people are single-lane stacked when waiting to turn left or right; if there is a person turning left they are generally creating more wait for everyone behind them. Autumn Woods Drive will be widened at the intersection to include dedicated left and right turn lanes to improve traffic turning movements here.
- Butternut Drive Median Modification; there is currently a sizeable median at the intersection of Butternut Drive and Audubon Road. There are homes that are located on both sides of Butternut Drive. The median does not allow some of the homes to make full turning movements into their driveways. In addition, the median doesn't allow for dedicated turn lanes on to Audubon Road. An alternative to this intersection was explored that can implement a smaller median that doesn't block driveways, and have dedicated turn lanes. The City will coordinate the intersection improvements with the developer and adjacent neighbors this Spring to better refine options with the existing median and turn lane/signal improvements.

Traffic Calming Methods for Continued Exploration and Implementation:

- Pedestrian Striping and Cones on Autumn Woods Drive; it was brought up during Concept Plan review and the subsequent meetings with residents that Autumn Woods Drive is not a safe road. There are no sidewalks for pedestrians to use, and it appears that cut-through traffic occurs. The exhibit to the right shows a small stretch of pedestrian trail that is included at the proposed public park entrance on Autumn Woods Drive up to Julian Drive to the north (red); this is to be further discussed with the Jonathan Association of its installation. A couple other measures for further studying/evaluation were discussed to potentially mitigate safety concerns on this road. One method was to provide striping along the east side of Autumn Woods Drive from Ironwood Boulevard up



to the proposed public park entrance that would be dedicated to pedestrians walking along this road. Parking would be minimized to one side of the road on the west side. In addition, it was discussed to include cones mimicking bump outs to be added near the proposed park entrance. This bump-out method would essentially lessen the road width and make cars slow down, or be more cautious, as they approach this area. It should be noted, that both these methods are more temporary implementations initially. If these methods prove to be successful in the field, then more permanent installations of such methods could occur. The methods and scope of implementation have only been briefly considered as it would be important to include more residents in the discussion since these implementations would be primarily used near them, and come at a cost of the residents if installed. These methods can continued to be discussed during and after the development so that appropriate measures are taken.

Utilities
Sewer and water utilities are available.

Stormwater
Stormwater ponding is proposed as a part of this proposal; ponding areas have been delineated on the plan mainly situated around the large wetland on the south side of the site. Maintenance accesses are shown for all ponds, and some are doubling as pedestrian trails. Stormwater ponding will have to meet all Riley Purgatory BCWD and City standards.

Setbacks
Minimum setbacks proposed are front setbacks of 25 feet, rear setbacks of 25 feet, side setbacks of 7.5 feet, and corner setbacks are 20 feet. In addition to the above, the development must meet the following setbacks:

SETBACKS	
Direction	**Setback**
Wooded Steep Slopes	50 feet building setback and 30 feet no grade/no mow setback
Wetlands	30 feet
County Road 15	125 feet from centerline

The lots that abut the wooded steep slope edges on the north edge of the site are now shown to be out of the 30 foot no grade/no mow setback. The 30 foot setback does not allow fences to be built on or within it so it's better that these setbacks are not within property lines.

Architecture & Anti Monotony
Lennar will be the sole builder in this development. The Landmark Series noted above will be 50-60 foot wide homes, ranging in price from $500,000-600,000. The Discovery Series will be 40 foot wide home, ranging in price from $450,000-$500,000. Lennar homes include varying amounts of stone on front facades and siding materials consist of lap siding, shakes, or board and batten. Other architectural features available on selected facades include columns, gables, shutters, accentuated window trim and fascia, and decorative roof brackets and cornices. They have provided a couple home examples they offer as an attachment in the packet.

City ordinance dictates that housing may not be similar within two houses to each side, directly across the street or diagonal from the house in question. This ordinance also requires that homes provide LP Smartside on the front elevations, at least 4 inch window trim on all windows, and provide varied color packages on homes within one home on each side and directly across the street. This ordinance has been very successful in other newer residential developments.

Trails & Sidewalks

There are a couple trails proposed as a part of this development. These trails will be Jonathan owned and maintained. These trails exist on the south side of the site adjacent to the wetland/ponding area, and in the center of the site adjacent to the infiltration basin area. A public trail already exists on the west side of County Road 15 (Audubon Road), which will be connected by the development's proposed sidewalks (one on the northeast side at Autumn Woods Drive; and one on the east side at the new right-out access). Another trail connection is shown on the NW side of the site at the proposed public park entrance on Autumn Woods Drive, which would connect north up to Julian Drive. This connection needs to be further discussed with Jonathan on its implementation.

The developer will be required to provide sidewalks on both sides of the streets per City policy. The plan is showing sidewalks on both sides of the street. In addition, a sidewalk extension on the south side of Autumn Woods Drive is being proposed that connects the development entrance out to the County Road trail. Another extension is shown that connects the easterly sidewalk on Ironwood Boulevard to connect into Butternut Drive, which will ultimately connect into the proposed pedestrian crossing across the Ironwood Boulevard and Butternut Drive intersection.

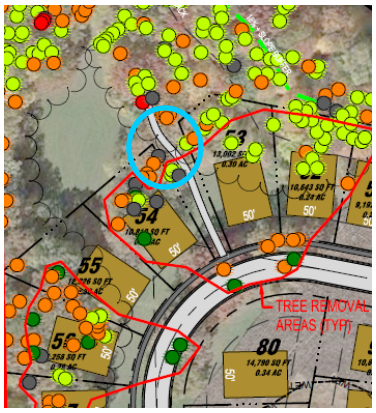
Screening, Landscaping & Tree Preservation

Because this development abuts a major roadway (Audubon Road; CR 15) it will be important that the homes that back up to this have adequate screening. The development north of Autumn Woods Drive (Lake Hazeltine Woods) provides berming and landscaping on its east edge along the County Road. Staff would require this same screening to be carried all the way through the east side of Reserve at Autumn Woods. The plan is showing a level of screening occurring and the applicant states that approximately 90 trees will be added to this area. The plan is also showing a section drawing of the proposed berm and landscaping to be added, which appears to be adequate and consistent with the townhome development to the north. Additional buffer trees will be added to the southeast edge of the development to provide screening to the three existing Autumn Woods homes on Butternut Drive.

Trees will be required in the boulevard in order to meet the City's Boulevard Tree Policy. It should be noted that the boulevard is the area between the sidewalk and the street.

A level of Tree Preservation is an important piece of this development. The applicant has conducted and submitted a tree survey as a part of this proposal showing the location and condition of the trees. Wooded areas exist on the southwest, northwest, and north portions of the site. 722 trees were inventoried on the site. The developer is showing certain areas for tree preservation (574 trees saved; 148 trees proposed to be removed), mainly along the south edge, and northwest edges of the site in rear yards and in the public park area. The south and some northwest edge trees to be preserved are proposed to be in an outlot or tree preservation

easement that will be deeded to/maintained by the Jonathan HOA. Tree preservation will also occur in the area slated for public park on the northwest side. There were trees noted in concept plan near the entrance of this park that would be beneficial in preserving (oak trees ranging from 29" to 41" in caliper that are in Excellent and Good conditions; trees 1208, 1215, 1220, and 1221; these trees are in the general area circled in blue below) and provide a natural grand entrance to the park for the development. The plan has been modified to provide a wider opening into the park, which now preserves those trees.



Parkland & Park Board Recommendations From Concept Plan

The Comprehensive Plan guides a portion of this area of land for a neighborhood park. The Comprehensive Plan shows the park space on the south side of the site as a connection to the Jonathan-owned park in Autumn Woods, however, after a site visit it appeared that the northwest portion of the site was the most viable/ideal location for a public park. This area would be able to contiguously connect into City-owned land that abuts the north and northwest sides of the site. It also provides an open pocket area nestled between trees, making it very idyllic. The south side of the site is encumbered by a wetland and abuts a Jonathan-owned park, which does not lend itself well for a public park. The park space proposed is showing a total of 3.13 acres (does not include wetland or wooded steep slope areas as these areas do not count as acceptable park space), which falls below the park dedication requirements for this size of site. It will be required of the developer to pay park dedication fees for the remainder of park dedication requirements; the Park Board will review and approve the amount of park acreage that will be accepted as public park dedication.

Previously the Park Board met on the Concept Plan (May 11, 2021) and recommended the following:

- The City receive a minimum of 2.65 acres of park dedication in land, with a strong recommendation for additional land, and receive the balance of park dedication in cash.
- Further recommendation is to omit Lennar's proposed park land dedication starting at northwest corner of lot 52 and everything east from there, and to omit lots 53, 54, and 55 to achieve the minimum 2.65 acres all contiguous on the northwest corner of the site.

It would appear that the developer has incorporated these comments into their plan. The Park Board also approved this park provision at their Tuesday, October 12th, 2021 meeting.

Jonathan Association & Update

As noted previously, the Jonathan Association plans to take over this development once its built out. They will be the owners and maintainers of the tree preservation areas, trails, ponds, and other common areas. The Association formally approved the acquisition of this development in October of 2021.

Final Plat
The final plat shows the platting of 86 single-family lots. The disposition of outlots are as follows:

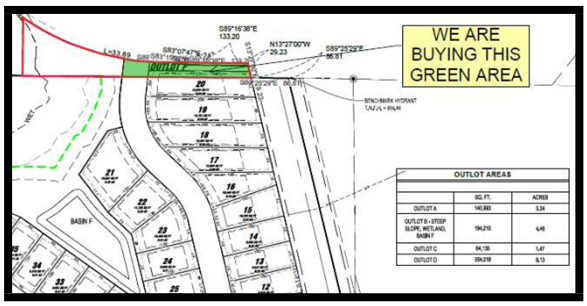
- **Outlot A**: public park space to be deeded to the City of Chaska
- **Outlot B**: wooded steep slope and wetland to be deeded to the City of Chaska
- **Outlot C**: trail and ponding area to be owned by the Jonathan HOA
- **Outlot D**: trail, wetland, and ponding area to be owned by the Jonathan HOA
- **Outlot E**: trail and ponding area to be owned by the Jonathan HOA
- **Outlot F**: ponding area to be owned by the Jonathan HOA
- **Outlot G**: ponding area to be owned by the Jonathan HOA
- **Outlot H**: monument sign to be owned by the Jonathan HOA

Development Costs (Infrastructure Improvements)
The City of Chaska has a number of area-wide development cost such as, but not limited to:
- Sewer and water area fees
- Storm Sewer
- Trails
- Parks

Prior to final platting, the developer will need to work with City Staff to determine which of these are applicable and what those fees will be.

City Land Purchase/Acquisition
The development did not have direct frontage on Autumn Woods Drive; there was a small sliver of City owned land that ran between the Wagner's property and Autumn Woods Drive (see in blue below). Because of this the developer was required to purchase a portion of the land needed for the street access (see exhibit on right below in green). The developer purchased this green area from the City at the same per acre charge that they bought the Wagner property for. This transaction between the City and Lennar was executed in January 2022. Lennar now owns this area.





Deadline for Agency Action
The City of Chaska received the complete application for this request on March 21, 2022. Pursuant to Minnesota State Statutes the City must act on this request by **Friday, May 20, 2022 (60 days)**, unless the City provides the petitioner with written reasons for an additional

60-day review period. The additional review period would extend to Tuesday, July 19, 2022. The City may with the petitioner's consent extend the review period beyond the Tuesday, July 19, 2022 date. Lastly, if the City denies the petitioners request "… it must state in writing the reasons for the denial at the time it denies the request."

PLANNING COMMISSION ACTION REQUESTED:

Motion to recommend to City Council approval of the final plat for Reserve at Autumn Woods for a 86-lot subdivision on 45 acres of land, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Narrative (pgs 1-2), prepared by Josh Metzer of Lennar, undated
    b. Title Sheet General Information (pg 1), prepared by ISG, dated January 27, 2022
    c. Soils and Construction Notes (pg 2), prepared by ISG, dated January 27, 2022
    d. Utility Schedules (pgs 3-5), prepared by ISG, dated January 27, 2022
    e. Typical Street Sections and Details (pg 6), prepared by ISG, dated January 27, 2022
    f. Typical Details (pgs 7-11), prepared by ISG, dated January 27, 2022
    g. Storm Water Basin Details (pgs 13-14), prepared by ISG, dated January 27, 2022
    h. Retaining Wall Fence Plan and Details (pg 15), prepared by ISG, dated January 27, 2022
    i. Pedestrian Curb Details (pgs 16-21), prepared by ISG, dated January 27, 2022
    j. Final Plat (Overall) (pg 22), prepared by ISG, dated January 27, 2022
    k. SWPPP (pgs 23-31), prepared by ISG, dated January 27, 2022
    l. Existing Site & Removal Plan (pg 32), prepared by ISG, dated January 27, 2022
    m. Utility Plan (Overall) (pg 33), prepared by ISG, dated January 27, 2022
    n. Hydrant Coverage Map (pg 34), prepared by ISG, dated January 27, 2022
    o. Planned Street and Utility Construction (pgs 35-46), prepared by ISG, dated January 27, 2022
    p. Planned Storm Construction (pgs 47-53), prepared by ISG, dated January 27, 2022
    q. Storm Drain Details (pgs 54-56), prepared by ISG, dated January 27, 2022
    r. Grading Plans (pgs 57-61), prepared by ISG, dated January 27, 2022
    s. Detailed Grading (Intersections) (pgs 62-63), prepared by ISG, dated January 27, 2022
    t. Wetland Buffer and Signage (pg 64), prepared by ISG, dated January 27, 2022
    u. Landscape and Restoration Plans (pgs 65-68), prepared by ISG, dated January 27, 2022
    v. Tree Preservation Plans (pgs 69-76), prepared by ISG, dated January 27, 2022
    w. Final Plat (pgs 1-6), prepared by ISG, undated
    x. Traffic Impact Analysis – Draft, prepared by ISG, dated September 3, 2021
2. Adherence with the City Engineer's Memo dated April 13, 2022.
3. Adherence with the Carver County Public Works memo dated May 7, 2021.
4. Provision that all lot lines are outside 30 foot no grade/no mow setback of wooded steep slopes.
5. Preservation of the wooded steep slopes, including 30-foot buffer and a 50-foot setback from that wooded steep slope.
6. Provision that all lot lines are outside of wetland areas and their required buffers.
7. Adherence to the City's Boulevard Tree Policy and local street section design.
8. Provision that boulevard trees are placed between the sidewalk and street.
9. Provision of adequate berming and landscaping along east edge abutting County Road 15 consistent with the final landscape plan.
10. Provision of sidewalks on both sides of all local streets.
11. Adherence to the following building setbacks:
    a. Front (house): 25 feet
    b. Rear: 25 feet

c. Side (Landmark Series and Discovery Series): 7.5 feet
d. Side (corner): 20 feet

12. Adherence to the 125 foot centerline building setback from County Road 15.
13. Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.
14. Compliance with the City's anti-monotony and design requirements zoning ordinance (Section 15.28.290).
15. Provision of LP Smartside used on all front elevations, and 4 inch window trim on all windows.
16. Provision of developer responsibility to remove any hazardous trees or limbs on site as determined by the Public Works Director, prior to issuance of a building permit.
17. Provision of a storm water management plan meeting City and Riley Purgatory BCWD standards.
18. Provision that adequate maintenance accesses are provided for the stormwater ponds.
19. Direct right-out access onto County Road 15 (Audubon Road) shall be shown on the plans and receive approval by Carver County prior to recording of the final plat.
20. Right-out access to accommodate life safety for emergency service and to be coordinated with Engineering and City fire department.
21. Provision that the remaining park dedication requirements be provided in cash.
22. Provision that the monument sign adhere to zoning Section 15.32 sign regulations, and a sign permit obtained prior to installation.

RESERVE AT AUTUMN WOODS

PLAT FILE NO.
C.R. DOC. NO.

KNOW ALL PERSONS BY THESE PRESENTS: That U.S. Home, LLC, a Delaware limited liability company, fee owner of the following described property situated in the County of Carver, State of Minnesota to wit::

That part of the following described tract of land lying west of County State Aid Highway No. 17, Carver County, Minnesota:

All that part of the Northwest Quarter of Section 27, Township 116 North, Range 23 West, Carver County, Minnesota, lying easterly of the following described line: Commencing at a point on the north line of said Section 27, 1053.28 feet east of the northwest corner of said Section; thence south parallel with the west line of said Section to the south line of said Northwest Quarter and there terminating; excepting therefrom the south 1287.50 feet of said tract.

AND

That part of Outlot I, AUTUMN WOODS, according to the recorded plat thereof, Carver County, Minnesota, lying easterly of the following described line: Commencing at the southwest corner of said Outlot I; thence South 89 degrees 25 minutes 29 seconds East, assumed bearing along the south line of said Outlot I, 231.71 feet to the point of beginning of the line to be described; thence North 06 degrees 49 minutes 27 seconds East, 41.98 feet to the north line of said Outlot I and said line there terminating.

Has caused the same to be surveyed and platted as RESERVE AT AUTUMN WOODS and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as created by this plat.

In witness whereof said U.S. Home, LLC, a Delaware limited liability company, has caused these presents to be signed by its proper officer this _____ day of _____, 20____.

Signed: U.S. Home, LLC

_____ its _____

State of _____

County of _____

This instrument was acknowledged before me on _____, 20____ by _____ its _____, of U.S. Home, LLC, a Delaware limited liability company, on behalf of the company.

_____
(signature)

_____
(print)

Notary Public _____ County, Minnesota

My Commission expires _____

SURVEYOR'S CERTIFICATE

I Mark A. Schwanz do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been or, will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 20____.

_____
Mark A. Schwanz, Licensed Land Surveyor
Minnesota License No. 45817

State of Minnesota
County of _____

This instrument was acknowledged before me on _____, 20____ by Mark A. Schwanz.

_____
(signature)

_____
(print)

Notary Public, _____ County, Minnesota

My Commission expires _____

CITY COUNCIL, CITY OF CHASKA, MINNESOTA

This plat of **RESERVE AT AUTUMN WOODS**, was approved and accepted by the City Council of the City of Chaska, Minnesota at a regular meeting thereof held this _____ day of _____, 20____, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

CITY COUNCIL, CITY OF CHASKA, MINNESOTA

By: _____ Mayor

By: _____ Clerk

COUNTY SURVEYOR, CARVER COUNTY, MINNESOTA

Pursuant to Chapter 395, Minnesota Laws of 1971, this plat has been approved this _____ day of _____, 20____.

Brian E. Praske, County Surveyor

By: _____

COUNTY AUDITOR, CARVER COUNTY, MINNESOTA

I hereby certify that taxes payable in _____ and prior years have been paid for land described on this plat. Dated this _____ day of _____, 20____.

Crystal Campos, County Auditor

By: _____

COUNTY RECORDER, CARVER COUNTY, MINNESOTA

I hereby certify that the within plat of RESERVE AT AUTUMN WOODS was filed this _____ day of _____, 20____, at ___ o'clock ___M. as Document No. _____.

Kaaren Lewis, County Recorder

By: _____

ISG

RESERVE AT AUTUMN WOODS

PLAT FILE NO.
C.R. DOC. NO.

AUTUMN WOODS DRIVE

AUTUMN WOODS

N LINE OF NE 1/4 OF NW 1/4 SEC. 27-T116N-R23W

N89°25'29"W 988.48

S6°49'27"W 41.98

L=63.90 R=596.24 Δ=6°08'27"

N89°16'38"W 193.28

N13°27'00"W 34.64

N89°25'29"W 86.81

N 1/4 CORNER SEC. 27-T116N-R23W

OUTLOT H

N06°49'27"E 81.34

L=168.79 R=182.00 Δ=53°07'10"

N46°37'43"W L=105.39 R=182.00 Δ=33°10'43"

N13°27'00"W 152.06

OUTLOT A

OUTLOT B

OUTLOT C

OUTLOT D

OUTLOT E

OUTLOT F

OUTLOT G

AUDOBON ROAD (C.S.A.H. NO. 17)

N13°30'56"W 517.21

IRONWOOD BLVD.

L=283.00 R=2750.00 Δ=5°53'47"

L=276.00 R=2750.00 Δ=5°45'02"

L=265.17 R=1432.50 Δ=10°36'21"

S80°35'13"E 77.23

Δ=82°29'07" L=287.93 R=200.00

Δ=27°08'26" L=142.11 R=300.00

S53°26'47"E 195.06

Δ=45°44'48" L=145.91 R=182.00

N16°35'40"E 224.80

S14°19'38"E 1401.87

30

S07°41'58"E 70.35

SUGAR MAPLE DRIVE

S82°18'02"W 439.31

S82°18'02"W 190.00

L=158.71 R=182.00 Δ=49°59'03"

S32°16'59"W 143.08

L=449.88 R=250.00 Δ=103°06'16"

N86°10'36"W 30.70

L=195.38 R=182.00 Δ=61°30'25"

L=333.98 R=2750.00 Δ=6°57'30"

L=340.98 R=2750.00 Δ=7°06'15"

Δ=58°09'05" L=184.51 R=182.00

N57°29'22"E 152.93

N0°32'08"W 643.77 E LINE OF NE 1/4 OF NW 1/4 SEC. 27-T116N-R23W

S LINE OF NE 1/4 OF NW 1/4 SEC. 27-T116N-R23W

978.98

S89°12'05"E 1507.37

EXCEPTION

AUTUMN WOODS EAST

RICHWOOD BOULEVARD

AUTUMN WOODS 2ND ADDITION

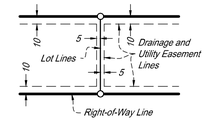
AUTUMN WOODS 2ND

CREEK

EAST

NW 1/4

Drainage and Utility Easements are shown thus:



Being 5 feet in width and adjoining lot lines and being 10 feet in width and adjoining right - of - way lines and rear lot lines, unless otherwise indicated on the plat.

N

0 80 160

SCALE IN FEET

LEGEND

- ● Iron Monument Found
- ⊗ Indicates 1/2" Dia. x 18" Long Solid Iron Pipe Set With Plastic Cap Marked By ISG, License No. 45817 To Be Set Before Time of Recording.
- ○ Indicates 1/2" Dia. x 18" Long Solid Iron Pipe Set With Plastic Cap Marked By ISG, License No. 45817 To Be Set Within One Year of Recording.
- ▲ Set PK Nail

BEARING NOTE:
The orientation of this bearing system is based on the north line of NE 1/4 of Sec. 33, Twp. 110, Rge 21. Said line bears South 89 degrees 59 minutes 23 seconds West.

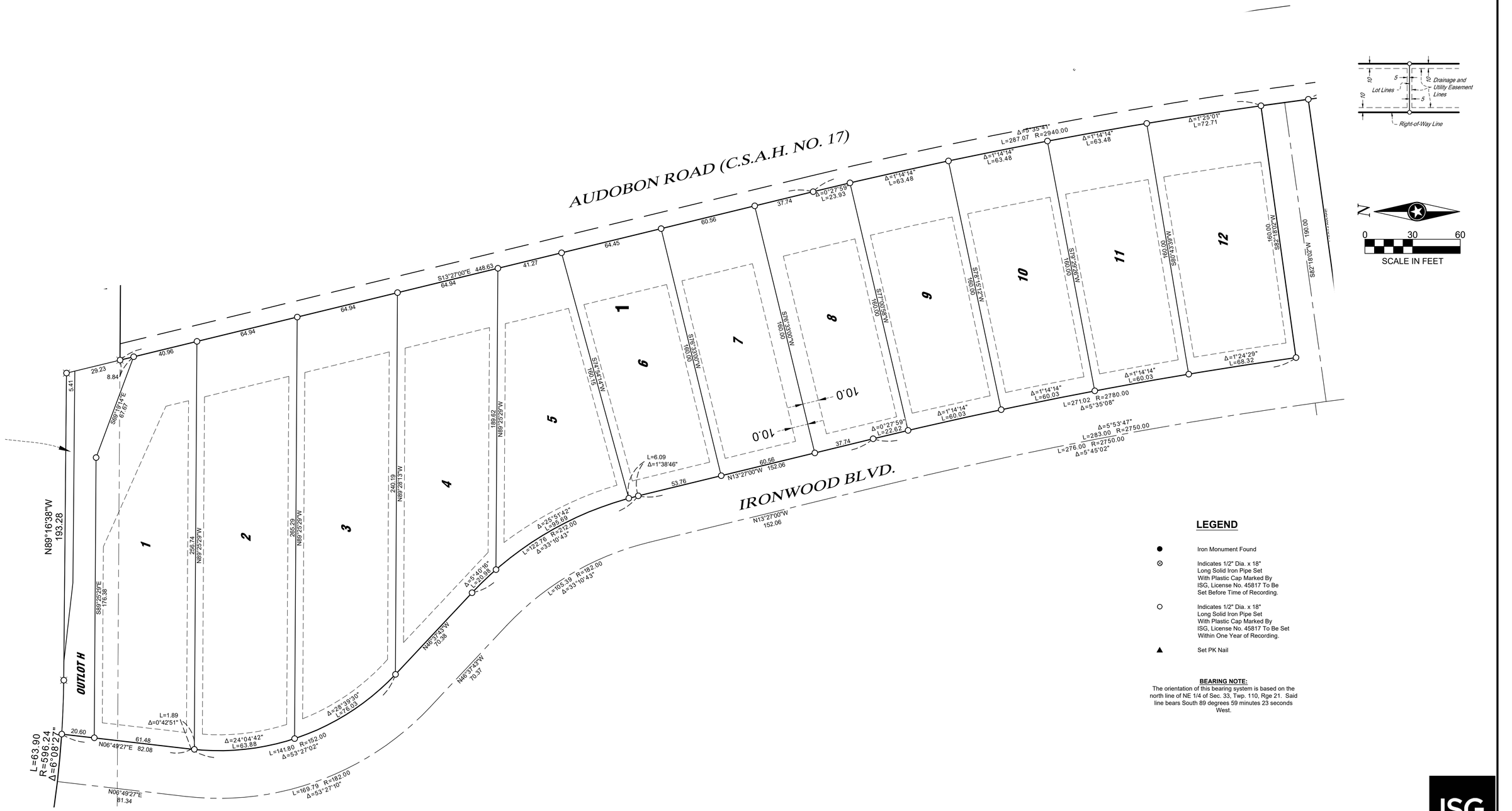
ISG

JOB # xx DATE: xx

SHEET 2 OF 6 SHEETS

RESERVE AT AUTUMN WOODS

PLAT FILE NO.
C.R. DOC. NO.



LEGEND

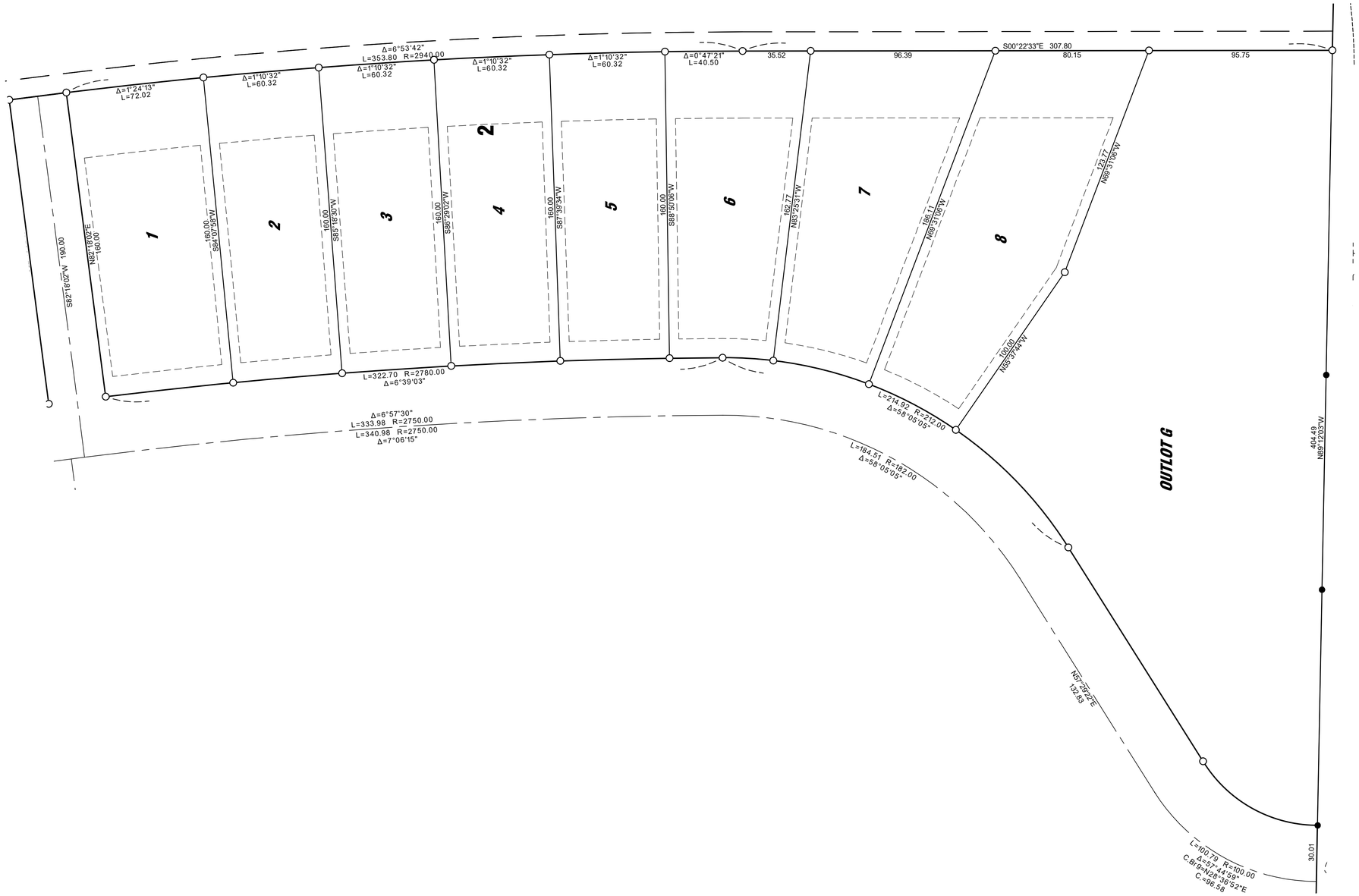
- ● Iron Monument Found
- ⊗ Indicates 1/2" Dia. x 18" Long Solid Iron Pipe Set With Plastic Cap Marked By ISG, License No. 45817 To Be Set Before Time of Recording.
- ○ Indicates 1/2" Dia. x 18" Long Solid Iron Pipe Set With Plastic Cap Marked By ISG, License No. 45817 To Be Set Within One Year of Recording.
- ▲ Set PK Nail

BEARING NOTE:
The orientation of this bearing system is based on the north line of NE 1/4 of Sec. 33, Twp. 110, Rge 21. Said line bears South 89 degrees 59 minutes 23 seconds West.

ISG

RESERVE AT AUTUMN WOODS

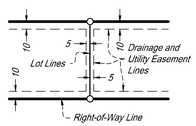
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BEARING NOTE:
The orientation of this bearing system is based on the north line of NE 1/4 of Sec. 33, Twp. 110, Rge 21. Said line bears South 89 degrees 59 minutes 23 seconds West.



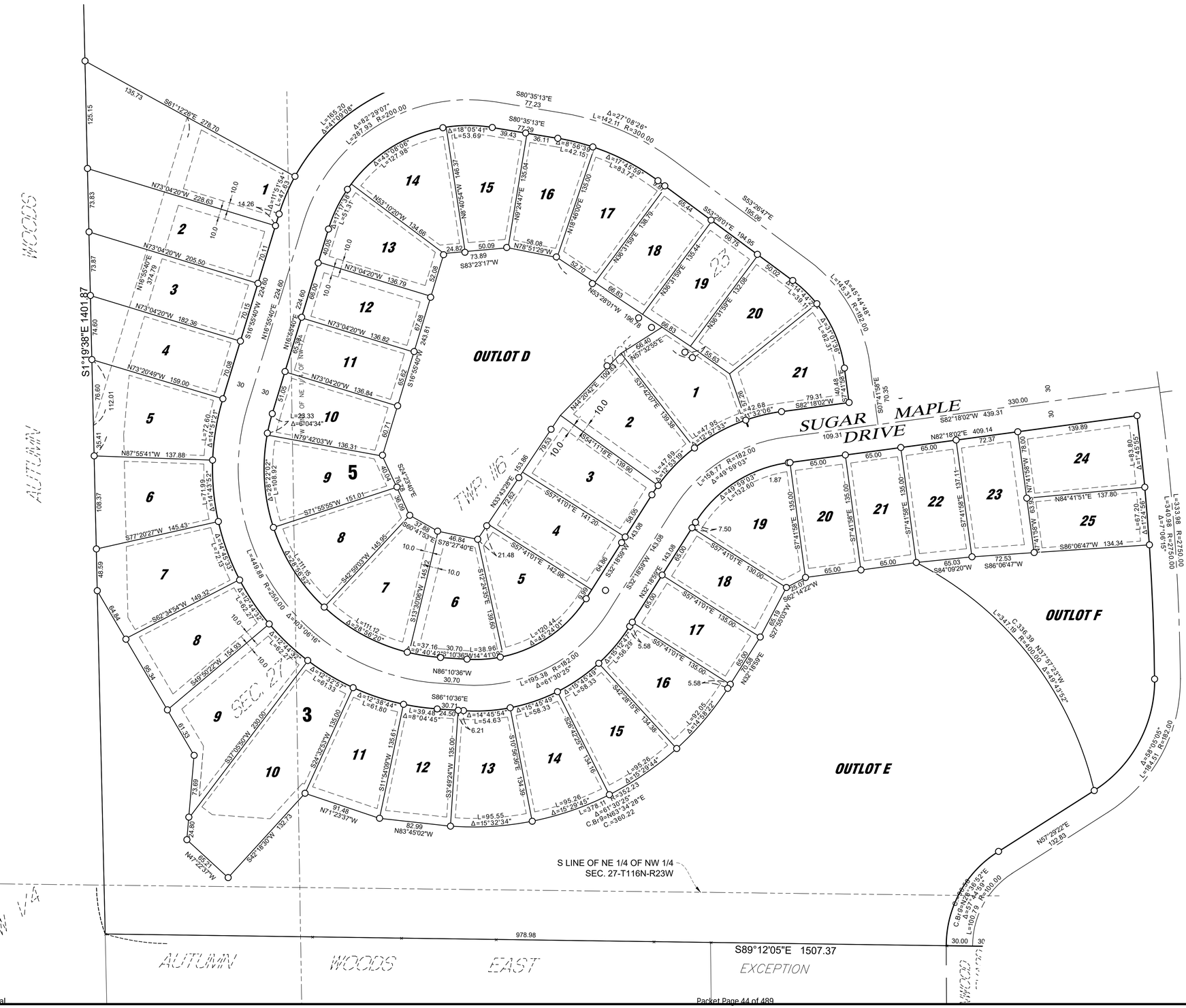


ISG

SHEET 4 OF 6 SHEETS

RESERVE AT AUTUMN WOODS

PLAT FILE NO.
C.R. DOC. NO.


S1°19'38"E 1401.87
S61°12'26"E 278.70
135.73
125.15
N73°04'20"W 228.63
14.26
10.0
73.83
N73°04'20"W 205.50
70.17
73.87
N16°55'40"E 374.78
N73°04'20"W 182.36
70.15
S16°55'40"W 224.60
N16°55'40"E 224.60
74.60
N73°20'49"W 159.00
70.08
76.60
112.01
N87°55'41"W 137.88
35.41
108.37
S77°20'27"W 145.43
48.59
S62°34'54"W 149.32
64.84
S9°50'22"W 154.93
85.34
S7°05'30"W 200.00
61.33
73.69
24.80
N41°22'37"W 65.21
S42°18'39"W 132.73
N71°23'37"W 91.48
N83°45'02"W 82.99
S24°23'40"E 76.98
S71°55'55"W 151.01
S62°59'03"W 145.86
S13°30'05"W 145.22
S17°24'35"E 139.60
S32°18'59"W 143.08
N32°18'59"E 143.08
S57°41'01"E 130.00
S57°41'01"E 135.00
S42°28'15"E 134.38
S26°42'25"E 134.16
S10°56'36"E 134.39
S3°49'24"W 135.00
S11°24'09"W 135.61
S24°29'53"W 135.00
N44°20'40"E 109.83
S37°42'01"E 139.98
S54°41'18"E 139.90
N33°43'28"E 153.86
S57°41'01"E 141.20
S32°18'59"W 143.08
N32°18'59"E 143.08
S57°41'01"E 135.00
S57°41'01"E 135.00
S57°41'58"E 135.00
S57°41'58"E 135.00
S57°41'58"E 137.11
S49°41'58"W 76.00
N84°41'51"E 137.80
S86°06'47"W 134.34
S84°09'20"W 65.03
S86°06'47"W 72.53
S62°14'22"W 65.00
S27°50'37"W 66.19
N32°18'59"E 65.00
N57°28'22"E 152.83
S89°12'05"E 1507.37
978.98
S82°18'02"W 439.31
330.00
N82°18'02"E 409.14
109.31
S82°18'02"W 79.31
S07°41'58"E 70.35
S53°28'01"E 184.95
S63°28'17"E 185.06
S80°35'13"E 77.23
S80°35'13"E 77.29
N78°51'29"W 58.08
N9°24'47"E 135.04
N16°46'00"E 135.00
N86°31'59"E 138.79
N86°31'59"E 135.44
N86°31'59"E 132.06
N57°24'55"E 66.40
N16°55'40"E 65.00
N73°04'20"W 136.79
N73°04'20"W 136.82
N73°04'20"W 136.84
N79°42'03"W 136.31
N86°10'36"W 30.70
S86°10'36"E 30.71
N83°10'20"W 134.66
N16°55'40"E 224.60
S16°55'40"W 224.60
S16°55'40"W 65.00
S16°55'40"W 67.68
S16°55'40"W 65.82
S16°55'40"W 65.82
S16°55'40"W 65.82

RESERVE AT AUTUMN WOODS

PLAT FILE NO.
C.R. DOC. NO.

AUTUMN WOODS

N LINE OF NE 1/4 OF NW 1/4
SEC. 27-T116N-R23W

N89°25'29"W 988.48
765.92
184.81

385.97

47.49 N56°11'49"W
S9.43 N31°49'35"W
61.07 N46°38'29"W
47.71 N31°38'53"W

30.89 N29°20'11"W

N79°58'42"W 306.31

N78°04'57"E 208.06

N31°28'28"E 230.04

S6°49'27"W 41.98

L=63.
R=596
Δ=6°08

37.75

40.14 S8°49'27"W

N06°49'27"E 81.34

L=78.71 Δ=21°16'21"

S75°33'06"W 34.94

L=169.19 Δ=53°27'10" R=182.00

122.10 S33°06'06"W

L=169.07 Δ=53°10'49"

N46°37'43"W 70.37

N46°37'43"W 73.37

L=105.19 Δ=33°10'43" R=182.00

S07°24'13"E 111.26

N43°22'17"E 135.00

L=22.52 Δ=8°29'17"

N51°51'34"E 104.81

L=69.50 Δ=24°41'26"

72.91 N46°37'44"W

2.53

N76°33'00"E 135.00

N13°27'00"W 152.06

N76°33'00"E 135.00

N76°33'00"E 134.90

L=24.21 Δ=0°30'36"

L=589.19 Δ=1°12'42"

N78°31'18"E 135.83

L=38.19 Δ=1°26'11"

N79°57'29"E 135.10

L=181.20 Δ=4°14'38"

L=276.00 R=2750.00 Δ=5°45'02"

L=283.00 R=2750.00

N11°24'07"W 64.89

S11°24'07"E 102.62

N11°24'07"W 65.94

N72°43'06"E 136.12

35.01 N11°24'07"W

N77°58'14"E 40.17

S82°18'02"W 134.83

S82°18'02"W 135.00

S07°41'58"E 70.35

S82°18'02"W 439.31

330.00

30

OUTLOT A

OUTLOT B

OUTLOT C

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

S61°12'26"E 276.70

L=165.20 Δ=41°09'58"

Δ=82°29'07" L=287.93 R=200.00

S80°35'13"E 77.23

Δ=27°08'26" L=142.11 R=300.00

S53°26'47"E 195.06

S54°19'40"E 370.10

S67°26'39"E 122.30

S80°35'13"E 332.51

110.86 95.38 65.30 60.97 20.91 65.86 65.73 65.73 74.63 98.30

S00°06'18"E 160.24

147.28 S89°53'55"E

135.00 S0°24'47"W

135.43 S11°25'56"W

136.48 S28°39'15"W

136.70 S38°31'59"W

137.69 S38°31'59"W

138.67 S38°31'59"W

Δ=14°49'24" L=59.51 R=230.00

Δ=14°38'41" L=58.79

Δ=29°28'05" L=118.29

65.30 N80°35'13"W 77.29

11.98 Δ=8°34'08" L=49.35

Δ=10°34'19" L=60.89

Δ=7°59'44" L=42.96

16.02 65.72

15.52

L=16.32 Δ=4°24'35"

Δ=65°53'15" L=34.79

Δ=15°53'17" L=58.19

Δ=9°54'53" L=35.45

Δ=45°44'48" L=145.31 R=182.00

5.29

47.49

N53°26'01"W 194.95

N40°50'04"E 140.84

160.88 S59°49'49"W

L=10.27

L=69.50

L=38.19

L=181.20

L=24.21

L=589.19

L=283.00

L=276.00

L=105.19

L=169.19

L=69.50

L=78.71

L=10.27

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA, MINNESOTA

CONSTRUCTION PLANS

ISG PROJECT # 21-24984

PRELIMINARY NOT FOR CONSTRUCTION

LEGEND

EXISTING

- CITY LIMITS
- SECTION LINE
- QUARTER SECTION LINE
- RIGHT OF WAY LINE
- PROPERTY / LOTLINE
- EASEMENT LINE
- ACCESS CONTROL
- WATER EDGE
- WETLAND BOUNDARY
- WETLAND / MARSH
- FENCE LINE
- CULVERT
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER FORCEMAIN
- WATER
- GAS
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- UNDERGROUND TV
- OVERHEAD UTILITY
- UNDERGROUND UTILITY
- UNDERGROUND FIBER OPTIC
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE LINE
- MANHOLE/STRUCTURE
- CATCH BASIN
- HYDRANT
- VALVE
- CURB STOP
- POWER POLE
- UTILITY PEDESTAL / CABINET

PROPOSED

- LOT LINE
- RIGHT OF WAY
- EASEMENT
- CULVERT
- STORM SEWER
- STORM SEWER (PIPE WIDTH)
- SANITARY SEWER
- SANITARY SEWER (PIPE WIDTH)
- WATER
- GAS
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TV
- CONTOUR
- MANHOLE (STORM, SANITARY)
- CATCH BASIN
- HYDRANT
- VALVE



LOCATION MAP

SCALE IN FEET

0 500 1000

ABBREVIATIONS:

AC	ACRE	CMP	CORRUGATED METAL PIPE	FDN	FOUNDATION	HR	HOUR	MB	MAIL BOX	PVC	POLYVINYL CHLORIDE	TEL	TELEPHONE
ADA	AMERICANS WITH DISABILITIES ACT	CO	CLEANOUT	FFE	FINISHED FLOOR ELEVATION	HWL	HIGH WATER LEVEL	MECH	MECHANICAL	PVMT	PAVEMENT	TEMP	TEMPORARY
ADD	ADDENDUM	CONC	CONCRETE	FPM	FEET PER MINUTE	HWY	HIGHWAY	MH	MANHOLE	QTY	QUANTITY	THRU	THROUGH
AFF	ABOVE FINISHED FLOOR	CONST	CONSTRUCTION	FPS	FEET PER SECOND	HYD	HYDRANT	MIN	MINIMUM	RAD	RADIUS	TNFH	TOP NUT OF FIRE HYDRANT
AGG	AGGREGATE	CONT	CONTINUOUS	FT	FOOT, FEET	I	INVERT	MISC	MISCELLANEOUS	RCP	REINFORCED CONCRETE PIPE	TRANS	TRANSFORMER
APPROX	APPROXIMATE	CY	CUBIC YARD	FTG	FOOTING	ID	INSIDE DIAMETER	NO	NUMBER	RD	ROOF DRAIN	TV	TELEVISION
ARCH	ARCHITECT, ARCHITECTURAL	C&G	CURB AND GUTTER	GA	GAUGE	IN	INCH	NTS	NOT TO SCALE	REBAR	REINFORCING BAR	T/W	TOP OF WALL
BFE	BASEMENT FLOOR ELEVATION	DEMO	DEMOLITION	GAL	GALLON	INV	INVERT	NWL	NORMAL WATER LEVEL	REM	REMOVE	TYP	TYPICAL
BIT	BITUMINOUS	DIA	DIAMETER	GALV	GALVANIZED	IP	IRON PIPE	OC	ON CENTER	ROW	RIGHT OF WAY	UT	UTILITY, UNDERGROUND
CAD	COMPUTER-AIDED DESIGN	DIM	DIMENSION	GC	GENERAL CONTRACTOR	IPS	IRON PIPE SIZE	OCEW	ON CENTER EACH WAY	R/W	RIGHT OF WAY		TELEPHONE
CB	CATCH BASIN	DS	DOWNSPOUT	GFE	GARAGE FLOOR ELEVATION	J-BOX	JUNCTION BOX	OH	OVERHEAD	SAN	SANITARY	VCP	VITRIFIED CLAY PIPE
CFS	CUBIC FEET PER SECOND	EA	EACH	GL	GUTTER LINE	JT	JOINT	OHD	OVERHEAD DOOR	SCH	SCHEDULE	W/O	WITHOUT
CF	CUBIC FOOT	ELEC	ELECTRICAL	GPM	GALLONS PER MINUTE	LF	LINEAR FEET	OZ	OUNCE	SF	SQUARE FOOT	W/	WITH
CI	CAST IRON	ELEV	ELEVATION	GV	GATE VALVE	LIN	LINEAR	PED	PEDESTAL, PEDESTRIAN	SPEC	SPECIFICATION	YD	YARD
CIP	CAST IRON PIPE	EOF	EMERGENCY OVERFLOW	HDPE	HIGH DENSITY POLYETHYLENE	LPS	LOW PRESSURE STEAM	PERF	PERFORATED	SQ	SQUARE	YR	YEAR
CIPC	CAST IN PLACE CONCRETE	EQ	EQUAL	HD	HEAVY DUTY	LS	LUMP SUM	PL	PROPERTY LINE	STA	STATION		
CJ	CONTROL JOINT	EX	EXISTING	HH	HANDHOLE	LSO	LOWEST STRUCTURAL OPENING	PP	POLYPROPYLENE	SY	SQUARE YARD		
CL	CENTERLINE	FDC	FIRE DEPARTMENT CONNECTION	HORIZ	HORIZONTAL	MAX	MAXIMUM	PSI	POUNDS PER SQUARE INCH	T/C	TOP OF CURB		

SHEET INDEX

1	TITLE SHEET GENERAL INFORMATION
2	SOILS AND CONSTRUCTION NOTES
3-5	UTILITY SCHEDULES
6	TYPICAL STREET SECTIONS AND DETAILS
7-11	TYPICAL DETAILS
13-14	STORM WATER BASIN DETAILS
15	RETAINING WALL FENCE PLAN AND DETAILS
16-21	PEDESTRIAN CURB DETAILS
22	FINAL PLAT (OVERALL)
23-31	SWPPP
32	EXISTING SITE AND REMOVAL PLAN
33	UTILITY PLAN (OVERALL)
34	HYDRANT COVERAGE MAP
35-46	PLANNED STREET AND UTILITY CONSTRUCTION
47-53	PLANNED STORM CONSTRUCTION
54-56	STORM DRAIN DETAILS
57-61	GRADING PLANS
62-63	DETAILED GRADING (INTERSECTIONS)
64	WETLAND BUFFER AND SIGNAGE
65-68	LANDSCAPE AND RESTORATION PLANS
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THIS PLAN SET CONTAINS 76 TOTAL SHEETS

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS AND CLARIFICATIONS ISSUED BY THE ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "GOPHER STATE ONE CALL" FOR UTILITY LOCATIONS, MINIMUM 2 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (1-800-252-1166).

PROJECT INDEX:

OWNER:

LENNAR
16305 36TH AVENUE NORTH
PLYMOUTH, MN 55446

PROJECT ADDRESS / LOCATION:

SECTION 27 / TWP. 116 / RGE. 23

CARVER COUNTY MN

CHASKA, MINNESOTA

MANAGING OFFICE:

BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

PROJECT MANAGER: JERREMY FOSS
EMAIL: JERREMY.FOSS@ISGINC.COM

SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF CHASKA REQUIREMENTS AND MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2018 EDITION, AND THE STANDARD SPECIFICATIONS FOR SANITARY SEWER, STORM DRAIN AND WATERMAIN AS PROPOSED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA 2013, UNLESS DIRECTED OTHERWISE.

PROJECT DATUM

HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), 1996 ADJUSTMENT (NAD83(1996)) ON THE CARVER COUNTY COORDINATE SYSTEM, IN U.S. SURVEY FEET.
ELEVATIONS HAVE BEEN REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
RTK GPS METHODS WERE USED TO ESTABLISH HORIZONTAL AND VERTICAL COORDINATES FOR THIS PROJECT.

B.M. ELEVATION=954.44
TNFH SE INTERSECTION AUTUMN WOODS DR AND AUDUBON ROAD

B.M. ELEVATION=940.33
WEST SIDE AUDUBON ROAD, APPROX. 500' NORTH INTERSCTION WITH BUTTERNUT DRIVE

TOPOGRAPHIC SURVEY

THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN MARCH - APRIL 2021 BY ISG, INC.

NOTE:
THE CLARITY OF THESE PLANS DEPEND UPON COLOR COPIES. IF THIS TEXT DOES NOT APPEAR IN COLOR, THIS IS NOT AN ORIGINAL PLAN SET AND MAY RESULT IN MISINTERPRETATION.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TITLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TITLE SHEET GENERAL INFORMATION

SHEET

1 OF 76

PLOT DATE: 10/14/2021 9:51 AM

SOIL AND CONSTRUCTION NOTES

1. TOP OF THE GRADING GRADE: THE TOP OF GRADING GRADE FOR THIS PROJECT IS DEFINED AS THE BOTTOM OF THE AGGREGATE BASE.

2. SUITABLE GRADING MATERIAL: ON THIS PROJECT SUITABLE GRADING MATERIAL SHALL INCLUDE ALL MINERAL SOILS IN ACCORDANCE WITH THE TRIAXIAL CHART IN THE MnDOT GRADING AND BASE MANUAL, EXCEPT SILT. UNSUITABLE MATERIALS SHALL INCLUDE DEBRIS, MARL, PEAT, WOOD, OR ANY OTHER ORGANIC SOILS. SELECT GRADING MATERIAL SHOULD BE RESERVED FOR EMBANKMENT PLACEMENT WITHIN THE ROADWAY CORE.

3. STRIP ALL INPLACE TOPSOIL AND SLOPE DRESSING IN AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS SLOPE DRESSING. INPLACE TOPSOIL AND SLOPE DRESSING, ENCOUNTERED IN THE AREAS OF PROPOSED CONSTRUCTION.

4. PROVIDE A SAWCUT WHERE PLACING NEW PAVEMENT NEXT TO INPLACE PAVEMENT TO ENSURE A UNIFORM JOINT. THE CONTRACTOR SHALL SAWCUT THE EXISTING BITUMINOUS PAVEMENT AT ALL LOCATIONS WHERE THE NEW PAVEMENT MATCHES IN PLACE PAVEMENT, PROVIDING A CLEAN STRAIGHT EDGE. PRIOR TO PAVING THE WEAR COURSE, THE CONTRACTOR SHALL MILL THE EDGE OF ADJACENT PAVEMENTS TO PROVIDE FULL DEPTH OF THE WEAR COURSE TO THE EDGE. SAW CUTTING AND MILLING OF THE EDGES OF THE EXISTING PAVEMENTS AT THE CONSTRUCTION LIMITS SHALL BE INCIDENTAL TO PAVING. THE CONTRACTOR SHALL ALSO BE REQUIRED TO CLEAN THE UNDERLYING PAVEMENT SURFACE PRIOR TO PAVING THE WEAR COURSE. A WATER TRUCK AND PICK-UP STREET SWEEPER WILL BE REQUIRED FOR THIS WORK TO MINIMIZE DUST AND DIRT IMPACTS ON ADJACENT RESIDENCES.

5. BITUMINOUS AND CONCRETE ITEMS DISTURBED BY CONSTRUCTION AND EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE RECYCLED TO THE EXTENT ALLOWED IN BASE AND SURFACING ITEMS OR DISPOSED OF OFF THE PROJECT LIMITS IN ACCORDANCE WITH MnDOT SPECIFICATION SPEC. 2104.3C3.

6. OBTAIN COMPACTION ON THE GRADING PORTION OF PERMANENT CONSTRUCTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND IF IT ISNT SPECIFICALLY OUTLINED THEN FOLLOW THE "QUALITY COMPACTION METHOD" REQUIREMENTS.

7. OBTAIN COMPACTION ON THE MnDOT CLASS 5 PORTION OF THE PAVEMENT SECTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND CITY OF CHASKA.

8. TEST ROLLING SHALL BE REQUIRED ON ALL ROADWAYS WITH A LOADED TRI-AXLE DUMP TRUCK AT THE BOTTOM OF THE SUBGRADE AND THE TOP OF THE AGGREGATE BASE.

9. IN ANY PROPOSED CONSTRUCTION THE CONTRACTOR SHALL STRIVE TO SUBSTANTIALLY MATCH THE SOILS INPLACE IN THE TOP 4' OF THE ROADWAYS. GRANULAR BACKFILL SHALL NOT BE PERMITTED ADJACENT TO INPLACE NON-GRANULAR SOILS IN ORDER TO PREVENT AN ABRUPT SOILS DIFFERENTIAL.

10. THE BOTTOM OF ALL SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD".

11. IN ANY CASE WHERE GRANULAR EMBANKMENTS OR BACKFILL JOIN NON-GRANULAR SOIL EMBANKMENTS OR BACKFILL, PROVIDE A 1(V):20(H) TRANSITION TAPER BETWEEN THE CHANGES IN MATERIAL TO PREVENT AN ABRUPT SOILS DIFFERENTIAL. THE 1(V):20(H) TAPER SHALL BE CONSTRUCTED SO THAT THE GRANULAR BACKFILL MATERIAL OVERLAYS THE ADJACENT NON-GRANULAR SOILS BACKFILL.

12. WHERE CONNECTING NEW SURFACING ADJACENT TO ANY INPLACE PAVEMENTS TO BE WIDENED, CUT VERTICALLY TO THE BOTTOM OF THE INPLACE SURFACING OR TO THE BOTTOM OF THE NEW SURFACING DESIGN, WHICH EVER IS DEEPER, THEN AT A 2(V):1(H) SLOPE TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION.

13. WHERE SUBCUTS RUN INTO DRIVEWAYS OR LOCAL ROADS, CUT VERTICALLY TO THE BOTTOM OF THE INPLACE SURFACING OR TO THE BOTTOM OF THE NEW SURFACING DESIGN, WHICHEVER IS DEEPER, THEN AT A 1(V):4(H) TAPER TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION.

14. THE CONTRACTOR IS HEREBY REMINDED OF THEIR RESPONSIBILITY UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THIS AREA. CONTACT MUST BE MADE THROUGH GOPHER STATE ONE-CALL.

15. SLOPE DRESSING ON THIS PROJECT IS DEFINED AS THE TOPSOIL OR OTHER SOIL PLACED DURING CONSTRUCTION TO PROVIDE A MEDIUM FOR ESTABLISHING TURF.

16. ANY DEBRIS WHICH MAY BE ENCOUNTERED DURING GRADING SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT RIGHT OF WAY IN A SUITABLE DISPOSAL AREA.

17. EXTREME CARE SHALL BE TAKEN SO THAT ALL EXISTING TREES LOCATED WITHIN & ADJACENT TO THE CONSTRUCTION AREAS ARE NOT REMOVED OR DAMAGED, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL CONTACT THE OWNER WITH ANY POTENTIAL CONFLICTS.

18. UNLESS OTHERWISE RECOMMENDED, PROVIDE FOR ALL SUBCUTS AND BACKFILL ACCORDINGLY THROUGHOUT THE ENTIRE PROJECT AS DEFINED ON THE GRADING PLANS.

19. PROVIDE 1(V):20(H) TAPERS WHEN CHANGING SUBCUT DEPTHS.

20. PIPE SEWERS CONNECTING MANHOLES AND CATCH BASINS SHALL BE IN ACCORDANCE WITH MNDOT SPEC. 2503 AND CITY OF CHASKAS REQUIREMENTS. BEDDING AND BACKFILL SHALL CONSIST OF UNIFORM SUITABLE GRADING MATERIAL MATCHING ADJACENT SOILS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

21. NO EXTRA PAYMENT WILL BE MADE FOR TEMPORARY STOCKPILING OF EXCAVATION, EMBANKMENT AND/OR BORROW MATERIAL.

22. CONSTRUCTION ACTIVITY SHALL BE PERFORMED IN SUCH A MANNER THAT ACCESS IS MAINTAINED TO ALL RESIDENCES. WHERE CONSTRUCTION OPERATIONS REQUIRE CLOSURE OF ACCESS TO SITE OR SURROUNDING PROPERTIES, CONTRACTOR SHALL COORDINATE WITH SAID PROPERTY OWNER AT LEAST 24 HOURS BEFORE THE ANTICIPATED ACCESS INTERRUPTION AND ALL ACCESS SHALL BE AT LEAST TEMPORARILY RESTORED EACH NIGHT BEFORE THE END OF THE WORK DAY. NO PROPERTY OWNER SHALL BE LEFT WITHOUT ADEQUATE ACCESS OVERNIGHT OR OVER THE WEEKEND. EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED AS WELL.

23. AS SHOWN ON THE PLANS, VARIOUS UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS. THERE ARE ADDITIONAL UTILITIES THAT MAY EXIST AND ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR ACTIVITIES WITH THE AFFECTED UTILITY COMPANIES AND/OR ADJACENT PROPERTY OWNERS AND WILL BE RESPONSIBLE FOR VERIFICATION AND PROTECTION OF ALL UTILITIES IN THEIR EXISTING LOCATION (POWER POLES, PEDESTALS, ETC.). THE CONTRACTOR SHALL COORDINATE WITH THE PRIVATE UTILITIES AND/OR ADJACENT PROPERTY OWNERS TO ARRANGE SUPPORTING/RELOCATE AND/OR REPAIRS TO ALL FACILITIES AS NEEDED FOR ALL UTILITY AND STREET IMPROVEMENTS. THE OWNER SHALL NOT INCUR ADDITIONAL COSTS IF THE LOCATIONS OF UTILITIES ARE NOT SHOWN ON THE PLANS FOR FOR DELAYS IN CONSTRUCTION CAUSED FROM CONFLICTS WITH PRIVATE UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH CARVER COUNTY, THE CITY OF CHASKAS, AND ALL UTILITY COMPANIES FOR ANY NECESSARY REMOVAL AND RELOCATION OF THEIR FACILITIES. THE CONTRACTOR SHALL PERFORM GRADING OPERATIONS AROUND ALL OVERHEAD ELECTRIC POWER POLES AND GUY WIRES. COORDINATE WITH LOCAL ELECTRIC COMPANY.

24. STORAGE AREAS ARE ONLY FOR NEW MATERIALS TO BE INCORPORATED INTO THE WORK OR MATERIALS SALVAGED FROM THE PROJECT THAT ARE TO BE REINSTALLED AS PART OF THE PROJECT. CONTRACTOR WILL NOT BE ALLOWED TO STORE PROJECT REMOVAL ITEMS (SUCH AS CONCRETE PAVEMENTS, SIDEWALKS, OLD MANHOLE STRUCTURES, ETC.) FOR LATER DISPOSAL. THOSE TYPES OF MATERIALS SHALL BE REMOVED FROM THE PROJECT AREA ON THE DAY THAT IT IS REMOVED FROM ITS EXISTING LOCATION,. THE CONTRACTOR SHALL ERECT A TEMPORARY BARRIER SYSTEM TO PREVENT THE GENERAL PUBLIC FROM ACCESSING THE STORAGE AREA. THE BARRIER SYSTEM SHALL BE APPROVED BY THE ENGINEER AND ERECTED PRIOR TO STORING MATERIALS. THE STORAGE AREAS SHALL BE RESTORED TO EXISTING OR BETTER QUALITY PRIOR TO PROJECT ACCEPTANCE. ALL COSTS INCURRED BY THE CONTRACTOR TO PROVIDE, MAINTAIN AND REMOVE THE TEMPORARY BARRIER SYSTEM AND RESTORE THE STORAGE AREA ARE INCIDENTAL TO THE PROJECT.

25. CONCRETE WASHOUT SHALL BE IN ACCORDANCE WITH MnDOT SPECIFICATION 1717 AND AS MAY BE MODIFIED IN THE SPECIAL PROVISIONS. ALL MATERIALS AND WORK NECESSARY TO CONSTRUCT AND MAINTAIN THE CONCRETE WASHOUT AREA SHALL BE INCIDENTAL TO CONCRETE PAY ITEMS.

26. ANY DISTURBED PROPERTY PINS SHALL BE REPLACED AND RESET AT NO COST TO THE OWNER.

27. ALL CURB RAMPS & SIDEWALKS SHALL CONFORM TO THE LATEST ADA REQUIREMENTS.

28. UTILITY TRENCHES SHALL BE COMPACTED BY THE METHODS LISTED IN THE GEOTECHNICAL REPORT. IF MEANS ARE NOT SPECIFIED THEN FOLLOW THE THE "QUALITY COMPACTION METHOD" PER MnDOT SPECIFICATIONS.

29. THE REMOVAL OF BITUMINOUS/CONCRETE PAVEMENT SHALL INCLUDE ALL NECESSARY SAWCUTS AS INCIDENTAL.

30. ALL FIELD TILES CROSSING THE EXISTING AND/OR NEW RIGHT OF WAY SHALL BE PROTECTED AT ALL TIMES. TILE LINES MARKED ON THIS PLAN AND ANY LOCATED DURING CONSTRUCTION OPERATIONS SHALL BE VERIFIED TO BE IN WORKING ORDER AT THE COMPLETION OF MASS EARTHWORK AND AGGREGATE PLACEMENT OPERATIONS. INSPECTION, DOCUMENTATION AND REPAIR/REPLACEMENT OF TILE LINES, IF NECESSARY DUE TO THE NEGLIGENCE OF THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

31. THE CONTRACTOR SHALL INSTALL TEMPORARY MAIL BOXES AND SUPPORTS AT LOCATIONS DESIGNATED BY THE POST MASTER DURING CONSTRUCTION OPERATIONS, INCIDENTAL.

32. IT IS SUSPECTED THAT UNKNOWN TILES ARE LOCATED WITHIN THE EXCAVATION AREA. SHOULD A TILE BE BROKEN DURING EXCAVATION ACTIVITES AND DETERMINED TO BE A LIVE TILE, THE CONTRACTOR SHALL FURNISH AND UTILIZE THE SAME OR SIMILAR MATERIAL AS THE BROKEN PIPE TO RECONNECT THE BROKEN TILE. WHERE THE NEW PIPING AND EXISTING PIPE ARE OF DIFFERENT SIZES AND/OR MATERIALS, THE CONTRACTOR SHALL FURNISH AND INSTALL ECCENTRIC FITTINGS OR "FERNCOS" TO PROVIDE A CONSTANT FLOW LINE ELEVATION AND WATERTIGHT CONNECTION.

ISG

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 NOTES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

SOILS AND CONSTRUCTION NOTES

SHEET

2

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/8/2021 7:22 AM

SANITARY SEWER STRUCTURE SCHEDULE

STRUCTURE NO.	ALIGNMENT	STATION	LOCATION	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
S-1	IRONWOOD BLVD	1+54	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	28.48	933.01	904.53	SP-1
S-2	IRONWOOD BLVD	2+15	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	14.24	934.84	920.60	SP-2
S-3	IRONWOOD BLVD	4+02	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.10	933.73	921.63	SP-3
S-4	IRONWOOD BLVD	5+11	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.53	935.60	923.07	SP-4
S-5	IRONWOOD BLVD	6+32	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	14.26	938.94	924.69	SP-5
S-6	IRONWOOD BLVD	8+98	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.11	945.01	926.90	SP-6
S-7	IRONWOOD BLVD	11+98	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	17.07	948.40	931.33	SP-7
S-8	IRONWOOD BLVD	13+92	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	19.51	952.01	932.50	SP-8
S-9	IRONWOOD BLVD	15+41	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	20.41	953.75	933.34	SP-9
S-10	IRONWOOD BLVD	16+21	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	16.65	950.50	933.84	SP-10
S-11	IRONWOOD BLVD	17+15	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	11.99	946.40	934.41	SP-11
S-12	SUGAR MAPLE DR	22+55	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	14.39	942.27	927.88	SP-12
S-13	SUGAR MAPLE DR	24+30	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	14.82	943.57	928.75	SP-13
S-14	SUGAR MAPLE DR	25+46	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	15.07	944.50	929.43	SP-14
S-15	SUGAR MAPLE DR	26+60	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	13.87	943.96	930.09	SP-15
S-16	SUGAR MAPLE DR	28+58	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICKHOLES	13.02	944.20	931.18	SP-16
S-17	SUGAR MAPLE DR	29+21	0' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICKHOLES	12.18	943.67	931.49	SP-17
S-18	SUGAR MAPLE DR	29+84	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICKHOLES	11.47	943.28	931.81	SP-18
S-19	SUGAR MAPLE DR	31+02	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	11.63	944.12	932.49	SP-19
S-20	SUGAR MAPLE DR	32+07	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.08	945.20	933.11	SP-20
S-21	SUGAR MAPLE DR	33+08	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.51	946.22	933.71	SP-21
S-22	SUGAR MAPLE DR	34+04	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.91	947.20	934.29	SP-22
S-23	SUGAR MAPLE DR	34+96	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	13.29	948.14	934.85	SP-23
S-24	SUGAR MAPLE DR	37+68	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	11.62	947.93	936.31	SP-24
S-25	SUGAR MAPLE DR	38+54	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.48	950.39	937.91	SP-25
S-26	SUGAR MAPLE DR	39+21	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	13.01	952.01	939.00	SP-26
S-27	SUGAR MAPLE DR	39+93	0' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	11.70	951.62	939.92	SP-27
S-28	SUGAR MAPLE DR	41+65	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.11	954.11	942.00	SP-28
S-29	SUGAR MAPLE DR	45+89	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	11.74	944.59	932.85	SP-29
S-30	SUGAR MAPLE DR	45+17	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	11.80	947.99	936.19	SP-30
S-31	SUGAR MAPLE DR	44+44	0' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.00	951.55	939.55	SP-31
S-32	SUGAR MAPLE DR	41+93	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.00	955.23	943.23	SP-32

SANITARY SEWER PIPE SCHEDULE

PIPE NO.	ALIGNMENT	STATION	LOCATION	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
SP-1	IRONWOOD BLVD	1+54' to 1+09'	0' to 0'	S-1	904.53	EX SP-1	904.30	8	PVC	C900	0.50%	45
SP-2	IRONWOOD BLVD	2+15' to 1+54'	0' to 0'	S-2	920.60	S-1	920.30	8	PVC	SDR-35	0.50%	60
SP-3	IRONWOOD BLVD	4+02' to 2+15'	0' to 0'	S-3	921.63	S-2	920.70	8	PVC	SDR-35	0.50%	187
SP-4	IRONWOOD BLVD	5+11' to 4+02'	0' to 0'	S-4	923.07	S-3	921.73	8	PVC	SDR-35	1.25%	107
SP-5	IRONWOOD BLVD	6+32' to 5+11'	0' to 0'	S-5	924.69	S-4	923.17	8	PVC	SDR-35	1.25%	121
SP-6	IRONWOOD BLVD	8+98' to 6+32'	0' to 0'	S-6	927.00	S-5	924.79	8	PVC	SDR-26	0.83%	266
SP-7	IRONWOOD BLVD	11+98' to 8+98'	0' to 0'	S-7	931.44	S-6	927.10	8	PVC	SDR-26	1.44%	300
SP-8	IRONWOOD BLVD	13+92' to 11+98'	0' to 0'	S-8	932.50	S-7	931.54	8	PVC	SDR-26	0.50%	193
SP-9	IRONWOOD BLVD	15+41' to 13+92'	0' to 0'	S-9	933.34	S-8	932.60	8	PVC	SDR-26	0.50%	149
SP-10	IRONWOOD BLVD	16+21' to 15+41'	0' to 0'	S-10	933.84	S-9	933.45	8	PVC	SDR-26	0.50%	79
SP-11	IRONWOOD BLVD	17+15' to 16+21'	0' to 0'	S-11	934.41	S-10	933.94	8	PVC	SDR-35	0.50%	94
SP-12	SUGAR MAPLE DR	22+55' to 21+00'	0' to 0'	S-12	927.88	S-6	927.10	8	PVC	SDR-26	0.50%	155
SP-13	SUGAR MAPLE DR	24+30' to 22+55'	0' to 0'	S-13	928.75	S-12	927.88	8	PVC	SDR-35	0.50%	175
SP-14	SUGAR MAPLE DR	25+46' to 24+30'	0' to 0'	S-14	929.43	S-13	928.85	8	PVC	SDR-35	0.50%	116
SP-15	SUGAR MAPLE DR	26+60' to 25+46'	0' to 0'	S-15	930.09	S-14	929.53	8	PVC	SDR-35	0.50%	112
SP-16	SUGAR MAPLE DR	28+58' to 26+60'	0' to 0'	S-16	931.18	S-15	930.19	8	PVC	SDR-35	0.50%	198
SP-17	SUGAR MAPLE DR	29+21' to 28+58'	0' L to 0'	S-17	931.49	S-16	931.18	8	PVC	SDR-35	0.50%	62
SP-18	SUGAR MAPLE DR	29+84' to 29+21'	0' to 0' L	S-18	931.81	S-17	931.49	8	PVC	SDR-35	0.50%	63
SP-19	SUGAR MAPLE DR	31+02' to 29+84'	0' to 0'	S-19	932.49	S-18	931.91	8	PVC	SDR-35	0.50%	117
SP-20	SUGAR MAPLE DR	32+07' to 31+02'	0' to 0'	S-20	933.11	S-19	932.59	8	PVC	SDR-35	0.50%	105
SP-21	SUGAR MAPLE DR	33+08' to 32+07'	0' to 0'	S-21	933.71	S-20	933.21	8	PVC	SDR-35	0.50%	100
SP-22	SUGAR MAPLE DR	34+04' to 33+08'	0' to 0'	S-22	934.29	S-21	933.81	8	PVC	SDR-35	0.50%	96
SP-23	SUGAR MAPLE DR	34+96' to 34+04'	0' to 0'	S-23	934.85	S-22	934.39	8	PVC	SDR-35	0.50%	92
SP-24	SUGAR MAPLE DR	37+68' to 34+96'	0' to 0'	S-24	936.31	S-23	934.95	8	PVC	SDR-35	0.50%	271
SP-25	SUGAR MAPLE DR	38+54' to 37+68'	0' to 0'	S-25	937.91	S-24	936.41	8	PVC	SDR-35	1.76%	85
SP-26	SUGAR MAPLE DR	39+21' to 38+54'	0' to 0'	S-26	939.00	S-25	938.01	8	PVC	SDR-35	1.47%	68
SP-27	SUGAR MAPLE DR	39+93' to 39+21'	0' L to 0'	S-27	939.92	S-26	939.10	8	PVC	SDR-35	1.16%	71
SP-28	SUGAR MAPLE DR	41+65' to 39+93'	0' to 0' L	S-28	942.00	S-27	940.02	8	PVC	SDR-35	1.15%	172
SP-29	SUGAR MAPLE DR	45+89' to 46+60'	0' to 0'	S-29	932.85	S-13	930.08	8	PVC	SDR-35	3.93%	70
SP-30	SUGAR MAPLE DR	45+17' to 45+89'	0' to 0'	S-30	936.19	S-29	932.95	8	PVC	SDR-35	4.49%	72
SP-31	SUGAR MAPLE DR	44+44' to 45+17'	0' R to 0'	S-31	939.55	S-30	936.29	8	PVC	SDR-35	4.52%	72
SP-32	SUGAR MAPLE DR	41+93' to 44+44'	0' to 0' R	S-32	943.23	S-31	939.65	8	PVC	SDR-35	1.43%	251

WATERMAIN SCHEDULE

ALIGNMENT	STATION	LOCATION	PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
IRONWOOD BLVD	1+01 TO 1+03	10' TO 10'	C900	1	8
IRONWOOD BLVD	1+04 TO 1+53	10' TO 10'	C900	48	8
IRONWOOD BLVD	2+15 TO 1+53	10' TO 10'	C900	55	8
IRONWOOD BLVD	4+02 TO 2+16	11' TO 10'	C900	185	8
IRONWOOD BLVD	4+54 TO 4+02	11' TO 11'	C900	54	8
IRONWOOD BLVD	4+90 TO 4+54	10' TO 11'	C900	38	8
IRONWOOD BLVD	4+90 TO 4+90	19' TO 23'	C900	4	6
IRONWOOD BLVD	4+90 TO 4+90	10' TO 18'	C900	7	6
IRONWOOD BLVD	5+12 TO 4+91	12' TO 10'	C900	23	8
IRONWOOD BLVD	5+73 TO 5+12	13' TO 12'	C900	64	8
IRONWOOD BLVD	6+33 TO 5+74	11' TO 13'	C900	59	8
IRONWOOD BLVD	8+68 TO 6+33	11' TO 11'	C900	237	8
IRONWOOD BLVD	8+69 TO 9+06	11' TO 11'	C900	37	8
IRONWOOD BLVD	9+06 TO 9+06	19' TO 22'	C900	4	6
IRONWOOD BLVD	9+06 TO 9+06	11' TO 18'	C900	7	6
IRONWOOD BLVD	9+07 TO 9+08	11' TO 11'	C900	1	8
IRONWOOD BLVD	9+09 TO 11+74	11' TO 10'	C900	266	8
IRONWOOD BLVD	11+74 TO 13+31	10' TO 10'	C900	157	8
IRONWOOD BLVD	13+32 TO 13+32	18' TO 23'	C900	5	6
IRONWOOD BLVD	13+32 TO 13+32	11' TO 17'	C900	6	6
IRONWOOD BLVD	13+32 TO 13+62	10' TO 12'	C900	32	8

** PIPE LENGTHS EXCLUDE ALL TEES, VALVES, AND FITTINGS

WATERMAIN SCHEDULE

ALIGNMENT	STATION	LOCATION	PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
IRONWOOD BLVD	13+63 TO 13+94	12' TO 10'	C900	33	8
IRONWOOD BLVD	13+94 TO 15+10	10' TO 12'	C900	117	8
IRONWOOD BLVD	15+10 TO 15+10	13' TO 18'	C900	5	6
IRONWOOD BLVD	15+10 TO 15+11	19' TO 23'	C900	4	6
IRONWOOD BLVD	15+41 TO 15+10	11' TO 12'	C900	29	8
IRONWOOD BLVD	16+21 TO 15+41	11' TO 11'	C900	74	8
IRONWOOD BLVD	16+97 TO 16+21	12' TO 11'	C900	72	8
IRONWOOD BLVD	16+97 TO 17+27	12' TO 13'	C900	30	8
IRONWOOD BLVD	17+28 TO 17+52	14' TO 39'	C900	35	8
IRONWOOD BLVD	17+70 TO 17+53	192' TO 40'	C900	152	8
IRONWOOD BLVD	17+70 TO 17+71	192' TO 192'	C900	1	6
IRONWOOD BLVD	17+72 TO 17+74	192' TO 191'	C900	2	6
SUGAR MAPLE DR	21+30 TO 20+90	10' TO 10'	C900	40	8
SUGAR MAPLE DR	24+19 TO 21+31	10' TO 10'	C900	288	8
SUGAR MAPLE DR	24+59 TO 46+49	10' TO -10'	C900	39	8
SUGAR MAPLE DR	25+66 TO 24+60	12' TO 10'	C900	107	8
SUGAR MAPLE DR	26+08 TO 25+66	11' TO 12'	C900	45	8
SUGAR MAPLE DR	26+64 TO 26+08	14' TO 11'	C900	59	8
SUGAR MAPLE DR	26+86 TO 26+64	11' TO 14'	C900	23	8
SUGAR MAPLE DR	27+06 TO 26+86	10' TO 11'	C900	20	8
SUGAR MAPLE DR	28+28 TO 27+06	10' TO 10'	C900	123	8

** PIPE LENGTHS EXCLUDE ALL TEES, VALVES, AND FITTINGS

WATERMAIN SCHEDULE

ALIGNMENT	STATION	LOCATION	PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
SUGAR MAPLE DR	28+29 TO 28+29	19' TO 23'	C900	4	6
SUGAR MAPLE DR	28+29 TO 28+29	11' TO 18'	C900	7	6
SUGAR MAPLE DR	28+55 TO 28+29	10' TO 10'	C900	25	8
SUGAR MAPLE DR	29+05 TO 28+55	12' TO 10'	C900	47	8
SUGAR MAPLE DR	29+39 TO 29+05	12' TO 12'	C900	31	8
SUGAR MAPLE DR	29+84 TO 29+39	10' TO 12'	C900	42	8
SUGAR MAPLE DR	31+01 TO 29+84	10' TO 10'	C900	112	8
SUGAR MAPLE DR	32+07 TO 31+02	11' TO 10'	C900	100	8
SUGAR MAPLE DR	32+37 TO 32+07	14' TO 11'	C900	28	8
SUGAR MAPLE DR	32+37 TO 32+38	18' TO 22'	C900	5	6
SUGAR MAPLE DR	32+38 TO 32+37	15' TO 17'	C900	2	6
SUGAR MAPLE DR	32+72 TO 32+38	14' TO 14'	C900	32	8
SUGAR MAPLE DR	33+08 TO 32+73	11' TO 14'	C900	33	8
SUGAR MAPLE DR	34+04 TO 33+08	11' TO 11'	C900	91	8
SUGAR MAPLE DR	34+97 TO 34+04	10' TO 11'	C900	88	8
SUGAR MAPLE DR	36+33 TO 34+97	11' TO 10'	C900	135	8
SUGAR MAPLE DR	36+34 TO 36+34	20' TO 23'	C900	3	6
SUGAR MAPLE DR	36+34 TO 36+34	12' TO 19'	C900	7	6
SUGAR MAPLE DR	36+42 TO 36+34	11' TO 11'	C900	8	8
SUGAR MAPLE DR	37+67 TO 36+43	10' TO 11'	C900	123	8
SUGAR MAPLE DR	37+68 TO 38+54	10' TO 10'	C900	81	8

** PIPE LENGTHS EXCLUDE ALL TEES, VALVES, AND FITTINGS

WATERMAIN SCHEDULE

ALIGNMENT	STATION	LOCATION	PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
SUGAR MAPLE DR	38+54 TO 38+92	10' TO 13'	C900	36	8
SUGAR MAPLE DR	38+93 TO 39+12	12' TO -11'	C900	29	8
SUGAR MAPLE DR	39+13 TO 39+27	-11' TO -11'	C900	14	8
SUGAR MAPLE DR	39+27 TO 39+27	-18' TO -22'	C900	4	6
SUGAR MAPLE DR	39+27 TO 39+27	-12' TO -17'	C900	6	6
SUGAR MAPLE DR	39+59 TO 39+28	-12' TO -11'	C900	33	8
SUGAR MAPLE DR	40+06 TO 39+59	-11' TO -12'	C900	49	8
SUGAR MAPLE DR	41+42 TO 40+06	-12' TO -11'	C900	139	8
SUGAR MAPLE DR	41+93 TO 41+43	-13' TO -12'	C900	53	8
SUGAR MAPLE DR	42+65 TO 41+93	-10' TO -13'	C900	74	8
SUGAR MAPLE DR	42+65 TO 42+65	-18' TO -23'	C900	4	6
SUGAR MAPLE DR	42+65 TO 42+65	-11' TO -17'	C900	6	6
SUGAR MAPLE DR	44+44 TO 42+66	-12' TO -10'	C900	178	8
SUGAR MAPLE DR	45+15 TO 44+44	-12' TO -12'	C900	75	8
SUGAR MAPLE DR	45+87 TO 45+15	-11' TO -12'	C900	76	8
SUGAR MAPLE DR	46+15 TO 45+88	-11' TO -11'	C900	28	8
SUGAR MAPLE DR	46+16 TO 46+16	-18' TO -22'	C900	4	6
SUGAR MAPLE DR	46+16 TO 46+16	-11' TO -17'	C900	6	6
SUGAR MAPLE DR	46+30 TO 46+16	-11' TO -11'	C900	13	8
SUGAR MAPLE DR	46+49 TO 46+31	-11' TO -11'	C900	18	8
AUTUMN WOODS DR	61+43 TO 61+42	-31' TO -31'	C900	1	8

** PIPE LENGTHS EXCLUDE ALL TEES, VALVES, AND FITTINGS

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 SCHEDULES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

SANITARY & WATERMAIN SCHEDULES

SHEET

3

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/19/2022 3:40 PM

STORM DRAIN STRUCTURE SCHEDULE

STRUCTURE NO.	ALIGNMENT	STATION	LOCATION	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	* TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
ST-1	IRONWOOD BLVD	3+96	42' L	MnDOT TYPE F	48 Ø	RC	NEENAH R-1642 CASTING "STORM SEWER" 2 CONCEALED PICK HOLES	6.22	934.50	928.28	P-1
ST-2	IRONWOOD BLVD	3+72	11' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	4.83	933.50	928.67	P-2
ST-2A	IRONWOOD BLVD	3+72	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	4.50	933.50	929.00	P-2A
ST-3	SUGAR MAPLE DR	22+70	17' L	MnDOT 4020	72 Ø	RC	NEENAH R-3067-VB	11.22	941.96	930.74	P-3
ST-3A	SUGAR MAPLE DR	22+70	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	4.06	941.96	937.90	P-3A
ST-4	IRONWOOD BLVD	8+83	16' L	MnDOT TYPE F	48 Ø	RC	NEENAH R-1642 CASTING "STORM SEWER" 2 CONCEALED PICK HOLES	4.69	944.05	939.36	P-4
ST-5	IRONWOOD BLVD	9+37	16' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	4.18	945.53	941.35	P-5
ST-5A	IRONWOOD BLVD	9+37	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	3.62	945.47	941.85	P-5A
ST-6	IRONWOOD BLVD	8+60	15' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	4.17	943.81	939.64	P-6
ST-6A	IRONWOOD BLVD	8+63	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	3.90	943.86	939.96	P-6A
ST-7	SUGAR MAPLE DR	24+72	17' L	MnDOT 4020	60 Ø	RC	NEENAH R-3067-V	8.86	943.65	934.79	P-7
ST-7A	SUGAR MAPLE DR	24+68	16' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	5.44	943.61	938.17	P-7A
ST-7B	SUGAR MAPLE DR	46+22	16' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	4.61	943.10	938.49	P-7B
ST-7C	SUGAR MAPLE DR	46+22	16' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	4.17	943.17	939.00	P-7C
ST-8	SUGAR MAPLE DR	25+37	17' L	MnDOT 4020	60 Ø	RC	NEENAH R-3067-V	8.95	944.18	935.23	P-8
ST-9	SUGAR MAPLE DR	26+48	17' L	MnDOT 4020	60 Ø	RC	NEENAH R-3067-V	7.91	943.73	935.82	P-9
ST-10	SUGAR MAPLE DR	26+87	16' L	MnDOT 4020	72 Ø	RC	NEENAH R-3067-VB	7.42	943.56	936.14	P-10
ST-11	SUGAR MAPLE DR	26+87	17' R	MnDOT 4020	48 Ø	RC	NEENAH R-3067-VB	7.00	943.56	936.56	P-11
ST-12	IRONWOOD BLVD	12+18	17' L	MnDOT 4020	48 Ø	RC	NEENAH R-3067-VB	11.87	948.07	936.20	P-12
ST-12A	IRONWOOD BLVD	12+12	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	5.51	948.06	942.55	P-12A
ST-13	AUDUBON BACKARD	59+47	0' L	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.36	946.70	943.34	P-13
ST-13A	AUDUBON BACKARD	61+22	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.00	947.25	944.25	P-13A
ST-14	IRONWOOD BLVD	15+61	165' L	MnDOT TYPE F	48 Ø	RC	NEENAH R-1642 CASTING "STORM SEWER" 2 CONCEALED PICK HOLES	8.25	941.62	933.36	P-14
ST-15	IRONWOOD BLVD	16+04	65' L	MnDOT TYPE F	48 Ø	RC	NEENAH R-1642 CASTING "STORM SEWER" 2 CONCEALED PICK HOLES	8.35	947.09	938.74	P-15
ST-16	IRONWOOD BLVD	17+46	16' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	5.28	945.38	940.10	P-16
ST-16A	IRONWOOD BLVD	17+47	16' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	5.10	945.60	940.50	P-16A
ST-16B	IRONWOOD BLVD	17+47	151' R	MnDOT TYPE F	48 Ø	RC	FRAME GRATE COVER	6.23	949.55	943.32	P-16B
ST-16C	IRONWOOD BLVD	17+26	216' R	MnDOT TYPE H	27 Ø	RC	FRAME GRATE COVER	3.00	947.00	944.00	P-16C
ST-17	SUGAR MAPLE DR	37+02	17' R	MnDOT 4020	48 Ø	RC	NEENAH R-3067-VB	10.83	947.05	936.22	P-17
ST-18	SUGAR MAPLE DR	37+02	17' L	MnDOT 4020	60 Ø	RC	NEENAH R-3067-VB	6.40	947.05	940.65	P-18
ST-18B	SUGAR MAPLE DR	37+27	155' L	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353	3.00	945.95	942.95	P-18B
ST-19	SUGAR MAPLE DR	37+93	16' L	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	6.16	948.16	942.00	P-19
ST-19A	SUGAR MAPLE DR	37+93	53' L	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	4.75	947.75	943.00	P-19A
ST-19B	SUGAR MAPLE DR	37+87	143' L	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.00	947.00	944.00	P-19B
ST-20	SUGAR MAPLE DR	38+75	16' L	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	5.34	950.84	945.50	P-20
ST-21	SUGAR MAPLE DR	40+26	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	4.67	951.17	946.50	P-21
ST-21A	SUGAR MAPLE DR	40+26	15' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	4.17	951.17	947.00	P-21A
ST-22	AUDUBON BACKARD	51+22	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.00	933.90	930.90	P-22
ST-23	AUDUBON BACKARD	52+84	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.34	936.32	932.99	P-23
ST-24	AUDUBON BACKARD	53+44	0'	MnDOT TYPE G	48 Ø	RC	NEENAH R-4353 BEEHIVE	3.84	938.35	934.51	P-24
ST-25	AUDUBON BACKARD	54+03	0'	MnDOT TYPE G	48 Ø	RC	NEENAH R-4353 BEEHIVE	3.77	939.80	936.03	P-25
ST-26	AUDUBON BACKARD	55+23	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.50	942.35	938.85	P-26
ST-27	RIGHT OUT	51+55	13' L	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-V	4.49	944.38	939.89	P-27
ST-28	AUDUBON BACKARD	56+96	1' L	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.31	944.20	940.89	P-28
ST-29	AUDUBON BACKARD	57+59	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.42	945.48	942.06	P-29
ST-30	AUDUBON BACKARD	58+23	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.50	946.74	943.24	P-30
ST-31	SUGAR MAPLE DR	31+09	16' L	MnDOT 4020	72 Ø	RC	NEENAH R-3067-V	10.02	943.91	933.89	P-31
ST-31A	SUGAR MAPLE DR	29+95	17' L	MnDOT 4020	48 Ø	RC	NEENAH R-3067-VB	4.92	942.98	938.06	P-31A
ST-31B	SUGAR MAPLE DR	29+95	15' R	CATCH BASIN (TYPE 1)	36 x 24	RC	NEENAH R-3067-VB	4.57	942.98	938.41	P-31B
ST-32	SUGAR MAPLE DR	32+13	16' L	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	6.21	944.96	938.75	P-32
ST-33	SUGAR MAPLE DR	32+68	16' L	MnDOT 4020	60 Ø	RC	NEENAH R-3067-V	6.05	945.52	939.47	P-33
ST-34	WEST-SOUTH BACKYARDS	77+19	0'	MnDOT 4020	60 Ø	RC	NEENAH R-4353 BEEHIVE	3.23	944.50	941.27	P-34
ST-35	WEST-SOUTH BACKYARDS	78+49	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.00	945.18	942.18	P-35
ST-36	WEST-SOUTH BACKYARDS	80+29	0'	MnDOT TYPE G	48 Ø	RC	NEENAH R-4353 BEEHIVE	4.00	947.50	943.50	P-36
ST-37	WEST-SOUTH BACKYARDS	81+31	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.43	947.45	944.02	P-37
ST-38	WEST-SOUTH BACKYARDS	82+01	0'	MnDOT TYPE H	27 Ø	RC	NEENAH R-4353 BEEHIVE	3.00	947.50	944.50	P-38
ST-41A	BASIN F OUTLET	0+88	0'	MnDOT 4020	60 Ø	RC	SKIMMER GRATE (SEE CITY DETAIL)	7.50	940.50	933.00	P-41A
ST-47	WETLAND D OUTLET	51+87	0'	MnDOT 4020	60 Ø	RC	SKIMMER GRATE (SEE CITY DETAIL)	4.50	933.00	928.50	P-47

* TOP OF CASTING ELEVATIONS ON CURB STYLE CATCH BASINS = TOP BACK OF CURB BOX, NOT GUTTER ELEVATION

HYDRANT SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE	BREAK ELEV
IRONWOOD BLVD	4+90	23	HYDRANT	5"x 8'-0"	BREAK ELEV=935.31
IRONWOOD BLVD	9+07	23	HYDRANT	5"x 8'-0"	BREAK ELEV=945.40
IRONWOOD BLVD	13+32	23	HYDRANT	5"x 8'-0"	BREAK ELEV=950.13
IRONWOOD BLVD	15+11	23	HYDRANT	5"x 8'-0"	BREAK ELEV=954.26
SUGAR MAPLE DR	28+29	23	HYDRANT	5"x 8'-0"	BREAK ELEV=944.52
SUGAR MAPLE DR	32+38	22	HYDRANT	5"x 8'-0"	BREAK ELEV=945.58
SUGAR MAPLE DR	36+34	23	HYDRANT	5"x 8'-0"	BREAK ELEV=948.02
SUGAR MAPLE DR	39+27	-22	HYDRANT	5"x 8'-0"	BREAK ELEV=952.12
SUGAR MAPLE DR	42+65	-23	HYDRANT	5"x 8'-0"	BREAK ELEV =957.18
SUGAR MAPLE DR	46+16	-22	HYDRANT	5"x 8'-0"	BREAK ELEV=943.59
AUTUMN WOODS DR	61+44	-26	HYDRANT	5"x 8'-0"	BREAK ELEV =954.78

VALVE SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE
IRONWOOD BLVD	1+03	10	GV & BOX	8"
IRONWOOD BLVD	4+90	18	GV & BOX	6"
IRONWOOD BLVD	8+69	11	GV & BOX	8"
IRONWOOD BLVD	9+06	18	GV & BOX	6"
IRONWOOD BLVD	13+32	18	GV & BOX	6"
IRONWOOD BLVD	15+10	18	GV & BOX	6"
SUGAR MAPLE DR	21+30	10	GV & BOX	8"
SUGAR MAPLE DR	24+60	10	GV & BOX	8"
SUGAR MAPLE DR	28+29	18	GV & BOX	6"
SUGAR MAPLE DR	32+37	17	GV & BOX	6"
SUGAR MAPLE DR	36+34	19	GV & BOX	6"
SUGAR MAPLE DR	36+42	11	GV & BOX	8"
SUGAR MAPLE DR	39+27	-18	GV & BOX	6"
SUGAR MAPLE DR	42+65	-18	GV & BOX	6"
SUGAR MAPLE DR	46+16	-18	GV & BOX	6"
SUGAR MAPLE DR	46+30	-11	GV & BOX	8"
AUTUMN WOODS DR	61+42	-31	GV & BOX	8"
AUTUMN WOODS DR	61+44	-29	GV & BOX	6"

WATERMAIN FITTING SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE	WEIGHT (LBS)
IRONWOOD BLVD	1+53	10	BEND	8"x22.5°	50
IRONWOOD BLVD	2+16	10	BEND	8"x22.5°	50
IRONWOOD BLVD	4+02	11	BEND	8"x11.25°	44
IRONWOOD BLVD	4+54	11	BEND	8"x11.25°	44
IRONWOOD BLVD	4+90	10	TEE	8"x6"	79
IRONWOOD BLVD	5+12	12	BEND	6"x11.25°	29
IRONWOOD BLVD	5+73	13	BEND	8"x11.25°	44
IRONWOOD BLVD	9+06	11	TEE	8"x6"	79
IRONWOOD BLVD	9+09	11	TEE	8"x8"	90
IRONWOOD BLVD	13+32	10	TEE	8"x6"	79
IRONWOOD BLVD	13+62	12	BEND	8"x11.25°	44
IRONWOOD BLVD	13+94	10	BEND	8"x11.25°	44
IRONWOOD BLVD	15+10	12	TEE	8"x6"	79
IRONWOOD BLVD	15+41	11	BEND	8"x11.25°	44
IRONWOOD BLVD	16+21	11	BEND	8"x22.5°	50
IRONWOOD BLVD	16+97	12	BEND	8"x11.25°	44
IRONWOOD BLVD	17+28	13	BEND	8"x45°	50
IRONWOOD BLVD	17+53	40	BEND	8"x45°	50
IRONWOOD BLVD	17+70	192	TEE	8"x6"	79
SUGAR MAPLE DR	24+19	10	TEE	8"x8"	90
SUGAR MAPLE DR	25+66	12	BEND	8"x11.25°	44
SUGAR MAPLE DR	26+08	11	BEND	8"x11.25°	44
SUGAR MAPLE DR	26+64	14	BEND	8"x22.5°	50
SUGAR MAPLE DR	28+29	10	TEE	8"x6"	79
SUGAR MAPLE DR	28+55	10	BEND	8"x11.25°	44
SUGAR MAPLE DR	29+05	12	BEND	8"x11.25°	44

WATERMAIN FITTING SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE	WEIGHT (LBS)
SUGAR MAPLE DR	29+39	12	BEND	8"x11.25°	44
SUGAR MAPLE DR	29+84	10	BEND	8"x22.5°	50
SUGAR MAPLE DR	31+01	10	BEND	8"x11.25°	44
SUGAR MAPLE DR	32+07	11	BEND	8"x11.25°	44
SUGAR MAPLE DR	32+38	14	TEE	8"x6"	79
SUGAR MAPLE DR	32+73	14	BEND	8"x11.25°	44
SUGAR MAPLE DR	33+08	11	BEND	8"x11.25°	44
SUGAR MAPLE DR	34+04	11	BEND	8"x22.5°	50
SUGAR MAPLE DR	34+97	10	BEND	8"x22.5°	50
SUGAR MAPLE DR	36+34	11	TEE	8"x6"	79
SUGAR MAPLE DR	37+67	10	BEND	8"x22.5°	50
SUGAR MAPLE DR	38+54	10	BEND	8"x22.5°	50
SUGAR MAPLE DR	38+93	13	BEND	8"x45°	50
SUGAR MAPLE DR	39+12	-11	BEND	8"x45°	50
SUGAR MAPLE DR	39+27	-11	TEE	8"x6"	79
SUGAR MAPLE DR	39+59	-12	BEND	8"x11.25°	44
SUGAR MAPLE DR	40+06	-11	BEND	8"x11.25°	44
SUGAR MAPLE DR	41+43	-12	BEND	8"x11.25°	44
SUGAR MAPLE DR	41+93	-13	BEND	8"x11.25°	44
SUGAR MAPLE DR	42+65	-10	TEE	8"x6"	79
SUGAR MAPLE DR	44+44	-12	BEND	8"x11.25°	44
SUGAR MAPLE DR	45+15	-12	BEND	8"x22.5°	50
SUGAR MAPLE DR	45+87	-11	BEND	8"x11.25°	44
SUGAR MAPLE DR	46+16	-11	TEE	8"x6"	79

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 SCHEDULES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

STORM & WATERMAIN SCHEDULES

SHEET

4

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 11/8/2021 3:40 PM

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE GRADE	PIPE LENGTH (FT)
P-1	ST-1	928.28	FES-1	928.12	18	RCP	0.51%	32
P-2	ST-2	928.67	ST-1	928.48	18	RCP	0.50%	37
P-2A	ST-2A	929.00	ST-2	928.87	15	RCP	0.50%	26
P-3	ST-3	930.74	FES-3	929.00	36	RCP	0.96%	182
P-3A	ST-3A	937.90	ST-3	937.00	12	RCP	2.85%	32
P-4	ST-4	939.36	ST-3	937.00	12	RCP	1.54%	153
P-5	ST-5	941.35	ST-4	939.54	12	RCP	3.40%	53
P-5A	ST-5A	941.85	ST-5	941.55	12	RCP	0.98%	31
P-6	ST-6	939.64	ST-4	939.54	12	RCP	0.42%	23
P-6A	ST-6A	939.96	ST-6	939.84	12	RCP	0.40%	30
P-7	ST-7	934.79	ST-3	933.74	36	RCP	0.52%	202
P-7A	ST-7A	938.17	ST-7	937.85	18	RCP	1.00%	32
P-7B	ST-7B	938.49	ST-7A	938.17	15	RCP	1.00%	32
P-7C	ST-7C	939.00	ST-7B	938.69	12	RCP	1.00%	31
P-8	ST-8	935.23	ST-7	934.99	36	RCP	0.36%	65
P-9	ST-9	935.82	ST-8	935.43	36	RCP	0.40%	99
P-10	ST-10	936.14	ST-9	936.02	36	RCP	0.33%	36
P-11	ST-11	936.56	ST-10	936.34	30	RCP	0.67%	33
P-11A	FES-11A	938.15	ST-11	936.76	30	RCP	0.75%	184
P-12	ST-12	940.20	FES-12	936.50	18	RCP	2.28%	163
P-12A	ST-12A	942.55	ST-12	942.20	18	RCP	1.09%	32
P-13	ST-13	943.34	ST-12A	942.75	18	RCP	0.40%	150
P-13A	ST-13A	944.25	ST-13	943.54	12	RCP	0.41%	173
P-14	ST-14	937.36	FES-14	937.00	15	RCP	0.96%	38
P-15	ST-15	938.74	ST-14	937.56	15	RCP	0.96%	122

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE GRADE	PIPE LENGTH (FT)
P-16	ST-16	940.10	ST-15	938.94	15	RCP	0.69%	167
P-16A	ST-16A	940.50	ST-16	940.30	18	RCP	0.63%	32
P-16B	ST-16B	943.32	ST-16A	940.70	15	RCP	1.94%	135
P-16C	ST-16C	944.00	ST-16B	943.52	15	RCP	0.70%	68
P-17	ST-17	940.22	FES-17	937.25	24	RCP	1.62%	183
P-18	ST-18	940.65	ST-17	940.22	24	RCP	1.31%	33
P-18B	ST-18B	942.95	ST-18A	941.45	18	RCP	1.08%	138
P-19	ST-19	942.00	ST-18A	941.45	18	RCP	0.80%	69
P-19A	ST-19A	943.00	ST-19	942.20	18	RCP	2.19%	37
P-19B	ST-19B	944.00	ST-19A	943.20	15	RCP	0.89%	90
P-20	ST-20	945.50	ST-19	943.50	15	RCP	2.26%	88
P-21	ST-21	946.50	ST-20	945.70	15	RCP	0.53%	151
P-21A	ST-21A	947.00	ST-21	946.70	12	RCP	1.00%	30
P-22	ST-22	930.90	FES-22	930.50	24	RCP	0.41%	97
P-23	ST-23	933.00	ST-22	931.10	15	RCP	1.18%	161
P-24	ST-24	934.51	ST-23	933.20	12	RCP	2.20%	60
P-25	ST-25	936.03	ST-24	934.71	12	RCP	2.20%	60
P-26	ST-26	938.85	ST-25	936.23	12	RCP	2.20%	119
P-27	ST-27	939.89	ST-26	939.05	12	RCP	1.06%	79
P-28	ST-28	940.89	ST-27	939.89	12	RCP	1.06%	94
P-29	ST-29	942.06	ST-28	941.09	12	RCP	1.55%	63
P-30	ST-30	943.24	ST-29	942.26	12	RCP	1.55%	63
P-31	ST-31	937.89	FES-32	937.25	30	RCP	0.28%	230
P-31A	ST-31A	938.06	ST-31	937.89	24	RCP	0.14%	120
P-31B	ST-31B	938.41	ST-31A	938.26	18	RCP	0.47%	32

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE GRADE	PIPE LENGTH (FT)
P-32	ST-32	938.75	ST-31	937.89	24	RCP	0.79%	109
P-33	ST-33	939.47	ST-32	938.95	24	RCP	0.88%	59
P-34	ST-34	941.27	ST-33	939.67	18	RCP	0.95%	168
P-35	ST-35	942.18	ST-34	941.47	18	RCP	0.55%	129
P-36	ST-36	943.50	ST-35	942.38	15	RCP	0.63%	178
P-37	ST-37	944.02	ST-36	943.70	15	RCP	0.31%	102
P-38	ST-38	944.50	ST-37	944.22	12	RCP	0.40%	71
P-39	FES-39	935.50	FES-39A	934.46	15	RCP	3.92%	27
P-41A	ST-41A	933.00	ST-41	929.00	18	RCP	7.52%	53
P-41B	FES-41B	936.81	ST-41A	936.66	8	PVC	1.00%	15
P-42	FES-42	930.50	FES-42A	929.75	18	RCP	0.69%	109
P-44	FES-44	930.50	FES-44C	930.50	15	RCP	0.00%	78
P-44A	FES-44A	930.50	FES-44B	930.50	15	RCP	0.00%	78
P-45A	FES-45A	931.18	FES-45AA	930.21	24	RCP	2.40%	40
P-45B	FES-45B	931.18	FES-45BB	930.21	24	RCP	2.39%	41
P-45C	FES-45C	931.18	FES-45CC	930.21	12	RCP	2.39%	41
P-46	FES-46	931.07	FES-46A	929.40	18	RCP	3.65%	46
P-47	ST-47	928.50	FES-47	928.40	24	RCP	0.30%	34
P-47A	FES-47A	928.20	ST-47	928.50	24	RCP	1.56%	19

ARCH PIPE SCHEDULE

PIPE NO.	ALIGNMENT	STATION	LOCATION	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE WxH (IN)	MATERIAL	PIPE GRADE	PIPE LENGTH (FT)
P-43	Ironwood Blvd	2+61 to 2+57	47' R to 53' L	FES-43	931.09	FES-43A	930.00	22"x13"	RC	1.09%	100

STORM DRAIN APRON SCHEDULE

APRON NO.	AREA	APRON SIZE (IN)	APRON MATERIAL	INVERT ELEVATION	PIPE NO.	NOTES
FES-1	BASIN C	18	RC	928.12	P-1	6 CY CL. III RIRAP
FES-3	BASIN C	36	RCP	929.00	P-3	12 CY CL. III RIRAP
FES-11A	BASIN E OUTLET	30	HDPE	938.15	P-11A	
FES-12	BASIN F	18	RC	936.50	P-12	6 CY CL. III RIRAP
FES-14	BASIN F	15	RC	937.00	P-14	4 CY CL. III RIRAP
FES-17	BASIN E	24	RC	937.25	P-17	8 CY CL. III RIRAP
FES-22	BASIN B	24	RC	930.50	P-22	8 CY CL. III RIRAP
FES-32	BASIN E	30	HDPE	937.25	P-31	12 CY CL. III RIRAP
FES-39	WEST-SOUTH BACKYARDS	15	RC	935.50	P-39	
FES-39A	WEST-SOUTH BACKYARDS	15	RC	934.46	P-39	5 CY CL. III RIRAP
FES-41	BASIN F OUTLET	18	HDPE	925.25	P-41	30 CY CL III RIPRAP
FES-41B	BASIN F OUTLET	8	HDPE	936.81	P-41B	
FES-42	BASIN A-B CONNECTION	18	RC	930.50	P-42	
FES-42A	BASIN A-B CONNECTION	18	RC	929.75	P-42	6 CY CL. III RIRAP
FES-43	BASIN B OUTLET	22	RC ARCH	931.09	P-43	22x14 ARCH
FES-43A	BASIN B OUTLET	22	RC ARCH	930.00	P-43	22X14 ARCH 4 CY CL. III RIPRAP
FES-44	BASIN B-C CONNECTION	15	RC	930.50	P-44	
FES-44A	BASIN B-C CONNECTION	15	RC	930.50	P-44A	
FES-44B	BASIN B-C CONNECTION	15	RC	930.50	P-44A	
FES-44C	BASIN B-C CONNECTION	15	RC	930.50	P-44	
FES-45A	BASIN C OUTLET	24	RC	931.18	P-45A	
FES-45AA	BASIN C OUTLET	24	RC	930.21	P-45A	8 CY CL III RIPRAP
FES-45B	IRONWOOD BLVD	24	RC	931.18	P-45B	
FES-45BB	IRONWOOD BLVD	24	RC	930.21	P-45B	8 CY CL III RIPRAP
FES-45C	IRONWOOD BLVD	12	RC	931.18	P-45C	
FES-45CC	IRONWOOD BLVD	12	RC	930.21	P-45C	4 CY CL III RIPRAP
FES-46	BASIN A OUTLET	18	HDPE	931.07	P-46	
FES-46A	BASIN A OUTLET	18	HDPE	929.40	P-46	6 CY CL. III RIRAP
FES-47	WETLAND D OUTLET	24	HDPE	928.40	P-47	8 CY CL. III RIPRAP
FES-47A	WETLAND D OUTLET	24	HDPE	928.20	P-47A	

** PIPE LENGTH INCLUDES LENGTH OF APRON

PLOT DATE: 11/8/2021 3:40 PM

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PROJECT

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RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO. 21-24984
FILE NAME 24984 SCHEDULES
DRAWN BY JRS
DESIGNED BY JRS
REVIEWED BY JDF
ORIGINAL ISSUE DATE 01/03/22
CLIENT PROJECT NO. -

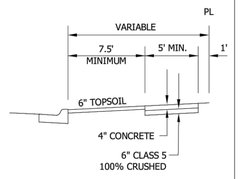
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STORM SCHEDULES

SHEET

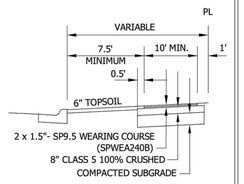
5

OF 76



CONC. MIX: 3F52 (MANUAL PLACEMENT)
3F32 (SLIP FORM PLACEMENT)

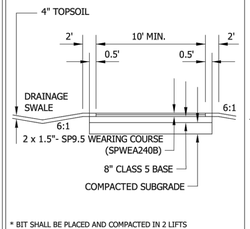
NEIGHBORHOOD SIDEWALK



* BIT SHALL BE PLACED AND COMPACTED IN 2 LIFTS

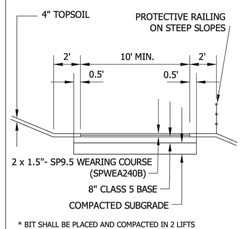
COMMUNITY ROADWAY TRAIL

URBAN SECTION



* BIT SHALL BE PLACED AND COMPACTED IN 2 LIFTS

COMMUNITY GREENWAY TRAIL



* BIT SHALL BE PLACED AND COMPACTED IN 2 LIFTS

COMMUNITY GREENWAY TRAIL

SIDE SLOPE LOCATION

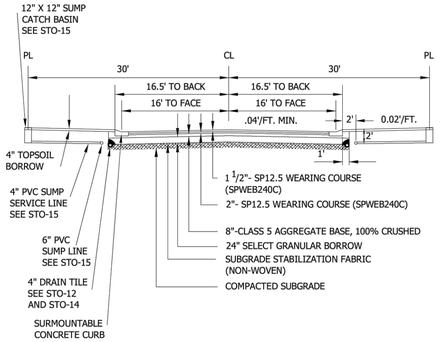
Stantec
3320 Highway 36 W
St. Paul, MN 55113
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TYPICAL PLACEMENT AND SECTION
FOR WALKS AND TRAILS

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STR-9



STANDARD STREET SECTION (7 TON)

NOTES:
1. ALL ORGANIC OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM BENEATH THE ROADWAY.
2. A TEST ROLL OF THE PREPARED SUBGRADE SHALL BE PERFORMED BY THE OWNER IN THE PRESENCE OF A CITY INSPECTOR. THE CITY HAS THE AUTHORITY TO REQUIRE ADDITIONAL SUBGRADE CORRECTION OR ELIMINATE THE STABILIZATION FABRIC.
3. THE CITY RESERVES THE RIGHT TO MODIFY STREET SECTION AS REQUIRED.
4. NO CONCRETE WORK OR BITUMINOUS PAVING SHALL OCCURE AFTER OCTOBER 31ST UNLESS AUTHORIZED BY THE CITY OF CHASKA.
5. STREET WIDTH TO BE DETERMINED BY PROJECTED TRAFFIC VOLUMES.
6. RECYCLE MATERIAL ACCEPTED AS CLASS 5 AGGREGATE BASE SUBSTITUTE IF MEETING GUIDELINES.

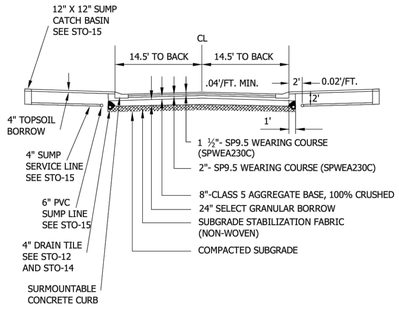
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TYPICAL SECTIONS FOR
RESIDENTIAL STREETS
7 TON SECTION

CHASKA, MINNESOTA

LAST REVISION: JUNE 2012

PLATE NO. STR-7



PRIVATE STREET WITH CONCRETE CURB AND GUTTER

STA: 1+39 TO 6+67

NOTES:
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2. A TEST ROLL OF THE PREPARED SUBGRADE SHALL BE PERFORMED BY THE OWNER IN THE PRESENCE OF A CITY INSPECTOR. THE CITY HAS THE AUTHORITY TO REQUIRE ADDITIONAL SUBGRADE CORRECTION.OR ELIMINATE THE STABILIZATION FABRIC.
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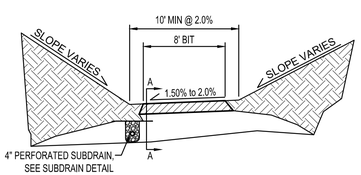
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TYPICAL SECTIONS FOR
RESIDENTIAL STREETS
PRIVATE SECTION

CHASKA, MINNESOTA

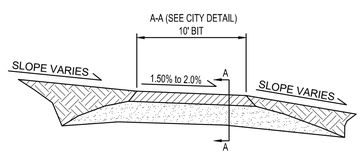
LAST REVISION: OCT 2016

PLATE NO. STR-7A



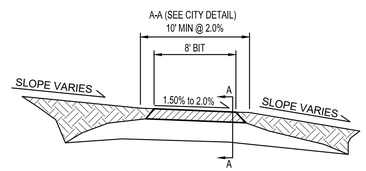
TYPICAL 8' TRAIL SECTION
WITH SUBDRAIN

NTS ST950



TYPICAL 10' TRAIL SECTION

NTS ST950



TYPICAL 8' TRAIL SECTION

NTS ST950

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

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DRAWN BY	JRS
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CLIENT PROJECT NO.	-

TITLE

TYPICAL STREET SECTIONS AND DETAILS

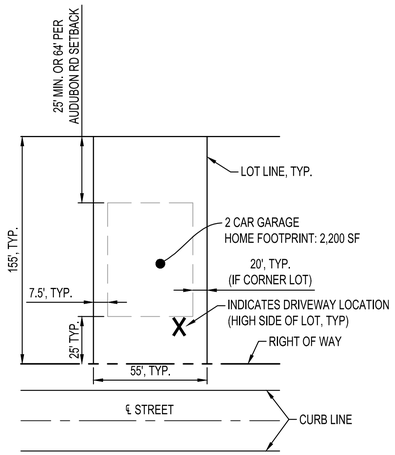
SHEET

6

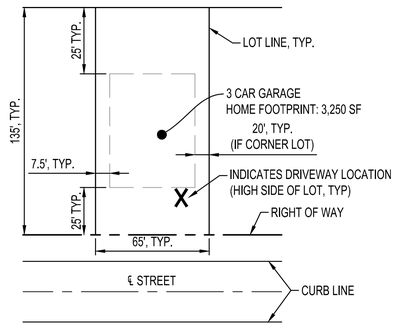
OF 76

PRELIMINARY NOT FOR CONSTRUCTION

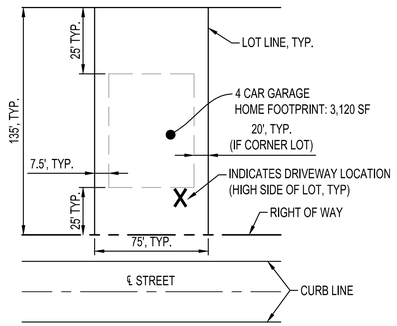
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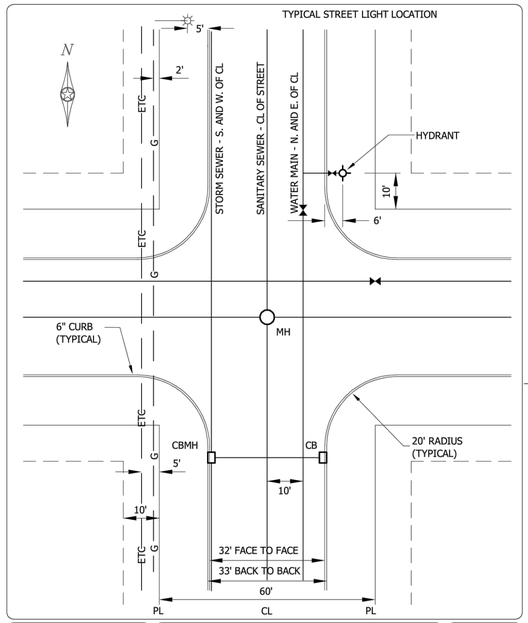
55' SINGLE FAMILY
TYPICAL LOT LAYOUT
NTS



65' SINGLE FAMILY
TYPICAL LOT LAYOUT
NTS



75' SINGLE FAMILY
TYPICAL LOT LAYOUT
NTS



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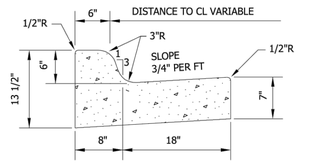
TYPICAL UTILITY LOCATIONS
(PUBLIC AND PRIVATE)

CHASKA, MINNESOTA

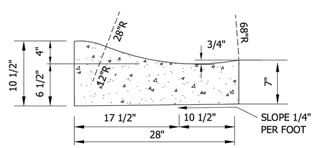
LAST REVISION: MARCH 2016

PLATE NO. GEN-5

CONCRETE MATERIALS AS FOLLOWS:
3F52 - MANUAL PLACEMENT
3F32 - SLIP FORM PLACEMENT



MNDOT B618



SURMOUNTABLE

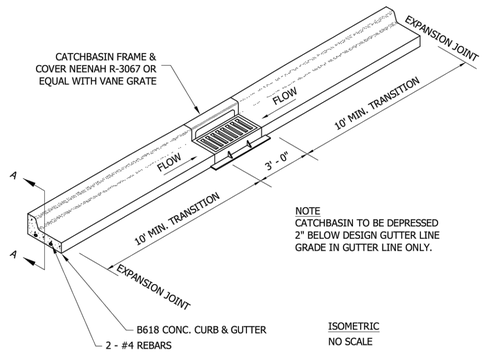
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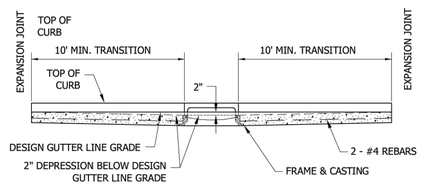
CURB AND GUTTER

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STR-1





SECTION A-A
NO SCALE

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B618 CURB & GUTTER
CONSTRUCTION AT CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2008

PLATE NO. STR-4

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TYPICAL DETAILS

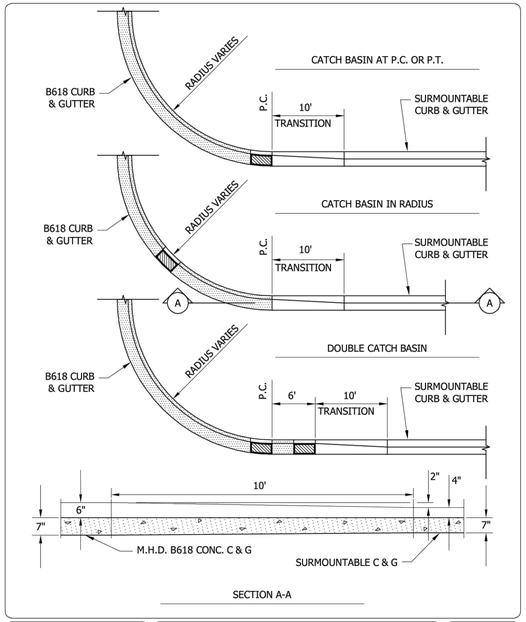
SHEET

7

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/29/2021 10:59 PM



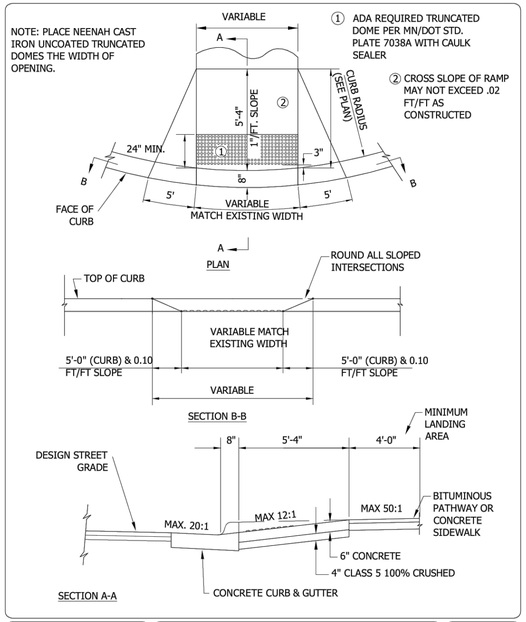
SECTION A-A

CONCRETE CURB & GUTTER TRANSITION

CHASKA, MINNESOTA

LAST REVISION: OCT. 1989

PLATE NO. STR-10



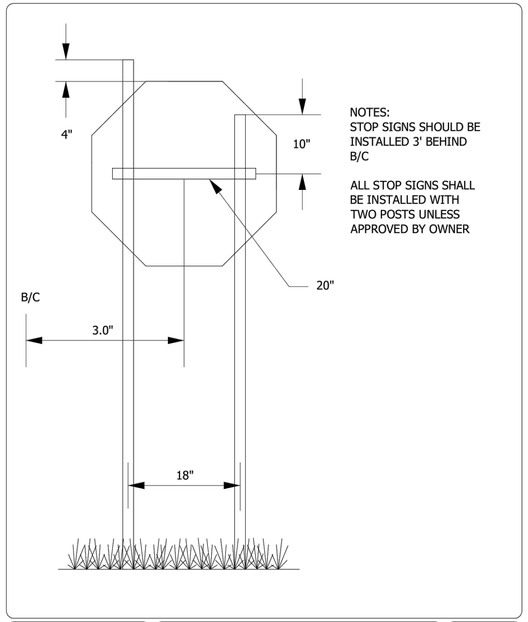
SECTION A-A

PEDESTRIAN CURB RAMP FOR PATHWAY/SIDEWALK

CHASKA, MINNESOTA

LAST REVISION: APRIL 2011

PLATE NO. STR-11



NOTES:
STOP SIGNS SHOULD BE INSTALLED 3' BEHIND B/C

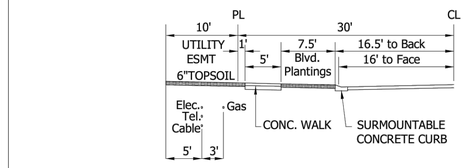
ALL STOP SIGNS SHALL BE INSTALLED WITH TWO POSTS UNLESS APPROVED BY OWNER

STOP SIGN INSTALLATION DETAIL

CHASKA, MINNESOTA

LAST REVISION: JUNE 2012

PLATE NO. STR-15



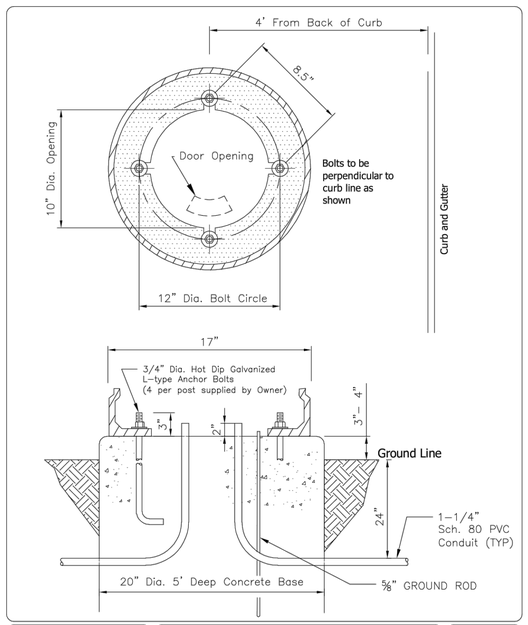
STANDARD RESIDENTIAL STREET

TYPICAL STREET COMPONENTS/DIMENSIONS RESIDENTIAL, COMMERCIAL & COLLECTOR

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STR-16

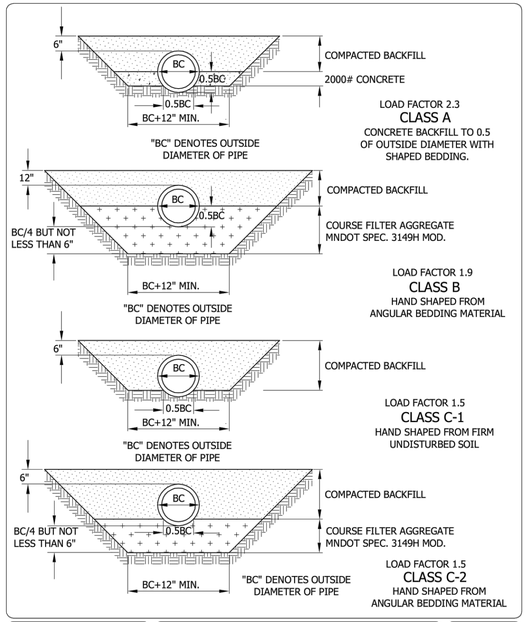


LIGHT POLE ANCHORAGE GUIDE AND LOCATION

CHASKA, MINNESOTA

LAST REVISION: JAN 2019

PLATE NO. ELC-01

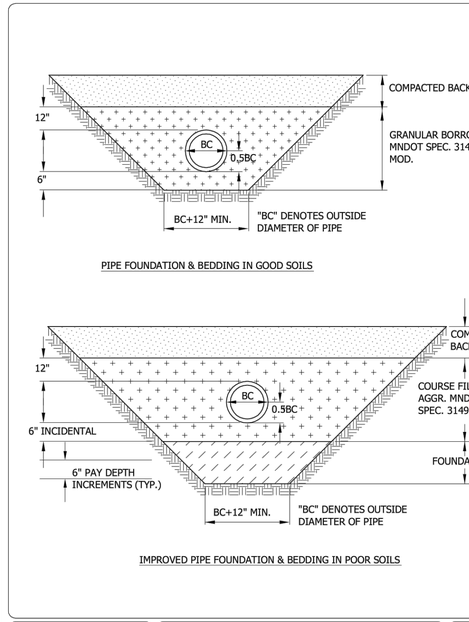


BEDDING METHODS FOR RCP OR DIP

CHASKA, MINNESOTA

LAST REVISION: MARCH 2001

PLATE NO. GEN-6



BEDDING METHODS FOR PVC

CHASKA, MINNESOTA

LAST REVISION: MARCH 2008

PLATE NO. GEN-7

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JERREMY D. FOSS

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PROJECT

LENNAR

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CHASKA MINNESOTA

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TITLE

TYPICAL DETAILS

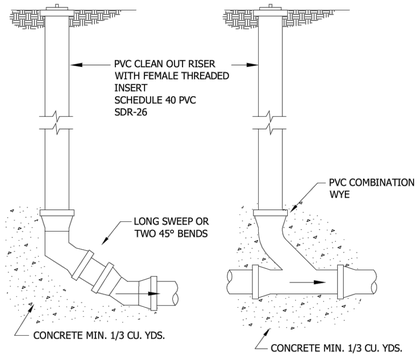
SHEET **8** OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/29/2021 10:59 PM

NOTE:
CLEANOUT CAP SHALL BE THREADED MALLEABLE IRON (GALVANIZED)

NOTE:
ENCLOSE LONG SWEEP BEND OR COMBINATION WYE IN CONCRETE AS SHOWN.



END OF LINE CLEANOUT IN LINE CLEANOUT

NOTE:
CLEANOUT IS REQUIRED FOR EVERY 100 FEET OF SERVICE LENGTH.

NOTE:
1. IF CLEAN OUT IS IN DRIVEWAY, CONTRACTOR MUST INSTALL FORD A-1 CASTING, MARKED WITH "SEWER" ON LID.
2. IF VALVE BOX IS IN ROADWAY, CONTRACTOR MUST INSTALL TOP SECTION OF A VALVE BOX WITH LID MARKED "SEWER".

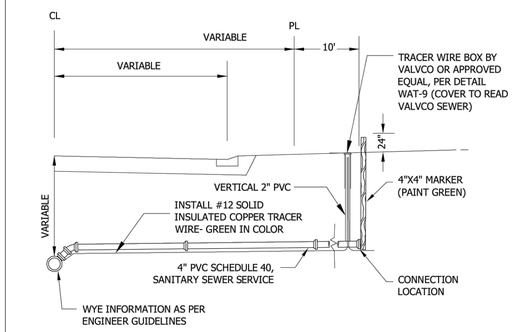
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SERVICE LINE CLEANOUTS

CHASKA, MINNESOTA

LAST REVISION: MARCH 2001

PLATE NO. SER-4



NOTES:
1. SEWER SERVICES, 4" SCHEDULE 40 PVC SEWER PIPE
2. SLOPE - 1/4" PER FOOT MINIMUM.
3. PIPE JOINTS SHALL BE NON GASKETED, SOLVENT WELD TYPE.
4. ALL PIPE SHALL BE BEDDED IN GRANULAR BORROW 3149.2B1 EXCEPT THE LAST TEN FEET WHERE COARSE FILTER AGGREGATE (3149.2H) AGGREGATE WILL BE REQUIRED.
5. BENDS OF 45° OR LESS SHALL BE USED WITHIN THE LAST 5' OF THE SERVICE IF THE DEPTH OF THE SERVICE WOULD EXCEED 10'.
6. NO SERVICE RISERS LESS THAN 3 FEET SHALL BE PERMITTED.
7. A SEPARATE TRACER WIRE WILL EXTEND FROM THE FINISH GRADE AT TRACER WIRE BOX AND FOLLOW SEWER SERVICE TO STRUCTURE FOUNDATION. TRACER WIRE FROM BOX TO FOUNDATION BY OTHERS.
8. FOR DEPTHS GREATER THAN 22', SERVICE PIPE SHALL BE C900 FROM MAIN TO CONNECTION, WITH TRANSITION FITTING FROM C900 TO SCH 40 INSTALLED AT CONNECTION LOCATION.

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SEWER SERVICE CONNECTION

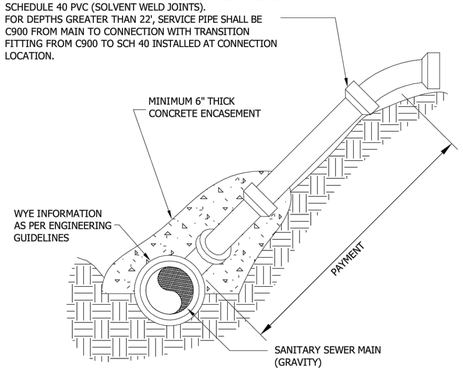
CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. SER-1

PVC PIPE
BED AND ENCASE IN SELECT GRANULAR, TYPICAL PVC APPLICATION.

SERVICE RISERS FOR SEWER MAINS LESS THAN 22' SHALL BE SCHEDULE 40 PVC (SOLVENT WELD JOINTS).
FOR DEPTHS GREATER THAN 22', SERVICE PIPE SHALL BE C900 FROM MAIN TO CONNECTION WITH TRANSITION FITTING FROM C900 TO SCH 40 INSTALLED AT CONNECTION LOCATION.



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SERVICE RISER

CHASKA, MINNESOTA

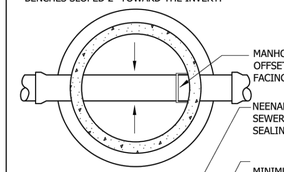
LAST REVISION: MARCH 2016

PLATE NO. SER-3

PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R1642-2310B	27"	7"
R1755G	27"	7"



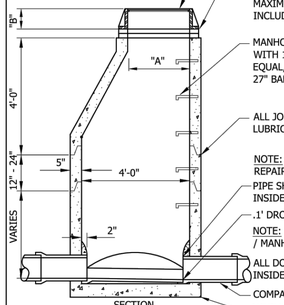
PLAN

MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

NEENAH COVER **R-1642-5001**, LETTERED "SANITARY SEWER" WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECIFICATION FOR CASTING NUMBER.

MINIMUM OF 2 MAXIMUM OF 4 ADJUSTMENT RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.

MAXIMUM 20"ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.



SECTION

MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL)

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS AND RAMNECK.

NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.

PIPE SHALL BE CUT 2" FROM INSIDE FACE OF WALL.

.1' DROP ACROSS INVERTS MIN.

NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.

ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.

COMPACT TO TOP OF PIPE, TO FIRST JOINT.

MINIMUM THICKNESS OF PRECAST BASE IS 6" FOR 14' DEEP OR LESS, AND INCREASES 1" IN THICKNESS FOR EVERY 4' OF DEPTH GREATER THAN 14'.

OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .

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SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

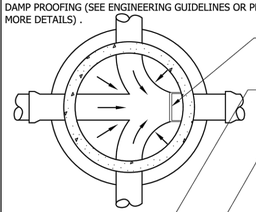
PLATE NO. SAN-1

PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R16420245	27"	7"
R1755G	27"	7"

OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .



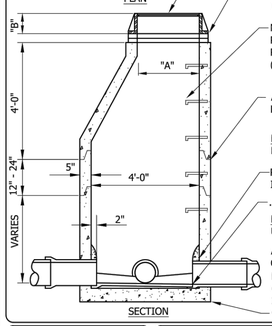
PLAN

MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

(SEE UTILITY SCHEDULE FOR CASTINGS, VERIFY WITH CITY) NEENAH COVER **R1642-5001**, LETTERED "SANITARY SEWER" WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECIFICATIONS FOR CASTING NUMBER

MINIMUM OF 2 MAXIMUM OF 4 ADJUSTING RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.

MAXIMUM 20" ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING



SECTION

MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL)

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS AND RAMNECK.

NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.

PIPE SHALL BE CUT 2" FROM INSIDE FACE OF WALL.

.1' DROP ACROSS INVERTS (MIN.)

NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.

ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.
MINIMUM THICKNESS OF PRECAST BASE IS 6" FOR 14' DEEP OR LESS, AND INCREASES 1" IN THICKNESS FOR EVERY 4' OF DEPTH GREATER THAN 14'.

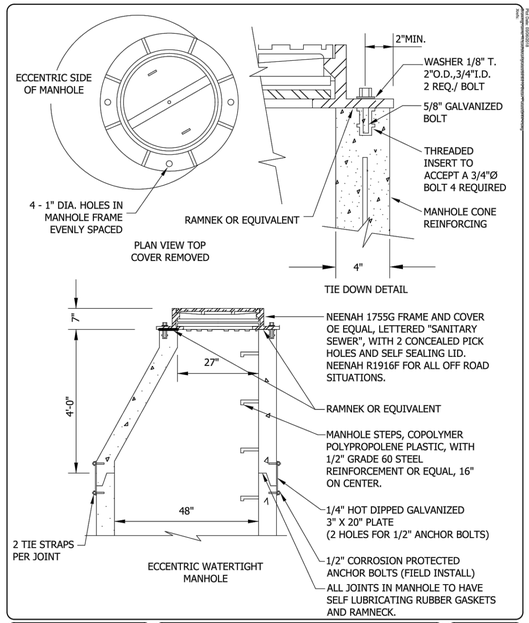
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SANITARY SEWER JUNCTION MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SAN-2



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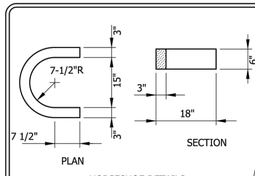
WATERTIGHT CASTING FOR SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

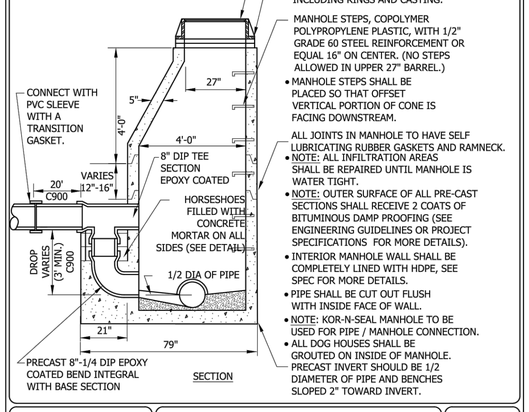
LAST REVISION: MARCH 2018

PLATE NO. SAN-5

FRAME	A	B
R1642-2310B	27"	7"



HORSESHOE DETAILS



NEENAH COVER **R-1642-5001**, LETTERED "SANITARY SEWER", WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECS. FOR CASTING NUMBERS.

- MINIMUM OF 2 MAXIMUM OF 4 ADJUSTMENT RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.
- MAXIMUM 20" ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.
- MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL.)
- MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS AND RAMNECK.

- NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.
- NOTE: OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS).
- INTERIOR MANHOLE WALL SHALL BE COMPLETELY LINED WITH HDPE, SEE SPEC FOR MORE DETAILS.
- PIPE SHALL BE CUT OUT FLUSH WITH INSIDE FACE OF WALL.
- NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.
- ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.
- PRECAST INVERT SHOULD BE 1/2 DIAMETER OF PIPE AND BENCHES SLOPED 2" TOWARD INVERT.

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SANITARY SEWER DROP INLET MANHOLE

CHASKA, MINNESOTA

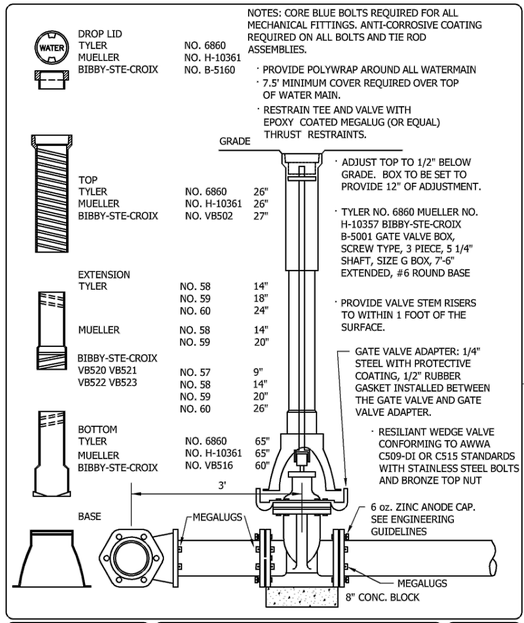
LAST REVISION: MARCH 2018

PLATE NO. SAN-4

NOTES: CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

- PROVIDE POLYWRAP AROUND ALL WATERMAIN
- 7.5' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.
- RESTRAIN TEE AND VALVE WITH EPOXY COATED MEGALUG (OR EQUAL) THRUST RESTRAINTS.

DROP LID		
TYLER	NO. 6860	
MUELLER	NO. H-10361	
BIBBY-STE-CROIX	NO. B-5160	
TOP		
TYLER	NO. 6860	26"
MUELLER	NO. H-10361	26"
BIBBY-STE-CROIX	NO. VB502	27"
EXTENSION		
TYLER	NO. 58	14"
	NO. 59	18"
	NO. 60	24"
MUELLER	NO. 58	14"
	NO. 59	20"
BIBBY-STE-CROIX		
VB520 VB521	NO. 57	9"
VB522 VB523	NO. 58	14"
	NO. 59	20"
	NO. 60	26"
BOTTOM		
TYLER	NO. 6860	65"
MUELLER	NO. H-10361	65"
BIBBY-STE-CROIX	NO. VB516	60"



- ADJUST TOP TO 1/2" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.
- TYLER NO. 6860 MUELLER NO. H-10357 BIBBY-STE-CROIX B-5001 GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 7'-6" EXTENDED, #6 ROUND BASE
- PROVIDE VALVE STEM RISERS TO WITHIN 1 FOOT OF THE SURFACE.

GATE VALVE ADAPTER: 1/4" STEEL WITH PROTECTIVE COATING, 1/2" RUBBER GASKET INSTALLED BETWEEN THE GATE VALVE AND GATE VALVE ADAPTER.

- RESILIANT WEDGE VALVE CONFORMING TO AWWA C509-DI OR C515 STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

6 oz. ZINC ANODE CAP. SEE ENGINEERING GUIDELINES

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GATE VALVE AND BOX INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-1

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

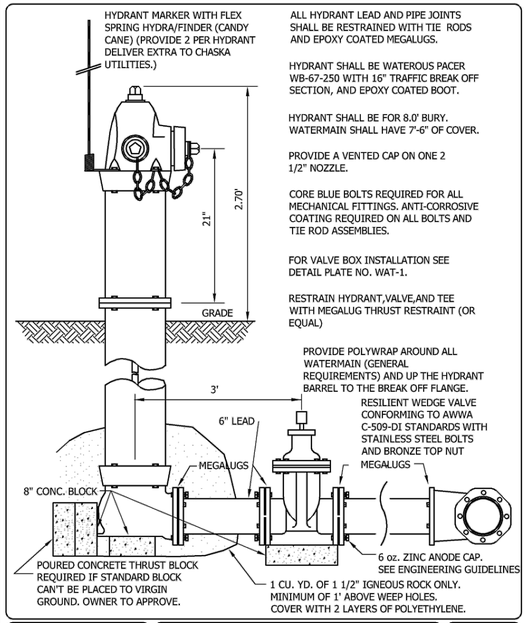
TYPICAL DETAILS

SHEET

9 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/29/2021 10:59 PM



ALL HYDRANT LEAD AND PIPE JOINTS SHALL BE RESTRAINED WITH TIE RODS AND EPOXY COATED MEGALUGS.

HYDRANT SHALL BE WATEROUS PACER WB-67-250 WITH 16" TRAFFIC BREAK OFF SECTION, AND EPOXY COATED BOOT.

HYDRANT SHALL BE FOR 8.0' BURY. WATERMAIN SHALL HAVE 7'-6" OF COVER.

PROVIDE A VENTED CAP ON ONE 2 1/2" NOZZLE.

CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

FOR VALVE BOX INSTALLATION SEE DETAIL PLATE NO. WAT-1.

RESTRAIN HYDRANT,VALVE,AND TEE WITH MEGALUG THRUST RESTRAINT (OR EQUAL)

PROVIDE POLYWRAP AROUND ALL WATERMAIN (GENERAL REQUIREMENTS) AND UP THE HYDRANT BARREL TO THE BREAK OFF FLANGE.

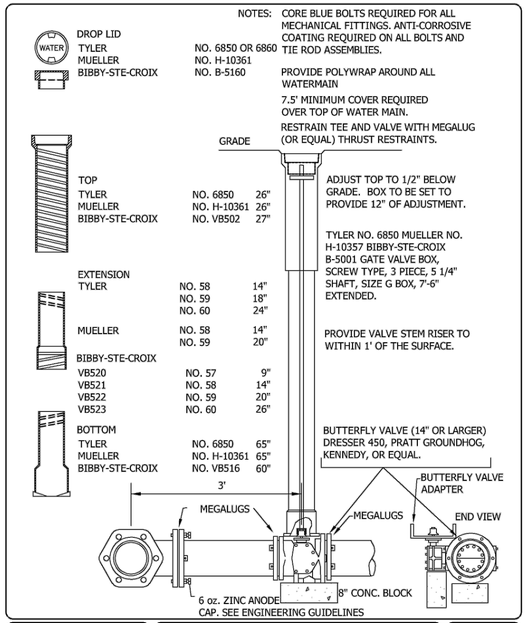
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WATEROUS PACER HYDRANT AND VALVE INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-2



NOTES:

CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

PROVIDE POLYWRAP AROUND ALL WATERMAIN

7.5' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.

RESTRAIN TEE AND VALVE WITH MEGALUG (OR EQUAL) THRUST RESTRAINTS.

ADJUST TOP TO 1/2" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.

TYLER NO. 6850 MUELLER NO. H-10357 BIBBY-STE-CROIX B-5001 GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 7'-6" EXTENDED.

PROVIDE VALVE STEM RISER TO WITHIN 1' OF THE SURFACE.

BUTTERFLY VALVE (14" OR LARGER) DRESSER 450, PRATT GROUNDHOG, KENNEDY, OR EQUAL.

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BUTTERFLY VALVE AND BOX INSTALLATION

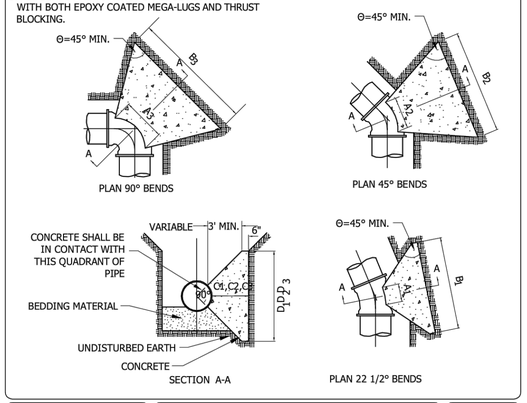
CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-3

NOTES:
1. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POURED AGAINST FIRM UNDISTURBED EARTH.
2. DIMENSION C1,C2,C3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Θ EQUAL TO OR LARGER THAN 45°.
3. DIMENSION A1,A2,A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH MJ BOLTS.
4. PROVIDE POLYETHYLENE WRAP AROUND ALL WATERMAIN.
5. ALL BENDS AND FITTINGS SHALL BE RESTRAINED WITH BOTH EPOXY COATED MEGA-LUGS AND THRUST BLOCKING.

PIPE SIZE	BUTTRESS DIMENSIONS 22 1/2° BEND B_1	D_1	45° BEND B_2	D_2	90° BEND B_3	D_3
6"	1'-5"	1'-5"	1'-5"	1'-5"	2'-1"	1'-6"
8"	1'-5"	1'-5"	2'-1"	1'-6"	2'-8"	2'-0"
12"	1'-10"	1'-10"	3'-4"	2'-0"	4'-9"	2'-6"
16"	3'-0"	2'-0"	3'-10"	3'-0"	6'-2"	3'-6"
20"	3'-6"	2'-8"	5'-6'	3'-4"	8'-4"	4'-0"
24"	4'-4"	3'-0"	6'-10"	3'-10"	9'-8"	5'-0"
30"	-	-	9'-3"	6'-0"	17'-0"	6'-0"



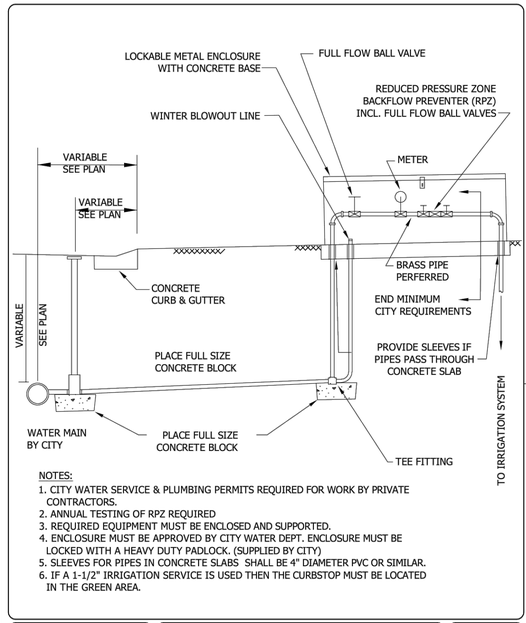
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CONCRETE THRUST BLOCKING

CHASKA, MINNESOTA

LAST REVISION: APRIL 2005

PLATE NO. WAT-4



NOTES:
1. CITY WATER SERVICE & PLUMBING PERMITS REQUIRED FOR WORK BY PRIVATE CONTRACTORS.
2. ANNUAL TESTING OF RPZ REQUIRED
3. REQUIRED EQUIPMENT MUST BE ENCLOSED AND SUPPORTED.
4. ENCLOSURE MUST BE APPROVED BY CITY WATER DEPT. ENCLOSURE MUST BE LOCKED WITH A HEAVY DUTY PADLOCK. (SUPPLIED BY CITY)
5. SLEEVES FOR PIPES IN CONCRETE SLABS SHALL BE 4" DIAMETER PVC OR SIMILAR.
6. IF A 1-1/2" IRRIGATION SERVICE IS USED THEN THE CURBSTOP MUST BE LOCATED IN THE GREEN AREA.

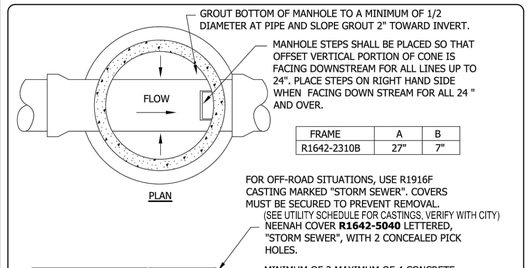
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IRRIGATION SERVICE BY PRIVATE CONTRACTOR

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SER-6



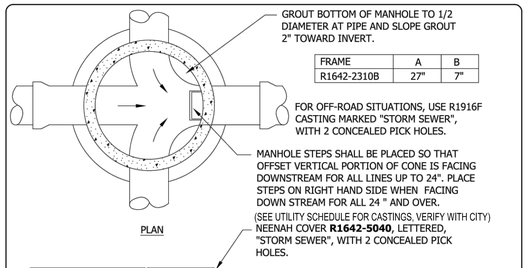
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STORM SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-1



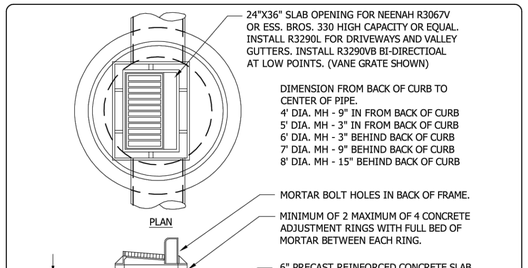
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STORM SEWER JUNCTION MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-2



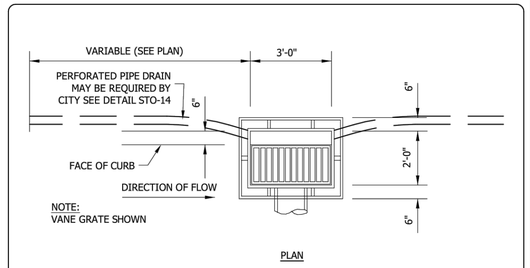
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TYPE II CATCHBASIN MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-5



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TYPE II CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-6

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RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

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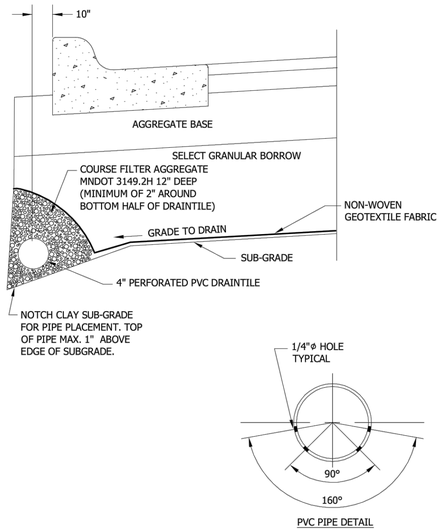
TYPICAL DETAILS

SHEET

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PLOT DATE: 12/29/2021 10:59 PM



PVC PIPE DETAIL

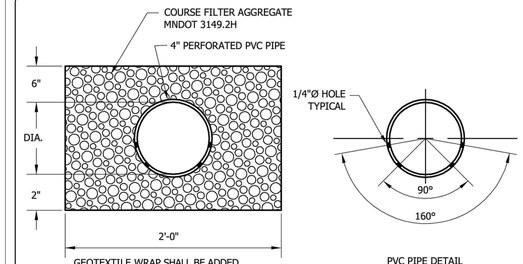
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PERFORATED PVC DRAINTILE PIPE
BELOW CONCRETE CURB

CHASKA, MINNESOTA

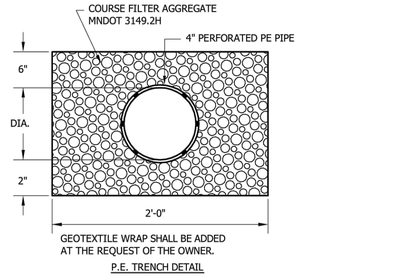
LAST REVISION: NOV. 2016

PLATE NO. STO-12



PVC TRENCH DETAIL

PVC PIPE DETAIL



P.E. TRENCH DETAIL

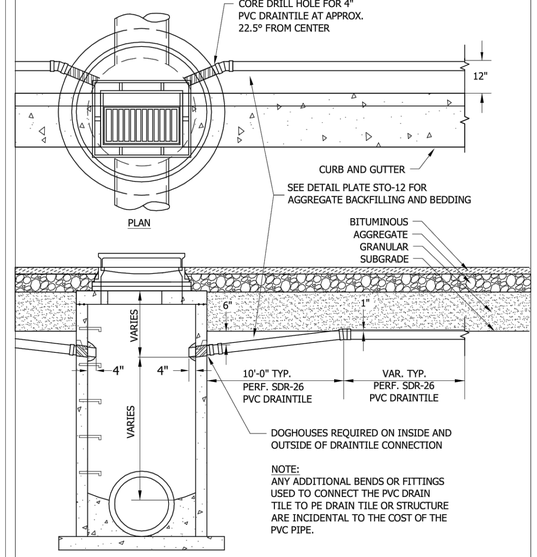
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PERFORATED PIPE
TRENCH DETAIL

CHASKA, MINNESOTA

LAST REVISION: NOV. 2014

PLATE NO. STO-13



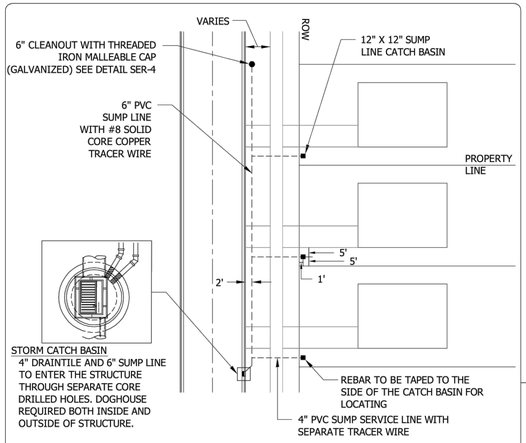
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DRAINTILE INSTALLATION INTO
CATCHBASIN MANHOLE

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STO-14



NOTES:
1. 6" PVC SUMP LINE TO BE INSTALLED 2' BELOW GRADE AND TO BE CORE DRILLED INTO NEAREST DOWNSTREAM CATCH BASIN.
2. EXTEND 4" PVC SUMP SERVICE FROM MAIN TO RIGHT OF WAY.
3. ALTERNATE CONFIGURATIONS ONLY WITH THE APPROVAL OF OWNER.
4. SEE ENGINEERING GUIDELINES OR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. MAXIMUM SUMP LINE LENGTH 300'. IF LONGER SUMP LINE IS NECESSARY, INTERMEDIATE CLEANOUTS WILL BE REQUIRED EVERY 200'.
6. INSTALL 4" X 4" POST ADJACENT TO EACH SUMP CATCH BASIN FOR PROTECTION DURING CONSTRUCTION.
7. CLEAN OUT TO BE PLACED ON PROPERTY LINE AT END OF LAST SERVICE LINE. IF SERVICE FALLS IN DRIVEWAY THE MAINLINE WILL BE EXTENDED BEYOND DRIVEWAY/ALLEY TO ENSURE THE CLEANOUT IS IN GREEN SPACE.
8. A SEPARATE TRACER WIRE WILL EXTEND FROM THE FINISHED GRADE CLEANOUT LOCATION WITH TRACER WIRE BOX AND FOLLOW THE SUMP LINE TO THE STRUCTURE LOCATION.

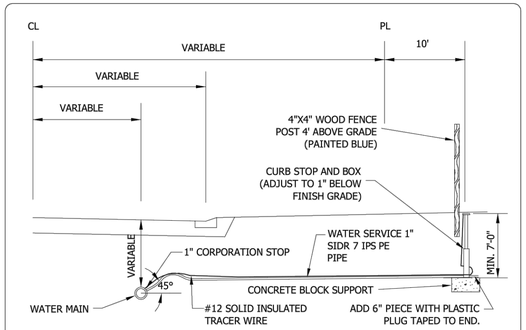
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PVC SUMP LINE
BEHIND CURB

CHASKA, MINNESOTA

LAST REVISION: MAY 2016

PLATE NO. STO-15



PVC WATER MAIN
STAINLESS STEEL
SERVICE SADDLE
SMITH-BLAIR 372 OR
APPROVED EQUAL

NOTE: FOR SERVICES LARGER THAN 1" A TAPPING SLEEVE IS REQUIRED. ROCKWELL TYPE 230, FULL CIRCLE, WITH TAP THREADED FOR APPROPRIATE SIZE COPPER CORPORATION STOP. (OR EQUAL)

CORPORATION STOP	CURB STOP	CURB BOX
MUELLER B25009N	MUELLER B25222N	MUELLER H-10300-N OR H-10302-N
FORD FB1001-4Q	FORD B66444MQ	FORD EM2-75-56R-NL OR EM2-75-57R-NL
A.Y. MCDONALD 74704B	A.Y. MCDONALD 76104	A.Y. MCDONALD 75615 OR 75614

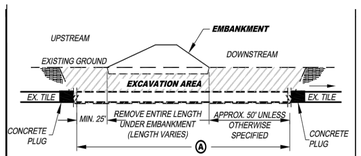
NOTES:
1. CURB BOX SHALL HAVE A STATIONARY ROD.
2. CURB BOX SHALL EXTEND FROM 78" TO 90".
3. ALL PIPE SHALL BE BEDDED IN GRANULAR BORROW 3149.2B1 EXCEPT THE LAST TEN FEET WHERE COARSE FILTER AGGREGATE (3149.2H) WILL BE REQUIRED.
4. IF CURB STOP IS IN DRIVEWAY, CONTRACTOR MUST INSTALL A FORD A-1 CASTING, MARKED WITH "WATER" ON LID.
5. CURB BOX LID SHALL BE MUELLER #89375 "TW" OR EQUAL.
6. ALL BRASS FITTINGS SHALL BE "NO LEAD BRASS".
7. PIPE INSERT STIFFENERS REQUIRED FOR FITTING CONNECTIONS.
8. HDPE SERVICE PIPE SHALL BE MANUFACTURED BY ENDOPURE OR BLUE ULTRA PIPE.

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WATER SERVICE CONNECTION
HDPE PIPE
CHASKA, MINNESOTA

LAST REVISION: MARCH 2016

PLATE NO. SER-2A



TYPE B

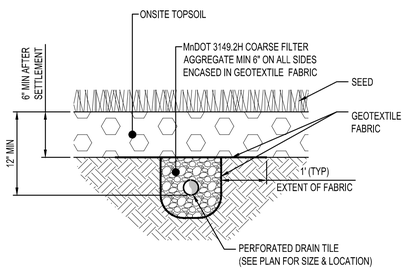
CONSTRUCTION REQUIREMENTS

SHOULD UNEXPECTED DRAIN TILE (NOT SHOWN ON PLAN DRAWINGS) BE DISCOVERED DURING CONSTRUCTION THE PROJECT ENGINEER SHALL BE CONTACTED FOR APPROPRIATE COURSE OF ACTION FOR THE TILE BLOCK.

TILE REMOVAL (EXCAVATION):
- THE WORK SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE EXCAVATION AND REMOVAL OF ALL IDENTIFIED TILE DRAINAGE SYSTEMS.
- IDENTIFIED DRAINAGE TILE SHALL BE EXCAVATED AND REMOVED AS REQUIRED BY THE DRAWINGS, AS STAKED, OR AS OTHERWISE SPECIFIED BY THE ENGINEER.
- UNLESS OTHERWISE SPECIFIED, ALL FRAGMENTS OF THE DRAINAGE TILE SHALL BE REMOVED FROM THE EXCAVATED TRENCH AND ASSOCIATED BACKFILL MATERIAL.
- EACH END OF THE EXPOSED DRAINAGE TILE IN THE EXCAVATED TRENCH SHALL BE PLUGGED WITH CONCRETE (MIN. 2' IN LENGTH). PLUGS SHALL BE WATER TIGHT.
- BACKFILL AND TAMP BY HAND A MINIMUM DISTANCE OF TWO FEET AROUND EACH SEALED TILE END WITH SUITABLE SOIL MATERIAL. BACKFILL THE REMAINING TRENCH WITH THE MOST SUITABLE MATERIAL AVAILABLE AND COMPACT TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE SURROUNDING UNDISTURBED SOIL.

TILE PLUGGING:
- THE WORK SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE PLUGGING OF ALL IDENTIFIED TILE DRAINAGE SYSTEMS.
- IDENTIFIED DRAINAGE TILE SHALL BE PLUGGED AS REQUIRED BY THE DRAWINGS, AS STAKED, OR AS OTHERWISE SPECIFIED BY THE ENGINEER.
- MEANS TO ACCESS THE TILE DRAINAGE SYSTEM TO CONSTRUCT APPROPRIATE PLUGS SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTED PLUGS SHALL BE MADE PERMANENT AND WATERTIGHT. METHODS TO PLUG THE TILE SYSTEM INCLUDE USING SAND SLURRY MIXES, CONCRETE GROUT, OR CERTAIN EXPANDING POLYURETHANE FOAMS. IF PLUGGING METHOD IS NOT SPECIFIED, THE METHOD PROPOSED REQUIRES ENGINEER'S APPROVAL.
- AREAS THAT ARE EXCAVATED TO ACCESS THE TILE SYSTEM SHALL BE CAREFULLY BACKFILLED AND COMPACTED IN LIFTS WITH SUITABLE SOIL MATERIAL. BACKFILL SHALL BE COMPACTED TO A DENSITY EQUAL TO SURROUNDING UNDISTURBED SOIL.

TILE PLUGGING DETAIL
NTS SD320



SUBSURFACE DRAIN
NTS SD510

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

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TITLE

TYPICAL DETAILS

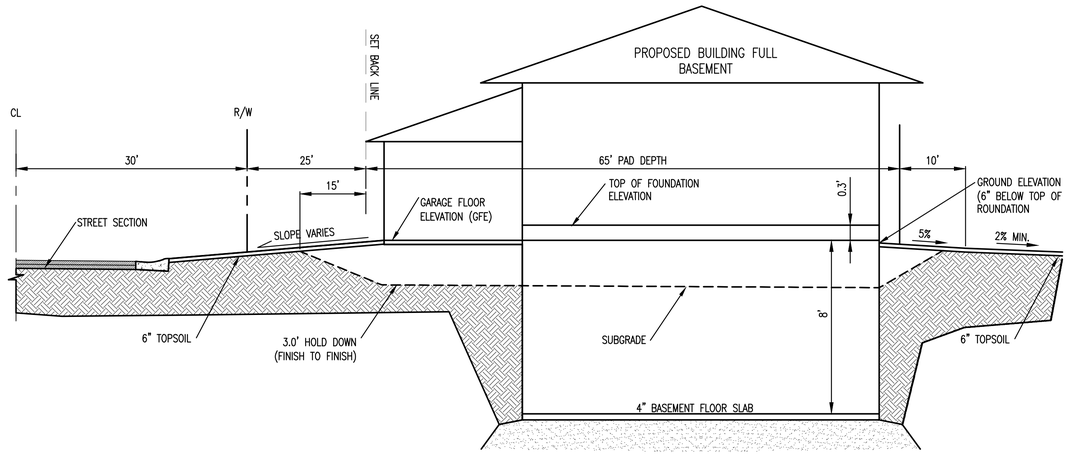
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OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/29/2021 10:59 PM



SINGLE FAMILY FULL BASEMENT (FB)
3.0' HOLD DOWN

N.T.S.

NOTE:

FB = FULL BASEMENT

LO = LOOK OUT BASEMENT

WO = WALKOUT BASEMENT

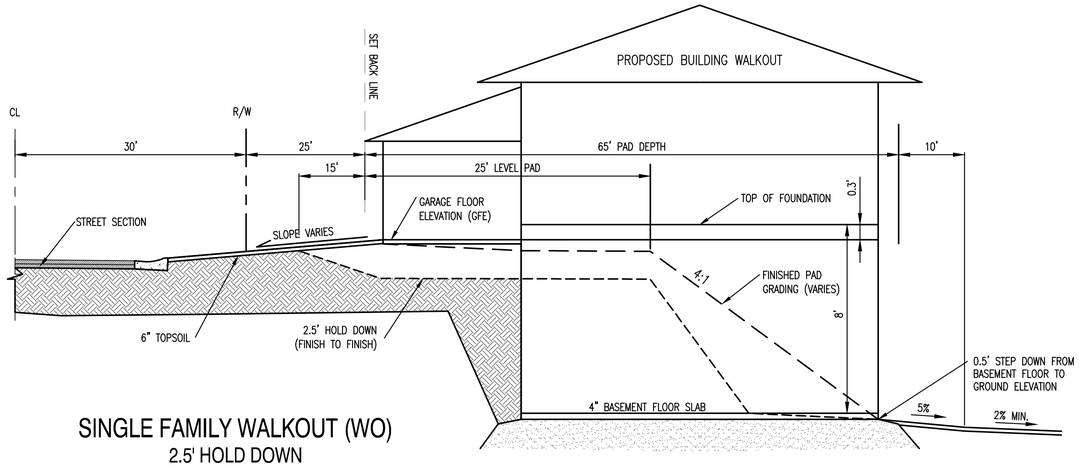
SELO = SPLIT ENTRY LOOKOUT BASEMENT

SEWO = SPLIT ENTRY WALKOUT BASEMENT

SOG = SLAB ON GRADE

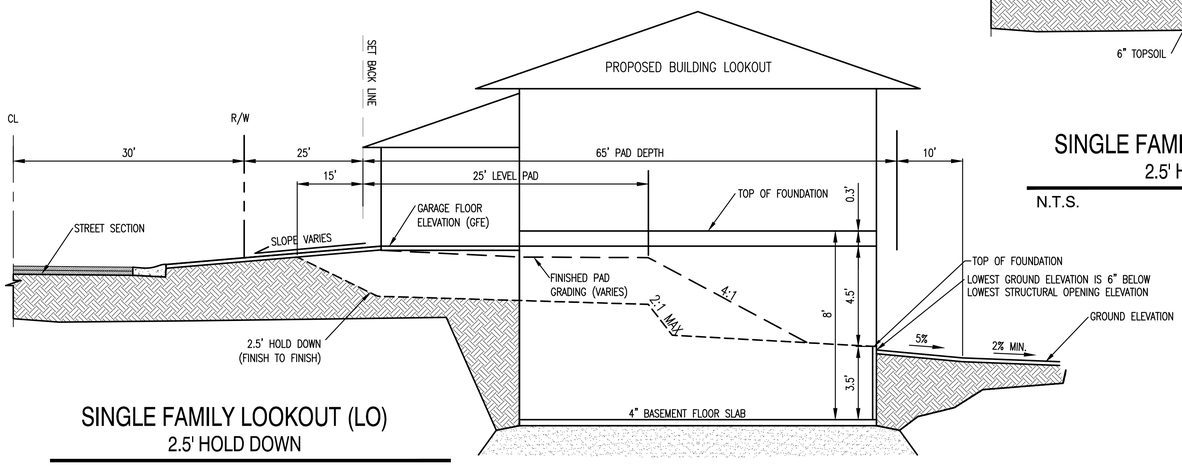
THE FIRST ELEVATION LISTED REFERS TO THE GARAGE FLOOR ELEVATION (GFE). THE SECOND ELEVATION LISTED REFERS TO THE LOWEST STRUCTURAL OPENING (LSO). IF NO SECOND ELEVATION IS LISTED THEN THE PRIMARY ELEVATION IS THE LOWEST STRUCTURAL OPENING.

SEE DETAILS OF EACH TYPE.



SINGLE FAMILY WALKOUT (WO)
2.5' HOLD DOWN

N.T.S.



SINGLE FAMILY LOOKOUT (LO)
2.5' HOLD DOWN

N.T.S.

NOTE:
THESE DETAILS ARE FOR 65-FT DEEP SINGLE FAMILY HOME PRODUCTS.

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

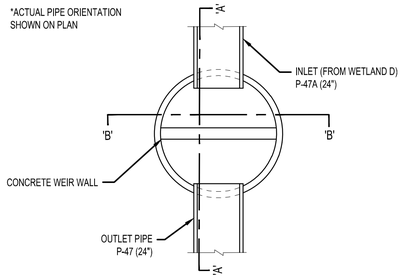
TYPICAL DETAILS

SHEET

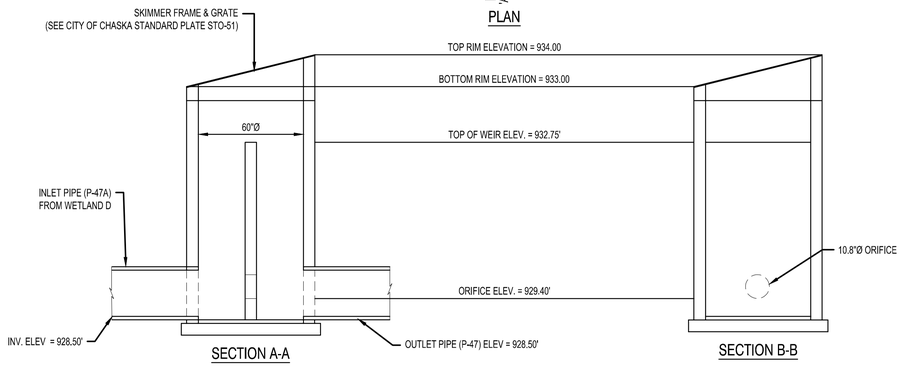
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OF 76

PLOT DATE: 12/29/2021 10:59 PM



PLAN



WETLAND D OUTLET STRUCTURE

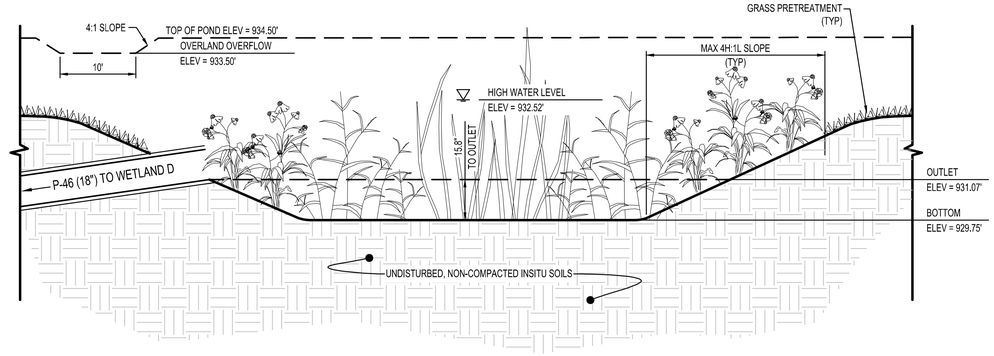
NTS SD700

INFILTRATION BASIN CONSTRUCTION:

A. WORK SHALL INCLUDE - ALL EXCAVATION AND CONSTRUCTION AS OUTLINED IN THE PLANS, SPECIFICATIONS AND DETAILS OUTLINING THE CONSTRUCTION OF THE INFILTRATION BASIN.
B. THE CONTRACTOR SHALL MAINTAIN SILT FENCE AROUND THE PERIMETER OF THE INFILTRATION BASIN DURING ALL PHASES OF CONSTRUCTION. THE INFILTRATION AREA MUST BE STAKED OFF AND MARKED TO KEEP ALL CONSTRUCTION TRAFFIC, EQUIPMENT AND MATERIAL STOCKPILES OUT OF THE PROPOSED INFILTRATION AREA.
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BASIN SEEDING

REFER TO SITE RESTORATION PLAN FOR BASIN SEEDING REQUIREMENTS.



BASIN A INFILTRATION BASIN

NTS SD800

INFILTRATION BASIN CONSTRUCTION:

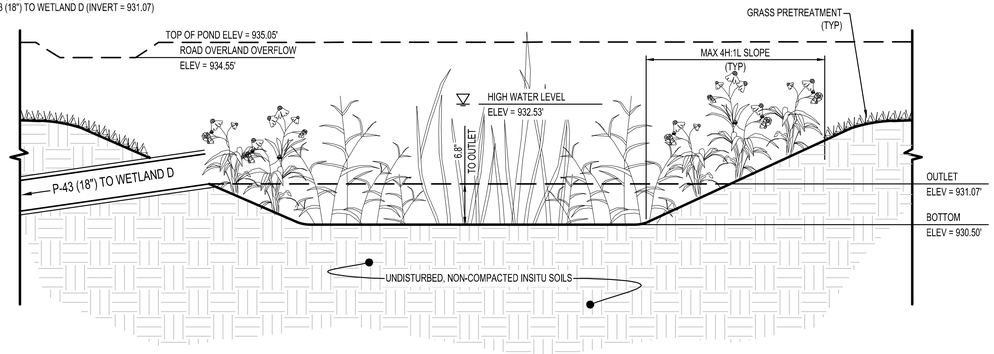
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BASIN SEEDING:

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OUTLETS:

P-42 (18") TO BASIN A (INVERT = 930.50)
P-43 (18") TO WETLAND D (INVERT = 931.07)

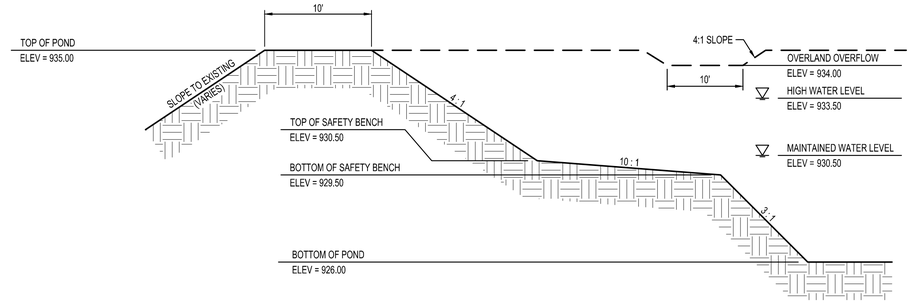


BASIN B INFILTRATION BASIN

NTS SD800

OUTLETS:

P-44 (15") TO BASIN B (INVERT = 930.50)
P-44A (15") TO BASIN B (INVERT = 930.50)
P-45 (24") TO WETLAND D (INVERT = 931.18)
P-45A (24") TO WETLAND D (INVERT = 931.18)
P-45B (12") TO WETLAND D (INVERT = 931.18)



BASIN C CROSS SECTION

NTS SD726

ISG

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TITLE

STORM WATER BASIN DETAILS

SHEET

13 OF 76

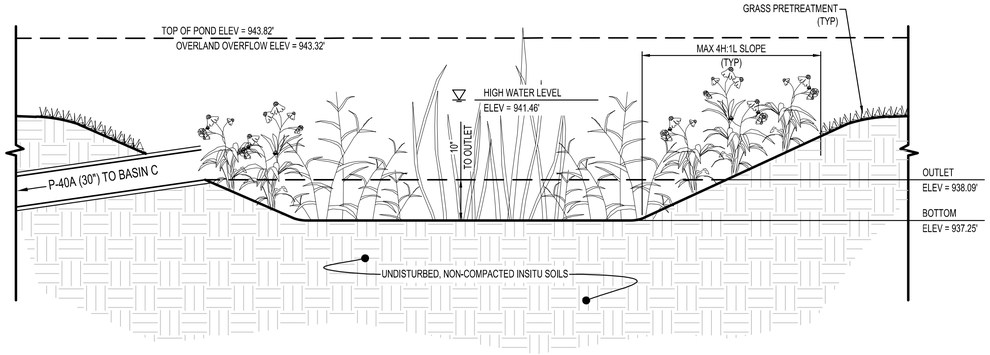
PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/28/2021 10:59 PM

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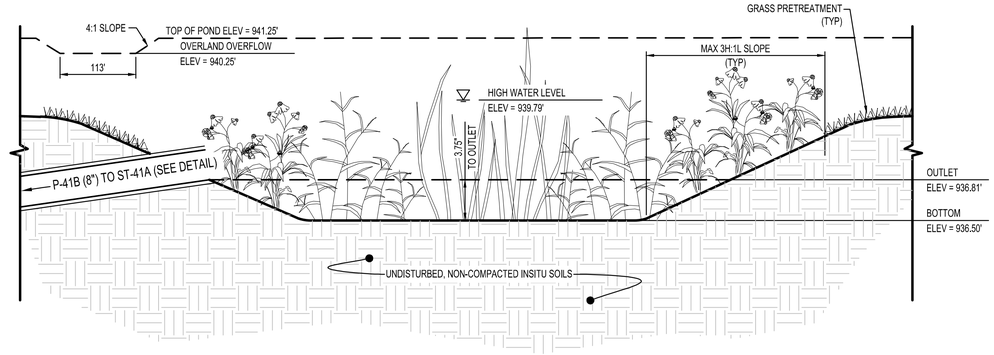


BASIN E INFILTRATION BASIN
NTS SD800

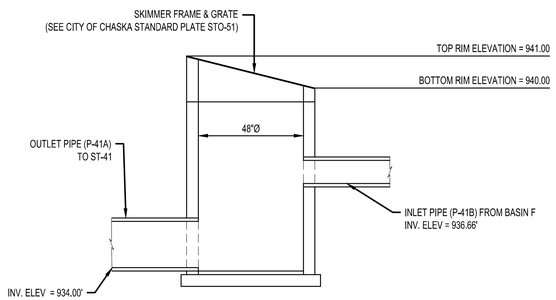
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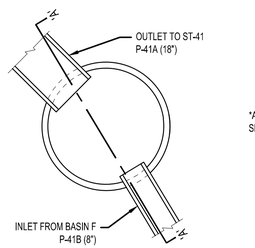
BASIN SEEDING:
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BASIN F INFILTRATION BASIN
NTS SD800



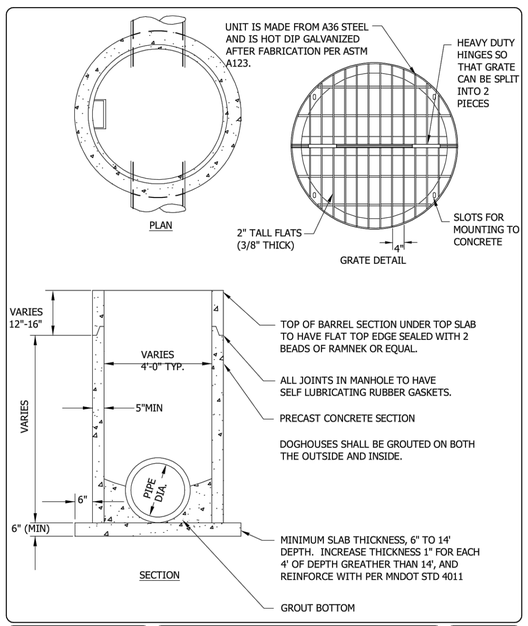
SECTION A-A



PLAN

*ACTUAL PIPE ORIENTATION SHOWN ON PLAN

BASIN F OUTLET STRUCTURE
NTS SD700



TYPE II
CATCHBASIN MANHOLE
POND SKIMMER
CARVER, MINNESOTA

LAST REVISION: MARCH 2018
PLATE NO. STO-5A

ISG

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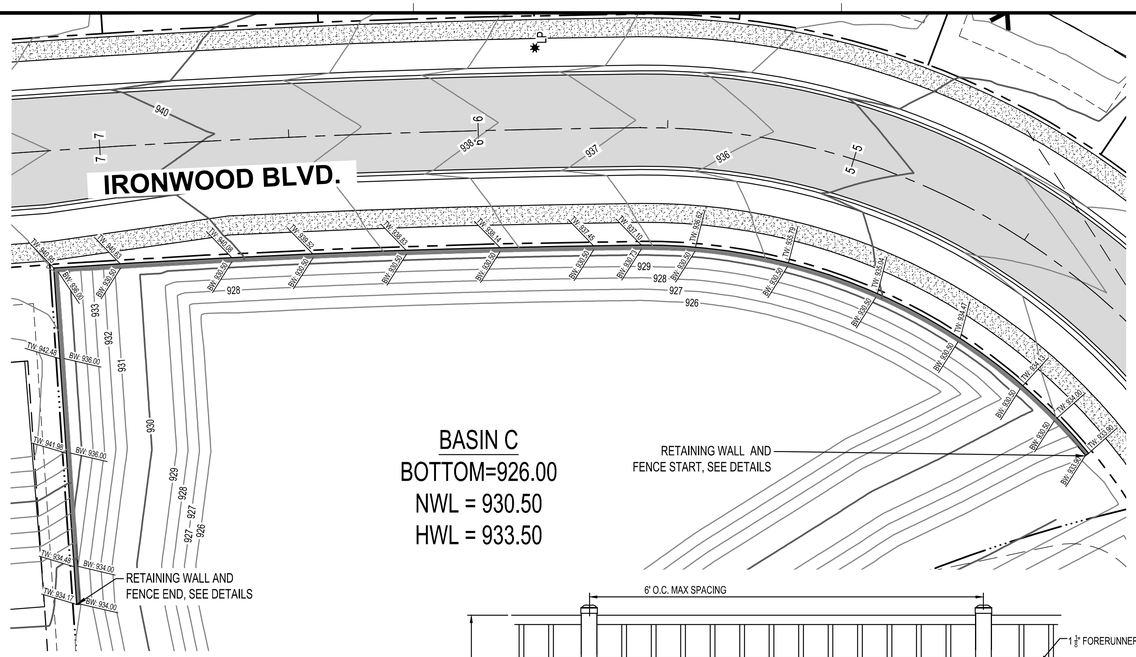
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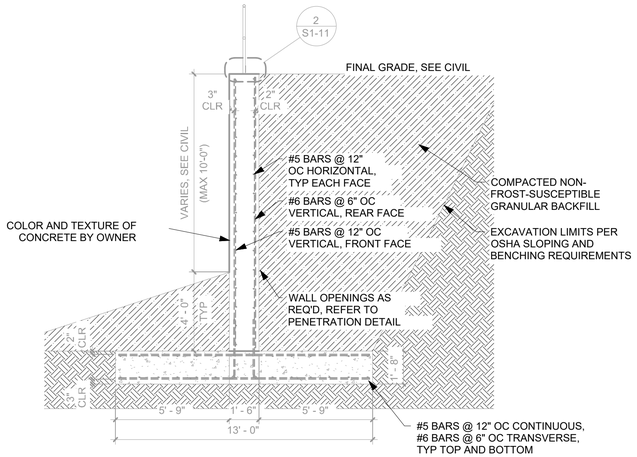
STORM WATER BASIN DETAILS

SHEET
14
OF 76

PRELIMINARY NOT FOR CONSTRUCTION

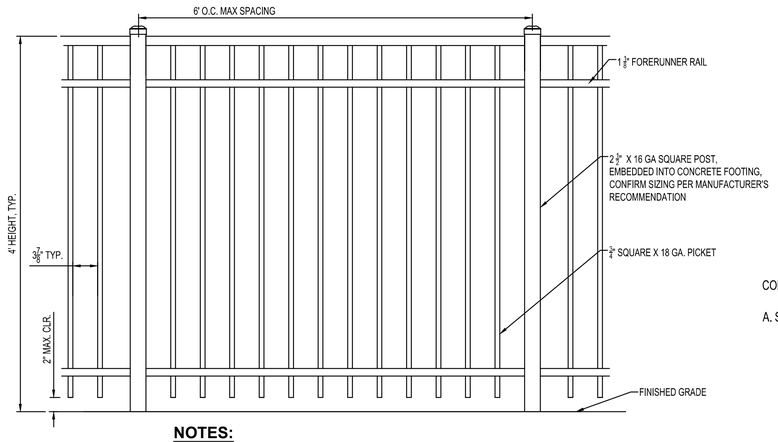
PLOT DATE: 12/29/2021 10:58 PM





TYPICAL WALL SECTION

NTS

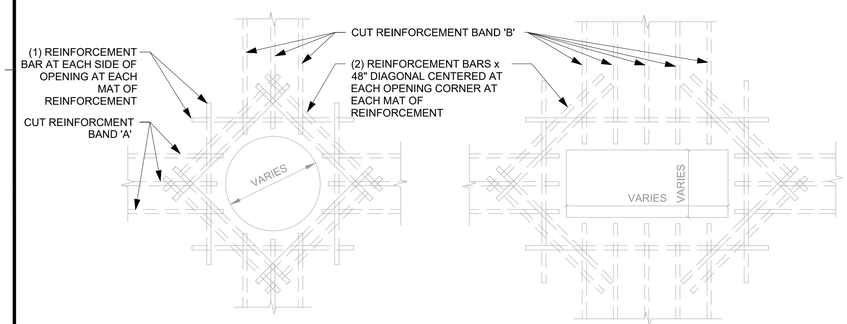


NOTES:

FENCE AND ALL COMPONENTS SHALL BE BLACK COLOR

TRAIL FENCE

NTS

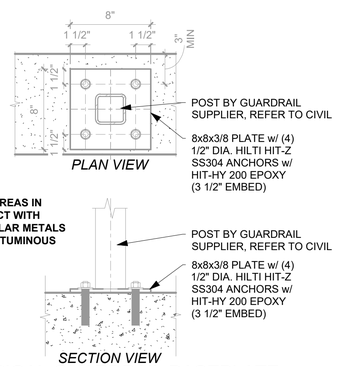


CONTRACTOR NOTES:

1. TYPICAL AT ALL OPENINGS IN CONCRETE WALLS AND SLABS UNLESS INDICATED OTHERWISE ON PLANS.
2. LAP ALL REINFORCEMENT PER STRUCTURAL NOTES, TYPICAL UNO.
3. PROVIDE 3" CLEARANCE MINIMUM BETWEEN REINFORCEMENT AND OPENING.
4. DO NOT WELD REINFORCEMENT TO PIPE SLEEVES OR INSERTS.

TYPICAL CONCRETE PENETRATION REINFORCEMENT

NTS



TYPICAL GUARDRAIL BASEPLATE

NTS

CONSTRUCTION NOTES:

A. SPECIFICATIONS
1. RETAINING WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.
   a. NON-FROST-SUSCEPTIBLE GRANULAR BACKFILL SHALL BE CRUSHED STONE OR CONCRETE, OR GRANULAR FILL WITH A GRADATION OF 100% PASSING 1 INCH, 75%-100% PASSING 3/4", <60% PASSING #4, <35% PASSING #40, AND <5% PASSING #200.
   b. ENGINEERED FILL SHALL BE SOILS WITH A PLASTICITY INDEX LESS THAN 6 PER ASTM D4318; UNSUITABLE SOILS INCLUDE ORGANIC AND UNIFIED SOIL CLASSIFICATION SYSTEM GROUPS OF SC, CL, ML, CH, OH, MH, OL, OR PT.
2. CONCRETE SHALL BE NORMAL WEIGHT, UNO, AND MEET THE FOLLOWING CRITERIA.
   a. f'c = 4,500 psi
   b. 6% +/- 1.5% AIR ENTRAINMENT
   c. 0.55 MAXIMUM WATER-TO-CEMENT RATIO
   d. CEMENT SHALL CONFORM TO ASTM C150, TYPE I/II
   e. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED ACCORDANCE WITH ASTM C94.
3. FOUNDATION NET ALLOWABLE SOIL BEARING PRESSURE IS 2,000 PSF (PRESUMED), AND SHALL BE VERIFIED IN FIELD BY GEOTECHNICAL ENGINEER.
   a. THE DESIGN FROST PENETRATION DEPTH FOR UNHEATED STRUCTURES IS 60 INCHES; PROTECT FOUNDATION EXCAVATIONS FROM FROST; DO NOT PLACE CONCRETE ON FROZEN GROUND.
   b. FOUNDATION EXCAVATIONS SHALL BE KEPT FREE OF LOOSE MATERIAL, STANDING WATER, AND SHALL BE INSPECTED BEFORE THE PLACEMENT OF ANY CONCRETE.

B. SUBMITTALS:
1. PRIOR TO SUBMITTAL, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS AND MAKE ANY CORRECTIONS REQUIRED. THE CONTRACTOR SHALL STAMP AND SIGN THE SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER.
2. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR PROPRIETARY MATERIAL AND ITEMS, INCLUDING FORMING ACCESSORIES, ADMIXTURES, PATCHING COMPOUNDS, SEALANTS, WATERSTOPS, JOINT SYSTEMS, CURING COMPOUNDS, AND OTHERS IN AND FOR CONSTRUCTION.
3. THE FABRICATOR SHALL CLEARLY HIGHLIGHT/CLOUD ANY CHANGES MADE IN THE SHOP DRAWINGS WHICH DO NOT COMPLY WITH DESIGN DRAWINGS, ANY CHANGES MUST BE APPROVED BY THE ENGINEER PRIOR TO FABRICATION.
4. CONTRACTOR TO SUBMIT THE FOLLOWING DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OF SIGN.
   a. CONCRETE MIX DESIGNS
   b. ADDITIONAL SHOP DRAWINGS REQUESTED IN THE SPECIFICATIONS.
5. A COPY OF ALL SHOP DRAWINGS SHALL BE MAINTAINED ON SITE AT ALL TIMES.

C. QUALITY CONTROL AND QUALITY ASSURANCE:
1. COORDINATE FOR ENGINEER OR OWNER'S INDEPENDENT TESTING AGENCY TO INSPECT AND APPROVE REINFORCING STEEL AND EMBEDS PRIOR TO ORDERING CONCRETE.
2. COORDINATE FOR OWNER'S INDEPENDENT TESTING AGENCY TO BE ON SITE AND PERFORM CONTINUOUS INSPECTION WHILE CONCRETE PLACEMENT IS OCCURING. PROVIDE NOTICE NO LESS THAN 48 HOURS IN ADVANCE OF CONRETE PLACEMENT.
3. COORINDATE WITH OWNER'S INDEPENDENT TESTING AGENCY TO SAMPLE CONCRETE AT TIME OF PLACEMENT IN ORDER TO PERFORM SLUMP, AIR, TEMPERATURE AND CASTING OF CYLINDERS.
4. THE SPECIAL INSPECTOR SHALL DETERMINE COMPLIANCE WITH THE SOIL REPORT FOR SITE PREPARATION, FILL PLACEMENT AND DENSITY TESTS.
5. ANY AND ALL WORK PERFORMED WITHOUT PROPER INSPECTION AND TESTING AS OUTLINED IN THIS SPECIFICATION WILL BE CONSIDERED UNAUTHORIZED WORK. ANY CORRECTIVE MEASURES REQUIRED OF THE UNAUTHORIZED WORK WILL BE AT CONTRACTORS OWN EXPENSE

RETAINING WALL DETAIL

NTS

PLOT DATE: 1/26/2022 5:45 PM

PRELIMINARY NOT FOR CONSTRUCTION

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 WALL DETAIL
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

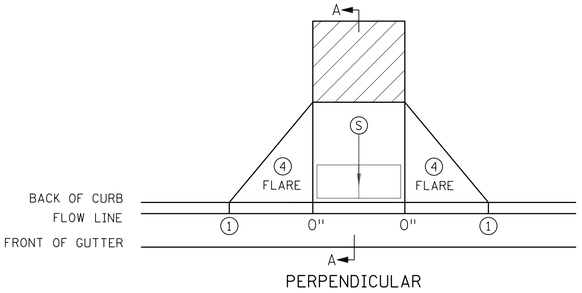
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RETAINING WALL-FENCE PLAN AND DETAILS

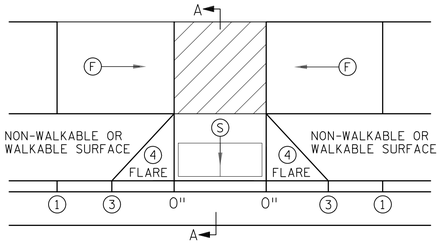
SHEET

15

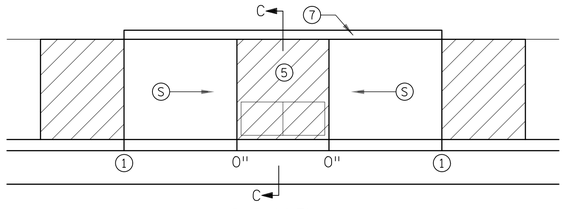
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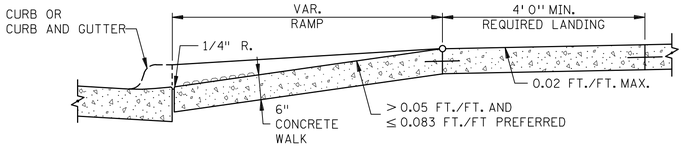
PERPENDICULAR



TIERED PERPENDICULAR

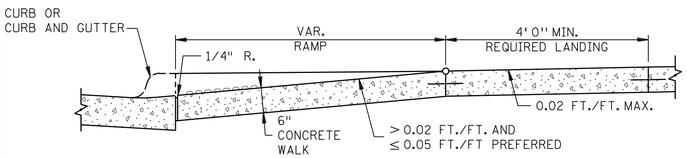


PARALLEL



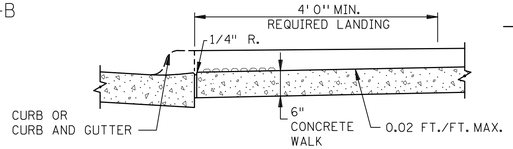
SECTION A-A

PERPENDICULAR/TIERED/DIAGONAL



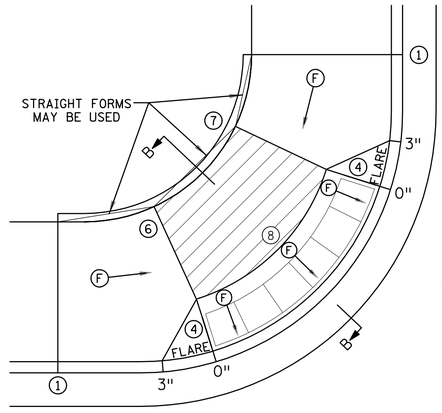
SECTION B-B

FAN

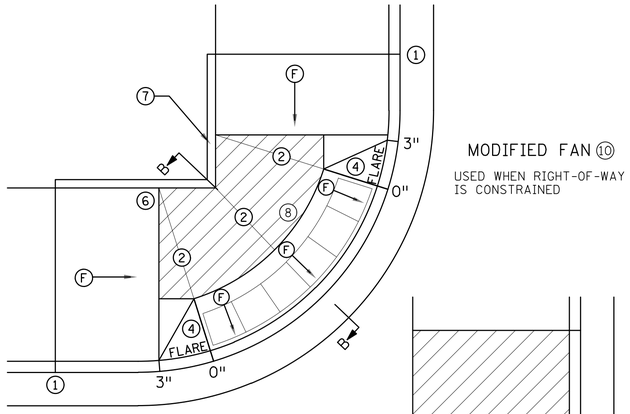


SECTION C-C

PARALLEL/DEPRESSED CORNER

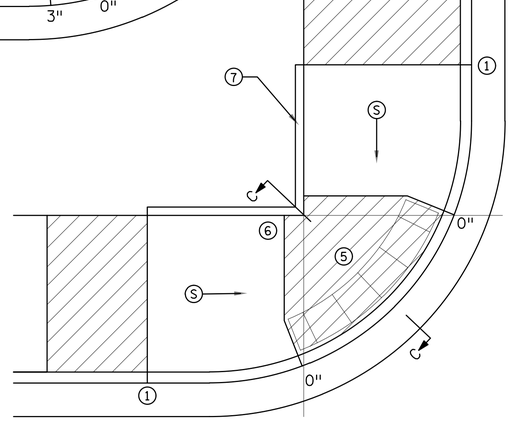


FAN (10)

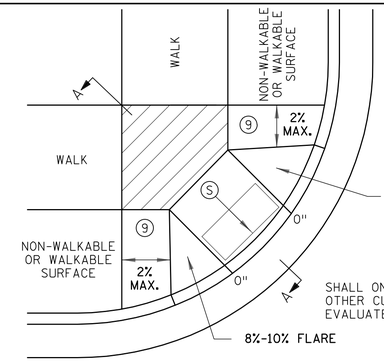


MODIFIED FAN (10)

USED WHEN RIGHT-OF-WAY IS CONSTRAINED



DEPRESSED CORNER



DIAGONAL

SHALL ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH. (EXCEPT AS STATED IN (6) BELOW.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISIONS - PROSECUTION OF WORK (ADA).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6" LESS THAN THE PAR/TRAIL WIDTH. ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

(1) MATCH FULL HEIGHT CURB.
(2) 4' MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.
(3) 3" HIGH CURB WHEN USING A 3' LONG RAMP, 4" HIGH CURB WHEN USING A 4' LONG RAMP.
(4) SEE SHEET 4 OF 6, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS, WHEN INITIAL LANDING IS AT FULL CURB HEIGHT.
(5) DETECTABLE WARNINGS MAY BE PART OF THE 4' X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
(6) THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL. (TYPICAL FOR ALL)
(7) WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.
(8) A 7' MIN TOP RADIUS GRADE BREAK REQUIRED TO BE CONSTRUCTIBLE.
(9) PAVE FULL WALK WIDTH.
(10) "S" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

(F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

X" CURB HEIGHT

REVISION:

APPROVED: JANUARY 23, 2017

OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION

STATE DESIGN ENGINEER

REVISED:

APPROVED: 1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 1 OF 6

PLOT DATE: 1/22/2021 4:28 PM

ISG

NOTE:
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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PED RAMP STD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

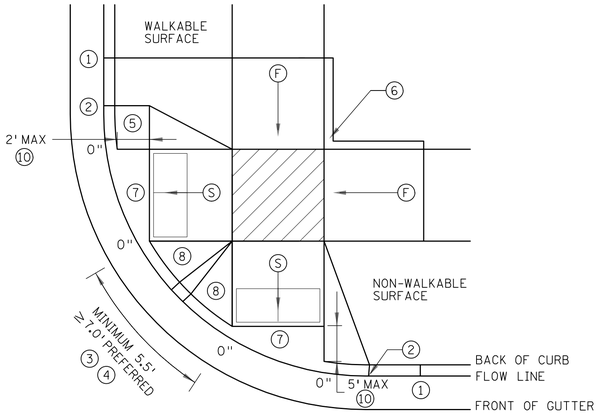
PEDESTRIAN CURB RAMP DETAILS 1

SHEET

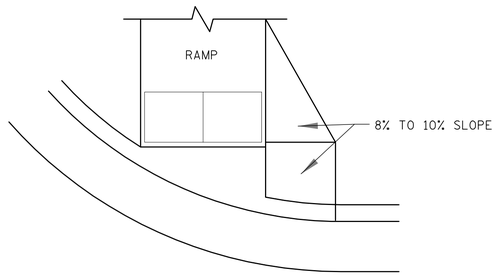
16

OF 76

PRELIMINARY NOT FOR CONSTRUCTION



COMBINED DIRECTIONAL ⑨



DIRECTIONAL RAMP WALKABLE FLARE

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOP GRADE BREAK OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISION (PROSECUTION OF WORK).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-USE PATH AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6" LESS THAN THE PAR/PATH WIDTH. ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB. SEE NOTES ⑩ & ⑪ FOR INFORMATION REGARDING RECTANGULAR DETECTABLE WARNING PLACEMENT.

① MATCH FULL CURB HEIGHT.

② 3" HIGH CURB WHEN USING A 3' LONG RAMP
4" HIGH CURB WHEN USING A 4' LONG RAMP.

③ 3" MINIMUM CURB HEIGHT (5.5' MIN. DISTANCE REQUIRED BETWEEN DOMES)
4" PREFERRED (7' MIN. DISTANCE REQUIRED BETWEEN DOMES).

④ THE "BUMP" IN BETWEEN THE RAMPS SHOULD NOT BE IN THE PATH OF TRAVEL FOR COMBINED DIRECTIONAL RAMPS. IF THIS OCCURS MODIFY THE RAMP LOCATION OR SWITCH RAMP TO A FAN/DEPRESSED CORNER.

⑤ WHEN USING CONCRETE PAVED FLARES ON THE OUTSIDE OF DIRECTIONAL RAMPS, AND ADJACENT TO A WALKABLE SURFACE, DIRECTIONAL RAMP FLARES SHOULD BE USED. SEE THE DETAIL ON THIS SHEET.

⑥ GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.

⑦ MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.

⑧ 8% TO 10% WALKABLE FLARE.

⑨ PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.

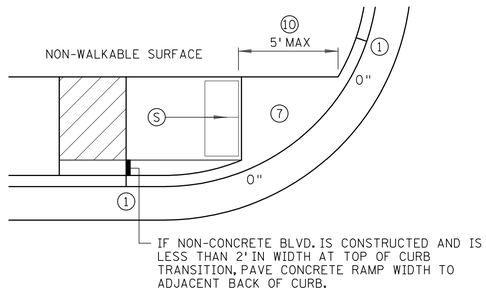
⑩ FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE, AND 5' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM BACK OF CURB. A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.

⑪ RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK UP TO 9" FROM THE BACK OF CURB WITH CORNERS SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.

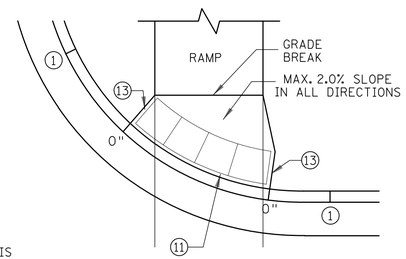
⑫ FOR DIRECTIONAL RAMPS WITH THE DETECTABLE WARNINGS PLACED AT THE BACK OF CURB, THE DETECTABLE WARNINGS SHALL COVER THE ENTIRE WIDTH OF THE WALK/PATH. THIS ENSURES A DETECTABLE EDGE AND HELPS ELIMINATE THE CURB TAPER OBSTRUCTING THE PATH OF PEDESTRIAN TRAVEL.

⑬ THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

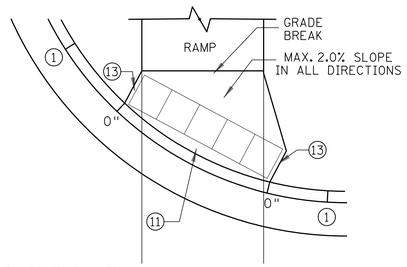
⑭ TO BE USED FOR ALL DIRECTIONAL RAMPS, EXCEPT WHERE DOMES ARE PLACED ALONG THE BACK OF CURB.

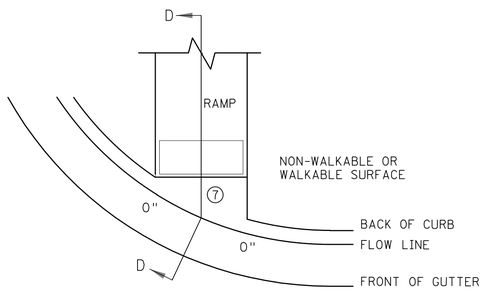


STANDARD ONE-WAY DIRECTIONAL ⑨

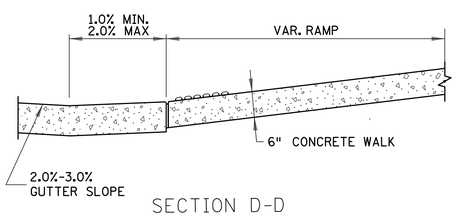


ONE-WAY DIRECTIONAL WITH DETECTABLE WARNING AT BACK OF CURB

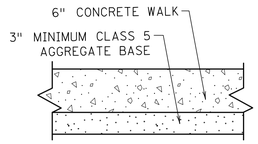




CURB FOR DIRECTIONAL RAMPS ⑭



SECTION D-D



TYPICAL SIDEWALK SECTION WITHIN INTERSECTION CORNER

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

(F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

X" CURB HEIGHT

REVISION:
APPROVED: JANUARY 23, 2017
OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER
REVISED:
APPROVED: 1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 2 OF 6

PLOT DATE: 1/22/2021 4:28 PM

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PED RAMP STD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

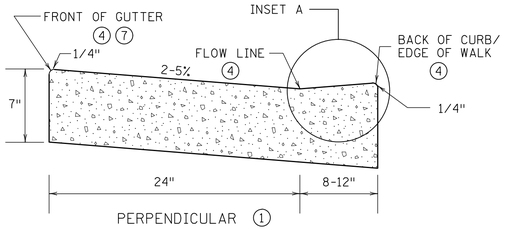
PEDESTRIAN CURB RAMP DETAILS 2

SHEET

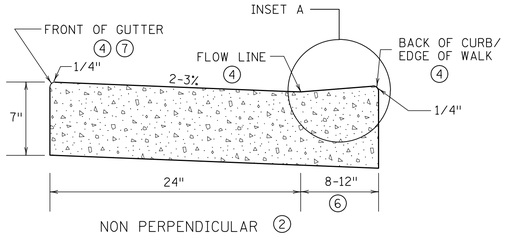
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OF 76

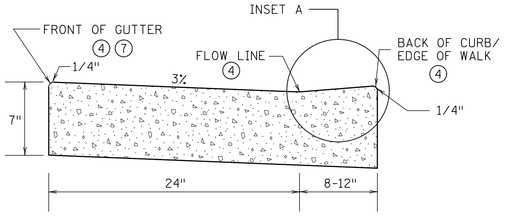
PRELIMINARY NOT FOR CONSTRUCTION



PERPENDICULAR (1)

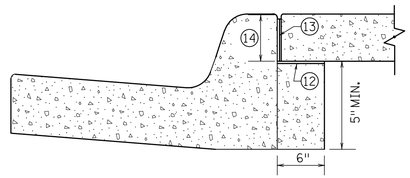


NON PERPENDICULAR (2)



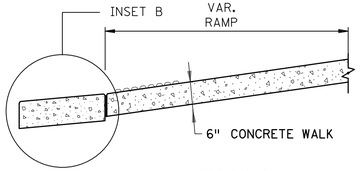
FOR CURB MACHINE PLACEMENT AROUND RADIUS (3)
(REGARDLESS OF RAMP TYPE)

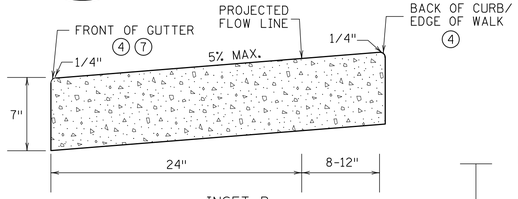
PEDESTRIAN ACCESS ROUTE CURB & GUTTER DETAIL



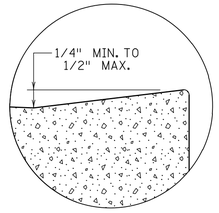
OPTIONAL SILL CURB WHEN SIDEWALK
IS AT BACK OF CURB

CONCRETE SILL TO BE USED ONLY WHEN
SPECIFIED IN THE PLAN.

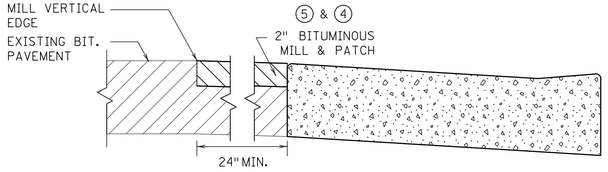


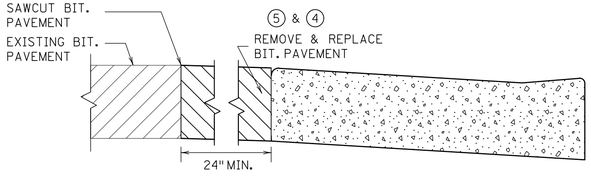


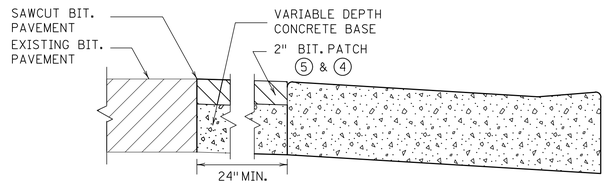
INSET B
OUTFLOW GUTTER (8)



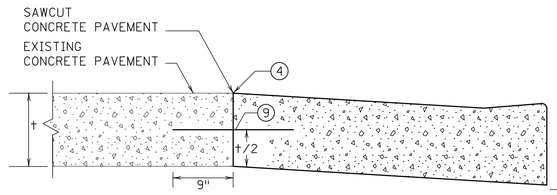
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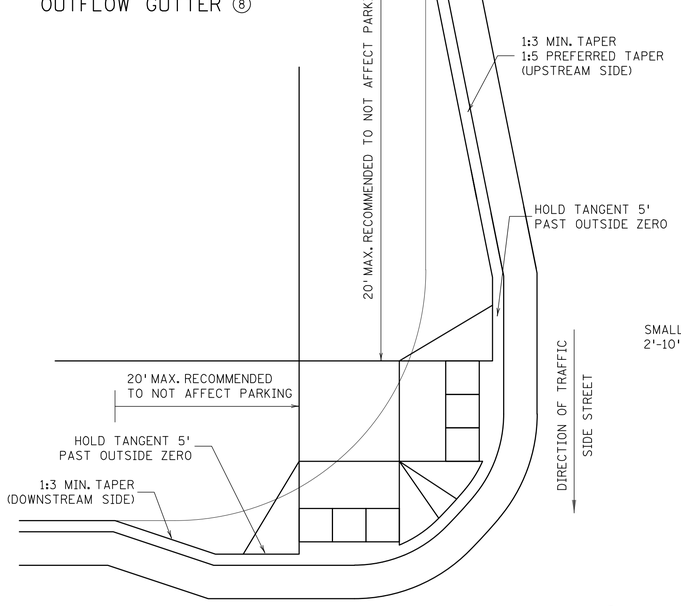


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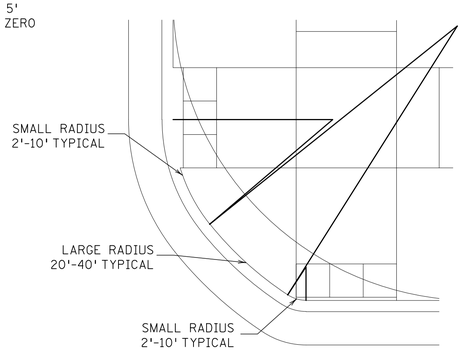
PAVEMENT TREATMENT OPTIONS IN FRONT OF CURB & GUTTER

FOR USE ON CURB RAMP RETROFITS



ADA CURB EXTENSION WITH COMPOUND RADIUS (BUMP OUT) (11)

DIRECTION OF TRAFFIC
MAIN STREET



COMBINED DIRECTIONAL (10)
(COMPOUND RADIUS)

NOTES:

POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM.

NO PONDING SHALL BE PRESENT IN THE PAR.

ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.

(1) FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.

(2) FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS & DEPRESSED CORNERS.

(3) BEGIN GUTTER SLOPE TRANSITION 10' OUTSIDE OF ALL CURB RAMPS.

(4) THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".

(5) ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.

(6) VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS. SEE SHEET 2 FOR DIRECTIONAL CURB SLOPE REQUIREMENTS.

(7) TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. TOP 1.5" OF THE GUTTER FACE MUST BE A FORMED EDGE. PAR GUTTER SHALL NOT BE OVERLAID.

(8) SHOULD BE USED AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.

(9) DRILL AND GROUT NO. 4 EPOXY-COATED 18" LONG TIE BARS AT 30" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT 1' MINIMUM FROM ALL JOINTS.

(10) HELPS PROVIDE TWO SEPARATE RAMPS, REDUCES THE DOME SETBACK LENGTH AND MINIMIZES DIRECTIONAL CURB. THIS RADIUS DESIGN CLOSELY FOLLOWS THE TURNING VEHICLE PATH WHILE OPTIMIZING CURB RAMP LENGTH.

(11) CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRAINED AREAS, USUALLY IN DOWNTOWN ROADWAY SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE. CURB EXTENSIONS SHOULD BE CONSIDERED FOR APS INTERSECTIONS WHERE SPACE IS LIMITED. PUSH BUTTONS MUST MEET APS CRITERIA AS DESCRIBED IN THE PUSH BUTTON LOCATION DETAIL SHEET.

(12) PLACE BOND BREAKER BETWEEN WALK AND TOP OF SILL.

(13) 1/2" PREFORMED JOINT FILLER PER MNDOT SPEC. 3702.

(14) DIMENSION TO BE SAME AS SIDEWALK THICKNESS, 4" MIN.

REVISION:

APPROVED: JANUARY 23, 2017
OPERATIONS ENGINEER

REVISED:

APPROVED:
1-23-2017
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 3 OF 6

PLOT DATE: 11/22/2021 4:28 PM

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PED RAMP STD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

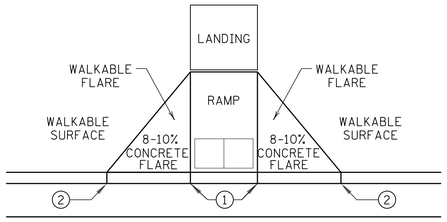
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PEDESTRIAN CURB RAMP DETAILS 3

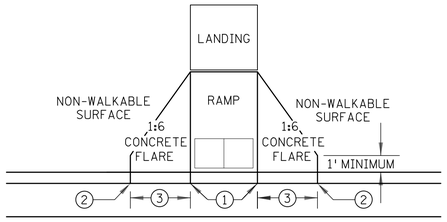
SHEET

18 OF 76

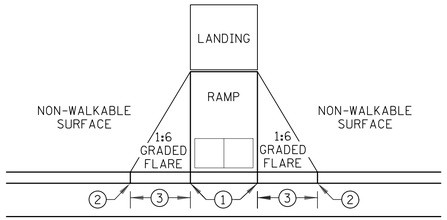
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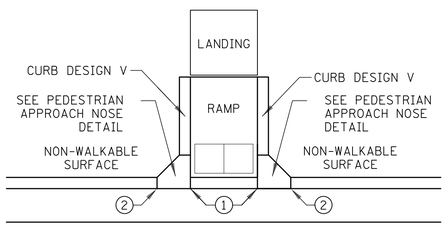
PAVED FLARES
ADJACENT TO WALKABLE SURFACE



PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE

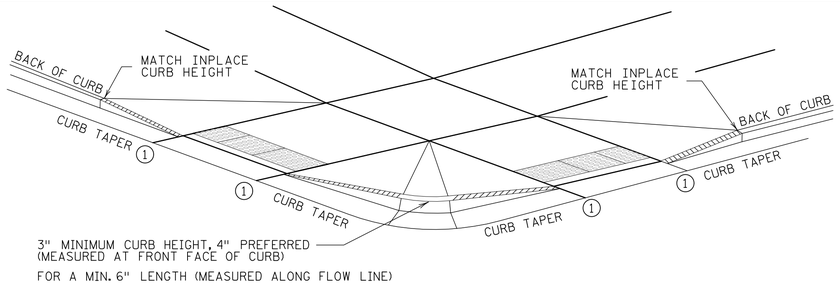


GRADED FLARES

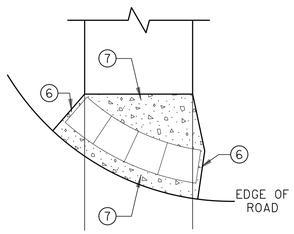


RETURNED CURB ⑤

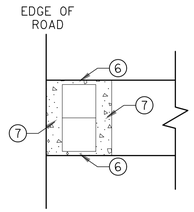
TYPICAL SIDE TREATMENT OPTIONS ④ ⑪



DETECTABLE EDGE WITH ⑧
CURB AND GUTTER

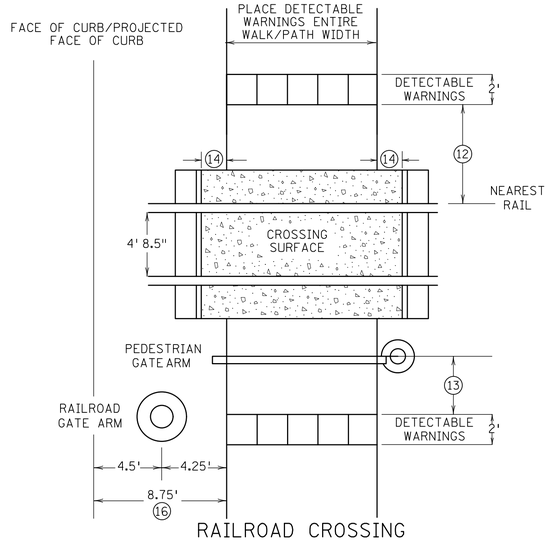


RADIAL DETECTABLE WARNING

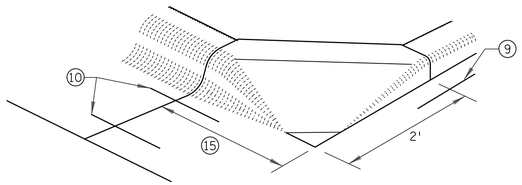


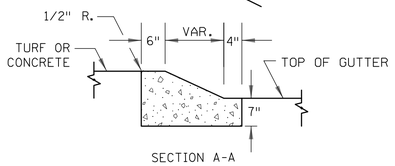
RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER

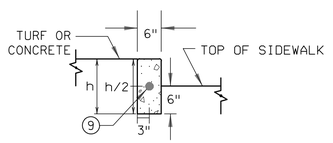


RAILROAD CROSSING
PLAN VIEW

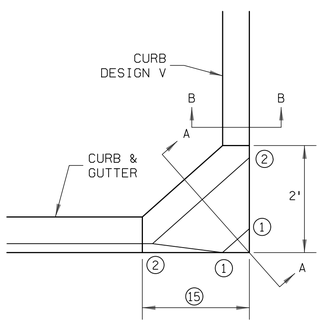




SECTION A-A



SECTION B-B



PEDESTRIAN APPROACH
NOSE DETAIL
(FOR RETURNED CURB
SIDE TREATMENT)

NOTES:

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.

CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

① 0" CURB HEIGHT.

② FULL CURB HEIGHT.

③ 2' FOR 4" HIGH CURB AND 3' FOR 6" HIGH CURB.

④ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.

⑤ TYPICALLY USED FOR MEDIANS AND ISLANDS.

⑥ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" MAX. BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑦ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF BITUMINOUS ROADWAY AND/OR BITUMINOUS SHARED-USE PATH TO PROVIDE VISUAL CONTRAST.

⑧ ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.

⑨ DRILL AND GROUT 1 - NO. 4 12" LONG REINFORCEMENT BAR (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE V CURB.

⑩ DRILL AND GROUT 2 - NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE CURB AND GUTTER.

⑪ SIDE TREATMENT EXAMPLES SHOWN ARE WHEN THE INITIAL LANDING IS APPROXIMATELY LEVEL WITH THE FULL HEIGHT CURB (I.E. 6' LONG RAMP FOR 6" HIGH CURB). WHEN THE INITIAL LANDING IS MORE THAN 1" BELOW FULL HEIGHT CURB REFER TO SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT TAPERS AND MAINTAIN POSITIVE BOULEVARD DRAINAGE.

⑫ NEAREST EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 12' MINIMUM TO 15' MAXIMUM FROM THE NEAREST RAIL. FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.

⑬ WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL, 2' FROM THE APPROACHING SIDE OF THE GATE ARM. THIS CRITERIA GOVERNS OVER NOTE ⑫.

⑭ CROSSING SURFACE SHALL EXTEND 2' MINIMUM PAST THE OUTSIDE EDGE OF WALK OR SHARED-USE PATH.

⑮ 3' FOR MEDIANS AND SPLITTER ISLANDS. NOSE CAN BE REDUCED TO 2' ON FREE RIGHT ISLANDS.

⑯ SIDEWALK TO BE PLACED 8.75' MIN. FROM THE FACE OF CURB/PROJECTED FACE OF CURB. THIS ENSURES MIN. CLEARANCE BETWEEN THE SIDEWALK AND GATE ARM COUNTERWEIGHT SUPPORTS.

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OPERATIONS ENGINEER

REVISED:

APPROVED:
1-23-2017

STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 4 OF 6

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PED RAMP STD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
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CLIENT PROJECT NO.	-

TITLE

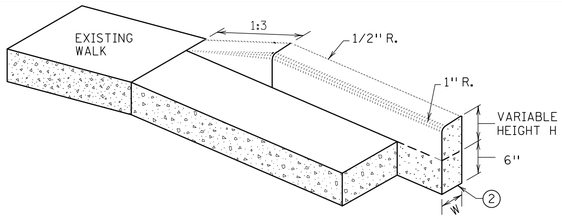
PEDESTRIAN CURB RAMP DETAILS 4

SHEET

19

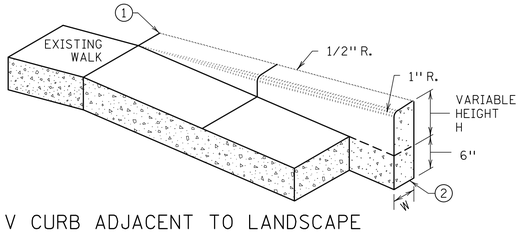
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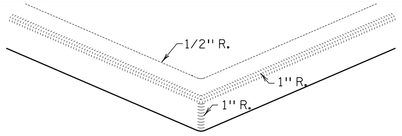
V CURB ADJACENT TO LANDSCAPE

CURB WITHIN SIDEWALK LIMITS

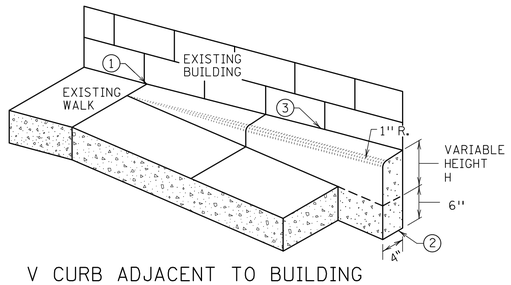


V CURB ADJACENT TO LANDSCAPE

CURB OUTSIDE SIDEWALK LIMITS

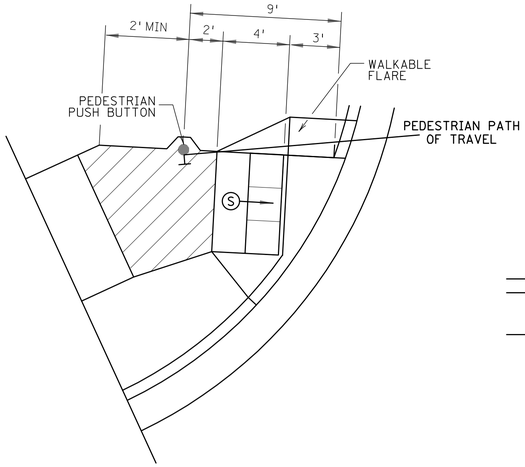


V CURB INTERSECTION



V CURB ADJACENT TO BUILDING OR BARRIER

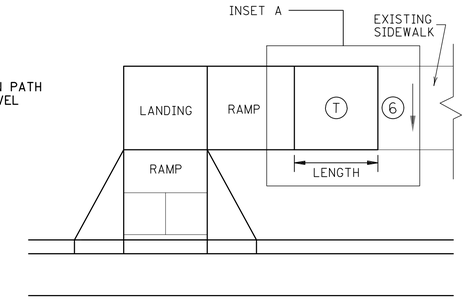
CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"

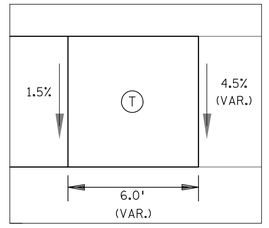


SEMI-DIRECTIONAL RAMP (3,4,9)

3' DOME SETBACK, 4' LONG RAMP AND PUSH BUTTON 9' FROM THE BACK OF CURB

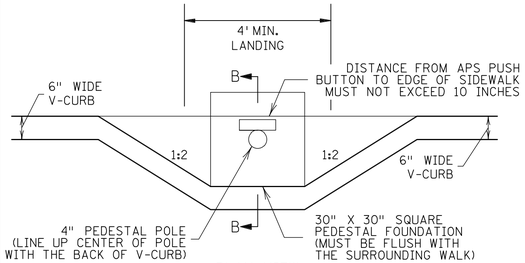
PRIMARILY USED FOR APS APPLICATIONS WHERE THE PAR DOES NOT CONTINUE PAST THE PUSH BUTTON (DEAD-END SIDEWALK)



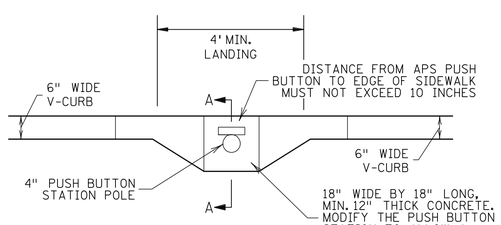


INSET A

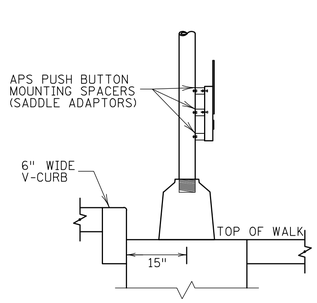
TRANSITION PANEL ④⑤



PLAN VIEW

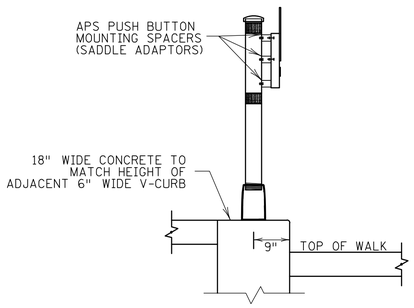


PLAN VIEW



SECTION B-B

SIGNAL PEDESTAL & PUSH BUTTON (V-CURB)



SECTION A-A

PUSH BUTTON STATION (V-CURB)

NOTES:

A WALKABLE FLARE IS AN 8-10% CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS ADJACENT TO A WALKABLE SURFACE, OR WHEN THE PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSES THE FLARE.

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

1. END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
2. ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
3. EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.
4. THE MAX. RATE OF CROSS SLOPE TRANSITIONING IS 1' LINEAR FOOT OF SIDEWALK PER HALF PERCENT CROSS SLOPE. WHEN PAR WIDTH IS GREATER THAN 6' OR THE RUNNING SLOPE IS GREATER THAN 5%, DOUBLE THE CALCULATED TRANSITION LENGTH.
5. TRANSITION PANELS ARE TO ONLY BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB HEIGHT (TYPICAL SECTION).
6. EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

- (S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
- LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
- (T) TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A RAMP TO THE EXISTING WALK CROSS-SLOPE. RATE OF TRANSITION SHOULD BE 0.5% PER 1 LINEAR FOOT OF WALK. SEE THIS SHEET FOR ADDITIONAL INFORMATION.

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STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 5 OF 6

PLOT DATE: 1/22/2021 4:28 PM

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PED RAMP STD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

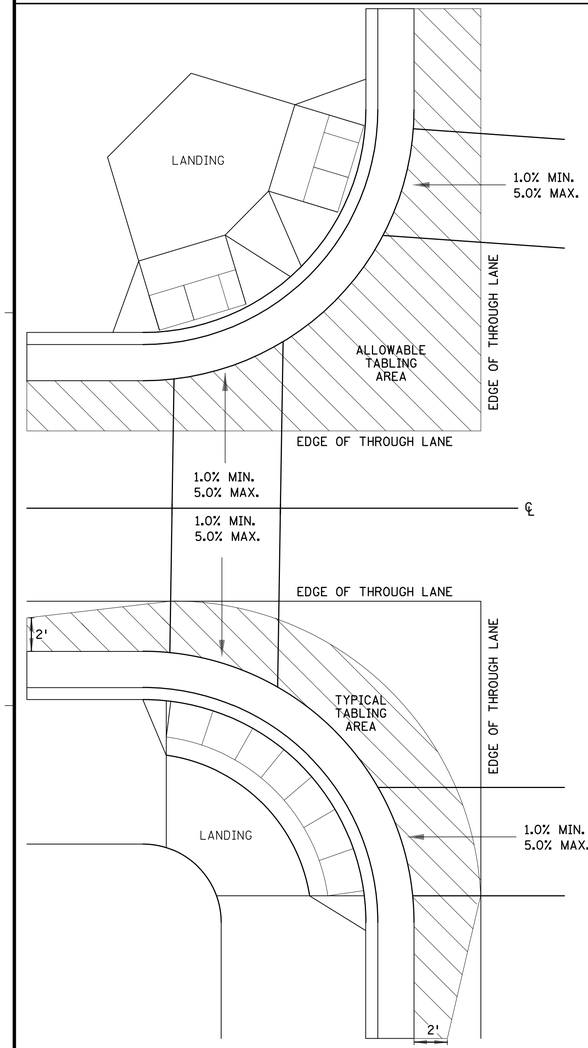
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PEDESTRIAN CURB RAMP DETAILS 5

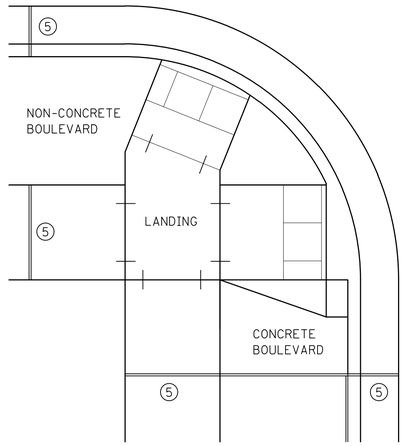
SHEET

20 OF 76

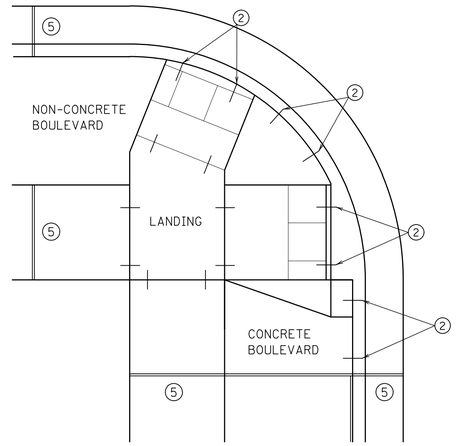
PRELIMINARY NOT FOR CONSTRUCTION



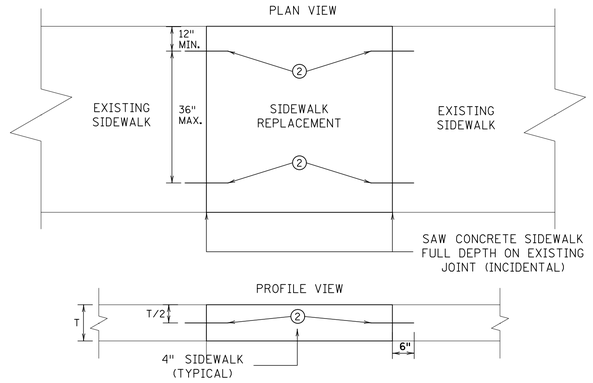
CURB LINE AND ROAD CROSSING ADJUSTMENTS



EXPANSION MATERIAL PLACEMENT FOR
CONCRETE AND BITUMINOUS ROADWAYS

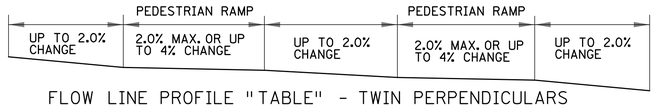


OPTIONAL CURB LINE REINFORCEMENT
PLACEMENT ON BITUMINOUS ROADWAYS (4)

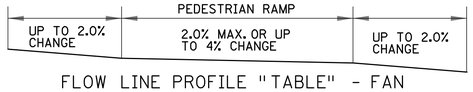


OPTIONAL SIDEWALK REINFORCEMENT

SIDEWALK REINFORCEMENT TO BE USED
ONLY WHEN SPECIFIED IN THE PLAN.



FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS



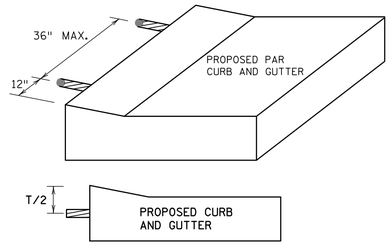
FLOW LINE PROFILE "TABLE" - FAN



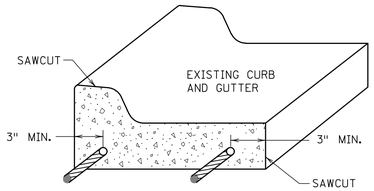
FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS



FLOW LINE PROFILE RAISE - FAN

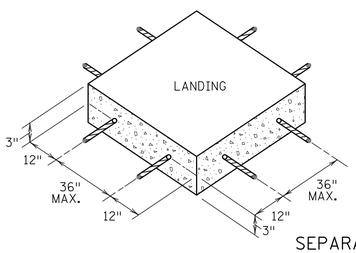


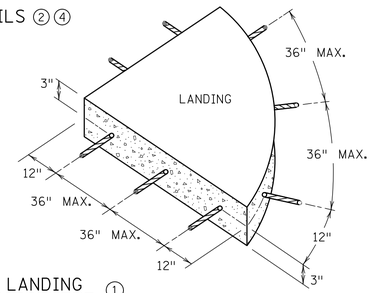
OPTIONAL CURB LINE REINFORCEMENT DETAILS (2)(4)



FOR USE ON CURB RAMP RETROFITS

CURB AND GUTTER
REINFORCEMENT (3)





SEPARATE LANDING
POUR REINFORCEMENT (1)

"TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK, IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS
"TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: "TABLING" OF FLOW LINES, IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2%. WARPING OF THE BITUMINOUS PAVEMENT CAN NOT EXTEND INTO THE THROUGH LANE. TABLE THE FLOW LINE TO 2% OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA;

1) 1.0% MIN. CROSS-SLOPE OF THE ROAD
2) 5.0% MAX. CROSS-SLOPE OF THE ROAD
3) "TABLE" FLOW LINE UP TO 4% CHANGE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
4) UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN CURB RAMP

STAND-ALONE ADA RETROFITS: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH APRON REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA;

1) 1.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
2) 1.0% MIN. FLOW LINE (ON EITHER SIDE OF PEDESTRIAN RAMP) TO MAINTAIN POSITIVE DRAINAGE
3) 5.0% RECOMMENDED MAX. FLOW LINE
4) LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

NOTES:

1. TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.
2. DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS AT 36" MAXIMUM CENTER TO CENTER (EPOXY COATED). BARS TO BE ADJUSTED TO MATCH RAMP GRADE.
3. DRILL AND GROUT 2 - NO. 4 X 12" LONG REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS WITHIN RADIUS.
4. THIS OPTIONAL CURB LINE REINFORCEMENT DETAIL SHOULD ONLY BE USED ON BITUMINOUS ROADWAYS WHEN SPECIFIED IN THE PLAN.
5. 1/2 IN. PREFORMED JOINT FILLER MATERIAL PER MNDOT SPEC. 3702.

REVISION:

APPROVED: JANUARY 23, 2017

OPERATIONS ENGINEER

DEPARTMENT OF TRANSPORTATION — MINNESOTA

STATE DESIGN ENGINEER

REVISED:

APPROVED: 1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 6 OF 6

PLOT DATE: 1/22/2021 4:28 PM

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

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CHASKA MINNESOTA

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CLIENT PROJECT NO.	-

TITLE

PEDESTRIAN CURB RAMP DETAILS 6

SHEET

21 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

RESERVE AT AUTUMN WOODS

PLAT FILE NO.
C.R. DOC. NO.

AUTUMN WOODS DRIVE

AUTUMN WOODS

N LINE OF NE 1/4 OF NW 1/4 SEC. 27-T116N-R23W

N89°25'29"W 988.48

S6°49'27"W 41.98

L=63.90 R=596.24 Δ=6°08'27"

N89°16'38"W 193.28

N13°27'00"W 34.64

N89°25'29"W 86.81

N 1/4 CORNER SEC. 27-T116N-R23W

OUTLOT H

OUTLOT A

OUTLOT B

OUTLOT C

OUTLOT D

OUTLOT E

OUTLOT F

OUTLOT G

AUDUBON ROAD (C.S.A.H. NO. 17)

IRONWOOD BLVD.

SUGAR MAPLE DRIVE

TWP. HD

SECTION

N13°30'56"W 517.21

L=265.17 R=1432.50 Δ=10°36'21"

N0°32'08"W 643.77 E LINE OF NE 1/4 OF NW 1/4 SEC. 27-T116N-R23W

S1°19'38"E 1401.87

S LINE OF NE 1/4 OF NW 1/4 SEC. 27-T116N-R23W

S89°12'05"E 1507.37 EXCEPTION

978.98

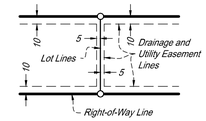
AUTUMN WOODS EAST

AUTUMN WOODS EAST 2ND ADDITION

IRONWOOD BOULEVARD

CREEK

Drainage and Utility Easements are shown thus:



Being 5 feet in width and adjoining lot lines and being 10 feet in width and adjoining right - of - way lines and rear lot lines, unless otherwise indicated on the plat.

N

0 80 160

SCALE IN FEET

LEGEND

- ● Iron Monument Found
- ⊗ Indicates 1/2" Dia. x 18" Long Solid Iron Pipe Set With Plastic Cap Marked By ISG, License No. 45817 To Be Set Before Time of Recording.
- ○ Indicates 1/2" Dia. x 18" Long Solid Iron Pipe Set With Plastic Cap Marked By ISG, License No. 45817 To Be Set Within One Year of Recording.
- ▲ Set PK Nail

BEARING NOTE:
The orientation of this bearing system is based on the north line of NE 1/4 of Sec. 33, Twp. 110, Rge 21. Said line bears South 89 degrees 59 minutes 23 seconds West.

ISG

JOB # xx DATE: xx

SHEET 2 OF 6 SHEETS

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT LOCATION
PROJECT/SITE NAME: RESERVE AT AUTUMN WOODS
CITY/TOWNSHIP: CHASKA
COUNTY/STATE: HENNEPIN CO, MINNESOTA
ZIP CODE: 55318
LATITUDE/LONGITUDE: 44.832528, -93.575482
SECTION, TOWNSHIP, RANGE: S 27, T 116, R 23

PROJECT DESCRIPTION
THE PROJECT INCLUDES CONSTRUCTION OF A LARGE RESIDENTIAL DEVLEOPMENT WITH VARIOUS STYLE HOMES AND SUPPORTING ROADS, DRIVEWAYS, SIDEWALKS, AND UTILITIES. THERE WILL ALSO BE SIX STORMWATER BASINS CONSTRUCTED WITHIN THE DEVELOPMENT.

TENTATIVE CONSTRUCTION SCHEDULE (OPERATOR SHOULD PROVIDE ESTIMATED CONSTRUCTION SCHEDULE TO THE OWNER'S REPRESENTATIVE)

CONSTRUCTION ACTIVITIES:	ESTIMATED DATES OF SOIL DISTURBANCE ACTIVITIES:
CLEARING AND GRUBBING OPERATIONS, GRADING, POND	APRIL - AUGUST 2022
CURB & GUTTER/SIDEWALK	AUGUST – OCTOBER 2022
PAVING	SEPTEMBER – OCTOBER 2022
LANDSCAPING, FINAL TURF, MISC.	APRIL –AUGUST 2023

PRE-CONSTRUCTION IMPERVIOUS SURFACE AND DISTURBED AREA CALCULATIONS
TOTAL AREA TO BE DISTURBED = 34.22 ACRES MINIMUM AREA REQUIRING MPCA PERMIT = 1.00 ACRES
"AN MPCA NPDES PERMIT IS REQUIRED FOR THIS PROJECT"
IMPERVIOUS AREA: PRE-CONSTRUCTION = 0.60 ACRES
POST-CONSTRUCTION = 12.09 ACRES
NET INCREASE OF IMPERVIOUS AREA = 11.49 ACRES

MINIMUM NEW IMPERVIOUS SURFACE AREA CREATED REQUIRING PERMANENT STORMWATER MANAGEMENT = 5,000 SF (BASED ON WATERSHED REQUIREMENTS)

CONTACT INFORMATION/RESPONSIBLE PARTIES
THE OWNER OWNS THE LAND, ADJACENT ROADS, AND EASEMENT AREAS ASSOCIATED WITH THE PROJECT. THE OWNER IS THE OWNER CO-PERMITTEE APPLYING FOR PERMIT COVERAGE AND WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT INCLUDING DEVELOPING THIS SWPPP AND THE LONG-TERM MAINTENANCE PLAN OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT (IF APPLICABLE). THE OWNER WILL ENSURE THAT THE DESCRIBED WORK IN THE SWPPP IS BEING COMPLETED BY THE OPERATOR PERMITTEE.

OWNER/PERMITTEE: LENNAR (JOSH METZER, LAND ENTITLEMENT MANAGER)
10300 36TH AVE NORTH, SUITE 600
PLYMOUTH, MN 55446
952.249.3068/JOSH.METZER@LENNAR.COM

THE PRIMARY CONTRACTOR WILL ENTER INTO A CONTRACT WITH THE OWNER TO COMPLETE THE REQUIRED WORK FOR THIS PROJECT. THE PRIMARY CONTRACTOR WILL BECOME (UNDER CONTRACT) THE OPERATOR CO-PERMITTEE ON THE NPDES PERMIT (THROUGH EXECUTION OF A NPDES PERMIT MODIFICATION FORM), AND THEREBY AGREE TO IMPLEMENT THIS SWPPP IN COOPERATION WITH THE OWNER. THE OPERATOR IS RESPONSIBLE FOR IDENTIFYING AN EROSION CONTROL SUPERVISOR PRIOR TO STARTING CONSTRUCTION (REFER TO SWPPP AMENDMENT SECTION). THE NPDES PERMIT MODIFICATION FORM SHALL BE SUBMITTED TO THE MPCA AFTER THE PROJECT IS AWARDED TO THE OPERATION, PRIOR TO LETTING THE PROJECT.

THE OPERATOR WILL ENSURE THAT INDIVIDUALS OVERSEEING OR IMPLEMENTING THE SWPPP HAVE BEEN PROPERLY TRAINED AND THAT CERTIFICATIONS WILL BE MADE AVAILABLE UPON REQUEST. THIS INCLUDES ANY SUB-CONTRACTORS THAT THE OPERATOR EMPLOYS UNDER SEPARATE CONTRACT. THE OPERATOR WILL PROVIDE THE CONTACT INFORMATION FOR THE EROSION CONTROL SUPERVISOR, SITE SUPERINTENDENT/FOREMAN, AND BMP INSTALLERS. THE EROSION CONTROL SUPERVISOR SHALL BE A RESPONSIBLE EMPLOYEE OF THE PRIME CONTRACTOR AND/OR DULY AUTHORIZED BY THE PRIME CONTRACTOR TO REPRESENT THE PRIME CONTRACTOR ON ALL MATTERS PERTAINING TO THE NPDES CONSTRUCTION STORMWATER PERMIT COMPLIANCE. THE EROSION CONTROL SUPERVISOR SHALL HAVE AUTHORITY OVER ALL OPERATOR ACTIVITIES WHICH INFLUENCE NPDES PERMIT COMPLIANCE, INCLUDING GRADING, EXCAVATION, BRIDGE CONSTRUCTION, CULVERT INSTALLATION, UTILITY WORK, CLEARING/GRUBBING, DEWATERING, AND ANY OTHER OPERATION THAT INCREASES THE EROSION POTENTIAL ON THE PROJECT.

THE OPERATOR WILL PERFORM A PRECONSTRUCTION SITE VISIT TO ADDRESS ANY AREAS OF CONCERN PERTAINING TO ENVIRONMENTAL COMPLIANCE. THE OPERATOR WILL IMPLEMENT AND MAINTAIN BMPS FOR THE DURATION OF CONSTRUCTION PROJECT. THE OPERATOR WILL COMPLETE THE REQUIRED SITE INSPECTIONS, AND IS RESPONSIBLE FOR SECTION 3-4, 6-22, 24, AND APPLICABLE PARTS OF 23, TO REMAIN IN COMPLIANCE WITH NPDES PERMIT.

OPERATOR/PERMITTEE: (TO BE DETERMINED AND IDENTIFIED THROUGH TRANSFER OF NPDES-CSW PERMIT)

ISG INC. HAS BEEN CONTRACTED BY THE OWNER TO DEVELOP THE SWPPP PLAN FOR THIS PROJECT. THIS SWPPP WAS PREPARED BY AN INDIVIDUAL THAT HAS BEEN PROPERLY TRAINED IN ACCORDANCE TO SECTION 21 OF THE NPDES PERMIT (CERTIFICATION CARDS ARE AVAILABLE UPON REQUEST). ISG INC. WILL OFFER GUIDANCE FOR COMPLIANCE WITH THE NPDES PERMIT BEFORE, DURING, AND AFTER CONSTRUCTION OF THE PROJECT.

SWPPP DESIGNER:
ISG INC. (EMILY SHAW)
7900 INTERNATIONAL DR., SUITE 550
MINNEAPOLIS, MN 55425
952-426-0699/EMILY.SHAW@IS-GRP.COM

PERMENANT STORMWATER MANAGEMENT SYSTEM:
ISG INC. (EMILY SHAW)
7900 INTERNATIONAL DR., SUITE 550
MINNEAPOLIS, MN 55416
952-426-0699/EMILY.SHAW@IS-GRP.COM

AGENCY CONTACTS

AGENCY	PERMIT	NAME	PHONE NUMBER/E-MAIL
MPCA (EMERGENCY)	N/A	STATE DUTY OFFICER:	1-800-422-0798
MPCA	NPDES-CSW #MNR100001	MATT KING	218-846-8103/MATTHEW.KING@STATE.MN.US
WATERSHED DISTRICT	STORMWATER MANAGEMENT	TERRY JEFFERY	952-807-6885/TJEFFERY@RPBCWD.ORG

PERMANENT STORMWATER TREATMENT SYSTEMS
THE NPDES PERMANENT WATER QUALITY VOLUME (SECTION 15) FROM THE NET NEW IMPERVIOUS SURFACES OF THE PROJECT IS PROVIDED IN THE PROPOSED INFILTRATION BASINS AND WET SEDIMENTATION BASIN. HYDROLOGIC AND WATER QUALITY MODELING DATA AND THE CONTAMINATION CHECKLIST IS AVAILABLE UPON REQUEST. THE SITE IS ABLE TO MEET THE FULL VOLUME REDUCTION REQUIREMENT. INFILTRATION RATES WERE DETERMINED BY THE FIELD MEASURED INFILTRATION RATE AND DIVIDED BY 2.

LOCATION OF SWPPP COMPONENTS

DESCRIPTION	TITLE	LOCATION (SHEET NAME)
SWPPP NARRATIVE	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
SITE CONDITIONS	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
SITE MAPS (SOILS, WATER RESOURCES, POTENTIAL POLLUTANT GENERATING ACTIVITIES)	SWPPP MAP, SWPPP NARRATIVE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
DIRECTION OF SURFACE WATER FLOW (PRE- & POST- CONSTRUCTION	DRAINAGE PLAN	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
IMPERVIOUS SURFACES	CONSTRUCTION PLAN & PROFILE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
TEMPORARY EROSION & SEDIMENT CONTROL BMPS FOR STEEP SLOPES (3:1), DNR FISH EXCLUSION "WORK IN WATER RESTRICTIONS" REFER TO SWPPP	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN, SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
PERMANENT EROSION PREVENTION BMPS	TURF ESTABLISHMENT PLAN, SWPPP NARRATIVE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP); SWPPP GENERAL INFORMATION, DETAILS AND NOTES; TURF RESTORATION PLAN
STORM SEWER	DRAINAGE PLAN	STORMWATER POLLUTION PREVENTION PLAN (SWPPP); OVERALL UTILITY PLAN
GRADING	GRADING PLAN	OVERALL GRADING PLAN, NOTES AND EARTHWORK CALCULATIONS
ESTIMATED BMP QUANTITIES	ESTIMATED QUANTITIES	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
BMP DETAILS/SPECIFICATIONS	MISC. DETAILS, SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
HYDROLOGIC/WATER QUALITY MODELING		AVAILABLE UPON REQUEST

EXISTING SITE CONDITIONS, SOILS, & WATER RESOURCES
SOILS AND NATIVE TOPSOIL: NATIVE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR FINAL GRADING OPERATIONS, WHERE INDICATED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. METHODS AND EQUIPMENT TO MINIMIZE SOIL COMPACTION (IN PROPOSED INFILTRATION AREAS, DRIP LINE OF TREES TO BE PRESERVED, ETC.) SHALL BE DETERMINED BY THE OPERATORS SWPPP AMENDMENT. TRACKED VEHICLES ARE PREFERRED AND WHEELED VEHICLES ARE DISCOURAGED IN THESE AREAS. THE FOLLOWING USDA-NRCS MAPPED SOILS ARE SHOWN AS "NOT HIGHLY ERODIBLE", "MODERATELY ERODED", AND "ERODED" IN THE COUNTY SOIL SURVEY MAP.

USDA-NRCS MAPPED SOIL SURVEY UNIT NO., NAME, TEXTURE, SLOPE PERCENTAGE	PERCENTAGE OF PROJECT AREA	APPROXIMATE PARTICLE SIZE RANGE (MM) SAND (0.05-2.00+)	SILT (0.002-0.05)	CLAY (<0.002)
EX- ESSEXVILLE SANDY LOAM	2	50-70%	0-50%	15-20%
GL – GLENCOE CLAY LOAM, 0-1% SLOPES	16	26-52%	59-74%	26-41%
HM – HAMEL LOAM, 0-2% SLOPES	5	30-60%	74-92%	8-26%
KB – KILKENNY-LESTER LOAM, 2-6% SLOPES	40	30-60%	74-92%	8-26%
KB2 – LESTER-KILKENNY LOAM, 2-6% SLOPES, ERODED	16	30-60%	74-92%	8-26%
KC – LESTER-KILKENNY LOAMS, 6-12% SLOPES	1	30-60%	74-92%	8-26%
KC2 - LESTER-KILKENNY COMPLEX, 6-12% SLOPES, MODERATELY ERODED	16	NA	NA	NA
KF – LESTER-KILKENNY COMPLEX, 22-40% SLOPES	3	NA	NA	NA
MK – MUSKEGO HOUGHTON SOILS, 0-1% SLOPES	1	NA	NA	NA

DESCRIPTION OF RECEIVING WATERS (LOCATED WITHIN 1-MILE): STORMWATER FROM THIS PROJECT WILL BE CONVEYED INTO SEVERAL CONSTRUCTED STORMWATER PONDS. THE PROJECT HAS THREE SEPARATE DISCHARGE POINTS. ONE DISCHARGE POINT IS THROUGH THE SOUTHERN WETLAND. THE SECOND DISCHARGE POINT IS TO THE NORTH THROUGH THE NORTH WETLAND AND THEN INTO LAKE HAZELTINE. THE THIRD IS THE SMALLEST DISCHARGE AMOUNT AND GOES UNDER AUDUBON RD TO AN OFFSITE STORMWATER POND. HYDROLOGIC AND WATER QUALITY MODELING DATA IS AVAILABLE UPON REQUEST.

DESCRIPTION OF IMPAIRED WATERS OR WATER SUBJECT TO TMDLS: A SPECIAL AND IMPAIRED WATERS SEARCH WAS COMPLETED USING THE MPCA SEARCH ENGINE (HTTP://PCA-GISQ.PCA.STATE.MN.US/CSWINDEX.HTML) ON 7/6/2021. BASED ON THIS REVIEW, THE FOLLOWING SPECIAL OR IMPAIRED WATERS (WITH CONSTRUCTION RELATED IMPAIRMENTS) ARE LOCATED WITHIN ONE MILE OF, AND DOWNSTREAM OF ANY PROJECT DISCHARGE POINTS: HAZELTINE LAKE IS IMPAIRED (NUTRIENTS) AND BLUFF CREEK IS IMPAIRED (FISHES BIOASSESSMENTS, TURBIDITY), THEREFORE SECTION 23 REQUIREMENTS APPLY TO THIS PROJECT.

DISCHARGES TO SPECIAL (PROHIBITED, RESTRICTED, OTHER) OR IMPAIRED WATERS (SECTION 23)
ALL REQUIREMENTS IN SECTION 23 ARE IN ADDITION TO BMPS ALREADY SPECIFIED IN THE PERMIT. WHERE PROVISIONS OF SECTION 23 CONFLICT WITH REQUIREMENTS ELSEWHERE IN THE PERMIT, THE PROVISIONS IN SECTION 23 TAKE PRECEDENCE. ALL BMPS USED TO COMPLY WITH THESE ITEMS MUST BE DOCUMENTED IN THE SWPPP FOR THE PROJECT.

23.9 EXPOSED SOILS: OPERATOR SHALL STABILIZE ALL EXPOSED SOIL AREAS WITHIN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

23.10 TEMPORARY BASIN: OPERATOR SHALL ADHERE TO THE REQUIREMENTS DESCRIBED IN ITEM 14.1-14.10 OF THE NPDES CONSTRUCTION PERMIT FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED.

23.11 BUFFER ZONE: AN UNDISTURBED BUFFER ZONE OF NOT LESS THAN 100 LINEAR FEET FROM THE SPECIAL WATER (NOT INCLUDING TRIBUTARIES) SHALL BE MAINTAINED AT ALL TIMES. EXCEPTIONS FROM THIS REQUIREMENT FOR AREAS, SUCH AS WATER CROSSINGS, LIMITED WATER ACCESS AND RESTORATION OF THE BUFFER ARE ALLOWED IF THE PERMITTEE FULLY DOCUMENTS IN THE SWPPP THE CIRCUMSTANCES AND REASONS THAT THE BUFFER ENCROACHMENT IS NECESSARY. REPLACEMENT OF EXISTING IMPERVIOUS SURFACE WITHIN THE BUFFER IS ALLOWED UNDER THIS PERMIT. ALL POTENTIAL WATER QUALITY, SCENIC AND OTHER ENVIRONMENTAL IMPACTS OF THESE EXCEPTIONS MUST BE MINIMIZED BY THE USE OF ADDITIONAL OR REDUNDANT BMPS AND DOCUMENTED IN THE SWPPP FOR THE PROJECT.

23.12 TEMPERATURE CONTROLS: THE PERMANENT STORMWATER MANAGEMENT SYSTEM MUST BE DESIGNED SUCH THAT THE DISCHARGE FROM THE PROJECT WILL MINIMIZE ANY INCREASE IN THE TEMPERATURE OF TROUT STREAM RECEIVING WATERS RESULTING FROM THE 1-AND 2-YEAR 24-HOUR PRECIPITATION EVENTS. THIS INCLUDES ALL TRIBUTARIES OF DESIGNATED TROUT STREAMS WITHIN THE PLSS SECTION THAT THE TROUT STREAM IS LOCATED. ALL STORMWATER ROUTED TO THE STORMWATER SYSTEM MUST DISCHARGE WITHIN 24 HOURS. PROJECTS THAT DISCHARGE TO TROUT STREAMS MUST MINIMIZE THE IMPACT USING ONE OR MORE OF THE FOLLOWING MEASURES, IN ORDER OF PREFERENCE:
A. PROVIDE STORMWATER INFILTRATION OR OTHER VOLUME REDUCTION PRACTICES AS DESCRIBED IN ITEM 15.4-15.5.
B. PROVIDE STORMWATER FILTRATION AS DESCRIBED IN ITEM 17.1-17.11.
C. MINIMIZE THE DISCHARGE FROM CONNECTED IMPERVIOUS SURFACES BY DISCHARGING TO VEGETATED AREAS, OR GRASS SWALES, AND THROUGH THE USE OF OTHER NON-STRUCTURAL CONTROLS.
D. IF A DRY POND IS USED, THE DESIGN MUST INCLUDE AN APPROPRIATE COMBINATION OR MEASURES SUCH AS SHADING, VEGETATED SWALE DISCHARGES OR CONSTRUCTD WETLAND TREATMENT CELLS THAT LIMIT TEMPERATURE INCREASES.
E. OTHER METHODS THAT MINIMIZE ANY INCREASE IN THE TEMPERATURE OF THE TROUT STREAM.

12.13 INSPECTIONS: PERMITTEES MUST CONDUCT ROUTINE SITE INSPECTIONS ONCE EVERY THREE (3) DAYS AS DESCRIBED IN ITEM 11.2.

23.14 TREATMENT: IF DISCHARGES TO PROHIBITED WATERS CANNOT PROVIDE VOLUME REDUCTION EQUAL TO ONE (1) INCH TIMES THE NET INCREASE OF IMPERVIOUS SURFACES AS REQUIRED IN ITEM 15.4 AND 15.5, PERMITTEES MUST DEVELOP A PERMANENT STORMWATER TREATMENT PLAN THAT WILL RESULT IN NO NET INCREASE OF TSS OR PHOSPHORUS TO THE PROHIBITED WATER. PERMITTEES MUST KEEP THE PLAN IN THE SWPPP FOR THE PROJECT.

POTENTIAL FOR SEDIMENT AND/OR OTHER POLLUTANT(S) DISCHARGING FROM THE PROJECT SITE
THE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS IN THIS SWPPP HAVE BEEN DESIGNED TO MINIMIZE THE POTENTIAL OF SEDIMENTS DISCHARGING OFF-SITE FROM A 0.5 INCH RAINFALL WITHIN A 24 HOUR PERIOD. THE NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATE FOR THE PROJECT LOCATION WAS REVIEWED AND USED FOR ANTICIPATED INSPECTION FREQUENCY, BMP DESIGN, AND ESTIMATING CONSTRUCTION ACTIVITIES IN THIS SWPPP. ATLAS 14 RESULTS DO NOT NECESSARILY REFLECT ANY DESIGN CRITERIA IN THE PERMANENT STORMWATER MANAGEMENT SYSTEM.

ROUTINE INSPECTION AND BMP MAINTENANCE BY THE OPERATOR IS CRUCIAL IN ENSURING THE FUNCTIONALITY OF EACH BMP. STEEP SLOPES AND OTHER ENVIRONMENTALLY SENSITIVE AREAS THAT ARE AT A HIGHER RISK OF SEDIMENTATION ARE DEFINED IN THIS SWPPP (IF APPLICABLE).

CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED
THERE IS NO CONSTRUCTION PHASING OR STAGING DEFINED BY THE OWNER FOR THIS PROJECT. THE SCHEDULE FOR INSTALLING TEMPORARY BMPS SHALL BE INCORPORATED INTO THE OPERATOR'S WEEKLY SCHEDULE FOR EACH CONSTRUCTION STAGE AND PRESENTED TO THE OWNER'S REPRESENTATIVE (PER MNDOT SPEC 1717.D). THE PROJECT'S CONSTRUCTION PHASING AND STAGING IS DEFINED BY THE "CONSTRUCTION STAGING & TRAFFIC CONTROL PLAN" AND PROJECT SPECIFICATIONS.

ENVIRONMENTALLY SENSITIVE AREAS
STEEP SLOPES: EXISTING AND PROPOSED SLOPES 1 IN 3 (33.33%) AND STEEPER THAT ARE PROPOSED TO BE DISTURBED ARE ILLUSTRATED ON THE PLAN SHEETS. STEEP SLOPES MAY BE TEMPORARILY CREATED DURING GRADING OPERATIONS IF NECESSARY, AT WHICH TIME TEMPORARY BMPS MUST BE IMPLEMENTED BY THE OPERATOR (THROUGH AN APPROVED SWPPP AMENDMENT) WITHIN 7 DAYS OF NO LONGER WORKING THE STEEP SLOPE.

CONTAMINATED PROPERTIES: THE MPCA'S "WHAT'S IN MY NEIGHBORHOOD" DATABASE WAS REVIEWED ON 7/6/2021 (WWW.PCA.STATE.MN.US/DATA/WHATS-MY-NEIGHBORHOOD) AND A CONTAMINATION ASSESSMENT WAS PERFORMED (AVAILABLE UPON REQUEST). THE RESULTS OF THIS REVIEW SHOW NO KNOWN CONTAMINATED PROPERTIES OR LEAK SOURCES LOCATED WITHIN AND ADJACENT TO THE PROJECT LIMITS.

STORMWATER POLLUTION MITIGATION MEASURES (AS IDENTIFIED FROM ENVIRONMENTAL REVIEW): NO FORMAL ENVIRONMENTAL REVIEW WAS REQUIRED FOR THIS PROJECT, THEREFORE, NO ADDITIONAL STORMWATER RELATED MITIGATION MEASURES APPLY.

KARST AREAS: THERE ARE NO KNOWN ACTIVE KARST AREAS WITHIN OR ADJACENT TO THE PROJECT LIMITS.

SITE PLAN REQUIRED AREAS: NO AREAS OF "HIGH ENVIRONMENTAL RISKS" ARE KNOWN TO BE LOCATED WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LIMITS.

FLOOD CONTINGENCY PLAN: PROJECT ACTIVITIES MAY NOT OCCUR WITHIN THE 100-YEAR FLOODPLAIN OR FLOODWAY, THEREFORE, THE PROJECT ENGINEER (AT THEIR DISCRETION) MAY REQUIRE A PREVENTATIVE FLOOD CONTINGENCY PLAN FOR SPECIFIC PROJECT ACTIVITIES AND AREAS IF SEASONAL PRECIPITATION POSSES A POTENTIAL RISK OF FLOODING WORK AREAS WITHIN THE PROJECT LIMITS. THIS PLAN SHALL BE SUBMITTED BY THE OPERATOR TO THE OWNERS REPRESENTATIVE FOR APPROVAL A MINIMUM OF 72 HOURS PRIOR TO THE SCHEDULED WORK AND/OR DURING ACTIVE WORK WITHIN THE FLOODPLAIN. NO WORK WITHIN THE FLOODPLAIN CAN COMMENCE UNTIL WRITTEN APPROVAL/NOTICE TO PROCEED FROM THE OWNERS REPRESENTATIVE IS RECEIVED.

FISH EXCLUSION DATES: FISH EXCLUSION DATES ARE NOT APPLICABLE TO THIS PROJECT LOCATION.

WETLANDS: THERE ARE SEVERAL WETLANDS WITHIN THE PROJECT AREA AND MUST BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE. APPROXIMATELY 1.03 ACRES OF WETLAND FILLED/EXCAVATION WILL BE PERMITTED. PERMITTED AREAS OF WETLAND IMPACT WILL BE PROTECTED WITH SILT FENCE ALONG THE PERIMETER OF THE FILL OR EXCAVATION LIMITS.

SEQUENCE OF CONSTRUCTION/TIMING OF BMP INSTALLATION
NO CONSTRUCTION OPERATIONS, INCLUDING REMOVALS, THAT REQUIRE EROSION & SEDIMENT CONTROL PER THE SWPPP CAN COMMENCE UNTIL THE OPERATOR'S EROSION CONTROL SUPERVISOR CERTIFIES THE PROPER INSTALLATION OF BMP'S AND A CHAIN OF RESPONSIBILITY FOR SWPPP IMPLEMENTATION IS CREATED FOR ALL OPERATORS ON THE SITE. PERIMETER SEDIMENT CONTROLS (SILT FENCE, INLET PROTECTION, CONSTRUCTION ENTRANCES, ETC.) SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ACHIEVED. OPERATOR SHALL IMPLEMENT THE NECESSARY ON SITE BMP'S IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS TO PREVENT NUISANCE CONDITIONS (MN RULES 7050.2010) FROM ANY DISCHARGES UNDER COVERAGE OF THE NPDES PERMIT. IN SOME CASES, MULTIPLE OR REDUNDANT APPLICATIONS OF SOME BMP'S MAY BE NEEDED TO MEET THESE REQUIREMENTS.

INSPECTION PROCEDURES, SWPPP AMENDMENTS, RECORD KEEPING, & TRAINING
1. THE SWPPP MUST BE AMENDED BY THE OPERATOR WHEN THE IDENTITY OF THE RESPONSIBLE SITE OPERATORS (EROSION CONTROL SUPERVISOR, SUB-CONTRACTORS, ETC.) ARE KNOWN.
2. THE OPERATOR MUST INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE OPERATOR SHALL PROVIDE A RAINFALL GAUGE ON-SITE, WITHIN ONE MILE OF THE SITE, OR SOURCE OF THE WEATHER REPORTING SYSTEM THAT USES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES. THE LOCATION AND SOURCE OF THE RAINFALL GAUGE OR REPORTING SYSTEM MUST BE DOCUMENTED IN THE FIRST SWPPP INSPECTION REPORT. THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE PER MONTH OR SUSPENDED, IF SITE CONDITIONS MEET ITEM 11.10 OF THE NPDES PERMIT. ALL INSPECTIONS AND MAINTENANCE CONDUCTED MUST BE RECORDED IN WRITING BY THE OPERATOR AND RETAINED WITH THE SWPPP. THE MPCA SITE INSPECTION FORM IS AVAILABLE FOR OPERATORS TO USE TO COMPLETE THE REQUIRED INSPECTIONS. THE FORM CAN BE FOUND ON THE MPCA WEBSITE OR AVAILABLE UPON REQUEST FOR THE PROJECT OWNER. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
   A. DATE, TIME, AND NAME OF PERSON(S) CONDUCTING INSPECTIONS;
   B. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
   C. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); INCLUDING DOCUMENTATION/PHOTOS OF IMPLEMENTED BMPS INTENDED TO CORRECT A PROBLEM BUT FAILED.
   D. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS;
   E. DOCUMENTATION OF CHANGES MADE TO THE SWPPP.
3. SWPPP AMENDMENTS AND SITE PLANS WILL BE PREPARED BY THE OPERATOR AND SUBMITTED TO THE OWNER FOR REVIEW AND WRITTEN APPROVAL BY THE PROJECT OWNER (OR DESIGNATED REPRESENTATIVE). ALL OWNER ACCEPTED AND DENIED SWPPP AMENDMENTS AND SITE PLANS MUST BE RECORDED IN WRITING AND RETAINED WITH THE SWPPP.
4. THE SWPPP SHALL BE AMENDED TO INCLUDE ADDITIONAL OR MODIFIED BMPS, DESIGNED TO CORRECT IDENTIFIED PROBLEMS OR ADDRESS SITUATIONS (UNDER SECTION 6 OF THE NPDES PERMIT), PRIOR TO CONDUCTING SPECIFIC STAGES/PHASES OF THE PROJECT, AS REQUIRED BY THE OWNER AND DEFINED IN THIS PROJECT SWPPP.

   THE TABLE BELOW IS A SUMMARY OF THE REQUIRED SWPPP AMENDMENTS:

SUMMARY OF OPERATOR PREPARED SWPPP AMENDMENTS (REQUIRED BY OWNER)

SWPPP AMENDMENT NAME	SWPPP AMENDMENT DETAILS	SUBMITTAL TIMEFRAME
OPERATOR CHAIN OF RESPONSIBILITY	REFER TO "CONTACT INFORMATION/RESPONSIBLE PARTIES" SECTION	7 DAY PRIOR TO INITIATING WORK
BMP AMENDMENTS	SUBSTITUTED, ADDITIONAL, OR REDUNDANT BMPS TO COMPENSATE FOR FAILING/FAILED BMPS	DURING/AFTER CONSTRUCTION ACTIVITIES
METHODS TO MINIMIZE SOIL COMPACTION	REFER TO "EXISTING SITE CONDITIONS, SOILS, AND WATER RESOURCES" SECTION	7 DAYS PRIOR TO WORK WITHIN INFILTRATION BASINS AND PRESERVED TREE AREAS
STEEP SLOPES PHASING PLAN	REFER TO "ENVIRONMENTALLY SENSITIVE AREAS" SECTION	7 DAYS PRIOR TO INITIATING WORK
SPILL PREVENTION & RESPONSE PLAN	REFER TO "POLLUTION PREVENTION MANAGEMENT MEASURES"	7 DAY PRIOR TO INITIATING WORK
DEWATERING PLAN	REFER TO "DEWATERING" SECTION	7 DAYS PRIOR TO ACTIVITY
FLOOD CONTINGENCY PLAN	REFER TO "ENVIRONMENTALLY SENSITIVE AREAS" SECTION	72 HOURS PRIOR TO ACTIVITY

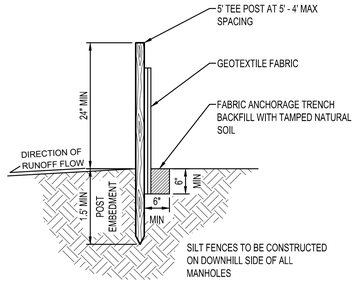
5. THE SWPPP (ORIGINAL OR COPIES), ALL CHANGES TO THE SWPPP, PROJECT MANUAL, AND INSPECTIONS/MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE OPERATOR WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN THE FIELD OFFICE OR ON SITE VEHICLE DURING NORMAL WORKING HOURS. THE PERMITEES MUST KEEP AND MAKE AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE DAYS THE SWPPP, OTHER STORMWATER RELATED PERMITS, RECORDS OF ALL INSPECTION/MAINTENANCE, ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS, ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS AND OTHER INFORMATION REQUIRED BY THE GENERAL PERMIT FOR THREE YEARS FOLLOWING THE NOTICE OF TERMINATION.
6. THE OPERATOR MUST ASSIGN A TRAINED INDIVIDUAL(S) (PURSUANT TO SECTION 21) TO OVERSEE THE IMPLEMENTATION, MAINTENANCE, AND REPAIR OF BMPS. THIS INDIVIDUAL(S) SHALL ALSO PERFORM INSPECTIONS, REVISE/AMEND THE SWPPP (DOCUMENT IN SWPPP AS NECESSARY), AND BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE PERMITTED OWNER (OR ITS DESIGNEE), LOCAL GOVERNMENT UNITS, OR MPCA. MNDOT LEAD PROJECTS REQUIRE AVAILABLE ONSITE INSPECTION WITHIN 24 HOURS.

POLLUTION PREVENTION MANAGEMENT MEASURES
POTENTIAL SOURCES OF POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE:
- SEDIMENT AND FUGITIVE DUST GENERATED FROM CLEARING AND GRUBBING, IMPORT/EXPORT OPERATIONS, REMOVALS/COMPACTION, MASS/FINE GRADING, EXCAVATIONS, TRENCHING, TOPSOIL STRIPING STOCKPILING, WET/DRY PAVEMENT CUTTING, STREET CONSTRUCTION.
- BASIC/ACIDIC PH LEVELS FROM CURB AND GUTTER, MANHOLE STRUCTURES, SIDEWALKS, DRIVEWAY APRONS, FOUNDATIONS, BRIDGE ABUTMENTS, WET/DRY PAVEMENT CUTTING, MASONRY WASH/CURE/LAYOUT.
- EXCESS NUTRIENTS FROM LANDSCAPING INSTALLATIONS, SOIL ADDITIVES, FERTILIZATION, MULCHING
- HYDROCARBONS FROM STREET CONSTRUCTION, DEMOLITION/REMOVALS, WET/DRY PAVEMENT CUTTING

OPERATOR WILL COMPLY WITH ALL OF THE POLLUTION PREVENTION AND MANAGEMENT MEASURES IDENTIFIED IN THE NPDES-CSW PERMIT. OPERATOR WILL SUBMIT A SPILL PREVENTION AND RESPONSE PLAN (SPRP) TO THE ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY. THE SPRP MUST SATISFACTORILY ADDRESS (AT A MINIMUM) THE FOLLOWING NPDES REQUIREMENTS BY THE PROPOSED IMPLEMENTATION AND MAINTENANCE OF APPROPRIATE BMPS:

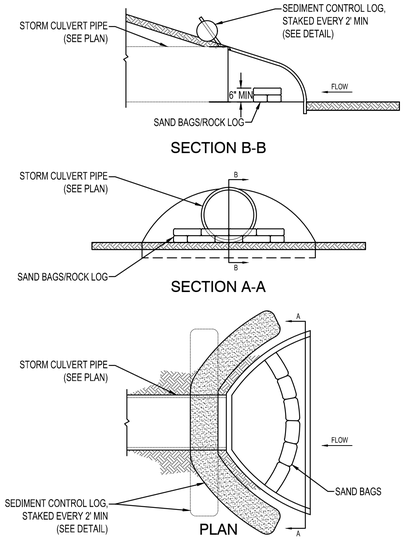
NO-EXPOSURE: CONSTRUCTION AND BUILDING PRODUCTS (THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS), PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPING MATERIALS MUST BE UNDER COVER (PLASTIC SHEETING OR TEMPORARY ROOFS) TO MINIMIZE CONTACT WITH STORMWATER AND PRECIPITATION.

SOLID WASTE: (SEDIMENT, ASPHALT, CONCRETE MILLINGS, CONSTRUCTION, AND DEMOLITION DEBRIS) AND OTHER WASTES MUST BE DISPOSED OF PROP



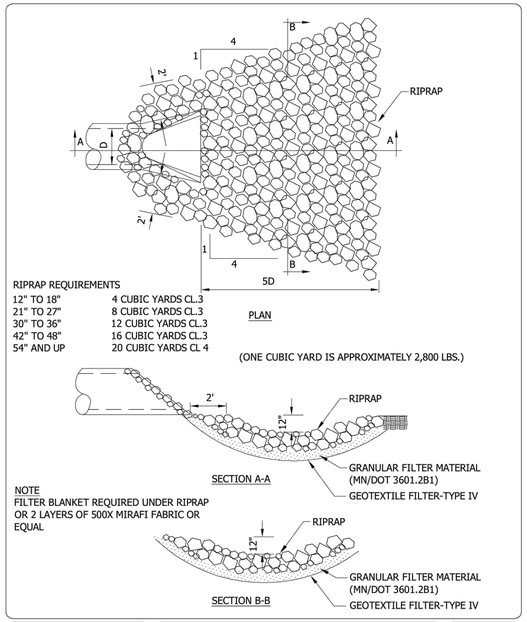
SILT FENCE

NTS EC100



CULVERT PIPE DITCH CHECK

NTS EC345



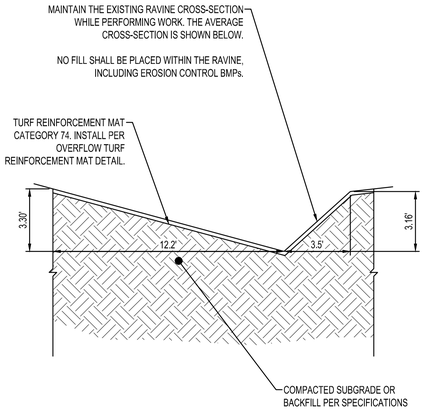
Stantec
2335 Highway 36 W
St. Paul, MN 55113
www.stantec.com

RIPRAP AT OUTLETS

CHASKA, MINNESOTA

LAST REVISION: APRIL 2004

PLATE NO. STO-11



RAVINE TURF REINFORCEMENT MAT

1" = 4' SD601

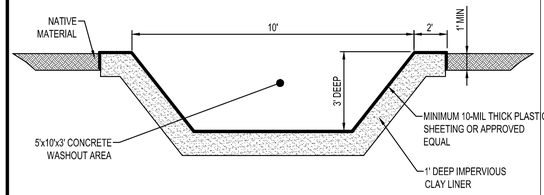
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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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NOTES:

CONTRACTOR SHALL INSTALL A SIGN INDICATING THE CONCRETE WASHOUT AREA.

CONTRACTOR SHALL MAINTAIN WASHOUT AREA TO REMOVE MATERIALS BEYOND 75% CAPACITY.

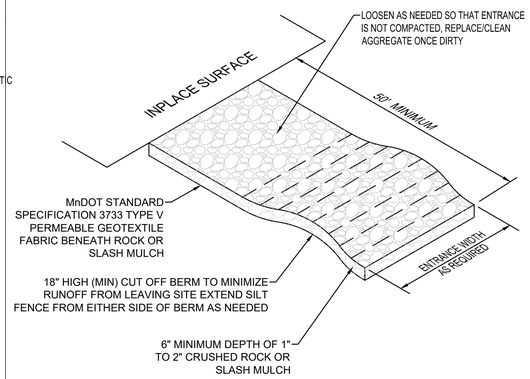
WASHOUT AREA SHALL NOT BE PLACED WITHIN 50' OF STORM DRAINS, OPEN DITCHES OR BODIES OF WATER.

CONTRACTOR SHALL INSPECT WASHOUT AREA AS NECESSARY TO PREVENT LEAKS AND OVER TOPPING.

WASHOUT AREA SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE.

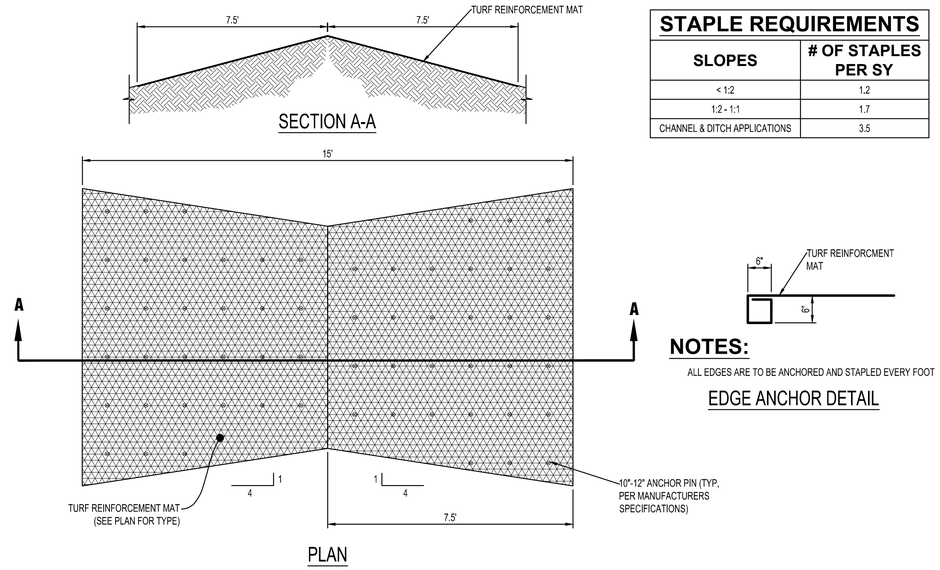
CONCRETE WASHOUT

NTS EC500



STABILIZED CONSTRUCTION EXIT

NTS EC600



STAPLE REQUIREMENTS	
SLOPES	# OF STAPLES PER SY
< 1:2	1.2
1:2 - 1:1	1.7
CHANNEL & DITCH APPLICATIONS	3.5

NOTES:

ALL EDGES ARE TO BE ANCHORED AND STAPLED EVERY FOOT

EDGE ANCHOR DETAIL

OVERFLOW TURF REINFORCEMENT MAT

NTS SD730

PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 SWPPP DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

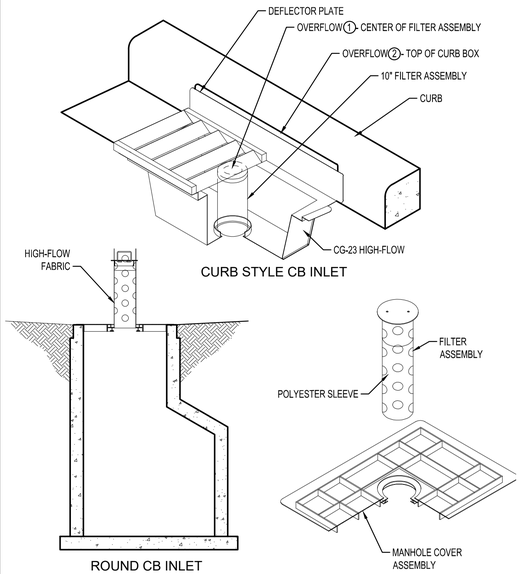
TITLE

SWPPP DETAILS

SHEET **24** OF 76

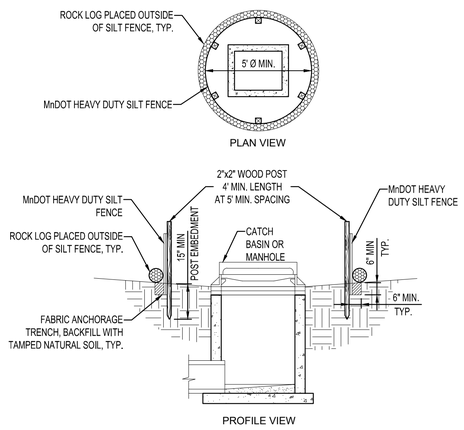
PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/27/2022 10:49 AM



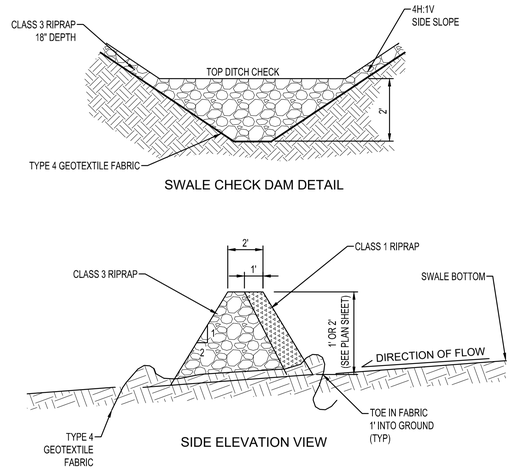
STREET INLET PROTECTION

NTS EC225



SILT FENCE INLET PROTECTION

NTS EC220

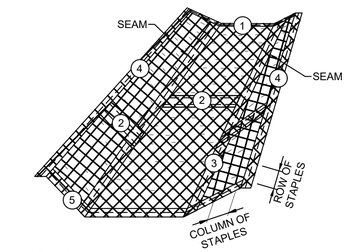


NOTES:

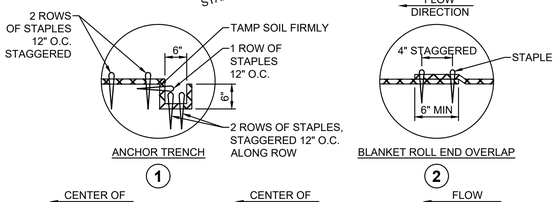
GEOTEXTILE FABRIC & RIPRAP ARE INCIDENTAL TO CHECK DAM CONSTRUCTION

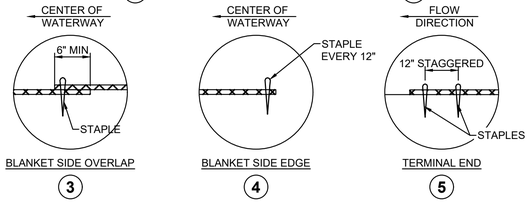
ROCK CHECK DAM

NTS EC310









NOTES:

INSTALL EROSION CONTROL BLANKET (ECB) OVER WATERWAYS AS SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN.

THE ECB SHALL CONFORM TO MnDOT STANDARD SPECIFICATIONS SECTION 3885.

PREPARE SOIL PRIOR TO INSTALLING ECB, INCLUDING SEEDING AND FERTILIZING.

THE ECB SHALL BE PLACED IN FIRM CONTACT WITH THE SOIL AND NOT BE ALLOWED TO BRIDGE OVER SURFACE IRREGULARITIES. THE MAT SHALL NOT BE STRETCHED.

START LAYING THE MATS BY ROLLING CENTER MAT IN THE DIRECTION OF FLOW, CENTERED ON THE CENTERLINE OF WATERWAY. THERE SHALL NOT BE AN OVERLAP OF MATS AT THE CENTER OF THE WATERWAY.

THE ECB SHALL BE ANCHORED, OVERLAPPED, AND STAPLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. IF NO MANUFACTURER'S INSTRUCTIONS ARE AVAILABLE, INSTALL THE MAT AS FOLLOWS.

STAPLES SHALL BE "U" SHAPED, 0.12" DIAMETER WIRE OR GREATER (#11 GAUGE). (SEE STAPLE DETAIL FOR DIMENSIONS)

(1) BURY UPSTREAM END OF MAT IN A TRENCH 6" WIDE BY 6" DEEP AND STAPLED IN STAGGERED ROWS ACROSS THE WIDTH AS SHOWN IN DETAIL 1.

(2) C. FOR JOINING ENDS OF ROLLS, OVERLAP END OF UP SLOPE MAT A MINIMUM OF 6" OVER DOWN SLOPE MAT (SHINGLE STYLE). USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART, AS SHOWN IN DETAIL 2.

(3) D. MATS ON SIDE SLOPES SHALL OVERLAP A MINIMUM OF 6" OVER THE MAT BELOW (SHINGLE STYLE). STAPLE OVERLAP AT 12" INTERVALS. (SEE DETAIL 3)

(4) E. THE OUTER EDGE ALONG SIDES OF THE MAT SHALL BE STAPLED EVERY 12". (SEE DETAIL 4)

F. STAPLES ARE TO BE PLACED ALTERNATELY IN COLUMNS (IN THE DIRECTION OF THE WATERWAY) 2' APART AND IN ROWS (ACROSS THE WATERWAY) 3' APART THROUGHOUT THE AREA COVERED BY THE ECB.

(5) G. DOWNSTREAM (TERMINAL) END OF BLANKET SHALL BE STAPLED WITH A DOUBLE ROW OF STAGGERED STAPLES 12" APART. (SEE DETAIL 5)

EROSION CONTROL BLANKET INSTALLATION

NTS EC700

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ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 SWPPP DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

SWPPP DETAILS

SHEET

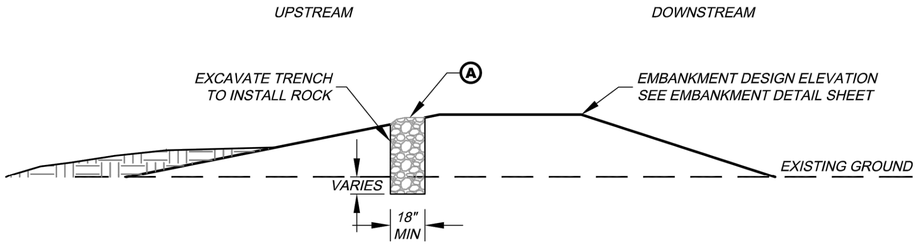
25

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

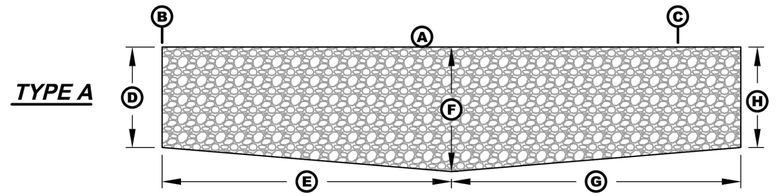
DESIGN TABLE

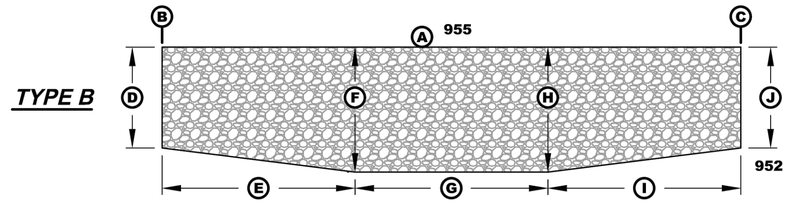
EMBANKMENT ID #	EMBANKMENT DESIGN ELEVATION (FEET)	ROCK LAYOUT TYPE (A, B, OR C)	Ⓐ TOP OF ROCK ELEVATION (FEET)	Ⓑ START STATION (FEET)	Ⓒ END STATION (FEET)	Ⓓ ROCK DEPTH (FEET)	Ⓔ ROCK LENGTH (FEET)	Ⓕ ROCK DEPTH (FEET)	Ⓖ ROCK LENGTH (FEET)	Ⓗ ROCK DEPTH (FEET)	Ⓘ ROCK LENGTH (FEET)	Ⓙ ROCK DEPTH (FEET)	Ⓚ ROCK LENGTH (FEET)	Ⓛ ROCK DEPTH (FEET)	ESTIMATED QUANTITY (SQ.FT.)
Wetland D	933.00	C	933.00	SEE SWPPP		3.0	22.5	3.2	12.1	5.4	5.6	4.1	24.0	3.0	

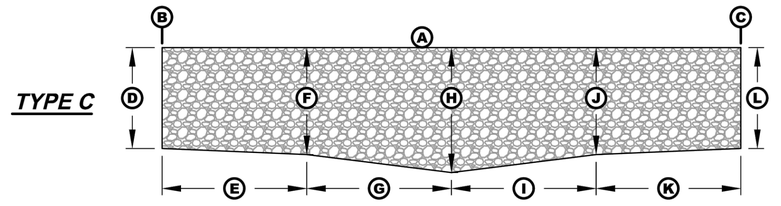


X-SECTION OF EMBANKMENT WITH RODENT PROTECTION

NOT TO SCALE







ROCK LAYOUTS FOR RODENT PROTECTION

NOT TO SCALE

ANGULAR ROCK GRADATION TABLE

ANGULAR ROCK GRADATION:
ONLY CRUSHED ANGULAR ROCK SHALL BE USED. ENGINEER RECOMMENDS CLASS I BALLAST ROCK (3/4" - 4"). SUBSTITUTE GRADATION SHALL BE APPROVED BY ENGINEER.

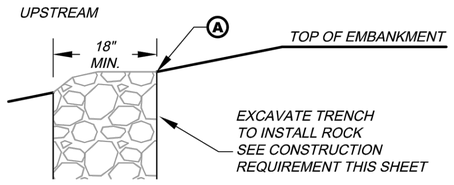
ROCK DIAMETER (INCHES)	PERCENT OF TOTAL SIZE SMALLER THAN A GIVEN SIZE (%)
2 - 4	100 - 30
< 2	29 - 0

CONSTRUCTION REQUIREMENTS

RODENT PROTECTION:
- ROCK TRENCH DEPTH MAY VARY.

- QUANTITIES ARE BASED ON A MINIMUM 18" WIDE EXCAVATED TRENCH, DEPTHS, AND LENGTHS SPECIFIED IN THE DESIGN TABLE. IF CONTRACTOR CHOOSES TO USE A WIDER BUCKET TO EXCAVATE TRENCH, CONTRACTOR WILL BE RESPONSIBLE FOR QUANTITY OVERAGES AND ADDITIONAL COSTS.

- BACK FILL AND BUCKET COMPACT PLACED ROCK IN 12" LIFTS.



TOP OF ROCK LOCATION

NOT TO SCALE

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PRINT NAME / SIGNATURE DATE: LIC. NO.

BWSR

STANDARD SHEET BWSR 103

WETLAND RESTORATION PLAN

ROCK RODENT PROTECTION DETAIL

PROJECT #:

SHEET NO.

OF

ISG

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LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

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TITLE

SWPPP DETAILS

SHEET

26

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/27/2022 10:49 AM

EROSION CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
2511.507	RANDOM RIPRAP, CLASS III	CY	143
2573.502	PROPOSED STORM DRAIN INLET PROTECTION	EACH	68
2573.501	STABILIZED CONSTRUCTION EXIT	EACH	1
2575.504	EROSION CONTROL BLANKET, CATEGORY 3N	SY	26,976
	PERIMETER CONTROL	LF	10,428
	CONCRETE WASHOUT AREA	EA	1

QUANTITIES ARE FOR INFORMATIONAL PURPOSES TO MEET THE REQUIREMENTS OF THE CONSTRUCTION STORMWATER PERMIT. NO GUARANTEE IS MADE TO THE ACTUAL QUANTITIES REQUIRED.

RPBCWD STANDARD EROSION CONTROL NOTES (cont. from SWPPP Narrative Sheet)

a. Natural topography and soil conditions must be protected, including retention onsite of native topsoil to the greatest extent possible.

b. Additional measures, such as hydraulic mulching and other practices as specified by the District must be used on slopes of 3:1 (H:V) or steeper to provide adequate stabilization.

c. Final site stabilization measures must specify that at least six inches of topsoil or organic matter with at least 5% organic content (shall meet RPBCWD topsoil definition) be spread and incorporated into the underlying soil during final site treatment wherever topsoil has been removed.

d. Construction site waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste must be properly managed.

e. All temporary erosion and sediment control BMPs must be maintained until completion of construction and vegetation is established sufficiently to ensure stability of the site, as determined by the District.

f. All temporary erosion and sediment control BMPs must be removed upon final stabilization.

g. Soil surfaces compacted during construction and remaining pervious upon completion of construction must be decompacted to achieve a soil compaction testing pressure of less than 1,400 kilopascals or 200 pounds per square inch in the upper 12 inches of the soil profile while taking care to protect utilities, tree roots, and other existing vegetation.

h. Infiltration facilities must not be excavated to within 3-ft of final grade until contributing drainage area has been constructed and fully stabilized. Any accumulated sediment in an infiltration facility must be removed in a manner that prevents compaction of the facility bottom. To provide a well-aerated, highly porous surface, the soils below an infiltration practice must be loosened to a minimum depth of 18" prior to installation or planting.

i. All disturbed areas must be stabilized within 7 calendar days after land-disturbing work has temporarily or permanently ceased on a property that drains to an impaired water, within 14 days elsewhere.

j. The permittee must, at a minimum, inspect, maintain and repair all disturbed surfaces and all erosion and sediment control facilities and soil stabilization measures every day work is performed on the site and at least weekly until land-disturbing activity has ceased. Thereafter, the permittee must perform these responsibilities at least weekly until vegetative cover is established. The permittee will maintain a log of activities under this section for inspection by the District on request.

k. For any in water work, potential transfer of aquatic species (e.g. zebra mussels, Eurasian watermilfoil, etc.) shall be minimized to the maximum extent possible.

l. After inspection of all erosion prevention, sediment control facilities, and soil stabilization, the contractor shall repair, replace or supplement all non-functional BMPs with functional BMPs within 48 hours of discovery and prior to the next rainfall event or as soon as possible. When active land-disturbing activities are not underway, inspection and these responsibilities shall take place weekly until vegetative cover is established. Also a log of inspection and repair activities shall be maintained and available per request of the watershed district (RBPCWD).

m. No activity affecting the bed or banks of a protected water may be conducted between March 15 and June 15 on watercourses, or between April 1 and June 30 on all other public waterbodies, to minimize impacts on fish spawning and migration.

n. Banks must be stabilized immediately after completion of permitted work and re-vegetated as soon as growing conditions allow.



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE
	STORM DRAIN INLET PROTECTION
	TURF REINFORCEMENT MAT, CATEGORY 74
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 3N
	CONCRETE WASHOUT AREA
	ROCK DITCH CHECK
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

SLOPES 3:1 OR GREATER MUST BE STABILIZED IMMEDIATELY FOLLOWING EXCAVATION.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 SWPPP
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (OVERALL)

SHEET

27

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/27/2022 10:56 AM

EROSION CONTROL LEGEND

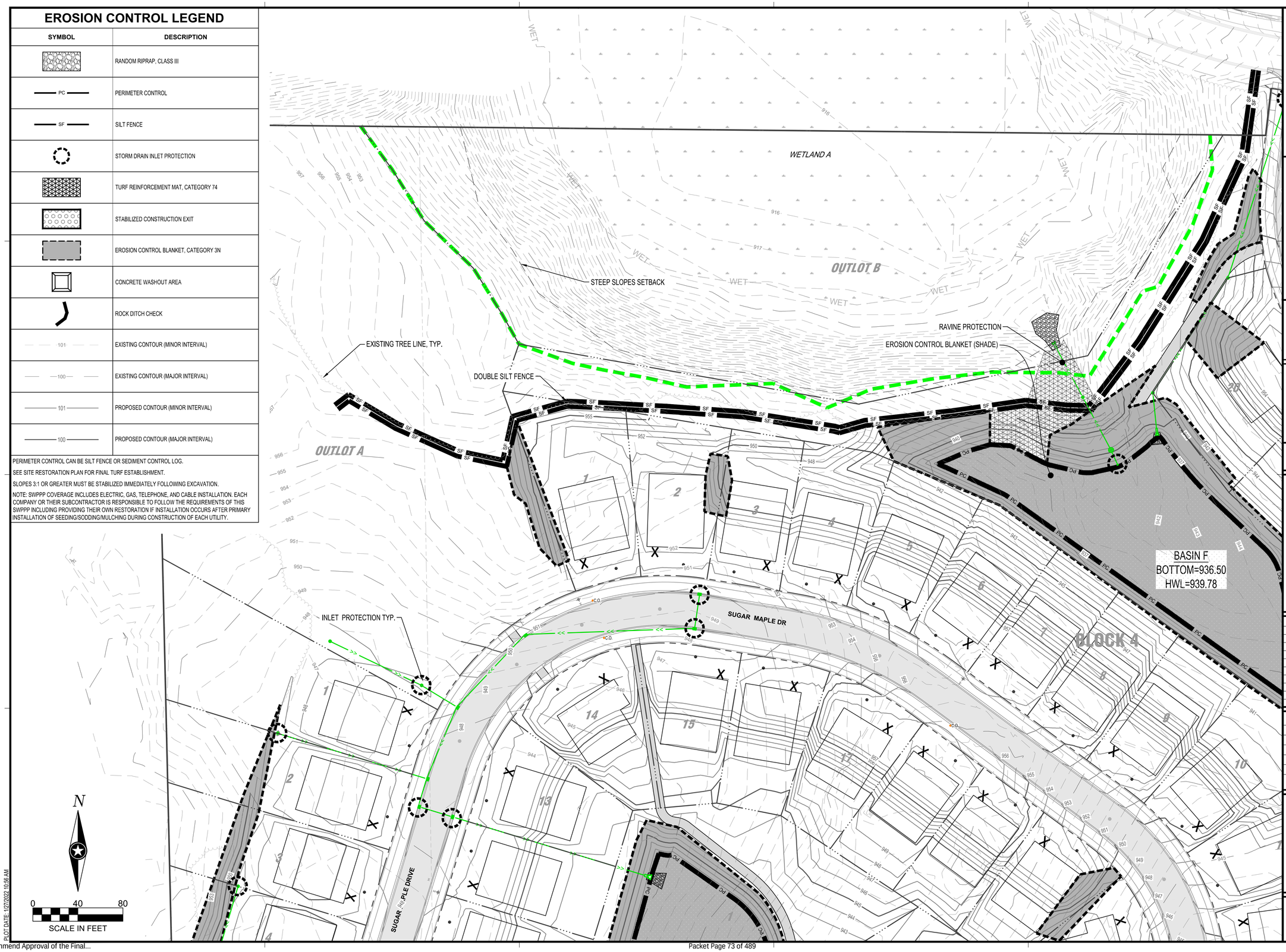
SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE
	STORM DRAIN INLET PROTECTION
	TURF REINFORCEMENT MAT, CATEGORY 74
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 3N
	CONCRETE WASHOUT AREA
	ROCK DITCH CHECK
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

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TITLE

PROPOSED SWPPP (NW)

SHEET

28 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

ROCK CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

EROSION CONTROL BLANKET, TYP. (SHADE)

DOUBLE SILT FENCE

RAVINE PROTECTION

INLET PROTECTION TYP.

BASIN F
BOTTOM=936.50
HWL=939.78

OUTLOT B

WET

IRONWOOD BLVD.

AUDUBON ROAD (COUNTY ROAD 15)

BLOCK 1

BLOCK 4

BLOCK 4

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE
	STORM DRAIN INLET PROTECTION
	TURF REINFORCEMENT MAT, CATEGORY 74
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 3N
	CONCRETE WASHOUT AREA
	ROCK DITCH CHECK
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
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N

0 40 80
SCALE IN FEET

PLOT DATE: 1/27/2022 10:56 AM

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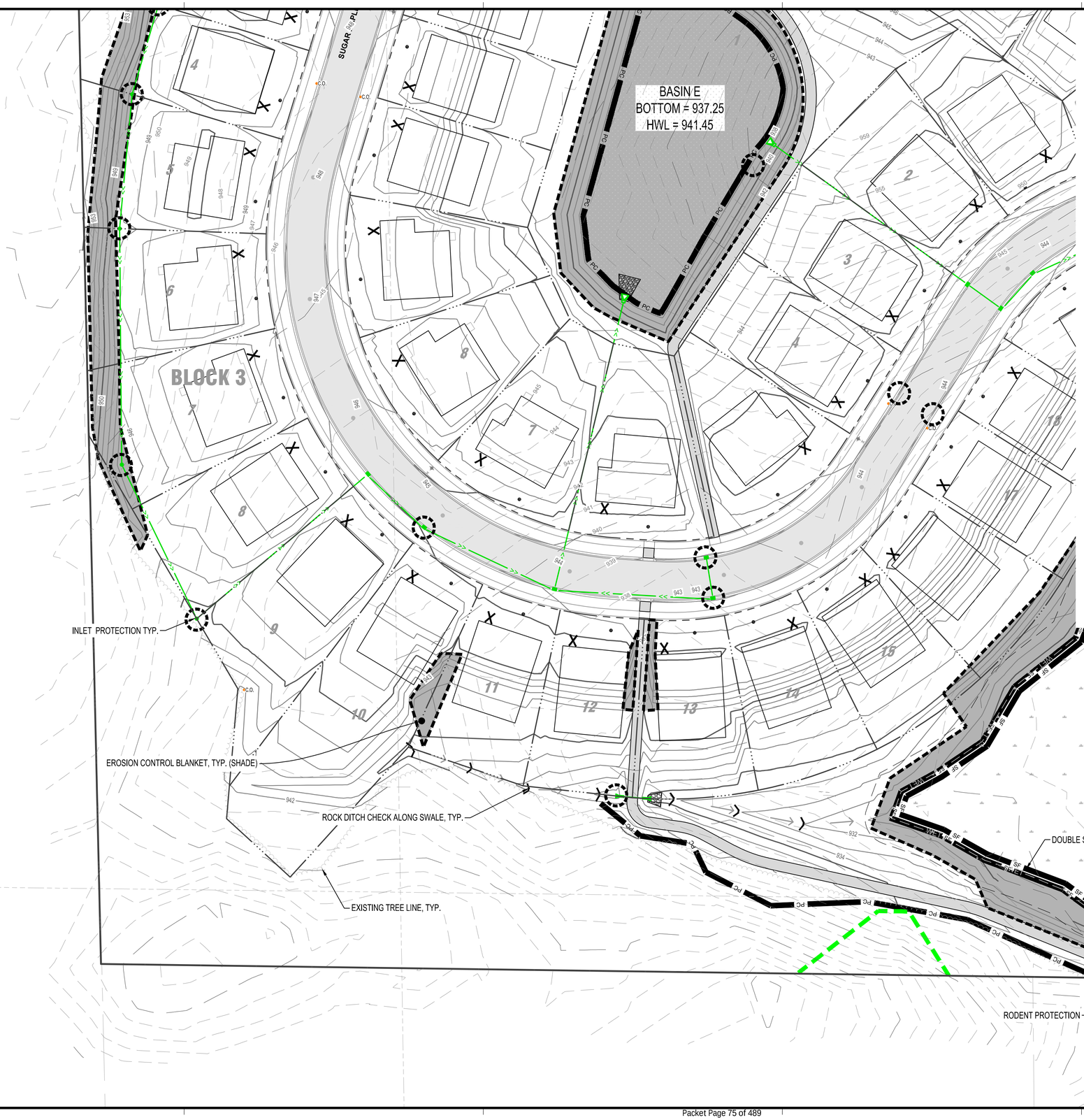
TITLE

PROPOSED SWPPP (NE)

SHEET

29 OF 76

PRELIMINARY NOT FOR CONSTRUCTION



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE
	STORM DRAIN INLET PROTECTION
	TURF REINFORCEMENT MAT, CATEGORY 74
	STABILIZED CONSTRUCTION EXIT
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	CONCRETE WASHOUT AREA
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CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (SW)

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30 OF 76

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EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
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PC	PERIMETER CONTROL
SF	SILT FENCE
	STORM DRAIN INLET PROTECTION
	TURF REINFORCEMENT MAT, CATEGORY 74
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 3N
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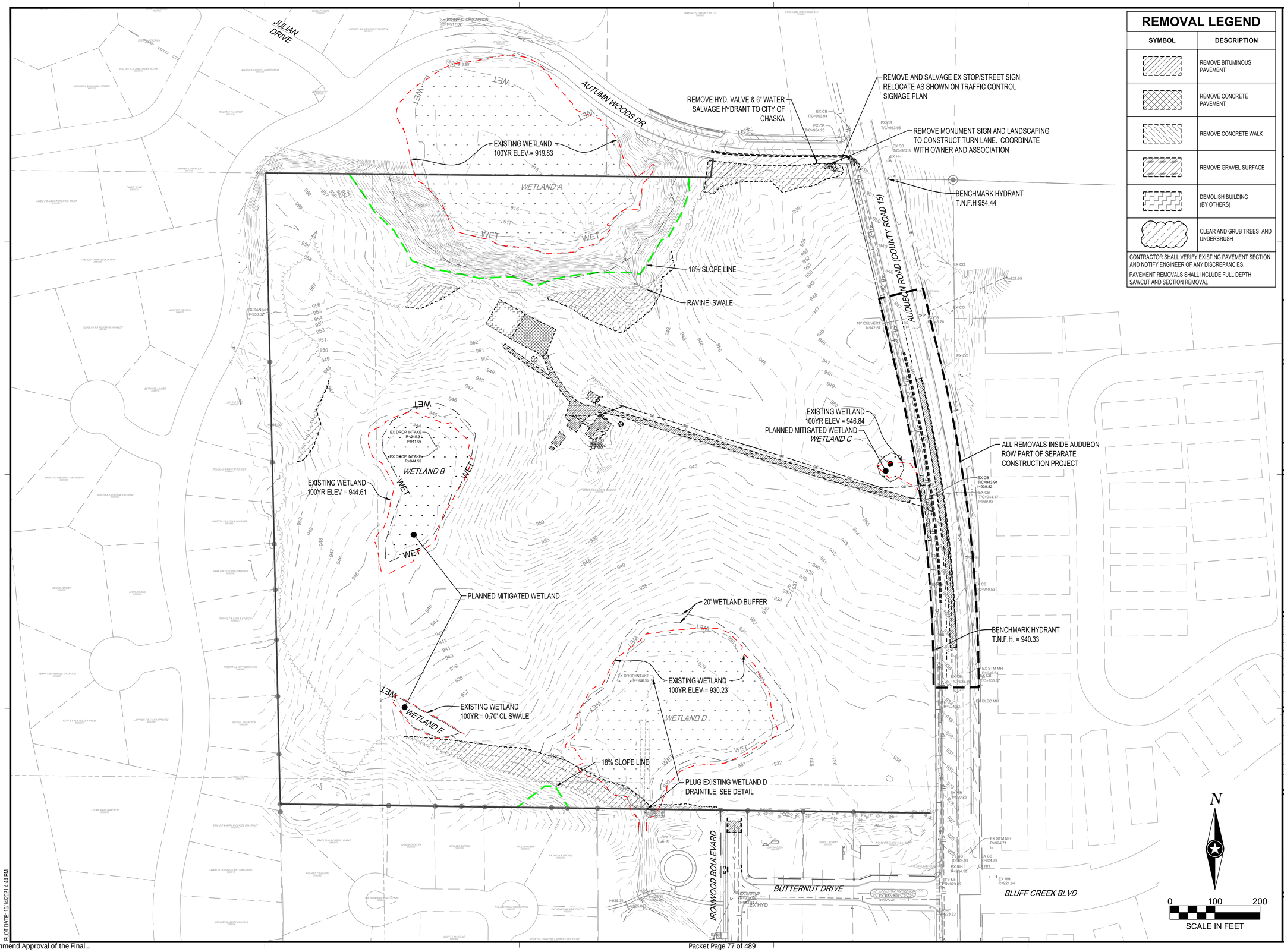
SHEET

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OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/27/2022 10:56 AM



REMOVAL LEGEND

SYMBOL	DESCRIPTION
	REMOVE BITUMINOUS PAVEMENT
	REMOVE CONCRETE PAVEMENT
	REMOVE CONCRETE WALK
	REMOVE GRAVEL SURFACE
	DEMOLISH BUILDING (BY OTHERS)
	CLEAR AND GRUB TREES AND UNDERBRUSH

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT SECTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

PAVEMENT REMOVALS SHALL INCLUDE FULL DEPTH SAWCUT AND SECTION REMOVAL.

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TITLE

EXISTING SITE AND REMOVAL PLAN

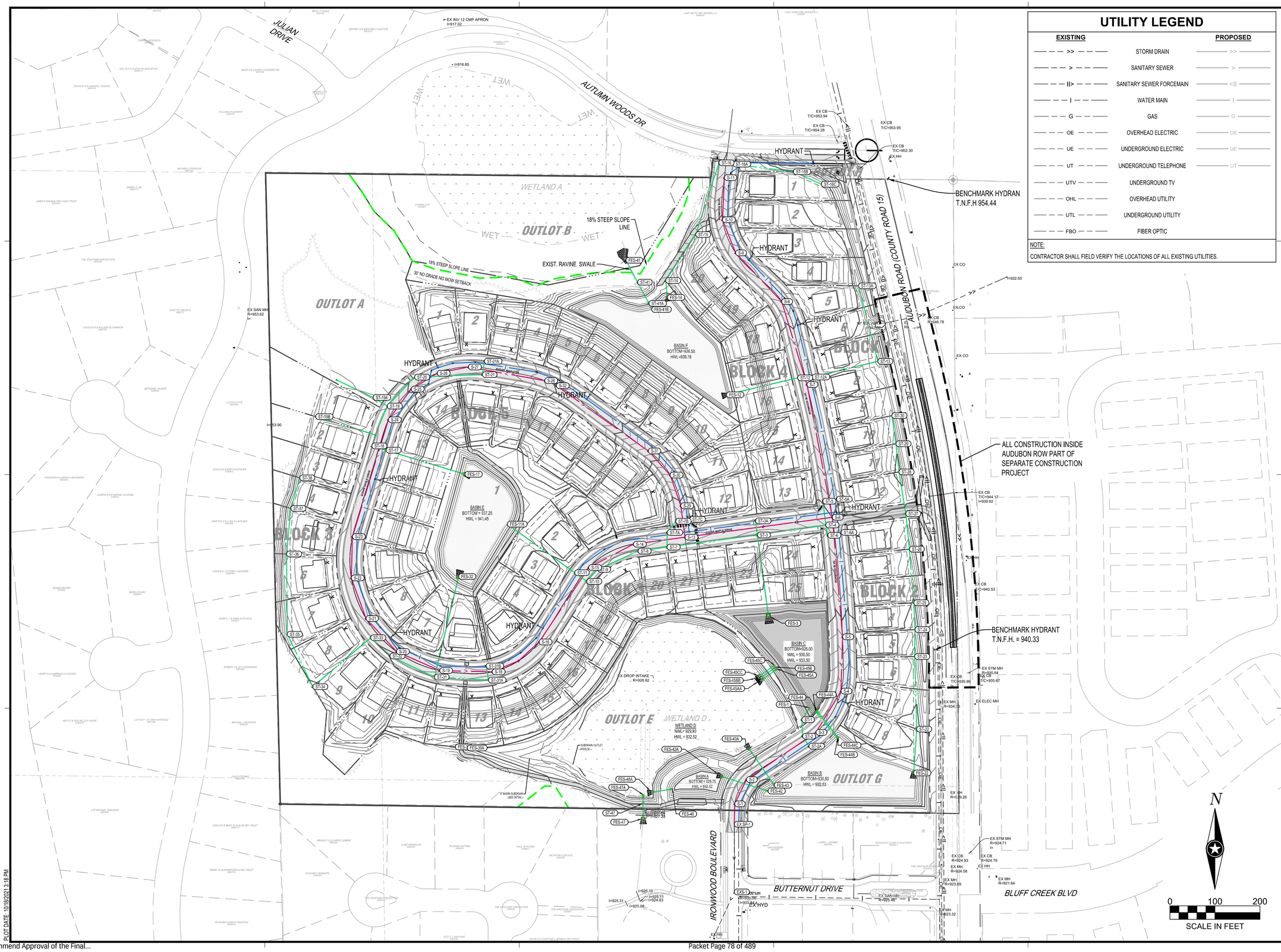
SHEET

32

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 01/4/2021 4:44 PM



UTILITY LEGEND

EXISTING		PROPOSED
— — — >> — — —	STORM DRAIN	——— >> ———
— — — > — — —	SANITARY SEWER	——— > ———
— — — II> — — —	SANITARY SEWER FORCEMAIN	——— <II ———
— — — I — — —	WATER MAIN	——— I ———
— — — G — — —	GAS	——— G ———
— — — OE — — —	OVERHEAD ELECTRIC	——— OE ———
— — — UE — — —	UNDERGROUND ELECTRIC	——— UE ———
— — — UT — — —	UNDERGROUND TELEPHONE	——— UT ———
— — — UTV — — —	UNDERGROUND TV	
— — — OHL — — —	OVERHEAD UTILITY	
— — — UTL — — —	UNDERGROUND UTILITY	
— — — FBO — — —	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 UTILITES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

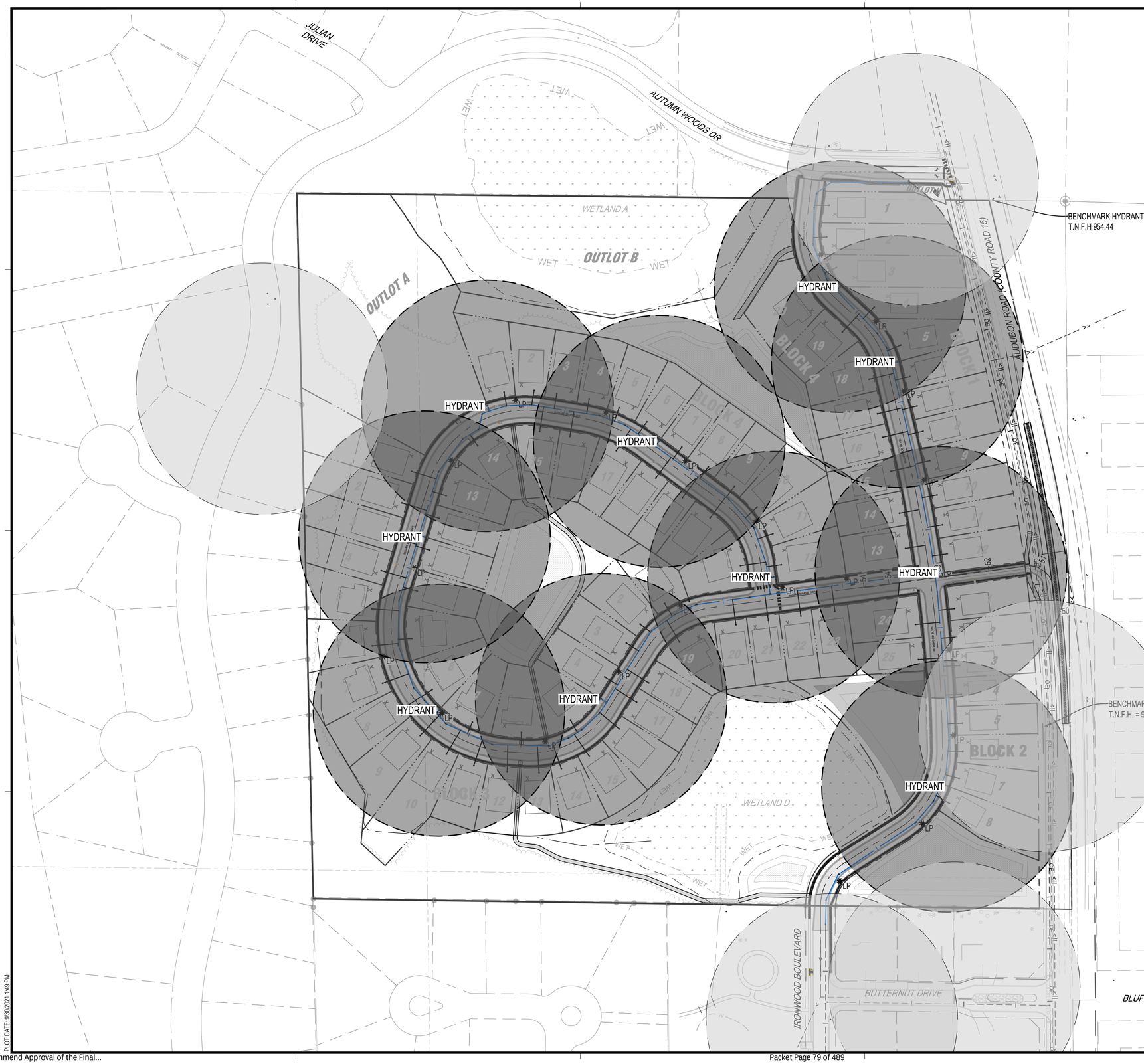
UTILITY PLAN (OVERALL)

SHEET

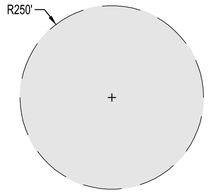
33 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

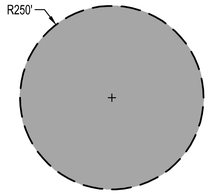
PLOT DATE: 10/18/2021 3:18 PM



HYDRANT COVERAGE LEGEND



EXISTING HYDRANT



PROPOSED HYDRANT

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 HYD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

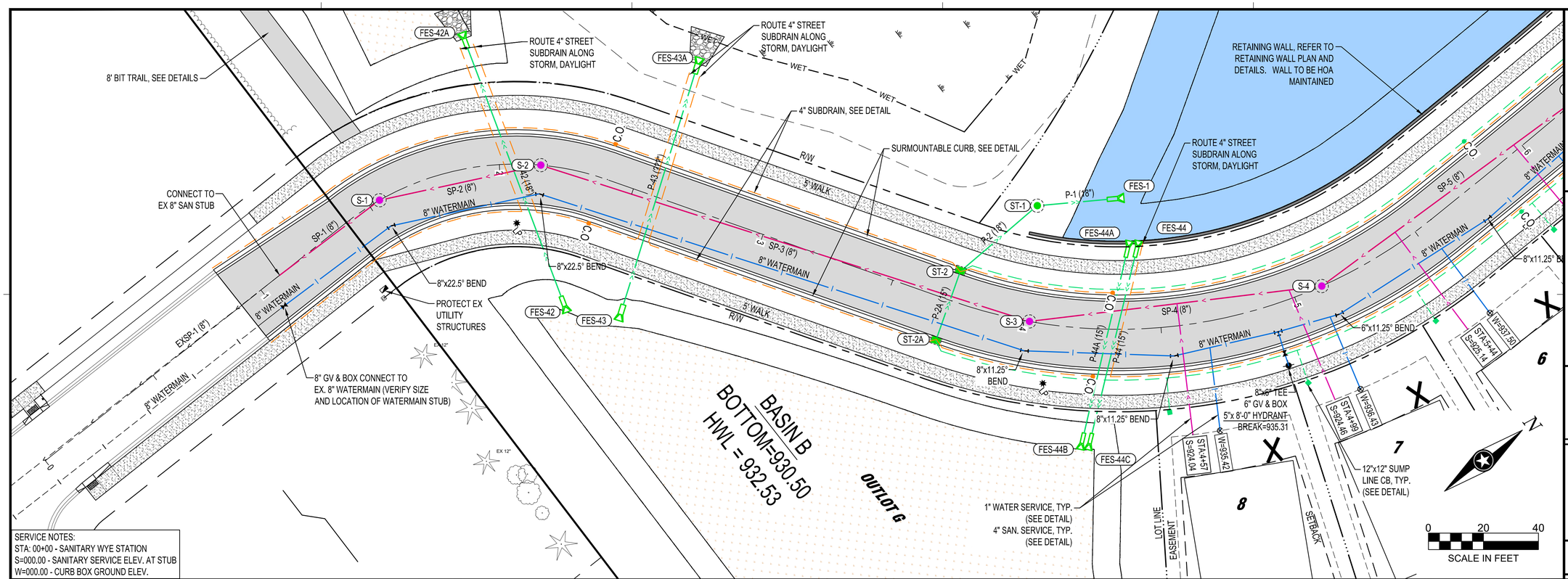
HYDRANT COVERAGE MAP

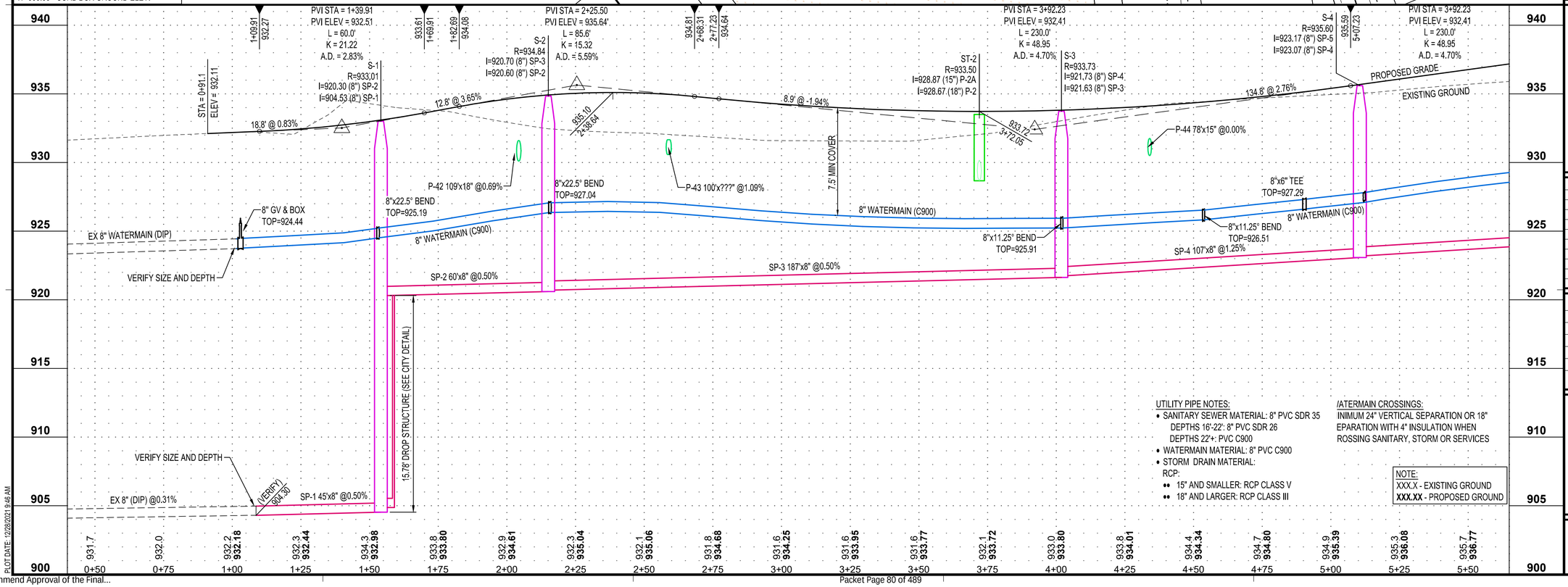
SHEET

34 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 9/30/2021 1:49 PM





UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

/ATERMAIN CROSSINGS:
INIMUM 24" VERTICAL SEPARATION OR 18"
EPARATION WITH 4" INSULATION WHEN
ROSSING SANITARY, STORM OR SERVICES

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PROF IRONWOOD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

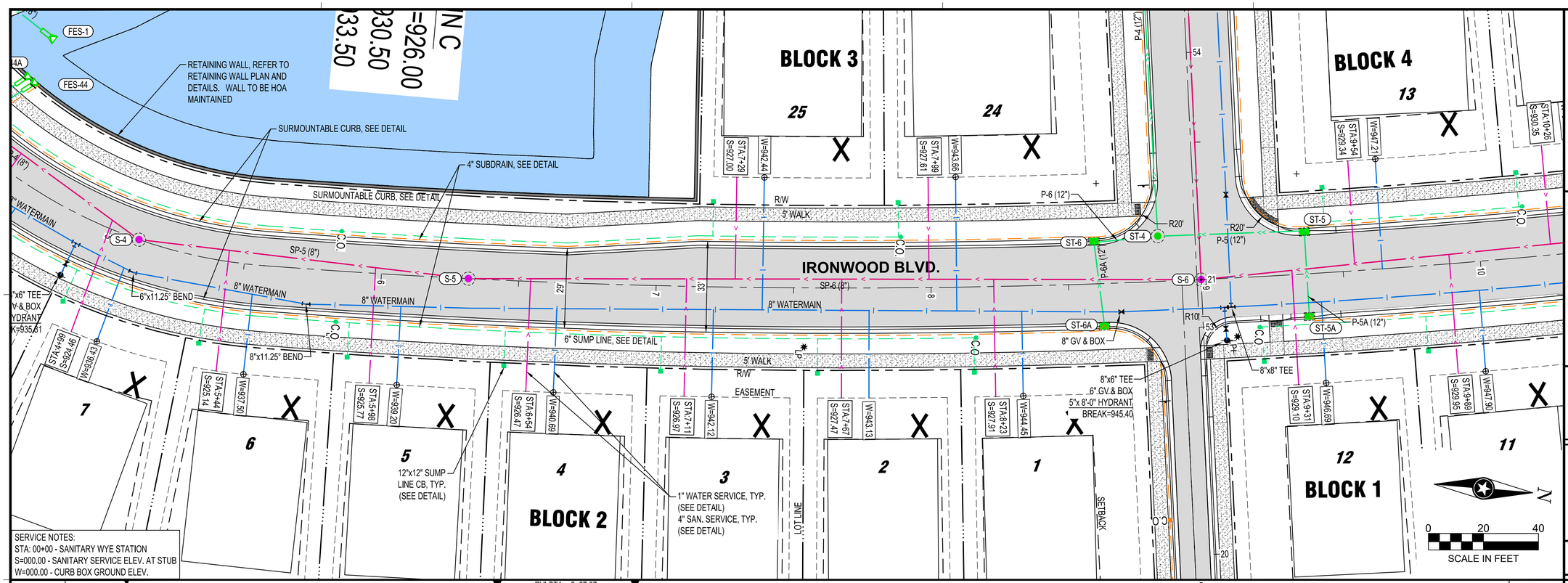
PLANNED STREET AND UTILITY CONSTRUCTION (IRONWOOD BLVD)

SHEET

35 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/28/2021 9:46 AM

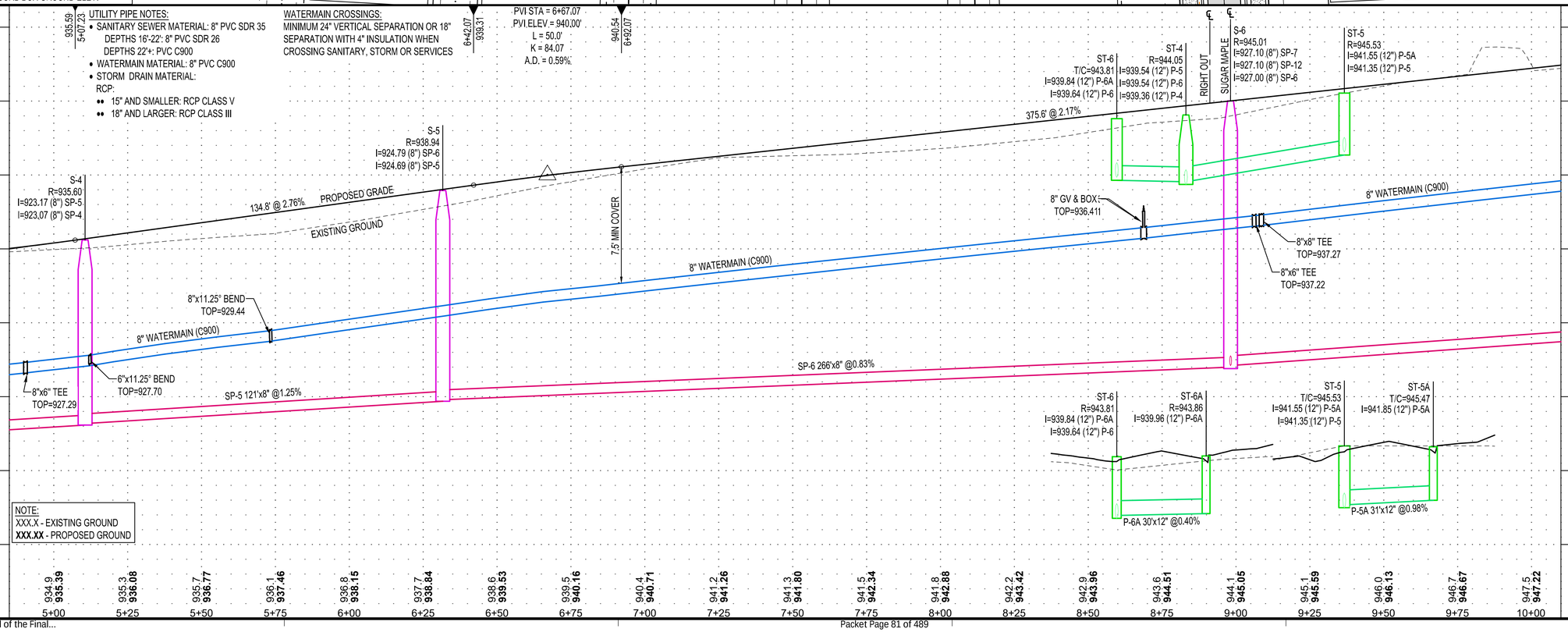


SERVICE NOTES:
STA: 00+00 - SANITARY WYE STATION
S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

PVI STA = 6+67.07
PVI ELEV = 940.00'
L = 50.0'
K = 84.07
A.D. = 0.59%



NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

STA	5+00	5+25	5+50	5+75	6+00	6+25	6+50	6+75	7+00	7+25	7+50	7+75	8+00	8+25	8+50	8+75	9+00	9+25	9+50	9+75	10+00
EXISTING GROUND	934.9	935.3	935.7	936.1	936.8	937.7	938.6	939.5	940.4	941.2	941.3	941.5	941.8	942.2	942.9	943.6	944.1	945.1	946.0	946.7	947.5
PROPOSED GRADE	935.39	936.08	936.77	937.46	938.15	938.84	939.53	940.16	940.71	941.26	941.80	942.34	942.88	943.42	943.96	944.51	945.05	945.59	946.13	946.67	947.22

PRELIMINARY NOT FOR CONSTRUCTION

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PROJECT
LENNAR
RESERVE AT AUTUMN WOODS
CHASKA MINNESOTA

REVISION SCHEDULE

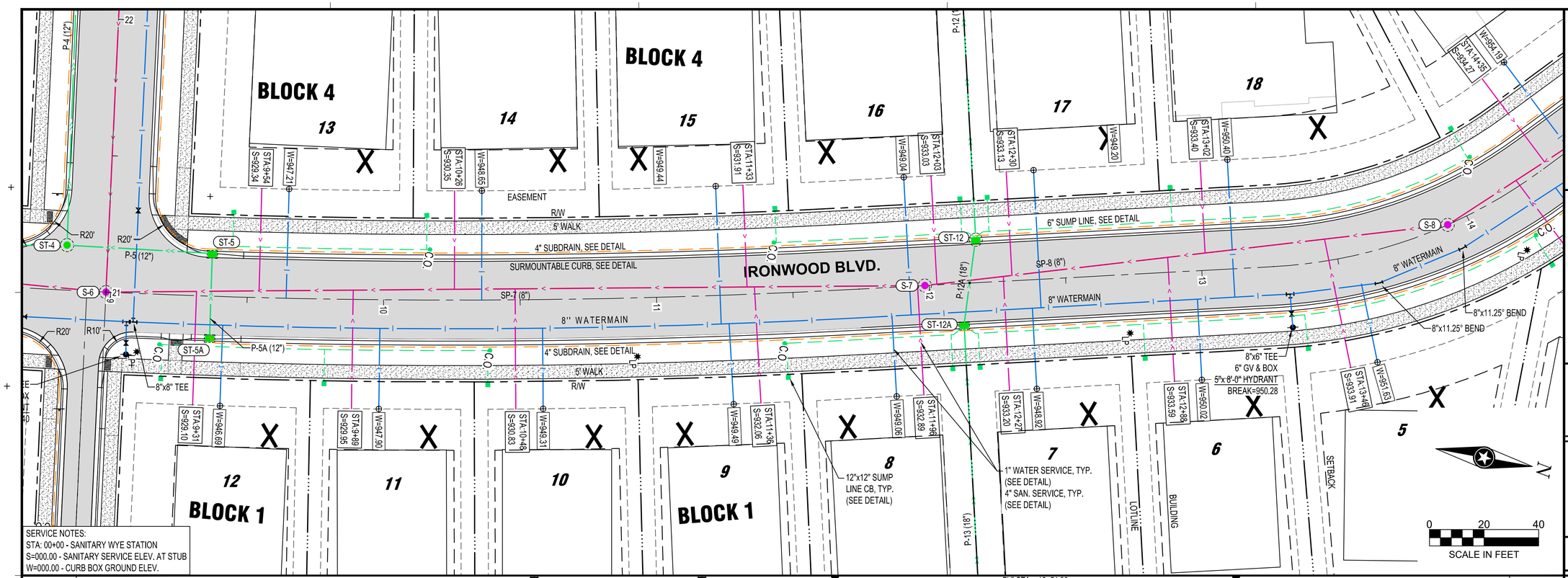
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

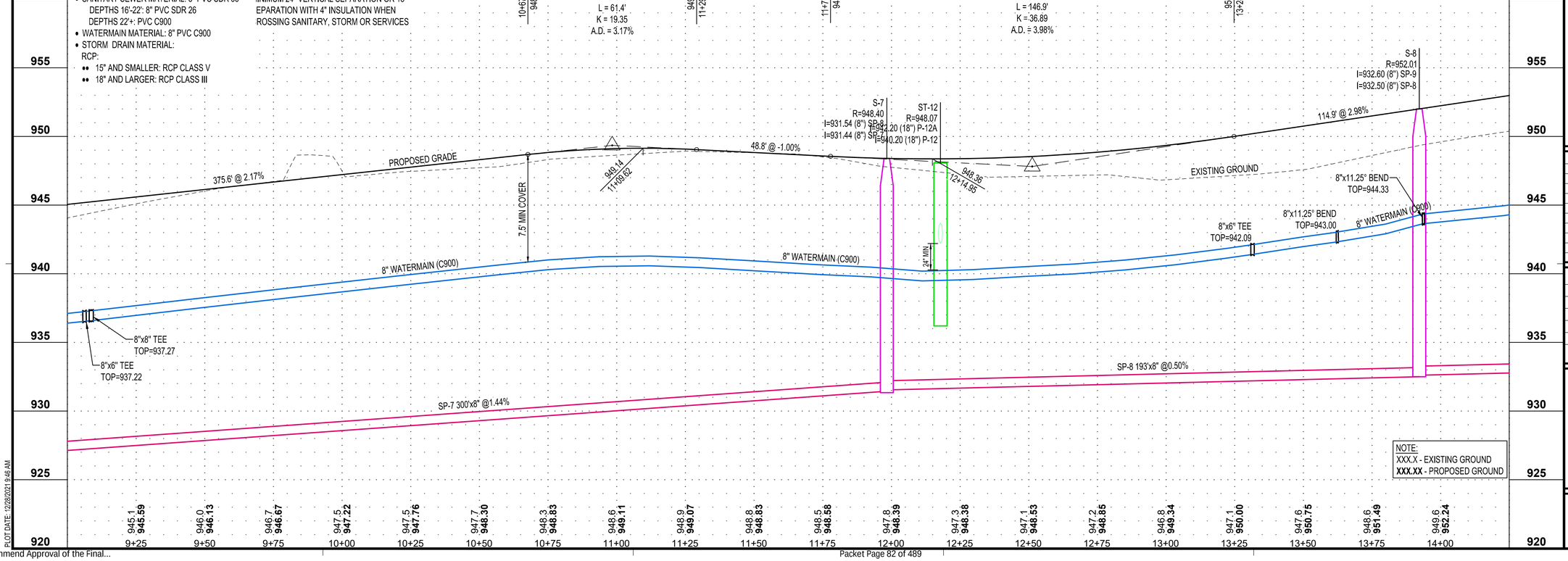
PROJECT NO.	21-24984
FILE NAME	24984 PROF IRONWOOD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE
PLANNED STREET AND UTILITY CONSTRUCTION (IRONWOOD BLVD)

SHEET
36 OF 76

PLOT DATE: 12/28/2021 9:46 AM





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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PROF IRONWOOD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

PLANNED STREET AND UTILITY CONSTRUCTION (IRONWOOD BLVD)

SHEET

37 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/28/2021 9:46 AM

SERVICE NOTES:
STA: 00+00 - SANITARY WYE STATION
S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.

IRONWOOD BLVD.
BLOCK 4
BLOCK 1
AUTUMN WOODS DR.
LOT LINE
SETBACK
EASEMENT
R/W
BUILDING PAD
4' SUBDRAIN, SEE DETAIL
SURMOUNTABLE CURB, SEE DETAIL
5' WALK
8" SUMP LINE, SEE DETAIL
12"x12" SUMP LINE CB, TYP. (SEE DETAIL)
1" WATER SERVICE, TYP. (SEE DETAIL)
4" SAN. SERVICE, TYP. (SEE DETAIL)
8"x6" TEE
6" GV & BOX
5"x 8'-0" HYDRANT
BREAK=954.29
8" WATERMAIN
8"x22.5° BEND
8"x11.25° BEND
8"x45° BEND
SP-10 (8")
SP-11 (8")
SP-9 (8")
P-16 (15")
P-16A (18")
P-16B (15")
S-8
S-9
S-10
S-11
ST-16
ST-16A
ST-16B
L-13
L-14
L-15
L-17
C.O.
P
R20'
18
19
20
63
62
0 20 40
SCALE IN FEET
N

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

PVI STA = 12+51.33
PVI ELEV = 947.81
L = 146.9'
K = 36.89
A.D. = 3.98%

PVI STA = 15+15.41
PVI ELEV = 955.67"
L = 151.5'
K = 19.23
A.D. = 7.88%

PVI STA = 17+06.47
PVI ELEV = 946.31
L = 105.0'
K = 36.21
A.D. = 2.90%

S-8
R=952.01
I=932.60 (8") SP-9
I=932.50 (8") SP-8
114.9' @ 2.98%
PROPOSED GRADE
954.27
14+96.92
S-9
R=953.75
I=933.45 (8") SP-10
I=933.34 (8") SP-9
S-10
R=950.50
I=933.94 (8") SP-11
I=933.84 (8") SP-10
62.8' @ -4.90%
EXISTING GROUND
7.5' MIN COVER
S-11
R=946.40
I=934.41 (8") SP-11
ST-16
R=945.38
I=940.30 (18") P-16A
I=940.10 (15") P-16
10.1' @ -2.00%
STA = 17+69.0
ELEV = 945.06
AUTUMNS WOODS DR
8"x6" TEE
TOP=942.09
8"x11.25° BEND
TOP=943.00
8"x6" TEE
TOP=946.23
8"x11.25° BEND
TOP=945.66
8"x22.5° BEND
TOP=943.47
8"x11.25° BEND
TOP=940.10
8"x45° BEND
TOP=938.84
8"x45° BEND
TOP=939.51
(SEE AUTUMN WOODS DR FOR CONTINUATION)
SP-9 149'x8" @0.50%
SP-10 79'x8" @0.50%
SP-11 94'x8" @0.50%

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

947.1	947.6	948.6	949.6	950.4	951.6	952.9	953.9	954.8	954.4	953.9	953.4	951.7	950.5	949.6	951.1	949.5	946.7	945.3	945.2
950.00	**950.75**	**951.49**	**952.24**	**952.98**	**953.70**	**954.14**	**954.27**	**954.06**	**953.54**	**952.68**	**951.53**	**950.30**	**949.08**	**947.91**	**946.92**	**946.10**	**945.45**		
13+25	13+50	13+75	14+00	14+25	14+50	14+75	15+00	15+25	15+50	15+75	16+00	16+25	16+50	16+75	17+00	17+25	17+50	17+75	18+00	18+25

965 960 955 950 945 940 935 930 925

PLOT DATE: 12/28/2021 9:46 AM

ISG

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DATE _____ LIC. NO. 55871

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PROJECT
LENNAR
RESERVE AT AUTUMN WOODS
CHASKA MINNESOTA

REVISION SCHEDULE

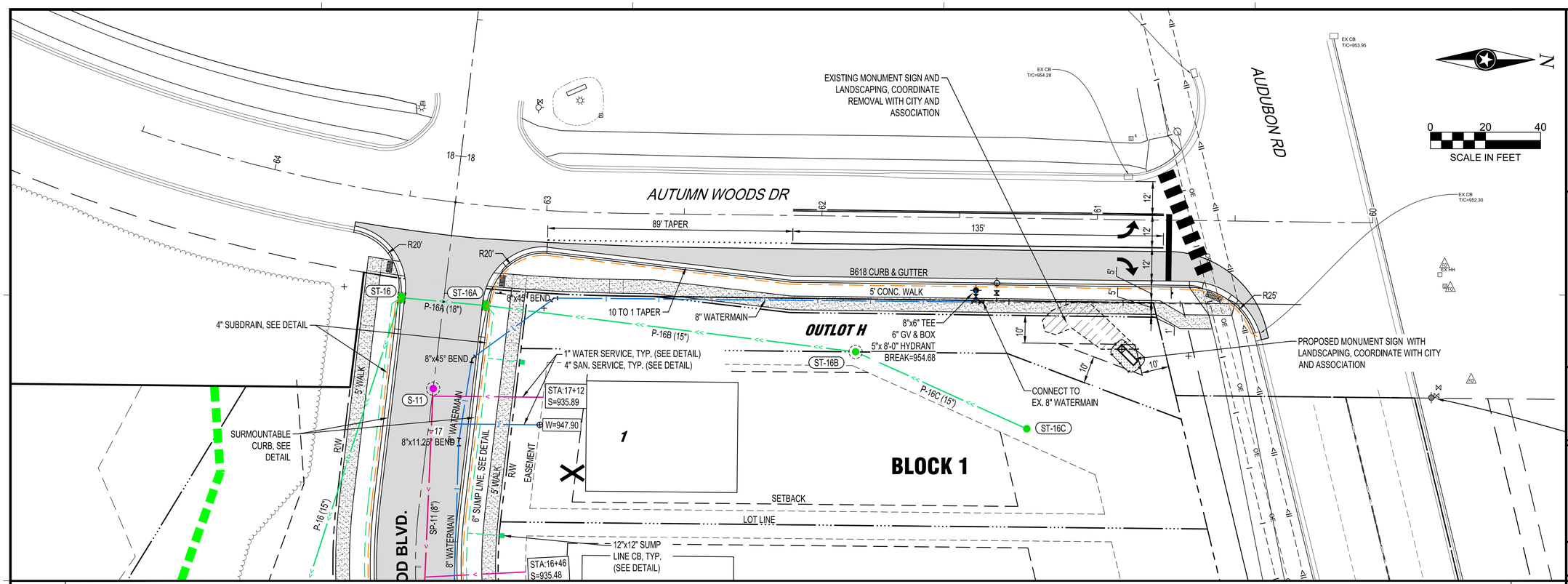
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

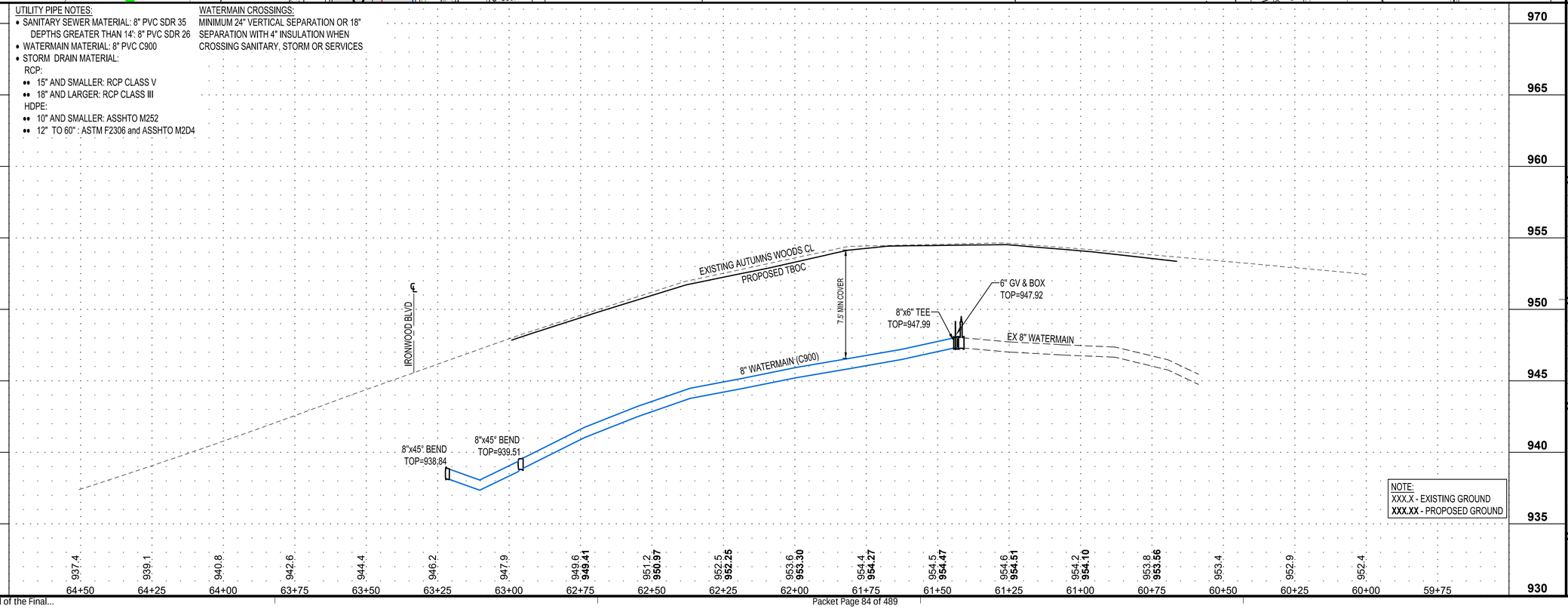
PROJECT NO.	21-24984
FILE NAME	24984 PROF IRONWOOD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE
PLANNED STREET AND UTILITY CONSTRUCTION (IRONWOOD BLVD)

SHEET
38 OF 76

PRELIMINARY NOT FOR CONSTRUCTION





UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS GREATER THAN 14': 8" PVC SDR 26
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III
  HDPE:
  - 10" AND SMALLER: ASSHTO M252
  - 12" TO 60" : ASTM F2306 and ASSHTO M2D4

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF AUTUMN
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

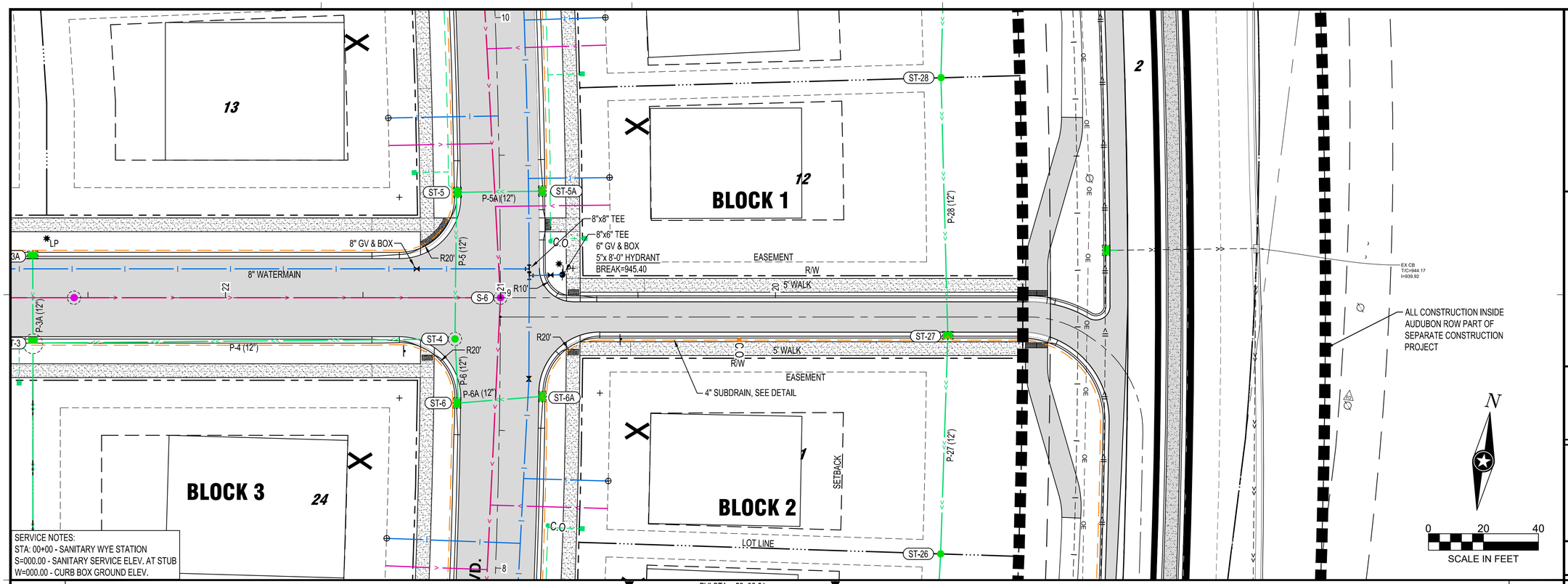
PLANNED STREET AND UTILITY CONSTRUCTION (AUTUMN WOODS DR)

SHEET

39 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/10/2021 12:27 PM



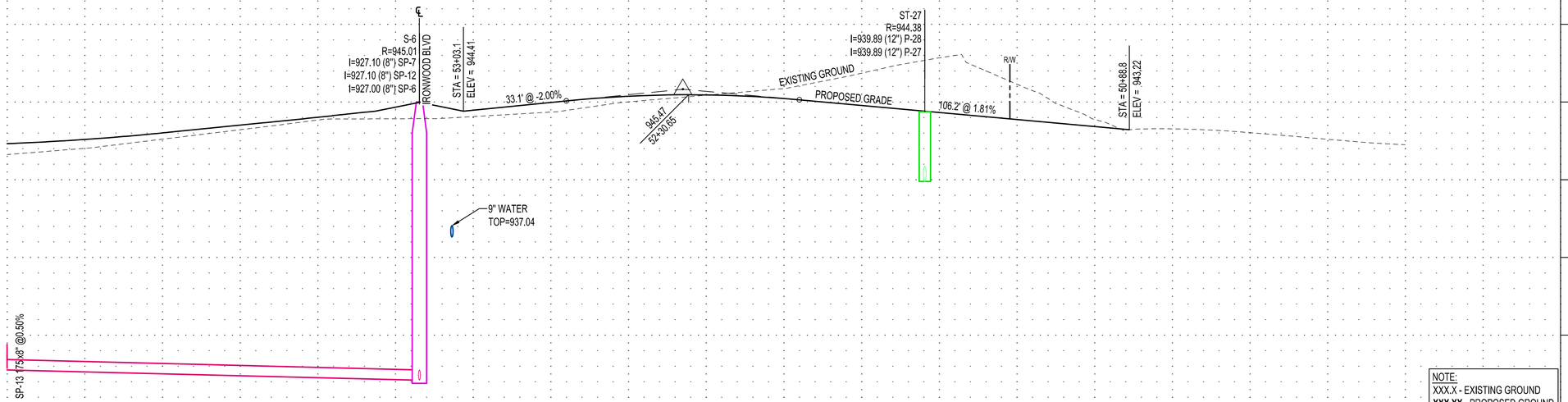
945.07
52+70.01

PVI STA = 52+32.51
PVI ELEV = 945.82'
L = 75.0'
K = 19.68
A.D. = 3.81%

945.01
51+95.14

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  - DEPTHS 16'-22': 8" PVC SDR 26
  - DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III



NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

PLOT DATE: 1/27/2022 8:05 AM

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

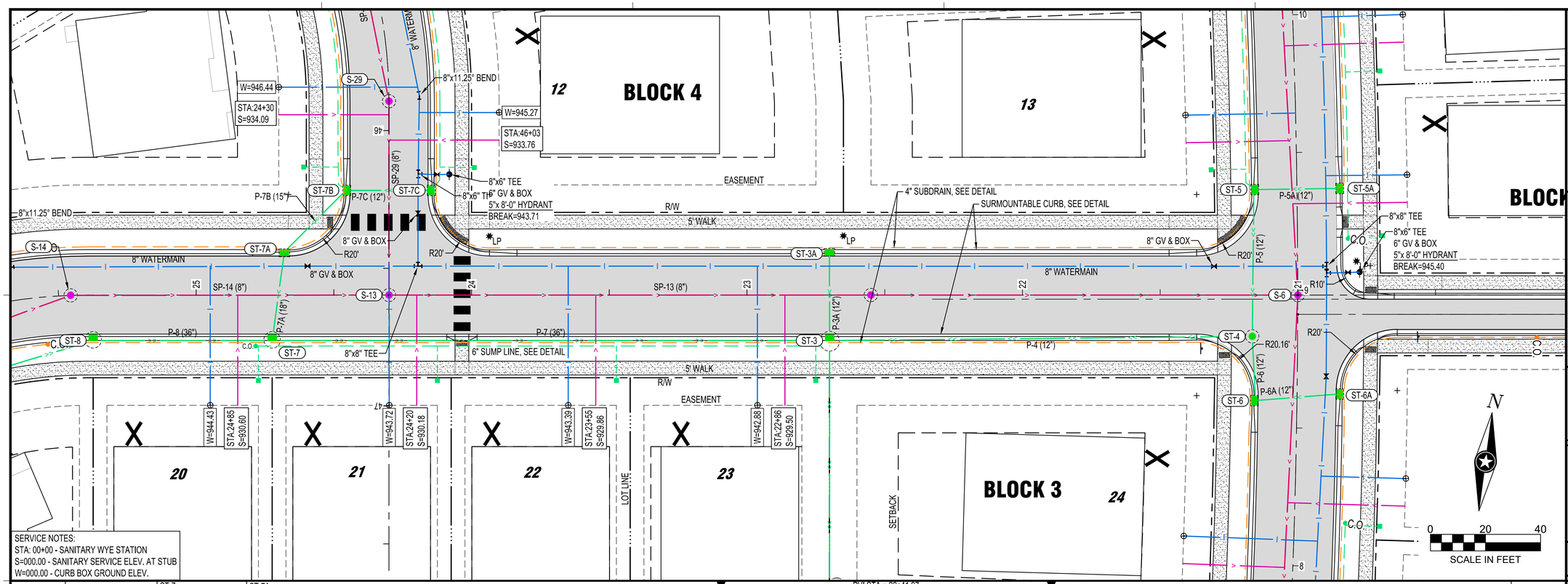
PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE RIGHT OUT)

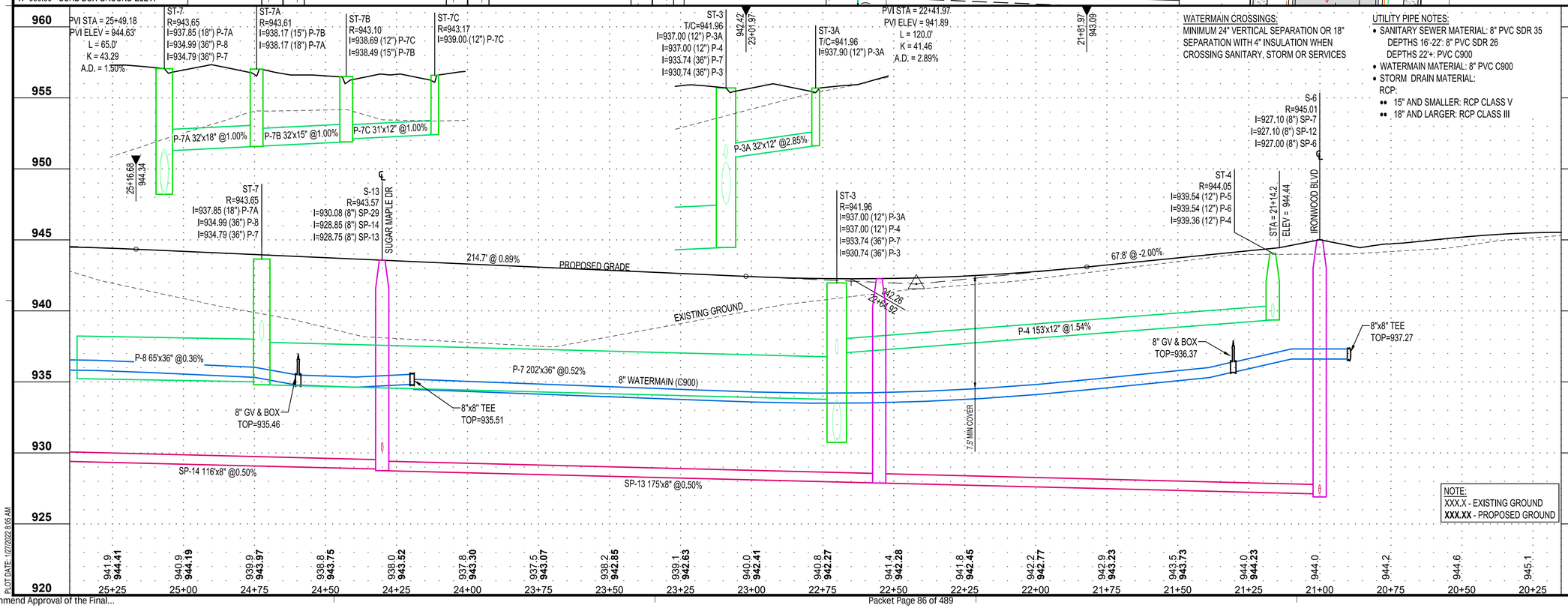
SHEET

40 OF 76

PRELIMINARY NOT FOR CONSTRUCTION



SERVICE NOTES:
STA: 00+00 - SANITARY WYE STATION
S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.



PLOT DATE - 1/27/2022 8:05 AM

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

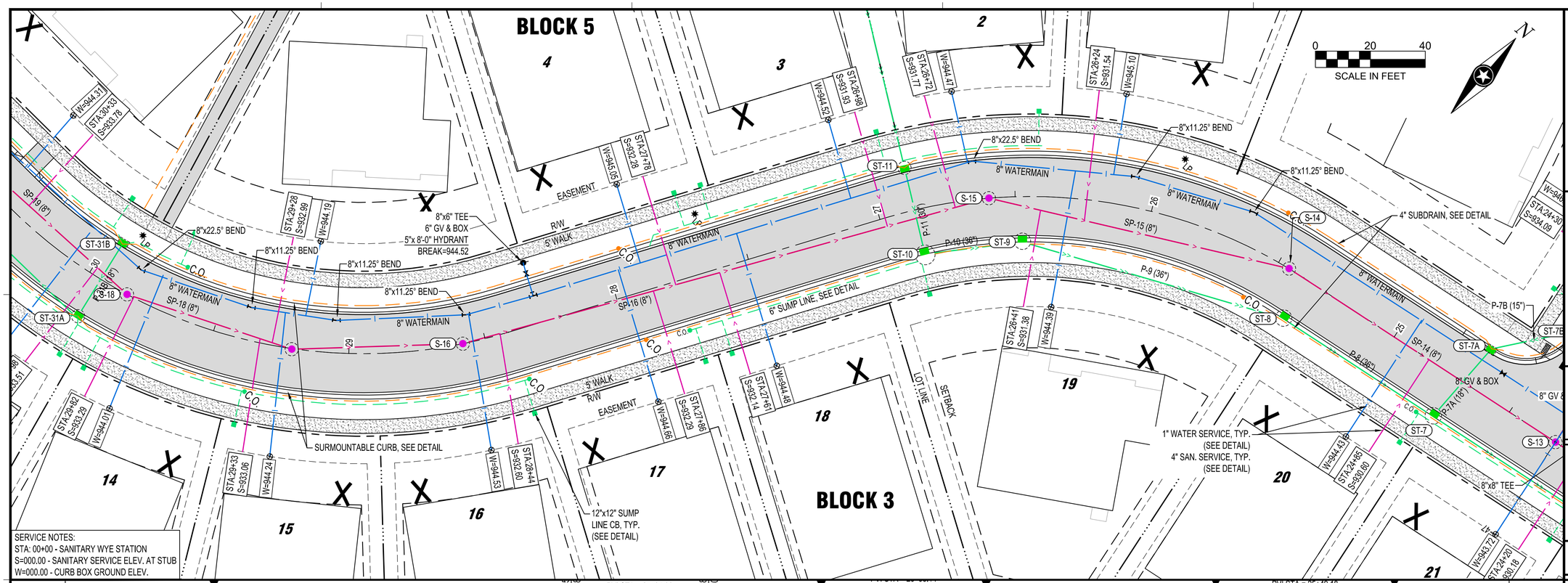
TITLE

PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE)

SHEET

41 OF 76

PRELIMINARY NOT FOR CONSTRUCTION



SERVICE NOTES:
STA: 00+00 - SANITARY WYE STATION
S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.

PVI STA = 29+95.95
PVI ELEV = 943.05
L = 100.0'
K = 53.90
A.D. = 1.86%

PVI STA = 27+91.08
PVI ELEV = 944.76'
L = 50.0'
K = 26.30
A.D. = 1.90%

PVI ELEV = 943.74
L = 60.0'
K = 35.90
A.D. = 1.67%

PVI STA = 25+49.18
PVI ELEV = 944
L = 65.0'
K = 43.29
A.D. = 1.50%

ST-31A
T/C=942.98
I=938.26 (18") P-31B
I=938.06 (24") P-31A

ST-31B
T/C=942.98
I=938.41 (18") P-31B

P-31B 32'x18" @0.47%

ST-31A
R=942.98
I=938.26 (18") P-31B
I=938.06 (24") P-31A

S-18
R=943.28
I=931.91 (8") SP-19
I=931.81 (8") SP-18

S-16
R=944.20
I=931.18 (8") SP-17
I=931.18 (8") SP-16

ST-10
R=943.56
I=936.34 (30") P-11
I=936.14 (36") P-10

S-15
R=943.96
I=930.19 (8") SP-16
I=930.09 (8") SP-15

ST-9
R=943.73
I=936.02 (36") P-10
I=935.82 (36") P-9

S-14
R=944.50
I=929.53 (8") SP-15
I=929.43 (8") SP-14

ST-8
R=944.18
I=935.43 (36") P-9
I=935.23 (36") P-8

129.9' @ -0.84%
40.9' @ 1.06%
83.5' @ -0.61%
214.7' @ 0.89%
PROPOSED GRADE
EXISTING GROUND
7.5' MIN COVER
18" MIN.

8"x22.5° BEND TOP=935.33
8"x11.25° BEND TOP=935.60
8"x11.25° BEND TOP=935.90
8" WATERMAIN (C900)
8"x11.25° BEND TOP=936.28
8"x6" TEE TOP=936.50
8"x22.5° BEND TOP=935.43
8"x11.25° BEND TOP=936.29
8"x11.25° BEND TOP=936.47

SP-18 63'x8" @0.50%
SP-16 198'x8" @0.50%
SP-15 112'x8" @0.50%
SP-14 116'x8" @0.50%
P-10 36'x36" @0.33%
P-9 99'x36" @0.40%
P-8 65'x36" @0.36%

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  - DEPTHS 16'-22': 8" PVC SDR 26
  - DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

STA	29+75	29+50	29+25	29+00	28+75	28+50	28+25	28+00	27+75	27+50	27+25	27+00	26+75	26+50	26+25	26+00	25+75	25+50	25+25	25+00
	939.1	939.7	940.2	940.8	939.8	939.0	938.8	938.9	939.0	939.9	941.3	942.3	943.0	943.7	944.1	944.1	944.0	943.4	941.9	940.9
	943.30	**943.43**	**943.64**	**943.85**	**944.06**	**944.27**	**944.48**	**944.64**	**944.58**	**944.33**	**944.06**	**943.88**	**943.88**	**944.02**	**944.17**	**944.32**	**944.47**	**944.51**	**944.41**	**944.19**

PRELIMINARY NOT FOR CONSTRUCTION

ISG

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JERREMY D. FOSS
DATE _____ LIC. NO. 55871

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PROJECT
LENNAR
RESERVE AT AUTUMN WOODS
CHASKA MINNESOTA

REVISION SCHEDULE

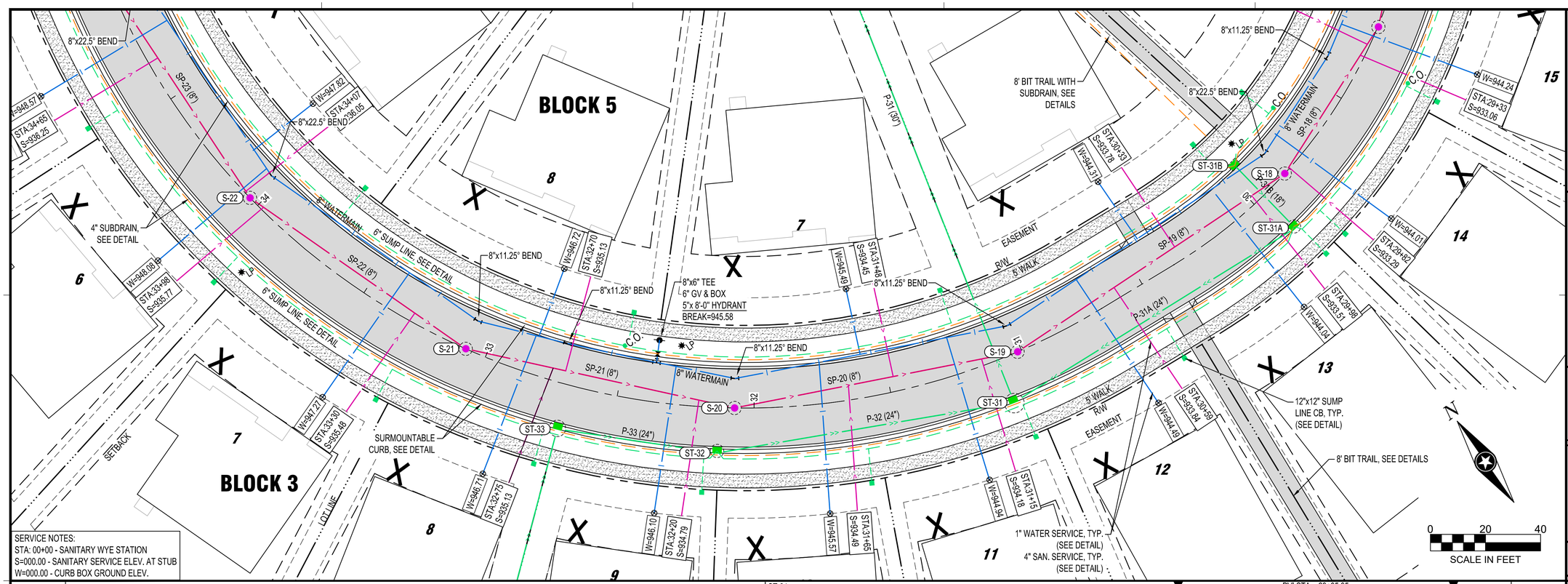
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE
PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE)

SHEET
42 OF 76

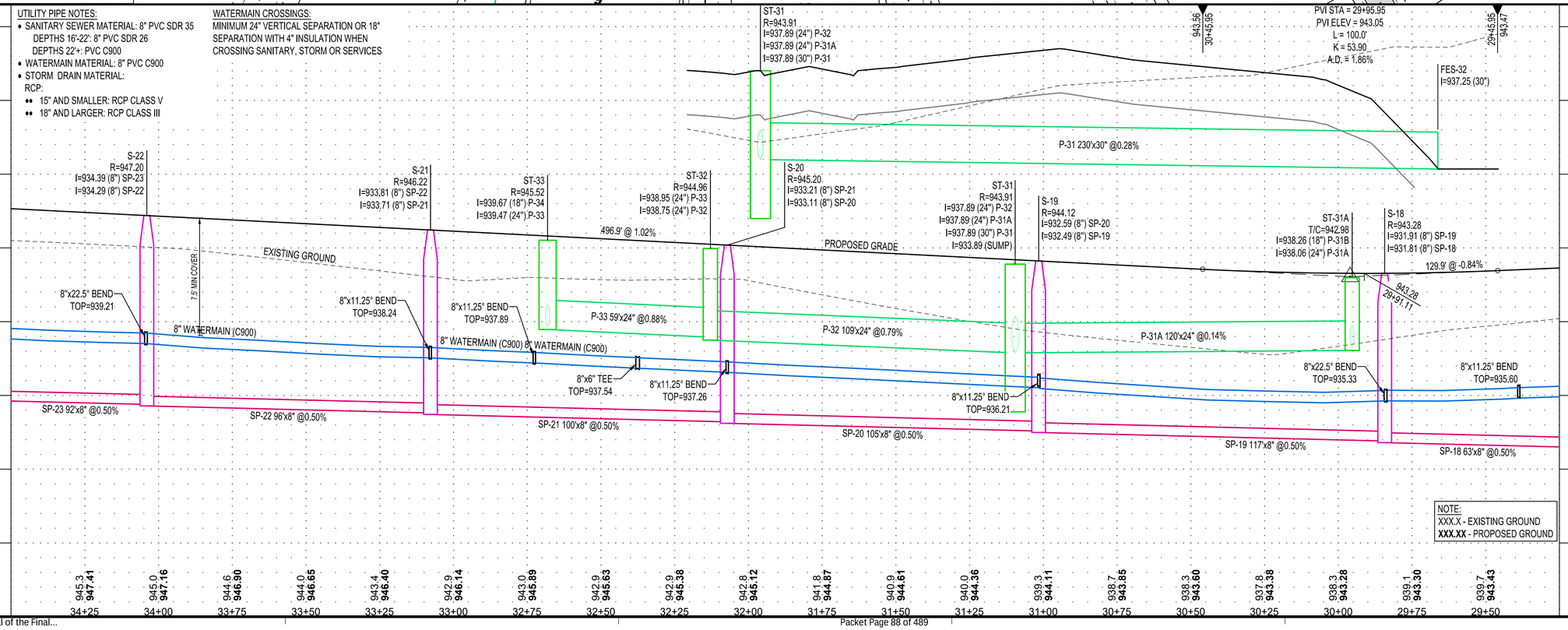
PLOT DATE: 1/27/2022 8:05 AM



SERVICE NOTES:
STA: 00+00 - SANITARY WYE STATION
S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES



NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

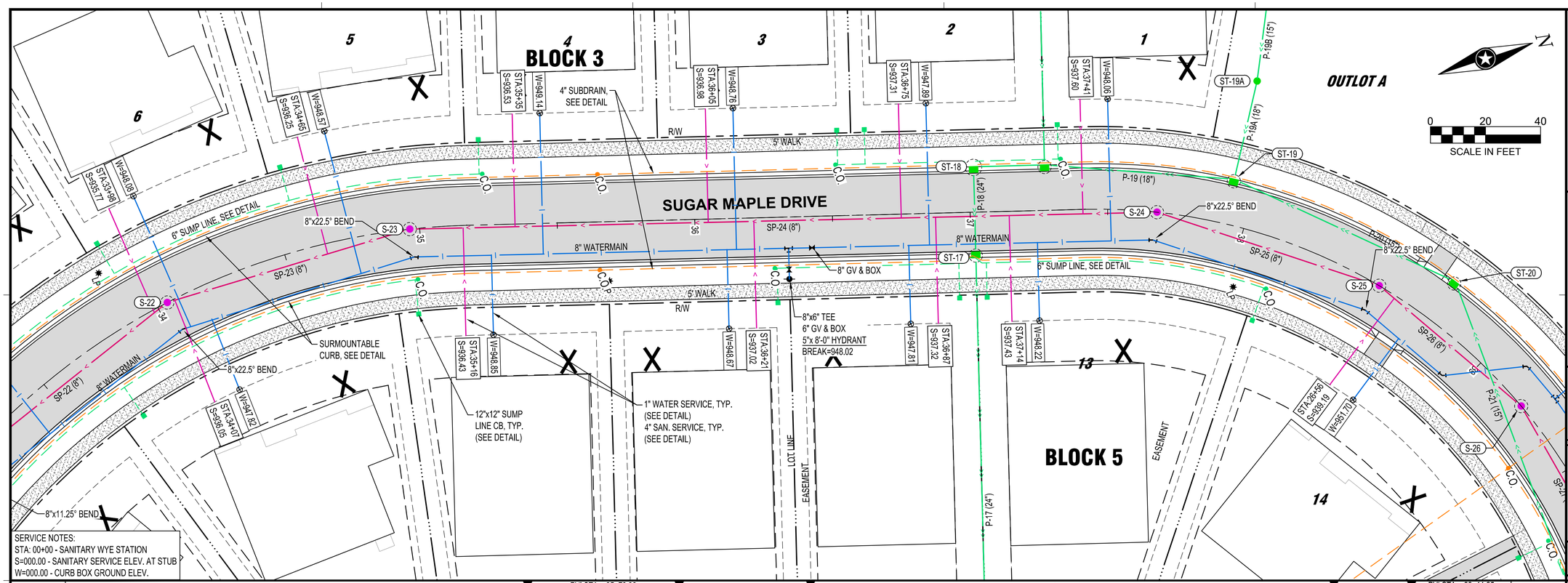
PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE)

SHEET

43 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

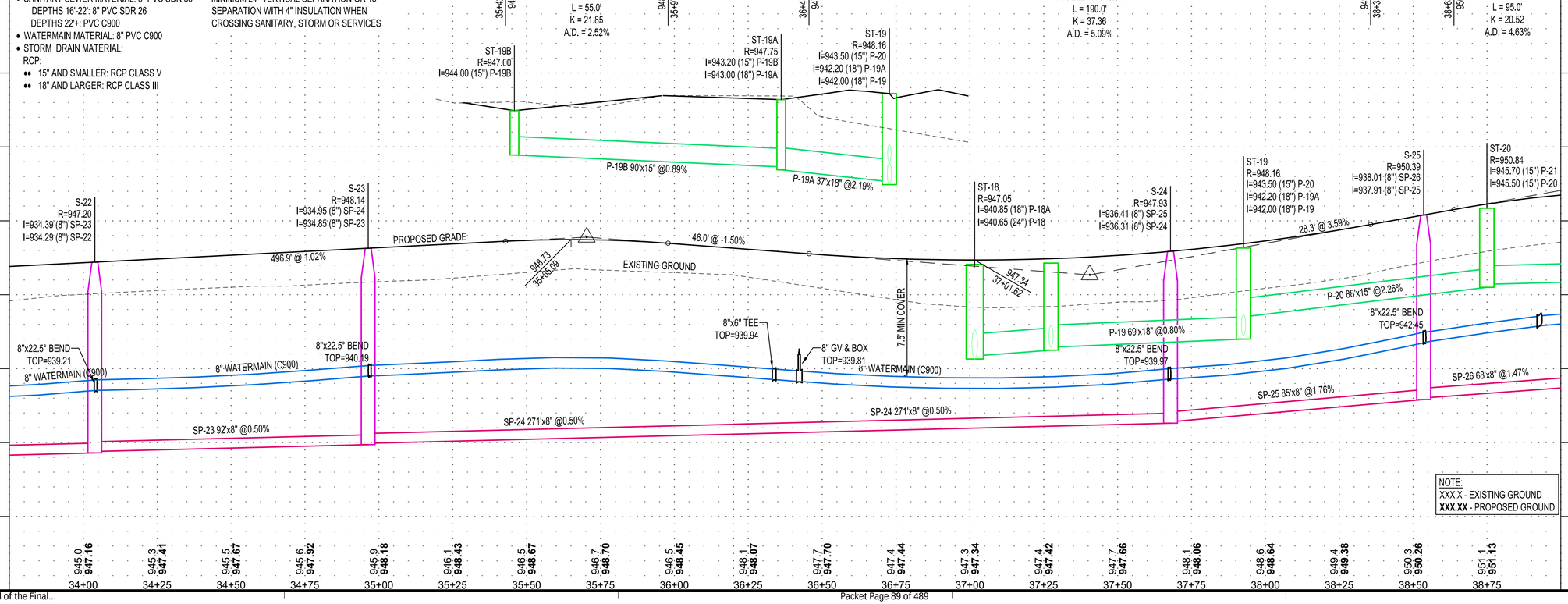
PLOT DATE - 1/27/2022 8:05 AM



SERVICE NOTES:
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S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES



NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

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PROJECT
LENNAR
RESERVE AT AUTUMN WOODS
CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

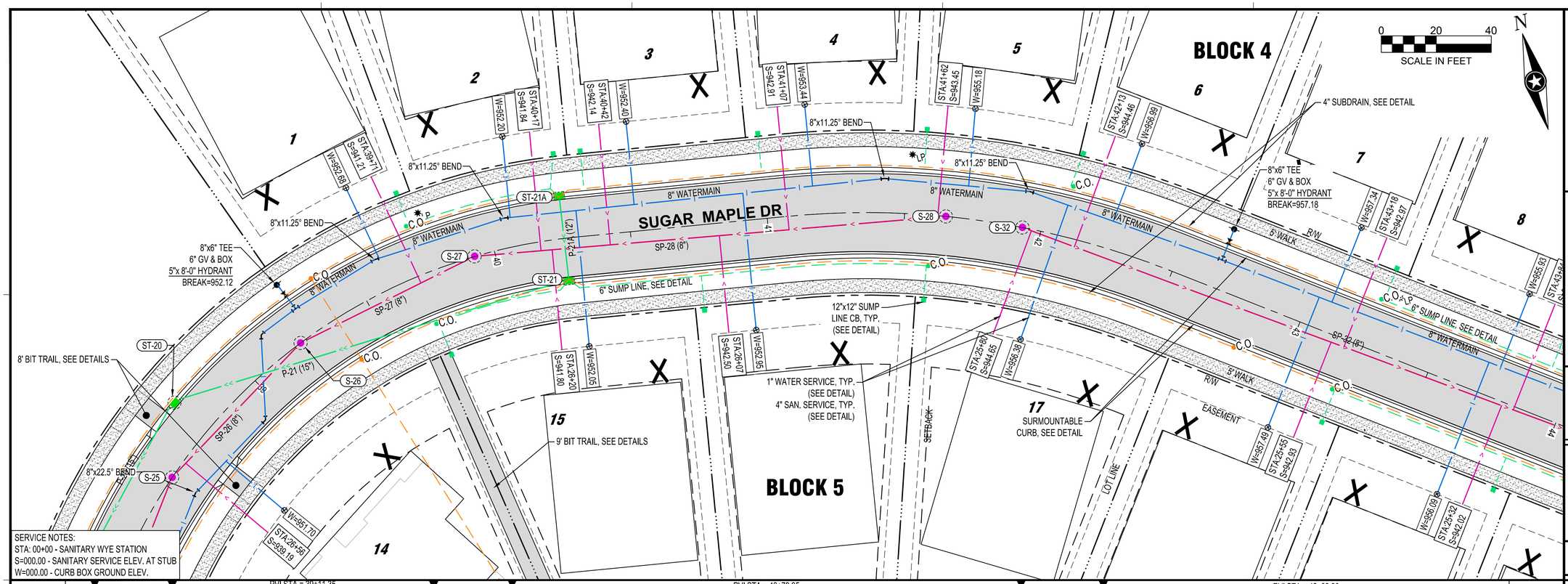
PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

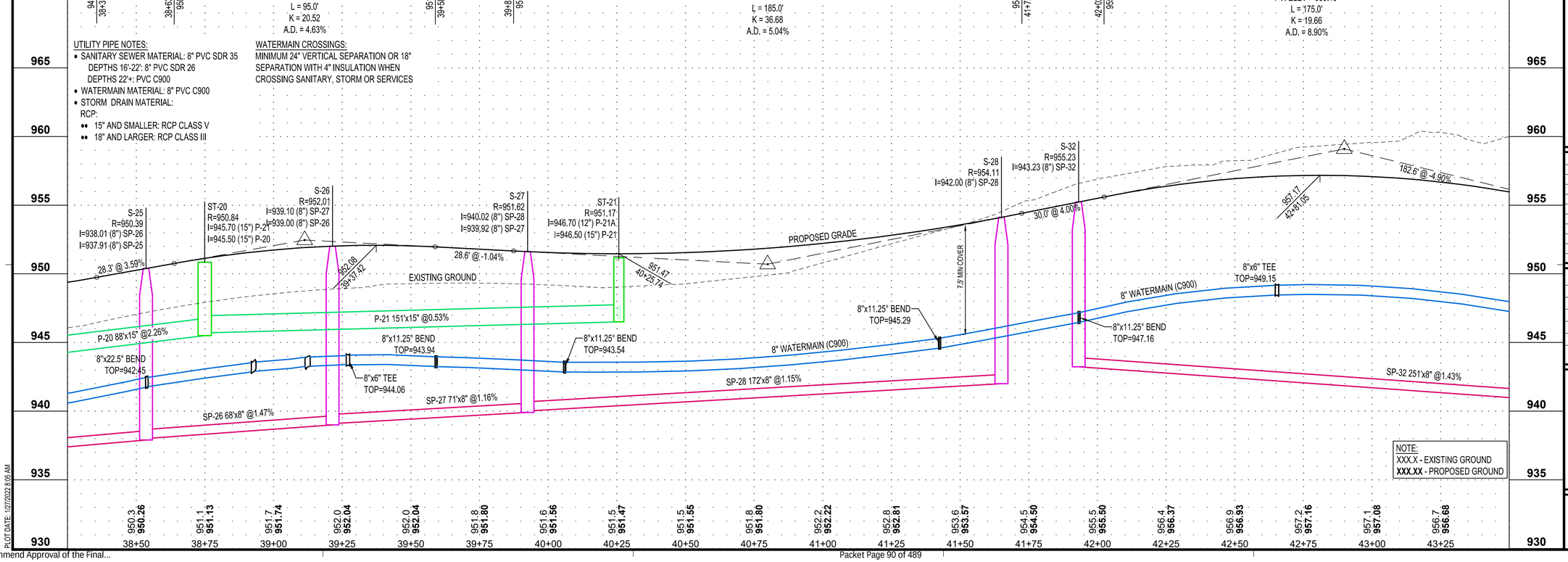
TITLE
PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE)

SHEET
44
OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/27/2022 8:05 AM





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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

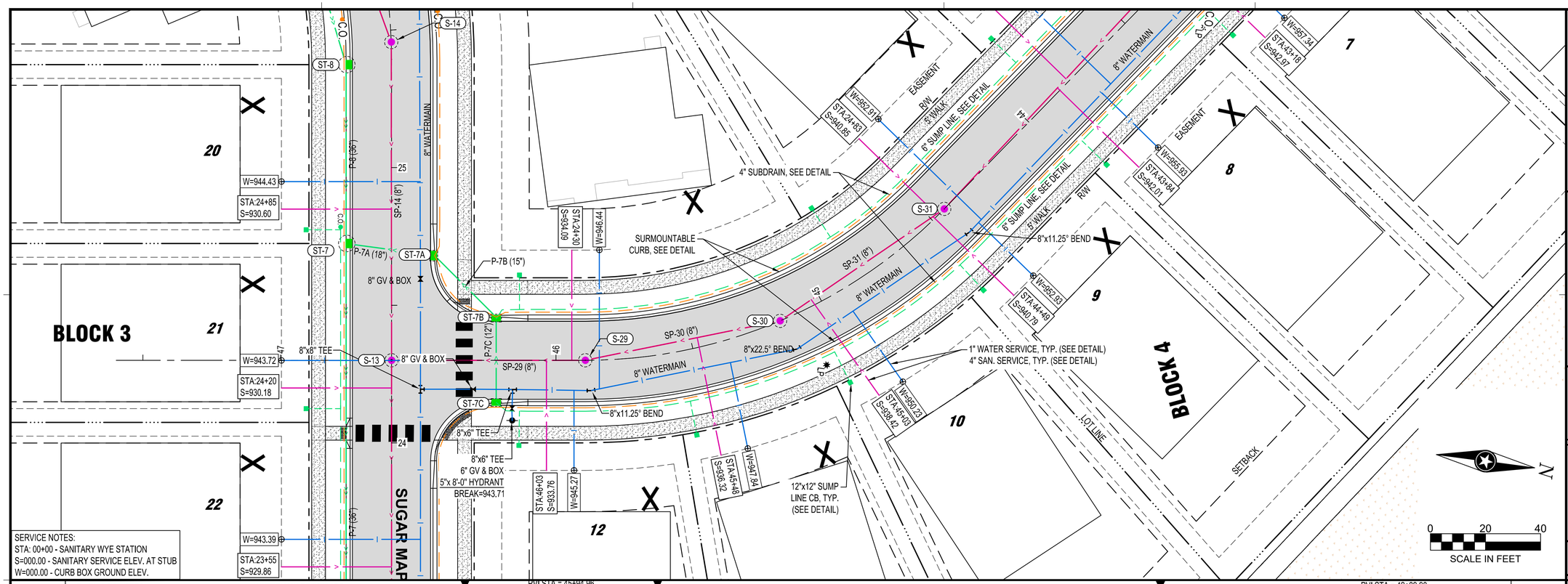
TITLE

PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE)

SHEET

45 OF 76

PLOT DATE: 1/27/2022 8:05 AM



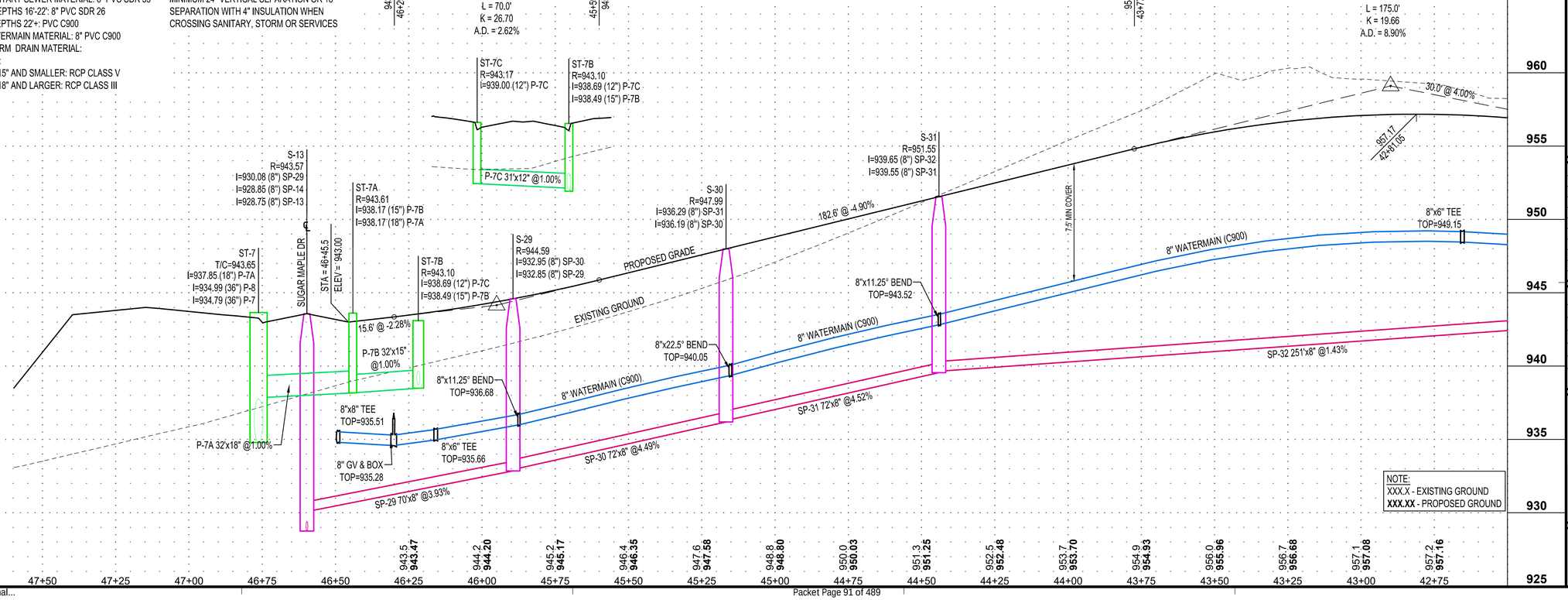
SERVICE NOTES:
STA: 00+00 - SANITARY WYE STATION
S=000.00 - SANITARY SERVICE ELEV. AT STUB
W=000.00 - CURB BOX GROUND ELEV.

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III

WATERMAIN CROSSINGS:
MINIMUM 24" VERTICAL SEPARATION OR 18" SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

PVI STA = 45+94.96
PVI ELEV = 944.15
L = 70.0'
K = 26.70
A.D. = 2.62%

PVI STA = 42+89.90
PVI ELEV = 959.10'
L = 175.0'
K = 19.66
A.D. = 8.90%



943.35	943.47	944.2	944.20	945.2	945.17	946.4	946.35	947.6	947.58	948.8	948.80	950.0	950.03	951.3	951.25	952.5	952.48	953.7	953.70	954.9	954.93	956.0	955.96	956.7	956.68	957.1	957.08	957.2	957.16
47+50	47+25	47+00	46+75	46+50	46+25	46+00	45+75	45+50	45+25	45+00	44+75	44+50	44+25	44+00	43+75	43+50	43+25	43+00	42+75

PLOT DATE: 1/27/2022 8:05 AM

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PROJECT
LENNAR
RESERVE AT AUTUMN WOODS
CHASKA MINNESOTA

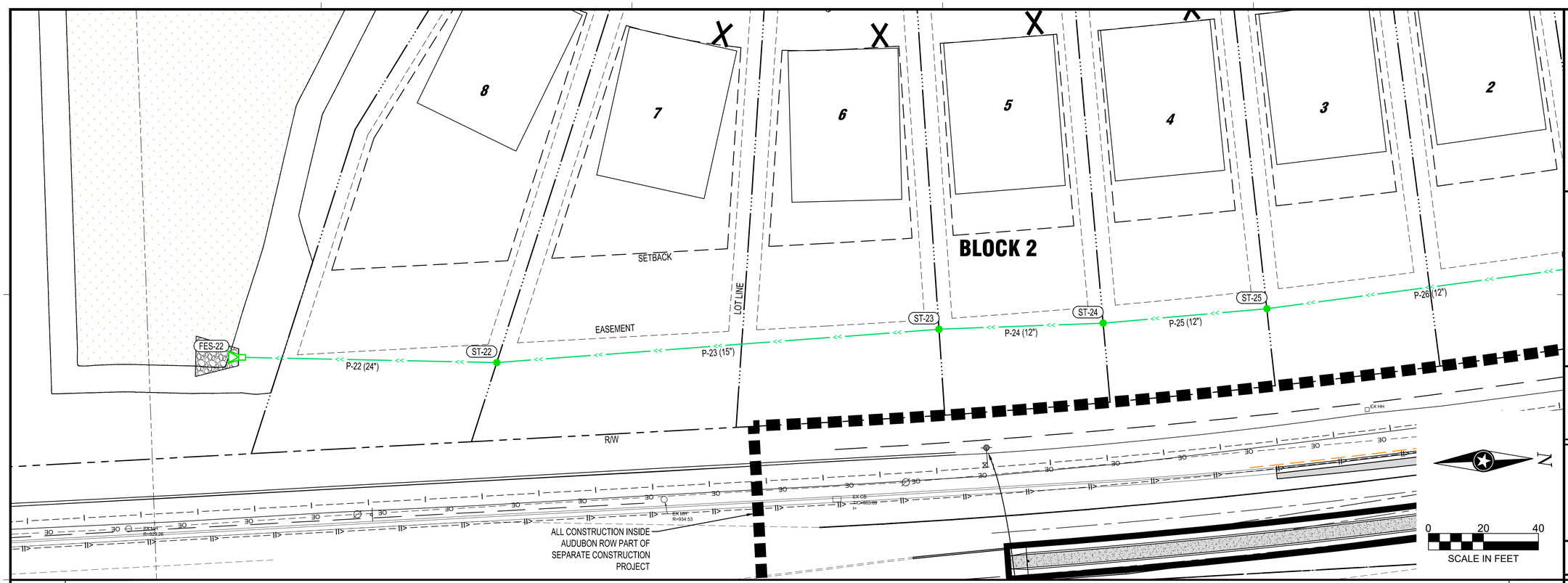
REVISION SCHEDULE		
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

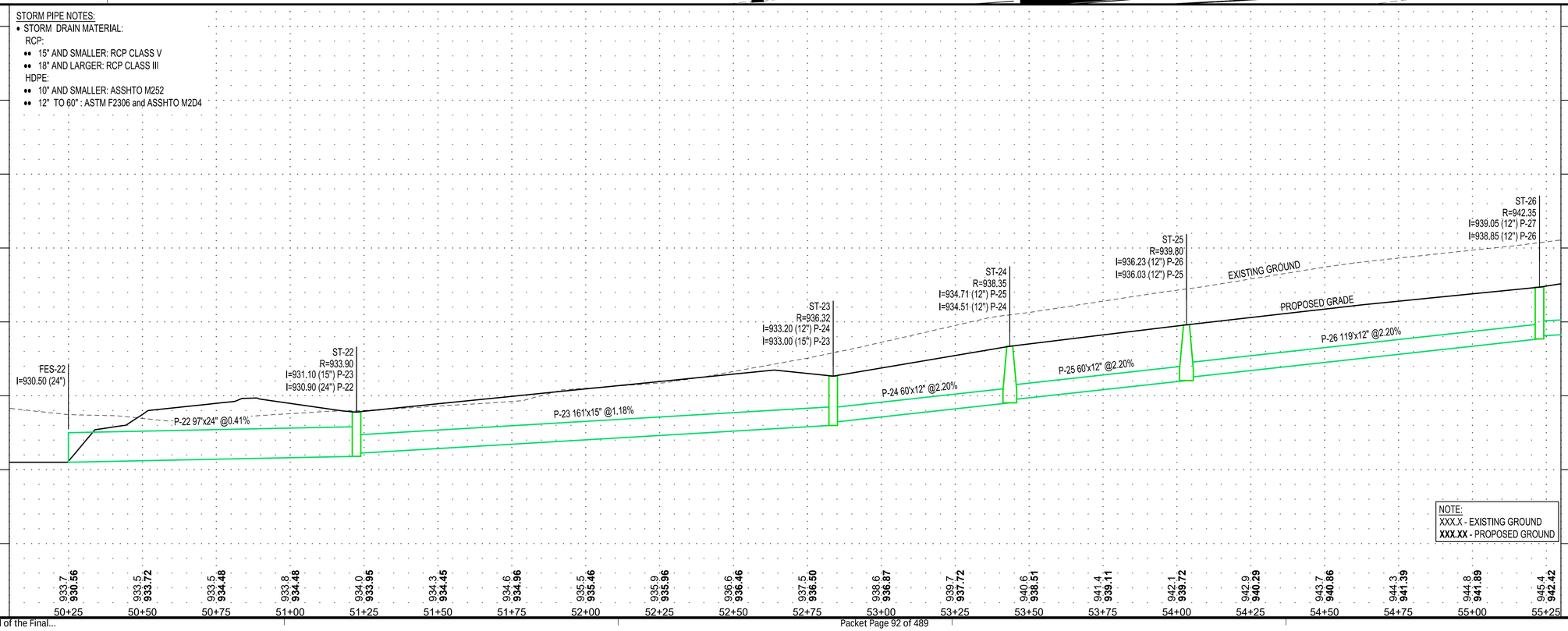
PROJECT NO.	21-24984
FILE NAME	24984 PROF SUGAR MAPLE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE
PLANNED STREET AND UTIILITY CONSTRUCTION (SUGAR MAPLE)

SHEET
46 OF 76

PRELIMINARY NOT FOR CONSTRUCTION





PLOT DATE: 11/15/2021 5:20 PM

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF AUDUBON BACKYARD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

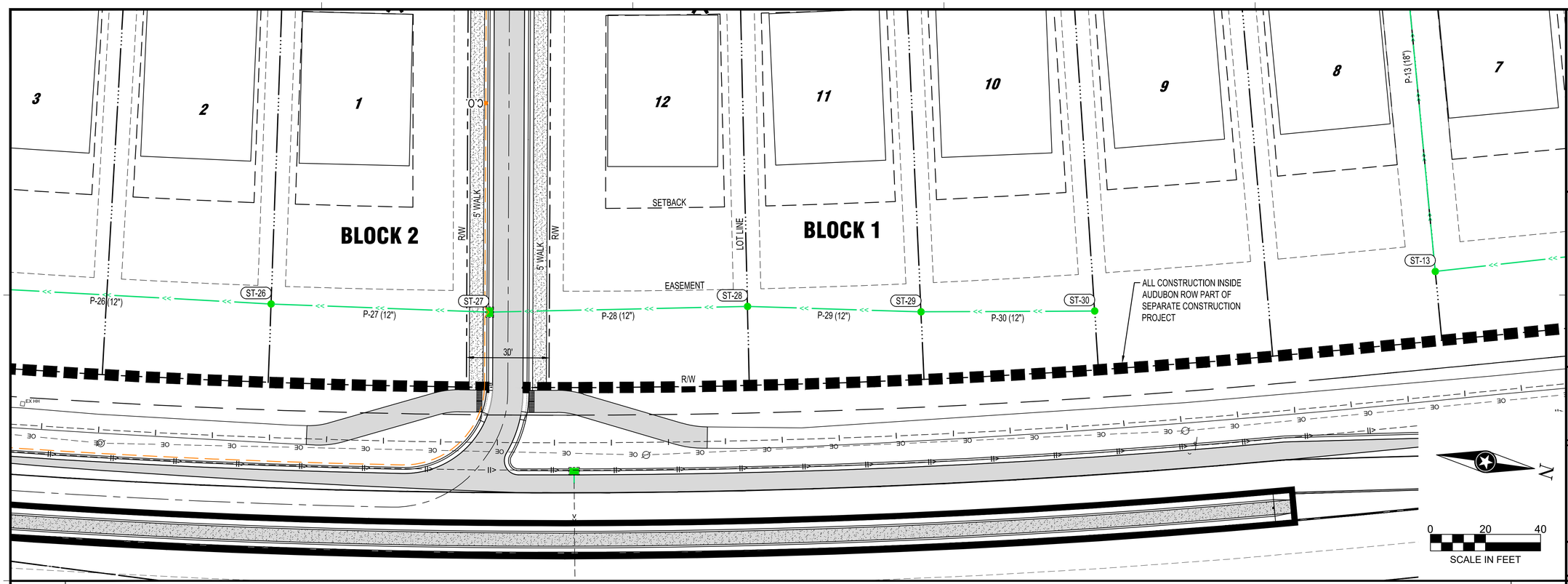
TITLE

PLANNED STORM CONSTRUCTION (AUDUBON BACKYARDS)

SHEET

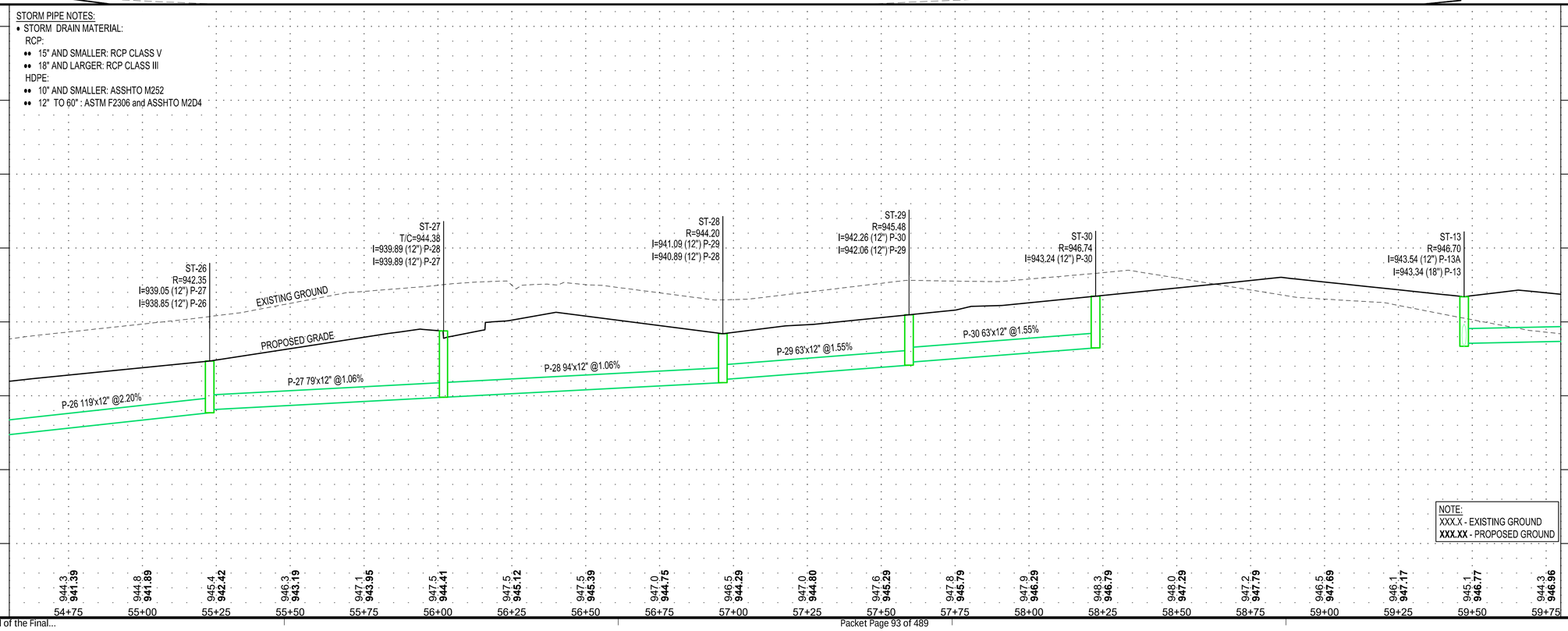
47 OF 76

PRELIMINARY NOT FOR CONSTRUCTION



STORM PIPE NOTES:

- STORM DRAIN MATERIAL:
  - RCP:
    - 15" AND SMALLER: RCP CLASS V
    - 18" AND LARGER: RCP CLASS III
  - HDPE:
    - 10" AND SMALLER: ASSHTO M252
    - 12" TO 60" : ASTM F2306 and ASSHTO M2D4



NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

PLOT DATE: 11/15/2021 5:20 PM

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REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF AUDUBON BACKYARD
DRAWN BY	JRS
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REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

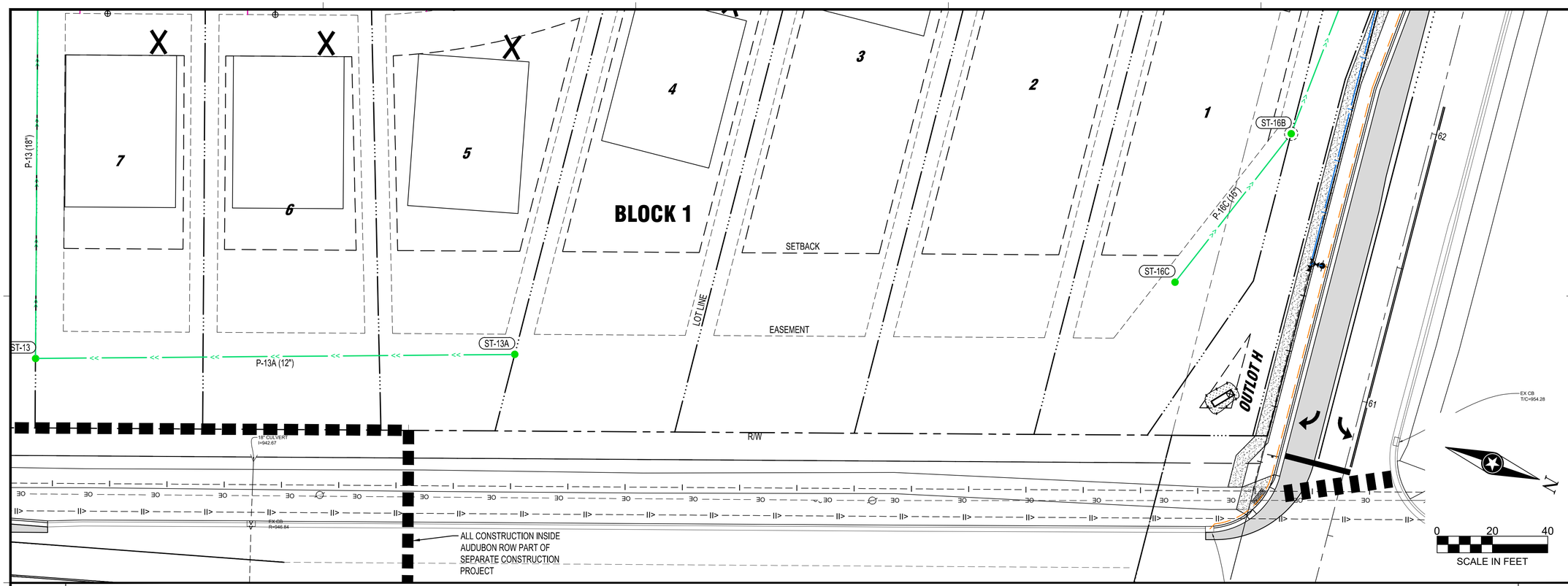
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PLANNED STORM CONSTRUCTION (AUDUBON BACKYARDS)

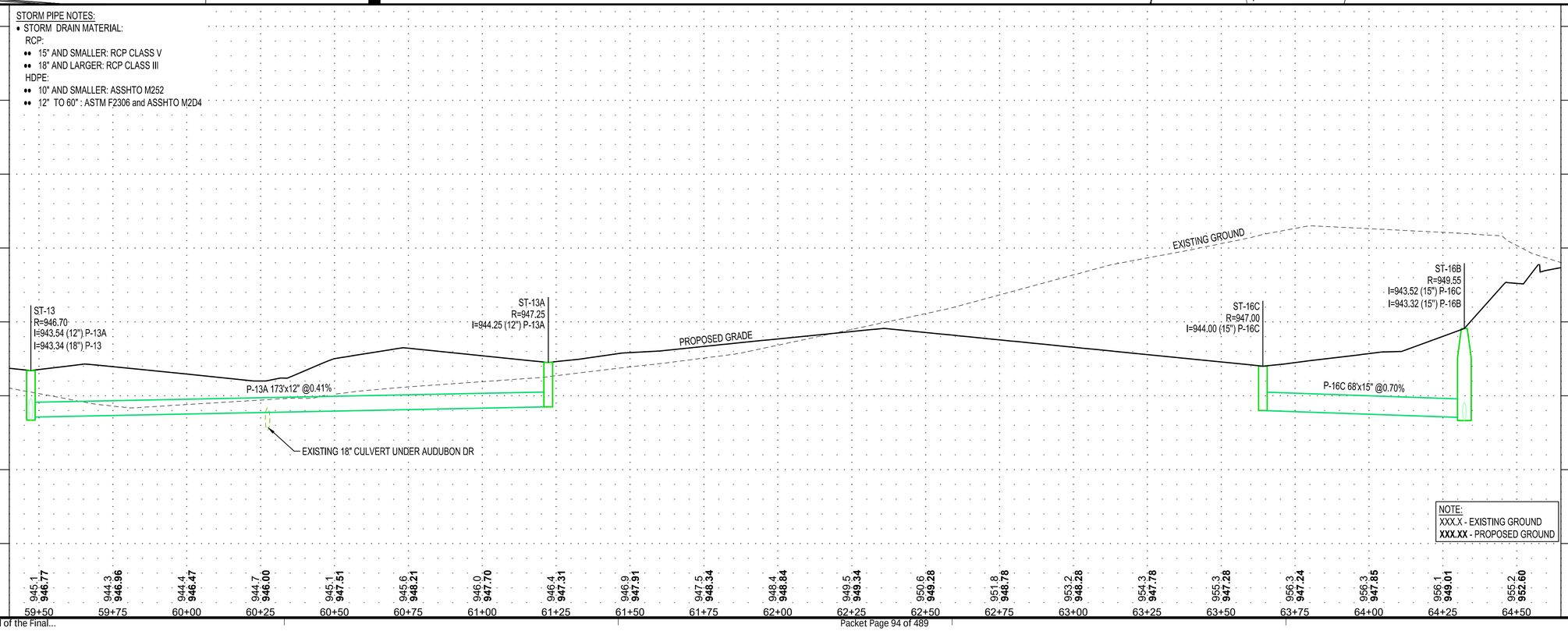
SHEET

48 OF 76

PRELIMINARY NOT FOR CONSTRUCTION



STORM PIPE NOTES:
- STORM DRAIN MATERIAL:
  - RCP:
    - 15" AND SMALLER: RCP CLASS V
    - 18" AND LARGER: RCP CLASS III
  - HDPE:
    - 10" AND SMALLER: ASSHTO M252
    - 12" TO 60" : ASTM F2306 and ASSHTO M2D4



NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF AUDUBON BACKYARD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

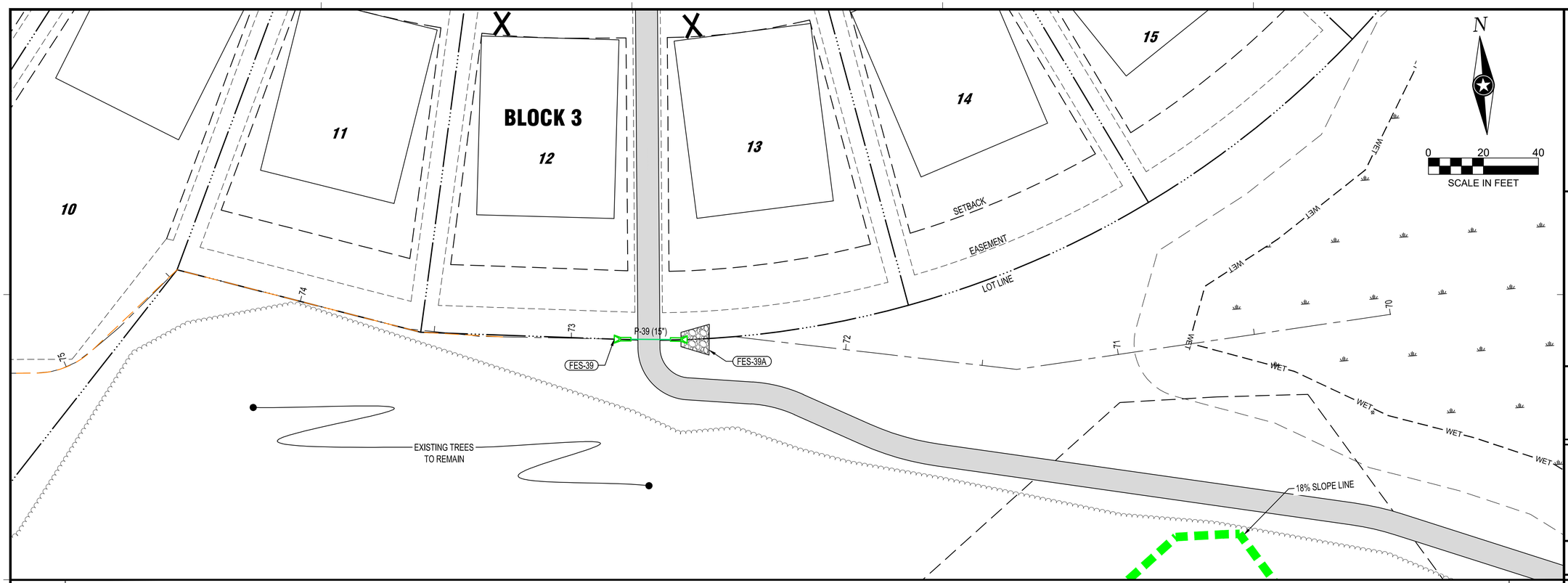
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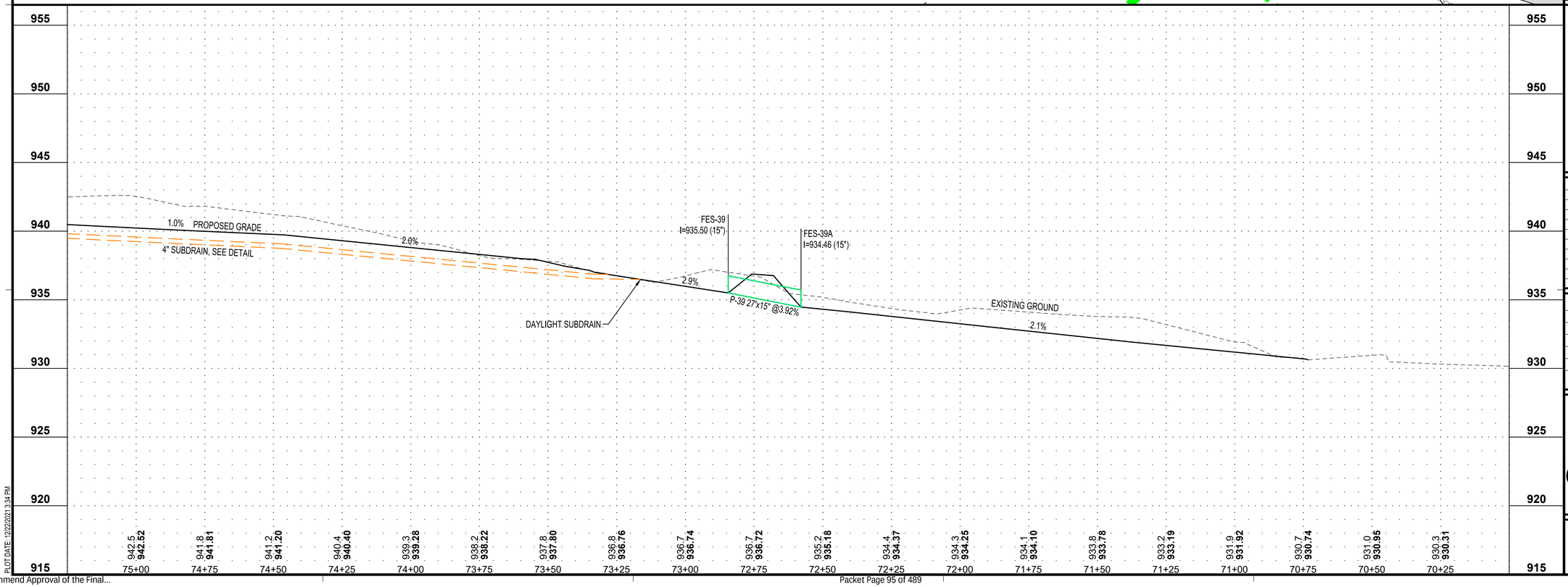
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49 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 11/15/2021 5:20 PM





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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF WEST BACKYARD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

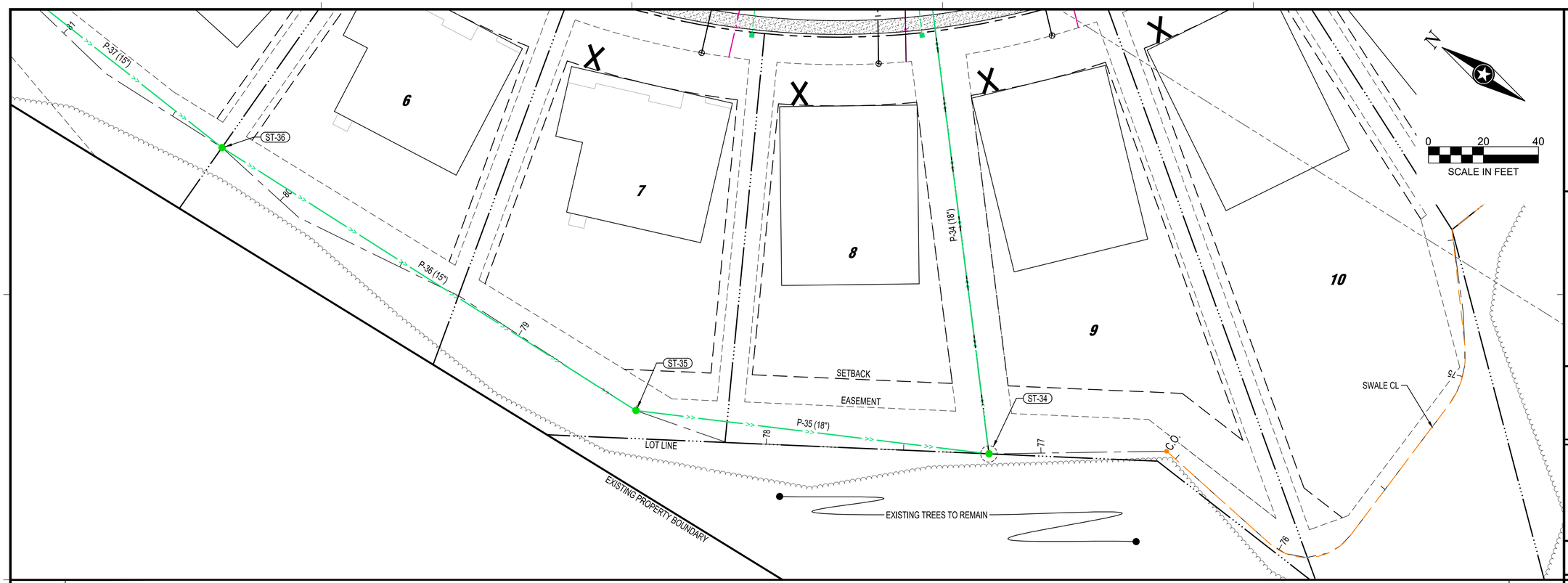
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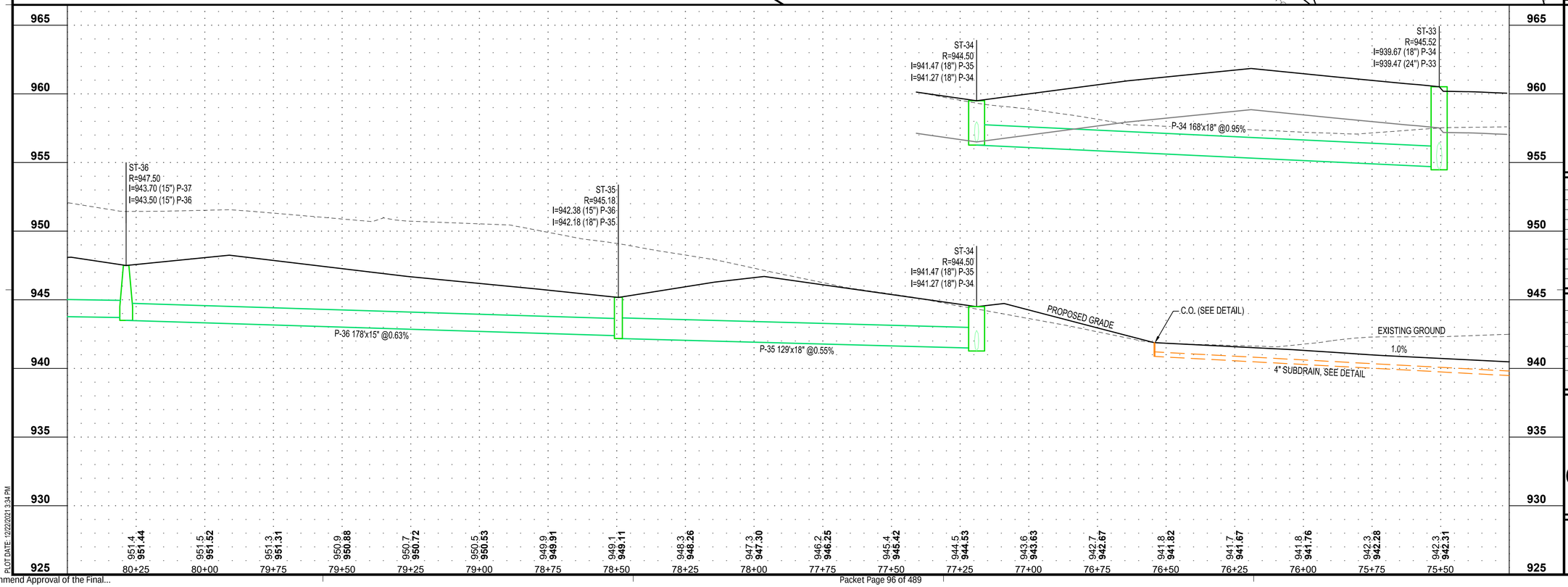
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50 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/22/2021 3:34 PM





ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF WEST BACKYARD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

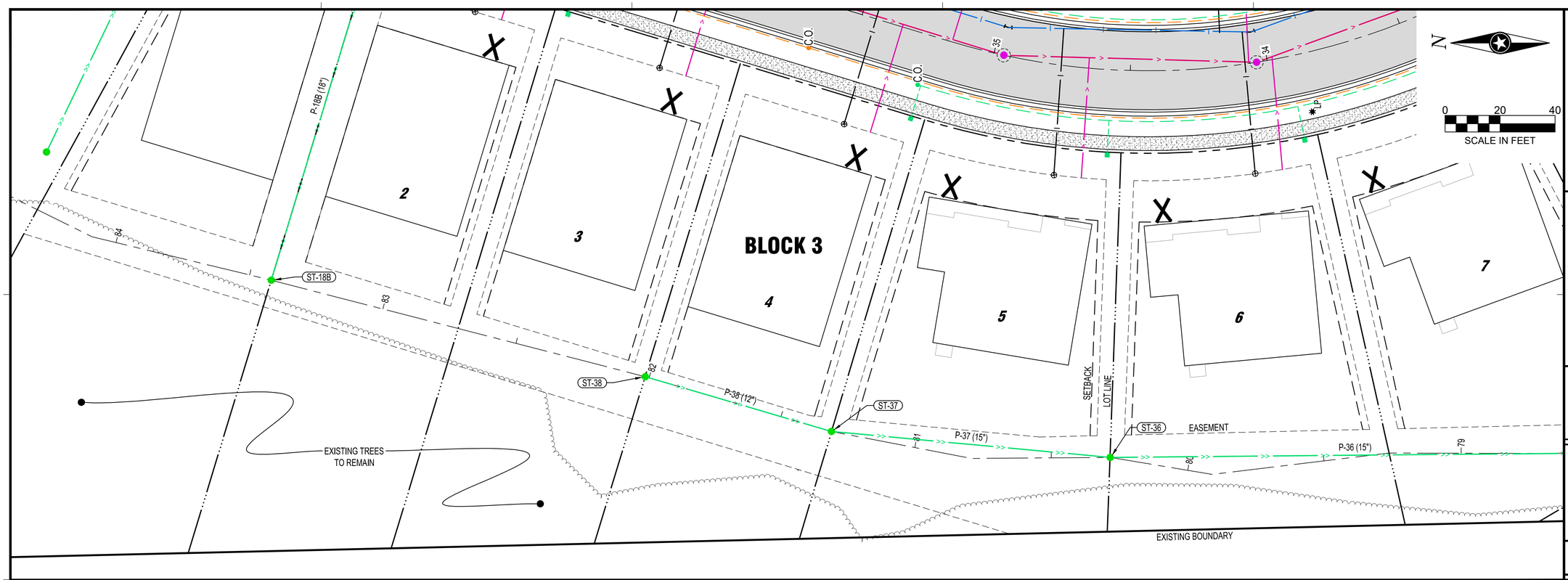
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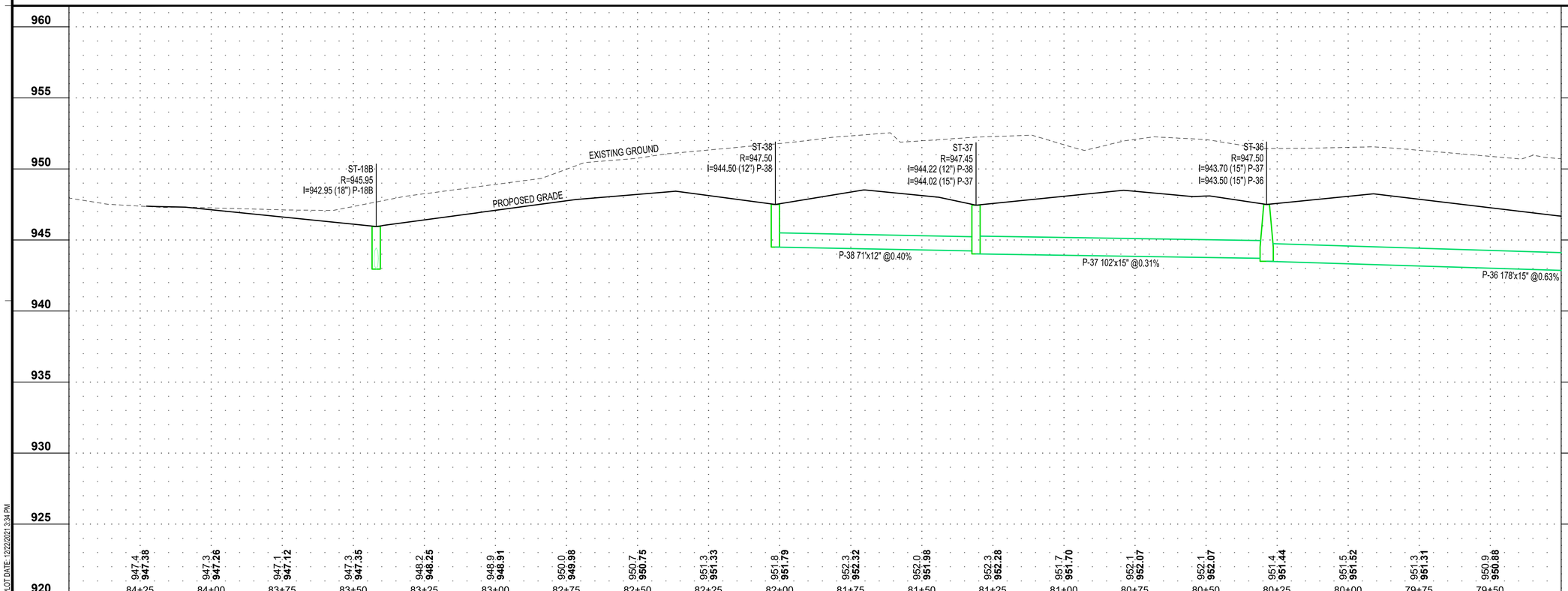
SHEET

51 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/22/2021 3:34 PM





PLOT DATE: 1/22/2021 1:34 PM

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LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF WEST BACKYARD
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

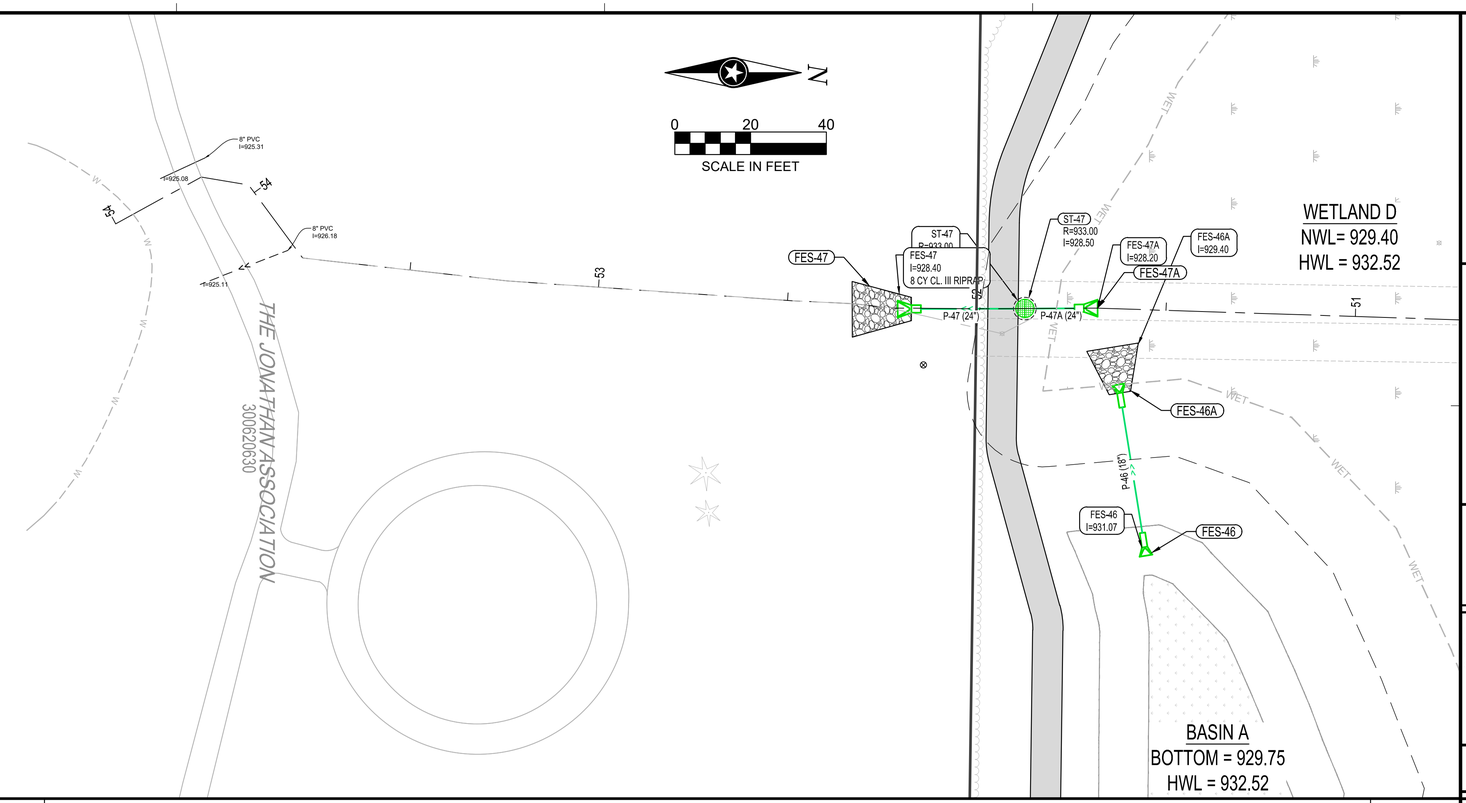
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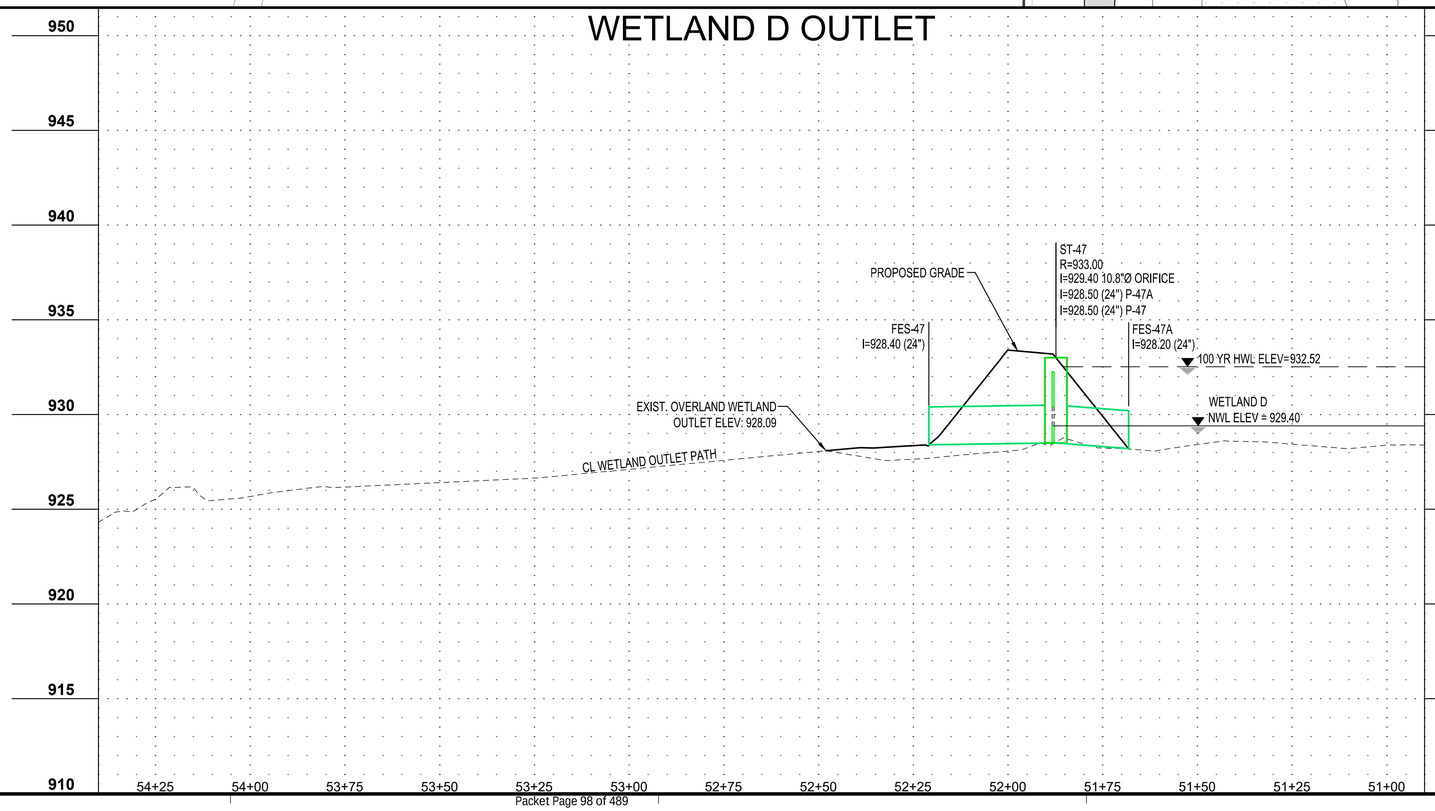
PLANNED STORM CONSTRUCTION (WEST BACKYARDS)

SHEET

52 OF 76

PRELIMINARY NOT FOR CONSTRUCTION





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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 STORM DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

PLANNED WETLAND D STORM OUTLET

SHEET

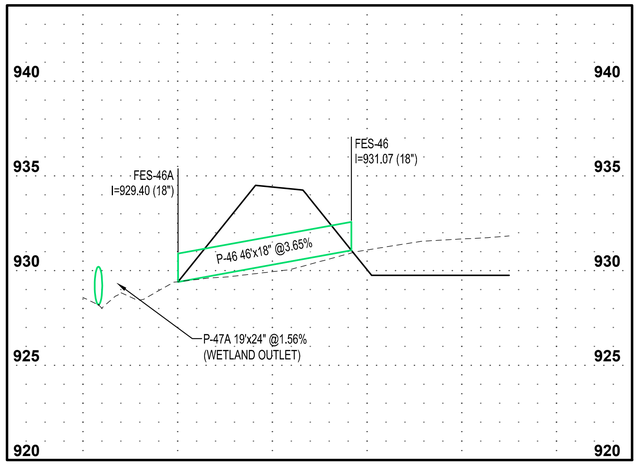
53 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

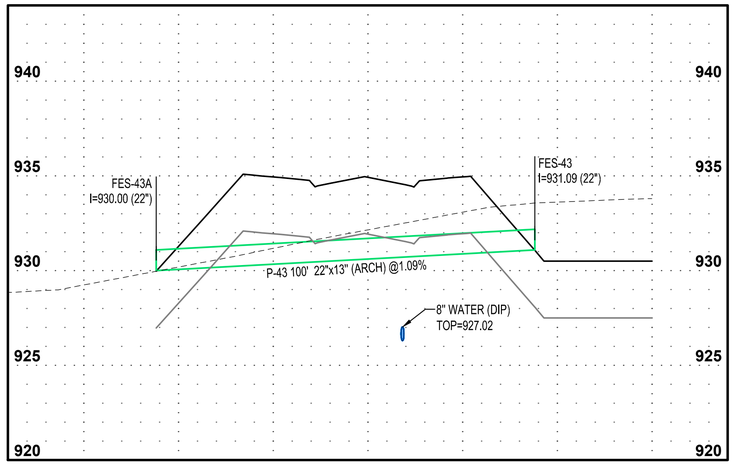
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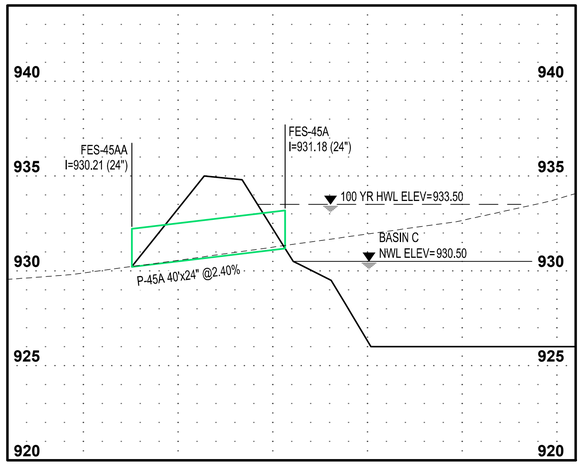
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  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III



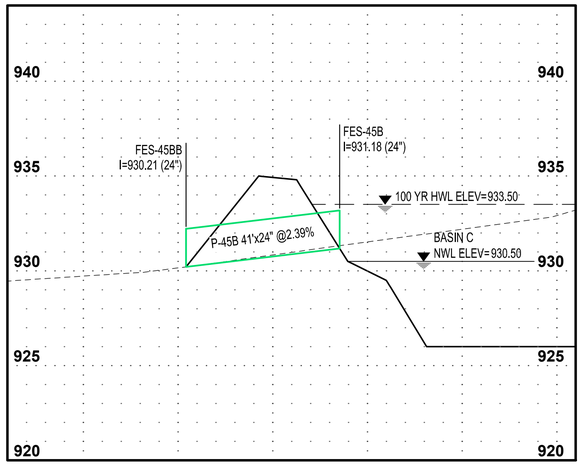
BASIN A OUTLET



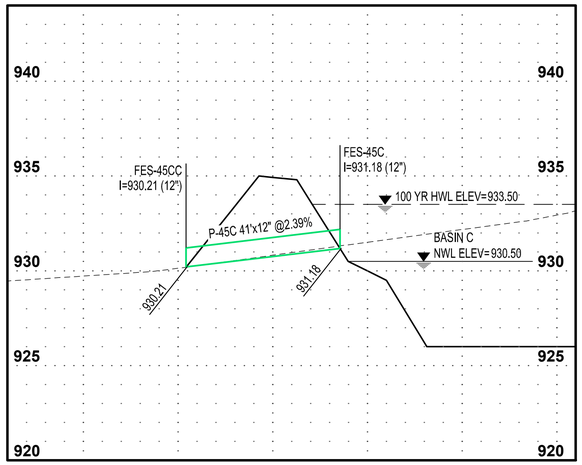
BASIN B OUTLET (IRONWOOD BLVD)



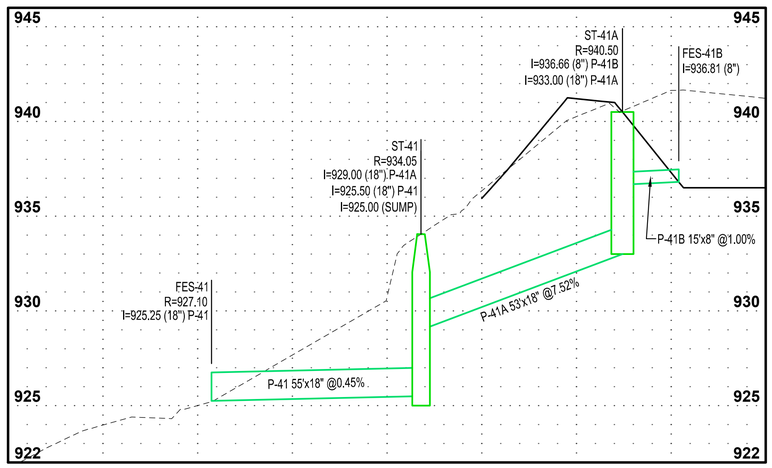
BASIN C OUTLET 1



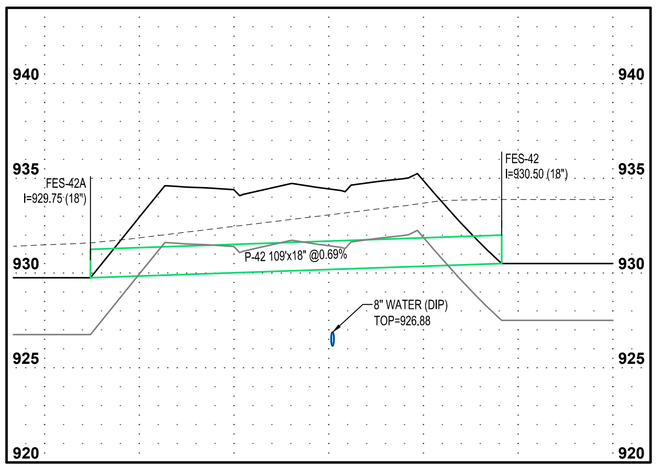
BASIN C OUTLET 2



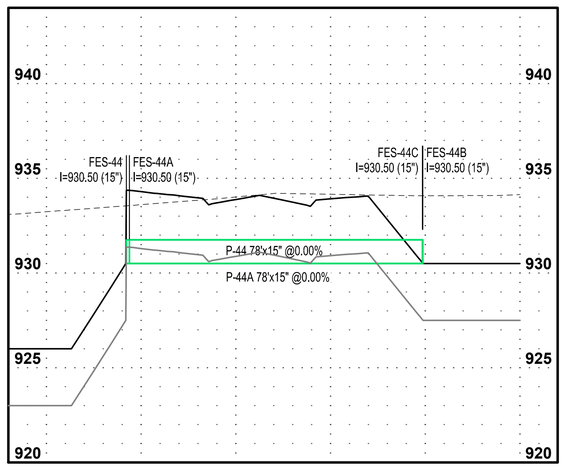
BASIN C OUTLET 3



BASIN F OUTLET



BASIN A-B STORM CROSSOVER (IRONWOOD BLVD)



BASIN C TO B STORM (IRONWOOD BLVD)

PLOT DATE: 11/18/2021 2:35 PM

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

STORM DRAIN DETAILS

SHEET

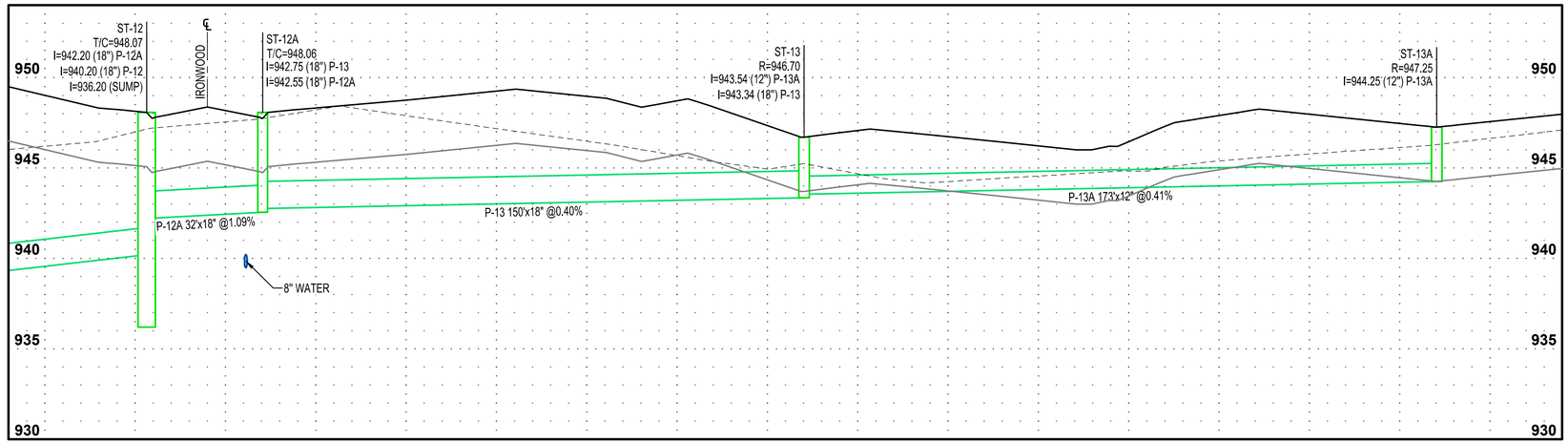
54

OF 76

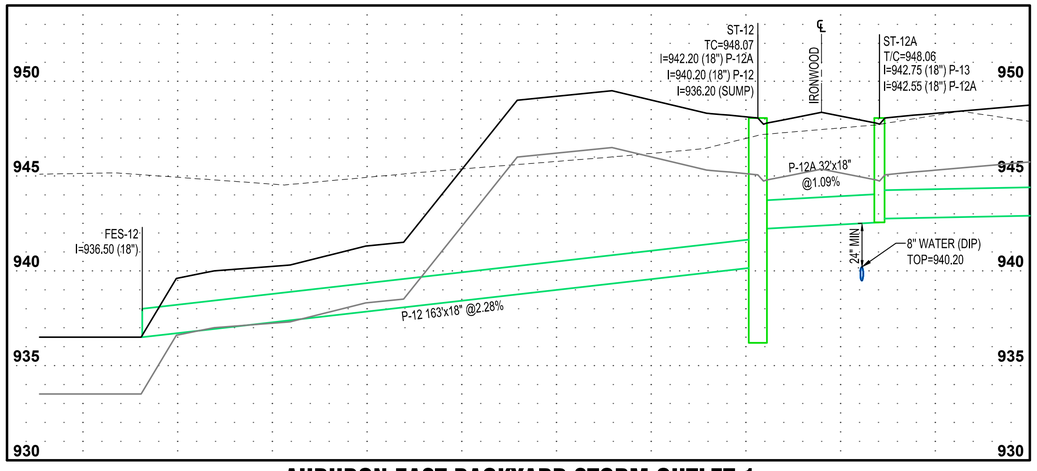
PRELIMINARY NOT FOR CONSTRUCTION

UTILITY PIPE NOTES:

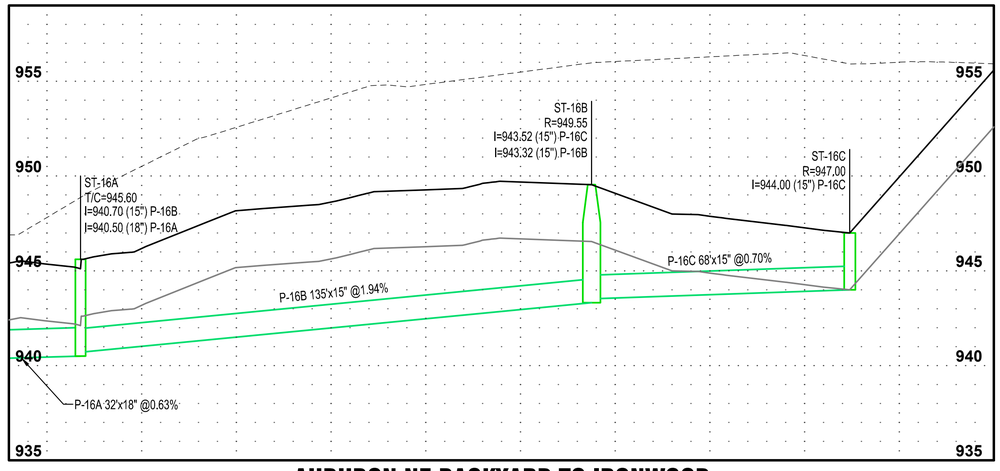
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  DEPTHS 16'-22': 8" PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
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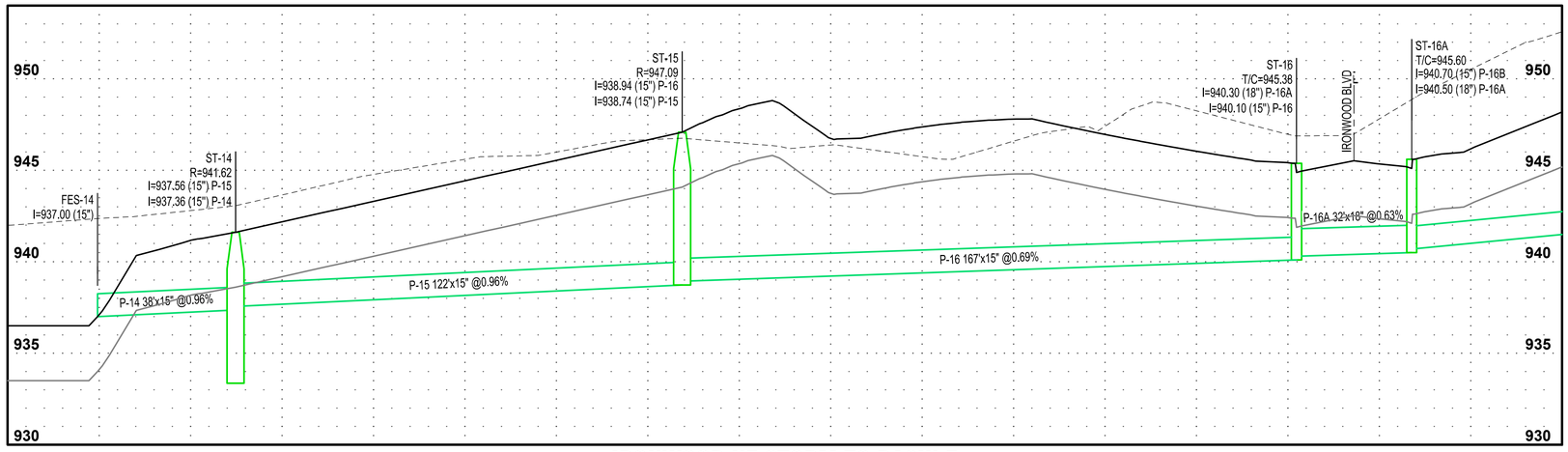
AUDUBON EAST BACKYARD STORM OUTLET 2



AUDUBON EAST BACKYARD STORM OUTLET 1



AUDUBON NE BACKYARD TO IRONWOOD



IRONWOOD NE STORM TO BASIN F

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF DETAILS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

STORM DRAIN DETAILS

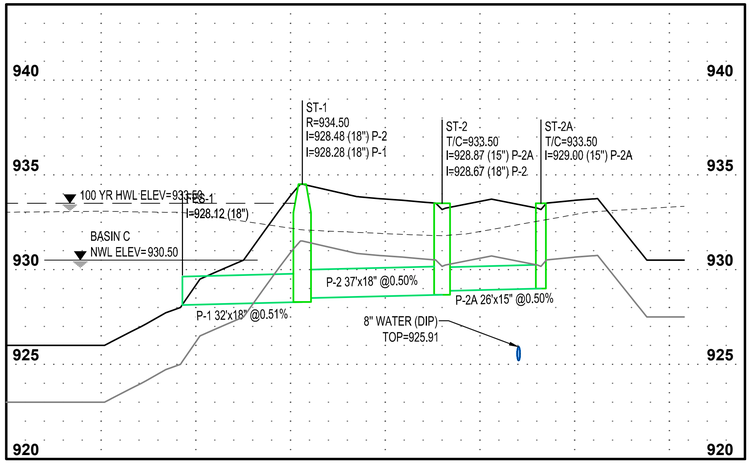
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55 OF 76

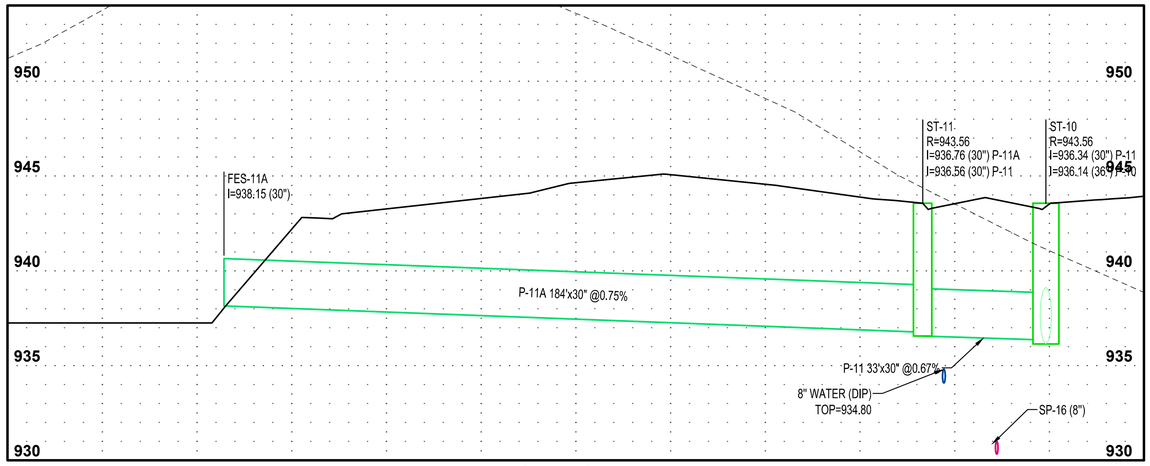
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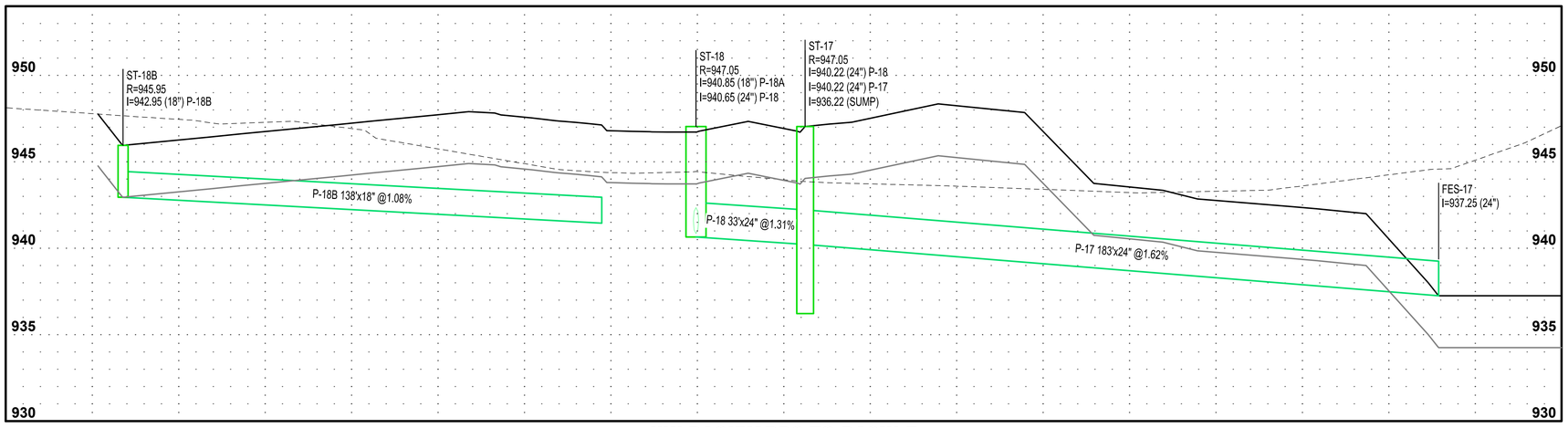
- SANITARY SEWER MATERIAL: 8" PVC SDR 35
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  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL: 8" PVC C900
- STORM DRAIN MATERIAL:
  RCP:
  - 15" AND SMALLER: RCP CLASS V
  - 18" AND LARGER: RCP CLASS III



IRONWOOD BLVD SOUTH OUTLET



BASIN E OUTLET



NW BACKYARDS TO BASIN E

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	23476 PROF DETAILS
DRAWN BY	JRS
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ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

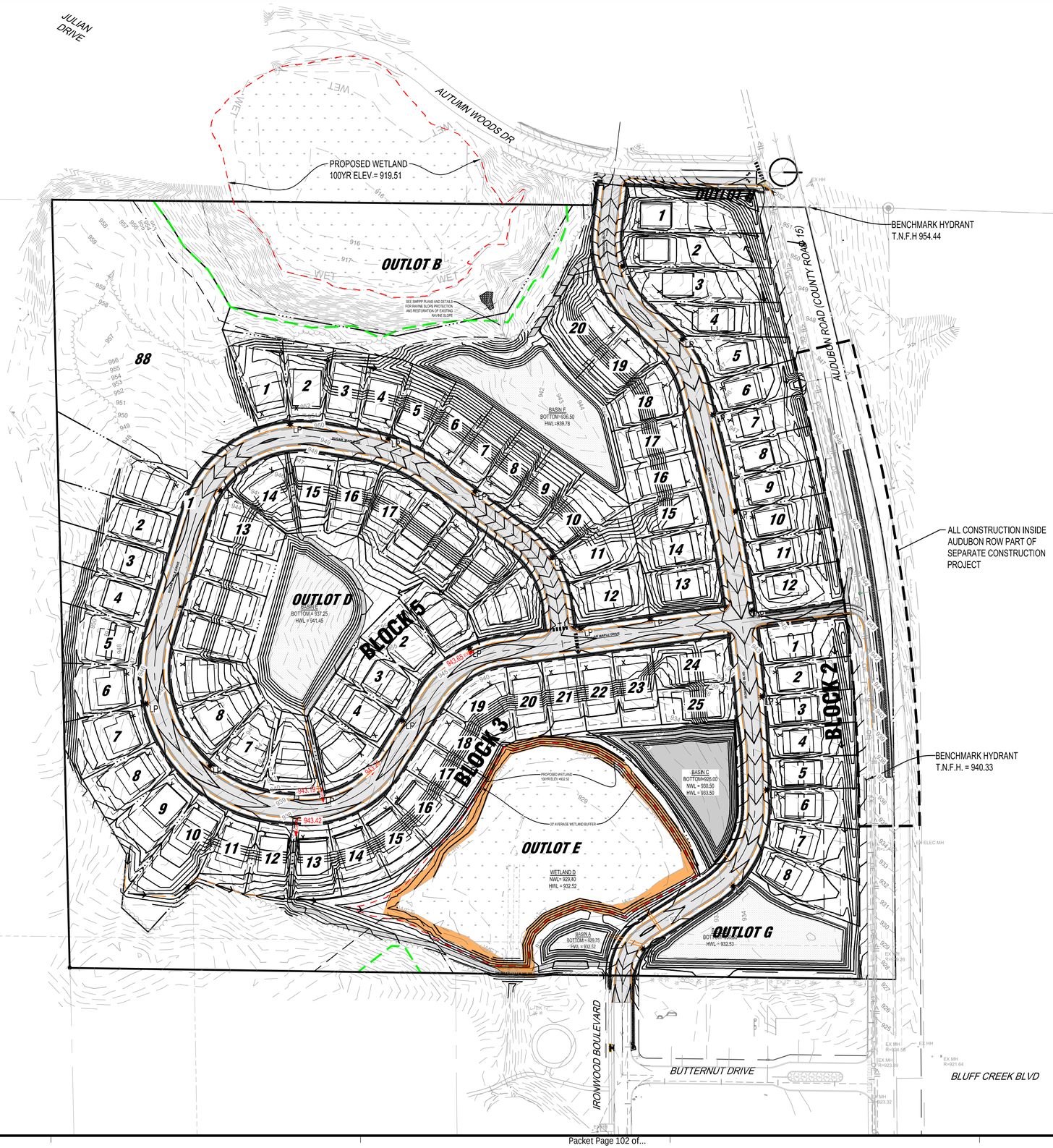
STORM DRAIN DETAILS

SHEET

56 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 11/18/2021 2:35 PM



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0 100 200

SCALE IN FEET

PRELIMINARY NOT FOR CONSTRUCTION

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PROJECT NO.	21-24984
FILE NAME	24984 GRADE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

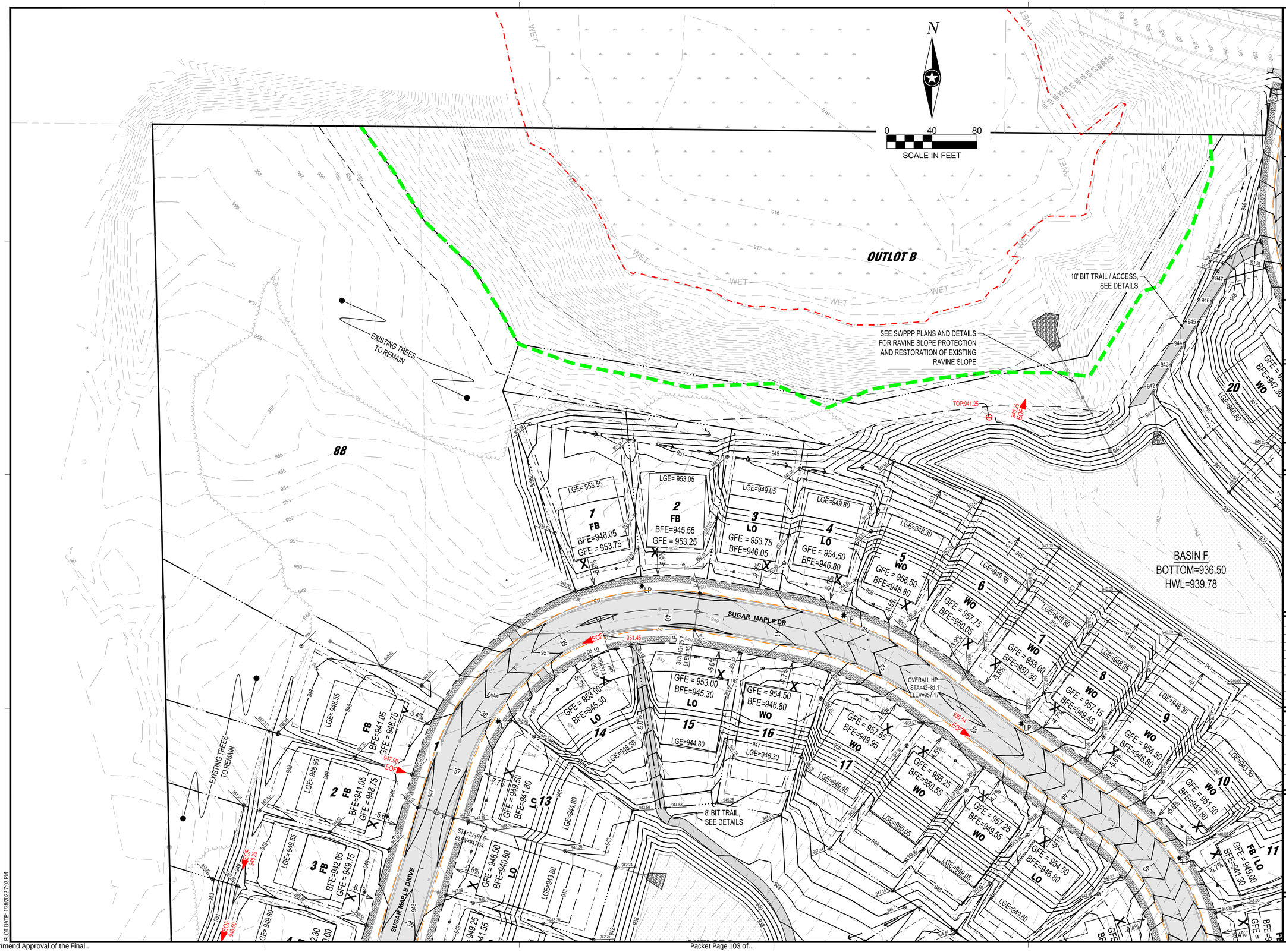
GRADING PLAN (OVERALL)

SHEET

57

OF 76

PLOT DATE: 1/25/2022 7:03 PM



ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 GRADE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

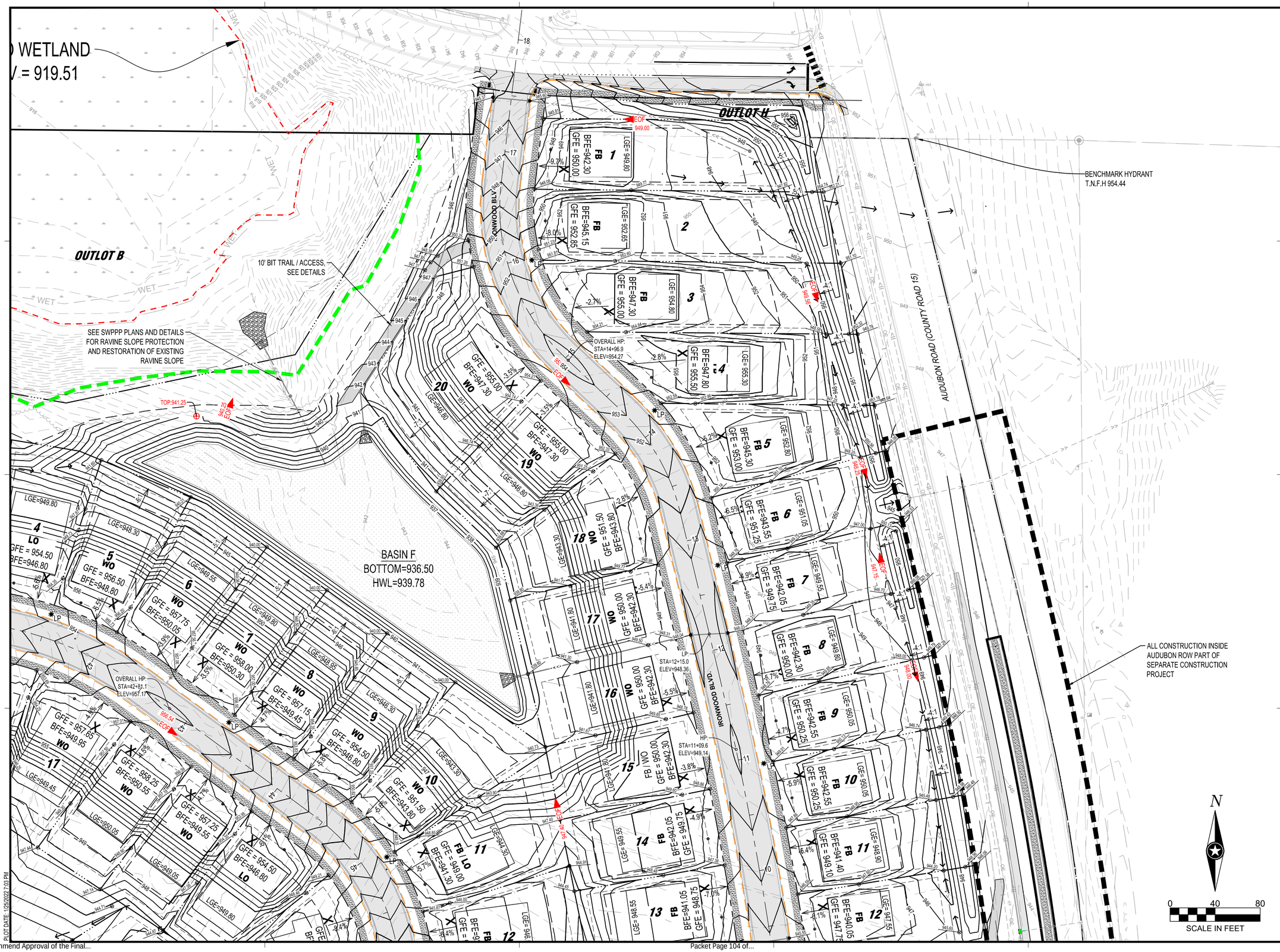
GRADING PLAN (NW)

SHEET

58 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/25/2022 7:03 PM



PRELIMINARY NOT FOR CONSTRUCTION

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 GRADE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

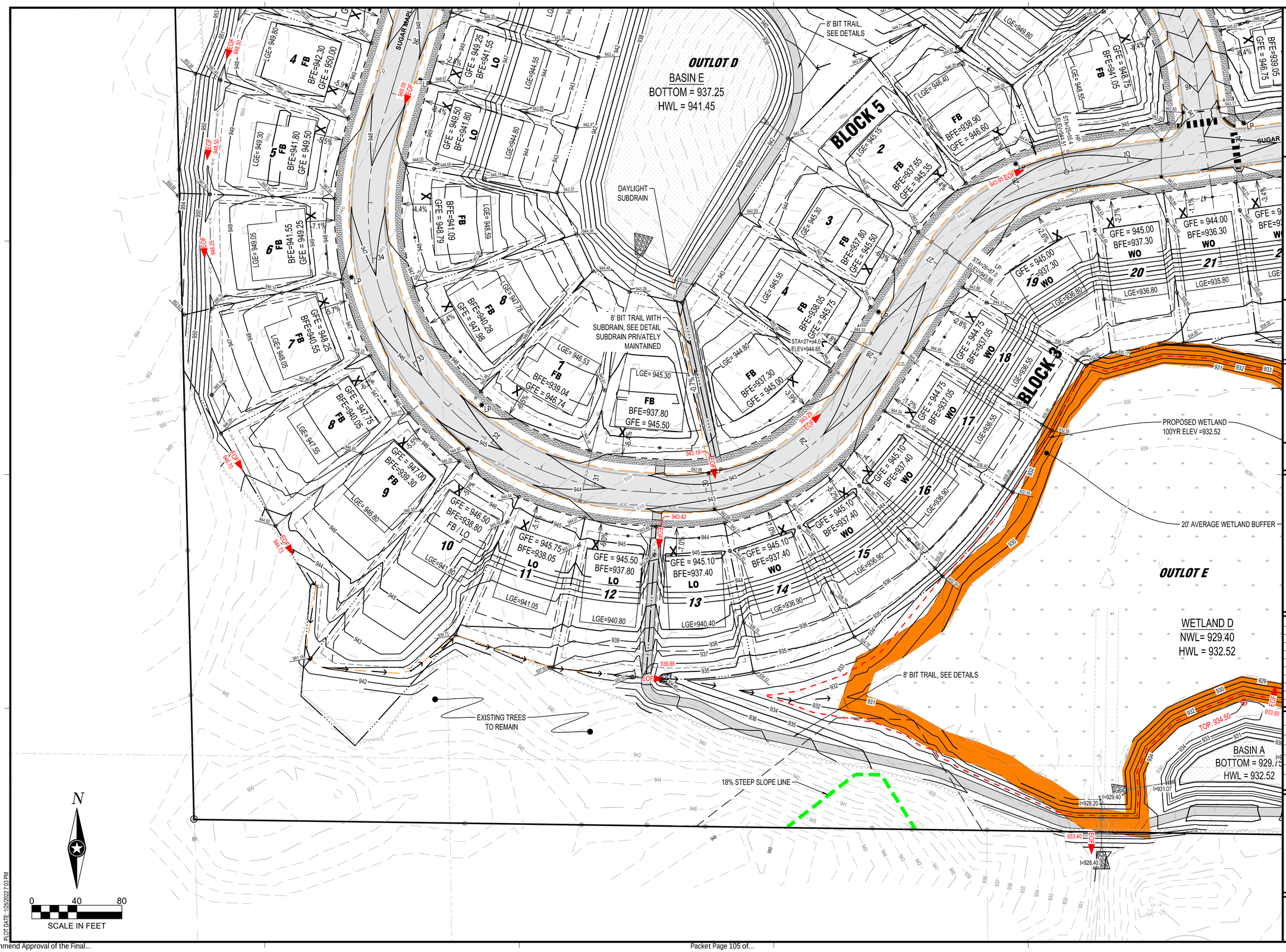
TITLE

GRADING PLAN (NE)

SHEET

59 OF 76

PLOT DATE: 1/25/2022 7:03 PM



PLOT DATE: 1/25/2022 1:03 PM

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 GRADE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

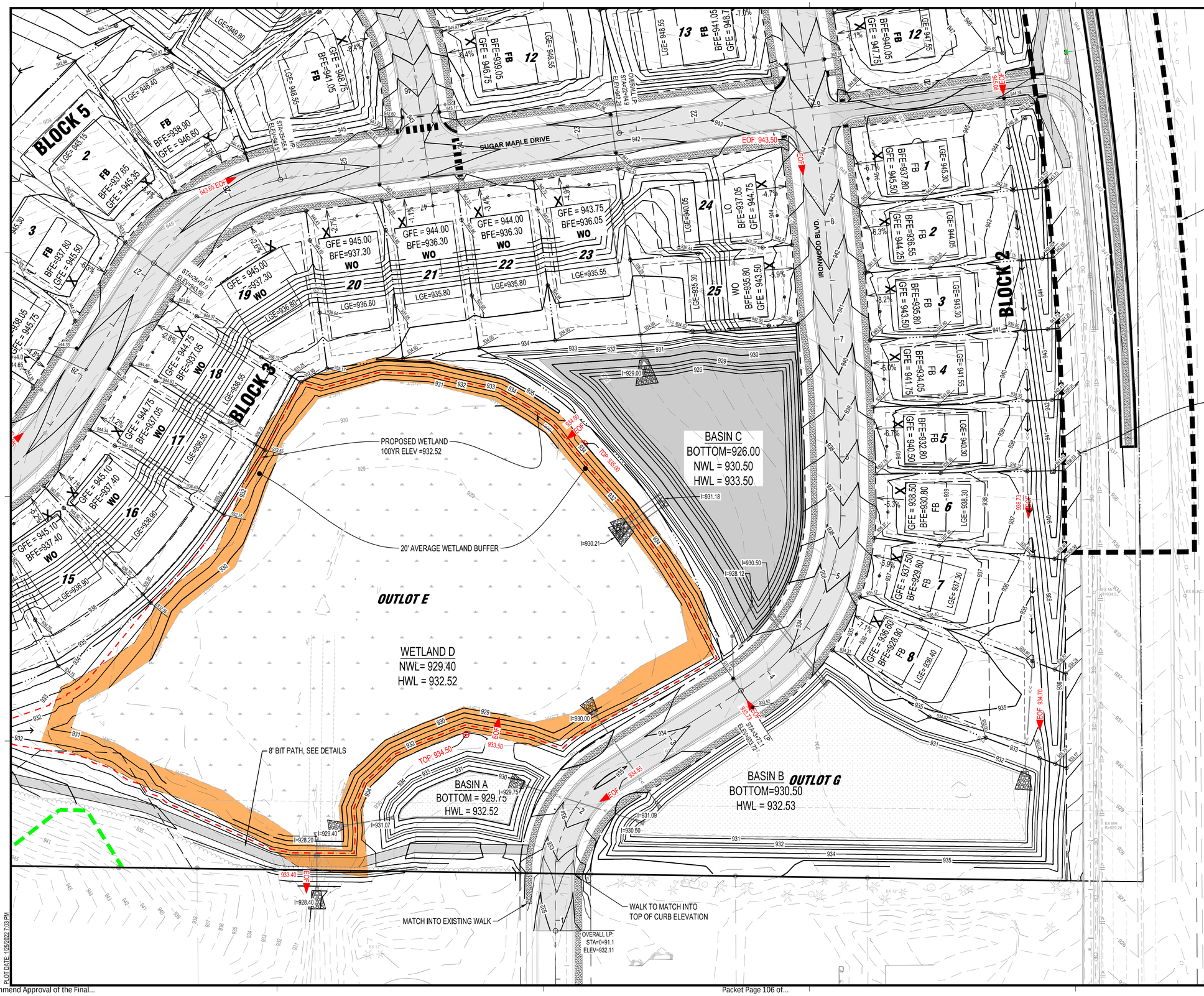
TITLE

GRADING PLAN (SW)

SHEET

60 OF 76

PRELIMINARY NOT FOR CONSTRUCTION



PRELIMINARY NOT FOR CONSTRUCTION

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 GRADE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

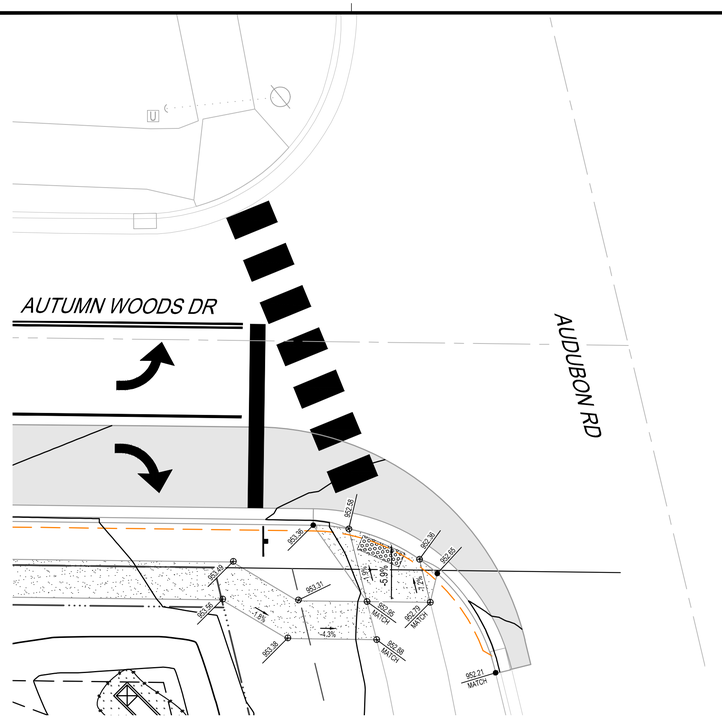
GRADING PLAN (SE)

SHEET

61

OF 76

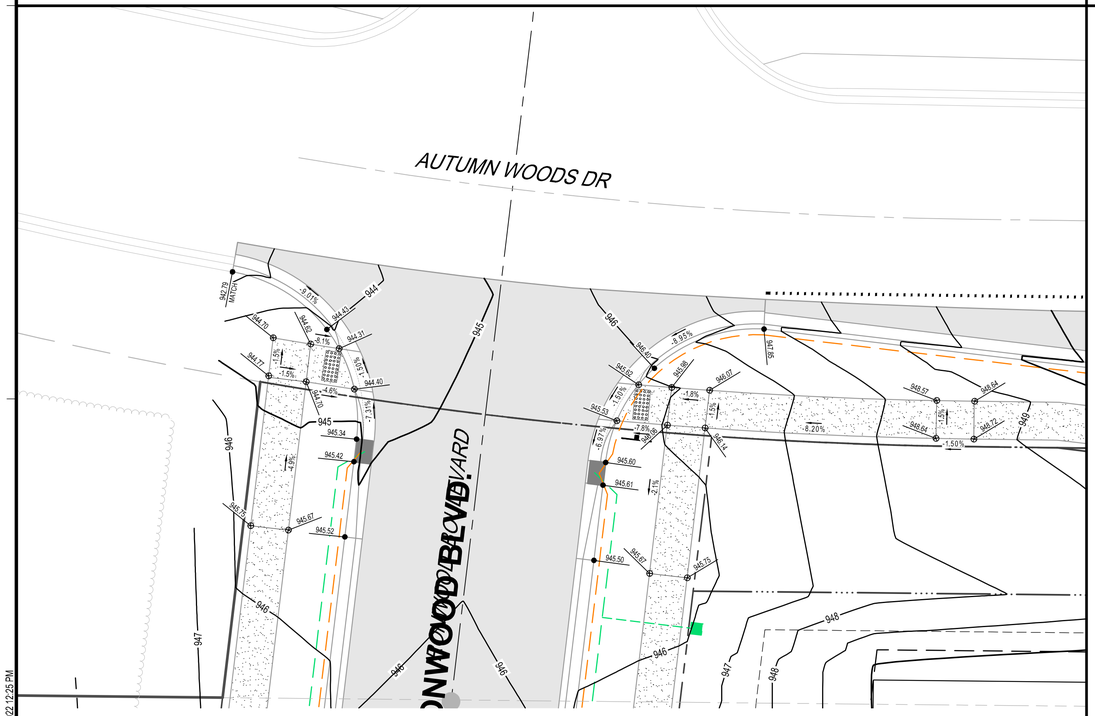
PLOT DATE: 1/25/2022 7:03 PM



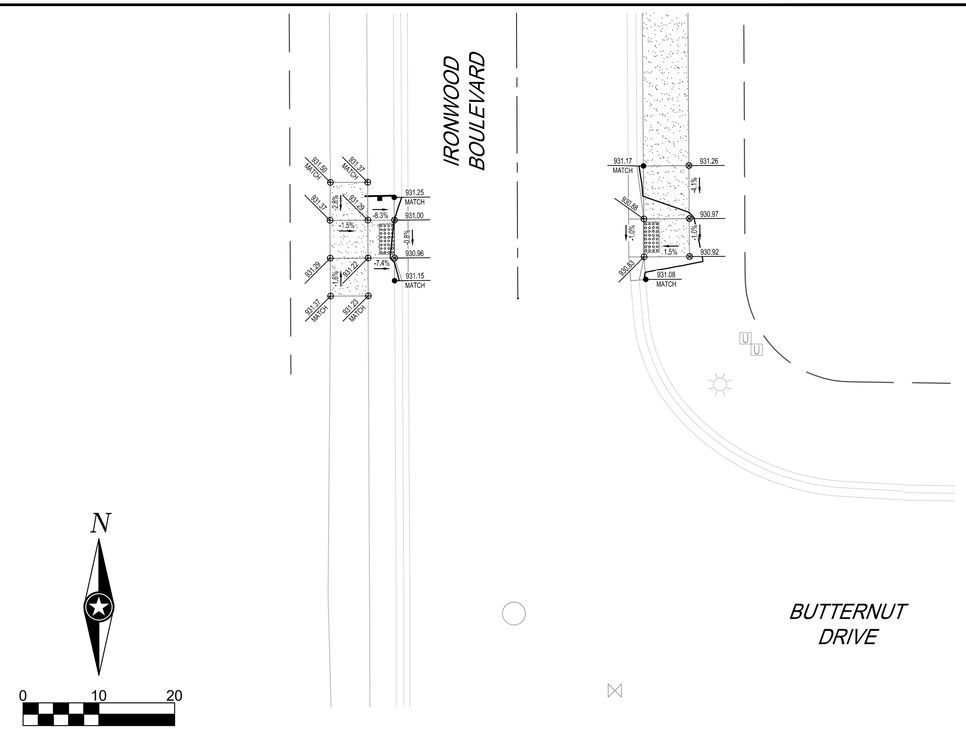
AUTUMN WOODS DR /AUDUBON RD

GRADING LEGEND

101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION



IRONWOOD BLVD / AUTUMN WOODS DR



IRONWOOD BLVD / EXISTING PARK

N

0 10 20

SCALE IN FEET

PLOT DATE - 1/27/2022 12:25 PM

PRELIMINARY NOT FOR CONSTRUCTION

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 GRADE INTERSECTIONS
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

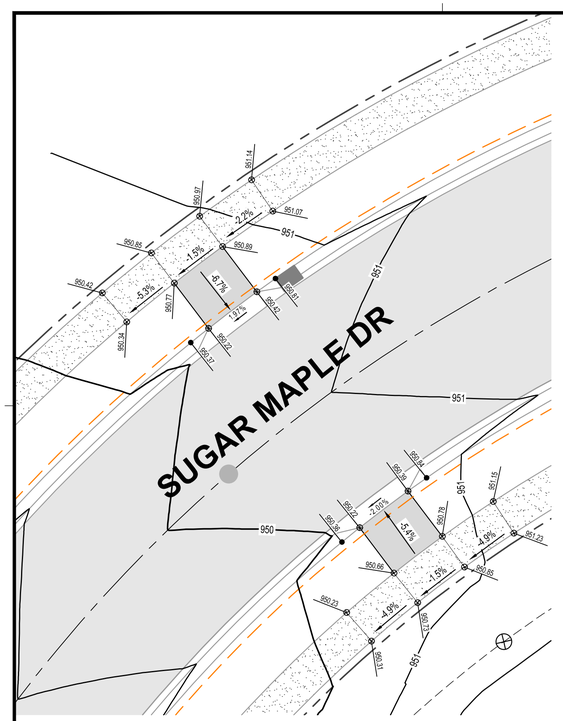
TITLE

DETAILED GRADING (INTERSECTIONS)

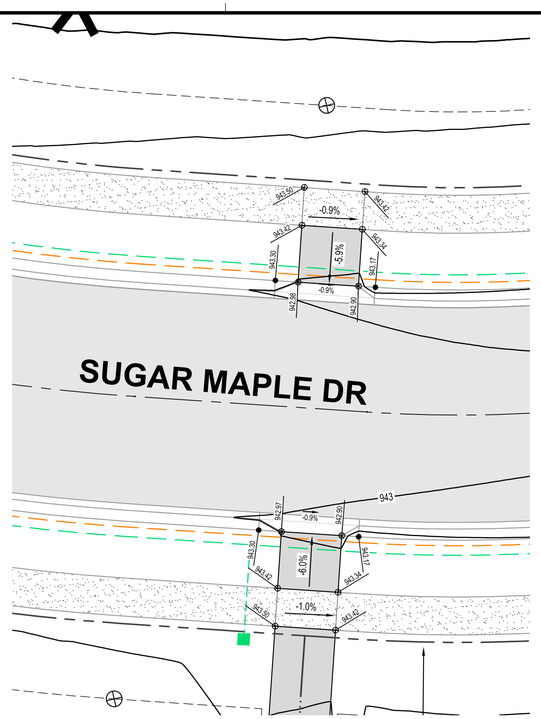
SHEET

62

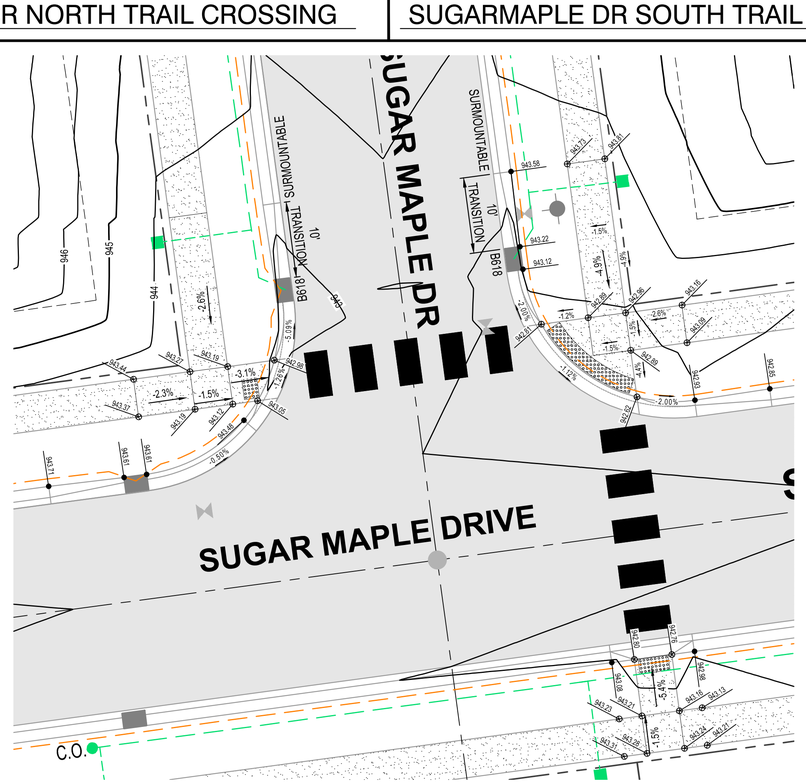
OF 76



SUGARMAPLE DR NORTH TRAIL CROSSING



SUGARMAPLE DR SOUTH TRAIL CROSSING



SUGARMAPLE DR LOOP ROAD

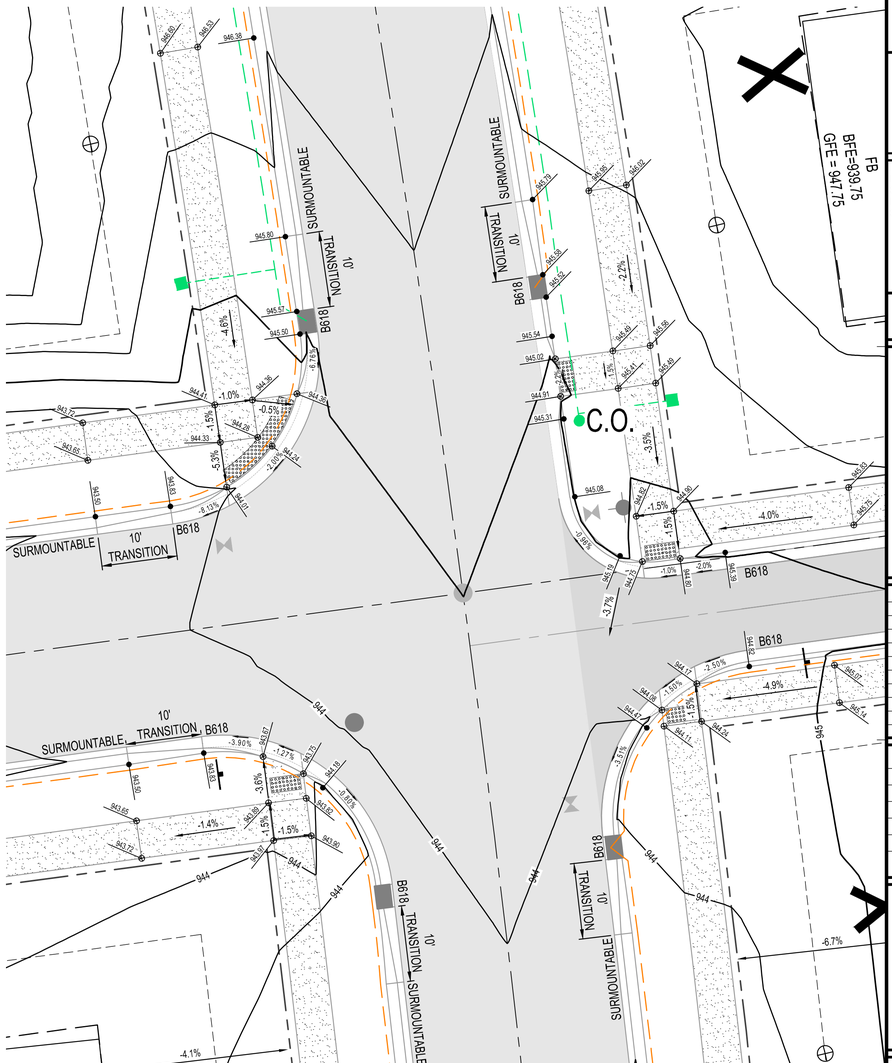
GRADING LEGEND

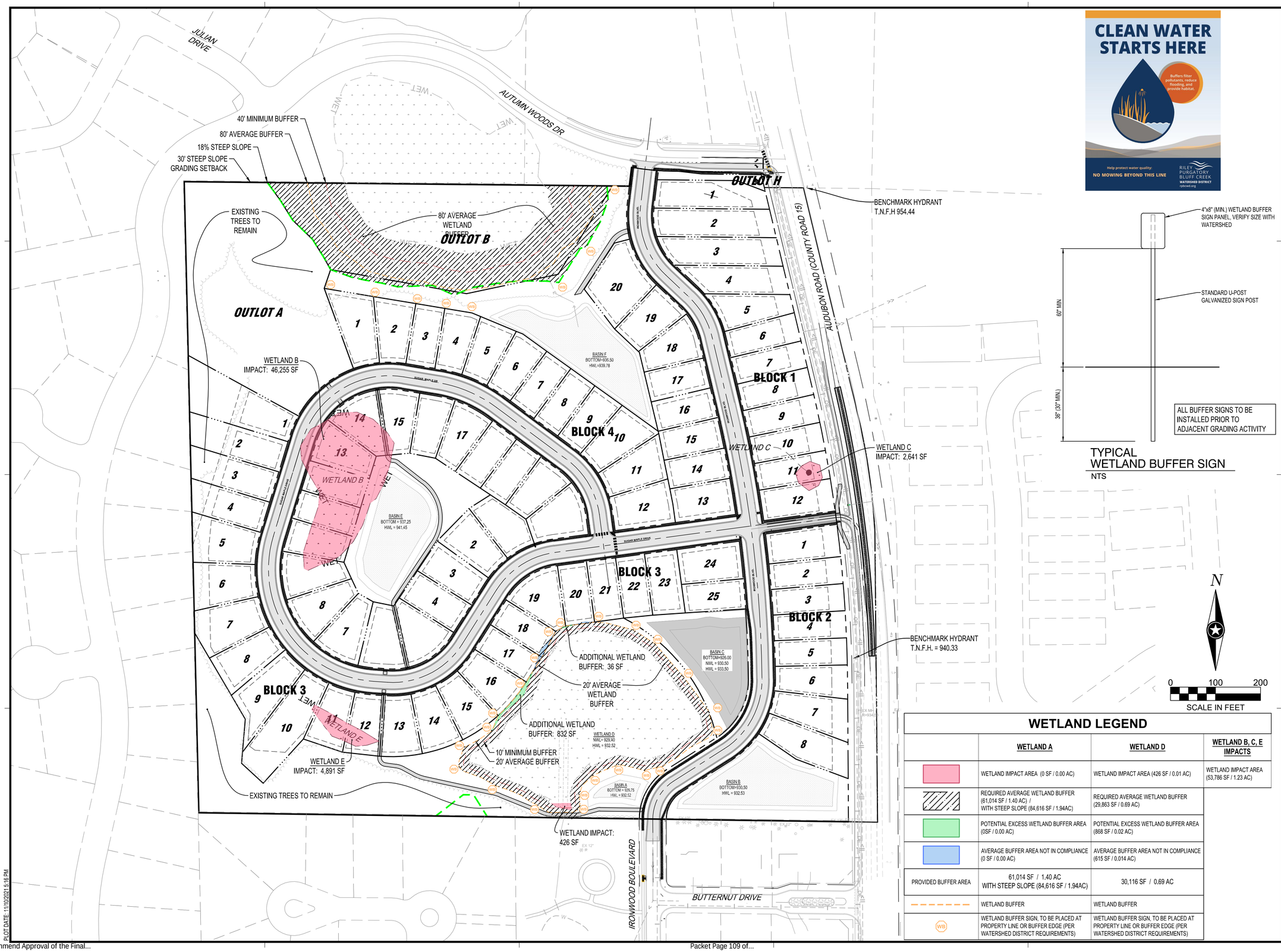
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION

N

0 10 20

SCALE IN FEET


SURMOUNTABLE
TRANSITION
10'
B618
946.60
946.58
946.38
945.80
945.57
945.50
944.41
944.33
944.29
944.46
944.34
944.24
943.65
943.68
943.71
943.85
943.90
943.87
943.75
943.91
943.92
943.98
943.90
943.87
943.71
943.85
943.69
943.67
944.11
944.15
944.25
944.18
944.12
944.08
944.07
944.14
944.34
944.31
944.25
944.18
944.12
944.08
944.07
944.14
944.34
944.31
944.25
945.73
945.54
945.02
944.91
945.31
945.08
945.10
945.05
945.12
945.46
945.44
945.40
945.38
945.35
945.58
945.55
945.52
945.49
945.46
945.43



TYPICAL
WETLAND BUFFER SIGN
NTS

WETLAND LEGEND

	WETLAND A	WETLAND D	WETLAND B, C, E IMPACTS
	WETLAND IMPACT AREA (0 SF / 0.00 AC)	WETLAND IMPACT AREA (426 SF / 0.01 AC)	WETLAND IMPACT AREA (53,786 SF / 1.23 AC)
	REQUIRED AVERAGE WETLAND BUFFER (61,014 SF / 1.40 AC) / WITH STEEP SLOPE (84,616 SF / 1.94AC)	REQUIRED AVERAGE WETLAND BUFFER (29,863 SF / 0.69 AC)	
	POTENTIAL EXCESS WETLAND BUFFER AREA (0SF / 0.00 AC)	POTENTIAL EXCESS WETLAND BUFFER AREA (868 SF / 0.02 AC)	
	AVERAGE BUFFER AREA NOT IN COMPLIANCE (0 SF / 0.00 AC)	AVERAGE BUFFER AREA NOT IN COMPLIANCE (615 SF / 0.014 AC)	
PROVIDED BUFFER AREA	61,014 SF / 1.40 AC WITH STEEP SLOPE (84,616 SF / 1.94AC)	30,116 SF / 0.69 AC	
	WETLAND BUFFER	WETLAND BUFFER	
WB	WETLAND BUFFER SIGN, TO BE PLACED AT PROPERTY LINE OR BUFFER EDGE (PER WATERSHED DISTRICT REQUIREMENTS)	WETLAND BUFFER SIGN, TO BE PLACED AT PROPERTY LINE OR BUFFER EDGE (PER WATERSHED DISTRICT REQUIREMENTS)	

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 WETLAND
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

WETLAND BUFFER AND SIGNAGE

SHEET

64

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 11/10/2021 5:16 PM

RESTORATION SCHEDULE

SEED MIX	QTY	DESCRIPTION
	63,520 SF	EMERGENT WETLAND MIX (MNDOT 34-181)
	118,068 SF	MESIC PRAIRIE GENERAL (MNDOT 35-241)
	114,341 SF	STORMWATER SOUTH AND WEST (MNDOT 33-261)
	44,971 SF	WET MEADOW SOUTH & WEST MIX (MNDOT 34-271)

SOD	QTY	DESCRIPTION
	844,213 SF	SALT TOLERANT SOD

CODE REQUIREMENTS SUMMARY

STREET TREES REQUIREMENTS:
1 OVERSTORY TREE ON EACH SIDE OF THE STREET FOR EVERY 50 FEET OF CENTERLINE.
9,370 LF / 50 = (188) TREES
- TREES REQUIRED = 188
- TREES PROVIDED = 188

SCREEN REQUIREMENTS:
BERM REQUIRED ALONG ARTERIALS AND COLLECTORS WITH PLANT MATERIAL TO PROVIDE A VISUAL SCREEN.
- TREES PROVIDED FOR SCREENING: 76

EXISTING TREES:
- (722) SURVEYED TREES MEETING ORDINANCE THRESHOLD
- (148) TOTAL PROPOSED REMOVALS

SIGNIFICANT TREES:
- (262) TOTAL TREES
- (46) PROPOSED REMOVALS, (7) OF WHICH ARE DEAD

SOD REQUIRED IN RIGHT-OF-WAY AND IN FRONT YARDS.
SOD TO BE PLACED BY BUILDER WITH HOME CONSTRUCTION



PLANT SCHEDULE

EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
AC	8	ABIES CONCOLOR WHITE FIR	6' HT MIN	B & B
AF	14	ABIES FRASERI FRASER FIR	6' HT MIN	B & B
PB	14	PICEA GLAUCA DENSATA BLACK HILLS SPRUCE	6' HT MIN	B & B
PN	17	PINUS NIGRA AUSTRIAN PINE	6' HT MIN	B & B
PR	14	PINUS RESINOSA RED PINE	6' HT MIN	B & B
TT	13	THUJA OCCIDENTALIS 'TECHNY' TECHNY ARBORVITAE	6' HT MIN	B & B

OVERSTORY TREES	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
AM	17	ACER X FREEMANII 'FIREFALL' FIREFALL MAPLE	2.5" CAL	B & B
AX	15	AESCULUS X 'AUTUMN SPLENDOR' AUTUMN SPLENDOR BUCKEYE	2.5" CAL	B & B
BC	17	BETULA NIGRA 'CULLY' TM HERITAGE RIVER BIRCH	2.5" CAL	B & B
CS	11	CATALPA SPECIOSA NORTHERN CATALPA	2.5" CAL	B & B
GT	26	GLEDITSIA TRIACANTHOS F. INERMIS THORNLESS HONEY LOCUST	2.5" CAL	B & B
GD	17	GYMNOCLADUS DIOICA 'ESPRESSO' KENTUCKY COFFEETREE	2.5" CAL	B & B
MA	15	MAACKIA AMURENSIS AMUR MAACKIA	2.5" CAL	B & B
OV	20	OSTRYA VIRGINIANA AMERICAN HOPHORNBEAM	2.5" CAL	B & B
QA	4	QUERCUS ALBA WHITE OAK	2.5" CAL	B & B
QB	12	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B
QE	6	QUERCUS ELLIPSOIDALIS NORTHERN PIN OAK	2.5" CAL	B & B
QD	15	QUERCUS ELLIPSOIDALIS 'BAILSKIES' TM MAJESTIC SKIES PIN OAK	2.5" CAL	B & B
QC	12	QUERCUS ROBUR X ALBA 'CRIMSCHMIDT' TM CRIMSON SPIRE OAK	2.5" CAL	B & B
QR	4	QUERCUS RUBRA RED OAK	2.5" CAL	B & B
TG	20	TILIA CORDATA 'GREENSPIRE' GREENSPIRE LITTLELEAF LINDEN	2.5" CAL	B & B
PE	23	ULMUS 'PATRIOT' PATRIOT ELM	2.5" CAL	B & B

N

0 100 200
SCALE IN FEET

ISG

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 LANDSCAPE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

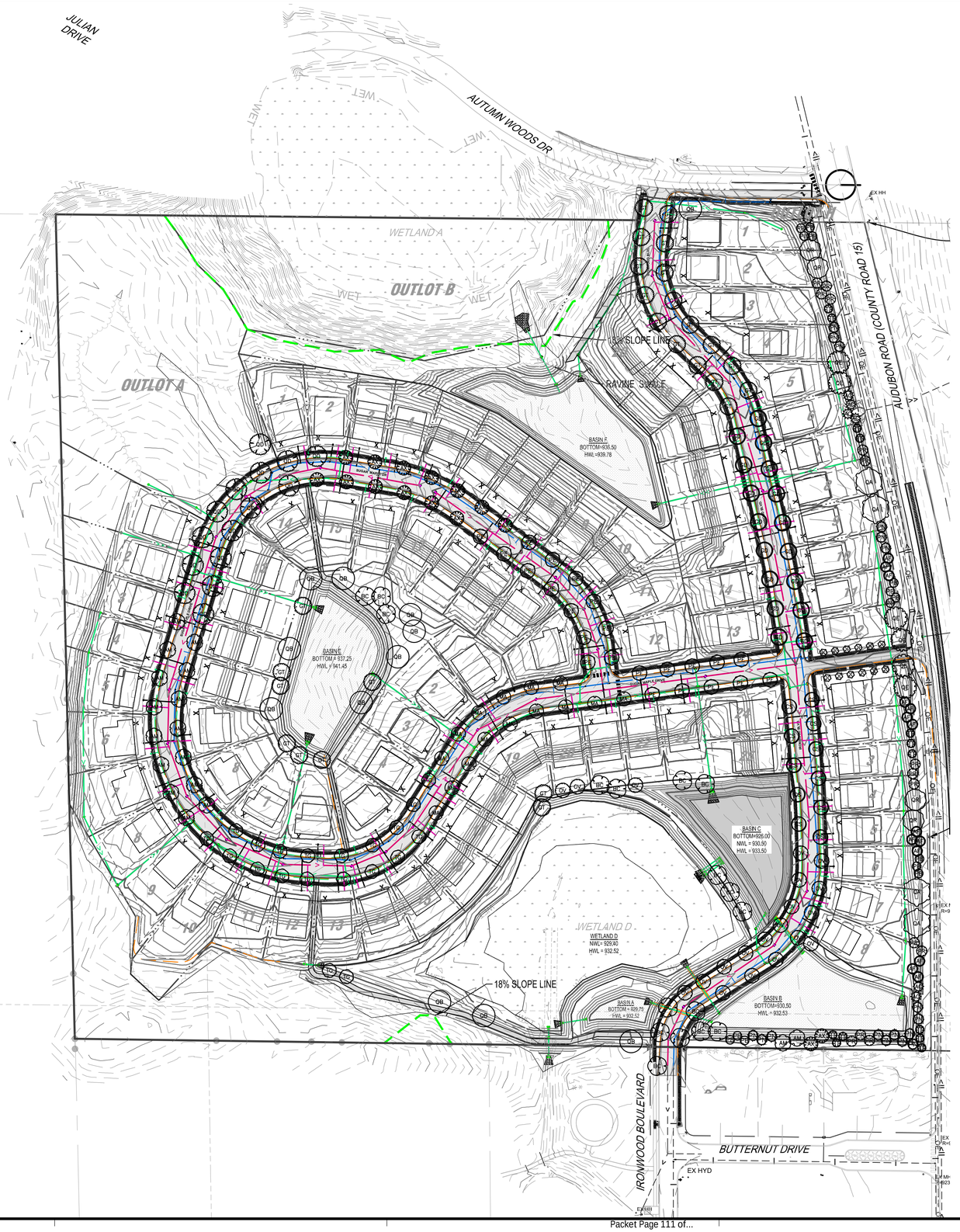
TITLE

RESTORATION AND PLANTING PLAN

SHEET
65
OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/27/2022 11:10 AM



PLANT SCHEDULE

EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
AC	8	ABIES CONCOLOR WHITE FIR	6` HT MIN	B & B
AF	14	ABIES FRASERI FRASER FIR	6` HT MIN	B & B
PB	14	PICEA GLAUCA DENSATA BLACK HILLS SPRUCE	6` HT MIN	B & B
PN	17	PINUS NIGRA AUSTRIAN PINE	6` HT MIN	B & B
PR	14	PINUS RESINOSA RED PINE	6` HT MIN	B & B
TT	13	THUJA OCCIDENTALIS `TECHNY` TECHNY ARBORVITAE	6` HT MIN	B & B

OVERSTORY TREES	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
AM	17	ACER X FREEMANII 'FIREFALL' FIREFALL MAPLE	2.5" CAL	B & B
AX	15	AESCULUS X 'AUTUMN SPLENDOR' AUTUMN SPLENDOR BUCKEYE	2.5" CAL	B & B
BC	17	BETULA NIGRA 'CULLY' TM HERITAGE RIVER BIRCH	2.5" CAL	B & B
CS	11	CATALPA SPECIOSA NORTHERN CATALPA	2.5" CAL	B & B
GT	26	GLEDITSIA TRIACANTHOS F. INERMIS THORNLESS HONEY LOCUST	2.5" CAL	B & B
GD	17	GYMNOCLADUS DIOICA 'ESPRESSO' KENTUCKY COFFEETREE	2.5" CAL	B & B
MA	15	MAACKIA AMURENSIS AMUR MAACKIA	2.5" CAL	B & B
OV	20	OSTRYA VIRGINIANA AMERICAN HOPHORNBEAM	2.5" CAL	B & B
QA	4	QUERCUS ALBA WHITE OAK	2.5" CAL	B & B
QB	12	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B
QE	6	QUERCUS ELLIPSOIDALIS NORTHERN PIN OAK	2.5" CAL	B & B
QD	15	QUERCUS ELLIPSOIDALIS 'BAILSKIES' TM MAJESTIC SKIES PIN OAK	2.5" CAL	B & B
QC	12	QUERCUS ROBUR X ALBA 'CRIMSCHMIDT' TM CRIMSON SPIRE OAK	2.5" CAL	B & B
QR	4	QUERCUS RUBRA RED OAK	2.5" CAL	B & B
TG	20	TILIA CORDATA 'GREENSPIRE' GREENSPIRE LITTLELEAF LINDEN	2.5" CAL	B & B
PE	23	ULMUS 'PATRIOT' PATRIOT ELM	2.5" CAL	B & B

N

0 100 200

SCALE IN FEET

ISG

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CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 OVERALL
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

PLANTING AND UTILITY PLAN (OVERALL)

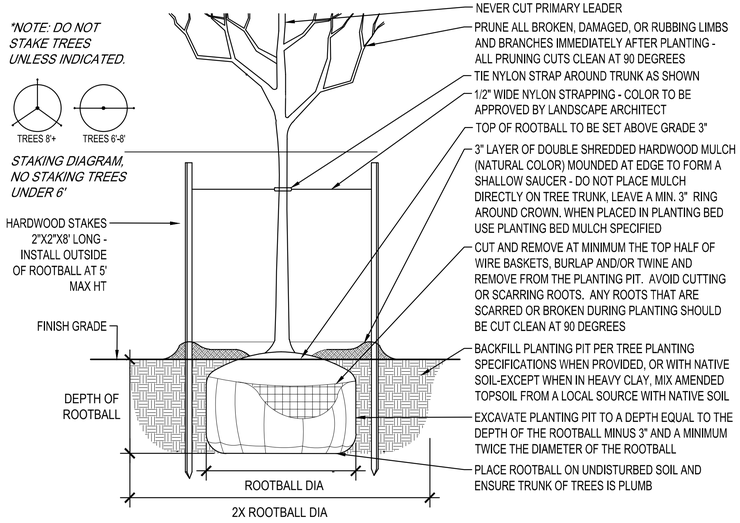
SHEET

66

OF 76

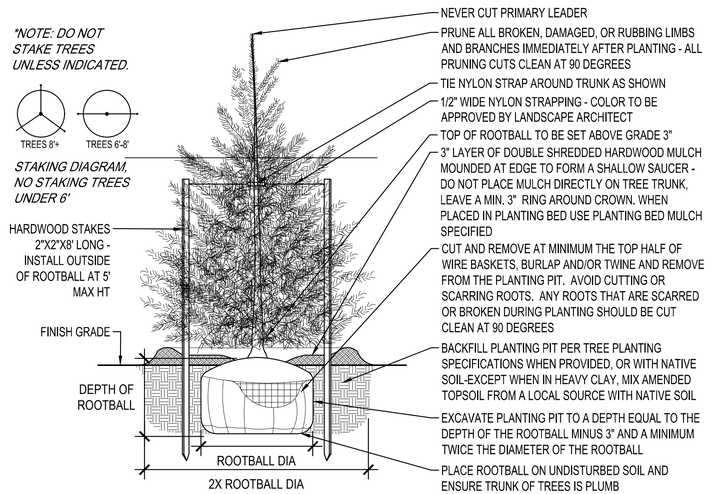
PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/21/2021 10:34 AM



DECIDUOUS TREE PLANTING DETAIL

SCALE: 1" = 1'-0



CONIFER / EVERGREEN TREE PLANTING DETAIL

SCALE: 1" = 1'-0

GENERAL PLANTING NOTES

1. COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED LANDSCAPE ELEMENTS . CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO WORK.
2. SAVE AND PROTECT ALL EXISTING TREES NOT NOTED TO BE REMOVED.
3. REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
4. ANY AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO OWNER.
5. LAWN AREAS SHALL HAVE 6" MINIMUM DEPTH OF TOPSOIL OR ORGANIC MATTER SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED. TOPSOIL SHALL BE COMPACTED TO 85% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AND SHALL MEET WATERSHED DISTRICT'S (RPBCWD) TOPSOIL DEFINITION.
6. REFER TO PLANTING DETAILS PLAN FOR AMENDED SOIL DEPTH IN PLANTING BEDS AND SURROUNDING TREES.
7. FIELD STAKE PLANTINGS ACCORDING TO PLAN. OWNER'S REPRESENTATIVE SHALL APPROVE ALL PLANT LOCATIONS PRIOR TO INSTALLATION. OWNER RESERVES THE RIGHT TO REVISE PLANTING LAYOUT AT TIME OF INSTALLATION.
8. ALL PLANT MATERIALS SHALL BE TRUE TO THEIR SCIENTIFIC NAME AND SIZE AS INDICATED IN THE PLANT SCHEDULE.
9. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE SCHEDULE, THE PLANTING PLAN SHALL GOVERN.
10. OWNER RESERVES THE RIGHT TO REVISE QUANTITIES TO SUIT BUDGET LIMITATIONS. CONTRACTOR'S UNIT BID PRICES SHALL PREVAIL FOR ANY CHANGES IN QUANTITIES.
11. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE AND OWNER.
12. ALL PLANT MATERIALS MUST CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK (A.N.S.I.), LATEST EDITION PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON D.C. LARGER SIZED PLANT MATERIALS OF THE SPECIES LISTED MAY BE USED IF THE STOCK CONFORMS TO A.N.S.I.
13. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN A LIVE AND HEALTHY GROWING CONDITION FOR ONE FULL GROWING SEASON (ONE YEAR) AFTER FINAL PROJECT ACCEPTANCE OR SHALL BE REPLACED FREE OF CHARGE WITH THE SAME GRADE AND SPECIES. ALL TREES SHALL HAVE A STRONG CENTRAL LEADER.
14. FOR TREES PROVIDE DOUBLE SHREDDED HARDWOOD MULCH RING (NATURAL COLOR) AT 3" DEPTH PER PLANTING DETAILS.
15. ALL TURF AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED OR SEEDED PER PLANS.

AUDUBON ROAD

PLOT DATE: 1/27/2022 11:10 AM

ISG

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JERREMY D. FOSS

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 LANDSCAPE
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

PLANTING NOTES AND DETAILS

SHEET

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PRELIMINARY NOT FOR CONSTRUCTION

SITE PREPARATION

HERBICIDE APPLICATION

1. Weed Identification: Site evaluation shall be conducted prior to site preparation to determine the undesirable and non-native species of trees, shrubs, vines, and herbaceous plants on site. This site evaluation will either be done by the Contractor or the Architect/Engineer's Representative.
2. Weed Eradication: All existing undesirable and non-native plant vegetation should be killed and/or removed from the site with multiple herbicide applications. Common weed species found in wetlands include Reed Canary Grass, non-native Phragmites, and Cattails.
3. Herbicide Selection: In riparian or wetland areas, water-safe herbicides approved for use near water must be used. Pre-emergent herbicides should not be used. For more detailed guidance on herbicide selection, see Appendix 5B of the BWSR Minnesota Wetland Restoration Guide.
3. Herbicide Application: All herbicides should be applied in accordance with state and federal regulations and manufacturer's instructions. Herbicides should not be applied during or within 72 hours of a rain event or when wind velocities exceed 5 miles per hour. Ideally, 3 herbicide applications would be conducted in spring, summer, and fall with seeding occurring in early winter. This ideal schedule may need to be adapted to align with the construction timeline.

SEEDBED PREPARATION

1. All restoration areas should be free of any rocks, crop residue, trash, or debris. Mow or harvest oats if used as temporary erosion control.
2. Construction and grading activities can compact the soil. Prior to seeding, any compacted areas must be prepared to provide a loose, smooth, evenly textured seedbed. A good seedbed is one that an adult footprint sinks into the soil about ¼ to ½ inch. If the seedbed is too compacted, discing is recommended. On slopes, operate equipment at right angles to the direction of surface drainage. The disc should not invert the soil. Avoid soil inversion and tilling to preserve soil biology and prevent emergence of weed seeds.
3. Discing may need to be followed by rolling or cultipacking to firm the seedbed. If the seedbed is too loose and fluffy, seeds will be placed too deep for proper germination.

WETLAND SEEDING

1. Seeding will only be conducted after all grading, construction, and site preparation activities are completed. The Contractor must wait 3 days after glyphosate application to seed native species. If other herbicides have been used on site, consult the manufacturer's recommendation for safe re-entry period prior to seeding. Some herbicides can stay in the soil for months and hinder the germination of native plants.
2. Seeding should be conducted by hand broadcasting, mechanical broadcasting, or drilling.
3. The Contractor is responsible for calibrating equipment to deliver seed at the specified rate and to operate equipment in a manner necessary to evenly distribute the seeds over the specified area at the specified rate.
4. Seeded areas may have one pass with a roller or cultipacker to firm the soil and ensure good seed-to-soil contact.
5. Do not apply fertilizers in the areas seeded with native grasses and wildflowers.
6. If necessary, plant a cover crop and/or apply Type 3 weed-free straw mulch for temporary erosion control. Use Oats as a cover crop in spring and summer; use Winter Wheat as a cover crop in fall.

TABLE 1: WET MEADOW SEED MIX 34-271

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
GRASSES					
Fringed Brome	*Bromus ciliatus*	1.23	1.10	9.18%	4.45
Bluejoint Grass	*Calamagrostis canadensis*	0.06	0.05	0.41%	5.00
Virginia Wild Rye	*Elymus virginicus*	1.12	1.00	8.37%	1.55
Rice Cut Grass	*Leersia oryzoides*	0.28	0.25	2.07%	3.10
Tall Manna Grass	*Glyceria grandis*	0.17	0.15	1.26%	3.90
Fowl Manna Grass	*Glyceria striata*	0.11	0.10	0.83%	3.30
Fowl Bluegrass	*Poa palustris*	0.39	0.35	2.88%	16.50
	Total Grasses	**3.36**	**3.00**	**25.00%**	**37.80**
SEDGES + RUSHES					
Bristly Sedge	*Carex comosa*	0.24	0.21	1.78%	2.36
Pointed Broom Sedge	*Carex scoparia*	0.06	0.05	0.43%	1.60
Awl-fruited Sedge	*Carex stipata*	0.19	0.17	1.40%	2.10
Tussock Sedge	*Carex stricta*	0.03	0.03	0.21%	0.50
Fox Sedge	*Carex vulpinoidea*	0.16	0.14	1.13%	5.00
Path Rush	*Juncus tenuis*	0.04	0.04	0.34%	15.00
Dark Green Bulrush	*Scirpus atrovirens*	0.20	0.18	1.48%	30.00
Woolgrass	*Scirpus cyperinus*	0.09	0.08	0.67%	50.00
	Total Sedges and Rushes	**1.01**	**0.90**	**7.44%**	**106.56**
FORBS					
Marsh Milkweed	*Asclepias incarnata*	0.27	0.24	2.03%	0.43
Common Boneset	*Eupatorium perfoliatum*	0.02	0.02	0.18%	1.30
Grass-leaved Goldenrod	*Euthamia graminifolia*	0.01	0.01	0.06%	1.00
Spotted Joe Pye Weed	*Eutrochium maculatum*	0.02	0.02	0.18%	0.75
Sneezeweed	*Helenium autumnale*	0.03	0.03	0.23%	1.30
Sawtooth Sunflower	*Helianthus grosseserratus*	0.04	0.04	0.30%	0.20
Great Blue Lobelia	*Lobelia siphilitica*	0.02	0.02	0.13%	2.90
Blue Monkey Flower	*Mimulus ringens*	0.01	0.01	0.07%	6.80
Virginia Mountain Mint	*Pycnanthemum virginianum*	0.07	0.06	0.53%	5.10
Giant Goldenrod	*Solidago gigantea*	0.02	0.02	0.14%	1.50
Eastern Panicled Aster	*Symphyotrichum lanceolatum*	0.03	0.03	0.22%	1.50
Red-stemmed Aster	*Symphyotrichum puniceum*	0.19	0.17	1.42%	5.00
Tall Meadow Rue	*Thalictrum dasycarpum*	0.01	0.01	0.12%	0.11
Blue Vervain	*Verbena hastata*	0.15	0.13	1.12%	4.61
Ironweed	*Vernonia fasciculata*	0.03	0.03	0.28%	0.30
Culver's Root	*Veronicastrum virginicum*	0.01	0.01	0.12%	4.20
Golden Alexanders	*Zizia aurea*	0.28	0.25	2.06%	1.00
	Total Forbs	**1.23**	**1.10**	**9.19%**	**38.00**
COVER CROP					
Oats	*Avena sativa*	7.85	7.00	58.37%	3.12
	Total Cover Crop	**7.85**	**7.00**	**58.37%**	**3.12**
	Totals:	**13.45**	**12.00**	**100.00%**	**185.48**
Purpose:	Wet meadow / Sedge meadow reconstruction for wetland mitigation or ecological restoration projects				
Planting Area:	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

VEGETATION ESTABLISHMENT

YEAR 1

1. During the first growing season after planting, all seeded areas must be kept mowed to the extent possible to help control weed growth, allow sunlight to penetrate to the soil surface, and encourage root development on the native perennials. Wet areas should be mowed along with the upland and buffer areas; however, the equipment shall not cause ruts or compact the wet soil. Some sites may be too wet to allow mowing without causing ruts or compaction in which case it is allowable not to mow the area.
2. Mow to a height of 6-8 inches whenever the vegetation reaches 10-12 inches tall, approximately once every 1-4 weeks depending on the rate of vegetation growth.
3. Use of a flail mower or stalk chopper to prevent smothering of native plant seedlings. If a flail mower or stalk chopper is not available, the vegetation must by hayed/bagged and removed from the site, or mowing must be frequent enough to ensure cut vegetation is small enough to compost itself back into the site without creating a thick mulch and negatively effecting the native plant seedlings.
4. Spot-treat weeds such as Reed Canary Grass and Canada Thistle with an appropriate herbicide.
5. Do not hand-pull any weeds during the first growing season as to not disturb the soil or native seedlings.

LONG-TERM MANAGEMENT

YEAR 2

1. Mow to a height of 6-8 inches up to two times in the spring and early summer to help control weed growth.
2. Spot-treat aggressive perennial weeds such as Reed Canary Grass and Canada Thistle with an appropriate herbicide.

YEAR 3 + BEYOND

1. Periodically monitor wetland for weeds and hydrological issues at least once per year. Healthy stands of native vegetation are important to provide wildlife habitat, capture nutrient runoff, and reduce peak flows during large precipitation events. It is important to ensure that vegetation is sufficiently established, maintains diversity levels, and is out-competing invasive species. On-site observations are necessary to spot problems and get them resolved as soon as possible.
2. Spot-treat weeds such as Reed Canary Grass and Canada Thistle with an appropriate herbicide.
3. Consider periodic disturbance such as prescribed fire, mowing, or grazing once every 3-5 years. By necessity, some amount of flexibility is needed when managing wetland restorations. Changes in management strategies and timing are often necessary to react to changing or unexpected project conditions, whether they are due to natural circumstances or manmade circumstances. Adaptive management solutions tailored to site observations are encouraged.

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 WETLAND REST
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

RESTORATION AND PLANTING PLAN (WETLAND D)

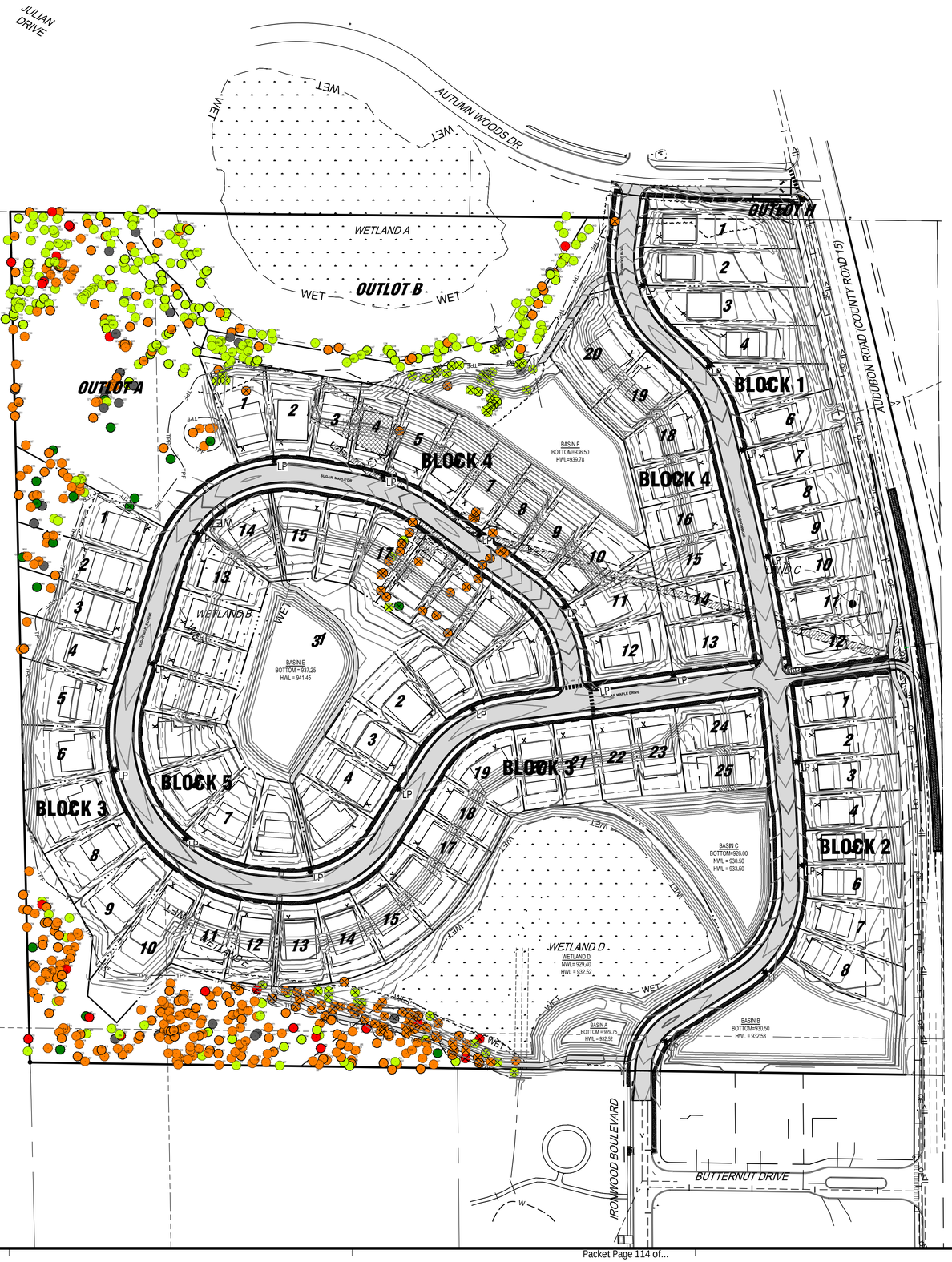
SHEET

68

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 1/3/2022 11:47 AM



TREE REMOVAL LEGEND

SYMBOL	DESCRIPTION
	EXCELLENT
	GOOD
	FAIR
	POOR
	DEAD

N

0 100 200

SCALE IN FEET

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

OVERALL TREE PRESERVATION

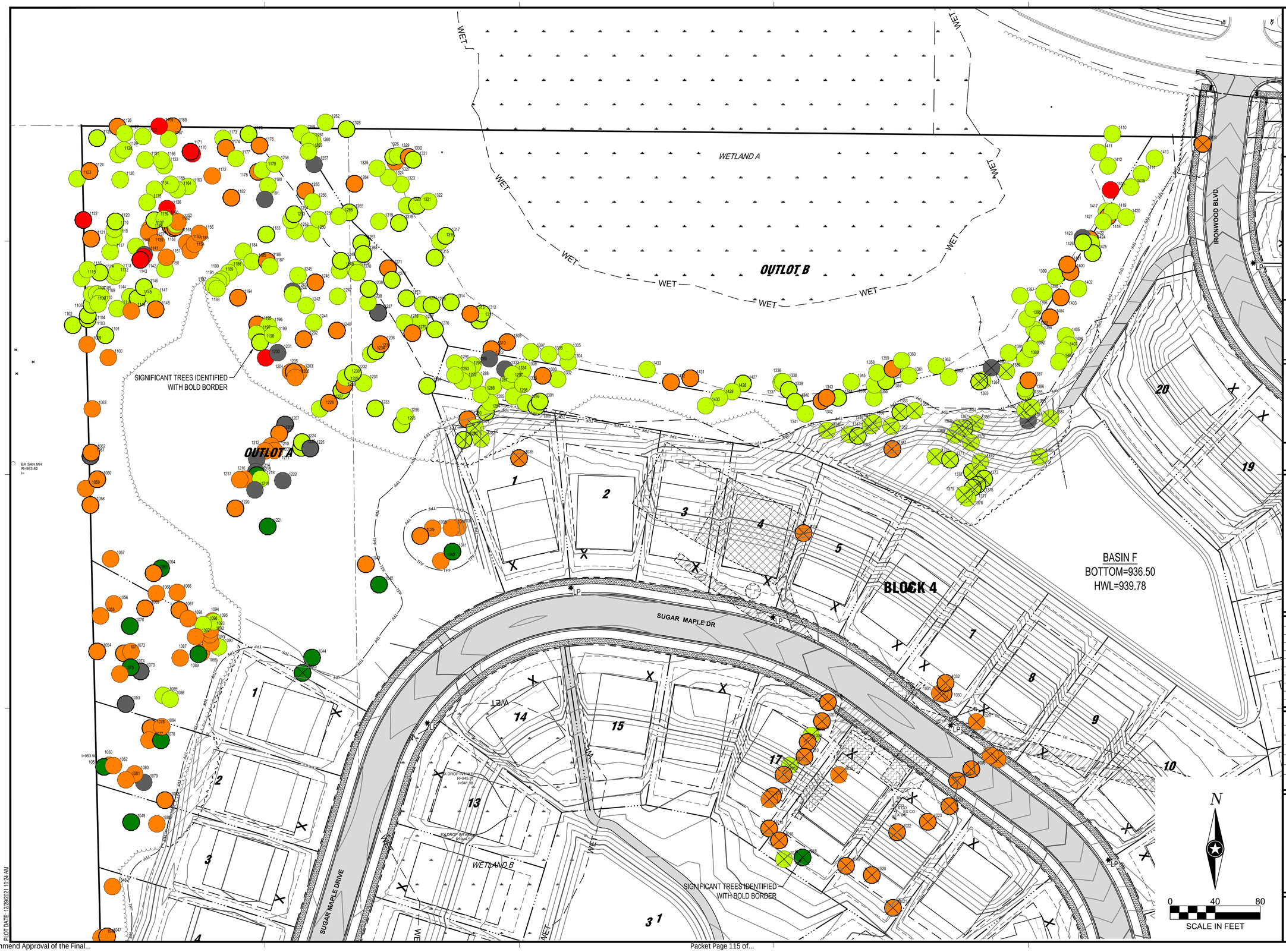
SHEET

69

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/29/2021 10:24 AM



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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

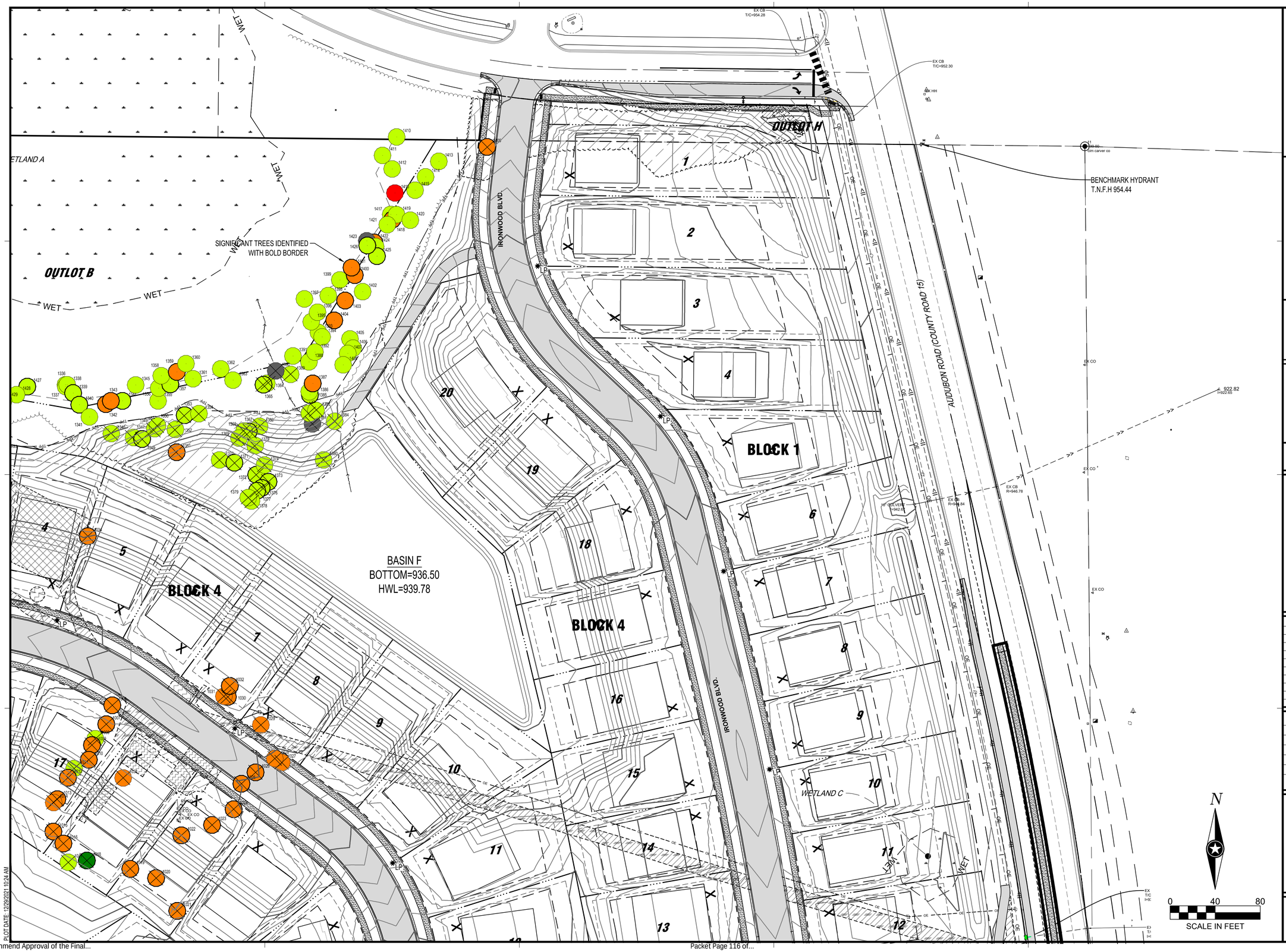
TITLE

TREE PRESERVATION A

SHEET

70 OF 76

PLOT DATE: 12/9/2021 10:24 AM



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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

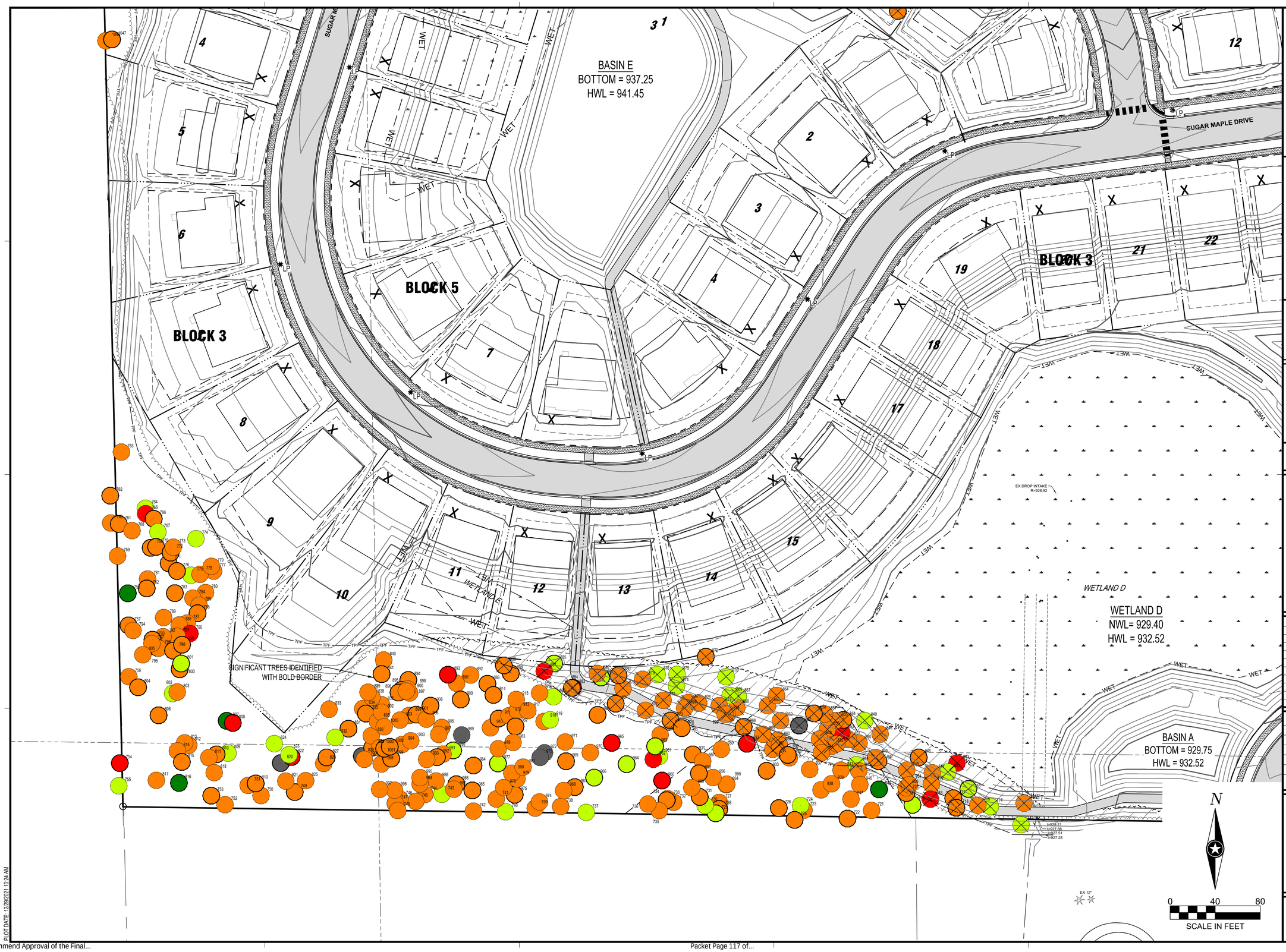
TITLE

TREE PRESERVATION B

SHEET

71 OF 76

PLOT DATE: 2/23/2022 10:24 AM



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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION C

SHEET

72

OF 76

PLOT DATE: 12/29/2021 10:24 AM

SUGAR MAPLE DRIVE

IRONWOOD BLVD.

BLOCK 3

BLOCK 2

BASIN C
BOTTOM=926.00
NWL = 930.50
HWL = 933.50

WETLAND D
NWL= 929.40
HWL = 932.52

BASIN A
BOTTOM = 929.75
HWL = 932.52

BASIN B
BOTTOM=930.50
HWL = 932.53

EX DROP INTAKE
R=928.92

EX CB
T/C=943.94
I=939.82

EX CB
T/C=944.17
I=939.92

EX HH

EX CB
T/C=940.53

BENCHMA
T.N.F.H. =

EX STM MH
R=935.64

EX CB
T/C=935.69

EX MH
I=934.53

EX ELEC MH

EX MH
R=929.26

SIGNIFICANT TREES IDENTIFIED
WITH BOLD BORDER

N

0 40 80
SCALE IN FEET

PLOT DATE: 2/23/2021 10:24 AM

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION D

SHEET

73

OF 76

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Removals
712	Elm, American	8	3-Fair	2-Good	X
713	Oak, Northern Red	6	2-Good	2-Good	X
714	Maple, Sugar	7	3-Fair	2-Good	X
715	Maple, Sugar	6	2-Good	2-Good	X
716	Maple, Sugar	14	3-Fair	3-Fair	X
717	Basswood, American	26	2-Good	2-Good	X
718	Oak, Northern Red	29	2-Good	2-Good	X
719	Oak, White	16	3-Fair	2-Good	
720	Oak, White	19	2-Good	2-Good	X
721	Basswood, American	10	2-Good	2-Good	
722	Elm, American	12	2-Good	3-Fair	
723	Elm, American	9	2-Good	2-Good	
724	Basswood, American	9	3-Fair	2-Good	
725	Basswood, American	14	2-Good	2-Good	
726	Hackberry	12	2-Good	2-Good	
727	Elm, American	6	2-Good	2-Good	
728	Basswood, American	16	2-Good	2-Good	
729	Basswood, American	16	3-Fair	2-Good	
730	Elm, American	11	3-Fair	2-Good	
731	Basswood, American	15	2-Good	2-Good	
732	Elm, American	9	2-Good	2-Good	
733	Ash, Black	7	2-Good	2-Good	
734	Hickory, Bitternut	12	2-Good	2-Good	
735	Basswood, American	11	2-Good	2-Good	
736	Oak, Northern Pin	10	2-Good	2-Good	
737	Elm, American	8	3-Fair	2-Good	
738	Maple, Sugar	9	2-Good	2-Good	
739	Maple, Sugar	6	2-Good	2-Good	
740	Basswood, American	11	3-Fair	3-Fair	
741	Maple, Sugar	6	2-Good	2-Good	
742	Hickory, Bitternut	7	2-Good	3-Fair	
743	Maple, Sugar	7	3-Fair	2-Good	
744	Elm, American	6	2-Good	2-Good	
745	Basswood, American	11	2-Good	2-Good	
746	Basswood, American	8	2-Good	2-Good	
747	Maple, Sugar	9	2-Good	2-Good	
748	Maple, Sugar	10	2-Good	2-Good	
749	Cottonwood, Eastern	30	2-Good	2-Good	
750	Maple, Sugar	8	2-Good	2-Good	
751	Hickory, Bitternut	12	2-Good	2-Good	
752	Hickory, Bitternut	6	2-Good	2-Good	
753	Elm, American	13	2-Good	2-Good	
754	Maple, Sugar	29	4-Poor	4-Poor	
755	Elm, American	7	3-Fair	2-Good	
756	Oak, White	7	2-Good	2-Good	
757	Basswood, American	14	2-Good	2-Good	
758	Cottonwood, Eastern	35	1-Excellent	2-Good	
759	Maple, Sugar	8	2-Good	2-Good	
760	Basswood, American	11	2-Good	2-Good	
761	Basswood, American	14	2-Good	2-Good	
762	Cottonwood, Eastern	29	2-Good	2-Good	
763	Oak, Northern Red	6	2-Good	2-Good	
764	Elm, American	7	3-Fair	2-Good	
765	Elm, American	6	4-Poor	2-Good	
766	Cottonwood, Eastern	41	2-Good	2-Good	
767	Ash, Black	7	3-Fair	2-Good	
768	Oak, Black	8	2-Good	2-Good	
769	Cottonwood, Eastern	23	2-Good	3-Fair	
770	Basswood, American	12	2-Good	2-Good	
771	Elm, American	14	2-Good	2-Good	
772	Oak, White	13	2-Good	2-Good	
773	Maple, Norway	7	2-Good	2-Good	
774	Hickory, Bitternut	7	3-Fair	2-Good	
775	Oak, White	7	3-Fair	2-Good	
776	Oak, White	12	2-Good	2-Good	
777	Oak, Northern Red	10	2-Good	3-Fair	
778	Elm, American	10	2-Good	2-Good	
779	Oak, Northern Red	11	2-Good	2-Good	
780	Oak, White	8	2-Good	2-Good	
781	Oak, Northern Pin	7	2-Good	2-Good	
782	Hackberry	12	2-Good	2-Good	
783	Cottonwood, Eastern	31	2-Good	2-Good	
784	Maple, Sugar	10	2-Good	2-Good	
785	Basswood, American	8	2-Good	2-Good	
786	Basswood, American	12	2-Good	2-Good	
787	Oak, Black	11	2-Good	2-Good	
788	Oak, White	9	2-Good	2-Good	
789	Oak, White	6	2-Good	2-Good	
790	Basswood, American	11	4-Poor	2-Good	
791	Oak, Northern Pin	7	2-Good	2-Good	
792	Hickory, Bitternut	11	2-Good	2-Good	
793	Hickory, Bitternut	13	2-Good	2-Good	
794	Oak, Northern Red	10	2-Good	2-Good	
795	Hickory, Bitternut	12	2-Good	2-Good	
796	Hickory, Bitternut	6	2-Good	2-Good	
797	Oak, Northern Red	7	2-Good	2-Good	
798	Basswood, American	14	2-Good	2-Good	
799	Basswood, American	13	2-Good	2-Good	
800	Basswood, American	18	2-Good	2-Good	
801	Locust, Black	14	3-Fair	2-Good	
802	Oak, Northern Pin	8	3-Fair	3-Fair	
803	Oak, Northern Pin	9	2-Good	2-Good	
804	Hickory, Bitternut	13	2-Good	2-Good	
805	Hickory, Bitternut	7	2-Good	3-Fair	
806	Locust, Black	32	2-Good	3-Fair	
807	Oak, Black	45	1-Excellent	2-Good	
808	Elm, American	12	4-Poor	4-Poor	
809	Oak, Northern Red	9	3-Fair	4-Poor	
810	Oak, Northern Red	12	2-Good	2-Good	
811	Oak, Northern Pin	6	2-Good	2-Good	
812	Oak, Northern Pin	8	2-Good	2-Good	
813	Oak, Northern Pin	10	2-Good	2-Good	
814	Oak, Northern Red	10	2-Good	2-Good	
815	Cottonwood, Eastern	30	2-Good	2-Good	
816	Locust, Black	34	1-Excellent	2-Good	
817	Basswood, American	16	2-Good	2-Good	
818	Hackberry	9	2-Good	2-Good	
819	Oak, Northern Red	18	2-Good	2-Good	
820	Cottonwood, Eastern	26	5-Dead	5-Dead	
821	Elm, American	7	2-Good	2-Good	
822	Basswood, American	12	4-Poor	3-Fair	
823	Oak, Northern Pin	10	3-Fair	3-Fair	
824	Oak, Northern Pin	8	3-Fair	2-Good	
825	Oak, Northern Red	9	2-Good	2-Good	
826	Oak, Northern Pin	11	2-Good	2-Good	
827	Oak, Northern Red	15	2-Good	2-Good	
828	Chestnut, American	13	5-Dead	5-Dead	
829	Oak, Northern Red	15	2-Good	2-Good	
830	Hickory, Bitternut	6	2-Good	2-Good	
831	Cottonwood, Eastern	30	2-Good	2-Good	
832	Maple, Sugar	11	3-Fair	2-Good	
833	Elm, American	8	2-Good	2-Good	
834	Hickory, Bitternut	8	2-Good	2-Good	
835	Hickory, Bitternut	12	2-Good	2-Good	
836	Oak, Northern Pin	10	2-Good	2-Good	
837	Locust, Black	9	2-Good	2-Good	
838	Maple, Sugar	11	2-Good	2-Good	
839	Maple, Sugar	9	2-Good	2-Good	
840	Maple, Black	10	2-Good	2-Good	
841	Maple, Black	17	2-Good	2-Good	
842	Elm, American	9	4-Poor	3-Fair	X
843	Maple, Sugar	7	3-Fair	2-Good	X
844	Maple, Sugar	14	2-Good	3-Fair	X
845	Oak, Northern Red	6	2-Good	2-Good	X
846	Maple, Sugar	17	2-Good	2-Good	X
847	Oak, White	22	2-Good	2-Good	X
848	Basswood, American	7	2-Good	2-Good	X
849	Oak, Northern Pin	6	3-Fair	3-Fair	X
850	Oak, Northern Pin	9	2-Good	2-Good	X
851	Maple, Sugar	6	2-Good	2-Good	X
852	Locust, Black	10	2-Good	3-Fair	X
853	Basswood, American	10	4-Poor	2-Good	X
854	Elm, American	19	2-Good	2-Good	X
855	Oak, Northern Red	12	2-Good	2-Good	X
856	Oak, Northern Red	8	2-Good	2-Good	X
857	Maple, Sugar	8	2-Good	2-Good	X
858	Maple, Sugar	12	2-Good	2-Good	X
859	Ash, White	27	5-Dead	5-Dead	X
860	Maple, Sugar	7	2-Good	2-Good	X
861	Basswood, American	6	2-Good	2-Good	X
862	Elm, American	11	2-Good	2-Good	X
863	Maple, Sugar	11	2-Good	2-Good	X
864	Locust, Black	11	2-Good	2-Good	X
865	Maple, Sugar	8	2-Good	2-Good	X
866	Basswood, American	21	2-Good	2-Good	X
867	Maple, Sugar	9	3-Fair	2-Good	X
868	Maple, Sugar	6	2-Good	2-Good	X
869	Locust, Black	10	3-Fair	2-Good	X
870	Elm, American	11	3-Fair	2-Good	X
871	Oak, Northern Pin	11	2-Good	2-Good	X
872	Maple, Sugar	16	2-Good	2-Good	X
873	Hickory, Bitternut	11	2-Good	2-Good	X
874	Basswood, American	10	3-Fair	2-Good	X
875	Maple, Sugar	6	3-Fair	3-Fair	X
876	Ash, White	8	3-Fair	2-Good	X
877	Maple, Sugar	9	2-Good	2-Good	X
878	Maple, Sugar	10	2-Good	2-Good	X
879	Elm, American	8	2-Good	2-Good	X
880	Basswood, American	19	2-Good	2-Good	X
881	Basswood, American	12	3-Fair	2-Good	X
882	Hickory, Bitternut	7	2-Good	2-Good	X
883	Maple, Sugar	14	4-Poor	3-Fair	X
884	Maple, Sugar	12	2-Good	2-Good	X
885	Maple, Sugar	14	3-Fair	2-Good	X
886	Locust, Black	11	3-Fair	3-Fair	
887	Maple, Sugar	8	4-Poor	4-Poor	X
888	Maple, Sugar	15	2-Good	2-Good	X
889	Maple, Sugar	12	2-Good	2-Good	
890	Maple, Sugar	20	2-Good	2-Good	X
891	Basswood, American	6	2-Good	3-Fair	
892	Basswood, American	6	2-Good	2-Good	
893	Maple, Sugar	17	4-Poor	4-Poor	
894	Maple, Sugar	12	2-Good	3-Fair	
895	Maple, Sugar	16	2-Good	2-Good	
896	Oak, Northern Red	14	2-Good	2-Good	
897	Maple, Sugar	10	2-Good	2-Good	
898	Oak, Northern Red	10	2-Good	3-Fair	
899	Maple, Sugar	10	2-Good	2-Good	
900	Maple, Sugar	7	2-Good	2-Good	
901	Oak, Northern Pin	13	2-Good	2-Good	
902	Maple, Sugar	11	2-Good	2-Good	
903	Maple, Sugar	7	2-Good	2-Good	
904	Maple, Sugar	7	2-Good	2-Good	
905	Maple, Sugar	7	2-Good	2-Good	
906	Oak, Northern Red	11	2-Good	2-Good	
907	Maple, Sugar	10	2-Good	2-Good	
908	Locust, Honey	13	2-Good	2-Good	
909	Hickory, Shagbark	27	2-Good	3-Fair	
910	Maple, Sugar	9	2-Good	2-Good	
911	Oak, Northern Pin	13	2-Good	2-Good	
912	Maple, Sugar	11	2-Good	2-Good	
913	Maple, Sugar	8	2-Good	2-Good	
914	Oak, Northern Pin	12	2-Good	2-Good	
915	Maple, Sugar	9	2-Good	2-Good	
916	Maple, Sugar	8	2-Good	2-Good	
917	Maple, Sugar	7	2-Good	2-Good	
918	Maple, Sugar	8	2-Good	2-Good	
919	Oak, Northern Red	8	3-Fair	2-Good	
920	Maple, Sugar	21	2-Good	2-Good	
921	Oak, White	24	2-Good	2-Good	X
922	Elm, American	9	2-Good	2-Good	
923	Basswood, American	16	2-Good	2-Good	X
924	Cottonwood, Eastern	25	2-Good	2-Good	
925	Elm, American	7	2-Good	2-Good	X
926	Maple, Sugar	7	2-Good	2-Good	X
927	Oak, Northern Red	10	2-Good	2-Good	X
928	Maple, Sugar	7	2-Good	2-Good	X
929	Maple, Sugar	9	2-Good	2-Good	X
930	Maple, Sugar	6	2-Good	2-Good	
931	Oak, Northern Red	21	2-Good	2-Good	
932	Locust, Black	26	4-Poor	3-Fair	
933	Oak, Northern Red	22	2-Good	2-Good	
934	Maple, Sugar	8	2-Good	2-Good	X
935	Maple, Sugar	6	2-Good	2-Good	
936	Oak, Northern Red	16	2-Good	2-Good	
937	Oak, Northern Pin	8	2-Good	2-Good	
938	Oak, White	11	2-Good	2-Good	
939	Maple, Sugar	7	2-Good	2-Good	
940	Maple, Sugar	9	2-Good	2-Good	X
941	Maple, Sugar	8	2-Good	2-Good	X
942	Maple, Sugar	7	2-Good	2-Good	X
943	Maple, Sugar	6	2-Good	2-Good	
944	Elm, American	6	3-Fair	2-Good	X
945	Maple, Sugar	8	2-Good	2-Good	
946	Maple, Sugar	7	2-Good	2-Good	
947	Oak, Northern Red	10	2-Good	2-Good	
948	Maple, Sugar	7	2-Good	3-Fair	X
949	Oak, Northern Red	34	1-Excellent	1-Excellent	
950	Maple, Sugar	6	2-Good	3-Fair	X
951	Maple, Sugar	8	2-Good	2-Good	X
952	Maple, Sugar	7	2-Good	2-Good	X
953	Oak, Northern Red	10	4-Poor	3-Fair	X
954	Basswood, American	6	2-Good	2-Good	
955	Basswood, American	10	2-Good	2-Good	
956	Basswood, American	11	2-Good	2-Good	
957	Basswood, American	11	2-Good	2-Good	
958	Basswood, American	12	2-Good	2-Good	
959	Basswood, American	7	2-Good	2-Good	
960	Basswood, American	13	4-Poor	3-Fair	
961	Basswood, American	11	3-Fair	3-Fair	

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DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TREE SURVEY A

SHEET

74

OF 76

PLOT DATE: 1/29/2021 10:24 AM

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Removals
962	Basswood, American	6	4-Poor	2-Good	
963	Basswood, American	14	3-Fair	2-Good	
964	Oak, White	14	3-Fair	3-Fair	
965	Oak, Northern Red	27	4-Poor	4-Poor	
966	Oak, Northern Pin	16	3-Fair	2-Good	
967	Oak, Northern Red	26	2-Good	2-Good	
968	Maple, Sugar	7	2-Good	2-Good	
969	Oak, Northern Red	21	2-Good	2-Good	
970	Maple, Sugar	6	2-Good	2-Good	
971	Maple, Sugar	9	2-Good	2-Good	
972	Elm, American	10	5-Dead	5-Dead	
973	Elm, American	6	5-Dead	5-Dead	
974	Maple, Sugar	6	2-Good	2-Good	
975	Basswood, American	17	2-Good	2-Good	
976	Basswood, American	11	2-Good	2-Good	
977	Oak, Northern Pin	12	3-Fair	2-Good	
978	Maple, Sugar	9	2-Good	2-Good	
979	Maple, Sugar	6	2-Good	2-Good	
980	Maple, Sugar	8	2-Good	2-Good	
981	Maple, Sugar	9	2-Good	2-Good	
982	Ash, White	27	2-Good	2-Good	
983	Hickory, Bitternut	10	2-Good	2-Good	
984	Hickory, Bitternut	12	2-Good	2-Good	
985	Locust, Black	13	2-Good	3-Fair	
986	Basswood, American	16	2-Good	2-Good	
987	Elm, American	6	2-Good	2-Good	
988	Elm, American	6	2-Good	2-Good	
989	Elm, American	6	5-Dead	5-Dead	
990	Locust, Black	15	3-Fair	3-Fair	
991	Maple, Sugar	9	2-Good	2-Good	
992	Locust, Black	14	2-Good	2-Good	
993	Maple, Sugar	8	2-Good	2-Good	
994	Elm, American	11	2-Good	2-Good	
995	Ash, White	11	2-Good	2-Good	
996	Maple, Sugar	10	2-Good	2-Good	
997	Maple, Sugar	7	2-Good	2-Good	
998	Maple, Sugar	10	2-Good	2-Good	
999	Oak, Northern Red	13	2-Good	2-Good	
1000	Maple, Sugar	8	2-Good	2-Good	
1001	Maple, Sugar	10	2-Good	2-Good	
1002	Maple, Sugar	12	2-Good	2-Good	
1003	Maple, Sugar	7	2-Good	2-Good	
1004	Maple, Sugar	11	2-Good	2-Good	
1005	Maple, Sugar	11	2-Good	2-Good	
1006	Spruce, White	20	2-Good	2-Good	X
1007	Spruce, White	24	2-Good	2-Good	X
1008	Spruce, White	6	3-Fair	3-Fair	X
1009	Spruce, White	15	2-Good	2-Good	X
1010	Spruce, White	13	2-Good	3-Fair	X
1011	Spruce, White	9	3-Fair	3-Fair	X
1012	Spruce, White	12	2-Good	2-Good	X
1013	Spruce, White	13	2-Good	2-Good	X
1014	Spruce, White	9	2-Good	3-Fair	X
1015	Spruce, White	15	2-Good	2-Good	X
1016	Spruce, White	15	2-Good	2-Good	X
1017	Spruce, White	7	3-Fair	2-Good	X
1018	Oak, White	35	1-Excellent	2-Good	X
1019	Walnut, Black	19	2-Good	2-Good	X
1020	Spruce, White	20	2-Good	2-Good	X
1021	Walnut, Black	25	2-Good	2-Good	X
1022	Spruce, White	25	2-Good	2-Good	X
1023	Spruce, White	14	2-Good	2-Good	X
1024	Spruce, White	12	2-Good	3-Fair	X
1025	Spruce, White	21	2-Good	2-Good	X
1026	Spruce, White	21	2-Good	2-Good	X
1027	Spruce, White	4	2-Good	2-Good	X
1028	Spruce, White	6	2-Good	2-Good	X
1029	Pine, Red	3	2-Good	2-Good	X
1030	Spruce, White	12	2-Good	3-Fair	X
1031	Spruce, White	8	2-Good	2-Good	X
1032	Spruce, White	12	2-Good	2-Good	X
1033	Oak, White	12	2-Good	2-Good	X
1034	Basswood, American	21	2-Good	3-Fair	X
1035	Elm, American	13	2-Good	3-Fair	X
1036	Elm, American	7	2-Good	3-Fair	
1037	Elm, American	9	2-Good	3-Fair	
1038	Elm, American	6	2-Good	3-Fair	
1039	Elm, American	13	2-Good	3-Fair	
1040	Elm, American	6	2-Good	3-Fair	
1041	Oak, White	37	1-Excellent	3-Fair	
1042	Oak, White	35	1-Excellent	3-Fair	
1043	Oak, White	27	2-Good	3-Fair	
1044	Oak, White	34	1-Excellent	3-Fair	
1045	Oak, White	49	1-Excellent	3-Fair	X
1046	Maple, Sugar	8	2-Good	3-Fair	
1047	Maple, Sugar	13	2-Good	3-Fair	
1048	Elm, American	6	2-Good	3-Fair	
1049	Ash, White	41	1-Excellent	3-Fair	
1050	Elm, American	6	2-Good	3-Fair	
1051	Oak, White	33	1-Excellent	3-Fair	
1052	Elm, American	10	2-Good	3-Fair	
1053	Elm, American	14	5-Dead	5-Dead	
1054	Oak, White	23	2-Good	3-Fair	
1055	Oak, Northern Red	8	2-Good	3-Fair	
1056	Oak, Northern Red	9	2-Good	3-Fair	
1057	Elm, American	8	2-Good	3-Fair	
1058	Basswood, American	12	2-Good	3-Fair	
1059	Hickory, Bitternut	8	2-Good	3-Fair	
1060	Oak, White	27	2-Good	3-Fair	
1061	Elm, American	12	5-Dead	5-Dead	
1062	Ash, White	15	2-Good	3-Fair	
1063	Oak, White	10	2-Good	3-Fair	
1064	Oak, White	38	1-Excellent	3-Fair	
1065	Elm, American	15	2-Good	3-Fair	
1066	Elm, American	10	2-Good	3-Fair	
1067	Oak, White	28	2-Good	3-Fair	
1068	Elm, American	8	2-Good	3-Fair	
1069	Oak, Bur	22	2-Good	3-Fair	
1070	Oak, Northern Red	32	1-Excellent	3-Fair	
1071	Elm, American	14	2-Good	3-Fair	
1072	Elm, American	8	2-Good	3-Fair	
1073	Elm, American	15	5-Dead	5-Dead	
1074	Oak, White	36	1-Excellent	3-Fair	
1075	Elm, American	6	2-Good	3-Fair	
1076	Oak, White	29	2-Good	3-Fair	
1077	Elm, American	6	2-Good	3-Fair	
1078	Oak, White	50	1-Excellent	3-Fair	
1079	Elm, American	8	5-Dead	5-Dead	
1080	Elm, American	10	2-Good	3-Fair	
1081	Elm, American	10	2-Good	3-Fair	
1082	Hackberry	15	2-Good	3-Fair	
1083	Ash, White	10	2-Good	3-Fair	
1084	Elm, American	7	2-Good	3-Fair	
1085	Elm, American	8	3-Fair	3-Fair	
1086	Elm, American	10	3-Fair	3-Fair	
1087	Oak, White	8	2-Good	3-Fair	
1088	Elm, American	7	2-Good	3-Fair	
1089	Oak, Northern Red	32	1-Excellent	3-Fair	
1090	Elm, American	6	3-Fair	3-Fair	
1091	Ash, White	10	2-Good	3-Fair	
1092	Ash, White	11	2-Good	3-Fair	
1093	Ash, White	9	2-Good	3-Fair	
1094	Ash, White	9	2-Good	3-Fair	
1095	Ash, White	11	3-Fair	3-Fair	
1096	Ash, White	9	3-Fair	3-Fair	
1097	Elm, American	7	2-Good	3-Fair	
1098	Elm, American	7	2-Good	3-Fair	
1099	Ash, White	11	2-Good	3-Fair	
1100	Ash, White	11	2-Good	3-Fair	
1101	Basswood, American	16	3-Fair	4-Poor	
1102	Basswood, American	13	3-Fair	3-Fair	
1103	Basswood, American	13	3-Fair	3-Fair	
1104	Basswood, American	13	3-Fair	3-Fair	
1105	Basswood, American	13	3-Fair	3-Fair	
1106	Elm, American	8	3-Fair	3-Fair	
1107	Basswood, American	6	3-Fair	3-Fair	
1108	Basswood, American	7	3-Fair	3-Fair	
1109	Basswood, American	7	3-Fair	3-Fair	
1110	Basswood, American	7	3-Fair	3-Fair	
1111	Maple, Sugar	10	3-Fair	3-Fair	
1112	Basswood, American	10	3-Fair	3-Fair	
1113	Basswood, American	7	3-Fair	3-Fair	
1114	Oak, Northern Red	16	3-Fair	3-Fair	
1115	Basswood, American	9	3-Fair	3-Fair	
1116	Oak, Northern Red	11	3-Fair	3-Fair	
1117	Oak, Northern Red	10	3-Fair	3-Fair	
1118	Basswood, American	10	3-Fair	3-Fair	
1119	Basswood, American	6	3-Fair	3-Fair	
1120	Maple, Sugar	12	3-Fair	3-Fair	
1121	Oak, White	27	2-Good	3-Fair	
1122	Oak, Black	24	4-Poor	3-Fair	
1123	Elm, American	9	3-Fair	3-Fair	
1124	Oak, White	24	2-Good	3-Fair	
1125	Maple, Sugar	12	3-Fair	3-Fair	
1126	Elm, American	15	2-Good	2-Good	
1127	Elm, American	9	3-Fair	3-Fair	
1128	Maple, Sugar	7	3-Fair	3-Fair	
1129	Maple, Sugar	7	3-Fair	3-Fair	
1130	Maple, Sugar	7	3-Fair	3-Fair	
1131	Maple, Sugar	7	3-Fair	3-Fair	
1132	Maple, Sugar	7	3-Fair	3-Fair	
1133	Maple, Sugar	8	3-Fair	3-Fair	
1134	Oak, Northern Red	8	3-Fair	3-Fair	
1135	Maple, Sugar	7	3-Fair	3-Fair	
1136	Oak, Northern Red	6	4-Poor	3-Fair	
1137	Basswood, American	7	2-Good	2-Good	
1138	Basswood, American	7	2-Good	2-Good	
1139	Elm, American	8	2-Good	2-Good	
1140	Maple, Sugar	6	3-Fair	3-Fair	
1141	Basswood, American	11	5-Dead	5-Dead	
1142	Oak, Northern Red	9	4-Poor	3-Fair	
1143	Oak, Northern Red	16	4-Poor	3-Fair	
1144	Basswood, American	7	3-Fair	3-Fair	
1145	Oak, Northern Red	15	3-Fair	3-Fair	
1146	Oak, Northern Red	12	3-Fair	2-Good	
1147	Basswood, American	7	3-Fair	2-Good	
1148	Oak, Northern Red	27	2-Good	2-Good	
1149	Elm, American	11	2-Good	2-Good	
1150	Elm, American	7	3-Fair	2-Good	
1151	Oak, Northern Red	10	2-Good	2-Good	
1152	Maple, Sugar	7	2-Good	2-Good	
1153	Hickory, Bitternut	7	2-Good	2-Good	
1154	Ash, White	7	2-Good	2-Good	
1155	Elm, American	6	2-Good	2-Good	
1156	Elm, American	8	2-Good	2-Good	
1158	Ash, White	24	2-Good	2-Good	
1157	Ash, White	24	2-Good	3-Fair	
1159	Ash, White	15	3-Fair	3-Fair	
1160	Ash, White	10	3-Fair	3-Fair	
1161	Ash, White	19	2-Good	3-Fair	
1162	Ash, White	8	3-Fair	3-Fair	
1163	Maple, Sugar	6	3-Fair	3-Fair	
1164	Maple, Sugar	6	3-Fair	3-Fair	
1165	Maple, Sugar	7	3-Fair	3-Fair	
1166	Maple, Sugar	9	3-Fair	3-Fair	
1168	Oak, White	34	2-Good	3-Fair	
1167	Oak, White	9	3-Fair	3-Fair	
1169	Basswood, American	9	4-Poor	3-Fair	
1170	Elm, American	7	4-Poor	4-Poor	
1171	Oak, Northern Red	24	4-Poor	3-Fair	
1172	Maple, Sugar	8	2-Good	2-Good	
1173	Elm, American	7	3-Fair	3-Fair	
1174	Oak, White	23	2-Good	3-Fair	
1175	Basswood, American	13	3-Fair	3-Fair	
1176	Oak, White	23	2-Good	3-Fair	
1177	Maple, Sugar	8	3-Fair	2-Good	
1178	Oak, White	25	2-Good	2-Good	
1179	Basswood, American	8	3-Fair	2-Good	
1180	Maple, Sugar	8	3-Fair	2-Good	
1181	Elm, American	8	5-Dead	5-Dead	
1182	Oak, White	29	2-Good	3-Fair	
1183	Elm, American	15	3-Fair	3-Fair	
1184	Hickory, Bitternut	7	3-Fair	3-Fair	
1185	Basswood, American	8	3-Fair	3-Fair	
1186	Oak, White	33	2-Good	3-Fair	
1187	Elm, American	6	3-Fair	3-Fair	
1188	Elm, American	8	3-Fair	3-Fair	
1189	Elm, American	6	3-Fair	3-Fair	
1190	Elm, American	8	3-Fair	3-Fair	
1191	Elm, American	8	3-Fair	3-Fair	
1192	Elm, American	8	3-Fair	3-Fair	
1193	Elm, American	8	3-Fair	3-Fair	
1194	Oak, Northern Red	21	2-Good	2-Good	
1195	Oak, White	33	2-Good	2-Good	
1196	Maple, Sugar	6	3-Fair	2-Good	
1197	Maple, Sugar	8	3-Fair	3-Fair	
1198	Basswood, American	15	3-Fair	3-Fair	
1199	Hickory, Bitternut	6	3-Fair	3-Fair	
1200	Elm, American	8	4-Poor	5-Dead	
1201	Elm, American	10	5-Dead	5-Dead	
1202	Elm, American	15	2-Good	2-Good	
1203	Maple, Sugar	6	2-Good	2-Good	
1204	Maple, Sugar	7	2-Good	2-Good	
1205	Hickory, Bitternut	12	2-Good	2-Good	
1206	Hickory, Bitternut	8	2-Good	2-Good	
1207	Elm, American	6	5-Dead	5-Dead	
1208	Oak, White	29	2-Good	2-Good	
1209	Basswood, American	7	2-Good	2-Good	
1210	Basswood, American	9	2-Good	2-Good	
1211	Basswood, American	11	2-Good	2-Good	
1212	Basswood, American	9	2-Good	2-Good	
1213	Elm, American	10	5-Dead	5-Dead	

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TREE SURVEY B

SHEET

75

OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/29/2021 10:24 AM

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Removals
1212	Basswood, American	9	2-Good	2-Good	
1213	Elm, American	10	5-Dead	5-Dead	
1214	Elm, American	7	5-Dead	5-Dead	
1215	Oak, Bur	41	1-Excellent	2-Good	
1216	Ash, White	8	2-Good	2-Good	
1217	Ash, White	8	2-Good	2-Good	
1218	Elm, American	8	3-Fair	3-Fair	
1219	Elm, American	9	5-Dead	5-Dead	
1220	Oak, Bur	29	2-Good	2-Good	
1221	Oak, Bur	34	1-Excellent	2-Good	
1222	Elm, American	7	5-Dead	5-Dead	
1223	Elm, American	10	3-Fair	3-Fair	
1224	Elm, American	6	3-Fair	3-Fair	
1225	Elm, American	6	5-Dead	5-Dead	
1226	Elm, American	6	3-Fair	3-Fair	
1227	Oak, White	29	2-Good	3-Fair	
1228	Basswood, American	13	3-Fair	3-Fair	
1229	Basswood, American	21	2-Good	3-Fair	
1230	Basswood, American	9	3-Fair	3-Fair	
1231	Hackberry	6	3-Fair	3-Fair	
1232	Oak, Northern Red	12	3-Fair	3-Fair	
1233	Ash, White	13	3-Fair	3-Fair	
1234	Maple, Sugar	9	3-Fair	3-Fair	
1235	Maple, Sugar	13	3-Fair	3-Fair	
1236	Hackberry	20	2-Good	3-Fair	
1237	Elm, American	16	5-Dead	3-Fair	
1238	Maple, Sugar	7	3-Fair	3-Fair	
1239	Hackberry	14	3-Fair	3-Fair	
1240	Maple, Sugar	24	2-Good	3-Fair	
1241	Maple, Sugar	6	3-Fair	3-Fair	
1242	Maple, Sugar	10	3-Fair	3-Fair	
1243	Elm, American	8	5-Dead	5-Dead	
1244	Maple, Sugar	7	3-Fair	3-Fair	
1245	Maple, Sugar	6	3-Fair	3-Fair	
1246	Oak, White	20	2-Good	3-Fair	
1247	Maple, Sugar	10	3-Fair	3-Fair	
1248	Maple, Sugar	10	3-Fair	3-Fair	
1249	Oak, White	15	3-Fair	3-Fair	
1250	Maple, Sugar	7	3-Fair	3-Fair	
1251	Maple, Sugar	7	3-Fair	3-Fair	
1252	Maple, Sugar	8	3-Fair	3-Fair	
1253	Maple, Sugar	10	3-Fair	3-Fair	
1254	Oak, Northern Red	14	3-Fair	3-Fair	
1255	Oak, White	19	2-Good	3-Fair	
1256	Maple, Sugar	8	3-Fair	3-Fair	
1257	Elm, American	10	5-Dead	5-Dead	
1258	Maple, Sugar	7	3-Fair	3-Fair	
1259	Maple, Sugar	7	3-Fair	3-Fair	
1260	Maple, Sugar	7	3-Fair	3-Fair	
1261	Hackberry	10	3-Fair	3-Fair	
1262	Maple, Sugar	10	3-Fair	3-Fair	
1263	Basswood, American	6	3-Fair	3-Fair	
1264	Oak, White	21	2-Good	3-Fair	
1265	Maple, Sugar	12	3-Fair	3-Fair	
1266	Maple, Sugar	9	3-Fair	3-Fair	
1267	Maple, Sugar	13	3-Fair	3-Fair	
1268	Oak, White	13	3-Fair	3-Fair	
1269	Maple, Sugar	8	3-Fair	3-Fair	
1270	Maple, Sugar	6	3-Fair	3-Fair	
1271	Oak, White	27	2-Good	3-Fair	
1272	Oak, White	16	3-Fair	3-Fair	
1273	Maple, Sugar	16	3-Fair	3-Fair	
1274	Maple, Sugar	7	3-Fair	3-Fair	
1275	Hackberry	13	3-Fair	3-Fair	
1276	Maple, Sugar	14	3-Fair	3-Fair	
1277	Maple, Sugar	7	3-Fair	3-Fair	
1278	Maple, Sugar	7	3-Fair	3-Fair	
1279	Maple, Sugar	19	2-Good	3-Fair	
1280	Ash, White	18	2-Good	3-Fair	
1281	Oak, White	11	3-Fair	3-Fair	X
1282	Oak, White	10	3-Fair	3-Fair	X
1283	Ash, White	15	3-Fair	3-Fair	X
1284	Maple, Sugar	13	3-Fair	3-Fair	
1285	Maple, Sugar	8	3-Fair	3-Fair	
1286	Maple, Sugar	7	3-Fair	3-Fair	
1287	Maple, Sugar	10	3-Fair	3-Fair	
1288	Maple, Sugar	7	3-Fair	3-Fair	
1289	Maple, Sugar	7	3-Fair	3-Fair	
1290	Maple, Sugar	8	3-Fair	2-Good	
1291	Maple, Sugar	7	3-Fair	3-Fair	
1292	Maple, Sugar	8	3-Fair	3-Fair	
1293	Maple, Sugar	11	3-Fair	3-Fair	
1294	Maple, Sugar	15	3-Fair	3-Fair	
1295	Maple, Sugar	13	3-Fair	3-Fair	
1296	Maple, Sugar	6	3-Fair	3-Fair	
1297	Maple, Sugar	8	3-Fair	3-Fair	
1298	Maple, Sugar	11	3-Fair	3-Fair	
1299	Maple, Sugar	11	3-Fair	3-Fair	
1300	Maple, Sugar	13	3-Fair	3-Fair	
1301	Maple, Sugar	16	3-Fair	3-Fair	
1302	Maple, Sugar	11	3-Fair	3-Fair	
1303	Oak, White	25	2-Good	3-Fair	
1304	Ash, White	6	3-Fair	3-Fair	
1305	Maple, Sugar	9	3-Fair	3-Fair	
1306	Maple, Sugar	6	3-Fair	3-Fair	
1307	Maple, Sugar	8	3-Fair	3-Fair	
1308	Maple, Sugar	6	3-Fair	3-Fair	
1309	Ironwood	20	2-Good	3-Fair	
1310	Elm, American	21	2-Good	3-Fair	
1311	Oak, White	13	3-Fair	3-Fair	
1312	Elm, American	14	3-Fair	3-Fair	
1313	Oak, White	18	2-Good	3-Fair	
1314	Elm, American	15	3-Fair	3-Fair	
1315	Oak, White	15	3-Fair	3-Fair	
1316	Maple, Sugar	7	3-Fair	3-Fair	
1317	Maple, Sugar	13	3-Fair	3-Fair	
1318	Oak, Northern Red	15	3-Fair	3-Fair	
1319	Maple, Sugar	6	3-Fair	3-Fair	
1320	Maple, Sugar	9	3-Fair	3-Fair	
1321	Maple, Sugar	13	3-Fair	3-Fair	
1322	Maple, Sugar	9	3-Fair	3-Fair	
1323	Maple, Sugar	8	3-Fair	3-Fair	
1324	Maple, Sugar	8	3-Fair	3-Fair	
1325	Maple, Sugar	9	3-Fair	3-Fair	
1326	Oak, Northern Red	20	2-Good	3-Fair	
1327	Oak, Northern Red	11	3-Fair	3-Fair	
1328	Maple, Sugar	17	3-Fair	3-Fair	
1329	Maple, Sugar	6	3-Fair	3-Fair	
1330	Oak, Northern Red	26	2-Good	3-Fair	
1331	Oak, Northern Red	13	3-Fair	3-Fair	
1332	Maple, Sugar	9	5-Dead	5-Dead	
1333	Maple, Sugar	8	5-Dead	5-Dead	
1334	Maple, Sugar	9	3-Fair	3-Fair	
1335	Elm, American	10	3-Fair	4-Poor	
1336	Ash, White	6	3-Fair	3-Fair	
1337	Ash, White	6	3-Fair	3-Fair	
1338	Ash, White	9	3-Fair	3-Fair	
1339	Ash, White	12	3-Fair	3-Fair	
1340	Ash, White	12	3-Fair	3-Fair	
1341	Ash, White	11	3-Fair	3-Fair	
1342	Ash, White	29	2-Good	3-Fair	
1344	Elm, American	13	3-Fair	3-Fair	
1343	Ash, White	29	2-Good	3-Fair	
1345	Elm, American	7	3-Fair	3-Fair	
1346	Ash, White	9	3-Fair	3-Fair	X
1347	Elm, American	11	3-Fair	3-Fair	X
1348	Ash, White	12	3-Fair	3-Fair	X
1349	Ash, White	10	3-Fair	3-Fair	X
1350	Ash, White	9	3-Fair	3-Fair	X
1351	Ash, White	26	2-Good	3-Fair	X
1352	Maple, Sugar	9	3-Fair	3-Fair	X
1353	Ash, White	16	3-Fair	3-Fair	X
1354	Hickory, Bitternut	8	3-Fair	3-Fair	X
1355	Ash, White	9	3-Fair	3-Fair	
1356	Maple, Sugar	7	3-Fair	3-Fair	
1357	Elm, American	17	3-Fair	3-Fair	
1358	Oak, White	8	3-Fair	3-Fair	
1359	Oak, White	32	2-Good	3-Fair	
1360	Ash, White	8	3-Fair	3-Fair	
1361	Maple, Sugar	6	3-Fair	3-Fair	
1362	Ash, White	7	3-Fair	3-Fair	
1363	Ash, White	7	3-Fair	3-Fair	
1364	Ash, White	11	3-Fair	3-Fair	X
1365	Ash, White	14	3-Fair	3-Fair	X
1366	Ash, White	7	3-Fair	3-Fair	X
1367	Ash, White	12	3-Fair	3-Fair	X
1368	Ash, White	11	3-Fair	3-Fair	X
1369	Ash, White	11	3-Fair	3-Fair	X
1370	Elm, American	8	3-Fair	3-Fair	X
1371	Oak, Northern Red	17	3-Fair	3-Fair	X
1372	Oak, Northern Red	15	3-Fair	3-Fair	X
1373	Maple, Sugar	12	3-Fair	3-Fair	X
1374	Maple, Sugar	11	3-Fair	3-Fair	X
1375	Ash, White	8	3-Fair	3-Fair	X
1376	Hackberry	12	3-Fair	3-Fair	X
1377	Hackberry	17	3-Fair	3-Fair	X
1378	Hackberry	7	3-Fair	3-Fair	X
1379	Ash, White	6	3-Fair	3-Fair	X
1380	Boxelder	10	3-Fair	3-Fair	X
1381	Elm, American	8	5-Dead	5-Dead	X
1382	Ash, White	7	3-Fair	3-Fair	X
1383	Ash, White	7	3-Fair	3-Fair	X
1384	Boxelder	9	3-Fair	3-Fair	X
1385	Ash, White	13	3-Fair	3-Fair	
1386	Hickory, Bitternut	6	3-Fair	3-Fair	
1387	Ash, White	20	2-Good	3-Fair	
1388	Ash, White	11	3-Fair	3-Fair	
1389	Maple, Sugar	10	3-Fair	3-Fair	X
1390	Elm, American	7	5-Dead	5-Dead	X
1391	Ash, White	13	3-Fair	3-Fair	
1392	Ash, White	8	3-Fair	3-Fair	
1393	Ash, White	8	3-Fair	3-Fair	
1394	Ash, White	10	3-Fair	3-Fair	
1395	Ash, White	8	3-Fair	3-Fair	
1396	Hackberry	13	3-Fair	3-Fair	
1397	Maple, Sugar	8	3-Fair	3-Fair	
1398	Maple, Sugar	8	3-Fair	3-Fair	
1399	Oak, Northern Red	8	3-Fair	3-Fair	
1400	Oak, White	23	2-Good	3-Fair	
1401	Oak, White	22	2-Good	3-Fair	
1402	Oak, Northern Red	10	3-Fair	3-Fair	
1403	Oak, White	33	2-Good	3-Fair	
1404	Oak, White	39	2-Good	3-Fair	
1405	Boxelder	8	3-Fair	3-Fair	
1406	Maple, Sugar	10	3-Fair	3-Fair	
1407	Maple, Sugar	6	3-Fair	3-Fair	
1408	Ash, White	6	3-Fair	3-Fair	
1409	Oak, Northern Red	25	2-Good	3-Fair	X
1410	Elm, American	7	3-Fair	3-Fair	
1411	Ash, White	9	3-Fair	3-Fair	
1412	Cherry, Black	9	3-Fair	3-Fair	
1413	Maple, Sugar	7	3-Fair	3-Fair	
1414	Maple, Sugar	7	3-Fair	3-Fair	
1415	Maple, Sugar	7	3-Fair	3-Fair	
1416	Maple, Sugar	9	4-Poor	3-Fair	
1417	Elm, American	6	3-Fair	3-Fair	
1418	Oak, White	37	2-Good	3-Fair	
1419	Elm, American	8	3-Fair	3-Fair	
1420	Elm, American	7	3-Fair	3-Fair	
1421	Elm, American	10	3-Fair	3-Fair	
1422	Oak, White	36	2-Good	3-Fair	
1423	Elm, American	10	5-Dead	5-Dead	
1424	Elm, American	10	3-Fair	3-Fair	
1425	Elm, American	14	3-Fair	3-Fair	
1426	Elm, American	13	3-Fair	3-Fair	
1427	Ash, White	14	3-Fair	3-Fair	
1428	Elm, American	7	3-Fair	3-Fair	
1429	Ash, White	11	3-Fair	3-Fair	
1430	Ash, White	7	3-Fair	3-Fair	
1431	Oak, White	30	2-Good	3-Fair	
1432	Ash, White	20	2-Good	3-Fair	
1433	Maple, Sugar	10	3-Fair	3-Fair	

TREE PRESERVATION SUMMARY

722 SURVEYED TREES MEETING ORDINANCE THRESHOLD
139 TOTAL PROPOSED REMOVALS

SIGNIFICANT TREES
262 TOTAL
46 PROPOSED REMOVAL, 7 OF WHICH ARE DEAD

ISG

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JERREMY D. FOSS

DATE _____ LIC. NO. 55871

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PROJECT

LENNAR

RESERVE AT AUTUMN WOODS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY
1/27/22	CITY COMMENTS	JRS

PROJECT NO.	21-24984
FILE NAME	24984 TREE PRES
DRAWN BY	JRS
DESIGNED BY	JRS
REVIEWED BY	JDF
ORIGINAL ISSUE DATE	01/03/22
CLIENT PROJECT NO.	-

TITLE

TREE SURVEY C

SHEET

76 OF 76

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 12/29/2021 10:24 AM

City of Chaska
Memorandum

To: **Planning Commission**
From: **Matt Clark**
Date: **April 13, 2022**
Subject: **Reserve at Autumn Woods Final Plat**

The items discussed with the Council for the development are being accounted for with the development site plans. The City will be taking the lead with coordinating the intersection improvements associated with the Butternut intersection and reaching out to the neighbors this spring to better refine the options with the existing median and turn lane/signal improvements.

ONE CITY HALL PLAZA/CHASKA, MN 55318-1962/PH: (952) 448-2851/ FX: (952) 448-9300

REQUEST FOR ACTION
CHASKA PLANNING COMMISION
04/13/2022

Subject: **Cantissimo of Chaska - 32 Unit Assisted Living and Memory Care Building – Preliminary Site & Building Plan, Preliminary Plat & Rezoning**

Applicant: Anasazi Holdings, LLC

Location: Southeast corner of Hundertmark Road and Pioneer Trail

Case No.: P.C. No. 2022-01

Synopsis: The applicant is requesting approval of the preliminary plan for a new 32-unit assisted living and memory care building

Prepared By: Elizabeth Hanson

Staff Recommendation: Recommend approval of the request

BACKGROUND

In May and July of 2000, the Pioneer Pointe development was fully approved. This development is directly south of the subject property (also known as the former Fred Molnau parcel) being looked at tonight. During the 2000 Pioneer Pointe approvals Fred Molnau's 2.7-acre property was referenced. Mr. Molnau decided to hold off on developing his parcel with Pioneer Pointe as his desires were to rezone the parcel to Commercial. At that time staff indicated that they are not in support of such rezoning and that the parcel should remain residential based on its size, configuration, and the City's Comprehensive Plan that guides it to be residential.

In March 2019, a different Concept Plan (Hazel View Senior Cooperative) was approved for a four-story, 37-unit senior Co-op building on this site. This plan never came in for subsequent approvals and has since been abandoned.

In April 2021, the Concept Plan for Cantissimo was approved.

Comparison to Former Hazel View Concept Plan

Use: Hazel View was a Senior Cooperative apartment building for people 62 years and older; the new use is proposing an assisted living and memory care facility.

Units: Hazel View proposed 37 total residential units; this new use is proposing 32 units with 38 residents.

Size: Hazel View proposed 4 stories and approximately 68,000 square feet in size. An underground parking lot was also proposed, which required more excavation to take place

on the site; this new use will be one story and approximately 22,000 square feet in size. No underground parking is proposed.

Parking: Hazel View proposed 50 total parking space (30 underground and 20 above ground); the new use proposes to have only an above ground parking lot with 25 spaces.

Tree Preservation: Hazel View proposed to save 25 of the 35 trees identified by staff for tree preservation; this new use is showing to preserve 28 of the 35 trees.

Changes Since Concept Plan

Alignment of Driveway Access: the alignment of the access into the site has moved southerly to align with Super Target's access to the west. This was advised by City and County staff. In order to achieve this alignment the site has to secure an easement from the Pioneer Pointe development to the south. Pioneer Pointe has provided approval of such easement. A designated southbound left-turn lane on Hundertmark Road will also be installed so that there is efficient traffic flow into the site.

Goals

CHASKA'S HIGH QUALITY OF LIFE IS ENHANCED – This project provides a low impact development on the 2.7-acre site by maintaining most of the site in its natural state providing open spaces and environmental preservation. This will allow the residents to enjoy these open spaces as well as the public with the adjusted walking trail along Pioneer Trail.

WELL PLANNED AND ORDERLY COMMUNITY DEVELOPMENT IS A PRIORITY – This new development will have a positive impact to the community in providing much needed senior housing options. The project sits adjacent to an existing townhome development and therefore consistent with the land use contemplated for the area. The infrastructure is already in place, thus allowing a cost-effective development for the City and its shareholders.

A SENSE OF COMMUNITY AND SMALL TOWN TALUES ARE MAINTAINED – This project will certainly provide an emphasis on family, neighborhood, and integration. It integrates along with townhome development to the South, as well as single family development to the West. The Chaska High School is near to the East and supports many public activities as well as a local meeting space for local church services. This will allow active participation in civic, religious, and other volunteer activities given its proximity to these amenities.

COMMITMENT TO EXCELLENCE – We believe that Cantissimo of Chaska will bolster this commitment. Our Development team has an excellent track record in providing a high-quality development and shares the same desire and vision of excellence that the city of Chaska possesses.

ZONING & COMPREHENSIVE PLAN
Currently, the site is zoned Planned Residential District (PRD-38). The Comprehensive Plan guides this parcel to be Medium Density Residential. The use that is being proposed is consistent with this guidance.

EXISTING CONDITIONS
The site is located on the southeast corner of Hundertmark Road and Pioneer Trail. It is a 2.7 acre triangular parcel with a scattering of significant trees. The site is currently vacant, and was a remnant of the Pioneer Pointe development. There are two bituminous public trails on the property; one on the northern portion of the site that runs parallel with Pioneer Trail, and one on the west side that runs parallel with Hundertmark Road. There also exists a drainage swale that runs north-south that splits the property in half.

CURRENT REQUEST
The applicant, Anasazi Holdings, LLC, is requesting Preliminary Site & Building Plan, Preliminary Plat and Rezoning approval for the construction of an assisted living and memory care building totaling 32 units (38 residents), 22,000 square feet in size, and one-story in height.

Adjacent properties
The new building's site is bounded on the south by the residential development Pioneer Pointe; the north by Pioneer Trail and a City trail; the east by Pioneer Trail; and the west by Hundertmark Road and a City trail.

Site Layout
The one-story building and parking are situated mainly on the western side of the site, due in part to the narrow shape of the site and the fact that the eastern end has very little buildable room. One access point is proposed on the west edge of the site to connect into Hundertmark Road. This ingress/egress will provide access to the surface parking lot. The parking lot is proposed on the southern portion of the site with the building just north of that. Two patio spaces are proposed on the north and east sides of the site.

The applicant has stated that several layouts were reviewed for the placement of the building and parking area. As the access from Hundertmark Road will be the only access and its location limited to the southern-most point of the property, it only made sense to place the parking lot on the south side with the building just north of that so that impervious surface was minimized to its greatest extent. The applicant also explored the potential in creating a two-story versus one-story building to lessen the building footprint on the site. However, the building was ultimately decided as a one-story for the following reasons according to the applicant:

1. It is considered desirable for the residents to live in a one-story building. We feel that residents will be more comfortable in a one-story where all the living is on one level rather than dealing with stairs and an elevator to get around their living environment.
2. A one-story building would be less obtrusive to the neighborhood to the South as well as to the intersection of Pioneer Trail and Hundertmark Road.

3. Instead of 32 units, we would need 44-48 units for a two-story building. This increase would be necessary because a two-story building will be more expensive to build and operate. This is a result of a code requirement that a two-story building be constructed of steel and concrete rather than wood, two sets of stairwells would be required to meet code, an elevator would be required to meet code and additional staff would be needed to cover two different floor levels.
4. The increase in units would require an increase in parking and traffic. The increase of 25 parking spaces to 32 means an increase in parking lot cover of approximately 2200 square feet. This increase in parking and traffic would be less desirable with the curved access point at the Southwest tip of the property.
5. While the bigger footprint will impact more trees, the actual loss of trees is less than the previous concept recommended for approval because of the bigger excavation area due to the proposed sub-garage of the previous project. Our concept is of slab on grade construction with minimal excavation. Please refer to Exhibit A on sheet A1.2.
6. The one-story with less units falls more in line with the Chaska Mission Statement: to be the 'Best Small Town in Minnesota'.

Overall, staff is generally favorable of the site layout. There are not many options for this site and the applicant has made decisions that seem to make the most sense. Providing more of a separation between the senior building and townhome buildings to the south seems most appropriate. The building will be the main focus on the intersection of Hundertmark Road and Pioneer Trail rather than the parking lot, which staff is favorable of. The building and layout will be less intrusive from a tree preservation and height perspective compared to the previously approved Concept Plan for Hazel View. It will be important, however, that there is an adequate buffer and screen between the parking lot and residential to the south.

Building Design

The building is a subtle u-shape in footprint and will be one-story tall with the front entrance facing the south towards the parking lot. The footprint is meant to provide interest and form to the site while allowing adequate sight lines near the intersection of Hundertmark Road and Pioneer Trail. The proposed building will be constructed with lap and shake siding, stone, glass, and have a pitched roof. The City of Chaska has certain building design and material requirements for multi-family residential buildings. A portion of it is stated as follows:

"Multi-family buildings shall use at least three (3) Class I materials and shall be composed of at least eighty (80) percent Class I materials, and no more than five (5) percent Class III materials

Building Materials	
Class I	Glass, stone, LP siding (shakes and board & batten) (100%)
Class II	Not provided
Class III	Not provided

CLASS I REQUIRED	80%; three different materials
CLASS III REQUIRED	Shall not exceed 5%
CLASS I PROVIDED	100%; three different materials
CLASS III PROVIDED	None

The applicant is showing that they are meeting the building requirements for Multi-Family. An item of note is the stone to be used. In order to be classified as a Class I material, the stone needs to be natural stone. The applicant will need to provide a physical sample of such for staff to make a full determination.

The applicant has provided a couple renderings/drawings of the building. The building's exterior appearance appears to show a well-balanced application of materials and depth. Given that this building will have high visibility on all of its sides, staff would advise that 360 degree architecture is achieved throughout the building. In addition to that, the building will have to show how it fits into the context of Chaska.

Setbacks
The required setbacks for the site are as follows:

BUILDING SETBACKS	
Direction	**Setback**
Hundertmark Road	100 feet from centerline
Pioneer Trail	125 feet from centerline
South Property Line	20 feet
PARKING SETBACKS	
Direction	**Setback**
ROW	10 feet
South Property Line	10 feet

This setback variance request was also made during the Hazel View concept plan. Staff's analysis was generally the same as stated above. However, the proposed site plan for Cantissimo provides less impact compared to Hazel View's from a parking, height, and tree preservation perspective. The added 20 foot building setback on the south property line thus pushes the building closer to Pioneer Trail, so their request to deviate 25 feet into the Pioneer Trail setback appears to be an even trade-off.

<u>100' versus 125' Building Setback from Centerline of Pioneer Trail</u>
The applicant is asking for a reduction in the Pioneer Trail setback to be 100 feet from the centerline (25 foot variance) so that there is more usable space on the property. Their building is proposing to meet a 100' centerline setback. The property is tight to begin with because of its shape. In essence, half of the property is unbuildable with

setbacks applied. Because this property is not a part of the Pioneer Pointe development there is an additional building setback from the south property line (20 feet), which in turn, creates less buildable room. The applicant is showing the building to be roughly 28 feet off the southern property line to make room for the parking lot. Staff's main concern with the reduction is the safety component and whether there will be adequate sight lines at the corner of Hundertmark Road and Pioneer Trail. Because of the placement and shape of the building, the site does not appear to pose a sight line concern.

A logical analysis is flipping the building and the parking lot so that the building can meet setbacks. The developer did explore this and has provided an analysis and exhibit in their submittal. In general, flipping the building and parking would create more impervious surface and more impacts on trees. The flip would also require the building to be reshaped to be more rectangular to fit into the setbacks. 12 additional trees would be removed with this flipped layout; 9 of those are considered significant.

The driveway access requires to be placed southerly to align with Super Target's access on Hundertmark Road. With that in mind, the parking lot was oriented on the south of the site to be closer to the access point and have less of an impervious footprint. The building is oriented just north of that.

From staff's standpoint the irregular shape of the lot and the preservation of significant trees are grounds for a variation from the setback. The developer has chosen a layout that would appear to be the most logical and least impactful to justify the proposed variation.

Parking/Access/Circulation/Traffic

24 parking spaces are proposed as a part of this project. The following chart summarizes the overall parking demand on the site, based on the approximated sizes of the conceptual uses.

Uses	Approx. Size	Code Req.	Est. Parking Req.
Multi-Family Res. - Senior	32 dwelling units	1ps/2 dwelling units	16 parking spaces
		REQUIRED	**16 parking spaces**
		PROVIDED	**24 parking spaces**

According to this table the applicant is meeting the required amount of parking spaces needed for the proposed use of the site. The applicant has stated that they will have 12 employees total, and with the addition of guests coming into the facility the parking will be more than sufficient to serve the use. The residents of the facility will not be driving nor have cars. The parking lot is situated on the south side of the site facing Pioneer Pointe to the south. The applicant is showing a 6 foot privacy fence to provide separation between the parking lot/driveway access and Pioneer Pointe to the south.

The access into the site will be from one ingress/egress on Hundertmark Road. The access is shown to encroach onto Pioneer Pointe's property to the south so that the

driveway can completely align with Super Target's access to the west. This was required by both City and County staff to provide proper traffic movement into and out of the site. Pioneer Pointe has approved an easement so that this alignment can occur. In addition, a dedicated left-turn lane is also shown on Hundertmark Road to access the site. This turn lane is required in order for proper traffic movements to occur.

It should be noted that when the Pioneer Pointe development went in the three driveways on its northern edge were stubbed off for the purpose of connecting into the site to north of it (this subject site) when it decided to develop. However, this was done so that the same type of development (Townhomes) could extend onto this site. That is not the case with this proposal. With that said, the HOA of Pioneer Pointe have previously denied the ability to connect to their site as they do not want the additional traffic added to their development; this was stated during the Hazel View concept plan. An access point off of Pioneer Trail was also explored in previous submittals, however, Carver County has also denied the opportunity of gaining access on their road. Because of this the applicant has proposed to gain access off of Hundertmark Road.

A traffic analysis was completed for this site. The traffic analysis concluded that layout and use of the site will operate adequately.

Pedestrian Connections

The site currently has two public trails that transcend through the site; one on the west side that runs parallel with Hundertmark Road; one on the north side that runs parallel with Pioneer Trail. The applicant is showing in their plan connecting to both trail networks. The east side of the building shows a sidewalk connection from the building and parking lot that connects into the Pioneer Trail trail. The west side of the building also shows a sidewalk connection from the building and parking lot that connects into the Hundertmark Road trail.

It should be noted that the traffic study done for Hazel View recommends that a pedestrian connection at the site access should not be provided across Hundertmark Road to connect into Super Target's access. This is primarily due to the unsafe connection it creates; the oversaturation of connections across Hundertmark are the main reasons for unsafety. The study recommends that pedestrians use the existing pedestrian connection at the Pioneer Trail and Hundertmark Road intersection to connect into Super Target as opposed to creating another connection at the new access point into Cantissimo.

The applicant is showing the re-alignment of the public trail on the north side of the site. Currently the trail meanders through the site. This was done intentionally to help preserve trees on site. Staff has looked into this more and have determined that this is an acceptable re-alignment. There is currently a drainage issue in this area that will ultimately have to be fixed with this project. Because of this the trees will be disrupted regardless. Having the trail closer to the road, while still providing an adequate buffer, is the most ideal option from a City perspective. Additionally, the trees that are to be disrupted are mainly cottonwoods and box elders, which are not necessarily the most desirable in saving.

Tree Preservation & Landscaping

Tree Preservation will be important on this site. There are significant clusters of trees that exist. The applicant has provided a tree survey to indicate where these trees are located. A majority are located on the western half of the site where the building and parking lot are going. Other clusters exist on the eastern half, which are proposed to be preserved. There is also a cluster of trees on the western-most side of the site that are generally proposed to be preserved as well. There is a cluster on the north side of the site that are shown to be effected by the proposed re-alignment of the public trail. As iterated before, this re-alignment is acceptable by staff given the trees to be effected are not considered desirable. Staff provided an analysis that highlighted specific areas to focus tree preservation attention on. That exhibit is shown below and circles 35 total trees in red. Staff advised to preserve the areas to the greatest extent possible on the west, north and east sides as shown in the exhibit in red.



The Cantissimo plan proposes to preserve 28 of the 35 trees. The layout of the building and parking lot were done intentionally to preserve as many trees as possible. From staff's perspective the developer has done an exceptional job in trying to preserve as many trees as possible.

The table below indicates the landscaping requirements for this site:

LANDSCAPING REQUIREMENTS & PROPOSED		
	Required	**Proposed**
Overstory Trees	70 caliper inches (26 trees)	trees; 37 existing and 36 new
Understory Trees	7	16
Shrubs	227	227

According to the table above the applicant is meeting the landscape requirements for the site.

Landscaping will be achieved around the site particularly on the south edge adjacent to the privacy fence and Pioneer Pointe. There are also a healthy grouping of plantings around the sidewalk and patio areas.

Usable Open Space

Multi-Family residential building sites are required to provide sufficient, usable open space, which is defined as defined as "a portion of a lot which provides the purpose for outdoor recreation, scenic amenity, and/or shared exterior space for people to gather and use".

The applicant is currently showing two outdoor patio spaces; one on the north side and one on the east side. Most of the residents occupying this building cannot be outside on their own so the enclosed patio space on the north side will be a nice exterior setting that is safe and secure. The east patio will be another option for residents who do not require as much overwatch. Sidewalks will also connect these spaces to the outlying trail systems.

Lighting

Any lighting proposed for this plan should be fully screened and face downward. The applicant has shown in this preliminary submittal the photometrics and specs for all lighting proposed. 18 foot pole mounts will be used in the parking lot, and 12 foot wall mounts will be used on the building.

Utilities

Water and sewer are available to serve this site.

Stormwater

The applicant will work with the City to determine the drainage necessities for the site. The applicant is showing an underground biofiltration basin on the east side of the site.

Impact to Public Safety

Because this facility is a residential facility specializing in medical care, the City likes to get an understanding of the medical services provided internally (ie. lift assist and CPR) to see if there will be a major impact to the City's emergency services (Fire and Police). The applicant has provided an addendum in their narrative to elaborate on the services they provide. In sum, the City's Fire Department was generally comfortable with the services and policies they have in place to deal with emergency situations.

Preliminary Plat

The site will be platted into one lot. There are no outlots.

Rezoning

The site is being rezoned from Rural (R) to Planned Residential District No. 83 (PRD-83).

Deadline for Agency Action

The City of Chaska received the complete application for this request on March 21, 2022. Pursuant to Minnesota State Statutes the City must act on this request by **Friday, May 20, 2022 (60 days)**, unless the City provides the petitioner with written reasons for an additional 60-day review period. The additional review period would extend to Tuesday,

July 19, 2022. The City may with the petitioner's consent extend the review period beyond the Tuesday, July 19, 2022 date. Lastly, if the City denies the petitioners request "… it must state in writing the reasons for the denial at the time it denies the request."

PLANNING COMMISSION ACTION REQUESTED:

Motion to recommend approval to the City Council of the Preliminary Site & Building Plan and Preliminary Plat for Cantissimo of Chaska, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Narrative (pgs 1-8), submitted by TCO Design, dated December 14, 2021, February 28, 2022 and March 21, 2022.**
    b. **Traffic Analysis Memo (pgs 1-12), submitted by Swing Traffic Solutions, dated November 4, 2021**
    c. **Existing Conditions Plan, submitted by Premier Land Surveying, dated May 23, 2018**
    d. **Boundary & Topographic Survey, submitted by Premier Land Surveying, dated May 17, 2017**
    e. **Previous Concept Excavation Area Plan (pg A1.2), submitted by Jim Mackey Architect, dated December 7, 2021**
    f. **Aerial Site Exhibit, submitted by Jim Mackey Architect, dated December 7, 2021**
    g. **Context Map/Site Influences (pg A1.4), submitted by Jim Mackey Architect, dated December 7, 2021**
    h. **Site Plan (pg A1.1), submitted by Jim Mackey Architect, dated March 21, 2022**
    i. **Landscape Plan (pg A1.2), submitted by Jim Mackey Architect, dated March 22, 2022**
    j. **Lighting Plan (pg A1.3), submitted by Jim Mackey Architect, dated March 22, 2022**
    k. **Building South 100' Setback Exhibit (pg A1.8), submitted by Jim Mackey Architect, dated March 21, 2022**
    l. **Firetruck Turning Movements, submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    m. **Preliminary Plat, submitted by Demarc Land Surveying & Engineering, dated March 29, 2022**
    n. **Preliminary Title Sheet (pg C1), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    o. **Preliminary Details (pg C2-C5), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    p. **Preliminary Existing Conditions & Removals (pg C6), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    q. **Preliminary Site Plan (pg C7), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    r. **Preliminary Grading & Drainage Plan (pg C8), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    s. **Preliminary Utility Plan (pg C9), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    t. **Preliminary Stormwater Pollution Prevention Plan (pg C10), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**
    u. **Preliminary Stormwater Pollution Prevention Plan Notes, (pg C11), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022**

v. **Building Floor Plan (pg A2.1), submitted by Jim Mackey Architect, dated December 7, 2021**
w. **Exterior Elevations (pg A3.1), submitted by Jim Mackey Architect, dated December 7, 2021**
x. **Renderings (pg A3.2), submitted by Jim Mackey Architect, dated December 7, 2021**

2. **Coordination with the City Engineer with regard to utilities, grading and drainage.**
3. **Installation of all site lighting at a 0 degree angle with the light source fully concealed at the property line.**
4. **Provision that all facades provide 360 degree architecture.**
5. **Utilization of natural stone as a Class I material.**
6. **No exterior storage will be permitted.**
7. **Provision of hydrant placement needs to accommodate City standards for hydrant placement and fire code standards.**
8. **Provision to submit Utility and Site Plan As-Builts prior to a certificate of occupancy being issued.**
9. **Any and all building signage shall be submitted separately, meet the sign ordinance, and shall obtain sign permits prior to installation.**
10. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
11. **Compliance with applicable zoning requirements, in particular Chapter 15.28 (Special Regulations).**
12. **Provision that all mechanical equipment will be fully screened from view.**
13. **Adherence with the Engineers Memo dated April 13, 2022.**
14. **Adherence with Carver County Public Work's memo dated March 29, 2021 and updated April 1, 2022.**
15. **Provision of a southbound left turn lane on Hundertmark Road consistent with Carver County and City standards.**
16. **Provision of an engineered plan of the southbound left turn lane on Hundertmark Road to be shown on the final plans.**
17. **Provision that a cross access easement be completed and executed on Pioneer Pointe's site prior to final plat recording.**

Motion to recommend approval of the rezoning from PRD-38 to Planned Residential District No. 83. (PRD-83).

City of Chaska
Memorandum

To: **Planning Commission**
From: **Matt Clark, City Engineer**
Date: **April 13, 2022**
Subject: **Cantissimo of Chaska – Assisted Living Preliminary Plat**

The concept plan development of the new site proposes a new senior living facility building and parking lot along with site amenities. The site plan proposes a full access onto Hundertmark which will provide a new southbound left turn lane. Hundertmark and Pioneer Trail are regional and local collector roads that require agency design standards are met with approvals. An engineered plan that outlines the improvements is needed with the final plans. With the berm that exists along Hundertmark, the new entrance will need to be evaluated to ensure proper sight lines can be accommodated.

From a storm water perspective, a stormwater management plan along with a grading and drainage plan is required. The grading plan must meet both the City and watershed requirements prior to grading occurring. The utility plans will need to be coordinated with staff. The site improvements need to accommodate appropriate drainage and utility easements to remain unrestricted.

ONE CITY HALL PLAZA/CHASKA, MN 55318-1962/PH: (952) 448-2851/ FX: (952) 448-9300

CITY OF CHASKA

ORDINANCE NO. xxxx

MOTION BY COUNCILMEMBER _____, SECOND BY COUNCILMEMBER _____

AN ORDINANCE AMENDING ORDINANCE NO. 229 (ZONING ORDINANCE) BY REZONING CERTAIN REAL ESTATE WITHIN THE CITY OF CHASKA FROM PRD-38 TO PRD-83 AND BY ESTABLISHING PERMITTED USES AND REGULATIONS FOR PRD-83 (CANTISSIMO)

THE CITY COUNCIL OF THE CITY OF CHASKA DO ORDAIN:

Section I. Rezoning. The boundaries of the Zoning District as established by Ordinance No. 229 and as shown on the Zoning Map of Chaska, Minnesota are hereby amended as follows:

The following described real estate is hereby removed from the Planned Residential District (PRD-38) zoning district and rezoned to Planned Residential District No. 83 (PRD-83) for all of Block 1 of the Anasazi Holdings, Carver County, Minnesota.

The following graphic exhibits shall serve as the general guide for development of the Anasazi Holdings (Cantissimo) area:

1. Traffic Analysis Memo (pgs 1-12), submitted by Swing Traffic Solutions, dated November 4, 2021
2. Existing Conditions Plan, submitted by Premier Land Surveying, dated May 23, 2018
3. Boundary & Topographic Survey, submitted by Premier Land Surveying, dated May 17, 2017
4. Previous Concept Excavation Area Plan (pg A1.2), submitted by Jim Mackey Architect, dated December 7, 2021
5. Aerial Site Exhibit, submitted by Jim Mackey Architect, dated December 7, 2021
6. Context Map/Site Influences (pg A1.4), submitted by Jim Mackey Architect, dated December 7, 2021
7. Site Plan (pg A1.1), submitted by Jim Mackey Architect, dated March 21, 2022
8. Landscape Plan (pg A1.2), submitted by Jim Mackey Architect, dated March 22, 2022
9. Lighting Plan (pg A1.3), submitted by Jim Mackey Architect, dated March 22, 2022
10. Building South 100' Setback Exhibit (pg A1.8), submitted by Jim Mackey Architect, dated March 21, 2022
11. Firetruck Turning Movements, submitted by Demarc Land Surveying & Engineering, dated March 22, 2022

12. Preliminary Plat, submitted by Demarc Land Surveying & Engineering, dated March 29, 2022
13. Preliminary Title Sheet (pg C1), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
14. Preliminary Details (pg C2-C5), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
15. Preliminary Existing Conditions & Removals (pg C6), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
16. Preliminary Site Plan (pg C7), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
17. Preliminary Grading & Drainage Plan (pg C8), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
18. Preliminary Utility Plan (pg C9), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
19. Preliminary Stormwater Pollution Prevention Plan (pg C10), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
20. Preliminary Stormwater Pollution Prevention Plan Notes, (pg C11), submitted by Demarc Land Surveying & Engineering, dated March 22, 2022
21. Building Floor Plan (pg A2.1), submitted by Jim Mackey Architect, dated December 7, 2021
22. Exterior Elevations (pg A3.1), submitted by Jim Mackey Architect, dated December 7, 2021
23. Renderings (pg A3.2), submitted by Jim Mackey Architect, dated December 7, 2021

Section II. **PRD-83 District regulations.** Permitted uses and regulations applicable to the PRD-83 District (Cantissimo) is hereby amended to read as follows:

A. Intent

The intent of PRD-83 is to create a residentially compatible area that is generally low traffic generating and sensitive to the existing wooded nature of the site.

B. Permitted Uses

Permitted uses shall be the following:

1. Lot 1, Block 1, Anasazi Holdings:

a) Assisted Living and Memory Care facility up to a maximum of 32 dwelling units

C. Accessory Uses

Customary accessory uses incidental to the foregoing principal use, including but not limited to the following:

1. Off street parking and loading facilities as regulated by Section 15.28.030 of the zoning ordinance.
2. Signs as regulated by Section 15.32 of the Zoning Ordinance

D. <u>Building Setbacks</u>

Minimum building setbacks shall be as follows:

1. From centerline of Hundertmark Road: 100 feet
2. From centerline of Pioneer Trail: 100 feet
3. From South Property Line: 20 feet
4. Interior Property Lines: 10 feet

Minimum parking setbacks shall be as follows:

1. From Right-of-Way (ROW): 10 feet
2. From South Property Line: 10 feet
3. Interior Property Lines: 5 feet

<u>Section III</u>. <u>Effective Date.</u> This Ordinance shall be in full force and effect from and after its date of passage, adoption, and publication according to law.

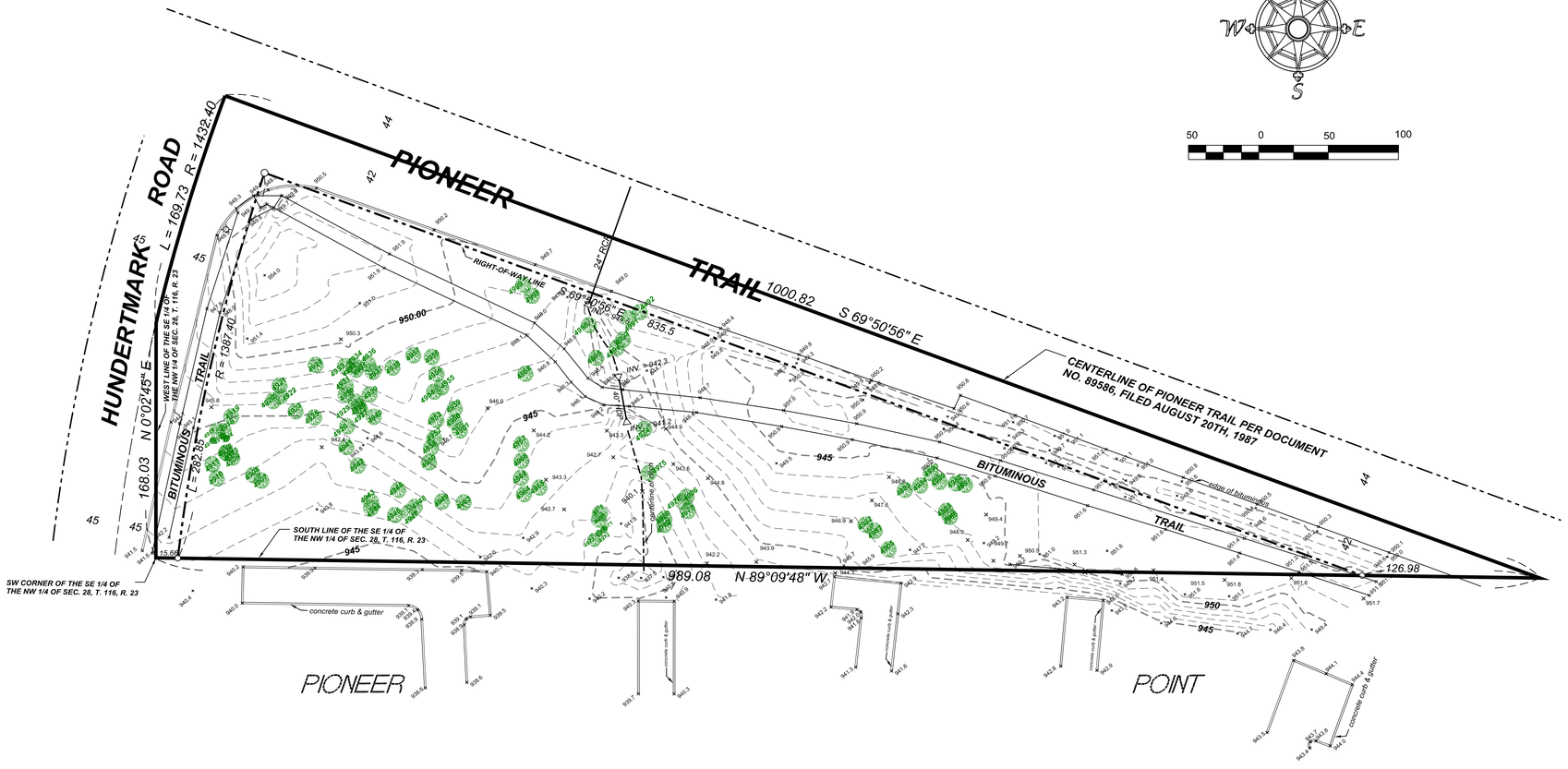
Passed and adopted by the City Council of the City of Chaska, Minnesota this 18th day of April, 2022.

_____
Mark Windschitl, Mayor

Attest:_____
Deputy Clerk

Topographic and Tree Inventory Survey

~ for ~ Lake West Development, LLC



Species List	ID	DBH	Condition	Notes
Bur oak	4999	7	8	
Hackberry	4998	7	6	
Bur oak	4996	8	5	
Eastern cottonwood	4995	25	7	
Eastern cottonwood	4994	23	7	
Box elder	4993	7	5	
Box elder	4992	10	5	
Box elder	4991	10	5	
Box elder	4990	7	5	
Hackberry	4989	11	6	
American elm	4988	23	2	Dangerous tree should be removed
Bur oak	4987	7	4	
Box elder	4986	15	3	Dangerous tree should be removed
Box elder	4985	18	2	Dangerous tree should be removed
Bur oak	4984	6	6	
Bur oak	4983	8	6	
American elm	4982	8	4	
White oak	4981	40	1	Dangerous tree should be removed
American elm	4980	10	5	
American elm	4979	13	5	
American elm	4978	7	5	
Bur oak	4976	34	5	
Box elder	4975	12	5	
Box elder	4974	12	4	
Bur oak	4973	7	4	
Bur oak	4972	42	7	
Bur oak	4971	10	4	
Bur oak	4970	7	4	
Bur oak	4969	9	4	
Bur oak	4968	33	7	
White oak	4967	6	7	
Bur oak	4966	34	5	
Eastern red cedar (junipe	4965	2	7	
Eastern red cedar (junipe	4964	2	7	
White oak	4963	7	7	
White oak	4962	7	6	
White oak	4961	9	6	
Green ash (red ash)	4960	7	7	
White oak	4959	8	6	
Box elder	4958	7	5	
American elm	4957	13	6	
American elm	4956	9	6	
American elm	4955	9	5	
Bur oak	4954	35	3	
White oak	4953	6	8	
American elm	4952	7	5	
Bur oak	4951	27	6	
Green ash (red ash)	4950	6	7	
American elm	4949	8	5	
Bur oak	4948	28	3	Dangerous tree should be removed
Bur oak	4947	22	3	Dangerous tree should be removed
American elm	4946	6	5	
American elm	4945	6	3	Dangerous tree should be removed
American elm	4944	6	4	
Bur oak	4943	28	3	
American elm	4942	7	5	
American elm	4941	7	3	Dangerous tree should be removed
Bur oak	4940	40	1	
American elm	4939	10	5	
White oak	4938	6	7	
White oak	4937	6	7	
White oak	4936	6	7	
White oak	4935	6	4	
White oak	4934	6	4	
White oak	4933	7	7	
White oak	4932	6	4	
Box elder	4931	8	5	
White oak	4930	29	2	Dangerous tree should be removed
White oak	4929	8	5	
White oak	4928	30	5	
Bur oak	4927	20	5	
Box elder	4926	7	4	
American elm	4925	6	4	
White oak	4924	6	7	
White oak	4923	53	1	Dangerous tree should be removed
White oak	4922	6	2	Dangerous tree should be removed
White oak	4921	6	2	Dangerous tree should be removed
American elm	4920	7	5	
White oak	4919	6	6	
White oak	4918	6	6	
American elm	4917	7	5	
White oak	4916	7	5	
American elm	4915	8	5	
White oak	4914	9	5	
Bur oak	4913	25	7	
Bur oak	4912	28	7	
Box elder	4911	10	5	
American elm	4910	6	4	
Bur oak	4909	26	7	
Bur oak	4908	33	0	Dangerous tree should be removed
American elm	4907	7	4	
Box elder	4906	8	4	
Hackberry	4905	7	5	

NOTE: Tree inventory data furnished by Soil Investigation & Design, INC.

LEGEND

- Spot Elevation
- Fire Hydrant
- Survey Control Point
- Set 1/2" X 14" rebar marked with cap no. 22703
- Contour Line
- Deciduous Tree

I hereby certify that this survey was prepared by me or under my direct supervision and that I am a duly licensed Professional Land Surveyor under the laws of the State of Minnesota.

Steven V. Ische — 22703 — 05/23/18

Steven V. Ische | License No. | Date

PROJ. #1577-00

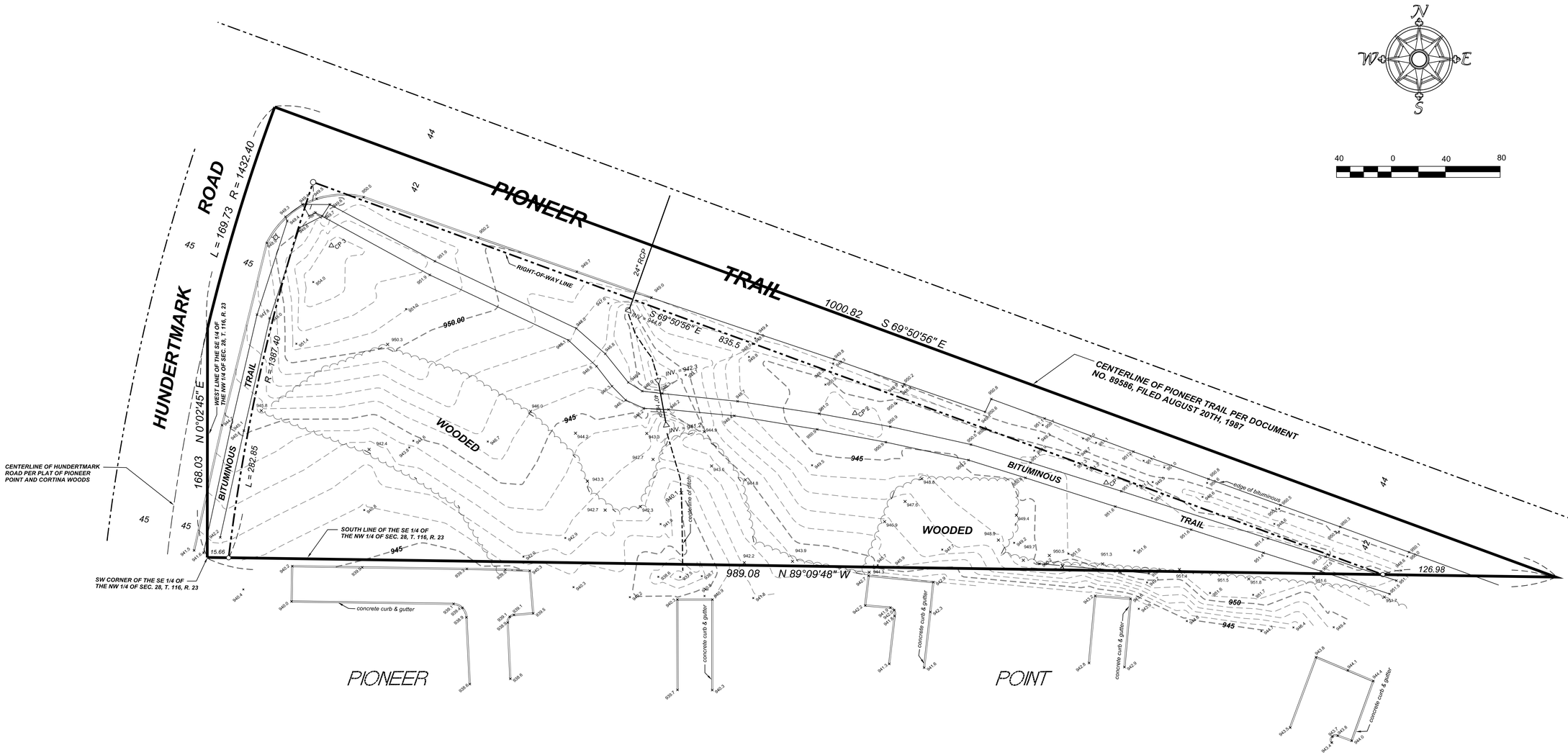
EXISTING CONDITIONS PLAN

PREMIER LAND SURVEYING, LLC

1600 Arboretum Blvd., Suite 203
Victoria, MN 55386
952-443-3010

Boundary & Topographic Survey

~ for ~ Molnau Family LLLP



LEGEND	
×	Spot Elevation
⊖	Fire Hydrant
△	Survey Control Point
○	Set 1/2" X 14" rebar marked with cap no. 22703
– – –	Contour Line

DESCRIPTION OF PROPERTY SURVEYED::

That part of the Southeast Quarter of the Northwest Quarter (SE 1/4 of NW 1/4) Section 28, Township 116, Range 23 lying southerly of the centerline of Pioneer Trail (County Road 14) and lying easterly of Hundertmark Road.

NOTE: This survey was prepared without the benefit of a title commitment. All easements of record may not be shown.

I hereby certify that this survey was prepared by me or under my direct supervision and that I am a duly licensed Professional Land Surveyor under the laws of the State of Minnesota.

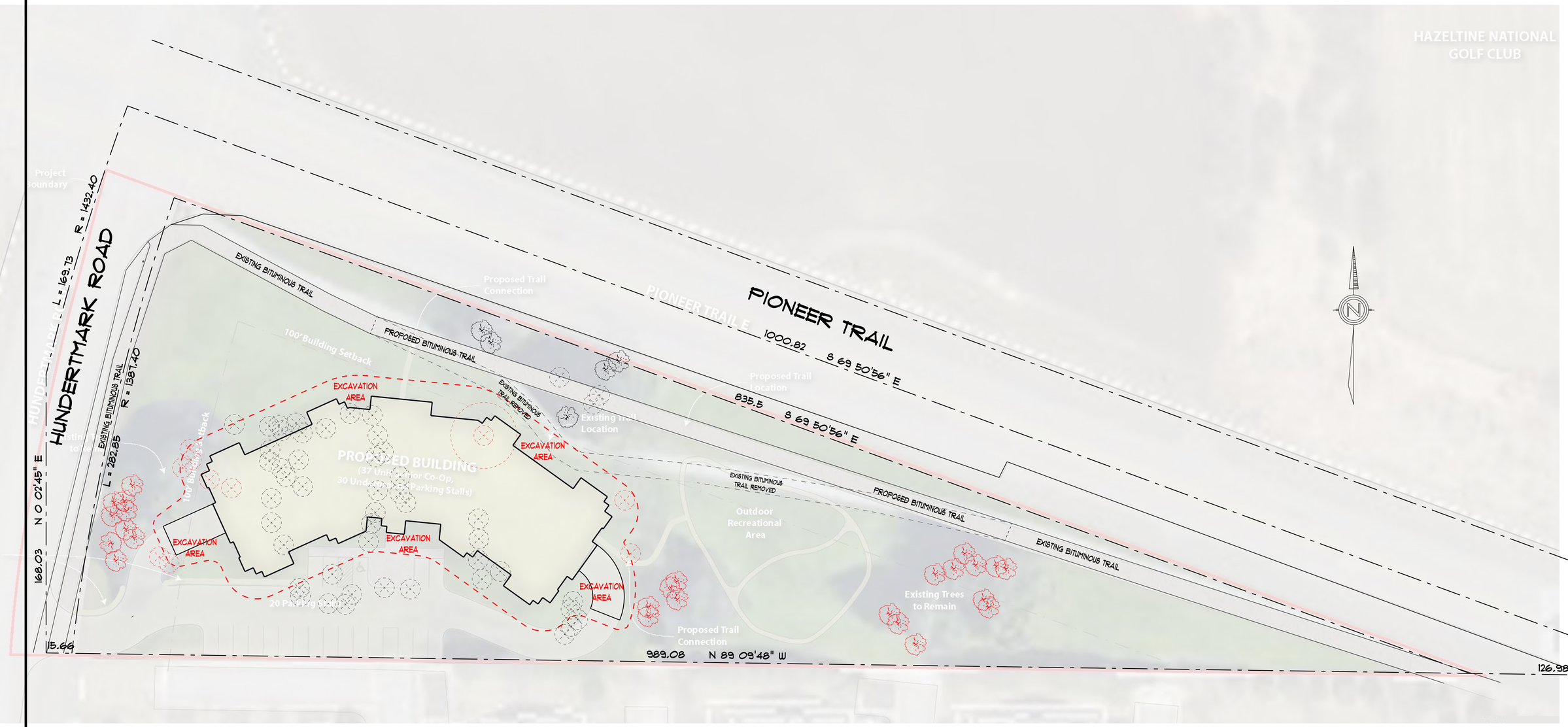
Steven V. Ische — 22703 — 05/17/17

Steven V. Ische — License No. — Date

PROJ. #1481-00

PREMIER LAND SURVEYING, LLC

1600 Arboretum Blvd., Suite 203
Victoria, MN 55386
952-443-3010



ADJACENT PROPERTY:
PIONEER POINTE
Chaska, MN 55318

NOTE:
EXISTING TREES TO REMAIN AND EXISTING TREES TO BE REMOVED SHOWN IN RED REPRESENT THE 35 TREES THAT STAFF HAS MARKED AS PREFERRIABLY PRESERVED.

1 / A1.1

PREVIOUS CONCEPT EXCAVATION AREA PLAN

SCALE 1" = 30.0'

0 5 10 15 20 30 40 50 60 80 100

SUBJECT PROPERTY:
SOUTHEAST CORNER OF PIONEER TRAIL AND HUNDERTMARK ROAD
CHASKA, MN 55318
PID# 300280330
(+2.71 ACRES, +118,048 SQ.FT.)

JIM MACKEY ARCHITECT

JIM MACKEY ARCHITECT
1723 LaFond Avenue
St. Paul, MN 55104

Jim Mackey
Office 651-644-0869

registration # 23018

Drafting by:
Todd Ofthun

Office 763-424-3676
Cell 952-934-8776

todd@tcodesign.net

Plan Date
PP APPL. 12-1-21

CANTIGNIMO OF CHASKA

PID# 300280330 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

TCO DESIGN
drafting and home design

P.O. Box 47130
Plymouth, MN 55447

dedication to excellence

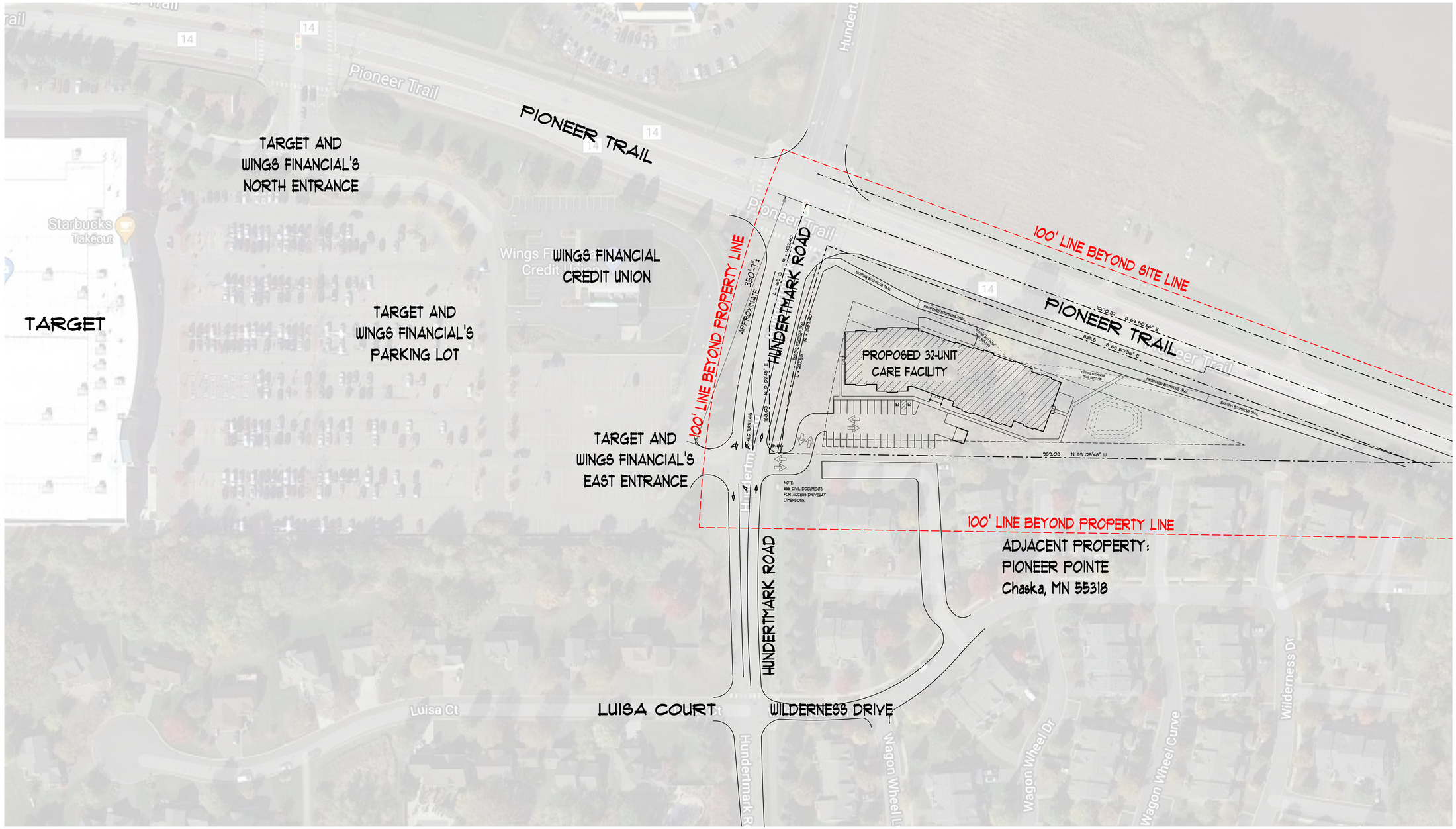
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Design #
tco202104

EXCAVATION EXHIBIT

A1.4



1 A1.3

AERIAL SITE EXHIBIT

SCALE 1" = 150.0'

0 20 40 60 80 100 150 200 300

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SOUTHEAST CORNER OF PIONEER TRAIL
AND HUNDERTMARK ROAD
CHASKA, MN 55318
PID# 300280330
(~2.71 ACRES, ~118,048 SQ.FT.)

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Plan Date
PP APPL. 12-1-21

CANTISIMO OF CHASKA
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AERIAL SITE OVERVIEW

A1.5

Context Map / Site Influences



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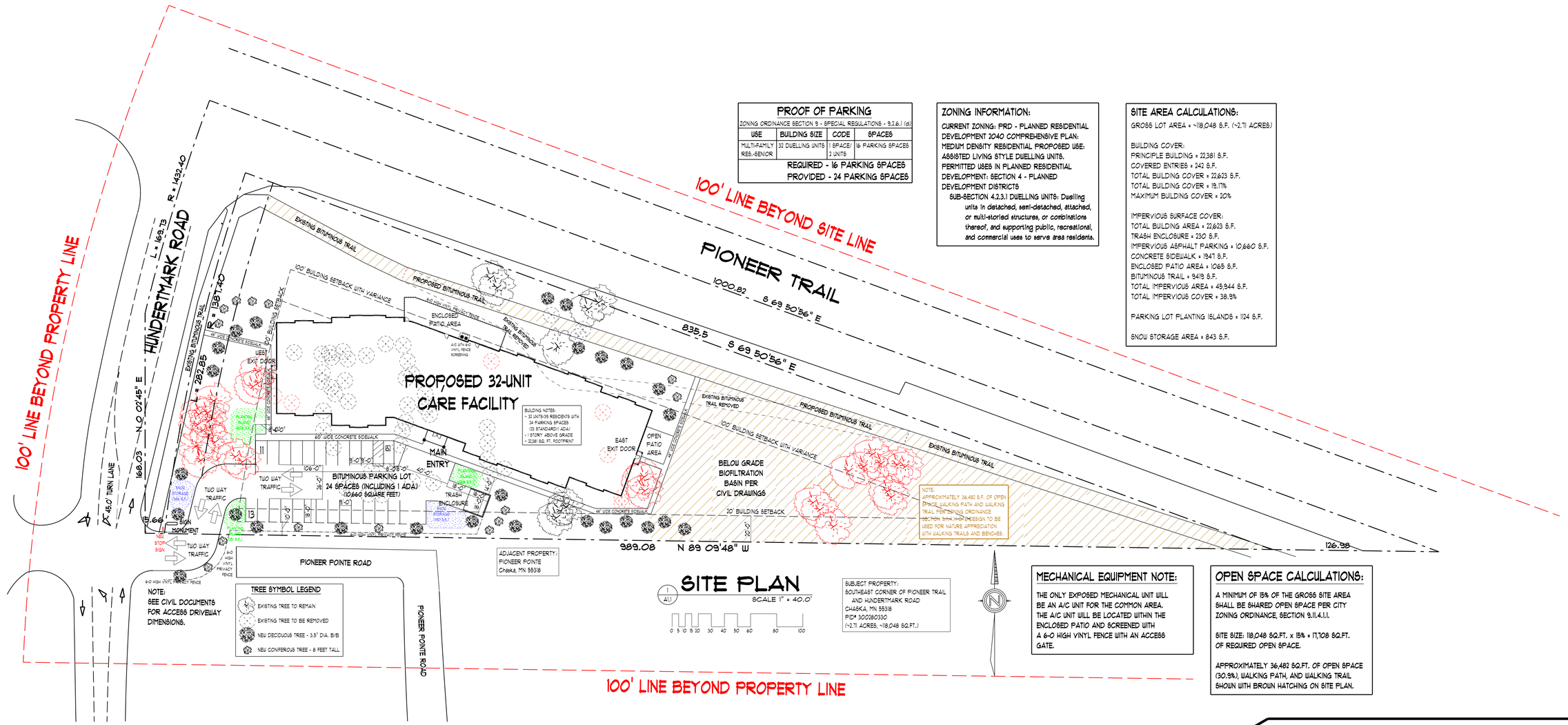
Plan Date
PP APPL. 12-1-21

CANTIGIMO OF CHASKA
PID# 3002803301 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

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Design #
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A1.6



PROOF OF PARKING

ZONING ORDINANCE SECTION 9 - SPECIAL REGULATIONS - 9.2.6.1 (d)

USE	BUILDING SIZE	CODE	SPACES
MULTI-FAMILY RES.-SENIOR	32 DWELLING UNITS	1 SPACE/ 2 UNITS	16 PARKING SPACES
		REQUIRED -	16 PARKING SPACES
		PROVIDED -	24 PARKING SPACES

ZONING INFORMATION:

CURRENT ZONING: PRD - PLANNED RESIDENTIAL DEVELOPMENT 2040 COMPREHENSIVE PLAN: MEDIUM DENSITY RESIDENTIAL PROPOSED USE: ASSISTED LIVING STYLE DWELLING UNITS. PERMITTED USES IN PLANNED RESIDENTIAL DEVELOPMENT: SECTION 4 - PLANNED DEVELOPMENT DISTRICTS

SUB-SECTION 4.2.3.1 DWELLING UNITS: Dwelling units in detached, semi-detached, attached, or multi-storied structures, or combinations thereof, and supporting public, recreational, and commercial uses to serve area residents.

SITE AREA CALCULATIONS:

GROSS LOT AREA = ~118,048 S.F. (~2.71 ACRES)

BUILDING COVER:
PRINCIPLE BUILDING = 22,381 S.F.
COVERED ENTRIES = 242 S.F.
TOTAL BUILDING COVER = 22,623 S.F.
TOTAL BUILDING COVER = 19.17%
MAXIMUM BUILDING COVER = 20%

IMPERVIOUS SURFACE COVER:
TOTAL BUILDING AREA = 22,623 S.F.
TRASH ENCLOSURE = 230 S.F.
IMPERVIOUS ASPHALT PARKING = 10,660 S.F.
CONCRETE SIDEWALK = 1947 S.F.
ENCLOSED PATIO AREA = 1065 S.F.
BITUMINOUS TRAIL = 9419 S.F.
TOTAL IMPERVIOUS AREA = 45,944 S.F.
TOTAL IMPERVIOUS COVER = 38.9%

PARKING LOT PLANTING ISLANDS = 1124 S.F.

SNOW STORAGE AREA = 843 S.F.

MECHANICAL EQUIPMENT NOTE:

THE ONLY EXPOSED MECHANICAL UNIT WILL BE AN A/C UNIT FOR THE COMMON AREA. THE A/C UNIT WILL BE LOCATED WITHIN THE ENCLOSED PATIO AND SCREENED WITH A 6-0 HIGH VINYL FENCE WITH AN ACCESS GATE.

OPEN SPACE CALCULATIONS:

A MINIMUM OF 15% OF THE GROSS SITE AREA SHALL BE SHARED OPEN SPACE PER CITY ZONING ORDINANCE, SECTION 9.11.4.1.1.

SITE SIZE: 118,048 SQ.FT. x 15% = 17,708 SQ.FT. OF REQUIRED OPEN SPACE.

APPROXIMATELY 36,482 SQ.FT. OF OPEN SPACE (30.9%), WALKING PATH, AND WALKING TRAIL SHOWN WITH BROWN HATCHING ON SITE PLAN.

SHEET INDEX:

A1.1	TITLE SHEET AND SITE PLAN
A1.2	LANDSCAPE PLAN
A1.3	LIGHTING PLAN
A1.4	EXHIBIT A - PREVIOUS CONCEPT EXCAVATION
A1.5	EXHIBIT B - AERIAL SITE EXHIBIT
A1.6	EXHIBIT C - CONTEXT MAP/SITE INFLUENCES
A1.7	EXHIBIT D - 100' VS. 125' SETBACK EXHIBIT
A1.8	EXHIBIT E - BUILDING TO SOUTH EXHIBIT
A2.1	PROPOSED BUILDING FLOOR PLAN
A3.1	PROPOSED BUILDING EXTERIOR ELEVATIONS
A3.2	PROPOSED BUILDING EXTERIOR RENDERINGS

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Jim Mackey
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registration # 23018
Drafting by:
Todd Ofthun
Office 763-424-3676
Cell 952-994-8716
todd@tcodesign.net

Plan Date
PP APPL. 1-4-22
PP APPL. 3-21-22

CANTIGGIMO OF CHASKA
PID# 300280330 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

TCO DESIGN
drafting and home design
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Plymouth, MN 55447
dedication to excellence
Prepared by:
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Office 763-424-3676
Cell 952-994-8716
todd@tcodesign.net

Design #
tco202104
SITE PLAN
A1.1

ADDITIONAL PLANTING NOTE:

ADDITIONAL PLANTING BEDS AROUND BUILDING PERIMETER TO BE PROVIDED LIKE PICTURES PROVIDED AND LANDSCAPE PLAN TO BE PROVIDED DURING PERMIT PROCESS.

ZONING INFORMATION:

CURRENT ZONING: PRD - PLANNED RESIDENTIAL DEVELOPMENT 2040 COMPREHENSIVE PLAN: MEDIUM DENSITY RESIDENTIAL PROPOSED USE: ASSISTED LIVING STYLE DWELLING UNITS. PERMITTED USES IN PLANNED RESIDENTIAL DEVELOPMENT: SECTION 4 - PLANNED DEVELOPMENT DISTRICTS

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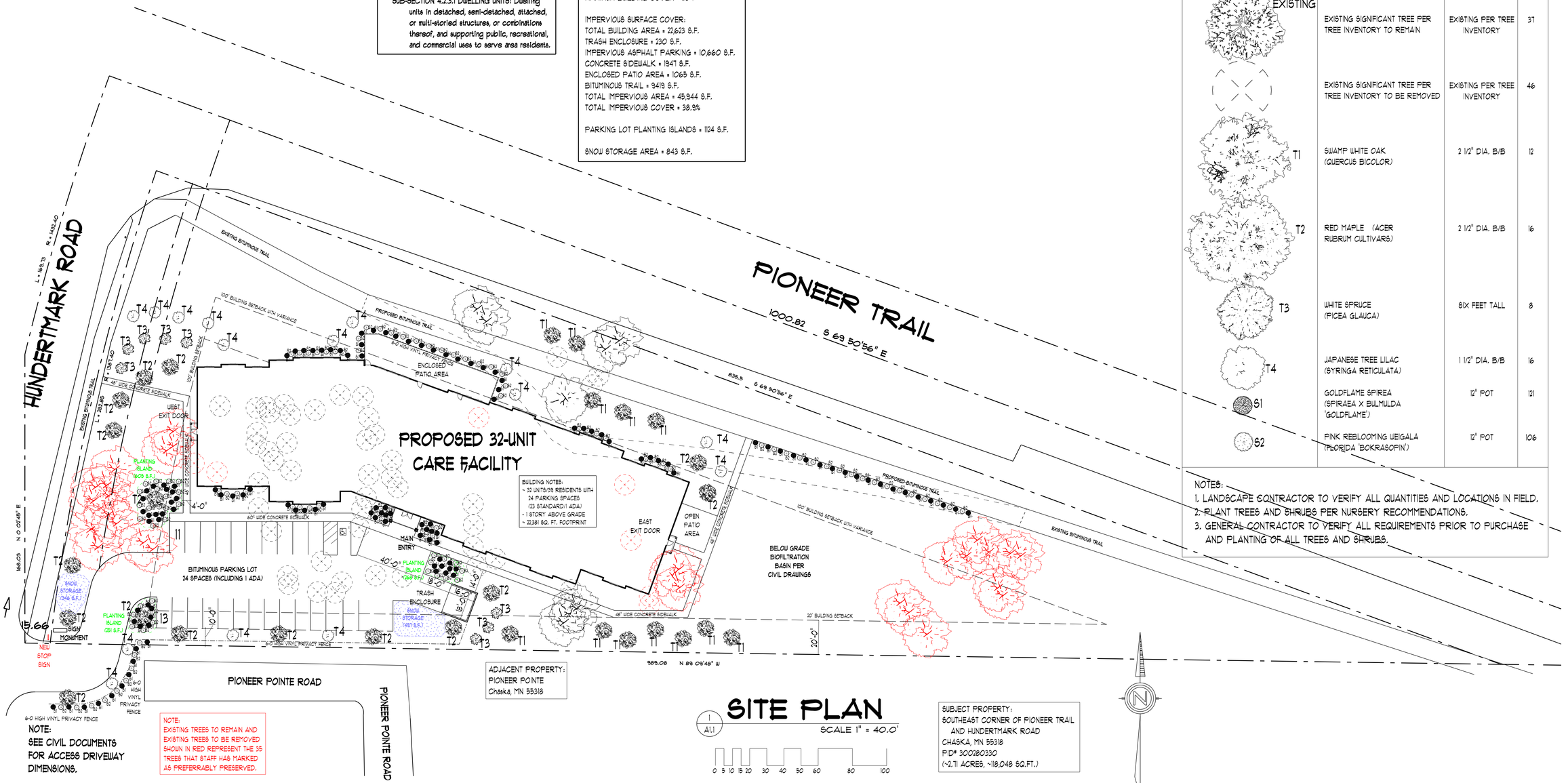
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TOTAL BUILDING COVER = 19.17%
MAXIMUM BUILDING COVER = 20%

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TOTAL BUILDING AREA = 22,623 S.F.
TRASH ENCLOSURE = 230 S.F.
IMPERVIOUS ASPHALT PARKING = 10,660 S.F.
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PARKING LOT PLANTING ISLANDS = 1124 S.F.

SNOW STORAGE AREA = 843 S.F.



NOTE:
SEE CIVIL DOCUMENTS FOR ACCESS DRIVEWAY DIMENSIONS.

NOTE:
EXISTING TREES TO REMAIN AND EXISTING TREES TO BE REMOVED SHOWN IN RED REPRESENT THE 35 TREES THAT STAFF HAS MARKED AS PREFERRABLY PRESERVED.

SITE PLAN

1 / A1.1 — SCALE 1" = 40.0'

PLANTING SCHEDULE

SYMBOL	COMMON NAME (SCIENTIFIC NAME)	SIZE/TYPE	QTY.
EXISTING	EXISTING SIGNIFICANT TREE PER TREE INVENTORY TO REMAIN	EXISTING PER TREE INVENTORY	37
	EXISTING SIGNIFICANT TREE PER TREE INVENTORY TO BE REMOVED	EXISTING PER TREE INVENTORY	46
T1	SWAMP WHITE OAK (QUERCUS BICOLOR)	2 1/2" DIA. B/B	12
T2	RED MAPLE (ACER RUBRUM CULTIVARS)	2 1/2" DIA. B/B	16
T3	WHITE SPRUCE (PICEA GLAUCA)	SIX FEET TALL	8
T4	JAPANESE TREE LILAC (SYRINGA RETICULATA)	1 1/2" DIA. B/B	16
S1	GOLDFLAME SPIREA (SPIRAEA X BULMULDA 'GOLDFLAME')	12" POT	121
S2	PINK REBLOOMING WEIGALA (FLORIDA 'BOKRASOFIN')	12" POT	106

NOTES:
1. LANDSCAPE CONTRACTOR TO VERIFY ALL QUANTITIES AND LOCATIONS IN FIELD.
2. PLANT TREES AND SHRUBS PER NURSERY RECOMMENDATIONS.
3. GENERAL CONTRACTOR TO VERIFY ALL REQUIREMENTS PRIOR TO PURCHASE AND PLANTING OF ALL TREES AND SHRUBS.

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JIM MACKEY ARCHITECT
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St. Paul, MN 55104
Jim Mackey
Office 651-644-0869
registration # 23018
Drafting by:
Todd Ofathun
Office 763-424-3676
Cell 952-994-8276
todd@todddesign.net

Plan Date
PP APPL. 12-1-21
PP APPL. 1-1-22
PP APPL. 3-22-22

CANTIGGIMO OF CHASKA
PID# 300280330 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

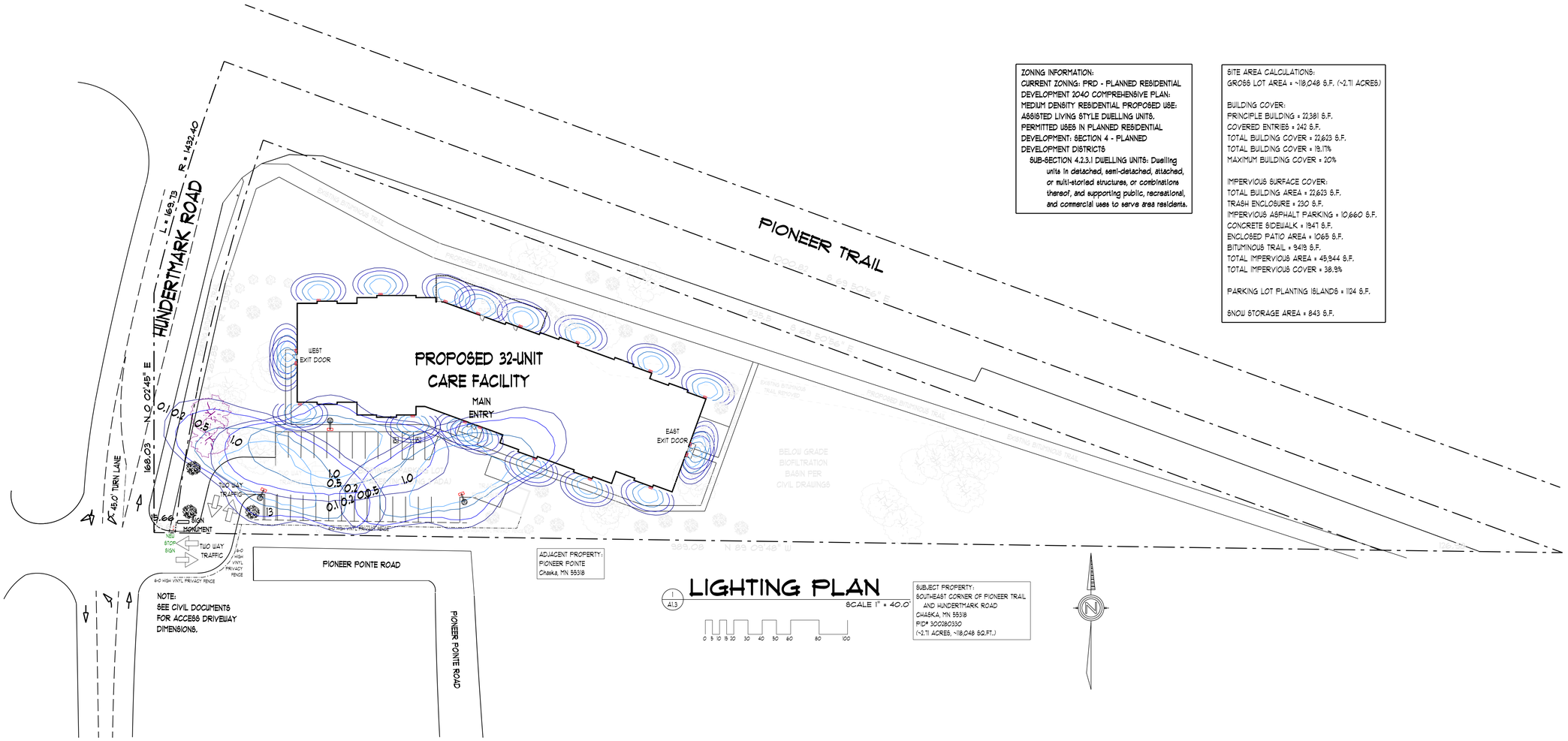
TCO DESIGN
drafting and home design
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dedication to excellence
Prepared by:
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Office 763-424-3676
Cell 952-994-8276
todd@todddesign.net

Design #
tco202104
LANDSCAPE PLAN
A1.2

LIGHTING SCHEDULE

DES.	QTY.	MANUF.	CATALOG DES.	TYPE	LIGHT RATING B	LIGHT RATING U	LIGHT RATING G	LUMENS	MOUNTING INSTRUCTIONS	DESCRIPTION
L1	9	LITHONIA LIGHTING	WST LED 2A 30K 120 DIFS	WSTM LED WALL SCONCE	B1	U0	G0	1543	WALL MOUNTED - 12" ABOVE DOOR	WSTM LED WITH 2 BOARDS, 3000K CCT, 120 VOLT, DIFFUSE GLASS LENS
L2	10	LITHONIA LIGHTING	WST LED 2A 30K 120 DIFS	WSTM LED WALL SCONCE	B1	U0	G0	1543	WALL MOUNTED - 8'-0" ABOVE GRADE	WSTM LED WITH 2 BOARDS, 3000K CCT, 120 VOLT, DIFFUSE GLASS LENS
L3	3	LITHONIA LIGHTING	KAD LED 20C 1000 30K R2 MVOLT	KAD-LED SOFT SQUARE	B2	U0	G2	6143	POLE MOUNTED - 18'-0" ABOVE GRADE	KAD LED, 20 LED, 1 AMP MVOLT DRIVER, 3000K, TYPE 2 OPTICS

NOTE: SEE LIGHTING PLAN FOR DISTANCE TO PROPERTY LINE.



NOTE:
SEE CIVIL DOCUMENTS FOR ACCESS DRIVEWAY DIMENSIONS.

ADJACENT PROPERTY:
PIONEER POINTE
Chaska, MN 55318

1 A1.3 LIGHTING PLAN
SCALE 1" = 40.0'

0 5 10 15 20 30 40 50 60 80 100

SUBJECT PROPERTY:
SOUTHEAST CORNER OF PIONEER TRAIL AND HUNDERTMARK ROAD
CHASKA, MN 55318
PID# 300280330
(~2.71 ACRES, ~118,048 SQ.FT.)

ZONING INFORMATION:
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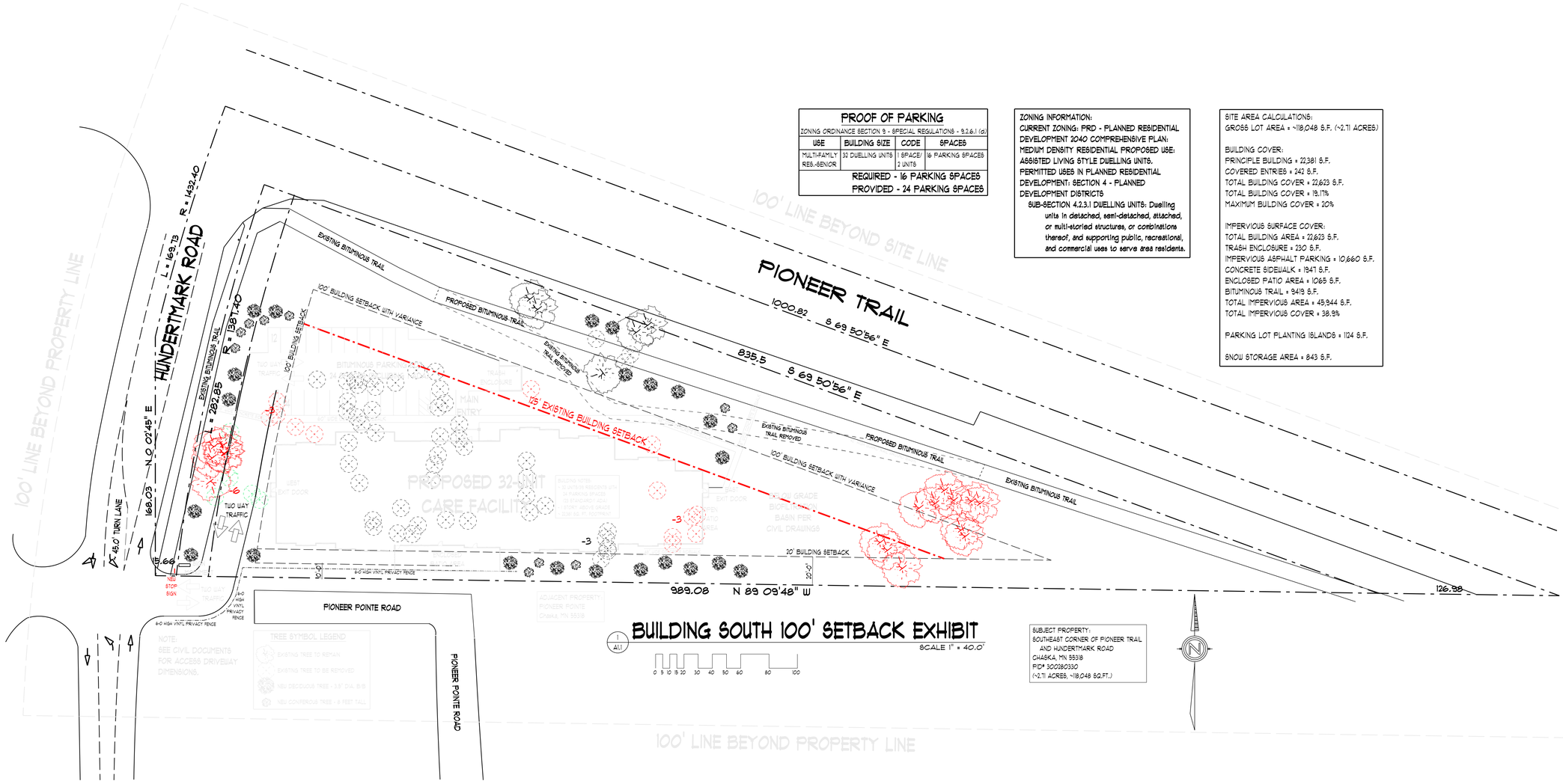
Plan Date
PP APPL. 12-4-21
PP APPL. 3-22-22

CANTIGIMO OF CHASKA
PID# 300280330 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

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A1.3



BUILDING SOUTH 100' SETBACK EXHIBIT

1 / A1.1

SCALE 1" = 40.0'

0 5 10 15 20 30 40 50 60 80 100

PROOF OF PARKING			
ZONING ORDINANCE SECTION 9 - SPECIAL REGULATIONS - 9.2.6.1 (d)			
USE	BUILDING SIZE	CODE	SPACES
MULTI-FAMILY RES.-SENIOR	32 DWELLING UNITS	1 SPACE/ 2 UNITS	16 PARKING SPACES
REQUIRED - 16 PARKING SPACES			
PROVIDED - 24 PARKING SPACES			

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Plan Date
PP APPL, 3-21-22

CANTIGNIMO OF CHASKA
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Design #
tco202104

A1.8

PIONEER TRAIL

PIONEER TRAIL

HUNDERTMARK ROAD

HUNDERTMARK ROAD

0 40 80

SCALE IN FEET

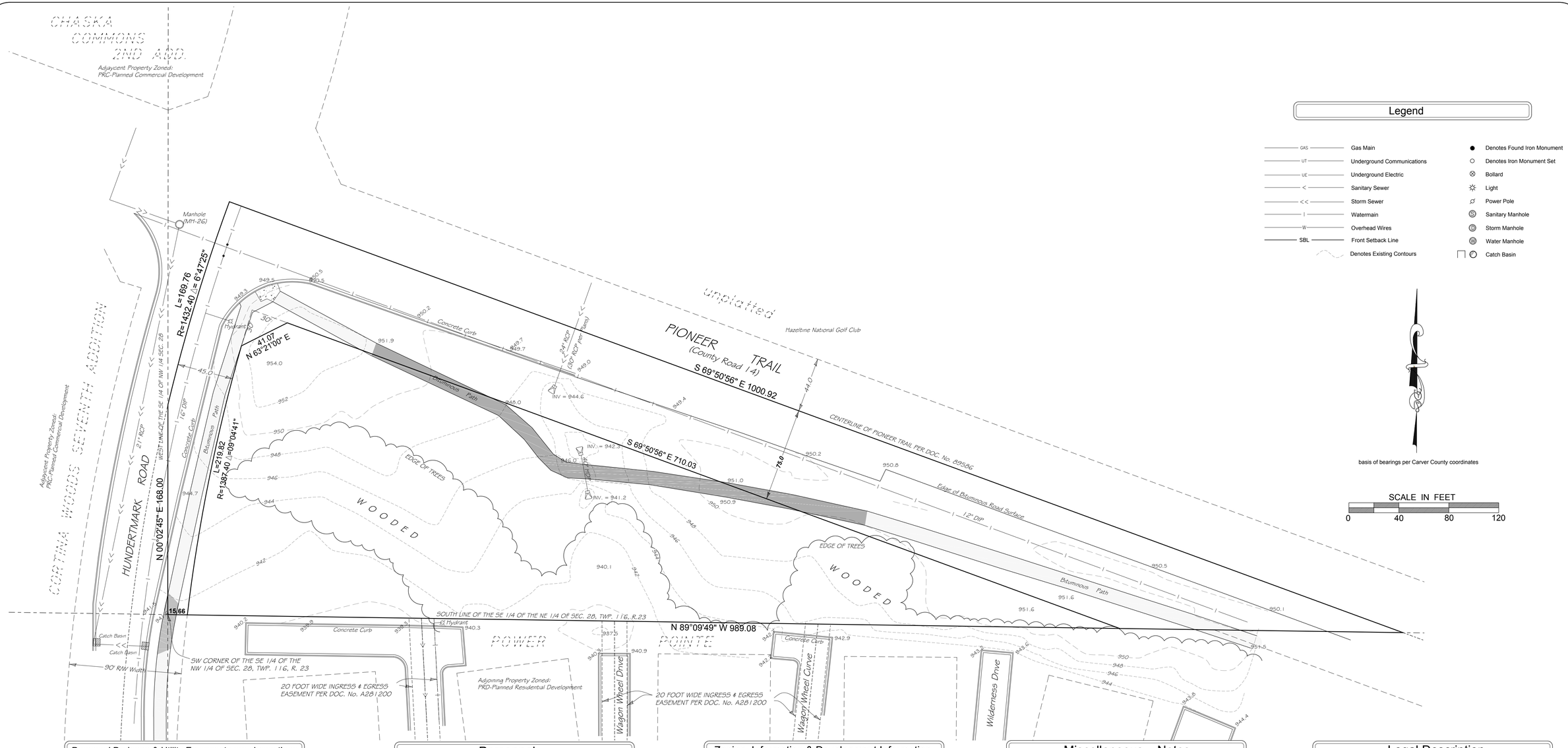
DEMARC
LAND SURVEYING & ENGINEERING

CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MN

FIRETRUCK TURNING MOVEMENTS

EXHIBIT A

03.22.2022



Legend

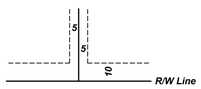
- Gas Main
- Underground Communications
- Underground Electric
- Sanitary Sewer
- Storm Sewer
- Watermain
- Overhead Wires
- Front Setback Line
- Denotes Existing Contours
- Denotes Found Iron Monument
- Denotes Iron Monument Set
- Bollard
- Light
- Power Pole
- Sanitary Manhole
- Storm Manhole
- Water Manhole
- Catch Basin

basis of bearings per Carver County coordinates

SCALE IN FEET

0 40 80 120

Proposed Drainage & Utility Easements are shown thus:



BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES AND 5 FEET IN WIDTH AND ADJOINING INTERIOR LOT LINES.

Personnel

PROPERTY OWNER

Anasazi Holdings, LLC
603 Lake Street E., Suite 206
Wayzata, MN 55391
Phone: 612-325-8377
Attn: Paul Ablack

DEVELOPER

Anasazi Holdings, LLC
603 Lake Street E., Suite 206
Wayzata, MN 55391
Phone: 612-325-8377
Attn: Paul Ablack

SURVEYOR
Demarc
Surveying and Engineering
7601 73rd Avenue N.
Brooklyn Park, MN 55428
Attn: Greg Prasch
phone: 763-560-3093
fax: 763-560-3522
e-mail: gregprasch@demarcinc.com

ENGINEER:
Demarc
Land Surveying & Engineering
7601 73rd Avenue N.
Brooklyn Park, MN 55428
phone 763-560-3093
fax 763-560-3522
Attn: Jeff Prasch
jeff prasch@dmearcinc.com

Zoning Information & Development Information

Property Currently Zoned: PRD - Planned Residential Development

Zoning Ordinance Requirements:

Building Setbacks
Building setbacks from all property lines which form the perimeter of the total property in the PRD or from all exterior dedicated street right-of-way lines shall be at least 30 feet or the height of the building, whichever is greater. Minimum spacing between principal buildings shall be 25 feet.

Refer to City code for additional requirements, exceptions and modifications.

Total Number of Proposed Lots - 1

Areas:
Lot 1, Block 1 = 91,864 sq.ft (2.11 acres)
Right of Way dedication = 76,263 sq.ft (1.75 acres)

Miscellaneous Notes

1. Property Address: unassigned address, Chaska, MN
   PID No.: 300280330
2. Total Area of Parcel = 168,127 sq. ft.
3. By graphic interpretation only, this property is in Flood Zone "X" (area of minimal flooding) per FEMA panel map number 27019C0228D dated 12/21/2018.
4. Title insurance commitment showing property description and any encumbrances of record not provided, survey subject to change.
   The only easements shown are from plats of record or information provided by client.
5. Property located in Section 28, Township 116, Range 23, Carver County, Minnesota.
6. Benchmark: Elevation information by others. No field work has been completed to verify.
7. Boundary information provided by client from previous survey. Not field verified and subject to change.

Legal Description

That part of the Southeast Quarter of the Northwest Quarter (SE 1/4 of NW 1/4) Section 28, Township 116, Range 23 lying southerly of the centerline of Pioneer Trail (County Road 14) and lying easterly of Hundertmark Road.

FIELD BY:	others
DRAWN BY:	RAG
CHECKED BY:	GRP

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed land Surveyor under the laws of the State of Minnesota.
Prepared this 28th day of December 2021.
Signed: Gregory R. Prasch Registration No. 24992

REVISION SUMMARY
3.14.2022 County comments per letter dated 3-29-22

DEMARC
LAND SURVEYING & ENGINEERING
7601 73rd Avenue North (763) 560-3093
Minneapolis, Minnesota 55428 DemarcInc.com

SURVEY FOR:
Anasazi Holdings
603 Lake Street E., Suite 206
Wayzata, MN 55391

PRELIMINARY PLAT
ANASAZI HOLDINGS

PROJECT: 89556C
FB No: ****
SHEET NO. 1 OF 1

I:\Survey\26-116-23\chaska assisted living\01 Surveying - 89556\01 CAD\01 Source\01 Survey Base.dwg

SITE DEVELOPMENT PLANS

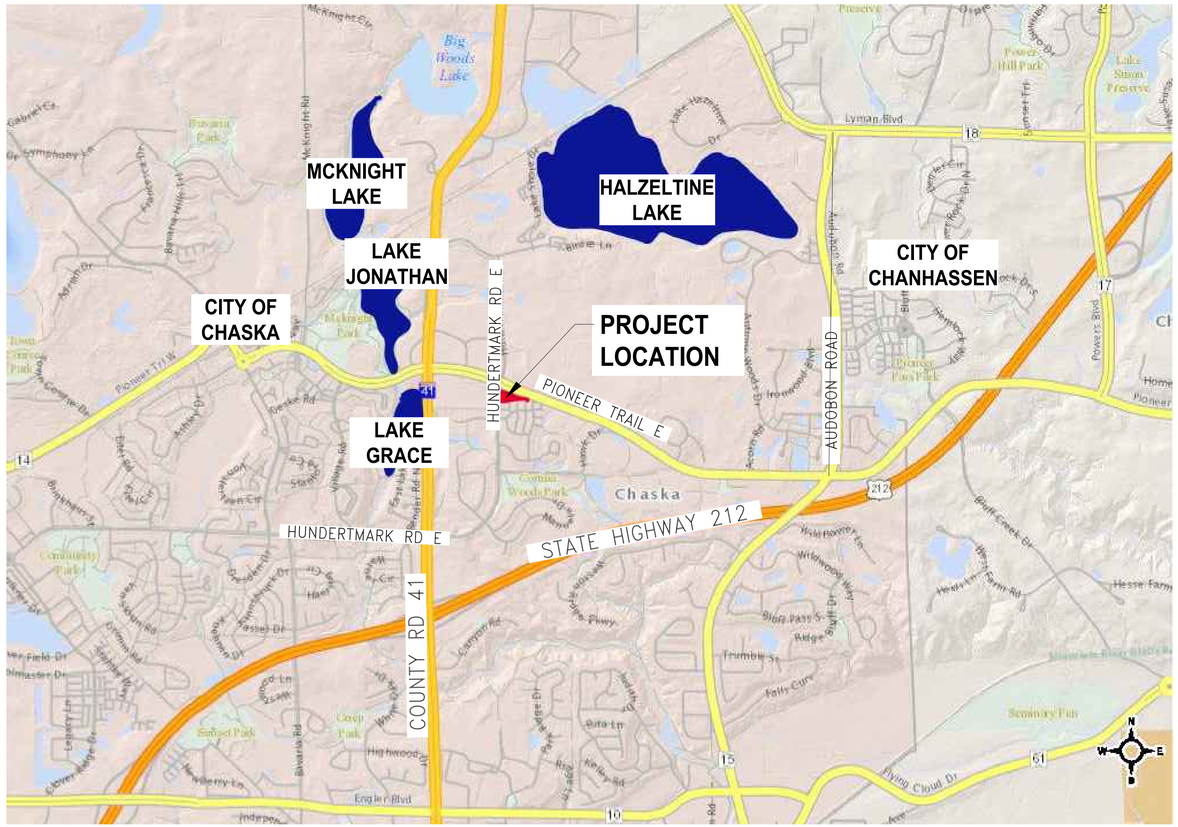
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CANTISSIMO OF CHASKA

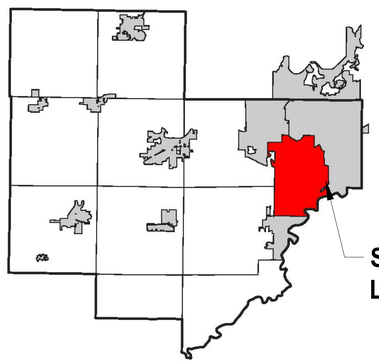
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA



CARVER COUNTY



0 1500 3000
SCALE IN FEET



CITY OF CHASKA
SECTION 28, TOWNSHIP 116, RANGE 23

SHEET INDEX

THIS PLAN CONTAINS 11 SHEETS

SHEET NO.	DESCRIPTION
C1	PRELIMINARY TITLE SHEET
C2–C4	PRELIMINARY DETAILS
C6	PRELIMINARY EXISTING CONDITIONS & REMOVALS
C7	PRELIMINARY SITE PLAN
C8	PRELIMINARY GRADING & DRAINAGE PLAN
C9	PRELIMINARY UTILITY PLAN
C10–C11	PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN

LEGEND

IMPAIRED WATERS

THE SUBSURFACE UTILITY INFORMATION DEPICTED IN THESE PLANS ARE SHOWN ACCORDING TO CI/ASCE 38-02, "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA," LEVEL D STANDARDS.

BENCHMARK: EXISTING ELEVATIONS COMPLETED BY PREMIER LAND SURVEYING AND DATED 5/17/17 REVISED 04/26/21

CALL BEFORE YOU DIG!
Gopher State One Call
Twin City Area:651-454-0002
Toll Free: 1-800-252-1166

DESIGNED BY:	JAP
DRAWN BY:	ABL
CHECKED BY:	GRP

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JEFFREY A. PRASCH, P.E.
DATE: 12.07.21 LIC. NO.: 52706

	REVISIONS
02.21.22	CITY COMMENTS
03.22.22	CITY COMMENTS

DEMARC
LAND SURVEYING & ENGINEERING
7601 73RD AVENUE N, BROOKLYN PARK, MN 55428
PHONE: 763.560.3093 FAX: 763.560.3522
www.DemarcInc.com

TCO DESIGN
P.O. BOX 41790
PLYMOUTH, MINNESOTA 55441

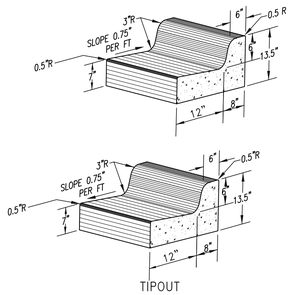
CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA

PRELIMINARY TITLE SHEET

PROJECT: 89556

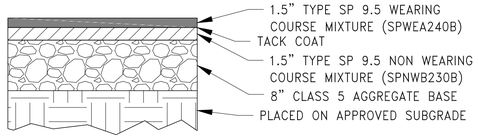
SHEET NO.
C1 OF C11

J:\survey\28-116-23\chaska assisted living\02 Engineering - 89556\01 CAD\05 Sheet Files\01 Title Sheet.dwg



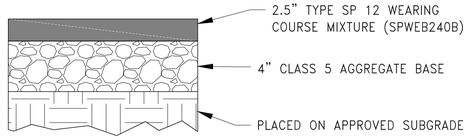
1 / C2 — B612 CURB AND GUTTER

NOT TO SCALE



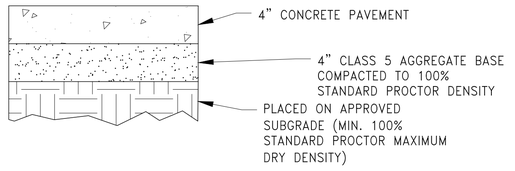
2 / C2 — BUTIMINOUS PAVEMENT

NOT TO SCALE



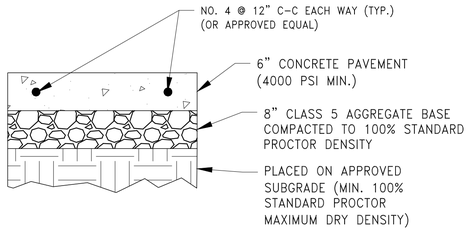
3 / C2 — BITUMINOUS PATH

NOT TO SCALE



4 / C2 — CONCRETE SIDEWALK

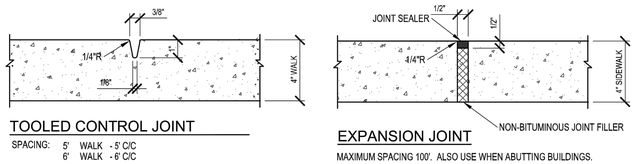
NOT TO SCALE



NOTE: CONCRETE COMPRESSIVE STRENGTH SHALL COMPLY WITH ASTM STANDARD C94. MINIMUM 28-DAY STRENGTH = 4,000 PSI

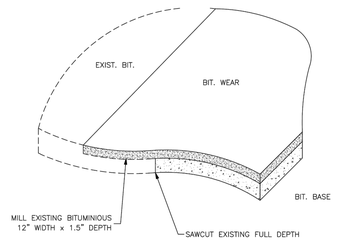
5 / C2 — CONCRETE DUMPSTER PAVEMENT

NOT TO SCALE



6 / C2 — CONCRETE JOINT DETAILS

NOT TO SCALE



7 / C2 — MATCH EXISTING BITUMINOUS

NOT TO SCALE

NOTES:

1) N/A

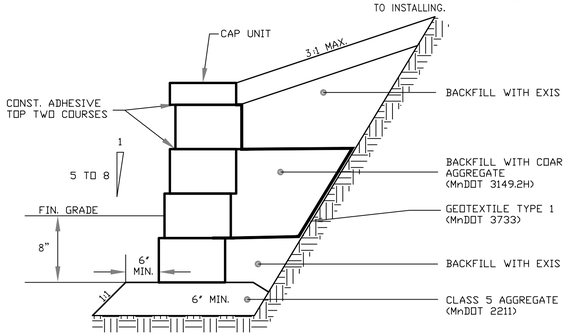
2) FILL ALL VOID AREAS IN MODULAR BLOCK UNITS WITH COARSE FILTER AGGREGATE (MnDOT 3149.2H)

3) MODULAR BLOCK UNITS MUST HAVE INTERLOCKING LIP OR PIN CONNECTIONS

4) RETAINING WALL LOCATION SHOWN PLANS.

5) CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR PROPOSED MODULAR BLOCK UNITS

6) OTHER RETAINING WALL TYPES MAY BE SUBMITTED FOR APPROVAL AND SHOP DRAWINGS PROVIDED PRIOR TO INSTALLING.



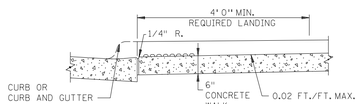
8 / C2 — RETAINING WALL

NOT TO SCALE

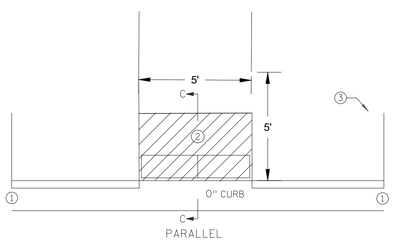
LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

- (S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
- (F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.
- LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
- X'' CURB HEIGHT



SECTION C-C
PARALLEL/DEPRESSED CORNER



NOTES:

LANDINGS SHALL BE LOCATED AT WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30'' OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4'' DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH. (EXCEPT AS STATED IN (6) BELOW.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISIONS - PROSECUTION OF WORK (ADA).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

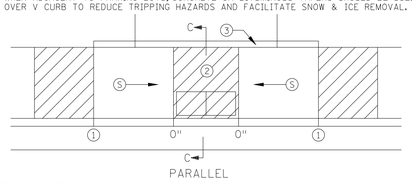
WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24'' IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6'' LESS THAN THE PAR/TRAIL WIDTH, ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

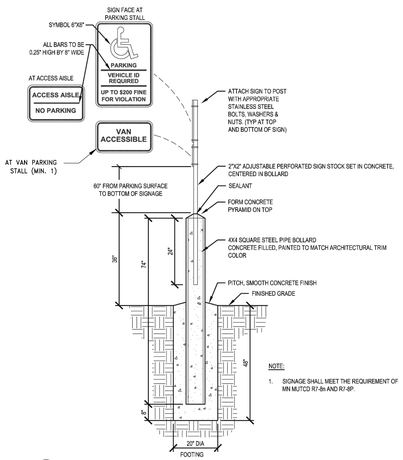
RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3'' FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3'' MINIMUM TO 6'' MAXIMUM FROM THE BACK OF CURB.

1. MATCH FULL HEIGHT CURB.
2. DETECTABLE WARNINGS MAY BE PART OF THE 4' X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
3. WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.



9 / C2 — PEDESTRIAN CURB RAMP

NOT TO SCALE

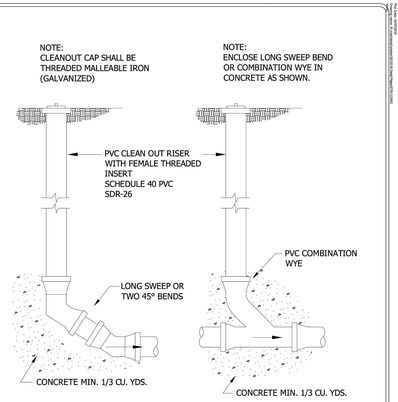


10 / C2 — ADA SIGN DETAIL

NOT TO SCALE

DESIGNED BY: JAP DRAWN BY: ABL CHECKED BY: GRP	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. JEFFREY A. PRASCH, P.E. DATE: 12.07.21 LIC. NO.: 52706	REVISIONS	DEMARC LAND SURVEYING & ENGINEERING 7601 73RD AVENUE N, BROOKLYN PARK, MN 55428 PHONE: 763.560.3093 FAX: 763.560.3522 www.Demarcinc.com	TCO DESIGN P.O. BOX 41790 PLYMOUTH, MINNESOTA 55441 763.424.3676	CANTISSIMO OF CHASKA XXX HUNDERTMARK ROAD CHASKA, MINNESOTA	PRELIMINARY DETAILS	PROJECT: 89556 SHEET NO. C2 OF C11

J:\survey\28-116-23\chasko assisted living\02 Engineering - 89556\01 CAD\05 Sheet Files\02 Details.dwg



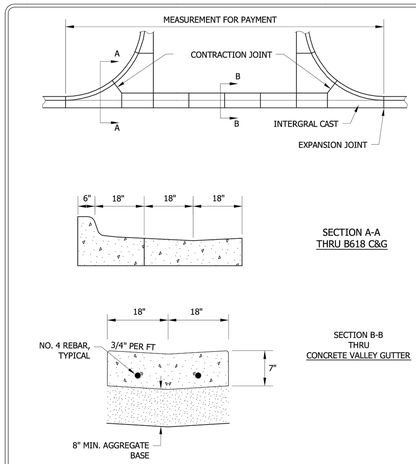
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SERVICE LINE CLEANOUTS

CHASKA, MINNESOTA

LAST REVISION: MARCH 2001

PLATE NO. SER-4



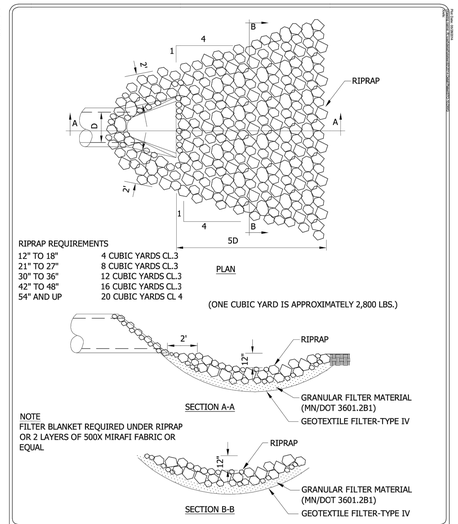
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COMMERCIAL DRIVEWAY

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STR-3



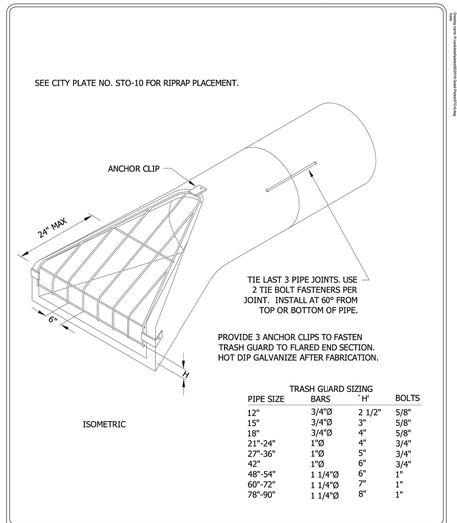
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RIPRAP AT OUTLETS

CHASKA, MINNESOTA

LAST REVISION: APRIL 2004

PLATE NO. STO-11



TRASH GUARD SIZING

PIPE SIZE	BARS	'H'	BOLTS
12"	3/4"Ø	2 1/2"	5/8"
15"	3/4"Ø	3"	5/8"
18"	3/4"Ø	4"	5/8"
21"-24"	1"Ø	4"	3/4"
27"-36"	1"Ø	5"	3/4"
42"	1"Ø	6"	3/4"
48"-54"	1 1/4"Ø	6"	1"
60"-72"	1 1/4"Ø	7"	1"
78"-90"	1 1/4"Ø	8"	1"

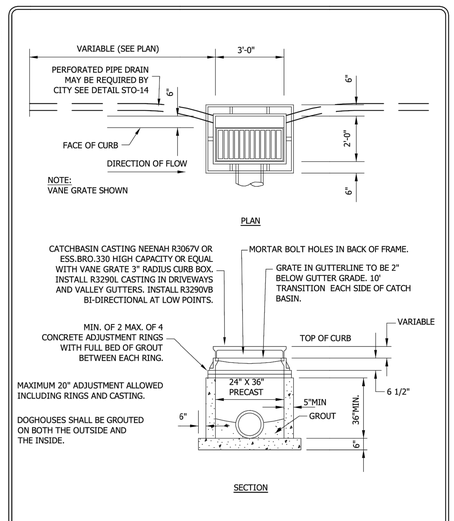
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FLARED END SECTION AND TRASH GUARD

CHASKA, MINNESOTA

LAST REVISION: FEB. 1995

PLATE NO. STO-10



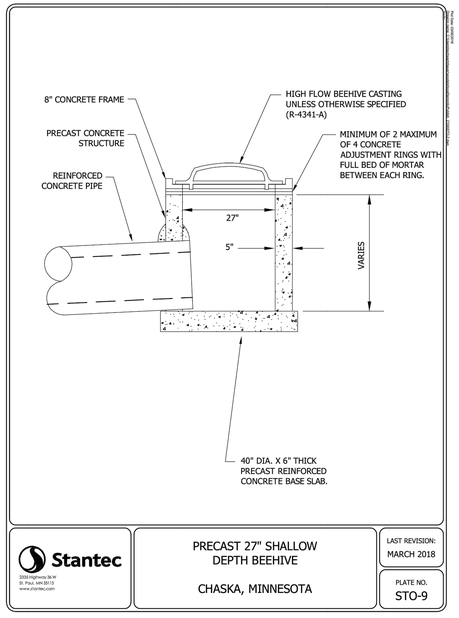
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www.stantec.com

TYPE II CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-6



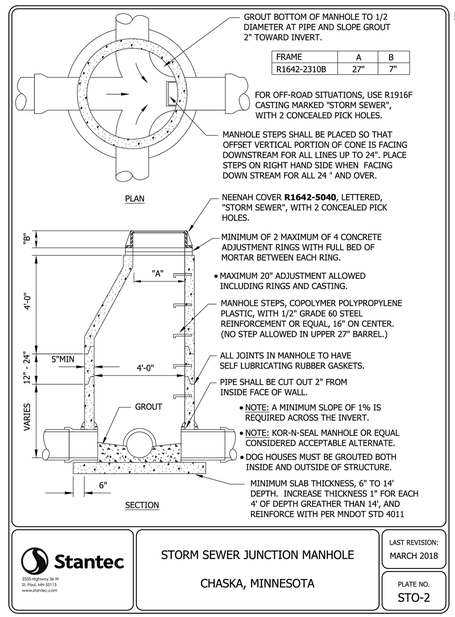
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PRECAST 27" SHALLOW DEPTH BEEHIVE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-9



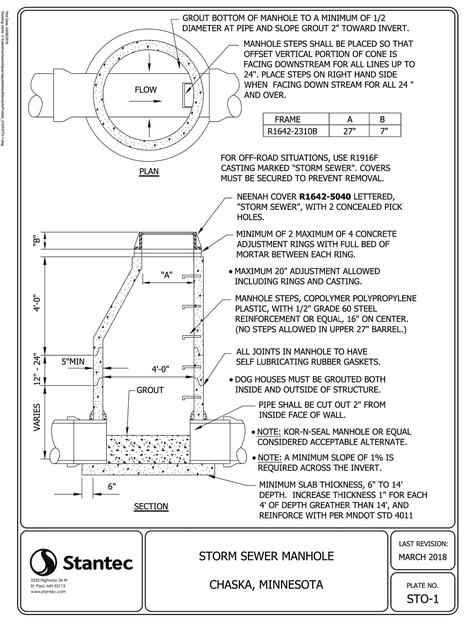
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STORM SEWER JUNCTION MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-2



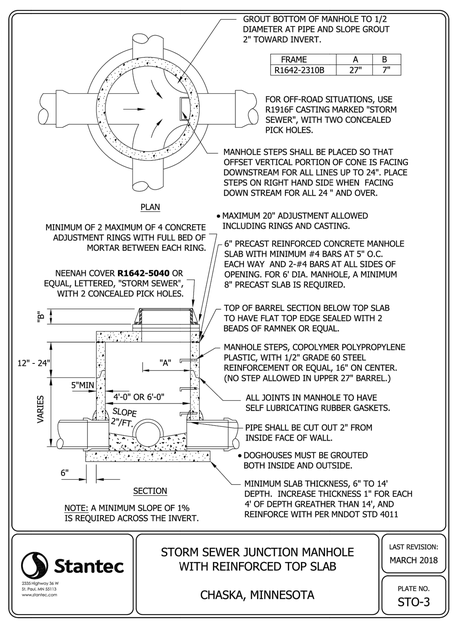
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STORM SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-1



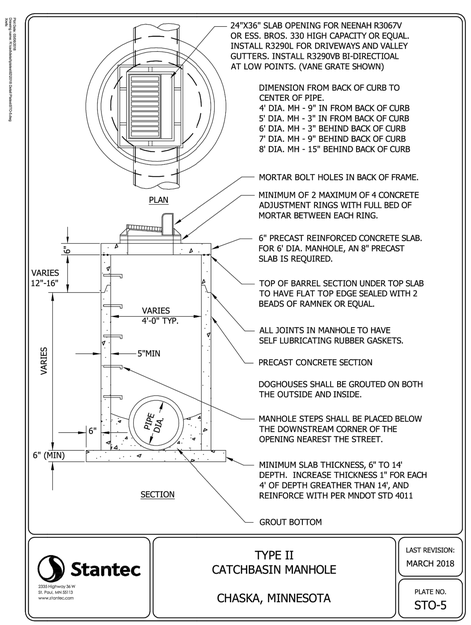
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St. Paul, MN 55113
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STORM SEWER JUNCTION MANHOLE WITH REINFORCED TOP SLAB

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-3



Stantec
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St. Paul, MN 55113
www.stantec.com

TYPE II CATCHBASIN MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-5

DESIGNED BY: JAP
DRAWN BY: ABL
CHECKED BY: GRP

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JEFFREY A. PRASCH, P.E.

DATE: 12.07.21 LIC. NO.: 52706

REVISIONS

DEMARC
LAND SURVEYING & ENGINEERING
7601 73RD AVENUE N, BROOKLYN PARK, MN 55428
PHONE: 763.560.3093 FAX: 763.560.3522
www.Demarcinc.com

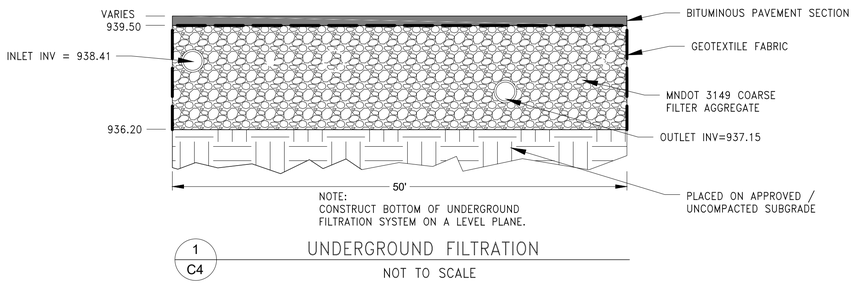
TCO DESIGN
P.O. BOX 41790
PLYMOUTH, MINNESOTA 55441
763.424.3676

CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA

PRELIMINARY DETAILS

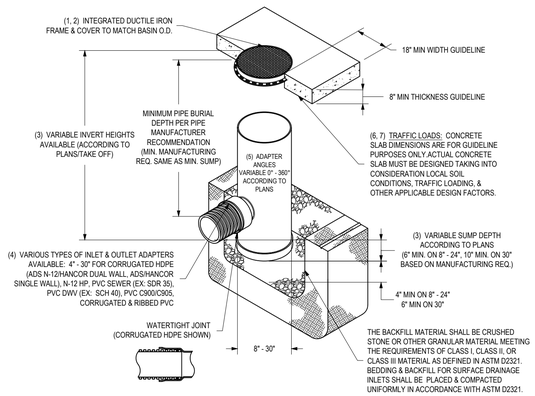
PROJECT: 89556

SHEET NO. C3 OF C11



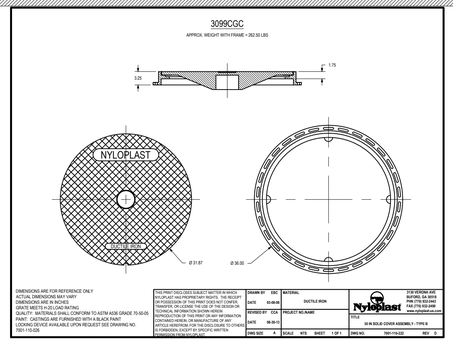
1 / C4 UNDERGROUND FILTRATION

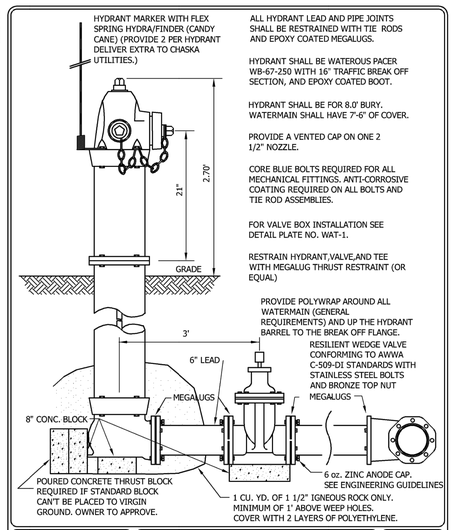
NOT TO SCALE



1 - 8" - 30" SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" SOLID COVERS FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 30" SOLID COVERS SHALL MEET H-20 LOAD RATING.
7 - 8" & 10" SOLID COVERS ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

1 NYLOPLAST DRAIN BASIN WITH SOLID COVER





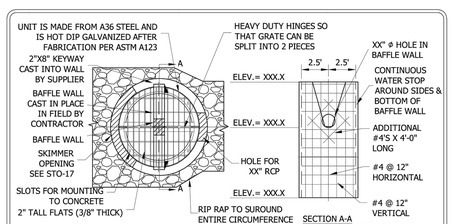
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WATEROUS PACER HYDRANT AND VALVE INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-2



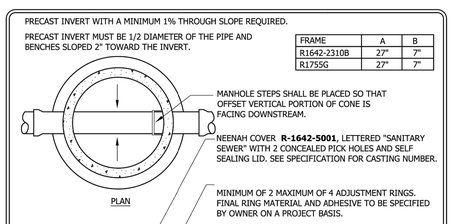
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SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-18



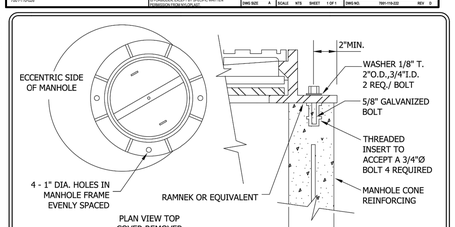
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SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SAN-1



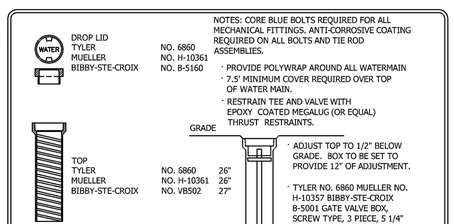
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WATERTIGHT CASTING FOR SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SAN-5



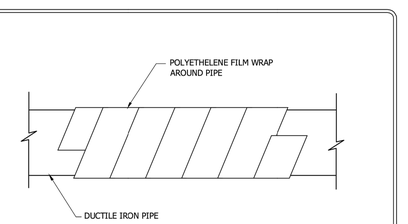
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GATE VALVE AND BOX INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-1



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TYPICAL WATER MAIN INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2008

PLATE NO. WAT-7

DESIGNED BY: JAP
DRAWN BY: ABL
CHECKED BY: GRP

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JEFFREY A. PRASCH, P.E.

DATE: 12.07.21 LIC. NO.: 52706

	REVISIONS
02.21.22	CITY COMMENTS
03.22.22	CITY COMMENTS

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CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA

PRELIMINARY DETAILS

PROJECT: 89556

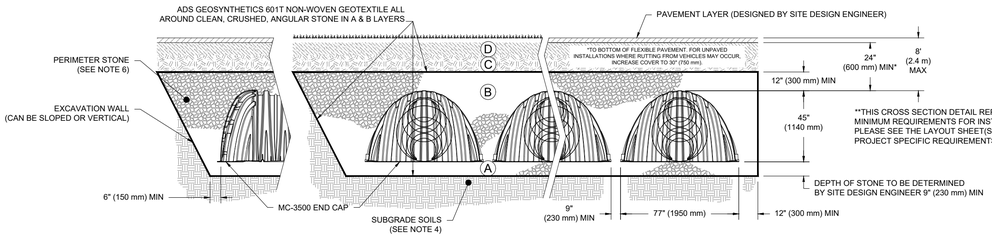
SHEET NO. C4 OF C11

\\survey\28-116-23\chasko assisted living\02 Engineering - 89556\01 CAD\05 Sheet Files\02 Details.dwg
7.A. PUBLIC HEARING: Recommend...
Packet Page 152 of...
Page 30 of 79

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

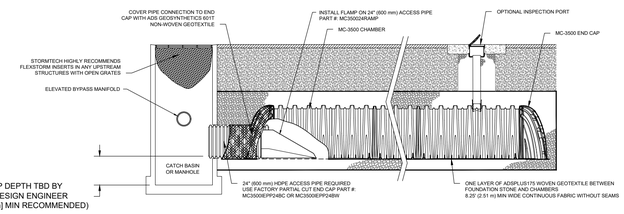
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL



INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

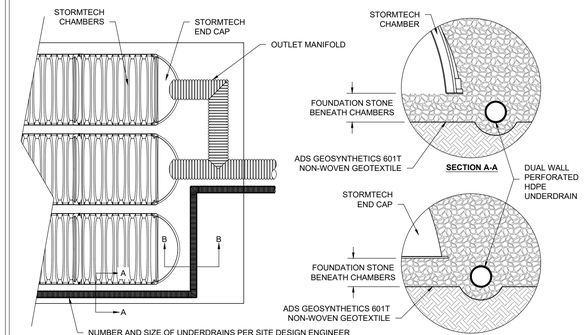
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

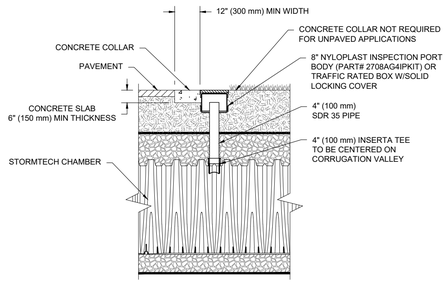
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

4 MC-3500 ISOLATOR ROW PLUS DETAIL

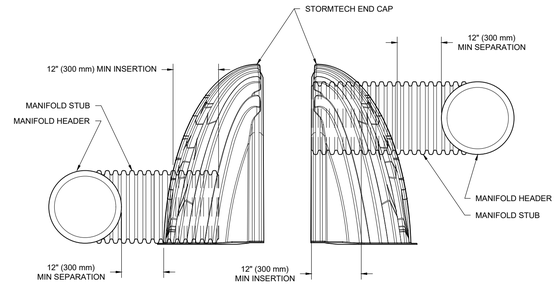


2 UNDERDRAIN DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

3 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

5 MC-SERIES END CAP INSERTION DETAIL

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

DESIGNED BY: JAP	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	02.21.22	CITY COMMENTS
DRAWN BY: ABL		03.22.22	CITY COMMENTS
CHECKED BY: GRP	JEFFREY A. PRASCH, P.E. DATE: 12.07.21 LIC. NO.: 52706		

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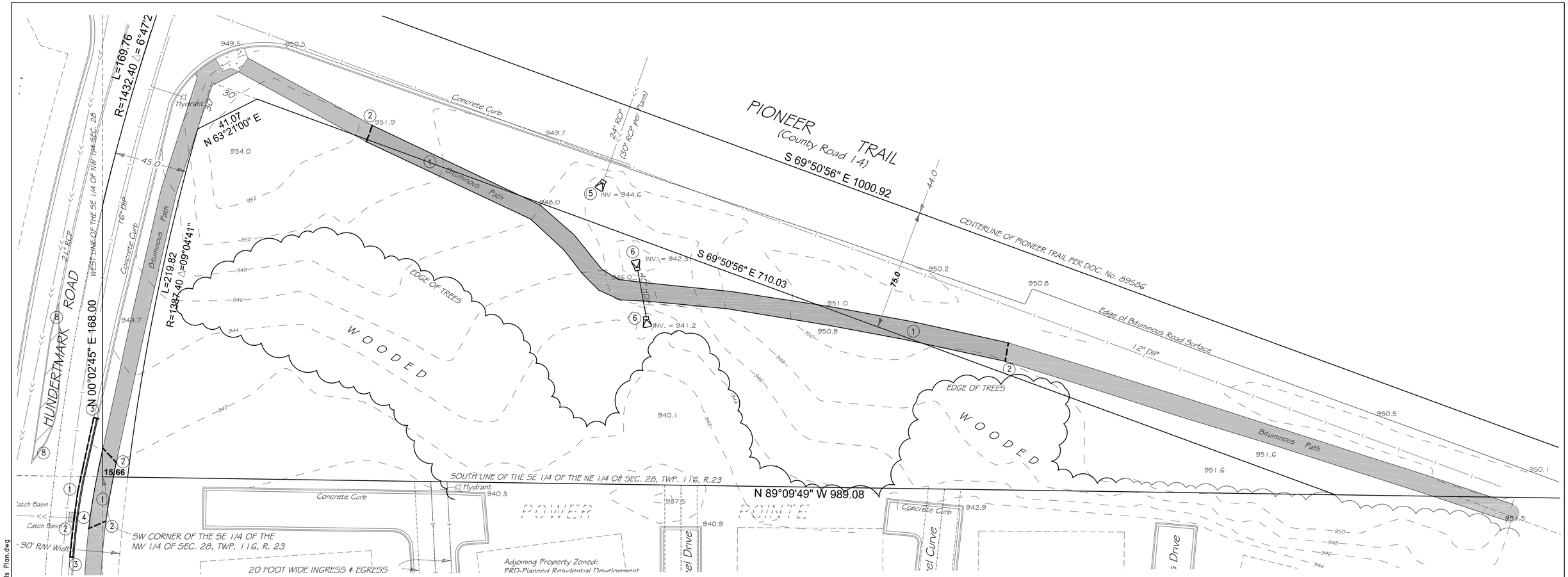
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CANTISSIMO OF CHASKA
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CHASKA, MINNESOTA

PRELIMINARY DETAILS

PROJECT: 89556
SHEET NO. C5 OF C11

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REFERENCE NOTES:

1. REMOVE BITUMINOUS PATH (FULL DEPTH)
2. SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)
3. SAWCUT CONCRETE CURB & GUTTER
4. REMOVE CONCRETE CURB AND GUTTER
5. REMOVE FLARED-END SECTION
6. REMOVE CULVERT AND FLARED-END SECTIONS
7. CLEAR AND GRUB TREES PER ARCHITECTURAL SITE PLAN
8. REMOVE YELLOW CROSS HATCHING

LEGEND

- EXISTING CONTOUR
- EXISTING BUILDING
- EXISTING CURB & GUTTER
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING CONCRETE PAVEMENT
- EXISTING FENCE
- EXISTING SIGN
- EXISTING HYDRANT
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING FES
- EXISTING CATCH BASIN
- REMOVE CURB & GUTTER
- REMOVE BITUMINOUS PAVEMENT
- REMOVE TREE (VERIFY WITH TREE PRESERVATION PLAN)
- SAWCUT PAVEMENT

SCALE IN FEET: 0, 30, 60

DESIGNED BY: JAP
DRAWN BY: ABL
CHECKED BY: GRP

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JEFFREY A. PRASCH, P.E.
DATE: 12.07.21 LIC. NO.: 52706

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02.21.22	CITY COMMENTS

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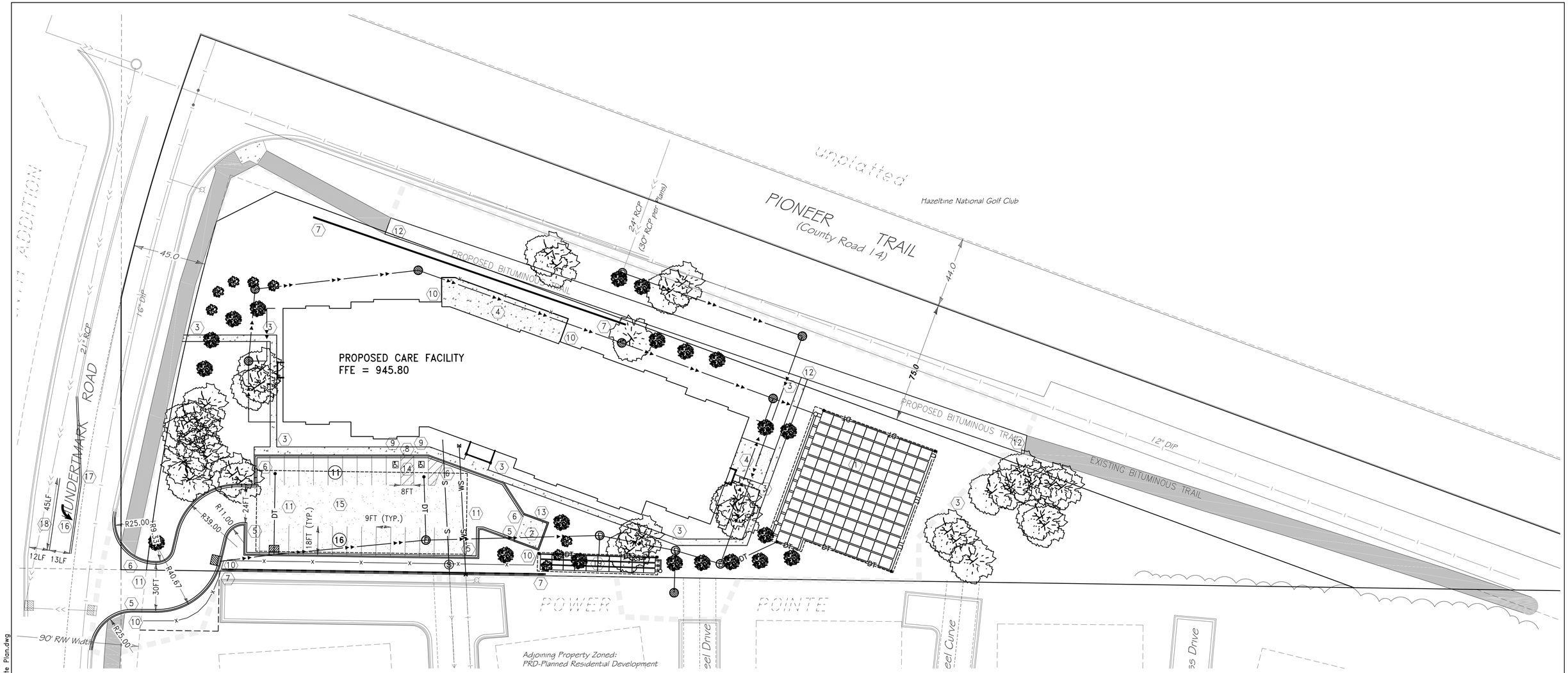
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763.424.3676

CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA

PRELIMINARY EXISTING CONDITIONS & REMOVALS

PROJECT: 89556
SHEET NO. C6 OF C11

\survey\28-116-23\chaska assisted living\02 Engineering - 89556\01 CAD\05 Sheet Files\03 Existing Conditions & Removals Plan.dwg



REFERENCE NOTES:

1. UNDERGROUND STORMTECH MC-3500 SYSTEM PER DETAILS ON C5
2. CONCRETE PAVEMENT PER 5/C2 and 6/C2
3. CONCRETE SIDEWALK PER 4/C2 and 6/C2
4. CONCRETE PATIO PER 4/C2 and 6/C2
5. B612 CURB & GUTTER PER 1/C2
6. B612 TIPOUT CURB & GUTTER PER 1/C2
7. MAXIMUM 4 FT HIGH WALL PER 8/C2 (BLOCK OR APPROVED EQUAL)
8. PED RAMP PER 9/C2 MEETING ADA REQUIREMENTS
9. HANDICAP SIGN AT EACH HANDICAP STALL (2 TOTAL) PER 10/C2
10. FENCE (SEE ARCHITECTURAL PLANS)
11. BITUMINOUS PAVEMENT PER 2/C2
12. BITUMINOUS PATH PER 3/C2
13. TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DIMENSIONS)
14. 8 FT WIDE PAINTED ACCESS AISLE 45° 4 INCH WHITE CROSS HATCHING WITH NO PARKING SIGN
15. UNDERGROUND FILTRATION PER 1/C4
16. LEFT TURN ARROW
17. 98 LF 4" EPOXY DOUBLE YELLOW LINE
18. 45 LF 4" EPOXY SOLID WHITE LINE
19. UNDERGROUND STORMTECH SC-310 SYSTEM PER DETAILS ON C5

SITE DATA:

LOT AREA = 2.71 ACRES
DISTURBED AREA = 2.28 ACRES
EXISTING IMPERVIOUS AREA = 0.22 ACRES
PROPOSED IMPERVIOUS AREA = 1.13 ACRES
BUILDING COVERAGE = 0.51 ACRES = 19%
PROPOSED PARKING STALLS = 27 (INCLUDES 2 HANDICAP)

LEGEND

- EXISTING BUILDING
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- PROPOSED TIPOUT CURB & GUTTER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING CONCRETE
- PROPOSED CONCRETE
- BITUMINOUS PAVEMENT
- PROPOSED FENCE
- EXISTING SIGN
- PROPOSED PARKING STRIPE
- (10) NUMBER OF PARKING STALLS

0 30 60
SCALE IN FEET

DESIGNED BY: JAP
DRAWN BY: ABL
CHECKED BY: GRP

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JEFFREY A. PRASCH, P.E.
DATE: 12.07.21 LIC. NO.: 52706

	REVISIONS
02.21.22	CITY COMMENTS
03.22.22	CITY COMMENTS

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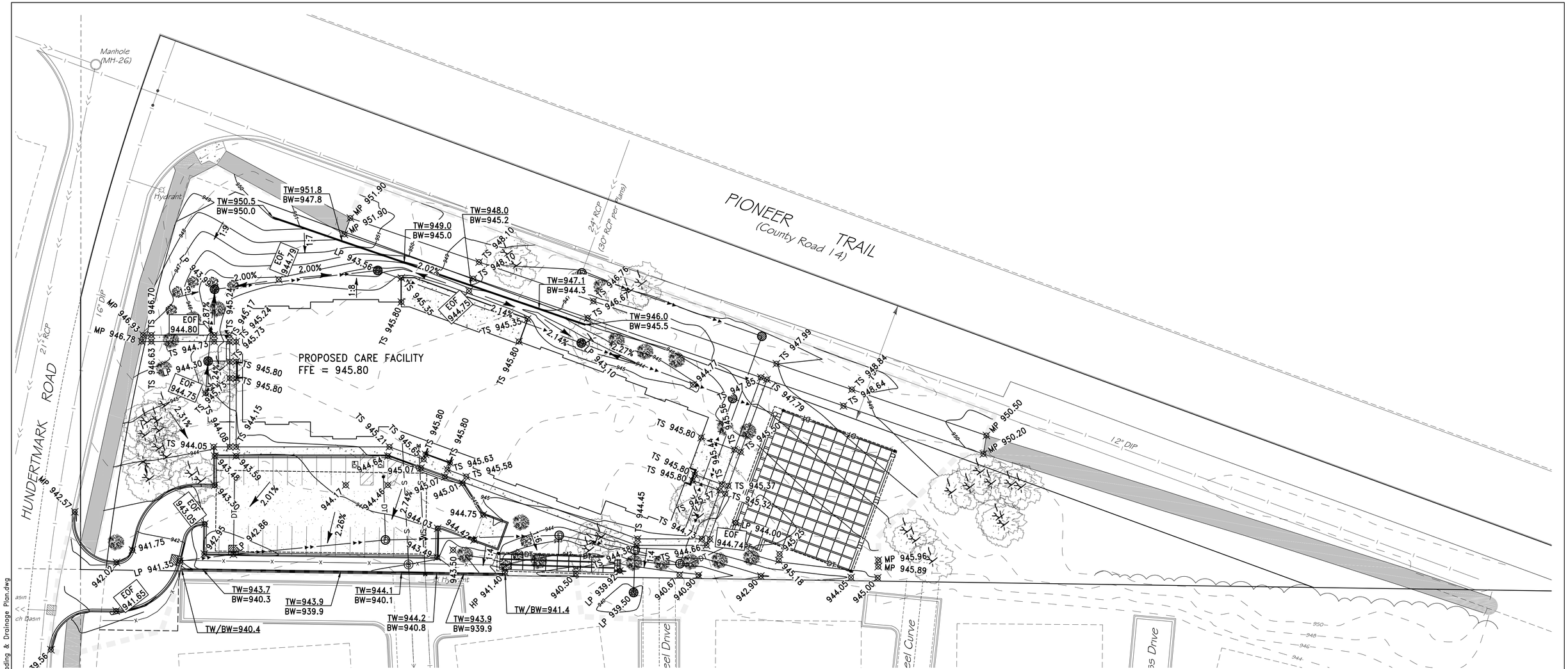
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CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA

PRELIMINARY SITE PLAN

PROJECT: 89556
SHEET NO. C7 OF C11

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LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- PROPOSED TIPOUT CURB & GUTTER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING WATERMAIN
- EXISTING FENCE
- PROPOSED FENCE
- 3.00% PROPOSED SLOPE
- HP 910.00 PROPOSED HIGH POINT
- MP 910.00 PROPOSED MATCH POINT
- LP 910.00 PROPOSED LOW POINT
- TS 910.00 PROPOSED TOP OF SLAB
- 910.00 PROPOSED GUTTER LINE OR FINISHED GROUND ELEVATION

0 30 60
SCALE IN FEET

DESIGNED BY: JAP
DRAWN BY: ABL
CHECKED BY: GRP

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DATE: 12.07.21 LIC. NO.: 52706

REVISIONS	
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CANTISSIMO OF CHASKA
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CHASKA, MINNESOTA

PRELIMINARY GRADING & DRAINAGE PLAN

PROJECT: 89556
SHEET NO. C8 OF C11

REFERENCE NOTES:
1. CONSTRUCT MANHOLE OVER EXISTING STORM SEWER.
2. SUMP MANHOLE
3. EXISTING UTILITIES APPROXIMATE LOCATION PER PLAN (FIELD VERIFY).
4. F&I ENVIROHOOD OR APPROVED EQUAL ON OUTLET PIPE INSIDE STRUCTURE.
5. CONSTRUCT PRIVATE MONITORING MANHOLE OVER EXISTING SANITARY SEWER STUB.
6. UNDERGROUND STORMTECH SC-310 SYSTEM (30 CHAMBERS) PER DETAILS ON SHEET C5.
7. UNDERGROUND STORMTECH MC-3500 SYSTEM (114 CHAMBERS) PER DETAILS ON SHEET C5.
8. CONNECT TO ROOF DRAIN (VERIFY WITH ARCHITECTURAL PLANS).
9. NYOPLAST CATCH BASIN AND CASTING PER DETAILS ON SHEET C4.
10. CLEANOUT, INV = 937.15

Manhole (MH-26)
EX. HYDRANT
Hydrant
CB 104
48" DIA (R-4342)
RIM = 943.56
12" INV(SE,W) = 941.31
24" INV(NE) = 944.60 (FIELD VERIFY)
24" INV(SE) = 944.60
① STMH 100
48" DIA (R-4342)
RIM = 948.00
24" RCP (30" RCP per Plans)
PIONEER TRAIL (County Road 14)
CB 101
48" DIA (R-4342)
RIM = 947.20
24" INV(NW) = 942.83
24" INV(SW) = 937.54
CB 102
48" DIA (R-4342)
RIM = 943.71
8" INV(SW) = 940.63
15" INV(NW,SE) = 940.13
CB 105
48" DIA (R-4342)
RIM = 943.99
12" INV(S,E) = 941.72
102 LF 12" HDPE @ 0.40%
134 LF 12" HDPE @ 0.40%
118 LF 24" HDPE @ 1.50%
28 LF 15" HDPE @ 0.46%
⑨ CB 113 (STANDARD)
RIM = 947.10
15" INV(NW) = 940.00
15" INV(SW) = 939.95
24" INV(SE) = 938.00
SUMP = 934.00
45 LF 12" HDPE @ 0.40%
54 LF 8" PVC SCH 40 @ 1.00% MIN. WITH (2) 90° BENDS
PROPOSED CARE FACILITY
FFE = 945.80
CB 106
27" DIA (R-4342)
RIM = 944.30
12" INV(N) = 941.90
8" INV(E,S) = 942.17
59 LF 8" PVC SCH 40 @ 1.00% MIN. WITH 90° BEND
CB 103
48" DIA (R-4342)
RIM = 943.71
12" INV(NW) = 940.77
15" INV(SE) = 940.57
100 LF 15" HDPE @ 0.44%
10 LF 8" PVC SCH 40 @ 1.00% MIN.
⑨ CB 112 (STANDARD)
RIM = 944.00
15" INV(NE,SW,SE) = 939.95
SUMP = 935.95
CLEANOUT INV = 937.20
8" GATE VALVE
8" TEE
12" DIP
CLEANOUT INV = 937.25
106 LF 8" DIP CL 52
STMH 109
48" DIA (R-1642)
RIM = 943.55
12" INV(W) = 936.53
27" INV(E,S) = 935.66
96 LF 8" PVC SCH 40 @ 1.00% MIN. WITH 90° BEND
29 LF 27" HDPE @ 1.00%
150 LF 24" HDPE @ 1.00%
90° BEND WITH CLEANOUT INV = 937.25
CLEANOUT INV = 938.41
40 LF 8" PERFORATED DRAINTILE @ 0.10%
88 LF 6" PVC SDR 35 @ 2.00%
84 LF 8" DIP CL 52
48 LF 12" HDPE @ 0.40%
34 LF 12" HDPE @ 0.40%
50 LF 12" DRAINTILE @ 0.60%
94 LF 12" HDPE @ 0.40%
107 LF 12" HDPE @ 0.40%
CB 107
2'X3' (R-3067)
RIM = 941.35
12" INV(E) = 938.83
② CB 114
48" DIA (R-1642)
RIM = 943.60
12" INV(W) = 938.69
12" INV(E) = 937.15
6" INV(N) = 937.15
WEIR = 940.50
SUMP = 933.15
EX. HYDRANT
8" GATE VALVE
6" TEE
73 LF 6" PERFORATED DRAINTILE @ 0.0%
90° BEND
232 LF 6" PERFORATED DRAINTILE @ 0.0%
22.5° BEND
45° BEND WITH CLEANOUT INV = 937.25
38LF 6" SOLID DRAINTILE @ 0.0%
② ④ CB 108
48" DIA (R-3067)
RIM = 942.86
12" INV(W,E) = 938.69
24" INV(N) = 937.65
12" INV(S) = 939.51
SUMP = 933.65
STMH 115
48" DIA (R-1642)
RIM = 943.40
6" INV(S) = 937.10
12" INV(W,E) = 936.72
27 LF 27" RCP @ 1.00%
STMH 110
72" DIA (R-1642)
RIM = 942.20
6" INV(E) = 937.25
24" INV(NE) = 936.04
27" INV(SW) = 935.84
⑤ SMH 200
48" DIA (R-1642)
RIM = 940.30
8" INV(S) = 928.61 (PER PLAN, FIELD VERIFY)
8" INV(N) = 928.71
⑨ CB 116 (STANDARD)
RIM = 939.92
12" INV(W) = 937.65
8" INV(N) = 937.94
SUMP = 933.65
① CB 111
60" DIA (R-4342)
RIM = 939.50
12" INV(NW) = 936.50
27" INV(NE) = 935.50
27" INV(S) = 935.47 (PER PLAN, FIELD VERIFY)
HUNDERTMARK
Basin
Curve
Drive

LEGEND
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED SANITARY SERVICE
- EXISTING HYDRANT
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING SANITARY MANHOLE
- EXISTING FES
- PROPOSED FES

SCALE IN FEET: 0, 30, 60

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DRAWN BY: ABL		03.22.22	CITY COMMENTS
CHECKED BY: GRP	JEFFREY A. PRASCH, P.E.		
	DATE: 12.07.21 LIC. NO.: 52706		

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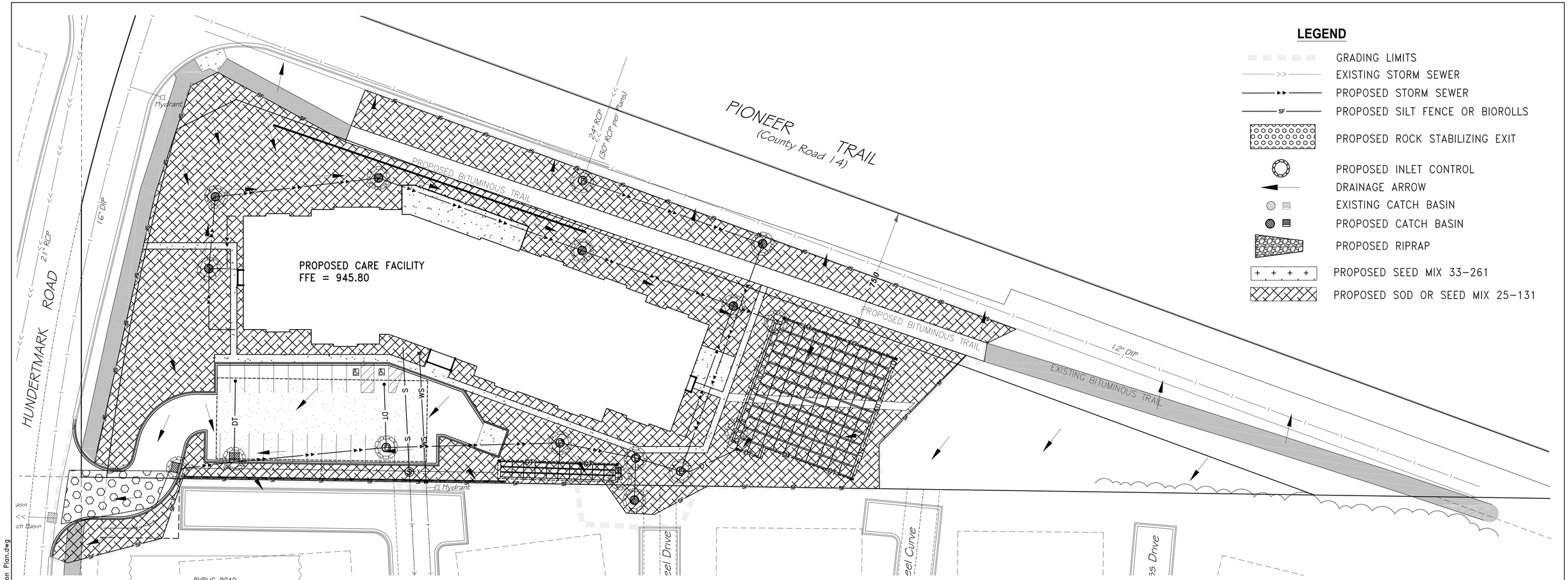
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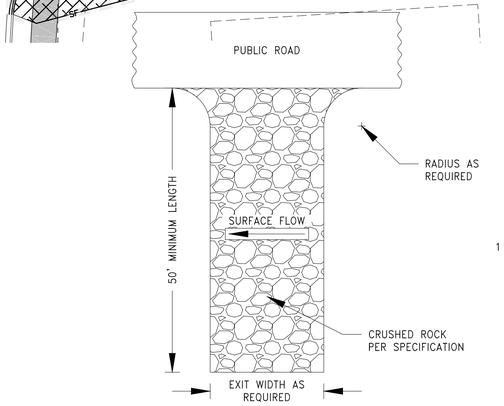
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CHASKA, MINNESOTA

PRELIMINARY UTILITY PLAN

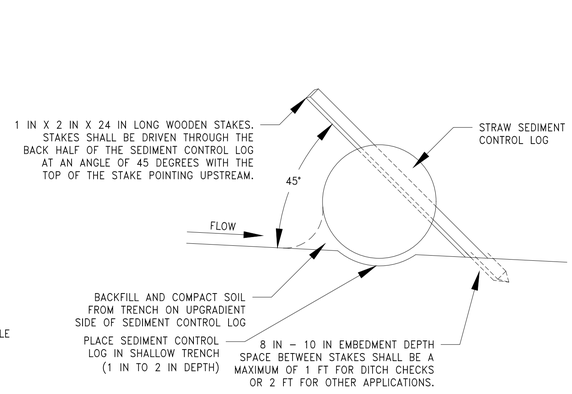
PROJECT: 89556
SHEET NO. C9 OF C11

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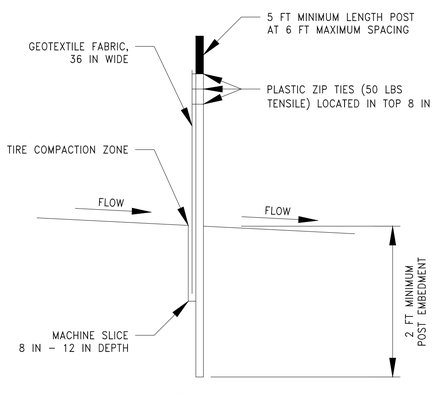




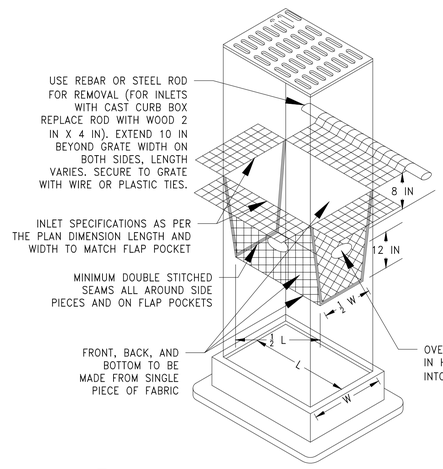
1 C10 ROCK CONSTRUCTION EXIT
NOT TO SCALE



2 C10 BIOROLLS
NOT TO SCALE



3 C10 SILT FENCE (MACHINE SLICED)
NOT TO SCALE



4 C10 INLET PROTECTION
NOT TO SCALE

0 30 60
SCALE IN FEET

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CHECKED BY: GRP	JEFFREY A. PRASCH, P.E.	03.22.22	CITY COMMENTS
	DATE: 12.07.21 LIC. NO.: 52706		

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CANTISSIMO OF CHASKA
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CHASKA, MINNESOTA

PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN

PROJECT: 89556

SHEET NO. C10 OF C11

\survey\28-116-23\chaska assisted living\02 Engineering - 89556\01 CAD\05 Sheet Files\07 Stormwater Pollution Prevention Plan.dwg

PROJECT INFORMATION:

DISTURBED AREA: 2.28 ACRES
EROSION CONTROL SUPERVISOR CONTACT: TBD
IMPAIRED WATERS WITHIN ONE (1) MILE THAT SITE DRAINS TO: NONE. THE SITE DRAINS TO A WETLAND AND THEN CONVEYED VIA A DITCH TOWARDS THE MINNESOTA RIVER. ALTHOUGH THERE ARE SEVERAL IMPAIRED WATERS WITHIN ONE (1) MILE OF THE SITE, THE STORMWATER RUNOFF DOES NOT DRAIN TO THEM.

AN ASSISTED LIVING AND MEMORY CARE FACILITY IS BEING PROPOSED AT THE CORNER OF PIONEER TRAIL AND HUNDERTMARK ROAD IN CHASKA, MINNESOTA. THE SITE IS ABOUT 2.71 ACRES IN TOTAL. MOST OF THE SITE IS GRASSY WITH SOME WOODED AREA. THERE IS AN EXISTING PAVED PATH THAT RUNS ALONG WEST AND NORTH OF THE SITE. THERE ARE EXISTING RESIDENCES DIRECTLY SOUTH OF THE SITE. CURRENTLY, MOST OF THE EXISTING STORMWATER SURFACE FLOWS TO THE PROPERTY TO THE SOUTH. A PORTION OF THE SITE DRAINS TO THE STREET. A SWALE THROUGH THE MIDDLE OF THE SITE CONVEYS STORMWATER FROM STORM SEWER OUTLET NORTH OF THE SITE AND FLOWS TO A LOW AREA JUST SOUTH OF THE SITE.
THE MAJORITY OF THE SITE WILL CONTINUE TO DRAIN TO THE PROPERTY TO THE SOUTH. THE BIOFILTRATION BASIN WILL RECEIVE THE RUNOFF FROM THE PROPOSED BUILDING AND AREA NORTH OF THE PROPOSED BUILDING. THE UNDERGROUND FILTRATION WILL RECEIVE RUNOFF FROM THE PARKING LOT AND SOME AREA NORTH OF THE PARKING LOT. THE OFFSITE DRAINAGE FROM THE NORTH STORM SEWER OUTLET WILL BYPASS THE SITE THROUGH STORM SEWER AND CONTINUE TO DRAIN TO THE PROPERTY TO THE SOUTH.

KNOWLEDGEABLE PERSON/CHAIN OF RESPONSIBILITY

THE CONTRACTOR SHALL IDENTIFY A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPS WHO WILL OVERSEE THE IMPLEMENTATION OF THE SWPPP, INCLUDING: INSTALLATION, INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS. THE GENERAL CONTRACTOR SHALL ATTACH CONTACT INFORMATION TO THE SWPPP PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.

THE CONTRACTOR SHALL ESTABLISH A CHAIN OF RESPONSIBILITY FOR ALL CONTRACTORS AND SUB-CONTRACTORS ON SITE TO ENSURE THE SWPPP IS BEING PROPERLY IMPLEMENTED AND MAINTAINED. THE CONTRACTOR SHALL PROVIDE THE CHAIN OF RESPONSIBILITY TO THE OWNER AND ATTACH TO THE SWPPP PRIOR TO ANY CONSTRUCTION ACTIVITY.

STORMWATER POLLUTION PREVENTION PLAN NOTES:

1. PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ACQUIRE THE NECESSARY MPCA NPDES CONSTRUCTION STORM WATER PERMIT.
2. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES. BMP'S SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES FOR THE PROJECT.
4. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE ABSOLUTE MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PROPERLY MANAGE THE PROJECT AREA.
5. THE CONTRACTOR SHALL KEEP THE SWPPP, INCLUDING ALL AMENDMENTS AND INSPECTION AND MAINTENANCE RECORDS ON SITE DURING CONSTRUCTION.
6. THE CONTRACTOR SHALL DOCUMENT AMENDMENTS TO THE SWPPP AS A RESULT OF INSPECTION(S) WITHIN 7 DAYS.
7. THE CONTRACTOR SHALL FILE A NOTICE OF TERMINATION WITHIN THIRTY (30) DAYS OF ACHIEVING PERMANENT STABILIZATION.
8. THE CONTRACTOR SHALL SCHEDULE THEIR OPERATION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY GIVEN TIME.
9. THE INFILTRATION AREAS SHALL BE PROTECTED AND HAVE RIGOROUS EROSION AND SEDIMENT CONTROLS IF GRADED WITHIN 3 FEET OF THE FINAL GRADES. THE CONTROLS SHALL KEEP RUNOFF COMPLETELY AWAY FROM THE INFILTRATION AREAS UNTIL FINAL STABILIZATION IS COMPLETE.
10. STABILIZE AREAS THAT ARE WITHIN 200 FEET OF AND DRAIN TO PUBLIC WATER WITHIN 24 HOURS DURING FISH SPAWNING TIMES.
11. WATER SHALL BE USED, IF NECESSARY, FOR DUST CONTROL.
12. ALL EROSION CONTROL SHALL CONFORM TO THE MNDOT EROSION CONTROL HANDBOOK.
13. INLET PROTECTION SHALL BE INSTALLED AT ANY INLET THAT MAY RECEIVE RUNOFF FROM THE DISTURBED AREAS OF THE PROJECT. IF A SPECIFIC SAFETY CONCERN HAS BEEN IDENTIFIED, WRITTEN AUTHORIZATION MUST BE RECEIVED BY THE CITY ENGINEER IN ORDER TO REMOVE THAT PARTICULAR INLET CONTROL.
14. ALL EXPOSED SOILS, INCLUDING STOCKPILES, SHALL BE TEMPORARILY STABILIZED PER MNDOT SPECIFICATION 2575 WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED. STABILIZATION OF ALL EXPOSED AREAS MUST BE INITIATED IMMEDIATELY.
15. STOCKPILES SHALL NOT BE PLACED ON ROADS, DRIVEWAYS, SURFACE WATERS OR SWALES. EFFECTIVE SEDIMENT CONTROL SHALL BE INSTALLED IMMEDIATELY AROUND ALL SOIL STOCKPILES.
16. REMOVE ALL SOILS AND SEDIMENT TRACKED OR OTHERWISE DEPOSITED ONTO PUBLIC ROADS OR PRIVATE DRIVEWAYS ON A DAILY BASIS OR AS NEEDED.
17. THE NORMAL WETTED PERIMETER WITHIN 200 LINEAL FEET OF ANY PROJECT DISCHARGE LOCATION SHALL BE STABILIZED WITHIN 24 HOURS OF CONNECTING TO THE DISCHARGE LOCATION.
18. IF DEWATERING IS NECESSARY, THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL DEWATERING AND SURFACE DRAINAGE REGULATIONS. THE APPROPRIATE PERMITS SHALL BE ACQUIRED PRIOR TO COMMENCING DEWATERING ACTIVITIES.
19. TURBID AND SEDIMENT-LADEN WATERS SHALL BE DIRECTED TO A TEMPORARY SEDIMENT POND PRIOR TO DISCHARGING. A VISUAL CHECK SHALL BE CONDUCTED PRIOR TO DISCHARGING TREATED WATER FROM THE SEDIMENT POND TO ENSURE NUISANCE CONDITIONS WILL NOT RESULT FROM THE DISCHARGE.
20. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED FROM THE SITE WITHIN THIRTY (30) DAYS AFTER PERMANENT STABILIZATION HAS BEEN ACHIEVED.
21. THE CORRECTIVE ACTION MUST BE COMPLETED BY THE NEXT BUSINESS DAY AFTER DISCOVERY WHEN PERIMETER CONTROL DEVICES BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-HALF (1/2) THE HEIGHT OF THE DEVICE.
22. PERMITEE MUST MINIMIZE SOIL COMPACTION. METHODS OF MINIMIZING SOIL COMPACTION INCLUDE THE USE OF TRACKED EQUIPMENT AND STAYING OFF AREAS TO BE LEFT UNCOMPACTED. AREAS OF COMPACTED SOIL WILL BE REMOVED OR LOOSENED VIA TILLING TO A DEPTH OF NO LESS THAN 18 INCHES.
23. SECTIONS 5.11-5.16, 5.18, & 5.22 OF THE 2018 CONSTRUCTION STORMWATER GENERAL PERMIT DO NOT APPLY.

TRAINING DOCUMENTATION:

SWPPP DESIGNER: JEFF PRASCH (DEMARC LAND SURVEYING & ENGINEERING) - "DESIGN OF CONSTRUCTION SWPPP" TRAINING EXPIRES MAY 31, 2023.

THE CONTRACTOR (OPERATOR) SHALL ADD TO THE SWPPP TRAINING RECORDS FOR THE FOLLOWING PERSONNEL:
- INDIVIDUALS OVERSEEING THE IMPLEMENTATION OF, REVISING, AND AMENDING THE SWPPP
- INDIVIDUALS PERFORMING INSPECTIONS
- INDIVIDUALS PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS

EXPECTED SEQUENCE OF CONSTRUCTION

1. INSTALL ROCK STABILIZING EXIT(S), PERIMETER CONTROL, INLET CONTROL, AND STABILIZE DOWN GRADIENT BOUNDARIES.
2. COMPLETE SITE GRADING.
3. APPLY EARLY APPLICATION OF BASE COURSE ON PARKING SECTION.
4. INSTALL CURB AND GUTTER, AND PAVING.
5. GRADE BIOFILTRATION BASIN.
6. COMPLETE FINAL GRADING AND PERMANENT STABILIZATION.
7. CONSTRUCT BUILDING.
8. REMOVE EROSION AND SEDIMENT CONTROL BMPs AFTER PERMANENT STABILIZATION IS ACHIEVED.

TEMPORARY SEDIMENT BASINS

1. THE CONTRACTOR SHALL INSTALL SEDIMENT BASIN(S) REQUIRED BY THE NPDES CONSTRUCTION PERMIT IF FIVE (5) OR MORE DISTURBED ACRES DISCHARGE TO A COMMON LOCATION.
2. TEMPORARY SEDIMENT BASIN OUTLETS SHALL BE CONSTRUCTED TO PREVENT SHORT-CIRCUITING AND PREVENT THE DISCHARGE OF FLOATING DEBRIS.
3. BASINS MUST HAVE THE ABILITY TO ALLOW COMPLETE DRAWDOWN, INCLUDE A STABILIZED EMERGENCY OVERFLOW, WITHDRAW WATER FROM THE SURFACE, AND PROVIDE ENERGY DISSIPATION AT THE OUTLET.
4. TEMPORARY SEDIMENT BASINS SHALL BE PROVIDED WITH ENERGY DISSIPATION AT ANY BASIN OUTLET TO PREVENT SOIL EROSION.
5. SEDIMENT BASINS MUST BE SITUATED OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONES, AND MUST BE DESIGNED TO AVOID THE DRAINING WATER FROM WETLANDS.
6. BASINS SHALL BE SIZED ACCORDING TO THE CONSTRUCTION STORMWATER GENERAL PERMIT REQUIREMENTS. CALCULATIONS SHALL BE PROVIDED WITH THE SWPPP.
7. SEDIMENT BASINS SHALL NOT BE PLACED IN FUTURE INFILTRATION AREAS.
8. SEDIMENT BASINS SHALL BE DRAINED AND SEDIMENT REMOVED WHEN IT REACHES $\frac{1}{2}$ THE STORAGE VOLUME WITHIN 72 HOURS.

INSPECTIONS AND MAINTENANCE

1. ALL INSPECTIONS, MAINTENANCE, REPAIRS, REPLACEMENTS AND REMOVAL OF BMPS SHALL BE CONSIDERED INCIDENTAL TO THE BMP BID ITEMS.
2. THE CONTRACTOR SHALL COMPLETE SITE INSPECTIONS, AND BMP MAINTENANCE TO ENSURE COMPLIANCE WITH THE PERMIT REQUIREMENTS.
3. THE CONTRACTOR SHALL PROVIDE A TRAINED PERSON TO INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. ALL INSPECTIONS MUST BE RECORDED IN WRITING WITHIN 24 HOURS OF CONDUCTING THE INSPECTIONS AND THE RECORDS MUST BE RETAINED WITH THE SWPPP. IF ANY DISCHARGE FROM THE SITE IS OBSERVED THE DISCHARGE MUST BE DESCRIBED AND PHOTOGRAPHED.
4. TEMPORARY AND PERMANENT SEDIMENT BASINS SHALL BE DRAINED AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES $\frac{1}{2}$ THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS OF DISCOVERY.
5. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED IN A MANOR AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS.

POLLUTION PREVENTION MANAGEMENT MEASURES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POLLUTION PREVENTION MANAGEMENT MEASURES.
2. ALL POLLUTION PREVENTION MEASURES ARE CONSIDERED INCIDENTAL TO THE BMP BID ITEMS, UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR IS RESPONSIBLE FOR INFORMING ALL VISITORS AND/OR PERSONNEL ON-SITE OF THE POLLUTION PREVENTION MANAGEMENT MEASURES. POLLUTION PREVENTION MANAGEMENT MEASURES INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
   A. SOLID WASTE SUCH AS COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, CEMENT PRODUCT WASTE, FLOATING DEBRIS, PAPER, PLASTIC, CONSTRUCTION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY OFF SITE.
   B. HAZARDOUS WASTES SUCH AS OILS, GASOLINE, PAINT, CEMENT BASED PRODUCTS, ETC. SHALL BE PROPERLY STORED WITH SECONDARY CONTAINMENT TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGES. IF STORED ON THE PROJECT SITE, THEY SHALL BE STORED IN RESTRICTED ACCESS AREAS TO PROTECT AGAINST VANDALISM. STORAGE AND DISPOSAL SHALL BE IN COMPLIANCE WITH THE MPCA.
   C. CEMENT BASED PRODUCT WASHOUTS ARE NOT PERMITTED ON SITE.
   D. THE CONTRACTOR SHALL INCLUDE SPILL KITS WITH ALL FUELING SOURCES AND MAINTENANCE ACTIVITIES. SECONDARY CONTAINMENT MEASURES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR.
   E. THE CONTRACTOR SHALL ENSURE SPILLS ARE CONTAINED AND CLEANED UP IMMEDIATELY UPON DISCOVERY. SPILLS LARGE ENOUGH TO REACH THE STORMWATER CONVEYANCE SYSTEM SHALL BE REPORTED TO THE MINNESOTA DUTY OFFICER AT 1.800.422.0798.

FINAL STABILIZATION

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING FINAL STABILIZATION OF THE ENTIRE SITE. FINAL STABILIZATION SHALL BE COMPLETED PER THE LANDSCAPE PLAN:
   A. COMPLETION OF ALL CONSTRUCTION ACTIVITY.
   B. INSTALLATION OF PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOTICE OF TERMINATION. PERMANENT COVER SHALL CONSIST OF 12 INCHES TOPSOIL, AND SOD, UNLESS OTHERWISE SPECIFIED.
   C. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR LANDSCAPED AREAS. SEE LANDSCAPE PLAN FOR PERMANENT VEGETATION SCHEDULE.
   D. CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEMS OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS AND IS OPERATING AS DESIGNED.
   E. REMOVAL OF ALL SEDIMENT FROM CONVEYANCE SYSTEMS.
   F. REMOVAL OF ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs.
   G. FINAL STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH MNDOT 2018 SPECIFICATION 2575.

ESTIMATED EROSION CONTROL QUANTITIES	
SILT FENCE	1600 LF
STABILIZED ROCK EXIT	1 EACH
STORM DRAIN INLET PROTECTION	17 EACH
SOD OR SEED MIX 25-131	1.25 ACRES

DESIGNED BY: JAP
DRAWN BY: ABL
CHECKED BY: GRP

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JEFFREY A. PRASCH, P.E.
DATE: 12.07.21 LIC. NO.: 52706

REVISIONS	
02.21.22	CITY COMMENTS
03.22.22	CITY COMMENTS

DEMARC
LAND SURVEYING & ENGINEERING
7601 73RD AVENUE N, BROOKLYN PARK, MN 55428
PHONE: 763.560.3093 FAX: 763.560.3522
www.Demarcinc.com

TCO DESIGN
P.O. BOX 41790
PLYMOUTH, MINNESOTA 55441
763.424.3676

CANTISSIMO OF CHASKA
XXX HUNDERTMARK ROAD
CHASKA, MINNESOTA

PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN NOTES

PROJECT: 89556
SHEET NO. C11 OF C11

J:\survey\28-116-23\chaska assisted living\02 Engineering - 89556\01 CAD\05 Sheet Files\07 Stormwater Pollution Prevention Plan.dwg

Carver County
Public Works
11360 Highway 212, Suite 1
Cologne, MN 55322

*Review comments from the March 2022 preliminary plat submittal are made in blue italic font. Comments updated **April 1, 2022**.*

March 29, 2021

City of Chaska
c/o Elizabeth Hanson, AICP
City Planner
952-448-9200
EHanson@chaskamn.com

Re: Development / Access Review Comments: Cantissimo of Chaska located at PID# 300280330 adjacent to County State Aid Highway (CSAH) 14 (Pioneer Trail)

Thank you for the opportunity to review the subject development in the City of Chaska. Consistent with the County Comprehensive Plan and County Codes, and other official controls of the County, the following are comments and recommended conditions of approval and as potential requirements for any necessary permits to be issued for the project.

1. Regarding access onto the County Highway –
   a. The County's Access Spacing Map in the 2040 Comprehensive Plan (Figure 4.14) identifies this segment of CSAH 14 as Category 5B, which guides full access intersection spacing at 1/4 mile intervals and secondary (limited) intersection spacing at 1/8 mile intervals.
      i. Information.
   b. No direct access to CSAH 14 is proposed. Additional County review and approval will be required if this condition changes.
      i. Information.
2. Regarding highway right of way –
   a. CSAH 14 at this location is in a transition area from a 2-lane undivided rural roadway facility to the east and becomes a 4-lane divided urban section with curb and gutter approximately 300 ft. from the intersection with Hundertmark Rd. The existing right of way is approximately 85 ft. total with an even distance from centerline on each side for approximately 42.5 ft. from centerline on the south side.
      i. Information.
   b. The planned typical section for this section of highway along this property is a 4-lane divided urban facility. The County's 2040 Comprehensive Plan (Figure B.6) defines the needed right of way for this type of highway typical section as 65 ft. from centerline without a trail facility. If the trail facility is included within the County right of way, then an additional 10 ft. is required. The trail facility may be included in a separate City-owned outlot.

CARVER COUNTY

i. *Information.*

c. The plat shall incorporate approximately an additional 22.5 ft. of dedicated right of way from the centerline of CSAH 14 for a total of 65 ft. from centerline, not including the trail facility. If the trail is included in County right of way, then a dedication of 75 ft. from centerline is required. The trail may also be located in a City-owned outlot.

i. *Condition applies. Revision required for right of way dedication from centerline. Confirm trail location within right of way, easement, or City-owned outlot.*

d. A 30 ft. sight triangle right of way dedication from the proposed right of way along CSAH 14 and Hundertmark Rd. is required on the southeast corner of CSAH 14/Hundertmark Rd. intersection.

i. *Condition applies. Revision required.*

3. Regarding access to Hundertmark Rd. and impacts to CSAH 14 intersection -

a. Proposed access should line up across from the existing access to Target on the west side of the road for more predictable operations and to prevent traffic operation issues at the intersection of CSAH 14 and Hundertmark Rd.

i. *Condition applies. Comment resolved.*

b. A left turn lane on Hundertmark Rd. into the proposed development should be added to adequately store the expected number of vehicles that may be waiting to turn to avoid operational issues with traffic backing up to the signal at CSAH 14 and Hundertmark Rd. The developer needs to provide a traffic impact analysis to demonstrate that this left turn lane can adequately store the expected number of waiting vehicles without impeding southbound Hundertmark Rd. traffic.

i. *Condition applies. Comment resolved. To the extent possible, avoid impacts or changes to the turn lanes serving the CSAH 14/Hundertmark Rd. intersection and work with County Public Works regarding review and approval of any impacts or changes.*

4. The County will need to review and approve the final grading plans for properties adjacent to CSAH 14. A grading permit will be required for grading work within the highway right of way. The grading and trail reconstruction along CSAH 14 will need to be compatible with the future CSAH 14 4-lane divided urban design.

i. *Condition applies. Drainage calculations for storm sewer within and impacting the County right of way will be required for review as part of permit approval.*

5. The technical details of the final plat, its boundaries and form(s) will need to be reviewed and approved by the County Surveyor.

i. *Condition applies for final approval.*

6. Prior to any work affecting or on County highways or in County right of way, the applicant shall coordinate plans with the County Engineer and obtain a Utility or Excavating/Filling/Grading Permit(s) from Carver County Public Works: (www.co.carver.mn.us/departments/public-works/quick-links/permits). Final details of locations, grades, and profiles affecting County roads as well as any utility connections will need to be reviewed and approved prior to any permits.

i. *Condition applies. Additional review and coordination needed for permit approval.*

7. Any damages, modifications, or changes incurred on County highways from current or approved conditions will need to remedied or updated at development expense, including costs incurred by the County.

i. Information.

These are the County's comments at this time. If you have any questions or need further assistance, please contact staff noted below:

Joan Guthmiller Administrative Technician Carver County Public Works 952.466.5201 jguthmiller@co.carver.mn.us	Angie Stenson AICP Sr. Transportation Planner Carver County Public Works 952.466.5273 astenson@co.carver.mn.us	Dan McCormick, P.E. PTOE Traffic Services Supervisor Carver County Public Works 952.466.5208 dmccormick@co.carver.mn.us

TCO Design

P.O. Box 41790, Plymouth, MN 55441
952-994-8276
todd@tcodesign.net

December 14, 2021

Assisted Living and Memory Care Facility
Corner of Pioneer Trail and Hundertmark Road (PID# 300280330)
Chaska, MN 55441

CANTISSIMO of CHASKA
CHASKA PIONEER SL, LLC
Anasazi Holdings, LLC - Paul Ablack, CEO
603 Lake Street East, Suite 203
Wayzata, MN 55391

Project Narrative:

Background

The proposed site is currently owned by Chaska Pioneer SL, LLC. Chaska Pioneer SL, LLC (Applicant) is proposing to construct a one story 32-unit (38 resident) care suite building on this site. This is a quiet, family-oriented facility that will fit nicely at this location. The site is on the corner of Pioneer Trail and Hundertmark Road. This central location close to a freeway and with great services within a mile makes this site a great location for an assisted living and memory care facility.

The maximum number of employees when the facility is full will be 12. This is the number of employee required by the State for this type of facility and care. This is also the number that a management company needs to provide the patients with meals, personal hygiene, housekeeping and any other resident needs. Building and exterior maintenance will be outsourced and maintained to the highest standards. There is plenty of on-site snow storage space. We are providing 24 off-street parking spaces that includes 1 ADA spaces. All deliveries will be at or near the main entrance of the building.

One Story vs. Two Story

There has been a discussion on whether the building should be one story or two story. The conclusion was one-story for several reasons.

1. It is considered desirable for the residents to live in a one-story building. We feel that residents will be more comfortable in a one-story where all the living is on one level rather than dealing with stairs and an elevator to get around their living environment.
2. A one-story building would be less obtrusive to the neighborhood to the South as well as to the intersection of Pioneer Trail and Hundertmark Road.
3. Instead of 32 units, we would need 44-48 units. This increase would be necessary because a two-story building will be more expensive to build and operate. This is a result of a code requirement that a two-story building be constructed of steel and concrete rather than wood, two sets of stairwells would be required to meet code, an elevator would be required to meet code and additional staff would be needed to cover two different floor levels.
4. The increase in units would require an increase in parking and traffic. The increase of 24 parking spaces to 32 means an increase in parking lot cover of approximately 2200 square feet. This increase in parking and traffic would be less desirable with the curved access point at the Southwest tip of the property.
5. While the bigger footprint will impact more trees, the actual loss of trees is less than the previous concept recommended for approval because of the bigger excavation area due to the proposed sub-garage of the previous project. Our concept is of slab on grade construction with minimal excavation. Please refer to Exhibit A on sheet A1.2.
6. The one-story with less units falls more in line with the Chaska Mission Statement: to be the 'Best Small Town in Minnesota'.

Compliance with Chaska Mission Statement

Chaska Mission Statement: to be the 'Best Small Town in Minnesota'.

Not a 'throw-away' statement. With the primary mission of the City of Chaska being to enhance and maintain the high quality of life of its 'shareholders', the citizens of Chaska, this project truly integrates that mission.

This project provides a balanced residential component that any community needs for true full life-cycle housing. Assisted living facilities bring back a spirit of community and sociability with numerous common areas centrally located. The participatory nature of assisted living enhances the lives of its residents and contributes to healthier living. While residents can enjoy the privacy of their individual space, there are also many opportunities for social involvement.

Cantissimo of Chaska promises to be a great asset to the Best Small Town in Minnesota.

Chaska Core Strategy Reinforcement

Chaska's Mission Statement is further enhanced by 5 Core Strategies. Below are several ways we believe this project meets those strategies:

CHASKA'S HIGH QUALITY OF LIFE IS ENHANCED – This project provides a low impact development on the 2.7-acre site by maintaining most of the site in its natural state providing open spaces and environmental preservation. This will allow the residents to enjoy these open spaces as well as the public with the adjusted walking trail along Pioneer Trail.

WELL PLANNED AND ORDERLY COMMUNITY DEVELOPMENT IS A PRIORITY – This new development will have a positive impact to the community in providing much needed senior housing options. The project sits adjacent to an existing townhome development and therefore consistent with the land use contemplated for the area. The infrastructure is already in place, thus allowing a cost-effective development for the City and its shareholders.

A SENSE OF COMMUNITY AND SMALL TOWN TALUES ARE MAINTAINED – This project will certainly provide an emphasis on family, neighborhood, and integration. It integrates along with townhome development to the South, as well as single family development to the West. The Chaska High School is near to the East and supports many public activities as well as a local meeting space for local church services. This will allow active participation in civic, religious, and other volunteer activities given its proximity to these amenities.

COMMITMENT TO EXCELLENCE – We believe that Cantissimo of Chaska will bolster this commitment. Our Development team has an excellent track record in providing a high-quality development and shares the same desire and vision of excellence that the city of Chaska possesses.

Programming and Project Opportunity Development

The building fits well with the existing townhomes located in Pioneer Pointe, the closest neighbor. The use of cedar shake 'look' siding, horizontal siding, and stone are similar. We also are using a combination of gable and hip style roofs. Even though they are two story, our one story has similar mass since we have a bigger footprint.

The exterior patios are located close to the existing walking trail and relate to a sidewalk. Residents who are able will be connected to walking trails with this sidewalk.

The building is placed closest to Hundertmark Road to minimize the amount of driveway and parking lot needed to properly access the building.

The main entry, East entry, and West entry are visible from Hundertmark, Pioneer Trail, or the walking trail. There is transparence from all the resident's units. The only blocking of views is from the private patio accessed from the building common area.

The access to the site will be off Hundertmark Road. The traffic generated by this concept is considerably less than the previous concept recommended for approval. A new traffic study will be provided. We are working with Pioneer Pointe to obtain an easement to be more in line with the current Target East entrance.

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The current site has a natural grade and drainage to the Southeast. The concept will not alter this other than add an infiltration pond and perhaps pervious pavement to keep stormwater run-off on our property. We will not increase stormwater to the South. A qualified civil Engineer will determine this through the application process.

A sign monument will be added near the driveway entrance from Hundertmark Road. The sign will identify the building and will meet Chaska city code.

Ownership Guiding Principles

Provide a quality and a compassionate living environment for individuals in need of assistance for day-to-day life.

Develop and maintain a facility and site to high standards that is an asset to the community and neighborhood.

Establish a business that fits the motto and standards of the city of Chaska.

Provide jobs and opportunities that will bring quality residents and services to the city of Chaska.

Encourage community involvement between the residents of Cantissimo of Chaska and the neighborhood.

Ownership Background

This dream of quality care for senior began in 2013 when one of the Owner's grandfather was diagnosed with Alzheimer's. Looking for a 'home' for his grandfather became the groundwork for stepping into their Fridley facility. Partnering with Jennifer Thorson, the executive Director of Fridley, they added an Anoka facility. They are currently looking to expand to Columbia Heights, Chaska, and Wayzata. The goal is to maintain the high standards of quality living for their residents and the cities in which they operate. Their goal is to expand at a speed that does not dimmish the quality of care and service.

The 'Senior Advisory.com' has awarded their Fridley facility the best of 2018 and 2019 awards. It is anticipated they will also receive their 2020 award. They have received 4.5 out of 5 state rating for residents and tours through Facebook, caring.com, senioradvisor.com. The Fridley 'home feel' facility has been operating for 3 years and has been so successful they are currently adding 18 more rooms to the existing 28 room facility. The addition is expected to be complete by the end of this summer.

This Ownership has shown success by providing a 'home feel' facility for the residents, family, and community they reside in. They will be bringing this same quality and best small town facility to Chaska.

Request for a 100' setback from Pioneer Trail

The 2.7-acre lot has a very unusual flat triangle shape. With the standard 125' setback from Pioneer Trail there would only be about 32,000 square feet of usable area for building and parking. This would not be enough area to fit the size of building needed to support a development for senior housing. The additional 6,000 square feet of usable area gives the elbow space needed to properly fit a development on the site with appropriate tree placement and outdoor area and sidewalks.

The building is angled to the West so that the West end of the building meets the 125' setback. This will maintain sight lines from Hundertmark Road and Pioneer Trail at the intersection.

Tree Preservation and Building Shape/Location

Several building shapes and locations have been considered for our use and this site. The location of the parking lot is ideal in preserving trees, placing the driveway as far South as possible on our site and efficiency of hardcover. We explored a straight building shape and a double angle shaped building. Both shapes were less efficient than the one angle shape proposed to the site and resulted in further compromise of the significant trees. The slab on grade construction allows minimal impact on existing trees. The shape, location and construction allow us to preserve 28 of the 35 trees indicated by Staff as significant. We will work with arborist through our process to ensure we reach the maximum possible preservation. The previously concept recommended for approval would only be able to preserve 25 of the 35 as shown in Exhibit A on sheet A1.2.

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Traffic Consideration

We have provided two traffic studies showing minimal impact on Hundertmark Road traffic. These indicated that the new entrance with a short-left turn lane for South bound traffic into our proposed project will not impact the intersection of Hundertmark Road and Pioneer Trail. We have talked to the townhome association about an easement to be as close as possible to Target's East entrance. We have placed our driveway as far South as possible within the proposed easement.

Enclosed Patio Area

A generous enclosed patio area is provided for the residents of the building. Because a significant number of residents cannot be outside on their own, the enclosed patio will provide a nice exterior setting that is safe and secure. Being enclosed, it will be available to these residents more frequently than a patio that is not enclosed and safe. An open patio area is provided on the East side of the building for those residents who do not require as much overwatch.

Community Benefit

This facility will bring with it a good economic benefit from construction to operation. During construction the project will bring lots of workers who will patron local businesses for lunches, services and retail. Once in operation, the employees, professional visitors and guest visitors will also patron the local businesses for the entirety of its operation. The facility will provide approximately 40-50 good new jobs just on employees and dozens of increased business opportunities for medical professional visitors and visiting maintenance personnel.

There are several other advantages to a residential care facility for this community. It is important to the owner and operators that this facility is well maintained and run. All aspects of site and building maintenance will be kept to high standards. The families and groups associated with Comprehensive Care have high standards for this type of facility and for their residents. They are caring family members, medical professionals and business professionals. These types of facilities are quiet and low key. There will be no large and loud parties or gatherings. It will have 24 hour a day security.

Zoning and Land Use

Zoning

The current zoning for the site is PRD, Planned Residential Development. The proposed use for the building is assisted living/memory care. According to City Code permitted uses, Section 4, Sub-Section 4.2.3.1 Dwelling Units: Dwelling units in detached, semi-detached, attached, or multi-storied structures, or combinations thereof, and supporting public, recreational, and commercial uses to serve area residents. Assisted living and similar facilities are considered dwelling units.

Building

The proposed building will consist of one floor of assisted living and memory care units. The total floor area is approximately 23,000 square feet. There will be two wings with a central gathering space that includes a seating area, dining area, kitchenette, and salon. There will be a total of 32 care units/38 residents. Each unit will contain an entry, closet and ¾ bath with an ADA shower. There will be a central kitchen to provide nutrition for the residents.

The residents will get assisted living care and memory care. Specific services provided will be determined by the management company. Memory care patients are not allowed to wander outside of the facility without being accompanied by a care team member. The facility will operate under the Minnesota state Comprehensive Care License requirements.

The proposed building will use exterior materials consistent with current residential construction. It will utilize a nice balance of manufactured stone and 'LP SmartSide'. The siding will be varied by using a combination of textures and colors. Other architectural features such as decorative vents, columns and brackets will be used to add visual interest. The roof will be finished with 'shake look' architectural asphalt shingles.

One hundred percent (100%) of the proposed exterior materials are Class I materials as described in the city of Chaska's zoning ordinance, Section 9.11.4.1 Permitted Materials – Multi Family Residential.

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Site

The overall site is approximately 2.71 acres. Setbacks for the property and proposed building are listed in the table below. The building location requires front yard setback variance from the City required front yard setback. The Developer is requesting a 100' setback from Pioneer Trail. The size and shape of this site creates a hardship not created by the Developer. This is caused by a small triangular shaped site that has two front streets.

	Building Setback		**Pavement Setback**	
	Required	Proposed	Required	Proposed
Front / Pioneer Trail ROW	125 Feet	100 Feet	20 Feet	22 Feet
Front Yard Hundertmark Road	100 Feet	100 Feet	10 Feet	100 Feet
Rear Yard South	20 Feet	28 Feet	10 Feet	10 Feet

Access and Parking

A new driveway will enter the site from Hundertmark Road as far South from Pioneer Trail as the property and new easement will allow. There will be a new 26-foot-wide curb cut to allow access for personal vehicles, delivery vans, and emergency vehicles. A 6-0 high fence will be installed to provide screening between the parking lot and the Pioneer Pointe townhomes to the South.

Parking has been provided to serve the proposed building with 24 parking stalls which exceeds City requirements. Based on City code, 1 parking space is required for every 2 dwelling units. A building with 32 dwelling units would be required to provide 16 parking spaces. One accessible stall is provided in accordance with 2020 MN Accessibility Code. The standard parking stalls are 9'x18' and the drive aisle is 26 feet in width.

Landscaping and Tree Preservation

A Landscape Plan and a Lighting Plan is provided to show new trees, new shrub screening and exterior lighting. There will be a 6-0 tall fence screening from the outdoor patio from Pioneer Trail and between the parking lot and townhomes to the South. The types (species) of new trees and minimum sizes are provided on the Landscaping Plan and the Lighting Plan. Tree preservation goal will be addressed.

Grading, Drainage, Utilities and Stormwater Treatment

Proposed preliminary site grades, drive aisles, parking areas, utilities and stormwater treatment is provided by our civil Engineer for the Preliminary Plat Review application process. A preliminary shallow infiltration pond is shown on the current site plan. This will be like a drainage ditch you would see on the side of Pioneer Trail and the existing walking trail. Our civil engineer has addressed this with a stormwater management plan.

Impact to Public Safety:

Lift Assistance

The proposed facility will incorporate the use of 'Hoyer' or equal lifts to assist residences who fall. An assessment will be made on site and have proper care staff on site 24/7 to assist with any fall or emergency, to assess the incident and be advised by the registered nurse as to when or if to call 911 for further assistance. The staff will only call 911 if a bone fracture is discovered or a head injury is sustained. Any other assistance will be performed by staff within the facility.

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CPR (Cardiopulmonary Resuscitation)

The staff of this facility will not perform CPR on residents suffering from a heart attack or lack of breathing. 911 will be called in these instances, due to the fragile state the residents are in there appears to be a larger liability on the community if staff were to perform CPR vs waiting for 911 IF the resident is not DNR. Attempted CPR can cause harm to its residents, including broken ribs, sternum fractures, and dislodged pacemaker electrodes. Additionally, attempted CPR on the elderly also has very low success rates.

D-N-R (Do Not Resuscitate Order)

All residents upon admission are required to bring forth a health care directive, POLST, and DNR/DNI. Most of the time our residents are admitted with a DNR/DNI in place, which is compatible to our no-CPR policy on site.

Lanewood Estates, LLC Development Schedule
December 2021 – Preliminary Plat Review Application to the City of Chaska
Winter 2022 – Building Permit Application
Spring 2022 – Begin Construction

Commercial Drafting and Home Design
Dedication to Excellence

TCO Design

P.O. Box 41790, Plymouth, MN 55441
952-994-8276
todd@tcodesign.net

February 28, 2022

Assisted Living and Memory Care Facility
Corner of Pioneer Trail and Hundertmark Road (PID# 300280330)
Chaska, MN 55441

CANTISSIMO of CHASKA
CHASKA PIONEER SL, LLC
Anasazi Holdings, LLC - Paul Ablack, CEO
603 Lake Street East, Suite 206
Wayzata, MN 55391

Project Narrative Addendum (100' vs. 125' and Easement Status):

100' Setback vs. 125' Setback

The 2.7-acre lot has a very unusual flat triangle shape. With the standard 125' setback from Pioneer Trail there would only be about 32,000 square feet of usable area for building and parking. This would not be enough area to fit the size of building needed to support a development for senior housing. The additional 6,000 square feet of usable area gives the elbow space needed to properly fit a development on the site with appropriate tree placement and outdoor area and sidewalks.

To maintain the 125' setback, the building and parking lot would have to be pressed more towards the South, West, and East. This would be needed to maximize the available space within the current setbacks. This would result in a loss of 8 trees, but a gain 1 tree for a net loss of 7 more trees. Five of those are considered significant by city staff. A '100' vs. 125' Setback Exhibit' Site Plan has been provided. It shows the eight trees that would have to get pressed out as the building would have to move into those areas to achieve the needed building footprint.

Access Easement Status

An access easement exhibit was provided to the Pioneer Pointe HOA (HomeOwner's Association) on 11-4-21. Mary Myss shared the exhibit with the HOA. Mary responded with an e-mail on 11-18-21 indicating that the exhibit would be approved with a vote of 48-1. She provided a list of the Homeowners that participated. The e-mail and list have been provided.

We will ask Pioneer Pointe for a formal approval after we receive Preliminary Plat approval from the city of Chaska.

Landscape Planting Beds

The intent of final landscaping is to have a continuous planting bed around the building perimeter. The Landscape Plan only represents code minimums for trees and screening. A picture has been provided of this Developer's previous project in Fridley that shows their intent.

TCO Design

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952-994-8276
todd@tcodesign.net

March 21, 2022

Assisted Living and Memory Care Facility
Corner of Pioneer Trail and Hundertmark Road (PID# 300280330)
Chaska, MN 55441

CANTISSIMO of CHASKA
CHASKA PIONEER SL, LLC
Anasazi Holdings, LLC - Paul Ablack, CEO
603 Lake Street East, Suite 206
Wayzata, MN 55391

Preliminary Plat Project Narrative Addendum 2:

Place Building to South and Parking to the North (Item #1):

An exhibit showing a concept of the building being placed to the South side of the property and the parking lot being placed to the North side of the property has been added. It is on plan set sheet A1.8. Because the need to line up the driveway with Target, the driveway must start where we originally planned and run along the West side of the building. This causes an additional removal of 9 significant trees. Also, the needed reshaping of the building will cause the removal of 3 additional significant trees and 3 other trees. The total loss of trees with this move would be 9 significant trees and 3 others for a total of 12 more trees being removed.

Mechanical Locations and Screening (Item #3):

The Site Plan and plan set sheet A1.1 shows the only exterior mechanical equipment being the air conditioning units. They are located on the North side of the building within the enclosed patio and additionally screened behind a 6-0 fence. The only other equipment will be in the interior of the building within a mechanical room shown on the floor plan.

Request to show two fire hydrants on the site plan (Item #5):

We had communication with Elizabeth Hanson. We are waiting for the Fire department to indicate the preferred location. We will add to our documents as soon as we have those locations.

Fence Specification Request (Item #7):

The stormwater pond has been changed to an underground basin. This mean there is no longer a need for a guard rail, so no specifications are needed or supplied at this time.



1 A2.1 **BUILDING FLOOR PLAN**

SCALE 1" = 10.0'

0 1 2 3 4 6 8 10 14 18 26

JIM MACKEY ARCHITECT

JIM MACKEY ARCHITECT
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St. Paul, MN 55104

Jim Mackey
Office 651-644-0869

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todd@tcodesign.net

Plan Date
PP APPL. 12-1-21

CANTIGNO OF CHASKA

PID# 300280330 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

TCO DESIGN
drafting and home design

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tco202104

FLOOR PLAN

A2.1



1 A3.1 **SOUTH ELEVATION (WEST WING) (FRONT OF BUILDING)**

SCALE 1/8" = 1'-0"

0 1 2 3 4 6 8 10 14 18 26



3 A3.1 **EAST ELEVATION (RIGHT SIDE OF BUILDING)**

SCALE 1/8" = 1'-0"

0 1 2 3 4 6 8 10 14 18 26

EXTERIOR MATERIALS:

ROOFING - 'GAF TIMBERLINE' NATURAL SHADOW OR EQUAL

SOFFIT MATERIAL - 'SMARTSIDE 190 SERIES' OR EQUAL

SIDING MATERIAL AT GABLES - 'LP SMARTSIDE' 0.375"X11.69"X47.94" CEDAR TEXTURE SHAKES OR EQUAL

SIDING MATERIAL ABOVE STONE - 'LP SMARTSIDE' 38 SERIES CEDAR TEXTURE LAP (6TRAND) (0.315"X1.84") OR EQUAL

EXTERIOR TRIM - 'LP SMARTSIDE' 540 SERIES REVERSIBLE TRIM (0.910") OR EQUAL

MANUFACTURED STONE - 'URESTONE' STACKED STONE OR EQUAL



2 A3.1 **SOUTH ELEVATION (EAST WING) (FRONT OF BUILDING)**

SCALE 1/8" = 1'-0"

0 1 2 3 4 6 8 10 14 18 26

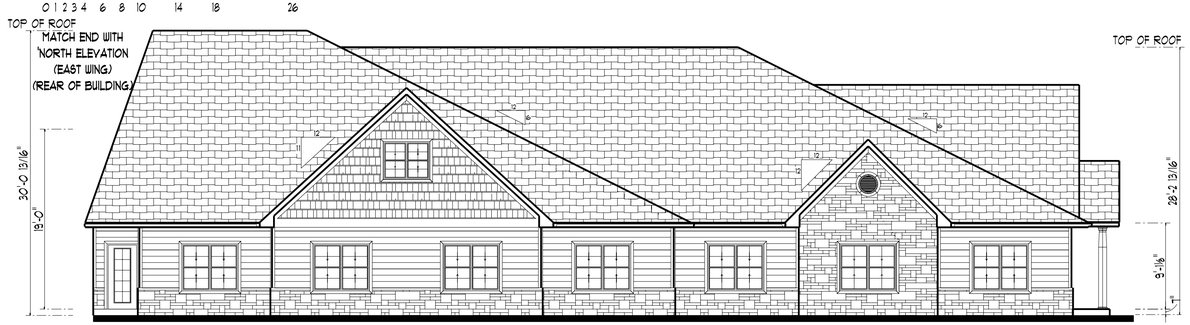
NOTE: 100% OF EXTERIOR MATERIALS QUALIFY AS CLASS I PER ZONING ORDINANCE SECTION 9.11.4.1
PERMITTED MATERIALS - MULTI FAMILY RESIDENTIAL:
II) NATURAL STONE
III) GLASS
IV) LP SMARTSIDE LAP SIDING



4 A3.1 **WEST ELEVATION (LEFT SIDE OF BUILDING)**

SCALE 1/8" = 1'-0"

0 1 2 3 4 6 8 10 14 18 26



5 A3.1 **NORTH ELEVATION (WEST WING) (REAR OF BUILDING)**

SCALE 1/8" = 1'-0"

0 1 2 3 4 6 8 10 14 18 26



6 A3.1 **NORTH ELEVATION (EAST WING) (REAR OF BUILDING)**

SCALE 1/8" = 1'-0"

0 1 2 3 4 6 8 10 14 18 26

EXTERIOR MATERIALS:

ROOFING - 'GAF TIMBERLINE' NATURAL SHADOW OR EQUAL

SOFFIT MATERIAL - 'SMARTSIDE 190 SERIES' OR EQUAL

SIDING MATERIAL AT GABLES - 'LP SMARTSIDE' 0.375"X11.69"X47.94" CEDAR TEXTURE SHAKES OR EQUAL

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Plan Date
PP APPL. 12-1-21

CANTIGNIMO OF CHASKA

PID# 300280330 (PIONEER TRAIL AND HUNDERTMARK ROAD), CHASKA

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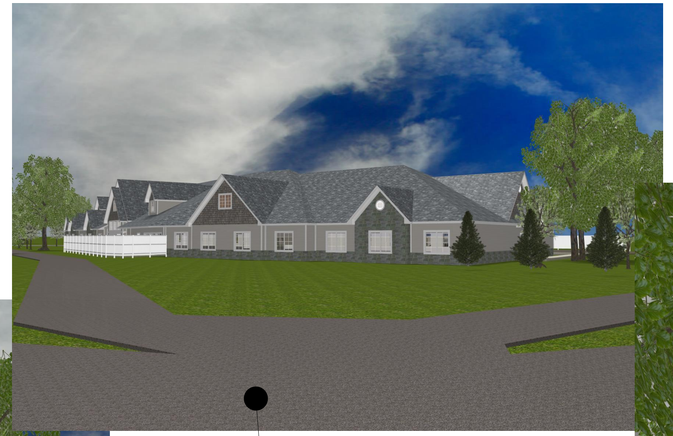
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EXTERIOR ELEVATIONS

A3.1



NORTH SIDE AS VIEWED FROM THE CORNER OF PIONEER TRAIL AND HUNDERTMARK ROAD



WEST ENTRY AS VIEWED FROM HUNDERTMARK ROAD



NORTH SIDE PATIO AS VIEWED FROM PIONEER TRAIL



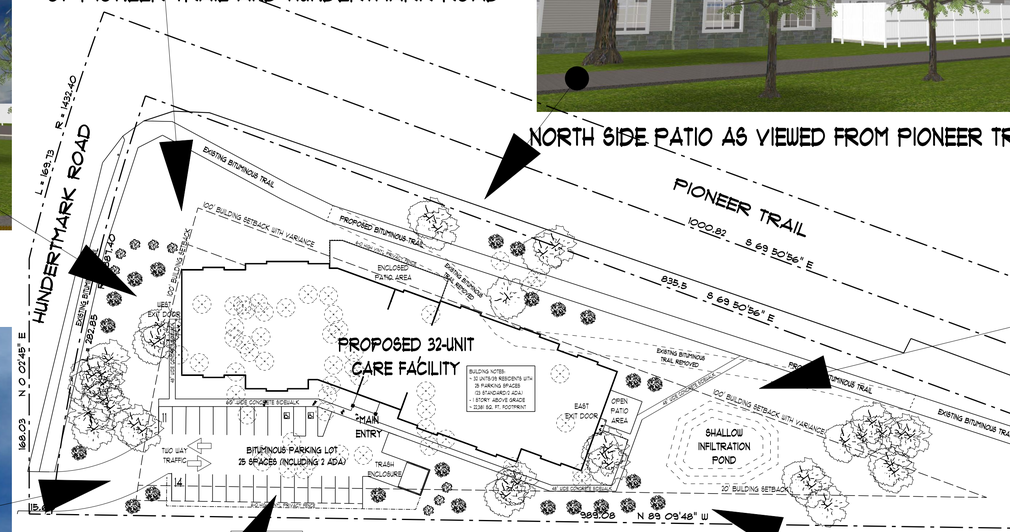
EAST ENTRY AS VIEWED FROM PIONEER TRAIL



MAIN ENTRANCE VIEW FROM HUNDERTMARK ROAD



MAIN ENTRY AS VIEWED FROM THE PARKING LOT



1 A3.2 RENDERINGS REFERENCE SITE PLAN

SCALE 1" = 50.0'



MAIN ENTRY AS VIEWED FROM PIONEER POINTE



VIEW OF THE SOUTHEAST CORNER

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Plan Date
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tco202104

A3.2

CANTISSIMO OF CHASKA

Assisted Living and Memory Care Facility

Corner of Pioneer Trail and Hundertmark Road







CANTISSIMO OF CHASKA

Assisted Living and Memory Care Facility

Corner of Pioneer Trail and Hundertmark Road

COLORS APPLIED SAMPLE

Sample is a Cantissimo Project in Wayzata

Colors as indicated on Sample Board

ROLLEX SYSTEM 3

Soffit and Fascia System

Color: White

CANTISSIMO OF CHASKA

Assisted Living and Memory Care Facility

Corner of Pioneer Trail and Hundertmark Road

LP SMARTSIDE

Trim and Siding

Color: Quarry Gray

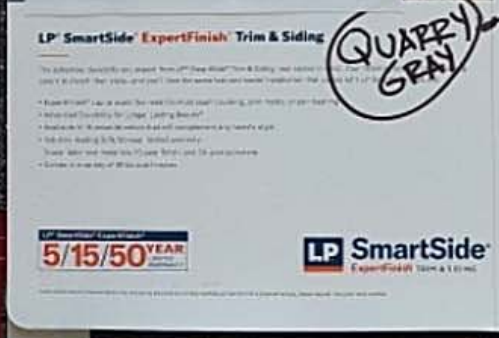
GAF TIMBERLINE Roofing

Natural Shadow Lifetime Shingles

Color: Pewter Gray



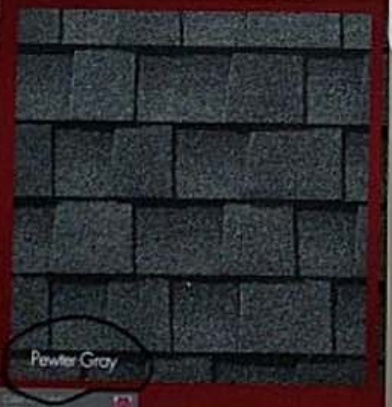




QUARRY GRAY









CANTISSIMO OF CHASKA

Assisted Living and Memory Care Facility

Corner of Pioneer Trail and Hundertmark Road

BARRETTE Fencing

OUTDOOR LIVING - Retail Fence

Color: White

BORAL VERSETTA STONE

Mortarless Ledgestone

Color: Mission Point

SSTS
S² TRAFFIC SOLUTIONS

November 4th, 2021

To: **Todd Ofsthun, TCO Design**

From: **Katie Schmidt, PE**

Re: **DRAFT Traffic Analysis Memo–Cantissimo of Chaska Assisted Living Development, Chaska, MN**

Per your request, S² Traffic Solutions, LLC has conducted a traffic analysis for the proposed Cantissimo of Chaska Assisted Living development (termed "Proposed Project" in this memo) in Chaska, Carver County, MN. The Proposed Project is located in the southeast quadrant of the Pioneer Trail (CSAH 14) and Hundertmark Road intersection and will consist of an assisted living facility with 32 units and a maximum of 38 beds. Access to the Proposed Project will be provided via a driveway off of Hundertmark Road. **Figure 1**, Vicinity Map, and **Figure 2**, Site Plan, depict the location and site layout. This memorandum documents the existing conditions, the anticipated site-generated traffic from the Proposed Project and its distribution, and reviews the traffic operations at the study area intersections/site access for year 2023, the year after completion of the development. The study area intersections are:

- Pioneer Trail (CSAH 14) & Hundertmark Road – Signal
- Hundertmark Road & Target Access – Side-Street Stop-Control
- Hundertmark Road & Wilderness Drive/Louisa Court– Side-Street Stop-Control

Existing Conditions

The existing conditions of the roadways and intersection providing direct access to the Proposed Project in Chaska, MN were gathered and the following notes the specifics:

- **Pioneer Trail (CSAH 14)** – is under Carver County jurisdiction and is classified as a minor expander arterial with a 45-mph speed limit. Pioneer Trail runs east-west in the vicinity of the site and is a four-lane roadway to the west of Hundertmark Road and a two-lane roadway to the east. Pioneer Trail has turn lanes at major intersections and a 10-foot bituminous trail on the south side near the Proposed Project.
- **Hundertmark Road** – is a two-lane roadway and it runs north-south roadway in the vicinity of the site. Hundertmark Road is classified as a major collect with a speed limit of 35-mph south of Pioneer Trail and 30-mph north of Pioneer Trail. There is a 10-foot bituminous trail on the east side of the roadway.
- **Louisa Court/Wilderness Drive** – is a local neighborhood roadway providing residential access. It is one lane in each direction and speed limits vary between 15 to 20 mph.

The following notes the specifics for the intersections:

- **Pioneer Trail (CSAH 14) & Hundertmark Road** – is a four-legged signalized intersection with marked crosswalks on all legs with pushbutton activation for pedestrian crossing phases. The signal, which is operated by Carver County, is actuated and coordinated to the west with the Chaska Commons intersections and all left turns operate with Flashing Yellow Arrow phasing.

The eastbound approach has four lanes; a left turn lane (250' of storage), two through lanes and a right turn lane (200' of storage). The westbound approach has three lanes; a left turn lane (250' of storage), a through lane and a shared through/right turn lane (250' of storage). Both the northbound and southbound approaches have three lanes; a left turn lane (180' NB and 200' SB for storage), a through lane and a right turn lane (200' NB and 180' SB for storage). Just east of the intersection the two eastbound through lanes merge to one through lane. The existing signal timing parameters were received from Carver County and inputted into the traffic operations model, as well as the eastbound lane drop geometry.

- **Hundertmark Road & Target Access** – is a three-legged side-street stop-controlled intersection with Hundertmark Road free-flowing and Target Access stop-controlled. The eastbound approach (Target Access) is one lane; a shared left turn/right turn lane. The northbound approach has two lanes; a left turn lane (160' of storage) and a through lane. The southbound approach has one lane; a shared though/right turn lane. Access to the Proposed Project will be a future east leg of this intersection.
- **Hundertmark Road & Wilderness Drive/Louisa Court -** is a four-legged side-street stop-controlled intersection with Hundertmark Road free-flowing and Wilderness Drive/Louisa Court stop-controlled. Both the eastbound and westbound approaches have one lane; a shared left turn/through/right turn lane. Both the northbound and southbound approaches have two lanes; a left turn lane (150' NB and 50' SB for storage) and a shared through/right turn lane.

Turning movement traffic counts were conducted at the study area intersections during the week of October 25th, 2021, revealing the AM peak traffic hour occurs between 7:15 – 8:15 AM and the PM peak traffic hour occurs between 4:15 – 5:15 PM (See **Figure 3**, Existing Traffic Volumes).

A review of the existing crash history in ***City of Chaska's 2040 Comprehensive Plan*** was completed in relation to the study roadways. The comprehensive plan summarizes crash data from 2011 to 2015 and notes the Pioneer Trail/Hundertmark Road intersection is one of the top ten intersection crash locations in Chaska with a critical crash index of 0.40. The critical index (ratio of observed crash rate to the critical crash rate) is a key parameter used to determine if there are existing safety concerns. If the critical index is above 1.00 then additional analysis and observation of the intersection should be completed. Since the Pioneer Trail/Hundertmark Road intersection is well below the 1.00 threshold at 0.40 no safety improvements are recommended. Additionally, the left turn phasing at this signal has been update to flashing yellow operations since this crashes data was published and safety likely improved based on crash modification factor (CMF) research. This intersection should be monitored for future safety issues as background traffic grows.

Future Conditions

To quantify the impacts of the Proposed Project on the surrounding roadway system, it is necessary to first analyze traffic conditions that would be present on the roadway system without the inclusion of the Proposed Project. The anticipated construction completion date for the Proposed Project is 2022, thus the year 2023 was selected for analysis so as to compare traffic conditions after initial traffic patterns to and from the site have become established. To determine the future traffic conditions a review of 2018 to 2040 traffic forecasts in the ***City of Chaska's 2040 Comprehensive Plan*** was completed. The review indicates a 0.37% annual growth rate for Hundertmark Road and a 0.94% annual growth rate for Pioneer

Trail. To be conservative a 1% annual growth rate was applied to volumes on both roadways. **Figure 4** illustrates the 2023 No-Build traffic conditions with this growth rate applied to the existing volumes.

Trip Generation

The volume of vehicle trips generated by the Proposed Project has been estimated for the weekday AM and PM peak hours and on a daily basis using the data methodology described in the ***Trip Generation Manual***[1]. Table 1 summarizes the trip generation estimates.

Table 1 - Trip Generation

Land Use	Land Use Code	Size	Trips Generated:				
			AM peak		PM Peak		Weekday ADT
			Enter	Exit	Enter	Exit	
Assisted Living/Suburban	254	38 beds	5	3	4	6	99
Totals			**5**	**3**	**4**	**6**	**99**
			8		**10**		

* Per ITE's Trip Generation Manual, 10th Edition.

As shown in Table 1, the site will generate 8 new trips (5 entering and 3 exiting) during the morning traffic peak hour, 10 new trips (4 entering and 6 exiting) during the evening traffic peak hour and 99 daily trips. These trips are generated by employees, deliveries and visitors. It is noted that this small number of trips does not reach thresholds to require detailed traffic studies, such as this report, per MnDOT and ITE data. The Developer is providing the City with this additional data to help City staff, and the City Council make sound decisions during the approval process.

The new trips have been assigned to the surrounding roadways according to existing traffic patterns and the anticipated travel patterns for employees, visitors and deliveries. The majority of the site generated traffic is estimated to come from and go to the south on Hundertmark Road via the TH 212/Chestnut Street interchange. **Figure 5** illustrates the trip assignment, and **Figure 6** illustrates the 2023 Build conditions by combining the 2023 No-Build traffic on Figure 4 with the trip assignment on Figure 5.

Proposed Access

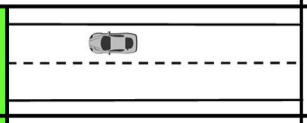
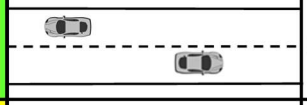
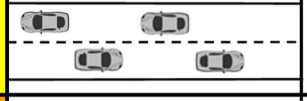
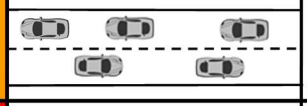
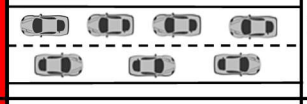
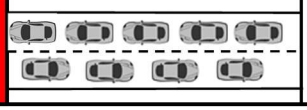
Access to the Proposed Project is via a driveway (one entering and existing lane) as an east leg of the Hundertmark Road & Target Access Intersection. With the driveway a 65' southbound left turn lane is proposed to be included from restriping on Hundertmark Road. Such a small amount of site-generated traffic from the site does not warrant a turn lane but it is being provide by the developer to increase safety. The design of the driveway will accommodate ambulances and delivery vehicles.

Traffic Operations

The operating conditions of transportation facilities, such as roadways, traffic signals, roundabouts and stop-controlled intersections, are evaluated based on the relationship of the theoretical capacity of a facility to the actual traffic volume on that facility. Various factors affect capacity including travel speed, roadway geometry, grade, number of travel lanes, and intersection control. The current standards for evaluating capacity and operating conditions are contained in ***Highway Capacity Manual***[2]. The procedures describe operating conditions in terms of driver delay represented as a Level of Service (LOS). Operations are given letter designations with "A" representing the best operating conditions and

[1] Trip Generation Manual, Institute of Transportation Engineers (ITE), 10th Edition
[2] Highway Capacity Manual (HCM), Transportation Research Board, 6th Edition

"F" representing the worst. Generally, level of service “D” represents the threshold for acceptable overall intersection operating conditions during a peak hour. The Chart on the following page summarizes the level of service and delay criteria for signalized and unsignalized intersections.

Level of Service		Description	Delay (sec)	
			Signalized	Unsignalized/ Roundabout
A		Primarily free-flow operation.	0-10	0-10
B		Reasonably unimpeded operation.	>10-20	>10-15
C		Stable operation. The ability to maneuver is more restricted than LOS B.	>20-35	>15-25
D		Less stable operation. Small increases in flow may cause large increases in delay and reduced speeds.	>35-55	>25-35
E		Unstable operation. Low speeds and considerable delay.	>55-80	>35-50
F		Congested operation. High delay and extensive queuing.	>80	>50

For side street stop-controlled intersections special emphasis is given to providing an estimate for the level of service of the minor approaches. Traffic operations at an unsignalized intersection with side street stop-control can be described two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes. Second, it is important to consider the delay on the minor approaches, since the mainline does not have to stop. It is common for intersections with higher mainline traffic volumes to experience increased levels of delay and poor level of service on the side streets.

A final fundamental component of operational analyses is a study of vehicular queuing, or the line of vehicles waiting to pass through an intersection. An intersection can operate with an acceptable Level of Service, but if queues from the intersection extend back to block entrances to turn lanes or accesses to adjacent land uses, unsafe operating conditions could result. In this report, the Industry Design Standard 95th percentile queue length is used. The 95th Percentile Queue Length refers to that length of vehicle queue that has only a five-percent probability of occurring during an analysis hour.

This study has utilized the industry current Synchro/SimTraffic software package (11th Edition) to analyze the 2023 No-Build and Build conditions for both the AM and PM peak hours. It is noted, the reported results are from the aggregate of 10 SimTraffic simulations which use a random number generator to seed the network with vehicles. These results reflect dynamic conditions and are more accurate than the results of the static analysis reported by Synchro. Due to the random number generator results can sometimes show slightly better operations on minor movements under higher traffic conditions when

the intersections are operating well. This can be seen when delays and queues noted in the Build Scenario are slightly less than the No-Build Scenario.

Tables 2 summarizes the results of the 2023 No-Build conditions analyses in terms of Level of Service (LOS) and vehicle queuing for the worst movement during peak conditions.

Table 2 – 2023 No-Build Traffic Operations

Intersection	Overall/Worst Movement Los & Delay (Sec)			95th Percentile Queue
	Criteria	AM Peak Hour	PM Peak Hour	
Pioneer Tr (CSAH 14) & Hundertmark Rd (Signal)	*Overall*	B (10.3)	B (15.6)	NBR - 102' in AM
	Worst Movement	D (40.2) SBL	D (36.6) SBL	SBT - 148' in PM
Hundertmark Rd & Target Access (Side-Street Stop-Controlled)	*Overall*	A (1.0)	A (3.5)	EBR - 48' in AM
	Worst Movement	A (8.0) EBL	B (12.2) EBL	EBR - 73' in PM
Hundertmark Rd & Wilderness Dr/Louisa Ct (Side-Street Stop-Controlled)	*Overall*	A (0.7)	A (0.9)	WBL/T/R - 45' in AM
	Worst Movement	A (6.9) EBL	A (8.9) EBL	WBL/T/R - 38' in PM

- Level of Service reported from an average delay from 10 SimTraffic simulations for overall intersection and worst movement.
- 95th percentile queues are a result from an average of 10 SimTraffic simulations and the longest queue per intersection is reported.
- Existing signal timing parameters from Carver County were used in the model.

The results shown in Table 2 indicate the 2023 No-Build overall operations and worst movement operations of the study area intersection are providing acceptable LOS C or better for most movements, with manageable vehicle queuing. At the Pioneer Trail & Hundertmark Road signalized intersection the southbound approach experiences longer delays (LOS D) with manageable queues. This is common for side-streets on coordinated signal corridors and is considered acceptable as queuing is not an issue. If side-street queuing becomes an issue in the future it is recommended that the County update signal timing plans. No improvement measures are needed for No-Build traffic conditions.

As mentioned earlier, the estimated trip generation associated with the proposed development has been added to the No-Build traffic conditions to create the 2023 Build scenario. This scenario was also analyzed, and the results are summarized in Table 3.

Table 3 – 2023 Build Traffic Operations

Intersection	Overall/Worst Movement Los & Delay (Sec)			95th Percentile Queue
	Criteria	AM Peak Hour	PM Peak Hour	
Pioneer Tr (CSAH 14) & Hundertmark Rd (Signal)	*Overall*	B (10.3)	B (15.7)	SBL - 94' in AM
	Worst Movement	D (40.2) SBL	D (38.7) NBT	SBT - 149' in PM
Hundertmark Rd & Target/Project Access (Side-Street Stop-Controlled)	*Overall*	A (1.0)	A (3.5)	EBR - 45' in AM
	Worst Movement	A (8.8) WBL	B (12.3) EBL	EBR - 70' in PM
Hundertmark Rd & Wilderness Dr/Louisa Ct (Side-Street Stop-Controlled)	*Overall*	A (0.7)	A (0.9)	WBL/T/R - 45' in AM
	Worst Movement	A (8.3) EBL	A (9.4) EBL	WBL/T/R - 40' in PM

- Level of Service reported from an average delay from 10 SimTraffic simulations for overall intersection and worst movement.
- 95th percentile queues are a result from an average of 10 SimTraffic simulations and the longest queue per intersection is reported.
- Existing signal timing parameters from Carver County were used in the model.

With the addition of such a small amount of site-generated traffic operations will be very similar to the No-Build operations. The results shown in Table 3 indicate the 2023 Build overall operations and worst movement operations of the study area intersection are providing the same acceptable LOS C or better for most movements, with manageable vehicle queuing. As mentioned above for the No-Build conditions, the Pioneer Trail & Hundertmark Road signalized intersection experiences longer delays (LOS D) with manageable queues for the side-street movements, which is common on coordinated corridor. If side-street queuing becomes an issue in the future it is recommended that the County update signal timing plans. Operations at the proposed access location (east leg of the Hundertmark Road/Target Access intersection) are acceptable with minimal delay and queuing. No mitigation measures to

accommodate site-generated traffic beyond those associated with the short-left turn lane are recommended for the surrounding roadway network.

Conclusion

In conclusion, the proposed development has appropriate access to the site and to the surrounding roadway network. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate the minimal amount of site-generated traffic. No mitigations measures are recommended for year 2023 conditions. As background traffic volumes grow beyond year 2023 it is recommended that Carver County monitor the signal operations and updated timing plans as needed. It is noted that this small number of trips generated by the Proposed Project does not reach thresholds to require detailed traffic studies, such as this report, per MnDOT and ITE data. The Developer is providing the City with this additional data to help make sound decisions during the approval process.

Please contact Katie Schmidt at katie@s2traffic.com or 952-212-7625 with any questions.

Attachments: Figures 1-6

(Appendices with Traffic Counts, Trip Generation Data, Synchro/Simtraffic Worksheets are available upon request.)



Figure 1 - Vicinity Map



Figure 2 - Site Plan (By Others)

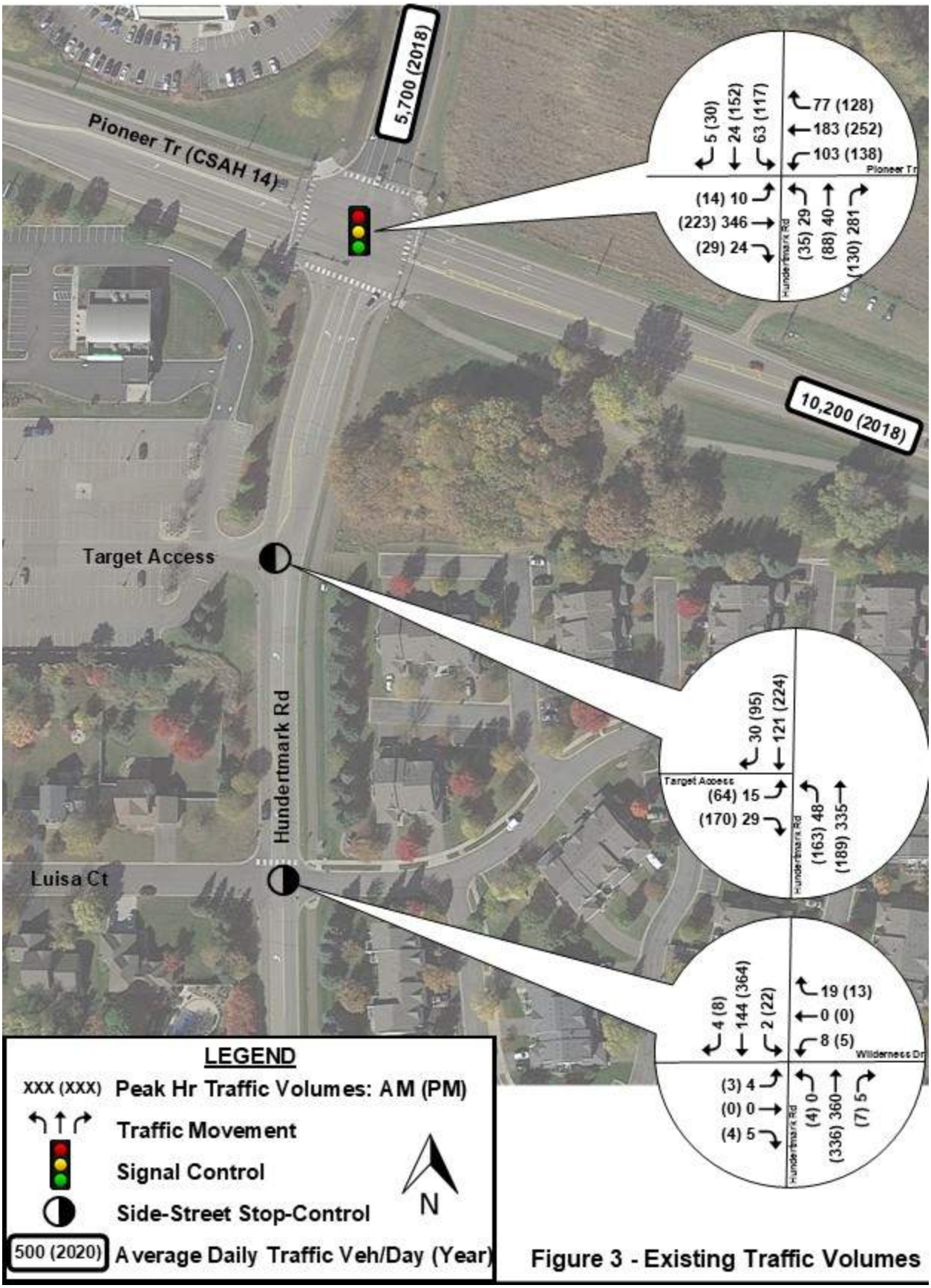


Figure 3 - Existing Traffic Volumes

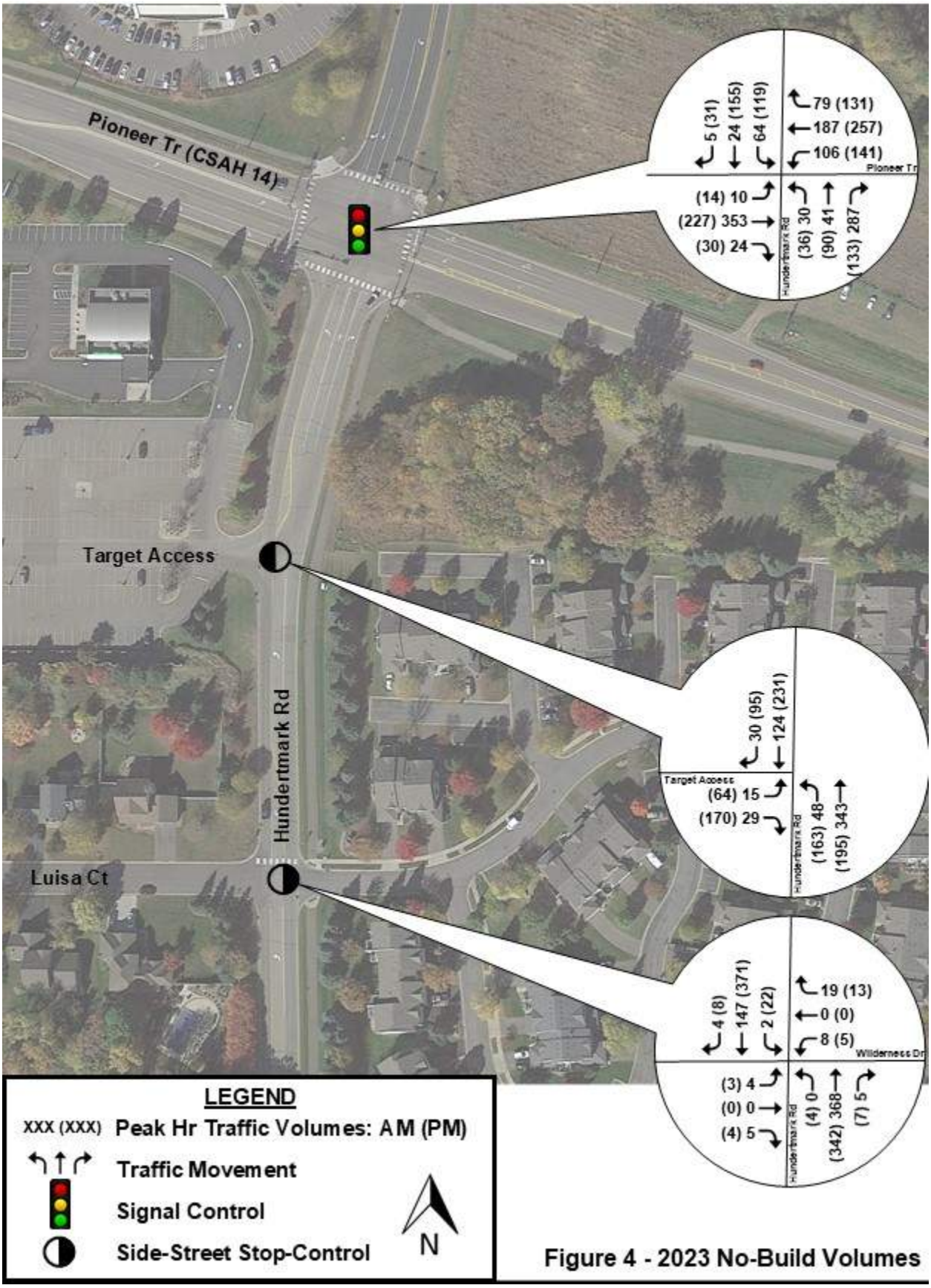


Figure 4 - 2023 No-Build Volumes

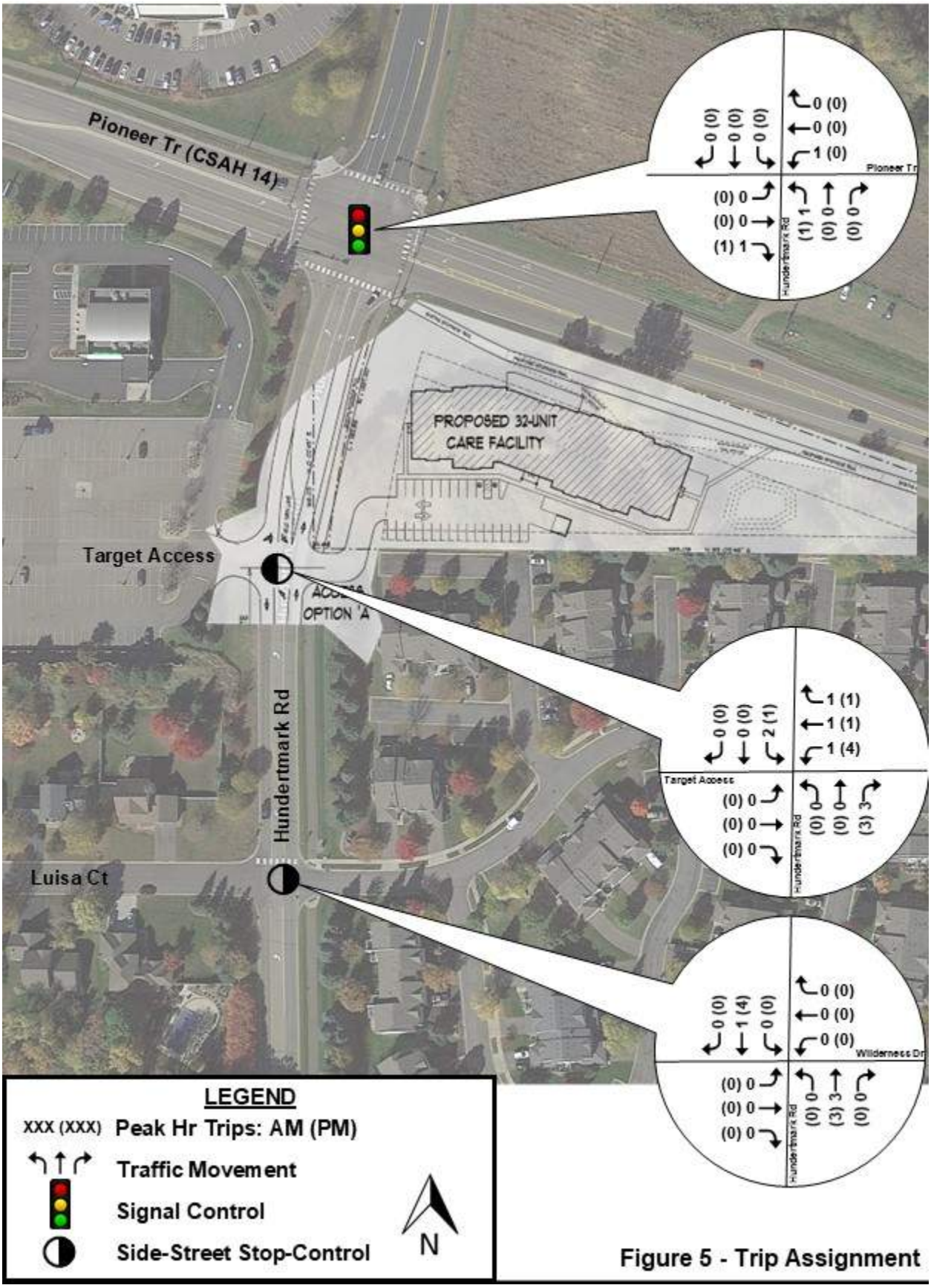


Figure 5 - Trip Assignment

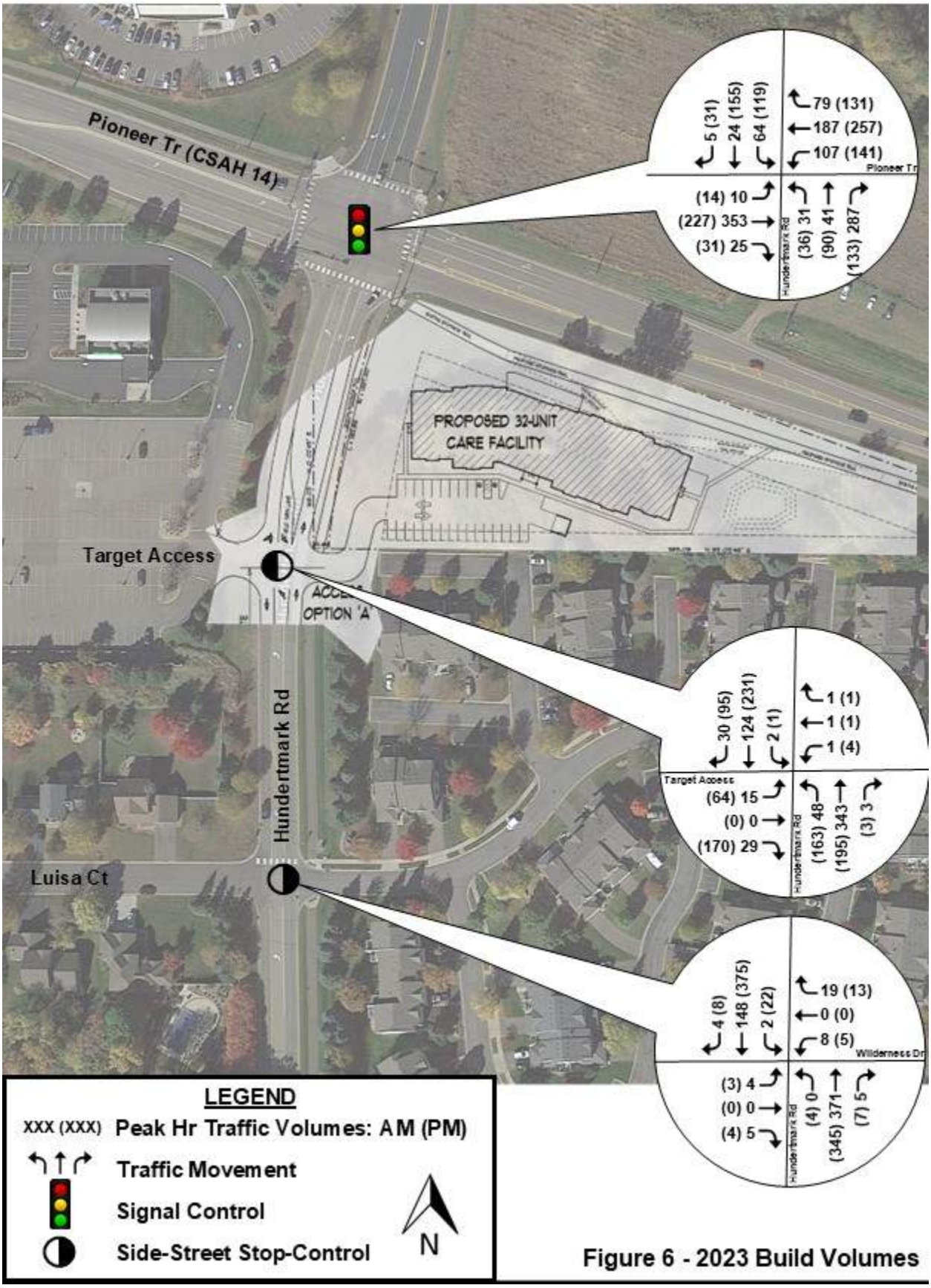


Figure 6 - 2023 Build Volumes



KAD LED
LED Area Luminaire

Buy American

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

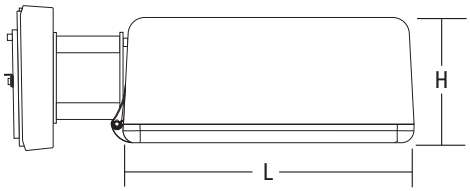
EPA: 1.2 ft² *(0.11 m²)*

Length: 17-1/2" *(44.5 cm)*

Width: 17-1/2" *(44.5 cm)*

Height: 7-1/8" *(18.1 cm)*

Weight (max): 36 lbs. *(16.4 kg)*



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM®2 or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: KAD LED 40C 1000 40K R5 MVOLT SPD04 DDBXD

KAD LED

Series	LEDs	Drive current	CCT	Distribution	Voltage	Mounting[3]
KAD LED	20C[1] 20 LEDs 30C[1] 30 LEDs 40C 40 LEDs 60C 60 LEDs	530 530 mA[1] 700 700 mA 1000 1000 mA	30K 3000 K 40K 4000 K 50K 5000 K	R2 Type II R3 Type III R4 Type IV R5 Type V[2]	MVOLT[3] 277[4] 120[4] 347[1,3] 208[4,5] 480[1,3] 240[4,5]	**Shipped included** SPUMBAK___ Square pole universal mounting adaptor[6] RPUMBAK___ Round pole universal mounting adaptor[6] SPD___ Square pole RPD___ Round pole WBD___ Wall bracket[2] WWD___ Wood pole or wall 04 4" arm 06 6" arm 09 9" arm[5] 12 12" arm[6] **Shipped separately** DAD12P Degree arm (pole) DAD12WB Degree arm (wall) KMA Mast arm external fitter

Options

Shipped installed

- PER5 NEMA twist-lock five-wire receptacle only (no controls)[7,8,9]
- PER7 Seven-wire receptacle only (no controls)[7,8,9]
- SF Single fuse (120, 277, 347V)[4]
- DF Double fuse (208, 240, 480V)[4]
- PIR Bi-level, motion/ambient sensor, 8–15' mounting height, ambient sensor enabled at 5fc[3,10,11,12,13]
- PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[3,10,11,12,13]
- PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[3,10,11,12,13]
- PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[3,10,11,12,13]
- BL30 Bi-level switched dimming, 30%[3,9,10,11]
- BL50 Bi-level switched dimming, 50%[3,9,10,11]
- PNMTDD3 Part night, dim till dawn[3,11,16]
- PNMT5D3 Part night, dim 5 hrs[3,11,16]
- PNMT6D3 Part night, dim 6 hrs[3,11,16]
- PNMT7D3 Part night, dim 7 hrs[3,11,16]
- HS Houseside shield[17]

Shipped separately[17]

- WG Wire guard

Finish *(required)*

- DDBXD Dark bronze
- DBLXD Black
- DNAXD Natural aluminum
- DWHXD White
- DDBTXD Textured dark bronze
- DBLBXD Textured black
- DNATXD Textured natural aluminum
- DWHGXD Textured white

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Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [18]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [18]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [18]
DSHORT SBK U	Shorting cap [18]
KADLEDHS 20C U	Houseside shield for 20 LED unit
KADLEDHS 30C U	Houseside shield for 30 LED unit
KADLEDHS 40C U	Houseside shield for 40 LED unit
KADLEDHS 60C U	Houseside shield for 60 LED unit
KMA DDBXD U	Mast arm adapter (specify finish)
KADWG U	Wire guard accessory
PUMBAK DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish)

For more control options, visit DTL and ROAM online.

**Round pole top must be 3.25" O.D. minimum.*

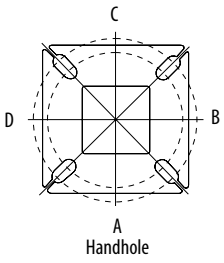
NOTES

1 20C or 30C LED are not available with 530 Drive Current and 347V or 480V.
2 Any Type 5 distribution, is not available with WBA.
3 Any PIRx with BL30, BL50 or PNMT, is not available with 208V,240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
5 9" or 12" arm is required when two or more luminaires are oriented on a 90° drilling pattern.
6 Available as a separate combination accessory: PUMBAK (finish) U.
7 Mounting must be restricted to ±45° from horizontal aim per ANSI C136.10-2010. Not available with motion sensor.
8 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
9 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. Shorting cap included.
10 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control. Dimming driver standard. Not available with PER5 or PER7.
11 Maximum ambient temperature with 347V or 480V is 30°C.
12 Reference Motion Sensor table.
13 Reference PER table on page 3 to see functionality.
14 Requires an additional switched circuit with same phase as main luminaire power. Supply circuit and control circuit are required to be in the same phase.
15 Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7 or PNMT options.
16 Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7, BL30 or BL50.
17 Also available as a separate accessory; see Accessories information.
18 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.

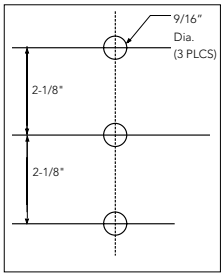
Drilling

Template #5

HANDHOLE ORIENTATION



Top of Pole



Tenon Mounting Slipfitter**

Tenon O.D.	Single Unit	2 at 180°	2 at 90° †	3 at 120°	3 at 90° †	4 at 90° †
2-3/8"	T20-190	T20-280	T20-290	T20-320 †	T20-390	T20-490
2-7/8"	T25-190	T25-280	T25-290	T25-320	T25-390	T25-490
4"	T35-190	T35-280	T35-290	T35-320	T35-390	T35-490

*** For round pole mounting (RPDXX) only.* *† Requires 9" or 12" arm.*

Pole drilling nomenclature: # of heads at degree from handhole (default side A)				
DM19	DM28	DM29	DM39	DM49
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Side B, C, & D	Sides A, B, C, D
Note: Review luminaire spec sheet for specific nomenclature				

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Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20C	530 mA	35W	R2	4,140	1	0	1	118	4,446	1	0	1	127	4,473	1	0	1	128
			R3	4,123	1	0	1	118	4,427	1	0	1	126	4,455	1	0	1	127
			R4	4,128	1	0	1	118	4,433	1	0	1	127	4,460	1	0	1	127
			R5	4,381	2	0	1	125	4,704	3	0	1	134	4,734	3	0	1	135
	700 mA	45W	R2	5,271	1	0	1	117	5,660	1	0	1	126	5,696	1	0	2	127
			R3	5,250	1	0	2	117	5,637	1	0	2	125	5,672	1	0	2	126
			R4	5,256	1	0	2	117	5,644	1	0	2	125	5,679	1	0	2	126
			R5	5,578	3	0	1	124	5,990	3	0	1	133	6,027	3	0	1	134
	1000 mA	73W	R2	7,344	1	0	2	101	7,886	2	0	2	108	7,935	2	0	2	109
			R3	7,314	1	0	2	100	7,854	1	0	2	108	7,903	1	0	2	108
			R4	7,322	1	0	2	100	7,863	1	0	2	108	7,912	1	0	2	108
			R5	7,771	3	0	1	106	8,345	3	0	1	114	8,397	3	0	1	115
30C	530 mA	53W	R2	6,166	1	0	2	116	6,621	1	0	2	125	6,663	1	0	2	126
			R3	6,141	1	0	2	116	6,594	1	0	2	124	6,635	1	0	2	125
			R4	6,148	1	0	2	116	6,602	1	0	2	125	6,643	1	0	2	125
			R5	6,525	3	0	1	123	7,006	3	0	1	132	7,050	3	0	1	133
	700 mA	69W	R2	7,817	2	0	2	113	8,395	2	0	2	122	8,447	2	0	2	122
			R3	7,785	1	0	2	113	8,360	2	0	2	121	8,412	2	0	2	122
			R4	7,794	1	0	2	113	8,370	1	0	2	121	8,422	1	0	2	122
			R5	8,272	3	0	2	120	8,883	3	0	2	129	8,938	3	0	2	130
	1000 mA	108W	R2	10,755	2	0	2	100	11,549	2	0	2	107	11,621	2	0	2	108
			R3	10,711	2	0	2	99	11,502	2	0	2	106	11,574	2	0	2	107
			R4	10,724	2	0	2	99	11,515	2	0	2	107	11,587	2	0	2	107
			R5	11,381	3	0	2	105	12,221	4	0	2	113	12,297	4	0	2	114
40C	530 mA	71W	R2	8,156	2	0	2	115	8,758	2	0	2	123	8,812	2	0	2	124
			R3	8,122	2	0	2	114	8,722	2	0	2	123	8,776	2	0	2	124
			R4	8,132	1	0	2	115	8,732	1	0	2	123	8,786	1	0	2	124
			R5	8,630	3	0	2	122	9,267	3	0	2	131	9,325	3	0	2	131
	700 mA	94W	R2	10,286	2	0	2	109	11,045	2	0	2	118	11,114	2	0	2	118
			R3	10,244	2	0	2	109	11,000	2	0	2	117	11,069	2	0	2	118
			R4	10,256	2	0	2	109	11,013	2	0	2	117	11,081	2	0	2	118
			R5	10,884	3	0	2	116	11,688	4	0	2	124	11,761	4	0	2	125
	1000 mA	141W	R2	13,923	2	0	2	99	14,951	2	0	2	106	15,045	2	0	2	107
			R3	13,866	2	0	3	98	14,890	2	0	3	106	14,983	2	0	3	106
			R4	13,882	2	0	3	98	14,907	2	0	3	106	15,000	2	0	3	106
			R5	14,733	4	0	2	104	15,821	4	0	2	112	15,920	4	0	2	113
60C	530 mA	103W	R2	11,996	2	0	2	116	12,882	2	0	2	125	12,963	2	0	2	126
			R3	11,947	2	0	2	116	12,829	2	0	2	125	12,909	2	0	2	125
			R4	11,961	2	0	2	116	12,844	2	0	2	125	12,925	2	0	2	125
			R5	12,694	4	0	2	123	13,632	4	0	2	132	13,717	4	0	2	133
	700 mA	137W	R2	14,927	2	0	2	109	16,029	3	0	3	117	16,130	3	0	3	118
			R3	14,866	2	0	3	109	15,964	2	0	3	117	16,063	2	0	3	117
			R4	14,884	2	0	2	109	15,982	2	0	3	117	16,082	2	0	3	117
			R5	15,796	4	0	2	115	16,962	4	0	2	124	17,068	4	0	2	125
	1000 mA	216W	R2	19,328	3	0	3	89	20,754	3	0	3	96	20,884	3	0	3	97
			R3	19,248	3	0	3	89	20,669	3	0	4	96	20,799	3	0	4	96
			R4	19,271	3	0	3	89	20,693	3	0	4	96	20,823	3	0	4	96
			R5	20,452	4	0	2	95	21,962	4	0	2	102	22,099	4	0	2	102

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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	**77°F**	**1.00**
30°C	86°F	1.00
40°C	104°F	0.99

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **KAD LED** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	KAD LED 60C 1000			
	1.0	0.91	0.86	0.76
	KAD LED 40C 1000			
	1.0	0.93	0.88	0.79
	KAD LED 60C 700			
	1.0	0.98	0.97	0.94

Electrical Load

			Current (A)					
Number of LEDs	Drive Current (mA)	System Watts	120	208	240	277	347	480
20	530	35	0.30	0.18	0.16	0.15	-	-
	700	45	0.39	0.23	0.20	0.18	0.15	0.12
	1000	73	0.61	0.35	0.31	0.27	0.22	0.17
30	530	53	0.44	0.26	0.23	0.20	-	-
	700	69	0.58	0.34	0.29	0.26	0.21	0.16
	1000	108	0.90	0.52	0.46	0.40	0.32	0.24
40	530	71	0.60	0.35	0.32	0.29	0.21	0.16
	700	94	0.79	0.46	0.41	0.36	0.27	0.20
	1000	141	1.18	0.68	0.59	0.52	0.42	0.30
60	530	103	0.87	0.50	0.44	0.39	0.29	0.22
	700	137	1.15	0.66	0.58	0.51	0.40	0.29
	1000	216	1.81	1.04	0.92	0.81	0.63	0.47

NOTE: All ratings in this table are for a nominal system operated at 25°C ambient temperature. Current and power specifications in this table do not include branch circuit derating specified in the National Electrical Code. Please observe all applicable electrical codes and ratings.

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*For use when motion sensor is used as dusk to dawn control						

PER Table						
Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✔	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	⊘	✔	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	⊘	⚠	Wires Capped inside fixture	⚠	Wires Capped inside fixture	Wires Capped inside fixture
Future-proof*	⊘	⚠	Wired to dimming leads on driver	✔	Wired to dimming leads on driver	Wires Capped inside fixture
Future-proof* with Motion	⊘	⚠	Wires Capped inside fixture	✔	Wires Capped inside fixture	Wires Capped inside fixture

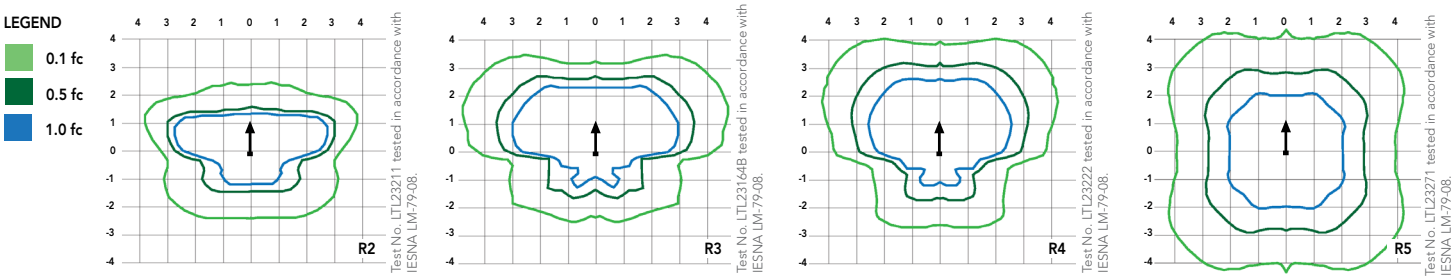
✔ Recommended
⊘ Will not work
⚠ Alternate

*Future-proof means: Ability to change controls in the future.

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's KAD LED homepage.

Isofootcandle plots for the KAD LED 60C 1000 40K. Distances are in units of mounting height (20').



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FEATURES & SPECIFICATIONS

INTENDED USE
The energy savings and long life of the KAD LED area luminaire make it a reliable choice for illuminating streets, walkways, parking lots, and surrounding areas.

CONSTRUCTION
Single-piece die-cast, aluminum housing with contoured edges has a 0.12" nominal wall thickness. Die-cast door frame has an impact-resistant, tempered glass lens that is fully gasketed with one piece tubular silicone.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS
Precision-molded refractive acrylic lenses are available in four distributions. Light engines are available in standard 4000K, 3000K or 5000K (70 CRI) configurations.

ELECTRICAL
Light engine consists of high-efficacy LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low (per ANSI/IEEE C62.41.2).

INSTALLATION
Included universal mounting block and extruded aluminum arm facilitate quick and easy installation using nearly any existing drilling pattern. Stainless steel bolts fasten the luminaire to the mounting block securing it to poles or walls. The KAD LED can withstand up to a 1.5 G vibration load rating per ANSI C136.31. The KAD LED also utilizes the standard K-Series (Template #5) for pole drilling.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient.
DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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WST LED
Architectural Wall Sconce

Buy American

Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

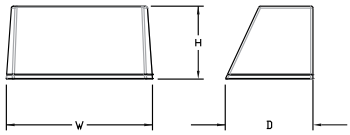
Luminaire

Height: 8-1/2″ *(21.59 cm)*

Width: 17″ *(43.18 cm)*

Depth: 10-3/16″ *(25.9 cm)*

Weight: 20 lbs *(9.1 kg)*

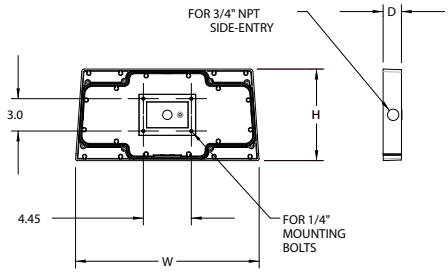


Optional Back Box (PBBW)

Height: 8.49″ *(21.56 cm)*

Width: 17.01″ *(43.21 cm)*

Depth: 1.70″ *(4.32 cm)*

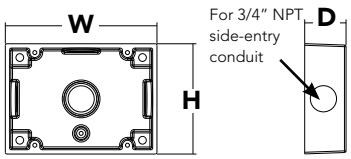


Optional Back Box (BBW)

Height: 4″ *(10.2 cm)*

Width: 5-1/2″ *(14.0 cm)*

Depth: 1-1/2″ *(3.8 cm)*



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

See ordering tree for details.

A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

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A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

WST LED					
Series	**Performance Package**	**Color temperature**	**Distribution**	**Voltage**	**Mounting**
WST LED	P1 1,500 Lumen package P2 3,000 Lumen package P3 6,000 Lumen package	27K 2700 K 30K 3000 K 40K 4000 K 50K 5000 K	VF Visual comfort forward throw VW Visual comfort wide	MVOLT[1] 120[2] 208[2] 240[2] 277[2] 347[2] 480[2]	**Shipped included** (blank) Surface mounting bracket **Shipped separately** BBW Surface-mounted back box[3] PBBW Premium surface-mounted back box[3,4]

Options

NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8'-15' mounting heights[5,6,7]
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights[5,6,7]
PE	Photoelectric cell, button type[8]
PER	NEMA twist-lock receptacle only (controls ordered separate)[9]
PER5	Five-wire receptacle only (controls ordered separate)[9]
PER7	Seven-wire receptacle only (controls ordered separate)[9]
PIR	Motion/Ambient Light Sensor, 8-15' mounting height[5,6]
PIR1FC3V	Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[5,6]
PIRH	180° motion/ambient light sensor, 15-30' mounting height[5,6]
PIRH1FC3V	Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[5,6]
SF	Single fuse (120, 277, 347V)[2]
DF	Double fuse (208, 240, 480V)[2]
DS	Dual switching[10]
DMG	0-10V dimming extend out back of housing for external control (control ordered separate)[11]
E7WH	Emergency battery backup, Non CEC compliant (7W)[7]
E7WC	Emergency battery backup, CA Title 20 Noncompliant (cold, 7W)[7,12]
E7WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 7W)[7,13]
E20WH	Emergency battery pack 18W constant power, Certified in CA Title 20 MAEDBS[7]
E20WC	Emergency battery pack -20°C 18W constant power, Certified in CA Title 20 MAEDBS[7,12]
E23WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 20W)[7,12,14]
LCE	Left side conduit entry[15]
RCE	Right side conduit entry[15]
BAA	Buy America(n) Act Compliant

Shipped separately

RBPW	Retrofit back plate[3]
VG	Vandal guard[15]
WG	Wire guard[15]

Finish *(required)*

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DSSXD	Sandstone
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white
DSSTXD	Textured sandstone

Accessories

Ordered and shipped separately.

WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WSBBW DDBTXD U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)[17]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V)[17]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V)[17]

NOTES

1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
3. Also available as a separate accessory; see accessories information.
4. Top conduit entry standard.
5. Not available with VG or WG. See PER Table.
6. Reference Motion Sensor table.
7. Not available with 347/480V.
8. Need to specify 120, 208, 240 or 277 voltage.
9. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
10. Not available with Emergency options, PE or PER options.
11. DMG option not available with standalone or networked sensors/controls.
12. Battery pack rated for -20° to 40°C.
13. Comes with PBBW.
14. Warranty period is 3-years.
15. Not available with BBW.
16. Must order with fixture; not an accessory.
17. Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table.

Emergency Battery Operation

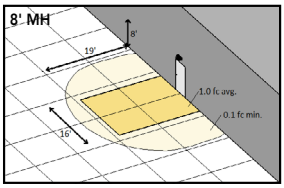
The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

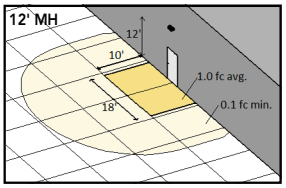
All emergency backup configurations include an independent secondary driver with an integral relay to immediately detect AC power loss, meeting interpretations of NFPA 70/NEC 2008 - 700.16

The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

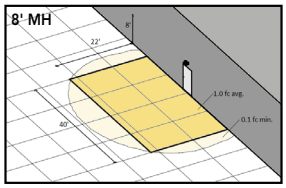
The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package and VF distribution product in emergency mode.

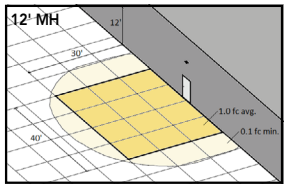
10' x 10' Gridlines
8' and 12' Mounting Height





WST LED P1 27K VF MVOLT E7WH





WST LED P2 40K VF MVOLT E20WH

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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.95	>0.92	>0.87

Electrical Load

Performance package	System Watts	Current (A)					
		120	208	240	277	347	480
P1	11	0.1	0.06	0.05	0.04	---	---
	14	---	---	---	---	0.04	0.03
P1 DS	14	0.12	0.07	0.06	0.06	---	---
P2	25	0.21	0.13	0.11	0.1	---	---
	30	---	---	---	---	0.09	0.06
P2 DS	25	0.21	0.13	0.11	0.1	---	---
P3	50	0.42	0.24	0.21	0.19	---	---
	56	---	---	---	---	0.16	0.12
P3 DS	52	0.43	0.26	0.23	0.21	---	---

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	3 sec	5 min	5 min

*for use with site wide Dusk to Dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	⊘	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion	⊘	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof*	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof* with Motion	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture

✓ Recommended

⊘ Will not work

⚠ Alternate

*Futureproof means: Ability to change controls in the future.

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT[1])	Dist. Type	27K (2700K, 70 CRI)					30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	12W	VF	1,494	0	0	0	125	1,529	0	0	0	127	1,639	0	0	0	137	1,639	0	0	0	137
		VW	1,513	0	0	0	126	1,548	0	0	0	129	1,659	0	0	0	138	1,660	0	0	0	138
P2	25W	VF	3,163	1	0	1	127	3,237	1	0	1	129	3,469	1	0	1	139	3,468	1	0	1	139
		VW	3,201	1	0	0	128	3,276	1	0	0	131	3,512	1	0	0	140	3,512	1	0	0	140
P3	50W	VF	6,025	1	0	1	121	6,165	1	0	1	123	6,609	1	0	1	132	6,607	1	0	1	132
		VW	6,098	1	0	1	122	6,240	1	0	1	125	6,689	1	0	1	134	6,691	1	0	1	134

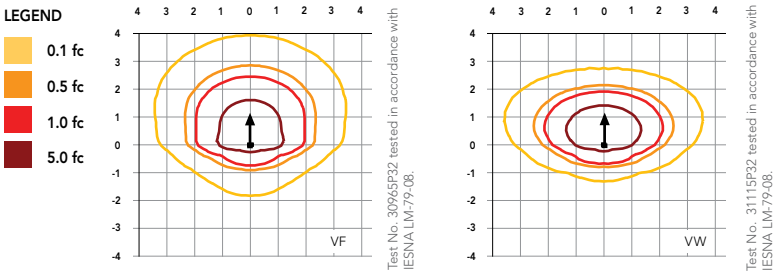
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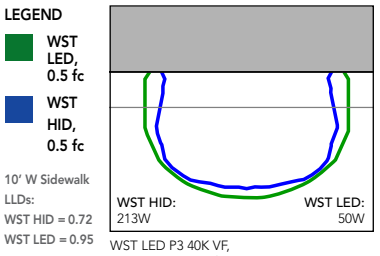
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WST LED homepage.

Isofootcandle plots for the WST LED P3 40K VF and VW. Distances are in units of mounting height (10').



Distribution overlay comparison to 175W metal halide.



WST LED P3 40K VF,
WST 175M FT Probe, 12' Mounting Ht

FEATURES & SPECIFICATIONS

INTENDED USE
The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WST LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) consist of 98 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 2 electronic driver has a power factor >90%, THD <20%. Easily-serviceable surge protection device meets a minimum Category B (per ANSI/IEEE C62.41.2).

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. PIR and back box options are rated for wet location. Rated for -30°C to 40°C ambient.

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

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Proposed Cantissimo Easement

From: Mary Myss (marymyss@yahoo.com)

To: todd@tcodesign.net; ehanson@chaskamn.com; kringwald@chaskamn.com; mclark@chaskamn.com; harvlois@gmail.com; wmjhope@hotmail.com; jefff@citiesmanagement.com; sillisrsu22@hotmail.com

Cc: marymyss@yahoo.com

Date: Thursday, November 18, 2021, 06:29 PM CST

Hi Todd and Elizabeth,

Attached you'll find the results of an email that was sent to Pioneer Pointe homeowners. I asked them to review the proposed easement giving access to the proposed Cantissimo development directly across from the Target entrance. I asked them if they would support granting the required easement provided the current easement would be vacated and a privacy fence would be built between Pioneer Pointe's townhouses and the entry road for Cantissimo.

The names and addresses of all respondents were included to validate the authenticity of the poll.

Please keep us posted of all further developments. We all look forward to moving forward with a mutually beneficial solution.

On behalf of Pioneer Pointe residents

Respectfully submitted,

MaryMyss

Easement votes PDF.pdf
33.7kB

EASEMENT SURVEY-PIONEER POINTE

“Yes” votes- Supporting the proposed easement across from Target

Alan Niebeling
Kaylyn Niebeling
379 Wagon Wheel Drive

Will Hope
Jackie Hope
421 Wilderness Drive

Lois Pankratz
373 Campfire Curve

Patti Frauendienst

Raven Rader
Les Rader
323 Campfire Curve

Jerry Julius
415 Wilderness

Marya Johanneson
482 Wilderness

Keith Maetzold
Marge Maetzold
494 Wilderness

Elmer Young
Mary Ann Young
489 Wilderness

Patti Martinovich

Doreen Gorghuber
342 Campfire

Dale Knudson
Sharon Knudson
479 Wilderness

Mary Starr
446 Wilderness

Renee Maass
374 Wilderness

Connie Luck
335 Wagon Wheel

John Mullen
Renee Mullen
346 Campfire

Nancy Votava
410 Wilderness Drive

Clark Grant
Annette Grant
449 Wilderness

Susan Ellingson
323 Wagon Wheel Lane

Mark Hoffman
Peggy Hoffman
351 Wagon Wheel Lane

Dan Peterson
475 Wilderness

Guy Costa
Sylvia Costa
499 Wilderness

Fred Byers
Lorna Byers
487 Campfire

David Christensen
340 Wilderness

Greg Moore
2742 Wagon Wheel Curve

Richard Kruger
303 Wagon Wheel Lane

Jeffrey Walker
Kathryn Walker
2713 Wagon Wheel Curve

Jim Perrone
Julie Perrone
311 Wagon Wheel Lane

Jim Glover
Susie Glover
409 Campfire

Paul Schlüeter
Gayle Schlueter
427 Campfire

Norm Melvin
Terri Melvin
493 Wilderness

Andy Strong

2764 Wagon Wheel Trail

Brian Olson
345 Wilderness

Jim Rightler
Barbara Rightler
343 Wagon Wheel Lane

Cheryl Spaulding
463 Campfire

Adrienne Klehr
453 Wilderness

Dale Kutter
Diane Kutter
359 Wagon Wheel

Patty Miller
483 Wilderness

Francoise Rausis Exsted
Craig Rausis Exsted
496 Wilderness Drive

Wayne Larson
Carolyn Larson
2784 Wagon Wheel Trail

Bruce Nelson
Bonnie Nelson
389 Campfire

Deann Bellanger
367 Wagon Wheel Lane

Kathleen Marier

381 Campfire

Patty Jochum
Rick Willette
341 Campfire

Mary Myss
347 Campfire

Jeff Altenburg
Katie Altenburg
411 Campfire Curve

Deb Hetherington
Jim Hetherington
401 Campfire Curve

Pat Denison
419 Campfire Curve

“NO” VOTES-AGAINST THE PROPOSED EASEMENT

Michael Kujak
Adria Kujak
467 Campfire

Proposed Cantissimo Easement

From: Mary Myss (marymyss@yahoo.com)

To: todd@tcodesign.net; ehanson@chaskamn.com; kringwald@chaskamn.com; mclark@chaskamn.com; harvlois@gmail.com; wmjhope@hotmail.com; jefff@citiesmanagement.com; sillisrsu22@hotmail.com

Cc: marymyss@yahoo.com

Date: Thursday, November 18, 2021, 06:29 PM CST

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33.7kB

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482 Wilderness

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494 Wilderness

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489 Wilderness

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342 Campfire

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Renee Maass
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335 Wagon Wheel

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Nancy Votava
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Peggy Hoffman
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Dan Peterson
475 Wilderness

Guy Costa
Sylvia Costa
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David Christensen
340 Wilderness

Greg Moore
2742 Wagon Wheel Curve

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Jeffrey Walker
Kathryn Walker
2713 Wagon Wheel Curve

Jim Perrone
Julie Perrone
311 Wagon Wheel Lane

Jim Glover
Susie Glover
409 Campfire

Paul Schlüeter
Gayle Schlueter
427 Campfire

Norm Melvin
Terri Melvin
493 Wilderness

Andy Strong

2764 Wagon Wheel Trail

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345 Wilderness

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411 Campfire Curve

Deb Hetherington
Jim Hetherington
401 Campfire Curve

Pat Denison
419 Campfire Curve

“NO” VOTES-AGAINST THE PROPOSED EASEMENT

Michael Kujak
Adria Kujak
467 Campfire

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
04/13/2022

Subject: **Oak Creek (fka Sagewood 3rd) – Preliminary Plat & Rezoning**

Applicant: DR Horton

Location: North of Engler Boulevard/Co Rd 10, west of Clover Preserve Drive

Case No.: 2022-20

Synopsis: Applicant seeks to obtain approval of a 102 lot development on 52 acres of land in Chaska and the orderly annexation Laketown Township area

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval to the City Council

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BACKGROUND

At its May 15, 2000 City Council meeting the Clover Ridge Concept Plan was approved. The Concept Plan showcased an assortment of housing and densities throughout the development, which included the portion of Kelzer's site that is being looked at tonight.

In July of 2002 the Final Plat for Clover Preserve 2nd Addition was approved, which encompassed the lots on Sophia Drive and a street stub that ended at the Chaska-Laketown Township border. Several signs were put along the edge of Sophia Drive and Kelzer's land to inform residents that the area will be developing.



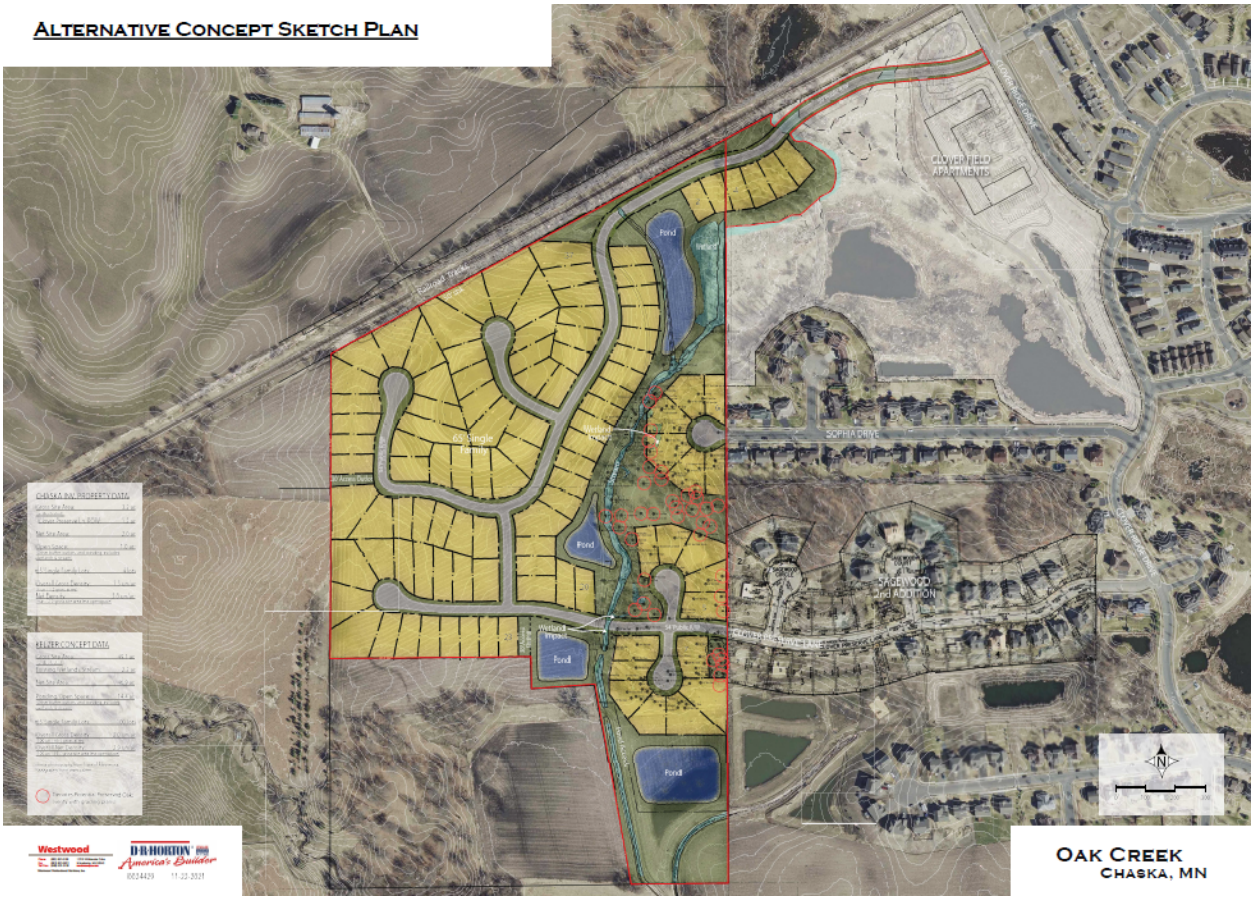
In May 2018 the concept plan for Sagewood was approved, which encompassed the 1st and 2nd additions. The 1st and 2nd additions were the extension and termination of Clover Field Circle, and the extension of Clover Preserve Lane up to the western border of Chaska abutting Laketown Township. The Final Plat for Sagewood was approved in October 2018, and the final plat for Sagewood 2nd was approved in April 2019.

In May 2020, the original concept plan for Sagewood 3rd was approved that showed the westerly extension of Clover Preserve Lane and Sophia Drive into the orderly annexation area of Laketown Township. 83 lots on approximately 42 acres were shown in this concept plan. Concerns were raised regarding development access, traffic, tree preservation, and school capacity. The developer was specifically asked to explore more development access opportunities. A copy of the May 2020 Concept Plan is shown on the next page.



May 2020 Concept Plan

In December 2021, a revised concept plan of Oak Creek (fka Sagewood 3rd addition) was approved, which included a 107-lot development on 52 acres of land, plus the inclusion of a 162-unit apartment building (Clover Field Apartments) on Clover Ridge Drive. Oak Creek was approved as a single-family development on both the Kelzer property and a portion of the Chaska Investment property. The apartments were proposed entirely on the Chaska Investment property. A new road extension was also shown to connect into Clover Ridge Drive across from Romeo Court that would provide an additional means of ingress/egress out of the single-family development, which was reactionary to the comments received during the May 2020 review. The December 2021 Concept Plan showed both projects reviewed together so that the property owners/developers could get an understanding of how a road extension could fit into the context of the future multi-family site where Clover Field Apartments was proposed.



December 2021 Concept Plan

Tonight we are looking at the development of both properties, however, they will be reviewed as separate applications. This is the request for the single-family development, Oak Creek.

Because the Kelzer property is located in the orderly annexation area of Laketown Township, it was required that this property be annexed into Chaska prior to preliminary plans being approved. The property has since been annexed as of March 2022.

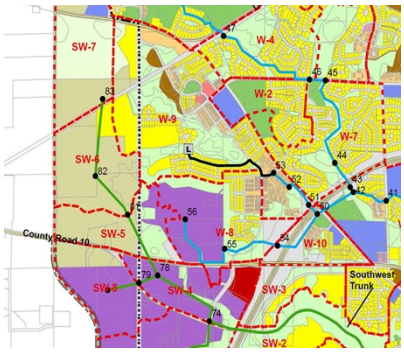
CHANGES SINCE DECEMBER 2021 CONCEPT PLAN

The following changes have occurred since the December 2021 concept plan approvals:

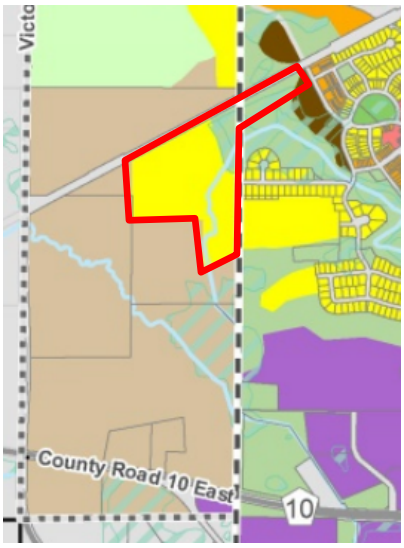
- Road Access; the December 2021 concept plan showed 3 separate access points into the Oak Creek development; one main road access extending from Clover Ridge Drive; one access from Sophia Drive serving 6 lots on a cul de sac; and one access from Clover Preserve Lane. Since road access into the development was a major concern from the adjacent neighbors, the developer has modified the plans. The road extension from Clover Ridge Drive (now known as Oak Creek Drive) will now be a dead end access serving a majority of the development (85 lots). The cul de sac on Sophia Drive will serve 5 lots. And the extension from Clover Preserve Lane will now dead end into two cul de sacs serving 13 lots.
- Traffic; a traffic study was completed for this development. The study concluded that the project will have appropriate access to the sites and to the surrounding roadway

network. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate site-generated traffic.

- Lot Count; the new plan is showing a decreas in lots from December 2021. The December 2021 concept plan showed 107 lots. The new plan is showing 102 lots, which is a 5 lot reduction. One of those eliminated lots was on Sophia Drive's proposed cul de sac.
- Tree Preservation; the preliminary plan is showing that 12 additional trees (mostly oaks) can be preserved compared to the December 2021 concept plan. These additional trees are mainly situated on the rear yards of the lots on Sophia Drive's cul de sac.
- Jonathan & Homeowners Assocation; the developer and Jonathan have been actively discussing the potential of Oak Creek to be absorbed into the Jonathan Association. The developer believes a resolution will be completed by the next month. If Oak Creek is not absorbed into Jonathan then DR Horton will create their own HOA to maintain the elements of their neighborhood (park, tree preservation areas and trails).



Sewer Plan

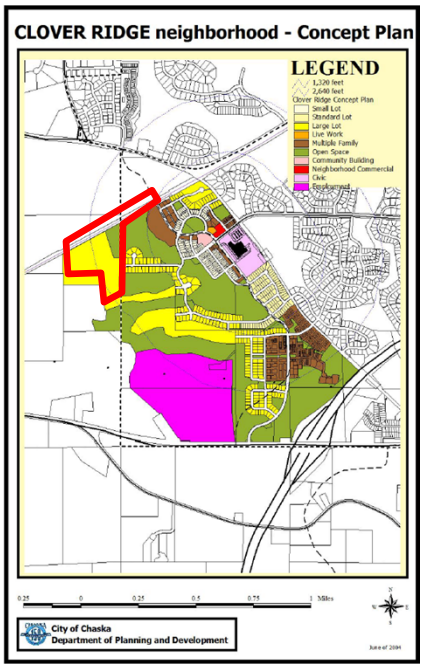


Excerpt from 2040 Land Use Plan

Neighborhood Meeting November 18, 2021:
DR Horton and Chaska Investments conducted a neighborhood meeting for their concept plan on November 18, 2021. In sum, there were concerns on traffic, access, and building height for the apartments.

Project Goals
The goals of the Oak Creek project include the following:

- Providing a seamless transition of road and pedestrian connections
- Housing design and lot sizes that will complement the existing 2-story homes on larger lots
- Creating a neighborhood layout that is sensitive to the existing conditions, including availability of utilities, natural grades and drainage patterns
- Preservation of trees and buffer to existing homes.
- Enhancement of a small community feel



Comprehensive Plan & Clover Ridge Concept Plan
The Comprehensive Plan guides these areas to be Low Density Residential. The proposal tonight is consistent with this guidance. The Clover Ridge concept plan also guided this area to be standard lot residential, which the proposal is consistent with. The Clover Ridge neighborhood was approved in May 2000. In September of 2002 it was

amended to show that the Kelzer site to the south would be developed for Employment (ie. Business Park), and the Kelzer site to the west would be developed for Low Density Residential as shown in the red outline of the attached Clover Ridge Concept Plan. This amendment was due as a result of an assessment agreement between the City and the Kelzer family. The delineation of this low-density residential area was dictated by the sewer capacity that could reach those limits. See sewer plan above for reference.

Use of the Comprehensive Plan

The primary use of the Comprehensive Plan is to be a general policy document for future growth and development within the City. Comprehensive Plan's are not binding, but rather guiding tools when development comes in. Chaska's Comprehensive Plan is intended to be flexible and responsive to changing conditions. It needs to be continually referenced, updated, and used as a guide. It functions as an overall course or path, and is intended to provide direction, rather than dictating specific activities or precise decision-making.

To that end, when development comes in, plans are looked at more closely and with more technical information to understand the raw details of a specific site (developability vs non-developability). The details that emerge from plans (i.e. wetland and wooded steep slope delineations) may differentiate from the layout/lines of the Comprehensive Plan. It is common, if not practical, that sites layouts, and lines, may change slightly from what the Comprehensive Plan shows based on what technical information reveals. Comprehensive Plans are not binding for that reason.

As it relates to this project, the Comprehensive Plan shows that the subject area is guided to be Low Density Residential and Open Space. The developer has completed a wetland delineation report that reviewed the wetlands on site. The conclusion of this report showed that there were buildable areas where the Comprehensive Plan showed Open Space. This would be an example of technical data differentiating from the layout of the Comprehensive Plan.

CURRENT PROPOSAL

Preliminary Plat and Rezoning is being requested for the Oak Creek project. The 102-lot Oak Creek proposal on approximately 52-acres of property is located north of Engler Boulevard/County Road 10 and west of Clover Preserve Drive and Sophia Drive. This area is now considered to be a part of Chaska and no longer in the orderly annexation area of Laketown Township as of March 2022.

Adjacent properties

The site is bound on the north by the Twin Cities & Western railway and Steve Kelzer's farm property; to the west by Victoria Drive (CR 11), the Brose family farm and the remaining portion of Kelzer's land; the south by Kelzer's farmland, land owned by Cal Haasken, and the homes on Sophia Drive; the east by residential in Clover Ridge and Sagewood.

Existing Conditions

The nearly 50-acre site is located to the west of the Sagewood and Clover Preserve neighborhoods and south of the Twin Cities & Western Railroad line. The site is currently used for agricultural purposes. The site naturally drains to the creek located along the west side of the side and ultimately off-site to the south.

The southerly portion of the Kelzer Property contains an area of trees. A tree survey indicates approximately 219 trees of varying sizes and species that are evenly distributed throughout. The majority is Oak. The remaining species include a combination of Cedar, Basswood, Ash and Elm among a few others. The average size of these trees are averaging around 20-35 inches in caliper. There is also a 'Heritage Tree' noted on the southwest corner of the site outside of the development area. This tree has been noted as one of the oldest trees in the community, and plans to remain.

Poor soils were noted on the southerly most tip of the subject site. Because of this the developer will be looking at this area for ponding.

A Notice of Determination of wetlands on the Kelzer Property was received November 2019 and it was determined that there are 10 wetlands on the site. The wetlands range in size from 158 sq. ft. to 21,953 sq. ft. A small creek also transverses the site from north to south. A Notice of Determination of wetlands for the access area on the Chaska Investment Property was received November 2020. This site contains a large wetland complex with various upland areas. Impacts to the wetlands are due to the new access road, Oak Creek Drive.

Land Use
The proposed Oak Creek consists of 102 single family lots with a typical lot size of 65 feet wide by 140 feet deep. Minimum setbacks are proposed to be consistent with those approved for Clover Preserve and Sagewood: front setback of 26 feet, side setback of 5 feet, corner lot side setback of 26 feet and rear yard setback of 20 feet.

The parcels of land that the Oak Creek project encompasses is currently zoned Open (O), which is a 'holding zone' until it develops. The area in question will be rezoned to a more appropriate zoning district, such as Planned Residential Development (PRD).

Layout
The neighborhood will be accessed from a new road, called Oak Creek Drive by the intersection of Clover Ridge Drive and Romeo Court. Clover Preserve Lane will be extended up to the creek and include 13 homesites. Sophia Drive will be constructed with a cul de sac and include 5 homesites. Trails will be constructed at the ends of both Clover Preserve and Sophia to provide pedestrian connectivity.

A private neighborhood park is planned for the site in a location that is west of the creek. Park amenities will include a play structure and seating.

There are a number of site conditions that were reviewed and considered in the layout of Oak Creek. These include:

- Site Access. As revised from the 2021 concept plan, access is being created from Clover Ridge Drive parallel with the rail line now known as Oak Creek Drive. Additionally, Sophia Drive will terminate in a cul de sac and provide access to 5 lots. Clover Preserve Lane will terminate into two cul de sacs and provide access to 13 lots.

- Existing Terrain and Creek. The site naturally drains to the creek located along the west side of the side and ultimately off-site to the south. It is this feature that influenced the design of separate north and south areas with ponding located throughout the site.

- View sheds. The topography of the site is such that the north portion sits higher than the south. This creates open sight lines to the south and west. The design takes advantage of this feature by providing a majority of the homes with desirable views. Those homes that face the north or east will benefit from the pond or wooded views.

- Tree Preservation. There is a large grove of trees located in the south area of the site. The site layout is sensitive to this feature and therefore accommodates preservation of trees. A more detailed analysis of tree preservation is provided in the tree preservation portion of this report.

- Utilities. Water & sewer is stubbed to each access point on the east. The site's layout is influenced by the extension of these utilities. A sanitary sewer lift station will be needed to serve this site. The final location of the lift station is oriented on the west side of the proposed tot lot.

- Railroad. The Twin City and Western Railroad has a set of tracks along the north boundary of the site. Additional buffer and setback for lots that back the railroad tracks will be provided. Due to the grade differential adjacent to the tracks, varying approaches to screening will include berming and landscaping.

- Farm Access. Currently, the land owner accesses the site for farming via a driveway over the railroad tracks. Upon development of the northerly portion of the site, farm access will be rerouted through the public road system to access the southerly & westerly retained parcels; shown as Outlots A & L on the proposed plat.

Transportation/ROW/Construction Traffic

The plan proposes to provide for a network of internal residential roadways with connectivity to arterial roadways. Specifically, Clover Preserve Lane is extended to the west to provide access to two cul de sacs that access 13 lots. In addition, a new development access is proposed from Clover Ridge Drive, parallel with the railroad, that will connect into the internal road system of Oak Creek now known as Oak Creek Drive.

The current plan appears to show road right-of-way widths (54 feet) that are consistent with the designs in the existing Clover Ridge and Sagewood developments, which is smaller than the City's typical 60 foot wide ROWs. City crews have evaluated this change in the 1st and 2nd additions of Sagewood and have determined that the 54 foot wide ROW is acceptable to carry through and provide more of a seamless approach to the existing neighborhoods.

A traffic study has been completed for this development. The traffic study found that Schoolmaster Drive currently operates near the maximum trips per day for a Local Street as classified in the City's Comprehensive Plan and by the Metropolitan Council. In response to access and traffic, Oak Creek is being proposed with one access, Oak Creek Drive. The new

access road connects to Clover Ridge Drive, which is classified as a collector road. The goal in creating the northerly connection is to encourage traffic to use the collector road system within the surrounding neighborhood and reduce the impact on the local streets.

Construction access will enter and exit from Pioneer Trail to the north. Construction traffic will be precluded from going south on Clover Ridge Drive per the developer's construction access plan. The developer will have to continue working with the existing neighbors on Sophia Drive and Clover Preserve Lane about how construction traffic will use these roadways for the homes proposed on these roadways.

Utilities
Sewer and water utilities are available. Water and sewer are stubbed to each access point on the east. The site's layout is influenced by the extension of these utilities. A sanitary sewer lift station will be needed to serve this site. The final location of the lift station is planned to be on the west edge of the tot lot.

Stormwater
Stormwater ponding is proposed as a part of this proposal on the south side of the site, center of the site just west of the creek, and north of the site. It will be required that the developer provides adequate maintenance access into these areas. Stormwater ponding will have to meet all Carver County WMO and City standards.

Phasing
The site is planned to be graded in its entirety beginning Spring 2022. The 1st phase will be the northeasterly portion of the site to construct Oak Creek Drive as well as the southeasterly portion to extend utilities from Clover Preserve Lane (Sagewood 2nd Addition). The 1st phase will consist of approximately 57 lots with the remaining 45 lots being constructed in the 2nd phase. Street and utility construction of the 1st phase will be Summer with home construction beginning Fall 2022. Dependent on market conditions, the 2nd phase of development is planned to occur in 2023.

Setbacks
The setbacks will be consistent with Sagewood 1st and 2nd. Namely, the front yard setback should be no less than 26 feet. The rear yard setback should be 20 feet. The side yard setback should be 5 feet. Corner lots should have a side yard setback of 26 feet.

In addition to these setbacks, there are other setbacks that may apply to this site. See below:

SETBACKS	
Direction	**Setback**
Wetlands	30 feet
Railway	50 feet

Architecture
DR Horton will be the sole builder in this development. The proposed homes will be 2-story single family designs, which are like those in the current Sagewood neighborhood. DR Horton anticipates offering approximately 7 floor plans ranging in size from 1,900 to 3,400 square feet.

Each floor plan will have multiple elevation options, which will create variety throughout. Pricing will also be similar to homes in Sagewood, starting in the lower to mid $500,000s. A sample of the home designs accompany this application.

City ordinance dictates that housing may not be similar within two houses to each side, directly across the street or diagonal from the house in question. This ordinance has been very successful in the recent past with the result of neighborhoods with varied housing design and architecture.

The following lots were subject to 360 degree architecture per the preliminary plat drawing of the full development dated March 25, 2022:

- Lots 1 & 6, Block 1
- Lots 7, 20, & 25, Block 2
- Lot 14, Block 3
- Lots 1, 4, 5, & 8, Block 4
- Lots 1 & 16, Block 5
- Lot 4, Block 9
- Lots 1 & 8, Block 10

Trails & Sidewalks

There are no public trails proposed as a part of this development nor are there trails called out for this area in the Comprehensive Plan. Because of this the developer will be required to pay trail fees, which will be wrapped into the Developer's Agreement. There will be a couple private trail sections included within the development; one that will connect the lots on Clover Preserve Lane to the lots to the west; and one trail that will connect the lots on Clover Preserve Lane to the Sophia Drive. The trail connection between Sophia Drive and Clover Preserve Lane is the developer's intent to meet the City's comment regarding providing a faster pedestrian connection for the westerly Oak Creek lots to access Clover Ridge Elementary. This option was explored as being the least impactful in terms of a crossing and preserving trees. Staff would still argue that the most direct and functional connection would be a bridge crossing between the Sophia Drive cul de sac and the westerly Oak Creek lots across the creek. The developer shall continue to explore this connection with staff and address at final submittal.

The plan is proposing to include sidewalks. The developer will be required to provide sidewalks on both sides of the streets up to the bulbs of cul de sacs per City policy. A sidewalk connection is proposed for the full length of the south side of Oak Creek Drive out to Clover Ridge Drive. The sidewalk will ultimately turn into the regional trail once it hits the apartment site. The north side of this street is not showing a sidewalk. If the bridge crossing between Sophia Drive and the westerly Oak Creek lots cannot be achieved as noted above, then the sidewalk on the north side of Oak Creek Drive will be required in order to meet policy.

Screening, Landscaping & Tree Preservation

Because this development abuts the Twin Cities and Western railway on its northern edge it will be important that the homes that back up to this use have adequate screening. Typically a mix of deciduous and coniferous trees with a level of berming is the best practice adjacent to railways. The applicant has shown in their plans that a mix of berming in some sections and

mainly coniferous trees will be installed along this edge. In addition they are incorporating a 6 foot privacy fence along the residential edge.



Trees will be required in the boulevard in order to meet the City's Boulevard Tree Policy. It should be noted that the boulevard is the area between the sidewalk and the street.

Tree Preservation is an important piece of this development, specifically in the southeast area where significant trees are present. The applicant has conducted a tree survey. As noted previously, there are 219 trees surveyed which are mainly oak trees ranging from 20-35 inches in caliper. 101 of the trees surveyed will be preserved, which totals 2,354 caliper inches; 118 removed, which totals 2,348 caliper inches. A more detailed review of trees was completed as part of the preliminary grading design. By eliminating a lot on Sophia, rerouting trails and adding retaining walls, 12 additional large trees (mostly Oaks) were able to be saved compared to the December 2021 concept plan. As with Sagewood 1st and 2nd additions, the tree preservation areas are proposed to be in an outlot containing a Conservation Easement and owned by the homeowners' association. There are other trees that sprinkle the yards of some of the lots that will also be preserved and incorporated into an easement area.

It should be noted that there is a cottonwood tree on the southwest tip of the subject site that has been deemed as one of the City's oldest cottonwood trees; it is pictured in the image on this page and is located just south of one of the southerly ponds outside the project limits. The developer has stated that this tree is not incorporated into the development and will remain preserved.

Private Amenity Area

A private neighborhood amenity area is planned for the site in a central location on the west side of the creek. Private amenities will include a play structure and seating.

Although this plan is proposing their own amenities, it will still be required of the developer to pay park dedication fees since the area proposed will be private.

Jonathan Association

During the reviews of Sagewood 1st and 2nd additions it was discussed whether or not Sagewood would be incorporated into the Jonathan Association, which is a Homeowners Association that encompasses the area over Clover Ridge. At that time the developer had the choice of either opting to be in the Association or create their own and provide their own private amenity area. The developer opted for their own private amenity area and the creation of their own Homeowners Association. As this new extension from the Sagewood development is mostly in the former orderly annexation area of Laketown Township, it is not required to be a part of the Jonathan Association by location. However, the developer has been in active discussions with Jonathan and are pursuing the Oak Creek development to be a part of the

Jonathan Association. The developer and Association will have more information related to this in the next month, or prior to final approvals. If the development does not become a part of the Jonathan Association then they will create their own HOA.

Annexation
The subject site was formerly located in the orderly annexation area of Laketown Township. This orderly annexation area was put in place in the 1980's to have zoning control over the areas that will be added to the City of Chaska in the future. The developer and City have completed the annexation process as of March 2022 and the area is now a part of the City of Chaska.

Development Costs (Infrastructure Improvements)
The City of Chaska has a number of area-wide development cost such as, but not limited to:

- Storm Sewer
- Trails
- Parks

Prior to final platting, the developer will need to work with City Staff to determine which of these are applicable and what those fees will be.

Preliminary Plat
The site will be platted into 102 lots for the development site. The following are the proposed outlots and their dispositions:

- Outlot A: farm access to be retained by the property owner (Kelzer's)
- Outlot B: wetland, ponding, and open space to be deeded to the City of Chaska
- Outlot C: tree preservation area to be owned by the HOA
- Outlot D: open space to be deeded to the City of Chaska
- Outlot E: open space to be owned by the HOA
- Outlot F: ponding area to be retained by the property owner (Chaska Investments)
- Outlot G: future development and wetland area to be retained by the property owner (Chaska Investments)
- Outlot H: farmland to be retained by the property owner (Kelzer's)
- Outlot I: farmland to be retained by the property owner (Kelzer's)
- Outlot J: farmland to be retained by the property owner (Kelzer's)
- Outlot K: farmland to be retained by the property owner (Kelzer's)
- Outlot L: farm access to be retained by the property owner (Kelzer's)
- Outlot M: tot lot to be owned by the HOA
- Outlot N: wetland, ponding, and open space to be deeded to the City of Chaska
- Outlot O: tree preservation area to be owned by the HOA

Rezoning
The site is being rezoned from Open (O) and Planned Multi-Use District (PMD-15) to Planned Residential District No. 85 (PRD-85).

Deadline for Agency Action
The City of Chaska received the complete application for this request on March 1, 2022. Pursuant to Minnesota State Statutes the City must act on this request by **Saturday, April 30, 2022 (60 days)**, unless the City provides the petitioner with written reasons for an additional

60-day review period. The additional review period would extend to Wednesday, June 29, 2022. The City may with the petitioner's consent extend the review period beyond the Wednesday, June 29, 2022 date. Lastly, if the City denies the petitioners request "… it must state in writing the reasons for the denial at the time it denies the request."

PLANNING COMMISSION ACTION REQUESTED

Motion to recommend to City Council approval of the Preliminary Plat for a 102 lot development on 52 acres of land, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Narrative (pgs 1-4), prepared by DR Horton, dated March 25, 2022**
    b. **Cover, prepared by Westwood, dated March 25, 2022**
    c. **Existing Conditions, prepared by Westwood, dated March 25, 2022**
    d. **Preliminary Plat – Overall, prepared by Westwood, dated March 25, 2022**
    e. **Preliminary Plat (pgs 4-6), prepared by Westwood, dated March 25, 2022**
    f. **Preliminary Grading Plan – Overall, prepared by Westwood, dated March 25, 2022**
    g. **Preliminary Grading, Drainage & Erosion Control (pgs 8-11), prepared by Westwood, dated March 25, 2022**
    h. **Preliminary Utility Plan – North, prepared by Westwood, dated March 25, 2022**
    i. **Preliminary Utility Plan – South, prepared by Westwood, dated March 25, 2022**
    j. **Street Profiles, prepared by Westwood, dated March 25, 2022**
    k. **Details (pgs 15-17), prepared by Westwood, dated March 25, 2022**
    l. **Overall Preliminary Landscape Plan, prepared by Westwood, dated March 25, 2022**
    m. **Preliminary Landscape Plan (pgs 19-21), prepared by Westwood, dated March 25, 2022**
    n. **Preliminary Landscape Plan, Notes & Details, prepared by Westwood, dated March 25, 2022**
    o. **Overall Tree Preservation Plan, prepared by Westwood, dated March 25, 2022**
    p. **Tree Preservation Plan (pgs 24-26), prepared by Westwood, dated March 25, 2022**
    q. **Tree Preservation Plan & Data, prepared by Westwood, dated March 25, 2022**
    r. **Illustrative Cross Sections, prepared by Westwood, dated March 14, 2022**
2. **Adherence with the City Engineer's Memo dated April 13, 2022.**
3. **Adherence to the City's Boulevard Tree Policy and local street section design.**
4. **Provision that boulevard trees are placed between the sidewalk and street.**
5. **Provision that boulevard trees are placed throughout the entire boulevard, including corner lot areas, to meet the Tree Policy.**
6. **Provision to preserve 'Heritage Tree' on the southwest corner of the Oak Creek site.**
7. **Provision of sidewalks on both sides of all local streets.**
8. **Adherence to the following building setbacks for Oak Creek:**
    a. **Front (house): 26 feet**
    b. **Front (unenclosed porch): 20 feet**
    c. **Rear: 20 feet**
    d. **Side: 5 feet**
    e. **Side (corner): 26 feet**
9. **Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs, including parkland fees.**
10. **Compliance with the City's anti-monotony and design requirements zoning ordinance (Section 15.28.290) for Oak Creek.**
11. **Provision to be setback 30 feet from edge of wetlands.**

12. **Provision of developer responsibility to remove any hazardous trees or limbs on site as determined by the Public Works Director, prior to issuance of a building permit.**
13. **Provision of a conservation easement in favor of the HOA be completed for all preserved trees, and to be supplied at final submittal.**
14. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
15. **Provision to continue to explore a pedestrian connection/opening across the creek and through Sophia Drive's cul de sac, and to be addressed at final submittal.**
16. **If the pedestrian connection/opening across the creek is not achieved between the Sophia Drive cul de sac and the westerly Oak Creek lots then a sidewalk will be required on the north side of Oak Creek Drive up to Clover Ridge Drive, and to be addressed on the final plans.**
17. **Provision that section 15.28 Special Regulations are complied with.**
18. **The following lots were subject to 360 degree architecture per the preliminary plat drawing of the full development dated March 25, 2022:**
    a. **Lots 1 & 6, Block 1**
    b. **Lots 7, 20, & 25, Block 2**
    c. **Lot 14, Block 3**
    d. **Lots 1, 4, 5, & 8, Block 4**
    e. **Lots 1 & 16, Block 5**
    f. **Lot 4, Block 9**
    g. **Lots 1 & 8, Block 10**

Recommend approval of the rezoning from Open (O) and Planned Multi-Use District (PMD-15) to Planned Residential District No. 85 (PRD-85).

ORDINANCE NO. xxx

AN ORDINANCE AMENDING ORDINANCE NO. 229 (ZONING ORDINANCE) OF THE CITY OF CHASKA BY REZONING CERTAIN REAL ESTATE WITHIN THE CITY OF CHASKA FROM THE OPEN (O) AND PLANNED MULTI-USE DISTRICT (PMD-15) ZONING DISTRICTS TO PLANNED RESIDENTIAL DEVELOPMENT DISTRICT NO. 85 (PRD-85) AND BY ESTABLISHING PERMITTED USES AND REGULATIONS FOR PRD-85 (OAK CREEK)

THE CITY COUNCIL OF THE CITY OF CHASKA DO ORDAIN:

Section I. **Rezoning.** The boundaries of the Zoning Districts as established by Ordinance No. 229 and as shown on the Zoning Map of Chaska, Minnesota are hereby amended as follows:

The following described real estate situated in the City of Chaska is hereby removed from the Open (O) and Planned Multi-Use District (PMD-15) and rezoned to Planned Residential Development District No. 85 (PRD-85) for all of Blocks 1-10 of Oak Creek.

The following graphic exhibits shall serve as the general guide for development of the Oak Creek area:

1. Cover, prepared by Westwood, dated March 25, 2022
2. Existing Conditions, prepared by Westwood, dated March 25, 2022
3. Preliminary Plat – Overall, prepared by Westwood, dated March 25, 2022
4. Preliminary Plat (pgs 4-6), prepared by Westwood, dated March 25, 2022
5. Preliminary Grading Plan – Overall, prepared by Westwood, dated March 25, 2022
6. Preliminary Grading, Drainage & Erosion Control (pgs 8-11), prepared by Westwood, dated March 25, 2022
7. Preliminary Utility Plan – North, prepared by Westwood, dated March 25, 2022
8. Preliminary Utility Plan – South, prepared by Westwood, dated March 25, 2022
9. Street Profiles, prepared by Westwood, dated March 25, 2022
10. Details (pgs 15-17), prepared by Westwood, dated March 25, 2022
11. Overall Preliminary Landscape Plan, prepared by Westwood, dated March 25, 2022
12. Preliminary Landscape Plan (pgs 19-21), prepared by Westwood, dated March 25, 2022
13. Preliminary Landscape Plan, Notes & Details, prepared by Westwood, dated March 25, 2022
14. Overall Tree Preservation Plan, prepared by Westwood, dated March 25, 2022
15. Tree Preservation Plan (pgs 24-26), prepared by Westwood, dated March 25, 2022
16. Tree Preservation Plan & Data, prepared by Westwood, dated March 25, 2022

17. Illustrative Cross Sections, prepared by Westwood, dated March 14, 2022

Section II. **PRD-85 District regulations.** Permitted uses and regulations applicable to the PRD-85 District is hereby amended to read as follows:

A. Intent

The intent of PRD-85 is to create a Low-Density Residential neighborhood that preserves the natural amenities unique to this site.

B. Detached Single Family

The following described real estate shall be limited in its use to Detached Single Family all of Blocks 110 of the recorded plat of Oak Creek, Carver County, Minnesota.

1. Permitted Uses shall be those as found in the R1-Low Density Residence, zoning ordinance Section 15.15.050, Special uses shall be those as found in the zoning ordinance Section 15.15.050C, and Accessory uses shall be as found in the zoning ordinance Section 15.15.050D.
2. The principal building setbacks for Oak Creek shall be:
    a. Front, house: 26 feet
    b. Front, unenclosed porch: 20 feet
    c. Rear: 20 feet
    d. Side: 5 feet
    e. Side, corner: 26 feet
    f. From Railroad Right-of-Way (ROW): 50 feet
3. The accessory structure setbacks for the development shall be:
    a. Front: 26 feet
    b. Rear: 5 feet
    c. Side, corner: 26 feet
    d. Side, interior: 5 feet
    e. In addition, no swimming pools or other recreational courts or appurtenant equipment shall be located in a front or side yard. Setbacks shall be measured from the impervious surfaces of such uses.
4. Preservation of trees as denoted in the Tree Preservation Plan.
5. 360-degree architecture shall be provided for all corner lots and all lots whose rear or sides are visible from public right's-of-way or across from open spaces, and are as follows per the March 25, 2022 preliminary plat:
    a. Lots 1 & 6, Block 1
    b. Lots 7, 20, & 25, Block 2
    c. Lot 14, Block 3
    d. Lots 1, 4, 5, & 8, Block 4
    e. Lots 1 & 16, Block 5
    f. Lot 4, Block 9
    g. Lots 1 & 8, Block 10
6. 4" window wrap on all elevations and the utilization of fiber cement siding on the front elevations shall be required for each home.
7. Maximum height shall be 35 feet for principal structures.

C. <u>Outlots</u>

The following described real estate shall be limited in its use to the following:

- Outlot A: farm access to be retained by the property owner (Kelzer's)
- Outlot B: wetland, ponding, and open space to be deeded to the City of Chaska
- Outlot C: tree preservation area to be owned by the HOA
- Outlot D: open space to be deeded to the City of Chaska
- Outlot E: open space to be owned by the HOA
- Outlot F: ponding area to be retained by the property owner (Chaska Investments)
- Outlot G: future development and wetland area to be retained by the property owner (Chaska Investments)
- Outlot H: farmland to be retained by the property owner (Kelzer's)
- Outlot I: farmland to be retained by the property owner (Kelzer's)
- Outlot J: farmland to be retained by the property owner (Kelzer's)
- Outlot K: farmland to be retained by the property owner (Kelzer's)
- Outlot L: farm access to be retained by the property owner (Kelzer's)
- Outlot M: tot lot to be owned by the HOA
- Outlot N: wetland, ponding, and open space to be deeded to the City of Chaska
- Outlot O: tree preservation area to be owned by the HOA

all in the plat of Oak Creek, Carver County, Minnesota.

<u>Section III</u>. <u>Effective Date.</u> This Ordinance shall be in full force and effect from and after its date of passage, adoption, and publication according to law.

Passed and adopted by the City Council of the City of Chaska, Minnesota this 18th day of April, 2022.

_____
Windschitl, Mayor

Attest:_____
Deputy Clerk

City of Chaska
Memorandum

To: Planning Commission
From: Matt Clark, City Engineer
Date: April 13th, 2022
Subject: Oak Creek Development – Preliminary Plat

The Oak Creek addition dates back to the City development approvals that were considered with the Clover Ridge residential development. The planned development for the site proposes new residential development. Sanitary sewer and water main connections are proposed via Clover Preserve Lane and Clover Ridge Drive. Mass grading is planned over the entire site that requires a storm water management plan and grading plan that meet both the City and watershed requirements prior to grading occurring. The utility plans will need to be coordinated with staff.

The overarching traffic study that was completed to analyze the impacts concluded the development has appropriate access to the surrounding road network with no concern of operations at any of the surrounding intersections. While traffic will increase with development, no improvements are recommended due to the surrounding roadways having sufficient capacity.

The developer will need to coordinate with the neighbors as to the timing of grading. A construction traffic plan will be needed to minimize impacts to the neighboring streets and directing construction traffic to utilize Clover Ridge Drive via Pioneer Trail.

ONE CITY HALL PLAZA/CHASKA, MN 55318-1962/PH: (952) 448-2851/ FX: (952) 448-9300

OAK CREEK

Concept Plan Narrative
3/25/2022
Chaska, MN

EXISTING CONDITIONS

Oak Creek is located to the west of the Sagewood and Clover Preserve neighborhoods and south of the Twin Cities & Western Railroad line. The site, currently used for agricultural purposes, is in Laketown Township and in the process of being annexed into the City of Chaska.

The site received concept plan approval in May 2020 with the condition that access be further reviewed. In December 2021, concept plan approval was granted on a revised plan that provided direct access to Clover Ridge Drive parallel with the rail line.

The southerly portion of the Kelzer Property contains an area of trees. A tree survey indicates approximately 219 trees of varying sizes and species that are generally located along the easterly border of the site. The majority is Oak. The remaining species include a combination of Cedar, Basswood, Ash and Elm among a few others. There are clusters of trees that will be preserved and identified on the tree preservation plan.

A Notice of Determination of wetlands on the Kelzer Property was received November 2019 and it was determined that there are 10 wetlands on the site. The wetlands range in size from 158 sq. ft. to 21,953 sq. ft. A small creek also transverses the site from north to south.

A Notice of Determination of wetlands for the access area on the Chaska Investment Property was received November 2020. This site contains a large wetland complex with various upland areas. Impacts to the wetlands are due to the new access road, Oak Creek Drive.

A traffic study was completed for the site in late 2021. The study reviewed how the proposed Oak Creek development would affect existing traffic conditions. It was determined that the existing roadway network to the north and east of the site could support the future traffic volumes of Oak Creek. The traffic study also showed that the existing local streets to the south are currently reaching the maximum traffic volumes shown in the City of Chaska's Comprehensive Plan.

THE NEIGHBORHOOD

The proposed Oak Creek consists of 102 single family lots with a typical lot size of 65 feet wide by 140 feet deep. Minimum setbacks are proposed to be consistent with those approved for Clover Preserve and Sagewood: front setback of 26 feet, side setback of 5 feet, corner lot side setback of 26 feet and rear yard setback of 20 feet.

The neighborhood will be accessed from a new road, called Oak Creek Drive by the intersection of Clover Ridge Drive and Romeo Court. Clover Preserve Lane will be extended up to the creek and include 13 homesites. Sophia Drive will be constructed with a cul de sac and include 5 homesites. Trails will be constructed at the ends of both Clover Preserve and Sophia to provide pedestrian connectivity.

A private neighborhood park will be located west of Clover Preserve Lane. Park amenities will include a play structure and seating.

The proposed homes will be 2-story single family designs, which are like those in the current Sagewood neighborhood. DR Horton anticipates offering approximately 7 floor plans ranging in size from 1,900 to 3,400 square feet. Each floor plan will have multiple elevation options, which will create variety throughout. Pricing is anticipated to start in the mid to upper $500,000s. A sample of the home designs accompany this application.

CONSTRUCTION & PHASING

Construction access will be mainly from the new road – the intersection of Oak Creek Drive & Clover Ridge Drive. However, access from both Sophia & Clover Preserve will be necessary to complete development of the lots and construction of homes on those streets.

The site is planned to be graded in its entirety beginning Spring 2022. The 1st phase will be the northeasterly portion of the site to construct Oak Creek Drive as well as the southeasterly portion to extend utilities from Clover Preserve Lane (Sagewood 2nd Add). The 1st phase will consist of approximately 57 lots with the remaining 45 lots being constructed in the 2nd phase. Street and utility construction of the 1st phase will be Summer with home construction beginning Fall 2022.

Dependent on market conditions, the 2nd phase of development is planned to occur in 2023.

CONCEPT PLAN DISCUSSION

The below were items of discussion or concern at the time of Concept Plan approval.

1. Access and Traffic. There were concerns that even with the north access, the extension of Clover Preserve Lane will significantly increase traffic on the local streets. It was desired that Clover Preserve Lane not be extended through the new neighborhood.

   Additionally, there were concerns with current traffic on the local neighborhood streets which was expected to worsen with more homes. A traffic study found that Schoolmaster Drive currently operates near the maximum trips per day for a Local Street as classified in the City's Comprehensive Plan and by the Metropolitan Council.
   In response to access and traffic, Oak Creek is being proposed with one access, Oak Creek Drive. The new access road connects to Clover Ridge Drive, which is classified as a collector road. The goal in creating the northerly connection is to encourage traffic to use the collector road system within the surrounding neighborhood and reduce the impact on the local streets.

   As a result of one connection, a cul de sac is proposed at the end of Sophia Drive. Clover Preserve Lane would be extended up to the creek and create 13 homesites off two cul de sacs. Utilities will be extended west into Oak Creek from Sagewood.

2. Tree Preservation. The tree preservation review that was completed at the concept plan stage contemplated approximately 48% of the healthy significant trees being saved. A more detailed review of trees was completed as part of the preliminary grading design. By eliminating a lot on Sophia, rerouting trails and adding retaining walls, 12 additional large trees (mostly Oaks) were able to be saved. As with Sagewood, the tree preservation areas are proposed to be in an outlot containing a Conservation Easement and owned by the homeowners' association.

3. Homeowners' Association. A homeowners' association (HOA) will be required for Oak Creek due to the private park, tree preservation and trails. Options are being reviewed on whether this is with The Jonathan Association or the creation of a separate HOA. We are currently in active conversations with Jonathan and expect a final decision will be made over the next month.

SSTS
S² TRAFFIC SOLUTIONS

February 13, 2022

To: **Michael Suel, DR Horton**

From: **Vernon Swing, PE**

Re: **Traffic Analysis Memorandum Addendum – Oak Creek Single Family with Revised Access, Chaska, MN**

Per your request, S^2 Traffic Solutions, LLC has conducted additional traffic analysis for the proposed Oak Creek single family homes development in the City of Chaska, MN. This study considered the impact of the Oak Creek single family homes, assuming the inclusion of the Clover Field and Clover Ridge apartment projects in the background, with access to Oak Creek limited to the extension of Romeo Ct to the west from the intersection with Clover Ridge Rd. This analysis does not include the previous circulation road that connected to Clover Preserve Dr via Clover Preserve Ln. That said, the site plan still includes 6 homes along the cul-du-sac on Sofia Dr and 12 homes along the Cul-du-sac on Clover Preserve Ln. The Oak Creek development will include 104 single family homes. **Figure 1**, Vicinity Map, and **Figure 2** is the revisednConcept Site Plan for the proposed development.

This memorandum updates the 2025 Build conditions at the study area intersections listed below, and provides a comparison between the trip assignment, **Figure 5**, 2025 Build conditions, **Figure 9**, and traffic operations **Table 3** from the original study:

- Pioneer Trail and Clover Ridge Dr
- Clover Ridge Dr and Romeo Ct
- Clover Ridge Dr and Clover Preserve Dr
- Clover Ridge Dr and Hundertmark Rd W
- Clover Ridge Dr and Clover Field Dr
- Clover Ridge Dr and Schoolmaster Dr
- Clover Preserve Dr and Hundertmark Rd W
- Clover Preserve Dr and Clover Field Dr
- Clover Preserve Dr and Schoolmaster Dr
- Clover Preserve Dr and Clover Preserve Ln
- Clover Preserve Dr and Sophia Dr
- Clover Ridge Apartment access and Clover Ridge Dr
- Clover Field Apartment access and Clover Ridge Dr

Future Conditions

Again, the 2025 conditions reflect a three percent annual increase in background traffic and include traffic forecasts for the Clover Field and Clover Ridge apartment projects.

Trip Generation and Distribution

The volume of vehicle trips generated by the Oak Creek single family home development and the two apartment developments has been estimated for the weekday AM and PM peak hours and on daily basis using the data and methodology described in the ***Trip Generation Manual***[1]. Table 1 summarizes the trip generation estimates.

Table 1 - Trip Generation

Land Use	Type	Block No.	Land Use Code	Size	Trips Generated:				
					AM peak		PM Peak		Weekday
					Enter	Exit	Enter	Exit	ADT
Single Family Housing	Residential	1	210	104 units	19	54	62	36	981
Mid-Rise Apartment/Suburban	Residential	2	221	162 units	14	44	43	28	881
Mid-Rise Apartment/Suburban	Residential	2	221	119 units	10	33	32	20	647
Totals - Gross					43	131	137	84	2,509
					174		221		

* Per ITE's Trip Generation Manual, 11th Edition.

As shown in Table 1, the Oak Creek single family homes development will generate 73 new trips (19 entering and 54 exiting) during the morning traffic peak hour, 98 new trips (62 entering and 36 exiting) during the evening traffic peak hour and 981 daily trips. (The apartment projects trip generation remains the same as reported in the traffic memorandum dated January 25, 2022.)

The new trips for the Oak Creek single family development have been reassigned to the surrounding roadways assuming 86 homes will access the regional roads via the Romeo Ct extension, 6 homes will use Sophia Dr, and 12 homes will use Clover Preserve Ln. In general, the new access scenario changes the distribution with approximately 78 percent of the traffic utilizing Pioneer Trail, 18 percent utilizing Hundertmark Rd W, and 4 percent utilizing Clover Field Dr to access the regional roadway network. **Figure 5 and 5a** illustrates the original trip assignment and the updated trip assignment, respectively. **Figures 9 and 9a** illustrate the original and reassigned Build traffic conditions, respectively.

Traffic Operations

The traffic operations were review reflecting the new traffic distribution. Again, the industry standard Synchro/SimTraffic software package (11th Edition) was used to analyze 2025 Build conditions for both the AM and PM peak hours. It is noted, the reported results are from the aggregate of 10 SimTraffic simulations which use a random number generator to seed the network with vehicles. These results reflect dynamic conditions and are more accurate than the results of the static analysis reported by Synchro. Due to the random number generator results can sometimes show slightly better operations on minor movements under higher traffic conditions when the intersections are operating well. This can be seen when delays and queues noted in the Build Scenario are slightly less than the No-Build Scenario.

Tables 3a, attached, summarizes the results of the original 2025 AM and PM Build analyses and the 2025 AM and PM Build analysis with the Updated Access. The results shown in the indicate the overall level of service at all the studied intersection will still be LOS A, with individual movements at LOS B or better for either access scenarios.

[1] Trip Generation Manual, Institute of Transportation Engineers (ITE), 11th Edition

Conclusion

In conclusion, the proposed Oak Creek single family residential with a single primary access to the regional roadway network will operate well. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate site-generated traffic.

Please contact Vernon Swing at vswingtraffic@gmail.com with any questions.

Attachments: Table 3a; Figures 1, 2, 6, 6a, 9, and 9a.
(Appendices with Traffic Counts, Trip Generation Data, Synchro/Simtraffic Worksheets are available upon request.)

Table 3a

LOS (Delay in sec) plus Vehicle Queuing in Feet (Lower case letter designates Unsignalized intersection; italics designates Roundabout)									
Intersection No.	**Both Build AM**	**BB AM Q**	**Both Build PM**	**BB PM Q**	**Updated Access =>**	**Both Build AM**	**BB AM Q**	**Both Build PM**	**BB PM Q**
5	a (2.8)		a (2.0)			a (3.2)		a (2.1)	
Worst Movement	sbt a (7.3)	NB 52	sbt b (10.4)	NB 45		sbt a (7.8)	NB 58	sbt b (11.1)	NB 44
10	a (1.3)		a (0.9)			a (2.0)		a (1.3)	
Worst Movement	wbl a (7.5)	EB 44	wbl a (6.0)	EB 36		ebl a (5.1)	EB 45	ebl a (5.1)	EB 46
15	*a (2.9)*		*a (2.7)*			*a (3.0)*		*a (2.6)*	
Worst Movement	*sbt a (3.2)*	*NB 10*	*nbr a (3.8)*	*SB 10*		*ebt a (3.6)*	*EB 10*	*sbt a (3.2)*	*NB 14*
20	*a (3.2)*		*a (3.1)*			*a (3.1)*		*a (3.0)*	
Worst Movement	*nbt a (4.5)*	*NB 34*	*nbl a (3.7)*	*EB 23*		*nbt a (3.8)*	*NB 42*	*wbt a (3.8)*	*EB 25*
25	a (1.0)		a (1.4)			a (1.2)		a (0.9)	
Worst Movement	ebl a (6.5)	EB 48	wbl a (6.7)	EB 43		ebl a (6.6)	EB 47	ebl a (4.3)	EB 28
30	a (1.8)		a (1.8)			a (1.9)		a (1.6)	
Worst Movement	ebt a (6.7)	WB 52	ebt a (7.0)	WB 43		ebt a (7.7)	WB 44	wbt a (6.9)	WB 42
35	a (1.3)		a (2.5)			a (1.4)		a (2.1)	
Worst Movement	wbl a (4.3)	WB 44	wbl a (4.7)	WB 58		wbl a (4.3)	WB 45	wbt a (4.3)	WB 49
40	a (2.9)		a (3.3)			a (2.7)		a (2.5)	
Worst Movement	sbt a (5.7)	SB 46	sbt a (5.6)	SB 48		sbt a (5.8)	SB 46	sbt a (5.0)	SB 43
45	a (2.6)		a (3.0)			a (1.7)		a (2.8)	
Worst Movement	sbl a (5.6)	SB 34	sbl a (5.9)	SB 41		sbl a (5.9)	SB 25	sbl a (5.1)	SB 39
50	a (2.2)		a (1.7)			a (1.7)		a (1.4)	
Worst Movement	sbl a (4.4)	EB 48	ebl a (4.7)	EB 50		ebl a (5.7)	EB 45	ebl a (4.5)	EB 46
55	a (1.9)		a (1.1)			a (1.7)		a (1.5)	
Worst Movement	ebl a (4.6)	EB 43	ebl a (4.2)	EB 34		ebl a (4.4)	EB 44	ebl a (4.5)	EB 34
60	a (0.9)		a (0.7)			a (1.0)		a (0.5)	
Worst Movement	ebl a (5.2)	EB 46	ebl a (5.2)	EB 38		ebl a (4.9)	EB 50	ebl a (4.7)	EB 34
65	a (1.0)		a (0.9)			a (1.0)		a (0.8)	
Worst Movement	ebl a (4.2)	EB 45	ebl a (5.0)	EB 42		ebl a (4.3)	EB 43	ebl a (5.0)	EB 34

Intersections:

5	Pioneer Trail and Clover Ridge Dr
10	Clover Ridge Dr and Romeo Ct
15	Clover Ridge Dr and Clover Preserve Dr
20	Clover Ridge Dr and Hundertmark Rd W
25	Clover Ridge Dr and Clover Field Dr
30	Clover Ridge Dr and Schoolmaster Dr
35	Clover Preserve Dr and Hundertmark Rd W
40	Clover Preserve Dr and Clover Field Dr
45	Clover Preserve Dr and Schoolmaster Dr
50	Clover Preserve Dr and Clover Preserve Ln
55	Clover Preserve Dr and Sophia Dr
60	Clover Ridge Apartment access and Clover Ridge Dr
65	Clover Field Apartment access and Clover Ridge Dr



Figure 1 - Vicinity Map

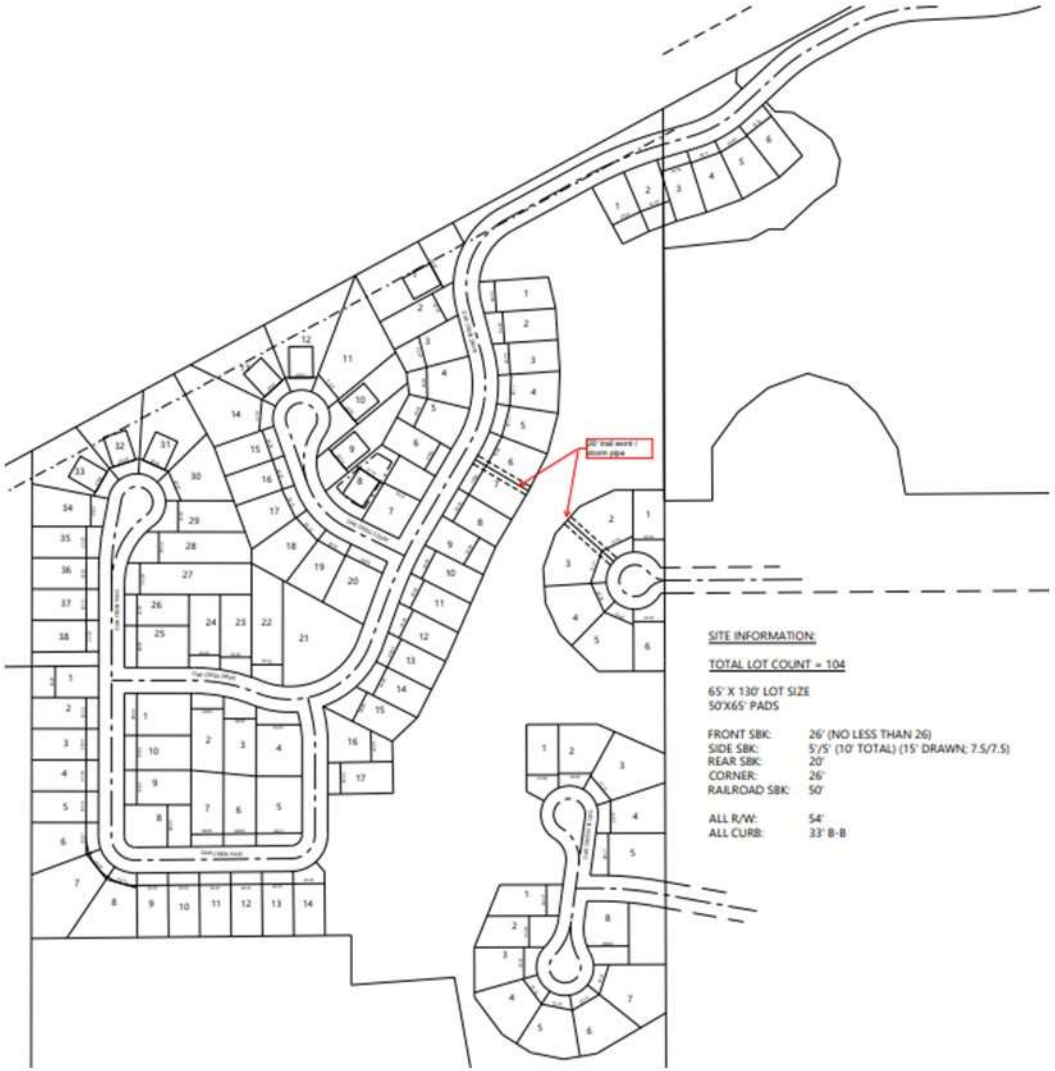


Figure 2 - Oak Creek Residential Site Plan (By Others)

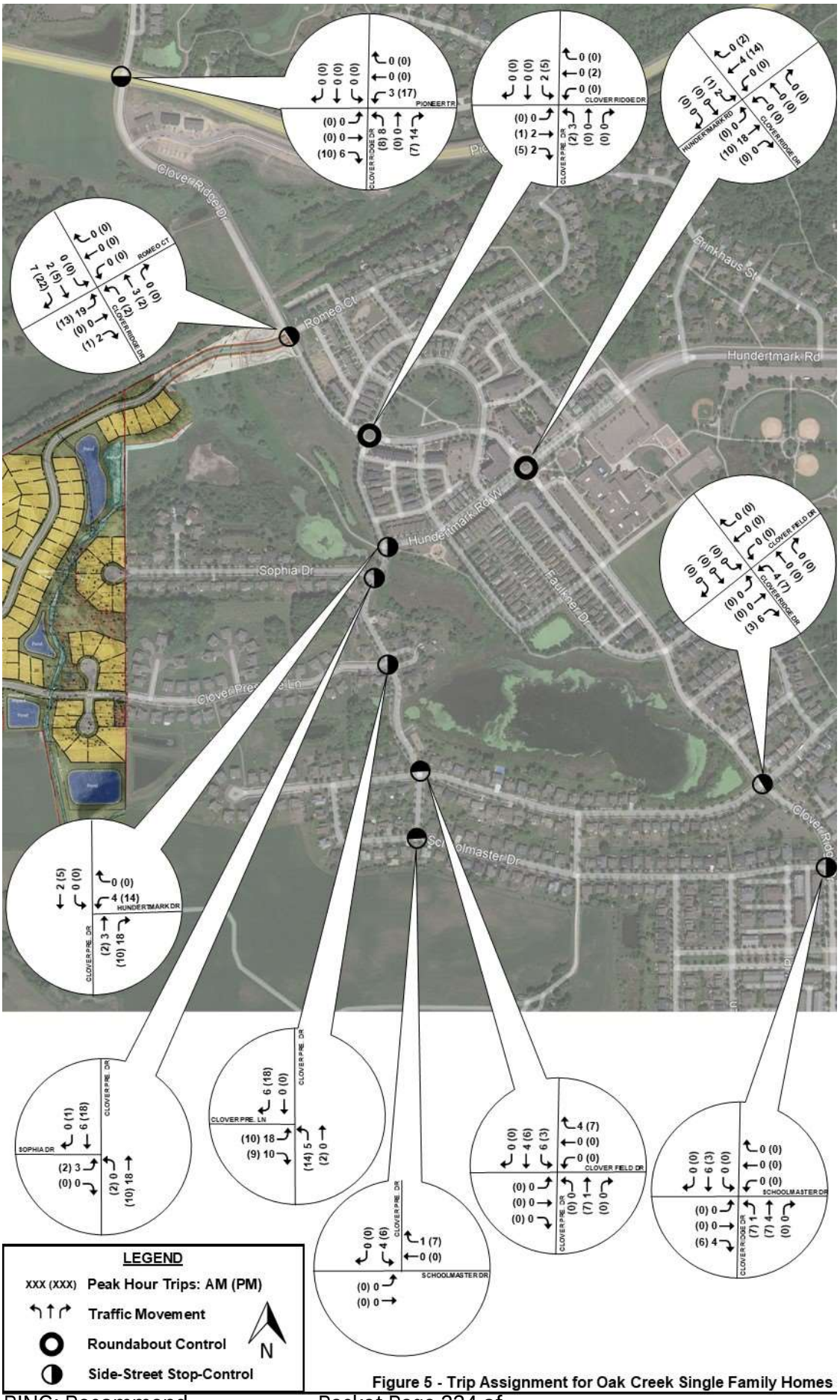


Figure 5 - Trip Assignment for Oak Creek Single Family Homes

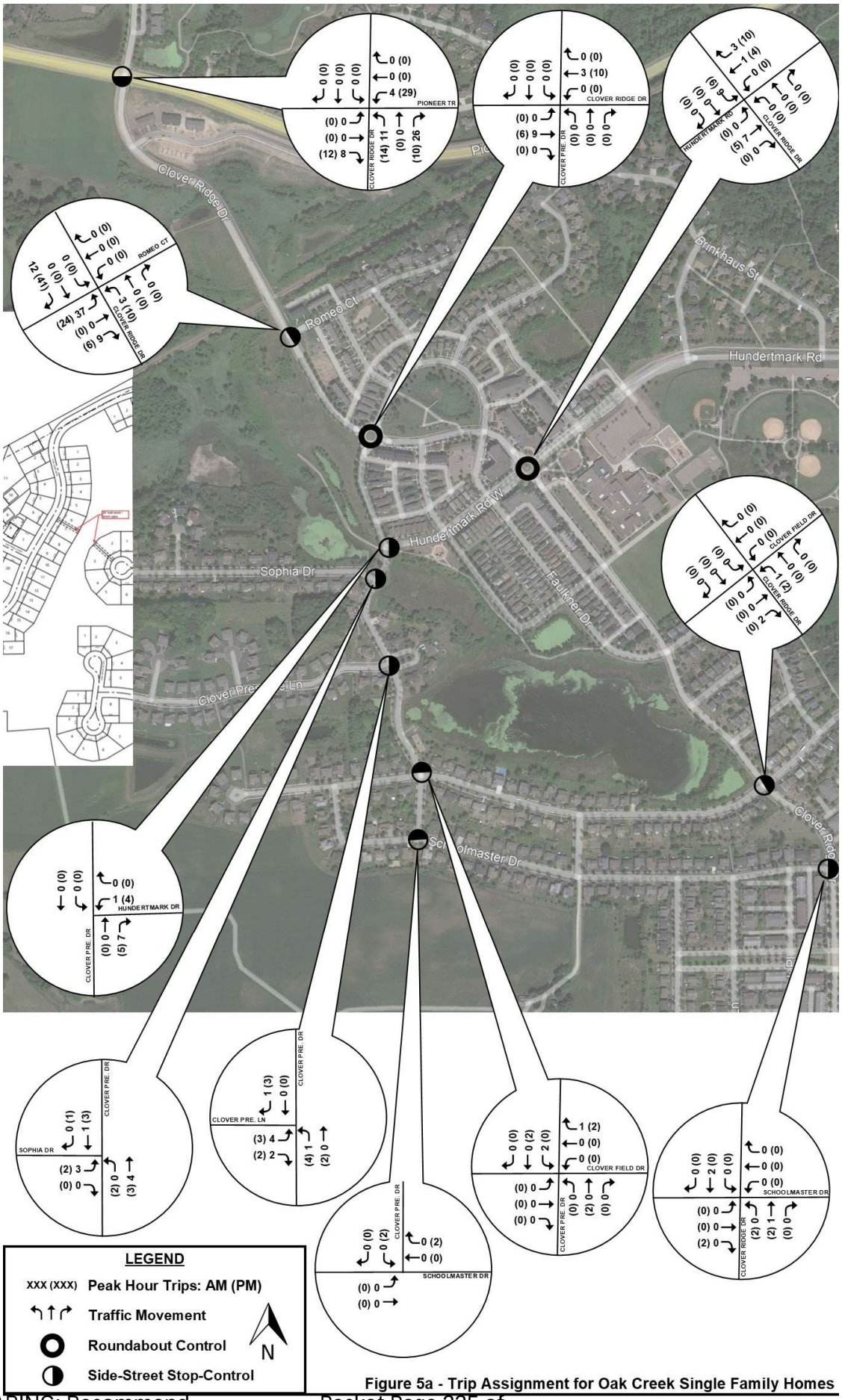


Figure 5a - Trip Assignment for Oak Creek Single Family Homes

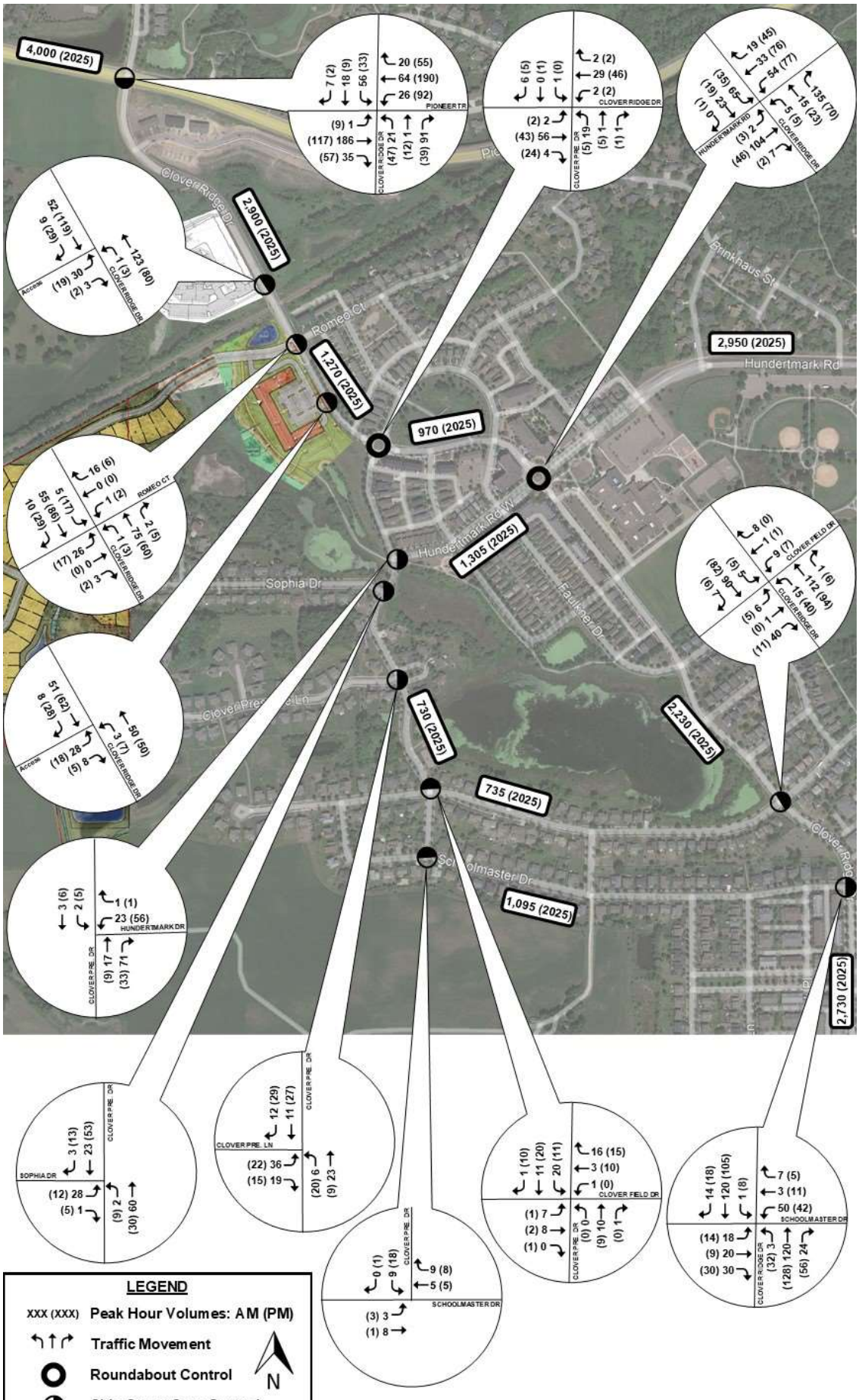


Figure 9 - Build Traffic Volumes for Combined Residential

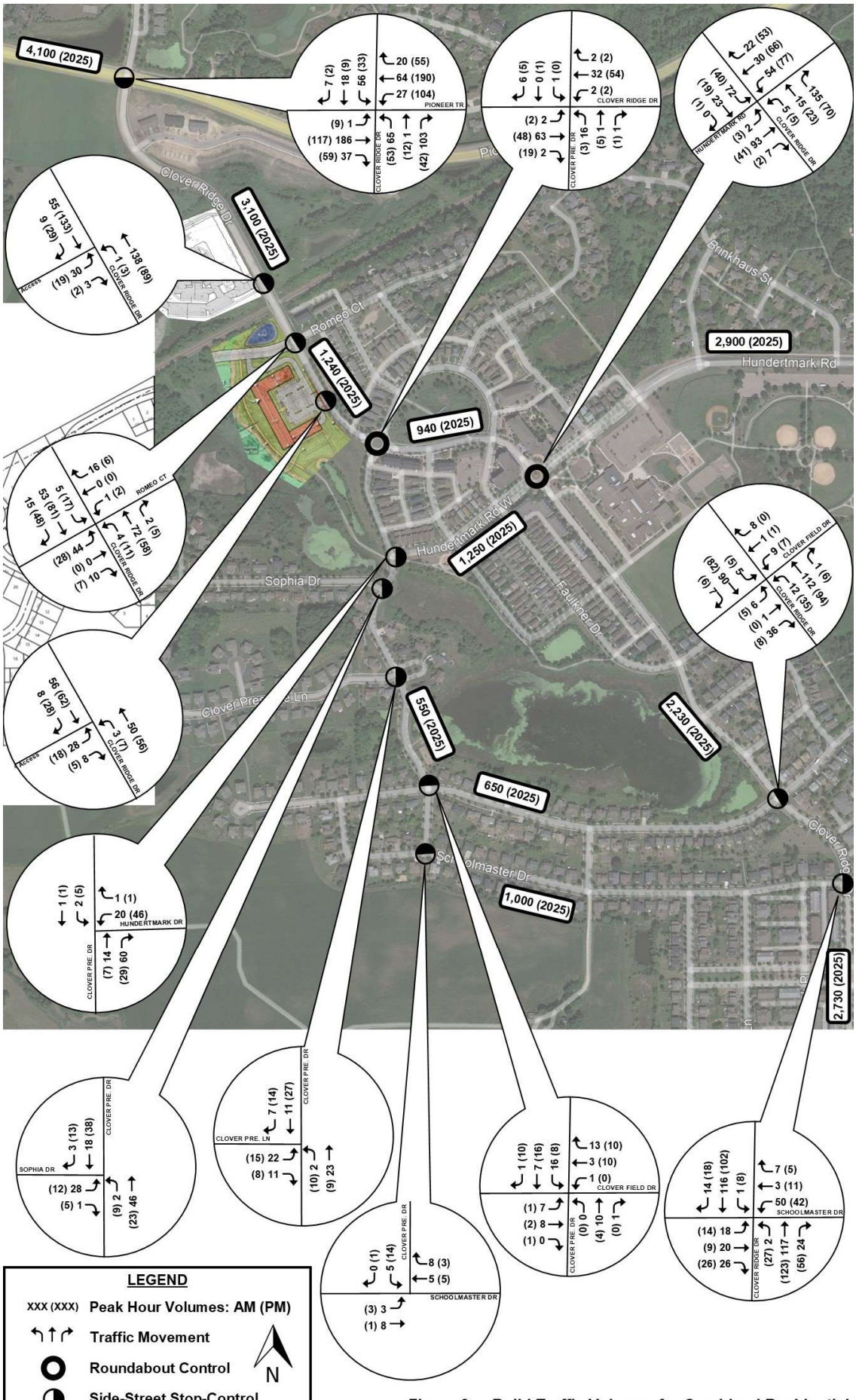


Figure 9a. Build Traffic Volumes for Combined Residential

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PRELIMINARY PLANS

FOR

PLAT, SITE, GRADING, EROSION CONTROL, UTILITIES AND TREE PRESERVATION

FOR

OAK CREEK

CHASKA, MN



Vicinity Map
(NOT TO SCALE)

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044
CONTACT: MIKE SUEL
PHONE: 952-985-7823
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PREPARED BY:

Westwood

Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
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Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

PROJECT NUMBER: 0024429.00
CONTACT: FRANCIS D. HAGEN

SHEET INDEX

Sheet List Table	
SHEET NUMBER	SHEET TITLE
1	Cover
2	Existing Conditions
3	Preliminary Plat - Overall
4	Preliminary Plat
5	Preliminary Plat
6	Preliminary Plat
7	Preliminary Grading Plan - Overall
8	Preliminary Grading, Drainage & Erosion Control
9	Preliminary Grading, Drainage & Erosion Control
10	Preliminary Grading, Drainage & Erosion Control
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23	Overall Tree Preservation Plan
24	Tree Preservation Plan
25	Tree Preservation Plan
26	Tree Preservation Plan
27	Tree Preservation Plan & Data

BENCHMARKS

MnDOT CONTROL POINT "GUERN"
POINT #7002
EL = 970.38

MnDOT CONTROL POINT "VICTORY"
POINT #7003
EL = 995.14

HORIZONTAL DATUM
1983NAD (1986 ADJ) CARVER COUNTY COORDINATE SYSTEM; US SURVEY FOOT

VERTICAL DATUM
1988NAVD US SURVEY FOOT

NO.	DATE	REVISION	SHEETS
1	03/25/22	CITY REQUESTED UPDATES	ALL
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PRELIMINARY PLANS
FOR
PLAT, SITE, GRADING, EROSION CONTROL, UTILITIES AND TREE PRESERVATION
FOR
OAK CREEK
CHASKA, MN

INITIAL SUBMITTAL DATE: 03/01/2022 SHEET: 1 OF 27

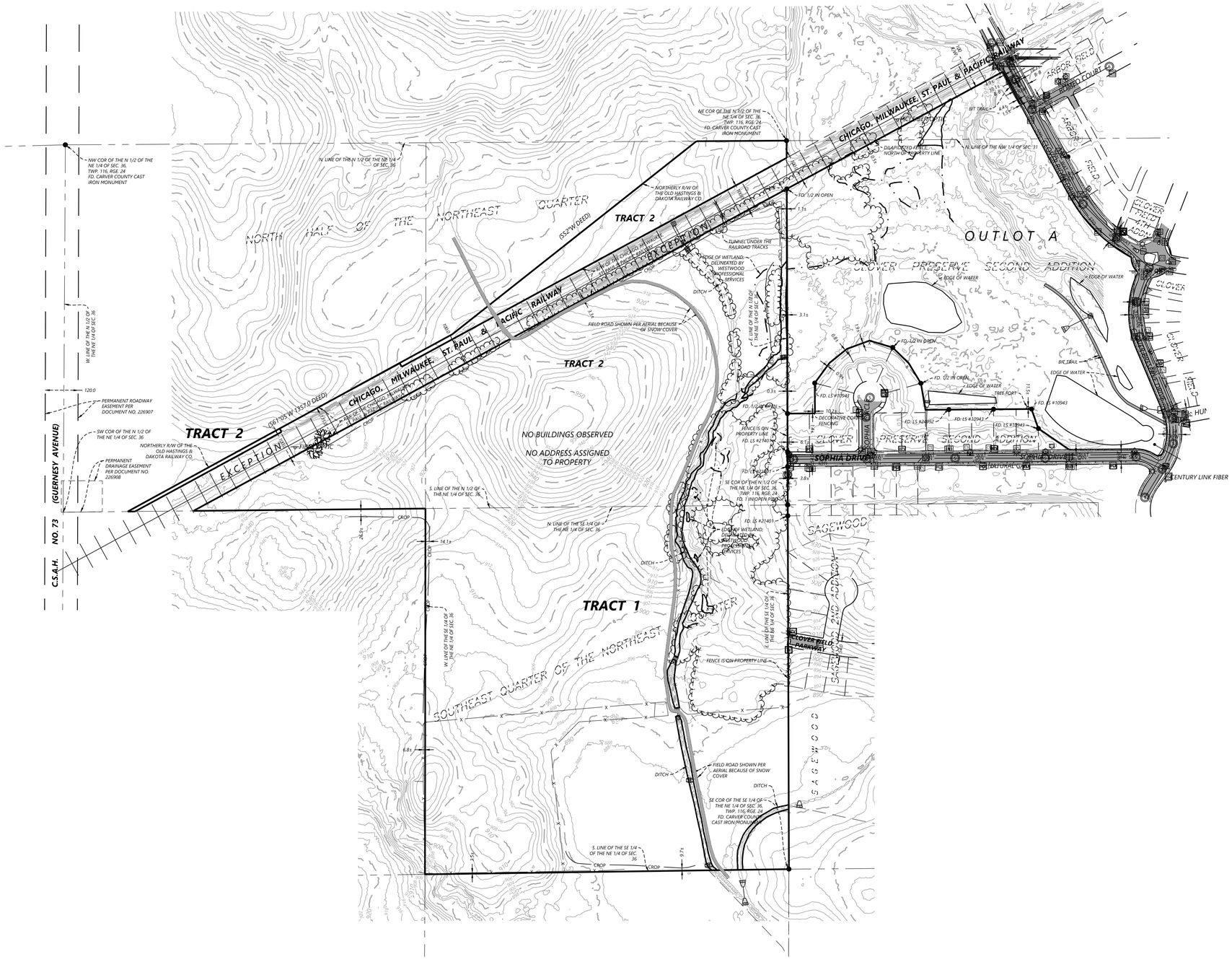
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OAK CREEK

PROJECT NUMBER: 0024429.00

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Call 48 Hours before digging:
811 or call811.com
Common Ground Alliance



LEGAL DESCRIPTION

Tract 1:
The Southeast Quarter of the Northeast Quarter (SE 1/4 of NE 1/4) of Section 36, Township 116 North, Range 24 West of the Fifth Principal Meridian.

(Abstract)

Tract 2:
All that part of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of Section 36, Township 116, Range 24, lying Southerly of the Northerly boundary line of the old right of way of the Hastings and Dakota Railway Co. as located prior to the year 1912, and described by metes and bounds, as follows: Beginning at the Northeast corner of said Section 36, running thence West on the North line of said Section 36, 330 feet to a point on the Northerly boundary line of said right of way; thence South 52 degrees West along said boundary line 1138 feet; thence South 61 degrees, 5 minutes West along said boundary line 1357 feet to a point on the South line of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of said Section 36, said point being 236 feet East from the Southwest corner of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of said Section 36 thence East along the South line of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of said Section 36, to the Southeast corner thereof; thence North on the section line to the place of beginning, EXCEPTING THEREFROM the right of way of the Chicago, Milwaukee and St. Paul Railway Co. as now located across said land as conveyed by deed, recorded in the office of the County Recorder, Carver County, Minnesota, in Book 23 of Deeds on page 304.

(Abstract)

AND

Outlot A, Clover Preserve Second Addition, Carver County, Minnesota

(Abstract)

LEGEND

- SANITARY MANHOLE
- SEWER CLEANOUT
- STORM MANHOLE
- BEEHIVE CATCH BASIN
- CATCH BASIN
- FLARED END SECTION
- CATCH BASIN MANHOLE
- HYDRANT
- GATE VALVE
- CURB STOP BOX
- ELECTRIC BOX
- STREET LIGHT
- TELEPHONE BOX
- HAND HOLE/JUNCTION BOX
- CABLE TV BOX
- FIBER OPTIC PEDESTAL
- STEEL/WOOD POST
- SIGN
- BOUNDARY LINE
- RIGHT-OF-WAY LINE
- LOT LINE
- EASEMENT LINE
- SECTION LINE
- TREE LINE
- POWER UNDERGROUND
- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- FIBER OPTIC
- FENCE LINE
- CURB & GUTTER
- CONCRETE SURFACE
- BITUMINOUS SURFACE
- GRAVEL SURFACE
- WETLAND
- FOUND MONUMENT (SEE LABEL)
- CAST IRON MONUMENT (SEE LABEL)

1" = 200'

0' 200' 400' 600'

NOT FOR CONSTRUCTION

N:\0024429.00\DWG\CIVIL\PRELIMINARY\00244295-EXP01.DWG

OAK CREEK

DESIGNED: .
CHECKED: .
DRAWN: .
HORIZONTAL SCALE: 200'
VERTICAL SCALE: 40' OR 20'

INITIAL ISSUE: 03/01/2022
REVISIONS:
1 03/25/22 CITY REQUESTED UPDATES
2 ---- ----
3 . .
4 . .
5 . .

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA

MATHEW J. WELINSKI
DATE: 03/25/22 LICENSE NO. 53596

OAK CREEK
CHASKA, MN

Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

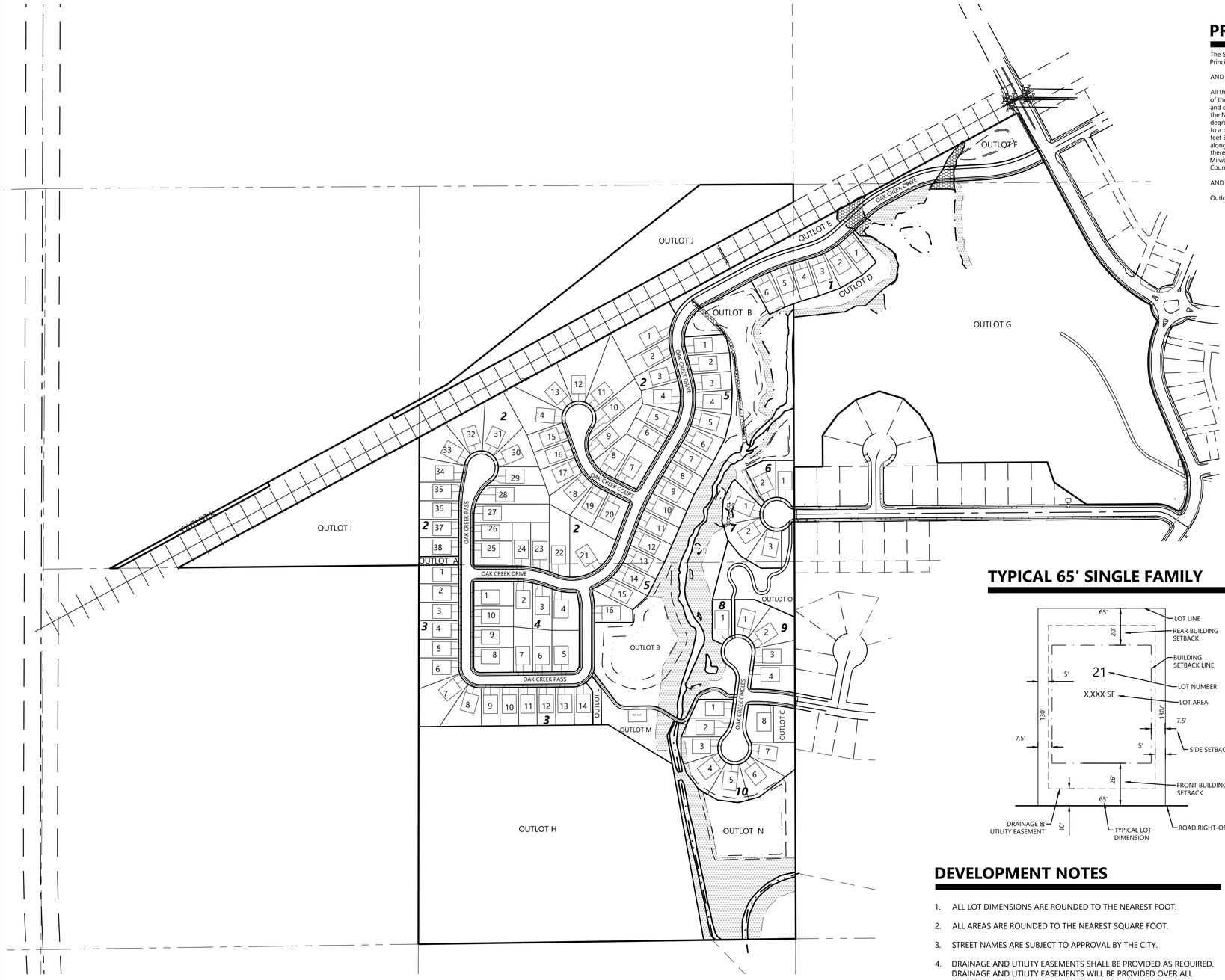
EXISTING CONDITIONS

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 2 OF 27
DATE: 03/25/22

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Common Ground Alliance



PROPERTY DESCRIPTION

The Southeast Quarter of the Northeast Quarter (SE 1/4 of NE 1/4) of Section 36, Township 116 North, Range 24 West of the Fifth Principal Meridian.

AND

All that part of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of Section 36, Township 116, Range 24, lying Southerly of the Northerly boundary line of the old right of way of the Hastings and Dakota Railway Co. as located prior to the year 1912, and described by metes and bounds, as follows: Beginning at the Northeast corner of said Section 36, running thence West on the North line of said Section 36, 330 feet to a point on the Northerly boundary line of said right of way; thence South 52 degrees West along said boundary line 1138 feet; thence South 61 degrees, 5 minutes West along said boundary line 1357 feet to a point on the South line of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of said Section 36, said point being 236 feet East from the Southwest corner of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of said Section 36; thence East along the South line of the North Half of the Northeast Quarter (N 1/2 of NE 1/4) of said Section 36, to the Southeast corner thereof; thence North on the section line to the place of beginning, EXCEPTING THEREFROM the right of way of the Chicago, Milwaukee and St. Paul Railway Co. as now located across said land and as conveyed by deed, recorded in the office of the County Recorder, Carver County, Minnesota, in Book 23 of Deeds on page 304.

AND

Outlot A, Clover Preserve 2nd Addition, Carver County, Minnesota

SITE DEVELOPMENT DATA

- EXISTING ZONING: O - OPEN DEVELOPMENT
- PROPOSED ZONING: PRD
- GROSS SITE AREA: 101.28 AC
  - OUTLOTS F THROUGH K: 48.99 AC
  - EXISTING WETLANDS / STREAM: 2.2 AC
- NET SITE AREA: 50.09 AC
- DEVELOPMENT SUMMARY
  - 65' SINGLE FAMILY LOTS: 102 HOMES
- PROJECT OPEN SPACE: 17.30 AC
  - OUTLOTS A-E & L-O (SEE OUTLOT TABLE BELOW)
- PROJECT DENSITY:
  - NET: ±2.03 UN/AC
  - ADJUSTED NET: ±3.11 UN/AC
    (NET SITE AREA, LESS OPEN SPACE)

TYPICAL 65' SINGLE FAMILY

OUTLOT TABLE

OUTLOT	USE	OWNERSHIP	GROSS AREA
A	FARM ACCESS	LANDOWNER	0.10 AC
B	WETLAND / PONDING / OPEN SPACE	CITY	8.83 AC
C	OPEN SPACE	HOA	0.22 AC
D	OPEN SPACE	CITY	0.86 AC
E	OPEN SPACE	HOA	0.50 AC
F	OPEN SPACE	LANDOWNER	0.97 AC
G	FUTURE DEVELOPMENT / WETLAND	LANDOWNER	23.51 AC
H	FARM LAND	LANDOWNER	16.03 AC
I	FARM LAND	LANDOWNER	4.41 AC
J	FARM LAND	LANDOWNER	3.88 AC
K	FARM LAND	LANDOWNER	0.19 AC
L	FARM ACCESS	LANDOWNER	0.12 AC
M	OPEN SPACE	HOA	0.90 AC
N	WETLAND / PONDING / OPEN SPACE	CITY	4.69 AC
O	OPEN SPACE	HOA	1.13 AC

LOT STANDARDS

STANDARD	65' SINGLE FAMILY
MINIMUM LOT AREA	8,575 SF
AVERAGE LOT AREA	11,651 SF
MINIMUM LOT WIDTH	65' @ FRT SBK
MINIMUM LOT DEPTH	130'
SETBACKS	
FRONT	26'
SIDE INTERIOR LOT	7.5' / 7.5'; 15' TOTAL
SIDE CORNER LOT	26'
REAR	20'
RAILROAD	50'
WETLAND BUFFER SBK	20'
STREAM BUFFER SBK	10'

DEVELOPMENT NOTES

1. ALL LOT DIMENSIONS ARE ROUNDED TO THE NEAREST FOOT.
2. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
3. STREET NAMES ARE SUBJECT TO APPROVAL BY THE CITY.
4. DRAINAGE AND UTILITY EASEMENTS SHALL BE PROVIDED AS REQUIRED. DRAINAGE AND UTILITY EASEMENTS WILL BE PROVIDED OVER ALL PUBLIC UTILITIES .
5. STREET WIDTHS ARE SHOWN FROM BACK OF CURB TO BACK OF CURB.

SITE LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		TIP-OUT CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
		WETLAND

1" = 200'
0' 200' 400' 600'

NOT FOR CONSTRUCTION

N:\0024429.00\DWG\CIVIL\PRELIMINARY\0024429S_PPP01.DWG

OAK CREEK

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	200'
VERTICAL SCALE:	40' OR 20'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

NICHOLAS T. MEYER
DATE: 03/25/22 LICENSE NO. 53774

OAK CREEK
CHASKA, MN

Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

PRELIMINARY PLAT - OVERALL

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 3 OF 27
DATE: 03/25/22

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Common Ground Alliance

SITE LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		TIP-OUT CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
		WETLAND
		WETLAND/STREAM BUFFER
		WETLAND/STREAM BUFFER SETBACK

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILWAY
100' R/W

OUTLOT F
42,395 sf

OAK CREEK DRIVE
5' SIDEWALK

CLOVER RIDGE DRIVE

OUTLOT E
21,593 sf

OUTLOT D
37,646 sf

25' AVG WETLAND BUFFER

1
8,884 sf
2
10,030 sf
3
9,558 sf
4
8,846 sf
5
9,167 sf
6
9,167 sf
1
20 sf

OUTLOT B

POND

OUTLOT G
1,024,025 sf

CLOVER PRESERVE DRIVE

1" = 60'
0' 60' 120' 180'

NOT FOR CONSTRUCTION

OAK CREEK

N:\0024429.00\DWG\CIVIL\PRELIMINARY\0024295-PPP02.DWG

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	60'
VERTICAL SCALE:	12' OR 6'

INITIAL ISSUE: 03/01/2022
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DR HORTON, INC. - MINNESOTA
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PRELIMINARY PLAT

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 4 OF 27
DATE: 03/25/22

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SITE LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		TIP-OUT CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
		WETLAND
		WETLAND/STREAM BUFFER
		WETLAND/STREAM BUFFER SETBACK

OUTLOT J
OUTLOT I
OUTLOT A 4,200 sf
OUTLOT B
OUTLOT O 49,082 sf
CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILWAY
100' RRD R/W
OAK CREEK DRIVE
OAK CREEK COURT
OAK CREEK PASS
SOPHIA DRIVE
5' SIDEWALK
25' AVG WETLAND BUFFER
50' AVG STREAM BUFFER
PROPOSED STREAM BUFFER
POND
10' TRAIL
OAK CREEK

1" = 60'
0' 60' 120' 180'

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20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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PRELIMINARY PLAT

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 5 OF 27
DATE: 03/25/22

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OUTLOT A
4,200 sf

OAK CREEK DRIVE

OAK CREEK PASS

OUTLOT B
384,775 sf

POND

OUTLOT L
5,099 sf

OUTLOT M
39,165 sf

TOT LOT

OUTLOT O
49,082 sf

OAK CREEK CIRCLES

OUTLOT C
9,640 sf

OUTLOT H
704,557 sf

OUTLOT N
204,110 sf

POND

PROPOSED STREAM BUFFER

PROPOSED 50' AVG / 25' MIN STREAM BUFFER

25' AVG WETLAND BUFFER

20' WETLAND BUFFER SETBACK

10' TRAIL

5' SIDEWALK

SITE LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		TIP-OUT CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
		WETLAND
		WETLAND/STREAM BUFFER
		WETLAND/STREAM BUFFER SETBACK

1" = 60'

0' 60' 120' 180'

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OAK CREEK

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	60'
VERTICAL SCALE:	12' OR 6'

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DATE: 03/25/22 LICENSE NO. 53774

OAK CREEK
CHASKA, MN

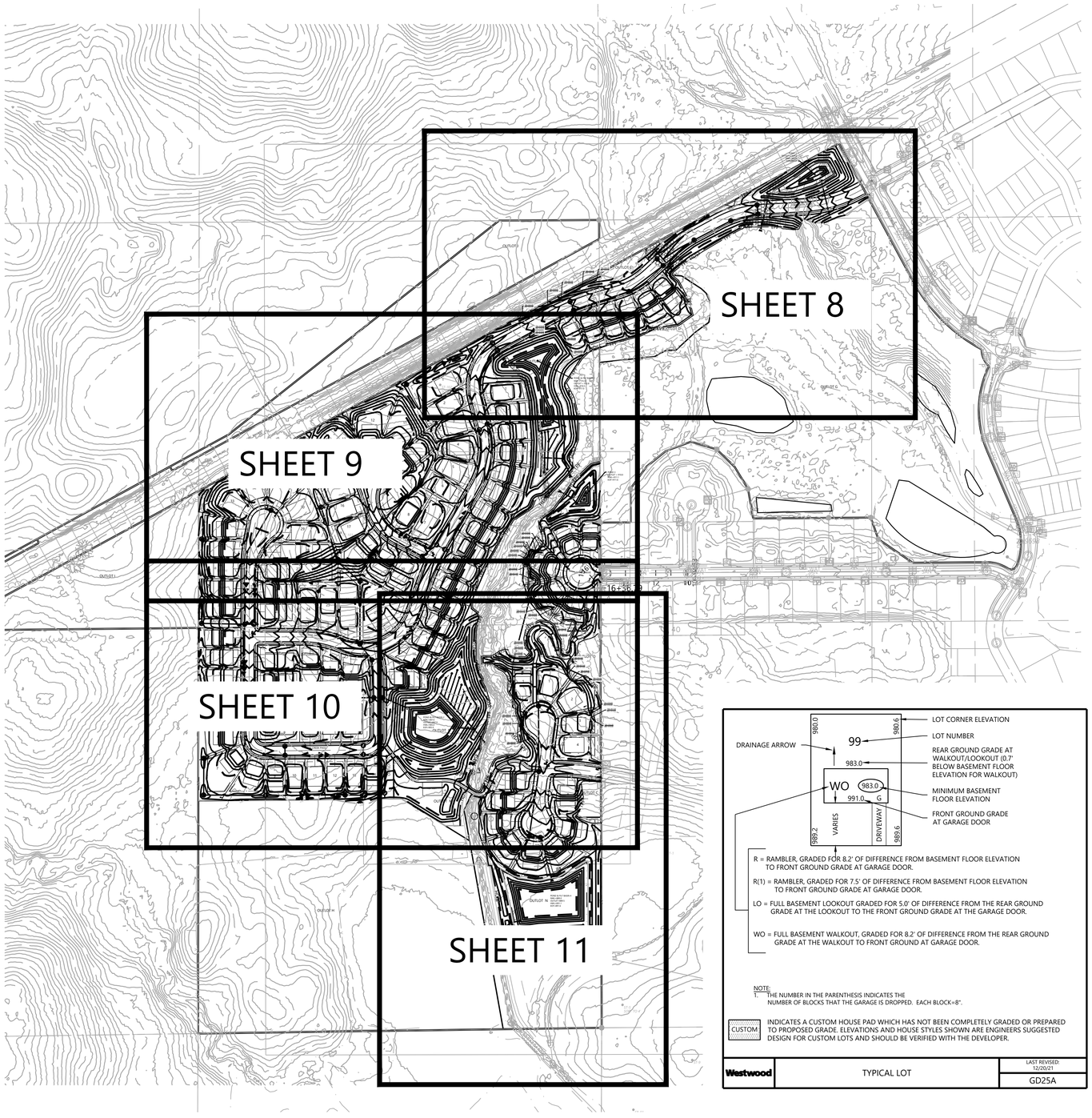
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Westwood Professional Services, Inc.

PRELIMINARY PLAT

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 6 OF 27
DATE: 03/25/22

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R = RAMBLER, GRADED FOR 8.2' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

R(1) = RAMBLER, GRADED FOR 7.5' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

LO = FULL BASEMENT LOOKOUT GRADED FOR 5.0' OF DIFFERENCE FROM THE REAR GROUND GRADE AT THE LOOKOUT TO THE FRONT GROUND GRADE AT THE GARAGE DOOR.

WO = FULL BASEMENT WALKOUT, GRADED FOR 8.2' OF DIFFERENCE FROM THE REAR GROUND GRADE AT THE WALKOUT TO FRONT GROUND AT GARAGE DOOR.

NOTE:
1. THE NUMBER IN THE PARENTHESIS INDICATES THE NUMBER OF BLOCKS THAT THE GARAGE IS DROPPED. EACH BLOCK=8".

CUSTOM — INDICATES A CUSTOM HOUSE PAD WHICH HAS NOT BEEN COMPLETELY GRADED OR PREPARED TO PROPOSED GRADE. ELEVATIONS AND HOUSE STYLES SHOWN ARE ENGINEERS SUGGESTED DESIGN FOR CUSTOM LOTS AND SHOULD BE VERIFIED WITH THE DEVELOPER.

Westwood	TYPICAL LOT	LAST REVISED: 12/20/21
		GD25A

GRADING & EROSION CONTROL LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
SB-19	SB-19	SOIL BORING LOCATION
980	980	INDEX CONTOUR
982	982	INTERVAL CONTOUR
× 900.00	× 900.00	SPOT ELEVATION
	× HP/LP 900.00	HIGH/LOW POINT
	× CL-CL 900.00	CL-CL ELEVATION
	0.00%	FLOW DIRECTION
	TW=XXX.XX BW=XXX.XX	TOP AND BOTTOM OF RETAINING WALL
	E.O.F.	EMERGENCY OVERFLOW
	X.XX%	PROPOSED STREET PROFILE GRADE
STO		STORM SEWER
		TREE LINE
	TPF	TREE PROTECTION FENCE
		RETAINING WALL (MODULAR BLOCK)
	GL	GRADING LIMITS
	SF	SILT FENCE
	POST-SF	SILT FENCE-POST GRADING
	HDSF	HEAVY DUTY SILT FENCE
	RSC	REDUNDANT SEDIMENT CONTROL
		INLET PROTECTION
		EROSION CONTROL CHECKS/BIOROLLS
		ROCK CONSTRUCTION ENTRANCE
		EROSION CONTROL BLANKET
		TURF REINFORCEMENT MAT
		POND NORMAL WATER LEVEL
		WETLAND LINE
		WETLAND FILL
		WETLAND BUFFER
		POND ACCESS MAINTENANCE BENCH
		WETLAND BUFFER LIMITS
		WETLAND BUFFER MONUMENT
	DND	DO NOT DISTURB

GRADING & DRAINAGE NOTES

1. ALL CONTOURS AND SPOT ELEVATIONS ARE SHOWN TO FINISHED SURFACE/GUTTER GRADES UNLESS OTHERWISE NOTED.
2. REFER TO THE SITE PLAN/RECORD PLAT FOR MOST CURRENT HORIZONTAL SITE DIMENSIONS AND LAYOUT.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHICAL FEATURES WITH THE OWNERS AND FIELD-VERIFY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
4. ALL CONSTRUCTION SHALL CONFORM TO LOCAL RULES.
5. THE CONTRACTOR IS TO CONTACT GOPHER STATE "ONE CALL" FOR UTILITY LOCATIONS AT 651-454-0002.
6. THE GRADING CONTRACTOR MUST BE AWARE OF ALL EXISTING AND PROPOSED UTILITIES.
7. HAULING HOURS MUST BE CONFIRMED WITH THE CITY PRIOR TO BEGINNING WORK/
8. POSITIVE DRAINAGE FROM THE SITE MUST BE PROVIDED AT ALL TIMES.

EROSION CONTROL NOTES

1. ALL SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN-PLACE PRIOR TO ANY EXCAVATION/CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED. EXISTING SILT FENCE ON-SITE SHALL BE MAINTAINED AND OR REMOVED AND SHALL BE CONSIDERED INCIDENTAL TO THE GRADING CONTRACT. IT IS OF EXTREME IMPORTANCE TO BE AWARE OF CURRENT FIELD CONDITIONS WITH RESPECT TO EROSION CONTROL. TEMPORARY PONDING, DIKES, HAY BALES, ETC., REQUIRED BY THE CITY SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
2. ALL STREETS DISTURBED DURING WORKING HOURS MUST BE CLEANED AT THE END OF EACH WORKING DAY. A ROCK ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO DETAILS TO REDUCE TRACKING OF DIRT ONTO PUBLIC STREETS.
3. REDUNDANT PERIMETER SEDIMENT CONTROLS ARE NECESSARY WHEN SOIL DISTURBANCE IS WITHIN 50 FEET OF SURFACE WATERS. REDUNDANT SEDIMENT CONTROLS COULD INCLUDE:
   - 3.1. TWO ROWS OF SILT FENCE (SEPARATED BY 8 FEET); OR
   - 3.2. SILT FENCE AND A TOPSOIL BERM (STABILIZE BERM WITH MULCH); OR
   - 3.3. SILT FENCE AND FIBER LOGS; OR
   - 3.4. TOPSOIL BERM AND FIBER LOGS (STABILIZE BERM WITH MULCH).
4. REDUNDANT SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO DISTURBING WITHIN 50 FEET OF THE SURFACE WATER.

1" = 200'

0' 200' 400' 600'

NOT FOR CONSTRUCTION

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OAK CREEK

DESIGNED:	FDH II
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DRAWN:	ACB
HORIZONTAL SCALE:	200'
VERTICAL SCALE:	40' OR 20'

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REVISIONS:

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PREPARED FOR:

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20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

FRANCIS D. HAGEN
DATE: 03/25/22 LICENSE NO. 17716

OAK CREEK
CHASKA, MN

Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

PRELIMINARY GRADING PLAN - OVERALL

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 7 OF 27

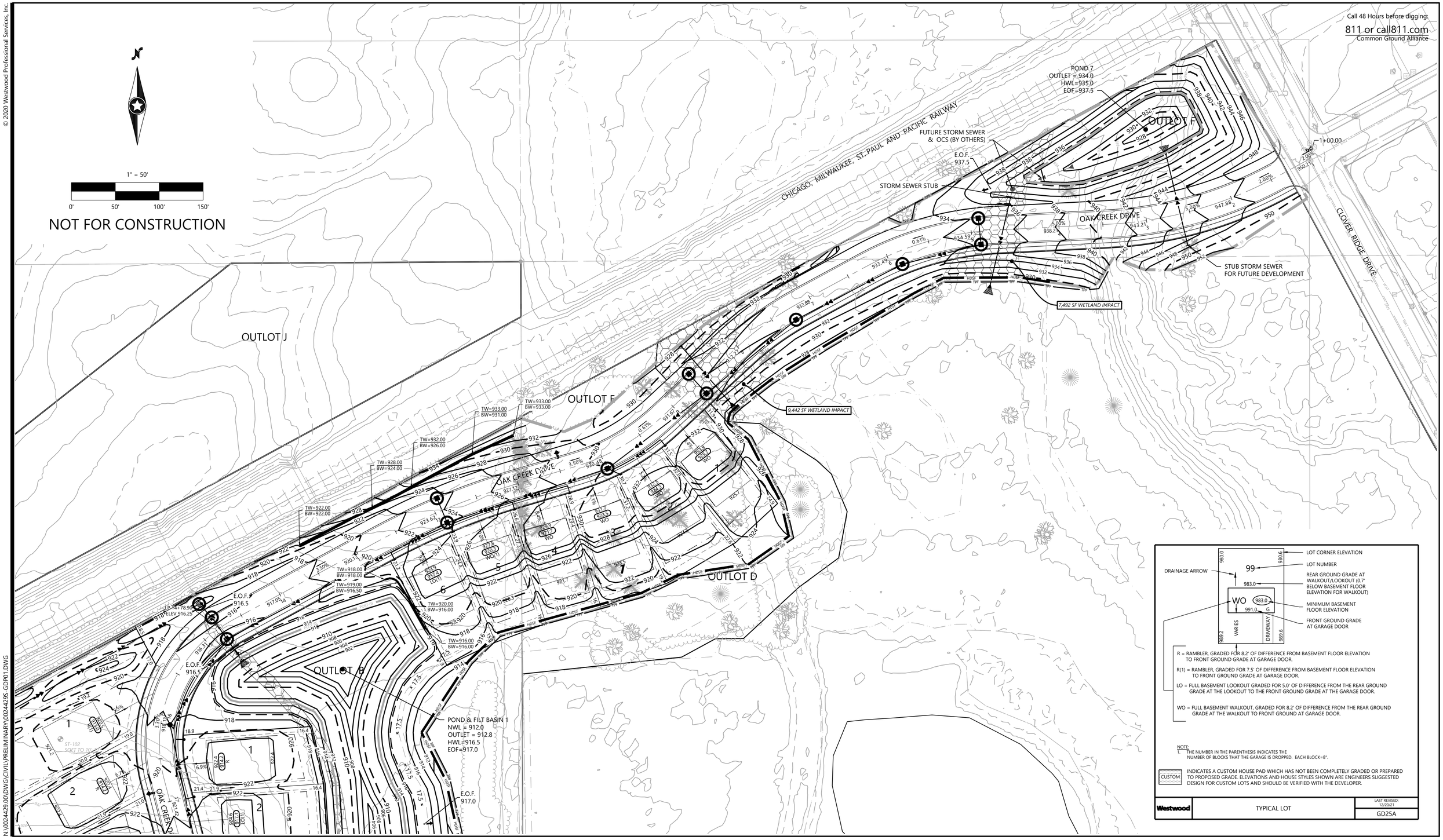
DATE: 03/25/22

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1" = 50'
0' 50' 100' 150'

NOT FOR CONSTRUCTION



R = RAMBLER, GRADED FOR 8.2' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

R(1) = RAMBLER, GRADED FOR 7.5' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

LO = FULL BASEMENT LOOKOUT GRADED FOR 5.0' OF DIFFERENCE FROM THE REAR GROUND GRADE AT THE LOOKOUT TO THE FRONT GROUND GRADE AT THE GARAGE DOOR.

WO = FULL BASEMENT WALKOUT, GRADED FOR 8.2' OF DIFFERENCE FROM THE REAR GROUND GRADE AT THE WALKOUT TO FRONT GROUND AT GARAGE DOOR.

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Westwood	TYPICAL LOT	LAST REVISED: 12/20/21 GD25A

N:\0024429.00\DWG\CIVIL\PRELIMINARY\0024429S_GDP01.DWG

OAK CREEK

DESIGNED:	FDH II
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VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022
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CHASKA, MN

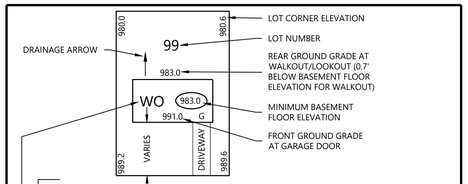
Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

PRELIMINARY GRADING, DRAINAGE & EROSION CONTROL

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 8 OF 27
DATE: 03/25/22

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R = RAMBLER, GRADED FOR 8.2' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

R(1) = RAMBLER, GRADED FOR 7.5' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

LO = FULL BASEMENT LOOKOUT GRADED FOR 5.0' OF DIFFERENCE FROM THE REAR GROUND GRADE AT THE LOOKOUT TO THE FRONT GROUND GRADE AT THE GARAGE DOOR.

WO = FULL BASEMENT WALKOUT, GRADED FOR 8.2' OF DIFFERENCE FROM THE REAR GROUND GRADE AT THE WALKOUT TO FRONT GROUND AT GARAGE DOOR.

NOTE:
1. THE NUMBER IN THE PARENTHESIS INDICATES THE NUMBER OF BLOCKS THAT THE GARAGE IS DROPPED. EACH BLOCK=8'.

CUSTOM — INDICATES A CUSTOM HOUSE PAD WHICH HAS NOT BEEN COMPLETELY GRADED OR PREPARED TO PROPOSED GRADE. ELEVATIONS AND HOUSE STYLES SHOWN ARE ENGINEERS SUGGESTED DESIGN FOR CUSTOM LOTS AND SHOULD BE VERIFIED WITH THE DEVELOPER.

Westwood	TYPICAL LOT	LAST REVISED: 12/20/21
		GD25A

1" = 50'

0' 50' 100' 150'

NOT FOR CONSTRUCTION

Call 48 Hours Before Digging:
811 or call811.com
Common Ground Alliance

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILWAY

OAK CREEK DRIVE

OAK CREEK COURT

OAK CREEK PASS

SOPHIA DRIVE

OUTLOT B

POND & FILT BASIN 1
NWL = 912.0
OUTLET = 912.8
HWL=916.5
EOF=917.0

POND 3
OUTLET = 910.0
HWL=911.1
EOF=911.6

7,237 SF NON-JURISDICTIONAL WATER COURSE IMPACT

1,856 SF WETLAND IMPACT

HOME BUILDER TO CONSTRUCT RETAINING WALL AS NEEDED DURING HOME CONSTRUCTION TO MAINTAIN PROPER DRAINAGE

HOME BUILDER TO CONSTRUCT RETAINING WALL AS NEEDED DURING HOME CONSTRUCTION TO MAINTAIN PROPER DRAINAGE

OAK CREEK

N:\0024429.00\DWG\CIVIL\PRELIMINARY\0024429S-GDP01.DWG

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	50'
VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022

REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA

20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

FRANCIS D. HAGEN

DATE: 03/25/22 LICENSE NO. 17716

OAK CREEK

CHASKA, MN

Westwood

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Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

PRELIMINARY GRADING, DRAINAGE & EROSION CONTROL

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 9 OF 27

DATE: 03/25/22

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HOME BUILDER TO CONSTRUCT RETAINING WALL AS NEEDED DURING HOME CONSTRUCTION TO MAINTAIN PROPER DRAINAGE

1,856 SF WETLAND IMPACT

OAK CREEK DRIVE

OAK CREEK PASS

SOPHIA DRIVE

OAK CREEK CIRCLES

OUTLOT A

OUTLOT B

OUTLOT C

OUTLOT M

TOT LOT

POND & FILT BASIN 2
NWL=897.0
OUTLET=897.9
HWL=905.4
EOF=905.9

Call 48 Hours before digging:
811 or call811.com
Common Ground Alliance

1" = 50'

0' 50' 100' 150'

NOT FOR CONSTRUCTION

- LOT CORNER ELEVATION
- LOT NUMBER
- DRAINAGE ARROW
- REAR GROUND GRADE AT WALKOUT/LOOKOUT (0.7' BELOW BASEMENT FLOOR ELEVATION FOR WALKOUT)
- MINIMUM BASEMENT FLOOR ELEVATION
- FRONT GROUND GRADE AT GARAGE DOOR

R = RAMBLER, GRADED FOR 8.2' OF DIFFERENCE FROM BASEMENT FLOOR ELEVATION TO FRONT GROUND GRADE AT GARAGE DOOR.

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Westwood | TYPICAL LOT | LAST REVISED: 12/20/21 | GD25A

N:\0024429.00\DWG\CIVIL\PRELIMINARY\00244295-GDP01.DWG

OAK CREEK

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	50'
VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022

REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA

20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

FRANCIS D. HAGEN
DATE: 03/25/22 LICENSE NO. 17716

OAK CREEK

CHASKA, MN

Westwood

Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

PRELIMINARY GRADING, DRAINAGE & EROSION CONTROL

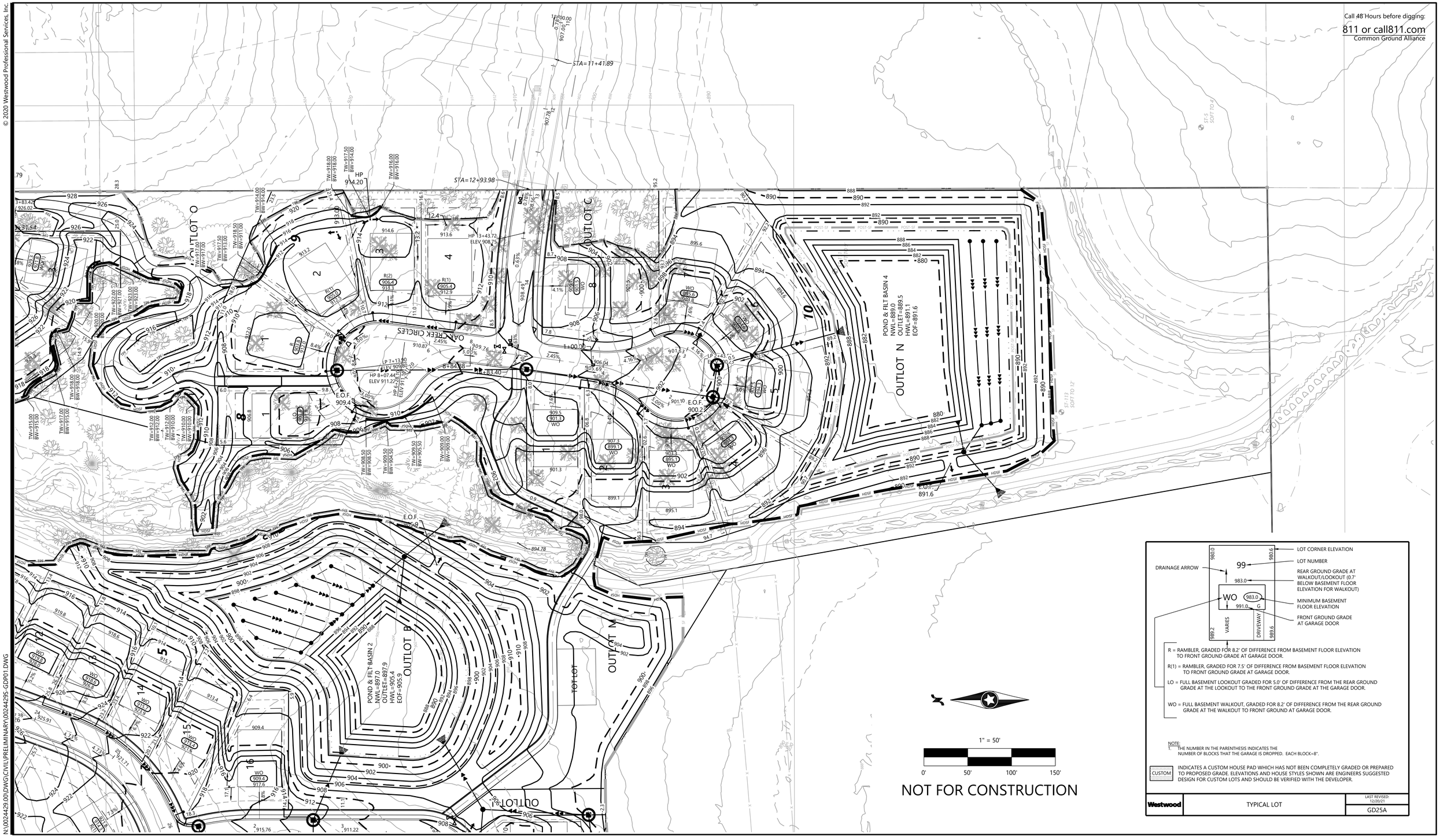
PROJECT NUMBER: 0024429.00

SHEET NUMBER: 10 OF 27

DATE: 03/25/22

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Common Ground Alliance



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OAK CREEK

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	50'
VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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FRANCIS D. HAGEN
DATE: 03/25/22 LICENSE NO. 17716

OAK CREEK
CHASKA, MN

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PRELIMINARY GRADING, DRAINAGE & EROSION CONTROL

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 11 OF 27

DATE: 03/25/22

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Call 48 Hours before digging:
811 or call811.com
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UTILITY LEGEND

EXISTING	PROPOSED	
SAN		SANITARY SEWER
STO		STORM SEWER
DT		DRAIN TILE
WAT		WATER MAIN
WAT		HYDRANT

GENERAL UTILITY NOTES

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OF ANY DIFFERENCES.
2. UNLESS OTHERWISE NOTED, ALL MATERIALS, CONST. TECHNIQUES AND TESTING SHALL CONFORM TO THE 2013 ED. OF THE "STANDARD UTILITIES SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION BY THE CITY ENGINEERING ASSOCIATION OF MINN." AND TO THE "STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION" MINN. DEPT. OF TRANS., AUGUST 31, 2016 INCLUDING THE CURRENT ADDENDUM. THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW ALL PROCEDURES AS OUTLINED BY THE LOCAL AGENCY.
3. THE CONTRACTOR SHALL RECEIVE THE NECESSARY PERMITS FOR ALL WORK OUTSIDE OF THE PROPERTY LIMITS.
4. VERIFY EXISTING INVERT LOCATION & ELEVATION PRIOR TO BEGINNING CONSTRUCTION.
5. THE CONTRACTOR SHALL CONTACT "GOPHER STATE ONE CALL" FOR FOR UTILITY LOCATIONS PRIOR TO UTILITY INSTALLATION.
6. WATER SERVICE SHALL BE INSTALLED WITH A MIN OF 7.5' OF COVER. THE CONTRACTOR SHALL VERIFY AS-BUILT CONSTRUCTION PLANS TO CHECK LOCATION AND MATERIAL TYPE.
7. ALL STORM SEWER PIPE SHALL BE CLASS 5 UNLESS OTHERWISE NOTED.
8. SEWER AND WATER SERVICES SHALL BE PLACED TO AVOID DRIVEWAYS.

1" = 100'
0' 100' 200' 300'

NOT FOR CONSTRUCTION

OAK CREEK

N:\0024429.00\DWG\CIVIL\PRELIMINARY\00244295-UTP01.DWG

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	100'
VERTICAL SCALE:	20' OR 10'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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FRANCIS D. HAGEN
DATE: 03/25/22 LICENSE NO. 17716

OAK CREEK
CHASKA, MN

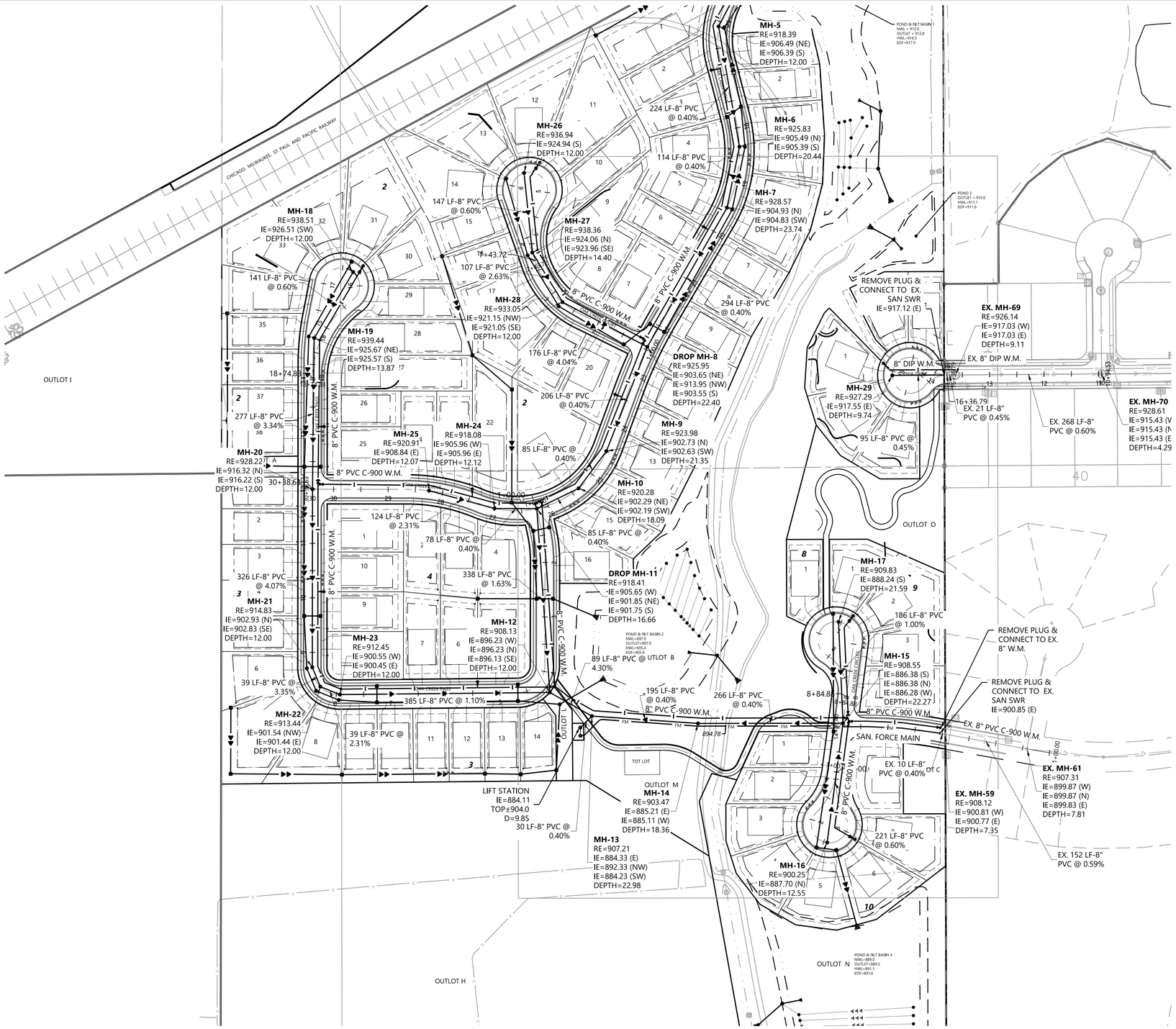
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Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

PRELIMINARY UTILITY PLAN - NORTH

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 12 OF 27
DATE: 03/25/22

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Common Ground Alliance

UTILITY LEGEND

EXISTING	PROPOSED	
SAN		SANITARY SEWER
STO		STORM SEWER
DT		DRAIN TILE
WAT		WATER MAIN
WAT		HYDRANT

GENERAL UTILITY NOTES

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OF ANY DIFFERENCES.
2. UNLESS OTHERWISE NOTED, ALL MATERIALS, CONST. TECHNIQUES AND TESTING SHALL CONFORM TO THE 2013 ED. OF THE "STANDARD UTILITIES SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION BY THE CITY ENGINEERING ASSOCIATION OF MINN." AND TO THE "STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION" MINN. DEPT. OF TRANS., AUGUST 31, 2016 INCLUDING THE CURRENT ADDENDUM. THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW ALL PROCEDURES AS OUTLINED BY THE LOCAL AGENCY.
3. THE CONTRACTOR SHALL RECEIVE THE NECESSARY PERMITS FOR ALL WORK OUTSIDE OF THE PROPERTY LIMITS.
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5. THE CONTRACTOR SHALL CONTACT "GOPHER STATE ONE CALL" FOR FOR UTILITY LOCATIONS PRIOR TO UTILITY INSTALLATION.
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7. ALL STORM SEWER PIPE SHALL BE CLASS 5 UNLESS OTHERWISE NOTED.
8. SEWER AND WATER SERVICES SHALL BE PLACED TO AVOID DRIVEWAYS.

1" = 100'

0' 100' 200' 300'

NOT FOR CONSTRUCTION

OAK CREEK

N:\0024429.00\DWG\CIVIL\PRELIMINARY\00244295-UTP01.DWG

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	100'
VERTICAL SCALE:	20' OR 10'

INITIAL ISSUE: 03/01/2022

REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA

20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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FRANCIS D. HAGEN

DATE: 03/25/22 LICENSE NO. 17716

OAK CREEK

CHASKA, MN

Westwood

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Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

PRELIMINARY UTILITY PLAN - SOUTH

PROJECT NUMBER: 0024429.00

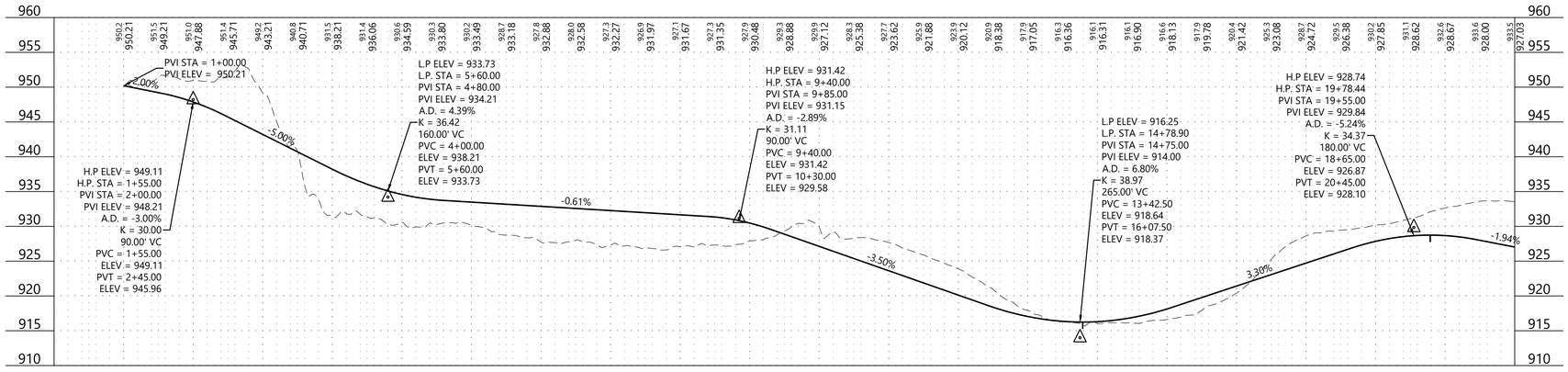
SHEET NUMBER: 13 OF 27

DATE: 03/25/22

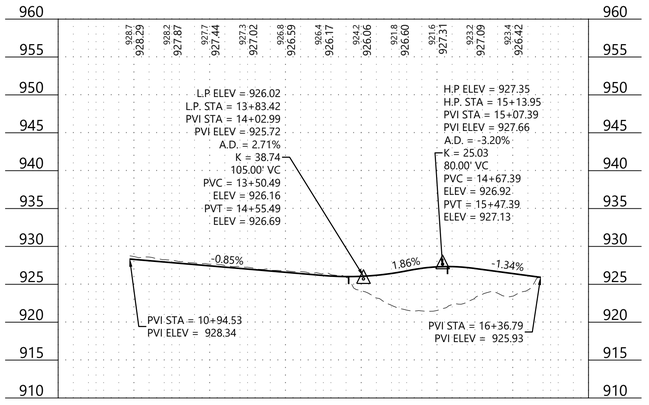
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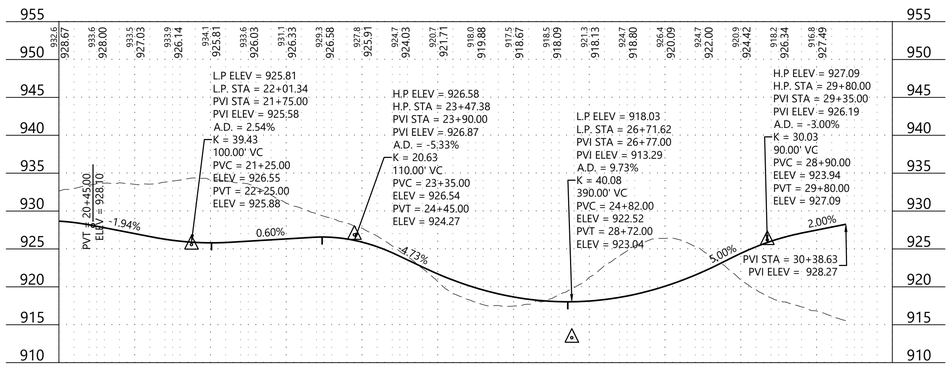
OAK CREEK DRIVE



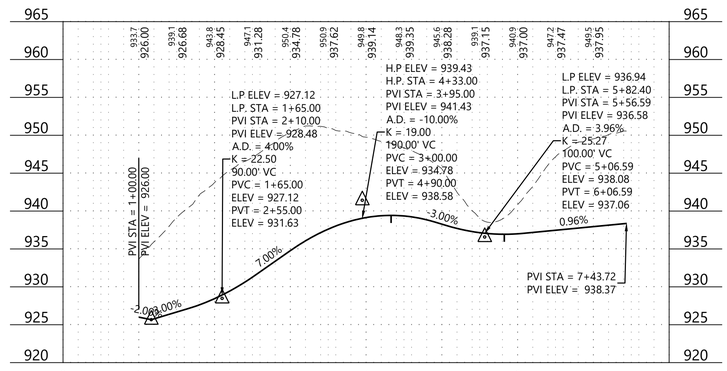
SOPHIA DRIVE



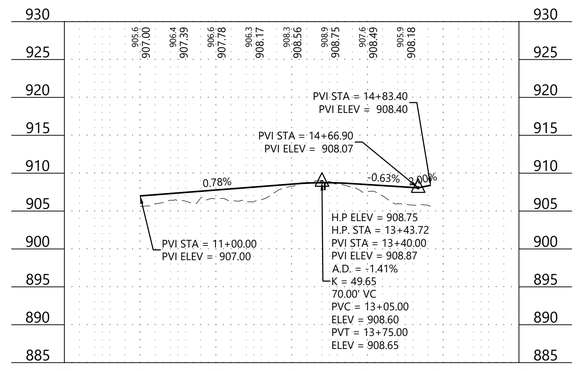
OAK CREEK DRIVE



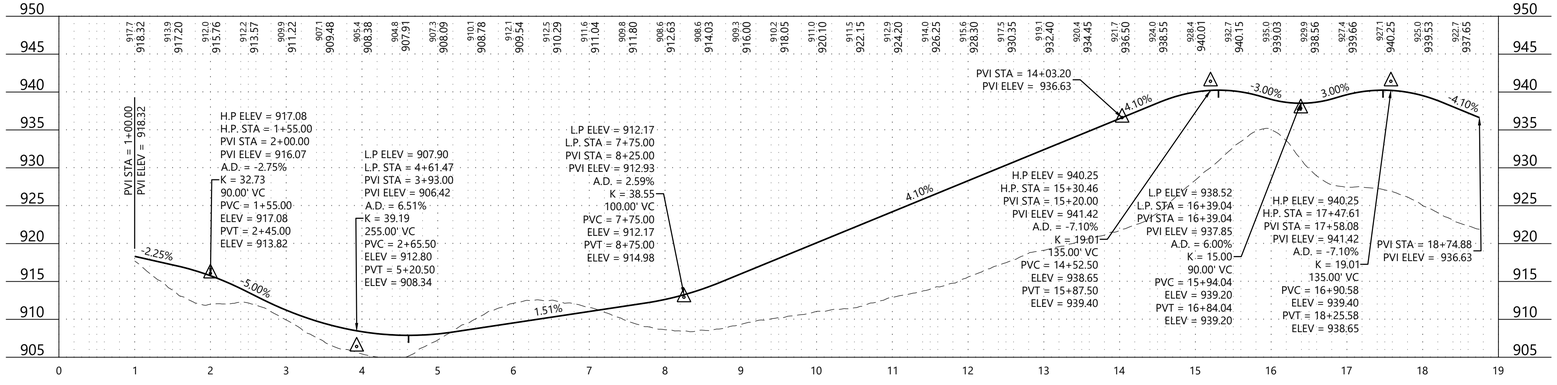
OAK CREEK COURT



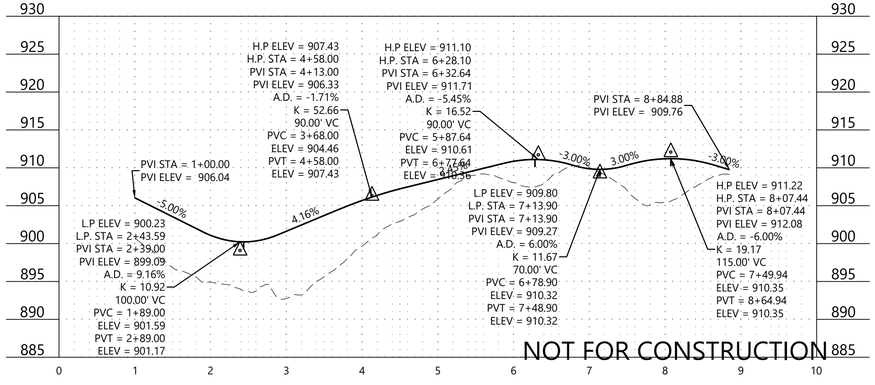
CLOVER PRESERVE LANE



OAK CREEK PASS



OAK CREEK CIRCLES



NOT FOR CONSTRUCTION

N:\0024429.00\DWG\CIVIL\PRELIMINARY\0024429S-DTP01.DWG

OAK CREEK

DESIGNED:	CHF
CHECKED:	RMB
DRAWN:	CHF
HORIZONTAL SCALE:	99.999981'
VERTICAL SCALE:	20' OR 10'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA

20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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OAK CREEK

CHASKA, MN

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Westwood Professional Services, Inc.

STREET PROFILES

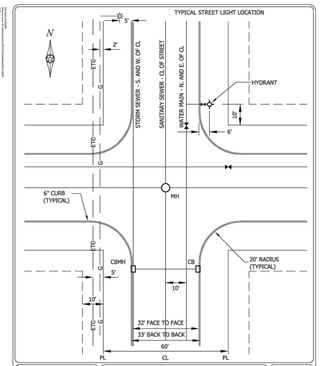
PROJECT NUMBER: 0024429.00

SHEET NUMBER: 14 OF 27

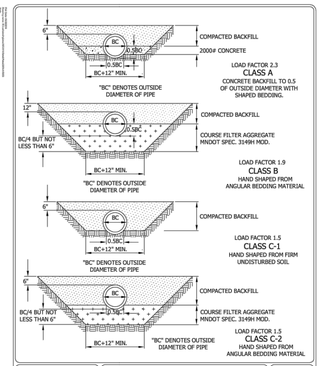
DATE: 03/25/22

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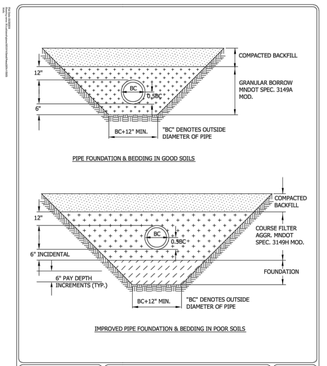
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Common Ground Alliance



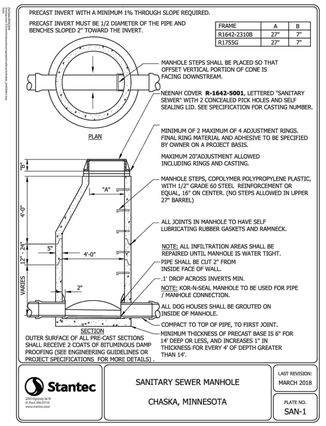
TYPICAL UTILITY LOCATIONS (PUBLIC AND PRIVATE)
CHASKA, MINNESOTA
LAST REVISION: MARCH 2016
PLATE NO. GEN-5



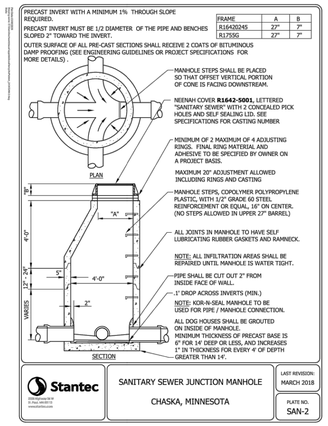
BEDDING METHODS FOR RCP OR DIP
CHASKA, MINNESOTA
LAST REVISION: MARCH 2001
PLATE NO. GEN-6



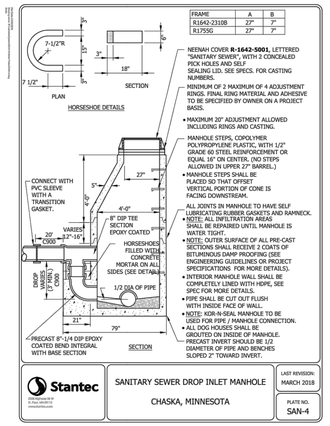
BEDDING METHODS FOR PVC
CHASKA, MINNESOTA
LAST REVISION: MARCH 2008
PLATE NO. GEN-7



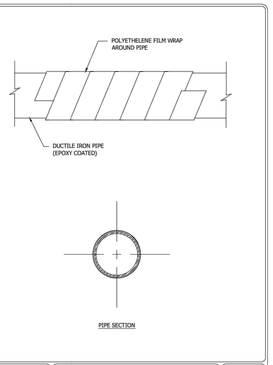
SANITARY SEWER MANHOLE
CHASKA, MINNESOTA
LAST REVISION: MARCH 2018
PLATE NO. SAN-1



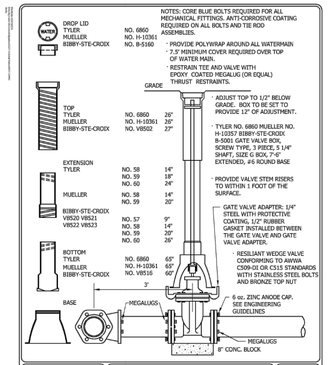
SANITARY SEWER JUNCTION MANHOLE
CHASKA, MINNESOTA
LAST REVISION: MARCH 2018
PLATE NO. SAN-2



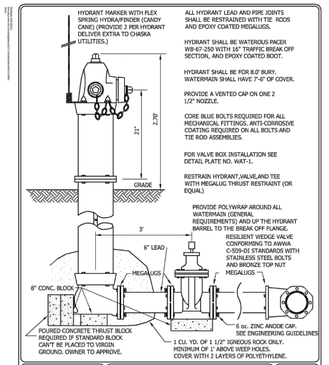
SANITARY SEWER DROP INLET MANHOLE
CHASKA, MINNESOTA
LAST REVISION: MARCH 2018
PLATE NO. SAN-4



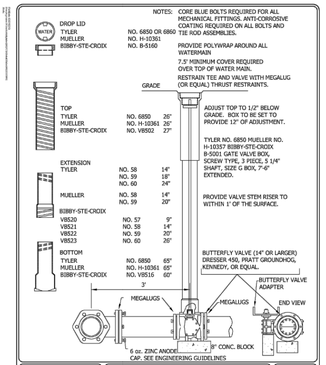
TYPICAL FORCEMAIN INSTALLATION
CHASKA, MINNESOTA
LAST REVISION: APRIL 2004
PLATE NO. SAN-7



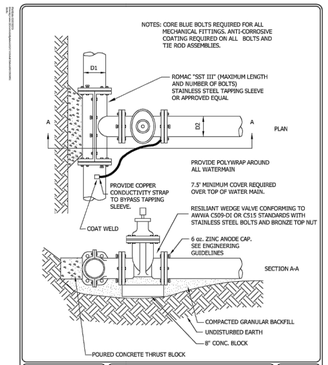
GATE VALVE AND BOX INSTALLATION
CHASKA, MINNESOTA
LAST REVISION: MARCH 2019
PLATE NO. WAT-1



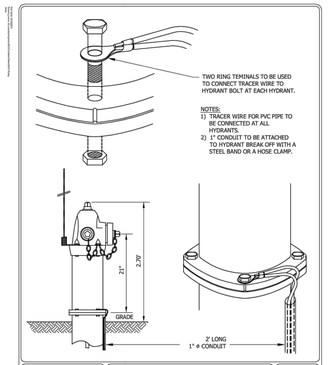
WATEROUS PACER HYDRANT AND VALVE INSTALLATION
CHASKA, MINNESOTA
LAST REVISION: MARCH 2019
PLATE NO. WAT-2



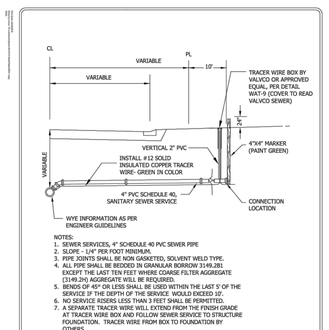
BUTTERFLY VALVE AND BOX INSTALLATION
CHASKA, MINNESOTA
LAST REVISION: MARCH 2019
PLATE NO. WAT-3



WATER MAIN WET TAP
CHASKA, MINNESOTA
LAST REVISION: MARCH 2019
PLATE NO. WAT-5

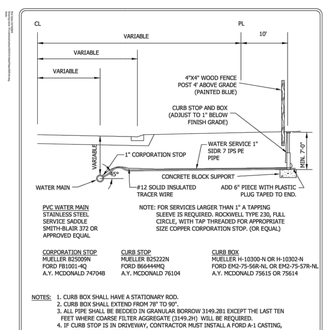


TRACER WIRE FOR PVC WATER MAIN
CHASKA, MN
LAST REVISION: APRIL 2008
PLATE NO. WAT-10



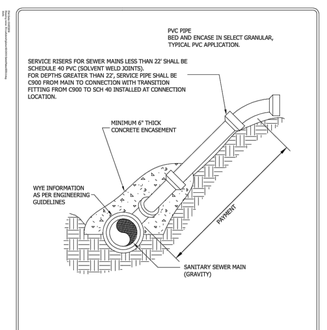
NOTES:
1. SEWER SERVICES, 4" SCHEDULE 40 PVC SEWER PIPE
2. SLOPE - 1/4" PER FOOT MINIMUM.
3. PIPE JOINTS SHALL BE NON GASKETED, SOLVENT WELD TYPE.
4. ALL PIPE SHALL BE BEDDED IN GRANULAR BORROW 3149.281 EXCEPT THE LAST TEN FEET WHERE COARSE FILTER AGGREGATE (3149.2H) AGGREGATE WILL BE REQUIRED.
5. BENDS OF 45° OR LESS SHALL BE USED WITHIN THE LAST 5' OF THE SERVICE IF THE DEPTH OF THE SERVICE WOULD EXCEED 10'.
6. NO SERVICE RISERS LESS THAN 3 FEET SHALL BE PERMITTED.
7. A SEPARATE TRACER WIRE WILL EXTEND FROM THE FINISH GRADE AT TRACER WIRE BOX AND FOLLOW SEWER SERVICE TO STRUCTURE FOUNDATION. TRACER WIRE FROM BOX TO FOUNDATION BY OTHERS.
8. FOR DEPTHS GREATER THAN 22', SERVICE PIPE SHALL BE C900 FROM MAIN TO CONNECTION, WITH TRANSITION FITTING FROM C900 TO SCH 40 INSTALLED AT CONNECTION LOCATION.

SEWER SERVICE CONNECTION
CHASKA, MINNESOTA
LAST REVISION: APRIL 2016
PLATE NO. SER-1

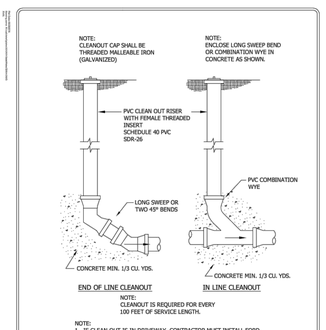


NOTES:
1. CURB BOX SHALL HAVE A STATIONARY ROD.
2. CURB BOX SHALL EXTEND FROM 70° TO 90°.
3. ALL PIPE SHALL BE BEDDED IN GRANULAR BORROW 3149.2B1 EXCEPT THE LAST TEN FEET WHERE COARSE FILTER AGGREGATE (3149.2H) WILL BE REQUIRED.
4. IF CURB STOP IS IN DRIVEWAY, CONTRACTOR MUST INSTALL A FORD A-1 CASTING, MARKED WITH "WATER" ON LID.
5. CURB BOX LID SHALL BE MUELLER #89375 "FW" OR EQUAL.
6. ALL BRASS FITTINGS SHALL BE "NO LEAD BRASS".
7. PIPE INSERT STIFFENERS REQUIRED FOR FITTING CONNECTIONS.
8. HDPE SERVICE PIPE SHALL BE MANUFACTURED BY ENDOPURE OR BLUE ULTRA PIPE.

WATER SERVICE CONNECTION HDPE PIPE
CHASKA, MINNESOTA
LAST REVISION: MARCH 2016
PLATE NO. SER-2A



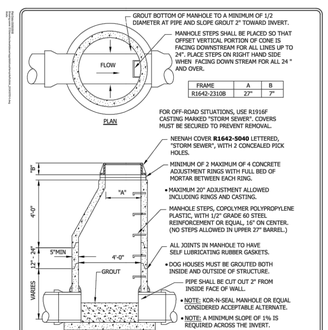
SERVICE RISER
CHASKA, MINNESOTA
LAST REVISION: MARCH 2016
PLATE NO. SER-3



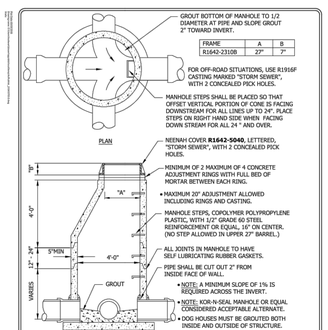
NOTE:
CLEANOUT IS REQUIRED FOR EVERY 100 FEET OF SERVICE LENGTH.

NOTE:
1. 3" CLEAN OUT IS IN DRIVEWAY, CONTRACTOR MUST INSTALL FORD A-1 CASTING, MARKED WITH "SEWER" ON LID.
2. 3" VALVE BOX IS IN ROADWAY, CONTRACTOR MUST INSTALL TOP SECTION OF A VALVE BOX WITH LID MARKED "SEWER".

SERVICE LINE CLEANOUTS
CHASKA, MINNESOTA
LAST REVISION: MARCH 2001
PLATE NO. SER-4



STORM SEWER MANHOLE
CHASKA, MINNESOTA
LAST REVISION: MARCH 2018
PLATE NO. STO-1



STORM SEWER JUNCTION MANHOLE
CHASKA, MINNESOTA
LAST REVISION: MARCH 2018
PLATE NO. STO-2

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20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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FRANCIS D. HAGEN
DATE: 03/25/22 LICENSE NO. 17716

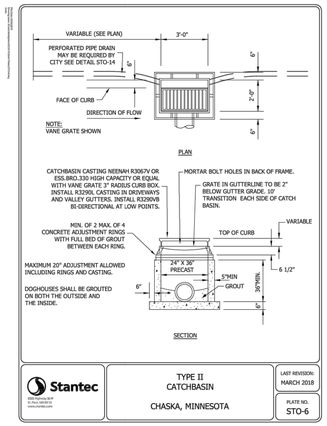
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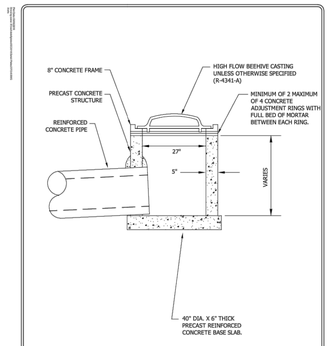
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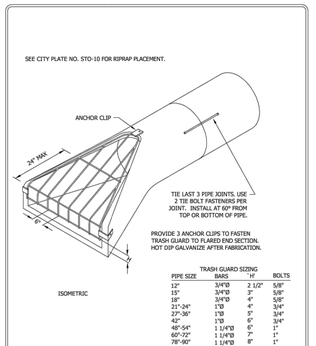
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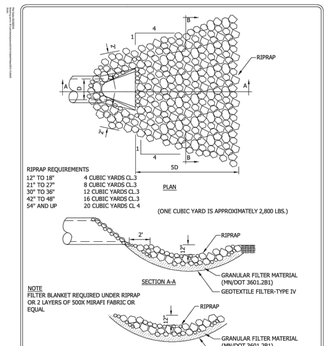
Stantec — TYPE II CATCHBASIN — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-6



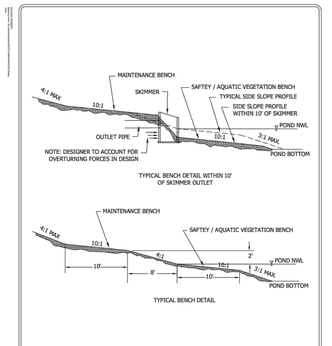
Stantec — PRECAST 27" SHALLOW DEPTH BEEHIVE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-9



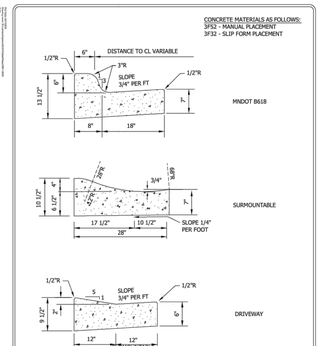
Stantec — FLARED END SECTION AND TRASH GUARD — CHASKA, MINNESOTA — LAST REVISION: FEB. 1995 — PLATE NO. STO-10



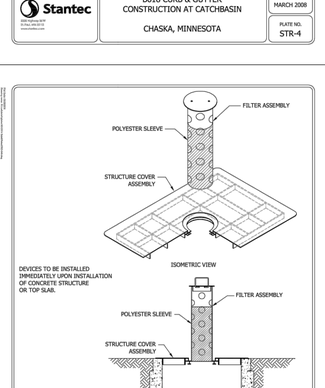
Stantec — RIPRAP AT OUTLETS — CHASKA, MINNESOTA — LAST REVISION: APRIL 2004 — PLATE NO. STO-11



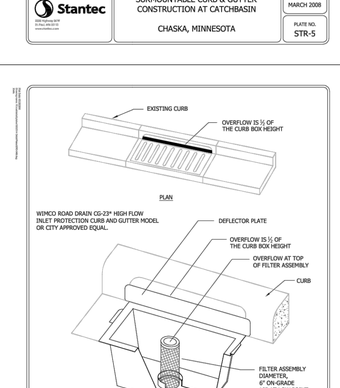
Stantec — TYPICAL BENCH DETAIL — CHASKA, MINNESOTA — LAST REVISION: MARCH 2001 — PLATE NO. STO-19



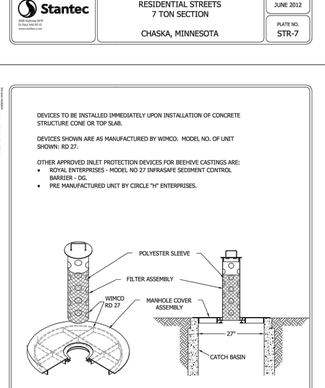
Stantec — CURB AND GUTTER — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. STR-1



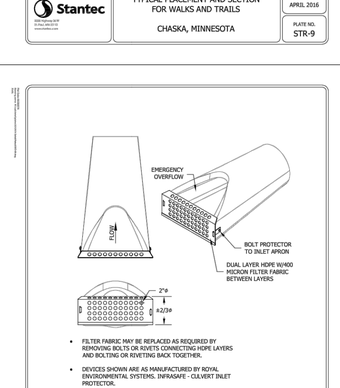
Stantec — B618 CURB & GUTTER CONSTRUCTION AT CATCHBASIN — CHASKA, MINNESOTA — LAST REVISION: MARCH 2008 — PLATE NO. STR-4



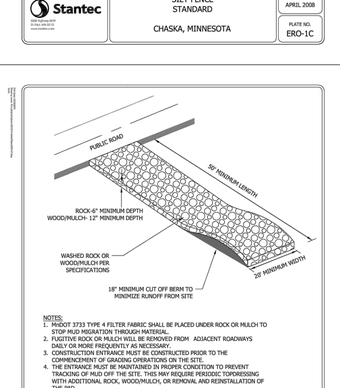
Stantec — SURMOUNTABLE CURB & GUTTER CONSTRUCTION AT CATCHBASIN — CHASKA, MINNESOTA — LAST REVISION: MARCH 2008 — PLATE NO. STR-5



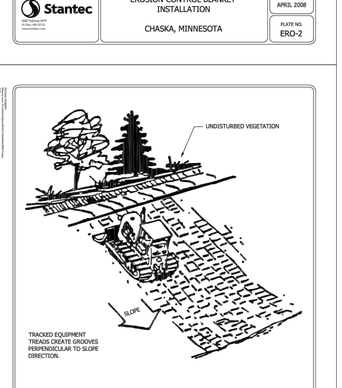
Stantec — TYPICAL SECTIONS FOR RESIDENTIAL STREETS 7 TON SECTION — CHASKA, MINNESOTA — LAST REVISION: JUNE 2012 — PLATE NO. STR-7



Stantec — TYPICAL PLACEMENT AND SECTION FOR WALKS AND TRAILS — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. STR-9



Stantec — SILT FENCE STANDARD — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-1C



Stantec — EROSION CONTROL BLANKET INSTALLATION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-2

Stantec — INLET PROTECTION FOR CATCH BASIN BEFORE CURB CONSTRUCTION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-4A

Stantec — INLET PROTECTION - CATCH BASIN INSERT AFTER CURB CONSTRUCTION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-4B

Stantec — INLET PROTECTION BEEHIVE CASTING — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-4C

Stantec — FLARED END EROSION CONTROL — CHASKA, MINNESOTA — LAST REVISION: FEB 2005 — PLATE NO. ERO-6

Stantec — ROCK CONSTRUCTION ENTRANCE — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-7

Stantec — SLOPE TRACKING — CHASKA, MINNESOTA — LAST REVISION: FEB 2004 — PLATE NO. ERO-10

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20860 KENBRIDGE COURT, SUITE 100
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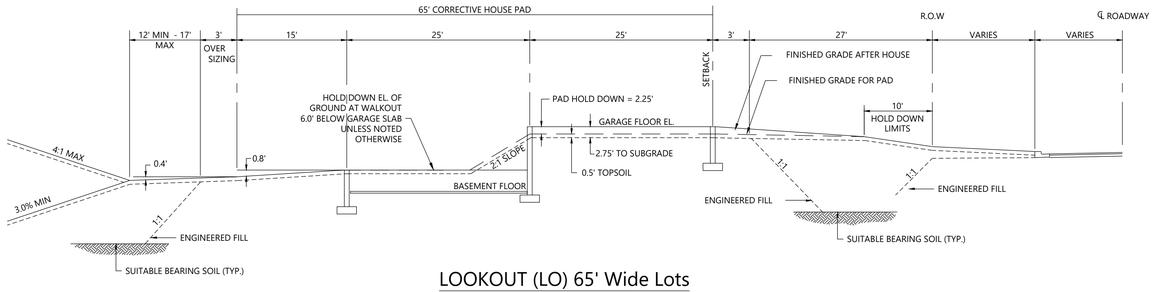
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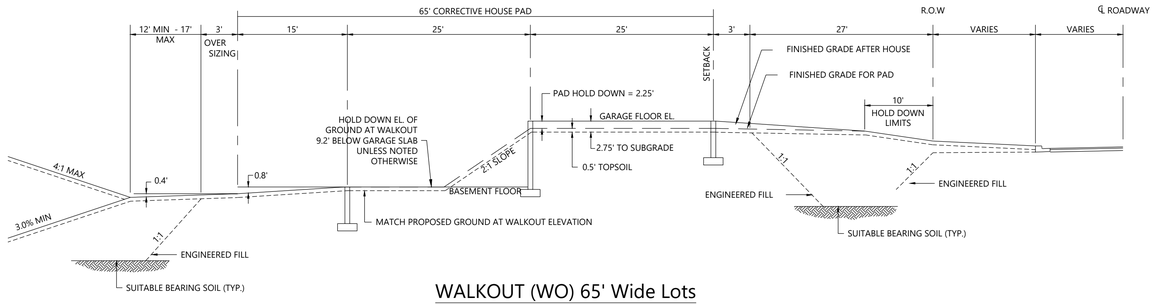
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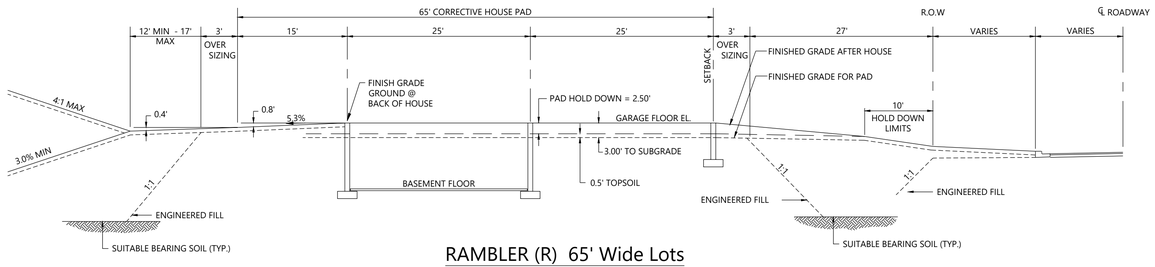
LOOKOUT (LO) 65' Wide Lots

N.T.S.



WALKOUT (WO) 65' Wide Lots

N.T.S.



RAMBLER (R) 65' Wide Lots

N.T.S.

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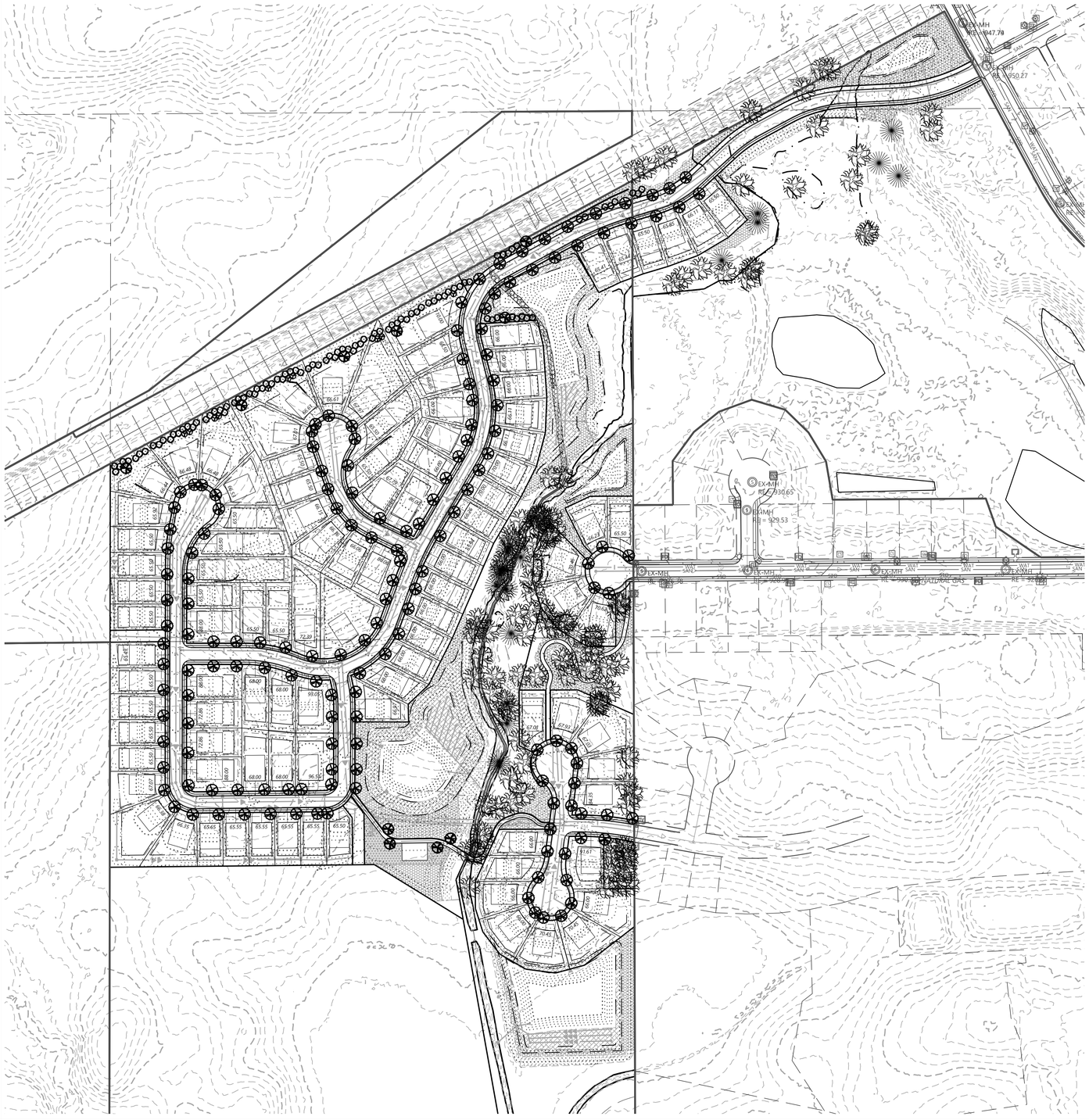
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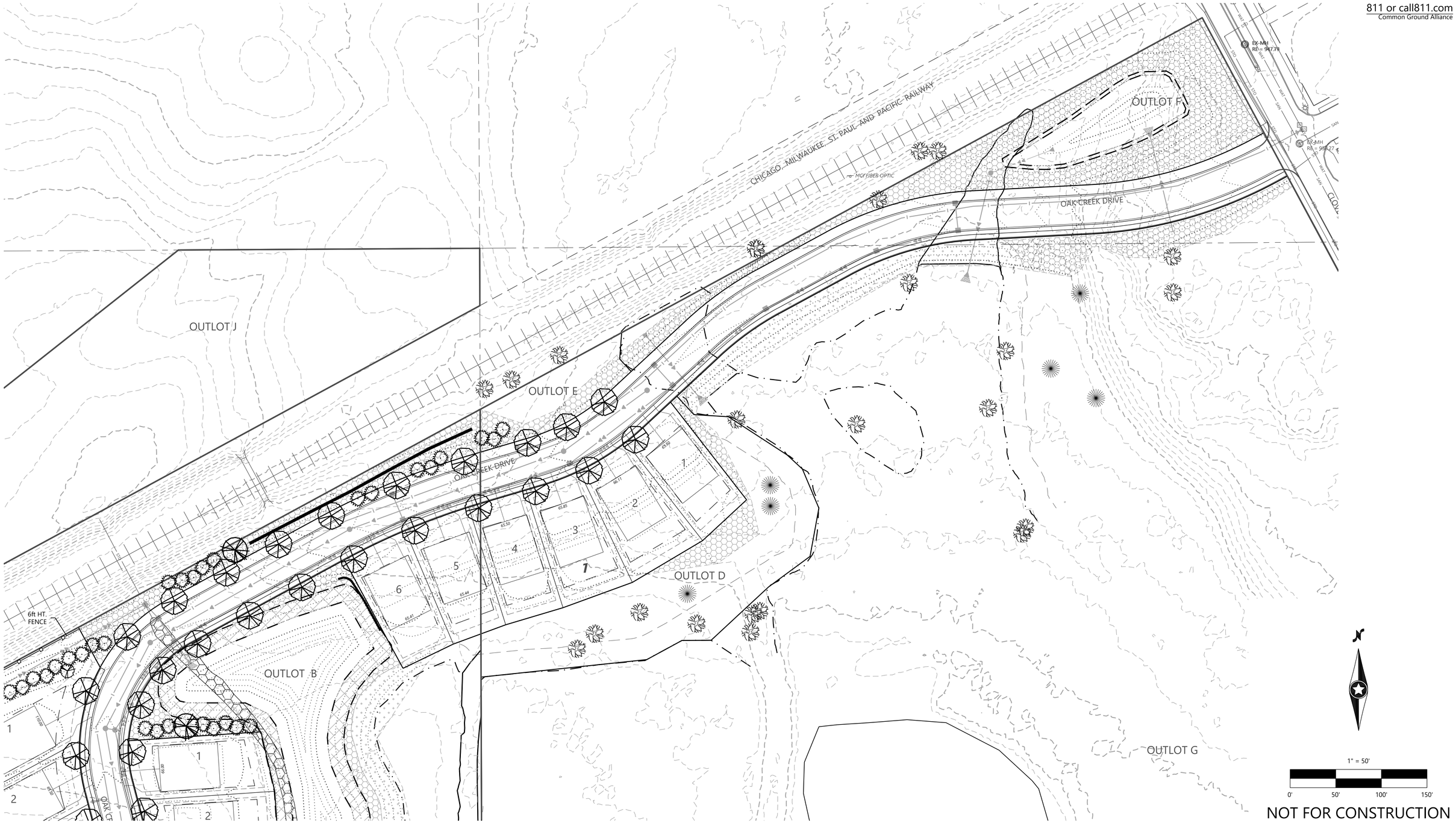
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DATE: 03/25/22 LICENSE NO. 53774

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PRELIMINARY LANDSCAPE PLAN

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7.B. PUBLIC HEARING: Recommend...
Page 50 of 75

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PRELIMINARY LANDSCAPE PLAN

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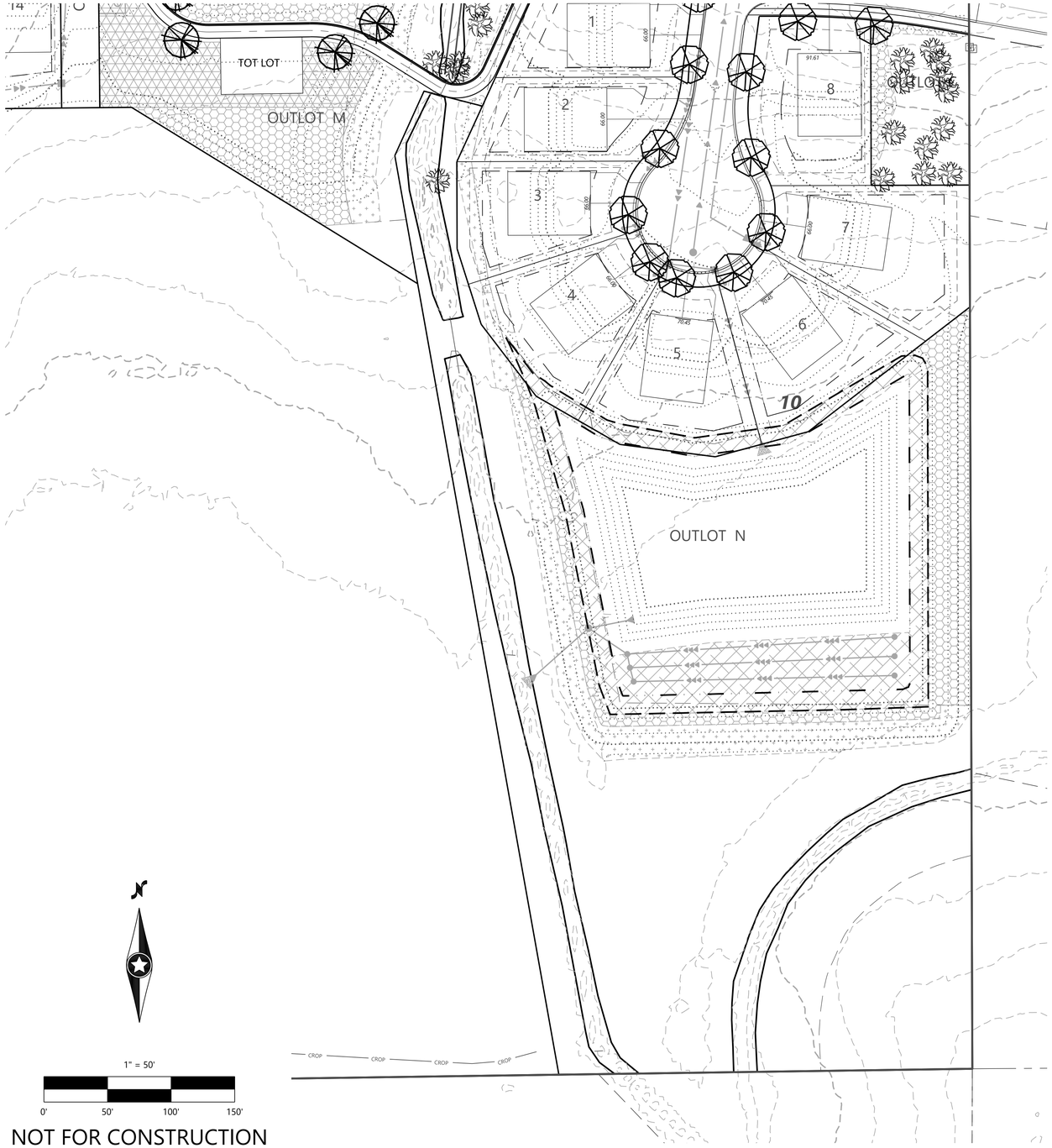
PRELIMINARY LANDSCAPE PLAN

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 21 OF 27

DATE: 03/25/22

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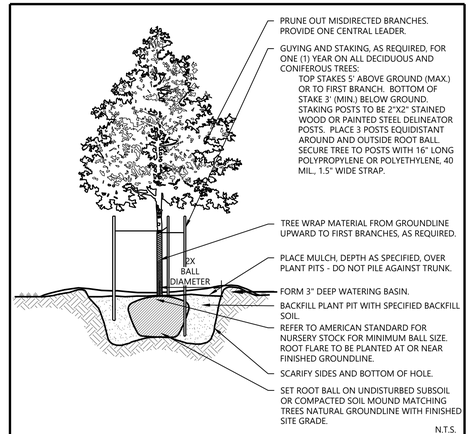


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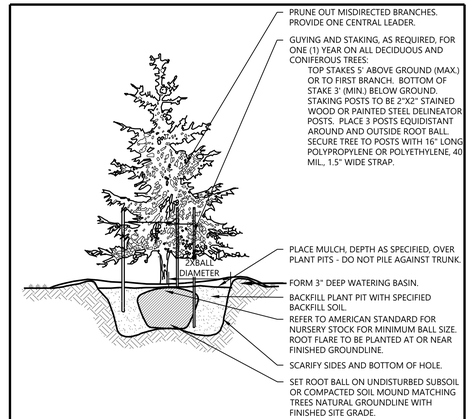
PLANTING NOTES

1. CONTRACTOR SHALL CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
6. ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
   ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
   ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
   ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
8. PLANTS TO BE INSTALLED AS PER MNLA & ANSI STANDARD PLANTING PRACTICES.
9. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
11. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
12. PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
13. WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
14. STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
15. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
16. BACKFILL SOIL AND TOPSOIL TO ADHERE TO MN/DOT STANDARD SPECIFICATION 3877 (SELECT TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.
17. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE AND SHRUB PLANTING BEDS SHALL HAVE 4" DEPTH OF SHREDDED HARDWOOD MULCH. SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH SHREDDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL AND COLORED RED, OR APPROVED EQUAL. ROCK MULCH TO BE BUFF LIMESTONE, 1 1/2" TO 3" DIAMETER, AT MINIMUM 3" DEPTH, OR APPROVED EQUAL. ROCK MULCH TO BE ON COMMERCIAL GRADE FILTER FABRIC, BY TYPAR, OR APPROVED EQUAL WITH NO EXPOSURE. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
18. EDGING TO BE COMMERCIAL GRADE VALLEY-VIEW BLACK DIAMOND (OR EQUAL) POLY EDGING OR SPADED EDGE, AS INDICATED. POLY EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH BASE OF TOP BEAD AT GRADE, FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
19. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. PARKING LOT ISLANDS TO BE SODDED WITH SHREDDED HARDWOOD MULCH AROUND ALL TREES AND SHRUBS. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN/DOT SPECIFICATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.
20. PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR.
21. CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
22. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
23. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
24. RAIN GARDEN NOTE: PROVIDE AND INSTALL EROSION CONTROL BLANKET AT RAIN GARDEN AREA SIDE SLOPES AFTER ALL PLANTING HAVE BEEN INSTALLED. BLANKET TO BE ONE SEASON GEOJUTE, MN/DOT CATEGORY 2 (STRAW 1S, WOOD FIBER 1S), OR APPROVED EQUAL. BLANKET TO BE OVERLAPPED BY 4" AND ANCHORED BY SOD STAPLES. PLACE BLANKET PERPENDICULAR TO THE SLOPE. TRENCH IN EDGES OF BLANKET AREA TO PREVENT UNDER MINING. PROVIDE SILT FENCE AT TOP OF SLOPE AS NEEDED. SHREDDED HARDWOOD MULCH TO MATCH OTHER PROJECT PLANTING MULCH. PLACE 4" DEPTH OF MULCH AT ALL PLANTING AND EROSION CONTROL BLANKET AREA (NO FILTER FABRIC). SEE RAIN GARDEN DETAIL FOR FURTHER INFORMATION. RAIN GARDEN TO PROVIDE PROPER INFILTRATION AND DRAINAGE REQUIREMENTS PER ENGINEERS APPROVAL.

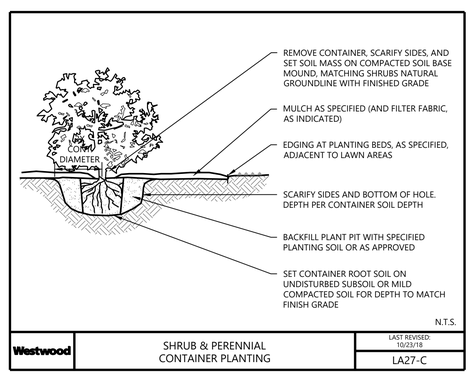
PLANTING NOTES



Westwood	DECIDUOUS TREE PLANTING	LAST REVISED: 10/19/18
		LA28



Westwood	EVERGREEN TREE PLANTING	LAST REVISED: 10/19/18
		LA29



Westwood	SHRUB & PERENNIAL CONTAINER PLANTING	LAST REVISED: 10/23/18
		LA27-C

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811 or call811.com
Common Ground Alliance

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OAK CREEK

DESIGNED: FDH II
CHECKED: FDH II
DRAWN: ACB
HORIZONTAL SCALE: ##########
VERTICAL SCALE: ### OR ###

INITIAL ISSUE: 03/01/2022
REVISIONS:
1 03/25/22 CITY REQUESTED UPDATES
2 ---- ----
3 . .
4 . .
5 . .

PREPARED FOR:
DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
NICHOLAS T. MEYER
DATE: 03/25/22 LICENSE NO. 53774

OAK CREEK
CHASKA, MN

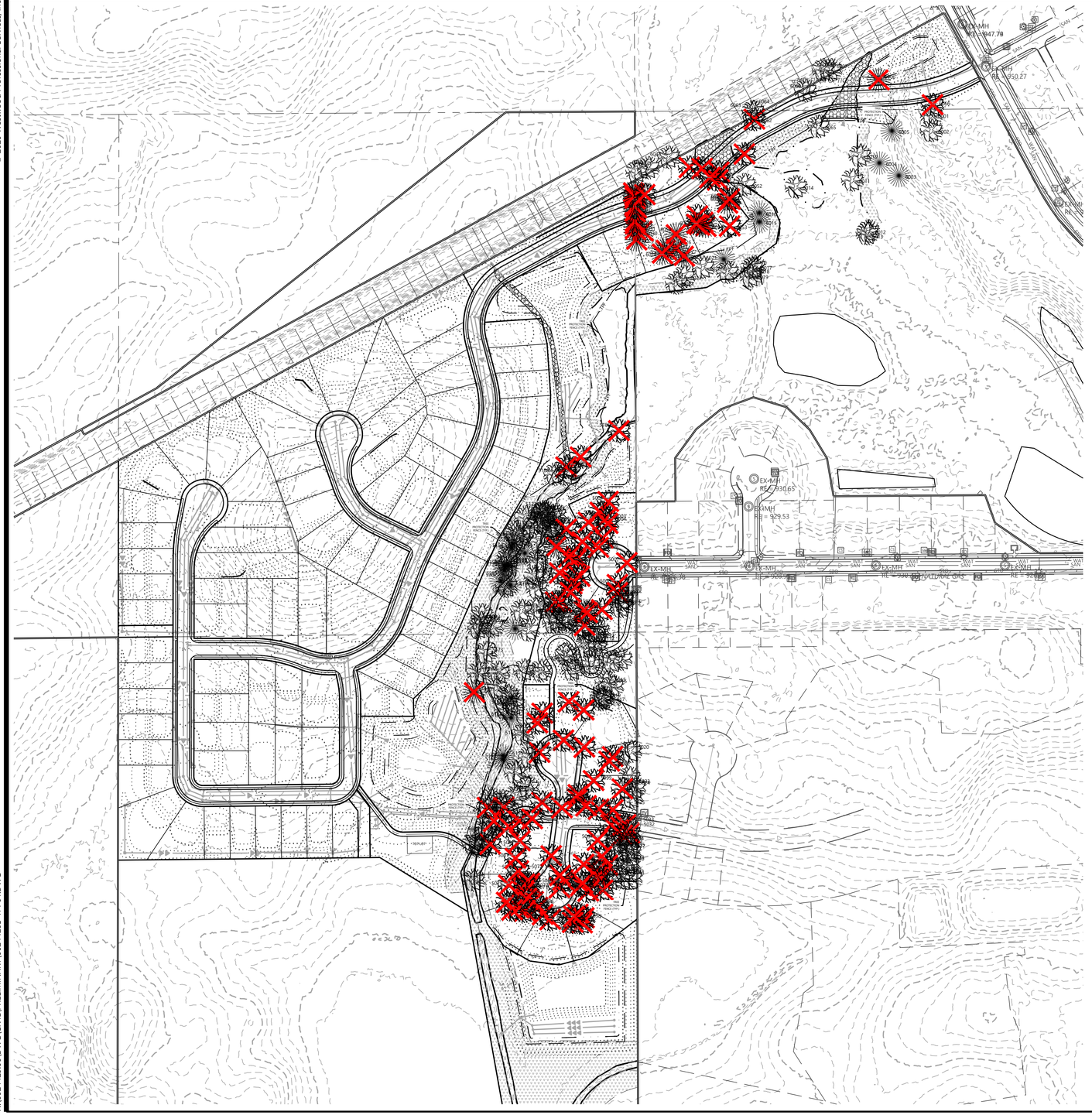
Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

PRELIMINARY LANDSCAPE PLAN, NOTES & DETAILS

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 22 OF 27
DATE: 03/25/22

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TREE INVENTORY REGULATIONS

SIGNIFICANT TREES:
DECIDUOUS HARDWOOD TREES - 12" DBH OR LARGER
CONIFEROUS TREES - 15' HT. OR LARGER
CONIFEROUS TREES CONVERSION RATE: 1' HT. = 2.4" DBH 15' HT. = 7" DBH

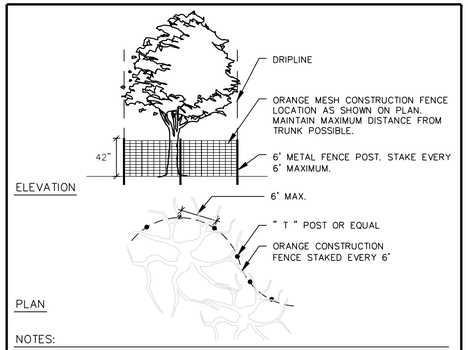
TREE INVENTORY CALCULATIONS

Tree Inventory Calculations	
Total Healthy Caliper Inches Onsite	4,702 DBH In.
Total Healthy Trees Onsite	219 Trees
Total Healthy Caliper Inches Saved	2,354 DBH In.
Total Healthy Trees Saved	101 Trees
Total Healthy Caliper Inches Remove	2,348 DBH In.
Total Healthy Trees Removed	118 Trees

LEGEND

- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING DECIDUOUS TREE TO BE REMOVED
- EXISTING CONIFEROUS TREE TO REMAIN
- EXISTING CONIFEROUS TREE TO BE REMOVED

TREE PROTECTION DETAIL



NOTES:

1. PRUNING WILL BE DONE BY PROFESSIONALS DURING APPROPRIATE PRUNING SEASON.
2. NO STORAGE OF MATERIALS, OPERATION OF MACHINERY, OR DEVELOPMENT OF ANY SORT WILL OCCUR WITHIN THE FENCE-LINE WITHOUT APPROVAL IN WRITING FROM THE CITY.
3. SITE GRADING TO BE DONE ONLY AFTER PROTECTIVE MEASURES HAVE BEEN TAKEN, CITY HAS APPROVED FENCING LOCATIONS, AND ALL CONTRACTORS HAVE BEEN BRIEFED ON TREE PRESERVATION TECHNIQUES.

Westwood

1" = 150'
0' 150' 300' 450'

NOT FOR CONSTRUCTION

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OAK CREEK

DESIGNED:	CHF
CHECKED:	RMB
DRAWN:	CHF
HORIZONTAL SCALE:	150.000012'
VERTICAL SCALE:	30' OR 15'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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NICHOLAS T. MEYER
DATE: 03/25/22 LICENSE NO. 53774

OAK CREEK
CHASKA, MN

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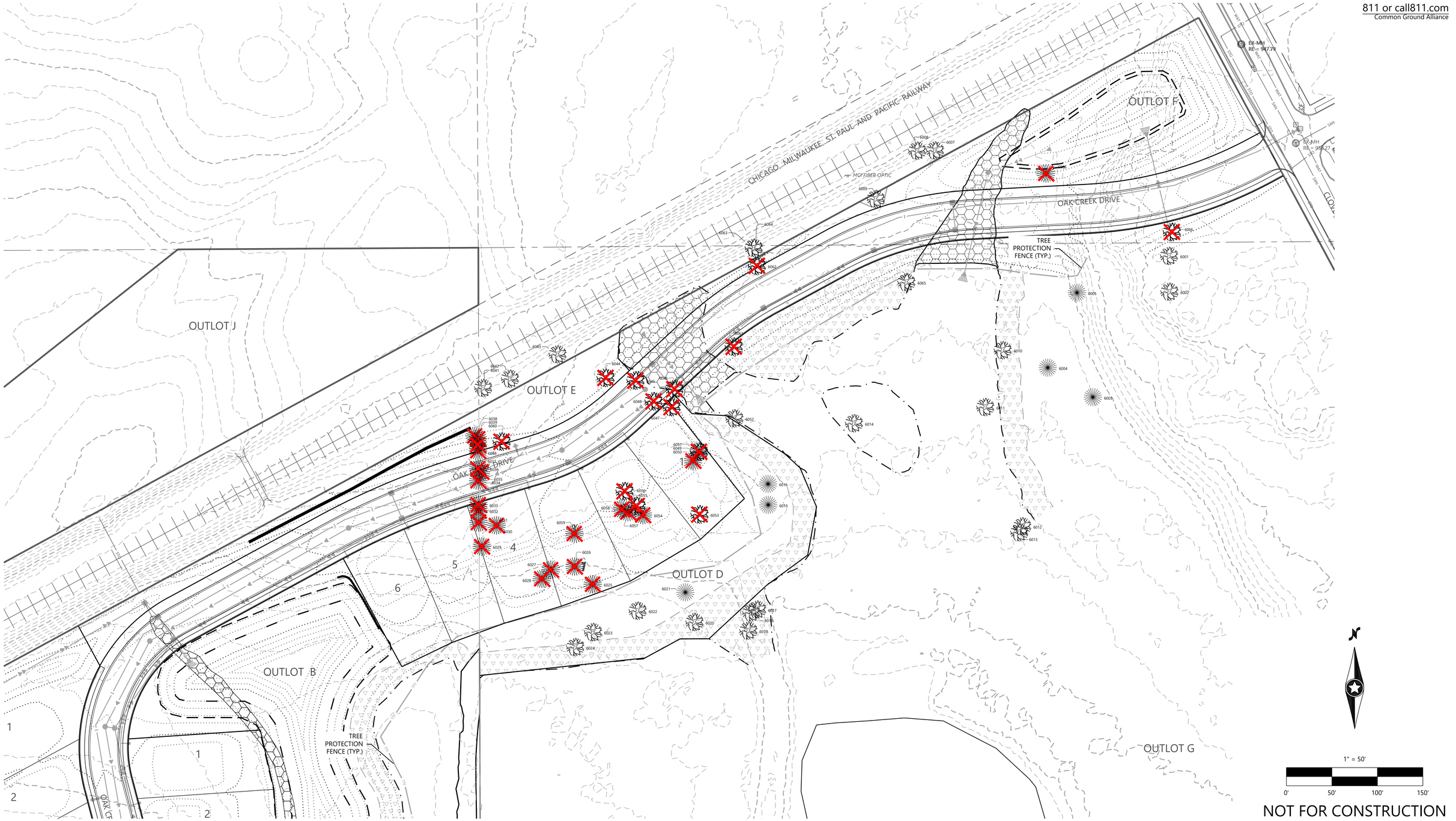
OVERALL TREE PRESERVATION PLAN

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 23 OF 27
DATE: 03/25/22

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OAK CREEK

DESIGNED:	CHF
CHECKED:	RMB
DRAWN:	CHF
HORIZONTAL SCALE:	50'
VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

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20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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NICHOLAS T. MEYER
DATE: 03/25/22 LICENSE NO. 53774

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CHASKA, MN

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TREE PRESERVATION PLAN

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 24 OF 27
DATE: 03/25/22

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OAK CREEK

DESIGNED:	CHF
CHECKED:	RMB
DRAWN:	CHF
HORIZONTAL SCALE:	50.000005'
VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

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20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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NICHOLAS T. MEYER
DATE: 03/25/22 LICENSE NO. 53774

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CHASKA, MN

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TREE PRESERVATION PLAN

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 25 OF 27
DATE: 03/25/22

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OUTLOT A
OAK CREEK PASS
OAK CREEK DRIVE
OUTLOT B
OUTLOT L
TOT LOT
OUTLOT M
SOPHIA DRIVE
OUTLOT O
OAK CREEK CIRCLES
TREE PROTECTION FENCE (TYP.)
EX. MH
RE = 926.38

1" = 50'
0' 50' 100' 150'

NOT FOR CONSTRUCTION

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OAK CREEK

DESIGNED:	FDH II
CHECKED:	FDH II
DRAWN:	ACB
HORIZONTAL SCALE:	50'
VERTICAL SCALE:	10' OR 5'

INITIAL ISSUE: 03/01/2022
REVISIONS:

1	03/25/22	CITY REQUESTED UPDATES
2	----	----
3	.	.
4	.	.
5	.	.

PREPARED FOR:

DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

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CHASKA, MN

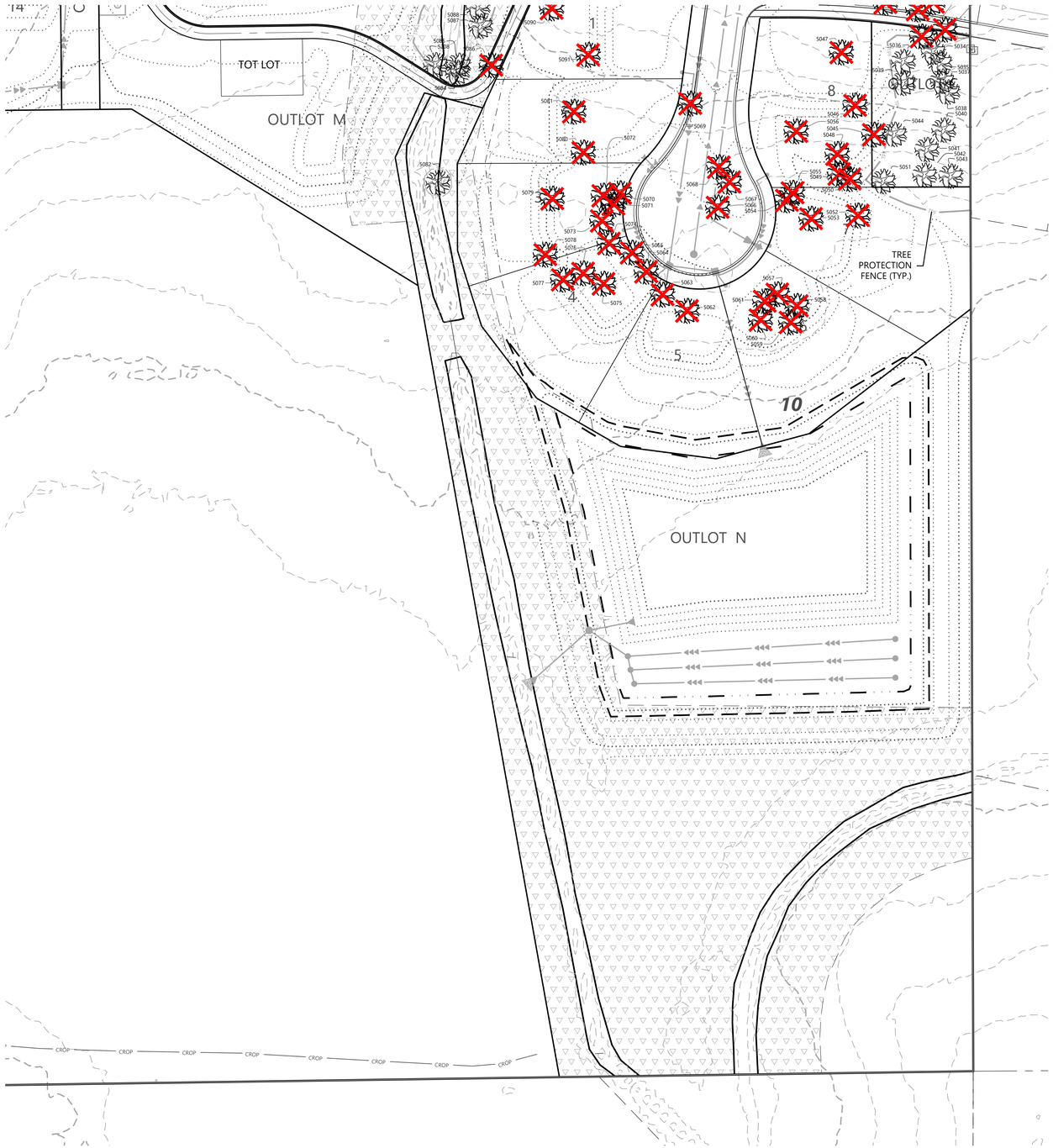
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TREE PRESERVATION PLAN

PROJECT NUMBER: 0024429.00

SHEET NUMBER: 26 OF 27
DATE: 03/25/22

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TREE PRESERVATION DATA

TREE TAG	SPECIES	SIZE (DBH)	NOTES	STATUS
5001	Red Oak	37	BD-35%	Removed-Exempt-Unhealthy
5002	Bur Oak	43		Removed
5003	Bur Oak	24		Removed
5004	Bur Oak	24		Removed
5005	Bur Oak	29		Removed
5006	Bur Oak	23		Removed
5007	Ash	43	EAB	Removed-Exempt-Unhealthy
5008	Sugar Maple	38		Removed
5009	Red Oak	26		Removed
5010	Bur Oak	20	X	Saved
5011	Bur Oak	25		Saved
5012	Bur Oak	26		Saved
5013	Bur Oak	25		Saved
5014	Bur Oak	41		Saved
5015	Bur Oak	29		Saved
5016	Bur Oak	59		Saved
5017	American Elm	12		Saved
5018	American Elm	14		Saved
5019	Bur Oak	29		Saved
5020	Red Oak	39	BD-20%	Saved
5021	Bur Oak	13		Removed
5022	Bur Oak	28		Removed
5023	Bur Oak	31		Saved
5024	Bur Oak	28		Saved
5025	Red Oak	37		Saved
5026	Bur Oak	22		Removed
5027	Bur Oak	26		Removed
5028	Bur Oak	29		Removed
5029	Bur Oak	35		Removed
5030	Bur Oak	20		Removed
5031	Bur Oak	13		Removed
5032	Bur Oak	18		Removed
5033	Bur Oak	20		Removed
5034	Bur Oak	34		Saved
5035	Bur Oak	21		Saved
5036	Bur Oak	15		Saved
5037	Bur Oak	28		Saved
5038	Bur Oak	24		Saved
5039	Bur Oak	28	BD-10%	Saved
5040	Bur Oak	28		Saved
5041	Bur Oak	25		Saved
5042	Bur Oak	20		Saved
5043	Bur Oak	45		Saved
5044	Bur Oak	19		Saved
5045	Bur Oak	39		Removed
5046	Bur Oak	32		Removed
5047	Bur Oak	24		Removed
5048	Bur Oak	18		Removed
5049	Bur Oak	18		Removed
5050	Bur Oak	19		Removed
5051	Bur Oak	23		Saved
5052	Bur Oak	32		Removed
5053	Bur Oak	32		Removed
5054	Bur Oak	23		Removed
5055	American Elm	12		Removed
5056	Bur Oak	28		Removed
5057	Bur Oak	26		Removed
5058	Fruit Tree	19		Removed
5059	Bur Oak	31		Removed
5060	Bur Oak	19		Removed
5061	Bur Oak	19		Removed
5062	Basswood	18		Removed
5063	Bur Oak	30		Removed
5064	Bur Oak	27		Removed
5065	Bur Oak	17		Removed
5066	Bur Oak	34		Removed
5067	Bur Oak	20		Removed
5068	Bur Oak	25		Removed
5069	Basswood	34		Removed
5070	Bur Oak	25		Removed
5071	Bur Oak	17	BD-15%	Removed
5072	Bur Oak	16		Removed
5073	Bur Oak	24		Removed
5074	Bur Oak	16		Removed
5075	Bur Oak	16		Removed
5076	Bur Oak	30		Removed
5077	Bur Oak	26		Removed
5078	Basswood	35	X BD, Dead	Removed-Exempt-Unhealthy
5079	Bur Oak	26		Removed
5080	Bur Oak	24		Removed
5081	Bur Oak	30		Removed
5082	Siberian Elm	17	Invasive	Saved-Exempt-Invasive
5084	Siberian Elm	12	Invasive	Saved-Exempt-Invasive
5085	Bur Oak	29		Saved
5086	Bur Oak	19		Removed
5087	Basswood	29	BD, Dead	Saved-Exempt-Unhealthy
5088	Bur Oak	25		Saved
5089	Bur Oak	24		Removed
5090	Bur Oak	28		Removed
5091	Bur Oak	28		Removed
5092	Bur Oak	34		Removed

TREE TAG	SPECIES	SIZE (DBH)	NOTES	STATUS
5093	Bur Oak	22		Removed
5094	Bur Oak	22		Removed
5095	Bur Oak	32		Removed
5096	Bur Oak	23		Removed
5097	Bur Oak	30		Removed
5098	Bur Oak	29		Removed
5099	Bur Oak	24		Removed
5100	Bur Oak	29		Removed
5101	Bur Oak	28		Removed
5102	Basswood	41	PD, Dead	Removed-Exempt-Unhealthy
5103	Bur Oak	35		Removed
5104	Bur Oak	21		Removed
5105	Red Oak	36	BD-40%	Removed-Exempt-Unhealthy
5106	Bur Oak	28		Saved
5107	Red Oak	24		Saved
5108	Bur Oak	28		Saved
5109	Red Oak	42	BD-60%	Saved-Exempt-Unhealthy
5110	Bur Oak	24		Saved
5111	Bur Oak	22		Saved
5112	Bur Oak	18		Saved
5113	Bur Oak	24		Saved
5114	Bur Oak	20		Saved
5115	Red Oak	39	BD, Dead	Removed-Exempt-Unhealthy
5116	Bur Oak	18		Saved
5117	Bur Oak	22		Removed
5118	Eastern Red Cedar	7		Removed
5119	Bur Oak	27		Removed
5120	Bur Oak	26		Removed
5121	Bur Oak	24		Saved
5122	Bur Oak	19		Saved
5123	Bur Oak	16		Saved
5124	Bur Oak	17		Saved
5125	Bur Oak	21		Saved
5126	Bur Oak	13		Saved
5127	Bur Oak	16		Saved
5128	Bur Oak	20		Saved
5129	Bur Oak	18		Saved
5130	Bur Oak	27		Removed
5131	Bur Oak	12		Saved
5132	Bur Oak	26		Saved
5133	Eastern Red Cedar	9		Removed
5134	Bur Oak	17		Saved
5135	Bur Oak	23		Removed
5136	Bur Oak	24		Removed
5137	Bur Oak	16		Removed
5138	Bur Oak	24		Removed
5139	Bur Oak	26		Removed
5140	Bur Oak	29		Removed
5141	Bur Oak	24	X	Removed
5142	Bur Oak	38		Removed
5143	Bur Oak	22		Removed
5144	Bur Oak	24		Removed
5145	Bur Oak	20		Removed
5146	Bur Oak	19		Saved
5147	Bur Oak	24		Saved
5148	Bur Oak	29		Saved
5149	Bur Oak	28	PD	Saved-Exempt-Unhealthy
5150	Bur Oak	19		Saved
5151	Bur Oak	18		Saved
5152	Bur Oak	28		Saved
5153	Red Oak	70	BD-35%	Saved-Exempt-Unhealthy
5154	Bur Oak	35		Removed
5155	Bur Oak	34		Saved
5156	Black Willow	28	BD-30%	Saved-Exempt-Unhealthy
5157	Bur Oak	37		Saved
5158	Bur Oak	39		Saved
5159	Basswood	39		Removed
5160	Bur Oak	42		Saved
5161	American Elm	12		Removed
5162	Bur Oak	32		Saved
5163	Eastern Red Cedar	7		Saved
5164	Eastern Red Cedar	7		Saved
5165	Ash	12	EAB	Saved-Exempt-Unhealthy
5166	Eastern Red Cedar	9	X	Saved
5167	Siberian Elm	12	Invasive	Saved-Exempt-Invasive
5168	Red Oak	32		Saved
5169	Eastern Red Cedar	6		Saved
5170	American Elm	12		Saved
5171	Bur Oak	30		Saved
5172	Basswood	29		Saved
5173	Siberian Elm	13	Invasive	Saved-Exempt-Invasive
5174	Sugar Maple	26		Saved
5175	Eastern Red Cedar	10		Saved
5176	Bur Oak	50	BD-10%	Saved
5177	Ash	30	BD-65% EAB	Saved-Exempt-Unhealthy
5178	Bur Oak	32		Saved
5179	Ash	13	EAB	Saved-Exempt-Unhealthy
5180	Eastern Red Cedar	5		Saved
5181	Bur Oak	30		Saved
5182	Bur Oak	40		Saved
5183	Bur Oak	34		Saved

TREE TAG	SPECIES	SIZE (DBH)	NOTES	STATUS
5184	Eastern Red Cedar	7		Saved
5185	American Elm	12	BD, Dead	Removed-Exempt-Unhealthy
5186	American Elm	12	BD, Dead	Removed-Exempt-Unhealthy
5187	Boxelder	14		Removed
5188	American Elm	14		Saved
5189	Ash	37	EAB	Saved-Exempt-Unhealthy
5190	Basswood	30	X	Saved
5191	American Elm	20		Saved
5192	Bur Oak	74		Saved
5193	Basswood	22		Saved
5194	Eastern Red Cedar	13		Saved
5195	Eastern Red Cedar	6		Saved
5196	Basswood	30		Saved
5197	Basswood	36	X	Saved
5198	Eastern Red Cedar	7		Saved
5199	Eastern Red Cedar	6		Saved
5200	Eastern Red Cedar	9		Saved
5201	Eastern Red Cedar	11		Saved
5202	Eastern Red Cedar	21		Saved
5203	Basswood	37	X	Saved
5204	Basswood	21		Saved
5205	American Elm	12		Saved
5206	Red Oak	29		Saved
5207	Eastern Red Cedar	15		Removed
5208	Bur Oak	34		Saved
6001	Cottonwood	13		Offsite
6002	Cottonwood	12		Offsite
6003	Eastern Red Cedar	2		Offsite
6004	Eastern Red Cedar	2		Offsite
6005	Eastern Red Cedar	2		Offsite
6006	Eastern Red Cedar	1		Removed
6007	Boxelder	18		Offsite
6008	Boxelder	22		Offsite
6009	Boxelder	12	x	Saved
6010	American Elm	14		Offsite
6011	Ash	13	EAB	Offsite
6012	Black Willow	23	x	Offsite
6013	Black Willow	54		Offsite
6014	American Elm	12		Offsite
6015	Eastern Red Cedar	2		Saved
6016	Eastern Red Cedar	3		Saved
6017	Cottonwood	14		Offsite
6018	Cottonwood	15		Offsite
6019	Cottonwood	14		Offsite
6020	Boxelder	12		Saved
6021	Eastern Red Cedar	2		Saved
6022	Ash	12	EAB	Saved-Exempt-Unhealthy
6023	Ash	12	EAB	Saved-Exempt-Unhealthy
6024	Ash	13	EAB	Saved-Exempt-Unhealthy
6025	Eastern Red Cedar	6		Removed
6026	Eastern Red Cedar	5		Removed
6027	Eastern Red Cedar	4		Removed
6028	Eastern Red Cedar	1		Removed
6029	Eastern Red Cedar	8		Removed
6030	Eastern Red Cedar	2		Removed
6031	Eastern Red Cedar	5		Removed
6032	Eastern Red Cedar	7		Removed
6033	Eastern Red Cedar	3		Removed
6034	Eastern Red Cedar	2		Removed
6035	Eastern Red Cedar	7		Removed
6036	Eastern Red Cedar	7		Removed
6037	Eastern Red Cedar	10		Removed
6038	Eastern Red Cedar	3		Removed
6039	Eastern Red Cedar	3		Removed
6040	Eastern Red Cedar	2		Removed
6041	Boxelder	14	x	Offsite
6042	Boxelder	14		Offsite
6043	Boxelder	12		Offsite
6044	American Elm	12		Removed
6045	Ash	12	EAB	Removed-Exempt-Unhealthy
6046	Ash	15	EAB	Removed-Exempt-Unhealthy
6047	Ash	13	EAB	Removed-Exempt-Unhealthy
6048	Ash	15	EAB	Removed-Exempt-Unhealthy
6049	Ash	14	EAB	Removed-Exempt-Unhealthy
6050	Eastern Red Cedar	1		Removed
6051	Eastern Red Cedar	1		Removed
6052	Ash	15	EAB	Offsite
6053	Ash	12	EAB	Removed-Exempt-Unhealthy
6054	Eastern Red Cedar	4		Removed
6055	American Elm	4		Removed
6056	Ash	12	EAB	Removed-Exempt-Unhealthy
6057	Eastern Red Cedar	3		Removed
6058	Eastern Red Cedar	2		Removed
6059	Eastern Red Cedar	1		Removed
6060	Black Cherry	12		Removed
6061	Boxelder	12		Removed
6062	Ash	13	EAB	Removed-Exempt-Unhealthy
6063	American Elm	16		Offsite
6064	Boxelder	18	x	Offsite
6065	Ash	14	pd 40% trunk	Offsite
6066	Cottonwood	12		Removed

1" = 50'

0' 50' 100' 150'

NOT FOR CONSTRUCTION

Call 48 Hours before digging:
811 or call811.com
Common Ground Alliance

N:\0024429.00\DWG\CIVIL\PRELIMINARY\0024429S-TPP01.DWG

OAK CREEK

DESIGNED: FDH II
CHECKED: FDH II
DRAWN: ACB
HORIZONTAL SCALE: ##########
VERTICAL SCALE: ### OR ###

INITIAL ISSUE: 03/01/2022
REVISIONS:
1 03/25/22 CITY REQUESTED UPDATES
2 ---- ----
3 . .
4 . .
5 . .

PREPARED FOR:
DR HORTON, INC. - MINNESOTA
20860 KENBRIDGE COURT, SUITE 100
LAKEVILLE, MINNESOTA 55044

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

NICHOLAS T. MEYER
DATE: 03/25/22 LICENSE NO. 53774

OAK CREEK
CHASKA, MN

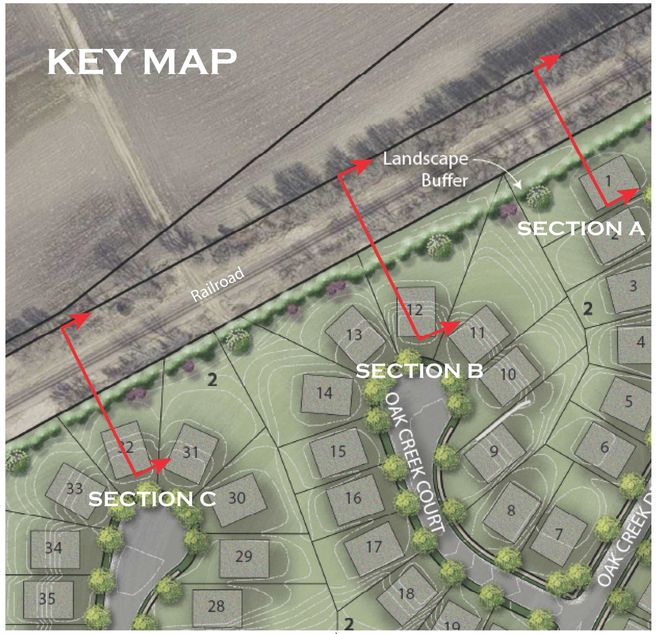
Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
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TREE PRESERVATION PLAN & DATA

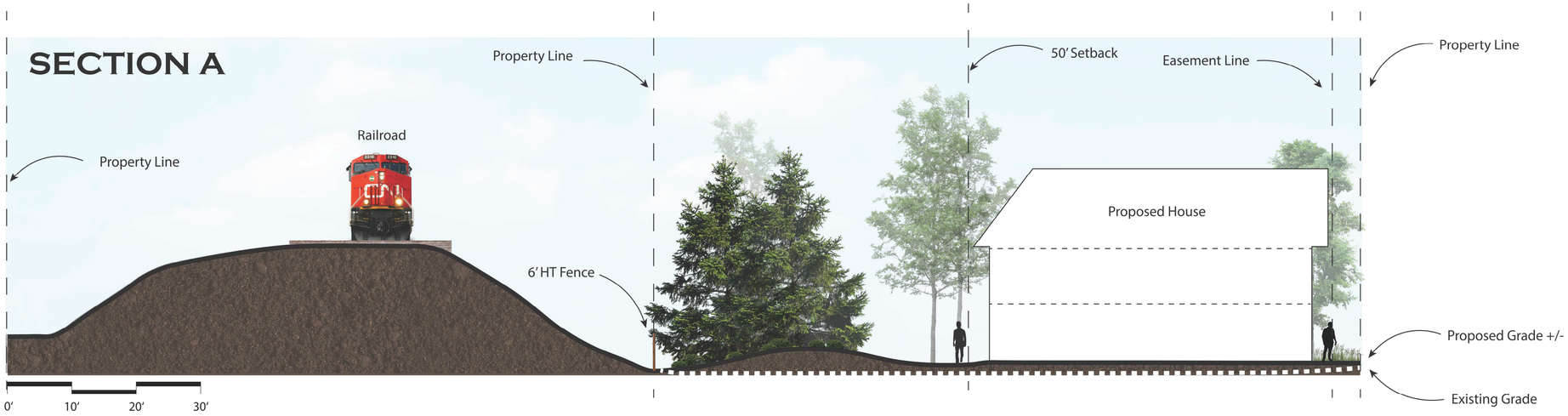
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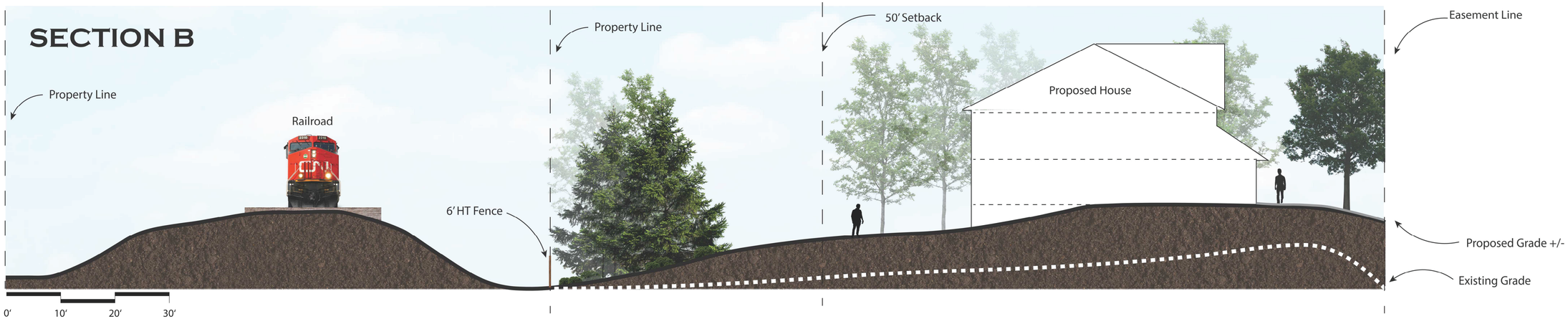
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DATE: 03/25/22

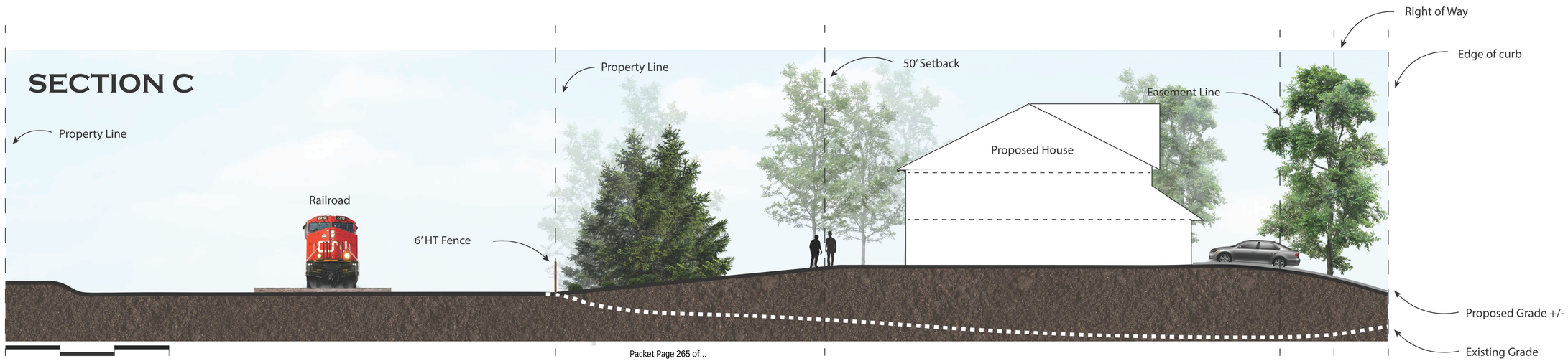
ILLUSTRATIVE CROSS SECTIONS
OAK CREEK-CHASKA, MN



NO SCALE







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Minnetonka, MN 55343
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Westwood Professional Services, Inc.

03-14-2022

0024439

March 29, 2022

The Jonathan Association
c/o First Service Residential
111000 Bavaria Rd
Chaska, MN 55318

Sent Via Email

Dear Board of Directors:

Thank you for taking the time to meet with our group last week. This letter serves as a summary of our meeting and the formal request of Chaska Investments and D.R. Horton as it relates to Outlot A, Clover Preserve 2nd Addition ("**Outlot A**") and the proposed Clover Field Apartments and Oak Creek development. We understand that the next Board meeting is set for April 18th. Given our approval and construction timeline, we respectfully request the Board meet earlier in April to consider this request. Our team can be available to attend and answer any questions.

SUMMARY

Outlot A is subject to Clover Preserve Declaration of Development Standards, Covenants, Conditions and Restrictions dated September 12, 2001 ("**Clover Preserve Declaration**"). Pursuant to Article II, Section 2.02, the Jonathan Association shall provide written consent of any lot subdivision or split. D.R. Horton has a purchase contract for a portion of Outlot A for the proposed Oak Creek access road and 4 residential lots (shown as Parcel A of attached Lot Split exhibit). Chaska Investments has a contracted buyer for a portion of the remaining site for the proposed Clover Field Apartments (shown as Parcel B of attached Lot Split exhibit).

Both the apartment site and Oak Creek are planned to begin development Spring 2022.

As discussed, the demographics for the apartment site include empty nesters and professionals with very few children. The rental market is competitive, which makes it challenging to justify additional fees for amenities that will get little use from tenants. The apartment site will have on site amenities, including a pool, party room, exercise facility and outdoor barbecue area.

D.R. Horton, Inc.-Minnesota
20860 Kenbridge Court, Suite 100
Lakeville, MN 55044
www.drhorton.com

REQUESTS

We request and propose the following:

- Chaska Investments requests written consent from The Jonathan Association for the lot split and re-platting of Outlot A to facilitate the closing to D.R. Horton, as well as the development of both Oak Creek and the apartments.

- Chaska Investments requests The Jonathan Association release the apartments from the Clover Preserve Declaration. Enclosed is a proposed draft of Release of Land from Declaration for your review.

- D.R. Horton will agree to add the Oak Creek neighborhood into The Jonathan Association with the below conditions:
  - Receipt of The Jonathan Association's legal opinion on the ability to annex real estate without consent of 2/3 of all classes of members. The legal opinion is to be reviewed and agreed to by D.R. Horton legal counsel.

  - No requirement of architectural approval of The Jonathan Association for the initial construction of homes. The plans are as approved by the City of Chaska. Any subsequent architectural changes would be reviewed by Jonathan once D.R. Horton transfers ownership to an end buyer.

  - The Jonathan Association will agree to accept all common elements that will be constructed as part of the Oak Creek development.

  - D.R. Horton shall not be responsible for annual assessments. Assessments begin once the home is closed with the end buyer.

We appreciate your time and consideration with this matter and look forward to an outcome that will work for all parties. Please contact one of the below with any questions or need for additional information. Thank you.

CHASKA INVESTMENTS
Mike Benson
mbenson@wpcrealestate.com
612.801.7281

D.R. HORTON
Mike Suel
msuel@drhorton.com
952.985.7823

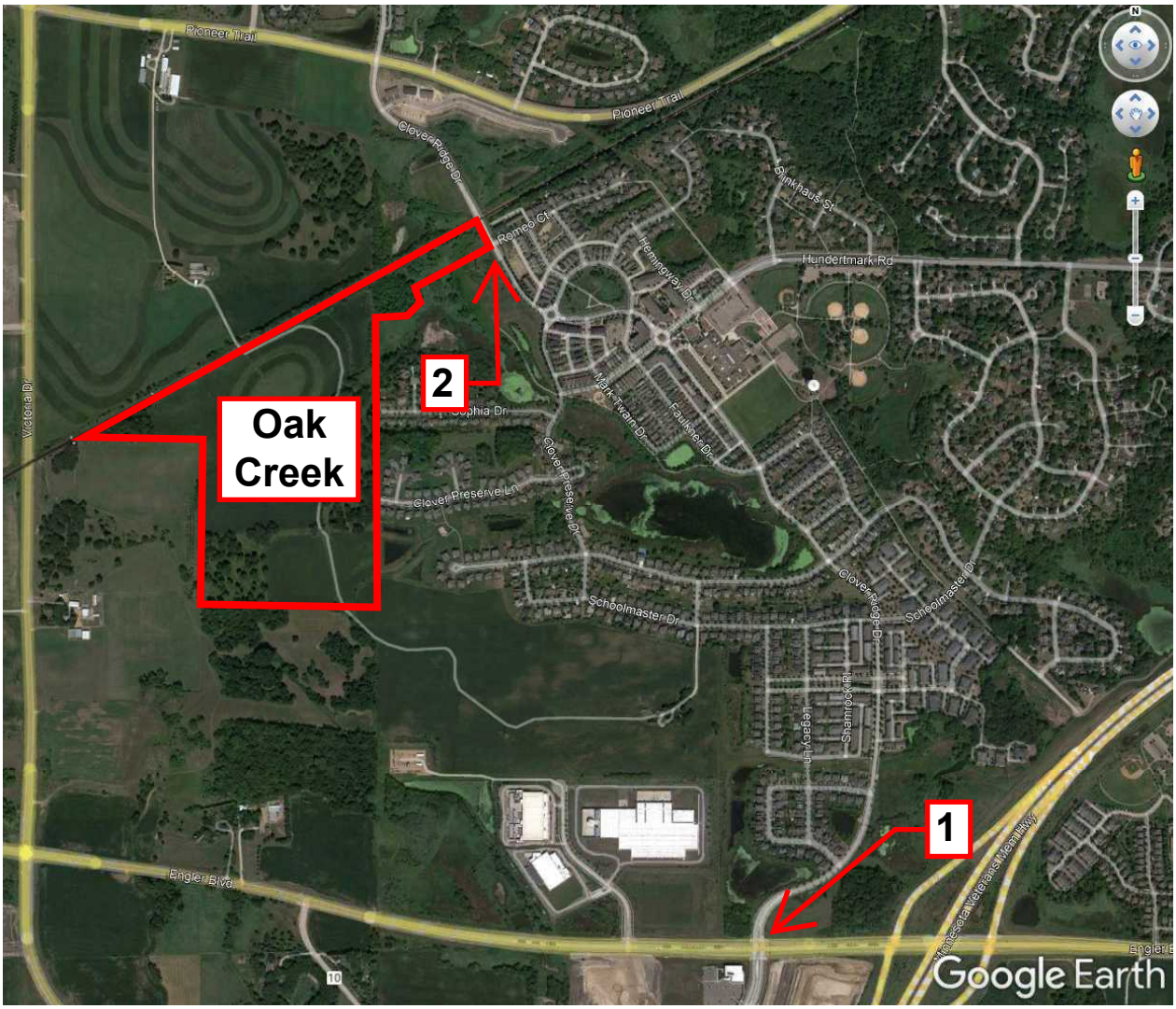
Deb Ridgeway
dridgeway@drhorton.com
952.985.7864

ENCLOSURES

Oak Creek Construction Traffic Plan

03/01/2022

Not to scale



1 - Construction Traffic Sign on northbound Clover Ridge Drive at Engler Blvd: "No Oak Creek Construction Access. Use Pioneer Trail"

2 - Construction Traffic Sign on southbound Clover Ridge Dr. at Romeo Ct: "No Oak Creek Construction Traffic Beyond This Point"

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THE WHITNEY



AMERICAN CLASSIC A



PRAIRIE D



NORTHERN CRAFTSMAN B

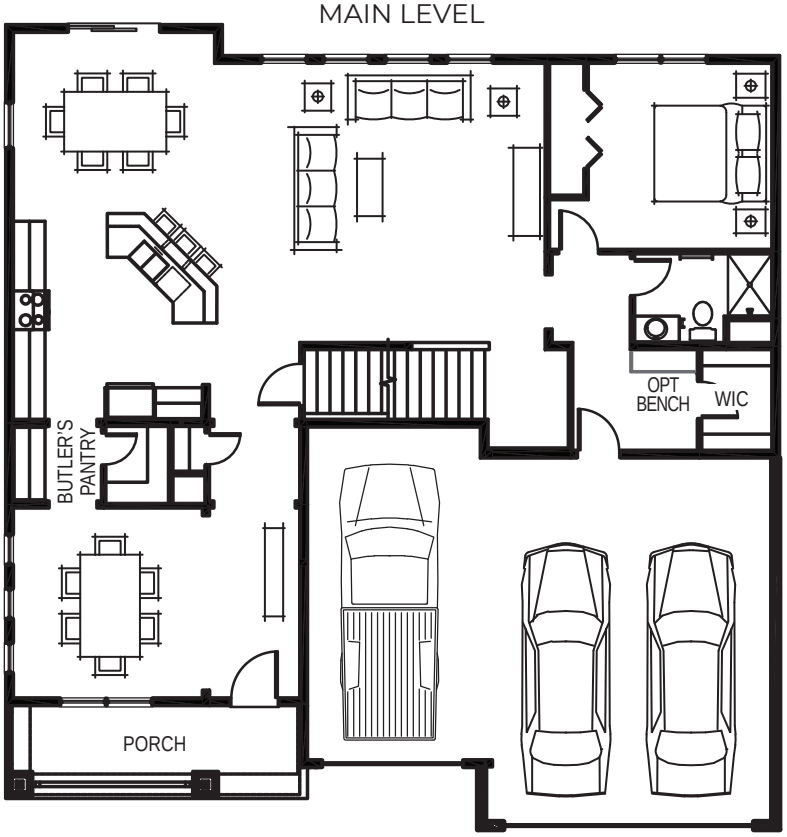
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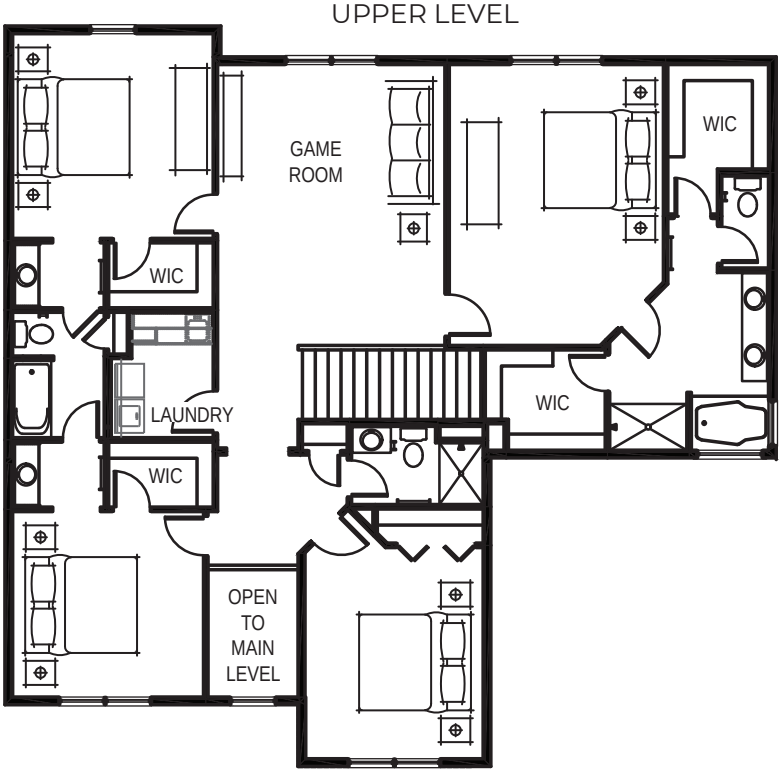
THE WHITNEY

3,400 SQUARE FEET

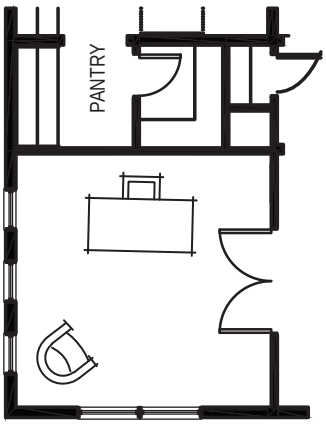
MAIN LEVEL



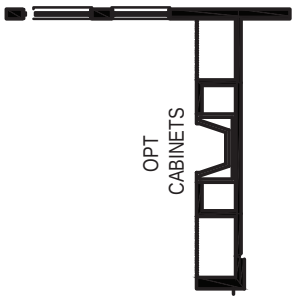
UPPER LEVEL



OPT STUDY



OPT GAS FIREPLACE



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THE HARRISON



AMERICAN CLASSIC A



HEARTLAND COTTAGE C



NORTHERN CRAFTSMAN B

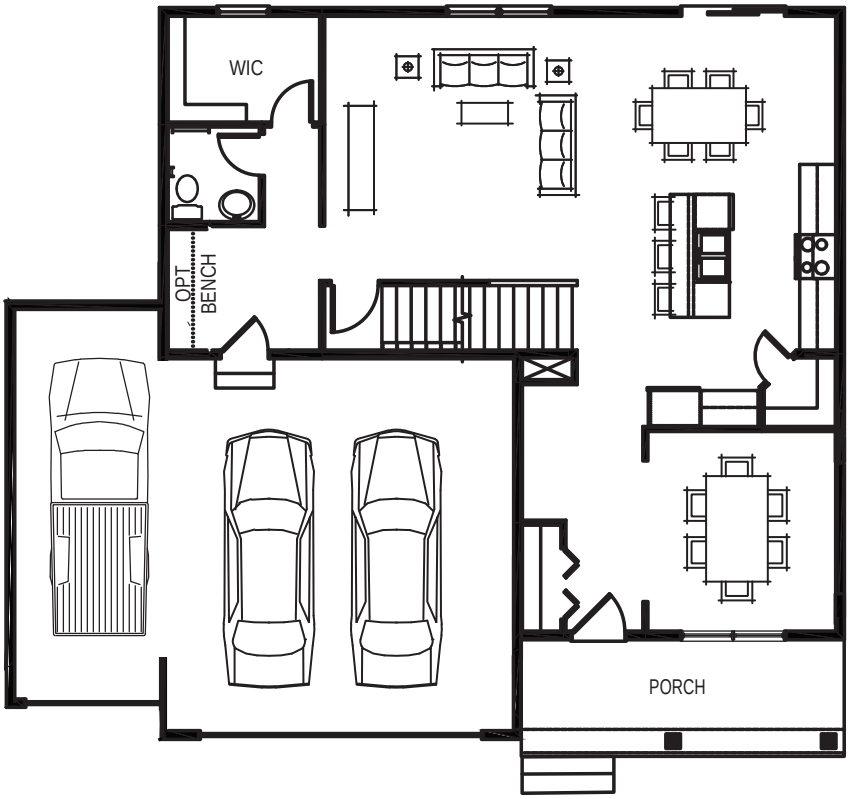
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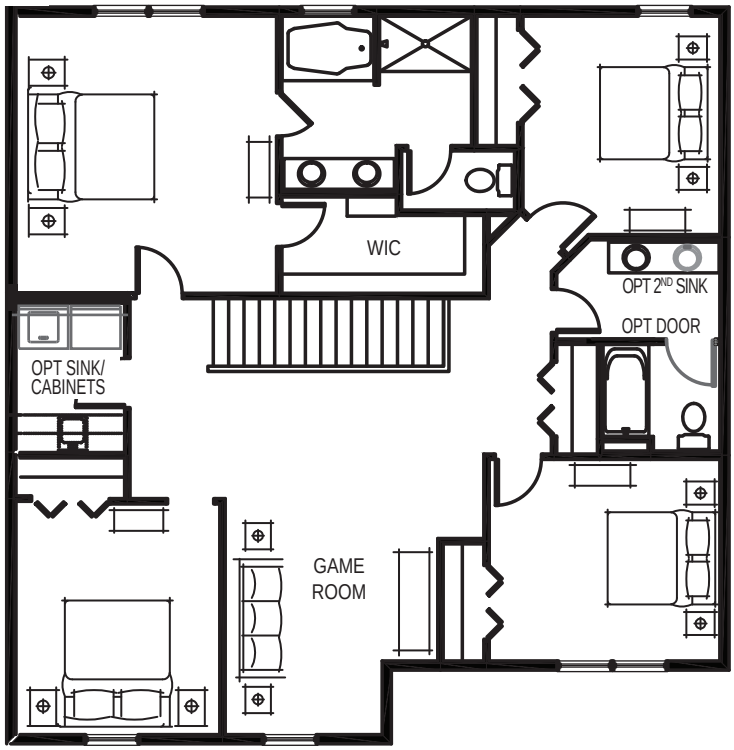
THE HARRISON

2,522 SQUARE FEET

MAIN LEVEL



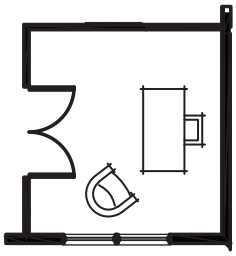
UPPER LEVEL



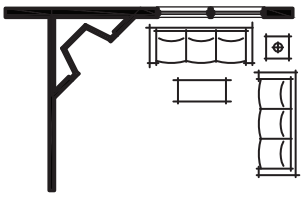
OPT BEDROOM PLAN W/ FULL BATH



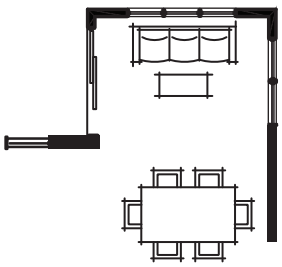
OPT STUDY



OPT GAS FIREPLACE



OPT SUNROOM



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THE JORDAN


AMERICAN CLASSIC A


HEARTLAND COTTAGE C


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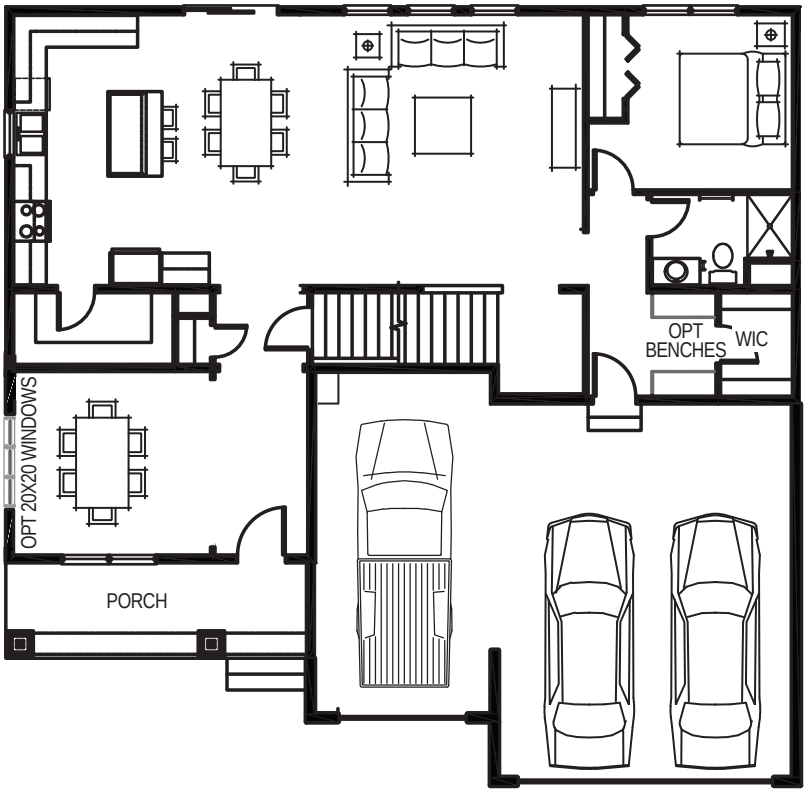

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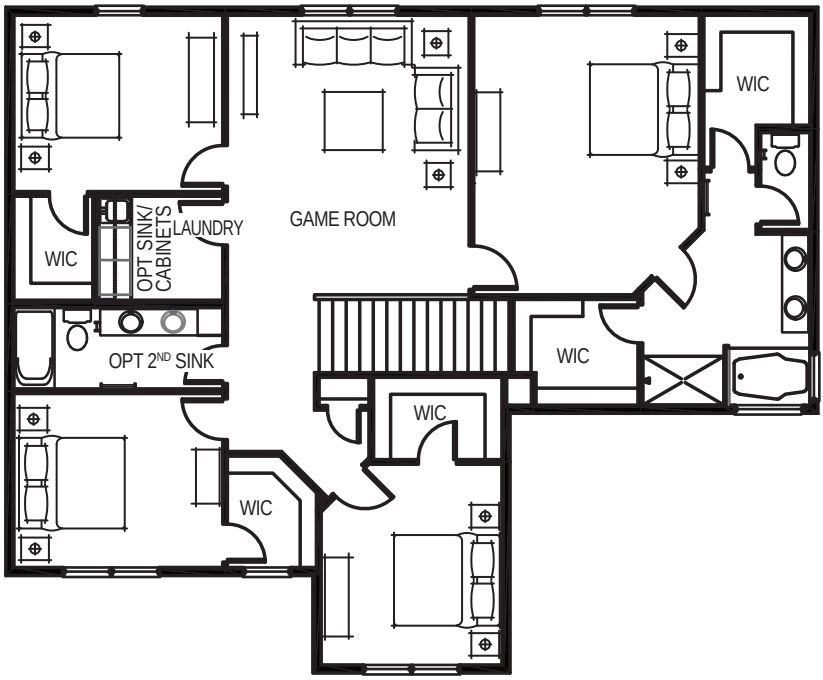
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THE JORDAN
3,003 SQUARE FEET

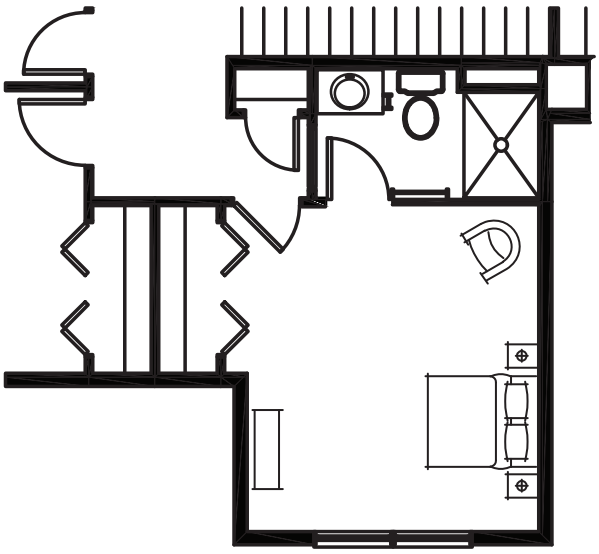
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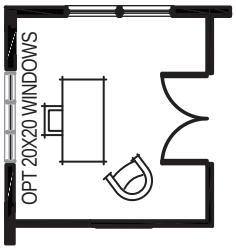
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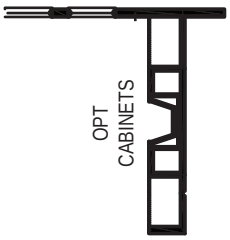
OPT 3RD BATH



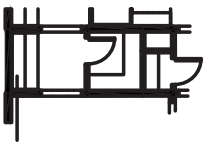
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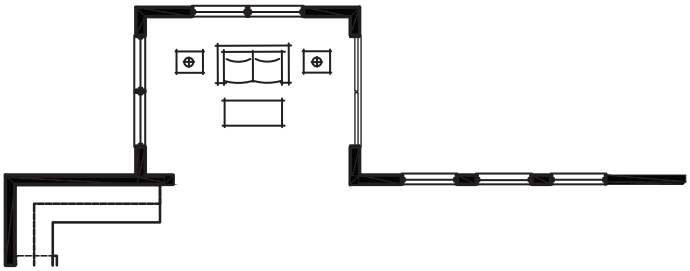
OPT GAS FIREPLACE



OPT BUTLER'S PANTRY



OPT SUNROOM



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THE REDWOOD



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HEARTLAND COTTAGE C



NORTHERN CRAFTSMAN B

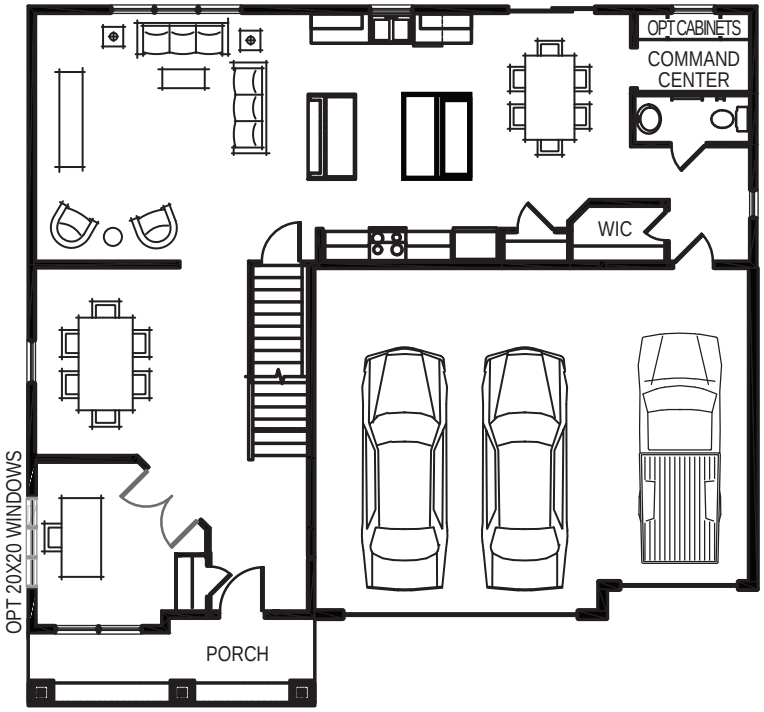
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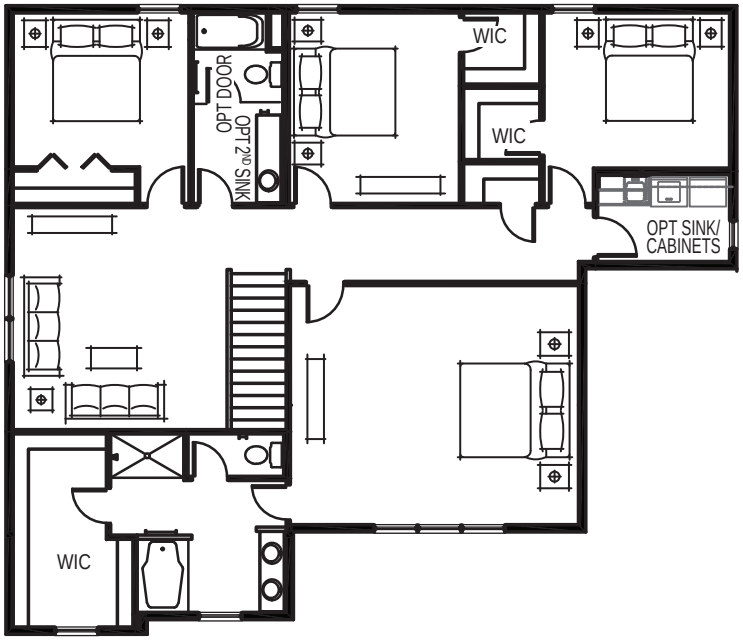
THE REDWOOD

3,084 SQUARE FEET

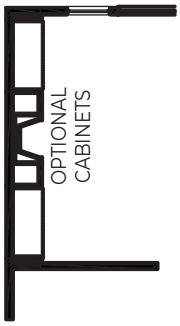
MAIN LEVEL



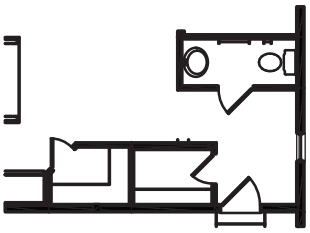
UPPER LEVEL



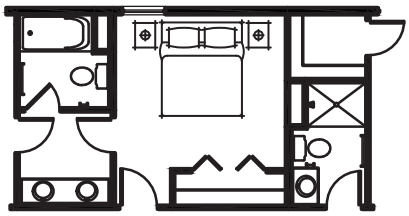
OPT GAS FIREPLACE



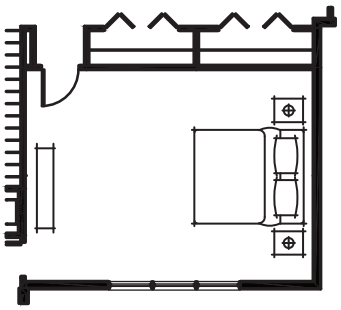
OPT WALK-IN PANTRY



OPT JACK & JILL PLUS HALL BATH



OPT LINEN CLOSETS



OPT SEE-THROUGH GAS FIREPLACE



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THE ADAMS


AMERICAN CLASSIC A


HEARTLAND COTTAGE C


NORTHERN CRAFTSMAN B

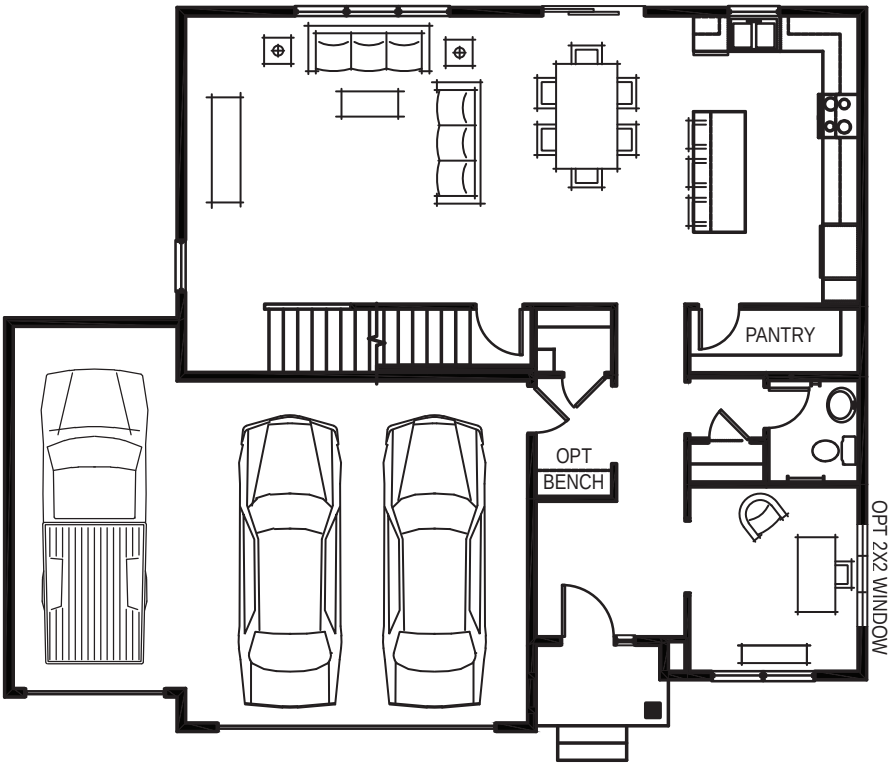

PRAIRIE D

D·R·HORTON
America's Builder

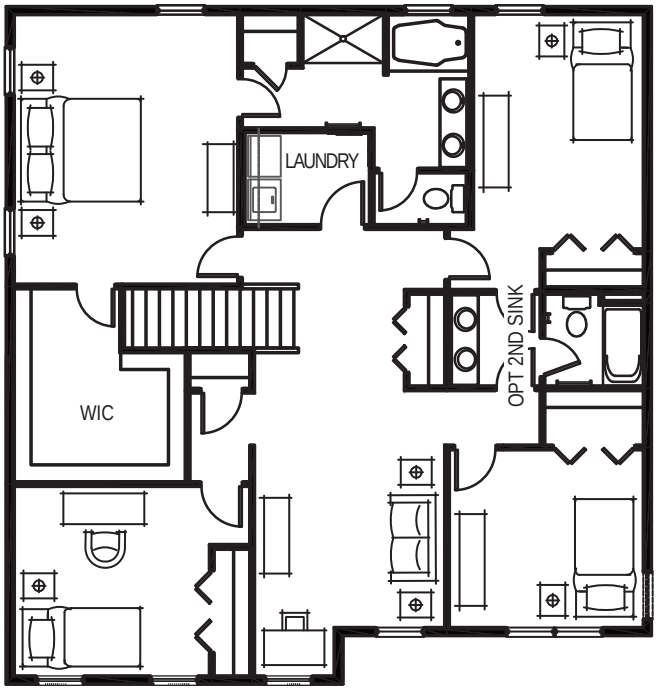
THE ADAMS

2,776 SQUARE FEET

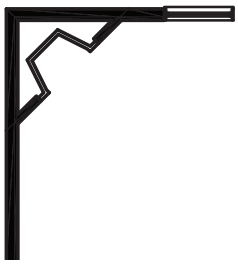
MAIN LEVEL



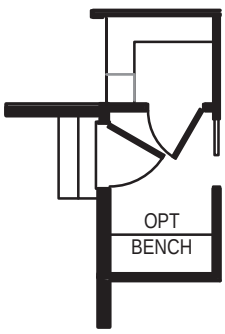
UPPER LEVEL



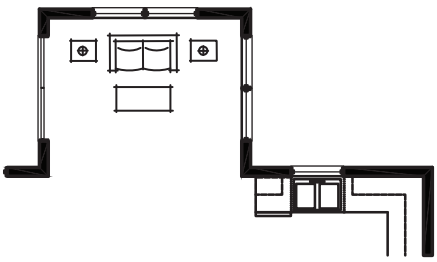
OPT GAS FIREPLACE



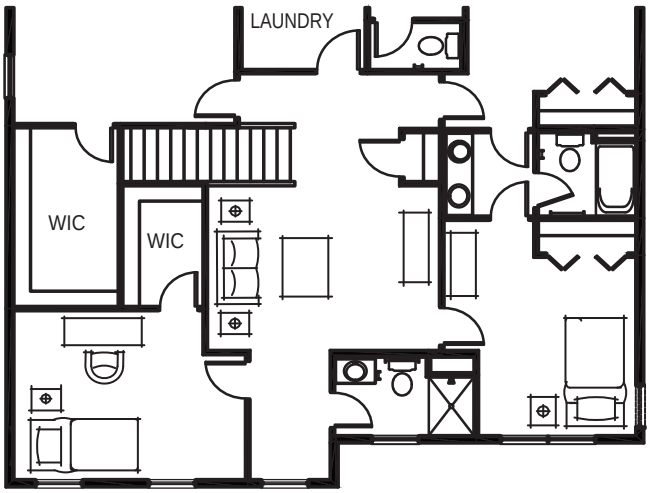
OPT POCKET DOOR



OPT SUNROOM



OPT JACK & JILL 3RD BATH



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EQUAL HOUSING OPPORTUNITY

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THE GRANT



AMERICAN CLASSIC A



HEARTLAND COTTAGE C



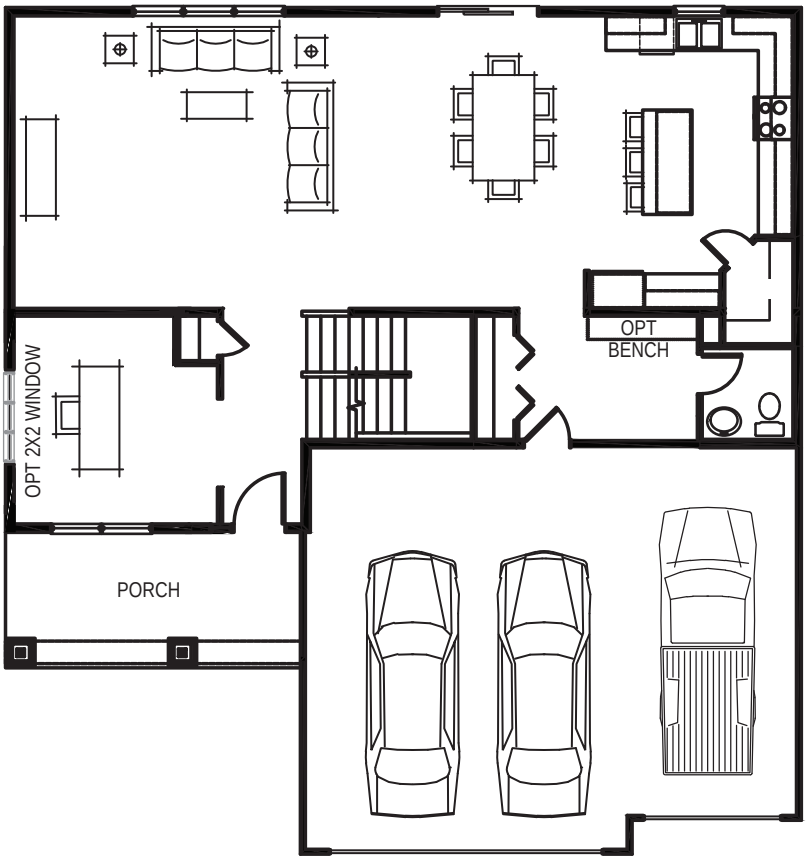
NORTHERN CRAFTSMAN B

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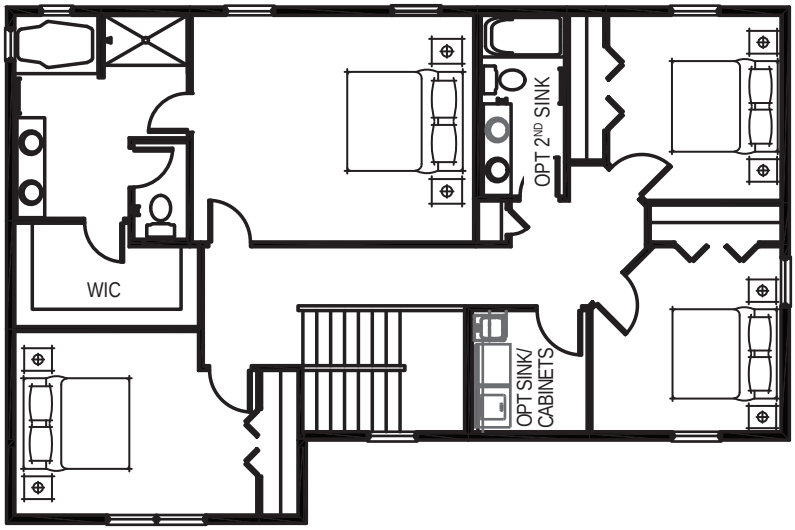
D·R·HORTON
America's Builder

THE GRANT
2,553 SQUARE FEET

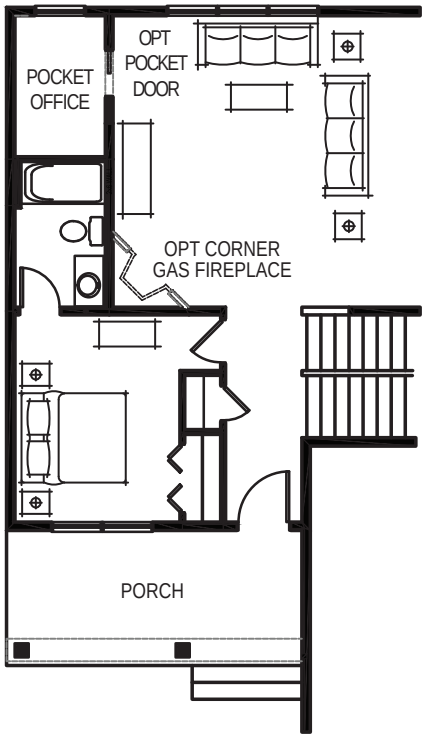
MAIN LEVEL



UPPER LEVEL



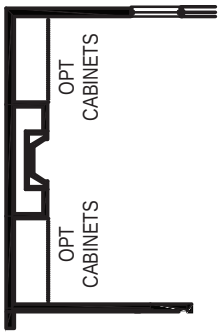
OPT MAIN LEVEL
BED, BATH, AND POCKET OFFICE



OPT LOFT IN LIEU OF BEDROOM



OPT GAS FIREPLACE



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CC PUBLIC HEARING: Recommend... Packet Page 280 of...

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THE BRIDGEWATER II



AMERICAN CLASSIC A



PRAIRIE D



NORTHERN CRAFTSMAN B

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America's Builder

THE BRIDGEWATER II

2,599 SQUARE FEET



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REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
04/13/2022

Subject: **The Gallery Chaska Apartments (fka Clover Field Apartments) – Preliminary Site & Building Plan and Preliminary Plat**

Applicant: Chase Real Estate, Inc.

Location: West of Clover Ridge Drive, south of the Twin Cities & Western Railroad

Case No.: 2022-21

Synopsis: Applicant seeks to obtain approval of a 175-unit apartment building on land just west of Clover Ridge Drive and south of the Twin Cities and Western Railroad

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval to the City Council

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BACKGROUND

At its May 15, 2000 City Council meeting the Clover Ridge Concept Plan was approved. The Concept Plan showcased an assortment of housing and densities throughout the development, which included multi-family pads.

In December of 2021, the revised Concept Plan for Oak Creek (fka Sagewood 3rd Addition) and Clover Field Apartments was approved. Oak Creek was approved as a single-family development on both the Kelzer property and a portion of the Chaska Investment property. The apartments were proposed entirely on the Chaska Investment property. The plan showed the incorporation of a road extension coming off of Clover Ridge Drive at the intersection of Romeo Court that would provide a primary access to the Oak Creek development. This road extension also showed an ingress/egress point for the apartment site. The Concept Plan showed both projects reviewed together so that the property owners/developers could get an understanding of how a road extension could fit into the context of the future multi-family site where Clover Field Apartments was proposed.

Tonight we are looking at the development of both properties, however, they will be reviewed as separate applications. This is the request for the apartment site, The Gallery Chaska Apartments.

CHANGES SINCE DECEMBER 2021 CONCEPT PLAN

The following changes have occurred since the December 2021 concept plan approvals:

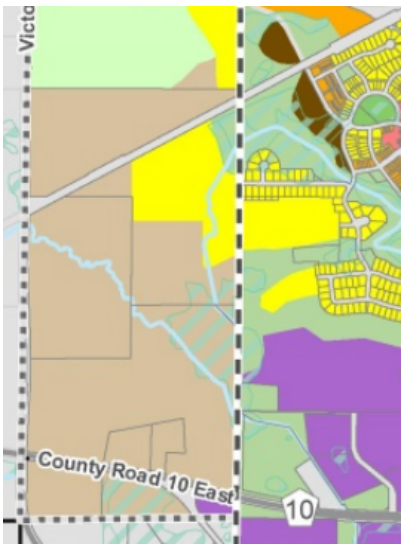
- Apartment Unit Count & Building Layout; the new plan is showing the inclusion of an apartment building totaling 175-units, 4-stories, pitched roof, and 1 level of underground parking. The apartment building proposed in the December 2021 concept plan showed 162 units, 4 stories, flat roof with elevator shaft, and 2 levels of underground parking. In addition, The layout of the building shows a very different layout compared to the previous concept plan. The previous plan showed a U-shaped

building. The new plan shows an H-shaped building. This change helps break up the massing on all four sides, and more importanly on the west side that faces the wetland and residential. In addition, the majority of the underground parking level will be fully underground, which was a concern raised during the concept plan. There are some areas that are exposed, which will be discussed in more detail later on in this report.

Project Goals

The goals of the Clover Field Apartments include the following:

- Provide Chaska and Clover Ridge an upscale residential complex
- Integrate the project into the neighborhood with connections to the current pedestrian sidewalk system and expanding the nearby trails
- Use the natural amenities, such as the wetland, as a focus for the development
- Provide a welcoming place that promotes an active and healthy lifestyle



Excerpt from 2040 Land Use Plan

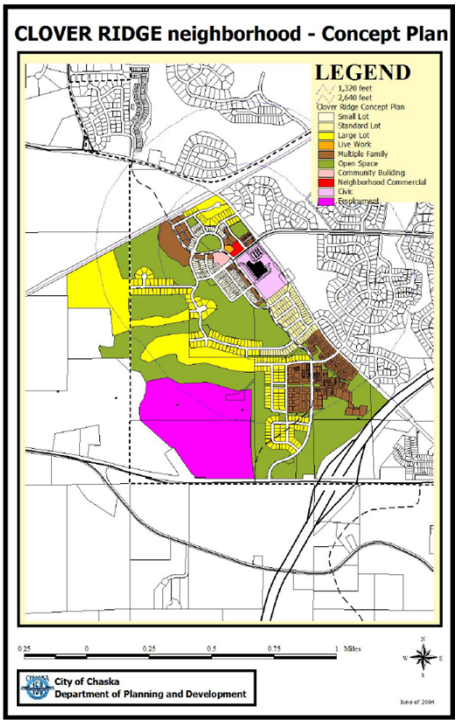
<u>Comprehensive Plan & Clover Ridge Concept Plan</u>

The Comprehensive Plan guides this area to be High Density Residential and Open Space. The proposal tonight is consistent with this guidance. The Clover Ridge concept plan (approved in May 2000) also guided this area to be multi-family residential, which the proposal is consistent with.

<u>Use of the Comprehensive Plan</u>

The primary use of the Comprehensive Plan is to be a general policy document for future growth and development within the City. Comprehensive Plan's are not binding, but rather guiding tools when development comes in. Chaska's Comprehensive Plan is intended to be flexible and responsive to changing conditions. It needs to be continually referenced, updated, and used as a guide. It functions as an overall course or path, and is intended to provide direction, rather than dictating specific activities or precise decision-making.

To that end, when development comes in, plans are looked at more closely and with more technical information to understand the raw details of a specific site (developability vs non-developability). The details that emerge from plans (i.e. wetland and wooded steep slope delineations) may differentiate from the layout/lines of the Comprehensive Plan. It is common, if not practical, that sites layouts, and lines, may change slightly from what the Comprehensive Plan shows based on what technical information reveals. Comprehensive Plans are not binding for that reason.



<u>CURRENT PROPOSAL</u>

Preliminary Site & Building Plan and Preliminary Plat are being requested for The Gallery Chaska Apartments. The 175-unit

building on approximately 5.5 acres of property is located west of Clover Ridge Drive and south of the Twin Cities & Western railroad. The proposal also shows the road extension that will be coming off Clover Ridge Drive to access the Oak Creek development.

Adjacent properties
The site is bound on the north by the Twin Cities & Western railway; to the west by the proposed Oak Creek development; the south by the homes on Sophia Drive; the east by residential in Clover Ridge.

Existing Conditions
The proposed apartments will occupy approximately 5.5 acre parcel on the eastern edge of a 27.9 acre parcel owned by Chaska Investment. The site consists of an open field and green space which offers beautiful unobstructed views of the central wetlands area. Access to the wetlands currently exists for maintenance and will continue to be provided.

A Notice of Determination of wetlands for the access area on the Chaska Investment Property was received November 2020. This site contains a large wetland complex with various upland areas. Impacts to the wetlands will be identified with the preliminary plat.

Land Use
The parcel of land that the apartment site is on is current zoned Planned Multi-Use District (PMD-15), which is the zoning regulations for Clover Ridge. The apartment use fits the guidance and zoning set up on the site.

Layout
The apartment site will be directly accessed off the west side of Clover Ridge Drive. The proposed development access road to Oak Creek will run along the north edge of the apartment site, known as Oak Creek Drive. Another access to the apartment site is shown off of Oak Creek Drive. The building is H-shaped with the surface parking facing towards Clover Ridge Drive and Oak Creek Drive. The underground parking will be accessed on the north and side of the building.

Building Design & Height
The building is H-shaped with the front façade/entrance facing Clover Ridge Drive. The building will be four stories and contain 175 units. These units will be a mixture of one and two bedroom units. There will be one level of underground parking which will provide a minimum of one stall per unit. The underground parking is proposed to be below grade but some of the north side, south side and west sides will show portions of this level exposed due to the grading that will need to occur around the building. In essence the project will appear to be a 5-story apartment building from the west. The applicant is showing landscaping around this area to help soften up the edges.

The building is proposed to be constructed out of brick (utility), architectural metal siding, fiber cement siding, glass, and rockface block. The City of Chaska has certain building design and material requirements for multi-family residential buildings. A portion of it is stated as follows:

"Multi-family buildings shall use at least three (3) Class I materials and shall be composed of at least eighty (80) percent Class I materials, and no more than five (5) percent Class III materials

Building Materials	
Class I	Glass, fiber cement siding, architectural metal paneling (77%)
Class II	Brick (utility), rockface block (23%)
Class III	Not provided
CLASS I REQUIRED	80%; three different materials
CLASS III REQUIRED	Shall not exceed 5%
CLASS I PROVIDED	77%; three different materials
CLASS III PROVIDED	None

The building is showing that it is slightly deficient of the building design standards for multi-family buildings. Utility brick is proposed, which is considered a Class II material. If all or a portion (3%) of the brick is changed to modular face brick then the building will be in compliance with the 80% Class I requirement.

The building's exterior appearance appears to show a well-balanced application of materials and depth. 360 degree architecture is achieved throughout the building meaning that the articulation is consistent throughout each side. The west façade was the biggest concern in the Concept Plan due to it's large linear expanse. The preliminary plan being proposed is an H-shaped building, which creates significant breaking in the massing; the west façade in particular. Because of this, the expanse of the west wall feels more minimal and significantly articulated compared to what was shown during the concept plan.

Height & Building Separation from Adjacent Uses

The building's height was brought up as a concern during the Neighborhood Meeting that occurred on November 18, 2021. At the time of the meeting the Concept Plan section drawing of the building showed that two levels of underground parking would be exposed on the western edge (facing the wetland and Sophia Drive residences). The preliminary plan now shoes a building with one level of underground parking. The west façade shows that some of this level will be exposed and may read as a five-story building. However, the west facade will utilize a different material (rockface block) to differentiate from the overall building design and read more like a retaining wall area. These "retaining wall" edges will also be softened up with landscaping and trees. The look and feel of this is no different than the Lake Jonathan Flats edge adjacent to the public trail and lake.

Per definition, building height is *"the vertical distance measured from the curb level to the highest point of the roof surface of a flat roof, to the deck line of mansard roofs, and to the*

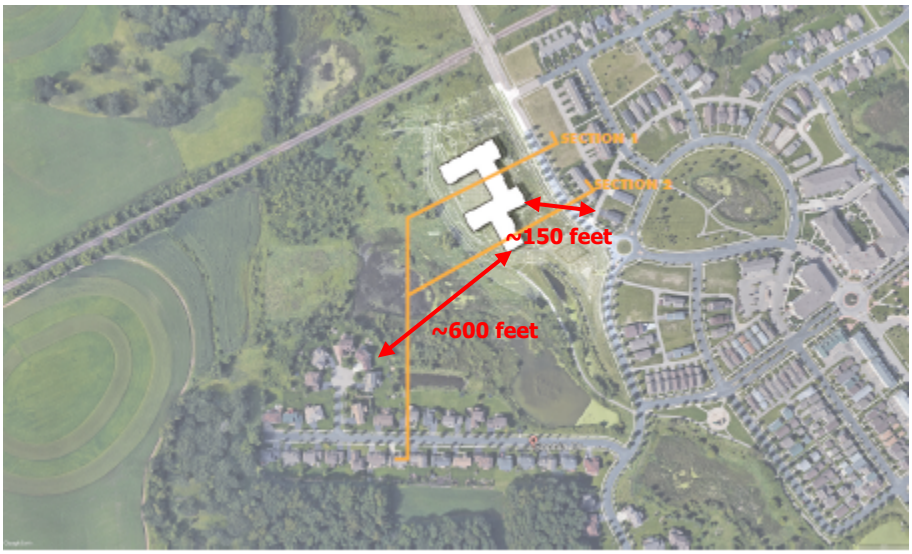
mean height level between eaves and ridge of gable, hip and gambrel roofs. For buildings set back from the street line, the heights of the building shall be measured from the average elevation of the finished grade along the front of the building, provided its setback from the street line is not less than the height of such finished grade above the established curb level."

The proposed building is setback at least 60 feet from the street line. Simply put, the measured height for this apartment building would be the vertical line on the front (east) façade between grade and the average point of the pitched roof, which is 50 feet.

For comparison, other apartment buildings within Clover Ridge are also four stories tall (i.e. Cloverfield Marketplace and Clover Condominiums). The Cloverfield Marketplace building is 55 feet at its tallest point (top of its pitched roof), however measures out at 47.5 feet per definition. The Clover Condominiums building is 47 feet at its tallest point.

For further comparison, Lake Jonathan Flats is 87 feet from its lowest elevation to the top of its elevator shaft. This building is located on Lake Jonathan adjacent to a public trail.

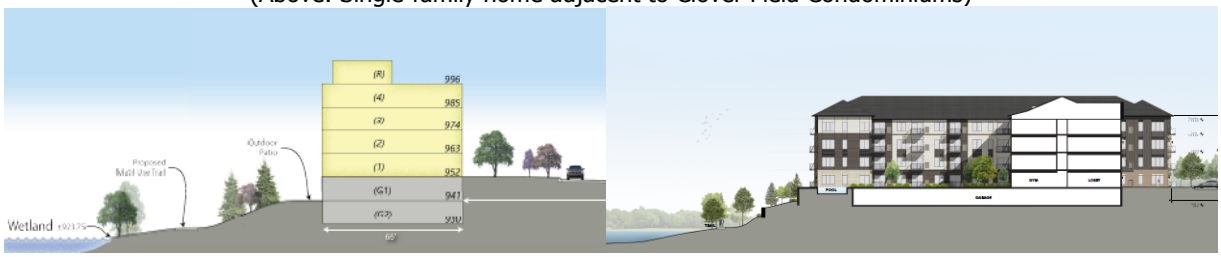
As it relates to apartments located near other single-family residential, there are other examples of this within the Clover Ridge development area. The Clover Ridge development's intent was to provide for a variety of housing and densities within. Many areas have a strong mixture of housing located side by side. Below is an example and its distance from single-family to show perspective, and to show that this type of layout is not uncommon, especially in Clover Ridge.



(Above: Proposed Gallery Apartments to Single-family residential)



(Above: Single-family home adjacent to Clover Field Condominiums)



Clover Field Apartments (Left: December 1, 2021 Section Drawing from Concept Plan; Right: Section Drawing from Preliminary Plan)

Setbacks

Namely, the front yard setback should be no less than 30 feet. The rear yard setback should be 20 feet. The side yard setback should be 20 feet. Corner lots should have a side yard setback of 20 feet. In addition to these setbacks, there are other setbacks that may apply to this site. See below:

SETBACKS	
Direction	**Setback**
Railway	50 feet

PARKING SETBACKS	
Direction	**Setback**
ROW	10 feet
Interior Property Lines	5 feet

Parking/Access/Circulation/Traffic

313 parking spaces are proposed as a part of this project; 182 underground stalls and 131 above ground stalls. The following chart summarizes the overall parking demand on the site, based on the approximated sizes of the conceptual uses.

Uses	Approx. Size	Code Req.	Est. Parking Req.
Multi-Family Res.	175 dwelling units	2ps/dwelling unit	350 parking spaces
		REQUIRED	**350 parking spaces**
		PROVIDED	**313 parking spaces**

According to this table the applicant is not meeting the required amount of parking spaces needed for the proposed use of the site. The site is providing 313 stalls (37 stall deficiency) and meets a 1.8 parking stall per dwelling unit ratio (0.2 ratio deficiency). The developer has developed numerous apartment projects in the twin cities area. In their suburban properties, they are typically right at 1.60 cars per apartment when the building is 100% full. So 1.8 is very comfortable for them at this apartment. Their more urban sites are 1.4 to 1. These are based on their actual property's numbers and are not estimates (they register every resident's car(s) across their 2,000 apartments.) In addition, their Chaska building will have 215 total bedrooms, which the parking will exceed a 1:1 ratio for.

For comparison, Lake Jonathan Flats was approved for 117 dwelling units (156 total bedrooms) and a reduced amount of parking. Their site showed 199 stalls on site, which was equivalent to 1.7 parking stalls per dwelling unit. The Lake Jonathan Flats building has since been constructed and operating. Staff has not noticed nor has been notified of any parking issues here.

During the analysis of the Lake Jonathan Flats building it was also determined that a 1 parking stall per bedroom ratio was a sufficient way to provide parking for an apartment. A summary provided showed examples of other apartment complexes in the Twin Cities area. It identified the dwelling unit and bedroom counts and parking accommodations for each apartment complex to give one a realistic understanding of the parking needs for this type of apartment product. Upon comparison, the Lake Jonathan Flats proposal met or exceeded the parking totals necessary for this type of product as it relates to parking stalls per dwelling unit and parking stalls per bedroom unit.

Staff also wanted to understand this 1:1 parking space to bedroom unit ratio first-hand by relating it to an existing project in the City. Staff looked at the Chaska Place Apartments (fka. North Meadows Apartments) located just west of the Fire Station on Engler Boulevard. The program make-up in this complex equals 127 units with a total of 259 bedrooms. By ordinance, this complex was required to provide 254 parking stalls, however, the total amount of parking provided was 259 stalls. If the amount of bedroom units dictated the amount of parking stalls required then this complex would be in compliance. By all accounts, this apartment complex provides adequate parking for their residents based on the notions that street parking has not been observed or a parking deficiency has not been brought up. With that in mind, staff finds that the parking space to bedroom ratio is an appropriate way of determining adequate parking.

The Lake Jonathan Flats building incorporates 22% studios, 45% one-bedroom, and 33% two-bedroom units (156 total bedrooms). The Gallery Chaska Apartment building incorporates 9% studios, 68% one-bedroom, and 23% two-bedroom units (215 total bedrooms).

Overall, the parking information provided by the applicant, field observations of existing examples (including an existing example of Lake Jonathan Flats), and parking based on bedroom counts all suggest that the parking proposed will accommodate The Gallery Chaska Apartments project.

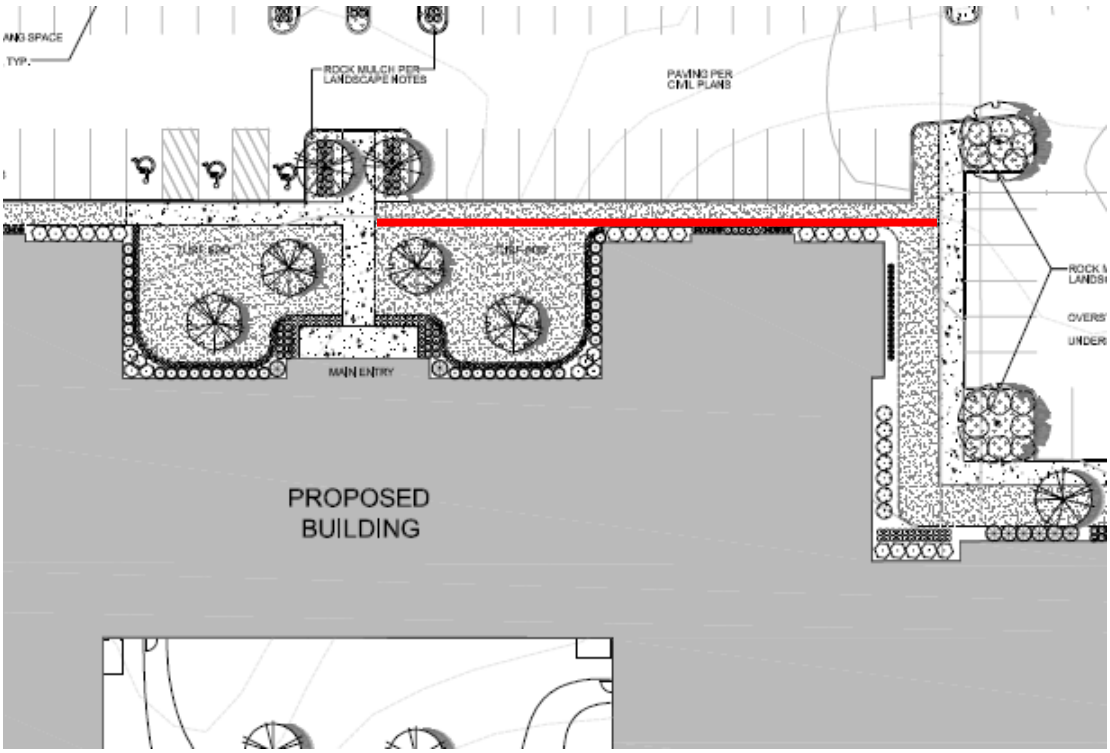
The access into the site will be from two ingress/egress points. The primary access will come directly from Clover Ridge Drive on its edge. The second access will come from the north on the proposed Oak Creek Drive. This road extension will line up with Romeo Court to the east. The underground parking lot and surface parking lot can be accessed from this ingress/egress point.

A traffic study was completed for this project. The study concluded that the project will have appropriate access to the sites and to the surrounding roadway network. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate site-generated traffic.

Construction access will enter and exit from Pioneer Trail to the north. Construction traffic will be precluded from going south on Clover Ridge Drive per the developer's construction access plan.

Pedestrian Connections

Sidewalks currently exist on both sides of Clover Ridge Drive. A public trail extends off the westerly sidewalk as it nears the Twin Cities and Western railroad. Another multi-use trail stubs southeasterly of the apartment site. The developer is proposing to extend this trail to connect into the proposed Oak Creek Drive. The trail will then extend easterly to connect into the trail on Clover Ridge Drive. The plan is also showing internal sidewalks within the apartment site. These added trail and sidewalk connections will be an added amenity for the apartment residents and Clover Ridge residents. One area that the development should provide a connection between is the main entrance sidewalk and the sidewalk abutting the easterly surface parking lot. This is shown in red on the below exhibit.



Landscaping
The table below indicates the landscaping requirements for this site:

LANDSCAPING REQUIREMENTS & PROPOSED		
	Required	**Proposed**
Overstory Trees	603 caliper inches (204 trees)	302 caliper inches (84 trees)
Understory Trees	51	43
Shrubs	161	713

The landscape plan is deficient in the overstory and understory categories. There is ample area on the site to provide for more plantings. In addition, the applicant can work on providing more caliper inches by bolstering the caliper inches of trees rather than adding trees to the site. The applicant will have to show how they meet these requirements in the final submittal.

Usable Open Space
Multi-Family residential building sites are required to provide sufficient, usable open space, which is defined as "a portion of a lot which provides the purpose for outdoor recreation, scenic amenity, and/or shared exterior space for people to gather and use". A minimum of 15% of the gross site area shall be shared open area. The site is showing that 21% of the site will be usable open space.

The applicant is showing a large plaza space with an outdoor pool in the large indent between the building. This pool will extend out past the building for several feet, which will provide expansive views of the adjacent wetland complex. In addition to the pool, the plaza will provide a landscaped courtyard, grilling stations, outdoor dining, fire pit, gazebo, and yard games.

Lighting
Any lighting proposed for this plan should be fully screened and face downward. Lighting specs will meet this criteria. Light poles are shown at 25 feet in height.

Utilities
Water and sewer are available to serve this site.

Stormwater
The applicant is showing ponding on the south side of the site. The applicant will work with the City to determine the drainage necessities for the site.

Development Costs (Infrastructure Improvements)
The City of Chaska has a number of area-wide development cost such as, but not limited to:

- Storm Sewer
- Trails
- Parks

Prior to final platting, the developer will need to work with City Staff to determine which of these are applicable and what those fees will be.

Wetland Donation
Being that there is a large wetland complex on this site, there is a question on what happens with the remnant wetland moving forward. It is not a requirement for developers to give wetlands to the City once a development moves forward. That is up to the developer. In some instances, these remnant areas are donated to the City as developers do not see a need to keep them. The City would be open to this opportunity if the developer wishes to donate. That would be determined as a part of the final plat portions of this project.

Preliminary Plat
The site will be platted into one lot for the apartment site. The following are the proposed outlots and their dispositions:

- Outlot A: wetland and land for future development to be retained by the property owner

Deadline for Agency Action
The City of Chaska received the complete application for this request on March 21, 2022. Pursuant to Minnesota State Statutes the City must act on this request by **Friday, May 20, 2022 (60 days)**, unless the City provides the petitioner with written reasons for an additional 60-day review period. The additional review period would extend to Tuesday, July 19, 2022. The City may with the petitioner's consent extend the review period beyond the Tuesday, July 19, 2022 date. Lastly, if the City denies the petitioners request "… it must state in writing the reasons for the denial at the time it denies the request."

PLANNING COMMISSION ACTION REQUESTED
Motion to recommend to City Council approval of the Preliminary Site & Building Plan and Preliminary Plat for a 175-unit apartment building, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Narrative (pgs 1-11), prepared by Chase Real Estate, dated March 1, 2022**
    b. **Title Sheet (pg C1.0), prepared by James R. Hill, dated March 23, 2022**
    c. **Existing Conditions (pg C1.1), prepared by James R. Hill, dated March 23, 2022**
    d. **Site Information – Drainage Maps (pgs C1.2-C1.3), prepared by James R. Hill, dated March 23, 2022**
    e. **Preliminary Plat (pg C2.0), prepared by James R. Hill, dated March 23, 2022**
    f. **Erosion & Sediment Control (pg C3.0), prepared by James R. Hill, dated March 23, 2022**
    g. **Erosion & Sediment Control Notes (pg C3.1-C3.2), prepared by James R. Hill, dated March 23, 2022**
    h. **Erosion & Sediment Control Details (pg C3.3), prepared by James R. Hill, dated March 23, 2022**
    i. **Grading & Drainage Plan (pgs C4.0-C4.2), prepared by James R. Hill, dated March 23, 2022**
    j. **Utility Plan (pg C5.0), prepared by James R. Hill, dated March 23, 2022**
    k. **Site Plan (pg C6.0), prepared by James R. Hill, dated April 6, 2022**
    l. **Overlay Plan (pg C6.1), prepared by James R. Hill, dated March 23, 2022**
    m. **Construction Details (pg C7.0), prepared by James R. Hill, dated March 23, 2022**
    n. **Landscape Plan (pg L101), prepared by KW Architects, dated April 6, 2022**
    o. **Landscape Details (pgs L102-L103), prepared by KW Architects, dated April 6, 2022**
    p. **Turning Movement Exhibit, prepared by James R. Hill, dated March 23, 2022**

q. **Photometric, prepared by Davis & Associates, Inc., dated February 25, 2022**
r. **Site Sections, undated**
s. **Exterior Elevations (pgs 1-5), prepared by KW Architects, undated**
t. **Exterior Materials, prepared by KW Architects, undated**
u. **Exterior Materials – Precedents (pgs 1-2), prepared by KW Architects, undated**
v. **Floor Plans (pgs 1-5), prepared by KW Architects, dated March 23, 2022**
w. **Gallery Chaska – Monument Sign Design, dated March 2022**

2. **Adherence with the City Engineer's Memo dated April 13, 2022.**
3. **Adherence to the City's Boulevard Tree Policy and local street section design.**
4. **Provision that boulevard trees are placed between the sidewalk and street.**
5. **Provision of sidewalks on both sides of all local streets.**
6. **Adherence to the following setbacks for The Gallery Chaska Apartments:**
    a. **Front: 30 feet**
    b. **Rear: 20 feet**
    c. **Side: 20 feet**
    d. **Side (corner): 20 feet**
7. **Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs, including parkland fees.**
8. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
9. **Provision of a final Notice of Decision for wetland boundary/type to be provided at the time of final submittal.**
10. **Provision that all mechanical equipment will be fully screened from view.**
11. **Provision that a portion (3%) or all of the proposed brick is modular face brick in order to meet the Building Design and Materials ordinance for Multi-Family, and to be shown on the final plans.**
12. **Provision that section 15.28 Special Regulations are complied with.**
13. **Provision of a sidewalk connection between the main entrance and the easterly parking lot area, and to be shown on the final plans.**
14. **Adherence with the City's landscape ordinance section 15.28.070 in terms of overstory and understory quantities, and to be shown on the final plans.**

City of Chaska
Memorandum

To: **Planning Commission**
From: **Matt Clark, City Engineer**
Date: **April 13, 2022**
Subject: **Gallery Chaska Apartments – Prelim Plat Plan**

The planned development for the site proposes a new apartment building and parking lot along with site amenities. From an overall sewer and water standpoint, the use over the site is consistent with the City's comprehensive plan with capacity in the system to serve what's proposed. The storm water management plan, and grading plan must meet both the City and watershed requirements prior to grading occurring. Further, the wetland agency requirements remain outstanding for jurisdiction and boundaries. The wetland conservation act requirements must be met prior to final plat, site, and grading plan approvals.

The overarching traffic study that was completed to analyze the impacts concluded the development has appropriate access to the surrounding road network with no concern of operations at any of the surrounding intersections. While traffic will increase with development, no improvements are recommended due to the surrounding roadways having sufficient capacity.

ONE CITY HALL PLAZA/CHASKA, MN 55318-1962/PH: (952) 448-2851/ FX: (952) 448-9300

Clover Field Apartments Development Site

City of Chaska – Planning Department

Preliminary Plat and Site Plan Submittal

"The Gallery Chaska"

March 1, 2022



Submitted By:
Chase Real Estate, Burnsville MN

2140 County Rd 42 West, Burnsville, MN 55337 | 952-898-5600 | www.ChaseRE.com

March 1, 2022

Elizabeth Hanson, City Planner
City of Chaska, MN

RE: **'The Gallery Chaska' |** Clover Ridge Apartments Proposal
Prelim Site Plan and Prelim Plat Applications

Dear Ms. Hanson:

Please find attached our development applications for The Gallery - Chaska proposal.

Below is the project narrative and building statistics. We look forward to our next steps with you as we move into the city review process and refine our plans. Our office and design team are thrilled to be proposing this high-quality project at this terrific location.

> ***The Gallery Chaska*** *is an upscale, 4-story, 175-Unit market-rate apartment proposal with the goal of complimenting the City's master plan for the Clover Ridge neighborhood master development and offering Chaska residents a beautiful place to call home. The project is situated off Clover Ridge Drive with a welcoming front door and two-story lobby leading through to an expansive landscaped courtyard and pool facing south and west views of the existing wetlands and regional trail. Residents will enjoy various indoor and outdoor amenities, condo-style interior finishes and connections to the outdoors.*

Goals of The Gallery Chaska Apartment Project:

- Provide Chaska and Clover Ridge an upscale residential property
- Integrate the project into the neighborhood with connections to the current pedestrian sidewalk system and expanding the nearby regional trail.
- Use the natural amenities, such as the wetland, as a focus for the development
- Provide a welcoming place that promotes an active and healthy lifestyle.

Intended Use of the Property:

> The property has been contemplated as a high-density apartment site since the May 2000 City Council approval of the Clover Ridge Concept Plan. The Gallery Chaska will provide Chaska residents – particularly empty nesters, retirees, renters-by-choice, and working adults with an upscale, amenity rich apartment home within a beautiful setting; abundant outdoor open space

within a mixed-use residential neighborhood, overlooking nature, wetlands and having various connections to trails and outdoor amenities.

Existing Zoning Classification: PMD: Planned Multi-use Development District (High Density)

2040 Guide Plan: High Density Residential: 12 to 40 Units/Acre
Proposed: 17.5 Units/Acre (per assumed 10 net acres plat)

Apartment Plans Unit Mix:

A variety of one bedroom, one bedroom + dens and 2-bedroom apartment homes will be provided.

	Qty:	**Avg Size:**
1 Bed 1 Bath	95	720 SF
1 Bed + Den, 1 Bath	40	980 SF
2 Bed, 2 Bath	40	1,240 sf
Total:	**175 Units**	**900 SF**

Parking: (Revised 4-6-2022).

Use	**CITY CODE**	**PROPOSED** (175 Apartments)
Multi-family Residential	2 Stalls / Unit	**1.79 Stalls/Unit** 131 Surface 182 Garage
	PROVIDED: *Needed based on Owner Data:	**= 313 parking stalls** **= 1.6 to 1.7**
	REQUIRED:	**= 350 parking stalls**

*Owner/Developer Parking Data: (full occupancy) w/ similar Unit Mix in our suburban Locations:

Gallery on the Parkway - Burnsville	171 cars / 109 Units	**=1.57 stalls/unit**
The Flats at Cedar Grove – Eagan	313 cars / 192 Units	**=1.63 stalls/unit**
Victoria Park V2 – St. Paul	318 cars / 197 Units	**= 1.61 stalls/unit**
Lakeville Woods – Lakeville	132 cars / 77 Units	**= 1.71 stalls/unit**

Common Areas:

6,000 SF interior common space: 2-story Lobby, work-from-home space, club room, coffee lounge, cellar, gym, yoga and Sky Lounge.

16,000 SF landscaped courtyard: pool, grilling/outdoor dining, fire pit, gazebo, games.

Describe how the Prelim Plan meets conditions laid out in Concept Plan Approval:

In December 2021, the Planning Commission and City Council approved the Concept Plan for an approximately 162-unit, four-story apartment building.

The development team has reviewed Items #1 - #34 of the Concept Plan Council Approval Resolution. The Gallery Chaska project will meet those conditions specific to the Apartment project and as additionally noted below:

#11: Adherence to the **Building Setbacks** for Clover Field Apartment Building: (See Civil Plans)

Setbacks:	Required	Provided
Front	30 ft	79 ft
Rear	20 ft	25.7 ft
Sides	20 ft	85.4 ft

#18: Per City Meetings: the Wetland Delineation Report will be provided by the Property Owner as a condition of Final Plat Approval.

#26: Material samples and precedent material images will be provided to the City Planner for approval during building permit review to meet City's exterior materials requirements 9.11.14.

Please see attached images from our recent projects: showing metal lap siding, utility brick and split face rock as our primary materials and approved as Class 1 materials in other cities.

*Request: Utility Brock be approved as Class 1 material.

Building Materials	
Class I	Glass/Windows (27%), Utility Brick* (11%), Stone (2%) CFP Hardi-Lap Siding (20%), Edco Metal Lap Siding (23%)
Class II	Rock-face block (17%)
Class III	None
Class I Required	80%
Class I Provided:	**83%**

2140 County Rd 42 West, Burnsville, MN 55337 | 952-898-5600 | www.ChaseRE.com

#27 thru #30: Landscaping along west side of Apartment Building to buffer grade change: Landscaping Retaining walls in combination with 3:1 grading with a variety of tall grasses and ornamental trees will buffer exposure of the building's single level garage foundation wall while also providing a pleasant experience along the regional trail.

#31: Useable Open Space 9.11.4.1.1:

15% Open Space Rule:	Required	Provided
Site = 5.58 Acres:	0.84 acres	1.25 acres

The Gallery Chaska - Improvements from the Concept Plan:

While the building footprint has remained nearly the same, the proposed F-shape or 'wrench shape' of the Gallery Chaska project has advantages over the U-Shaped Concept Plan:

- Building massing is more broken up; eliminates 360 ft of solid 5-story wall facing trail
- Better experience and landscaping along the Regional Trail
- Landscaped courtyard, outdoor amenities and pool facing the southwest Sun provides more green space for residents and active lifestyle
- More corner apartments and windows with better opportunities for Architectural variety
- Main Entry is closer and more visible to Clover Ridge and sidewalk access
- More building entries and pedestrian access to surrounding trails and sidewalks
- 2:1 Proposed Parking. No proof of parking necessary to meet code.

Due to the 20 foot grade change from Clover Ridge Drive down westward to the regional trail:

At Site Plan Approval: A 5-story exposed building elevation was approved (in addition to a roof top patio = partially 6-stories); having one level of garage fully exposed and the 2nd lowest level of garage buried.

The Gallery Chaska proposal will instead utilize a single level basement garage providing over 1:1 parking with an above 16,000 SF landscaped courtyard plaza for residents to enjoy in lieu of a large interior facing surface lot. This alleviates the challenge of burying a 6-story building along the regional trail.

Landscaping Requirements: Trees – **Variance request for reduction**

City's General Requirement = "*the minimum number of caliper inches of overstory trees required shall be determined by dividing the total gross building square footage of all floors* ***by 320****."*

City Required = 204 Overstory + 51 Understory = 255 total new trees Required

66 total new trees are Proposed.

This requirement cannot practically be accomplished. Additionally, there are no existing significant trees. With new trees spaced appropriately to account for mature growth and proper sunlight, at nearly 6 acres the site is not large enough to account for this generic requirement that likely is guided more toward single-family lots.

Also Note: the existing property is nearly 28 Acres of private property.
Nearly 20 Acres is going back to the City; 2 acres to DR Horton and 6 acres to Gallery Chaska.

Describe site access and how pedestrians utilize the building entries, plaza and surroundings.

The new road Oak Creek Drive will provide northern access adjacent to the building's basement garage door which coordinates well with the 10ft+ drop in grade change. The eastward access off Clover Ridge Drive will have separate entry drive and exit lanes for a more upscale, enhanced landscaping entryway and view of the front lobby door.

Residents will be able to conveniently walk through the lobby to reach paths connecting to the city sidewalk; as well as walk through the commons through the pool courtyard through two stairs to access the Regional Trail.

Construction of The Gallery Chaska will include completing that stretch of Regional Trail on the property and connecting to Oak Creek Drive Right of Way.

Describe the sustainable initiatives incorporated into the project:

- 100% Energy Star Appliances
- High efficiency gas furnaces
- 100% LED light fixtures

How the plan minimizes light pollution:

- All exterior lights to be down-cast dark-sky fixtures (specs attached)
- Only Level 1 walk-out apartments will have patio lights (down cast)
- Parking lot light ballasts are LED, better directed light to prevent light pollution

DEVELOPMENT SCHEDULE GOALS:

- March 1 – Prelim Plat and Prelim Site Plan Review Submitted
- April 13 – Planning Commission Meeting
- April 18 – City Council Meeting - Approvals conditional on wetland delineation
- May or June - TBD growing season – Wetland Delineation Submitted
- June – City Council Final Plat and Site Plan Approval

Property Address: Not available. Proposed = 3200 Clover Ridge Drive

Submitted By:

Joe McElwain
Development Director
Chase Real Estate
Burnsville, MN

Capital Lighting Fixture Company
5359 Rafe Banks Drive, Flowery Branch, GA, 30542-2768
TF: 800.323.3257 | **P:** 770.965.7238 | **F:** 770.965.7254
www.capitallightingfixture.com



Brock

1 LIGHT OUTDOOR WALL LANTERN

926312OZ

13"W X 13.25"H X 14"E

OIL RUBBED BRONZE

SPECS

Description	1 Light Outdoor Wall Lantern
Collection	Brock
Finish Description	Oiled Bronze
Lamping	1 - 100 Watt E26 Medium
Recommended Bulb	A19
Voltage	120V
Certification	UL Listed. Rated for Wet Locations.
Backplate	10"W x 0.75" H x 0.75"E
Center to Top / Btm	7" / 6.25"
Category	Wall Lantern
Light Source	Incandescent
About	Designed in Atlanta. Manufactured in China.
Style	Classic
Room List	Exterior
Warranty	5 years against rust and fading of finish

Eagle Series

Job Name	
Fixture Type	Eagle Series
Catalog Number	SLPM
Approved by	

2nd Generation LED Site Lighter

c UL us LISTED

5 YEAR WARRANTY

MANUFACTURED* & TESTED IN USA

SPECIFICATIONS:

Construction:
Designed for commercial and industrial applications, providing cooler operating temperatures, brighter light and longer LED life. The die cast aluminum housing utilizes external airflow fins allow for greater heat dissipation. The easy access driver compartment is a thermally independent compartment, separate from LED generated heat, for cooler operation and longer driver life.

Optics:
Atlas Site Lighter Pro fixtures utilize precision engineered individual lenses for maximum light intensity. The lens is made of optical grade polycarbonate. Advanced one piece optic board engineered for maximum light intensity. Types II, III, V and Forward Throw distributions are available. Types II, III and Forward Throw optics are rotatable allowing for optimal placement of the fixtures on the perimeter of any layout.

Mounting:
The easy mount bracket makes installation to any style pole quick and easy. Tenon and other mounting accessories also available.

Thermal Management:
Atlas Site Lighter Pro fixtures are designed as a complete system to optimize LED life and light output. The thermal stacking heat removal technology extracts heat from within the housing moving it away from LEDs and components. The lower temperatures result in long LED life (200,000+ hrs[1]) and component life and also allows for higher light output.

Listings:
Luminaire is certified to UL/cUL Standards for Wet Locations

AC Input:
120/208/240/277/347/480 V

Driver:
Constant current, 120-277 VAC, 50-60 Hz
High Efficiency – min. 88%
Off-State Power: 0 Watts
0-10 V Dimming

LEDs:
Available in 3000K, 4000K, 4500K and 5000K, CCT
Epoxy Guard™ protective conformal coated boards

Reduced Glare:
Positioning of the LED modules within the housing result in light directed to desired locations and reduces offensive light.

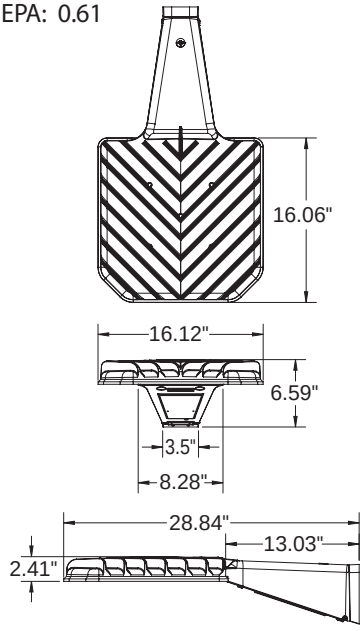
Testing:
Atlas LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 & LM-80.

Warranty: Five-year limited warranty

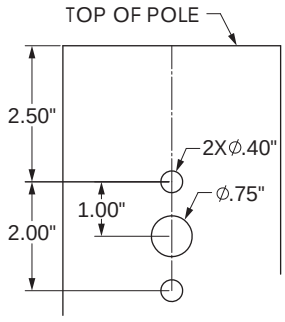


DIMENSIONS:

Weight: 21 lbs.
EPA: 0.61



DRILL PATTERN:



Rebates and Incentives are available in many areas.
Contact an Atlas Representative for more information.

[1]*LED Life Span Based Upon LM-80 Test Results*

ATLAS LIGHTING PRODUCTS, INC.
PO BOX 2348 | BURLINGTON, NC 27216
800-849-8485 | FAX: 336-227-0110 | www.atlasled.com

*The majority of Atlas Lighting Products are assembled in USA facilities by an American Workforce utilizing both Domestic and Foreign components. Meets Buy American requirements within the ARRA.

F6902-44



SPECIFICATIONS	
ITEM NUMBER	F6902-44
DESCRIPTION	ROUND SCONCE
MATERIAL	ALUMINUM
FINISH	OIL BRONZE - (44)
MOUNTING	WALL
WARRANTY	1 YR LIMITED
SUITABLE LOCATION	WET

ELECTRICAL	
SOCKET BASE	MEDIUM BASE - (MB)
NUMBER OF BULBS	2
WATTAGE PER BULB	75W / 100W
MAXIMUM WATTAGE	75W / 100W
VOLTS	120V
LIGHT BULB SUGGESTED	75W OR 100W
75W WITH PAR-30	
100W WITH A-19	

DIMENSIONS	
HEIGHT	15”
WIDTH	5”
EXTENSION	7-1/8”

SUNSET LIGHTING, A DIVISION OF LUMINANCE
P: 800.777.4440 | F: 800.866.7672 | E: INSIDESALES@LUMINANCE.US.COM
1945 TUBEWAY AVE. LOS ANGELES, CA 90040 | WWW.LUMINANCE.US.COM

TYPE J
IOL211BK

CANARM®

CANARM LTD.
PO Box 367, 2157 Parkedale Avenue, Brockville, Ontario K6V5V6
Tel: 613-342-5424 | Fax: 1-800-263-4598
2555 Rue Bernard Lefebvre, Laval, Quebec H7C 0A5
Tel: 1-450-665-2535 | Fax: 1-450-665-0910
808 Commerce Park Drive, Ogdensburg, New York, USA 13669
Tel: 1-800-267-4427 | Fax: 1-800-263-4598
www.canarm.com

Outdoor Light

part # IOL211BK

General

Size of fixture: 4 3/8” W x 7 3/5” H x 6 3/4” D
Finish: black
Glass: N/A
Size of glass: N/A
Base/Pan: 4 1/4” W x 7” H
Lamping: 1 x 100W A bulb (not included)
EASY CONNECT™



Packaging

Colour box: 9.25” x 8.27” x 5.51” (235 x 210 x 140mm)
Colour box weight:3.97 lbs
Master box: 17.32” x 11.02” x 10.04” (440 x 280 x 255mm)
Pieces per master box: 4
Master box weight: 17.64 lbs

Warranty & Safety Standards

Warranty 1 year
cCSAus
Suitable for wet locations

Prepared for
Contact
Date
Presented by
Remarks

WARNING: The use of this product can expose you to chemicals including Cadmium, which is known to the State of California to cause cancer, and Lead, which is known to the State of California to cause birth defects and/or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

PROJECT COORDINATES
N 44°49'10"
W 93°38'23"

GALLERY CHASKA

CHASKA, MINNESOTA

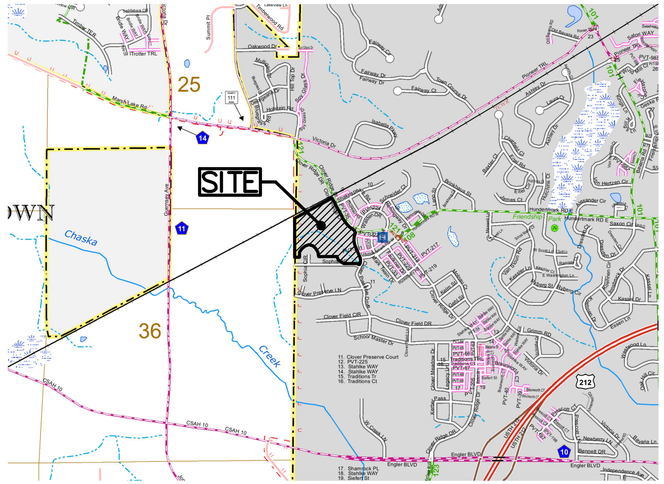
PRELIMINARY PLAT EXHIBITS

FOR

CHASE REAL ESTATE, INC.

2140 CO. RD. 42 WEST, BURNSVILLE, MN 5337

PHONE: (952) 898-5600



LOCATION MAP

SCALE: 1"=1600'

ZONING INFORMATION

CURRENT ZONING	PMD – PLANNED MULTI-USE DEVELOPMENT

SITE DATA

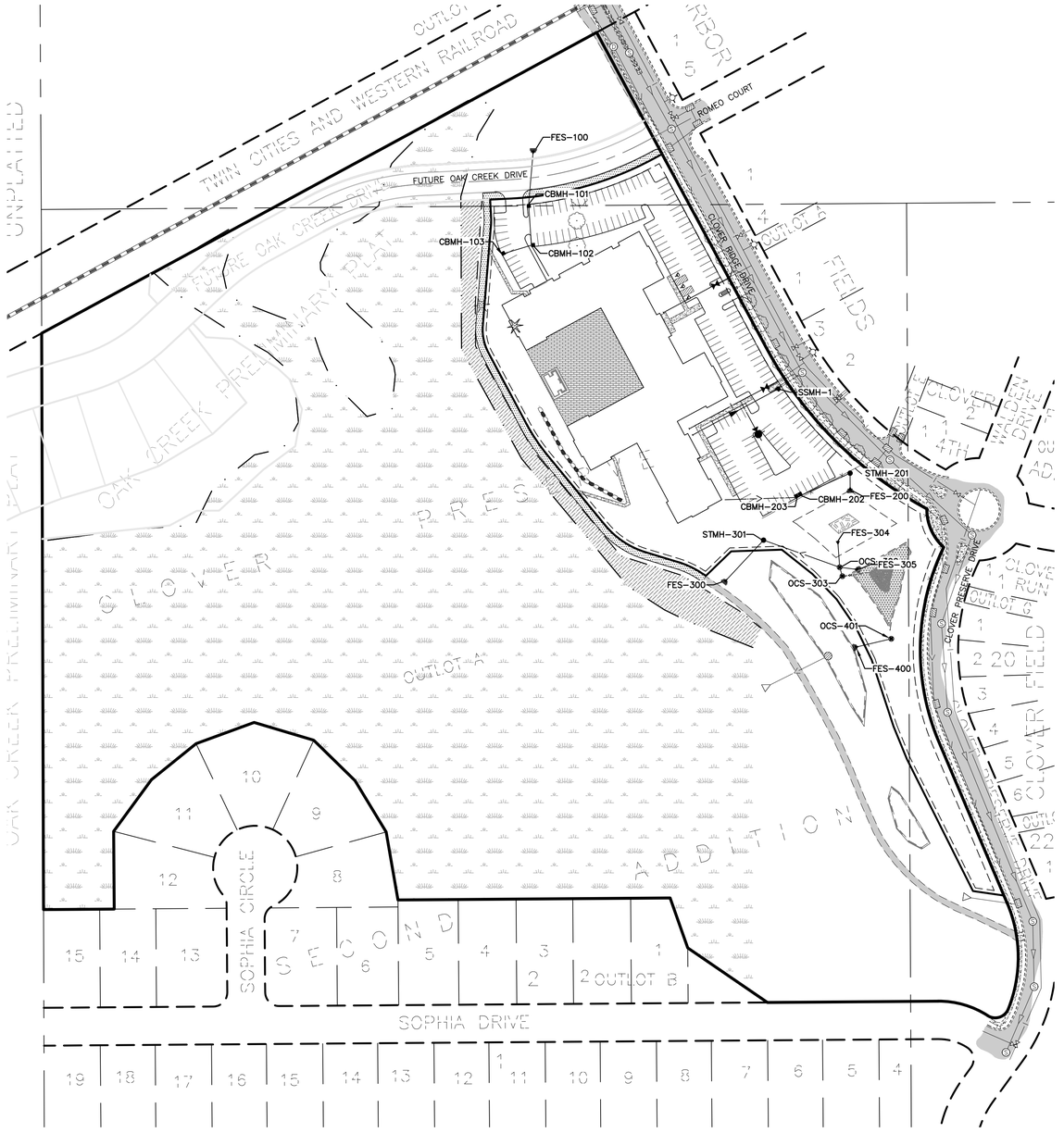
TOTAL SITE AREA	27.64 AC.
LOT AREA	5.58 AC.
OUTLOT AREA	22.06 AC.

PROPOSED MINIMUM BUILDING SETBACKS

FRONT	30 FEET
SIDE (INTERIOR)	20 FEET
SIDE (STREET)	20 FEET
REAR	20 FEET
WETLAND	30 FEET
RAILROAD	50 FEET

PROPOSED MINIMUM PARKING SETBACKS

RIGHT OF WAY	10 FEET
INTERIOR	5 FEET



INDEX

TITLE SHEET	C1.0
EXISTING CONDITIONS	C1.1
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EROSION & SEDIMENT CONTROL PLAN	C3.0
EROSION & SEDIMENT CONTROL NOTES	C3.1–3.2
EROSION & SEDIMENT CONTROL DETAILS	C3.3
GRADING & DRAINAGE PLAN	C4.0–4.2
UTILITY PLAN	C5.0
SITE PLAN	C6.0
OVERLAY PLAN	C6.1
CONSTRUCTION DETAILS	C7.0

LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING OVERHEAD POWER LINE
- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING CONTOUR
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION
- EXISTING TREELINE/TREES
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED PERFORATED DRAINTILE
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED FILTRATION BASIN

SCALE IN FEET
0 100 200 300
1 inch = 100 feet

Know what's below. Call 811 before you dig.

PROJECT CONTACTS

PROJECT ENGINEER	ERIC FAGERBERG, P.E. – JAMES R. HILL, INC.	(952)–890–6044 (O)
DEVELOPER:	JOE MCELWAIN – CHASE REAL ESTATE	(952)–898–5600 (O)
CITY ENGINEER:	MATT CLARK – CITY ENGINEER	(952)–227–7522 (O)
NPDES OFFICER:	JOSH NORMAN – MPCA	(651)–757–2389 (O)

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
TITLE SHEET
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
JEK
DATE
03/01/22
REVISIONS
03/23/22 CITY COMMENTS

CAD FILE
23973-TS
PROJECT NO.
23973
C1.0

Civil 3D Projects\23973\PRE-PLAT PLANS\23973-TS.dwg – 3/23/2022 09:49AM



LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING OVERHEAD POWER LINE
- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING CONTOUR
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION
- EXISTING TREELINE/TREES
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND

WETLAND DELINEATION NOTES

- WETLAND LINE SHOWN BASED OFF OF PRELIMINARY DELINEATION COMPLETED BY WESTWOOD PROFESSIONAL SERVICES. A COMPLETE DELINEATION IS TO BE PROVIDED WHEN WEATHER PERMITS.

N

SCALE IN FEET
0 100 200 300
1 inch = 100 feet

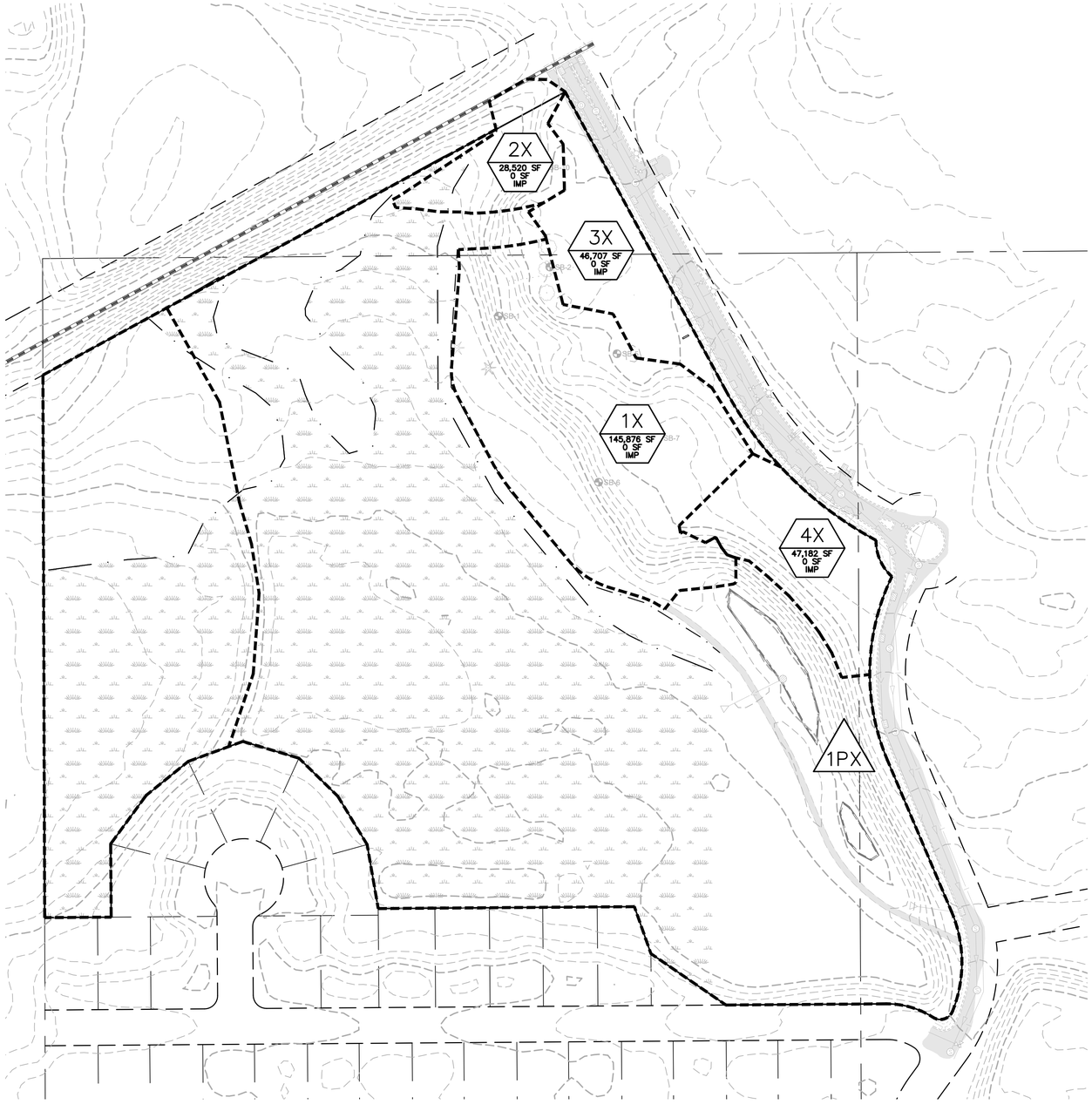
James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
EXISTING CONDITIONS
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY	JSO
DATE	03/01/22
REVISIONS	
03/23/22 CITY COMMENTS	
CAD FILE	23973-EXC
PROJECT NO.	23973
	C1.1

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EXISTING DRAINAGE MAP

LEGEND

1P — POND AREA

1S — DRAINAGE AREA (TOTAL DRAINAGE AREA: 336,710 SF; IMPERVIOUS AREA: 0 SF IMP)

N

SCALE IN FEET
0 100 200 300
1 inch = 100 feet

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Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
SITE INFORMATION - EX. DRAINAGE
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
EPF

DATE
03/01/22

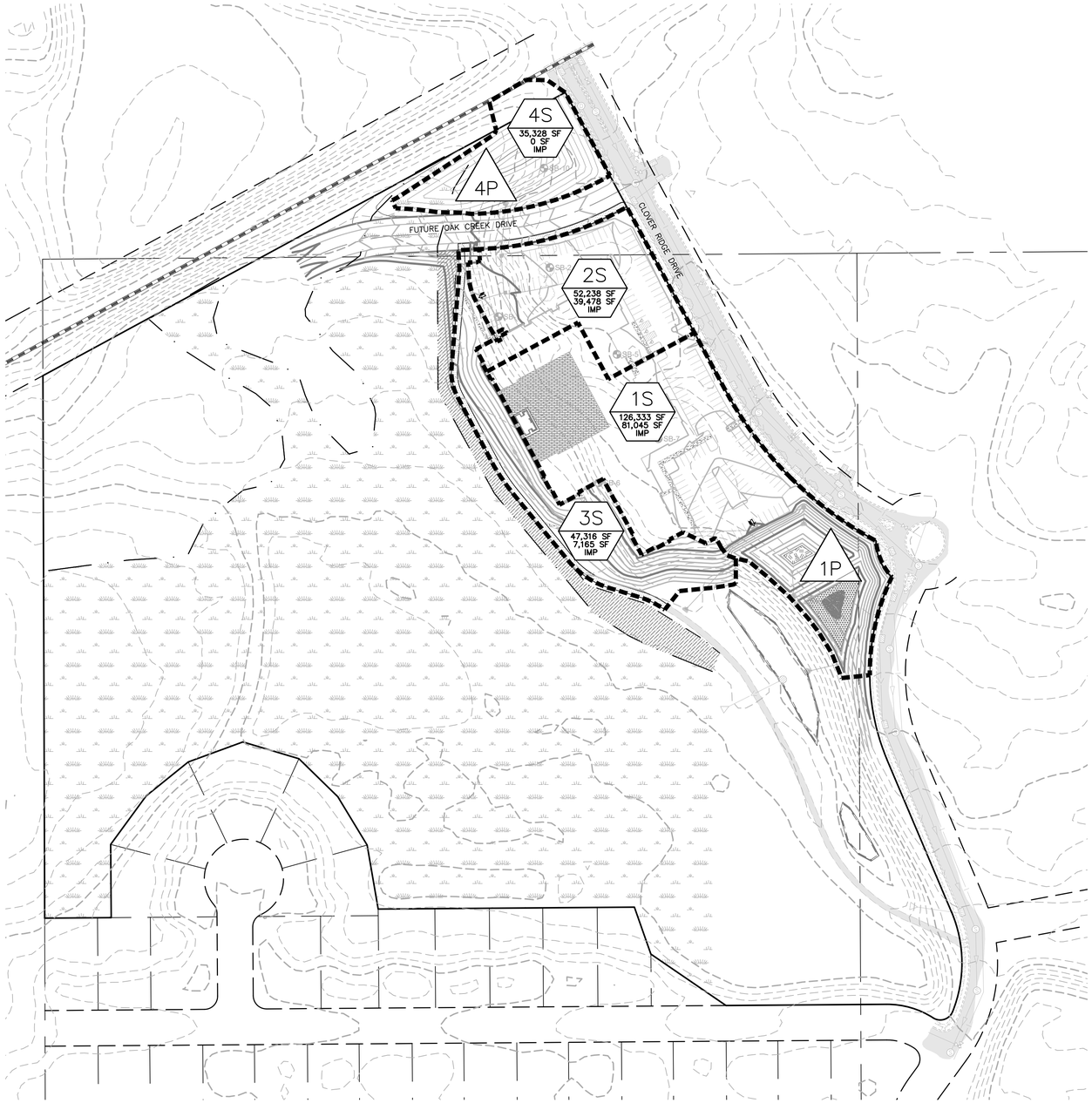
REVISIONS
03/23/22 CITY COMMENTS

CAD FILE
23973-SI-DRAIN

PROJECT NO.
23973

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PROPOSED DRAINAGE MAP

LEGEND

1P — POND AREA

1S — DRAINAGE AREA
TOTAL DRAINAGE AREA → 336,710 SF
IMPERVIOUS AREA → 0 SF IMP

NEW IMPERVIOUS AREA = 127,688 SF

WATER QUANTITY VOLUME = 1" OVER 127,688 SF = 10,641 CF
= 0.5" OVER 127,688 SF = 5,320 CF (RESTRICTED)

REQUIRED FILTRATION VOLUME = 5,320 CF/0.4 = 13,300 CF

FILTRATION VOLUME PROVIDED (927.5 TO 929.0) = 15,465 CF

12,919 CF (WHOLE BASIN 929–928)
+
2,546 CF (FILTRATION BASIN 928–927.5)

DRAINAGE SUMMARY

	EXISTING WEST (2L)	PROPOSED WEST (1L)	EXISTING FLOW TO EX–POND 1PX (4L)	PROPOSED FLOW TO EX–POND 1PX (4L)
2–YEAR (2.90")	6.35 CFS	2.56 CFS	3.42 CFS	0.59 CFS
10–YEAR (4.20")	12.60 CFS	4.52 CFS	6.70 CFS	4.20 CFS
100–YEAR (7.30")	28.79 CFS	9.74 CFS	15.33 CFS	15.25 CFS

N

SCALE IN FEET
0 100 200 300
1 inch = 100 feet

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Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
SITE INFORMATION – PROP. DRAINAGE MAP
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
EPF

DATE
03/01/22

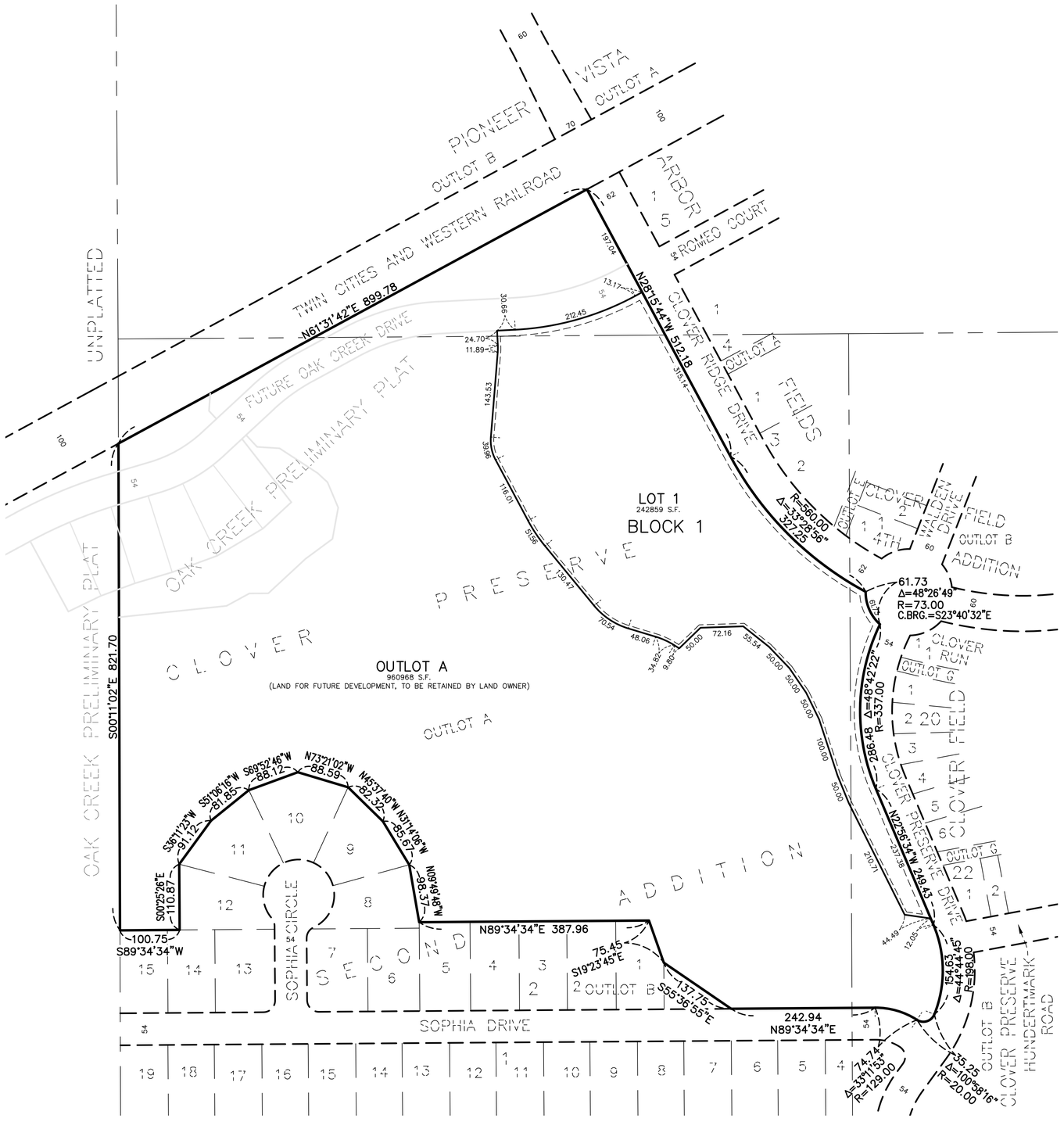
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03/23/22 CITY COMMENTS

CAD FILE
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PROJECT NO.
23973

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PROPERTY DESCRIPTION

Outlot A, CLOVER PRESERVE SECOND ADDITION, Carver County, Minnesota

ZONING INFORMATION

CURRENT ZONING	PMD – PLANNED MULTI–USE DEVELOPMENT

SITE DATA

TOTAL SITE AREA	27.64 AC.
LOT AREA	5.58 AC.
OUTLOT AREA	22.06 AC.

PROPOSED MINIMUM BUILDING SETBACKS

FRONT	30 FEET
SIDE (INTERIOR)	20 FEET
SIDE (STREET)	20 FEET
REAR	20 FEET
WETLAND	30 FEET
RAILROAD	50 FEET

PROPOSED MINIMUM PARKING SETBACKS

RIGHT OF WAY	10 FEET
INTERIOR	5 FEET

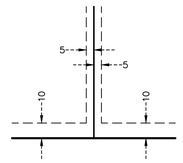
N

SCALE IN FEET

0 100' 200'

BEARINGS ARE BASED ON THE WEST LINE OF OUTLOT A, CLOVER PRESERVE SECOND ADDITION WHICH IS ASSUMED TO HAVE A BEARING OF S 00°11'02" E

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



DRAINAGE AND UTILITY EASEMENTS BEING 5 FEET IN WIDTH, UNLESS OTHERWISE INDICATED, ADJOINING LOT LINES, AND BEING 10 FEET IN WIDTH, UNLESS OTHERWISE INDICATED, ADJOINING RIGHT OF WAY LINES, AS SHOWN ON THIS PLAT.

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 WEST C.R. 42, SUITE 100, BURNSVILLE, MN 55306
PHONE: 952.890.6044 mhampton@jrhinc.com
www.jrhinc.com

GALLERY CHASKA

CHASKA, MINNESOTA

PRELIMINARY PLAT

FOR

CHASE REAL ESTATE, INC.

2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
PLM

DATE
3/1/2022

REVISIONS

CAD FILE
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PROJECT NO.
23973

C2.0

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POND GRADING & EROSION CONTROL BY OTHERS

FUTURE OAK CREEK DRIVE

CLOVER RIDGE DRIVE

ACCESS FROM PIONEER TR. ONLY

SITE

CONSTRUCTION ACCESS ROUTE (NTS)

LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING OVERHEAD POWER LINE
- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING CONTOUR
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION
- EXISTING TREELINE/TREES
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED PERFORATED DRAINTILE
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED INFILTRATION BASIN
- PROPOSED SILT FENCE
- PROPOSED SILT FENCE POST CONSTRUCTION
- PROPOSED SILT FENCE HEAVY DUTY
- PROPOSED WIMCO POST STORM SEWER CONSTRUCTION
- PROPOSED YARD CB INLET PROTECTION POST STORM SEWER CONSTRUCTION
- PROPOSED DITCH CHECK – MnDOT TYPE 3 POST GRADING/UTILITY CONSTRUCTION
- PROPOSED TEMPORARY ROCK CONSTRUCTION ENTRANCE
- PROPOSED EROSION CONTROL BLANKET MnDOT CATEGORY 3
- PROPOSED SEED & MULCH MIX GENERAL ROADSIDE MnDOT 25–141
- PROPOSED SEED & MULCH MIX NATIVE PONDS & WET AREAS MnDOT 33–261

811 Know what's below. Call 811 before you dig.

N

SCALE IN FEET
0 50 100 150
1 inch = 50 feet

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

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ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY EROSION & SEDIMENT CONTROL PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY	EPF
DATE	03/01/22
REVISIONS	
03/23/22 CITY COMMENTS	
CAD FILE	23973-ERC
PROJECT NO.	23973
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GALLERY CHASKA - CHASKA, MN

TYPE OF PROJECT: MULTI-FAMILY

TYPE OF WORK: Mass Grading, Utility and Street Construction, Paving. Subsequently, Joint Trench and Home construction will occur.

TOTAL PLATTED AREA: 27.64 AC

TOTAL DISTURBED AREA: 6.00 AC

PROPOSED (DESIGN) IMPERVIOUS AREA: 2.93 AC

SPECIAL WATERS: The site is not within a 1-mile radius of a special or impaired water.

CONSTRUCTION PHASING
The project is expected to be constructed in three phases, with mass grading occurring during one construction season. Mass grading is anticipated to be completed within 4 weeks from commencement of work. Utility and street construction is anticipated to be completed within 4 weeks from commencement of work.

POTENTIONAL FOR EROSION AND DISCHARGE OF SEDIMENT
As the site will be stripped of topsoil and vegetation for a period of several weeks during construction, the potential for erosion will increase. The overall gradients on the site are relatively low. The street subcut will serve as temporary sediment basins during construction. The project is primarily cut, and therefore perimeter erosion will flow inward towards the project.

The risk of discharge of sediment off of the site is low, due to the grade orientation and design. The highest potential for discharge off the site is from the street entrance.

Contractor will be required to manage completion of 3:1 slopes such that soil exposure is minimized. After excavation and embankments are completed, slopes shall be re-spread with topsoil, the slope grades certified, and erosion blanket installed as per the plan. Contractor shall coordinate these steps to be carried out in a timely manner.

EROSION CONTROL BMPs
The construction plans anticipate the use of, but are not limited to, the following Erosion Control BMPs:

1. Perimeter delineation to minimize disturbed areas
2. Temporary Rock Construction Entrance
3. Temporary straw mulch as needed.
4. Seed and mulch/sod
5. Erosion Control Blanket
6. Minimize active or disturbed work areas
7. Horizontal slope grading
8. Turf Reinforcement Mat

SEDIMENT CONTROL BMPs
The construction plans anticipate the use of, but are not limited to, the following Sediment Control BMPs

1. Sediment traps constructed in street subcut
2. Rock filter dikes in street subcut
3. Utilize permanent stormwater basin as Temporary Sediment Basin
4. Silt Fence at project perimeter or toe of slopes
5. Inlet protection on existing catch basins
6. Inlet protection on existing culverts
7. Inlet protection after utility construction
8. Linear control along back of new curb and gutter (sod, bioroll, or silt fence)
9. Routine street sweeping adjacent to construction entrance.
10. Ditch checks

Refer to plans for designated locations of BMPs, details and implementation notes.

BASIN AND TRAP DEWATERING BMPs
Should the need arise for basin or trap dewatering, contractor shall utilize a floating skimmer pump intake, such that the water is drawn from the surface of the basin. Pumped effluent shall not be discharged into Surface Waters in a turbid state.
Turbid effluent shall be filtered with mechanical devices, chemical filtering, or a combination thereof, to a state of 50 NTUs or less.

STABILZATION BMPs
The construction plans anticipate the use of, but are not limited to, the following Stabilization BMPs:

1. After lot pads are grade certified, permanent seed and mulch can be applied, generally from the front of the building pad, extending to the rear of the lot (areas where no further utility construction is anticipated.)
2. After 3:1 slopes on lots are certified, permanent seed and erosion control blanket can be applied.
3. Rip rap at pipe outfalls
4. Permanent seed and erosion control blanket on basin slopes after grade certified.
5. After curbs are backfilled, apply permanent seed and mulch to remaining building pads and boulevard area not already stabilized.
6. Sod placement, as appropriate.

POLLUTION CONTROL BMPs

1. Fueling: A fixed fueling station is not anticipated. Contractor will be required to implement BMPs for onsite re-fueling of equipment.
2. Concrete Washout: A suggested washout area will be specified on the plan. The developer has the ability to adjust location or to provide alternative washout containment.
3. There is not an anticipated need for storing chemicals, paints, solvents or other potentially toxic or hazardous materials on site.

SEED & MULCH SPECIFICATIONS
Seed placed for permanent cover or final stabilization requires 6" minimum topsoil cover. Exception: Infiltration basins - see basin details for soil type). Multiple site visits will be required to accommodate permanent or temporary stabilization as required during the phases of construction.

(1) General Seed & Mulch
A. Seed: **MNDOT 25-141** at a rate of 59 lb/acre
B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre
C. Mulch: MNDOT Type 1 at a rate of 2 tons/acre
(2) Temporary Cover Crop (Ponding/Infiltration/Adjacent Slope Areas)
A. Seed: **MNDOT 21-112** at a rate of 100 lb/acre
B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre
C. Mulch: MNDOT Type 3 at a rate of 2 tons/acre
(3) Hydro-Seeding (Stockpile)
A. Seed: **MNDOT 22-111 Seed & Type Hydraulic Mulch** at a rate of 10 lb/1000 gal
B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 50 lb/1000 gal
C. Mulch: Type Hydraulic Mulch at a rate of 350 lb/1000 gal
D. Water: 875 gal/1000 gal
E. Apply at 6000 gal of Slurry per acre
(4) Stormwater Basins (Aquatic Bench up to HWL)
A. Seed: **MNDOT 33-261** at a rate of 14.5 lb/acre
B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre
C. Mulch: MNDOT Type 3 at a rate of 2 tons/acre

INSPECTION AND MAINTENANCE OF BMPs
Routine Inspection

1. Rock Entrance - Inspect weekly. If rock becomes filled with sediment and tracked material to the extent the purpose ceases to function, remove the contaminated rock and replace with new rock.
2. Silt fence - Inspect weekly, particularly for damaged sections, breaches, down-gradient areas, flow concentration points, scour areas and sections adjacent to sensitive areas. Where capacity is filled to more than 50% of depth, sediment shall be removed to restore capture capacity.
3. Sediment traps and basins - Inspect weekly. Where capacity is filled to more than 50% of depth, sediment shall be removed to restore capture capacity within 72 hours of discovery.
4. Inlet Protection - Inspect weekly or more frequently as needed after multiple rainfalls less than 0.5". Verify intake capacity is not compromised. Where capacity is filled to more than 50% of depth, sediment shall be removed to restore capture capacity.
5. Inspect other site specific BMP's on a weekly basis minimum.

Rain Event Inspection - Mandatory, within 24 hours after a rain event 0.5" or greater. Complete all items associated with Routine Inspection. Furthermore, inspect site for breaches, failures, scours and gullying. Take corrective actions as necessary to restore functionality to the BMP's. If a given situation is discovered to be prone to repetitive failure, advise the Engineer and Contractor for SWPPP and BMP amendments.

ADDITIONAL SWPPP NOTES

1. All Erosion and Sediment Control facilities shall be maintained by the contractor during the construction operations. Any temporary facilities which are to be removed as called for on these plans and specifications shall be removed by the contractor at the time directed by the engineer. The contractor shall then restore the subsequently disturbed areas in accordance with these plans and specifications.
2. Wherever practical and feasible, the contractor shall protect and preserve existing natural trees, grass and other vegetative cover in effort to provide natural buffering and filtering of runoff.
3. Contractor shall be adaptable in adjusting construction schedules in anticipation of weather forecasts of precipitation, in order to minimize risk of erosion and sediment transport.
4. It is the responsibility of the contractor to keep public streets, travel ways, parking lots and trails utilized for ingress to and egress from the construction site free of dirt, sediment and debris, resulting from construction activity. Cost for this shall be considered incidental to the contract.
5. Adequate control of dust shall be maintained by the contractor. Cost for dust control shall be considered incidental to the contract.

ADDITIONAL SWPPP NOTES (continued)

6. Perimeter controls shall not be removed until final stabilization of areas draining toward the control devices.
7. When temperatures do not exceed 40 degrees F, areas that require seed and mulch stabilization shall be dormant seeded. Application rate shall be two times the normal rate. No dormant seeding shall be done on ice or snow greater than 2" in depth.
8. Any areas that were seeded that do not achieve 70% coverage shall be reseeded at the contractor's expense, where coverage limitation is caused by lack of seed germination and growth.

MPCA STORMWATER PERMIT - RESPONSIBILITY
The Contractor will be required to become the Permittee for the project, until final stabilization and transfer of responsibility is completed. Transfer of responsibility shall be completed with the Permit Modification Form.

OWNER: ANDE CHASE - CHASE REAL ESTATE - 952-898-5600
PERMITTEE: TBD

OPERATOR(S): TBD

OTHER CONTACTS
ENGINEER:
ERIC FAGERBERG, P.E., - James R. Hill, Inc. - 952-890-6044

TRAINING REQUIREMENTS
ERIC FAGERBERG, P.E.
DESIGN OF CONSTRUCTION SWPPP
(CERTIFICATION(2020-2023))
UNIVERSITY OF MINNESOTA
INSTRUCTOR: JOHN CHAPMAN

LGU CONTACT: MATT CLARK - CITY OF CHASKA - 952-227-7522

MPCA COMPLIANCE: JOSH NORMAN - MPCA - 651-757-2389

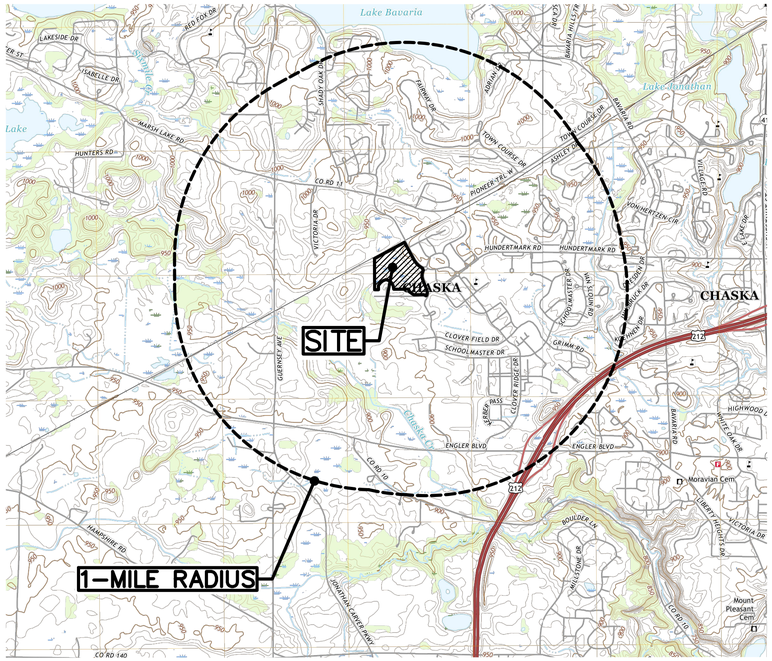
The Contractor shall follow the implementation sequence as described on these plans. Amendments shall be made as site conditions change. Amendments shall be proposed by contractor and reviewed by the engineer.

All BMP's selected and implemented shall be appropriate for the time of year, the current site conditions and for the estimated duration of use.

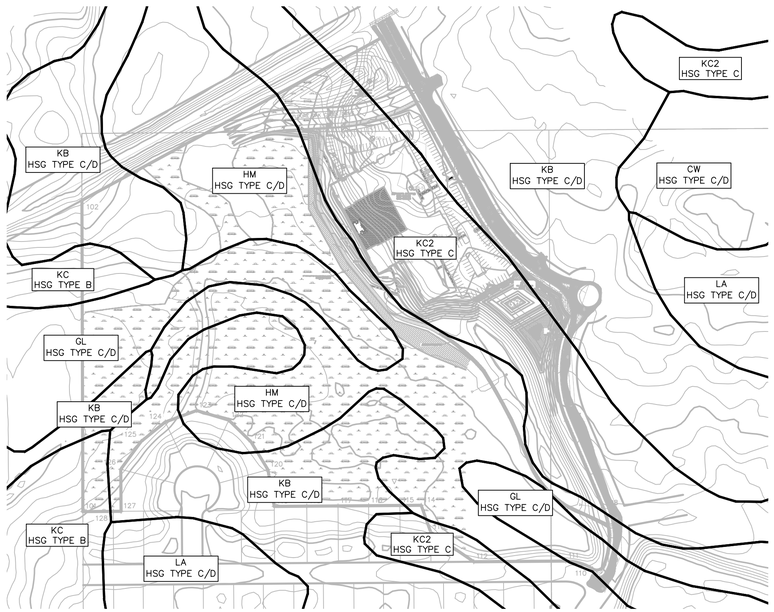
These plans shall be considered part of the project SWPPP. A copy of the SWPPP shall remain on site throughout active construction.

ESTIMATED EROSION AND SEDIMENT CONTROL QUANTITIES

CONSTRUCTION ROCK ENTRANCE	EA	1
STANDARD DUTY SILT FENCE	LF	2,840
MNDOT SEED AND MULCH 33-261 (STORMWATER BASIN)	AC	0
MNDOT SEED AND MULCH 25-141 (GENERAL MIX) - 1.5X	AC	0
MNDOT SEED AND MULCH 21-112 (TEMPORARY COVER CROP)	AC	0
REAR YARD INLET PROTECTION	EA	0
WIMCO OR APPROVED EQUAL INLET PROTECTION	EA	5



USGS MAP
1" = 2000'



USDA SOIL MAP
1" = 200'

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

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ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg.No.

GALLERY CHASKA
CHASKA, MINNESOTA
EROSION & SEDIMENT CONTROL DETAILS
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY AJA
DATE 03/01/22
REVISIONS
03/23/22 CITY COMMENTS
CAD FILE 23973-ERD
PROJECT NO. 23973
C3.1

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1.1 Permit Coverage. [Minn. R. 7090]

1.2 This permit is required for construction activity that results in land disturbance of equal to or greater than one (1) acre or if a project is part of a common plan of development or sale that ultimately will disturb greater than one (1) acre, and authorizes, subject to the terms and conditions of this permit, the discharge of stormwater associated with construction activity. [Minn. R. 7090]

1.3 Construction activity covered by this permit cannot commence until coverage under this permit is effective as described in item 3.3 through 3.4 or, if applicable, until the Minnesota Pollution Control Agency (MPCA) has issued an individual National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) construction stormwater permit for the project. [Minn. R. 7090]

1.4 This permit covers all areas of the State of Minnesota except land wholly within the boundaries of a federally recognized Indian Reservation owned by a tribe or a tribal member or land held in trust by the federal government for a tribe or tribal member. [Minn. R. 7090]

1.5 Coverage under this permit is not required when all stormwater from construction activity is routed directly to and treated by a "treatment works," as defined in Minn. Stat. Sect. 115.01, subd. 21, operated under an individual NPDES/SDS permit with a Total Suspended Solids (TSS) effluent limit. [Minn. R. 7090]

1.6 This permit covers ongoing projects covered under a construction stormwater permit that are not complete on the issuance date of this permit. Permittees must either remain in compliance with the previous permit and terminate coverage within 18 months of the issuance date of this permit or comply with this permit, including updating the Stormwater Pollution Prevention Plan (SWPPP), within the 18-month period. Permittees of previously permitted projects are not required to incorporate any additional requirements regarding the permanent stormwater treatment system included in this reissued permit. [Minn. R. 7090]

1.7 Coverage for projects that extend beyond the expiration date of this permit remains effective for a grace period covering project completion and Notice of Termination (NOT) submittal. If Permittees cannot complete projects during the grace period, the MPCA will extend coverage under the next permit and permittees must comply with the requirements of the new permit including updating the SWPPP. Permittees are not required to follow changes to the permanent stormwater treatment section of the next permit. [Minn. R. 7090]

2.1 Prohibitions and Limitations of Coverage. [Minn. R. 7090]

2.2 The owner must develop a complete and accurate SWPPP that complies with item 5.2 prior to submitting the application for coverage and starting construction activity. Failure to prepare a SWPPP prior to submitting the application may result in permit revocation, according to Minn. R. 7007.0800.

2.3 This permit prohibits discharges of any material other than stormwater treated in compliance with this permit and discharges from dewatering or basin draining activities in accordance with Section 10. Prohibited discharges include, but are not limited to, wastewater from washout of concrete, stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps or solvents used in vehicle and equipment washing and maintenance, and other hazardous substances not listed in the SWPPP. [Minn. R. 7090]

2.4 This permit does not authorize stormwater discharges related to the placement of fill into waters of the state requiring local, state or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits, Minnesota Department of Natural Resources (DNR) Public Waters Work permits or local governmental unit (LGU) Wetland Conservation Act replacement plans or determinations). [Minn. R. 7090]

2.5 This permit does not authorize stormwater discharges associated with industrial activity except for construction activity. Permittees must obtain coverage for discharges associated with industrial activity under a separate NPDES/SDS permit once day-to-day operational activities commence even if construction is ongoing. [Minn. R. 7090]

2.6 This permit does not authorize discharges from non-point source agricultural and silvicultural activities excluded from NPDES permit requirements under 40 CFR part 122.3(e). [Minn. R. 7090]

2.7 This permit does not authorize stormwater discharges to Prohibited, Restricted, Special or Impaired waters unless permittees follow the additional stormwater requirements in Section 23. [Minn. R. 7090]

2.8 This permit does not replace or satisfy any environmental review requirements including those under the Minnesota Environmental Policy Act or the National Environmental Policy Act. The owner must verify completion of any environmental review required by law, including any required Environmental Assessment Work Sheets or Environmental Impact Statements, federal environmental review, or other required review prior to applying for coverage under this permit. If any part of your common plan of development or sale requires environmental review, coverage under this permit cannot be obtained until such environmental review is complete. [Minn. R. 7090]

2.9 This permit does not replace or satisfy any review requirements for discharges adversely impacting State or Federally designated endangered or threatened species or a designated critical habitat. The owner must comply with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer. [Minn. R. 7090]

2.10 This permit does not authorize discharges to wetlands unless the permittee complies with the requirements in Section 22. [Minn. R. 7090]

3.1 Application and Coverage Effective Date. [Minn. R. 7090]

3.2 The owner and operator must submit a complete and accurate on-line application with the appropriate fee to the MPCA for each project that disturbs one (1) or more acres of land or for a common plan of development or sale that will ultimately disturb one (1) or more acres. [Minn. R. 7090]

3.3 For projects or common plans of development or sale that disturb less than 50 acres or do not discharge stormwater within 1 mile (aerial radius measurement) of a special or impaired water, permittees do not need to submit the SWPPP with the application. Permit coverage for these projects is effective upon application and completing the payment process. [Minn. R. 7090]

3.4 For certain projects or common plans of development or sale disturbing 50 acres or more, the complete SWPPP must be included with the application and submitted at least 30 days before the start of construction activity. This applies if there is a discharge point on the project within one mile (aerial radius measurement) of, and flows to, a special water listed in item 23.3 through 23.6 or an impaired water as described in item 23.7. Permit coverage for these projects is effective upon submitting the application and complete SWPPP, completing the payment process and receiving a determination from the MPCA that the review of the SWPPP is complete. The determination may take longer than 30 days if the SWPPP is incomplete. If the MPCA fails to contact the permittees within 30 days of application receipt, coverage is effective 30 days after completing the payment process. [Minn. R. 7090]

3.5 The application requires listing all persons meeting the definition of owner and operator as permittees. The owner is responsible for compliance with all terms and conditions of this permit. The operator is responsible for compliance with Sections 3, 4, 6-22, 24 and applicable requirements for construction activity in Section 23. [Minn. R. 7090]

3.6 Permittees will receive coverage notification in a manner determined by the MPCA. [Minn. R. 7090]

3.7 For construction projects where the owner or operator changes (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner), the current owner and the new owner or operator must submit a complete permit modification form provided by the MPCA. The current owner and the new owner or operator must submit the form prior to the new owner or operator commencing construction activity or no later than 30 days after taking ownership of the property. [Minn. R. 7090]

3.8 For construction projects where the owner or operator changes, the current owner must provide a SWPPP to the new owner and operator that specifically addresses the remaining construction activity. The new owner or operator can implement the original SWPPP, modify the SWPPP, or develop a new SWPPP. Permittees must ensure their activities do not render another party's erosion prevention and sediment control BMPs ineffective. [Minn. R. 7090]

4.1 Termination of Coverage. [Minn. R. 7090]

4.2 Permittees must submit a NOT within 30 days after all termination conditions listed in Section 13 are complete. [Minn. R. 7090]

4.3 Permittees must submit a NOT within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a site to another party. The permittees' coverage under this permit terminates at midnight on the submission date of the NOT. [Minn. R. 7090]

4.4 Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions:

a. construction activity has ceased for at least 90 days; and

b. at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and

c. on areas where construction activity is not complete, permanent cover has been established; and

d. the site complies with item 13.3 through 13.7.

After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activities of one (1) or more acres in size. [Minn. R. 7090]

4.5 Permittees may terminate coverage upon MPCA approval after submitting information documenting the owner cancelled the project. [Minn. R. 7090]

5.1 Stormwater Pollution Prevention Plan (SWPPP) Content. [Minn. R. 7090]

5.2 The owner must develop a SWPPP. The SWPPP must include items 5.3 through 5.26. [Minn. R. 7090]

5.3 The SWPPP must incorporate specific Best Management Practices (BMP) used to comply with the requirements of this permit. [Minn. R. 7090]

5.4 The SWPPP must include a narrative describing the timing for installation of all erosion prevention and sediment control BMPs and a description of the permanent stormwater treatment systems. [Minn. R. 7090]

5.5 The SWPPP must include the location and type of all temporary and permanent erosion prevention and sediment control BMPs along with procedures used to establish additional temporary BMPs as necessary for the site conditions during construction. Standard details or specifications for BMPs must be included in the final plans and specifications for the project. [Minn. R. 7090]

5.6 The SWPPP must include the calculations and other information used for the design of temporary sediment basins and any of the permanent stormwater treatment systems required in Section 15. [Minn. R. 7090]

5.7 The SWPPP must include estimated quantities anticipated at the start of the project for the life of the project for all erosion prevention and sediment control BMPs (e.g., linear feet of silt fence or square feet of erosion control blanket). [Minn. R. 7090]

5.8 The SWPPP must include the number of acres of impervious surface for both pre- and post-construction. [Minn. R. 7090]

5.9 The SWPPP must include a site map with existing and final grades, including drainage area boundaries, directions of flow and all discharge points where stormwater is leaving the site or entering a surface water. The site map must indicate the areas of steep slopes. The site map must also include impervious surfaces, soil types and locations of potential pollutant-generating activities as identified in Section 12. [Minn. R. 7090]

5.10 The SWPPP must include a map of all surface waters, existing wetlands, and stormwater ponds or basins that can be identified on maps such as United States Geological Survey 7.5 minute quadrangle maps, the National Wetland Inventory map or equivalent maps and are within one mile (aerial radius measurement) from the project boundaries that will receive stormwater from the construction site, during or after construction. The SWPPP must identify if the surface waters are special or impaired waters. [Minn. R. 7090]

5.11 The SWPPP must include a site map showing construction activity areas that are adjacent to and drain to Public Waters for which the DNR has promulgated "work in water restrictions" during specified fish spawning time frames. [Minn. R. 7090]

5.12 Permittees must identify locations of 50' buffer zones as required in item 9.17 and 100' permanent buffer zones as required in item 23.11, on plan sheets in the SWPPP. [Minn. R. 7090]

5.13 If permittees determine compliance with the following requirements is infeasible, they must document the determination in the SWPPP:

a. temporary sediment basins as described in Section 14; and

b. for linear projects, if the permanent stormwater treatment system cannot be constructed within the right-of-way, a reasonable attempt must be made to obtain additional right-of-way (item 15.9); and

c. buffer zones as described in item 9.17 and item 23.11. [Minn. R. 7090]

5.14 If permittees determine that a temporary sediment basin is infeasible as described in item 14.10, the SWPPP must describe the alternative BMPs used. [Minn. R. 7090]

5.15 Where systems cannot meet the full volume reduction requirement on site, (e.g., the site has infiltration prohibitions, see item 16.14 through item 16.21) the permittee must document the reasons in the SWPPP. [Minn. R. 7090]

5.16 The SWPPP must include any stormwater mitigation measures proposed to be part of the final project in any environmental review document, endangered species review, archeological or other required local, state or federal review conducted for the project. For purposes of this permit, mitigation measures means actions necessary to avoid, minimize, or mitigate for impacts related to erosion prevention, sediment control, the permanent stormwater treatment system, pollution prevention management measures and discharges associated with the project's construction activity. [Minn. R. 7090]

5.17 The SWPPP must describe the methods used to establish permanent cover of all exposed soil areas. [Minn. R. 7090]

5.18 Permittees must identify the locations of areas where construction will be phased to minimize the duration of exposed soil areas in the SWPPP. [Minn. R. 7090]

5.19 For projects with a discharge point on the project within one (1) mile (aerial radius measurement) of and which flows to an impaired water, permittees must identify the impaired water(s), and any United States Environmental Protection Agency (USEPA)-approved Total Maximum Daily Load (TMDL) for the pollutant(s) or stressor(s) described in item 23.7. Permittees' identification must include those TMDLs approved at any time prior to permit application submittal and are still in effect. [Minn. R. 7090]

5.20 Permittees must document in the SWPPP, all trained individuals identified in item 21.2. Documentation must include:

a. names of personnel required to be trained; and

b. dates of training and name of instructor(s) and entity providing training; and

c. content of training course.

If permittees do not know the names of the individuals at the time of application, the permittees must ensure they document training before construction activity commences. [Minn. R. 7090]

5.21 The SWPPP must identify a person knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will oversee the installation of those BMPs and must keep the sediment control practices in place until they establish permanent cover. [Minn. R. 7090]

5.22 The SWPPP must describe any specific chemicals and chemical treatment systems used for enhancing the sedimentation process and how it achieves compliance with item 9.18. [Minn. R. 7090]

5.23 The SWPPP must identify the person(s), organizations, or entities responsible for long-term operation and maintenance of permanent stormwater treatment systems. [Minn. R. 7090]

5.24 The SWPPP must describe methods to minimize soil compaction and preserve topsoil. Minimizing soil compaction is not required where the intended function of a specific area dictates compaction. [Minn. R. 7090]

5.25 The SWPPP must include any site assessments for groundwater or soil contamination required in item 16.15. [Minn. R. 7090]

5.26 The SWPPP must account for the following factors in designing temporary erosion prevention and sediment control BMPs:

a. the expected amount, frequency, intensity, and duration of precipitation; and

b. the nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features; and

c. the stormwater volume, velocity, and peak flowrates to minimize discharge of pollutants in stormwater and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points; and

d. the range of soil particle sizes expected to be present. [Minn. R. 7090]

6.1 SWPPP Amendments. [Minn. R. 7090]

6.2 One of the individuals described in item 21.2.a or item 21.2.b or another qualified individual must complete all SWPPP changes. Changes involving the use of a less stringent BMP must include a justification describing how the replacement BMP is effective for the site characteristics. [Minn. R. 7090]

6.3 Permittees must amend the SWPPP to include additional or modified BMPs as necessary to correct problems identified or address situations whenever there is a change in design, construction, operation, maintenance, weather or seasonal conditions having a significant effect on the discharge of pollutants to surface waters or groundwater. [Minn. R. 7090]

6.4 Permittees must amend the SWPPP to include additional or modified BMPs as necessary to correct problems identified or address situations whenever inspections or investigations by the site owner or operator, USEPA or MPCA officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or groundwater or the discharges are causing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2) or the SWPPP is not consistent with the objectives of a USEPA approved TMDL. [Minn. R. 7050.0210]

7.1 BMP Selection and Installation. [Minn. R. 7090]

7.2 Permittees must select, install, and maintain the BMPs identified in the SWPPP and in this permit in an appropriate and functional manner and in accordance with relevant manufacturer specifications and accepted engineering practices. [Minn. R. 7090]

8.1 Erosion Prevention Practices. [Minn. R. 7090]

8.2 Before work begins, permittees must delineate the location of areas not to be disturbed. [Minn. R. 7090]

8.3 Permittees must minimize the need for disturbance of portions of the project with steep slopes. When steep slopes must be disturbed, permittees must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope benching and terracing). [Minn. R. 7090]

8.4 Permittees must stabilize all exposed soil areas, including stockpiles. Stabilization must be initiated immediately to limit soil erosion when construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed no later than 14 calendar days after the construction activity has ceased. Stabilization is not required on temporal stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but permittees must provide sediment controls at the base of the stockpile. [Minn. R. 7090]

8.5 For Public Waters that the Minnesota DNR has promulgated "work in water restrictions" during specified fish spawning time frames, permittees must complete stabilization of all exposed soil areas within 200 feet of the water's edge, and that drain to these waters, within 24 hours during the restriction period. [Minn. R. 7090]

8.6 Permittees must stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Permittees must complete stabilization of remaining portions of temporary or permanent ditches or swales within 14 calendar days after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. [Minn. R. 7090]

8.7 Temporary or permanent ditches or swales being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized. Permittees must stabilize these areas within 24 hours after their use as a sediment containment system ceases. [Minn. R. 7090]

8.8 Permittees must not use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent. [Minn. R. 7090]

8.9 Permittees must provide temporary or permanent energy dissipation at all pipe outlets within 24 hours after connection to a surface water or permanent stormwater treatment system. [Minn. R. 7090]

8.10 Permittees must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with Section 11. [Minn. R. 7090]

9.1 Sediment Control Practices. [Minn. R. 7090]

9.2 Permittees must establish sediment control BMPs on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Permittees must locate sediment control practices upgradient of any buffer zones. Permittees must install sediment control practices before any upgradient land-disturbing activities begin and must keep the sediment control practices in place until they establish permanent cover. [Minn. R. 7090]

9.3 If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements, permittees must install additional upgradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required in item 6.3. [Minn. R. 7090]

9.4 Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions. [Minn. R. 7090]

9.5 A floating silt curtain placed in the water is not a sediment control BMP to satisfy item 9.2 except when working on a shoreline or below the waterline. Immediately after the short term construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, permittees must install an upland perimeter control practice if exposed soils still drain to a surface water. [Minn. R. 7090]

9.6 Permittees must re-install all sediment control practices adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity is completed. Permittees must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete. [Minn. R. 7090]

9.7 Permittees must protect all storm drain inlets using appropriate BMPs during construction until they establish permanent cover on all areas with potential for discharging to the inlet. [Minn. R. 7090]

9.8 Permittees may remove inlet protection for a particular inlet if a specific safety concern (e.g. street flooding/freezing) is identified by the permittee or the jurisdictional authority (e.g., city/county/township/Minnesota Department of Transportation engineer). Permittees must document the need for removal in the SWPPP. [Minn. R. 7090]

9.9 Permittees must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter. [Minn. R. 7090]

9.10 Permittees must locate stockpiles outside of natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems unless there is a bypass in place for the stormwater. [Minn. R. 7090]

9.11 Permittees must install a vehicle tracking BMP to minimize the track out of sediment from the construction site or onto paved roads within the site. [Minn. R. 7090]

9.12 Permittees must use street sweeping if vehicle tracking BMPs are not adequate to prevent sediment tracking onto the street. [Minn. R. 7090]

9.13 Permittees must install temporary sediment basins as required in Section 14. [Minn. R. 7090]

9.14 In any areas of the site where final vegetative stabilization will occur, permittees must restrict vehicle and equipment use to minimize soil compaction. [Minn. R. 7090]

9.15 Permittees must preserve topsoil on the site, unless infeasible. [Minn. R. 7090]

9.16 Permittees must direct discharges from BMPs to vegetated areas unless infeasible. [Minn. R. 7090]

9.17 Permittees must preserve a 50 foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. Permittees must install perimeter sediment controls at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, permittees must document the reasons in the SWPPP. Sheet piling is a redundant perimeter control if installed in a manner that retains all stormwater. [Minn. R. 7090]

9.18 Permittees must use polymers, flocculants, or other sedimentation treatment chemicals in accordance with accepted engineering practices, dosing specifications and sediment removal design specifications provided by the manufacturer or supplier. The permittees must use conventional erosion and sediment controls prior to chemical addition and must direct treated stormwater to a sediment control system for filtration or settlement of the solids prior to the permanent basin. [Minn. R. 7090]

10.1 Dewatering and Basin Draining. [Minn. R. 7090]

10.2 Permittees must discharge turbid or sediment-laden waters related to dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) to a temporary or permanent sediment basin on the project site unless infeasible. Permittees may dewater to surface waters if they visually check to ensure adequate treatment has been obtained and nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. If permittees cannot discharge the water to a sedimentation basin prior to entering a surface water, permittees must treat it with appropriate BMPs such that the discharge does not adversely affect the surface water or downstream properties. [Minn. R. 7050.0210]

10.3 If permittees must discharge water containing oil or grease, they must use an oil-water separator or suitable filtration device (e.g., cartridge filters, absorbents pads) prior to discharge. [Minn. R. 7090]

10.4 Permittees must discharge all water from dewatering or basin-draining activities in a manner that does not cause erosion or scour in the immediate vicinity of discharge points or inundation of wetlands in the immediate vicinity of discharge points that causes significant adverse impact to the wetland. [Minn. R. 7090]

10.5 If permittees use filters with backwash water, they must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. [Minn. R. 7090]

11.1 Inspections and Maintenance. [Minn. R. 7090]

11.2 Permittees must ensure a trained person, as identified in item 21.2.b, will inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 1/2 inch in 24 hours. [Minn. R. 7090]

11.3 Permittees must inspect and maintain all permanent stormwater treatment BMPs. [Minn. R. 7090]

11.4 Permittees must inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness. Permittees must repair, replace or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery unless another time frame is specified in item 11.5 or 11.6. Permittees may take additional time if field conditions prevent access to the area. [Minn. R. 7090]

11.5 During each inspection, permittees must inspect surface waters, including drainage ditches and conveyance systems but not curb and gutter systems, for evidence of erosion and sediment deposition. Permittees must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems and restabilize the areas where sediment removal results in exposed soil. Permittees must complete removal and stabilization within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. Permittees must use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) days of obtaining access. Permittees are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters. [Minn. R. 7090]

11.6 Permittees must inspect construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles. Permittees must remove sediment from all paved surfaces within one (1) calendar day of discovery or, if applicable, within a shorter time to avoid a safety hazard to users of public streets. [Minn. R. 7090]

11.7 Permittees must repair, replace or supplement all inoperative BMPs within 24 hours after discovery or as soon as field conditions allow access unless another time frame is specified in this permit. [Minn. R. 7090]

11.8 Permittees must drain temporary and permanent sedimentation basins and remove the sediment when the depth of sediment collected in the basin reaches 1/2 the storage capacity. [Minn. R. 7090]

11.9 Permittees must ensure that at least one individual present on the site (or available to the project site in three (3) calendar days) is trained in the job duties described in item 21.2.b. [Minn. R. 7090]

11.10 Permittees must adjust the inspection schedule listed in item 11.2 as follows:

a. inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or

b. where sites have permanent cover on all exposed soil and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or

c. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended. Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first. [Minn. R. 7090]

11.11 Permittees must perform inspection and maintenance activities within 24 hours of being conducted and these records must be retained with the SWPPP. These records must include:

a. date and time of inspections; and

b. name of persons conducting inspections; and

c. accurate findings of inspections, including the specific location where corrective actions are needed; and

d. corrective actions taken (including dates, times, and party completing maintenance activities); and

e. date of all rainfall events greater than 1/2 inches in 24 hours, and the amount of rainfall for each event. Permittees must obtain rainfall amounts by either a properly maintained rain gauge installed onsite, a weather station that is within one (1) mile of your location, or a weather reporting system that provides site specific rainfall data from radar summaries; and

f. if permittees observe a discharge during the inspection, they must record and should photograph and describe the location of the discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutants); and

g. any amendments to the SWPPP proposed as a result of the inspection must be documented as required in Section 6 within seven (7) calendar days. [Minn. R. 7090]

12.1 Pollution Prevention Management Measures. [Minn. R. 7090]

12.2 Permittees must prohibit exterior washing of equipment and materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Permittees are not required to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater. [Minn. R. 7090]

12.3 Permittees must place pesticides, fertilizers and treatment chemicals under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. [Minn. R. 7090]

12.4 Permittees must store hazardous materials and toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) in sealed containers to prevent spills, leaks or other discharge. Storage and disposal of hazardous waste materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable. [Minn. R. 7090]

12.5 Permittees must properly store, collect and dispose solid waste in compliance with Minn. R. ch. 7035. [Minn. R. 7035]

12.6 Permittees must position portable toilets so they are secure and will not tip or be knocked over.

12.7 Permittees must properly dispose sanitary waste in accordance with Minn. R. ch. 7041. [Minn. R. 7041]

Permittees must take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Permittees must maintain adequate containment and other items to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Permittees must report and clean up spills immediately as required by Minn. Stat. 115.061, using dry cleanup measures where possible. [Minn. R. 7090]

12.8 Permittees must limit vehicle exterior washing and equipment to a defined area of the site. Permittees must contain runoff from the washing area in a sediment basin or other similarly effective controls and must dispose wastes from the washing activity properly. Permittees must properly use and store soaps, detergents, or solvents. [Minn. R. 7090]

12.9 Permittees must provide effective containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. Permittees must prevent liquid and solid washout wastes from contacting the ground and must design the containment so it does not result in runoff from the washout operations or areas. Permittees must properly dispose liquid and solid wastes in compliance with MPCA rules. Permittees must install a sign indicating the location of the washout facility. [Minn. R. 7035, Minn. R. 7090]

13.1 Permit Termination Conditions. [Minn. R. 7090]

13.2 Permittees must temporarily stabilize all construction activity and must install permanent cover over all areas prior to submitting the NOT. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces, or areas covered by non-erodible solids, floating materials, and oils and grease from the runoff, to the maximum extent practicable, before runoff enters the filtration system. [Minn. R. 7090]

13.3 Permittees must clean the permanent stormwater treatment system of any accumulated sediment and must ensure the system meets all applicable requirements in Section 15 through 19 and is operating as designed. [Minn. R. 7090]

13.4 Permittees must remove all sediment from conveyance systems prior to submitting the NOT. [Minn. R. 7090]

13.5 Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. Permittees may leave BMPs designed to decompose on-site in place. [Minn. R. 7090]

13.6 For residential construction only, permanent cover may be established on individual lots if the structures are finished and temporary erosion prevention and downgradient perimeter control is complete, the permittees each explain to the homeowner, and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner. [Minn. R. 7090]

13.7 For construction projects on agricultural land (e.g., pipelines across cropland), permittees must return the disturbed land to its preconstruction agricultural use prior to submitting the NOT. [Minn. R. 7090]

14.1 Temporary Sediment Basins. [Minn. R. 7090]

14.2 Where ten (10) or more acres of disturbed soil drain to a common location, permittees must provide a temporary sediment basin to provide treatment of the runoff until the entire site is finally stabilized or enters surface waters. Permittees may convert a temporary sediment basin to a permanent basin after construction is complete. The temporary basin is no longer required when permanent cover has reduced the acreage of disturbed soil to less than ten (10) acres draining to a common location. [Minn. R. 7090]

14.3 The temporary basin must provide live storage for a calculated volume of runoff from a two (2)-year, 24-hour storm from each acre drained to the basin or 1,800 cubic feet of live storage per acre drained, whichever is greater. [Minn. R. 7090]

14.4 Where permittees have not calculated the two (2)-year, 24-hour storm runoff amount, the temporary basin must provide 3,600 cubic feet of live storage per acre of the basins' drainage area. [Minn. R. 7090]

14.5 Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. [Minn. R. 7090]

14.6 Permittees must design the outlet structure to withdraw water from the surface to minimize the discharge of pollutants. Permittees may temporarily suspend the use of a surface withdrawal mechanism during frozen conditions. The basin must include a stabilized emergency overflow to prevent failure of pond integrity. [Minn. R. 7090]

14.7 Permittees must provide energy dissipation for the basin outlet within 24 hours after connection to a surface water. [Minn. R. 7090]

14.8 Permittees must locate temporary basins outside of surface waters and any buffer zone required in item 23.11. [Minn. R. 7090]

14.9 Permittees must construct the temporary basins prior to disturbing 10 or more acres of soil draining to a common location. [Minn. R. 7090]

14.10 Where a temporary sediment basin meeting the requirements of item 14.3 through 14.9 is infeasible, permittees must install effective sediment controls such as smaller sediment basins and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures as dictated by individual site conditions. In determining whether installing a sediment basin is infeasible, permittees must consider public safety and may consider factors such as site soils, slope, and available area on-site. Permittees must document in the determination of infeasibility in the SWPPP. [Minn. R. 7090]

15.1 Permanent Stormwater Treatment System. [Minn. R. 7090]

15.2 Permittees must design the project so all stormwater discharged from the project during and after construction activities does not cause or contribute to violations of state water quality standards, including nuisance conditions, erosion in receiving channels or on downslope properties, or a significant adverse impact to wetlands caused by inundation or decrease of flow. [Minn. R. 7090]

15.3 Permittees must design and construct a permanent stormwater treatment system to treat the water quality volume if the project's ultimate development replaces vegetation and/or other pervious surfaces creating a net increase of one (1) or more acres of cumulative impervious surface. [Minn. R. 7090]

15.4 Permittees must calculate the water quality volume as one (1) inch times the net increase of impervious surfaces created by the project. [Minn. R. 7090]

15.5 Permittees must first consider volume reduction practices on-site (e.g., infiltration or other) when designing the permanent stormwater treatment system. If this permit prohibits infiltration as described in item 16.14 through item 16.21, permittees may consider a wet sedimentation basin, filtration basin or regional pond. This permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. [Minn. R. 7090]

15.6 For projects where the full volume reduction requirement cannot be met on-site, (e.g., the site has infiltration prohibitions), permittees must document the reasons in the SWPPP. [Minn. R. 7090]

15.7 Permittees must discharge the water quality volume to a permanent stormwater treatment system prior to discharge to a surface water. For purposes of this item, surface waters do not include man-made drainage systems that convey stormwater to a permanent stormwater treatment system. [Minn. R. 7090]

15.8 Where the proximity to bedrock precludes the installation of any of the permanent stormwater treatment practices required by Sections 15 through 19, permittees must install other treatment such as grassed swales, smaller ponds, or grit chambers, prior to the discharge of stormwater to surface waters. [Minn. R. 7090]

15.9 For linear projects where permittees cannot treat the entire water quality volume within the existing right-of-way, permittees must make a reasonable attempt to obtain additional right-of-way, easement or other permission for stormwater treatment during the project planning process. Documentation of these attempts must be in the SWPPP. Permittees must still consider volume reduction practices first as described in item 15.5. If permittees cannot obtain additional right-of-way, easement or other permission, they must maximize the treatment of the water quality volume prior to discharge to surface waters. [Minn. R. 7090]

16.1 Infiltration Systems. [Minn. R. 7090]

16.2 Infiltration options include, but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams, and natural depressions. If permittees submit an infiltration system to meet the requirements of this permit, they must incorporate the design parameters in item 16.3 through item 16.21. Permittees must follow the infiltration prohibition in item 16.14 anytime an infiltration system is designed, including those not required by this permit. [Minn. R. 7090]

16.3 Permittees must design infiltration systems such that pre-existing hydrologic conditions of wetlands in the vicinity are not impacted (e.g., inundation or breaching a perched water table supporting a wetland). [Minn. R. 7090]

16.4 Permittees must not excavate infiltration systems to final grade, or within three (3) feet of final grade, until the contributing drainage area has been constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the infiltration area. [Minn. R. 7090]

16.5 When excavating an infiltration system to within three (3) feet of final grade, permittees must stake off and mark the area so heavy construction vehicles or equipment do not compact the soil in the infiltration area. [Minn. R. 7090]

16.6 Permittees must use a pretreatment device such as a vegetated filter strip, forebay, or water quality inlet (e.g., grit chamber) to remove solids, floating materials, and oil and grease from the runoff, to the maximum extent practicable, before the system routes stormwater to the infiltration system. [Minn. R. 7090]

16.7 Permittees must design infiltration systems to provide a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]

16.8 Permittees must design the infiltration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Permittees must route additional flows that cannot infiltrate within 48 hours to bypass the system through a stabilized discharge point. [Minn. R. 7090]

16.9 Permittees must provide a means to visually verify that the infiltration system is discharging through the soil surface or filter media surface within 48 hours or less. [Minn. R. 7090]

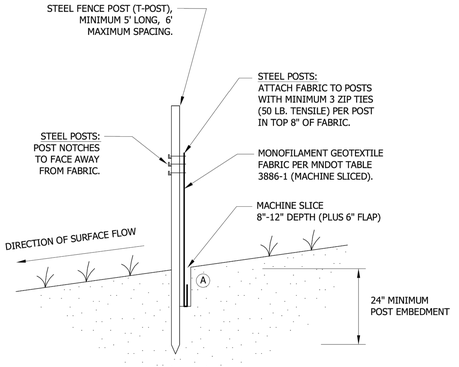
16.10 Permittees must provide at least one soil boring, test pit or infiltrometer test in the location of the infiltration practice for determining infiltration rates. [Minn. R. 7090]

16.11 Permittees using a wet sedimentation basin to meet the permanent stormwater treatment requirements of this permit must incorporate the design parameters in item 18.3 through 18.10. [Minn. R. 7090]

16.12 Permittees must employ appropriate on-site testing ensure a minimum of three (3) feet of separation from the seasonally saturated soils or from bedrock and the bottom of the proposed infiltration system. [Minn. R. 7090]

16.13 Permittees must design a maintenance access, typically eight (8) feet wide, for the infiltration system. [Minn. R. 7090]

16.14 This permit prohibits permittees from constructing infiltration systems that receive runoff from vehicle fueling and maintenance areas including construction of infi



NOTE:
THE MACHINE SLICED METHOD (THIS DETAIL) IS THE STANDARD SILT FENCE INSTALLATION METHOD. HEAVY DUTY (ERO-1B) SILT FENCE INSTALLATION METHODS SHOULD ONLY BE USED WHEN APPROVED OR DIRECTED BY THE CITY.

(A) COMPACTION:
AFTER "SLICING" IN THE FABRIC AND *BEFORE* INSTALLATION OF STEEL POSTS, DRIVE INSTALLATION EQUIPMENT OVER THE "SLICE" WHILE FABRIC IS LAYING ON THE GROUND. *THEN* INSTALL THE POSTS AND PULL UP FABRIC TO ATTACH AT A UNIFORM HEIGHT.

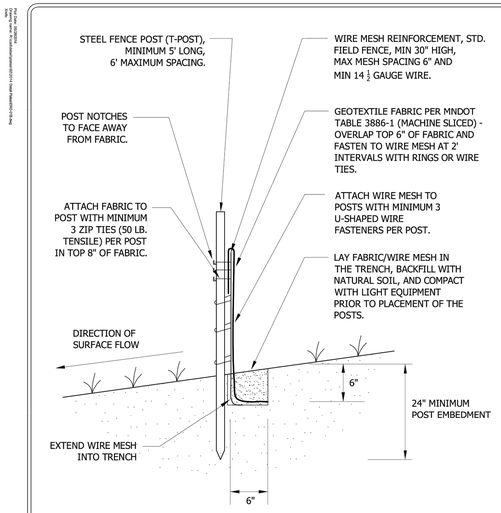
Stantec
2335 Highway 36 W
St. Paul, MN 55113
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SILT FENCE
MACHINE SLICED

CHASKA, MN

LAST REVISION: APRIL 2011

PLATE NO. ERO-1A



NOTE:
SPLICING WILL BE MADE AT OPPOSING SILT FENCE POSTS BY PLACING POSTS AND SILT FENCE NEXT TO EACH OTHER AND ROTATING 360°.

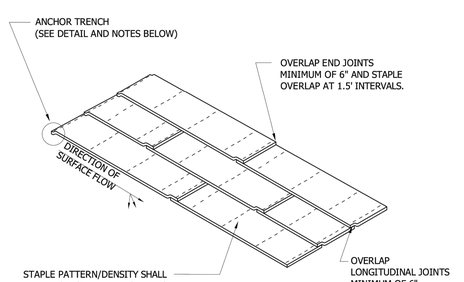
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SILT FENCE
HEAVY DUTY

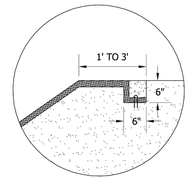
CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-1B



ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH



NOTE:
SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLUMPS, STICKS, VEHICLE IMPRINTS, AND GRASS. BLANKETS SHALL HAVE GOOD SOIL CONTACT.

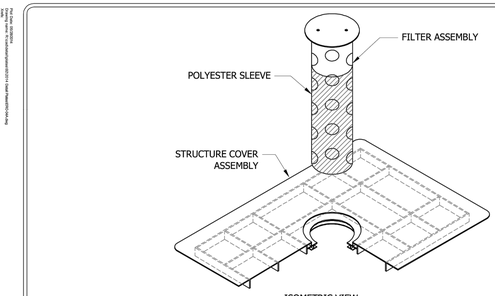
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St. Paul, MN 55113
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EROSION CONTROL BLANKET
INSTALLATION

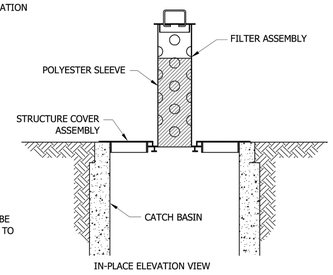
CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-2



DEVICES TO BE INSTALLED IMMEDIATELY UPON INSTALLATION OF CONCRETE STRUCTURE OR TOP SLAB.



NOTE: ALL OTHER INLET PROTECTION DEVICES MUST BE APPROVED BY OWNER PRIOR TO INSTALLATION.

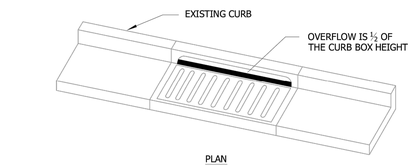
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INLET PROTECTION FOR CATCH BASIN
BEFORE CURB CONSTRUCTION

CHASKA, MINNESOTA

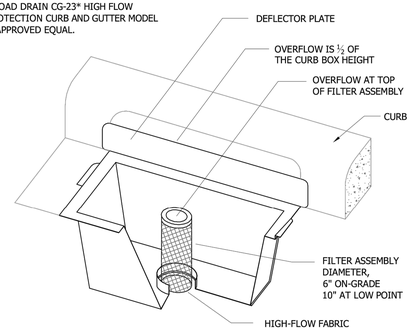
LAST REVISION: APRIL 2008

PLATE NO. ERO-4A



PLAN

WIMCO ROAD DRAIN CG-23* HIGH FLOW INLET PROTECTION CURB AND GUTTER MODEL OR CITY APPROVED EQUAL.



* FOR THE NEW R-3290-VB STANDARD CASTING, INSTALL WIMCO ROAD DRAIN CG-3290 OR CITY APPROVED EQUAL.

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St. Paul, MN 55113
www.stantec.com

INLET PROTECTION - CATCH BASIN INSERT
AFTER CURB CONSTRUCTION

CHASKA, MINNESOTA

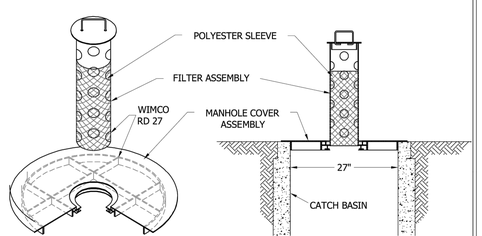
LAST REVISION: APRIL 2008

PLATE NO. ERO-4B

DEVICES TO BE INSTALLED IMMEDIATELY UPON INSTALLATION OF CONCRETE STRUCTURE CONE OR TOP SLAB.

DEVICES SHOWN ARE AS MANUFACTURED BY WIMCO. MODEL NO. OF UNIT SHOWN: RD 27.

OTHER APPROVED INLET PROTECTION DEVICES FOR BEEHIVE CASTINGS ARE:
- ROYAL ENTERPRISES - MODEL NO 27 INFRASAFE SEDIMENT CONTROL BARRIER - DG.
- PRE MANUFACTURED UNIT BY CIRCLE "H" ENTERPRISES.



ISOMETRIC VIEW

IN-PLACE ELEVATION VIEW

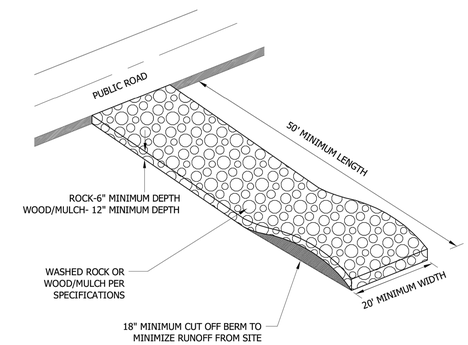
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INLET PROTECTION
BEEHIVE CASTING

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-4C



NOTES:
1. MnDOT 3733 TYPE 4 FILTER FABRIC SHALL BE PLACED UNDER ROCK OR MULCH TO STOP MUD MIGRATION THROUGH MATERIAL.
2. FUGITIVE ROCK OR MULCH WILL BE REMOVED FROM ADJACENT ROADWAYS DAILY OR MORE FREQUENTLY AS NECESSARY.
3. CONSTRUCTION ENTRANCE MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF GRADING OPERATIONS ON THE SITE.
4. THE ENTRANCE MUST BE MAINTAINED IN PROPER CONDITION TO PREVENT TRACKING OF MUD OFF THE SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL ROCK, WOOD/MULCH, OR REMOVAL AND REINSTALLATION OF THE PAD.
5. THIS ENTRANCE WILL BE USED BY ALL VEHICLES ENTERING OR LEAVING THE PROJECT.
6. THE CONSTRUCTION ENTRANCE WILL BE REMOVED PRIOR TO THE PLACEMENT OF BITUMINOUS SURFACING.

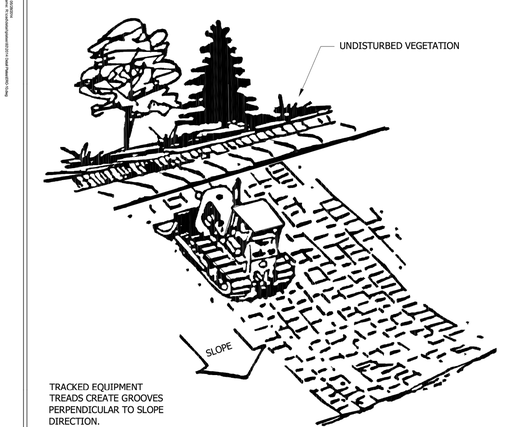
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ROCK CONSTRUCTION ENTRANCE

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-7



TRACKED EQUIPMENT TREADS CREATE GROOVES PERPENDICULAR TO SLOPE DIRECTION.

NOTE:
ALL SLOPES WITH A GRADE EQUAL TO OR STEEPER THAN 3:1 REQUIRE SLOPE TRACKING. SLOPES WITH A GRADE MORE GRADUAL THAN 3:1 REQUIRE SLOPE TRACKING IF THE STABILIZATION METHOD IS EROSION CONTROL BLANKET OR HYDROMULCH.

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www.stantec.com

SLOPE TRACKING

CHASKA, MINNESOTA

LAST REVISION: FEB 2004

PLATE NO. ERO-10

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg.No.

GALLERY CHASKA
CHASKA, MINNESOTA
EROSION & SEDIMENT CONTROL DETAILS
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY: AJA

DATE: 03/01/22

REVISIONS

03/23/22 CITY COMMENTS

CAD FILE: 23973-ERD

PROJECT NO.: 23973

C3.3

Plotted: Mon, Mar 28, 2022 - 10:58:00 AM
Saved: 3/28/2022 10:57:59 AM
By: Andrew Johnson
File Name: C:\Users\andrew.johnson\Documents\R_Acme_Tools_23973_ERD_andrew.johnson.rvt



LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING OVERHEAD POWER LINE
- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING CONTOUR
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION
- EXISTING TREELINE/TREES
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED PERFORATED DRAINTILE
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED FILTRATION BASIN

STANDARD GRADING NOTES:

1. SPECIFICATIONS WHICH APPLY ARE THE MOST RECENT EDITIONS OF THE MUNICIPALITY IN WHICH THE WORK IS LOCATED AND THE MINNESOTA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY CONSTRUCTION UNLESS MODIFIED HEREIN ON THESE CONTRACT DOCUMENTS.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UTILIZE THE "GOPHER STATE ONE CALL" EXCAVATION NOTICE SYSTEM AS REQUIRED UNDER MINNESOTA STATUTE CHAPTER 216D. CALL 811 OR SUBMIT A TICKET AT gopherstateonecall.org AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.
3. GRADING CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION.
4. ALL CONSTRUCTION AS CALLED FOR ON THESE CONTRACT DOCUMENTS SHALL BE PERFORMED IN ACCORDANCE WITH ALL OSHA REQUIREMENTS.
5. ALL LOT AND EASEMENT DIMENSIONS ARE SUBJECT TO FINAL PLAT.
6. IT IS THE RESPONSIBILITY OF THE GRADING CONTRACTOR TO DISPOSE OFF-SITE ALL TREES, STUMPS, BRUSH, OR OTHER DEBRIS THAT EXISTS WITHIN THE CONSTRUCTION AREAS. TREES TO REMAIN SHALL BE DESIGNATED BY THE ENGINEER.
7. THE GRADING CONTRACTOR SHALL SCHEDULE THE SOILS ENGINEER SO THAT CERTIFICATION OF ALL CONTROLLED FILLS CAN BE FURNISHED TO THE OWNER DURING AND UPON COMPLETION OF THE PROJECT.
8. DENSITY TESTS SHALL BE TAKEN TO EVALUATE THE COMPACTION WITHIN THE STREETS, TRAVEL WAYS OR PARKING LOTS. WITHIN THE UPPER 3 FEET OF STREET, TRAVEL WAYS OR PARKING LOT SUBGRADE, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN ONE PERCENTAGE POINT OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 100% OF STANDARD PROCTOR DENSITY BE PROVIDED. IN AREAS BELOW THE UPPER THREE FEET OF SUBGRADE OF THE STREETS, TRAVEL WAYS OR PARKING LOTS, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN THREE PERCENTAGE POINTS OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY BE PROVIDED. THE GRADING TOLERANCE FOR THESE AREAS SHALL BE WITHIN 0.1'±.
9. LOT GRADING AND/OR THE PREPARATION OF BUILDING PADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE GRADING TOLERANCE SHALL BE 0.30'±. ALL EARTHWORK OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE HUD-FHA DATA SHEET 79G "LAND DEVELOPMENT WITH CONTROLLED EARTHWORK", PROVIDING FOR A MINIMUM OF 95% STANDARD DENSITY, OR AS OTHERWISE SPECIFIED BY THE GEO-TECHNICAL ENGINEER.
10. IN AREAS WHERE RETAINING WALLS ARE PROPOSED ON CONTROLLED FILL AREAS, A MINIMUM 95% STANDARD DENSITY NEEDS TO BE ATTAINED WHERE FILL THICKNESS EXCEEDS 10' BELOW WALL FOUNDATION ELEVATIONS, A HIGHER MINIMUM OF 98% SHALL BE ATTAINED
11. BUILDING PADS SHOWN ON EACH LOT ARE TYPICAL ONLY. THE DEPTH OF THE PAD FROM FRONT TO BACK SHALL BE GRADED THROUGHOUT THE FULL WIDTH OF THE LOT OR AS NECESSARY TO ALLOW FOR CONSTRUCTION OF A BUILDING AT THE MINIMUM SIDE YARD SETBACKS. (REFER TO THE PLANS FOR SPECIFIC SETBACK DISTANCES.) IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED WITHIN A PROPOSED BUILDING PAD THAT CANNOT BE CORRECTED OR REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF THE CONDITIONS AND TO LOCATE THE LIMITS OF THE UNSUITABLE AREAS.
12. THE SITE GRADING TOLERANCE FOR THE SITE SHOULD BE ±0.1' FOR STREETS AND ±0.30' FOR LANDSCAPED/OPEN AREAS.
13. TOPSOIL SHALL BE RE-SPREAD AT A MINIMUM DEPTH OF 6" ON ALL DISTURBED AREAS TO BE VEGETATED.

SPECIFIC GRADING NOTES:

1. THE EXISTING TOPOGRAPHY AND CONTOUR ELEVATIONS ON THE PLANS WERE PROVIDED BY MNTOPO LIDAR ON FEBRUARY 21, 2022. THE DEGREE OF ACCURACY OF THE EXISTING CONTOURS SHOWN ON THE PLAN IS EQUAL TO ± ONE HALF THE CONTOUR INTERVAL. ADDITIONAL TOPOGRAPHY TO SUPPLEMENT THE LIDAR TO BE PROVIDED UPON SNOW MELT.

811 Know what's below. Call 811 before you dig.

N

SCALE IN FEET
0 60 120 180
1"=60'

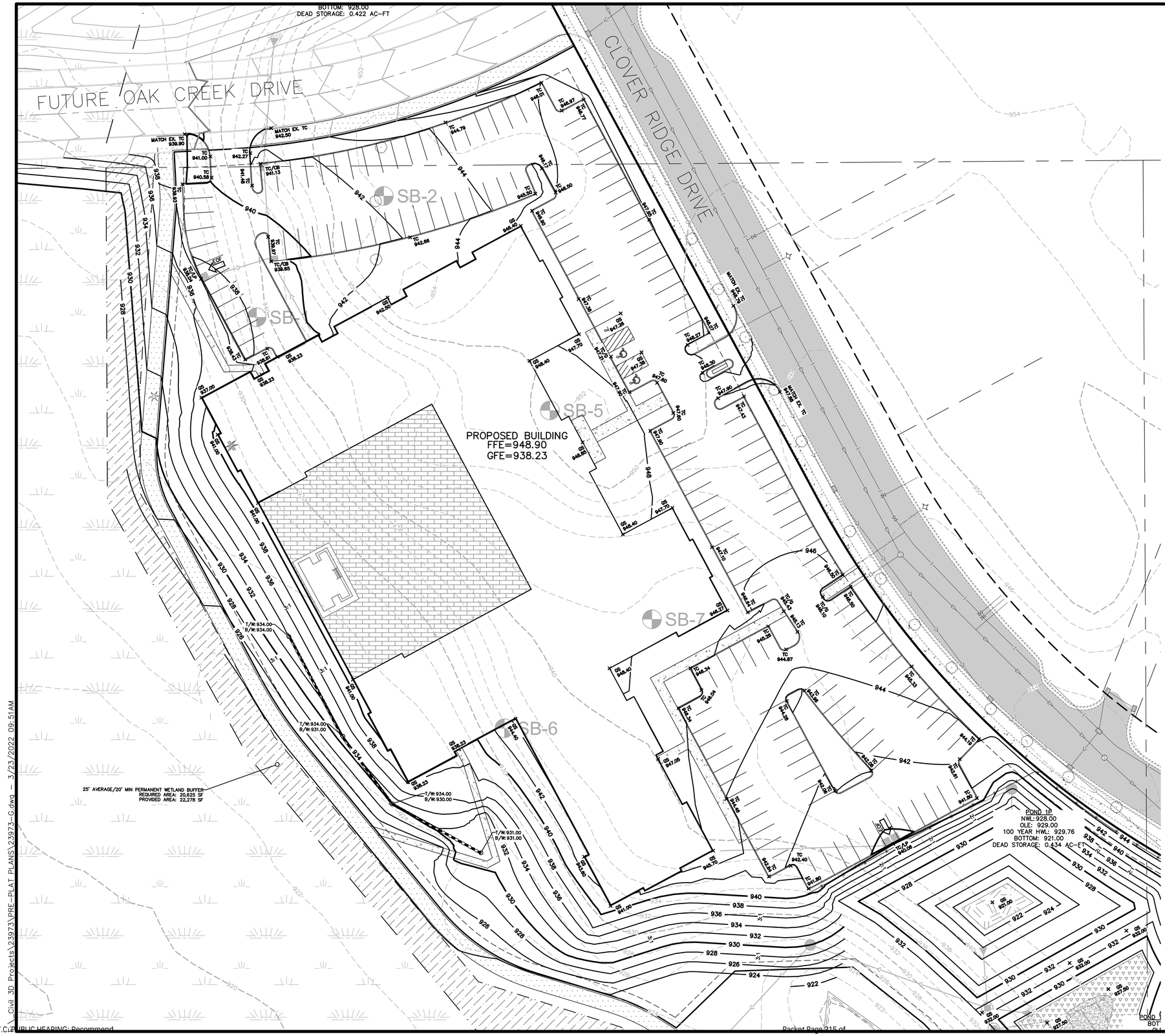
James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg.No.

GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY GRADING & DRAINAGE PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
AJA
DATE
03/01/22
REVISIONS
03/23/22 CITY COMMENTS
CAD FILE
23973-G
PROJECT NO.
23973
C4.0

Civil 3D Projects\23973\PRE-PLAT PLANS\23973-G.dwg - 3/23/2022 09:51AM



LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
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- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING CONTOUR
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION
- EXISTING TREELINE/TREES
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
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- PROPOSED RETAINING WALL
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED FILTRATION BASIN

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4. ALL CONSTRUCTION AS CALLED FOR ON THESE CONTRACT DOCUMENTS SHALL BE PERFORMED IN ACCORDANCE WITH ALL OSHA REQUIREMENTS.
5. ALL LOT AND EASEMENT DIMENSIONS ARE SUBJECT TO FINAL PLAT.
6. IT IS THE RESPONSIBILITY OF THE GRADING CONTRACTOR TO DISPOSE OFF-SITE ALL TREES, STUMPS, BRUSH, OR OTHER DEBRIS THAT EXISTS WITHIN THE CONSTRUCTION AREAS. TREES TO REMAIN SHALL BE DESIGNATED BY THE ENGINEER.
7. THE GRADING CONTRACTOR SHALL SCHEDULE THE SOILS ENGINEER SO THAT CERTIFICATION OF ALL CONTROLLED FILLS CAN BE FURNISHED TO THE OWNER DURING AND UPON COMPLETION OF THE PROJECT.
8. DENSITY TESTS SHALL BE TAKEN TO EVALUATE THE COMPACTION WITHIN THE STREETS, TRAVEL WAYS OR PARKING LOTS. WITHIN THE UPPER 3 FEET OF STREET, TRAVEL WAYS OR PARKING LOT SUBGRADE, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN ONE PERCENTAGE POINT OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 100% OF STANDARD PROCTOR DENSITY BE PROVIDED. IN AREAS BELOW THE UPPER THREE FEET OF SUBGRADE OF THE STREETS, TRAVEL WAYS OR PARKING LOTS, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN THREE PERCENTAGE POINTS OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY BE PROVIDED. THE GRADING TOLERANCE FOR THESE AREAS SHALL BE WITHIN 0.1'±.
9. LOT GRADING AND/OR THE PREPARATION OF BUILDING PADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE GRADING TOLERANCE SHALL BE 0.30'±. ALL EARTHWORK OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE HUD-FHA DATA SHEET 779D "LAND DEVELOPMENT WITH CONTROLLED EARTHWORK", PROVIDING FOR A MINIMUM OF 95% STANDARD DENSITY, OR AS OTHERWISE SPECIFIED BY THE GEO-TECHNICAL ENGINEER.
10. IN AREAS WHERE RETAINING WALLS ARE PROPOSED ON CONTROLLED FILL AREAS, A MINIMUM 95% STANDARD DENSITY NEEDS TO BE ATTAINED WHERE FILL THICKNESS EXCEEDS 10' BELOW WALL FOUNDATION ELEVATIONS, A HIGHER MINIMUM OF 98% SHALL BE ATTAINED
11. BUILDING PADS SHOWN ON EACH LOT ARE TYPICAL ONLY. THE DEPTH OF THE PAD FROM FRONT TO BACK SHALL BE GRADED THROUGHOUT THE FULL WIDTH OF THE LOT OR AS NECESSARY TO ALLOW FOR CONSTRUCTION OF A BUILDING AT THE MINIMUM SIDE YARD SETBACKS. (REFER TO THE PLANS FOR SPECIFIC SETBACK DISTANCES.) IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED WITHIN A PROPOSED BUILDING PAD THAT CANNOT BE CORRECTED OR REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF THE CONDITIONS AND TO LOCATE THE LIMITS OF THE UNSUITABLE AREAS.
12. THE SITE GRADING TOLERANCE FOR THE SITE SHOULD BE ±0.1' FOR STREETS AND ±0.30' FOR LANDSCAPED/OPEN AREAS.
13. TOPSOIL SHALL BE RE-SPREAD AT A MINIMUM DEPTH OF 6" ON ALL DISTURBED AREAS TO BE VEGETATED.

SPECIFIC GRADING NOTES:

1. THE EXISTING TOPOGRAPHY AND CONTOUR ELEVATIONS ON THE PLANS WERE PROVIDED BY MNTOPO LIDAR ON FEBRUARY 21, 2022. THE DEGREE OF ACCURACY OF THE EXISTING CONTOURS SHOWN ON THE PLAN IS EQUAL TO ± ONE HALF THE CONTOUR INTERVAL. ADDITIONAL TOPOGRAPHY TO SUPPLEMENT THE LIDAR TO BE PROVIDED UPON SNOW MELT.

811 Know what's below. Call 811 before you dig.

N

SCALE IN FEET
0 30 60 90
1 inch = 30 feet

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY GRADING & DRAINAGE PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
JEK

DATE
03/01/22

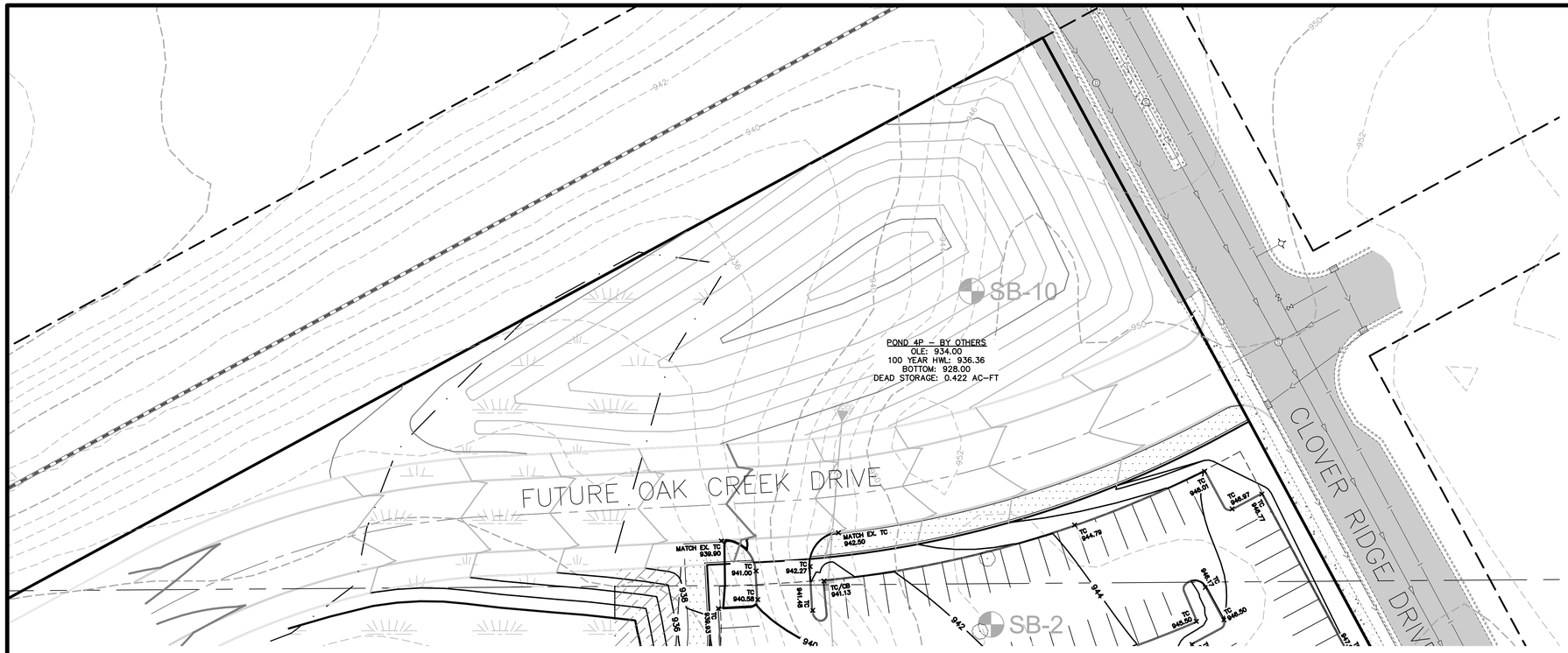
REVISIONS
03/23/22 CITY COMMENTS

CAD FILE
23973-G

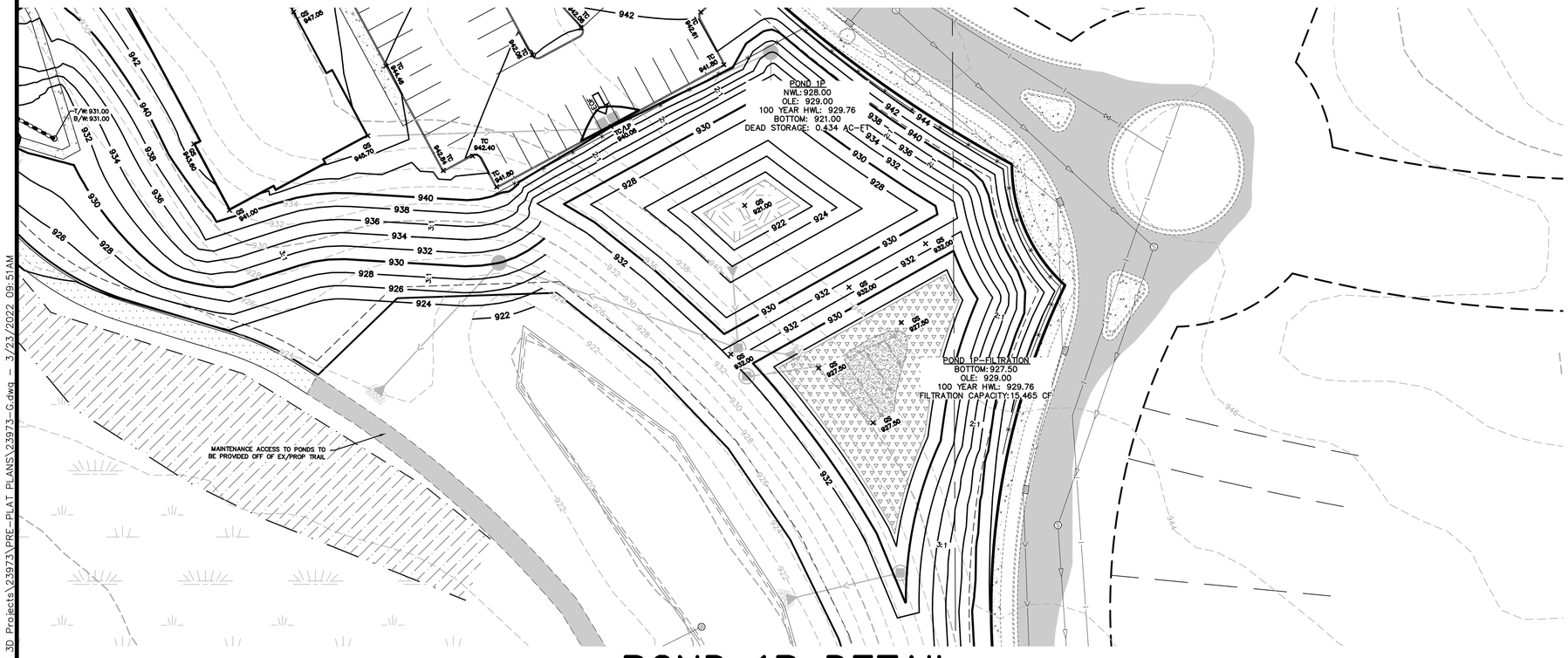
PROJECT NO.
23973

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POND 4P DETAIL



POND 1P DETAIL

LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING OVERHEAD POWER LINE
- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING CONTOUR
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION
- EXISTING TREELINE/TREES
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED PERFORATED DRAINTILE
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED FILTRATION BASIN

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GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY POND GRADING PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
EPF

DATE
03/01/22

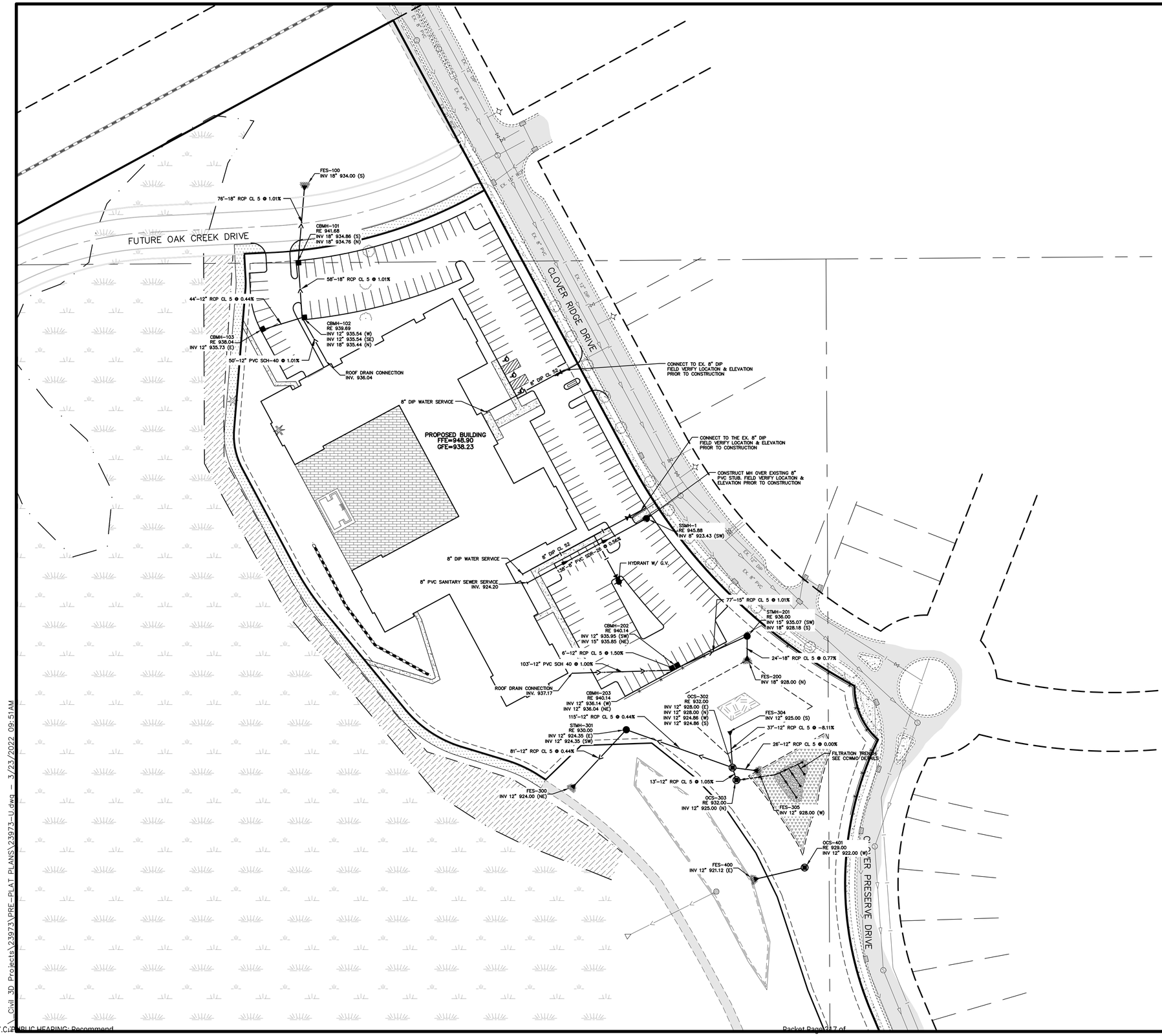
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CAD FILE
23973-G

PROJECT NO.
23973

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LEGEND

- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING OVERHEAD POWER LINE
- EXISTING LIGHT POLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL
- EXISTING TV PEDESTAL
- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING WETLAND EDGE
- EXISTING SOIL BORING LOCATION (SB-1)
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED PERFORATED DRAINTILE
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED FILTRATION BASIN

GENERAL UTILITY CONSTRUCTION NOTES:

1. SPECIFICATIONS: THE WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF CHASKA ENGINEERING GUIDELINES AND STANDARD DETAIL PLATES FOR STREET AND UTILITY CONSTRUCTION.
2. EXISTING FACILITIES: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF ALL EXISTING UTILITIES BEFORE STARTING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO SANITARY AND STORM SEWER, WATERMAIN, NATURAL GAS, ELECTRIC, TELEPHONE AND CABLE TELEVISION SERVICES.

   THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICT BETWEEN THE EXISTING UTILITIES AND THE PROPOSED CONSTRUCTION. THE ENGINEER IN COOPERATION WITH THE UTILITY COMPANIES, SHALL DETERMINE THE NECESSITY FOR ANY RELOCATION OF THESE FACILITIES.

   THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND FACILITIES SO THAT THEY WILL CONTINUE TO FUNCTION IN THEIR PROPER MANNER BOTH DURING CONSTRUCTION AND IN THE FUTURE. ANY SUPPORTING STRUCTURE THAT MAY BE REQUIRED BECAUSE OF THE CONTRACTOR'S OPERATION SHALL BE PROVIDED BY THE CONTRACTOR.

   THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY CONDITIONS SUCH AS SAND IN MANHOLES OR VALVE BOXES EXISTING PRIOR TO THE CONTRACTOR'S EXCAVATION, ONCE EXCAVATION HAS COMMENCED, IT WILL BE ASSUMED THAT ALL DAMAGE TO UNDERGROUND UTILITIES HAS BEEN CAUSED BY THE CONTRACTOR'S OPERATIONS AND IT WILL BE HIS RESPONSIBILITY TO MAKE THE NECESSARY REPAIRS.
3. CONTRACTOR RESPONSIBILITIES:
   THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR RECEIVING WATER FROM PUBLIC OR PRIVATE SOURCES AND SECURE NECESSARY PERMITS AND PAY REGULAR CHARGES. ALL CITY WATER SHALL BE METERED. DISPOSAL OF ANY WASTEWATER OR ANY TEST WATER INTO THE CITY SANITARY SEWER SYSTEM IS SUBJECT TO CITY CHARGE. CONTRACTORS ARE NOT TO OPERATE GATE VALVES OR HYDRANTS ON CITY WATER SUPPLY.

   THE CITY ENGINEER AND THE ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCING WORK. CONTRACTORS SHALL BE SUBJECT TO SHUT DOWN IF PROPER NOTIFICATION IS NOT GIVEN TO THE ENGINEER.

   CITY STREETS THAT ARE UTILIZED FOR INGRESS TO OR EGRESS FROM THE CONSTRUCTION SITE SHALL BE KEPT FREE OF DIRT AND OTHER DEBRIS RESULTING FROM SAID CONSTRUCTION. COST FOR THIS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

   THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ADEQUATE STORM DRAINAGE PROTECTION OF THE SITE IN ORDER TO PREVENT EROSION AND SILTING OF ON-SITE AND OFF-SITE AREAS. THIS SHALL BE ACCOMPLISHED BY PLACEMENT OF HAY BALES OR FILTER FABRIC FENCING AROUND THE DRAINAGE INLETS AND OUTLETS AND BY CONSTRUCTION OF DITCHES, BERMS, DEBRIS BASINS, FILTER FABRIC FENCING AND BY ANY OTHER ON-SITE PROTECTION AS DETERMINED BY THE ENGINEER. UNLESS SPECIFICALLY CALLED OUT AS A BID ITEM ON THE BID FORM, ANY TEMPORARY DITCHING, CULVERTS, HAY BALES, AND FILTER FABRIC FENCE NECESSARY TO ACCOMPLISH THIS SHALL BE AT THE CONTRACTOR'S EXPENSE.

   IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AND LEAVE UNDISTURBED THOSE MARKERS OR MONUMENTS SET FOR THE SUBDIVISION OF LAND.

   IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UTILIZE THE "GOPHER STATE ONE CALL" EXCAVATION NOTICE SYSTEM AS REQUIRED UNDER MINNESOTA STATUTE CHAPTER 216D. CALL 811 OR SUBMIT A TICKET AT gopherstateonecall.org AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.
4. COMPACTION: DENSITY TESTS SHALL BE TAKEN ON ALL TRENCHES WITHIN THE STREET CROSS SECTION AND THE PAD AREAS TO EVALUATE THE COMPACTION ACHIEVED DURING UTILITY CONSTRUCTION. WITHIN THE UPPER 3 FEET OF STREET SUBGRADE THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN ONE PERCENTAGE POINT OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 100% OF STANDARD PROCTOR DENSITY (AASHTO T-99) BE PROVIDED. WITHIN UTILITY TRENCHES IN OPEN SPACE AREAS (PAD AREAS) AND AREAS BELOW THE UPPER 3 FEET OF STREET SUBGRADE, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN THREE PERCENTAGE POINTS OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY BE PROVIDED. THE SURFACE OF ALL UTILITY TRENCHES SHALL BE FINISHED GRADED TO THE ELEVATIONS AS STAKED BY THE ENGINEER TO WITHIN A TOLERANCE OF ±0.3' IN OPEN SPACE AREAS AND ± 0.1' WITHIN STREET RIGHT OF WAYS. THE DENSITY WILL BE TESTED BY AN APPROVED TESTING LABORATORY. AN APPROVED TESTING METHOD WHICH UTILIZES A NUCLEAR DENSITY METER MAY BE USED FOR THE DENSITY TESTS. THE LOCATION OF THE TESTS WILL BE AT THE DIRECTION OF THE ENGINEER.

   THE OWNER SHALL BEAR ALL COSTS OF THE TESTING. FAILURE TO MEET THE COMPACTION REQUIREMENTS OUTLINED IN THIS SECTION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. ALL COSTS FOR ANY RE-TESTING ASSOCIATED WITH ANY CORRECTIVE WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
5. ALL PVC WATERMAIN TO BE INSTALLED WITH 8.5' MINIMUM COVER. ALL DIP WATERMAIN TO BE INSTALLED WITH 7.5' MINIMUM COVER.
6. ALL 8" WATERMAIN TO BE CONSTRUCTED OF CLASS C900 PVC W/ TRACER WIRE.
7. SANITARY SEWER PIPE TYPE & CLASS AS FOLLOWS:
   a. 0' – 18' DEEP = PVC SDR 35
   b. 18' – 28' DEEP = PVC SDR 26
   c. 28 – 32' DEEP = PVC SDR 18, AWWA C900
   d. 32' + DEEP = POLYBOND LINED DIP, ASTM A746

Know what's below. Call 811 before you dig.

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SCALE IN FEET
0 50 100 150
1 inch = 50 feet

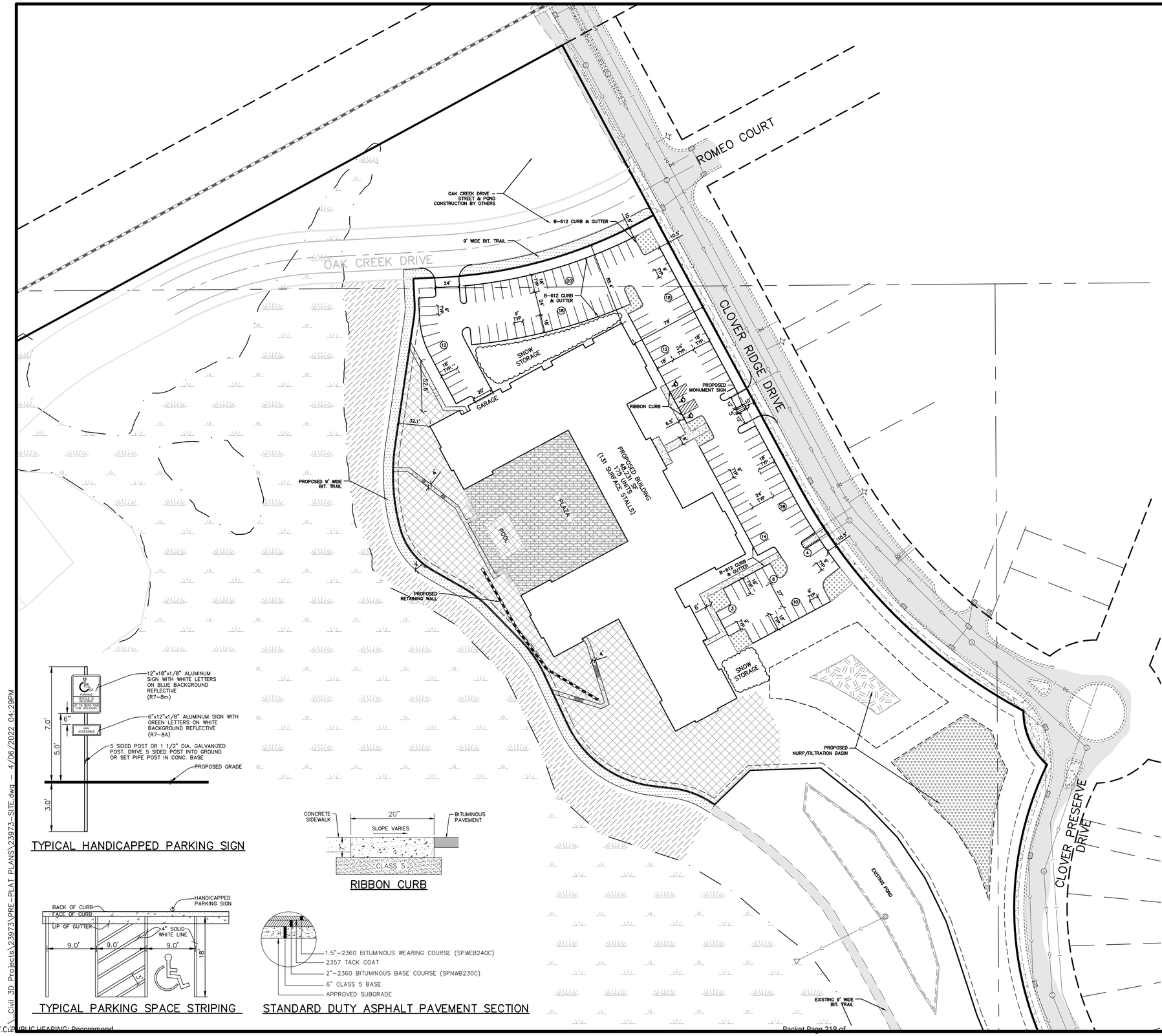
James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
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PHONE: (952)890-6044 FAX: (952)890-6244

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ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY UTILITY PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY JEK
DATE 03/01/22
REVISIONS
03/23/22 CITY COMMENTS
CAD FILE 23973-U
PROJECT NO. 23973
C5.0

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LEGEND

- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
- PROPOSED SEDIMENT BASIN
- PROPOSED FILTRATION BASIN
- PROPOSED PLANTING ISLAND AREA
- PROPOSED OPEN SPACE AREA

NOTE – DIMENSIONS ARE SHOWN TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

ABBREVIATIONS:
TYP=TYPICAL
BOC=BACK OF CURB

SITE DATA

GROSS PROJECT AREA	27.64 AC/1,203,998 SF
LOT AREA	5.62 AC/244,885 SF
OPEN SPACE AREA (INCL. PLAZA)	1.25 AC/54,256 SF
•54,256 SF / 244,885 SF = 22.16%	

175 UNITS
182 GARAGE STALLS
131 SURFACE STALLS
313 TOTAL STALLS = 1.79:1 PARKING RATIO

128 STANDARD PARKING STALLS
3 ADA STALLS
131 TOTAL STALLS (9X18) = 21,222 SF

PLANTING ISLAND AREA = 2,415 SF = 11.4%

REQUIRED (PROVIDED) BUILDING SETBACKS

FRONT	30 FEET (79 FEET)
SIDE (INTERIOR)	20 FEET
SIDE (STREET)	20 FEET (85.4 FEET)
REAR	20 FEET (25.7 FEET)
WETLAND	30 FEET
RAILROAD	50 FEET

REQUIRED PARKING SETBACKS

RIGHT OF WAY	10 FEET
INTERIOR	5 FEET

TYPICAL HANDICAPPED PARKING SIGN

RIBBON CURB

TYPICAL PARKING SPACE STRIPING

STANDARD DUTY ASPHALT PAVEMENT SECTION

N

SCALE IN FEET
0 50 100 150
1 inch = 50 feet

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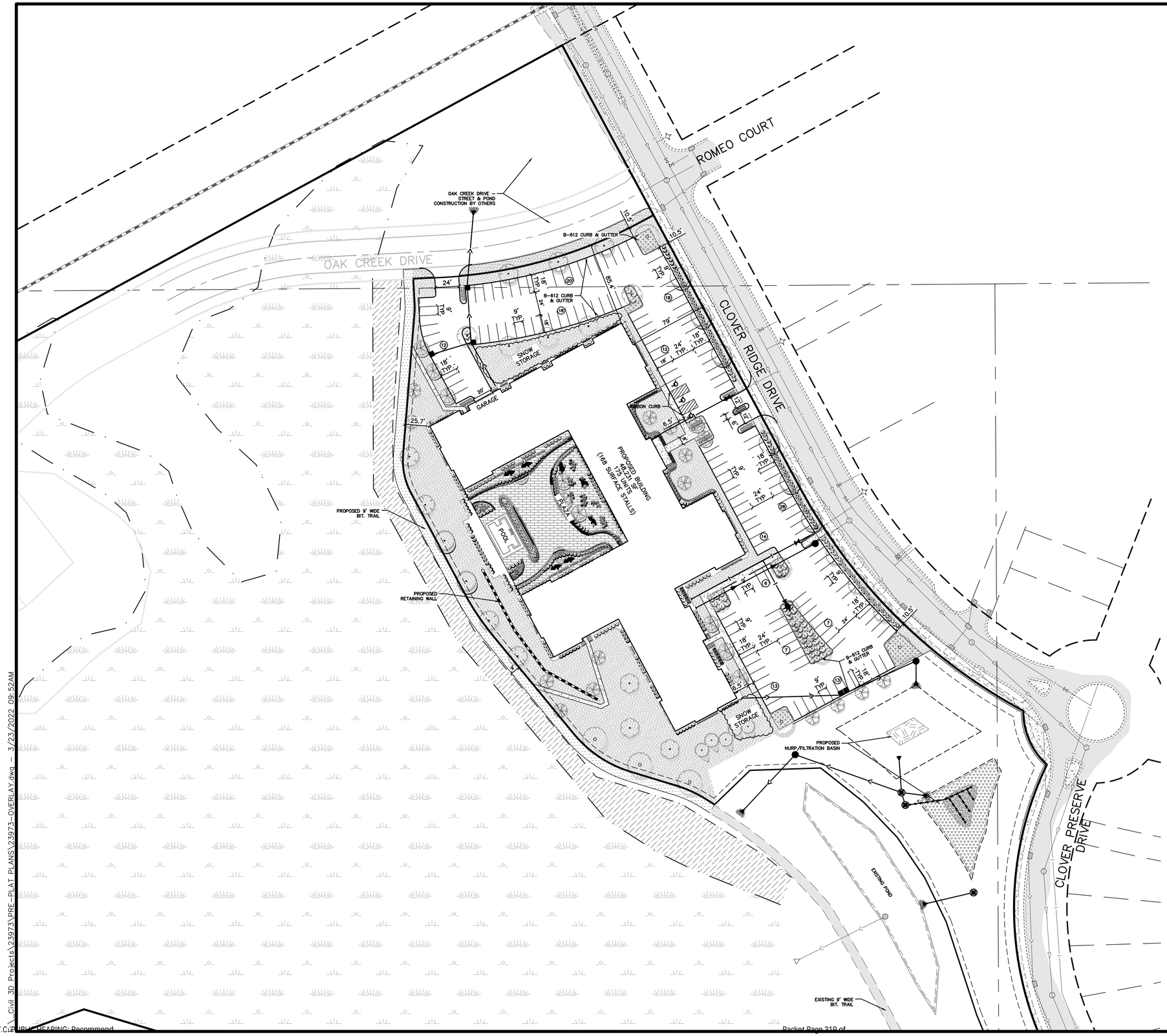
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GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY SITE PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY	EPF
DATE	03/01/22
REVISIONS	
03/23/22 CITY COMMENTS	
04/06/22 OWNER COMMENTS	
CAD FILE	23973-SITE
PROJECT NO.	23973
	C6.0

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LEGEND

- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE
- PROPOSED ASPHALT SURFACE
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- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER

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ABBREVIATIONS:
TYP=TYPICAL
BOC=BACK OF CURB

SITE DATA

GROSS PROJECT AREA	27.64 AC/1,203,998 SF
LOT AREA	5.58 AC/243,065 SF
OPEN SPACE AREA (INCL. PLAZA)	1.18 AC/51,210 SF
•51,210 SF / 243,065 SF = 21.07%	

175 UNITS
182 GARAGE STALLS
168 SURFACE STALLS
350 TOTAL STALLS = 2:1 PARKING RATIO

165 STANDARD PARKING STALLS
3 ADA STALLS
168 TOTAL STALLS (9X18) = 27,216 SF

PLANTING ISLAND AREA = 3,789 SF = 13.9%

REQUIRED (PROVIDED) BUILDING SETBACKS

FRONT	30 FEET (79 FEET)
SIDE (INTERIOR)	20 FEET
SIDE (STREET)	20 FEET (85.4 FEET)
REAR	20 FEET (25.7 FEET)
WETLAND	30 FEET
RAILROAD	50 FEET

REQUIRED PARKING SETBACKS

RIGHT OF WAY	10 FEET
INTERIOR	5 FEET

N

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Date:03/01/2022 Reg.No.

GALLERY CHASKA
CHASKA, MINNESOTA
PRELIMINARY OVERLAY PLAN
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
EPF

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03/01/22

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03/23/22 CITY COMMENTS

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PROJECT NO.
23973

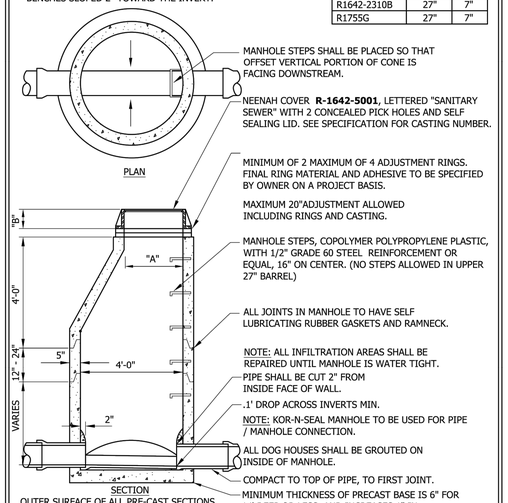
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PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R1642-2310B	27"	7"
R1755G	27"	7"



OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .

Stantec
2335 Highway 36 W
St. Paul, MN 55113
www.stantec.com

SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SAN-1

NOTES: CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

- PROVIDE POLYWRAP AROUND ALL WATERMAIN
- 7.5' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.
- RESTRAIN TEE AND VALVE WITH EPOXY COATED MEGALUG (OR EQUAL) THRUST RESTRAINTS.

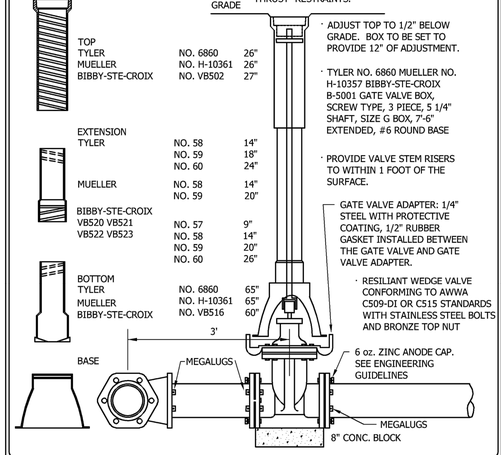
DROP LID
TYLER NO. 6860
MUELLER NO. H-10361
BIBBY-STE-CROIX NO. B-5160

TOP
TYLER NO. 6860 26"
MUELLER NO. H-10361 26"
BIBBY-STE-CROIX NO. VB502 27"

EXTENSION
TYLER NO. 58 14"
NO. 59 18"
NO. 60 24"
MUELLER NO. 58 14"
NO. 59 20"
BIBBY-STE-CROIX
VB520 VB521 NO. 57 9"
VB522 VB523 NO. 58 14"
NO. 59 20"
NO. 60 26"

BOTTOM
TYLER NO. 6860 65"
MUELLER NO. H-10361 65"
BIBBY-STE-CROIX NO. VB516 60"

BASE



- ADJUST TOP TO 1/2" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.
- TYLER NO. 6860 MUELLER NO. H-10357 BIBBY-STE-CROIX B-5001 GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 7'-6" EXTENDED, #6 ROUND BASE
- PROVIDE VALVE STEM RISERS TO WITHIN 1 FOOT OF THE SURFACE.

GATE VALVE ADAPTER: 1/4" STEEL WITH PROTECTIVE COATING, 1/2" RUBBER GASKET INSTALLED BETWEEN THE GATE VALVE AND GATE VALVE ADAPTER.

- RESILIANT WEDGE VALVE CONFORMING TO AWWA C509-DI OR C515 STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

6 oz. ZINC ANODE CAP. SEE ENGINEERING GUIDELINES

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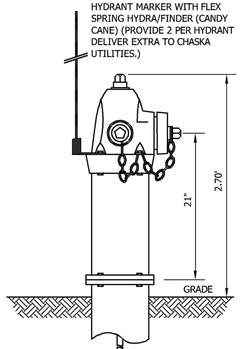
GATE VALVE AND BOX INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-1

HYDRANT MARKER WITH FLEX SPRING HYDRA/FINDER (CANDY CANE) (PROVIDE 2 PER HYDRANT DELIVER EXTRA TO CHASKA UTILITIES.)



ALL HYDRANT LEAD AND PIPE JOINTS SHALL BE RESTRAINED WITH TIE RODS AND EPOXY COATED MEGALUGS.

HYDRANT SHALL BE WATEROUS PACER WB-67-250 WITH 16" TRAFFIC BREAK OFF SECTION, AND EPOXY COATED BOOT.

HYDRANT SHALL BE FOR 8.0' BURY. WATERMAIN SHALL HAVE 7'-6" OF COVER.

PROVIDE A VENTED CAP ON ONE 2 1/2" NOZZLE.

CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

FOR VALVE BOX INSTALLATION SEE DETAIL PLATE NO. WAT-1.

RESTRAIN HYDRANT,VALVE,AND TEE WITH MEGALUG THRUST RESTRAINT (OR EQUAL)

PROVIDE POLYWRAP AROUND ALL WATERMAIN (GENERAL REQUIREMENTS) AND UP THE HYDRANT BARREL TO THE BREAK OFF FLANGE.

RESILIENT WEDGE VALVE CONFORMING TO AWWA C-509-DI STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

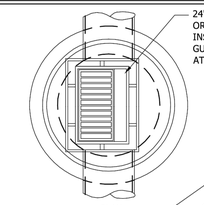
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WATEROUS PACER HYDRANT AND VALVE INSTALLATION

CHASKA, MINNESOTA

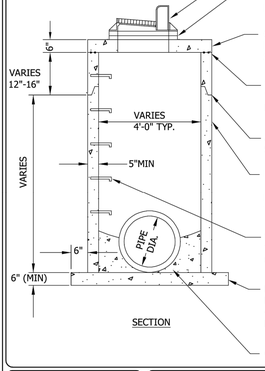
LAST REVISION: MARCH 2019

PLATE NO. WAT-2



24"X36" SLAB OPENING FOR NEENAH R3067V OR ESS. BROS. 330 HIGH CAPACITY OR EQUAL. INSTALL R3290L FOR DRIVEWAYS AND VALLEY GUTTERS. INSTALL R3290VB BI-DIRECTIONAL AT LOW POINTS. (VANE GRATE SHOWN)

DIMENSION FROM BACK OF CURB TO CENTER OF PIPE.
4' DIA. MH - 9" IN FROM BACK OF CURB
5' DIA. MH - 3" IN FROM BACK OF CURB
6' DIA. MH - 3" BEHIND BACK OF CURB
7' DIA. MH - 9" BEHIND BACK OF CURB
8' DIA. MH - 15" BEHIND BACK OF CURB



MORTAR BOLT HOLES IN BACK OF FRAME.

MINIMUM OF 2 MAXIMUM OF 4 CONCRETE ADJUSTMENT RINGS WITH FULL BED OF MORTAR BETWEEN EACH RING.

6" PRECAST REINFORCED CONCRETE SLAB. FOR 6' DIA. MANHOLE, AN 8" PRECAST SLAB IS REQUIRED.

TOP OF BARREL SECTION UNDER TOP SLAB TO HAVE FLAT TOP EDGE SEALED WITH 2 BEADS OF RAMNEK OR EQUAL.

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS.

PRECAST CONCRETE SECTION

DOGHOUSES SHALL BE GROUTED ON BOTH THE OUTSIDE AND INSIDE.

MANHOLE STEPS SHALL BE PLACED BELOW THE DOWNSTREAM CORNER OF THE OPENING NEAREST THE STREET.

MINIMUM SLAB THICKNESS, 6" TO 14' DEPTH. INCREASE THICKNESS 1" FOR EACH 4' OF DEPTH GREATHER THAN 14', AND REINFORCE WITH PER MNDOT STD 4011

GROUT BOTTOM

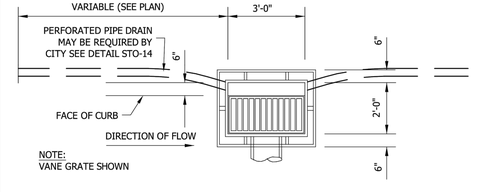
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TYPE II CATCHBASIN MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

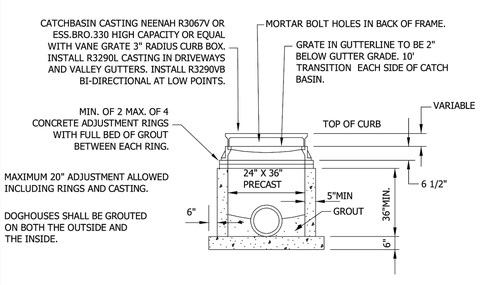
PLATE NO. STO-5



CATCHBASIN CASTING NEENAH R3067V OR ESS.BRO.330 HIGH CAPACITY OR EQUAL WITH VANE GRATE 3" RADIUS CURB BOX. INSTALL R3290L CASTING IN DRIVEWAYS AND VALLEY GUTTERS. INSTALL R3290VB BI-DIRECTIONAL AT LOW POINTS.

MORTAR BOLT HOLES IN BACK OF FRAME.

GRATE IN GUTTERLINE TO BE 2" BELOW GUTTER GRADE. 10' TRANSITION EACH SIDE OF CATCH BASIN.



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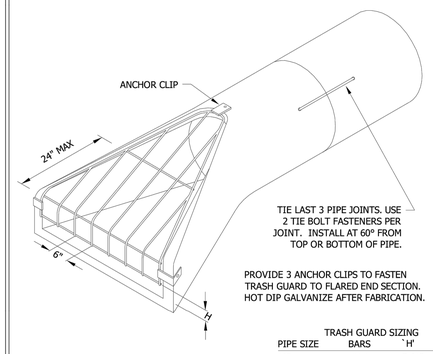
TYPE II CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-6

SEE CITY PLATE NO. STO-10 FOR RIPRAP PLACEMENT.



TIE LAST 3 PIPE JOINTS. USE 2 TIE BOLT FASTENERS PER JOINT. INSTALL AT 60° FROM TOP OR BOTTOM OF PIPE.

PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH GUARD TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.

TRASH GUARD SIZING

PIPE SIZE	BARS	`H'	BOLTS
12"	3/4"Ø	2 1/2"	5/8"
15"	3/4"Ø	3"	5/8"
18"	3/4"Ø	4"	5/8"
21"-24"	1"Ø	4"	3/4"
27"-36"	1"Ø	5"	3/4"
42"	1"Ø	6"	3/4"
48"-54"	1 1/4"Ø	6"	1"
60"-72"	1 1/4"Ø	7"	1"
78"-90"	1 1/4"Ø	8"	1"

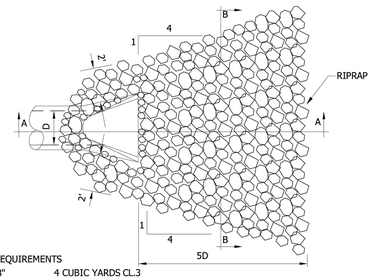
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FLARED END SECTION AND TRASH GUARD

CHASKA, MINNESOTA

LAST REVISION: FEB. 1995

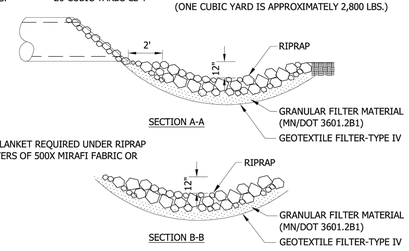
PLATE NO. STO-10



RIPRAP REQUIREMENTS

12" TO 18"	4 CUBIC YARDS CL.3
21" TO 27"	8 CUBIC YARDS CL.3
30" TO 36"	12 CUBIC YARDS CL.3
42" TO 48"	16 CUBIC YARDS CL.3
54" AND UP	20 CUBIC YARDS CL 4

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)



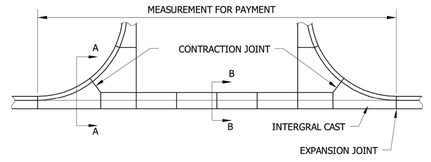
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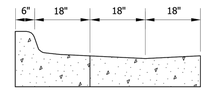
RIPRAP AT OUTLETS

CHASKA, MINNESOTA

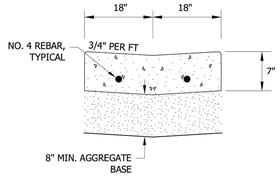
LAST REVISION: APRIL 2004

PLATE NO. STO-11





SECTION A-A
THRU B618 C&G



SECTION B-B
THRU
CONCRETE VALLEY GUTTER

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COMMERCIAL DRIVEWAY

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STR-3

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg.No.

GALLERY CHASKA
CHASKA, MINNESOTA
DETAILS
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY XXX

DATE 03/01/22

REVISIONS

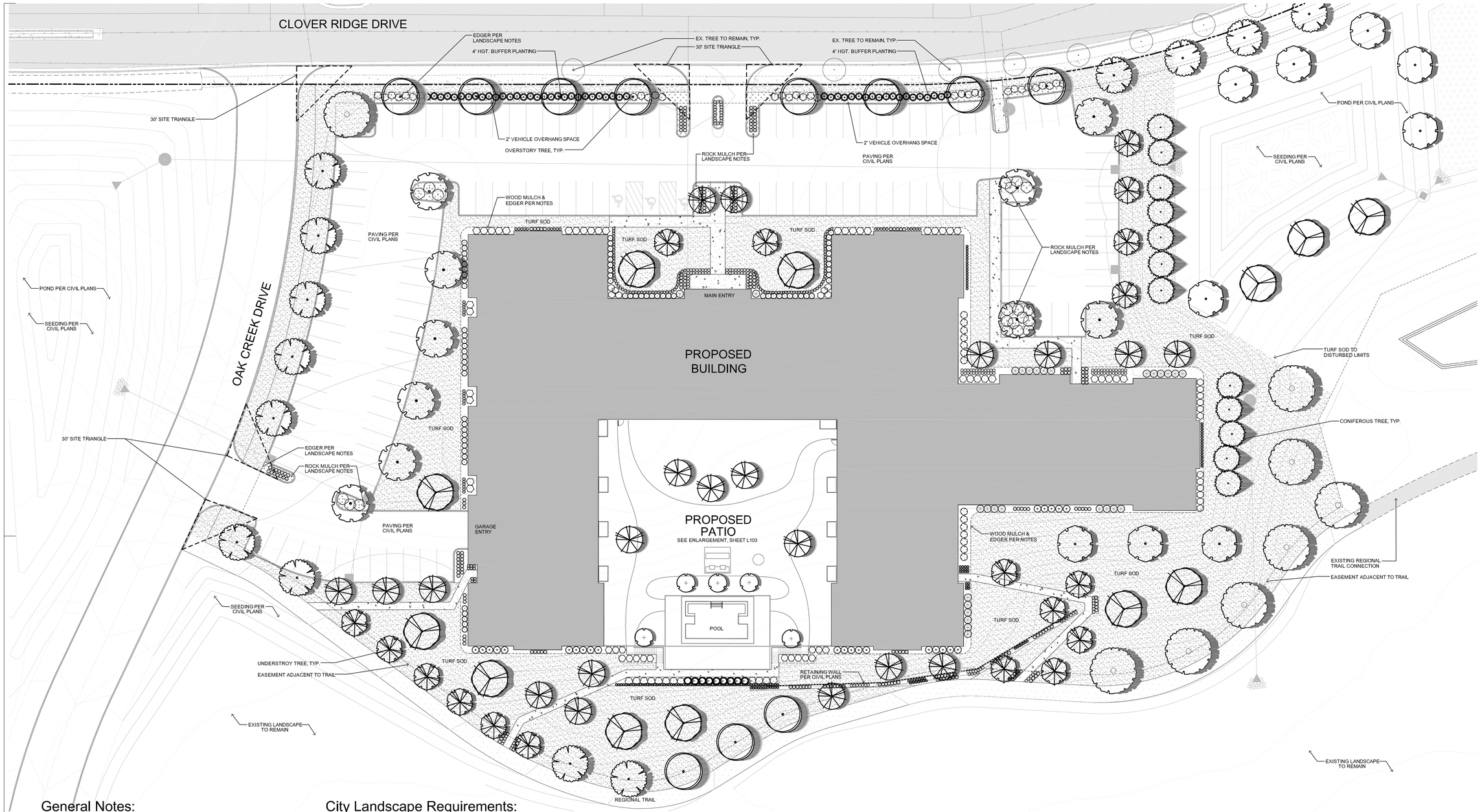
03/23/22 CITY COMMENTS

CAD FILE 23973-D

PROJECT NO. 23973

C7.0

Civil 3D Projects\23973\PRE-PLAT PLANS\23973-D.dwg - 3/23/2022 09:52AM



General Notes:

1. Refer to Sheet L102 for Notes, Requirements, and Planting Details
2. See Civil Engineer's plans for site plan layout and dimensions.
3. Contractor to coordinate all work in the city right-of-way with Carver County & City of Chaska Public Works Departments.
4. Protect existing trees to remain from damage during construction.
5. Place a minimum of 4" topsoil or slope dressing on all areas disturbed by construction, including right-of-way boulevards, unless specified otherwise.

Landscape Legend:

Turf Sod

Rock Mulch in Parking Lot Islands Per Landscape Notes

City Landscape Requirements:

Proposed Site & Building Data

Site Perimeter:	TBD
Building Footprint:	48,237 sq ft
Stories:	4 Stories
Gross Square Footage:	192,948 sq ft

Credit for Existing Significant Trees

Total caliper inches owed may be reduced by the total number of healthy significant inches to remain.

Significant Trees:
- Coniferous 12'+
- Overstory 10"+
- Understory 6"+

Total Credits: 0

Landscape Calculations

Overstory Tree Inches Owed:	Gross Square Footage / 320 192,948 / 320 603 Caliper Inches
Minimum Overstory Tree Size:	40% at 2.5" = 241 Caliper Inches = 96 Trees 20% at 3" = 120 Caliper Inches = 40 Trees 10% at 3.5" = 60 Caliper Inches = 17 Trees 10% at 4" = 60 Caliper Inches = 17 Trees 10% at 4.5" = 60 Caliper Inches = 17 Trees 10% at 5" = 60 Caliper Inches = 17 Trees
Total Trees Proposed:	127 Trees
Total Inches Proposed:	417 Caliper Inches
Shrubs Owed:	Bldg. Footprint / 300 48,237 / 300 161 Shrubs at 5 gal.
Total 5 gal. Shrubs Proposed:	453 Shrubs at 5 gal.

Parking Island Area

Parking Island Calculation (needs to meet 10% of parking lot)

Planting Island Area = 3,789 SF = 13.9%

Additional Requirements & Notes

Parking Lot Screening: 4' Height, 75% Opacity Year-Round

Overstory Tree Diversity: No more than 50% same species

Overstory Native Preference: All plantings shown are native or adapted natives

Coniferous Tree Height to Caliper Conversion: Hgt / 2.4 = Cal.

Site Triangles: 30'

0 25' 50'

SCALE: 1" = 25'-0"

NORTH

811 Know what's below. Call before you dig.

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Bloomington, MN 55425
tel: (612) 879-6000
fax: (612) 879-6666
www.kaaswilson.com

Civil Engineering:
James R Hill, Inc.
2999 West County Rd. 42, Suite 100
Burnsville, MN 55306
Phone: (952) 890-6044

Landscape Architect:
CALYX DESIGN GROUP
475 Cleveland Ave. N. Suite 101A
Saint Paul, MN 55104
(651) 788-9018

Clover Ridge Apartments

Chaska, MN

Prepared for:
Chase Real Estate, Inc.
2140 Co. Rd. 42 West
Burnsville, MN 55337

Project Number	22110
Date	03/01/2022
Drawn By	HL
Checked By	BH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the state of Minnesota.

Benjamin D. Hoelscher
Typed Name

PRELIMINARY

Signature

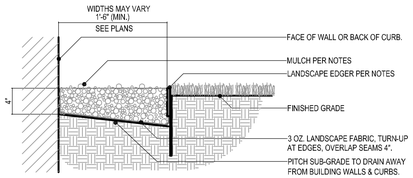
Registration Number

Date

Rev. No.	Revision	Date
1	City Resubmittal	3-23-2022
2	City Resubmittal	4-06-2022

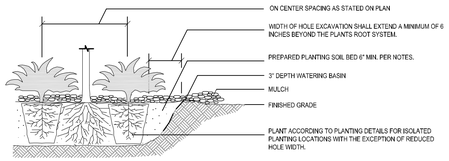
LANDSCAPE PLAN

L101

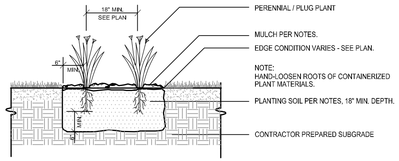


NOTES: SEE GRADING PLAN FOR CROSS SLOPE DIRECTION.
PLANT BED WIDTH VARIES, SEE PLAN.
SUBMIT ROCK MULCH SAMPLE FOR OWNER APPROVAL.
LANDSCAPE FABRIC TO BE FREE-DRAINING.

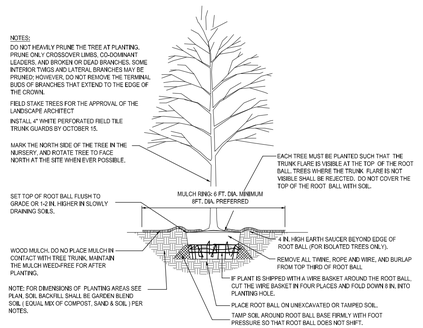
1 MULCH DETAIL
L102 NOT TO SCALE



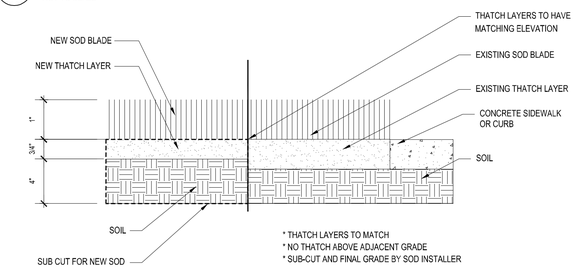
2 TYP. SHRUB PLANTING - SECTION
L102 NOT TO SCALE



3 TYP. PERENNIAL PLANTING DETAIL
L102 NOT TO SCALE



4 DECIDUOUS TREE PLANTING - SECTION
L102 NOT TO SCALE



5 NEW SOD TO EXISTING SOD DETAIL
L102 NOT TO SCALE

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Landscape Notes + Requirements:

1. Tree saucer for individual trees outside of a plant bed to be four inches (4") depth Western Red Cedar wood mulch for trees outside of a plant bed. Install per tree planting detail. Do not place mulch against tree trunk. Remove wire and burlap from top third of root ball before final soil back-fill and mulch. Dyed or Colorized mulch is strictly prohibited.

2. Refer to civil plan sheets for grading, drainage, site dimensions, survey, tree removal, proposed utilities & erosion control.

3. All plant material shall comply with the latest edition of the American Standard for Nursery Stock, American Association of Nurserymen. Unless noted otherwise, deciduous shrubs shall have at least 5 canes at the specified shrub height. Plant material shall be delivered as specified. All deciduous trees are measured at 48" from finished grade to determine tree diameter (DBH). All coniferous trees are measured from finished grade to the top of the central leader. If no central leader is present on coniferous trees, that plant is rejected and must be replaced immediately.

4. Adjustment in location of proposed plant material may be needed in field. Should an adjustment be required, the client will provide field approval. Significant changes may require city review and approval.

5. The project landscape contractor shall be held responsible for watering and properly handling all plant materials brought on the site both before and after installation. Schedule plant deliveries to coincide with expected installation time within 36 hours.

6. The landscape contractor shall provide the owner with a watering schedule appropriate to the project site conditions and to plant material growth requirements.

7. If the landscape contractor is concerned or perceives any deficiencies in the plant selections, soil conditions, drainage or any other site condition that might negatively affect plant establishment, survival or guarantee, they must bring these deficiencies to the attention of the landscape architect & client prior to bid submission. Plant bed drainage concerns during plant installation shall be brought to the attention of the Owner and General Contractor immediately.

8. Contractor is responsible for ongoing maintenance of all newly installed trees. Provide tree watering bags at the base of newly planted trees unless they are installed in an area with existing underground irrigation. The landscape contractor shall maintain the tree watering bags for 60 days following tree installation. Any acts of vandalism or damage which may occur prior to owner acceptance shall be the responsibility of the contractor. Contractor shall provide the owner with a maintenance program including, but not limited to, pruning, fertilization and disease/pest control.

9. Warranty: The contractor shall guarantee newly planted material through ONE calendar year from the date of written owner acceptance. Plants that exhibit more than 20% die-back damage shall be replaced at no additional cost to the owner. The contractor shall also provide PVC trunk guards on deciduous trees. Prune dead wood at 11 month warranty review period - use wound paint on trees.

10. This layout plan constitutes our understanding of the landscape requirements listed in the ordinance. Changes and modifications may be requested by the city based on applicant information, public input, council decisions, etc.

11. The landscape contractor shall be responsible for obtaining any permits and coordinating inspections as required throughout the work process.

12. Plant size & species substitutions must be approved in writing prior to acceptance in the field.

13. Landscape Contractor is responsible for coordination with the General Contractor, to protect the new improvements on and off-site during landscape work activities. Report any damage to the General Contractor immediately.

14. All landscape beds to receive a 4" depth of Western Red Cedar wood mulch over spun bonded, free draining weed mat EXCEPT for parking lot islands which are to receive 4" depth of locally available $\frac{3}{4}$" diameter Buff Limestone rock mulch over spun bonded, free draining weed mat. Install all mulch per detail. Do not install weed mat under perennials with the exception of ornamental grasses. Submit mulch samples for approval.

15. The landscape contractor shall contact Gopher State One Call no less than 48 hours before digging for field utility locations.

16. The landscape contractor shall be responsible for visiting the site to become familiar with the conditions prior to bidding and installation. Coordinate with the general contractors on matters such as fine grading, landscaped area conditions, staging areas, irrigation connection to building, etc.

17. See Site and Civil plans for additional information regarding the project, including infiltration area soils and sub-surface drainage requirements and performance.

18. Landscape contractor must prove the open sub-grade of all planting areas after their excavation is capable of infiltrating a minimum requirement of 1/4-inch of water per hour prior to installation of plant materials, topsoil, irrigation, weed mat, and mulch. Planting areas not capable of meeting this requirement shall have 4" diameter X 48" depth holes augured every 36" on-center and filled with MnDOT Free-Draining Coarse Filter Aggregate. Re-test sub-grade percolation for compliance to infiltration minimum requirement.

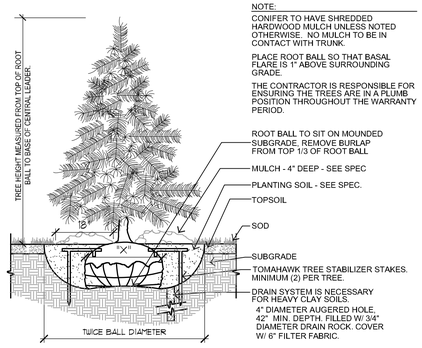
19. Landscape edger to be professional $\frac{1}{8}$" thick black steel landscape edging with stakes every 18" minimum. Coyote or Equal.

20. Irrigation is required for this project. Verify water service pressure and check local codes regarding building connection for irrigation. Irrigation contractor is to submit a proposed irrigation layout plan that utilizes a new connection in the building mechanical room. Install controller, rain sensor, and plumbing connections to meet current plumbing code. Ensure head-to-head coverage of all turf and planted areas, existing and proposed. Use Hunter Commercial irrigation equipment with fully adjustable stream rotor and spray heads (or equal manufacturer). Submit equipment cut sheets for approval. Coordinate sleeving under paving with excavation sub-contractor. Coordinate plumbing requirements with mechanical contractor. Ensure irrigation system is installed and functioning prior to installation of landscape materials. Remove old irrigation equipment. Refer to Irrigation System Performance Notes.

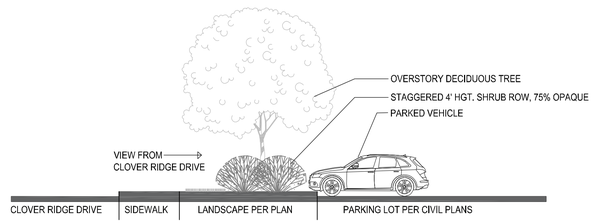
21. Boulder Accents: Boulders to be Niagra limestone cubes, available from Hedberg Landscape Supply (www.hedbergaggregates.com). Boulder character to be rectangular in shape, laid flat form down with a minimum of 16" and maximum of 20" exposed height from grade with the intent of informal pedestrian seating.

Irrigation System Performance Requirements:

1. IRRIGATION SYSTEM SHOULD AVERAGE 40(+/-) PSI AT THE BASE OF ALL SPRINKLER HEADS. NOTIFY LANDSCAPE ARCHITECT IF EXISTING PRESSURE DIFFERS. BUILDING PRESSURE IS NOT KNOWN.
2. IRRIGATION CONTRACTOR TO PREPARE FULL IRRIGATION LAYOUT PLANS FOR LANDSCAPE ARCHITECT'S REVIEW. LAYOUT WORK AS ACCURATELY AS POSSIBLE. THE CONTRACTOR MAY MAKE MINOR ADJUSTMENTS TO THE LOCATION AND SPACING AS NECESSARY TO ACCOMMODATE ACTUAL FIELD CONDITIONS. HEAD LOCATIONS SHALL BE FLAGGED AND REVIEWED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3. COORDINATE SLEEVING AND IRRIGATION PIPE / HEAD / INTERNAL PLUMBING INSTALLATION WITH THE WORK OF OTHERS.
4. ALL MATERIALS SHALL BE INSTALLED AS DETAILED ON DRAWINGS. (HOWEVER, IF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS DO NOT THOROUGHLY DESCRIBE THE METHOD OR TECHNIQUES TO BE USED, THE CONTRACTOR SHALL FOLLOW THE INSTALLATION METHODS ISSUED BY THE MANUFACTURE. ALL SUCH LITERATURE MUST BE SUBMITTED 48 HOURS PRIOR TO INSTALLATION FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT.)
5. CHECK AND VERIFY ALL EXISTING AND PROPOSED SITE CONDITIONS, UTILITIES AND SERVICES PRIOR TO TRENCHING.
6. LATERAL PIPING TO BE A MINIMUM OF 12 INCHES DEEP AND MAINLINES A MINIMUM OF 18 INCHES DEEP.
7. ALL MAIN LINE PIPING AND LATERAL PIPE OF 1-1/2" AND LARGER SHALL BE PVC (SDR 26 / CLASS 160). ALL OTHER LATERAL PIPE OF 1-1/4" AND SMALLER MAY BE POLYETHYLENE.
8. ALL TEES AND ELBOWS SHALL BE PVC (160 PSI), INCLUDE THRUST BLOCKING AT TEE AND ELBOW POINTS.
9. ALL SPRINKLERS SHALL BE AS NOTED ON DETAIL & SPECIFICATION.
10. ADJUST HEADS FOR GRADE, AS NECESSARY, AFTER TURF GRASS HAS BEEN ESTABLISHED AND ALL SETTLEMENT AT HEADS HAS OCCURRED.
11. ALL AUTOMATIC CONTROLLERS, RISERS, BACKFLOW PREVENTERS AND HOSE BIBS SHALL BE SET PLUM. SPRINKLER HEAD RISERS, QUICK COUPLER VALVES AND ALL VALVES WITH STEMS SHALL BE SET PERPENDICULAR TO FINISHED GRADE.
12. CONTROL VALVE WIRES, INCLUDING THE GROUND WIRE, SHALL BE #12 GAUGE U.F.U.L. APPROVED DIRECT BURIAL. UNDERGROUND CONNECTIONS SHALL BE MADE WITH 3-M WIRE CONNECTORS (DBY) OR APPROVED EQUAL.
13. TRACER-WIRE IS TO BE PLACED OVER ALL MAIN AND LATERAL LINES.
14. PLACE ALL VALVES IN APPROVED VALVE BOXES.
15. USE TEFLON TAPE ON ALL THREADED JOINTS.
16. BRAND EACH VALVE BOX WITH 2" HIGH LETTERING SHOWING ZONE NUMBER AND CONTROLLER LETTER (EXAMPLE '43'). THIS STAMP IS TO MATCH THE ZONE SHOWN ON THE PLAN UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT.
17. CONDUCT PERFORMANCE TEST IN THE PRESENCE OF OWNER AND LANDSCAPE ARCHITECT FOLLOWING COMPLETION OF SYSTEM INSTALLATION.
18. CONDUCT AND DEMONSTRATE WINTERIZATION AND SPRING START-UP PROCESS TO OWNER IN THE FALL OF COMPLETION.
19. LANDSCAPE ARCHITECT SHALL BE NOTIFIED TO VERIFY TRENCH DEPTHS BEFORE BACKFILLING.
20. IRRIGATION CONTRACTOR TO COORDINATE MECHANICAL ROOM WATER CONNECTION POINT WITH MECHANICAL ENGINEER AND PLUMBING CONTRACTOR.
21. AFTER INSTALLATION OF DRIP IRRIGATION PIPE IS COMPLETE AND PRIOR TO SODDING OR MULCH INSTALLATION, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT TO REVIEW THE INSTALLATION OF THE DRIP IRRIGATION SYSTEM.
22. LANDSCAPE CONTRACTOR TO ADJUST HEADS IN THE FIELD TO ENSURE WATER DOES NOT SPRAY THE BUILDING FACE OR PAVED AREAS.
23. COORDINATE LOCATION OF ROOFTOP-MOUNTED ATMOSPHERIC MOISTURE (RAIN) SENSOR WITH OWNER AND ARCHITECT.
24. COORDINATE LOCATION OF SLEEVING UNDER PAVED AREAS WITH GENERAL CONTRACTOR, EARTHWORK, AND PAVING SUB-CONTRACTORS.
25. SUBMIT LAYOUT PLAN AND PRODUCT DATA TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
26. IRRIGATION BID SHALL INCLUDE (1) FALL SHUT-DOWN AND (1) SPRING START-UP (SPRING OF THE YEAR FOLLOWING INSTALLATION).
27. THIS PROJECT WILL USE HUNTER COMMERCIAL IRRIGATION PRODUCTS.
28. PROVIDE THE OWNER WITH MANUFACTURER'S INSTRUCTION MANUAL FOR CONTROLLER, POST IRRIGATION ZONE LAYOUT MAP AT 8"x10" NEXT TO THE CONTROLLER FOR REFERENCE.
29. PROVIDE THE OWNER WITH AN AS-BUILT PLAN (PAPER AND CAD .DWG) UPON COMPLETION OF INSTALLATION.



6 CONIFEROUS TREE PLANTING - SECTION
L102 NOT TO SCALE



7 PARKING LOT SCREENING CROSS SECTION
L102 NOT TO SCALE

811 Know what's below. Call before you dig.

REFER TO SHEET L101 FOR LANDSCAPE LAYOUT PLAN

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Burnsville, MN 55306
Phone: (952) 890-6044

Landscape Architect:
CALYX DESIGN GROUP
475 Cleveland Ave. N. Suite 101A
Saint Paul, MN 55104
(651) 788-9018

Clover Ridge Apartments
Chaska, MN

Prepared for:
Chase Real Estate, Inc.
2140 Co. Rd. 42 West
Burnsville, MN 55337

Project Number	22110
Date	03/01/2022
Drawn By	HL
Checked By	BH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the state of Minnesota.

Benjamin D. Hall
Typed Name

PRELIMINARY

Signature

Registration Number | Date

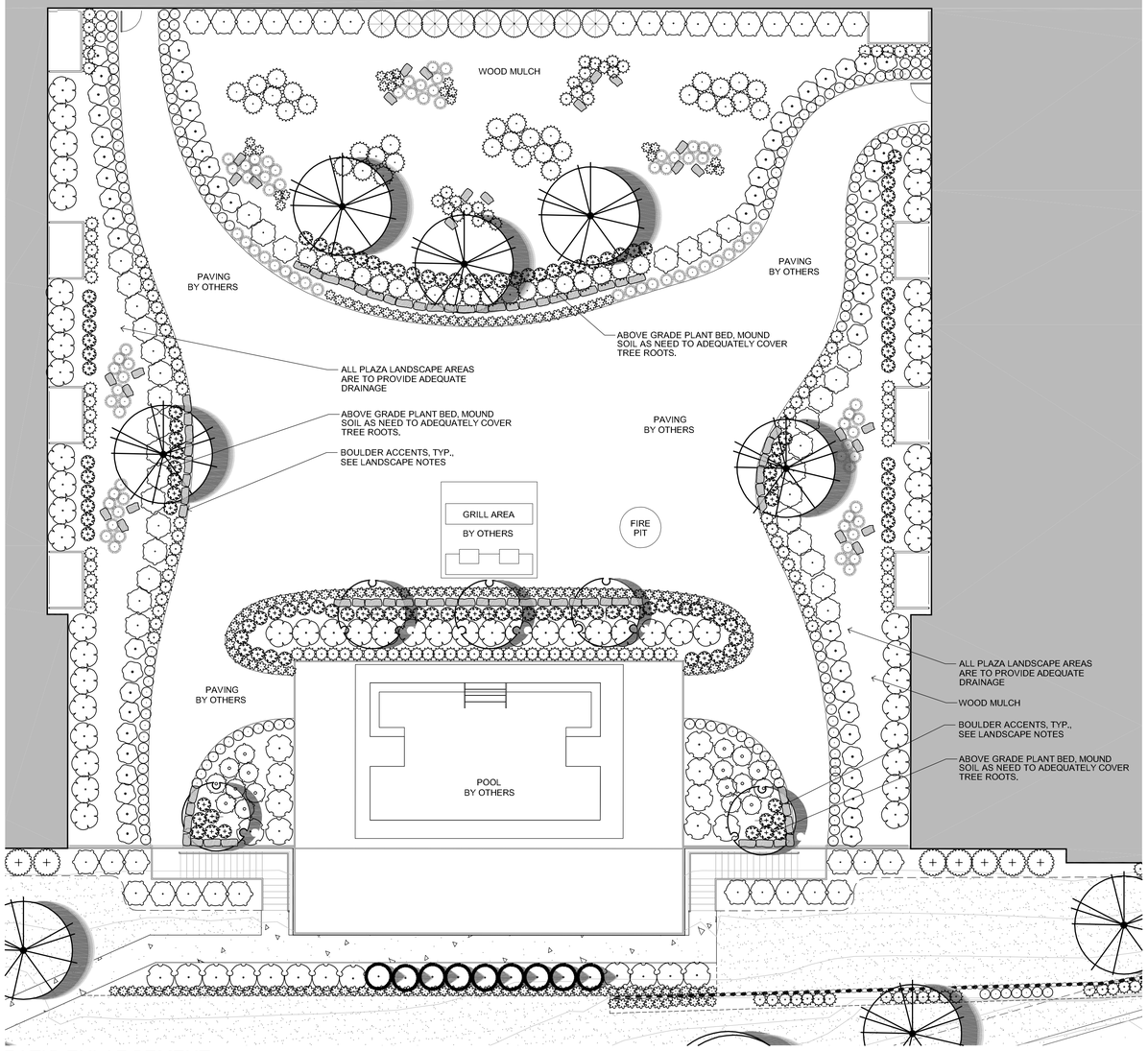
Rev. No.	Revision	Date
1	City Resubmittal	3-23-2022
2	City Resubmittal	4-06-2022

LANDSCAPE DETAILS

L102

PLANT SCHEDULE

DECIDUOUS OVERSTORY TREE	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Aa	Acer x freemanii `Armstrong`	Armstrong Freeman Maple	5" Cal.	B&B	11	
	Br	Betula nigra	River Birch	16` Ht.	B&B	12	Clump Form, Calculated as 4" cal.
	Co	Celtis occidentalis	Common Hackberry	3" Cal.	B&B	13	
	Gd	Gleditsia triacanthos inermis 'Draves' TM	Street Keeper Honey Locust	3" Cal.	B&B	10	
	Qb	Quercus bicolor	Swamp White Oak	3" Cal.	B&B	9	
	Ts	Tilia americana `Sentry`	American Linden	5" Cal.	B&B	8	
EVERGREEN TREES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**	**REMARKS**
	Pd	Picea glauca `Densata`	Black Hills Spruce	8` Ht.	B&B	12	Calculated as 3" cal.
	Ta	Thuja occidentalis `Art Boe` TM	North Pole Arborvitae	8` Ht.	B&B	9	Calculated as 3" cal.
ORNAMENTAL TREES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**	**REMARKS**
	Bf	Betula platyphylla `Fargo` TM	Dakota Pinnacle White Birch	4" Cal.	B&B	5	Single Stem
	Ms	Malus x `Spring Snow`	Spring Snow Crab Apple	2.5" Cal.	B&B	18	
	Si	Syringa reticulata `Ivory Silk`	Ivory Silk Japanese Tree Lilac	2.5" Cal.	B&B	20	
SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**	**REMARKS**
	Am	Aronia melanocarpa `Morton` TM	Iroquis Beauty Black Chokeberry	5 gal.	Pot	25	
	Cr	Cornus alba `Regnzam`	Red Gnome Dogwood	5 gal.	Pot	71	
	Dl	Diervilla lonicera	Dwarf Bush Honeysuckle	5 gal.	Pot	71	
	Ec	Euonymus fortunei `Canadale Gold`	Canadale Gold Euonymus	3 gal.	Pot	17	
	He	Hydrangea macrophylla `Bailmer` TM	Endless Summer	5 gal.	Pot	88	
	Jf	Juniperus chinensis `Sea Green`	Sea Green Juniper	5 gal.	Pot	49	
	Jc	Juniperus sabina `Calgary Carpet` TM	Calgary Carpet Juniper	3 gal.	Pot	53	
	Rg	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	5 gal.	Pot	20	
	Ra	Ribes alpinum	Alpine Currant	5 gal.	Pot	37	
	Rd	Rosa x `Dwarf Pavement`	Dwarf Pavement Rose	2 gal.	Pot	62	
	Tt2	Thuja occidentalis `Techny Globe`	Techny Globe Arborvitae	5 gal. (Min. 18" Height)	Pot	37	
	Vb	Viburnum trilobum `Bailey Compact`	Compact American Cranberry Bush	5 gal.	Pot	55	
	Wr	Weigela florida `Rumba`	Rumba Weigela	2 gal.	Pot	128	
ANNUALS/PERENNIALS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**	**REMARKS**
	Ho	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily	1 gal.	Pot	330	
	Hp	Heuchera micrantha `Palace Purple`	Palace Purple Coral Bells	1 gal.	Pot	153	
	Rg2	Rudbeckia fulgida `Goldstrum`	Black Eyed Susan	1 gal.	Pot	286	
GRASSES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**	**REMARKS**
	Ck	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	1 gal.	Pot	375	
	Ss	Schizachyrium scoparium `The Blues`	The Blues Little Bluestem	1 gal.	Pot	88	



1 L103 PATIO ENLARGEMENT
SCALE 1:10

REFER TO SHEET L101 FOR LANDSCAPE LAYOUT PLAN

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475 Cleveland Ave. N. Suite 101A
Saint Paul, MN 55104
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Clover Ridge Apartments

Chaska, MN

Prepared for:
Chase Real Estate, Inc.
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Burnsville, MN 55337

Project Number	22110
Date	03/01/2022
Drawn By	HL
Checked By	BH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the state of Minnesota.

Benjamin D. Hoerr
Typed Name

PRELIMINARY

Signature

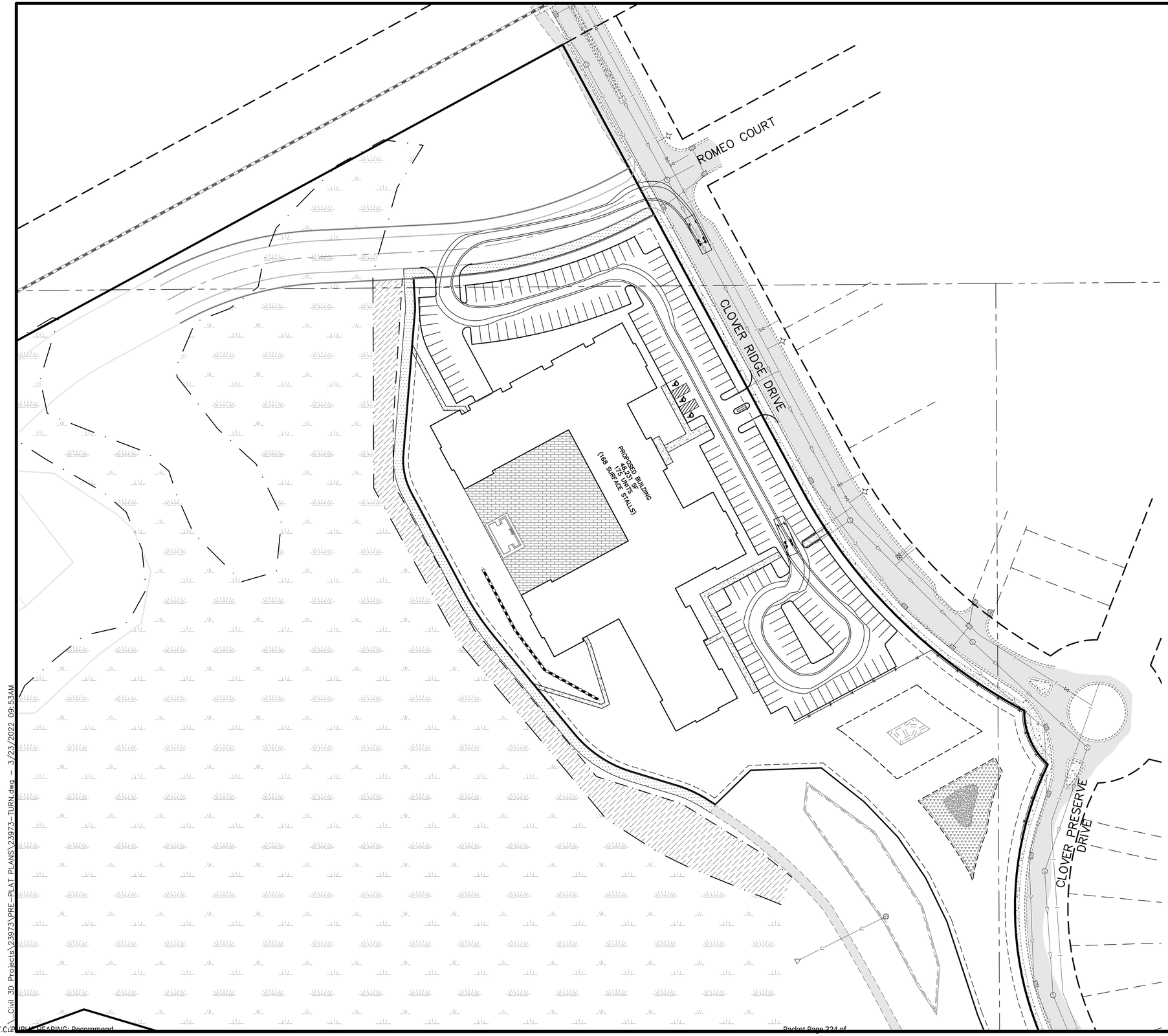
Registration Number | Date

Rev. No.	Revision	Date
1	City Resubmittal	3-23-2022
2	City Resubmittal	4-06-2022

LANDSCAPE DETAILS

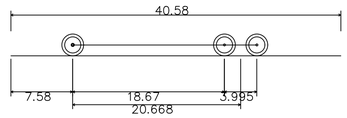
L103

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LEGEND

- EXISTING CURB & GUTTER
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING WETLAND
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL



Chaska Ladder	
Overall Length	40.580ft
Overall Width	10.500ft
Overall Body Height	1.332ft
Min Body Ground Clearance	1.332ft
Track Width	7.610ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	36.00°

James R. Hill, Inc.
PLANNERS / ENGINEERS / SURVEYORS
2999 W. Cty. Rd. 42, Suite 100, Burnsville, MN 55306
PHONE: (952)890-6044 FAX: (952)890-6244

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
ERIC P. FAGERBERG, PE
Date: 03/01/2022 Reg. No.

GALLERY CHASKA
CHASKA, MINNESOTA
TURNING MOVEMENT EXHIBIT
FOR
CHASE REAL ESTATE, INC.
2140 CO. RD. 42 WEST, BURNSVILLE, MN 55337

DRAWN BY
JEK
DATE
03/01/22
REVISIONS
03/23/22 CITY COMMENTS
CAD FILE
23973-TURN
PROJECT NO.
23973
1.0

C:\Civil 3D Projects\23973\PRE-PLAT PLANS\23973-TURN.dwg - 3/23/2022 09:53AM

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	AA1	7	Lithonia Lighting	RSX2 LED P4 40K R4	RSX Area Fixture Size 2 P4 Lumen Package 4000K CCT Type R4 Distribution	1	25328	1	189.54
	AA2	1	Lithonia Lighting	RSX2 LED P4 40K R4	RSX Area Fixture Size 2 P4 Lumen Package 4000K CCT Type R4 Distribution	1	25328	0.9	379.08
	W1	5	Lithonia Lighting	WPX1 LED P2 40K MVolt	WPX1 LED wallpack 3000lm 4000K color temperature 120-277 Volts	1	2913	0.9	24.42
	W2	12	Lithonia Lighting	WPX2 LED 40K MVolt	WPX2 LED wallpack 6000lm 4000K color temperature 120-277 Volt	1	5896	0.9	47.77

Note

1. Davis and Associates, Inc does not assume responsibility for the interpretation of this calculation, or compliance to local or state lighting codes and ordinances.
2. All readings/calculations are shown @ grade.
3. Fixture heights are shown on plan.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking and Drives	X	2.7 fc	12.9 fc	0.5 fc	25.8:1	5.4:1
Total Area Calculated @ Grade	+	1.4 fc	15.3 fc	0.0 fc	N/A	N/A



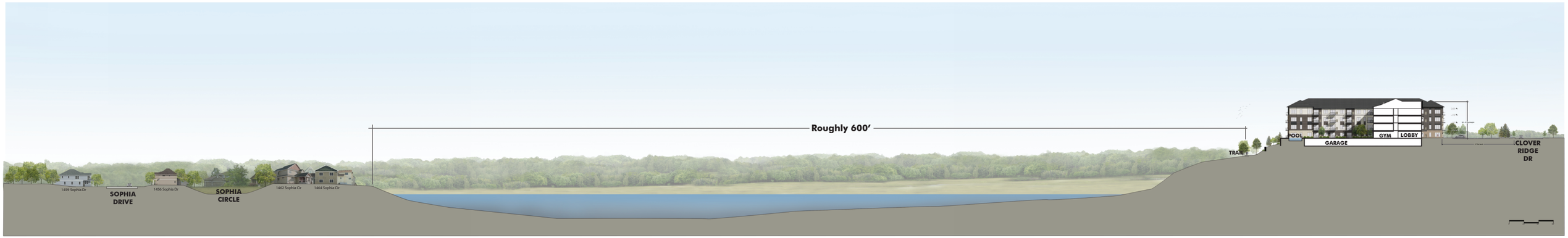
DAVIS & ASSOCIATES, INC
QUALITY LIGHTING SOLUTIONS

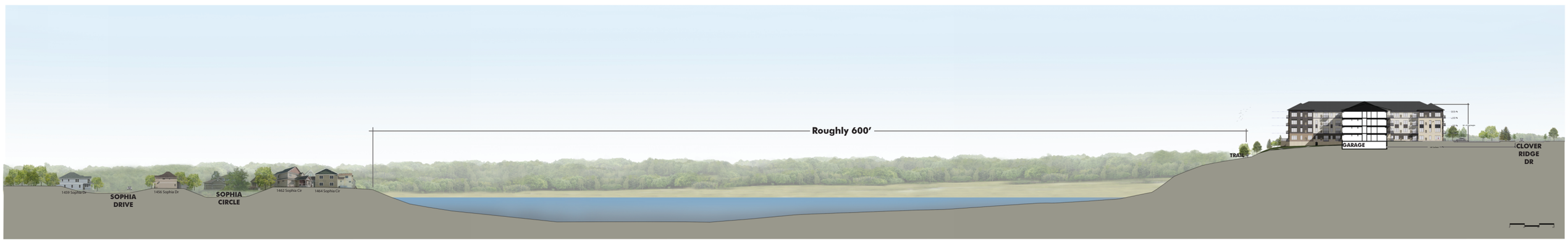
Gallery Chaska
Exterior Lighting
Chaska, MN

Designer
AM
Date
02/25/2022
Scale
As Noted
Drawing No.

Summary

1 of 1


Roughly 600'
1459 Sophia Dr
SOPHIA DRIVE
1456 Sophia Dr
SOPHIA CIRCLE
1462 Sophia Cir
1464 Sophia Cir
TRAIL
POOL
GARAGE
GYM
LOBBY
CLOVER RIDGE DR


Roughly 600'
1459 Sophia Dr
SOPHIA DRIVE
1456 Sophia Dr
SOPHIA CIRCLE
1462 Sophia Cir
1464 Sophia Cir
TRAIL
GARAGE
CLOVER RIDGE DR


SECTION 1
SECTION 2
Sophia Dr
Google Earth



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EXTERIOR ELEVATIONS

Gallery Chaska



1 Elevation 10
3/32" = 1'-0"



2 Elevation 11
3/32" = 1'-0"



3 Elevation 12
3/32" = 1'-0"



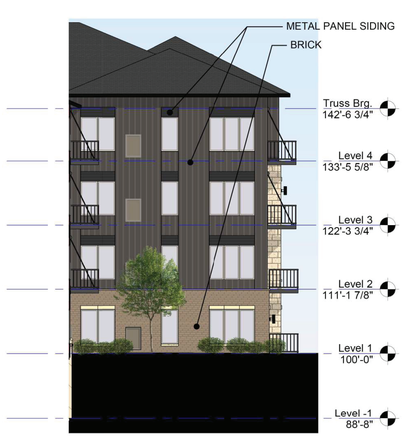
5 Elevation 14
3/32" = 1'-0"



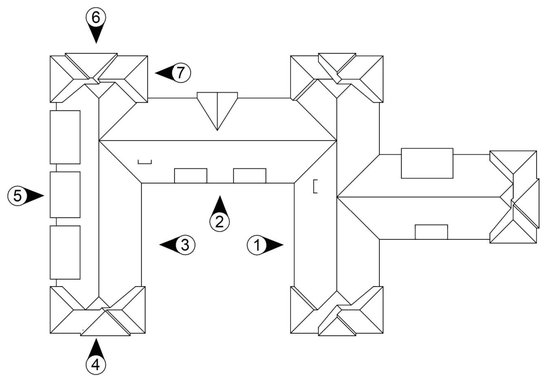
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3/32" = 1'-0"



6 Elevation 15
3/32" = 1'-0"



7 Elevation 16
3/32" = 1'-0"

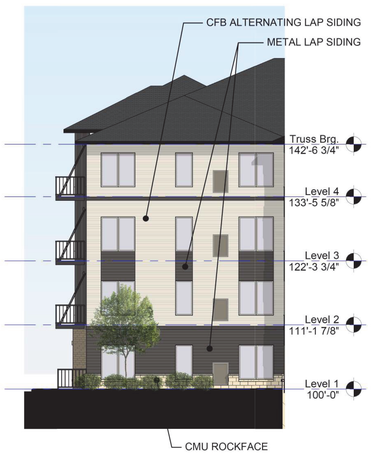


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EXTERIOR ELEVATIONS
Gallery Chaska



1 Elevation 1
3/32" = 1'-0"



2 Elevation 2
3/32" = 1'-0"



3 Elevation 3
3/32" = 1'-0"



4 Elevation 4
3/32" = 1'-0"



5 Elevation 5
3/32" = 1'-0"



6 Elevation 6
3/32" = 1'-0"



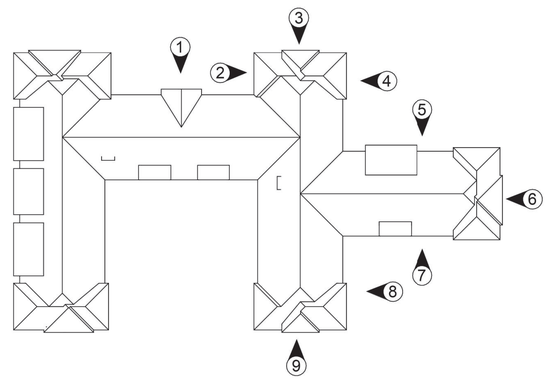
7 Elevation 7
3/32" = 1'-0"



8 Elevation 8
3/32" = 1'-0"



9 Elevation 9
3/32" = 1'-0"



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EXTERIOR ELEVATIONS
Gallery Chaska



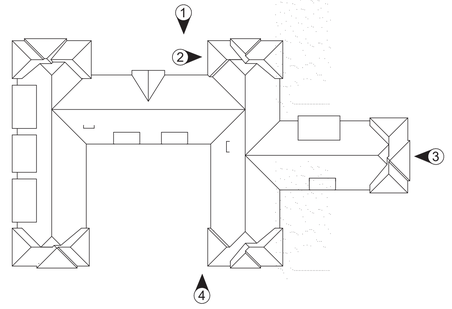
1 Elevation 1 Copy 1 Copy 1
3/32" = 1'-0"



2 Elevation 2 Copy 1 Copy 1
3/32" = 1'-0"



3 Elevation 3 Copy 1 Copy 1
3/32" = 1'-0"





4 Elevation 4 Copy 1 Copy 1
3/32" = 1'-0"

EXTERIOR ELEVATIONS

Gallery Chaska

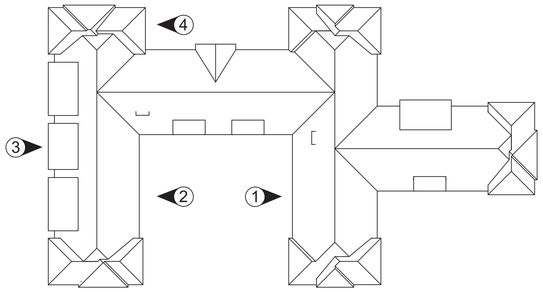
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2 Elevation 5 Copy 1 Copy 1
3/32" = 1'-0"



3 Elevation 6 Copy 1 Copy 1
3/32" = 1'-0"





4 Elevation 7 Copy 1 Copy 1
3/32" = 1'-0"

5 Elevation 8 Copy 1 Copy 1
3/32" = 1'-0"

ELEVATION 1 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	771	4%	Class I
Metal Siding	5,043	29%	Class I
CFB Lap SIding	3,515	20%	Class I
Windows, Doors, Storefront	5,654	32%	Class I
	14,983	**86%**	**Total Class I**
Rockface CMU	807	5%	Class II
Stone Masonry	1,711	10%	Class II
	2,518	**14%**	**Total Class II**
Grand Total:	17,501	100%	

ELEVATION 2 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	25	2%	Class I
Metal Siding	277	18%	Class I
CFB Lap SIding	817	53%	Class I
Windows, Doors, Storefront	360	23%	Class I
	1,479	**95%**	**Total Class I**
Rockface CMU	77	5%	Class II
Stone Masonry	-	0%	Class II
	77	**5%**	**Total Class II**
Grand Total:	1,556	100%	

ELEVATION 3 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	739	7%	Class I
Metal Siding	2,889	26%	Class I
CFB Lap SIding	1,805	16%	Class I
Windows, Doors, Storefront	3,077	28%	Class I
	8,510	**78%**	**Total Class I**
Rockface CMU	938	9%	Class II
Stone Masonry	1,500	14%	Class II
	2,438	**22%**	**Total Class II**
Grand Total:	10,948	100%	

ELEVATION 4 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	1,993	10%	Class I
Metal Siding	4,541	23%	Class I
CFB Lap SIding	3,162	16%	Class I
Windows, Doors, Storefront	5,970	31%	Class I
	15,666	**80%**	**Total Class I**
Rockface CMU	3,732	19%	Class II
Stone Masonry	78	0%	Class II
	3,810	**20%**	**Total Class II**
Grand Total:	19,476	100%	

ELEVATION 5 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	81	2%	Class I
Metal Siding	1,634	30%	Class I
CFB Lap SIding	1,538	29%	Class I
Windows, Doors, Storefront	1,678	31%	Class I
	4,931	**92%**	**Total Class I**
Rockface CMU	445	8%	Class II
Stone Masonry	-	0%	Class II
	445	**8%**	**Total Class II**
Grand Total:	5,376	100%	

ELEVATION 6 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	80	1%	Class I
Metal Siding	1,627	30%	Class I
CFB Lap SIding	1,510	28%	Class I
Windows, Doors, Storefront	1,781	33%	Class I
	4,998	**92%**	**Total Class I**
Rockface CMU	445	8%	Class II
Stone Masonry	-	0%	Class II
	445	**8%**	**Total Class II**
Grand Total:	5,443	100%	

ELEVATION 7 EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	849	8%	Class I
Metal Siding	3,538	32%	Class I
CFB Lap SIding	2,128	19%	Class I
Windows, Doors, Storefront	2,890	26%	Class I
	9,405	**84%**	**Total Class I**
Rockface CMU	1,726	15%	Class II
Stone Masonry	71	1%	Class II
	1,797	**16%**	**Total Class II**
Grand Total:	11,202	100%	

ELEVATION 8 EXTERIOR MATERIALS SCHEDULE

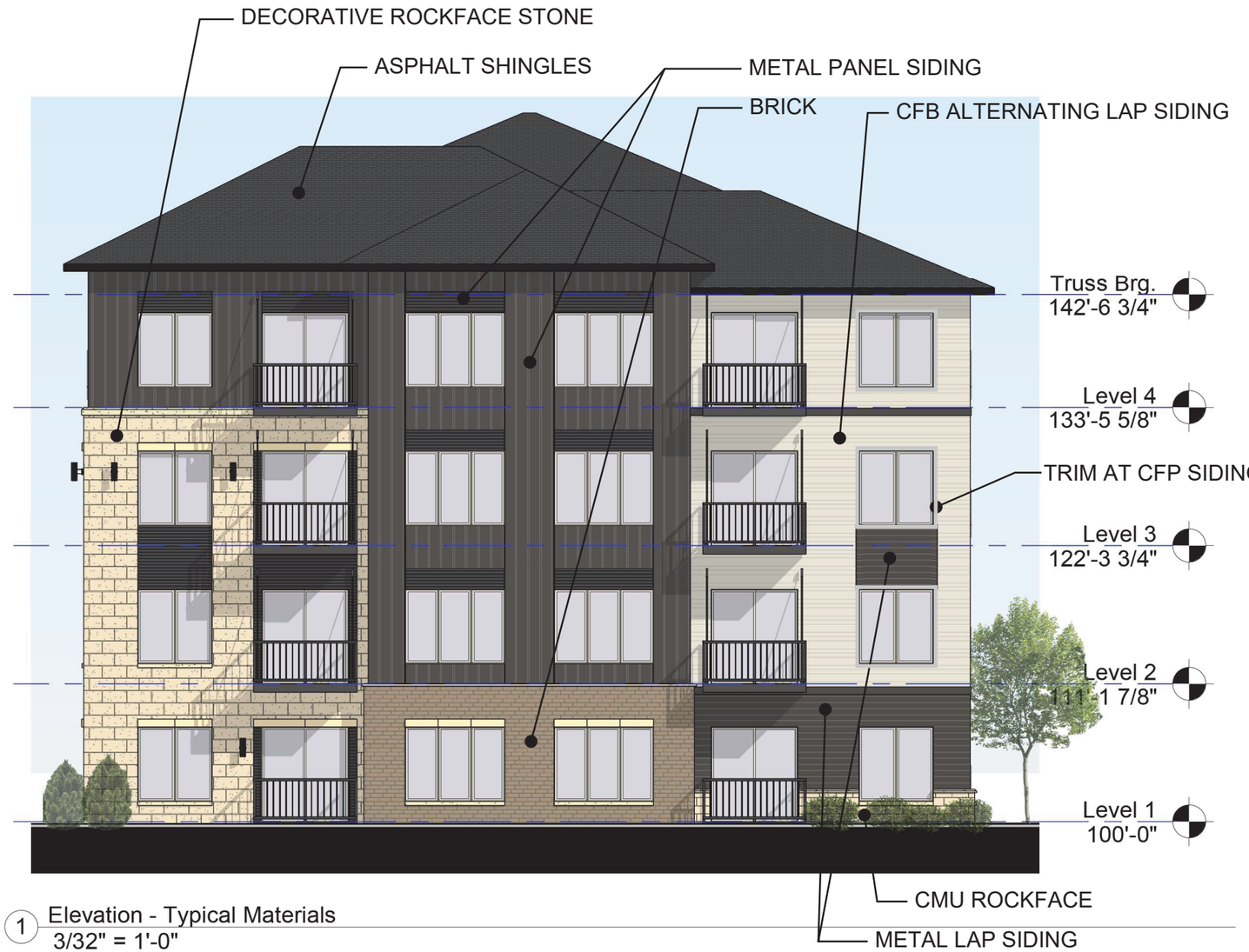
Exterior Materials	Area	Percent	Class
Brick	278	17%	Class I
Metal Siding	865	53%	Class I
CFB Lap SIding	-	0%	Class I
Windows, Doors, Storefront	407	25%	Class I
	1,550	**95%**	**Total Class I**
Rockface CMU	-	0%	Class II
Stone Masonry	74	5%	Class II
	74	**5%**	**Total Class II**
Grand Total:	1,624	100%	

TOTAL BUILDING EXTERIOR MATERIALS SCHEDULE

Exterior Materials	Area	Percent	Class
Brick	4,816	7%	Class I
Metal Siding	20,414	28%	Class I
CFB Lap Siding	14,475	20%	Class I
Windows, Doors, Storefront	21,817	30%	Class I
	61,522	**84%**	**Total Class I**
Rockface CMU	8,170	11%	Class II
Decorative Rockface Stone	3,434	5%	Class II
	11,604	**16%**	**Total Class II**
Grand Total:	73,126	100%	

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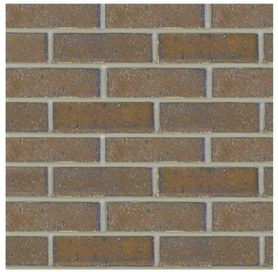
EXTERIOR ELEVATIONS
Gallery Chaska



1 Elevation - Typical Materials
3/32" = 1'-0"



ASPHALT SHINGLES



BRICK



ROCKFACE CMU



DECORATIVE ROCKFACE STONE



CFB LAP SIDING



METAL LAP SIDING



METAL SIDING



METAL SIDING



4" TO 6" METAL LAP SIDING

ROCKFACE CMU

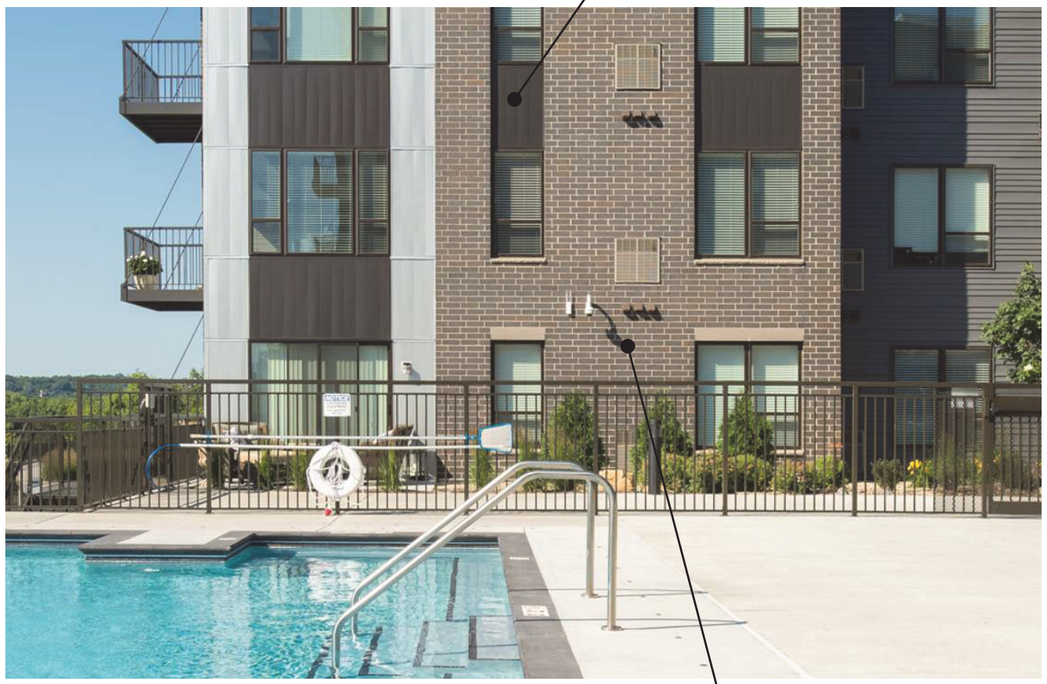


DECORATIVE ROCKFACE STONE



12x24 ROCKFACE TEXTURED VENEER

ARCHITECTURAL METAL PANEL



BRICK (UTILITY SIZE)



CFB LAP AND TRIM SIDING



BARN STYLE LIGHTS; WE CAN SPECIFY THESE OUTSIDE OUR COMMON ROOMS LEVEL 1 AND BLDG ENTRY

LIGHT BEIGE/LIMESTONE COLOR BRICK & STONE. (PROPOSED AT OUR MAIN ENTRY AND BLDG CORNERS)



'COPPERTONE' BRICK (PROPOSED)

LIGHT GRAY/CREAM SIDING (PROPOSED)







GROSS AREA - TOTAL	
Level	*Area*
Level 4	48,237 ft²
Level 3	48,237 ft²
Level 2	48,247 ft²
Level 1	48,154 ft²
Level -1	63,445 ft²
Grand total	256,319 ft²

GARAGE

170 PARKING STALLS
+ 12 TANDEM STALLS
182 TOTAL STALLS

STAIRS

STAIRS

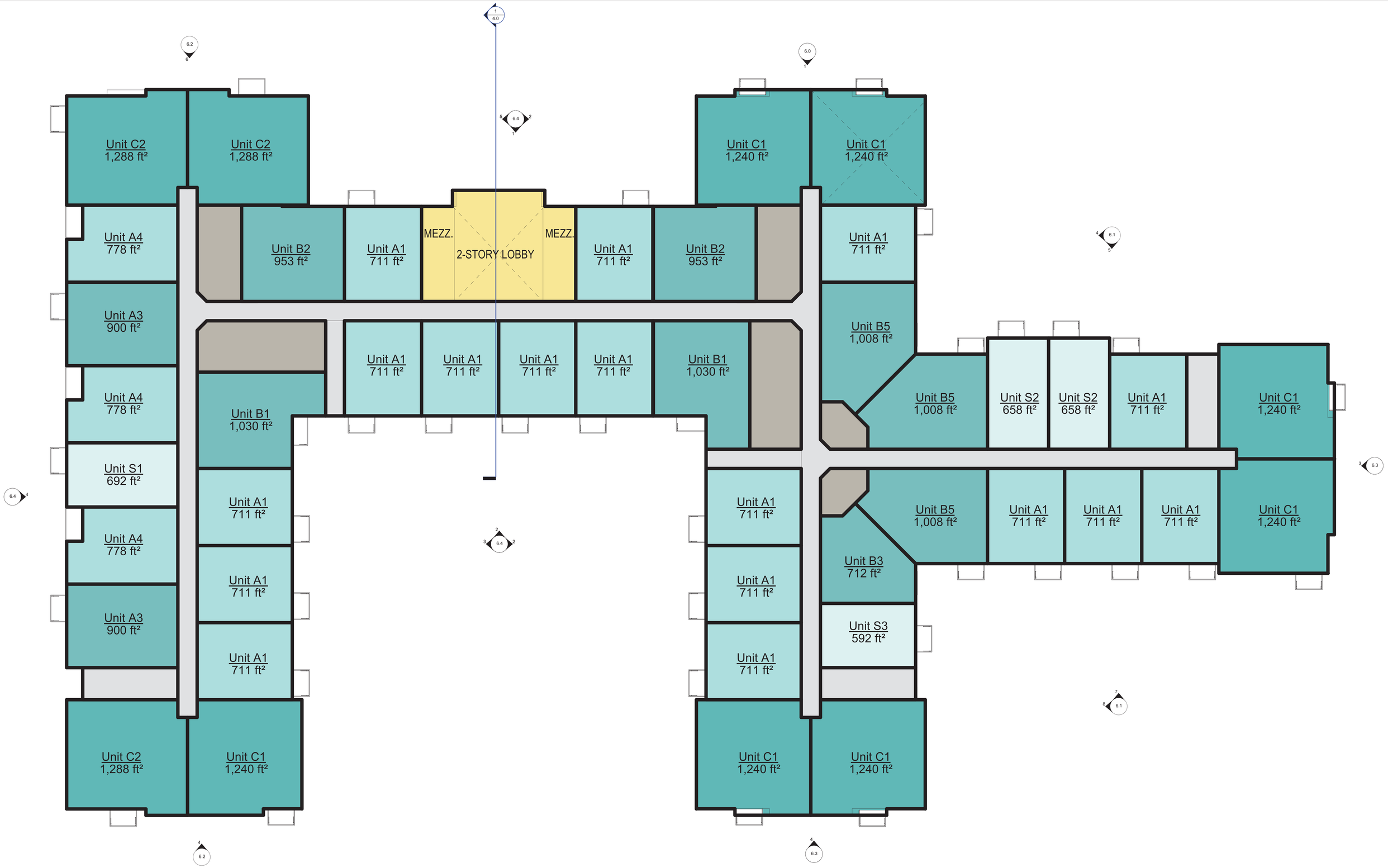
STAIRS

1 Level -1
3/32" = 1'-0"

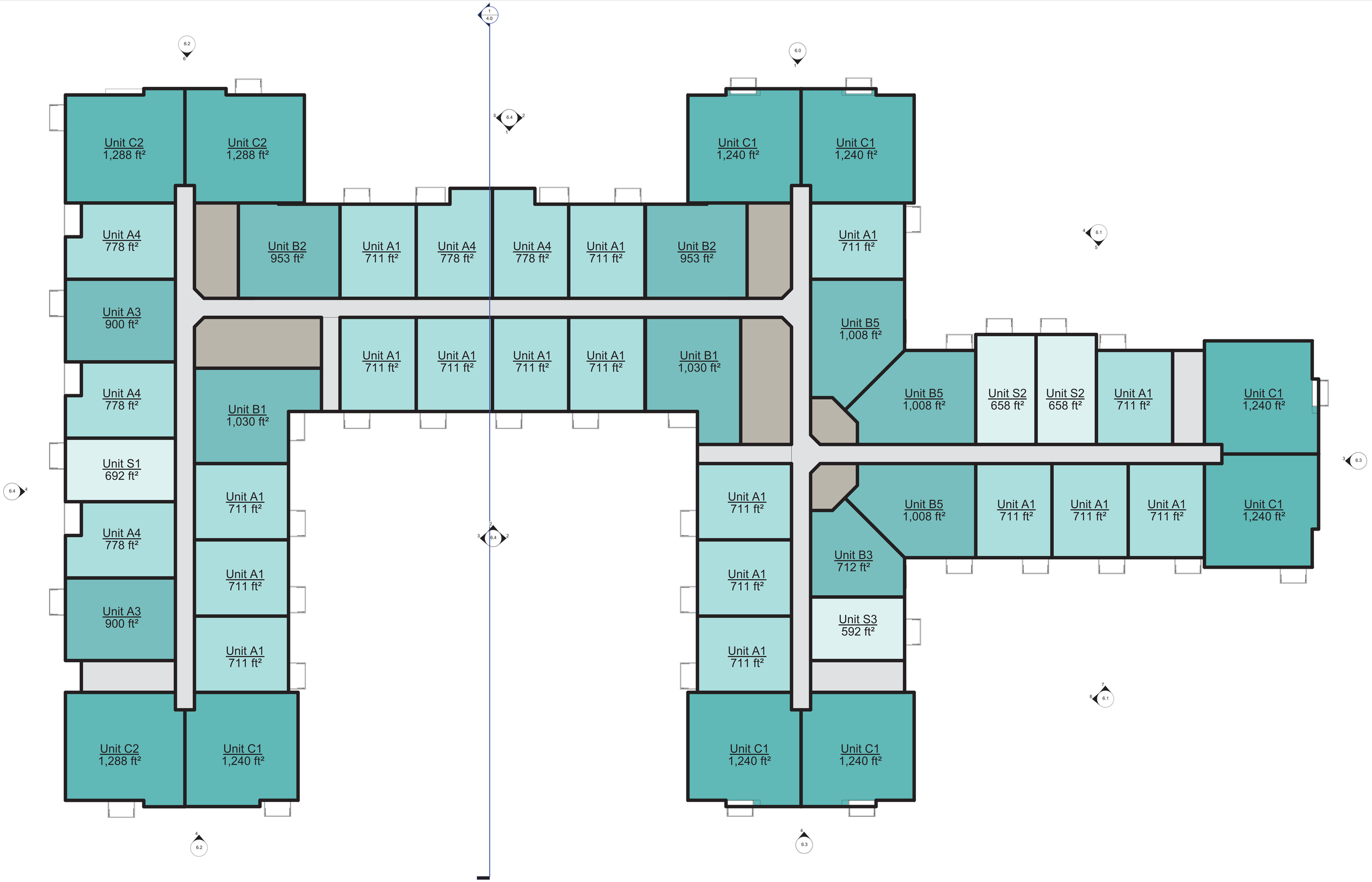
UNIT MIX - GROSS...		
Name	Count	Unit Gross Area Main Floor
0 BR (Studio)		
Unit S1	4	692 ft²
Unit S2	8	658 ft²
Unit S3	4	592 ft²
	16	
1BR		
Unit A1	63	711 ft²
Unit A4	16	778 ft²
	79	
1BR +D		
Unit A3	8	900 ft²
Unit B1	8	1,030 ft²
Unit B2	8	953 ft²
Unit B3	4	712 ft²
Unit B5	12	1,008 ft²
	40	
2BR		
Unit C1	28	1,240 ft²
Unit C2	12	1,288 ft²
	40	
Grand total	175	

Unit C2 1,313 ft²
Unit C2 1,288 ft²
Unit C1 1,218 ft²
Unit C1 1,218 ft²
Unit A4 778 ft²
Unit B2 953 ft²
OFFICES / MAIL
LOBBY
Unit A1 711 ft²
Unit B2 953 ft²
Unit A1 711 ft²
Unit A3 900 ft²
Unit B5 1,008 ft²
FITNESS
COMMUNITY ROOM
CELLAR
Unit A1 711 ft²
Unit B1 1,030 ft²
Unit A4 778 ft²
Unit B1 1,030 ft²
Unit B5 1,008 ft²
Unit S2 658 ft²
Unit S2 658 ft²
Unit A1 711 ft²
Unit C1 1,218 ft²
Unit S1 692 ft²
Unit A1 711 ft²
Unit A1 711 ft²
Unit B5 1,008 ft²
Unit A1 711 ft²
Unit A1 711 ft²
Unit A1 711 ft²
Unit C1 1,240 ft²
Unit A4 778 ft²
Unit A1 711 ft²
Unit B3 712 ft²
Unit A3 900 ft²
Unit A1 711 ft²
Unit S3 592 ft²
Unit A1 711 ft²
GRILL STATION
FIRE PIT
Unit C2 1,288 ft²
Unit C1 1,240 ft²
Unit C1 1,240 ft²
Unit C1 1,240 ft²

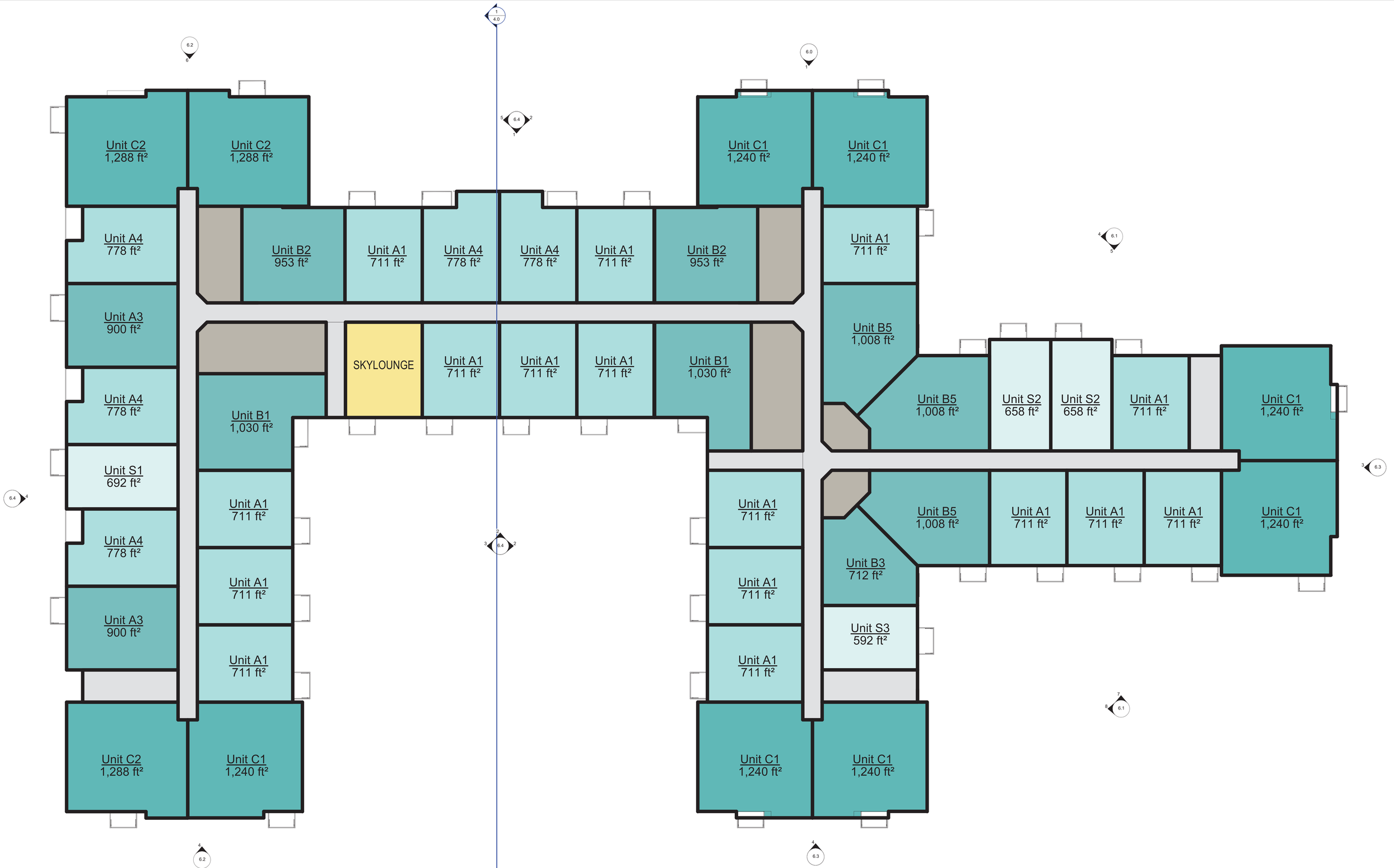
1 Level 1
3/32" = 1'-0"



1 Level 2
3/32" = 1'-0"



1 Level 3
3/32" = 1'-0"



1 Level 4
3/32" = 1'-0"



Gallery Chaska - Monument Sign Design (Draft 01) **March 2022**

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
04/13/2022

Subject: **Clover Ridge Apartments – Preliminary Site & Building Plan, Preliminary Plat and Rezoning**

Applicant: AV Development, LLC

Location: South of Pioneer Trail, West of Clover Ridge Drive, North of Twin Cities & Western Railroad

Case No.: 2022-15

Synopsis: Applicant seeks to obtain approval of a 119-unit apartment development on approximately 6 acres of land just north of Clover Ridge

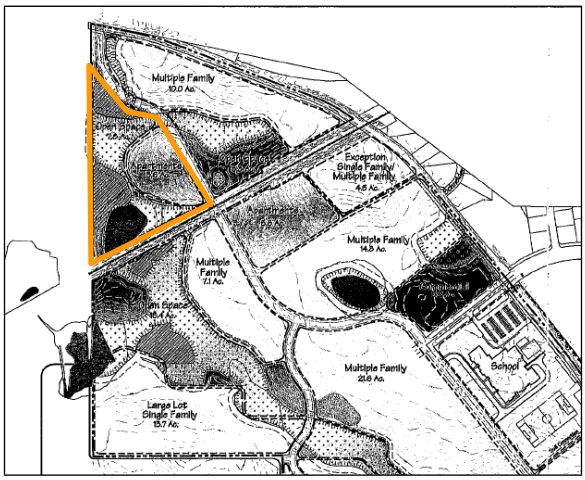
Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval to the City Council

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BACKGROUND

Back in 2000 when the Clover Ridge development was being planned, the property just north of the Twin Cities & Western railroad was also conceptually looked at for use as multi-family and apartments. The site being reviewed this evening was guided for Apartments. See below.



In December 2021, the Concept Plan for Clover Ridge Apartments was approved.

Project Goals

The identified goals in creating this new neighborhood include the following:

- Provide Chaska with an upscale residential apartment complex close to nearby retail amenities
- Views of the natural amenities
- Provide a welcoming place to live
- Promote an active and healthy lifestyle

Comprehensive Plan & Land Use
The Comprehensive Plan guides this area to be High Density Residential and Open Space. The proposal tonight is consistent with this guidance.

The parcel of land that this development encompasses is currently zoned Rural (R), which is. The area in question will be rezoned to a more appropriate zoning district, such as Planned Residential Development (PRD).

Adjacent properties
The site is bound on the south by the Twin Cities & Western railway and the Clover Ridge development; to the east by Clover Ridge Drive and Pioneer Vista; the north by Pioneer Trail; and the west by property owned by the Kelzer family.

Existing Conditions
The site is 12 gross acres in size, approximately 6 of which appear to be developable, and is currently vacant open space. There is a wetland complex that appears to surround the 6 acre site on its north, west, and south edges. There are a couple stormwater ponds that sprinkle the property on the north side that were put in with the development of Clover Ridge Drive. The topography includes a high point off of Clover Ridge Drive, which is an ideal spot for development, then it gradually slopes down towards the surrounding wetlands. The site offers beautiful and unobstructed views of the wetlands and woodlands beyond. These natural features will create a natural buffer for the project from surrounding land uses.

CURRENT PROPOSAL
The proposed Clover Ridge Apartment project would consist of approximately 120 market-rate units on 3.2 acres of land (38 units/acre net density).

The existing wetland complex is intended to remain undisturbed. The existing stormwater ponds will also remain and may be expanded to incorporate this new development. An amenity or gathering area of some type is proposed on the west edge of the site near the wetland area.

Layout
The apartment site will be directly accessed off the west side of Clover Ridge Drive. The building is angled and will surround the surface parking lot that faces out towards Clover Ridge Drive. The underground parking can be accessed from two different levels and by two separate points on the building; one on the northeast side, and the other on the south side. The northeast access will be at grade and provide 21 sheltered parking stalls. The south access will be below grade and provide 92 underground parking stalls.

Building Design & Height
The building is angled with the front façade facing Clover Ridge Drive. The building will contain approximately 120 units (195 total bedrooms) in four stories. These units will be a mixture of studio, one-bedroom, two-bedroom, and three-bedroom units. There will be one level of underground parking. Some of the site and project amenities will include a community room with full kitchen, large screen TV and high-quality sound system, fully equipped fitness room, media room, pet washing station and play area.

According to the applicant the target resident for the project will be empty nesters, families, as well as millennials; those that are renting by choice because of their lifestyle and having access to more amenities from an apartment complex.

The building is proposed to be constructed out of glass, modular brick, architectural precast concrete, and fiber cement siding. The City of Chaska has certain building design and material requirements for multi-family residential buildings. A portion of it is stated as follows:

"Multi-family buildings shall use at least three (3) Class I materials and shall be composed of at least eighty (80) percent Class I materials, and no more than five (5) percent Class III materials

Building Materials	
Class I	Glass, face brick modular, fiber cement siding (88%)
Class II	Architectural Precast Concrete (12%)
Class III	Not provided
CLASS I REQUIRED	80%; three different materials
CLASS III REQUIRED	Shall not exceed 5%
CLASS I PROVIDED	88%; three different materials
CLASS III PROVIDED	None

The applicant is showing that their building meets the requirements. The applicant has provided a conceptual renderings of the building. The building's exterior appearance appears to show a well-balanced application of colors and depth. The building will have 360 degree viewsheds and thus the balance of materials and articulation are important. It was unclear in the submittal how the building plans fit into Chaska. The applicant will have to show in their final submittal how the building brings in Chaska elements.

The height of the building will be approximately 42 feet tall and four stories. Generally speaking, four stories fits with other apartment buildings built in Clover Ridge (i.e. Cloverfield Marketplace and Clover Ridge Condominiums).

Setbacks
Namely, the front yard setback should be no less than 20 feet. The rear yard setback should be 20 feet. The side yard setback should be 10 feet. Corner lots should have a side yard setback of 20 feet. In addition to these setbacks, there are other setbacks that may apply to this site. See below:

SETBACKS	
Direction	**Setback**
Railway	50 feet

PARKING SETBACKS	
Direction	**Setback**
ROW	10 feet
Interior Property Lines	5 feet

Parking/Access/Circulation/Traffic
195 parking spaces are proposed as a part of this project; 120 underground stalls and 75 above ground stalls. The following chart summarizes the overall parking demand on the site, based on the approximated sizes of the conceptual uses.

Uses	Approx. Size	Code Req.	Est. Parking Req.
Multi-Family Res.	120 dwelling units	2ps/dwelling unit	240 parking spaces
		REQUIRED	**240 parking spaces**
		PROVIDED	**195 parking spaces**

According to this table the applicant is not meeting the required amount of parking spaces needed for the proposed use of the site. The site is providing 195 stalls (45 stall deficiency) and meets a 1.65 parking stall per dwelling unit ratio (0.35 ratio deficiency). The developer completed a parking analysis which concluded that their size of building would require 148 stalls based on comparable suburban apartment complexes. The building is proposing to provide 195 total bedrooms, which the parking will provide a 1:1 ratio for.

For relatable comparison, the Lake Jonathan Flats project is very comparable in size and parking. Lake Jonathan Flats was approved for 117 dwelling units (156 total bedrooms) and a reduced amount of parking. Their site showed 199 stalls on site, which was equivalent to 1.7 parking stalls per dwelling unit. The Lake Jonathan Flats building has since been constructed and operating. Staff has not noticed nor has been notified of any parking issues here.

During the analysis of the Lake Jonathan Flats building it was also determined that a 1 parking stall per bedroom ratio was a sufficient way to provide parking for an apartment. A summary provided showed examples of other apartment complexes in the Twin Cities area. It identified the dwelling unit and bedroom counts and parking accommodations for each apartment complex to give one a realistic understanding of the parking needs for this type of apartment product. Upon comparison, the Lake Jonathan Flats proposal met or exceeded the parking totals necessary for this type of product as it relates to parking stalls per dwelling unit and parking stalls per bedroom unit.

Staff also wanted to understand this 1:1 parking space to bedroom unit ratio first-hand by relating it to an existing project in the City. Staff looked at the Chaska Place Apartments (fka. North Meadows Apartments) located just west of the Fire Station on Engler Boulevard. The

program make-up in this complex equals 127 units with a total of 259 bedrooms. By ordinance, this complex was required to provide 254 parking stalls, however, the total amount of parking provided was 259 stalls. If the amount of bedroom units dictated the amount of parking stalls required then this complex would be in compliance. By all accounts, this apartment complex provides adequate parking for their residents based on the notions that street parking has not been observed or a parking deficiency has not been brought up. With that in mind, staff finds that the parking space to bedroom ratio is an appropriate way of determining adequate parking.

The Lake Jonathan Flats building incorporates 22% studios, 45% one-bedroom, and 33% two-bedroom units (156 total bedrooms). The Clover Ridge Apartment building incorporates 8% studios, 42% one-bedroom, and 37% two-bedroom, and 13% 3-bedroom units (195 total bedrooms).

Overall, the parking information provided by the applicant, field observations of existing examples (including a very comparable example of Lake Jonathan Flats), and parking based on bedroom counts all suggest that the parking proposed will accommodate the Clover Ridge Apartments project.

The access into the site will be from one ingress/egress point on Clover Ridge Drive. The underground parking lot and surface parking lot will be accessed from this ingress/egress point.

A traffic study was completed for this project. The study concluded that the project the will have appropriate access to the sites and to the surrounding roadway network. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate site-generated traffic.

Construction access will enter and exit from Pioneer Trail to the north. Construction traffic will be precluded from going south on Clover Ridge Drive per the developer's construction access plan.

Pedestrian Connections
Pedestrian systems currently exist on both sides of Clover Ridge Drive. A sidewalk on the east side and a public trail on the west side that stubs up to Pioneer Trail. Internal sidewalks from the site will provide access to the public trail. Another multi-use trail stubs north of the apartment building that provides access to the existing stormwater pond. The site plan shows this stormwater access to be relocated on the north side of the pond.

Landscaping
The table below indicates the landscaping requirements for this site:

LANDSCAPING REQUIREMENTS & PROPOSED		
	Required	**Proposed**
Overstory Trees	442 caliper inches	447 caliper inches

Understory Trees	36	36
Shrubs	471	471

Usable Open Space
Multi-Family residential building sites are required to provide sufficient, usable open space, which is defined as defined as "a portion of a lot which provides the purpose for outdoor recreation, scenic amenity, and/or shared exterior space for people to gather and use". A minimum of 15% of the gross site area shall be shared open area. The applicant is showing that 28% of their site will be usable open space.

The site is showing three different areas for usable open space. One area is shown on the west side of the building for an outdoor patio, which can be accessed via the building. This patio space will be elevated over the underground parking area and contain seating and eating areas. The other patio near the southeast portion of the building will contain grilling area and picnic tables. The other area for usable open space is situated on the south portion of the site. It will contain benches, a natural path that will meander through the landscaping, and provide pleasant views of the adjacent wetland area.

Lighting
Any lighting proposed for this plan should be fully screened and face downward. The specs proposed will meet this. Parking lot poles will be 22 feet high.

Utilities
Water and sewer are available to serve this site.

Stormwater
The applicant will work with the City to determine the drainage necessities for the site. They will need to meet City and County standards.

Development Costs (Infrastructure Improvements)
The City of Chaska has a number of area-wide development cost such as, but not limited to:

- Storm Sewer
- Trails
- Parks

Prior to final platting, the developer will need to work with City Staff to determine which of these are applicable and what those fees will be.

Preliminary Plat
The site will be platted into one lot for the apartment site. The following are the proposed outlots and their dispositions:

- Outlot A: wetland and stormwater ponding to be owned by the City of Chaska

Rezoning
The site is being rezoned from Rural (R) to Planned Residential District No. 84 (PRD-84).

Schedule
The developer's goal is to start construction of the project at the end of April/beginning of May 2022. The construction of the project takes approximately 18-20 months, with the anticipation to be completed by Spring of 2024.

Deadline for Agency Action
The City of Chaska received the complete application for this request on March 23, 2022. Pursuant to Minnesota State Statutes the City must act on this request by **Sunday, May 22, 2022 (60 days)**, unless the City provides the petitioner with written reasons for an additional 60-day review period. The additional review period would extend to Thursday, July 21, 2022. The City may with the petitioner's consent extend the review period beyond the Tuesday, July 21, 2022 date. Lastly, if the City denies the petitioners request "… it must state in writing the reasons for the denial at the time it denies the request."

PLANNING COMMISSION ACTION REQUESTED
Motion to recommend to City Council approval of the Clover Ridge Apartment Preliminary Site & Building Plan and Preliminary Plat for 120 units, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Project Narrative (pgs 1-4), prepared by AV Development, LLC, dated March 7, 2022**
    b. **Parking Study (pgs 1-3), prepared by Swing Traffic Solutions, dated February 13, 2022**
    c. **Existing Conditions Survey, prepared by Sambatek, dated January 5, 2022**
    d. **Preliminary Plat, prepared by Sambatek, dated April 8, 2022**
    e. **Title Sheet (pg C1.01), prepared by Sambatek, dated March 31, 2022**
    f. **Demolition Plan (pg C2.01), prepared by Sambatek, dated March 31, 2022**
    g. **Site Plan (pg C3.01), prepared by Sambatek, dated March 31, 2022**
    h. **Grading Plan (pg C4.01), prepared by Sambatek, dated March 31, 2022**
    i. **Utility Plan (pg C6.01), prepared by Sambatek, dated March 31, 2022**
    j. **Details (pgs C9.01-C9.02), prepared by Sambatek, dated March 31, 2022**
    k. **Landscape Plan (pg L1.01), prepared by Sambatek, dated March 31, 2022**
    l. **Landscape Details and Notes (pg L1.02), prepared by Sambatek, dated March 31, 2022**
    m. **Photometric Site Plan, prepared by Mlazgar Associates, dated February 1, 2022**
    n. **Fire Truck Turning Exhibit, prepared by Sambatek, dated March 7, 2022**
    o. **Construction Access Plan, undated**
    p. **Open Space Exhibit, prepared by Sambatek, dated March 31, 2022**
    q. **Clover Ridge Apartments (pgs A101-A105), prepared by J Corp, dated January 28, 2022**
    r. **Clover Ridge Apartments (pgs A201-A202), prepared by J Corp, dated March 7, 2022**
    s. **Clover Ridge Apartments (pg A203), prepared by J Corp, dated March 31, 2022**
2. **Adherence with the City Engineer's Memo dated April 13, 2022.**
3. **Adherence to the following setbacks for Clover Field Apartments:**
    a. **Front: 20 feet**
    b. **Rear: 20 feet**
    c. **Side: 10 feet**
    d. **Side (corner): 20 feet**
4. **Provision of 360 degree architecture be used on all facades.**
5. **Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.**
6. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
7. **Provision of a construction traffic plan to be coordinated and approved by the**

City Engineer.

8. **Provision that if masonry is used that they are natural stone and/or full face modular brick in order to be considered Class I materials.**
9. **Provision that mechanical equipment will be completely screened from view.**
10. **Provision that the building is designed to fit in Chaska and be addressed at final submittal.**
11. **Provision that section 15.28 Special Regulations are complied with.**
12. **Provision that light poles do not exceed 25 feet in height and comply with zoning section 15.28.250.**

Motion to recommend approval of the rezoning from Rural (R) to Planned Residential District (PRD-84).

CITY OF CHASKA

ORDINANCE NO. xxxx

MOTION BY COUNCILMEMBER _____, SECOND BY COUNCILMEMBER _____

AN ORDINANCE AMENDING ORDINANCE NO. 229 (ZONING ORDINANCE) BY REZONING CERTAIN REAL ESTATE WITHIN THE CITY OF CHASKA

THE CITY COUNCIL OF THE CITY OF CHASKA DO ORDAIN:

Section I. Rezoning. The boundaries of the Zoning Districts as established by Ordinance No. 229 and as shown on the Zoning Map of Chaska, Minnesota are hereby amended as follows:

The following described real estate is hereby removed from the Rural (R) zoning district and rezoned to Planned Residential Development No. 84 (PRD-84):

Block 1, Clover Ridge Apartments

The following graphic exhibits shall serve as the general guide for development of the area:

1. Existing Conditions Survey, prepared by Sambatek, dated January 5, 2022
2. Preliminary Plat, prepared by Sambatek, dated April 8, 2022
3. Title Sheet (pg C1.01), prepared by Sambatek, dated March 31, 2022
4. Demolition Plan (pg C2.01), prepared by Sambatek, dated March 31, 2022
5. Site Plan (pg C3.01), prepared by Sambatek, dated March 31, 2022
6. Grading Plan (pg C4.01), prepared by Sambatek, dated March 31, 2022
7. Utility Plan (pg C6.01), prepared by Sambatek, dated March 31, 2022
8. Details (pgs C9.01-C9.02), prepared by Sambatek, dated March 31, 2022
9. Landscape Plan (pg L1.01), prepared by Sambatek, dated March 31, 2022
10. Landscape Details and Notes (pg L1.02), prepared by Sambatek, dated March 31, 2022
11. Photometric Site Plan, prepared by Mlazgar Associates, dated February 1, 2022
12. Fire Truck Turning Exhibit, prepared by Sambatek, dated March 7, 2022
13. Construction Access Plan, undated
14. Open Space Exhibit, prepared by Sambatek, dated March 31, 2022

15. Clover Ridge Apartments (pgs A101-A105), prepared by J Corp, dated January 28, 2022
16. Clover Ridge Apartments (pgs A201-A202), prepared by J Corp, dated March 7, 2022
17. Clover Ridge Apartments (pg A203), prepared by J Corp, dated March 31, 2022

Section II. **PRD-84 District regulations.**

Permitted uses and regulations applicable to the PRD-84 District shall be as follows:

A. Intent

The intent of PRD-84 is to create a multi-family residential site that will take advantage of the natural views of the site.

B. Permitted Uses

Permitted uses shall be the following:

1. Lot 1, Block 1, Clover Ridge Apartments:

a) Multi-Family Residential.

C. Accessory Uses

Customary accessory uses incidental to the foregoing principal use, including but not limited to the following:

1. Off street parking and loading facilities as regulated by Section 15.28.030 of the zoning ordinance, except as follows:
   a. Lot 1, Block 1, Clover Ridge Apartments:
      i. One space per bedroom unit.
2. Signs as regulated by Section 15.32 of the Zoning Ordinance.

D. Building Setbacks

Minimum building setbacks shall be as follows:

1. Front: 20 feet
2. Rear: 20 feet
3. Interior Property Lines: 10 feet

Minimum parking setbacks shall be as follows:

1. From Right-of-Way: 10 feet
2. Interior Property Lines: 5 feet

E. Development Regulations

Development regulations shall be as follows:

1. Maximum building height shall be four stories.

Section III. Effective Date. This Ordinance shall be in full force and effect from and after its date of passage, adoption, and publication according to law.

Passed and adopted by the City Council of the City of Chaska, Minnesota this 18th day of April, 2022.

_____
Mark Windschitl, Mayor

Attest:_____
Deputy Clerk

City of Chaska
Memorandum

To: **Planning Commission**
From: **Matt Clark, City Engineer**
Date: **April 13, 2022**
Subject: **Clover Ridge Chaska Apartments – Prelim Plat Plan**

The planned development for the site proposes a new apartment building and parking lot along with site amenities. From an overall sewer and water standpoint, the use over the site is consistent with the City's comprehensive plan with capacity in the system to serve what's proposed. When Clover Ridge Drive was extended in the mid 2000's, access along with sewer and water stubs were installed into the property. The storm water management plan and grading plan must meet both the City and watershed requirements prior to grading occurring. The utility plans will need to be coordinated with staff.

The overarching traffic study that was completed to analyze the impacts concluded the development has appropriate access to the surrounding road network with no concern of operations at any of the surrounding intersections. While traffic will increase with development, no improvements are recommended due to the surrounding roadways having sufficient capacity.

ONE CITY HALL PLAZA/CHASKA, MN 55318-1962/PH: (952) 448-2851/ FX: (952) 448-9300

AV Development, LLC
11800 Singletree Lane Suite 301
Eden Prairie, MN 55344

March 7, 2022

Elizabeth Hanson
City Planner
City of Chaska
One City Hall Plaza
Chaska, MN 55318

Re: Request for Rezone, Preliminary Plat, Building/Site Plan Review Approval
Clover Ridge Chaska Apartments

Dear Ms. Hanson,

AV Development, LLC is requesting Concept Plan approval from the City of Chaska for a new ground up luxury apartment complex on 12.0 acre parcel of land located on Clover Ridge Drive (Outlot B Pioneer Vista, PID #305000560). We are submitting an Application Fee and Processing Fee per the requirements.

Goal of the Project:

The apartment project will provide Chaska with an upscale residential apartment complex closer to everyday conveniences and within a beautiful setting that integrates itself with trails and woodlands. The property's natural attributes and nearby retail amenities make an apartment residential complex the highest and best use of the land / property. As visioned, the apartment project would be a welcoming place to live, promoting an active and healthy lifestyle, which will allow Chaska to continue and realize its vision as "The Best Small Town in Minnesota".

The Property:

The proposed apartment project will occupy approximately 6.0 acres of the total 12.0-acre parcel. Refer to the project documents for further depiction of the site and location.

Existing Conditions:

The site is an undeveloped parcel with the railroad creating the southern boundary and Clover Ridge Drive curving to create the eastern and northern boundary to the site. There are already a couple of storm ponds from the development of the Clover Ridge Rd that could easily be expanded to accommodate storm water from our project. The topography includes high point off of Clover Ridge Drive, an ideal spot for development, and it slopes down to the surrounding wetlands. The site offers beautiful and unobstructed views west of the surrounding wetlands and mature woodlands beyond. These natural features will create a natural buffer for the project from surrounding land uses as half of the site is proposed to remain in its natural state.

Additionally, every effort will be made to preserve natural features adjacent to the building area, including existing trees to the extent feasible.

In order to facilitate development, we anticipate the site will need to export soil to allow for the subsurface parking and allow for natural grades to hit the building at a slope that feels as if the building is emerging from the land.

Description of Apartment Project:

The apartment project will contain 120 market rate units in a four-story structure with a variety of modern floor plan designs including a mixture of bedroom units (studios, one, two, and three). There will be one level of underground parking and additional surface parking which will provide a parking still for each unit. Green space will be maximized with preservation of the wetland, and the inclusion of outdoor patios, grills, and community room that enhance community interaction amongst the residents. Since the proposed complex is not large in scale, the residential units will be easily absorbed with current rental property demand in the community.

The apartment project will be a luxury, market-rate residential complex offering its resident a wide array of amenities within the units themselves as well as within the overall complex. Some of the site and project amenities will include: community room with full kitchen, large screen TV and high-quality sound system, fully equipped fitness room, media room with USB ports, pet washing station and play area. Residential units will include: walk-in closets, high speed internet, in-unit washers and dryers, private balcony or patio, full stainless-steel kitchen appliances.

The target resident for the project will be empty nesters, families, as well as Millennials, those that are renting by choice because of their lifestyle and are seeking more amenities from an apartment complex.

The building and project will fit in with surrounding neighborhoods by utilizing similar and complimentary exterior materials consisting of lap siding and manufactured stone, complimentary colors, and building massing that ties into the multi-family projects in the vicinity.

The project will comply with City of Chaska site lighting requirements. Exterior lighting will not be directed upon adjacent land or the public right-of-way.

Parking:

The project requires a parking ratio of 2 parking stalls per dwelling unit per City requirements. The developable area of the site is prohibitive to provide the amount of surface parking necessary to accomplish this ratio. The building provides for 120 interior parking stalls, while the site provides an additional 74. This totals 194 total stalls, or 1.65 stalls per dwelling unit.

The unit mix totals 195 bedrooms, so the parking count comes very close to achieving at 1:1 stall/bedroom ratio.

A parking study was completed to estimate the peak parking demands for the project and determine if sufficient parking capacity is provided. The results of the parking study indicate a demand of 148 total parking spaces.

Architectural Details:

Here is a brief summary of architectural details / features:

1) The exterior finish comprises of a combination of LP siding or Cement board siding and manufactured stone veneer.
2) Exterior windows and doors at residential units are fiberglass or vinyl with U values compliant with Minnesota Energy Conservation Code 2020.
3) Exterior doors at common areas are an aluminum storefront system while the windows are fiberglass or vinyl, with U values compliant with Minnesota Energy Conservation Code 2020.
4) Any rooftop mechanical equipment would be adequately screened from street level view.
5) All exterior colors / finishes would follow a cohesive and complementary design strategy, delivering an upscale aesthetic to the neighborhood.
6) Interior colors and finishes would also follow a cohesive and complementary design strategy, creating an environment that enhances livability.

Access and Connectivity:

Access to the site will be obtained via Clover Ridge Drive. The site can be roughly by reached to Minneapolis-St. Paul International Airport and the Mall of America within a 30-minute drive. The 30-minute drive time also reaches as far as Delano to the north, New Prague to the south, and nearly to Glencoe to the west.

The site is surrounded by a mix of residential, institutional, industrial, and commercial uses and are situated near employment concentrations and retail activity, as well as near the Chaska school system (specifically in the Eastern Carver County School District).

The site will connect pedestrians to adjacent neighborhoods in Chaska via the trail on the west side of Clover Ridge Drive.

Compliance:

Currently, the Site is zoned as Rural. We are proposing that the site be zoned Planned Residential District (PRD).

Drainage:

The site is sloped to drain to the Southwest corner which is the sites low point. There is active ponding that takes place within the delineated wetland. There are existing retention ponds on the property constructed with the construction of Clover Ridge Rd.

Proposed stormwater management will comply with City of Chaska and Carver County Watershed Management Organization rules and requirements.

Developer Experience:

Ashish Aggarwal is a full-time real estate owner / operator for the last 20 years, portfolio includes over 1.5 million of square feet under ownership and management in MN and AZ. This includes residential, senior living, office, industrial, and retail. Stonebay of Orono senior living project is the last development completed.

Vishal Dutt has been in real estate for the last 20 years with various real estate owners / operators in various asset types (retail, industrial, office, multi-family housing, senior living housing). Specialization includes ensuring financial and operational diligence for all aspects of real estate.

We look forward to working with the City of Chaska on this application and project. Our goal is to enhance the community and surrounding area, want to do what's best for the area.

Thank you,

AV Development, LLC

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February 13, 2022

To: **Vishal Dutt**
Josh McKinney

From: **Vernon Swing, PE**

Re: **Parking Demand for Clover Ridge Apartments, Chaska, MN**

Per your request, S² Traffic Solutions, LLC has conducted a parking demand analysis for the proposed development of a 119-unit, 205 bedroom, Multi-Family residential development in Chaska, MN. The site is located on the west side of Clover Ridge Rd, and is planned to include 199 parking stalls. The purpose of this study is to estimate peak parking demands for the proposed use and determine if sufficient parking capacity will be provided with the development.

Parking Demand

The parking demand for the proposed Clover Ridge Apartments development utilized *Parking Generation*, 4th Edition, published by ITE, the Institute of Transportation Engineers. The ITE information for Land Use Code 221 associated with Mid-rise multi-family residential buildings indicates the number of parking spaces needed to address the demand associated with this land use can be estimated based on the number of dwelling units or the number of bedrooms included with the project. The number of dwelling units is the most generic category since it includes units with one, two three or four bedrooms. The number of bedrooms is the most accurate for estimating demand with new developments. In this case, there are 205 bedrooms planned with this development.

Also, parking demand statistics are available for different area types, whether suburban, dense urban or City Center. In this case suburban was chosen because the statistics are more conservative suggesting more residents will drive, and because the characteristics for the other two categories include robust transit options which reduce parking demand, which is not present in this case.

The parking demand calculation includes are two methods. The first method is based on a rate of parking demand per "unit" determined from a weighted average of collected data. The second method is based on a fitted curve equation generated to fit the collected data. ITE recommendations as to the appropriate method are as follows:

From ITE:

"When the data plot includes at least 20 points and when a fitted curve is provided the fitted curve equation should be used if the R square value is 0.75 or greater.

Coefficient of Determination (R squared)— the percent of the variance in the number of parked vehicles associated with the variance in the independent variable value. This value is presented for every fitted

curve equation. If the R squared value is 0.75, then 75 percent of the variance in the number of parked vehicles is accounted for by the variance in the size of the independent variable. As the R squared value approaches 1.0 the better the fit; as the R squared value approaches zero, the worse the fit."

In this case the fitted curve equation was chosen as the regression analysis indicates the R squared is 0.94 indicating this is the most accurate method for estimating demand (see attached sheet from ITE). The Parking Demand is calculated as follows, with P representing Parking Demand, and X representing the number of bedrooms:

$$P = 0.82 (X) – 20.37$$
$$P = 0.82 (205) – 20.37$$
$$P = 148 \text{ Spaces}$$

As mentioned earlier the proposed development is planning to provide 199 spaces for residents and guests, exceeding the anticipated demand calculated at 148 spaces.

Conclusion

In conclusion, the proposed Clover Ridge Mid-rise Apartment development has sufficient parking for the anticipated demand. The parking supplied as part of the overall development exceeds the anticipated needs. Please contact Vernon Swing at vswingtraffic@gmail.com or 612-968-4142 with any questions.

Attachment: ITE Parking Demand Sheet

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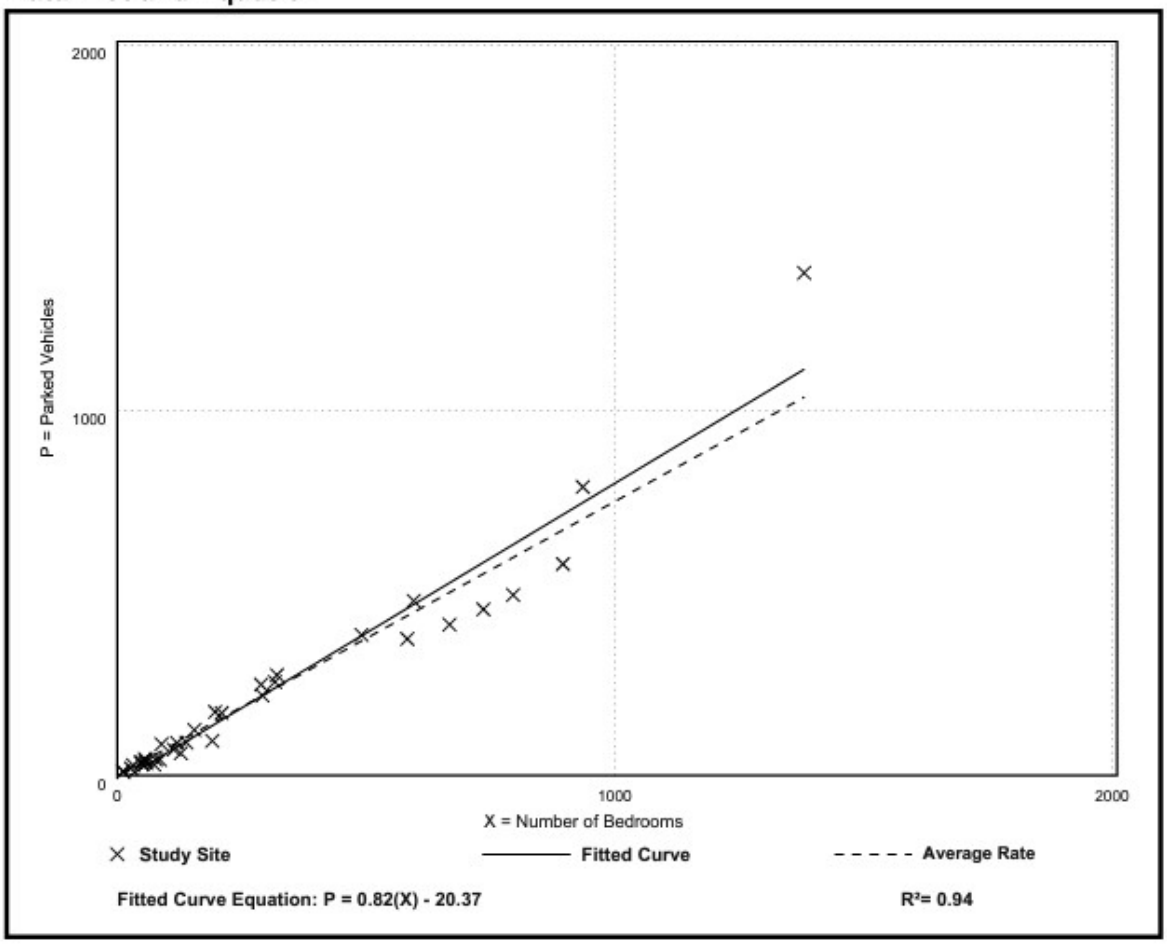
Multifamily Housing (Mid-Rise)
(221)

Peak Period Parking Demand vs: Bedrooms
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban (no nearby rail transit)
Peak Period of Parking Demand: 10:00 p.m. - 5:00 a.m.
Number of Studies: 35
Avg. Num. of Bedrooms: 294

Peak Period Parking Demand per Bedroom

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.75	0.41 - 1.00	0.65 / 0.87	0.70 - 0.80	0.15 (20%)

Data Plot and Equation



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January 24, 2022

To: **Michael Suel, DR Horton**

From: **Vernon Swing, PE**

Re: **DRAFT Traffic Analysis Memorandum – Oak Creek Single Family, Clover Ridge Apartments, and Clover Field Apartments, Chaska, MN**

Per your request, S² Traffic Solutions, LLC has conducted a traffic analysis for the three proposed developments – Oak Creek single family homes, Clover Ridge Apartments, and Clover Field Apartments in the City of Chaska, MN. This study considered the individual impact associated with the single family homes and the separate, combined impact of the apartment projects, as well as the total impact of all three projects. The proposed development projects are all located as follows: Clover Ridge Apartments is located on the west side of Clover Ridge Rd, south of Pioneer Trail and north of the railroad tracks; Clover Field Apartments is located on the west side of Clover Ridge Rd, south of the railroad tracks and north of the Clover Ridge Rd/Clover Preserve Dr roundabout; Oak Creek is located to the south of the railroad tracks, west of Clover Ridge Rd, and west of Clover Preserve Dr. The Oak Creek development will include 103 single family homes and will generally be accessed via an extension of Clover Preserve Ln on the south side, and via an extension of Romeo Ct on the north side. Clover Field apartments will consist of an apartment building with 162 units and will be accessed directly from Clover Ridge Rd on the south and via a driveway to the extension of Romeo Ct on the north side. Clover Ridge apartments will consist of an apartment building with 120 units and will be accessed from a single driveway from Clover Ridge Rd. **Figure 1**, Vicinity Map, and **Figures 2a, 2b, and 2c**, are the Site Plans for the proposed developments, depicting the location and site plans.

This memorandum documents the existing conditions, the anticipated site-generated traffic for the three developments, the distribution of the development traffic, and reviews the traffic operations at the following intersections for the year after completion of the development, 2025:

- Pioneer Trail and Clover Ridge Dr
- Clover Ridge Dr and Romeo Ct
- Clover Ridge Dr and Clover Preserve Dr
- Clover Ridge Dr and Hundertmark Rd W
- Clover Ridge Dr and Clover Field Dr
- Clover Ridge Dr and Schoolmaster Dr
- Clover Preserve Dr and Hundertmark Rd W
- Clover Preserve Dr and Clover Field Dr
- Clover Preserve Dr and Schoolmaster Dr
- Clover Preserve Dr and Clover Preserve Ln
- Clover Preserve Dr and Sophia Dr
- Clover Ridge Apartment access and Clover Ridge Dr
- Clover Field Apartment access and Clover Ridge Dr

Existing Conditions

Table 1 below details the existing conditions of the roadways providing direct access to the three proposed developments in Chaska, MN.

Table 1
Roadway Description

Roadway	Functional Class	Typical Section	Posted Speed	AADT (Year)
Pioneer Trail (CR 14)	A Minor Expander	3-Lane Undivided Urban	45 mph	3300 (2019)
Clover Ridge Dr	Minor Collector	2-Lane Undivided Urban	30 mph	1,050-2,500 (2021)*
Romeo Ct	Local	2-Lane Undivided Urban	30 mph	275 (2021)*
Hundertmark Rd W	Local/Major Collect	2-Lane Undivided Urban	30 mph	1,100 (2021)*
Clover Preserve Dr	Local	2-Lane Undivided Urban	30 mph	200-800 (2021)*
Sofia Dr	Local	2-Lane Undivided Urban	30 mph	275 (2021)*
Clover Preserve Ln	Local	2-Lane Undivided Urban	30 mph	330 (2021)*
Clover Field Dr	Local	2-Lane Undivided Urban	30 mph	600 (2021)*
Schoolmaster Dr	Local	2-Lane Undivided Urban	30 mph	1,000 (2021)*

* Based on 2021 PM peak hour turning movement counts

The traffic control and geometrics of the study area intersections for the future analysis year 2025 are shown on **Figure 3**, Study Area Geometrics.

Existing Traffic Volumes

Existing traffic volumes from the study area intersections were obtained from traffic counts conducted on Wednesday December 15, 2021. The AM peak hour was found to occur between 7:15 to 8:15 AM and the PM peak hour was found to occur between 4:00 to 5:00 PM (See **Figure 4**, Existing Peak Hour Volumes).

Future Conditions

To quantify the impacts of a development on the surrounding roadway system, it is necessary to first determine traffic conditions that would be present on the roadway system without the inclusion of the proposed development. The anticipated construction completion date for the three projects is 2024, thus year 2025 was selected for analysis so as to compare traffic conditions after initial traffic patterns to and from the developments have become established. To determine the future traffic conditions a review of the latest City of Chaska Comprehensive Transportation Plans indicates the traffic in the area is expected to increase by three percent per year as land development occurs. This growth rate is based on the traffic analysis zone forecast completed for the City's 2040 Transportation Plan, particularly for those zones adjacent to the Proposed Project. For this study, three separate future scenarios were addressed. In the first scenario it was assumed only the Oak Creek development will occur, in the second scenario it was assumed both apartment developments occur but no single family, and in the third scenario it was assumed all three developments will occur.

Trip Generation and Distribution

The volume of vehicle trips generated by the three developments has been estimated for the weekday AM and PM peak hours and on a daily basis using the data and methodology described in the ***Trip Generation Manual***[1]. Table 2 summarizes the trip generation estimates.

Table 2 - Trip Generation

Land Use	Type	Block No.	Land Use Code	Size	Trips Generated:				
					AM peak		PM Peak		Weekday
					Enter	Exit	Enter	Exit	ADT
Single Family Housing	Residential	1	210	100 units	18	52	59	35	943
Mid-Rise Apartment/Suburban	Residential	2	221	162 units	14	44	43	28	881
Mid-Rise Apartment/Suburban	Residential	2	221	120 units	10	33	32	21	653
Totals - Gross					43	129	135	83	2,477
					172		218		

* Per ITE's Trip Generation Manual, 11th Edition.

As shown in Table 1, the Oak Creek single family homes development will generate 70 new trips (18 entering and 52 exiting) during the morning traffic peak hour, 94 new trips (59 entering and 35 exiting) during the evening traffic peak hour and 943 daily trips. Similarly, the apartment projects will generate 101 new trips (24 entering and 77 exiting) during the morning traffic peak hour, 124 new trips (75 entering and 49 exiting) during the evening traffic peak hour, and 1,534 daily trips. It is noted that this estimate could be conservative as no reductions were taken for multimodal trips (walking, bicycling, transit) from the surrounding area or current work from home conditions.

The new trips have been assigned to the surrounding roadways according to the existing and anticipated traffic patterns. It is noted, the traffic associated with the apartment projects is expected favor Pioneer Trail to gain access to the region (approximately 85 percent) with less traffic (15 percent) utilizing Hundertmark Rd. The traffic from Oak Creek is generally divided between Pioneer Trail, Hundermark Rd, Clover Field Dr, and Schoolmaster Dr, with approximately 40 percent utilizing Pioneer Trail, 35 percent using Hundertmark Rd, 17 percent using Clover Field Dr, and 8 percent using Schoolmaster Dr.

As mentioned above, just the new trips associated with the Oak Creek were assigned to 2025 roadway traffic conditions and analyzed to determine the impact of just the single family homes development. Also, the just new trips associated with the Clover Ridge apartments and Clover Creek apartments were assigned to the 2025 roadway traffic conditions and analyzed to determine the impact of just the apartment developments. **Figures 5** and **6** illustrate the two separate trip assignments, and **Figures 7, 8,** and **9** illustrate the Build conditions for the Oak Creek development alone, the Build condition for the apartment projects alone, and the combined total of all three development, respectively.

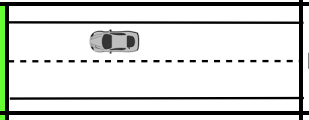
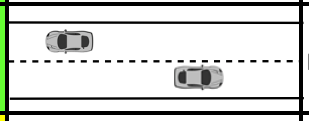
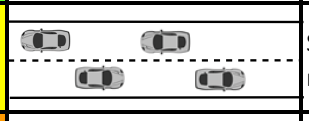
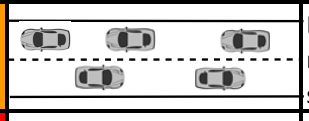
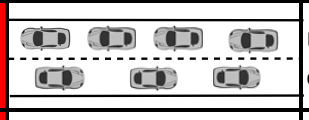
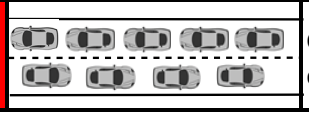
Traffic Operations

The operating conditions of transportation facilities, such as roadways, traffic signals, roundabouts and stop-controlled intersections, are evaluated based on the relationship of the theoretical capacity of a facility to the actual traffic volume on that facility. Various factors affect capacity including travel speed, roadway geometry, grade, number of travel lanes, and intersection control. The current standards for evaluating capacity and operating conditions are contained in ***Highway Capacity Manual***[2]. The

[1] Trip Generation Manual, Institute of Transportation Engineers (ITE), 11th Edition

[2] Highway Capacity Manual (HCM), Transportation Research Board, 6th Edition

procedures describe operating conditions in terms of driver delay represented as a Level of Service (LOS). Operations are given letter designations with "A" representing the best operating conditions and "F" representing the worst. Generally, level of service “D” represents the threshold for acceptable overall intersection operating conditions during a peak hour. The Chart below summarizes the level of service and delay criteria for signalized and unsignalized intersections.

Level of Service		Description	Delay (sec)	
			Signalized	Unsignalized/ Roundabout
A		Primarily free-flow operation.	0-10	0-10
B		Reasonably unimpeded operation.	>10-20	>10-15
C		Stable operation. The ability to maneuver is more restricted than LOS B.	>20-35	>15-25
D		Less stable operation. Small increases in flow may cause large increases in delay and reduced speeds.	>35-55	>25-35
E		Unstable operation. Low speeds and considerable delay.	>55-80	>35-50
F		Congested operation. High delay and extensive queuing.	>80	>50

For side street stop-controlled intersections special emphasis is given to providing an estimate for the level of service of the minor approaches. Traffic operations at an unsignalized intersection with side street stop-control can be described two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes. Second, it is important to consider the delay on the minor approaches, since the mainline does not have to stop. It is common for intersections with higher mainline traffic volumes to experience increased levels of delay and poor level of service on the side streets.

A final fundamental component of operational analyses is a study of vehicular queuing, or the line of vehicles waiting to pass through an intersection. An intersection can operate with an acceptable Level of Service, but if queues from the intersection extend back to block entrances to turn lanes or accesses to adjacent land uses, unsafe operating conditions could result. In this report, the Industry Design Standard 95th percentile queue length is used. The 95th Percentile Queue Length refers to that length of vehicle queue that has only a five-percent probability of occurring during an analysis hour.

This study has utilized the industry current Synchro/SimTraffic software package (11th Edition) to analyze the Existing conditions and the 2025 Build conditions for both the AM and PM peak hours. It is noted, the reported results are from the aggregate of 10 SimTraffic simulations which use a random number

generator to seed the network with vehicles. These results reflect dynamic conditions and are more accurate than the results of the static analysis reported by Synchro. Due to the random number generator results can sometimes show slightly better operations on minor movements under higher traffic conditions when the intersections are operating well. This can be seen when delays and queues noted in the Build Scenario are slightly less than the No-Build Scenario.

Tables 3 on the following page summarizes the results of the analyses for the existing, and three 2025 Build scenarios (assumes 3.0 percent annual growth in traffic from existing conditions and adds trips estimated for the various developments). The results shown in the indicate the overall level of service at all the studied intersection is and will be LOS A, with individual movements at LOS B or better for all of the studied scenarios. The inclusion of site-generated traffic does slightly increase delays and queuing, but operations remain acceptable and no development related mitigation measures are recommended. In other words, the roadways supplying direct and indirect access have sufficient reserve capacity for these projects and others.

Conclusion

In conclusion, the proposed developments have appropriate access to the sites and to the surrounding roadway network. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate site-generated traffic.

Please contact Vernon Swing at vswingtraffic@gmail.com with any questions.

Attachments: Table 3; Figures 1-9
(Appendices with Traffic Counts, Trip Generation Data, Synchro/Simtraffic Worksheets are available upon request.)

Table 3

LOS (Delay in sec) plus Vehicle Queuing in Feet

(Lower case letter designates Unsignalized intersection; italics designates Roundabout)

Intersection No.	Existing AM	AM Q	Existing PM	PM Q	Single Family AM	SF AM Q	Single Family PM	SF PM Q	Multi-Family AM	MF AM Q	Multi-Family PM	MF PM Q	Both Build AM	BB AM Q	Both Build PM	BB PM Q
5	a (2.3)		a (1.7)		a (2.8)		a (2.0)		a (2.7)		a (2.1)		a (2.8)		a (2.0)	
Worst Movement	sbt a (7.4)	SB 42	sbt a (9.2)	SB 37	sbt a (6.8)	SB 44	sbt a (8.4)	NB 43	nbt a (9.6)	NB 52	nbt b (10.1)	NB 47	sbt a (7.3)	NB 52	sbt b (10.4)	NB 45
10	a (0.5)		a (0.6)		a (0.6)		a (0.8)		a (0.7)		a (0.7)		a (1.3)		a (0.9)	
Worst Movement	wbr a (2.2)	WB 37	wbl a (5.5)	WB 27	ebl a (4.2)	EB 31	ebl a (4.8)	EB 34	wbl a (7.5)	WB 35	wbl a (4.1)	WB 32	wbl a (7.5)	EB 44	wbl a (6.0)	EB 36
15	*a (2.6)*		*a (2.4)*		*a (2.7)*		*a (2.4)*		*a 2.8)*		*a (2.6)*		*a (2.9)*		*a (2.7)*	
Worst Movement	*sbt a (3.0)*	*WB 10*	*wbt a (2.5)*	-	*nbt a (3.1)*	-	*ebt a (3.4)*	-	*ebt a (3.3)*	*EB 14*	*wbt a (3.4)*	-	*sbt a (3.2)*	*NB 10*	*nbr a (3.8)*	*SB 10*
20	*a (3.1)*		*a (2.9)*		*a (3.1)*		*a (3.0)*		*a (3.1)*		*a (3.1)*		*a (3.2)*		*a (3.1)*	
Worst Movement	*nbt a (4.9)*	*NB 33*	*wbt a (3.7)*	*WB 38*	*nbl a (4.3)*	*NB 42*	*sbt a (3.4)*	*EB 20*	*sbt a (3.6)*	*NB 48*	*nbt a (4.0)*	*WB 24*	*nbt a (4.5)*	*NB 34*	*nbl a (3.7)*	*EB 23*
25	a (1.1)		a (0.8)		a (1.1)		a (1.1)		a (1.1)		a (1.1)		a (1.0)		a (1.4)	
Worst Movement	ebl a (6.2)	EB 47	wbt a (5.9)	EB 36	wbl a (5.7)	EB 50	ebl a (6.4)	EB 39	wbt a (5.8)	EB 44	wbl a (6.2)	WB 30	ebl a (6.5)	EB 48	wbl a (6.7)	EB 43
30	a (1.6)		a (1.7)		a (1.7)		a (1.8)		a (1.8)		a (2.1)		a (1.8)		a (1.8)	
Worst Movement	ebt a (6.8)	EB 48	ebt a (7.3)	WB 48	wbt a (5.8)	WB 46	ebt a (8.0)	EB 39	ebt a (7.1)	WB 42	ebt a (9.2)	WB 63	ebt a (6.7)	WB 52	ebt a (7.0)	WB 43
35	a (0.8)		a (2.8)		a (1.1)		a (2.2)		a (1.2)		a (2.8)		a (1.3)		a (2.5)	
Worst Movement	wbl a (4.3)	WB 34	wbl a (4.4)	WB 44	wbl a (4.0)	WB 43	wbl a (4.5)	WB 52	wbl a (4.1)	WB 43	wbl a (4.4)	WB 53	wbl a (4.3)	WB 44	wbl a (4.7)	WB 58
40	a (2.4)		a (1.9)		a (2.1)		a (3.1)		a (2.6)		a (2.6)		a (2.9)		a (3.3)	
Worst Movement	sbt a (5.1)	SB 35	sbt a (4.9)	SB 40	sbt a (5.4)	SB 37	sbt a (5.5)	SB 43	sbt a (6.1)	SB 46	sbt a (5.0)	SB 44	sbt a (5.7)	SB 46	sbt a (5.6)	SB 48
45	a (0.6)		a (2.9)		a (0.9)		a (3.3)		a (1.6)		a (4.6)		a (2.6)		a (3.0)	
Worst Movement	sbt a (1.9)	-	sbl a (6.0)	SB 27	sbl a (5.7)	SB 23	sbl a (6.5)	SB 39	sbl a (5.8)	SB 43	sbr a (6.8)	SB 37	sbl a (5.6)	SB 34	sbl a (5.9)	SB 41
50	a (2.1)		a (1.2)		a (2.1)		a (1.6)		a (1.7)		a (1.2)		a (2.2)		a (1.7)	
Worst Movement	ebl a (4.5)	EB 47	ebl a (4.3)	EB 32	ebl a (4.3)	EB 42	ebl a (4.2)	EB 50	ebl a (4.8)	EB 44	ebl a (4.5)	EB 42	sbl a (4.4)	EB 48	ebl a (4.7)	EB 50
55	a (1.5)		a (0.9)		a (1.2)		a (1.0)		a (1.5)		a (0.9)		a (1.9)		a (1.1)	
Worst Movement	ebl a (4.8)	EB 36	ebl a (3.9)	EB 24	ebl a (4.3)	EB 37	ebl a (4.3)	EB 30	ebl a (4.0)	EB 44	ebl a (3.9)	EB 25	ebl a (4.6)	EB 43	ebl a (4.2)	EB 34
60	N/A		N/A		N/A		N/A		a (1.1)		a (0.9)		a (0.9)		a (0.7)	
Worst Movement		-		-		-		-	ebl a (5.0)	EB 44	ebl a (5.2)	EB 43	ebl a (5.2)	EB 46	ebl a (5.2)	EB 38
65	N/A		N/A		N/A		N/A		a (1.2)		a (0.8)		a (1.0)		a (0.9)	
Worst Movement		-		-		-		-	ebl a (4.6)	EB 46	ebl a (4.7)	EB 38	ebl a (4.2)	EB 45	ebl a (5.0)	EB 42

Intersections:

5	Pioneer Trail and Clover Ridge Dr
10	Clover Ridge Dr and Romeo Ct
15	Clover Ridge Dr and Clover Preserve Dr
20	Clover Ridge Dr and Hundertmark Rd W
25	Clover Ridge Dr and Clover Field Dr
30	Clover Ridge Dr and Schoolmaster Dr
35	Clover Preserve Dr and Hundertmark Rd W
40	Clover Preserve Dr and Clover Field Dr
45	Clover Preserve Dr and Schoolmaster Dr
50	Clover Preserve Dr and Clover Preserve Ln
55	Clover Preserve Dr and Sophia Dr
60	Clover Ridge Apartment access and Clover Ridge Dr
65	Clover Field Apartment access and Clover Ridge Dr



Figure 1 - Vicinity Map

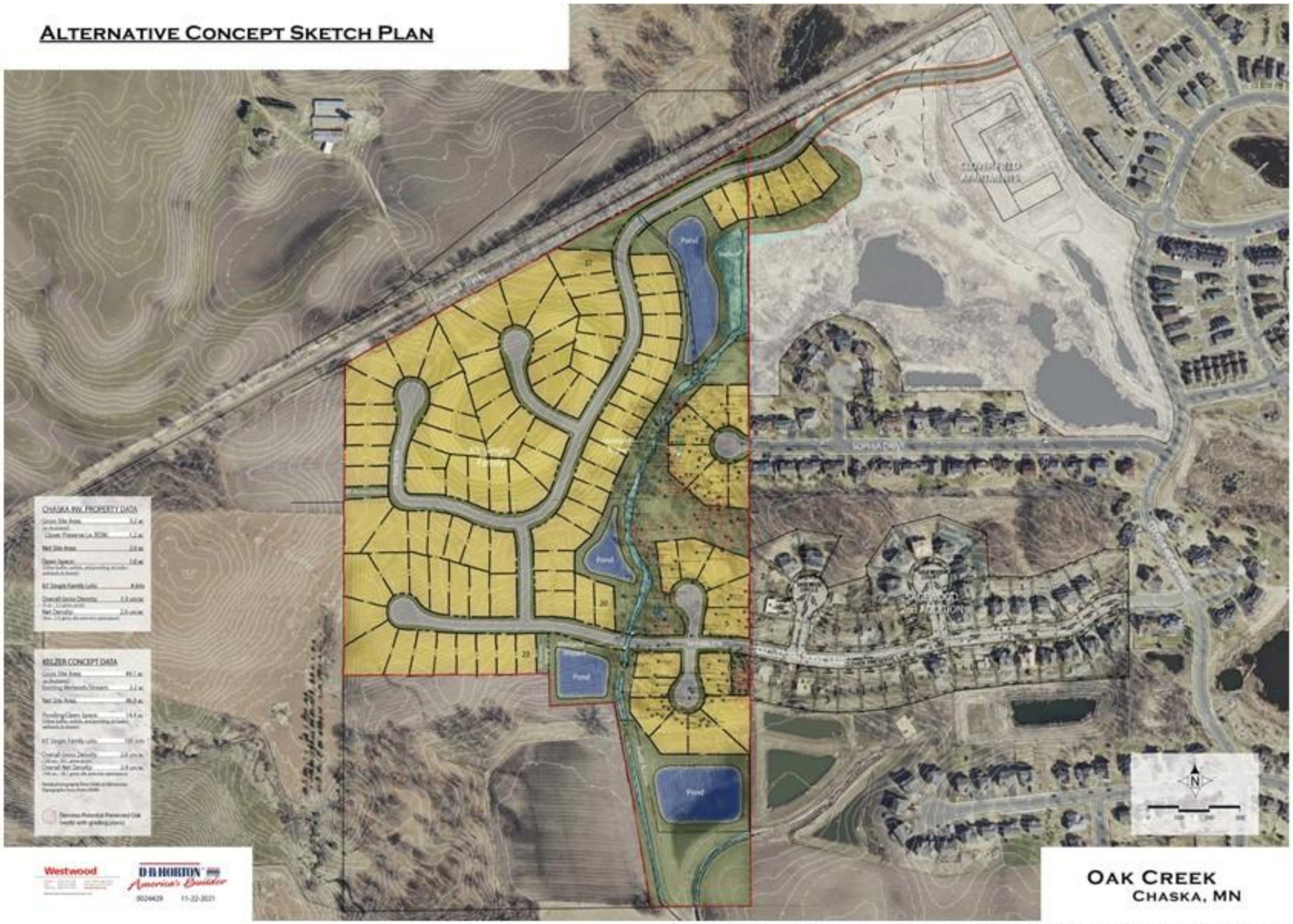


Figure 2A - Oak Creek Residential Site Plan (By Others)

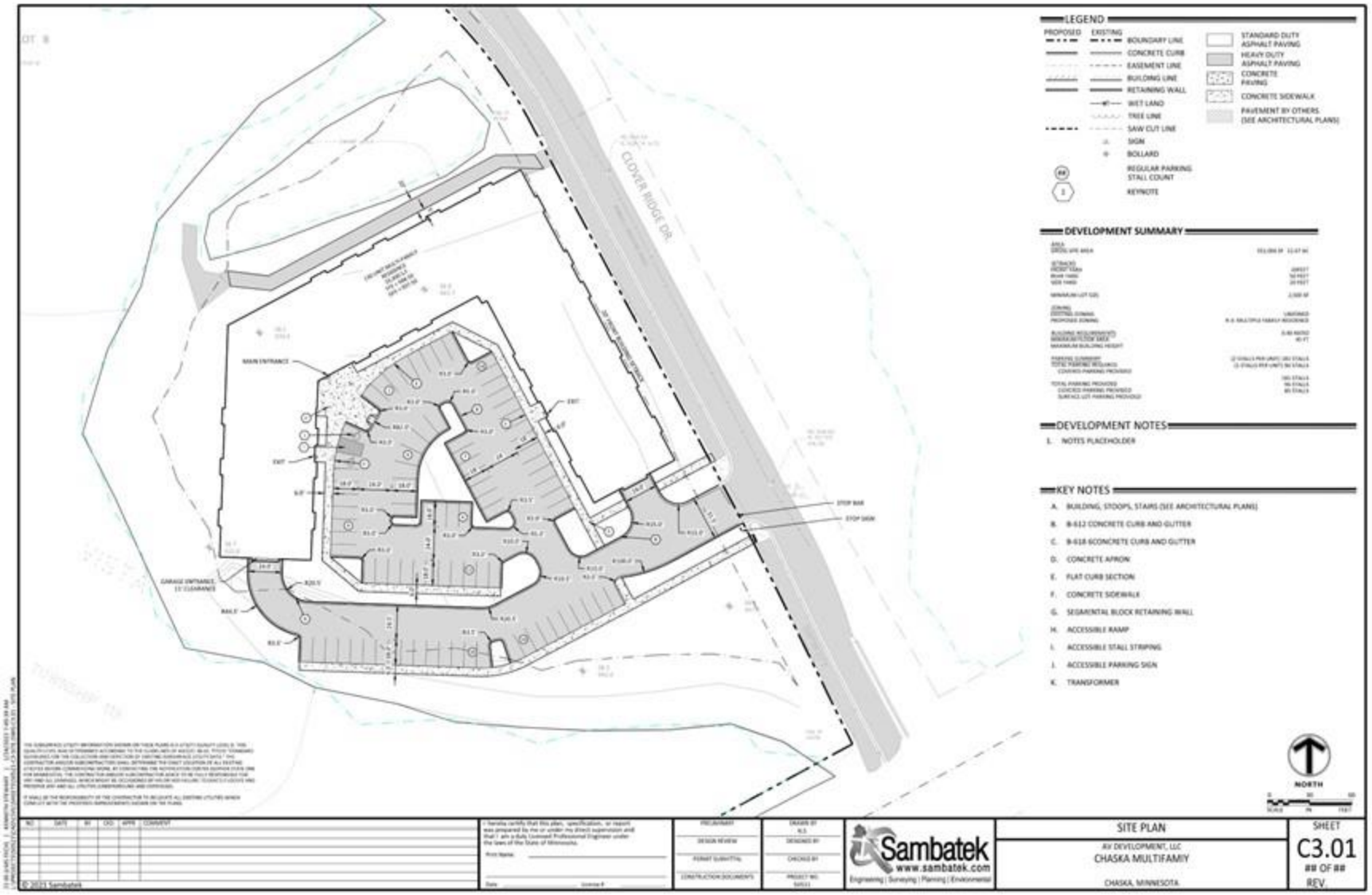


Figure 2B - Clover Ridge Apartments Site Plan (By Others)

SITE CONCEPT #01

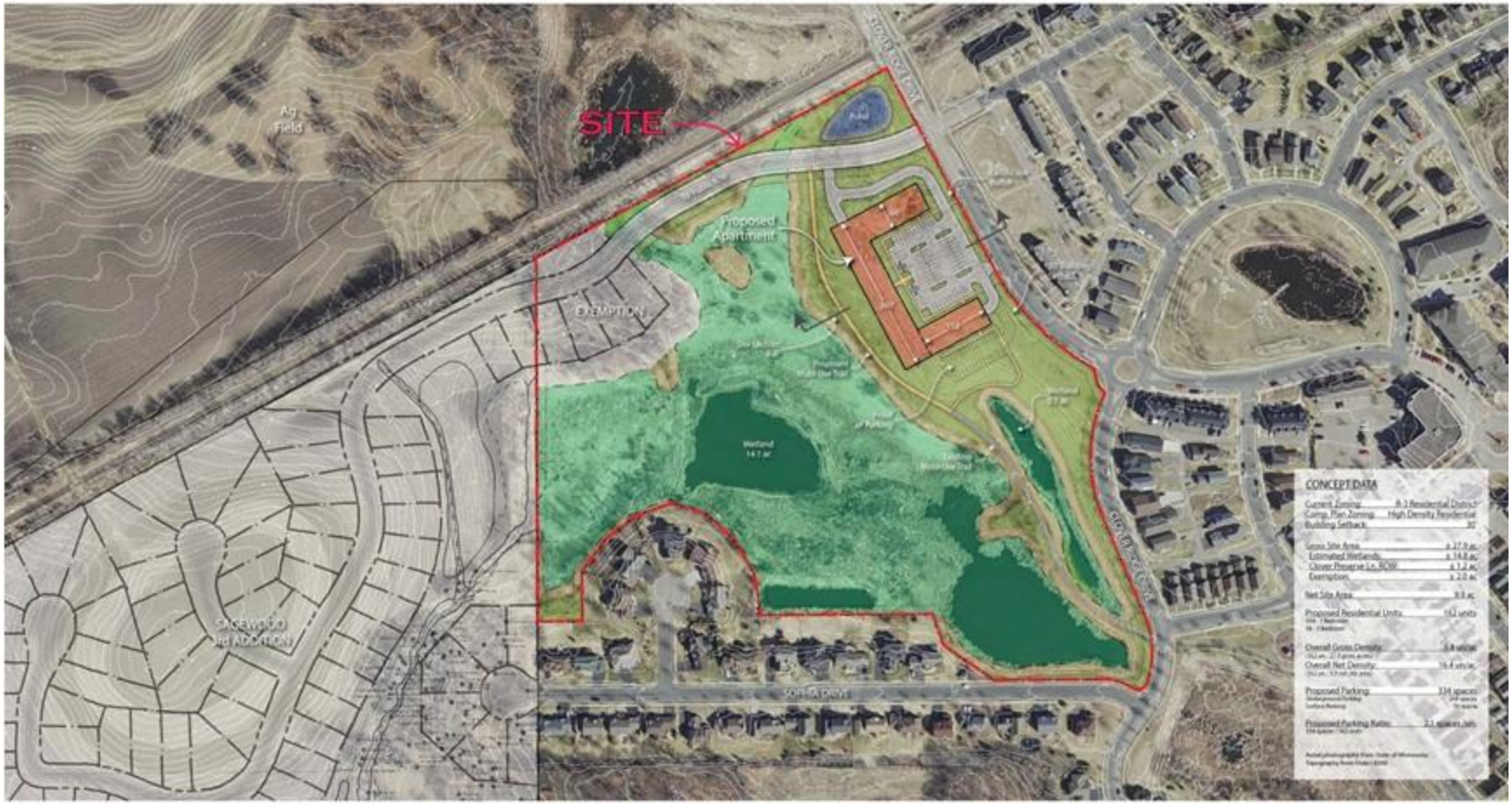


Figure 2C - Clover Field Apartments Site Plan (By Others)

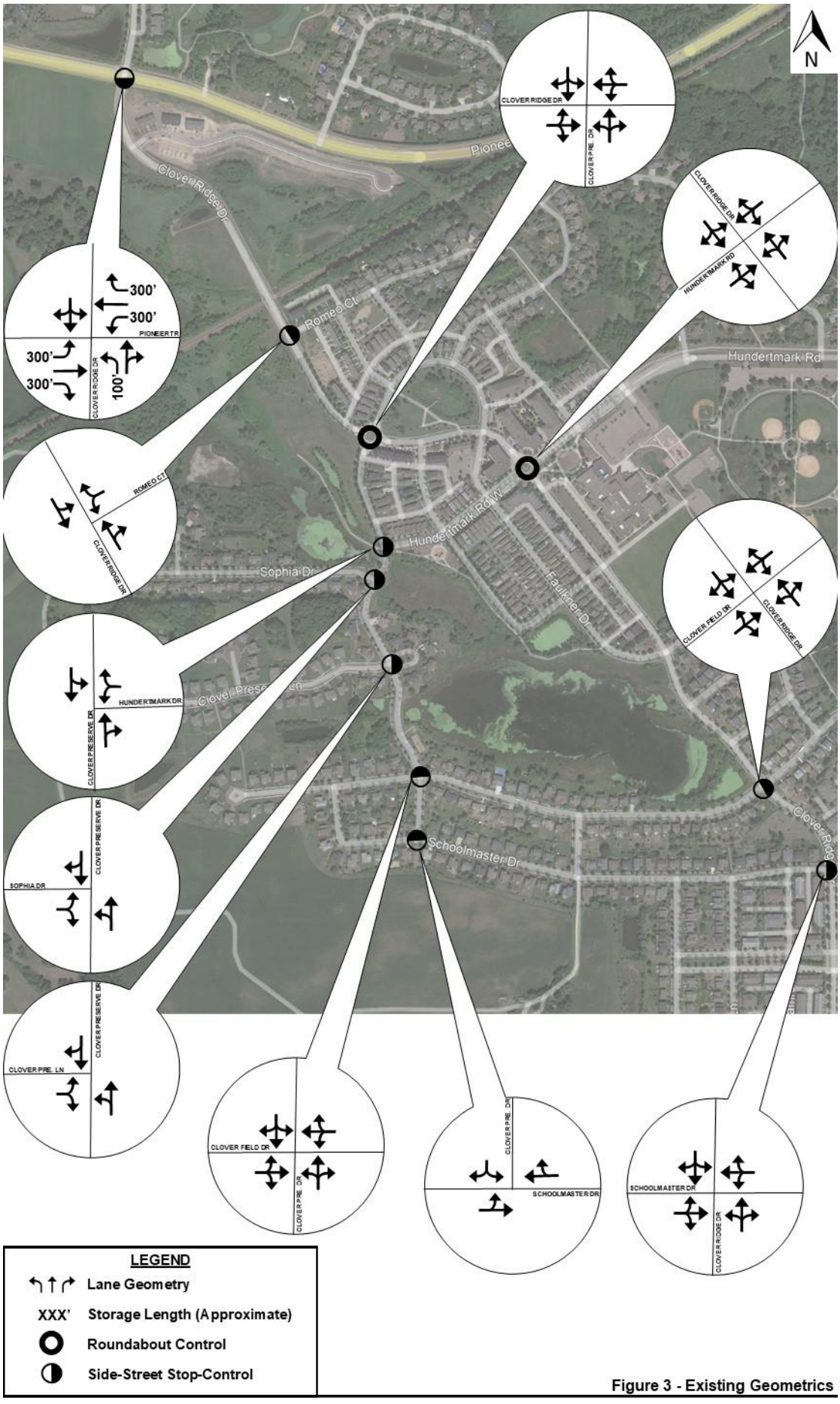


Figure 3 - Existing Geometrics

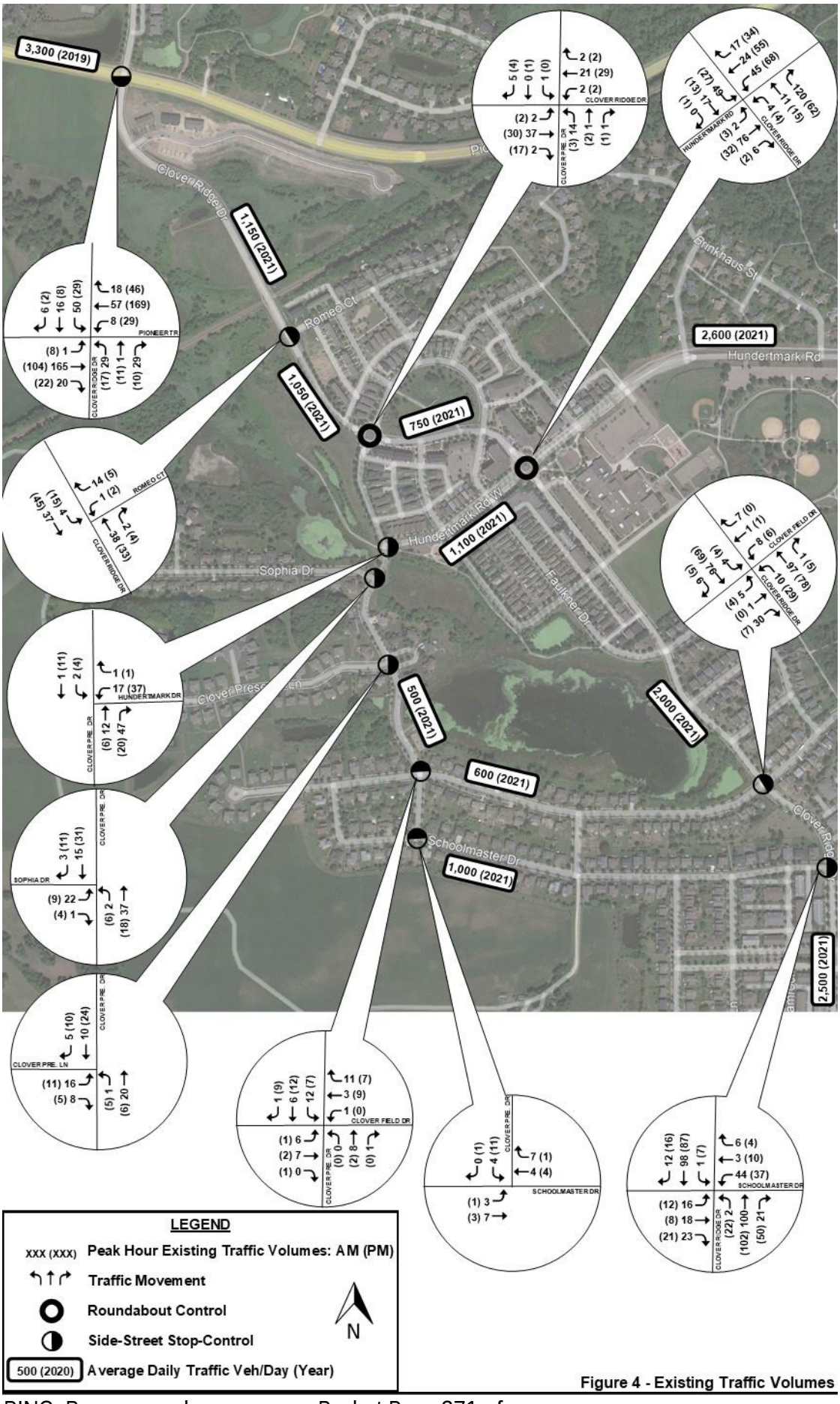


Figure 4 - Existing Traffic Volumes

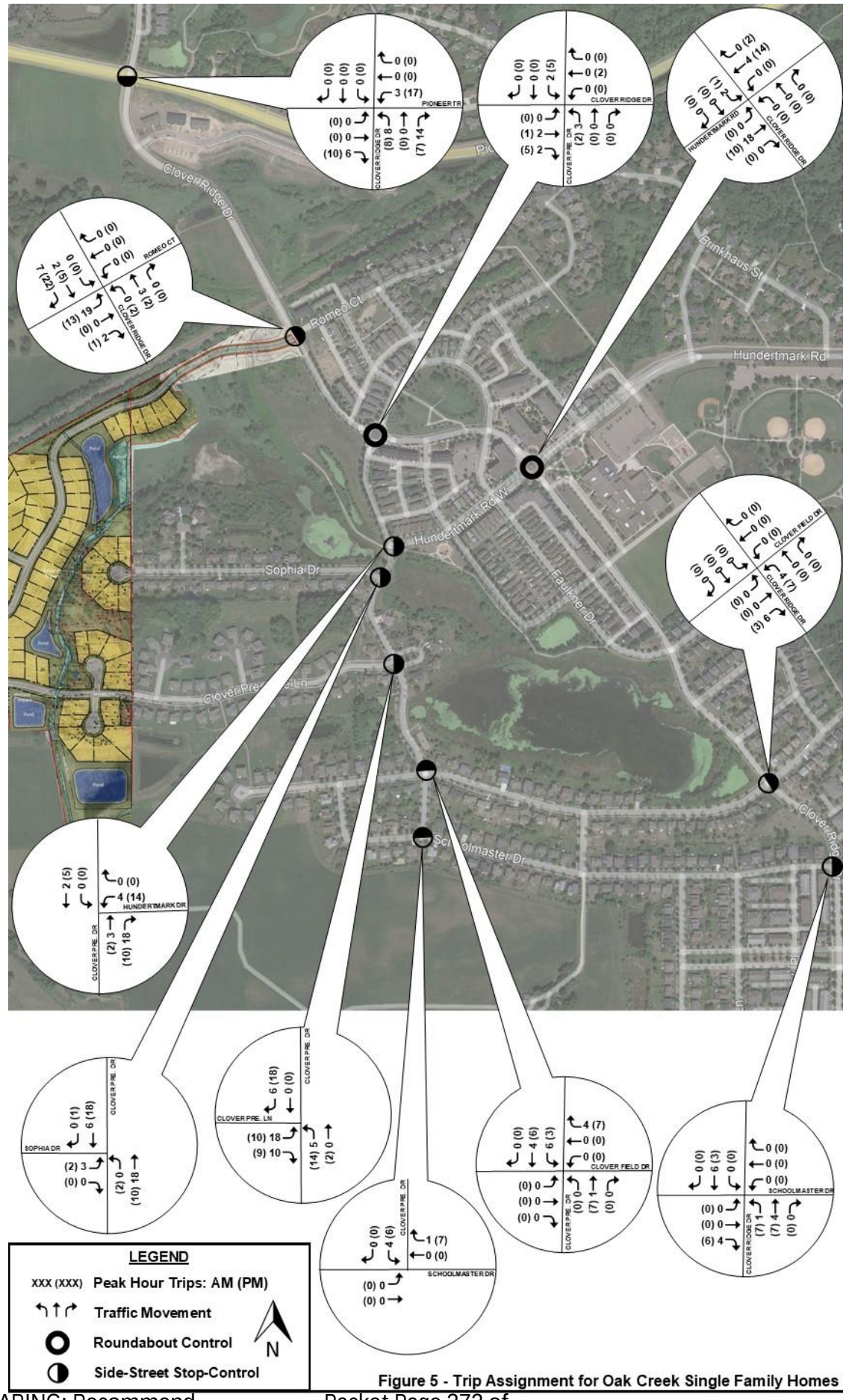


Figure 5 - Trip Assignment for Oak Creek Single Family Homes

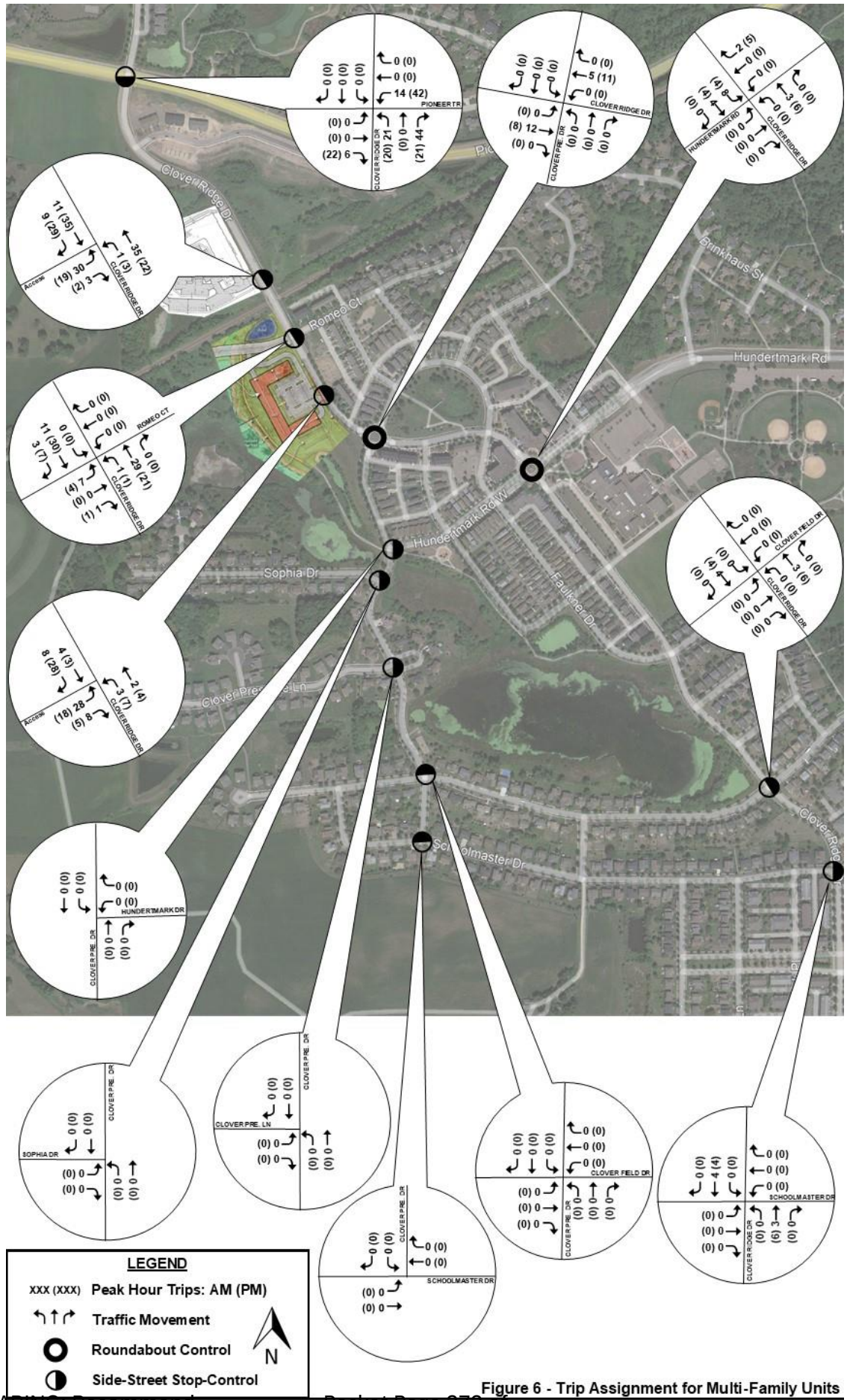


Figure 6 - Trip Assignment for Multi-Family Units

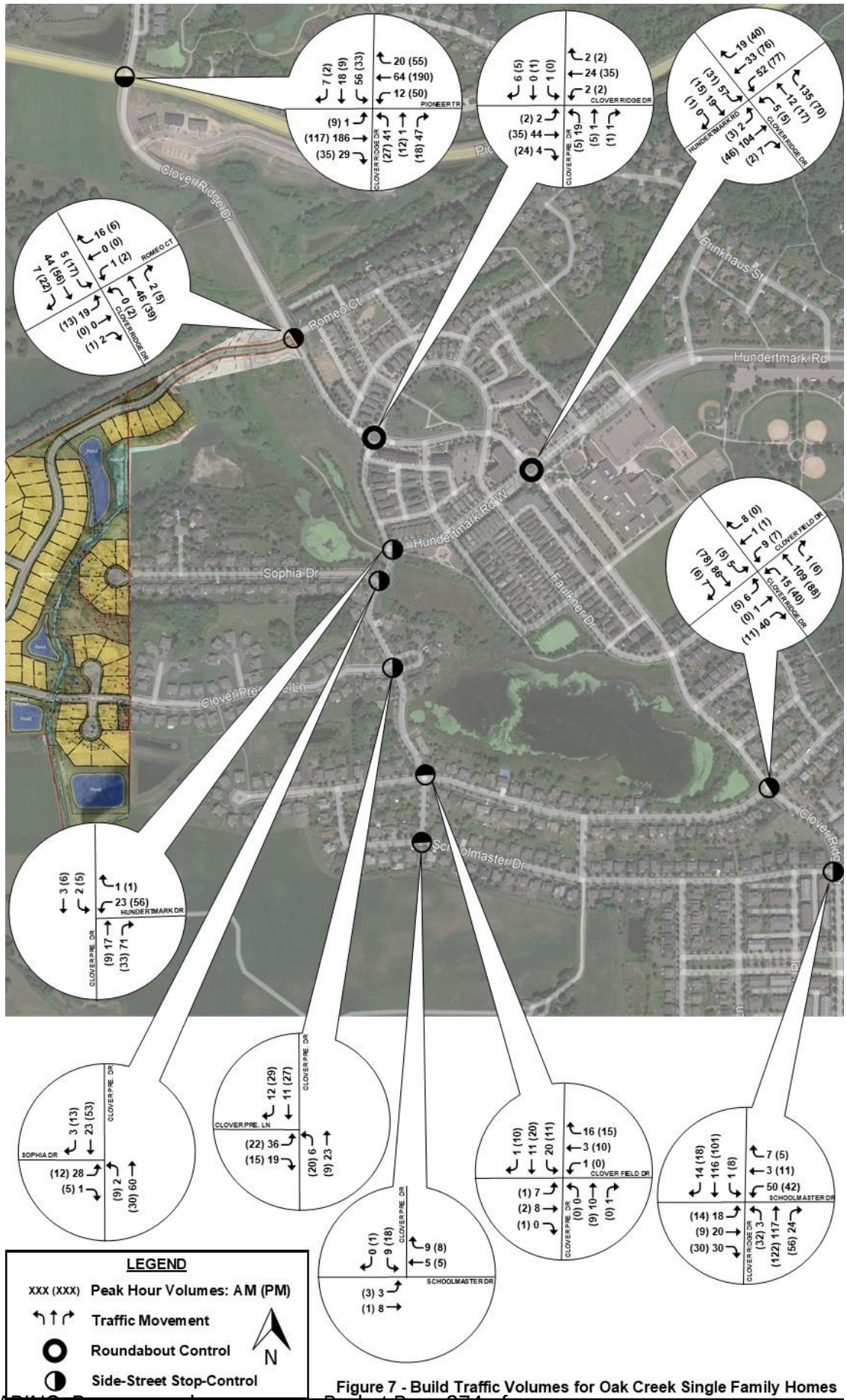


Figure 7 - Build Traffic Volumes for Oak Creek Single Family Homes

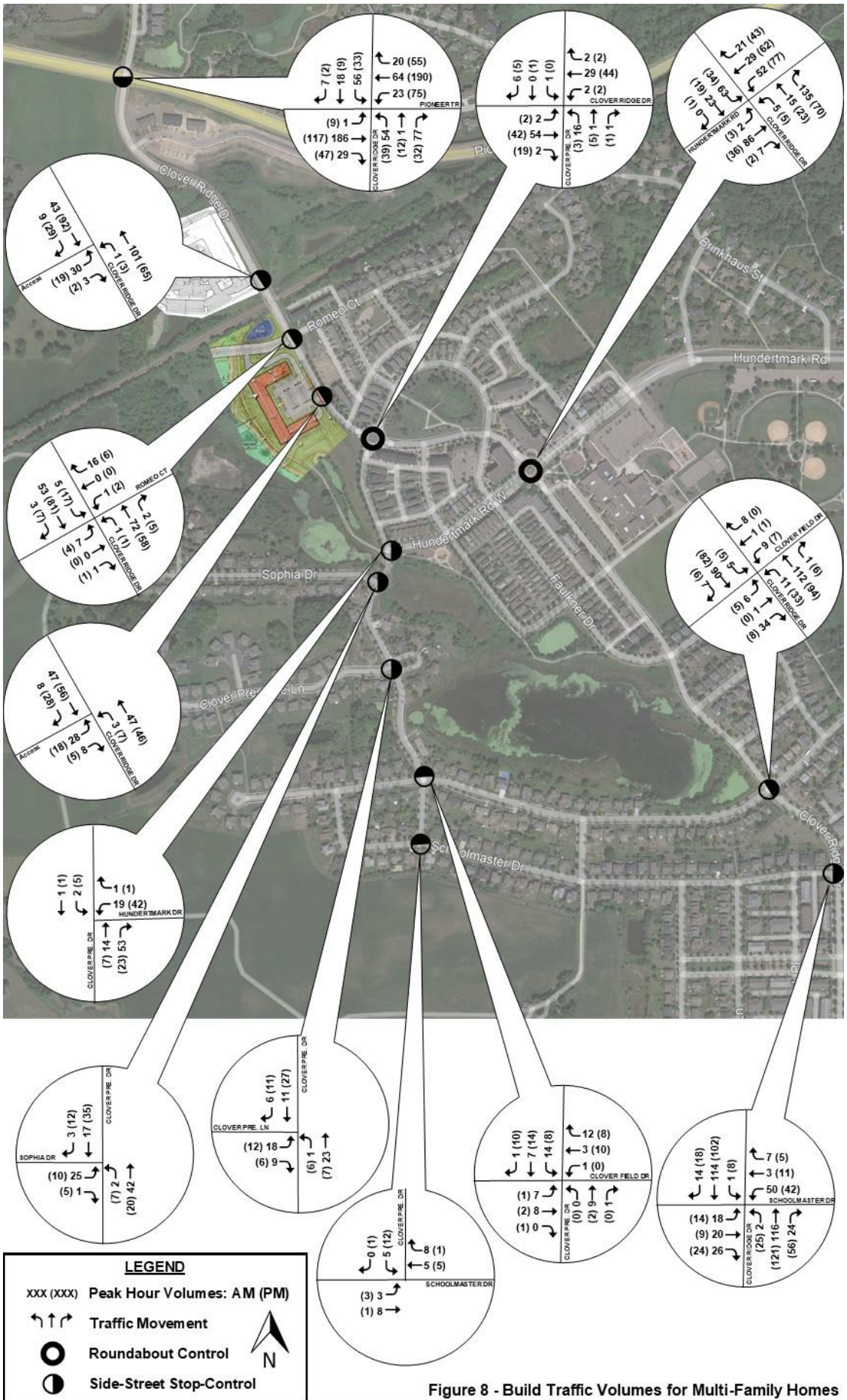


Figure 8 - Build Traffic Volumes for Multi-Family Homes

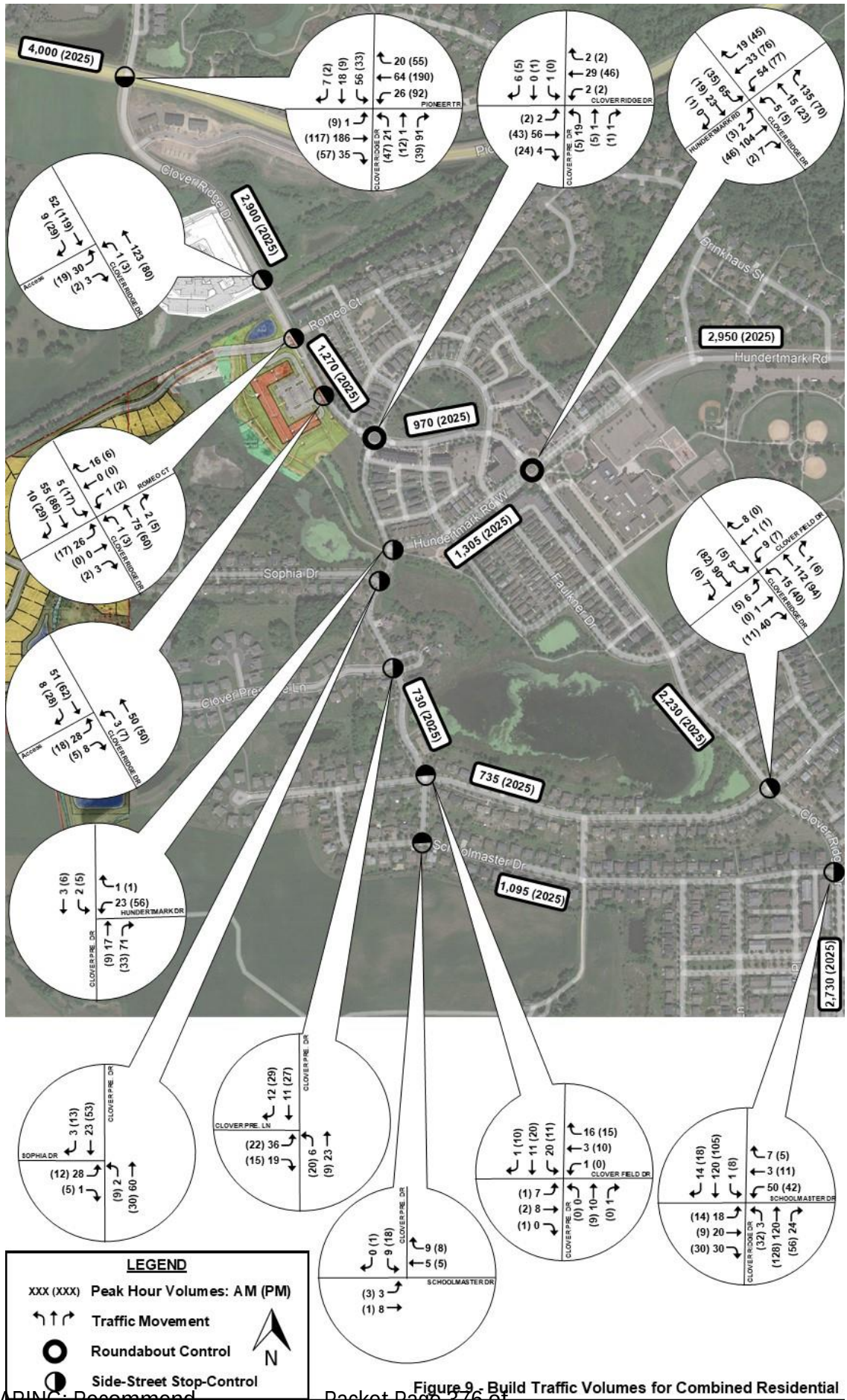


Figure 9 - Build Traffic Volumes for Combined Residential

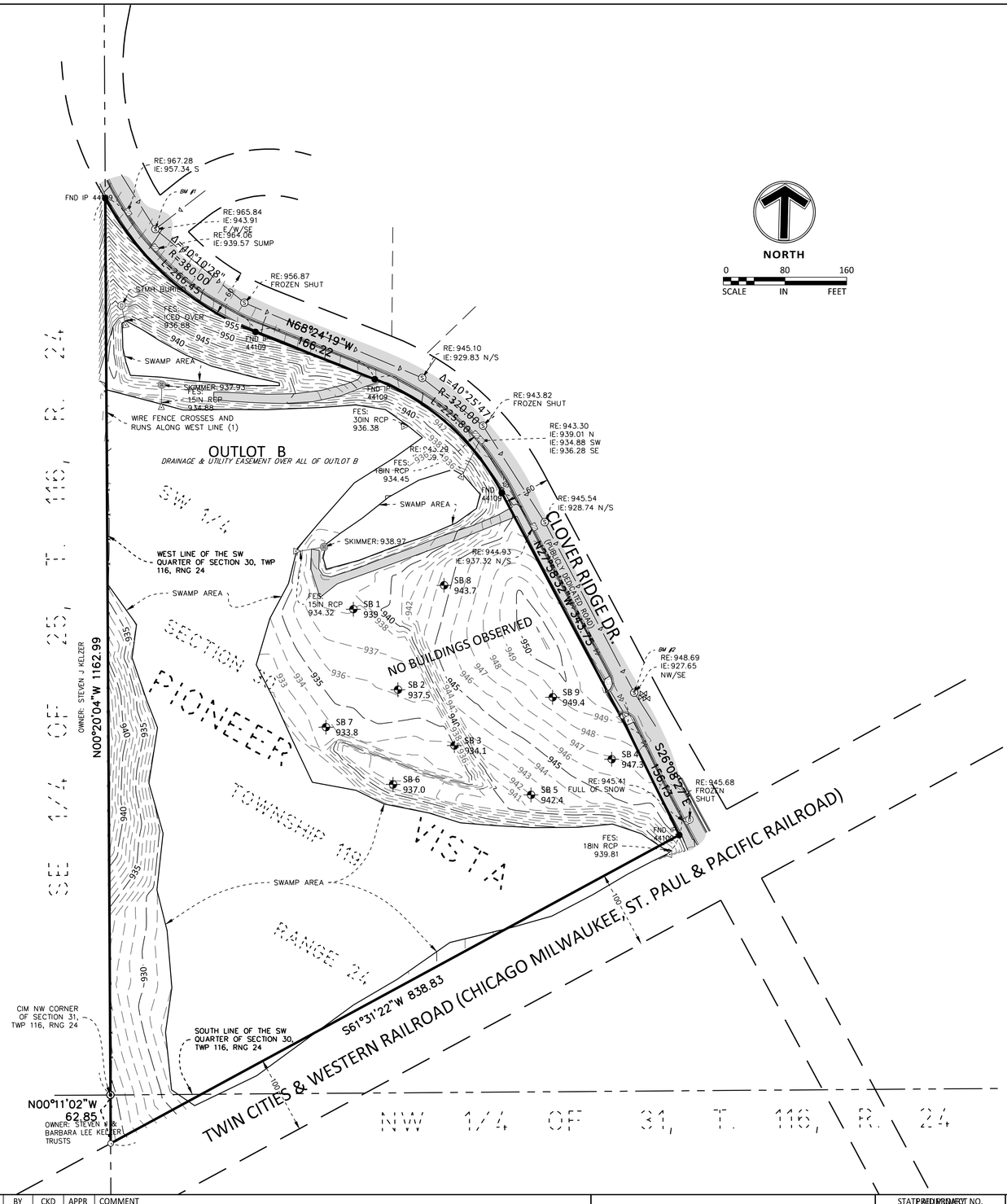


This map was created using Carver County's Geographic Information Systems (GIS), it is a compilation of information and data from various City, County, State, and Federal offices. This map is not a surveyed or legally recorded map and is intended to be used as a reference. Carver County is not responsible for any inaccuracies contained herein.

Map Date: 1/31/2022

EXISTING CONDITIONS SURVEY

A SURVEY OF LANDS LOCATED IN THE SW 1/4 OF SECTION 30 AND THE NW 1/4 OF SECTION 31
IN TWP. 119, RNG. 24, CITY OF CHASKA, CARVER COUNTY, MINNESOTA



PROPERTY SUMMARY

1. SUBJECT PROPERTIES ADDRESS IS UNASSIGNED, ITS PROPERTY IDENTIFICATION NUMBER IS 30.5000.560.
2. THE GROSS AREA OF THE SUBJECT PROPERTY IS 11.9851 Acres or 522,071 SQUARE FEET.
3. THE SUBJECT PROPERTY IS ZONED OPEN DEVELOPMENT, PER CITY OF CHASKA ZONING MAP ON THE CITY OF CHASKA WEBSITE ACCESSED 01/05/2021.

SURVEY NOTES

1. THE BEARING SYSTEM IS BASED ON THE CARVER COUNTY COORDINATE SYSTEM, NAD85 (1986 ADJ.)
2. FIELD WORK WAS COMPLETED ON 01/02/2022
3. THIS SURVEY WAS PERFORMED UNDER THE COVER OF SIGNIFICANT SNOW. THE SURVEYOR MAKES NO GUARANTEE THAT ALL IMPROVEMENTS ARE SHOWN HEREON.

BENCHMARKS

1. THE VERTICAL DATUM IS BASED ON NAVD88. THE ORIGINATING BENCH MARK IS MNDOT TOWNGOLF, REFERENCED FROM THE MNDOT GEODETIC DATABASE.

BENCHMARK #1 SANITARY MANHOLE N. END OF SITE	ELEV.=965.84
BENCHMARK #2 SANITARY MANHOLE S. END OF SITE	ELEV.=948.69

LEGEND

FOUND MONUMENT	WATERMAIN
SET MONUMENT MARKED	SANITARY SEWER
ELECTRIC METER	STORM SEWER
LIGHT	FLARED END SECTION
AIR CONDITIONER	TELEPHONE PEDESTAL
GUY ANCHOR	ELECTRIC TRANSFORMER
HANDICAP STALL	GAS METER
UTILITY POLE	OVERHEAD WIRE
POST	CHAIN LINK FENCE
SIGN	IRON FENCE
	WIRE FENCE
	WOOD FENCE
	EASEMENT LINE
	SETBACK LINE
	RESTRICTED ACCESS
	CONCRETE CURB
	BUILDING LINE
	BUILDING CANOPY
	STANDARD DUTY ASPHALT PAVING
	BITUMINOUS SURFACE
	CONCRETE SURFACE
	LANDSCAPE SURFACE

NO	DATE	BY	CKD	APPR	COMMENT

Print Name: _____

Date _____ License # _____

STATE PROJECT NO.
STATE PROJECT NO.
COUNTY PROJECT NO.
CONSTRUCTION DOCUMENTS

DRAWN BY DJT
DESIGNED BY
CHECKED BY JCW
PROJECT NO. 50521

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Engineering | Surveying | Planning | Environmental

EXISTING CONDITONS
AV DEVELOPMENT, LLC
CHASKA MULTIFAMILY
1/05/2021
CHASKA, CARVER COUNTY, MINNESOTA

SHEET
##
OF
REV. #

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PIONEER VISTA FIRST ADDTION

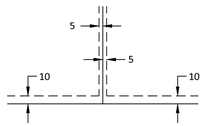
PRELIMINARY PLAT

A SURVEY OF LANDS LOCATED IN THE SW 1/4 OF SECTION 30 AND THE NW 1/4 OF SECTION 31
IN TWP. 119, RNG. 24, CITY OF CHASKA, CARVER COUNTY, MINNESOTA

NORTH

0 60 120
SCALE IN FEET

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:
(NOT TO SCALE)



BEING 5 FEET IN WIDTH AND ADJOINING LOT LINES AND BEING 10 FEET IN WIDTH AND ADJOINING PUBLIC WAYS, UNLESS OTHERWISE INDICATED ON THIS PLAT.

DESCRIPTION

THE SUBJECT PROPERTY IS DESCRIBED AS:
OUTLOT B, PIONEER VISTA
CARVER COUNTY, MINNESOTA
(ABSTRACT PROPERTY)

TO BE PLATTED AS:
LOT 1, BLOCK 1, PIONEER VISTA FIRST ADDITION
OUTLOT A, PIONEER VISTA FIRST ADDITION
CARVER COUNTY, MINNESOTA
(ABSTRACT PROPERTY)

PROPERTY SUMMARY

1. SUBJECT PROPERTY'S ADDRESS IS UNASSIGNED, ITS PROPERTY IDENTIFICATION NUMBER IS 30.5000.560.

2. THE AREAS OF THE SUBJECT PROPERTY ARE AS FOLLOWS:

TOTAL AREA:	11.986 ACRES OR 522,101 SQUARE FEET
LOT 1:	3.232 ACRES OR 140,797 SQUARE FEET
OUTLOT A:	8.754 ACRES OR 381,304 SQUARE FEET

3. THE SUBJECT PROPERTY IS ZONED OPEN DEVELOPMENT, PER CITY OF CHASKA ZONING MAP ON THE CITY OF CHASKA WEBSITE ACCESSED 01/05/2021.

SURVEY NOTES

1. THE BEARING SYSTEM IS BASED ON THE CARVER COUNTY COORDINATE SYSTEM, NAD83 (1986 ADJ.)

2. FIELD WORK WAS COMPLETED ON 01/02/2022

3. THIS SURVEY WAS PERFORMED UNDER THE COVER OF SIGNIFICANT SNOW. THE SURVEYOR MAKES NO GUARANTEE THAT ALL IMPROVEMENTS ARE SHOWN HEREON.

4. THE SUBJECT PROPERTY LIES WITHIN FLOOD PLAIN ZONE X, PER FEMA, FIRM MAP NO.27019C0209D DATED 12/21/2018.

5. THERE ARE NO BUILDING ON THE SUBJECT PROPERTY.

BENCHMARKS

1. THE VERTICAL DATUM IS BASED ON NAVD88. THE ORIGINATING BENCH MARK IS MNDOT TOWNGOLF, REFERENCED FROM THE MNDOT GEODETIC DATABASE.

BENCHMARK #1
SANITARY MANHOLE N. END OF SITE — ELEV.=965.84

BENCHMARK #2
SANITARY MANHOLE S. END OF SITE — ELEV.=948.69

LEGEND

- FOUND MONUMENT
- SET MONUMENT MARKED
- ELECTRIC METER
- LIGHT
- AIR CONDITIONER
- GUY ANCHOR
- HANDICAP STALL
- UTILITY POLE
- POST
- SIGN
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- FLARED END SECTION
- TELEPHONE PEDESTAL
- ELECTRIC TRANSFORMER
- GAS METER
- OVERHEAD WIRE
- CHAIN LINK FENCE
- IRON FENCE
- WIRE FENCE
- WOOD FENCE
- EASEMENT LINE
- SETBACK LINE
- RESTRICTED ACCESS
- CONCRETE CURB
- BUILDING LINE
- BUILDING CANOPY
- STANDARD DUTY ASPHALT PAVING
- BITUMINOUS SURFACE
- CONCRETE SURFACE
- LANDSCAPE SURFACE

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, survey, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Print Name: Jason C. Wittstock

Date 01/31/2022 License # 19552

PRELIMINARY

STATE AID PROJECT NO.	
STATE PROJECT NO.	
COUNTY PROJECT NO.	
CITY PROJECT NO.	
DRAWN BY	DJT
DESIGNED BY	
CHECKED BY	JCW
PROJECT NO.	50521

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PRELIMINARY PLAT

AV DEVELOPMENT, LLC
CHASKA MULTIFAMILY
1/31/2021
CHASKA, CARVER COUNTY, MINNESOTA

SHEET 1 OF 1 REV.

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CONSULTANT CONTACT LIST:

DEVELOPER/OWNER
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11800 SINGLE TREE LANE, SUITE 301
EDEN PRAIRIE MN 55344
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EMAIL
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GEOTECHNICAL
BRAUN INTERTEC
11001 HAMPSHIRE AVENUE
MINNEAPOLIS MN 55348
TEL 952-995-2000
EMAIL
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LANDSCAPE ARCHITECT
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
MINNETONKA, MN 55343
TEL 763-476-6010
EMAIL: JWORKMAN@SAMBATEK.COM
CONTACT: JOHN WORKMAN

Preliminary Plans

for

Clover Ridge Apartments

Chaska, Minnesota

Presented by:
AV Development, LLC

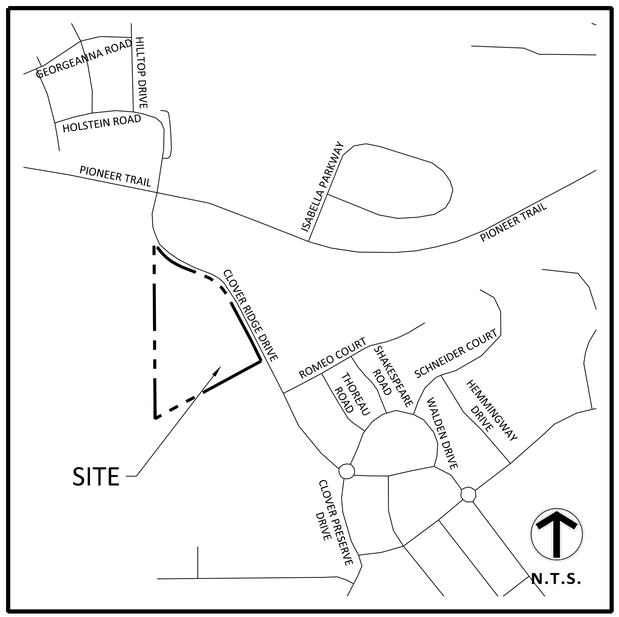
BENCHMARKS

BM NO. 1
SANITARY MANHOLE N. END OF SITE.
ELEV.=965.84

BM NO. 2
SANITARY MANHOLE S. END OF SITE
ELEV.=948.69

SHEET INDEX

SHEET	DESCRIPTION
C1.01	TITLE
C2.01	DEMOLITION PLAN
C3.01	SITE PLAN
C4.01	GRADING PLAN
C6.01	UTILITY PLAN
C9.01	DETAILS
C9.02	DETAILS
L1.01	LANDSCAPE PLAN
L1.02	LANDSCAPE DETAILS AND NOTES



VICINITY MAP
NO SCALE

GOVERNING SPECIFICATIONS

CITY OF CHASKA SPECIFICATIONS (2019)
CITY ENGINEER'S ASSOCIATION OF MINNESOTA STANDARD SPECIFICATIONS (2013)
MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION (2018 EDITION)

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY
DESIGN REVIEW
PERMIT SUBMITTAL
CONSTRUCTION DOCUMENTS

DRAWN BY KLS
DESIGNED BY
CHECKED BY
PROJECT NO. 50521

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TITLE

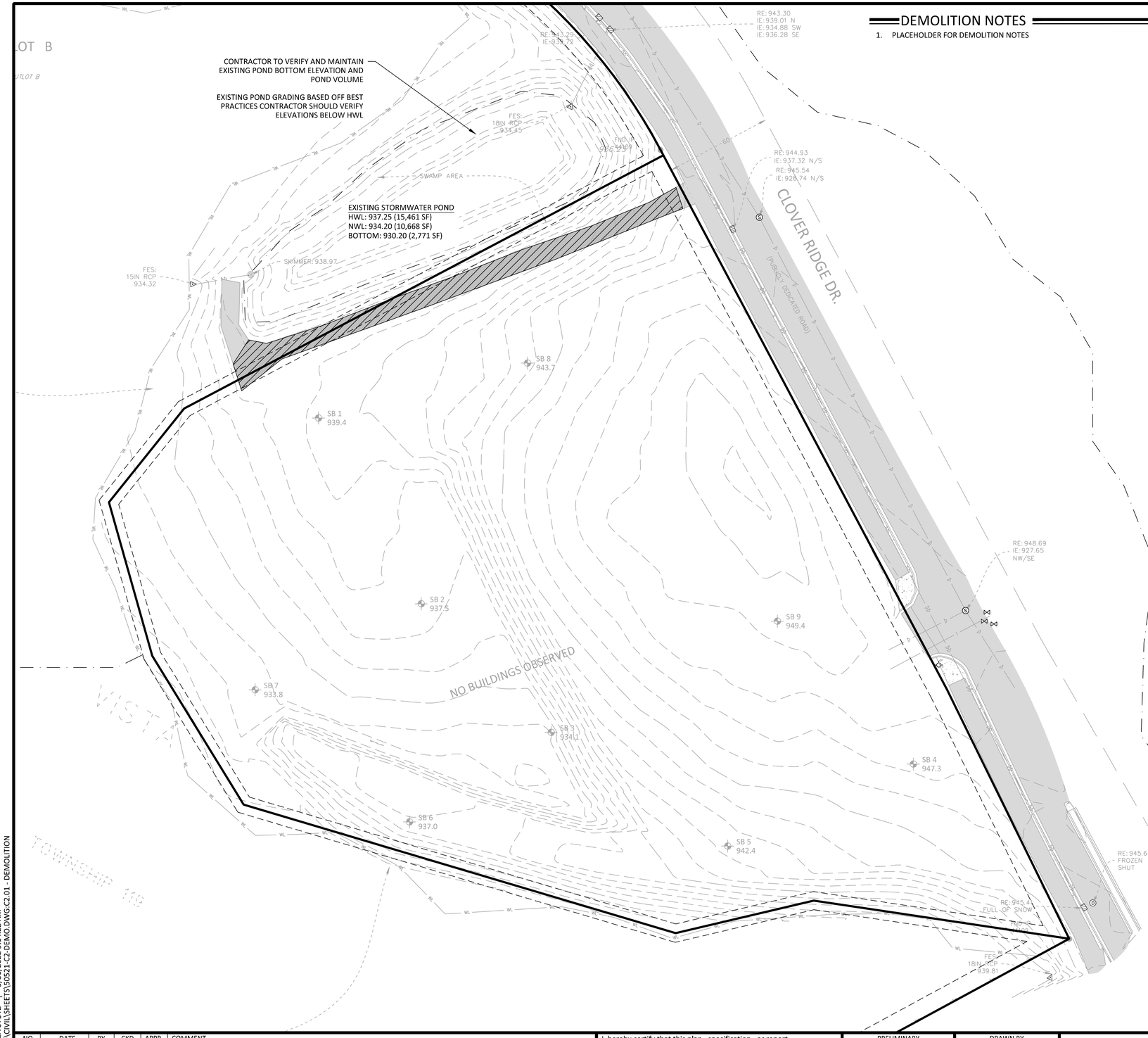
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
C1.01
1 OF 10
REV.

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Plotted: 31-MAR-2022 09:14 | By: ALEA STUTZ | Xrefs: | Ltscale: 1 | Layout: C1.01 - TITLE | Plotstyle: 2.0S (LMS TECH) | ALEA STUTZ | 3/31/2022 9:14:24 AM
J:\PROJECTS\50521\CAD\CIVIL\SHEETS\50521-C1-TITLE.DWG:C1.01 - TITLE



DEMOLITION NOTES

1. PLACEHOLDER FOR DEMOLITION NOTES

LEGEND

EXISTING

- GAS METER
- HYDRANT
- LIGHT
- STORM SEWER
- DRAINTILE
- WATERMAIN
- FORCEMAIN (SAN.)
- SANITARY SEWER
- OVERHEAD ELECTRIC WIRE
- UNDERGROUND TELEPHONE
- UNDERGROUND CABLE TV
- ELECTRIC
- UNDERGROUND GAS LINE
- WIRE FENCE
- IRON FENCE
- WOOD FENCE
- CHAIN LINK FENCE
- STONE RETAINING WALL
- SPRINKLER HEAD
- SPRINKLER VALVE
- GUARDRAIL
- HANDRAIL
- TREE LINE
- GUARD POST
- SIGN
- CONCRETE CURB
- BUILDING LINE
- REMOVE UTILITY STRUCTURE
- REMOVE EXISTING CONCRETE CURB
- SAW CUT EXISTING BITUMINOUS PAVEMENT
- REMOVE EXISTING BITUMINOUS PAVEMENT
- REMOVE EXISTING CONCRETE PAVEMENT
- REMOVE EXISTING GRAVEL DRIVE
- REMOVE EXISTING LANDSCAPING
- REMOVE EXISTING BUILDING
- DEMO TREE
- REMOVE EXISTING (DEMO LG)
- REMOVE UTILITY STRUCTURE
- DEMO LIGHT
- REMOVE CHAIN LINK FENCE

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NORTH

SCALE 0 30 60 IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY	
DESIGN REVIEW	
PERMIT SUBMITTAL	
CONSTRUCTION DOCUMENTS	

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DESIGNED BY	
CHECKED BY	
PROJECT NO.	50521

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DEMOLITION PLAN

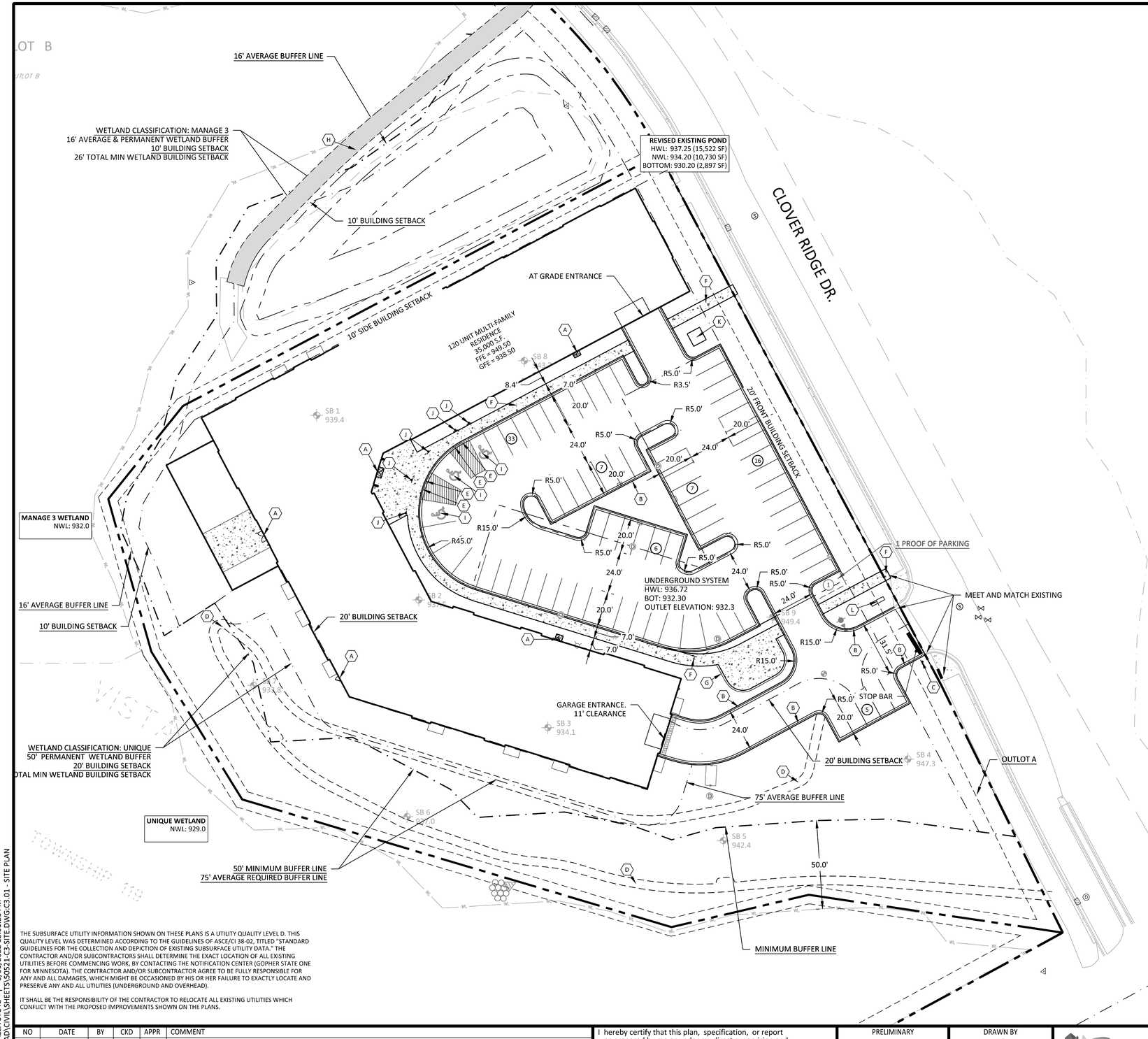
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET C2.01 2 OF 10 REV.

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LEGEND

PROPOSED	EXISTING	
		BOUNDARY LINE
		CONCRETE CURB
		EASEMENT LINE
		BUILDING LINE
		RETAINING WALL
	WT	WET LAND
		TREE LINE
		SAW CUT LINE
		SIGN
		BOLLARD
##		REGULAR PARKING STALL COUNT
1		KEYNOTE

- STANDARD DUTY ASPHALT PAVING
- HEAVY DUTY ASPHALT PAVING
- CONCRETE PAVING
- CONCRETE SIDEWALK
- PAVEMENT BY OTHERS (SEE ARCHITECTURAL PLANS)

DEVELOPMENT SUMMARY

AREA	
GROSS SITE AREA	552,066 SF 12.67 AC
SETBACKS	
FRONT YARD	30 FEET, 20 FEET REQUESTED
REAR YARD	50 FEET
SIDE YARD	10 FEET
ZONING	
EXISTING ZONING	R: RURAL
PROPOSED ZONING	PRD: PLANNED RESIDENTIAL DEVELOPMENT
BUILDING REQUIREMENTS	
MINIMUM FLOOR AREA	0.50
MAXIMUM BUILDING HEIGHT	45 FT
PARKING SUMMARY	
TOTAL PARKING REQUIRED (PER ORDINANCE)	240 STALLS
TOTAL PARKING REQUIRED (PER PARKING DEMAND MEMO)	119 STALLS
TOTAL PARKING PROVIDED	195 STALLS
COVERED PARKING PROVIDED	120 STALLS
SURFACE LOT PARKING PROVIDED	74 STALLS
PROOF OF PARKING	1 STALLS

DEVELOPMENT NOTES

1. NOTES PLACEHOLDER

KEY NOTES

A. BUILDING, STOOPS, STAIRS (SEE ARCHITECTURAL PLANS)
B. B-612 CONCRETE CURB AND GUTTER (SEE DETAIL 01, SHEET C9.02)
C. STOP SIGN
D. CRUSHED AGGREGATE PATH
E. FLAT CURB SECTION (SEE DETAIL 06, SHEET C9.02)
F. CONCRETE SIDEWALK (SEE DETAIL 02, SHEET C9.02)
G. SEGMENTAL BLOCK RETAINING WALL
H. GRASS PAVERS ACCESS TRAIL
I. ACCESSIBLE STALL STRIPING (SEE DETAIL 04, SHEET C9.02)
J. ACCESSIBLE PARKING SIGN (SEE DETAIL 05, SHEET C9.02)
K. TRANSFORMER
L. MONUMENT SIGN

WETLAND DEVELOPMENT SUMMARY

REQUIRED BUFFER	
MANAGE 3	6,816 SF
UNIQUE	39,832 SF
TOTAL	46,648 SF
PROVIDED BUFFER	
MANAGE 3	6,816 SF
UNIQUE	41,522 SF
TOTAL	48,338 SF

NORTH
0 30 60
SCALE IN FEET

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

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NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY	
DESIGN REVIEW	
PERMIT SUBMITTAL	
CONSTRUCTION DOCUMENTS	

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DESIGNED BY	
CHECKED BY	
PROJECT NO.	50521

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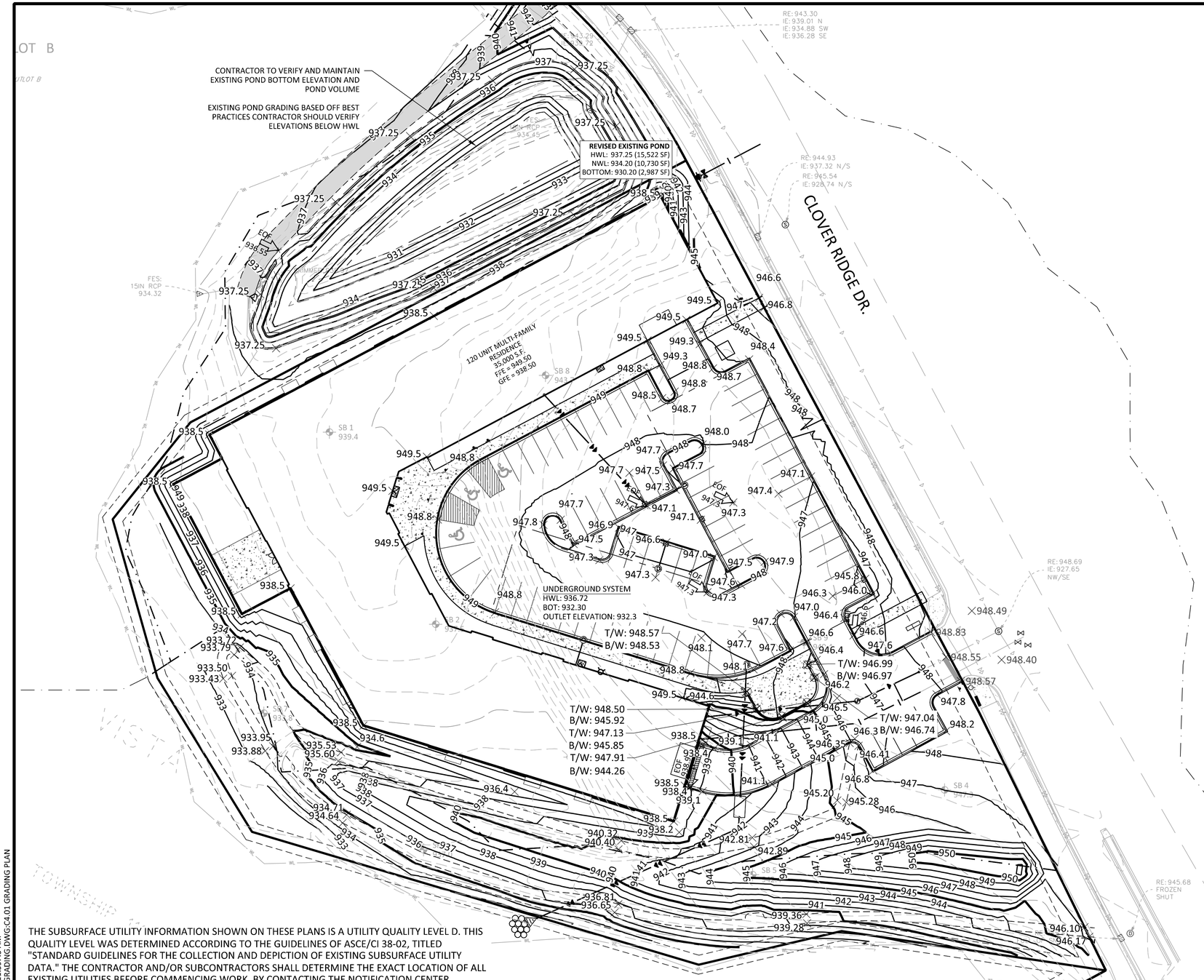
SITE PLAN

AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
C3.01
3 OF 10
REV.

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LEGEND

PROPOSED	EXISTING	
		PROPERTY LINE
		CONCRETE CURB
		STORM SEWER
		DRAINTILE
		BUILDING LINE
		RETAINING WALL
	WL	WETLAND LIMITS
		TREE LINE
	800	SPOT ELEVATIONS
		RIPRAP
EOF 902.5		OVERFLOW ELEV.
	ST # 999.9	SOIL BORING

- STANDARD DUTY ASPHALT PAVING
- HEAVY DUTY ASPHALT PAVING
- CONCRETE PAVING
- CONCRETE SIDEWALK
- PAVEMENT BY OTHERS (SEE ARCHITECTURAL PLANS)

GRADING NOTES

1. GRADING NOTES PLACE HOLDER

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NORTH

0 30 60
SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY	DRAWN BY KLS
DESIGN REVIEW	DESIGNED BY
PERMIT SUBMITTAL	CHECKED BY
CONSTRUCTION DOCUMENTS	PROJECT NO. 50521

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GRADING PLAN

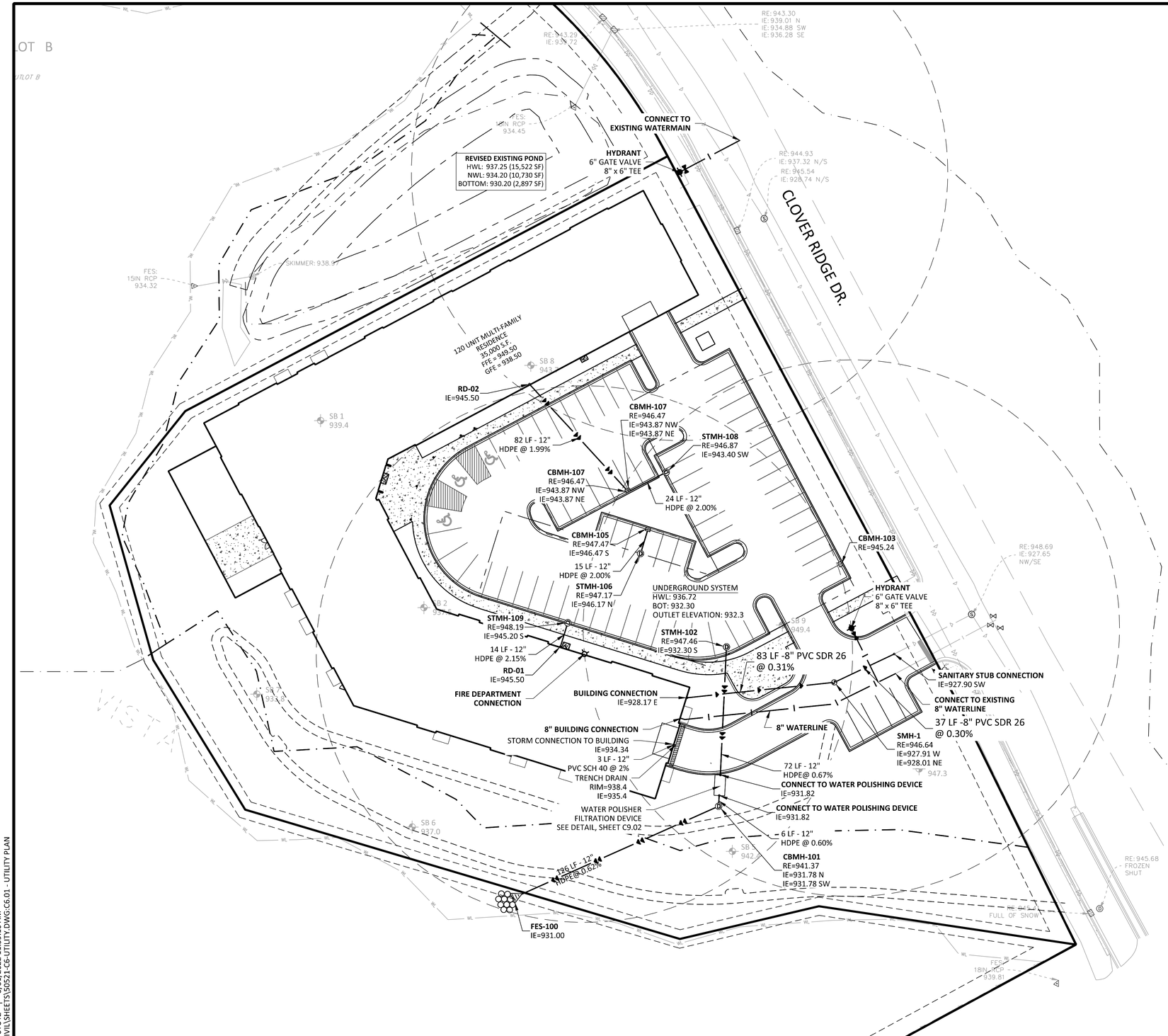
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CHASKA, MINNESOTA

SHEET
C4.01
4 OF 10
REV.

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P:\PROJECTS\50521\CADCIVIL\SHEETS\50521-C4-GRADING.DWG;C4.01 GRADING PLAN
2020 (LMS TECH) | ALEA STUTZ | 3/31/2022 11:59:45 AM



LEGEND

- SANITARY SEWER
- FORCEMAIN (SAN.)
- STORM SEWER
- DRAINTILE
- WATERMAIN
- UNDERGROUND GAS LINE
- UNDERGROUND TELEPHONE
- ELECTRIC
- CONCRETE CURB
- EASEMENT LINE

UTILITY CONSTRUCTION NOTES

1. UTILITY CONSTRUCTION NOTES HOLDER

STORM SEWER STRUCTURE SCHEDULE

NUMBER	TYPE	CASTING*
*INDICATES NEENAH FOUNDRY CASTING NO., OR APPROVED EQUAL		
NOTE: CONTRACTOR AND THEIR SUPPLIER SHALL DETERMINE THE MINIMUM DIAMETER REQUIRED FOR EACH STORM SEWER STRUCTURE.		

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IF THE CONTRACTOR ENCOUNTERS ANY DRAIN TILE WITHIN THE SITE, HE OR SHE SHALL NOTIFY THE ENGINEER WITH THE LOCATION, SIZE, INVERT AND IF THE TILE LINE IS ACTIVE. NO DRAIN TILE SHALL BE BACKFILLED WITHOUT APPROVAL FROM THE PROJECT ENGINEER.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NORTH

0 30 60
SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

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UTILITY PLAN

AV DEVELOPMENT, LLC
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CHASKA, MINNESOTA

SHEET
C6.01
5 OF 10
REV.

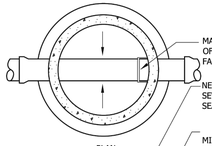
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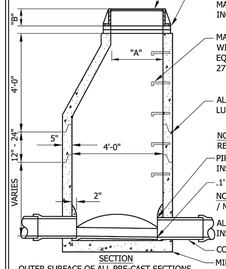
PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R1642-2310B	27"	7"
R1755G	27"	7"



PLAN



SECTION

- MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.
- NEENAH COVER **R-1642-5001**, LETTERED "SANITARY SEWER" WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECIFICATION FOR CASTING NUMBER.
- MINIMUM OF 2 MAXIMUM OF 4 ADJUSTMENT RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.
- MAXIMUM 20"ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.
- MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL)
- ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS AND RAMNECK.
- NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.
- PIPE SHALL BE CUT 2" FROM INSIDE FACE OF WALL.
- .1' DROP ACROSS INVERTS MIN.
- NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.
- ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.
- COMPACT TO TOP OF PIPE, TO FIRST JOINT.
- MINIMUM THICKNESS OF PRECAST BASE IS 6" FOR 14' DEEP OR LESS, AND INCREASES 1" IN THICKNESS FOR EVERY 4' OF DEPTH GREATER THAN 14'.

OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .

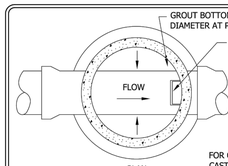
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SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SAN-1

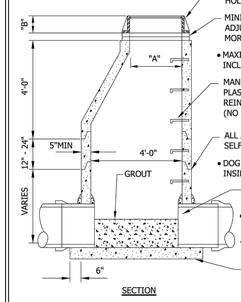


PLAN

- GROUT BOTTOM OF MANHOLE TO A MINIMUM OF 1/2 DIAMETER AT PIPE AND SLOPE GROUT 2" TOWARD INVERT.
- MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM FOR ALL LINES UP TO 24". PLACE STEPS ON RIGHT HAND SIDE WHEN FACING DOWN STREAM FOR ALL 24 " AND OVER.

FRAME	A	B
R1642-2310B	27"	7"

FOR OFF-ROAD SITUATIONS, USE R1916F CASTING MARKED "STORM SEWER". COVERS MUST BE SECURED TO PREVENT REMOVAL.



SECTION

- NEENAH COVER **R1642-5040** LETTERED, "STORM SEWER", WITH 2 CONCEALED PICK HOLES.
- MINIMUM OF 2 MAXIMUM OF 4 CONCRETE ADJUSTMENT RINGS WITH FULL BED OF MORTAR BETWEEN EACH RING.
- MAXIMUM 20" ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.
- MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL.)
- ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS.
- DOG HOUSES MUST BE GROUTED BOTH INSIDE AND OUTSIDE OF STRUCTURE.
- PIPE SHALL BE CUT OUT 2" FROM INSIDE FACE OF WALL.
- NOTE: KOR-N-SEAL MANHOLE OR EQUAL CONSIDERED ACCEPTABLE ALTERNATE.
- NOTE: A MINIMUM SLOPE OF 1% IS REQUIRED ACROSS THE INVERT.
- MINIMUM SLAB THICKNESS, 6" TO 14' DEPTH. INCREASE THICKNESS 1" FOR EACH 4' OF DEPTH GREATHER THAN 14', AND REINFORCE WITH PER MNDOT STD 4011

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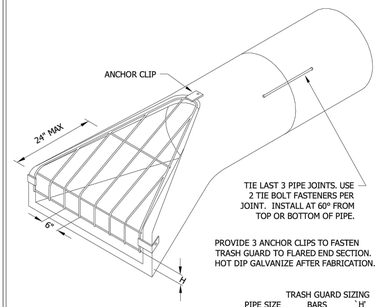
STORM SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-1

SEE CITY PLATE NO. STO-10 FOR RIPRAP PLACEMENT.



ISOMETRIC

PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH GUARD TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.

TRASH GUARD SIZING

PIPE SIZE	BARS	'H'	BOLTS
12"	3/4"Ø	2 1/2"	5/8"
15"	3/4"Ø	3"	5/8"
18"	3/4"Ø	4"	5/8"
21"-24"	1"Ø	4"	3/4"
27"-36"	1"Ø	5"	3/4"
42"	1"Ø	6"	3/4"
48"-54"	1 1/4"Ø	6"	1"
60"-72"	1 1/4"Ø	7"	1"
78"-90"	1 1/4"Ø	8"	1"

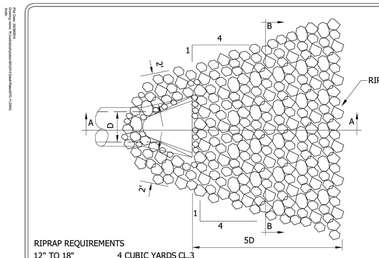
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FLARED END SECTION AND TRASH GUARD

CHASKA, MINNESOTA

LAST REVISION: FEB. 1995

PLATE NO. STO-10

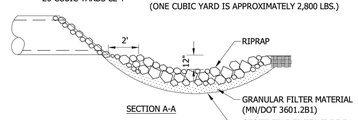


RIPRAP REQUIREMENTS

12" TO 18"	4 CUBIC YARDS CL.3
21" TO 27"	8 CUBIC YARDS CL.3
30" TO 36"	12 CUBIC YARDS CL.3
42" TO 48"	16 CUBIC YARDS CL.3
54" AND UP	20 CUBIC YARDS CL 4

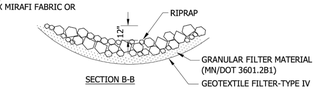
PLAN

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)



SECTION A-A

NOTE
FILTER BLANKET REQUIRED UNDER RIPRAP OR 2 LAYERS OF 500X MIRAFI FABRIC OR EQUAL



SECTION B-B

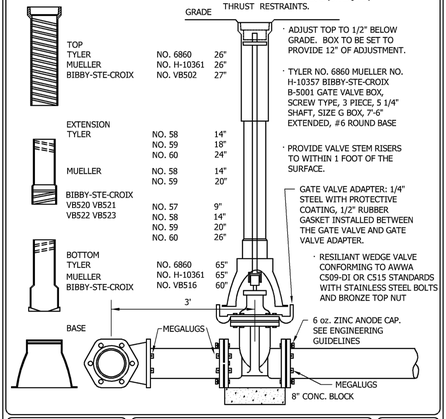
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RIPRAP AT OUTLETS

CHASKA, MINNESOTA

LAST REVISION: APRIL 2004

PLATE NO. STO-11



NOTES: CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

- PROVIDE POLYWRAP AROUND ALL WATERMAIN
- 7.5' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.
- RESTRAIN TEE AND VALVE WITH EPOXY COATED MEGALUG (OR EQUAL) THRUST RESTRAINTS.
- ADJUST TOP TO 1/2" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.
- TYLER NO. 6860 MUELLER NO. H-10357 BIBBY-STE-CROIX B-5001 GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 7'-6" EXTENDED, #6 ROUND BASE
- PROVIDE VALVE STEM RISERS TO WITHIN 1 FOOT OF THE SURFACE.
- GATE VALVE ADAPTER: 1/4" STEEL WITH PROTECTIVE COATING, 1/2" RUBBER GASKET INSTALLED BETWEEN THE GATE VALVE AND GATE VALVE ADAPTER.
- RESILIANT WEDGE VALVE CONFORMING TO AWWA C509-DI OR C515 STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT
- 6 oz. ZINC ANODE CAP. SEE ENGINEERING GUIDELINES
- MEGALUGS
- 8" CONC. BLOCK

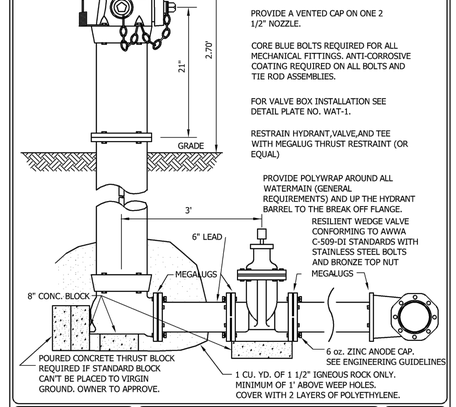
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GATE VALVE AND BOX INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-1



- ALL HYDRANT LEAD AND PIPE JOINTS SHALL BE RESTRAINED WITH TIE RODS AND EPOXY COATED MEGALUGS.
- HYDRANT SHALL BE WATEROUS PACER WB-67-250 WITH 16" TRAFFIC BREAK OFF SECTION, AND EPOXY COATED BOOT.
- HYDRANT SHALL BE FOR 8.0' BURY. WATERMAIN SHALL HAVE 7'-6" OF COVER.
- PROVIDE A VENTED CAP ON ONE 2 1/2" NOZZLE.
- CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.
- FOR VALVE BOX INSTALLATION SEE DETAIL PLATE NO. WAT-1.
- RESTRAIN HYDRANT,VALVE,AND TEE WITH MEGALUG THRUST RESTRAINT (OR EQUAL)
- PROVIDE POLYWRAP AROUND ALL WATERMAIN (GENERAL REQUIREMENTS) AND UP THE HYDRANT BARREL TO THE BREAK OFF FLANGE.
- RESILIENT WEDGE VALVE CONFORMING TO AWWA C-509-DI STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

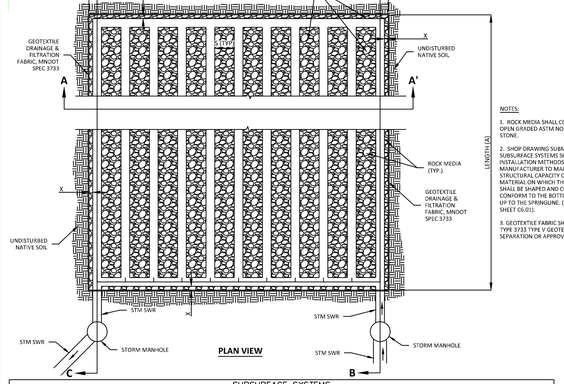
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WATEROUS PACER HYDRANT AND VALVE INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-2

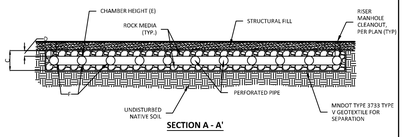


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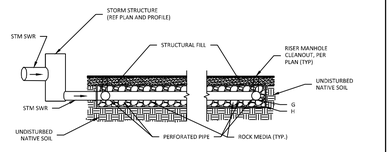
1. ROCK MEDIA SHALL CONSIST OF AN OPEN GRADED ASTM NO. 2 CRUSHED STONE.
2. SHOP DRAWING SUBMITTALS FOR SUBSURFACE SYSTEMS SHALL INCLUDE INSTALLATION METHODS PER PIPE MANUFACTURER TO MAINTAIN STRUCTURAL CAPACITY OF PIPES. THE SMALL ORIFICES SHALL BE LOCATED AT BEDDED SHALL BE DRILLED AND COMPACTED TO CONFORM TO THE BOTTOM OF THE PIPE, UP TO THE SPRINGLINE. (SEE NOTE #12 ON SHEET C6.01)
3. GEOTEXTILE FABRIC SHALL BE MNDOT TYPE 3733 TYPE V GEOTEXTILE FOR SEPARATION OR APPROVED EQUIVALENT.

SUBSURFACE SYSTEMS

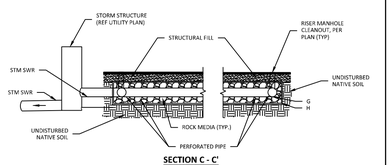
BMP	TYPE OF SYSTEM	LENGTH, FT (A)	WIDTH, FT (B)	SYSTEM DEPTH, FT (C)	PIPE COVER, IN (D)	PIPE SIZE, IN (E)	ROWS (F)	PIPE INVERT (G)	BOTTOM OF ROCK (H)	EDGE SPACING, IN (X)	PIPE SPACING, IN (S)	TOTAL STORAGE (CF)
1P	PERF. CMP PIPE	183.00	90.00	5.00	6.0	48	15	932.80	932.30	12.0	24.0	34117.0



SECTION A - A'



SECTION B - B'



SECTION C - C'

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY

DESIGN REVIEW

PERMIT SUBMITTAL

CONSTRUCTION DOCUMENTS

DRAWN BY KLS

DESIGNED BY

CHECKED BY

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DETAILS

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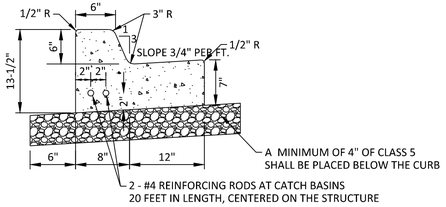
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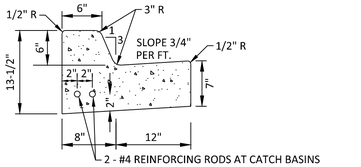
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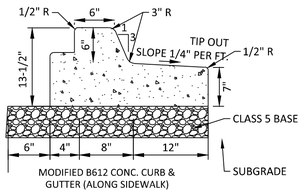
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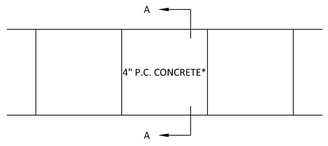
Page 45 of 81







01 B612 CONCRETE CURB & GUTTER
N.T.S.

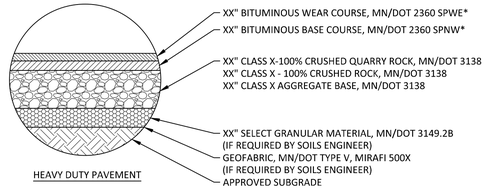


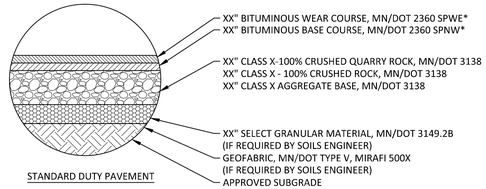
GENERAL NOTES FOR CONCRETE CONSTRUCTION:

1. THE CONCRETE SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF MN/DOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION".
2. SIDEWALK CONTROL JOINTS SHALL BE LOCATED AT 5 FEET ON CENTER. SIDEWALK EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM OF 100 FEET ON CENTER, AND WHERE SIDEWALK ABUTS CURB, STRUCTURES, AND OTHER FIXED OBJECTS. SEAL ALL EXPANSION JOINTS. BROOM FINISH SHALL BE PERPENDICULAR TO THE LINE OF TRAFFIC.

*THE THICKNESS SHALL BE INCREASED TO A MINIMUM DEPTH OF __ INCHES AT DRIVEWAY CROSSINGS.

02 CONCRETE SIDEWALK
N.T.S.

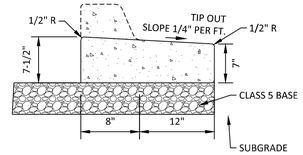




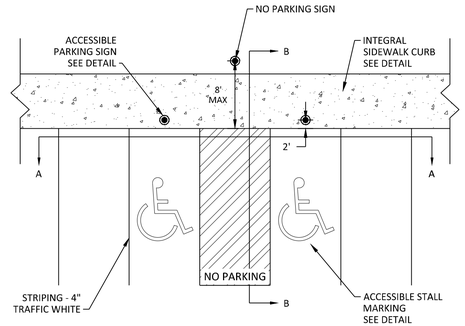
* REFER TO BITUMINOUS MIX DESIGN REQUIREMENT PROVIDED BY THE GEOTECHNICAL CONSULTANT

NOTES:
1. THE PAVEMENT SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT "STANDARD SPECIFICATION FOR CONSTRUCTION", AND ALSO THE REQUIREMENTS OF THE OWNER'S GEOTECHNICAL CONSULTANT.
2. ALL THICKNESSES, AS SPECIFIED, ARE TO BE CONSIDERED MINIMUM DEPTHS, AFTER COMPACTION.
3. MN/DOT SPEC. 2357 BITUMINOUS TACK COAT SHALL BE PLACED BETWEEN SUCCESSIVE BITUMINOUS LIFTS AND AGAINST ABUTTING CONCRETE CURB EDGES.

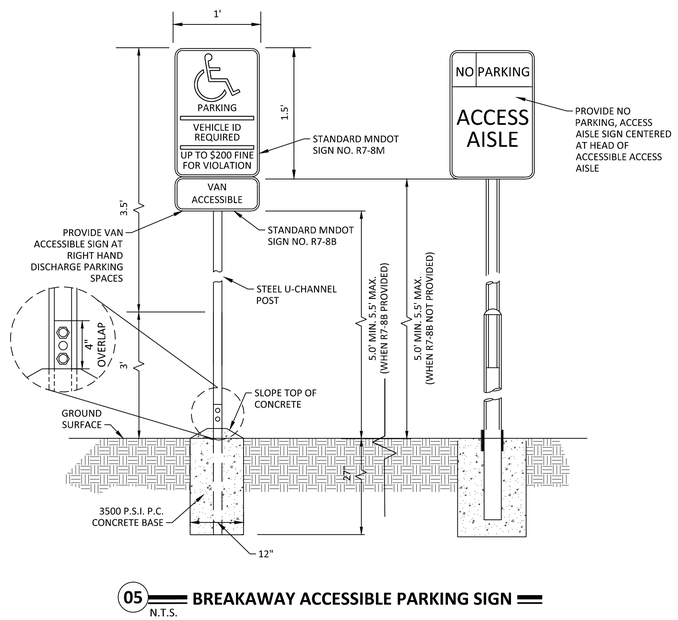
03 PAVEMENT SECTIONS
N.T.S.



06 B612 FLAT CURB & GUTTER
N.T.S.



04 ADA PARKING
N.T.S.



05 BREAKAWAY ACCESSIBLE PARKING SIGN
N.T.S.

SITE SPECIFIC DATA*

PROJECT NUMBER	
PROJECT NAME	
PROJECT LOCATION	
STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS)	
PEAK FLOW RATE (CFS)	
PEAK STORM DURATION (YEARS)	

PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
OUTLET PIPE 1			
RIM ELEVATION			

SURFACE LOADING REQUIREMENT	
FRAME AND COVER	#30"
CORROSIVE SOIL CONDITIONS	
KNOWN GROUNDWATER ELEVATION	

NOTES:

*PER ENGINEER OF RECORD

WP PERFORMANCE DATA

TREATMENT FLOW RATE (CFS)	0.60
MEDIA SURFACE AREA (SF)	25
LOADING RATE (GPM/SF)	--
SEDIMENT STORAGE CAPACITY (CF)	90.50

WP STORAGE CAPACITIES

SEDIMENT CHAMBER CAPACITY

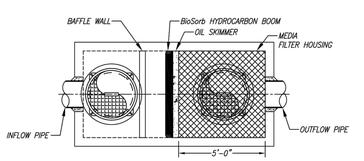
	LENGTH (FT)	WIDTH (FT)	HEIGHT (FT)	TOTAL (CF)
CHAMBER 1	3.25	5.00	3.44	55.90
CHAMBER 2	6.92	5.00	1.00	34.60

GENERAL NOTES

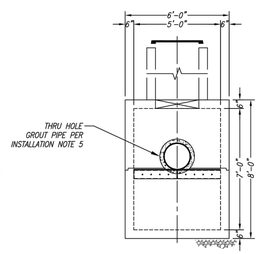
1. BIO CLEAN TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS, AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS, AND ACCESSORIES PLEASE CONTACT BIO CLEAN.

INSTALLATION NOTES

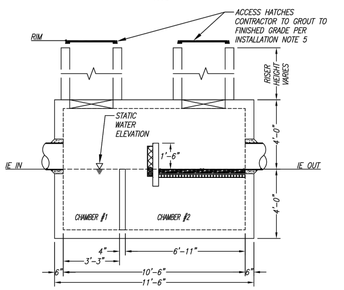
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE NSBB UNIT AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
2. MANUFACTURER RECOMMENDS A 6"-12" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH).
4. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURERS STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCED REGIONAL PIPE CONNECTION STANDARDS.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. ALL COVERS SHALL BE SHIPPED LOOSE. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.



PLAN VIEW
NTS



END VIEW
NTS



ELEVATION VIEW
NTS

PROPRIETARY AND CONFIDENTIAL:
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BIO CLEAN ENVIRONMENTAL SERVICES, INC.
biocleanenvironmental.com
P 760.433.7640 F 760.433.3176

WP-5-10.5
WATER POLISHER-UP FLOW MEDIA FILTER
STANDARD DETAIL

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY | DESIGN REVIEW | PERMIT SUBMITTAL | CONSTRUCTION DOCUMENTS

DRAWN BY KLS | DESIGNED BY | CHECKED BY | PROJECT NO. 50521

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DETAILS

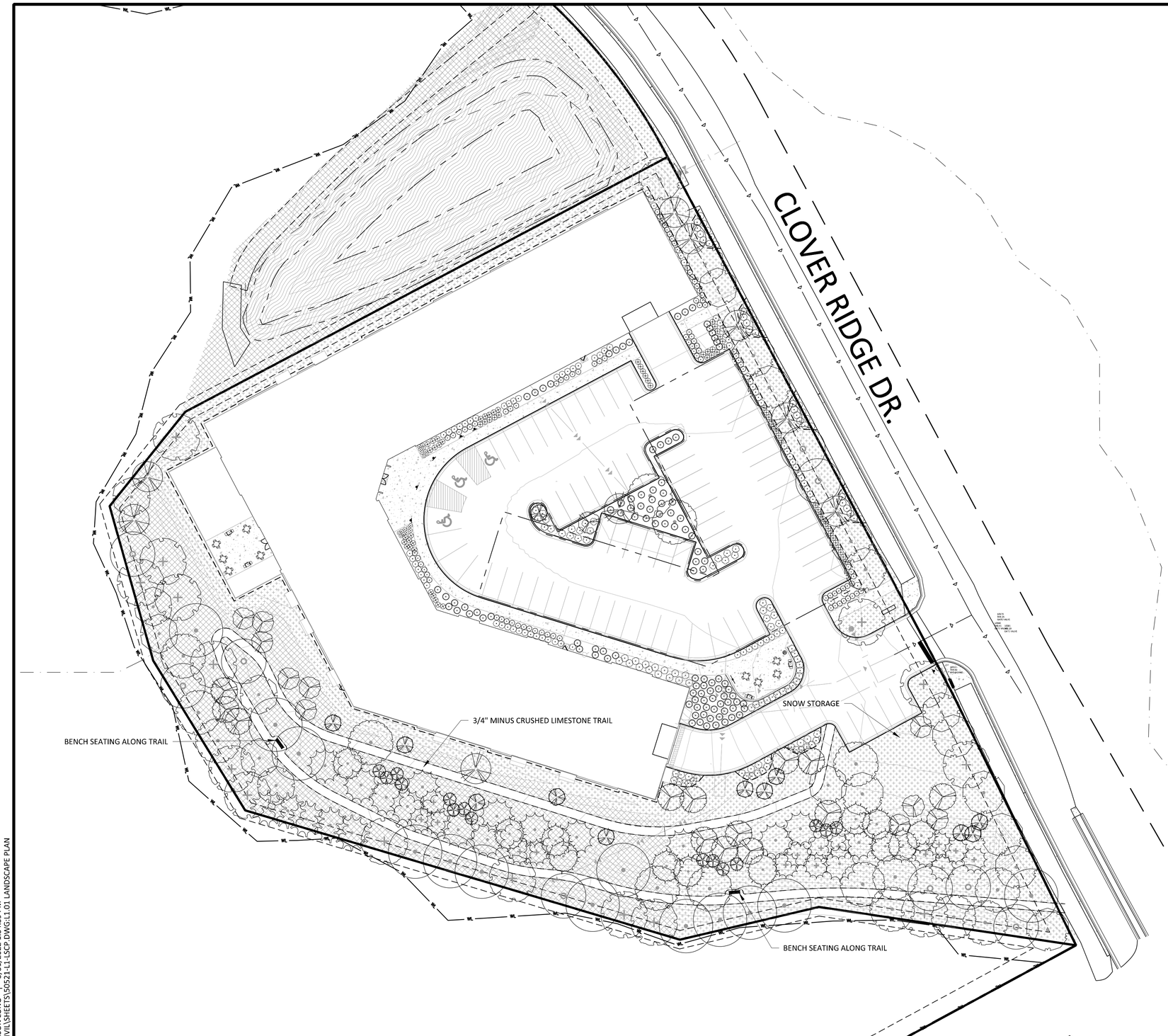
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

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LEGEND

	PROPOSED	EXISTING
PROPERTY LIMIT		
CURB & GUTTER		
EASEMENT		
BUILDING		
RETAINING WALL		
WETLAND LIMITS		WL
TREELINE		
LANDSCAPE EDING		
STORM SEWER	D	
SANITARY SEWER	S	S
FORCEMAIN (SAN.)	LS	FM S
WATERMAIN		
YARDDRAIN		
LIMITS OF DISTURBANCE		

STANDARD DUTY ASPHALT PAVING
CONCRETE PAVING
CONCRETE SIDEWALK
TREE PROTECTION FENCE — TP
TREE TO BE REMOVED
SIGN
PIPE BOLLARD
RIPRAP

CHASKA LANDSCAPE CODE

1. Total Caliper Inches of Overstory Trees Required. In order to achieve landscaping which is appropriate in scale with the size of a building site, the minimum number of caliper inches of overstory trees required shall be determined by dividing the total gross square footage of all floors of a building by 320.
2. Understory Trees and Shrubs. In addition to the required number of overstory trees listed above, a full complement of understory trees and shrubs shall be provided to complete a quality landscape treatment of the site. A minimum number of understory trees and shrubs are required as follows:
   - 2.1. The number of understory trees shall be equal to twenty-five (25) percent of the required number of overstory trees; and
   - 2.2. The number of shrubs shall be equal to one (1) shrub per thirty (30) feet of site perimeter or one (1) shrub per three-hundred (300) square feet of building footprint, whichever is greater.
3. For the purpose of satisfying the total caliper inch requirement, coniferous trees can be considered equivalent to overstory trees by dividing the height of a coniferous tree's six (6) foot height minimum by 2.4 to determine equivalent caliper inches.

TOTAL NUMBER OF STORIES ON BUILDING: 4

TOTAL CALIPER INCHES REQUIRED: 442"

CALCULATIONS	INCHES REQUIRED	INCHES PROPOSED	TREES PROPOSED
2.5" CAL. OVERSTORY TREES REQUIRED(40%)	176.8	177.5	71
3" CAL. OVERSTORY TREES REQUIRED(20%)	88.4	90	30
3.5" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	45.5	13
4" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	44	11
4.5" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	45	10
5" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	45	9
UNDERSTORY TREES REQUIRED		36	36
SHRUBS REQUIRED		471	471

	REQUIRED	PROPOSED
LANDSCAPE ISLAND CALCULATION (5,475SF / 37,223SF)	10%	14%

OPEN SPACE CALCULATION
BALCONIES (2,560 SF)
OPEN SPACE A,B,AND C (43,252 SF)

TOTAL (CALCULATION: 45,812 SF/ 163,501 SF)	15% (24,525 SF)	28% (45,812 SF)

PLANT SCHEDULE

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	AB	Acer freemanii 'Autumn Blaze' / Autumn Blaze Maple	B & B	5" Cal		9
	SG	Acer freemanii 'Sienna Glen' / Sienna Glen Maple	B & B	3.5" Cal.		13
	BPS	Betula papyrifera 'Whitespire' / Whitespire Birch	B & B	2.5"Cal		9
	HL	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	B & B	3"Cal.		35
	KC	Gymnocladus dioica 'Espresso' / Kentucky Coffeetree	B & B	4.5" CAL.		10
	SO	Quercus bicolor / Swamp White Oak	B & B	3"Cal.		15
	BL	Tilia americana 'Boulevard' / Boulevard Linden	B & B	4"CAL		31
CONIFERS	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	BF	Abies balsamea / Balsam Fir	B & B		6'	15
	LR	Larix laricina / Tamarack	B & B		6'	5
	NS	Picea abies / Norway Spruce	B & B		6'	12
	BS	Picea glauca densata / Black Hills Spruce	B & B		6'	15
	PW	Pinus strobus 'Fastigiata' / Pyramidal White Pine	B & B		6'	15
ORN. TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	SB	Amelanchier canadensis 'Autumn Brilliance' / Autumn Brilliance Serviceberry	B & B	2"Cal		11
	RE	Cercis canadensis / Eastern Redbud	B & B	2"Cal		12
	IL	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	B & B	2"Cal		13
SHRUBS	CODE	BOTANICAL / COMMON NAME	CONT			
	BH	Diervilla lonicera / Dwarf Bush Honeysuckle	5 gal			69
	LH	Hydrangea paniculata 'Jane' / Little Lime Hydrangea	5 gal			90
	CJ	Juniperus sabina 'Monna' / Calgary Carpet Juniper	5 gal			100
	PM	Pinus mugo 'Slowmound' / Mugo Pine	5 gal			28
	PT	Potentilla fruticosa 'Fargo' TM / Fargo Potentilla	5 gal			88
	GL	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	5 gal			52
	GS	Spiraea japonica 'Goldflame' / Spirea	5 gal			37
	HA	Thuja occidentalis 'Holmstrup' / Holmstrup Cedar	10 gal			6
PERENNIALS	CODE	BOTANICAL / COMMON NAME	CONT			
	SBA	Allium x 'Summer Beauty' / Summer Beauty Allium	1 gal			37
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	CONT			
	33-261	MNDOT Seed Mix 33-261 / Ponds and Wet Areas	Seed			
	34-262	MNDOT Seed mix 34-262 / Wet Prairie	Seed			
	TURF MIX	Turf Sod Highland Sod / Sod	Sod			

NORTH
0 30 60
SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Print Name: Johnnie R. Workman

Date _____ License # _____

PRELIMINARY
DESIGN REVIEW
PERMIT SUBMITTAL
CONSTRUCTION DOCUMENTS

DRAWN BY
DESIGNED BY
CHECKED BY
PROJECT NO. 50521

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LANDSCAPE PLAN

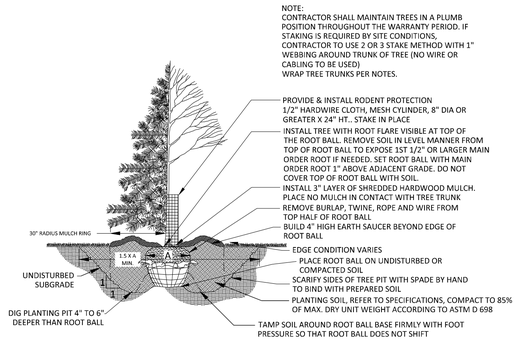
AV DEVELOPMENT, LLC
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CHASKA, MINNESOTA

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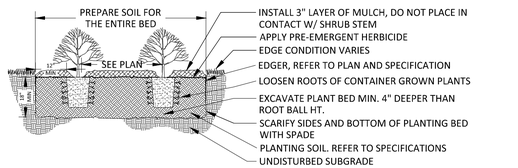
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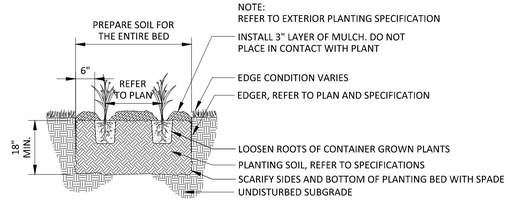
1 C3.01 TREE PLANTING DETAIL

1/4" = 1'-0" P-01



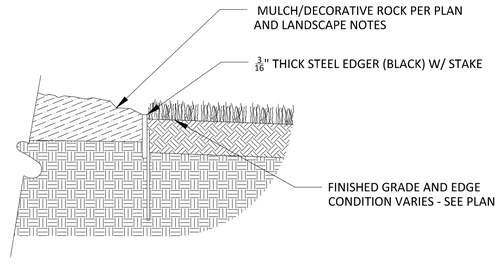
2 C3.01 SHRUB PLANTING DETAIL

3/8" = 1'-0" P-02



3 C3.01 PERENNIAL PLANTING DETAIL

1/2" = 1'-0" P-03



4 C3.01 STEEL EDGER

1 1/2" = 1'-0" P-06

NOTES

GENERAL NOTES:

1. THE CONTRACTOR SHALL INSPECT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF THE WORK.
2. THE CONTRACTOR SHALL VERIFY PLAN LAYOUT AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN OR INTENT OF THE LAYOUT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.
4. THE CONTRACTOR SHALL PROTECT EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING CONSTRUCTION. DAMAGE TO SAME SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
5. LOCATE AND VERIFY ALL UTILITIES, INCLUDING IRRIGATION LINES, WITH THE OWNER FOR PROPRIETARY UTILITIES AND GOPHER STATE ONE CALL 48 HOURS BEFORE DIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ANY DAMAGES TO SAME. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.
6. **THE LANDSCAPE CONTRACTOR SHALL COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.**
7. THE CONTRACTOR SHALL REVIEW THE SITE FOR DEFICIENCIES IN SITE CONDITIONS WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR WARRANTY. UNDESIRABLE SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK.
8. THE PLAN TAKES PRECEDENCE OVER THE LANDSCAPE LEGEND IF DISCREPANCIES EXIST. QUANTITIES SHOWN IN THE PLANTING SCHEDULE ARE FOR THE CONTRACTOR'S CONVENIENCE. CONTRACTOR TO VERIFY QUANTITIES SHOWN ON THE PLAN.
9. THE SPECIFICATIONS TAKE PRECEDENCE OVER THE PLANTING NOTES AND GENERAL NOTES.
10. EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED TO THE DRIP LINE FROM ALL CONSTRUCTION TRAFFIC, STORAGE OF MATERIALS ETC. WITH 4' HT. ORANGE PLASTIC SAFETY FENCING ADEQUATELY SUPPORTED BY STEEL FENCE POSTS 6' O.C. MAXIMUM SPACING.
11. LONG-TERM STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE ALLOWED.
12. CONTRACTOR SHALL REQUEST IN WRITING, A FINAL ACCEPTANCE INSPECTION.

PLANTING NOTES:

1. NO PLANTS SHALL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
2. A GRANULAR PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANT BEDS AT THE MANUFACTURERS RECOMMENDED RATE PRIOR TO PLANT INSTALLATION.
3. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z60, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS.
4. OVERSTORY TREES SHALL BEGIN BRANCHING NO LOWER THAN 6' ABOVE PAVED SURFACES.
5. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE AND BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE LANDSCAPE LEGEND.
6. PLANT MATERIALS TO BE INSTALLED PER PLANTING DETAILS.
7. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
8. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION.
9. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
10. ALL PLANT MATERIAL QUANTITIES, SHAPES OF BEDS AND LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN AND ADJUSTED TO CONFORM TO THE EXACT CONDITIONS OF THE SITE. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIALS PRIOR TO INSTALLATION.
11. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
12. MULCH: DOUBLE SHREDDED HARDWOOD MULCH, CLEAN AND FREE OF NOXIOUS WEEDS OR OTHER DELETERIOUS MATERIAL, IN ALL MASS PLANTING BEDS AND FOR TREES, UNLESS INDICATED AS ROCK MULCH ON DRAWINGS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT PRIOR TO DELIVERY ON-SITE FOR APPROVAL. DELIVER MULCH ON DAY OF INSTALLATION. USE 3" FOR SHRUB BEDS, TREE RINGS, AND 3" FOR PERENNIAL/GROUND COVER BEDS, UNLESS OTHERWISE DIRECTED.
13. BUILDING MAINTENANCE STRIP: WHERE NO LANDSCAPE PLANTING BEDS EXIST ADJACENT TO A BUILDING FOUNDATION, CONTRACTOR SHALL INSTALL A DECORATIVE ROCK MAINTENANCE STRIP PER PLAN. DECORATIVE ROCK SHALL BE 1"-3" DRESSER TRAP ROCK, GREY IN COLOR.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE THE WORK SHOWN ON THE PLAN.
15. USE ANTI-DESICCANT (WILTPRUF OR APPROVED EQUAL) ON DECIDUOUS PLANTS MOVED IN LEAF AND FOR EVERGREENS MOVED ANYTIME. APPLY AS PER MANUFACTURER'S INSTRUCTION. ALL EVERGREENS SHALL BE SPRAYED IN THE LATE FALL FOR WINTER PROTECTION DURING WARRANTY PERIOD.
16. WRAP ALL SMOOTH-BARKED DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO DECEMBER 1 AND REMOVE WRAPPING AFTER MAY 1. TREE WRAPPING MATERIAL SHALL BE WHITE TWO-WALLED PLASTIC SHEETING APPLIED FROM TRUNK FLARE TO THE FIRST BRANCH.
17. ALL DECIDUOUS, PINE, AND LARCH PLANTINGS SHALL RECEIVE RODENT PROTECTION PER MNDOT 2571.31.2
18. PLANTING SOIL FOR TREES, SHRUBS AND GROUND COVERS: FERTILE FRIABLE LOAM CONTAINING A LIBERAL AMOUNT (4% MIN.) OF HUMUS AND CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL COMPLY WITH MNDOT SPECIFICATION 3877 TYPE B SELECT TOPSOIL. MIXTURE SHALL BE FREE FROM HARDPACK SUBSOIL, STONES, CHEMICALS, NOXIOUS WEEDS, ETC. SOIL MIXTURE SHALL HAVE A PH BETWEEN 6.1 AND 7.5 AND 10-0-10 FERTILIZER AT THE RATE OF 3 POUNDS PER CUBIC YARD. IN PLANTING BEDS INCORPORATE THIS MIXTURE THROUGHOUT THE ENTIRE BED IN A 6" LAYER AND ROTO-TILLING IT INTO THE TOP 12" OF SOIL AT A 1:1 RATIO.ANY PLANT STOCK NOT PLANTED ON DAY OF DELIVERY SHALL BE HEELED IN AND WATERED UNTIL INSTALLATION. PLANTS NOT MAINTAINED IN THIS MANNER WILL BE REJECTED.
19. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT EACH EXCAVATED TREE AND SHRUB PIT WILL PERCOLATE PRIOR TO INSTALLING PLANTING MEDIUM AND PLANTS. THE CONTRACTOR SHALL FILL THE BOTTOM OF SELECTED HOLES WITH SIX INCHES OF WATER AND CONFIRM THAT THIS WATER WILL PERCOLATE WITHIN A 24-HOUR PERIOD. IF THE SOIL AT A GIVEN AREA DOES NOT DRAIN PROPERLY, A PVC DRAIN OR GRAVEL SUMP SHALL BE INSTALLED OR THE PLANTING SHALL BE RELOCATED IF DIRECTED BY THE LANDSCAPE ARCHITECT.
20. ALL PLANTS SHALL BE GUARANTEED FOR TWO COMPLETE GROWING SEASONS (APRIL 1 - NOVEMBER 1), UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND PLANTS.
21. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 3 DAYS PRIOR TO PLANNED DELIVERY. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 24 HOURS IN ADVANCE OF BEGINNING PLANT INSTALLATION.
22. SEASONS/TIME OF PLANTING AND SEEDING: NOTE: THE CONTRACTOR MAY ELECT TO PLANT IN OFF-SEASONS ENTIRELY AT HIS/HER RISK.

22.1.	POTTED PLANTS:	4/1 - 6/1; 9/21 - 11/1
22.2.	DECIDUOUS /B&B:	4/1 - 6/1; 9/21 - 11/1
22.3.	EVERGREEN POTTED PLANTS:	4/1 - 6/1; 9/21-11/1
22.4.	EVERGREEN B&B:	4/1 - 5/1; 9/21 - 11/1
22.5.	TURF/LAWN SEEDING:	4/1 - 6/1; 7/20 - 9/20
22.6.	NATIVE MIX SEEDING:	4/15 - 7/20; 9/20-10/20

23. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PORTION OF THE WORK IS IN PLACE. PLANT MATERIAL SHALL BE PROTECTED AND MAINTAINED UNTIL THE INSTALLATION OF THE PLANTS IS COMPLETE, INSPECTION HAS BEEN MADE, AND PLANTINGS ARE ACCEPTED EXCLUSIVE OF THE GUARANTEE. MAINTENANCE SHALL INCLUDE WATERING, CULTIVATING, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING PLANTS TO PROPER GRADE AND KEEPING PLANTS IN A PLUMB POSITION. AFTER ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE RESPONSIBILITIES. HOWEVER, THE CONTRACTOR SHALL CONTINUE TO BE RESPONSIBLE FOR KEEPING THE TREES PLUMB THROUGHOUT THE GUARANTEE PERIOD.
24. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL LANDSCAPE LEGEND SPECIFICATIONS.
25. WATERING: MAINTAIN A WATERING SCHEDULE WHICH WILL THOROUGHLY WATER ALL PLANTS ONCE A WEEK. IN EXTREMELY HOT, DRY WEATHER, WATER MORE OFTEN AS REQUIRED BY INDICATIONS OF HEAT STRESS SUCH AS WILTING LEAVES. CHECK MOISTURE UNDER MULCH PRIOR TO WATERING TO DETERMINE NEED. CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR WATER.

TURF NOTES:

TURF ESTABLISHMENT SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROVISIONS OF THE MN/DOT 2105 AND 2575 EXCEPT AS MODIFIED BELOW:

1. ALL AREAS TO RECEIVE SOD SHALL ALSO RECEIVE 6" OF TOPSOIL PRIOR TO INSTALLING SOD. TOPSOIL SHALL BE FREE OF TREE ROOTS, STUMPS, BUILDING MATERIAL, AND TRASH, AND SHALL BE FREE OF STONES LARGER THAN 1 ½" INCHES IN ANY DIMENSION.
2. WHERE SOD ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.
3. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, SOD SHALL BE STAKED SECURELY.
4. TURF ON ALL OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY SEEDING, MULCHING AND FERTILIZING. SEED MIXTURE NO.25-121 WILL BE PLACED AT THE RATE OF 65 POUNDS PER ACRE.
5. ALL DISTURBED AREAS TO BE TURF SEEDED, ARE TO RECEIVE 6" TOP SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. FOR SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES INSTALL EROSION CONTROL BLANKET.
6. ALL DISTURBED AREAS TO RECEIVE NATIVE SEED, ARE TO RECEIVE PLANTING SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. FOR SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES INSTALL EROSION CONTROL BLANKET.

GENERAL TREE SPECIFICATIONS:

1. ALL STREET AND PARKING LOT TREES SHALL BE LIMBED UP TO THE FOLLOWING HEIGHTS:
   - 1.1. 2" CAL. TREES: LOWEST BRANCH 6' HT.
   - 1.2. 3" CAL + TREES: LOWEST BRANCH 7' HT.
2. TREE CANOPY WIDTH SHALL BE RELATIVE TO HEIGHT/CALIPER OF TREE AND TYPE OF TREE.
   - 2.1. 1" CALIPER/6-8' HT: 3-4' WIDTH MIN.
   - 2.2. 2" CALIPER/12-14' HT: 4-5' WIDTH MIN.
   - 2.3. 3" CALIPER/14-16' HT: 6-7' WIDTH MIN.
3. CANOPY TREES SHALL NOT HAVE CO-DOMINATE LEADERS IN LOWER HALF OF TREE CROWN.
4. ALL TREES SHALL HAVE SYMMETRICAL OR BALANCED BRANCHING ON ALL SIDES OF THE TREE.
5. TREES SHALL NOT BE TIPPED PRUNED.
6. TREES SHALL BE FREE OF PHYSICAL DAMAGE FROM SHIPPING AND HANDLING. DAMAGED TREES SHALL BE REJECTED.
7. SUMMER DUG TREES SHALL HAVE ROOTBALL SIZE INCREASED BY 20%
8. TREES WHICH EXCEED RECOMMENDED CALIPER TO HEIGHT RELATIONSHIP SHALL BE REJECTED.

IRRIGATION NOTES:

1. IRRIGATION SYSTEM TO BE DESIGN/BUILD. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL OF SYSTEM LAYOUT PRIOR TO INSTALLATION.
2. ALL SOD TO RECEIVE SPRAY OR ROTOR IRRIGATION HEADS WITH MINIMUM DESIGN OF 1" IRRIGATION PER WEEK.
3. ALL PLANT BEDS TO RECEIVE DRIP LINE IRRIGATION , WITH A MINIMUM DESIGN OF .25" IRRIGATION PER WEEK.
4. CONTRACTOR TO INSTALL A TOTAL OF 4 QUICK COUPLERS AT THE CORNERS OF THE PROPERTY. A 2.5" TYPE K SOURCE PIPE IS PROVIDED BY MECHANICAL.

LOW MAINTENANCE FESCUE NOTES:

1. DURING GROWING SEASON NEVER MOW SHORTER THAN 3.5 INCHES, PREFERRED MAINTENANCE IS MOW ONCE PER MONTH AT 5" HEIGHT
2. DO NOT USE HIGH NITROGEN FERTILIZER ON FESCUE LAWN
3. OVERSEED THIN,BARE SPOTS IN FALL
4. ALWAYS USE SHARP BLADE WHEN MOWING TO AVOID TEARING LEAF BLADE
5. SET MOWER TO 3" FOR BAGGING AND MOWING IN LATE FALL AFTER GROWING SEASON

NATIVE SEED MIX NOTES:

1. ESTABLISHMENT AND YEAR ONE: MOW THREE(3) TIMES FIRST YEAR ON 30-DAY INTERVALS TO A HEIGHT BETWEEN FIVE AND EIGHT INCHES. DO NOT USE FERTILIZERS. SPOT TREAT INVASIVE WOODY PLANTS OR HAND WEED INDIVIDUAL NOXIOUS WEEDS.
2. YEAR TWO: PERFORM ONE MOWING BETWEEN MID-JUNE AND MID-AUGUST. SPOT SPRAY WEEDS AS NEEDED WHERE THEY ARE ESPECIALLY DOMINATE.
3. YEAR THREE (AND BEYOND): CUT ONE TIME PER YEAR AS A CLEAN UP PROCEDURE (EITHER IN EARLY MAY OR LATE NOVEMBER). PRESCRIBED BURNS MAY BE USED AS WELL IN PLACE OF MOWING. CHECK LOCAL REGULATIONS AND PERMIT PROCEDURES.

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Print Name: Johnnie R. Workman

Date _____ License # _____

PRELIMINARY	DRAWN BY	
DESIGN REVIEW	DESIGNED BY	
PERMIT SUBMITTAL	CHECKED BY	
CONSTRUCTION DOCUMENTS	PROJECT NO. 50521	

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LANDSCAPE DETAILS AND NOTES

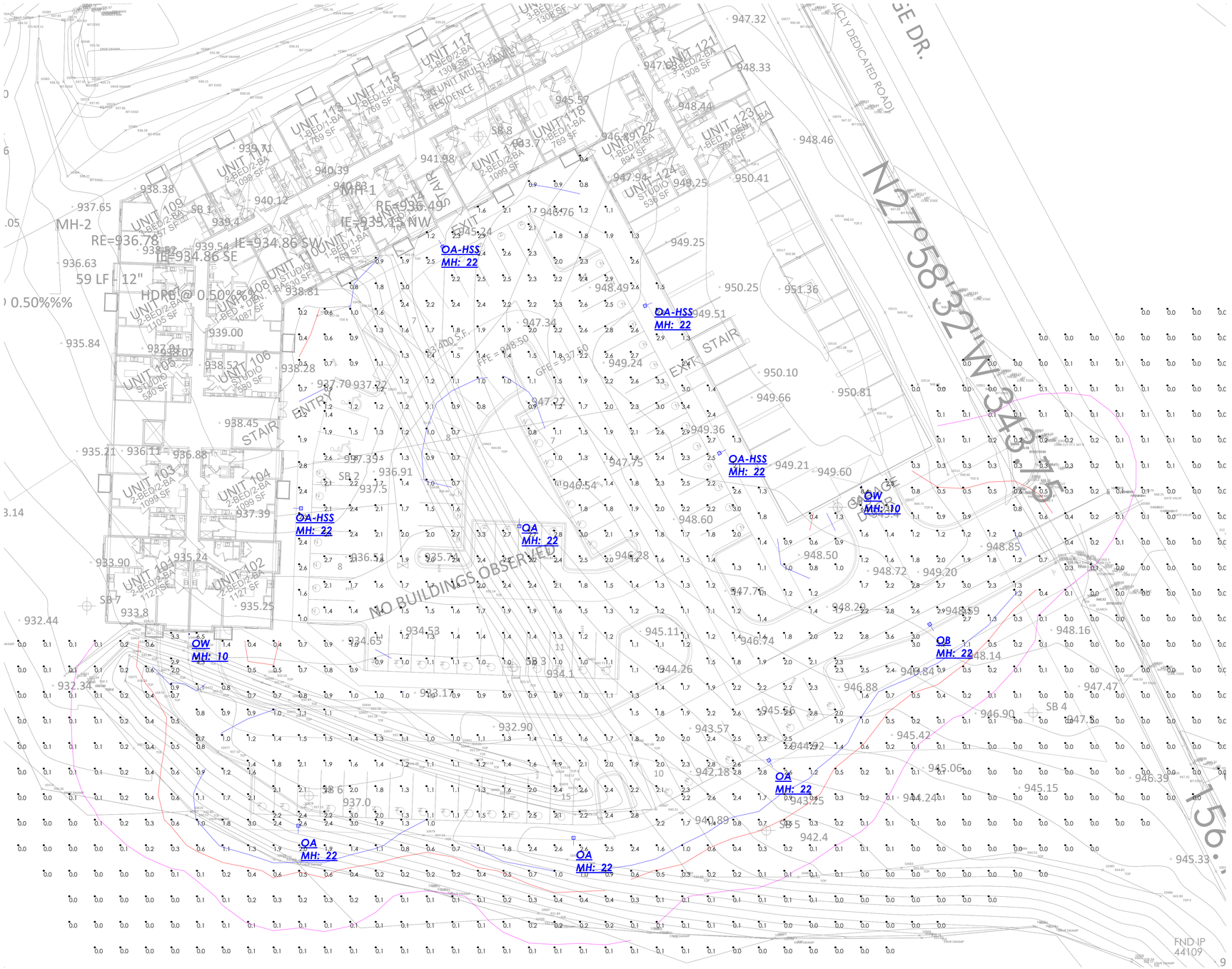
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
L1.02
3 OF 10
REV.

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C:\PROJECTS\50521\CAD\CIVIL\SHEETS\50521-L1-LSCP.DWG|L1.02 LANDSCAPE DETAILS AND NOTES
3/31/2022 12:10:24 PM | ALEA STUTZ | ZD OS (LMS TECH)



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	0.43	8.4	0.0	N.A.	N.A.
PARKING AND DRIVE	Illuminance	Fc	1.84	6.5	0.7	2.63	9.29

Luminaire Schedule							
Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
	4	OA	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T4-BZ	Single	13140	96	0.900
	4	OA-HSS	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T4-BZ-HSS	Single	11933	96	0.900
	1	OB	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T3-BZ	Single	13183	96	0.900
	2	OW	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	AXCS2A	Single	2561	20.7	0.900

1. Standard Reflectance of 80/50/20 unless noted otherwise
2. Not a Construction Document, for Design purposes only
3. Standard indoor calc points @ 30" A.F.F. unless noted otherwise
4. Standard outdoor calc points @ Grade unless noted otherwise
5. Egress calc points @ 0" A.F.F.
6. Mlazgar Associates assumes no responsibility for installed light levels due to field conditions, etc.

MLAZGAR ASSOCIATES
16350 W. GLENDALE DR.
NEW BERLIN, WI 53151
(p) 414-943-1915
(f) 952-943-8088
www.mlazgar.com

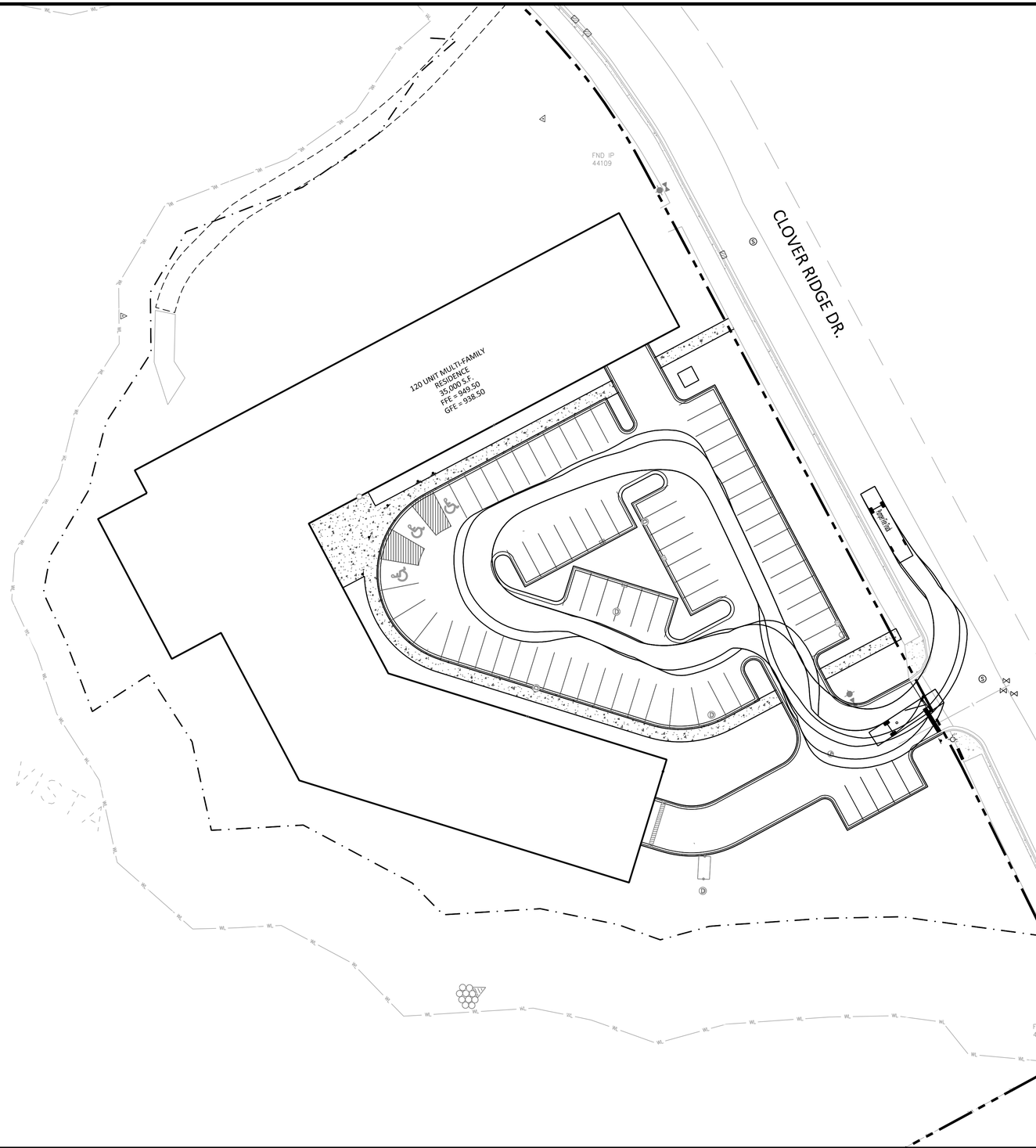
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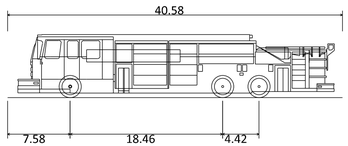
Revisions

RLMA Project #:123005
Drawn By:MB
Date:2/1/2022
Scale:1"=20'-0"

PHOTOMETRIC SITE PLAN

CHASKA SITE
CHASKA, MN





Chaska - Ladder Truck

Overall Length	40.580ft
Overall Width	10.500ft
Overall Body Height	7.647ft
Min Body Ground Clearance	0.558ft
Track Width	7.610ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	36.00°

NORTH

SCALE 0 30 60 IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

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FIRE TRUCK TURNING EXHIBIT

AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET A 1 OF 1 REV.

J:\PROJECTS\50521\CADCIVIL\EXHIBITS\50521-EXHBT-FIRE TRUCK.DWG | 3/7/2022 1:23:09 PM | JACOB MITZEL, PE (MN) | JC.OS (LMS TECH)

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DEVELOPMENT SUMMARY

AREA	
GROSS SITE AREA	552,066 SF 12.67 AC
SETBACKS	
FRONT YARD	20FEET
REAR YARD	50 FEET
SIDE YARD	20 FEET
MINIMUM LOT SIZE	2,500 SF
ZONING	
EXISTING ZONING	UNZONED
PROPOSED ZONING	R-3: MULTIPLE FAMILY RESIDENCE
BUILDING REQUIREMENTS	0.40 RATIO
MINIMUM FLOOR AREA	45 FT
MAXIMUM BUILDING HEIGHT	
PARKING SUMMARY	(2 STALLS PER UNIT) 238 STALLS
TOTAL PARKING REQUIRED	(1 STALLS PER UNIT) 113 STALLS
COVERED PARKING PROVIDED	183 STALLS
TOTAL PARKING PROVIDED	113 STALLS
COVERED PARKING PROVIDED	70 STALLS
SURFACE LOT PARKING PROVIDED	

OUTLOT B

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT B

AVERAGE BUFFER LINE

WETLAND CLASSIFICATION: MANAGE 3
16' AVERAGE & PERMANENT WETLAND BUFFER
10' BUILDING SETBACK
26' TOTAL

10' BUILDING SETBACK

SWAMP AREA

SKIMMER: 938.97

AT GRADE

119 UNIT MULTI-FAMILY RESIDENCE
35,000 S.F.
FFE = 948.50
GFE = 937.50

SB 8 939.7

SB 1 939.4

FES: 30IN RCP 936.38

FES: 18IN RCP 934.15

FES: 15IN RCP 934.45

RE: 943.30
IE: 939.01 N
IE: 934.88 SW
IE: 936.28 SE

RE: 943.22
IE: 939.72

FND IP 44109

RE: 945.54
IE: 928.74 N/S

RE: 944
IE: 937.74 N/S

CLOVER RIDGE DR

(PUBLIC - 100' DEDICATED ROAD)

2555.2 1/4"

6' Temporary Construction Fencing - Full Perimeter of the Site

Construction/ Gate/Entrance

Sign to be placed facing Northwest

NO CONSTRUCTION TRAFFIC BEYOND THIS POINT

Sign(s) sold separately

RE: 948.69
IE: 927.65
NW/SE

SB 9 949.4

SB X 947.3

S26°09'27"E

RE: 945.68
FROZEN
SHUT

RE: 945.41
TOP OF SNOW

FND IP 44109

FES: 18IN RCP 939.81

CROSSES AND
G WEST LINE (1)

WEST LINE OF THE SW QUARTER OF SECTION 30, TWP 116, RNG 24

SW 1/4

SECTION 30

PIONEER

VISTA

TOWNSHIP 116

SB 2 937.5

SB 7 933.8

SB 3 934.1

SB 6 937.0

SB 5 942.4

NO BUILDINGS OBSERVED

GARAGE ENTRANCE

20' BUILDING SETBACK

AVERAGE BUFFER LINE

10' BUILDING SETBACK

WETLAND CLASSIFICATION: UNIQUE
50' PERMANENT WETLAND BUFFER
20' BUILDING SETBACK
70' TOTAL

MINIMUM BUFFER LINE

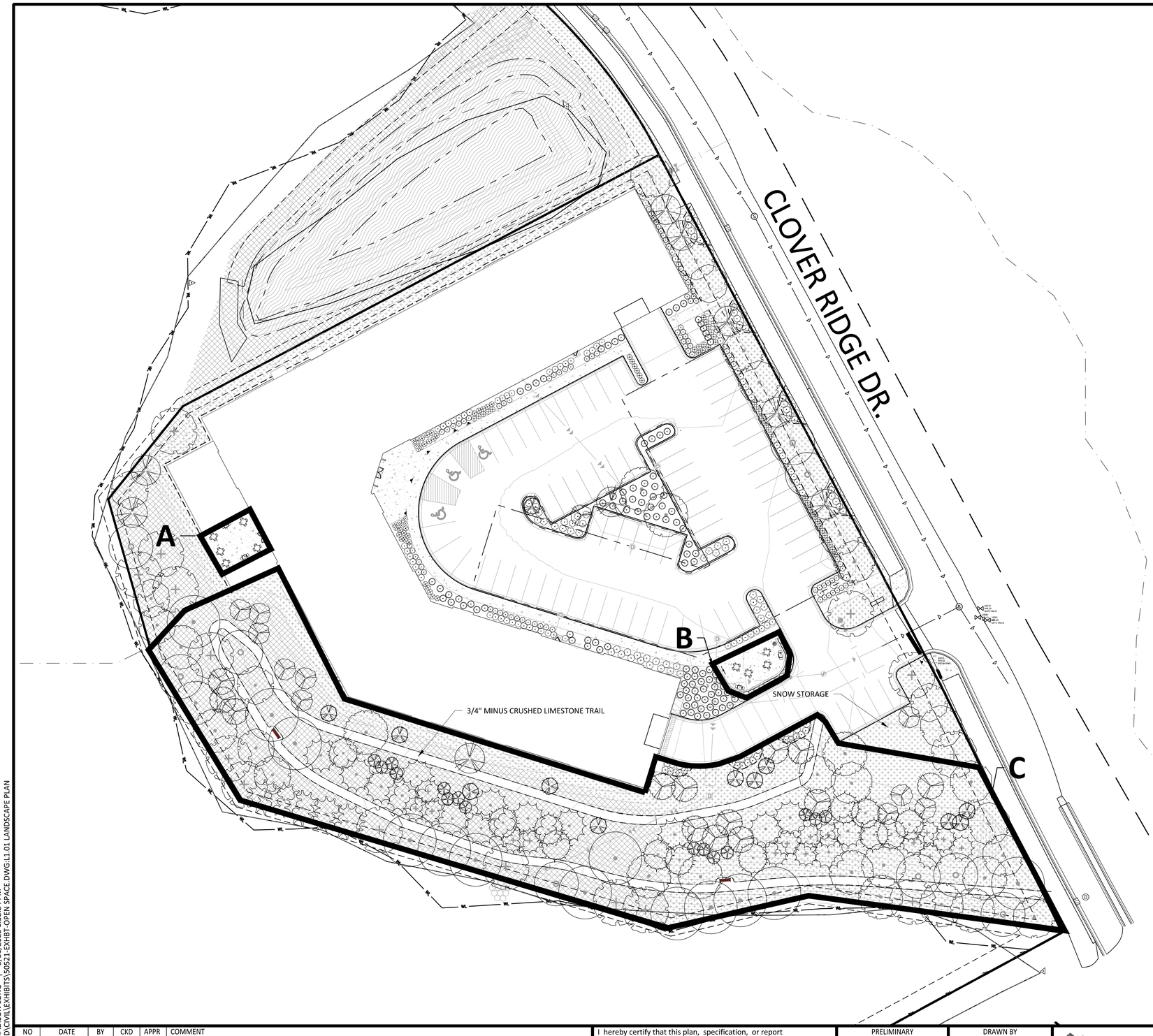
50.0'

MINIMUM BUFFER LINE

NORTH

0 30 60

SCALE IN FEET



LEGEND

	PROPOSED	EXISTING
PROPERTY LIMIT		
CURB & GUTTER		
EASEMENT		
BUILDING		
RETAINING WALL		
WETLAND LIMITS		WL
TREELINE		
LANDSCAPE EDING		
STORM SEWER	D	
SANITARY SEWER	S	S
FORCEMAIN (SAN.)	LS	FM S
WATERMAIN		
YARDDRAIN		
LIMITS OF DISTURBANCE		

STANDARD DUTY ASPHALT PAVING	
CONCRETE PAVING	
CONCRETE SIDEWALK	
TREE PROTECTION FENCE	TP
TREE TO BE REMOVED	
SIGN	
PIPE BOLLARD	
RIPRAP	

CHASKA LANDSCAPE CODE

OPEN SPACE A

- 750 SF
- THIS OPEN SPACE WILL CONSIST OF ROOF TOP PATIO SPACE WITH OUTDOOR FURNITURE, FOR OUTDOOR DINNING AND GATHERING.

OPEN SPACE B

- 611 SF
- THIS OPEN SPACE WILL CONSIST OF A GRILL STATION AND PICNIC TABLES.

OPEN SPACE C

- 41,891 SF
- THIS OPEN SPACE WILL CONSIST OF A BERM WITH A HIGH CONCENTRATION OF CONIFERS AND A LARGE FLAT GRASS AREA. THIS AREA WILL ALSO HAVE A WALKING TRAIL AND BENCHES TROUGH THE WOODLANDS AREA. THIS OPEN SPACE WILL BE USED FOR WINTER RECREATIONAL ACTIVITIES SUCH AS SLEDDING, AND SUMMER ACTIVITIES SUCH AS OPEN FIELD BALL SPORTS, AND FRISBEE.

OPEN SPACE CALCULATION	REQUIRED	PROPOSED
BALCONIES (2,560 SF)		
OPEN SPACE A,B,AND C (43,252 SF)		
TOTAL (CALCULATION: 45,812 SF/ 163,501 SF)	15% (24,525 SF)	28% (45,812 SF)

PLANT SCHEDULE

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	AB	Acer freemanii 'Autumn Blaze' / Autumn Blaze Maple	B & B	5" Cal		9
	SG	Acer freemanii 'Sienna Glen' / Sienna Glen Maple	B & B	3.5" Cal.		13
	WS	Betula papyrifera 'Whitespire' / Whitespire Birch	B & B	2.5"Cal		9
	HL	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	B & B	3"Cal.		15
	KC	Gymnocladus dioica 'Espresso' / Kentucky Coffeetree	B & B	4.5" CAL.		10
	SO	Quercus bicolor / Swamp White Oak	B & B	3"Cal.		15
	BL	Tilia americana 'Boulevard' / Boulevard Linden	B & B	4"CAL		11
CONIFERS	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	BF	Abies balsamea / Balsam Fir	B & B		6'	15
	LR	Larix laricina / Tamarack	B & B		6	5
	NS	Picea abies / Norway Spruce	B & B		6'	12
	BS	Picea glauca densata / Black Hills Spruce	B & B		6'	15
	PW	Pinus strobus 'Fastigiata' / Pyramidal White Pine	B & B		6	15
ORN. TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	SB	Amelanchier canadensis 'Autumn Brilliance' / Autumn Brilliance Serviceberry	B & B	2"Cal		13
	RE	Cercis canadensis / Eastern Redbud	B & B	2"Cal		12
	IL	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	B & B	2"Cal		13
SHRUBS	CODE	BOTANICAL / COMMON NAME	CONT			
	BH	Diervilla lonicera / Dwarf Bush Honeysuckle	5 gal			69
	LH	Hydrangea paniculata 'Jane' / Little Lime Hydrangea	5 gal			90
	CJ	Juniperus sabina 'Monna' / Calgary Carpet Juniper	5 gal			100
	PM	Pinus mugo 'Slowmound' / Mugo Pine	5 gal			28
	PT	Potentilla fruticosa 'Tango' TM / Fangs Potentilla	5 gal			94
	GL	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	5 gal			52
	GS	Spiraea japonica 'Goldflame' / Spirea	5 gal			37
PERENNIALS	CODE	BOTANICAL / COMMON NAME	CONT			
	SBA	Allium x 'Summer Beauty' / Summer Beauty Allium	1 gal			17
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	CONT			
	33-261	MNDOT Seed Mix 33-261 / Ponds and Wet Areas	Seed			
	34-262	MNDOT Seed mix 34-262 / Wet Prairie	Seed			
	TLR HIG	Turf Sod Highland Sod / Sod	Sod			

NORTH

0 30 60

SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Print Name: Johnnie R. Workman

Date _____ License # _____

PRELIMINARY

DESIGN REVIEW

PERMIT SUBMITTAL

CONSTRUCTION DOCUMENTS

DRAWN BY

DESIGNED BY

CHECKED BY

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OPEN SPACE EXHIBIT

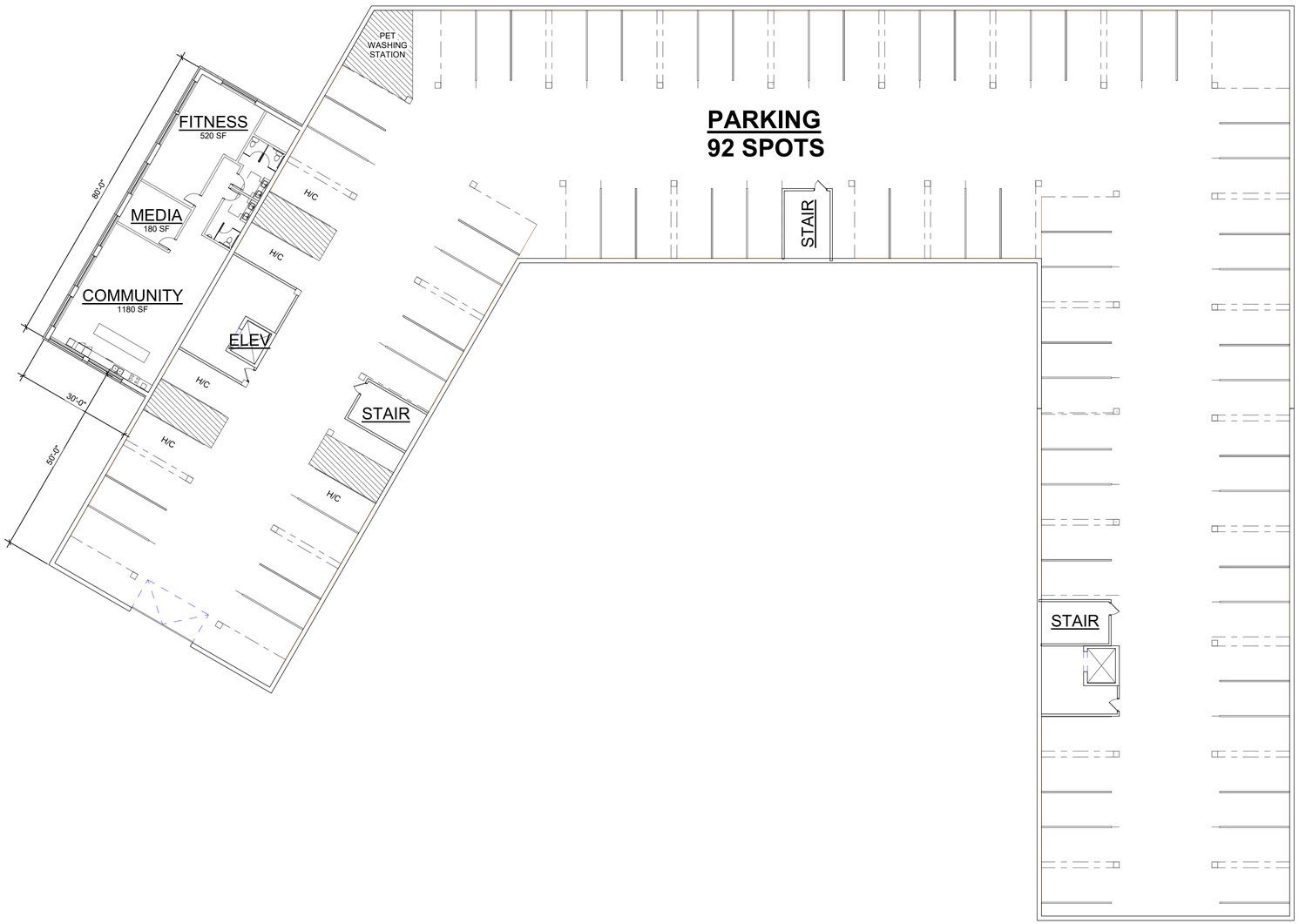
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SHEET 1
1 OF 1
REV.

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P:\PROJECTS\50521\CAD\CIVIL\EXHIBITS\50521-EXHBT-OPEN SPACE.DWG;L1.01 LANDSCAPE PLAN
3/31/2022 1:32:24 PM
MADISON LONG (LMS TECH)



1 BASEMENT
SCALE: 1/16" = 1'-0"

PRELIMINARY- NOT FOR CONSTRUCTION

JCorp
1680 SW Ankeny Rd, #2D
Ankeny, IA 50023
Phone: (515) 597-5457
Fax: (515) 597-5461
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KEY PLAN

PROJECT:
Clover Ridge Apartments
Chaska, MN

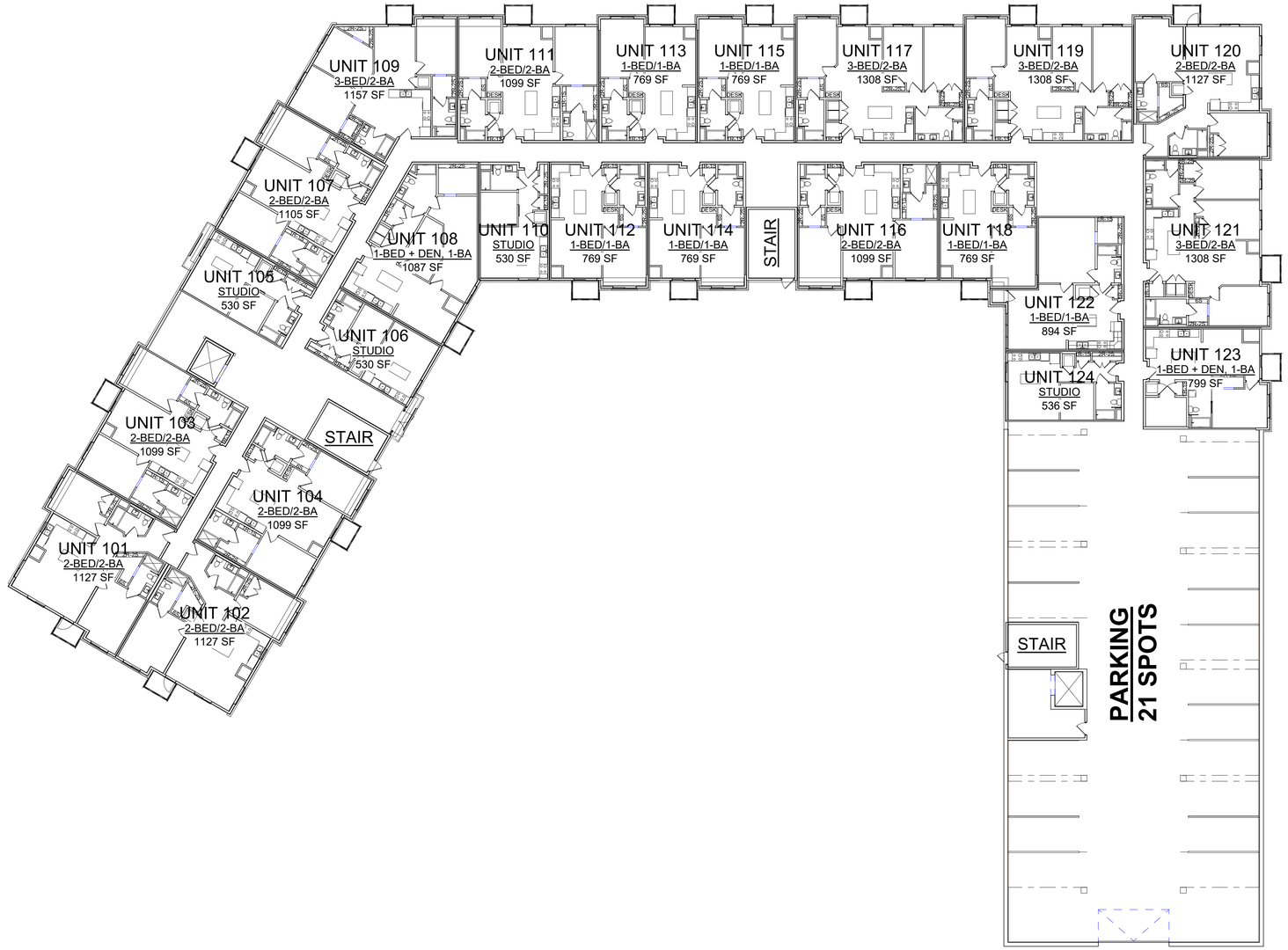
REVISIONS:

01/28/2022

PROJECT NO: 21-043

CONTENTS:
BASEMENT

SHEET NO:
A101



UNIT SCHEDULE	
TYPE	COUNT
1-BED + DEN, 1-BA	20
1-BED/1-BA	30
2-BED/2-BA	44
3-BED/2-BA	16
STUDIO	10

Grand total: 120

1 1ST FLOOR
SCALE: 1/16" = 1'-0"

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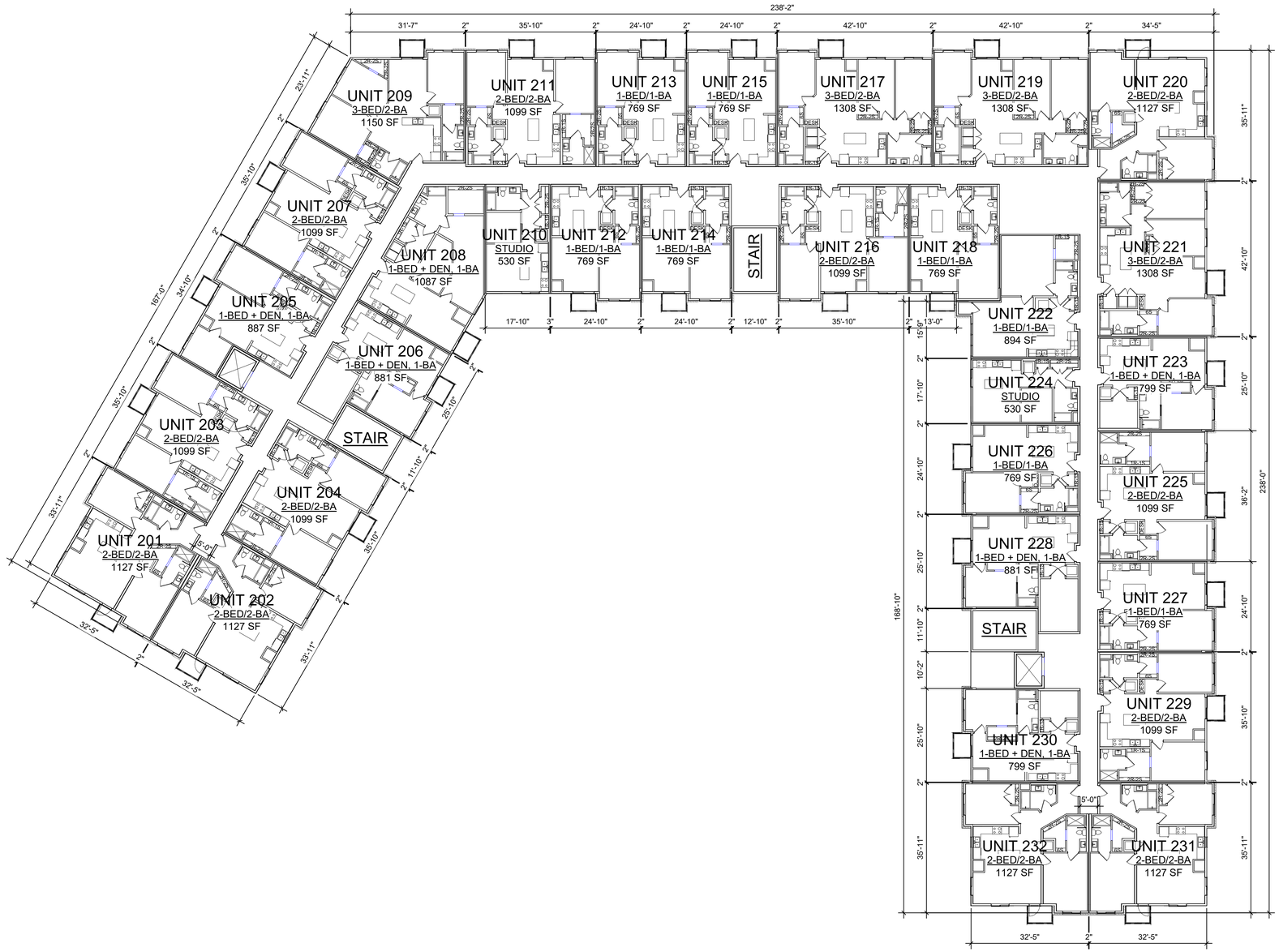
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PROJECT NO: 21-043

CONTENTS:
1ST FLOOR

SHEET NO:
A102



2 2ND FLOOR
SCALE: 1/16" = 1'-0"

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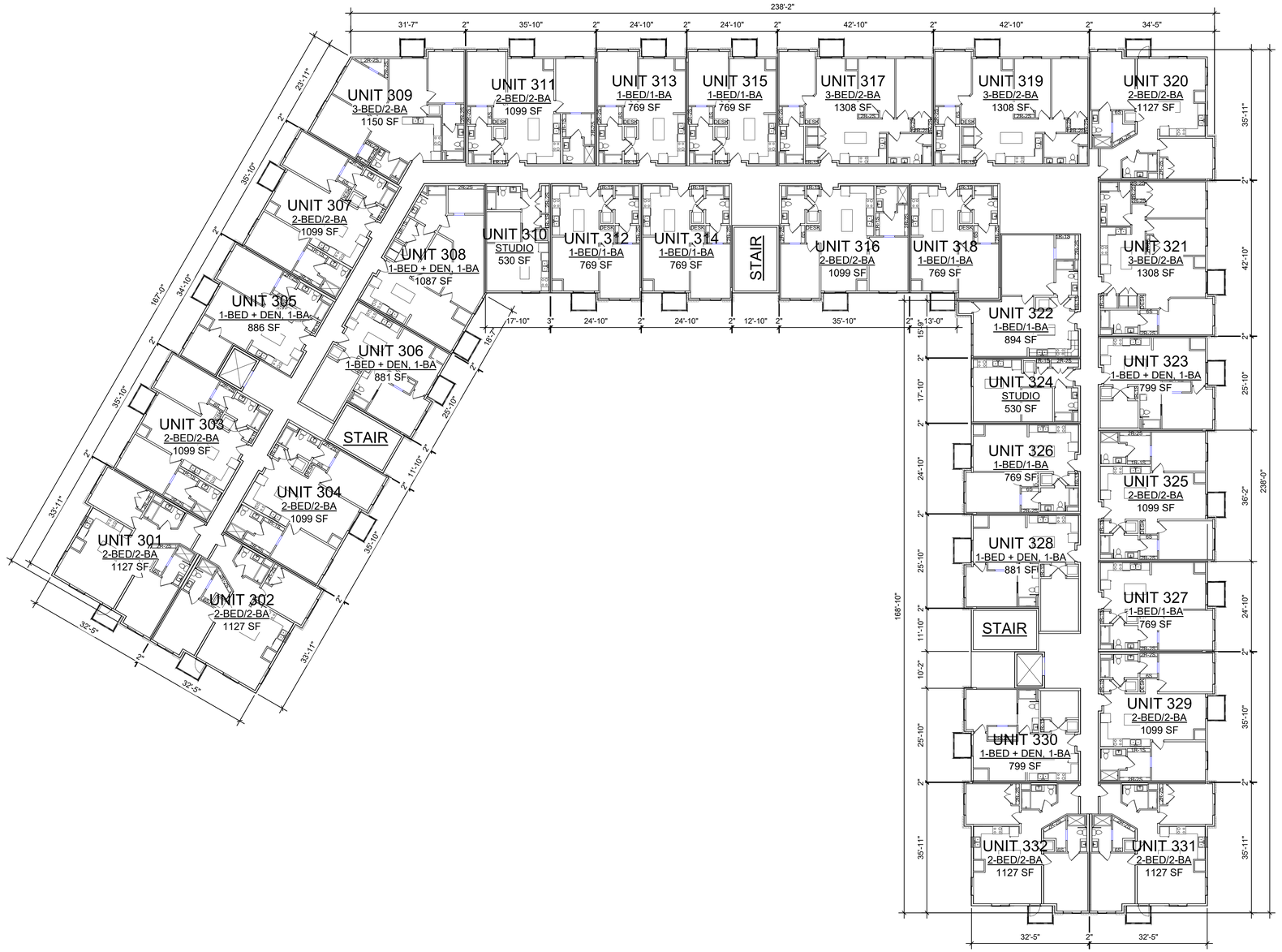
REVISIONS:

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PROJECT NO: 21-043

CONTENTS:
2ND FLOOR

SHEET NO:
A103



1 3RD FLOOR
SCALE: 1/16" = 1'-0"

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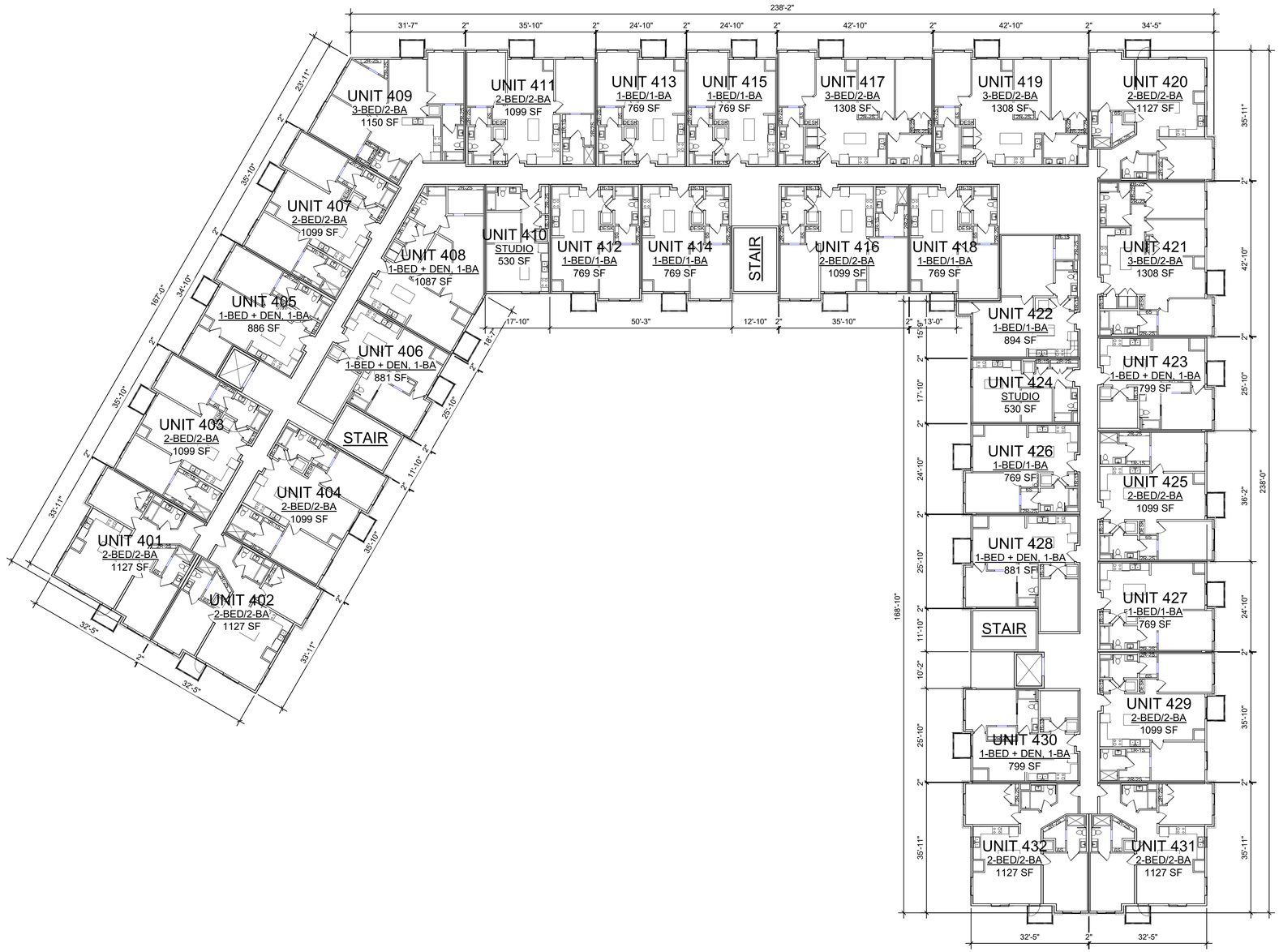
REVISIONS:

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PROJECT NO: 21-043

CONTENTS:
3RD FLOOR

SHEET NO:
A104



1 4TH FLOOR
SCALE: 1/16" = 1'-0"

PRELIMINARY- NOT FOR CONSTRUCTION

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KEY PLAN

PROJECT:
Clover Ridge Apartments
Chaska, MN

REVISIONS:

01/28/2022

PROJECT NO: 21-043

CONTENTS:
4TH FLOOR

SHEET NO:
A105

MATERIAL SCHEDULE - EAST

Type Mark	Description	Area	Percentage
C1	Architectural Precast Concrete	553 SF	15%
S1	Fiber Cement Panel	650 SF	18%
S2	Fiber Cement Lap Siding - Dark	1212 SF	34%
S3	Fiber Cement Lap Siding - Cedar Look	151 SF	4%
GLAZING		1040 SF	29%



1 EAST ELEVATION
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - SOUTH

Type Mark	Description	Area	Percentage
C1	Architectural Precast Concrete	1942 SF	20%
S1	Fiber Cement Panel	2326 SF	25%
S2	Fiber Cement Lap Siding - Dark	2680 SF	28%
S3	Fiber Cement Lap Siding - Cedar Look	306 SF	3%
GLAZING		2338 SF	24%

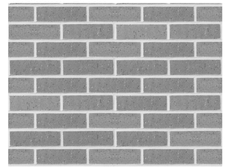


2 SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - TOTAL

B1	Modular Brick	4859 SF	9%
C1	Architectural Precast Concrete	6531 SF	12%
S1	Fiber Cement Panels	12480 SF	23%
S2	Fiber Cement Lap Siding - Dark	12968 SF	24%
S3	Fiber Cement Lap Siding - Cedar Look	2322 SF	4%
GLAZING		14116 SF	27%

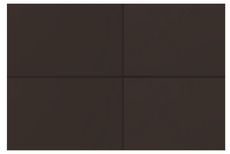
Modular Brick



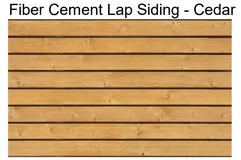
Fiber Cement Lap Siding - Dark



Fiber Cement Panels



Fiber Cement Lap Siding - Cedar



Architectural Precast Concrete



MATERIAL SCHEDULE - SOUTHWEST

Type Mark	Description	Area	Percentage
B1	Modular Brick	2407 SF	31%
S1	Fiber Cement Panel	1866 SF	24%
S2	Fiber Cement Lap Siding - Dark	729 SF	9%%
S3	Fiber Cement Lap Siding - Cedar Look	531 SF	7%%
GLAZING		2310 SF	29%



3 SOUTHWEST ELEVATION
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - NORTHWEST

Type Mark	Description	Area	Percentage
B1	Modular Brick	1000 SF	8%%
C1	Architectural Precast Concrete	1720 SF	14%
S1	Fiber Cement Panel	2588 SF	21%
S2	Fiber Cement Lap Siding - Dark	2945 SF	24%
S3	Fiber Cement Lap Siding - Cedar Look	528 SF	4%
GLAZING		3371 SF	28%



4 NORTHWEST ELEVATION
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - NORTHEAST - 1

Type Mark	Description	Area	Percentage
C1	Architectural Precast Concrete	631 SF	21%
S1	Fiber Cement Panel	450 SF	15%
S2	Fiber Cement Lap Siding - Dark	955 SF	32%
S3	Fiber Cement Lap Siding - Cedar Look	80 SF	3%
GLAZING		850 SF	29%



5 NORTHEAST ELEVATION - 1
SCALE: 1/16" = 1'-0"

PRELIMINARY- NOT FOR CONSTRUCTION

JCorp
1680 SW Ankeny Rd, #2D
Ankeny, IA 50023
Phone: (515) 597-5457
Fax: (515) 597-5461
www.jcorpdesignbuild.com

KEY PLAN

PROJECT:
Clover Ridge Apartments
Chaska, MN

REVISIONS:

03/07/2022

PROJECT NO: 21-043

CONTENTS:
ELEVATIONS

SHEET NO:
A201

MATERIAL SCHEDULE - SOUTHEAST

Type Mark	Description	Area	Percentage
C1	Architectural Precast Concrete	1685 SF	23%
S1	Fiber Cement Panel	1918 SF	27%
S2	Fiber Cement Lap Siding - Dark	1542 SF	21%
S3	Fiber Cement Lap Siding - Cedar Look	203 SF	3%
GLAZING		1857 SF	26%



1 SOUTHEAST ELEVATION
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - NORTHEAST - 2

Type Mark	Description	Area	Percentage
B1	Modular Brick	1452 SF	44%
S1	Fiber Cement Panel	991 SF	20%
S2	Fiber Cement Lap Siding - Dark	113 SF	3%
S3	Fiber Cement Lap Siding - Cedar Look	219 SF	6%
GLAZING		828 SF	23%



2 NORTHEAST ELEVATION - 2
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - NORTH

Type Mark	Description	Area	Percentage
S1	Fiber Cement Panel	1589 SF	26%
S2	Fiber Cement Lap Siding - Dark	2792 SF	45%
S3	Fiber Cement Lap Siding - Cedar Look	304 SF	5%
GLAZING		1522 SF	24%

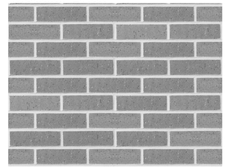


3 NORTH ELEVATION
SCALE: 1/16" = 1'-0"

MATERIAL SCHEDULE - TOTAL

B1	Modular Brick	4859 SF	9%
C1	Architectural Precast Concrete	6531 SF	12%
S1	Fiber Cement Panels	12480 SF	23%
S2	Fiber Cement Lap Siding - Dark	12968 SF	24%
S3	Fiber Cement Lap Siding - Cedar Look	2322 SF	4%
GLAZING		14116 SF	27%

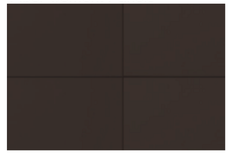
Modular Brick



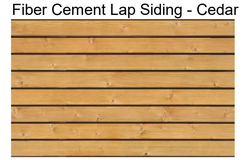
Fiber Cement Lap Siding - Dark



Fiber Cement Panels



Fiber Cement Lap Siding - Cedar



Architectural Precast Concrete



PRELIMINARY- NOT FOR CONSTRUCTION

JCorp

1680 SW Ankeny Rd, #2D

Ankeny, IA 50023

Phone: (515) 597-5457

Fax: (515) 597-5461

www.jcorpdesignbuild.com

KEY PLAN

PROJECT:
Clover Ridge Apartments
Chaska, MN

REVISIONS:

03/07/2022

PROJECT NO: 21-043

CONTENTS:
ELEVATIONS

SHEET NO:
A202



1 **EAST AERIAL**
SCALE:



2 **MAIN ENTRY**
SCALE:



3 **NORTH AERIAL**
SCALE:

PRELIMINARY- NOT FOR CONSTRUCTION

JCorp

1680 SW Ankeny Rd, #2D
Ankeny, IA 50023
Phone: (515) 597-5457
Fax: (515) 597-5461
www.jcorpdesignbuild.com

KEY PLAN

PROJECT:
Clover Ridge Apartments
Chaska, MN

REVISIONS:

03/31/2022

PROJECT NO: 21-043

CONTENTS:
3D Views

SHEET NO:
A203

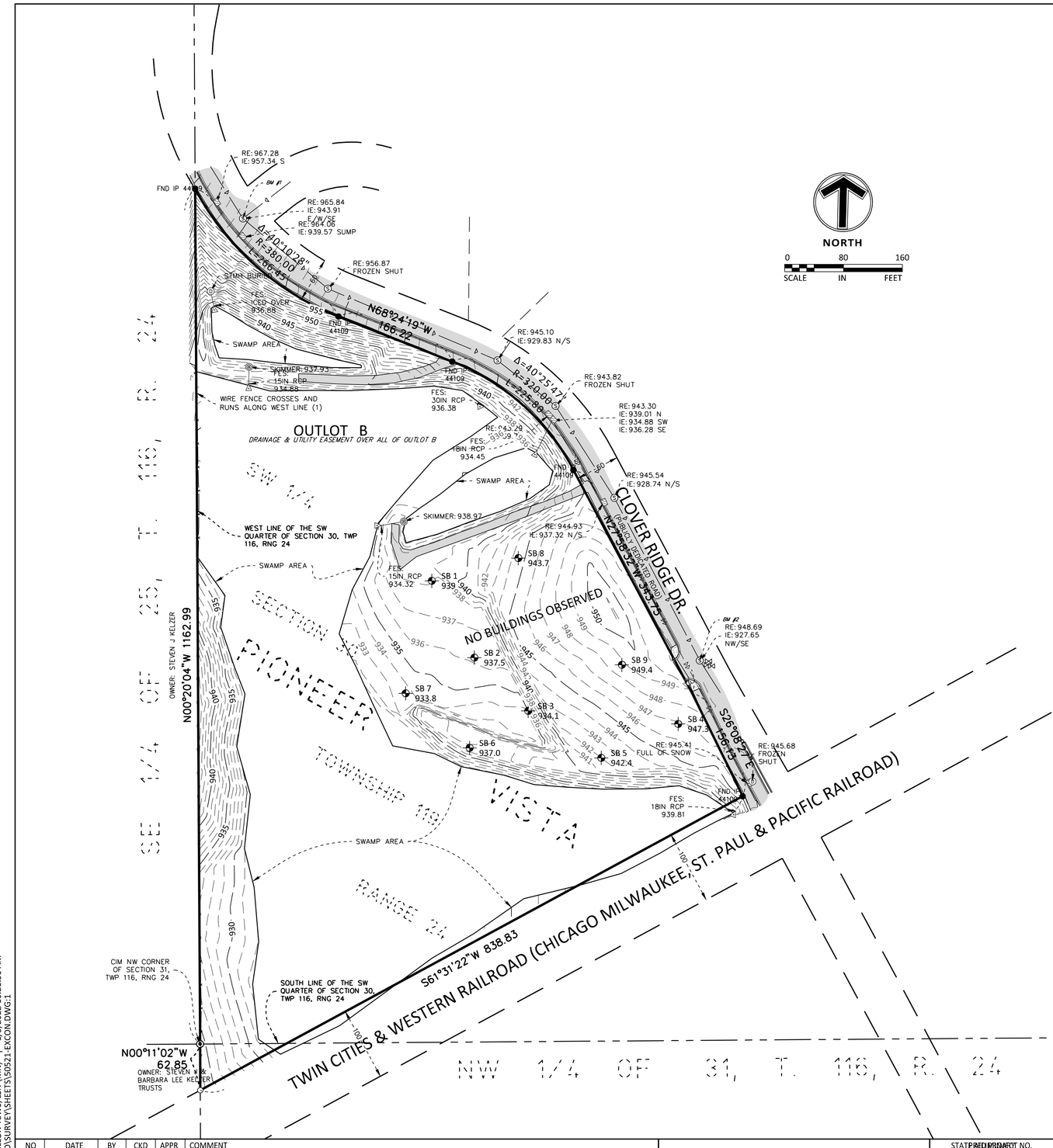


This map was created using Carver County's Geographic Information Systems (GIS), it is a compilation of information and data from various City, County, State, and Federal offices. This map is not a surveyed or legally recorded map and is intended to be used as a reference. Carver County is not responsible for any inaccuracies contained herein.

Map Date: 1/31/2022

EXISTING CONDITIONS SURVEY

A SURVEY OF LANDS LOCATED IN THE SW 1/4 OF SECTION 30 AND THE NW 1/4 OF SECTION 31
IN TWP. 119, RNG. 24, CITY OF CHASKA, CARVER COUNTY, MINNESOTA



PROPERTY SUMMARY

1. SUBJECT PROPERTIES ADDRESS IS UNASSIGNED, ITS PROPERTY IDENTIFICATION NUMBER IS 30.5000.560.
2. THE GROSS AREA OF THE SUBJECT PROPERTY IS 11.9851 Acres or 522,071 SQUARE FEET.
3. THE SUBJECT PROPERTY IS ZONED OPEN DEVELOPMENT, PER CITY OF CHASKA ZONING MAP ON THE CITY OF CHASKA WEBSITE ACCESSED 01/05/2021.

SURVEY NOTES

1. THE BEARING SYSTEM IS BASED ON THE CARVER COUNTY COORDINATE SYSTEM, NAD85 (1986 ADJ.)
2. FIELD WORK WAS COMPLETED ON 01/02/2022
3. THIS SURVEY WAS PERFORMED UNDER THE COVER OF SIGNIFICANT SNOW. THE SURVEYOR MAKES NO GUARANTEE THAT ALL IMPROVEMENTS ARE SHOWN HEREON.

BENCHMARKS

1. THE VERTICAL DATUM IS BASED ON NAVD88. THE ORIGINATING BENCH MARK IS MNDOT TOWNGOLF, REFERENCED FROM THE MNDOT GEODETIC DATABASE.

BENCHMARK #1 SANITARY MANHOLE N. END OF SITE	ELEV.=965.84
BENCHMARK #2 SANITARY MANHOLE S. END OF SITE	ELEV.=948.69

LEGEND

FOUND MONUMENT	WATERMAIN
SET MONUMENT MARKED	SANITARY SEWER
ELECTRIC METER	STORM SEWER
LIGHT	FLARED END SECTION
AIR CONDITIONER	TELEPHONE PEDESTAL
GUY ANCHOR	ELECTRIC TRANSFORMER
HANDICAP STALL	GAS METER
UTILITY POLE	OVERHEAD WIRE
POST	CHAIN LINK FENCE
SIGN	IRON FENCE
	WIRE FENCE
	WOOD FENCE
	EASEMENT LINE
	SETBACK LINE
	RESTRICTED ACCESS
	CONCRETE CURB
	BUILDING LINE
	BUILDING CANOPY
	STANDARD DUTY ASPHALT PAVING
	BITUMINOUS SURFACE
	CONCRETE SURFACE
	LANDSCAPE SURFACE

NO	DATE	BY	CKD	APPR	COMMENT

Print Name: _____

Date _____ License # _____

STATE PROJECT NO.
STATE PROJECT NO.
COUNTY PROJECT NO.
CONSTRUCTION DOCUMENTS

DRAWN BY DJT
DESIGNED BY
CHECKED BY JCW
PROJECT NO. 50521

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

EXISTING CONDITONS
AV DEVELOPMENT, LLC
CHASKA MULTIFAMILY
1/05/2021
CHASKA, CARVER COUNTY, MINNESOTA

SHEET
##
OF
REV. #

P:\PROJECTS\50521\CAD\SURVEY\SHEETS\50521-EXCON.DWG | 1/5/2022 10:21:56 AM | DILLON TEWS, LSIT (MN) | DILLON TEWS (LMS TECH)

CLOVER RIDGE APARTMENTS

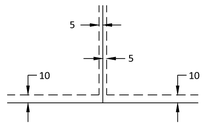
PRELIMINARY PLAT

A SURVEY OF LANDS LOCATED IN THE SW 1/4 OF SECTION 30 AND THE NW 1/4 OF SECTION 31
IN TWP. 119, RNG. 24, CITY OF CHASKA, CARVER COUNTY, MINNESOTA

NORTH

0 60 120
SCALE IN FEET

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:
(NOT TO SCALE)



BEING 5 FEET IN WIDTH AND ADJOINING LOT LINES AND BEING 10 FEET IN WIDTH AND ADJOINING PUBLIC WAYS, UNLESS OTHERWISE INDICATED ON THIS PLAT.

DESCRIPTION

THE SUBJECT PROPERTY IS DESCRIBED AS:
OUTLOT B, PIONEER VISTA
CARVER COUNTY, MINNESOTA
(ABSTRACT PROPERTY)

TO BE PLATTED AS:
LOT 1, BLOCK 1, CLOVER RIDGE APARTMENTS
OUTLOT A, CLOVER RIDGE APARTMENTS
CARVER COUNTY, MINNESOTA
(ABSTRACT PROPERTY)

PROPERTY SUMMARY

1. SUBJECT PROPERTY'S ADDRESS IS UNASSIGNED, ITS PROPERTY IDENTIFICATION NUMBER IS 30.5000.560.

2. THE AREAS OF THE SUBJECT PROPERTY ARE AS FOLLOWS:

TOTAL AREA:	11.986 ACRES OR 522,101 SQUARE FEET
LOT 1:	3.232 ACRES OR 140,797 SQUARE FEET
OUTLOT A:	8.754 ACRES OR 381,304 SQUARE FEET

3. THE SUBJECT PROPERTY IS ZONED OPEN DEVELOPMENT, PER CITY OF CHASKA ZONING MAP ON THE CITY OF CHASKA WEBSITE ACCESSED 01/05/2021.

SURVEY NOTES

1. THE BEARING SYSTEM IS BASED ON THE CARVER COUNTY COORDINATE SYSTEM, NAD83 (1986 ADJ.)

2. FIELD WORK WAS COMPLETED ON 01/02/2022

3. THIS SURVEY WAS PERFORMED UNDER THE COVER OF SIGNIFICANT SNOW. THE SURVEYOR MAKES NO GUARANTEE THAT ALL IMPROVEMENTS ARE SHOWN HEREON.

4. THE SUBJECT PROPERTY LIES WITHIN FLOOD PLAIN ZONE X, PER FEMA, FIRM MAP NO.27019C0209D DATED 12/21/2018.

5. THERE ARE NO BUILDING ON THE SUBJECT PROPERTY.

BENCHMARKS

1. THE VERTICAL DATUM IS BASED ON NAVD88. THE ORIGINATING BENCH MARK IS MNDOT TOWNGOLF, REFERENCED FROM THE MNDOT GEODETIC DATABASE.

BENCHMARK #1 SANITARY MANHOLE N. END OF SITE	ELEV.=965.84
BENCHMARK #2 SANITARY MANHOLE S. END OF SITE	ELEV.=948.69

LEGEND

- FOUND MONUMENT
- SET MONUMENT MARKED
- ELECTRIC METER
- LIGHT
- AIR CONDITIONER
- GUY ANCHOR
- HANDICAP STALL
- UTILITY POLE
- POST
- SIGN
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- FLARED END SECTION
- TELEPHONE PEDESTAL
- ELECTRIC TRANSFORMER
- GAS METER
- OVERHEAD WIRE
- CHAIN LINK FENCE
- IRON FENCE
- WIRE FENCE
- WOOD FENCE
- EASEMENT LINE
- SETBACK LINE
- RESTRICTED ACCESS
- CONCRETE CURB
- BUILDING LINE
- BUILDING CANOPY
- STANDARD DUTY ASPHALT PAVING
- BITUMINOUS SURFACE
- CONCRETE SURFACE
- LANDSCAPE SURFACE

NO	DATE	BY	CKD	APPR	COMMENT
A	04/08/2022	DJT	MRS	MRS	LOT LINE AND PLAT NAME

I hereby certify that this plan, survey, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Print Name: Mark R. Salo

PRELIMINARY

Date 04/08/2022 License # 43933

STATE AID PROJECT NO.	
STATE PROJECT NO.	
COUNTY PROJECT NO.	
CITY PROJECT NO.	
DRAWN BY	DJT
DESIGNED BY	
CHECKED BY	MRS
PROJECT NO.	50521

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PRELIMINARY PLAT

AV DEVELOPMENT, LLC
CHASKA MULTIFAMILY
1/31/2021
CHASKA, CARVER COUNTY, MINNESOTA

SHEET 1 OF 1 REV.

R:\SAMBATEK-FS1\PROJECTS\PROJECTS\50521\CAD\SURVEY\SHEETS\50521-PPLAT.DWG:1 | 4/8/2022 1:16:20 PM | DILLON TEWS, LSIT (MN) | DILLON TEWS (LMS TECH)

CONSULTANT CONTACT LIST:

DEVELOPER/OWNER
AV DEVELOPMENT LLC
11800 SINGLE TREE LANE, SUITE 301
EDEN PRAIRIE MN 55344
TEL
EMAIL
CONTACT: VISHAL DUTT

CIVIL ENGINEER
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
MINNETONKA, MN 55343
TEL 763-476-6010
EMAIL: BFRANK@SAMBATEK.COM
CONTACT: BRIAN FRANK

ARCHITECT
J CORP
750 MAIN STREET, #207
MENDOTA HEIGHTS MN 55118
TEL
EMAIL
CONTACT: HENRY ELGERSMA

SURVEYOR
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
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EMAIL: JWITTSTOCK@SAMBATEK.COM
CONTACT: JAY WITTSTOCK

GEOTECHNICAL
BRAUN INTERTEC
11001 HAMPSHIRE AVENUE
MINNEAPOLIS MN 55348
TEL 952-995-2000
EMAIL
CONTACT:

LANDSCAPE ARCHITECT
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
MINNETONKA, MN 55343
TEL 763-476-6010
EMAIL: JWORKMAN@SAMBATEK.COM
CONTACT: JOHN WORKMAN

Preliminary Plans

for

Clover Ridge Apartments

Chaska, Minnesota

Presented by:
AV Development, LLC

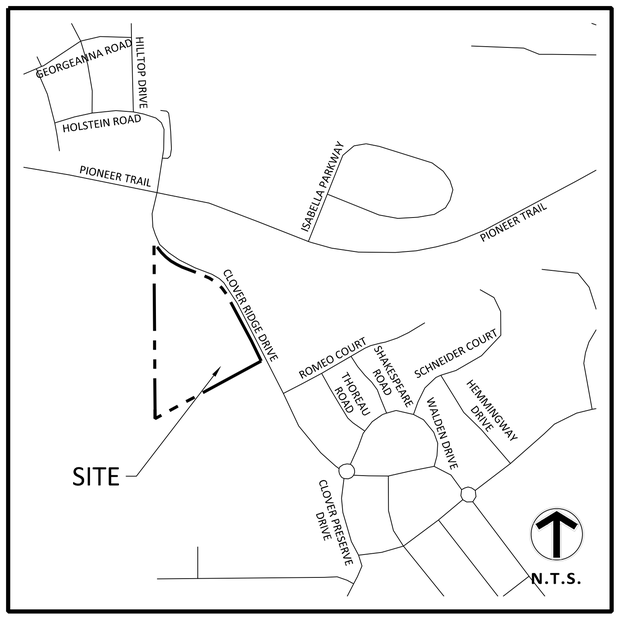
BENCHMARKS

BM NO. 1
SANITARY MANHOLE N. END OF SITE.
ELEV.=965.84

BM NO. 2
SANITARY MANHOLE S. END OF SITE
ELEV.=948.69

SHEET INDEX

SHEET	DESCRIPTION
C1.01	TITLE
C2.01	DEMOLITION PLAN
C3.01	SITE PLAN
C4.01	GRADING PLAN
C6.01	UTILITY PLAN
C9.01	DETAILS
C9.02	DETAILS
L1.01	LANDSCAPE PLAN
L1.02	LANDSCAPE DETAILS AND NOTES



VICINITY MAP
NO SCALE

GOVERNING SPECIFICATIONS

CITY OF CHASKA SPECIFICATIONS (2019)
CITY ENGINEER'S ASSOCIATION OF MINNESOTA STANDARD SPECIFICATIONS (2013)
MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION (2018 EDITION)

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY
DESIGN REVIEW
PERMIT SUBMITTAL
CONSTRUCTION DOCUMENTS

DRAWN BY KLS
DESIGNED BY
CHECKED BY
PROJECT NO. 50521

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TITLE

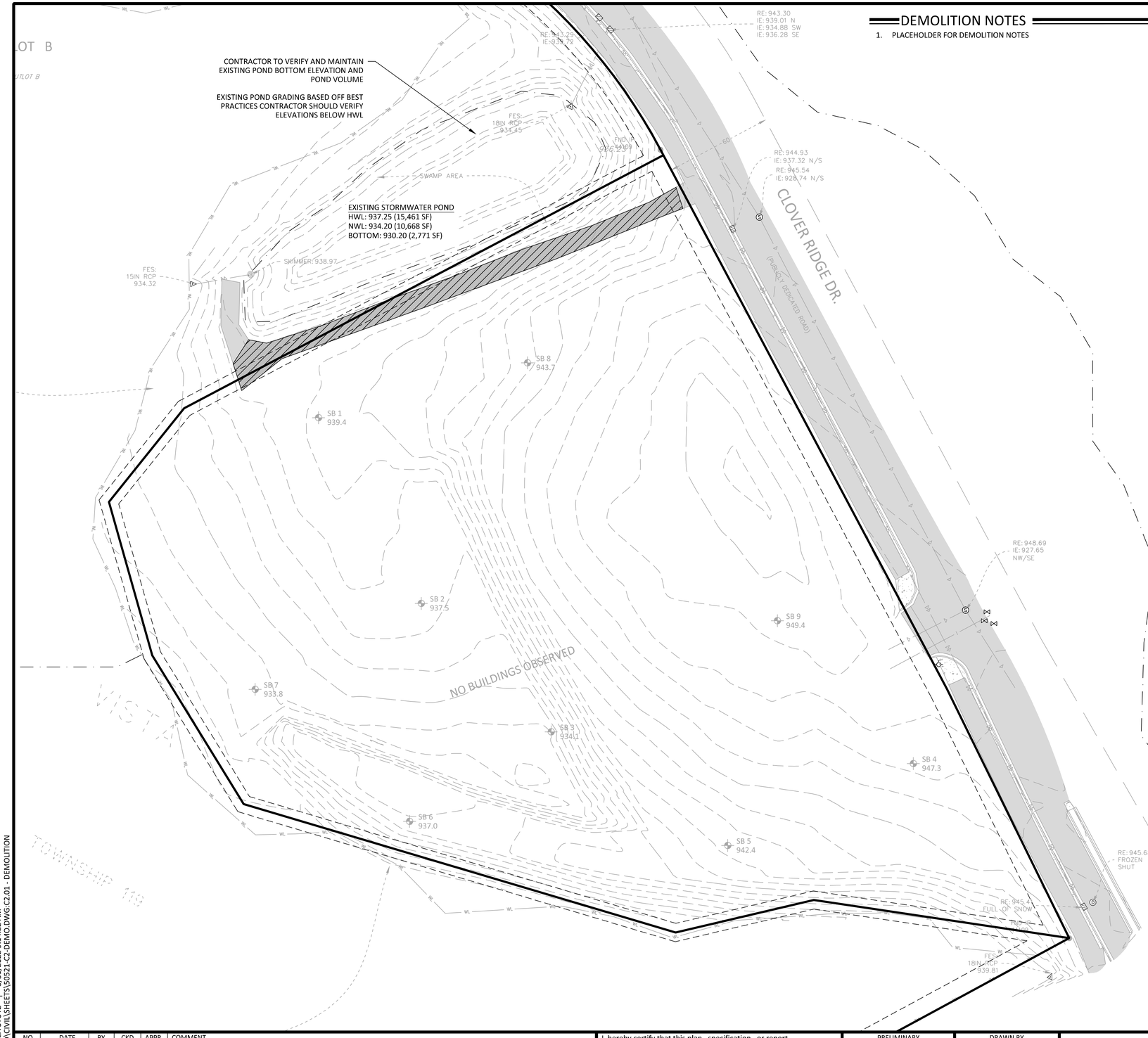
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
C1.01
1 OF 10
REV.

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PLOT DATE: 3/31/2022 9:14:24 AM | ALEA STUTZ | PLOT SCALE: 2.05 (LMS TECH) | C:\PROJECTS\50521\CAD\CIVIL\SHEETS\50521-C1-TITLE.DWG:C1.01 - TITLE



DEMOLITION NOTES

1. PLACEHOLDER FOR DEMOLITION NOTES

LEGEND

EXISTING

- GAS METER
- HYDRANT
- LIGHT
- STORM SEWER
- DRAINTILE
- WATERMAIN
- FORCEMAIN (SAN.)
- SANITARY SEWER
- OVERHEAD ELECTRIC WIRE
- UNDERGROUND TELEPHONE
- UNDERGROUND CABLE TV
- ELECTRIC
- UNDERGROUND GAS LINE
- WIRE FENCE
- IRON FENCE
- WOOD FENCE
- CHAIN LINK FENCE
- STONE RETAINING WALL
- SPRINKLER HEAD
- SPRINKLER VALVE
- GUARDRAIL
- HANDRAIL
- TREE LINE
- GUARD POST
- SIGN
- CONCRETE CURB
- BUILDING LINE
- REMOVE UTILITY STRUCTURE
- REMOVE EXISTING CONCRETE CURB
- SAW CUT EXISTING BITUMINOUS PAVEMENT
- REMOVE EXISTING BITUMINOUS PAVEMENT
- REMOVE EXISTING CONCRETE PAVEMENT
- REMOVE EXISTING GRAVEL DRIVE
- REMOVE EXISTING LANDSCAPING
- REMOVE EXISTING BUILDING
- DEMO TREE
- REMOVE EXISTING (DEMO LG)
- REMOVE UTILITY STRUCTURE
- DEMO LIGHT
- REMOVE CHAIN LINK FENCE

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NORTH

SCALE 0 30 60 IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY	
DESIGN REVIEW	
PERMIT SUBMITTAL	
CONSTRUCTION DOCUMENTS	

DRAWN BY	KLS
DESIGNED BY	
CHECKED BY	
PROJECT NO.	50521

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DEMOLITION PLAN

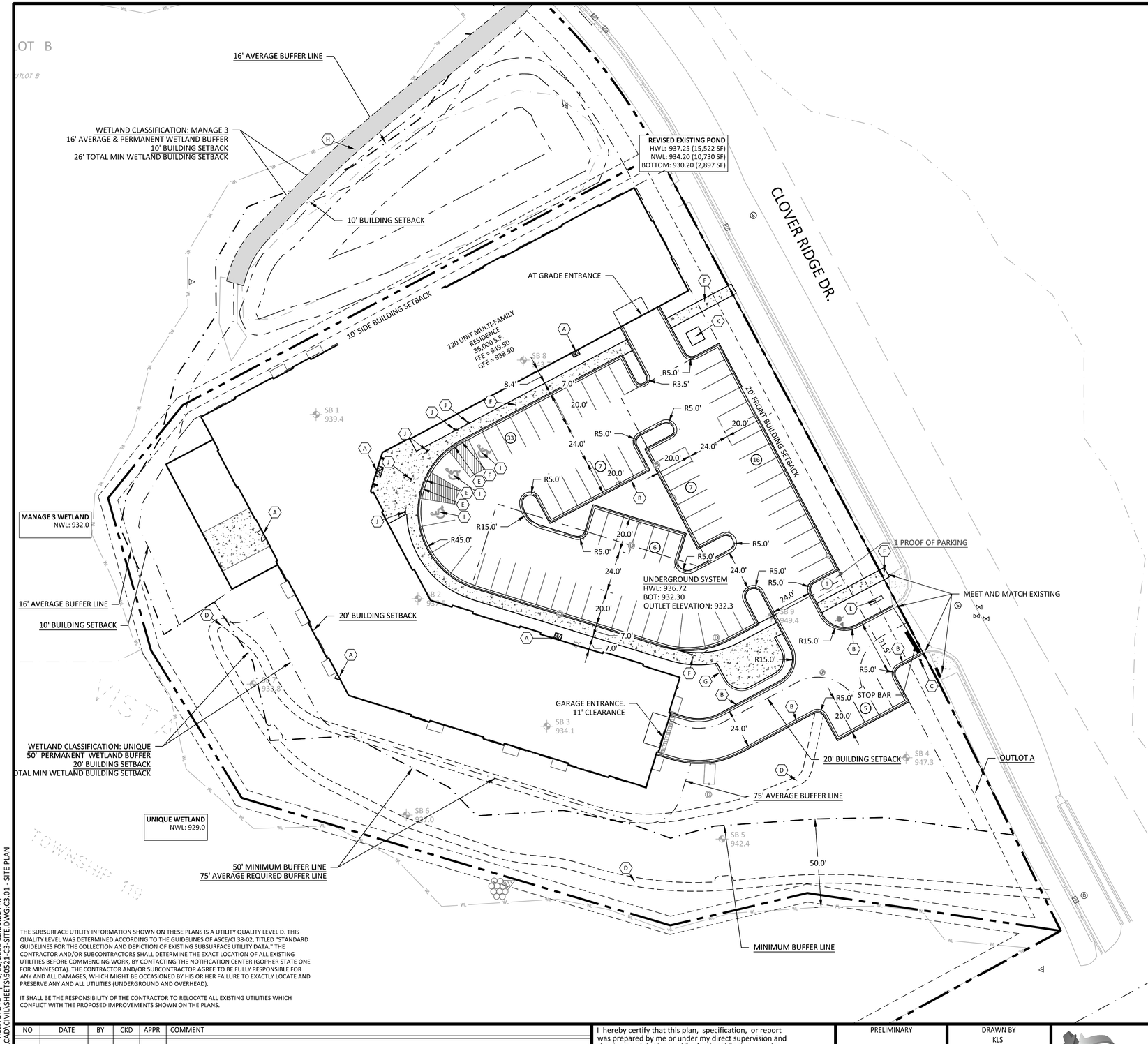
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
C2.01
2 OF 10
REV.

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20.0S (LMS TECH) | ALEA STUTZ | 3/31/2022 9:14:22 AM
J:\PROJECTS\50521\CAD\CIVIL\SHEETS\50521-C2-DEMO.DWG:C2.01 - DEMOLITION



LEGEND

PROPOSED	EXISTING	
		BOUNDARY LINE
		CONCRETE CURB
		EASEMENT LINE
		BUILDING LINE
		RETAINING WALL
	WT	WET LAND
		TREE LINE
		SAW CUT LINE
		SIGN
		BOLLARD
##		REGULAR PARKING STALL COUNT
1		KEYNOTE

- STANDARD DUTY ASPHALT PAVING
- HEAVY DUTY ASPHALT PAVING
- CONCRETE PAVING
- CONCRETE SIDEWALK
- PAVEMENT BY OTHERS (SEE ARCHITECTURAL PLANS)

DEVELOPMENT SUMMARY

AREA	
GROSS SITE AREA	552,066 SF 12.67 AC
SETBACKS	
FRONT YARD	30 FEET, 20 FEET REQUESTED
REAR YARD	50 FEET
SIDE YARD	10 FEET
ZONING	
EXISTING ZONING	R: RURAL
PROPOSED ZONING	PRD: PLANNED RESIDENTIAL DEVELOPMENT
BUILDING REQUIREMENTS	
MINIMUM FLOOR AREA	0.50
MAXIMUM BUILDING HEIGHT	45 FT
PARKING SUMMARY	
TOTAL PARKING REQUIRED (PER ORDINANCE)	240 STALLS
TOTAL PARKING REQUIRED (PER PARKING DEMAND MEMO)	119 STALLS
TOTAL PARKING PROVIDED	195 STALLS
COVERED PARKING PROVIDED	120 STALLS
SURFACE LOT PARKING PROVIDED	74 STALLS
PROOF OF PARKING	1 STALLS

DEVELOPMENT NOTES

1. NOTES PLACEHOLDER

KEY NOTES

A. BUILDING, STOOPS, STAIRS (SEE ARCHITECTURAL PLANS)
B. B-612 CONCRETE CURB AND GUTTER (SEE DETAIL 01, SHEET C9.02)
C. STOP SIGN
D. CRUSHED AGGREGATE PATH
E. FLAT CURB SECTION (SEE DETAIL 06, SHEET C9.02)
F. CONCRETE SIDEWALK (SEE DETAIL 02, SHEET C9.02)
G. SEGMENTAL BLOCK RETAINING WALL
H. GRASS PAVERS ACCESS TRAIL
I. ACCESSIBLE STALL STRIPING (SEE DETAIL 04, SHEET C9.02)
J. ACCESSIBLE PARKING SIGN (SEE DETAIL 05, SHEET C9.02)
K. TRANSFORMER
L. MONUMENT SIGN

WETLAND DEVELOPMENT SUMMARY

REQUIRED BUFFER	
MANAGE 3	6,816 SF
UNIQUE	39,832 SF
TOTAL	46,648 SF
PROVIDED BUFFER	
MANAGE 3	6,816 SF
UNIQUE	41,522 SF
TOTAL	48,338 SF

NORTH

0 30 60
SCALE IN FEET

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

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PERMIT SUBMITTAL
CONSTRUCTION DOCUMENTS

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SITE PLAN

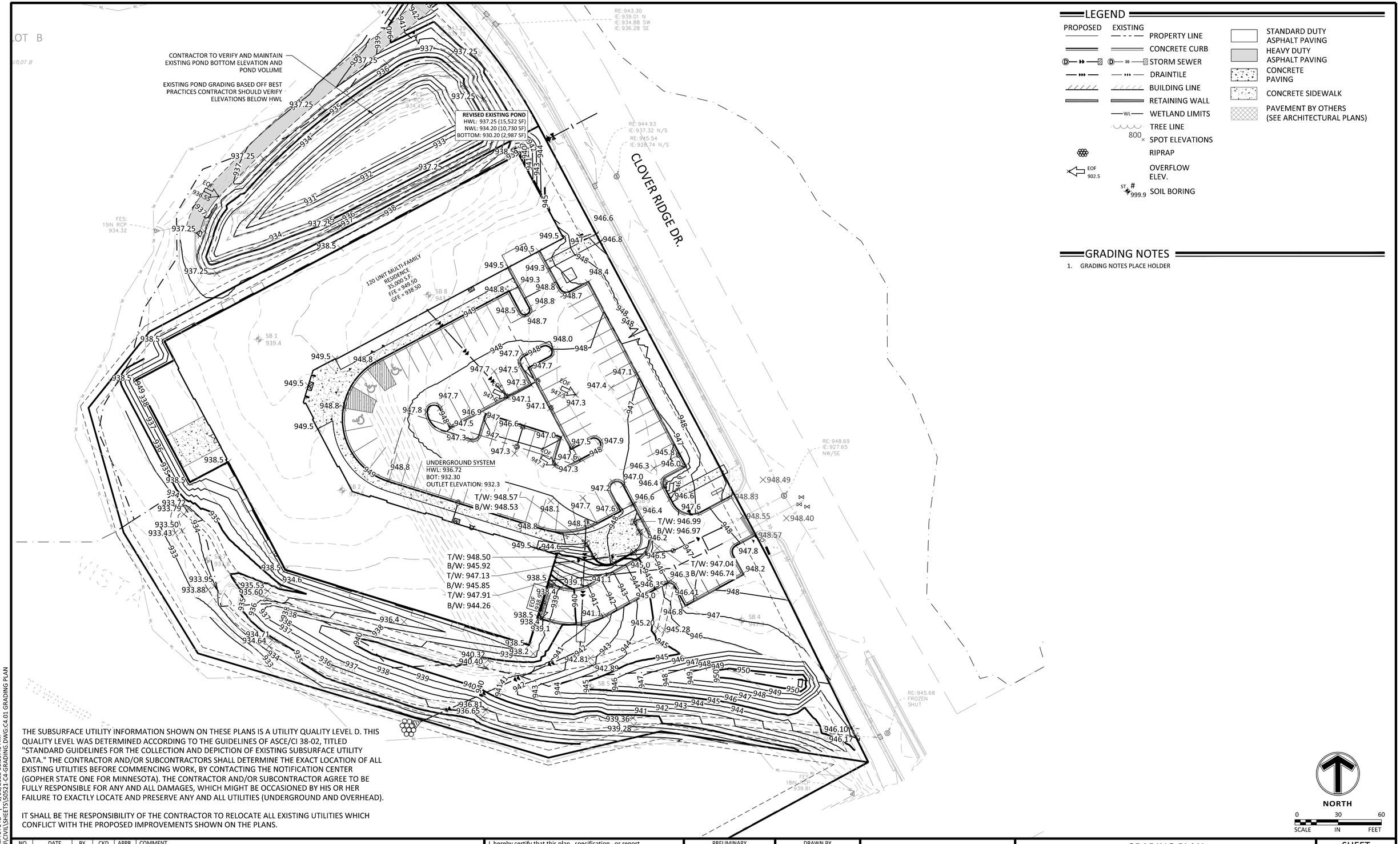
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
C3.01
3 OF 10
REV.

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LEGEND

PROPOSED	EXISTING	
		PROPERTY LINE
		CONCRETE CURB
		STORM SEWER
		DRAINTILE
		BUILDING LINE
		RETAINING WALL
	WL	WETLAND LIMITS
	800	TREE LINE / SPOT ELEVATIONS
		RIPRAP
EOF 902.5		OVERFLOW ELEV.
	ST # 999.9	SOIL BORING

- STANDARD DUTY ASPHALT PAVING
- HEAVY DUTY ASPHALT PAVING
- CONCRETE PAVING
- CONCRETE SIDEWALK
- PAVEMENT BY OTHERS (SEE ARCHITECTURAL PLANS)

GRADING NOTES

1. GRADING NOTES PLACE HOLDER

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

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NORTH

0 30 60
SCALE IN FEET

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GRADING PLAN

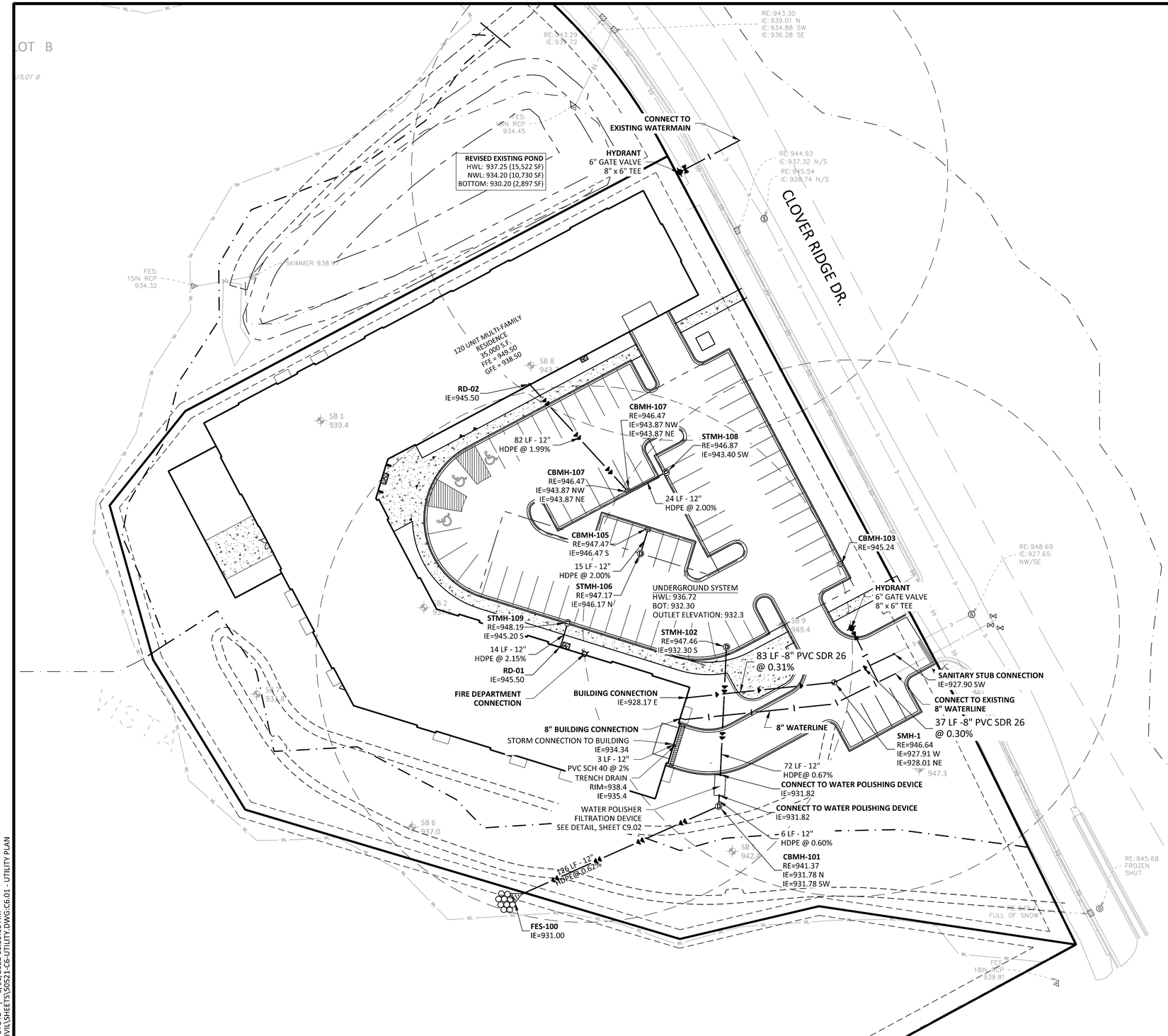
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SHEET
C4.01
4 OF 10
REV.

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LEGEND

- SANITARY SEWER
- FORCEMAIN (SAN.)
- STORM SEWER
- DRAINTILE
- WATERMAIN
- UNDERGROUND GAS LINE
- UNDERGROUND TELEPHONE
- ELECTRIC
- CONCRETE CURB
- EASEMENT LINE

UTILITY CONSTRUCTION NOTES

1. UTILITY CONSTRUCTION NOTES HOLDER

STORM SEWER STRUCTURE SCHEDULE

NUMBER	TYPE	CASTING*
*INDICATES NEENAH FOUNDRY CASTING NO., OR APPROVED EQUAL		
NOTE: CONTRACTOR AND THEIR SUPPLIER SHALL DETERMINE THE MINIMUM DIAMETER REQUIRED FOR EACH STORM SEWER STRUCTURE.		

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IF THE CONTRACTOR ENCOUNTERS ANY DRAIN TILE WITHIN THE SITE, HE OR SHE SHALL NOTIFY THE ENGINEER WITH THE LOCATION, SIZE, INVERT AND IF THE TILE LINE IS ACTIVE. NO DRAIN TILE SHALL BE BACKFILLED WITHOUT APPROVAL FROM THE PROJECT ENGINEER.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NORTH

0 30 60
SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

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Print Name: Brian W. Frank

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UTILITY PLAN

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CHASKA, MINNESOTA

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5 OF 10
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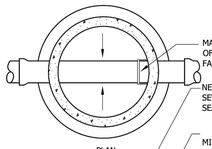
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C:\PROJECTS\50521\CADCIVIL\SHEETS\50521-C6-UTILITY.DWG:C6.01 - UTILITY PLAN

PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R1642-2310B	27"	7"
R1755G	27"	7"



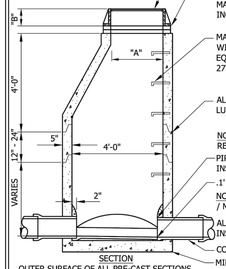
PLAN

MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

NEENAH COVER **R-1642-5001**, LETTERED "SANITARY SEWER" WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECIFICATION FOR CASTING NUMBER.

MINIMUM OF 2 MAXIMUM OF 4 ADJUSTMENT RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.

MAXIMUM 20"ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.



MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL)

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS AND RAMNECK.

NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.

PIPE SHALL BE CUT 2" FROM INSIDE FACE OF WALL.

.1' DROP ACROSS INVERTS MIN.

NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.

ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.

COMPACT TO TOP OF PIPE, TO FIRST JOINT.

MINIMUM THICKNESS OF PRECAST BASE IS 6" FOR 14' DEEP OR LESS, AND INCREASES 1" IN THICKNESS FOR EVERY 4' OF DEPTH GREATER THAN 14'.

SECTION

OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .

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SANITARY SEWER MANHOLE

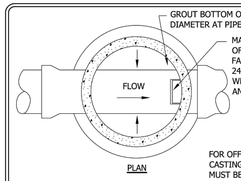
CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. SAN-1

GROUT BOTTOM OF MANHOLE TO A MINIMUM OF 1/2 DIAMETER AT PIPE AND SLOPE GROUT 2" TOWARD INVERT.

MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM FOR ALL LINES UP TO 24". PLACE STEPS ON RIGHT HAND SIDE WHEN FACING DOWN STREAM FOR ALL 24 " AND OVER.



PLAN

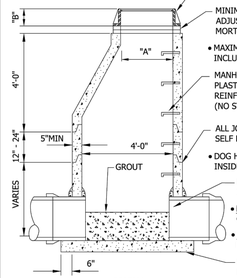
FRAME	A	B
R1642-2310B	27"	7"

FOR OFF-ROAD SITUATIONS, USE R1916F CASTING MARKED "STORM SEWER". COVERS MUST BE SECURED TO PREVENT REMOVAL.

NEENAH COVER **R1642-5040** LETTERED, "STORM SEWER", WITH 2 CONCEALED PICK HOLES.

MINIMUM OF 2 MAXIMUM OF 4 CONCRETE ADJUSTMENT RINGS WITH FULL BED OF MORTAR BETWEEN EACH RING.

- MAXIMUM 20" ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.



MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL.)

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS.

- DOG HOUSES MUST BE GROUTED BOTH INSIDE AND OUTSIDE OF STRUCTURE.

PIPE SHALL BE CUT OUT 2" FROM INSIDE FACE OF WALL.

- NOTE: KOR-N-SEAL MANHOLE OR EQUAL CONSIDERED ACCEPTABLE ALTERNATE.
- NOTE: A MINIMUM SLOPE OF 1% IS REQUIRED ACROSS THE INVERT.

MINIMUM SLAB THICKNESS, 6" TO 14' DEPTH. INCREASE THICKNESS 1" FOR EACH 4' OF DEPTH GREATHER THAN 14', AND REINFORCE WITH PER MNDOT STD 4011

SECTION

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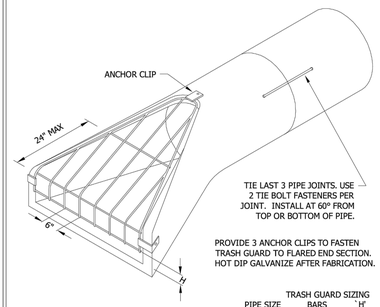
STORM SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-1

SEE CITY PLATE NO. STO-10 FOR RIPRAP PLACEMENT.



ISOMETRIC

PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH GUARD TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.

TRASH GUARD SIZING

PIPE SIZE	BARS	'H'	BOLTS
12"	3/4"Ø	2 1/2"	5/8"
15"	3/4"Ø	3"	5/8"
18"	3/4"Ø	4"	5/8"
21"-24"	1"Ø	4"	3/4"
27"-36"	1"Ø	5"	3/4"
42"	1"Ø	6"	3/4"
48"-54"	1 1/4"Ø	6"	1"
60"-72"	1 1/4"Ø	7"	1"
78"-90"	1 1/4"Ø	8"	1"

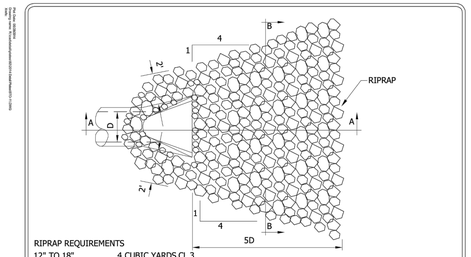
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FLARED END SECTION AND TRASH GUARD

CHASKA, MINNESOTA

LAST REVISION: FEB. 1995

PLATE NO. STO-10

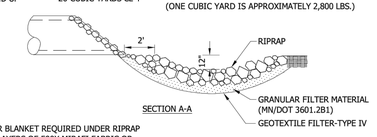


RIPRAP REQUIREMENTS

12" TO 18"	4 CUBIC YARDS CL.3
21" TO 27"	8 CUBIC YARDS CL.3
30" TO 36"	12 CUBIC YARDS CL.3
42" TO 48"	16 CUBIC YARDS CL.3
54" AND UP	20 CUBIC YARDS CL 4

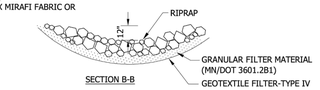
PLAN

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)



SECTION A-A

NOTE
FILTER BLANKET REQUIRED UNDER RIPRAP OR 2 LAYERS OF 500X MIRAFI FABRIC OR EQUAL



SECTION B-B

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RIPRAP AT OUTLETS

CHASKA, MINNESOTA

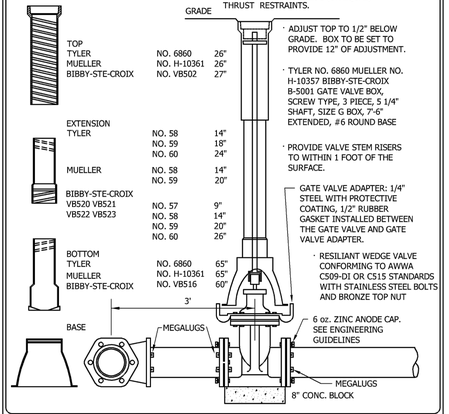
LAST REVISION: APRIL 2004

PLATE NO. STO-11

DROP LID
TYLER NO. 6860
MUELLER NO. H-10361
BIBBY-STE-CROIX NO. B-5160

NOTES: CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

- PROVIDE POLYWRAP AROUND ALL WATERMAIN
- 7.5' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.
- RESTRAIN TEE AND VALVE WITH EPOXY COATED MEGALUG (OR EQUAL) THRUST RESTRAINTS.



TOP

TYLER	NO. 6860	26"
MUELLER	NO. H-10361	26"
BIBBY-STE-CROIX	NO. VB502	27"

- ADJUST TOP TO 1/2" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.
- TYLER NO. 6860 MUELLER NO. H-10357 BIBBY-STE-CROIX B-5001 GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 7'-6" EXTENDED, #6 ROUND BASE

EXTENSION

TYLER	NO. 58	14"
	NO. 59	18"
	NO. 60	24"
MUELLER	NO. 58	14"
	NO. 59	20"
BIBBY-STE-CROIX		
VB520 VB521	NO. 57	9"
VB522 VB523	NO. 58	14"
	NO. 59	20"
	NO. 60	26"

- PROVIDE VALVE STEM RISERS TO WITHIN 1 FOOT OF THE SURFACE.

BOTTOM

TYLER	NO. 6860	65"
MUELLER	NO. H-10361	65"
BIBBY-STE-CROIX	NO. VB516	60"

- GATE VALVE ADAPTER: 1/4" STEEL WITH PROTECTIVE COATING, 1/2" RUBBER GASKET INSTALLED BETWEEN THE GATE VALVE AND GATE VALVE ADAPTER.
- RESILIANT WEDGE VALVE CONFORMING TO AWWA C509-DI OR C515 STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

BASE

6 oz. ZINC ANODE CAP. SEE ENGINEERING GUIDELINES

MEGALUGS

MEGALUGS

8" CONC. BLOCK

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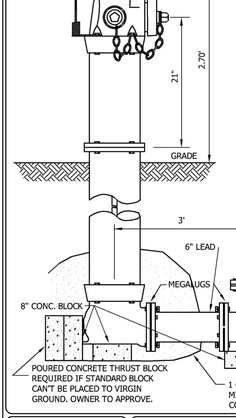
GATE VALVE AND BOX INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-1

HYDRANT MARKER WITH FLEX SPRING HYDRA/FINDER (CANDY CANE) (PROVIDE 2 PER HYDRANT DELIVER EXTRA TO CHASKA UTILITIES.)



ALL HYDRANT LEAD AND PIPE JOINTS SHALL BE RESTRAINED WITH TIE RODS AND EPOXY COATED MEGALUGS.

HYDRANT SHALL BE WATEROUS PACER WB-67-250 WITH 16" TRAFFIC BREAK OFF SECTION, AND EPOXY COATED BOOT.

HYDRANT SHALL BE FOR 8.0' BURY. WATERMAIN SHALL HAVE 7'-6" OF COVER.

PROVIDE A VENTED CAP ON ONE 2 1/2" NOZZLE.

CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

FOR VALVE BOX INSTALLATION SEE DETAIL PLATE NO. WAT-1.

RESTRAIN HYDRANT,VALVE,AND TEE WITH MEGALUG THRUST RESTRAINT (OR EQUAL)

PROVIDE POLYWRAP AROUND ALL WATERMAIN (GENERAL REQUIREMENTS) AND UP THE HYDRANT BARREL TO THE BREAK OFF FLANGE.

RESILIENT WEDGE VALVE CONFORMING TO AWWA C-509-DI STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

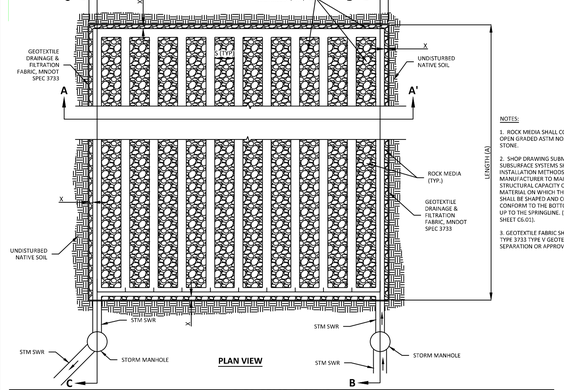
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WATEROUS PACER HYDRANT AND VALVE INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-2



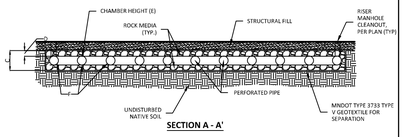
PLAN VIEW

NOTES:

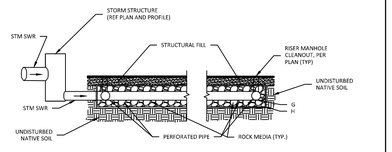
1. ROCK MEDIA SHALL CONSIST OF AN OPEN GRADED ASTM NO. 2 CRUSHED STONE.
2. SHOP DRAWING SUBMITTALS FOR SUBSURFACE SYSTEMS SHALL INCLUDE INSTALLATION METHODS PER PIPE MANUFACTURER TO MAINTAIN STRUCTURAL CAPACITY OF PIPES. THE TRENCH BACKFILL SHALL BE PLACED AND SHALL BE COMPACTED TO CONFORM TO THE BOTTOM OF THE PIPE, UP TO THE SPRINGLINE. (SEE NOTE #12 ON SHEET C6.01)
3. GEOTEXTILE FABRIC SHALL BE MNDOT TYPE 3733 TYPE V GEOTEXTILE FOR SEPARATION OR APPROVED EQUIVALENT.

SUBSURFACE SYSTEMS

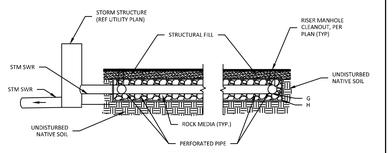
BMP	TYPE OF SYSTEM	LENGTH, FT (A)	WIDTH, FT (B)	SYSTEM DEPTH, FT (C)	PIPE COVER, IN (D)	PIPE SIZE, IN (E)	ROWS (F)	PIPE INVERT (G)	BOTTOM OF ROCK (H)	EDGE SPACING, IN (X)	PIPE SPACING, IN (S)	TOTAL STORAGE (CF)
1P	PERF. CMP PIPE	183.00	90.00	5.00	6.0	48	15	932.80	932.30	12.0	24.0	34117.0



SECTION A - A'



SECTION B - B'



SECTION C - C'

NO	DATE	BY	CKD	APPR	COMMENT

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Print Name: Brian W. Frank

Date _____ License # _____

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DETAILS

AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET C9.01
9 OF 10
REV.

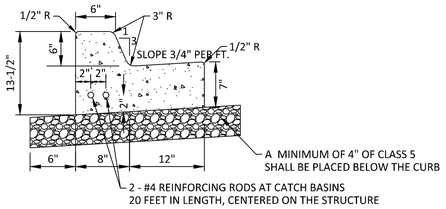
C:\PROJECTS\50521\CAD\CIVIL\SHEETS\50521-C9-DETAILS.DWG LMS (LMS TECH) | ALEA STUTZ | 3/31/2022 9:14:21 AM

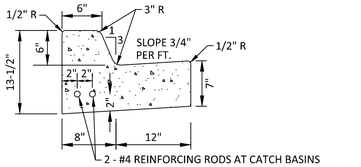
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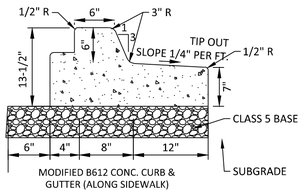
7.D. PUBLIC HEARING Attachments

Packet Page 409 of

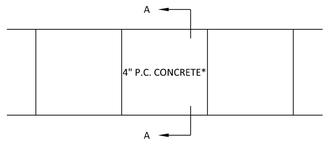
Page 69 of 81







01 B612 CONCRETE CURB & GUTTER
N.T.S.

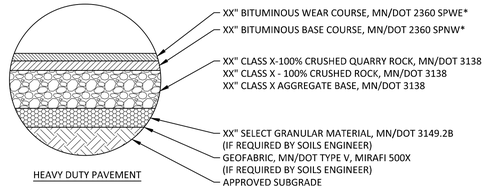


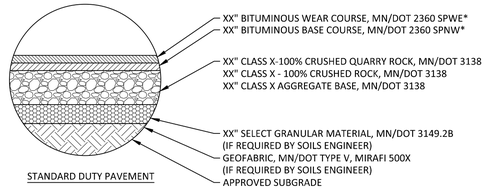
GENERAL NOTES FOR CONCRETE CONSTRUCTION:

1. THE CONCRETE SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF MN/DOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION".
2. SIDEWALK CONTROL JOINTS SHALL BE LOCATED AT 5 FEET ON CENTER. SIDEWALK EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM OF 100 FEET ON CENTER, AND WHERE SIDEWALK ABUTS CURB, STRUCTURES, AND OTHER FIXED OBJECTS. SEAL ALL EXPANSION JOINTS. BROOM FINISH SHALL BE PERPENDICULAR TO THE LINE OF TRAFFIC.

*THE THICKNESS SHALL BE INCREASED TO A MINIMUM DEPTH OF __ INCHES AT DRIVEWAY CROSSINGS.

02 CONCRETE SIDEWALK
N.T.S.

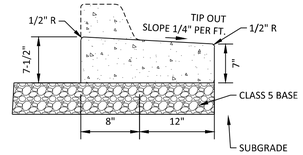




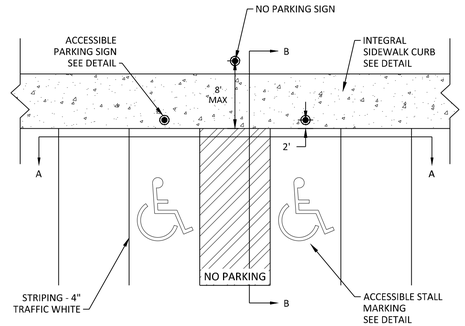
* REFER TO BITUMINOUS MIX DESIGN REQUIREMENT PROVIDED BY THE GEOTECHNICAL CONSULTANT

NOTES:
1. THE PAVEMENT SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT "STANDARD SPECIFICATION FOR CONSTRUCTION", AND ALSO THE REQUIREMENTS OF THE OWNER'S GEOTECHNICAL CONSULTANT.
2. ALL THICKNESSES, AS SPECIFIED, ARE TO BE CONSIDERED MINIMUM DEPTHS, AFTER COMPACTION.
3. MN/DOT SPEC. 2357 BITUMINOUS TACK COAT SHALL BE PLACED BETWEEN SUCCESSIVE BITUMINOUS LIFTS AND AGAINST ABUTTING CONCRETE CURB EDGES.

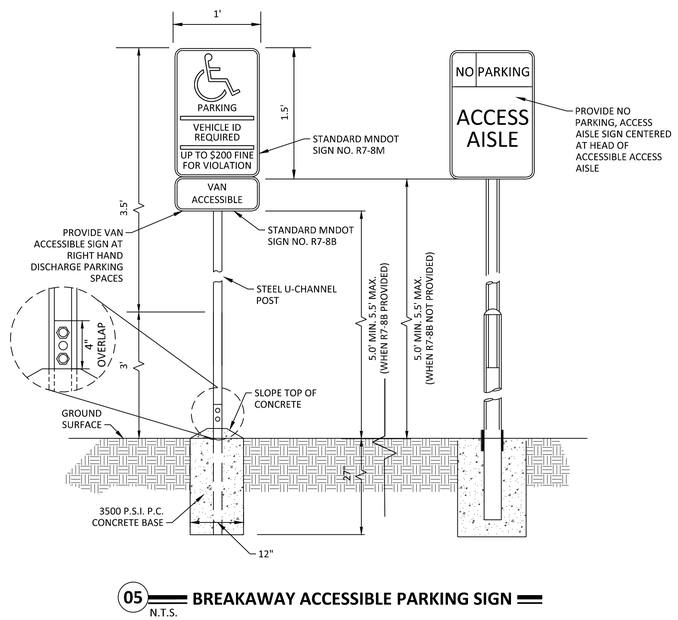
03 PAVEMENT SECTIONS
N.T.S.



06 B612 FLAT CURB & GUTTER
N.T.S.



04 ADA PARKING
N.T.S.



05 BREAKAWAY ACCESSIBLE PARKING SIGN
N.T.S.

SITE SPECIFIC DATA*

PROJECT NUMBER	
PROJECT NAME	
PROJECT LOCATION	
STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS)	
PEAK FLOW RATE (CFS)	
PEAK STORM DURATION (YEARS)	

PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
OUTLET PIPE 1			
RIM ELEVATION			

SURFACE LOADING REQUIREMENT	
FRAME AND COVER	ø30"
CORROSIVE SOIL CONDITIONS	
KNOWN GROUNDWATER ELEVATION	

NOTES:

*PER ENGINEER OF RECORD

WP PERFORMANCE DATA

TREATMENT FLOW RATE (CFS)	0.60
MEDIA SURFACE AREA (SF)	25
LOADING RATE (GPM/SF)	--
SEDIMENT STORAGE CAPACITY (CF)	90.50

WP STORAGE CAPACITIES

SEDIMENT CHAMBER CAPACITY

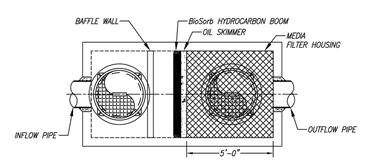
	LENGTH (FT)	WIDTH (FT)	HEIGHT (FT)	TOTAL (CF)
CHAMBER 1	3.25	5.00	3.44	55.90
CHAMBER 2	6.92	5.00	1.00	34.60

GENERAL NOTES

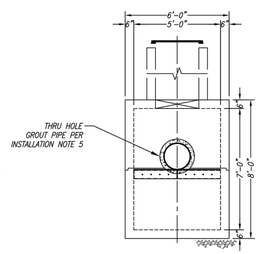
1. BIO CLEAN TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS, AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS, AND ACCESSORIES PLEASE CONTACT BIO CLEAN.

INSTALLATION NOTES

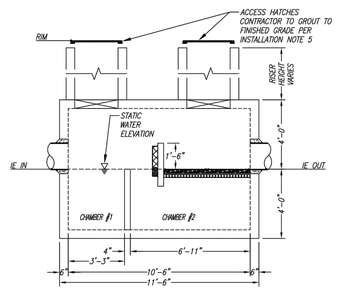
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE NSBB UNIT AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
2. MANUFACTURER RECOMMENDS A 6"-12" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH).
4. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURERS STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. ALL COVERS SHALL BE SHIPPED LOOSE. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.



PLAN VIEW
NTS



END VIEW
NTS



ELEVATION VIEW
NTS

PROPRIETARY AND CONFIDENTIAL:
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BIO CLEAN ENVIRONMENTAL SERVICES, INC.
biocleanenvironmental.com
P 760.433.7640 F 760.433.3176

WP-5-10.5
WATER POLISHER-UP FLOW MEDIA FILTER
STANDARD DETAIL

220156509

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

PRELIMINARY
DESIGN REVIEW
PERMIT SUBMITTAL
CONSTRUCTION DOCUMENTS

DRAWN BY KLS
DESIGNED BY
CHECKED BY
PROJECT NO. 50521

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DETAILS

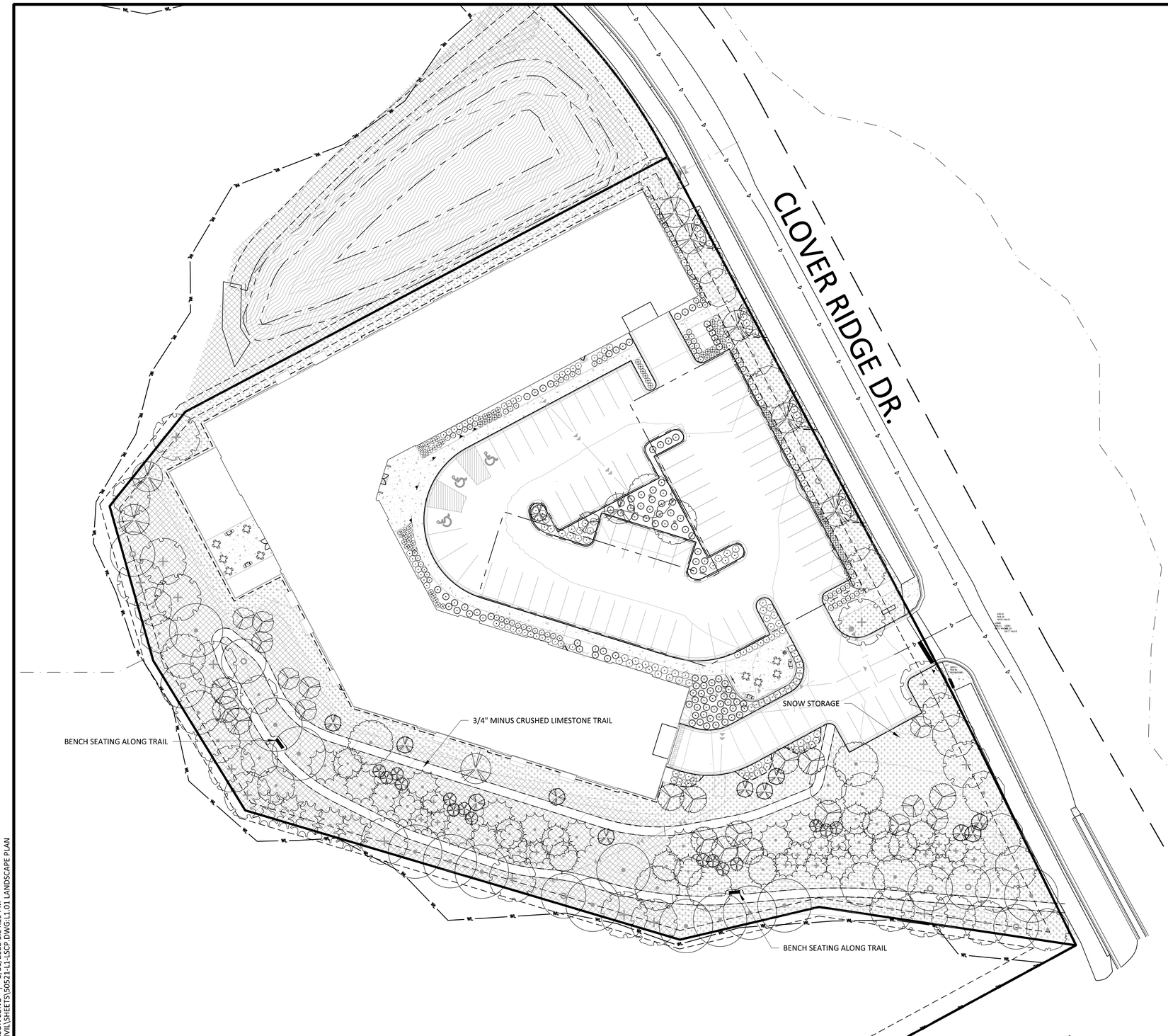
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CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET
C9.02
10 OF 10
REV.

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LEGEND

	PROPOSED	EXISTING
PROPERTY LIMIT		
CURB & GUTTER		
EASEMENT		
BUILDING		
RETAINING WALL		
WETLAND LIMITS		WL
TREELINE		
LANDSCAPE EDING		
STORM SEWER	D	
SANITARY SEWER	S	S
FORCEMAIN (SAN.)	LS	FM S
WATERMAIN		
YARDDRAIN		
LIMITS OF DISTURBANCE		

STANDARD DUTY ASPHALT PAVING
CONCRETE PAVING
CONCRETE SIDEWALK
TREE PROTECTION FENCE — TP
TREE TO BE REMOVED
SIGN
PIPE BOLLARD
RIPRAP

CHASKA LANDSCAPE CODE

1. Total Caliper Inches of Overstory Trees Required. In order to achieve landscaping which is appropriate in scale with the size of a building site, the minimum number of caliper inches of overstory trees required shall be determined by dividing the total gross square footage of all floors of a building by 320.
2. Understory Trees and Shrubs. In addition to the required number of overstory trees listed above, a full complement of understory trees and shrubs shall be provided to complete a quality landscape treatment of the site. A minimum number of understory trees and shrubs are required as follows:
   - 2.1. The number of understory trees shall be equal to twenty-five (25) percent of the required number of overstory trees; and
   - 2.2. The number of shrubs shall be equal to one (1) shrub per thirty (30) feet of site perimeter or one (1) shrub per three-hundred (300) square feet of building footprint, whichever is greater.
3. For the purpose of satisfying the total caliper inch requirement, coniferous trees can be considered equivalent to overstory trees by dividing the height of a coniferous tree's six (6) foot height minimum by 2.4 to determine equivalent caliper inches.

TOTAL NUMBER OF STORIES ON BUILDING: 4

TOTAL CALIPER INCHES REQUIRED: 442"

CALCULATIONS	INCHES REQUIRED	INCHES PROPOSED	TREES PROPOSED
2.5" CAL. OVERSTORY TREES REQUIRED(40%)	176.8	177.5	71
3" CAL. OVERSTORY TREES REQUIRED(20%)	88.4	90	30
3.5" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	45.5	13
4" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	44	11
4.5" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	45	10
5" CAL. OVERSTORY TREES REQUIRED(10%)	44.2	45	9
UNDERSTORY TREES REQUIRED		36	36
SHRUBS REQUIRED		471	471

	REQUIRED	PROPOSED
LANDSCAPE ISLAND CALCULATION (5,475SF / 37,223SF)	10%	14%

OPEN SPACE CALCULATION
BALCONIES (2,560 SF)
OPEN SPACE A,B,AND C (43,252 SF)

TOTAL (CALCULATION: 45,812 SF/ 163,501 SF)	15% (24,525 SF)	28% (45,812 SF)

PLANT SCHEDULE

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	AB	Acer freemanii 'Autumn Blaze' / Autumn Blaze Maple	B & B	5" Cal		9
	SG	Acer freemanii 'Sienna Glen' / Sienna Glen Maple	B & B	3.5" Cal.		13
	BWS	Betula papyrifera 'Whitespire' / Whitespire Birch	B & B	2.5"Cal		9
	HL	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	B & B	3"Cal.		35
	KC	Gymnocladus dioica 'Espresso' / Kentucky Coffeetree	B & B	4.5" CAL.		10
	SO	Quercus bicolor / Swamp White Oak	B & B	3"Cal.		15
	BL	Tilia americana 'Boulevard' / Boulevard Linden	B & B	4"CAL		11
CONIFERS	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	BF	Abies balsamea / Balsam Fir	B & B		6'	15
	LR	Larix laricina / Tamarack	B & B		6'	5
	NS	Picea abies / Norway Spruce	B & B		6'	12
	BS	Picea glauca densata / Black Hills Spruce	B & B		6'	15
	PW	Pinus strobus 'Fastigiata' / Pyramidal White Pine	B & B		6'	15
ORN. TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	SB	Amelanchier canadensis 'Autumn Brilliance' / Autumn Brilliance Serviceberry	B & B	2"Cal		11
	RE	Cercis canadensis / Eastern Redbud	B & B	2"Cal		12
	IL	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	B & B	2"Cal		13
SHRUBS	CODE	BOTANICAL / COMMON NAME	CONT			
	BH	Diervilla lonicera / Dwarf Bush Honeysuckle	5 gal			69
	LH	Hydrangea paniculata 'Jane' / Little Lime Hydrangea	5 gal			90
	CJ	Juniperus sabina 'Monna' / Calgary Carpet Juniper	5 gal			100
	PM	Pinus mugo 'Slowmound' / Mugo Pine	5 gal			28
	PT	Potentilla fruticosa 'Fargo' TM / Fargo Potentilla	5 gal			88
	GL	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	5 gal			52
	GS	Spiraea japonica 'Goldflame' / Spirea	5 gal			37
	HA	Thuja occidentalis 'Holmstrup' / Holmstrup Cedar	10 gal			6
PERENNIALS	CODE	BOTANICAL / COMMON NAME	CONT			
	SBA	Allium x 'Summer Beauty' / Summer Beauty Allium	1 gal			37
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	CONT			
	33-261	MNDOT Seed Mix 33-261 / Ponds and Wet Areas	Seed			
	34-262	MNDOT Seed mix 34-262 / Wet Prairie	Seed			
	TURF MIX	Turf Sod Highland Sod / Sod	Sod			

NORTH
0 30 60
SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Print Name: Johnnie R. Workman

Date _____ License # _____

PRELIMINARY
DESIGN REVIEW
PERMIT SUBMITTAL
CONSTRUCTION DOCUMENTS

DRAWN BY
DESIGNED BY
CHECKED BY
PROJECT NO. 50521

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LANDSCAPE PLAN

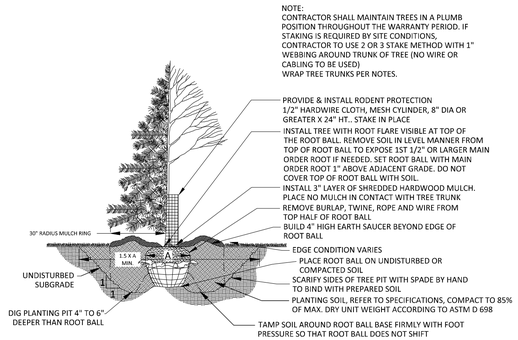
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

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3 OF 10
REV.

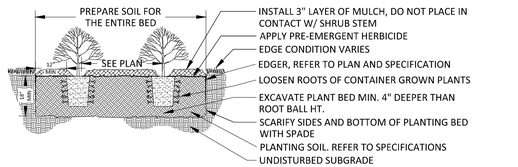
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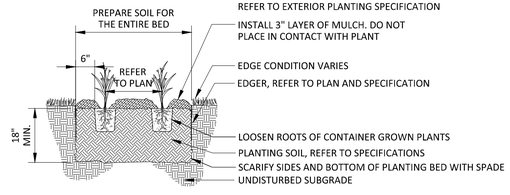
1 C3.01 TREE PLANTING DETAIL

1/4" = 1'-0" P-01



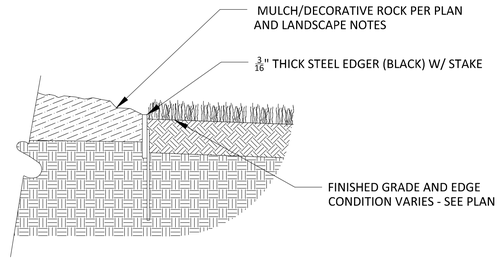
2 C3.01 SHRUB PLANTING DETAIL

3/8" = 1'-0" P-02



3 C3.01 PERENNIAL PLANTING DETAIL

1/2" = 1'-0" P-03



4 C3.01 STEEL EDGER

1 1/2" = 1'-0" P-06

NOTES

GENERAL NOTES:

1. THE CONTRACTOR SHALL INSPECT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF THE WORK.
2. THE CONTRACTOR SHALL VERIFY PLAN LAYOUT AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN OR INTENT OF THE LAYOUT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.
4. THE CONTRACTOR SHALL PROTECT EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING CONSTRUCTION. DAMAGE TO SAME SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
5. LOCATE AND VERIFY ALL UTILITIES, INCLUDING IRRIGATION LINES, WITH THE OWNER FOR PROPRIETARY UTILITIES AND GOPHER STATE ONE CALL 48 HOURS BEFORE DIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ANY DAMAGES TO SAME. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.
6. **THE LANDSCAPE CONTRACTOR SHALL COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.**
7. THE CONTRACTOR SHALL REVIEW THE SITE FOR DEFICIENCIES IN SITE CONDITIONS WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR WARRANTY. UNDESIRABLE SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK.
8. THE PLAN TAKES PRECEDENCE OVER THE LANDSCAPE LEGEND IF DISCREPANCIES EXIST. QUANTITIES SHOWN IN THE PLANTING SCHEDULE ARE FOR THE CONTRACTOR'S CONVENIENCE. CONTRACTOR TO VERIFY QUANTITIES SHOWN ON THE PLAN.
9. THE SPECIFICATIONS TAKE PRECEDENCE OVER THE PLANTING NOTES AND GENERAL NOTES.
10. EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED TO THE DRIP LINE FROM ALL CONSTRUCTION TRAFFIC, STORAGE OF MATERIALS ETC. WITH 4' HT. ORANGE PLASTIC SAFETY FENCING ADEQUATELY SUPPORTED BY STEEL FENCE POSTS 6' O.C. MAXIMUM SPACING.
11. LONG-TERM STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE ALLOWED.
12. CONTRACTOR SHALL REQUEST IN WRITING, A FINAL ACCEPTANCE INSPECTION.

PLANTING NOTES:

1. NO PLANTS SHALL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
2. A GRANULAR PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANT BEDS AT THE MANUFACTURERS RECOMMENDED RATE PRIOR TO PLANT INSTALLATION.
3. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z60, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS.
4. OVERSTORY TREES SHALL BEGIN BRANCHING NO LOWER THAN 6' ABOVE PAVED SURFACES.
5. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE AND BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE LANDSCAPE LEGEND.
6. PLANT MATERIALS TO BE INSTALLED PER PLANTING DETAILS.
7. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
8. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION.
9. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
10. ALL PLANT MATERIAL QUANTITIES, SHAPES OF BEDS AND LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN AND ADJUSTED TO CONFORM TO THE EXACT CONDITIONS OF THE SITE. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIALS PRIOR TO INSTALLATION.
11. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
12. MULCH: DOUBLE SHREDDED HARDWOOD MULCH, CLEAN AND FREE OF NOXIOUS WEEDS OR OTHER DELETERIOUS MATERIAL, IN ALL MASS PLANTING BEDS AND FOR TREES, UNLESS INDICATED AS ROCK MULCH ON DRAWINGS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT PRIOR TO DELIVERY ON-SITE FOR APPROVAL. DELIVER MULCH ON DAY OF INSTALLATION. USE 3" FOR SHRUB BEDS, TREE RINGS, AND 3" FOR PERENNIAL/GROUND COVER BEDS, UNLESS OTHERWISE DIRECTED.
13. BUILDING MAINTENANCE STRIP: WHERE NO LANDSCAPE PLANTING BEDS EXIST ADJACENT TO A BUILDING FOUNDATION, CONTRACTOR SHALL INSTALL A DECORATIVE ROCK MAINTENANCE STRIP PER PLAN. DECORATIVE ROCK SHALL BE 1"-3" DRESSER TRAP ROCK, GREY IN COLOR.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE THE WORK SHOWN ON THE PLAN.
15. USE ANTI-DESICCANT (WILTPRUF OR APPROVED EQUAL) ON DECIDUOUS PLANTS MOVED IN LEAF AND FOR EVERGREENS MOVED ANYTIME. APPLY AS PER MANUFACTURER'S INSTRUCTION. ALL EVERGREENS SHALL BE SPRAYED IN THE LATE FALL FOR WINTER PROTECTION DURING WARRANTY PERIOD.
16. WRAP ALL SMOOTH-BARKED DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO DECEMBER 1 AND REMOVE WRAPPING AFTER MAY 1. TREE WRAPPING MATERIAL SHALL BE WHITE TWO-WALLED PLASTIC SHEETING APPLIED FROM TRUNK FLARE TO THE FIRST BRANCH.
17. ALL DECIDUOUS, PINE, AND LARCH PLANTINGS SHALL RECEIVE RODENT PROTECTION PER MNDOT 2571.31.2
18. PLANTING SOIL FOR TREES, SHRUBS AND GROUND COVERS: FERTILE FRIABLE LOAM CONTAINING A LIBERAL AMOUNT (4% MIN.) OF HUMUS AND CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL COMPLY WITH MNDOT SPECIFICATION 3877 TYPE B SELECT TOPSOIL. MIXTURE SHALL BE FREE FROM HARDPACK SUBSOIL, STONES, CHEMICALS, NOXIOUS WEEDS, ETC. SOIL MIXTURE SHALL HAVE A PH BETWEEN 6.1 AND 7.5 AND 10-0-10 FERTILIZER AT THE RATE OF 3 POUNDS PER CUBIC YARD. IN PLANTING BEDS INCORPORATE THIS MIXTURE THROUGHOUT THE ENTIRE BED IN A 6" LAYER AND ROTO-TILLING IT INTO THE TOP 12" OF SOIL AT A 1:1 RATIO.ANY PLANT STOCK NOT PLANTED ON DAY OF DELIVERY SHALL BE HEELED IN AND WATERED UNTIL INSTALLATION. PLANTS NOT MAINTAINED IN THIS MANNER WILL BE REJECTED.
19. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT EACH EXCAVATED TREE AND SHRUB PIT WILL PERCOLATE PRIOR TO INSTALLING PLANTING MEDIUM AND PLANTS. THE CONTRACTOR SHALL FILL THE BOTTOM OF SELECTED HOLES WITH SIX INCHES OF WATER AND CONFIRM THAT THIS WATER WILL PERCOLATE WITHIN A 24-HOUR PERIOD. IF THE SOIL AT A GIVEN AREA DOES NOT DRAIN PROPERLY, A PVC DRAIN OR GRAVEL SUMP SHALL BE INSTALLED OR THE PLANTING SHALL BE RELOCATED IF DIRECTED BY THE LANDSCAPE ARCHITECT.
20. ALL PLANTS SHALL BE GUARANTEED FOR TWO COMPLETE GROWING SEASONS (APRIL 1 - NOVEMBER 1), UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND PLANTS.
21. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 3 DAYS PRIOR TO PLANNED DELIVERY. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 24 HOURS IN ADVANCE OF BEGINNING PLANT INSTALLATION.
22. SEASONS/TIME OF PLANTING AND SEEDING: NOTE: THE CONTRACTOR MAY ELECT TO PLANT IN OFF-SEASONS ENTIRELY AT HIS/HER RISK.

22.1.	POTTED PLANTS:	4/1 - 6/1; 9/21 - 11/1
22.2.	DECIDUOUS /B&B:	4/1 - 6/1; 9/21 - 11/1
22.3.	EVERGREEN POTTED PLANTS:	4/1 - 6/1; 9/21-11/1
22.4.	EVERGREEN B&B:	4/1 - 5/1; 9/21 - 11/1
22.5.	TURF/LAWN SEEDING:	4/1 - 6/1; 7/20 - 9/20
22.6.	NATIVE MIX SEEDING:	4/15 - 7/20; 9/20-10/20

23. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PORTION OF THE WORK IS IN PLACE. PLANT MATERIAL SHALL BE PROTECTED AND MAINTAINED UNTIL THE INSTALLATION OF THE PLANTS IS COMPLETE, INSPECTION HAS BEEN MADE, AND PLANTINGS ARE ACCEPTED EXCLUSIVE OF THE GUARANTEE. MAINTENANCE SHALL INCLUDE WATERING, CULTIVATING, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING PLANTS TO PROPER GRADE AND KEEPING PLANTS IN A PLUMB POSITION. AFTER ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE RESPONSIBILITIES. HOWEVER, THE CONTRACTOR SHALL CONTINUE TO BE RESPONSIBLE FOR KEEPING THE TREES PLUMB THROUGHOUT THE GUARANTEE PERIOD.
24. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL LANDSCAPE LEGEND SPECIFICATIONS.
25. WATERING: MAINTAIN A WATERING SCHEDULE WHICH WILL THOROUGHLY WATER ALL PLANTS ONCE A WEEK. IN EXTREMELY HOT, DRY WEATHER, WATER MORE OFTEN AS REQUIRED BY INDICATIONS OF HEAT STRESS SUCH AS WILTING LEAVES. CHECK MOISTURE UNDER MULCH PRIOR TO WATERING TO DETERMINE NEED. CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR WATER.

TURF NOTES:

TURF ESTABLISHMENT SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROVISIONS OF THE MN/DOT 2105 AND 2575 EXCEPT AS MODIFIED BELOW:

1. ALL AREAS TO RECEIVE SOD SHALL ALSO RECEIVE 6" OF TOPSOIL PRIOR TO INSTALLING SOD. TOPSOIL SHALL BE FREE OF TREE ROOTS, STUMPS, BUILDING MATERIAL, AND TRASH, AND SHALL BE FREE OF STONES LARGER THAN 1 ½" INCHES IN ANY DIMENSION.
2. WHERE SOD ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.
3. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, SOD SHALL BE STAKED SECURELY.
4. TURF ON ALL OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY SEEDING, MULCHING AND FERTILIZING. SEED MIXTURE NO.25-121 WILL BE PLACED AT THE RATE OF 65 POUNDS PER ACRE.
5. ALL DISTURBED AREAS TO BE TURF SEEDED, ARE TO RECEIVE 6" TOP SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. FOR SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES INSTALL EROSION CONTROL BLANKET.
6. ALL DISTURBED AREAS TO RECEIVE NATIVE SEED, ARE TO RECEIVE PLANTING SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. FOR SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES INSTALL EROSION CONTROL BLANKET.

GENERAL TREE SPECIFICATIONS:

1. ALL STREET AND PARKING LOT TREES SHALL BE LIMBED UP TO THE FOLLOWING HEIGHTS:
   - 1.1. 2" CAL. TREES: LOWEST BRANCH 6' HT.
   - 1.2. 3" CAL + TREES: LOWEST BRANCH 7' HT.
2. TREE CANOPY WIDTH SHALL BE RELATIVE TO HEIGHT/CALIPER OF TREE AND TYPE OF TREE.
   - 2.1. 1" CALIPER/6-8' HT: 3-4' WIDTH MIN.
   - 2.2. 2" CALIPER/12-14' HT: 4-5' WIDTH MIN.
   - 2.3. 3" CALIPER/14-16' HT: 6-7' WIDTH MIN.
3. CANOPY TREES SHALL NOT HAVE CO-DOMINATE LEADERS IN LOWER HALF OF TREE CROWN.
4. ALL TREES SHALL HAVE SYMMETRICAL OR BALANCED BRANCHING ON ALL SIDES OF THE TREE.
5. TREES SHALL NOT BE TIPPED PRUNED.
6. TREES SHALL BE FREE OF PHYSICAL DAMAGE FROM SHIPPING AND HANDLING. DAMAGED TREES SHALL BE REJECTED.
7. SUMMER DUG TREES SHALL HAVE ROOTBALL SIZE INCREASED BY 20%
8. TREES WHICH EXCEED RECOMMENDED CALIPER TO HEIGHT RELATIONSHIP SHALL BE REJECTED.

IRRIGATION NOTES:

1. IRRIGATION SYSTEM TO BE DESIGN/BUILD. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL OF SYSTEM LAYOUT PRIOR TO INSTALLATION.
2. ALL SOD TO RECEIVE SPRAY OR ROTOR IRRIGATION HEADS WITH MINIMUM DESIGN OF 1" IRRIGATION PER WEEK.
3. ALL PLANT BEDS TO RECEIVE DRIP LINE IRRIGATION , WITH A MINIMUM DESIGN OF .25" IRRIGATION PER WEEK.
4. CONTRACTOR TO INSTALL A TOTAL OF 4 QUICK COUPLERS AT THE CORNERS OF THE PROPERTY. A 2.5" TYPE K SOURCE PIPE IS PROVIDED BY MECHANICAL.

LOW MAINTENANCE FESCUE NOTES:

1. DURING GROWING SEASON NEVER MOW SHORTER THAN 3.5 INCHES, PREFERRED MAINTENANCE IS MOW ONCE PER MONTH AT 5" HEIGHT
2. DO NOT USE HIGH NITROGEN FERTILIZER ON FESCUE LAWN
3. OVERSEED THIN,BARE SPOTS IN FALL
4. ALWAYS USE SHARP BLADE WHEN MOWING TO AVOID TEARING LEAF BLADE
5. SET MOWER TO 3" FOR BAGGING AND MOWING IN LATE FALL AFTER GROWING SEASON

NATIVE SEED MIX NOTES:

1. ESTABLISHMENT AND YEAR ONE: MOW THREE(3) TIMES FIRST YEAR ON 30-DAY INTERVALS TO A HEIGHT BETWEEN FIVE AND EIGHT INCHES. DO NOT USE FERTILIZERS. SPOT TREAT INVASIVE WOODY PLANTS OR HAND WEED INDIVIDUAL NOXIOUS WEEDS.
2. YEAR TWO: PERFORM ONE MOWING BETWEEN MID-JUNE AND MID-AUGUST. SPOT SPRAY WEEDS AS NEEDED WHERE THEY ARE ESPECIALLY DOMINATE.
3. YEAR THREE (AND BEYOND): CUT ONE TIME PER YEAR AS A CLEAN UP PROCEDURE (EITHER IN EARLY MAY OR LATE NOVEMBER). PRESCRIBED BURNS MAY BE USED AS WELL IN PLACE OF MOWING. CHECK LOCAL REGULATIONS AND PERMIT PROCEDURES.

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Print Name: Johnnie R. Workman

Date _____ License # _____

PRELIMINARY | DESIGN REVIEW | PERMIT SUBMITTAL | CONSTRUCTION DOCUMENTS

DRAWN BY | DESIGNED BY | CHECKED BY | PROJECT NO. 50521

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LANDSCAPE DETAILS AND NOTES

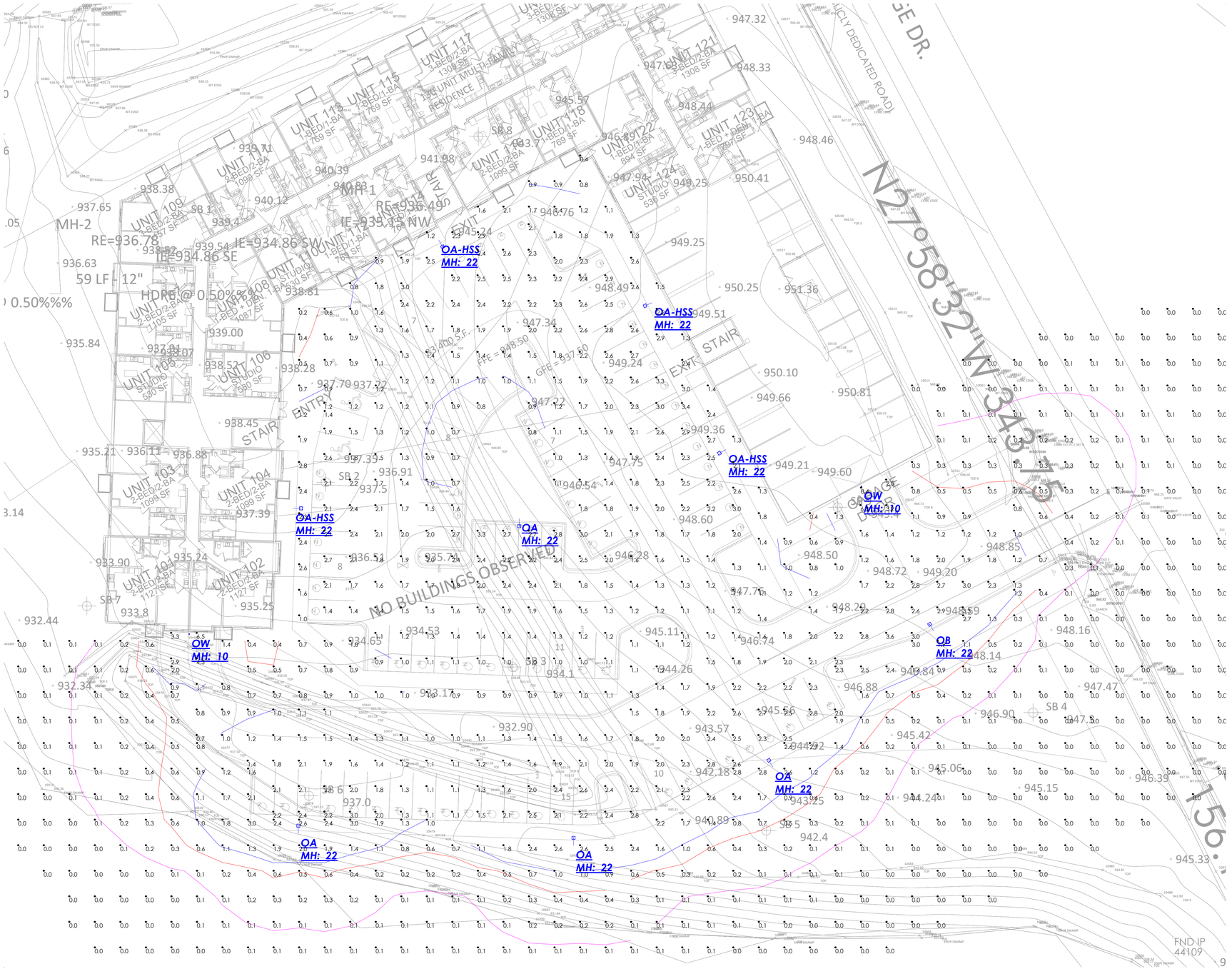
AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET L1.02 3 OF 10 REV.

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C:\PROJECTS\50521\CAD\CIVIL\SHEETS\50521-L1-LSCP.DWG|L1.02 LANDSCAPE DETAILS AND NOTES | 3/31/2022 12:10:24 PM | ALEA STUTZ | ZDS (LMS TECH)



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	0.43	8.4	0.0	N.A.	N.A.
PARKING AND DRIVE	Illuminance	Fc	1.84	6.5	0.7	2.63	9.29

Luminaire Schedule							
Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
	4	OA	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T4-BZ	Single	13140	96	0.900
	4	OA-HSS	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T4-BZ-HSS	Single	11933	96	0.900
	1	OB	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T3-BZ	Single	13183	96	0.900
	2	OW	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	AXCS2A	Single	2561	20.7	0.900

1. Standard Reflectance of 80/50/20 unless noted otherwise
2. Not a Construction Document, for Design purposes only
3. Standard indoor calc points @ 30" A.F.F. unless noted otherwise
4. Standard outdoor calc points @ Grade unless noted otherwise
5. Egress calc points @ 0" A.F.F.
6. Mlazgar Associates assumes no responsibility for installed light levels due to field conditions, etc.

MLAZGAR ASSOCIATES
16350 W. GLENDALE DR.
NEW BERLIN, WI 53151
(p) 414-943-1915
(f) 952-943-8088
www.mlazgar.com

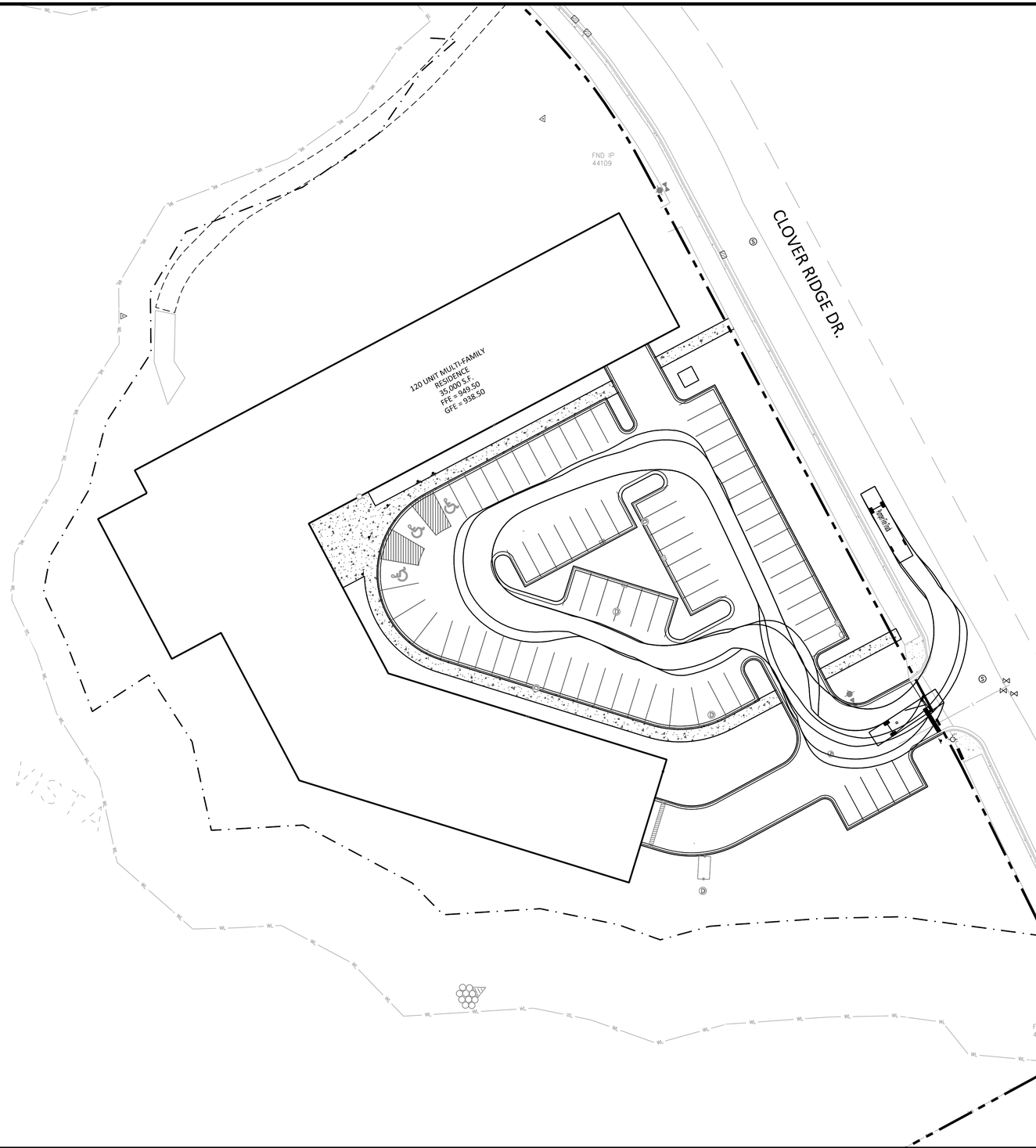
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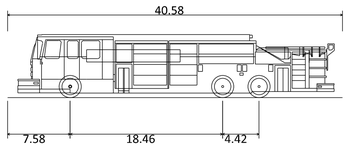
Revisions

RLMA Project #:123005
Drawn By:MB
Date:2/1/2022
Scale:1"=20'-0"

PHOTOMETRIC SITE PLAN

CHASKA SITE
CHASKA, MN





Chaska - Ladder Truck	
Overall Length	40.580ft
Overall Width	10.500ft
Overall Body Height	7.647ft
Min Body Ground Clearance	0.558ft
Track Width	7.610ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	36.00°

NORTH

SCALE 0 30 60 IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Brian W. Frank

Date _____ License # _____

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DRAWN BY KLS | DESIGNED BY | CHECKED BY | PROJECT NO. 50521

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FIRE TRUCK TURNING EXHIBIT

AV DEVELOPMENT, LLC
CLOVER RIDGE APARTMENTS

CHASKA, MINNESOTA

SHEET A 1 OF 1 REV.

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C:\05 (LMS TECH) | JACOB MITZEL, PE (MN) | 3/7/2022 1:23:09 PM
C:\PROJECTS\50521\CADCIVIL\EXHIBITS\50521-EXHBT-FIRE TRUCK.DWG;FIRE TRUCK

DEVELOPMENT SUMMARY

AREA	
GROSS SITE AREA	552,066 SF 12.67 AC
SETBACKS	
FRONT YARD	20FEET
REAR YARD	50 FEET
SIDE YARD	20 FEET
MINIMUM LOT SIZE	2,500 SF
ZONING	
EXISTING ZONING	UNZONED
PROPOSED ZONING	R-3: MULTIPLE FAMILY RESIDENCE
BUILDING REQUIREMENTS	0.40 RATIO
MINIMUM FLOOR AREA	45 FT
MAXIMUM BUILDING HEIGHT	
PARKING SUMMARY	(2 STALLS PER UNIT) 238 STALLS
TOTAL PARKING REQUIRED	(1 STALLS PER UNIT) 113 STALLS
COVERED PARKING PROVIDED	183 STALLS
TOTAL PARKING PROVIDED	113 STALLS
COVERED PARKING PROVIDED	70 STALLS
SURFACE LOT PARKING PROVIDED	

OUTLOT B

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT B

AVERAGE BUFFER LINE

WETLAND CLASSIFICATION: MANAGE 3
16' AVERAGE & PERMANENT WETLAND BUFFER
10' BUILDING SETBACK
26' TOTAL

10' BUILDING SETBACK

SWAMP AREA

SKIMMER: 938.97

AT GRADE

119 UNIT MULTI-FAMILY RESIDENCE
35,000 S.F.
FFE = 948.50
GFE = 937.50

SB 8 939.7

SB 1 939.4

FES: 30IN RCP 936.38

FES: 18IN RCP 934.15

FND IP 44109

RE: 943.30
IE: 939.01 N
IE: 934.88 SW
IE: 936.28 SE

RE: 943.22
IE: 939.72

RE: 945.54
IE: 928.74 N/S

CLOVER RIDGE DR

(PUBLIC - DEDICATED ROAD)

RE: 944
IE: 937.74 N/S

WEST LINE OF THE SW QUARTER OF SECTION 30, TWP 116, RNG 24

SECTION 30

PIONEER

VISTA

TOWNSHIP 116

6' Temporary Construction Fencing - Full Perimeter of the Site

2555.2 1/4"

Construction/ Gate/Entrance

Sign to be placed facing Northwest

NO CONSTRUCTION TRAFFIC BEYOND THIS POINT

Sign(s) sold separately

RE: 948.69
IE: 927.65
NW/SE

RE: 945.68
FROZEN
SHUT

S26°09'27"E

AVERAGE BUFFER LINE

10' BUILDING SETBACK

20' BUILDING SETBACK

NO BUILDINGS OBSERVED

SB 2 937.5

SB 7 933.8

GARAGE ENTRANCE

SB 3 934.1

WETLAND CLASSIFICATION: UNIQUE
50' PERMANENT WETLAND BUFFER
20' BUILDING SETBACK
70' TOTAL

MINIMUM BUFFER LINE

SB 6 937.0

SB 9 949.4

20' BUILDING SETBACK

SB 4 947.3

AVERAGE BUFFER LINE

RE: 945.41
TOP OF SNOW

SB 5 942.4

50.0'

MINIMUM BUFFER LINE

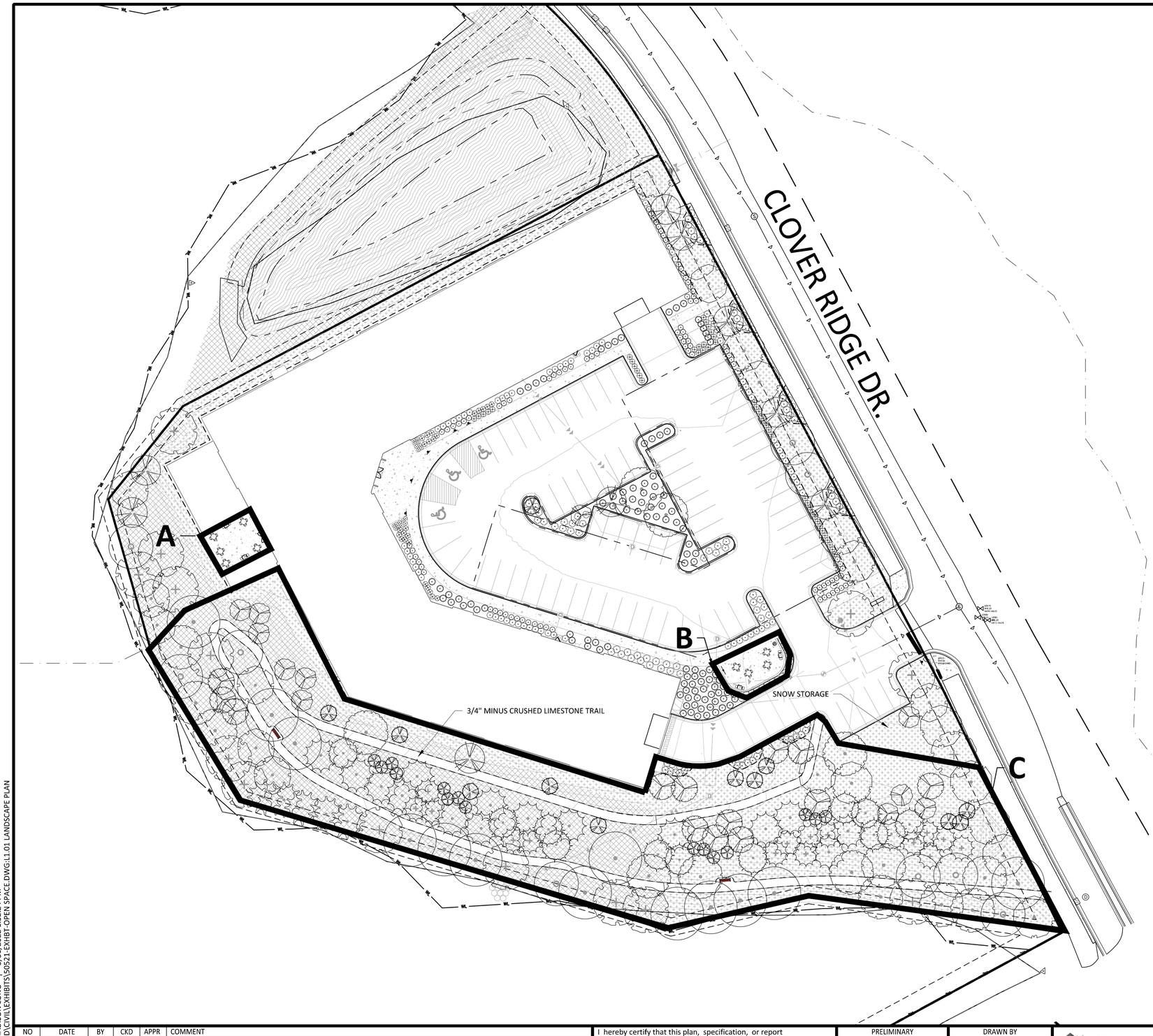
FND IP 44109

FES: 18IN RCP 939.81

NORTH

0 30 60

SCALE IN FEET



LEGEND

	PROPOSED	EXISTING
PROPERTY LIMIT		
CURB & GUTTER		
EASEMENT		
BUILDING		
RETAINING WALL		
WETLAND LIMITS		WL
TREELINE		
LANDSCAPE EDING		
STORM SEWER	D	
SANITARY SEWER	S	
FORCEMAIN (SAN.)	LS FM	S
WATERMAIN		
YARDDRAIN		
LIMITS OF DISTURBANCE		

STANDARD DUTY ASPHALT PAVING	
CONCRETE PAVING	
CONCRETE SIDEWALK	
TREE PROTECTION FENCE	TP
TREE TO BE REMOVED	
SIGN	
PIPE BOLLARD	
RIPRAP	

CHASKA LANDSCAPE CODE

OPEN SPACE A

- 750 SF
- THIS OPEN SPACE WILL CONSIST OF ROOF TOP PATIO SPACE WITH OUTDOOR FURNITURE, FOR OUTDOOR DINNING AND GATHERING.

OPEN SPACE B

- 611 SF
- THIS OPEN SPACE WILL CONSIST OF A GRILL STATION AND PICNIC TABLES.

OPEN SPACE C

- 41,891 SF
- THIS OPEN SPACE WILL CONSIST OF A BERM WITH A HIGH CONCENTRATION OF CONIFERS AND A LARGE FLAT GRASS AREA. THIS AREA WILL ALSO HAVE A WALKING TRAIL AND BENCHES TROUGH THE WOODLANDS AREA. THIS OPEN SPACE WILL BE USED FOR WINTER RECREATIONAL ACTIVITIES SUCH AS SLEDDING, AND SUMMER ACTIVITIES SUCH AS OPEN FIELD BALL SPORTS, AND FRISBEE.

OPEN SPACE CALCULATION	REQUIRED	PROPOSED
BALCONIES (2,560 SF)		
OPEN SPACE A,B,AND C (43,252 SF)		
TOTAL (CALCULATION: 45,812 SF/ 163,501 SF)	15% (24,525 SF)	28% (45,812 SF)

PLANT SCHEDULE

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	AB	Acer freemanii 'Autumn Blaze' / Autumn Blaze Maple	B & B	5" Cal		9
	SG	Acer freemanii 'Sienna Glen' / Sienna Glen Maple	B & B	3.5" Cal.		13
	WS	Betula papyrifera 'Whitespire' / Whitespire Birch	B & B	2.5"Cal		9
	HL	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	B & B	3"Cal.		15
	KC	Gymnocladus dioica 'Espresso' / Kentucky Coffeetree	B & B	4.5" CAL.		10
	SO	Quercus bicolor / Swamp White Oak	B & B	3"Cal.		15
	BL	Tilia americana 'Boulevard' / Boulevard Linden	B & B	4"CAL		11
CONIFERS	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	BF	Abies balsamea / Balsam Fir	B & B		6'	15
	LR	Larix laricina / Tamarack	B & B		6	5
	NS	Picea abies / Norway Spruce	B & B		6'	12
	BS	Picea glauca densata / Black Hills Spruce	B & B		6'	15
	PW	Pinus strobus 'Fastigiata' / Pyramidal White Pine	B & B		6	15
ORN. TREES	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	SB	Amelanchier canadensis 'Autumn Brilliance' / Autumn Brilliance Serviceberry	B & B	2"Cal		13
	RE	Cercis canadensis / Eastern Redbud	B & B	2"Cal		12
	IL	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	B & B	2"Cal		13
SHRUBS	CODE	BOTANICAL / COMMON NAME	CONT			
	BH	Diervilla lonicera / Dwarf Bush Honeysuckle	5 gal			69
	LH	Hydrangea paniculata 'Jane' / Little Lime Hydrangea	5 gal			90
	CJ	Juniperus sabina 'Monna' / Calgary Carpet Juniper	5 gal			100
	PM	Pinus mugo 'Slowmound' / Mugo Pine	5 gal			28
	PT	Potentilla fruticosa 'Tango' TM / Tango Potentilla	5 gal			94
	GL	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	5 gal			52
	GS	Spiraea japonica 'Goldflame' / Spirea	5 gal			37
PERENNIALS	CODE	BOTANICAL / COMMON NAME	CONT			
	SBA	Allium x 'Summer Beauty' / Summer Beauty Allium	1 gal			17
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	CONT			
	33-261	MNDOT Seed Mix 33-261 / Ponds and Wet Areas	Seed			
	34-262	MNDOT Seed mix 34-262 / Wet Prairie	Seed			
	TLR HIG	Turf Sod Highland Sod / Sod	Sod			

NORTH

0 30 60

SCALE IN FEET

NO	DATE	BY	CKD	APPR	COMMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Print Name: Johnnie R. Workman

Date _____ License # _____

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PERMIT SUBMITTAL

CONSTRUCTION DOCUMENTS

DRAWN BY

DESIGNED BY

CHECKED BY

PROJECT NO. 50521

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OPEN SPACE EXHIBIT

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SHEET 1
1 OF 1
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Packet Page 416 of

P:\PROJECTS\50521\CAD\CIVIL\EXHIBITS\50521-EXHBT-OPEN SPACE.DWG;L1.01 LANDSCAPE PLAN
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Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	



Lumark

Prevail LED

Area / Site Luminaire

Product Features

LumenSafe Technology

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Configurations page 3
- Product Specifications page 3
- Energy and Performance Data page 4
- Control Options page 5

Product Certifications

Quick Facts

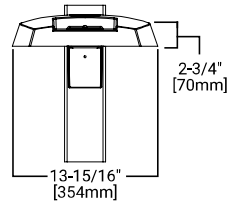
- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

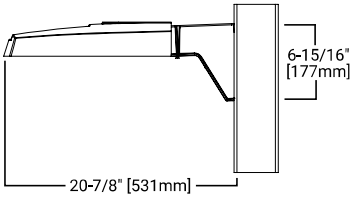
Connected Systems

- WaveLinx

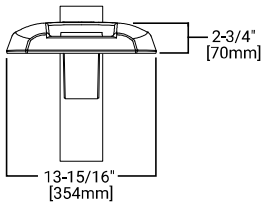
Dimensional Details

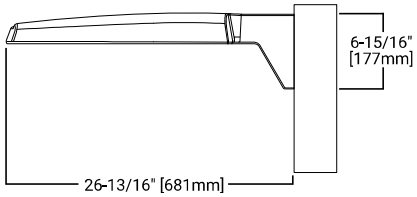
Prevail Petite



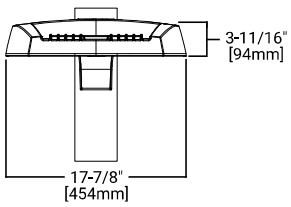


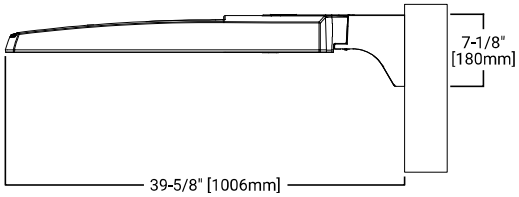
Prevail





Prevail XL





NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: **PRV-XL-C75-D-UNV-T4-SA-BZ**

Product Family [1, 2]	Light Engine [3]	Driver	Voltage	Distribution	Mounting	Color
PRV-P=Prevail Petite **BAA-PRV-P**=Prevail Petite BAA Compliant [23] **TAA-PRV-P**=Prevail Petite TAA Compliant [23]	**C10**=(1 LED) 4,900 Nominal Lumens **C15**=(1 LED) 6,900 Nominal Lumens **C20**=(1 LED) 9,800 Nominal Lumens **C25**=(1 LED) 11,800 Nominal Lumens	**D**=Dimming (0-10V)	**UNV**=Universal (120-277V) **347**=347V **480**=480V [4] **DV**=DuraVolt (277-480V) [4, 25]	**T2**=Type II **T3**=Type III **T4**=Type IV **T5**=Type V	**SA**=Standard Versatile Arm **MA**=Mast Arm **WM**=Wall Mount Arm	**BZ**=Bronze **AP**=Grey **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White
PRV=Prevail **BAA-PRV**=Prevail BAA Compliant [23] **TAA-PRV**=Prevail TAA Compliant [23]	**C15**=(1 LED) 7,100 Nominal Lumens **C25**=(2 LEDs) 13,100 Nominal Lumens **C40**=(2 LEDs) 17,100 Nominal Lumens **C60**=(2 LEDs) 20,000 Nominal Lumens					
PRV-XL=Prevail XL **BAA-PRV-XL**=Prevail XL BAA Compliant [23] **TAA-PRV-XL**=Prevail XL TAA Compliant [23]	**C75**=(4 LED) 26,100 Nominal Lumens **C100**=(4 LED) 31,000 Nominal Lumens **C125**=(4 LED) 36,000 Nominal Lumens **C150**=(6 LED) 41,100 Nominal Lumens **C175**=(6 LED) 48,600 Nominal Lumens					

Options (Add as Suffix)	**Accessories** (Order Separately) [17, 24]
7030=70 CRI / 3000K CCT [5] **7050**=70 CRI / 5000K CCT [5] **HSS**=House Side Shield [6] **L90**=Optics Rotated 90° Left **R90**=Optics Rotated 90° Right **10K**=10kV UL 1449 Fused Surge Protective Device **20MSP**=20kV MOV Surge Protective Device **20K**=Series 20kV UL 1449 Surge Protective Device **HA**=50°C High Ambient Temperature [7] **CC**=Coastal Construction [8] **PER**=NEMA 3-PIN Twistlock Photocontrol Receptacle [26] **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [26] **MS/DIM-L08**=Dimming Motion and Daylight Sensor, IR Remote Programmable, < 8' Mounting [9, 10] **MS/DIM-L20**=Dimming Motion and Daylight Sensor, IR Remote Programmable, 8' - 20' Mounting [9, 10] **MS/DIM-L40**=Dimming Motion and Daylight Sensor, IR Remote Programmable, 21' - 40' Mounting [9, 10] **SPB1**=Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting [9, 11] **SPB2**=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting [9, 11] **SPB4**=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 21' - 40' Mounting [9, 11] **ZW**=Wavelinx-enabled 4-PIN Twistlock Receptacle [9] **ZD**=SR Driver-enabled 4-PIN Twistlock Receptacle [9] **ZW-SWPD4XX**=WaveLinx, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [9, 12, 13, 14] **ZW-SWPD5XX**=WaveLinx, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [9, 12, 13, 14] **ZD-SWPD4XX**=WaveLinx, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [9, 12, 13, 14] **ZD-SWPD5XX**=WaveLinx, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [9, 12, 13, 14] **(See Table Below)**=LumenSafe Integrated Network Security Camera [15, 16]	**PRVSA-XX**=Standard Arm Mounting Kit [18] **PRVMA-XX**=Mast Arm Mounting Kit [18] **PRVWM-XX**=Wall Mount Kit [18] **PRVXLSA-XX**=Standard Arm Mounting Kit [15] **PRVXLMA-XX**=Mast Arm Mounting Kit [15] **PRVXLWM-XX**=Wall Mount Kit [15] **MA1010-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1011-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1017-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1018-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **HS/VERD**=House Side Shield [6, 19] **VGS-F/B**=Vertical Glare Shield, Front/Back [19] **VGS-SIDE**=Vertical Glare Shield, Side [19] **OA/RA1013**=Photocontrol Shorting Cap **OA/RA1014**=NEMA Photocontrol - 120V **OA/RA1016**=NEMA Photocontrol - Multi-Tap 105-285V **OA/RA1201**=NEMA Photocontrol - 347V **OA/RA1027**=NEMA Photocontrol - 480V **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [20] **SWPD4-XX**=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 13, 14, 21] **SWPD5-XX**=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 13, 14, 21] **WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-PIN) [22]

NOTES:

1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for alll applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
3. Standard 4000K CCT and 70CRI.
4. 480V not to be used with ungrounded or impedance grounded systems.
5. Use dedicated IES files on product website for non-standard CCTs.
6. Option will come factory-installed. House Side Shield not suitable with T5 distribution. Not available with PRV-C60 lumen package.
7. Not available with PRV-C60 lumen package. Not available with PRV-P-C25 lumen package.
8. Salt spray tested to over 5,000-hours per ASTM B117 with a scribe rating of 9 per ASTM D1654. Also achieves 7,000-hour rating per ASTM B117 with a scribe rating of 4 per ASTM D1654. Extended lead times may apply.
9. Controls system is not available in combination with a photocontrol receptacle (PER or PER7) or another controls system (MS, SPB, ZD, or ZW). Option not available with DuraVolt (DV) voltage option.
10. Utilizes the Wattstopper sensor FSP-211. Sensor color white unless specified otherwise via PDR. To field-configure, order FSIR-100 accessory separately.
11. Utilizes the Wattstopper sensor FSP-3XX series. Sensor color determined by product finish. See Sensor Color Reference Table. Field-configures via mobile application. See Controls section for details.
12. Sensor passive infrared (PIR) may be overly sensitive when operating below -20°C (-4°F).
13. For the device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more Wavelinx application information.
14. Replace XX with sensor color (WH, BZ, or BK).
15. Only available in PRV-XL configurations C75, C100, C125, C150, or C175.
16. Not available with 347V, 480V, DV, or HA options. Consult LumenSafe system product pages for additional details and compatability information.
17. Replace XX with paint color.
18. Not for use with PRV-XL configurations.
19. Must order one per optic/LED when ordering as a field-installable accessory (1, 2, 4, or 6).
20. This tool enables adjustment to Motion Sensor (MS) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative for more information.
21. Requires 4-PIN twistlock receptacle (ZD or ZW) option.
22. Requires 7-PIN NEMA twistlock photocontrol receptacle (PER7) option. The WOLC-7 cannot be used in conjunction with other controls systems (MS, ZD, ZW or LWR). Operates on 120-347V input voltages.
23. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
24. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
25. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
26. If DuraVolt (DV) is specified, use a photocontrol that matches the input voltage used.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul		
L=LumenSafe Technology	**H**=Dome Camera, High Res **Z**=Dome Camera, Remote PTZ	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card	**V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**E**=Ethernet Networking

Stock Ordering Information

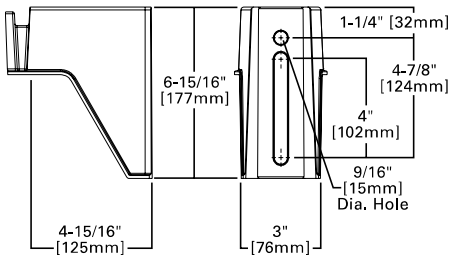
Product Family [1]	Light Engine	Voltage	Distribution
PRVS=Prevail	**C15**=(1 LED) 7,100 Nominal Lumens **C25**=(2 LEDs) 13,100 Nominal Lumens **C40**=(2 LEDs) 17,100 Nominal Lumens **C60**=(2 LEDs) 20,000 Nominal Lumens	**UNV**=Universal (120-277V) **347**=347V [2]	**T3**=Type III **T4**=Type IV
PRVS-XL=Prevail XL	**C75**=(4 LED) 26,100 Nominal Lumens **C100**=(4 LED) 31,000 Nominal Lumens **C125**=(4 LED) 36,000 Nominal Lumens **C150**=(6 LED) 41,100 Nominal Lumens **C175**=(6 LED) 48,600 Nominal Lumens		

NOTES:

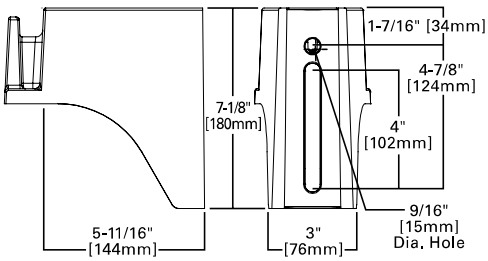
1. All stock configurations are standard 4000K/70CRI, bronze finish, and include the standard versatile mounting arm.
2. Only available in PRVS configurations C15, C25, C40 or C60.

Mounting Details

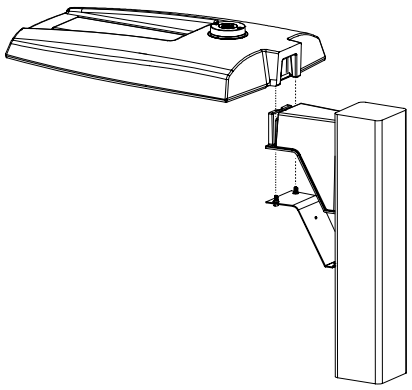
Pole Mount Arm (PRV & PRV-P)



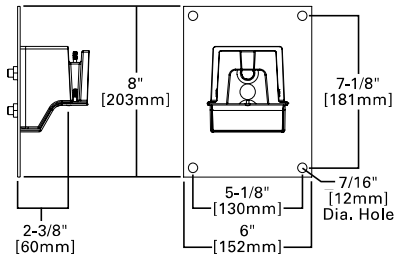
Pole Mount Arm (PRV-XL)



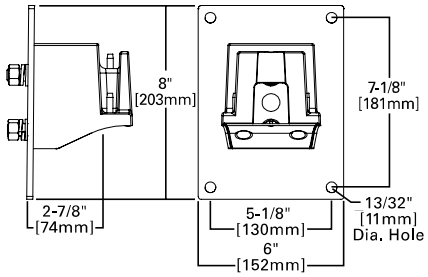
Versatile Mount System



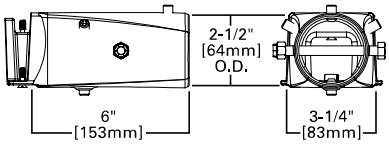
Wall Mount (PRV & PRV-P)



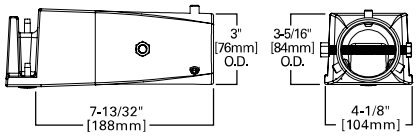
Wall Mount (PRV-XL)



Mast Arm Mount (PRV & PRV-P)



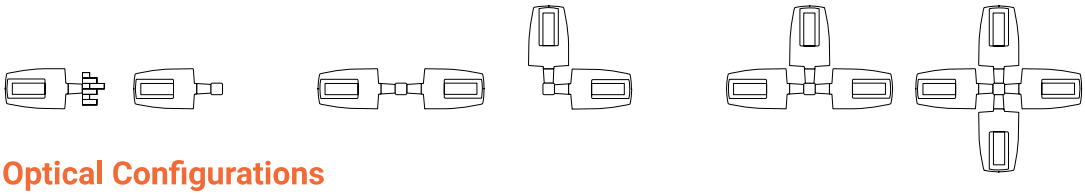
Mast Arm Mount (PRV-XL)



Mounting Configurations and EPAs

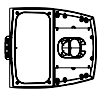
NOTE: For 2 PRV's mounted at 90°, requires minimum 3" square or 4" round pole for fixture clearance. For 2 PRV-XL's mounted at 90°, requires minimum 4" square or round pole for fixture clearance. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications.

Wall Mount	Arm Mount Single	Arm Mount 2 @ 180°	Arm Mount 2 @ 90°	Arm Mount 3 @ 90°	Arm Mount 4 @ 90°
	EPA 0.54 (PRV-P) EPA 0.92 (PRV) EPA 1.12 (PRV-XL)	EPA 1.08 (PRV-P) EPA 1.35 (PRV) EPA 2.25 (PRV-XL)	EPA 0.84 (PRV-P) EPA 1.42 (PRV) EPA 2.13 (PRV-XL)	EPA 1.38 (PRV-P) EPA 1.63 (PRV) EPA 2.52 (PRV-XL)	EPA 1.38 (PRV-P) EPA 1.63 (PRV) EPA 2.52 (PRV-XL)

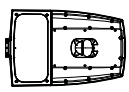


Optical Configurations

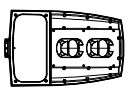
PRV-P-C10/C15/C20/C25
(4,900/6,900/9,800/11,800 Nominal Lumens)



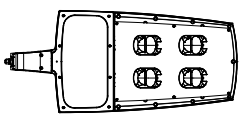
PRV-C15
(7,100 Nominal Lumens)



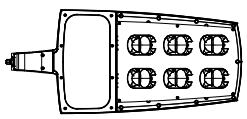
PRV-C25/C40/C60
(13,100/17,100/20,000 Nominal Lumens)



PRV-XL-C75/C100/C125
(26,100/31,000/36,300 Nominal Lumens)



PRV-XL-C150/C175
(41,100/48,600 Nominal Lumens)



Product Specifications

Construction
- Single-piece die-cast aluminum housing
- Tethered die-cast aluminum door

Optics
- Dark Sky Approved (3000K CCT and warmer only)
- Precision molded polycarbonate optics

Electrical
- -40°C minimum operating temperature
- 40°C maximum operating temperature
- >.9 power factor
- <20% total harmonic distortion
- Class 1 electronic drivers have expected life of 100,000 hours with <1% failure rate
- 0-10V dimming driver is standard with leads external to the fixture
- Standard MOV surge protective device designed to withstand 10kV of transient line surge

Mounting
- Versatile, patented, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8"
- A knock-out on the standard mounting arm enables round pole mounting
- Prevail and Prevail Petite: 3G vibration rated
- Prevail XL Mast Arm: 3G vibration rated
- Prevail XL Standard Arm: 1.5G vibration rated

Typical Applications
- Parking lots, Walkways, Roadways and Building Areas

Finish
- Five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness

Shipping Data
- Prevail Petite: 18 lbs. (7.94 kgs.)
- Prevail: 20 lbs. (9.09 kgs.)
- Prevail XL: 45 lbs. (20.41 kgs.)

Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

View PRV-P IES files | View PRV IES files | View PRV-XL IES files

Power and Lumens

Product Family		Prevail Petite				Prevail				Prevail XL				
Light Engine		C10	C15	C20	C25	C15	C25	C40	C60	C75	C100	C125	C150	C175
Power (Watts)		35	49	73	94	52	96	131	153	176	217	264	285	346
Input Current @ 120V (A)		0.29	0.41	0.61	0.79	0.43	0.80	1.09	1.32	1.50	1.84	2.21	2.38	2.92
Input Current @ 277V (A)		0.13	0.18	0.27	0.35	0.19	0.35	0.48	0.57	0.66	0.82	0.97	1.04	1.25
Input Current @ 347V (A)		0.11	0.16	0.23	0.29	0.17	0.30	0.41	0.48	0.54	0.66	0.79	0.84	1.02
Input Current @ 480V (A)		0.08	0.12	0.17	0.22	0.12	0.22	0.30	0.35	0.40	0.48	0.57	0.62	0.74
Distribution [1]														
Type II	4000K Lumens	4,775	6,717	9,542	11,521	7,123	13,205	17,172	20,083	26,263	31,231	36,503	41,349	48,876
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5
	Lumens per Watt	138	137	131	122	137	138	131	131	149	144	138	145	141
	3000K Lumens [1]	4,869	6,595	9,369	11,312	6,994	12,965	16,860	19,718	25,786	30,664	35,840	40,598	47,989
Type III	4000K Lumens	4,782	6,727	9,556	11,538	7,111	13,183	17,144	20,050	26,120	31,061	36,304	41,124	48,610
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	138	137	131	123	137	137	131	131	148	143	138	144	140
	3000K Lumens [1]	4,695	6,605	9,383	11,329	6,982	12,944	16,832	19,686	25,646	30,497	35,645	40,377	47,727
Type IV	4000K Lumens	4,880	6,865	9,752	11,774	7,088	13,140	17,087	19,984	26,098	31,035	36,274	41,089	48,569
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	141	140	134	125	136	137	130	131	148	143	137	144	140
	3000K Lumens [1]	4,792	6,740	9,575	11,561	6,959	12,901	16,777	19,621	25,624	30,471	35,615	40,343	47,687
Type V	4000K Lumens	5,067	7,128	10,126	12,226	7,576	14,045	18,264	21,360	28,129	33,450	39,097	44,287	52,349
	BUG Rating	B3-U0-G2	B3-U0-G2	B4-U0-G3	B4-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	146	145	139	130	146	146	139	140	160	154	148	155	151
	3000K Lumens [1]	4,975	6,999	9,942	12,004	7,438	13,790	17,932	20,972	27,618	32,843	38,387	43,483	51,398

NOTES:
1. For 3000K, 5000K or HSS data, refer to published IES files.

Lumen Maintenance

Configuration	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
Prevail and Prevail Petite at 25°C	91.30%	> 194,000
Prevail and Prevail Petite at 40°C	87.59%	> 134,000
Prevail XL at 25°C	91.40%	> 204,000
Prevail XL at 40°C	89.41%	> 158,000

Sensor Color Reference Table (SPBx)

Housing Finish	Sensor Color
AP=Grey	Grey
BZ=Bronze	Bronze
BK=Black	Black
DP=Dark Platinum	Grey
GM=Graphite Metallic	Black
WH=White	White

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

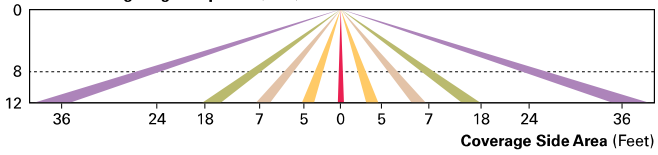
Control Options

0-10V This fixture provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

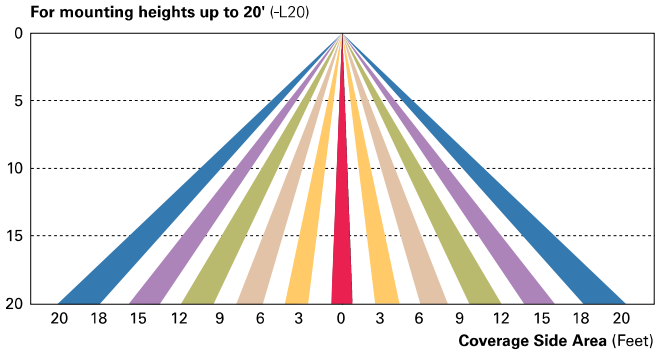
Photocontrol (PER and PER7) Photocontrol receptacles provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-PIN standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the luminaire will dim down after five minutes of no activity detected. When activity is detected, the luminaire returns to full light output. When a sensor for ON/OFF operation (MS-LXX) is selected, the luminaire will turn off after five minutes of no activity. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or "daylight harvesting." Factory default is enabled for the MS sensors and disabled for the SPB. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes.

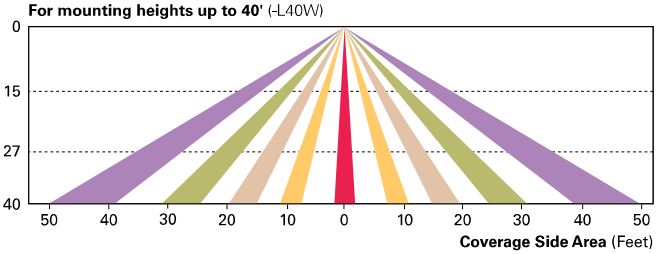
For mounting heights up to 8' (-L08)



For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40W)

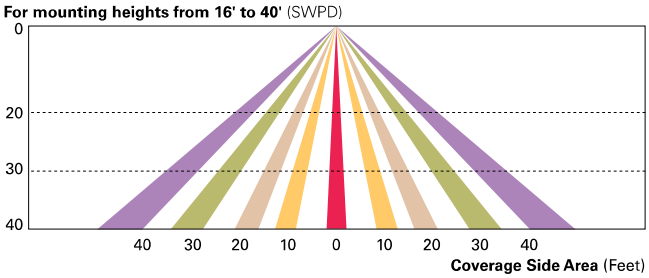


WaveLinx Wireless Control and Monitoring System Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets).

WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

WaveLinx Wireless Sensor (SWPD4 and SWPD5) These outdoor sensors offer passive infrared (PIR) occupancy sensing and a photocell for closed-loop daylight sensing. These sensors can be factory installed or field-installed via simple, tool-less integration into luminaires equipped with the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW). These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected, and the photocell for "dusk-to-dawn" control is default enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-40'.

For mounting heights from 16' to 40' (SWPD)



LumenSafe (LD) The LumenSafe integrated network camera is a streamlined, outdoor-ready camera that provides high definition video surveillance. This IP camera solution is optimally designed to integrate into virtually any video management system or security software platform of choice. No additional wiring is needed beyond providing line power to the luminaire. LumenSafe features factory-installed power and networking gear in a variety of networking options allowing security integrators to design the optimal solution for active surveillance.

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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Specifications and dimensions subject to change without notice.

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PRELIMINARY SITE IMPROVEMENT PLANS

FOR

SOUTHWEST CHRISTIAN HIGH SCHOOL - FIELDHOUSE ADDITION

CHASKA, MN



Vicinity Map
(NOT TO SCALE)

PREPARED FOR:

SOUTHWEST CHRISTIAN HIGH SCHOOL

1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318
CONTACT: MARK ANDERSON
PHONE: (952) 556-0040
EMAIL: M_ANDERSON@SWCHS.ORG

PREPARED BY:

Westwood

Phone (952) 937-5150
Fax (952) 937-5822
Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #300
Minnetonka, MN 55343
westwoodps.com

Westwood Professional Services, Inc.

PROJECT NUMBER: 0033661.00
CONTACT: TYLER D. MAXSON, P.E.

Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER
C1.0	EXISTING CONDITIONS PLAN
C3.0	CIVIL SITE PLAN
C3.1	OVERLAY PLAN
C4.0	GRADING PLAN
C4.1	EROSION CONTROL PLAN
C5.0	UTILITY PLAN
C5.1	STORMWATER DETAILS
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE DETAILS
L1.2	HEADLIGHT SECTION PLAN

NO.	DATE	REVISION	SHEETS
	03/25/22	CITY COMMENTS	
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PRELIMINARY SITE IMPROVEMENT PLANS
FOR
SOUTHWEST CHRISTIAN HIGH SCHOOL - FIELDHOUSE ADDITION
CHASKA, MN
INITIAL SUBMITTAL DATE: 03/07/22 SHEET: C0.0 OF 11

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE

PROJECT NUMBER: 0033661.00

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Common Ground Alliance

HIGHWAY NO 212

WESTWOOD LANE

BAVARIA ROAD

WHITE OAK DRIVE

LOT 1

BLOCK 1

OUTLOT A

SOUTHWEST CHRISTIAN HIGH SCHOOL

DEVELOPMENT

EXISTING BUILDING

FFE=908.90
LFE=893.90

APPROX LOCATION OF FIBER OPTIC PER MNDOT MAPPING

APPROX LOCATION OF STORM PER MAPPING

APPROX LOCATION OF WATER PER MAPPING

APPROX LOCATION OF GAS FROM CENTERPOINT ENERGY MAPPING

APPROX LOCATION OF OVERHEAD POWER PER MAPPING

RIM ELEV=931.08
INV ELEV=917.68 (E/W)

RIM ELEV=931.17
INV ELEV=918.17 (S/U)

RIM ELEV=922.07
(INV FULL)

RIM ELEV=922.02
INV ELEV=919.22 (W/12")

RIM ELEV=911.45
INV ELEV=901.95 (N)(U/24")

RIM ELEV=912.27
INV ELEV=901.42 (N/U)

EXIST. 8" W.M

CONNECT TO EXISTING 8" WATERMAIN
8"X4" WET TAP W/ 4" G.V.

APPROX LOCATION OF STORM PER MAPPING

92 LF - 8" PVC @ 1.09%

CANOPY R.D.
INV=905.0

ROOF DRAINS TO GROUND & SPLASH BLOCK

4"X12" RISER

8" PVC ROOF DRAIN OUTLET PIPE (TYP.)

TRENCH DRAIN 105
RIM=908.70
INV (W)=907.65
INV (E)=907.91

CBMH 304
RIM=907.40
INV (N,E)=904.00
INV (W)=903.70

CBMH 303
RIM=902.28
INV (S,E)=897.78

STMH 301
RIM=911.25
INV (W,E)=902.28
INV (N)=902.18

CBMH 201A
RIM=907.80
INV (E)=901.40

CB 202
RIM=906.50
INV (E)=903.00

CBMH 302
RIM=900.40
INV (N/W)=900.23
INV (W)=900.13

CB
RIM=895.85
INV (S)=890.00

TRENCH DRAIN 102
RIM=894.56

TRENCH DRAIN
RIM=893.56

4" DRAIN TILE TO
DRAIN TO STORM PIPE

76 - 12" PVC SCHED. 40 @ 1.32%

10" PVC SCHEDULE 40 PIPE. CONNECT TO EX. PIPES FROM BLDG. CONFIRM ELEVATIONS. SEE PLUMBING PLAN.

8" PVC BLDG. SUBDRAIN; CONNECT TO EX. PIPE WITH CORE & RUBBER BOOT (TYP.) - SEE PLUMBING PLAN

EXISTING 6" SANITARY STUB @ 4.80% IE=884.0
CONTRACTOR TO VERIFY

STMH
RIM=897.80
INV (S)=889.00
INV (W)=890.10

RIM ELEV=890.34
INV ELEV=882.74

RIM ELEV=892.86
INV ELEV=887.65 (E)(W/15"CONCRETE

CBMH
RIM=893.30
INV (W)=890.48

RIM ELEV=892.3
INV ELEV=882.39 (N/ES/W)
INV ELEV=882.89 (N/W/E)

50 - 12" STM
SWR @ 1.00%
CONNECT TO EX. STMH

15" FES
IE=881.81

INV
RE=893.3
IE (NW)=884.2
IE (SE)=882.0

6" W.M STUB

55 - 15" STM
SWR @ 0.86%

89 - 18" STM
SWR @ 0.86%

86 - 15" PVC STM
SWR @ 0.44%

8" PVC ROOF DRAIN OUTLET PIPE(TYP.)

4" SANITARY SWR @ 8.04%

EXIST. 24" STORM SEWER

TYP. WAY OF WAY NOT GO HERE CB TO THE SOUTH SAYS THE INVERT GOES SOUTH, SO ASSUMED

DRAINAGE & UTILITY EASEMENT PER THE PLAT OF SOUTHWEST CHRISTIAN HIGH SCHOOL DEVELOPMENT

WATERMAIN AS SCALED PER PLANS

R.E. = 907.62
I.E.(NE) = 895.87
I.E.(SE) = 895.77

R.E. = 905.71
I.E.(NW) = 891.81
I.E.(N) = 890.01
I.E.(E) = 890.21

R.E. = 908.34
I.E.(NW) = 897.54
I.E.(SE) = 892.54

R.E. = 899.90
I.E.(N) = 890.60
I.E.(E) = 894.40
I.E.(S) = 890.50

R.E. = 899.88
I.E.(W) = 895.08

R.E. = 852.19
I.E.(NW) = 887.00
I.E.(E) = 886.79

R.E. = 852.49
I.E.(NW) = 884.09
I.E.(SW) = 880.39

R.E. = 904.36
I.E. (E) = 895.06
I.E. (SW) = 894.86

R.E. = 904.54
I.E.(W) = 900.64

R.E. = 906.20
I.E.(NE) = 897.60
I.E. (E) = 881.30
I.E. (SW) = 883.30

R.E. = 907.17
I.E.(SE) = 903.27

R.E. = 899.70
I.E.(NW) = 895.00
I.E.(SW) = 894.80

IE = 880.10

IE = 879.96

12" RCP

24" RCP

STO

SAN

WAT

GAS

PUG

OHP

FOH

SSS

1" = 50'
0' 50' 100' 150'

NOT FOR CONSTRUCTION

DESIGNED: DMP
CHECKED: DMP
DRAWN: TDM
HORIZONTAL SCALE: 50'
VERTICAL SCALE:

INITIAL ISSUE: 03/07/22
REVISIONS:
1 03/25/22 CITY COMMENTS
2 . . .
3 . . .
4 . . .
5 . . .

PREPARED FOR:
SOUTHWEST CHRISTIAN HIGH SCHOOL
1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

TYLER D. MAXSON, P.E.

DATE: 03/25/22 LICENSE NO. _____

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

Westwood
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Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #200
Minnetonka, MN 55343
westwoodps.com
Westwood Professional Services, Inc.

EXISTING CONDITIONS PLAN

SHEET NUMBER:
C1.0

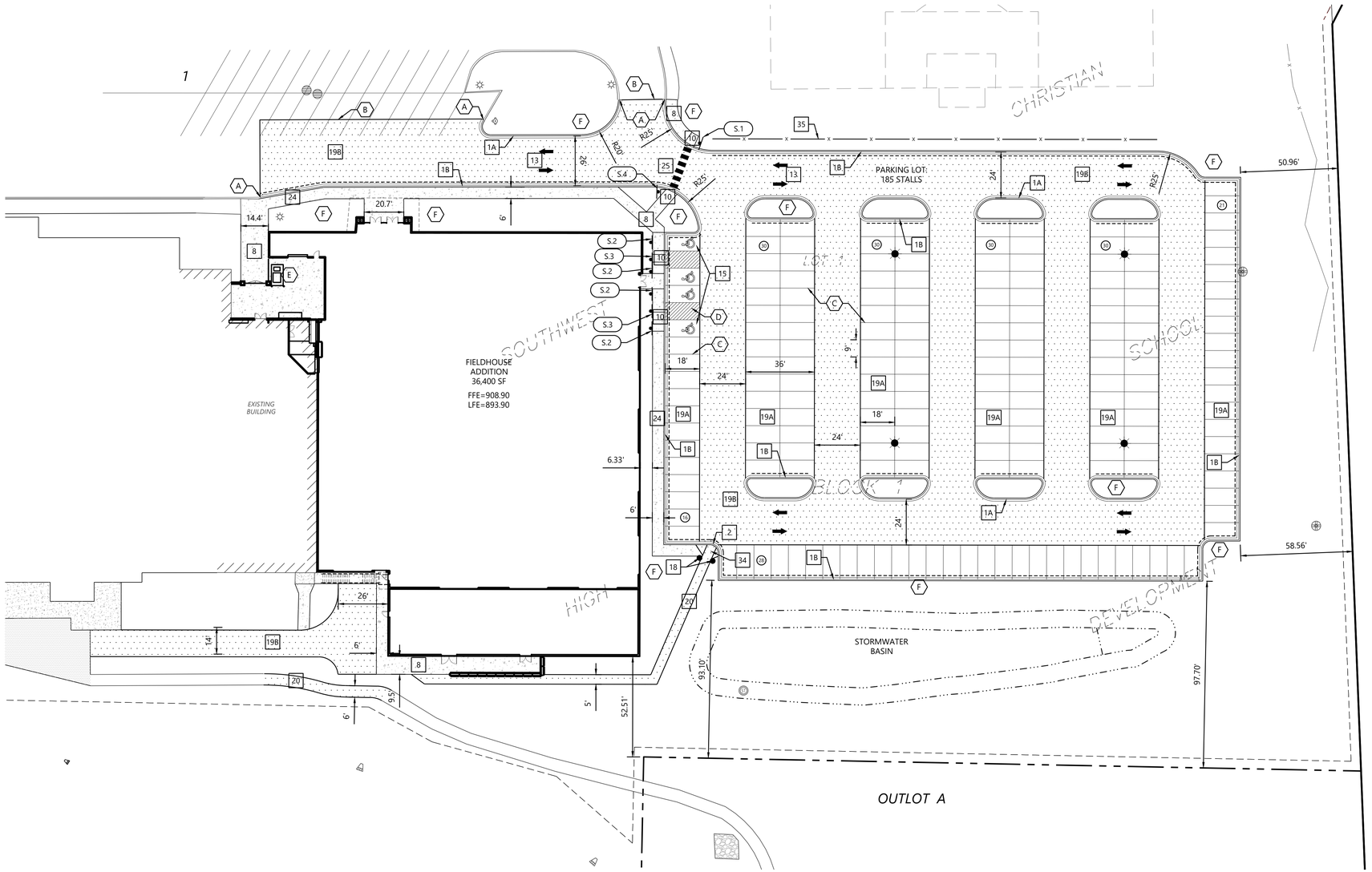
DATE: 03/25/22

PROJECT NUMBER: 0033661.00

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE

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SITE LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		TIP-OUT CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
x	x	FENCE
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		STANDARD DUTY BITUMINOUS PAVEMENT
		HEAVY DUTY BITUMINOUS PAVEMENT
		NUMBER OF PARKING STALLS
		TRANSFORMER
		SITE LIGHTING
		TRAFFIC SIGN
		POWER POLE
		BOLLARD / POST

1 SITE DETAILS (SI-0XX)

1A	B612 CURB AND GUTTER
1B	B612 TIPOUT CURB AND GUTTER
2	MOUNTABLE CURB AND GUTTER
5	INTEGRAL CURB AND WALK
8	PRIVATE CONCRETE SIDEWALK
10	PRIVATE PARALLEL PEDESTRIAN CURB RAMP
13	TRAFFIC ARROW
14	SIGN INSTALLATION
15	HANDICAP ACCESSIBLE SIGNAGE AND STRIPING
18	BOLLARD W/ REMOVABLE CHAIN
19A	STANDARD DUTY PAVEMENT SECTION
19B	HEAVY DUTY PAVEMENT SECTION
20	BITUMINOUS TRAIL
24	CONCRETE CURB AT SIDEWALK
25	CROSSWALK STIPING
34	PEDESTRIAN CURB RAMP FOR BITUMINOUS TRAILS
35	ORNAMENTAL FENCE (SEE ARCH.)

A SITE KEYNOTES

A	MATCH EX. CURB AND GUTTER
B	MATCH EX. BITUMINOUS PAVEMENT WITH SAWCUT
C	4" SOLID WHITE PAVEMENT MARKING (TYP.)
D	4" WHITE DIAGONAL PARKING STRIPE (TYP.)
E	TRANSFORMER PAD
F	LANDSCAPE AREA
G	LIGHT POLE

S.10 SIGN LEGEND

REFERENCE		SIZE	MnDOT DESIGNATION
S.1	STOP SIGN	30" X 30"	R1-1
S.2	HANDICAP ACCESSIBLE	12" X 18"	R7-8M
S.3	NO PARKING	12" X 12"	R8-38
S.4	PEDESTRIAN PARKING	30" X 30"	W11-2

GENERAL SITE NOTES

1. BACKGROUND INFORMATION FOR THIS PROJECT PROVIDED BY WESTWOOD PROFESSIONAL SERVICES, MINNETONKA, MN, 8/24/21.
2. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
3. REFER TO BOUNDARY SURVEY FOR LOT BEARINGS, DIMENSIONS AND AREAS.
4. ALL DIMENSIONS ARE TO FACE OF CURB OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
5. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND LOCATIONS OF EXITS, RAMPS, AND TRUCK DOCKS.
6. ALL CURB RADII ARE SHALL BE 3.0 FEET (TO FACE OF CURB) UNLESS OTHERWISE NOTED.
7. ALL CURB AND GUTTER SHALL BE ***B612*** UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
9. BITUMINOUS PAVEMENT AND CONCRETE SECTIONS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
10. CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES.
11. SITE LIGHTING SHOWN ON PLAN IS FOR REFERENCE ONLY. REFER TO LIGHTING PLAN PREPARED BY OTHERS FOR SITE LIGHTING DETAILS AND PHOTOMETRICS.

SITE DEVELOPMENT SUMMARY

• EXISTING ZONING:	R1A
• PROPOSED ZONING:	R1A
• PARCEL DESCRIPTION:	LOT 1, BLOCK 1 SOUTHWEST CHRISTIAN HIGH SCHOOL DEVELOPMENT
• DISTURBED AREA:	3.45 AC
• PERVIOUS SURFACE:	32,354 SF (21.6%)
• IMPERVIOUS SURFACE(RATIO):	117,708 SF (78.4%)
• BUILDING FOOTPRINT:	36,400 SF
• PARKING SPACE/DRIVE AISLE:	9' WIDE X 18' LONG, 24' AISLE
• EXISTING PARKING:	440 STALLS
• PROPOSED ADDITIONAL PARKING:	185 STALLS

1" = 30'

0' 30' 60' 90'

NOT FOR CONSTRUCTION

DESIGNED: DMP
CHECKED: DMP
DRAWN: TDM
HORIZONTAL SCALE: 30'
VERTICAL SCALE: -

INITIAL ISSUE: 03/07/22
REVISIONS:
1 03/25/22 CITY COMMENTS
2 . .
3 . .
4 . .
5 . .

PREPARED FOR:
SOUTHWEST CHRISTIAN HIGH SCHOOL
1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318

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TYLER D. MAXSON, P.E.
DATE: 03/25/22 LICENSE NO. -

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

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12701 Whitewater Drive, Suite #200
Minnetonka, MN 55343
westwoodps.com
Westwood Professional Services, Inc.

CIVIL SITE PLAN

SHEET NUMBER: C3.0

DATE: 03/25/22

PROJECT NUMBER: 0033661.00

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE

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1" = 50'
0' 50' 100' 150'

NOT FOR CONSTRUCTION

DESIGNED: TDM
CHECKED: DMP
DRAWN: TDM
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TYLER D. MAXSON, P.E.
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SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

Westwood
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Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

OVERLAY PLAN

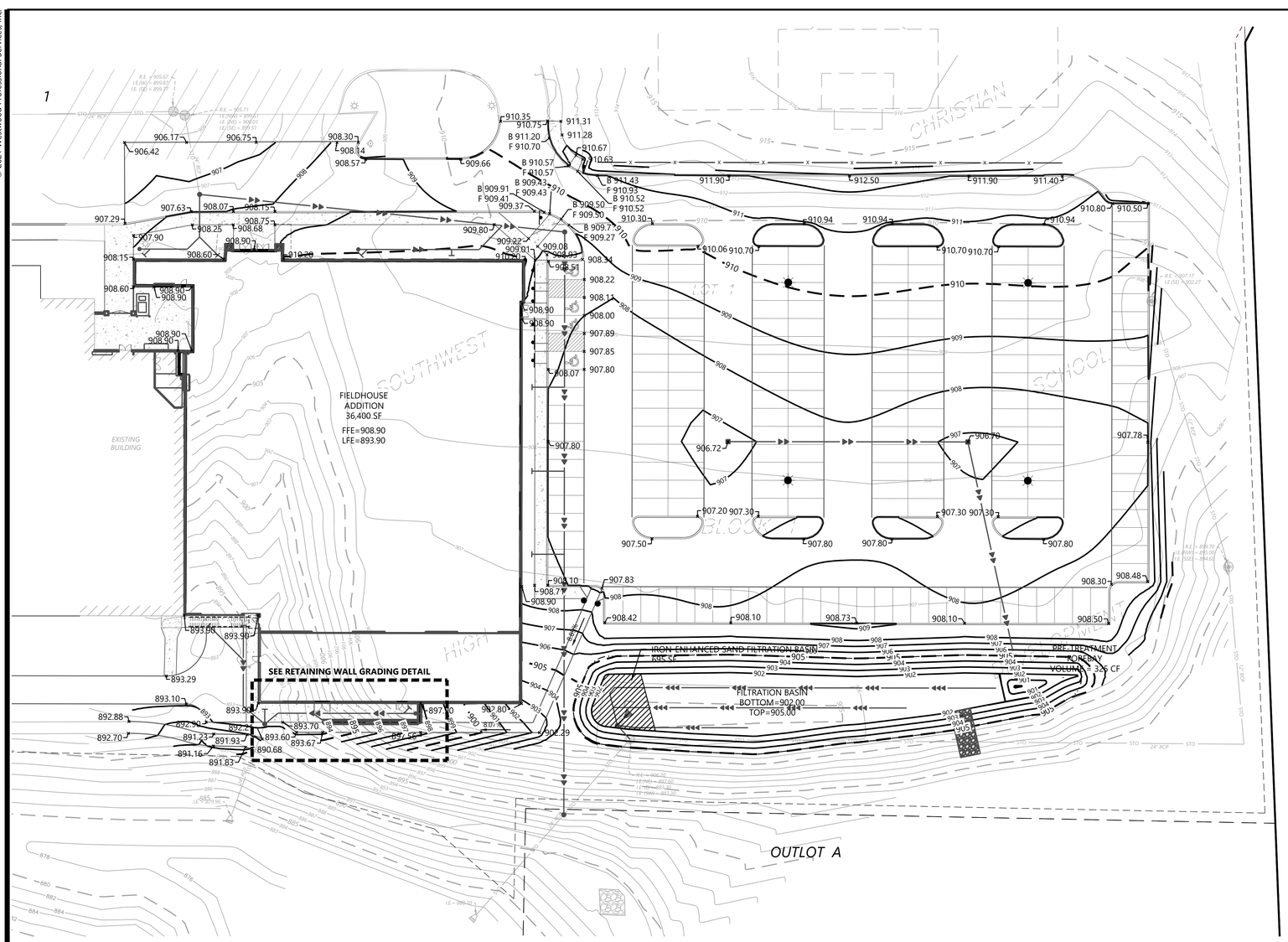
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C3.1

DATE: 03/25/22

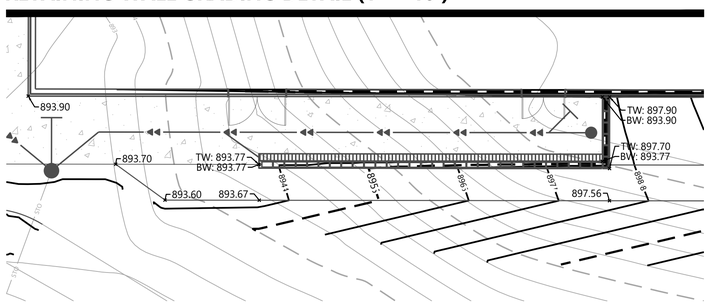
PROJECT NUMBER: 0033661.00

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE

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RETAINING WALL GRADING DETAIL (1" = 10')



GRADING LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
980	980	INDEX CONTOUR
982	982	INTERVAL CONTOUR
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
STO	STO	STORM SEWER
		FLARED END SECTION (WITH RIPRAP)
WAT	WAT	WATER MAIN
SAN	SAN	SANITARY SEWER
		RETAINING WALL
		DRAIN TILE
		RIDGE LINE
	GL	GRADING LIMITS
900.00	× 900.00	SPOT ELEVATION
	0.00%	FLOW DIRECTION
	TW=XXX.XX BW=XXX.XX	TOP AND BOTTOM OF RETAINING WALL
	E.O.F.	EMERGENCY OVERFLOW
SB-19	SB-19	SOIL BORING LOCATION

GRADING NOTES

1. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
2. CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
3. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
4. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE SIX INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
6. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
7. CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
8. **SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.**
9. SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
10. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
11. CONTRACTOR SHALL PROVIDE A STRUCTURAL RETAINING WALL DESIGN CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
12. ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
13. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RE-COMPACTED AS SPECIFIED HEREIN.
14. EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
15. EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA, SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
16. ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.

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1" = 30'
0' 30' 60' 90'

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DESIGNED: DMP
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HORIZONTAL SCALE: 30'
VERTICAL SCALE:

INITIAL ISSUE: 03/07/22
REVISIONS:
1 03/25/22 CITY COMMENTS

PREPARED FOR:
SOUTHWEST CHRISTIAN HIGH SCHOOL
1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
TYLER D. MAXSON, P.E.
DATE: 03/25/22 LICENSE NO. ____

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

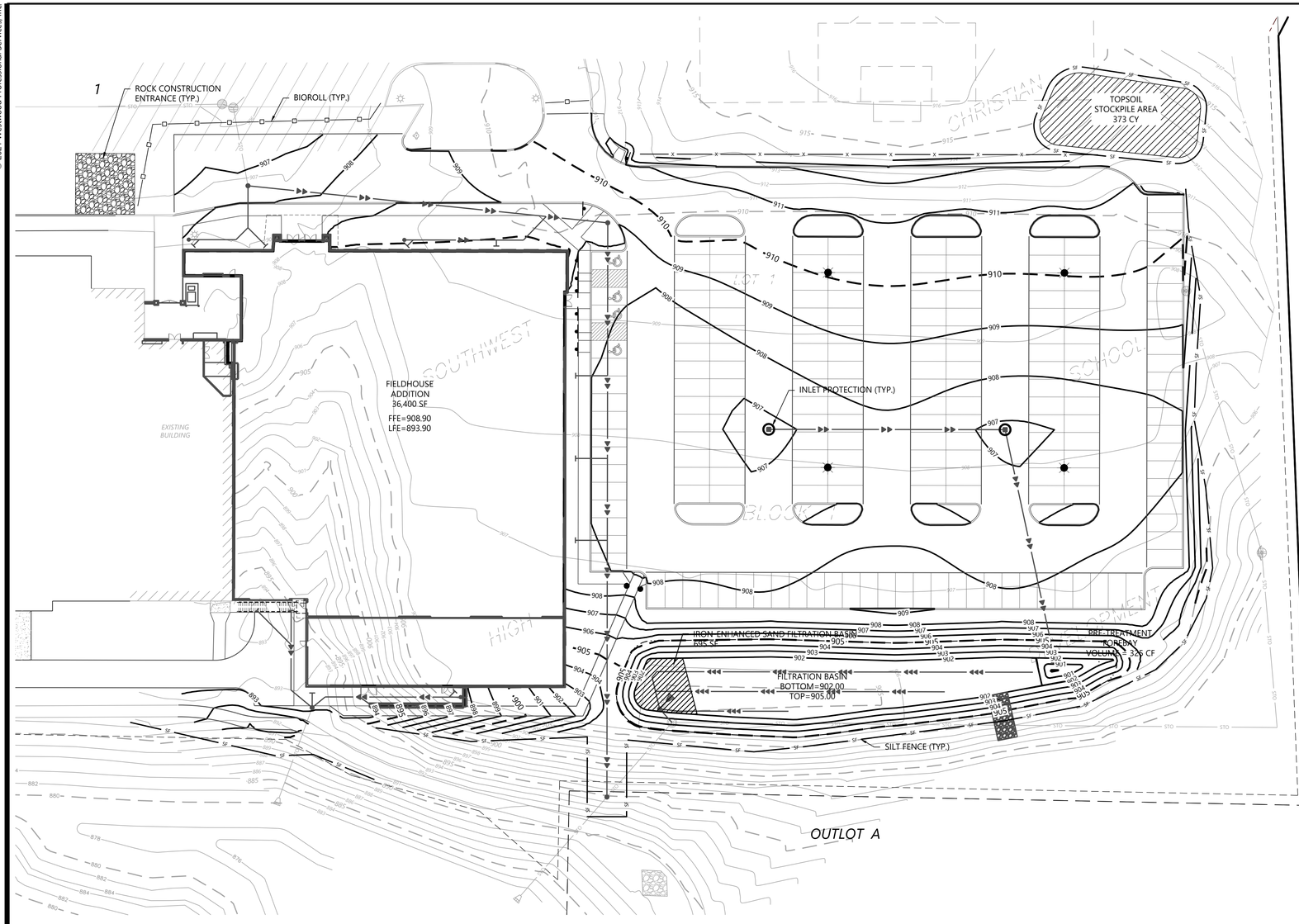
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12701 Whitewater Drive, Suite #200
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Westwood Professional Services, Inc.

GRADING PLAN

SHEET NUMBER:
C4.0
DATE: 03/25/22

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
PROJECT NUMBER: 0033661.00

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GENERAL EROSION CONTROL NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
2. ALL SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN-PLACE PRIOR TO ANY EXCAVATION/CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED. EXISTING SILT FENCE ON-SITE SHALL BE MAINTAINED AND OR REMOVED AND SHALL BE CONSIDERED INCIDENTAL TO THE GRADING CONTRACT. IT IS OF EXTREME IMPORTANCE TO BE AWARE OF CURRENT FIELD CONDITIONS WITH RESPECT TO EROSION CONTROL. TEMPORARY PONDING, DIKES, HAYBALES, ETC., REQUIRED BY THE CITY SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
3. EROSION AND SILTATION CONTROL (ESC): THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL THE EROSION AND SILTATION INCLUDING BUT NOT LIMITED TO: CATCH BASIN INSERTS, CONSTRUCTION ENTRANCES, EROSION CONTROL BLANKET, AND SILT FENCE. ESC SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY DIRECT THE CONTRACTOR'S METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITION OF SILT OR MUD ON NEW OR EXISTING PAVEMENT OR IN EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN EVENT. AFFECTED AREAS SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. ALL TEMPORARY EROSION CONTROL SHALL BE REMOVED BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
4. ALL STREETS DISTURBED DURING WORKING HOURS MUST BE CLEANED AT THE END OF EACH WORKING DAY. A CONSTRUCTION ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO DETAILS TO REDUCE TRACKING OF DIRT ONTO PUBLIC STREETS.
5. PROPOSED PONDS SHALL BE EXCAVATED FIRST AND USED AS TEMPORARY PONDING DURING CONSTRUCTION.
6. WHEN INSTALLING END-OF-LINE FLARED END SECTIONS, BRING THE SILT FENCE UP & OVER THE FLARED END SECTIONS & COVER DISTURBED AREAS WITH RIP RAP. THE UPSTREAM FLARED END SECTIONS SHALL HAVE WOOD FIBER BLANKET INSTALLED ON THE DISTURBED SOILS.
7. ALL UNPAVED AREAS ALTERED DUE TO CONSTRUCTION ACTIVITIES MUST BE RESTORED WITH SEED AND MULCH, SOD, EROSION CONTROL BLANKET OR BE HARD SURFACE WITHIN 2 WEEKS OF COMPLETION OF CONSTRUCTION.
8. THE SITE MUST BE STABILIZED PER THE REQUIREMENTS OF THE MPCA, NPDES, MNDOT, AND CITY.
   A. TEMPORARY (GREATER THAN 1-YEAR) SEED SHALL BE MNDOT SEED MIX 22-111 AT 30.5-POUNDS PER ACRE.
   B. TEMPORARY (LESS THAN 1-YEAR) SEED SHALL BE MNDOT SEED MIX 21-112 (FALL) OR 21-111 (SPRING/SUMMER) AT 100-POUNDS PER ACRE
   C. INFILTRATION/FILTRATION BASIN SHALL BE MNDOT SEED MIX 34-262 AT 14.5-POUNDS PER ACRE.
   D. POND SLOPES SHALL BE MNDOT SEED MIX 33-261 AT 35-POUNDS PER ACRE.
   E. GENERAL SEEDING SHALL BE MNDOT SEED MIX 25-151 AT 70-POUNDS PER ACRE.
   F. MULCH SHALL BE MNDOT TYPE 1 APPLIED AT 2-TONS PER ACRE.
9. FOR AREAS WITH SLOPE OF 3:1 OR GREATER, RESTORATION WITH SOD OR EROSION CONTROL BLANKET IS REQUIRED.
10. ALL TEMPORARY STOCKPILES MUST HAVE SILT FENCE INSTALLED AROUND THEM TO TRAP SEDIMENT.
11. ALL PERMANENT PONDS USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION SHALL BE DREDGED AFTER THE SITE HAS BEEN STABILIZED TO RESTORE THE POND TO THE PROPOSED BOTTOM ELEVATION.
12. ALL CONSTRUCTION SHALL CONFORM TO LOCAL AND STATE RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
13. THE SITE MUST BE KEPT IN A WELL-DRAINED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS REQUIRED TO INSURE PROPER DRAINAGE DURING CONSTRUCTION. LOW POINTS IN ROADWAYS OR BUILDING PADS MUST BE PROVIDED WITH A POSITIVE OUTFLOW.
14. PUBLIC STREETS USED FOR HAULING SHALL BE KEPT FREE OF SOIL AND DEBRIS. STREET SWEEPING SHALL BE CONCURRENT WITH SITE WORK.

CCWMO TOPSOIL STANDARD

Requirement	Range	Test Method
Material Passing the ¾ in [19 mm]	100 %	ASTM D 422
Material passing No 4 in [4.75 mm]	≥ 85%	-
Clay	5% – 30%	ASTM D 422
Silt	5% - 35%	ASTM D 422
Sand	38% - 75%	ASTM D 422
Organic matter	3% – 15%	ASTM D 2974
pH	6.1 – 7.5	ASTM G 51
Compaction	- 1,400 kilopascals (kPa) / 200 pounds per square inch (psi) in the upper 12 inches of soil, or - bulk density of less than 1.4 grams per cubic centimeter (g/cm3) in the upper 12 inches of soil	Field test

FILTRATION/INFILTRATION BASIN NOTES

1. BASIN EXCAVATION AND PIPE INSTALLATION MAY TAKE PLACE BEFORE CURB INSTALLATION. ALL OTHER BASIN CONSTRUCTION MUST WAIT UNTIL FINAL SITE LANDSCAPING. REMOVE SEDIMENT FROM EXCAVATED BASIN PRIOR TO PLACEMENT OF FILTER MEDIA. PLACE SAND BAGS OR SIMILAR ITEM IN CURB CUTS TO PRE-FILTER STORM WATER UNTIL PLANTS ARE ESTABLISHED IN BASINS. MAINTAIN INLET PROTECTION ON DOWN STREAM INLETS UNTIL BASINS ARE ON-LINE.
2. BASIN EXCAVATION SHALL BE WITH TOOTHED-BUCKETS TO SCARIFY THE BOTTOM.
3. PLACE SILT FENCE AROUND BASINS AS SHOWN IMMEDIATELY AFTER BASIN CONSTRUCTION.
4. BASINS MUST BE TESTED FOR INFILTRATION RATE AFTER TOTAL SITE STABILIZATION. A DUAL RING INFILTROMETER SHALL BE USED FOR TESTING. MINIMUM INFILTRATION RATE IS 1-INCH PER HOUR. IF BASIN DOES NOT MEET INFILTRATION RATE, CONTRACTOR MUST TAKE CORRECTIVE ACTION UNTIL MINIMUM INFILTRATION RATE IS MET. CORRECTIVE ACTION MAY INCLUDE REMOVING PLUG IN DRAIN TILE. ALL TESTING AND CORRECTIVE ACTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE INCIDENTAL TO THE CONTRACT, WITH NO DIRECT COMPENSATION MADE.

EROSION CONTROL LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
980	980	INDEX CONTOUR
982	982	INTERVAL CONTOUR
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
	SF	SILT FENCE
		BIOROLL
	RSC	REDUNDANT SILT CONTROL
STO		STORM SEWER
		FLARED END SECTION (WITH RIPRAP)
WAT		WATER MAIN
SAN		SANITARY SEWER
		RETAINING WALL
		DRAIN TILE
	GL	GRADING LIMITS
		ROCK CONSTRUCTION ENTRANCE
		EROSION CONTROL BLANKET
		TURF REINFORCEMENT MAT
	E.O.F.	EMERGENCY OVERFLOW
SB-19	SB-19	SOIL BORING LOCATION
		INLET PROTECTION

CCWMO TOPSOIL NOTES

1. EXISTING ON-SITE TOPSOIL MAY BE USED FOR RE-SPREAD IF APPROVED BY CCWMO. CONTRACTOR TO COORDINATE WITH BRAUN INTERTEC AND CCWMO.
2. FOR TOPSOIL STRIPPING AND STOCKPILING:
   - EXISTING TOPSOIL AVAILABLE ON-SITE: 2,407 CY
   - TOPSOIL NEEDED TO RESTORE GREEN SPACES: 373 CY
   - AVERAGE DEPTH OF TOPSOIL AVAILABLE ON-SITE: 0.5 FEET
   - DOZERS/SCRAPERS TO BE USED FOR TOPSOIL STRIPPING.
   - SILT FENCE TO BE USED FOR TOPSOIL STOCKPILE.
   - CONTRACTOR TO TEMPORARILY SEED TOPSOIL STOCKPILE IF STOCKPILE WILL REMAIN IN PLACE FOR > 6 MONTHS.
3. STOCKPILE SAMPLING PROCEDURE:
   - ONE SAMPLE SHALL BE COLLECTED PER 2,500 CUBIC METERS OF STOCKPILE, MINIMUM ONE SAMPLE.
   - THE CONTRACTOR SHALL FORM A FACE FOR THE FULL HEIGHT OF THE STOCKPILE AT FOUR LOCATIONS.
   - A LOADER BUCKET OR SIMILAR EQUIPMENT SHALL THEN BE FILLED BY CHANNELING THE FULL HEIGHT OF THE STOCKPILE FACE, FROM THE BOTTOM TO THE TOP, IN ONE OPERATION.
   - THE BUCKET SHALL THEN BE LOWERED AND EMPTIED BY ROTATION TO FORM A SMALL PILE AT EACH SAMPLING LOCATION.
   - THE SAMPLER SHALL PLACE A SHOVEL FULL OF SOIL FROM EACH PILE INTO A LARGE CONTAINER. THE SOIL SHALL BE THOROUGHLY MIXED AND A SUFFICIENT AMOUNT OF MIXED TOPSOIL SHALL BE TAKEN TO FILL A STANDARD TOPSOIL SAMPLING CONTAINER.
   - SAMPLES SHALL BE SUBMITTED FOR ANALYSIS TO LAB QUALIFIED TO USE THE FOLLOWING TEST METHODS: ASTM D422, ASTM D2974, AND ASTM G51. SAMPLES SHALL BE ANALYZED FOR CLAY, SILT, SAND, ORGANIC MATTER, AND PH.
   - ADDITIONAL TOPSOIL SHALL NOT BE ADDED TO THE STOCKPILE AFTER SAMPLING.
   - SAMPLE RESULTS SHALL BE SUBMITTED TO THE COUNTY FOR REVIEW. TEST RESULTS ARE VALID FOR 6 MONTHS.
4. SUBSOIL PREPARATION PROCEDURE:
   - CONTRACTOR TO PERFORM SUBSOIL PREPARATION BEFORE PLACING TOPSOIL.
   - SUBSOIL PREPARATION TO BE PERFORMED IN ONE DIRECTION ON THE CONTOURS PERPENDICULAR TO THE FLOW OF WATER AND SLOPES FLATTER THAN 1:2
5. ALL DISTURBED UN-PAVED AREAS ARE TO RECEIVE SIX INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
6. TOPSOIL LOCATIONS ARE PLANTING AND SODDED AREAS AS SHOWN ON THE LANDSCAPE PLAN.
7. TOPSOIL RE-APPLIED MUST MEET THE MATERIALS SPECIFICATIONS OF THE CARVER COUNTY WATER RESOURCE MANAGEMENT ORDINANCE AND BMP GUIDELINES. SEE SECTION 1. ORDINANCE GUIDANCE, F. TOPSOIL MANAGEMENT PLAN GUIDANCE. THE TOPSOIL SPECIFICATIONS INCLUDE SOIL TYPE, ORGANIC MATTER CONTENT, PH, AND COMPACTION. COUNTY APPROVAL OF SOIL SAMPLES AND TESTING ARE REQUIRED PRIOR TO SPREADING OF TOPSOIL. TOPSOIL MAY NEED TO BE AMENDED OR IMPORTED TO MEET THIS STANDARD.

1" = 30'
0' 30' 60' 90'

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DESIGNED: DMP
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VERTICAL SCALE:

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1 03/25/22 CITY COMMENTS
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4 . .
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PREPARED FOR:
SOUTHWEST CHRISTIAN HIGH SCHOOL
1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

TYLER D. MAXSON, P.E.

DATE 03/25/22 LICENSE NO. -

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

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Westwood Professional Services, Inc.

EROSION CONTROL PLAN

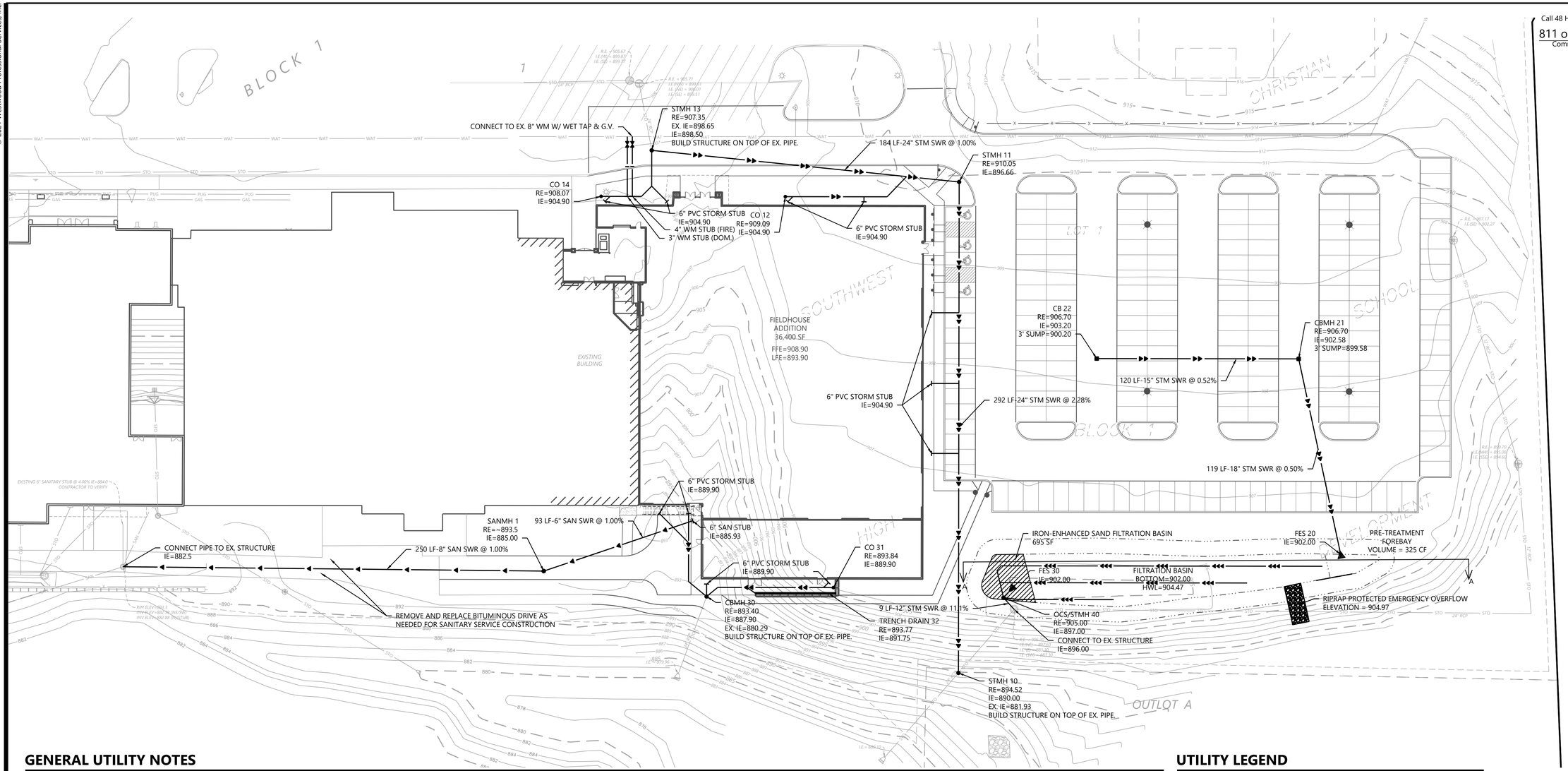
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DATE: 03/25/22

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE

PROJECT NUMBER: 0033661.00

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GENERAL UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
2. ALL SANITARY SEWER, STORM SEWER AND WATER MAIN MATERIAL AND INSTALLATIONS SHALL BE PER CITY REQUIREMENTS, MINNESOTA PLUMBING CODE, AND IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE NECESSARY FEDERAL, STATE AND LOCAL PERMITS FOR THE PROPOSED WORK OR VERIFY WITH THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED WITH THE OWNER.
4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF DOORWAYS, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY CONNECTION LOCATIONS.
5. ALL PRIVATE UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
6. CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS, AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING WITH THE UTILITY CONSTRUCTION OR ANY REQUIRED TESTING. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, CONNECT ANY PIPE OR HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. WATER MAIN LENGTHS AS SHOWN ARE APPROXIMATE HORIZONTAL LENGTHS. ALLOW FOR ADDITIONAL PIPE WHEN INSTALLING ON SLOPES OR WHEN DEFLECTIONS ARE REQUIRED. THE JOINT DEFLECTIONS SHALL NOT EXCEED THE MAXIMUM RECOMMENDED BY THE PIPE MANUFACTURER OR BY LOCAL GOVERNING SPECIFICATIONS. FITTINGS REQUIRED TO CONSTRUCT WATER MAIN SHALL BE INCLUDED IN WATER MAIN CONSTRUCTION.
8. PROVIDE WATER MAIN THRUST RESTRAINTS PER CITY STANDARD REQUIREMENTS.
9. A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED AT ALL WATER LINE CROSSINGS WITH SANITARY SEWER OR STORM SEWER. THE WATER LINE SHALL NOT HAVE JOINTS OR CONNECTION WITHIN 10-FEET OF THE CROSSING. INSULATE CROSSINGS WITH STORM SEWER.
10. UTILITY SERVICES TYPICALLY TERMINATE 5' OUTSIDE BUILDING WALL UNLESS OTHERWISE SHOWN OR NOTED.
11. DUCTILE IRON WATER LINES SHALL BE CLASS 52, PER AWWA C115 OR C151. COPPER WATER LINES SHALL BE TYPE K PER ASTM B88. PVC WATER LINES SHALL BE PER AWWA C900 AND INSTALLED PER AWWA C605 IF ALLOWED BY CITY.
12. ALL WATER LINES SHALL HAVE <<7.5' OR 8'>> MINIMUM COVER. INSULATE WATER MAIN IF LESS THAN 8' OF COVER. INSULATION SHALL BE DOW STYROFOAM HI BRAND 35 OR EQUIVALENT, WITH 4 INCHES OF THICKNESS.
13. SANITARY SEWER PIPE OUTSIDE THE BUILDING ENVELOPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 OR 26. SDR 26 IS REQUIRED FOR DEPTHS GREATER THAN 15 FEET. SANITARY SEWER PIPE WITHIN 5 FEET OF THE BUILDING AND UNDER FOOTINGS SHALL BE SCHEDULE 40 PER ASTM D2665. ALL PLASTIC SANITARY SEWER SHALL BE INSTALLED PER D2321. SOLVENT WELD JOINTS MUST INCLUDE USE OF A PRIMER WHICH IS OF A CONTRASTING COLOR TO THE PIPE AND CEMENT. ALL SANITARY SEWER SHALL BE TESTED ACCORDING TO MINNESOTA PLUMBING CODE, PART 712.0.
14. STORM SEWER PIPE:
    A. RCP AND HDPE PIPE MAY BE INSTALLED WITH APPROVAL OF LOCAL GOVERNING AGENCY.
    B. REINFORCED CONCRETE PIPE SHALL BE CLASS 5 FOR PIPE DIAMETERS 18" AND SMALLER, CLASS 3 FOR PIPE DIAMETERS 21" AND LARGER UNLESS OTHERWISE NOTED, PER ASTM C76 WITH R-4 GASKETS.
    C. HDPE STORM PIPE 4- TO 10-INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF AASHTO M252. HDPE STORM PIPE 12- TO 60-INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF ASTM F2306. FITTINGS SHALL BE PER ASTM D3212 AND INSTALLED PER ASTM D2321.
    D. PVC STORM SEWER PIPE AND FITTINGS SHALL BE SCHEDULE 40 PIPE PER ASTM D2665 AND INSTALLED PER ASTM D2321.
    E. CORRUGATED METAL PIPE (CMP) FOR SIZES 18- TO 120-INCH AND MUST MEET ASTM A760 OR ASTM A796 AND BE INSTALLED PER ASTM A798. CMP MAY NOT BE INSTALLED WITHIN 10-FEET OF A WATERMAIN, WATER SERVICE, OR A BUILDING.
    F. ALL STORM SEWER JOINTS AND STRUCTURE CONNECTIONS SHALL BE GASTIGHT OR WATERTIGHT AS REQUIRED BY MINNESOTA PLUMBING CODE, PART 707.3. STORM SEWER LOCATED WITHIN 10-FEET OF A BUILDING AND/OR WATER LINE SHALL BE TESTED PER MINNESOTA PLUMBING CODE, PART 712.
15. ALL NONCONDUCTIVE PIPE SHALL BE INSTALLED WITH A LOCATE (TRACER) WIRE PER MINNESOTA RULES, PART 7560.0150.
16. POST INDICATOR VALVES SHALL BE CLOW F-5750 (OR EQUIVALENT) MEETING AWWA STANDARD C509 AND CITY STANDARDS. VALVE TO BE MECHANICAL JOINT RESILIENT WEDGE GATE VALVE. POST TO BE ADJUSTABLE FOR 8 FEET WATER MAIN DEPTH. THE ELECTRICAL ALARM SWITCH SHALL BE PART NO. PCVS2 (OR EQUIVALENT).
17. AFTER CONSTRUCTION IS COMPLETED, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN AS-BUILT RECORD OF UTILITY CONSTRUCTION. THE AS-BUILT SHALL INCLUDE LOCATION AND LENGTH DEVIATIONS OR CHANGES TO THE PLAN. CONTRACTOR TO VERIFY WITH OWNER OR ENGINEER WHETHER A PLAN WITH POST-CONSTRUCTION ELEVATIONS IS REQUIRED.
18. ALL MANHOLE CASTINGS IN PAVED AREAS SHALL BE SUMPED 0.05 FEET. RIM ELEVATIONS ON PLAN REFLECT THE SUMPED ELEVATIONS.
19. ALL CATCH BASIN CASTINGS IN CURB SHALL BE SUMPED 0.15 FEET AND MANHOLE CASTINGS IN PAVED AREAS SHALL BE SUMPED 0.05 FEET. RIM ELEVATIONS ON PLAN REFLECT THE SUMPED ELEVATIONS.

UTILITY LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		CURB AND GUTTER
SAN		SANITARY SEWER
FM	FM	SANITARY SEWER FORCE MAIN
STO		STORM SEWER
WAT		WATER MAIN
WAT		HYDRANT
GAS	GAS	GAS
PUG	PUG	UNDERGROUND ELECTRIC
POH	POH	OVERHEAD ELECTRIC
TUG	TUG	UNDERGROUND TELEPHONE
TOH	TOH	OVERHEAD TELEPHONE
FO	FO	TELEPHONE FIBER OPTIC
CTV	CTV	CABLE TELEVISION
DT		DRAIN TILE
		GATE VALVE
		FLARED END SECTION (WITH RIPRAP)
		LIGHT POLE

1" = 30'
0' 30' 60' 90'

NOT FOR CONSTRUCTION

DESIGNED: DMP
CHECKED: DMP
DRAWN: TDM
HORIZONTAL SCALE: 30'
VERTICAL SCALE:

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1	03/25/22	CITY COMMENTS
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Westwood Professional Services, Inc.

UTILITY PLAN

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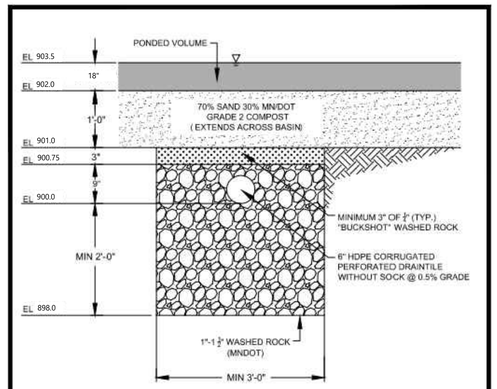
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CALCULATIONS TO MEET RULES

VOLUME:

1. VOLUME REDUCTION IS CALCULATED AS 40% OF PONDED VOLUME.
2. IF NO VEGETATION IS PROVIDED, THE VOLUME CALCULATION IS LOWERED TO 50% OF ROCK VOLUME BELOW TILE.
3. TILE INVERT MUST BE 3 FT ABOVE DOWNSTREAM NWL, GROUNDWATER, BEDROCK, ETC.

WATER QUALITY:

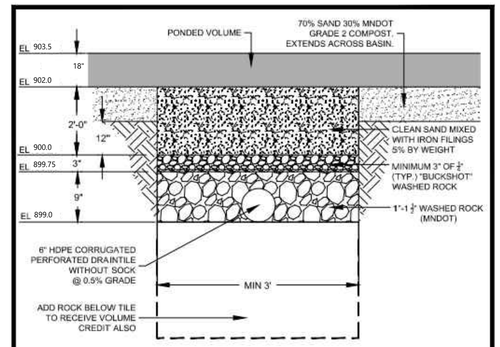
1. FILTRATION IS CALCULATED AS 75% TP REMOVAL AND 90% TSS REMOVAL.

DRAWDOWN:

1. 48 HOUR DRAWDOWN OF BMPS IS REQUIRED. TO DETERMINE LENGTH OF TRENCH NEEDED, USE FILTRATION RATE OF 50 CF OF PONDED VOLUME WILL PASS THROUGH ONE LINEAR FOOT OF 3' WIDE TRENCH, OR 17 CF PER SF OF SURFACE AREA.

CARVER COUNTY	WENCK ASSOCIATES Responsive partner. Exceptional outcomes.	BIORETENTION TRENCH	DEC 2016
			DETAIL 1

M:\1097\GENERAL DETAILS\December 2016 Details\1--BIORETENTION TRENCH.dwg



CALCULATIONS TO MEET RULES

VOLUME:

1. VOLUME REDUCTION IS CALCULATED AS 40% OF PONDED VOLUME.
2. TO RECEIVE VOLUME CREDIT, ADD 2 FEET OF ROCK BELOW TILE PER DETAIL 6.
3. IF NO VEGETATION IS PROVIDED, THE VOLUME CALCULATION IS LOWERED TO 50% OF ROCK VOLUME BELOW TILE.
4. TILE INVERT MUST BE 3 FT ABOVE DOWNSTREAM NWL, GROUNDWATER, BEDROCK, ETC.

WATER QUALITY:

1. IRON ENHANCED FILTRATION IS CALCULATED AS 90% TP REMOVAL AND 90% TSS REMOVAL.

DRAWDOWN:

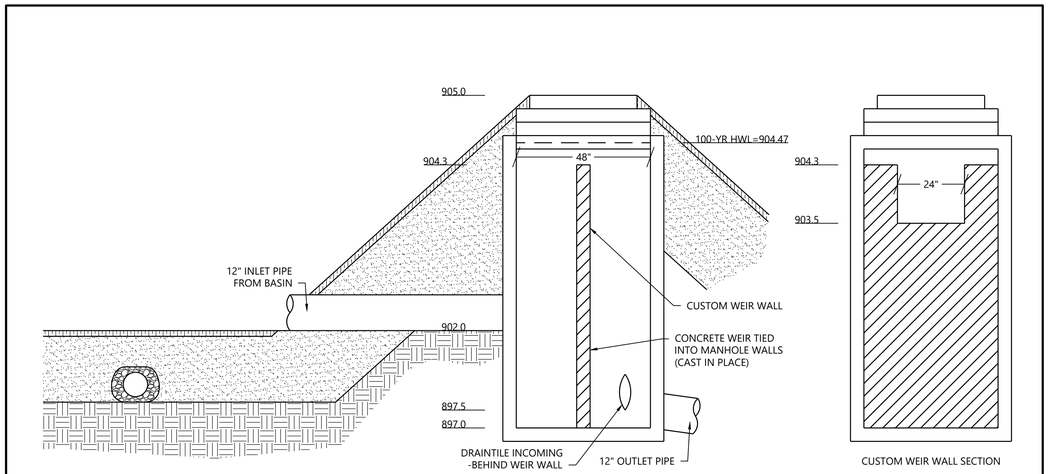
1. 48 HOUR DRAWDOWN OF BMPS IS REQUIRED. TO DETERMINE LENGTH OF TRENCH NEEDED, USE FILTRATION RATE OF 50 CF OF PONDED VOLUME WILL PASS THROUGH ONE LINEAR FOOT OF 3' WIDE TRENCH, OR 17 CF PER SF OF SURFACE AREA. RETROFITS USE MINIMUM OF 150 SF.

IRON FILINGS:

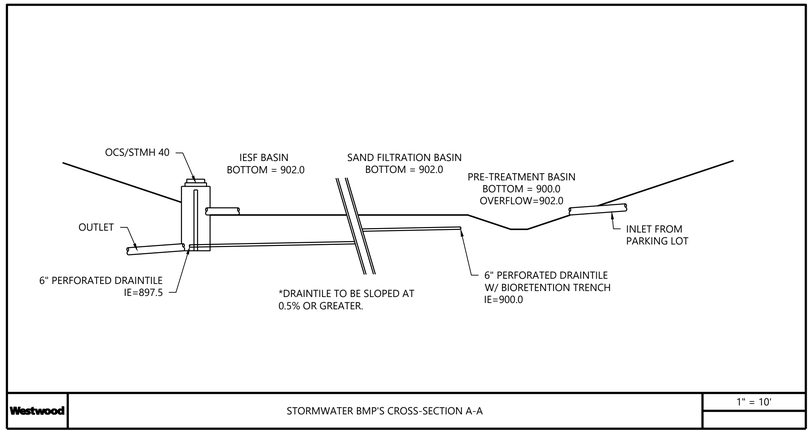
1. AMOUNT OF FILINGS CAN BE DETERMINED BY CALCULATING TOTAL SAND NEEDED TO FILL THE TRENCH, AND MULTIPLYING BY 5%.
2. SAND IRON NEEDS TO BE PRE-MIXED PRIOR TO INSTALLATION. CAN OCCUR OFF SITE.
3. IRON FILINGS MUST BE CLEANED AND WASHED. PROVIDE SUPPLIER INFORMATION TO WMO. NO OIL OR GREASE ALLOWED.

CARVER COUNTY	WENCK ASSOCIATES Responsive partner. Exceptional outcomes.	IRON ENHANCED SAND FILTER	DEC 2016
			DETAIL 2

M:\1097\GENERAL DETAILS\December 2016 Details\2--IRON ENHANCED SAND FILTER.dwg



Westwood	OCS/STMH 40 CROSS-SECTION	N.T.S.



Westwood	STORMWATER BMP'S CROSS-SECTION A-A	1" = 10'

NOT FOR CONSTRUCTION

DESIGNED: DMP
CHECKED: DMP
DRAWN: TDM
HORIZONTAL SCALE:
VERTICAL SCALE:

INITIAL ISSUE: 03/07/22

REVISIONS:		
1	03/25/22	CITY COMMENTS
2	.	.
3	.	.
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PREPARED FOR:
SOUTHWEST CHRISTIAN HIGH SCHOOL
1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

TYLER D. MAXSON, P.E.
DATE: 03/25/22 LICENSE NO. .

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

Westwood
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Fax (952) 937-5822
Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #200
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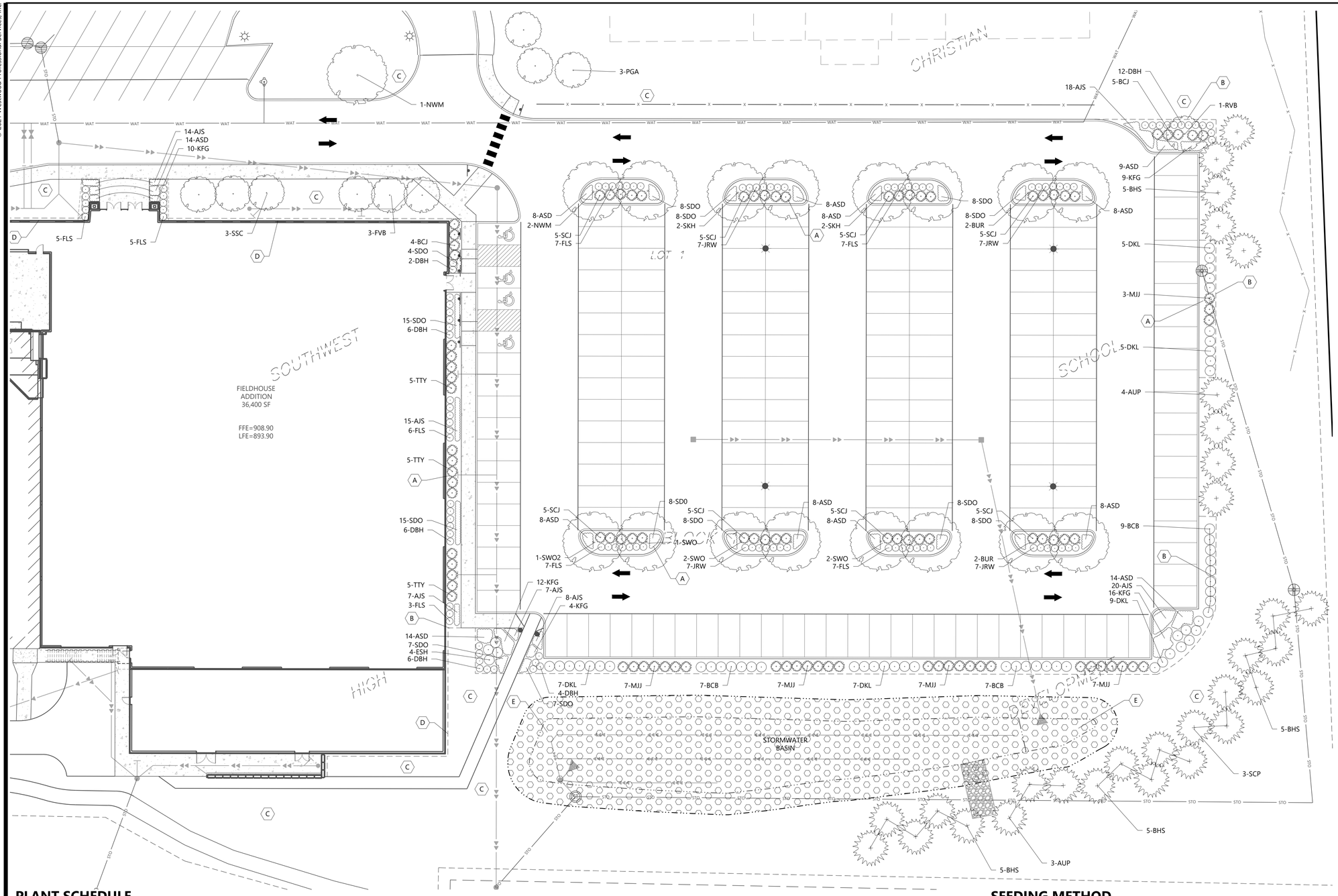
STORMWATER DETAILS

SHEET NUMBER:
C5.1
DATE: 03/25/22

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
PROJECT NUMBER: 0033661.00

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LANDSCAPE REQUIREMENTS

TWO STORY SCHOOL ADDITION CALIPER INCHES REQUIRED:
SCHOOL ADDITION = 46,600 S.F.

OVER STORY TREES REQUIRED = GROSS SF OF ALL FLOORS / 320
TOTAL TWO STORY BUILDING S.F. (46,600±SF)/320 = 146 CAL. IN.

TWO STORY BUILDING CALIPER INCH BREAKDOWN:		TREES REQUIRED:
60% @ 2.5" =	87.6 CAL. IN.	35 TREES
10% @ 3.0" =	14.6 CAL. IN.	5 TREES
10% @ 3.5" =	14.6 CAL. IN.	4 TREES
10% @ 4.0" =	14.6 CAL. IN.	4 TREES
10% @ 4.5" =	14.6 CAL. IN.	3 TREES
100%	188.0 CAL. IN.	51 TREES

SITE CALIPER INCHES REQUIRED:

OVERSTORY TREE CALIPER INCHES REQUIRED: 146.0 CAL. IN.

UNDERSTORY TREE CALIPER INCHES REQUIRED = 25% OVERSTORY REQ.
146.0 * .25 = 13 UNDERSTORY TREES

SHRUBS REQUIRED = BUILDING GROSS AREA OF ALL FLOORS / 300
46,600 / 300 = 155 SHRUBS

CONIFEROUS TREES CAN REPLACE DEC. TREE REQ. WITH HEIGHT / 2.4
ONE 6' TREE / 2.4 = ONE 2.5" CAL TREE

SITE CALIPER INCHES PROVIDED:

OVERSTORY DECIDUOUS TREES:	61.0 CAL. IN.
CONIFEROUS TREES:	75.0 CAL. IN.
ORNAMENTAL TREES:	20.0 CAL. IN.
TOTAL CALIPER INCHES PROVIDED:	156.0 CAL. IN.

LANDSCAPE LEGEND

- OVERSTORY DECIDUOUS TREE
- CONIFEROUS TREE
- ORNAMENTAL TREE
- SHRUBS
- PERENNIALS
- EDGER

LANDSCAPE KEYNOTES (A)

A SHREDDED HARDWOOD MULCH (TYP.)
B EDGER (TYP.)
C SOD (TYP.)
D 1' WIDE MAINTENANCE STRIP (ROCK MULCH, EDGING FABRIC)
E SEED MIX - MNDOT SEED MIX 33-262, DRY SWALE /POND (SEE SEEDING METHOD NOTES)

CITY PARKING LOT GREEN SPACE REQUIREMENT

- PARKING LOT AREA: 71,355 SF
- REQUIRED GREEN SPACE (10% OF PARKING LOT): 7,136 SF
- PROVIDED GREEN SPACE: 7,312 SF

PLANT SCHEDULE

CODE	QTY.	CAL. IN.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
OVERSTORY DECIDUOUS - 17 (61.0 CAL. IN.)					
NWM	3	13.5	NORTHWOOD MAPLE / ACER RUBRUM 'NORTHWOOD'	4.5" BB	AS SHOWN
SKH	4	16	SKYLINE HONEYLOCUST / GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	4.0" BB	AS SHOWN
BUR	4	14	BUR OAK / QUERCUS MACROCARPA	3.5" BB	AS SHOWN
SWO	5	15	SWAMP WHITE OAK / QUERCUS BICOLOR	3.0" BB	AS SHOWN
SWO2	1	2.5	SWAMP WHITE OAK / QUERCUS BICOLOR	2.5" BB	AS SHOWN
MID-STORY DECIDUOUS - 10 (20 CAL. IN.)					
FVB	3	6	FOX VALLEY CLUMP BIRCH / BETULA NIGRA 'LITTLE KING'	6' HT., BB CLUMP	AS SHOWN
RVB	1	2	RIVER BIRCH / BETULA NIGRA	6' HT., BB CLUMP	AS SHOWN
SSC	3	6	SPRING SNOW CRAB / MALUS 'SPRING SNOW'	2.0" BB	AS SHOWN
PGA	3	6	PRAIRIE GOLD ASPEN / POPULUS TREMULOIDES 'NEArb'	2.0" BB	AS SHOWN
OVERSTORY CONIFEROUS - 30 (75.0 CAL. IN.)					
BHS	20	50	BLACK HILLS SPRUCE / PICEA GLAUCA DENSATA	6' HT., BB	AS SHOWN
AUP	7	17.5	AUSTRIAN PINE / PINUS NIGRA	6' HT., BB	AS SHOWN
SCP	3	7.5	SCOTCH PINE / PINUS SYLVESTRIS	6' HT., BB	AS SHOWN

ABBREVIATIONS: B&B = BALLED AND BURLAPPED CAL. = CALIPER HT. = HEIGHT MIN. =MINIMUM O.C. = ON CENTER SP. = SPREAD
QTY.= QUANTITY CONT. = CONTAINER NOTE: QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
DECIDUOUS SHRUBS - 171				
ESH	4	ENDLESS SUMMER HYDRANGEA / HYDRANGEA MACROPHYLLA BAILMER'	24" HT., POT	4'-0" O.C.
JRW	28	JAVA RED WEIGELA / WEIGELA FLORIDA 'JAVA RED'	24" HT., POT	3'-0" O.C.
FLS	47	FIRE LIGHT SPIREA / SPIRAEA 'FIRE LIGHT'	18" HT., POT	2'-0" O.C.
DBH	36	DWARF BUSH HONEYSUCKLE / DIERVILLA LONICERA	18" HT., POT	2'-0" O.C.
BCB	23	BLACK CHOKEBERRY / ARONIA MELANOCARPA ELATA	18" HT., POT	5'-0" O.C.
DKL	33	DWARF KOREAN LILAC / SYRINGA MEYERI 'PALIBIN'	18" HT., POT	5'-0" O.C.
CONIFEROUS SHRUBS - 95				
SCJ	40	SCANDIA JUNIPER / JUNIPERUS SABINA 'SCANDIA'	24" SPRD., POT	4'-0" O.C.
MJJ	31	MINT JULIP JUNIPER / JUNIPERUS CHINENSIS 'MONLEP'	36" SPRD., POT	4'-0" O.C.
BCJ	14	BLUE CHIP JUNIPER / JUNIPERUS HORIZONTALIS 'BLUE CHIP'	36" SPRD., POT	4'-0" O.C.
TYY	10	TAUTON YEW / TAXUS X MEDIA 'TAUNTON'	36" SPRD., POT	4'-0" O.C.
PERENNIALS - 351				
ASD	115	APRICOT SPARKLES DAYLILY / HEMEROCALLIS 'APRICOT SPARKLES'	NO. 1 CONT.	12" O.C.
SDO	96	STELLA DE ORO DAYLILY / HEMEROCALIS ' STELLA DE ORO'	NO. 1 CONT.	12" O.C.
KFG	51	FEATHER REED GRASS / CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	NO. 1 CONT.	16" O.C.
AJS	89	AUTUMN JOY SEDUM / SEDUM X 'AUTUMN JOY'	NO. 1 CONT.	16" O.C.

SEEDING METHOD

Drop Seeding Onto Tilled Sites (per MnDot Standards)
This is the "standard" method for seeding on prepared sites such as those on construction projects.

A) Site Preparation - The site should be prepared by loosening topsoil to a minimum depth of 3 inches.
B) Fertilizer – Use a fertilizer analysis based on a soil test or a general recommendation is a 10-10-10 (NPK) commercial grade analysis at 200 lbs/acre.
C) Seed Installation - Seed should be installed with a drop seeder that will accurately meter the types of seed to be planted, keep all seeds uniformly mixed during the seeding and contain drop seed tubes for seed placement (Brillion-type). The drop seeder should be equipped with a cultipacker assembly to ensure seed-to-soil contact.
D) Seeding Rates - Rates are specified in the mixture tabulation for the specified mix.
E) Packing – If the drop seeder is not equipped with a cultipacker, the site should be cultipacked following the seeding to ensure seed-to-soil contact.
F) Mulch - The site should be mulched and disc-anchored following cultipacking. The standard mulch is Mn/DOT Type 1 at a rate of 2.0 tons/acre.

Irrigation
Seed to be irrigated on its own irrigation zone until established. Once established this zone will be turned off.

1" = 20'
0' 20' 40' 60'

NOT FOR CONSTRUCTION

DESIGNED:
CHECKED:
DRAWN:
HORIZONTAL SCALE: 20'
VERTICAL SCALE:

INITIAL ISSUE: 03/07/22
REVISIONS:
1 03/25/22 CITY COMMENTS
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SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

LANDSCAPE PLAN

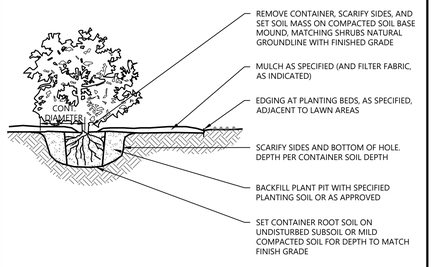
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DATE: 03/25/22

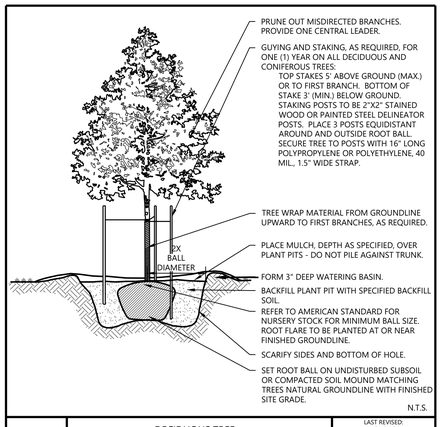
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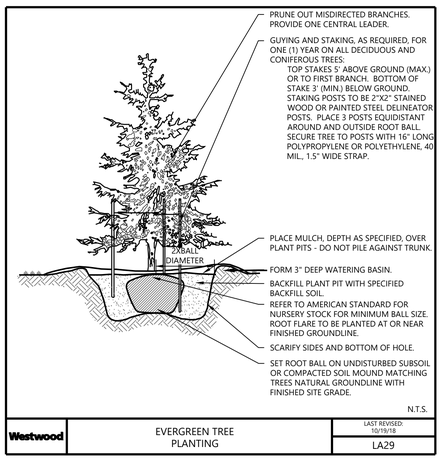
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Westwood	SHRUB & PERENNIAL CONTAINER PLANTING	LAST REVISED: 10/23/18
		LA27-C



Westwood	DECIDUOUS TREE PLANTING	LAST REVISED: 10/19/18
		LA28



Westwood	EVERGREEN TREE PLANTING	LAST REVISED: 10/19/18
		LA29

PLANTING NOTES

1. CONTRACTOR SHALL CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
6. ALL PLANTS TO BE SPECIMEN GRADE, WISCONSIN-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
   ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
   ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
   ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
8. PLANTS TO BE INSTALLED AS PER WILA & ANSI STANDARD PLANTING PRACTICES.
9. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
11. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
12. PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
13. WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
14. STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
15. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
16. BACKFILL SOIL AND TOPSOIL TO ADHERE TO WIS/DOT STANDARD SPECIFICATION (SELECT TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.
17. PROVIDE A MINIMUM OF 4" TOPSOIL IN LAWN AREAS AND 12" TOPSOIL IN LANDSCAPE BEDS. ADD SOIL AMENDMENTS FOR OPTIMUM PLANT GROWTH. ALL PARKING ISLAND GRADES SHALL HAVE A SIGNIFICANT CROWN.
18. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE AND SHRUB PLANTING BEDS SHALL HAVE 4" DEPTH OF SHREDDED HARDWOOD MULCH. SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH SHREDDED HARDWOOD MULCH. SINGLE TREE AND SHRUB PLANTINGS SHALL HAVE A 4" DEPTH SHREDDED HARDWOOD MULCH RING AROUND EACH BASE. DECIDUOUS PLANT MATERIAL SHALL HAVE A MINIMUM 3' DIAMETER RING, EVERGREEN PLANT MATERIAL SHALL HAVE A RING TO THE DRIP LINE. MULCH TO BE FREE OF DELETERIOUS MATERIAL AND MULCH TO BE ON COMMERCIAL GRADE FILTER FABRIC, BY TYPAR, OR APPROVED EQUAL WITH NO EXPOSURE. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
19. EXISTING TREES AND SHRUBS, AROUND THE SITE, SHALL BE PRUNED TO REMOVE DEAD OR UNDESIRABLE LIMBS AND TO SHAPE PLANT FOR DESIRABLE APPEARANCE AND COMPLETED BY A QUALIFIED INDIVIDUAL. CONTRACTOR TO CLEAR AND GRUB EXISTING VEGETATION AND DISPOSE OF ALL REMOVALS OFF-SITE PER PROJECT IMPROVEMENTS.
20. EDGING TO BE COMMERCIAL GRADE VALLEY-VIEW BLACK DIAMOND (OR EQUAL) POLY EDGING OR SPADED EDGE, AS INDICATED. POLY EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH BASE OF TOP BEAD AT GRADE, FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
21. ALL DISTURBED AREAS TO BE SODDED, UNLESS OTHERWISE NOTED. PARKING LOT ISLANDS TO BE SODDED WITH SHREDDED HARDWOOD MULCH AROUND ALL TREES AND SHRUBS. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN/DOT SPECIFICATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.
22. PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. SEE PLAN FOR LIMITS OF IRRIGATION. LANDSCAPE WITHIN LANDSCAPE/IRRIGATION DASHED LINE TO BE IRRIGATED FROM BUILDING. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO WATER PLANT MATERIAL DURING INSTALLATION AND DURING ESTABLISHMENT PERIOD. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR. VOLUME OF WATER TO BE PER PLANT REQUIREMENT FOR ESTABLISHMENT AND NORMAL GROWTH. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR.
23. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
24. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
25. VERIFY ALL LANDSCAPE IMPROVEMENTS WITH REMOVALS AND SITE WORK.
26. ALL DISTURBED LANDSCAPED AREAS, NOT INDICATED AS PLANTING BEDS, ARE TO BE SODDED, UNLESS NOTED OTHERWISE. SOD IS TO BE PRIMARILY KENTUCKY BLUEGRASS, FREE OF LAWN GRASS WEEDS. MATCH INTO EXISTING, AS APPLICABLE. ANCHOR SOD ON SLOPED OR POTENTIAL EROSION AREAS, OR AS REQUIRED.
27. CONTRACTOR TO VERIFY PLANTS REQUIRED AS REFLECTED ON PLAN, NOTIFY LANDSCAPE ARCHITECT IF PLAN AND SCHEDULE DO NOT MATCH. ALL PLANT MATERIAL TO ADHERE TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST VERSION. ADD FERTILIZER, HERBICIDE, AND PESTICIDE AS NECESSARY FOR OPTIMUM GROWTH.

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DESIGNED: ---
CHECKED: ---
DRAWN: ---
HORIZONTAL SCALE: ###
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DATE 03/25/22 LICENSE NO. ---

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE CHASKA, MN

Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #200
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

LANDSCAPE DETAILS

SHEET NUMBER: L1.1
DATE: 03/25/22
PROJECT NUMBER: 0033661.00

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE

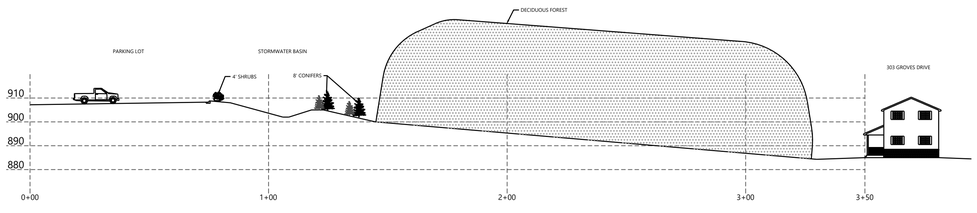
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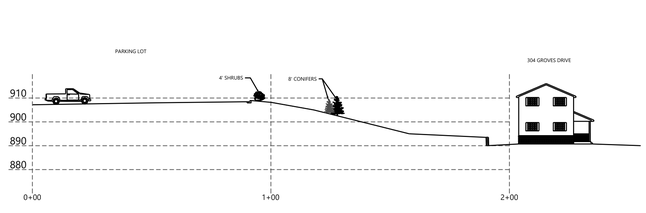
Call 48 Hours before digging:

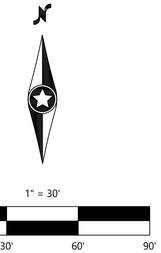
811 or call811.com
Common Ground Alliance

SECTION A-A



SECTION B-B





NOT FOR CONSTRUCTION

DESIGNED: .
CHECKED: .
DRAWN: .
HORIZONTAL SCALE: 30'
VERTICAL SCALE: .

INITIAL ISSUE: 03/07/22

REVISIONS:		
1	03/25/22	CITY COMMENTS
2	.	.
3	.	.
4	.	.
5	.	.

PREPARED FOR:
SOUTHWEST CHRISTIAN HIGH SCHOOL
1981 BAVARIA ROAD
CHASKA, MINNESOTA 55318

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

TYLER D. MAXSON, P.E.

DATE 03/25/22 LICENSE NO. .

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE
CHASKA, MN

Westwood
Phone (952) 937-5150
Fax (952) 937-5822
Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #300
Minnetonka, MN 55343
westwoodps.com
Westwood Professional Services, Inc.

HEADLIGHT SECTION PLAN

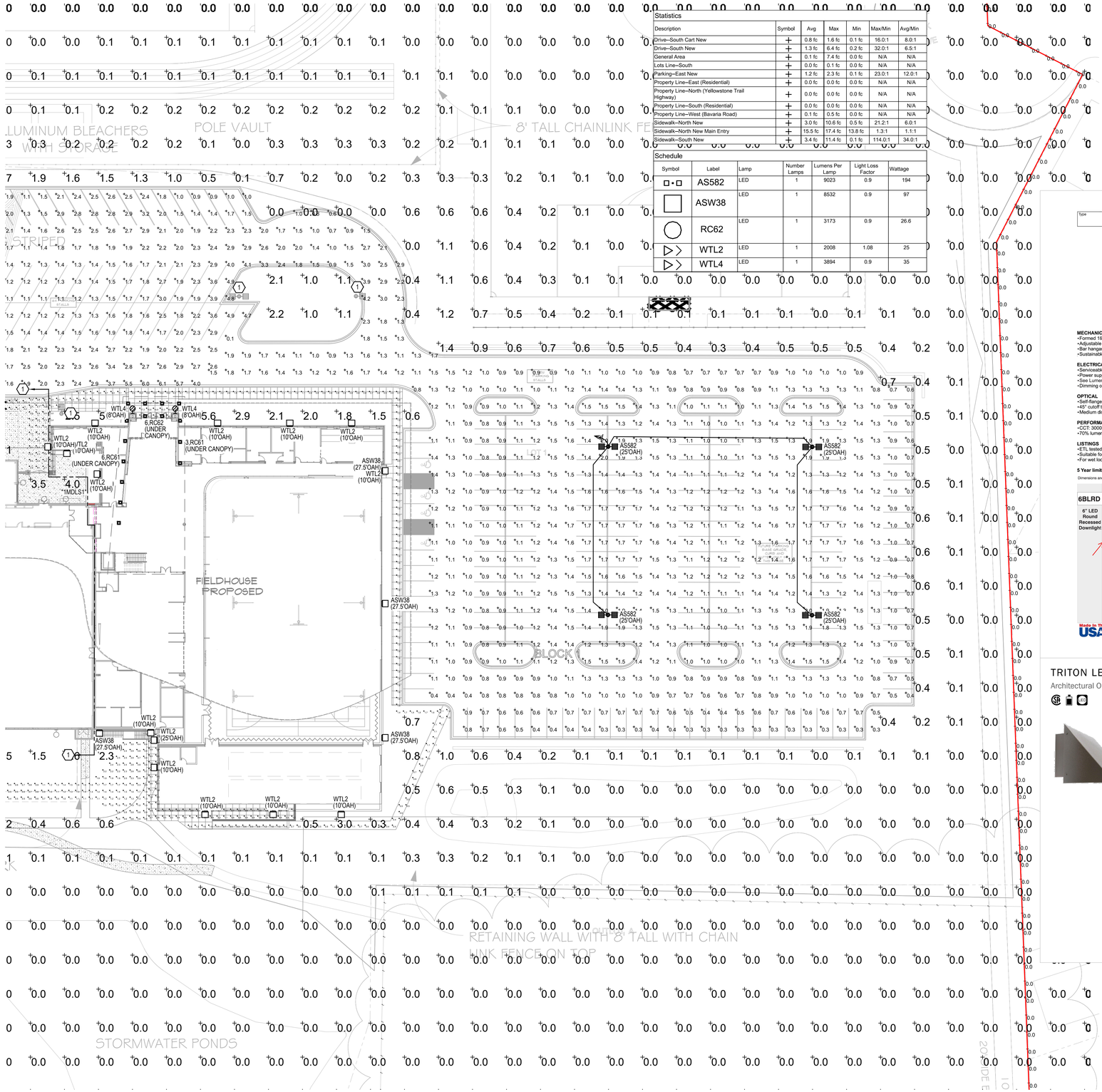
SHEET NUMBER:

L1.2

DATE: 03/25/22

PROJECT NUMBER: 0033661.00

SOUTHWEST CHRISTIAN HIGH SCHOOL FIELDHOUSE



KEYED NOTES

1. EXISTING LIGHTING TO REMAIN.

GENERAL NOTES

1. REFER TO E100 FOR SITE LIGHTING FINAL LAYOUTS AND CIRCUITING & E511 FOR FIXTURE SELECTIONS.

1 PHOTOMETRIC SITE PLAN

3/24/22

NEW FIELDHOUSE

SCALE: 1" = 30'-0"

RC62

Type | Job, Nat

Peachtree LIGHTING

6BLRD

6" LED
Recessed Downlight

1200 - 12000 Lumens



LED

PRODUCT SPECIFICATION DATA

MECHANICAL
- Formed 16 ga. galvanized steel ceiling pan with built-in Plaster ring
- Adjustable to 1 ½" ceiling thickness
- Bar hangars accommodate 27" span
- Sustainable - electrical components accessible though aperture

ELECTRICAL
- Serviceable and upgradable light engine.
- Power supply is overload and short circuit protected
- See Lumens Column for standard dimming
- Dimming options available: Dim to 1%; Dim to Black; and Triac

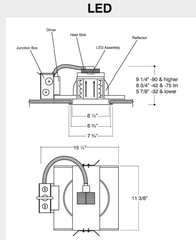
OPTICAL
- Self-flanged lower reflector
- 45° cutoff to source
- Medium distribution standard.

PERFORMANCE
- CCT: 3000K, 3500K, 4000K @ 80+ CRI
- 70% lumen maintenance at 50,000 hours based on IESNA LM-80-2008.

LISTINGS
- ETL tested & listed to ANSI/UL1598 and CAN/CSA C22.2 No. 250.0-08
- Suitable for damp location
- For wet location select -WL option (consult factory for -120 -WL)

5 Year limited warranty.

Dimensions and specifications in this literature are subject to change.



	DELIVERED LUMENS @ 35K	DIMMING	COLOR TEMPERATURE	CRI/REFLECTOR	REFLECTOR OPTIONS	OPTIONS	VOLTAGE
6BLRD							
6" LED Round Recessed Downlight	-120 12418 lumens -90 9370 lumens -75 7447 lumens -60 5689 lumens -42 4309 lumens -32 3335 lumens -22 2384 lumens -17 1747 lumens -12 1258 lumens	-DIMLV10 0-10V Dim to 10% -DIMLV1 0-10V Dim to 1%* -DIMT1 Triac Dim to 1%* -DIMB Dim to Black (0.1%)** -ND No Driver (Order Remote Driver Panel (RDP) separately.)*** *12 DIMLV10 std -17 to -90 DIMLV std -120 DIMLV10 std ONLY* * 10 Option ONLY ** 12 Option ONLY *** -17 to -60 Option ONLY*	-30K 3000 K -35K 3500 K -40K 4000 K	-80 CRI -90 CRI -WH White* -BK Black* * Powder Coat Finish	-RC Reg. Clear Temp. Glass Lens -RCA Reg. Clear Acrylic Lens -RPG Reg. Prismatic Temp. Glass Lens -RPA Reg. Prismatic Acrylic Lens -TRW Trim Ring White -TRB Trim Ring Black *Regressed Lens Holder is White Unless Specified Otherwise* *No Lens Available on the -120*	-F Fussing -WL Wet Location* (Items required) Emergency**, Emergency***, Internal Test Switch Generator Transfer Device -EWL1 -EWL4 -ETR -GTD -RETR06 Retrofit Pan * -90 -80 -60 -42 -32 -22 -17 -12 ONLY ** -120 ONLY *** -120 non EWL4 -EM Option Use Remote Test Switch	-120 -277 Voltage MUST be Specified

SLOPED CEILING OPTIONS

-SCA614	Sloped Ceiling Adapter 10° to 14°
-SCA619	Sloped Ceiling Adapter 15° to 19°
-SCA622	Sloped Ceiling Adapter 20° to 22°
-SCA626	Sloped Ceiling Adapter 24° to 26°

White Unless Specified Otherwise. Cannot be used with decorative options.

DECORATIVE OPTIONS
ICE Suspended Clear Side Glass

-ICE	Soda Lime Temp. Glass
-ICE-S	SOLID Soda Lime Temp. Glass
-ICE-C	Colorless Temp. Glass
-ICE-S-C	SOLID Colorless Temp. Glass
-ICE-O	Open Soda Lime Temp. Glass
-ICE-O-C	SOLID Open Colorless Temp. Glass

Made in The USA

6BLRD

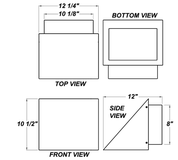
TRITON LED
Architectural Outdoor

WTL4

PROJECT:
TYPE:
PO#: QTY:
COMMENTS:

FEATURES
- Aluminum Housing w/ Textured Bronze Polyester Powder Coat Finish
- Aluminum Reflector
- Clear Tempered Glass Diffuser
- CSA Listed Wet Location For Wall Mounting -Down Light only
- Dark Sky Compliant
- Fully Gasketed
- Integral Emergency Battery Available
- LED Light Fixture
- Mounts Direct to Flat Surface w/ Two #8 Wall Anchors (Not Included)
- Surge Protector

LINE DRAWING — LINE DRAWING NOT TO SCALE



AS582, ASW38

AS1 LED
LED Area Luminaire

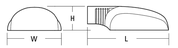
Buy American



AERIS

Specifications

EPA:	0.7 ft² (0.07 m²)
Length:	22-1/4" (564.4 mm)
Width:	13" (333.0 mm)
Height:	6-3/8" (115.9 mm)
Weight (max):	33 lbs (14.8 kg)



Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM®2 or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background.

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: AS1 LED 42C 700 40K SR5 MVOLT SPA DDBXD

AS1 LED

Series	LEDs	Drive Current	Color Temperature	Distribution	Voltage	Mounting
AS1 LED	42C 42 LEDs (one engine)	350 350mA 530 530mA 700 700mA	30K 3000 K 40K 4000 K 50K 5000 K	SR2 Type II Short SR3 Type II SR4 Type IV SR5 Type V	MVOLT[1] 240[1] 480 120[1] 277[1] 208[1] 347	SPA Square pole mounting RPA Round pole mounting WBA Wall bracket

Control Options	Other Options	Finish (required)
Shipped installed PER NEMA twist-lock receptacle only (no controls) PER5 Five-wire receptacle only (no controls)[2] PER7 Seven-wire receptacle only (no controls)[2] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[3] BL30 Bi-level switched dimming, 30%[4] BL50 Bi-level switched dimming, 50%[4]	**Shipped separately**[5] PIMOTD03 Part no.gtr, dim till down[1] PIMOTD03 Part no.gtr, dim 0.1m[1] PIMOTD03 Part no.gtr, dim 0.6m[1] PIMOTD03 Part no.gtr, dim 7.6m[1] VG Vandal guard SF Single fuse (120, 277, 347V)[1] DF Double fuse (208, 240, 480V)[1] DFL Diffusing lens	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

LITHONIA LIGHTING
COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
© 2011-2021 Acuity Brands Lighting, Inc. All rights reserved.

AS1-LED
Rev. 03/12/21

TRITON MINI LED
Architectural Outdoor

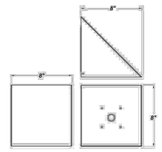
WTL1

PROJECT:
TYPE:
PO#: QTY:
COMMENTS:



FEATURES
- Aluminum Housing w/ Textured Bronze Polyester Powder Coat Finish,
- Aluminum Mount Pan & Reflector w/ Hi-Reflectance White Powder Coat Finish
- CSA Approved Wet Location For Wall Mounting -Down Light only
- Dark Sky Compliant
- LED Light Fixture
- Mounting Hardware Included
- Mounts Directly to Junction Box (Mounting Hardware Included)
- Semi-Opaque Polycarbonate Diffuser
- Surge Protector

LINE DRAWING — LINE DRAWING NOT TO SCALE



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: Shane D. Swenson

SIGNATURE:

DATE: 3/24/2022 LICENSE #: 54604 (Electrical)

SW CHRISTIAN HIGH SCHOOL

BGW ARCHITECTS

PLOT SAVE 3/24/2022 T:\JOBS\2021054 SWCHS FIELD HOUSE ADDITION (AS1188)\01 DRAWINGS\00 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E101 PHOTOMETRIC SITE PLAN.DWG
PLOT SAVED: 24 Mar 22

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
04/13/2022

Subject: **Southwest Christian High School – Preliminary Site & Building Plan**

Applicant: Southwest Christian High School

Location: East side of Bavaria Road, south of Highway 212

Case No.: PC No. 2022-19

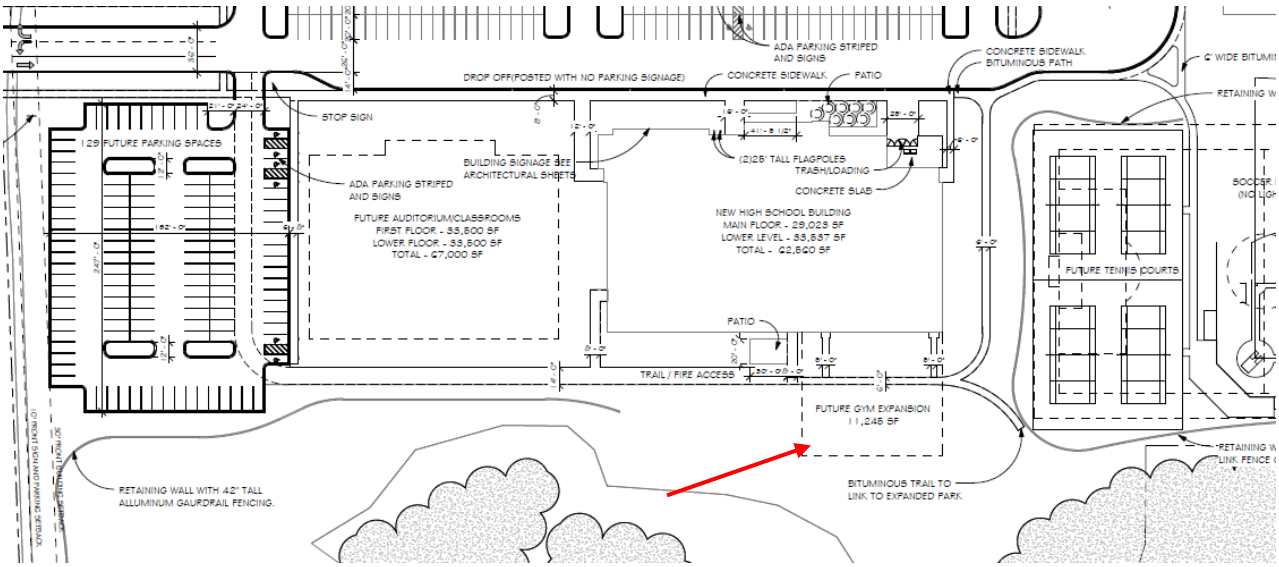
Synopsis: The applicant is requesting approval of a preliminary site & building plan to construct a 48,000 square foot fieldhouse addition at Southwest Christian High School.

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval

BACKGROUND

In May of 2011, the Preliminary Plat, Preliminary Site/Building Plans and a Conditional Use Permit were approved for Southwest Christian High School to construct a new school on the east side of Bavaria Road, south of Highway 212. The Final Site/Building Plans and Final Plat were approved in June of 2011. It was noted during those approvals that a gym addition (~11,000 square feet) was anticipated on the southern portion of the school building. See below.



In April of 2017, the Final Site & Building Plan was approved for a building addition totaling approximately 62,000 square feet that included additional classrooms, offices, and a new 643-

seat auditorium on the west side of the existing school. The plan also incorporated an 87-stall parking lot. The addition allowed the school to provide the needed space for 500 students plus expand its programming in the areas of music, theater, engineering, robotics and industrial arts.

In February of 2022, the Concept Plan for the fieldhouse addition was approved.

Changes Since Concept Plan
The following are changes on the plan since Concept Plan approval in February 2022:

Landscaping & Screening; a concern was raised from the adjacent neighbor at 303 Groves Drive regarding the landscaping and screening to occur on the southeast portion of the site near the proposed parking lot. The applicant has since bolstered this area with their landscape plan to include a staggered row of coniferous trees. A section drawing was also done to show the relation of the site, landscaping and concerned neighbor's home. The applicant has also reached out directly to this neighbor to see that the revised landscape plan was addressing the concerns that they raised. It was shared that the reaction from the neighbor was favorable of the new landscape plan.

Project Goals
The identified goals for this new addition include the following:

- Create Excellence and Community with the expansion project
- Provide improvements to the sports facilities and training offered to students
- Building community amongst the teams, student body, parent community, and the community at large

Existing Conditions
The site currently holds the existing high school (124,450 sq ft) with almost 500 students, and several tennis courts and recreational fields. There are three parking lots totaling 353 stalls. Just east of the existing school is a flat grassy area used for a soccer field, where the anticipated building addition is proposed to go.

CURRENT REQUEST
Southwest Christian High School is requesting approval of a Preliminary Site & Building Plan to build an approximately 48,000 square foot fieldhouse addition on the east side of the building. A new parking lot of 185 stalls is also proposed as a part of this project on the east side. The proposed project will not add any additional classroom space and will not increase the 500 student capacity of the school.

Adjacent properties
The site is bounded on the north by Highway 212, to the west by Bavaria Road and single family residential, the south by single family residential, and the east by single family residential.

Use
The subject property is zoned R1-A, which is a low-density single family residential zone district designation. A conditional use in the R1-A zone district is "schools, churches and similar public or semi-public uses on sites greater than 10 acres". A conditional use permit (CUP) was obtained in May of 2011 to allow for the school use. Therefore, a Conditional Use Permit was required for a

school use on this 28-acre property, which was approved at the May 11 Planning Commission meeting and May 16 City Council meeting.

One provision of this CUP was the school shall not allow the enrollment to exceed 600 students. The current school capacity holds 500 students, which is in compliance with the CUP provision.

Building Materials & Design

The Athletic Fieldhouse design will be consistent with the approved materials of the first two phases of construction. These materials consist of precast concrete walls with both smooth and raised aggregate finishes, stucco finishes on framed walls, storefront glazing/entry systems, red brick accents and exposed structural steel trim elements. The building expansion occurs to the back of the site, with the first two phases of construction anchoring the massing as seen from the primary sight line from Bavaria Road. The massing is consistent with the previously approved buildings. The new fieldhouse entrance is situated at the intersection adjacent to the existing gymnasium and has an elevated single slope roof with tall curtainwall and clerestory glazing. This fieldhouse entrance will provide the primary entrance for athletic events only. The existing entrances developed in the first two phases of construction will continue to handle the day-to-day building entrances. The overall building height matches the height of the existing gymnasium building (28'-0" on North side and 43'-0" on the South side due to site grade differential), which is less than the approved height of the Performing Arts building.

Staff Recommendation/Analysis

The original approvals of the school, including the anticipated building addition, were done before the exterior building materials were adopted. And during those original approvals, the overall design of the building went through extensive review as well. The material composition found on the building today was the result of that review. In that regard, staff is comfortable with the proposed material selection/application as long as the building is providing for an articulated and balanced design, which it appears it is doing.

It should be noted that the architectural elevations show the incorporation of additional rooftop mechanical equipment. This equipment is required to be fully screened from view. The applicant will have to work with staff to ensure the equipment is fully screened.

Setbacks

Buildings and parking shall meet the following setbacks:

BUILDING SETBACKS	
Direction	**Setback**
Bavaria Road	100 feet from centerline
Residential Property Lines	40 feet
Interior Property Lines	15 feet

PARKING SETBACKS	
Direction	**Setback**
Interior Property Lines	10 feet

Parking/Access/Circulation
185 parking spaces are proposed as a part of this building addition. The following chart summarizes the overall parking demand on the site, based on the approximated sizes of the existing and proposed uses.

Uses	Approx. Size	Code Req.	Est. Parking Req.
High School	32 Classrooms; 500 students	1ps/classroom 1ps/6 students	115 parking spaces
Auditorium	643 seats	1ps/3.5 seats	184 parking spaces
Existing Gym	300 seats	1ps/3.5 seats	86 parking spaces
Fieldhouse	300 seats	1ps/3.5 seats	86 parking spaces
		REQUIRED	**471 parking spaces**
		PROVIDED	**538 parking spaces**

According to this table the applicant is meeting the required amount of parking spaces needed for the uses. The total number of parking spaces provided are totaled from the existing (353) and proposed (185) parking counts on site. Furthermore, the applicant has noted the following in relation to their parking:

"The athletic expansion project is primarily being built to meet the needs of our existing programs and athletic events, and it includes additional parking spaces to help us manage parking for our highest-attended events. In fact, the expansion provides parking relief. Not only will we continue to be strategic in how we schedule events on campus, including not stacking events beyond our parking capacity, we will create extra parking with this additional expansion. We are quickly nearing our maximum enrollment which was already approved by the City of Chaska, and this expansion will meet the athletic needs of our current community. It will not drive enrollment beyond those agreed-to levels."

Staff is comfortable with the amount of parking proposed based on the site meeting parking requirements and the applicant's analysis of existing uses. It will be important when the school looks to add their future athletic field on the north side of the site that parking is adequately vetted out. A site and building plan process will be required to formally review this addition.

Access into the site will be gained from the existing access on Bavaria Road. No new accesses are proposed. The applicant will have to work with City staff on the operations of the existing access and timing of necessary improvements along Bavaria Road. The City Engineer has had a chance to review and comment in his memo.

Landscaping
The plan is showing landscaping to be added to the site. A mix of new trees and shrubs will be added around the site.

Landscaping will have to meet the City's ordinance in terms of quantity and size. The table below indicates the landscaping requirements for this site and how the applicant meets or does not meet them:

LANDSCAPING REQUIREMENTS & PROPOSED		
	Required	**Proposed**
Overstory Trees	146 caliper inches (51 trees)	156 caliper inches (57 trees)
Understory Trees	13	13
Shrubs	155	266

According to the table above the applicant is meeting the landscape requirements in terms of quantities. A majority of the plantings will be placed on the eastern and southern edges of the proposed parking lot, which will help with screening from the residential. The applicant has also bolstered the southeast portion of the site with staggered coniferous trees to help address the concerns of the neighbor at 303 Groves Drive.

The applicant is also incorporating planting islands in the proposed parking lot, which meet City requirements.

Lighting
Lighting will have to meet the City's lighting requirements. Pole lights will be no taller than 25 feet in height. There are some wall packs proposed on the new addition. These wall packs cannot be taller than 18 feet from grade.

Utilities & Stormwater
Water and sewer are available to serve this site. The applicant will have to meet all City and County stormwater requirements.

PLANNING COMMISSION ACTION REQUESTED:
Motion to recommend approval of the Preliminary Site & Building Plan for the fieldhouse building addition at Southwest Christian High School (PC#2022-19), subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Project Narrative (pgs 1-4), submitted by BGW Architects, dated January 26, 2022**
    b. **Main Floor Plan, submitted by BGW, dated March 3, 2022**
    c. **Lower Floor Plan, submitted by BGW, dated March 3, 2022**
    d. **Exterior Elevations, submitted by BGW, dated March 3, 2022**
    e. **Cover, submitted by Westwood, dated March 25, 2022**
    f. **Existing Conditions Plan, submitted by Westwood, dated March 25, 2022**
    g. **Civil Site Plan, submitted by Westwood, dated March 25, 2022**
    h. **Overlay Plan, submitted by Westwood, dated March 25, 2022**
    i. **Grading Plan, submitted by Westwood, dated March 25, 2022**
    j. **Erosion Control Plan, submitted by Westwood, dated March 25, 2022**
    k. **Utility Plan, submitted by Westwood, dated March 25, 2022**
    l. **Stormwater Details, submitted by Westwood, dated March 25, 2022**
    m. **Landscape Plan, submitted by Westwood, dated March 25, 2022**

n. **Landscape Details, submitted by Westwood, dated March 25, 2022**
o. **Headlight Section Plan, submitted by Westwood, dated March 25, 2022**
p. **Photometric Site Plan, submitted by BGW Architects, dated March 24, 2022**

2. **Adherence to City Engineer Memo dated February 9, 2022.**
3. **Provision that Bavaria Road improvements are installed and in coordination with the City Engineering Department.**
4. **Provision of proposed signage to meet Section 15.32 of the zoning ordinance.**
5. **Provision of mechanical equipment to be fully screened from view.**
6. **Provision of proposed light poles to not exceed 25 feet in height.**
7. **Provision of proposed wall packs to not exceed 18 feet in height.**
8. **Provision of lighting to meet Section 15.28.250 of the zoning ordinance.**
9. **The school shall not allow the enrollment to exceed 600 students.**
10. **No parking associated with Southwest Christian High School or associated events may occur on White Oak Drive, Groves Drive or any other adjacent public Right-of-Way.**
11. **Provision of landscaping to meet required quantities per Section 15.28.070 of the zoning ordinance.**
12. **Provision of irrigation for the landscaped and sodded areas of the site.**
13. **Compliance with applicable zoning requirements, in particular Section 15.28 (Special Regulations).**
14. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
15. **Provision of a Site and Building Plan review to be completed for the future athletic field on the north side of the site.**

City of Chaska
Memorandum

To: **Planning Commission**
From: **Matt Clark, City Engineer**
Date: **February 9th 2022**
Subject: **Southwest Christian High School – Concept Plan**

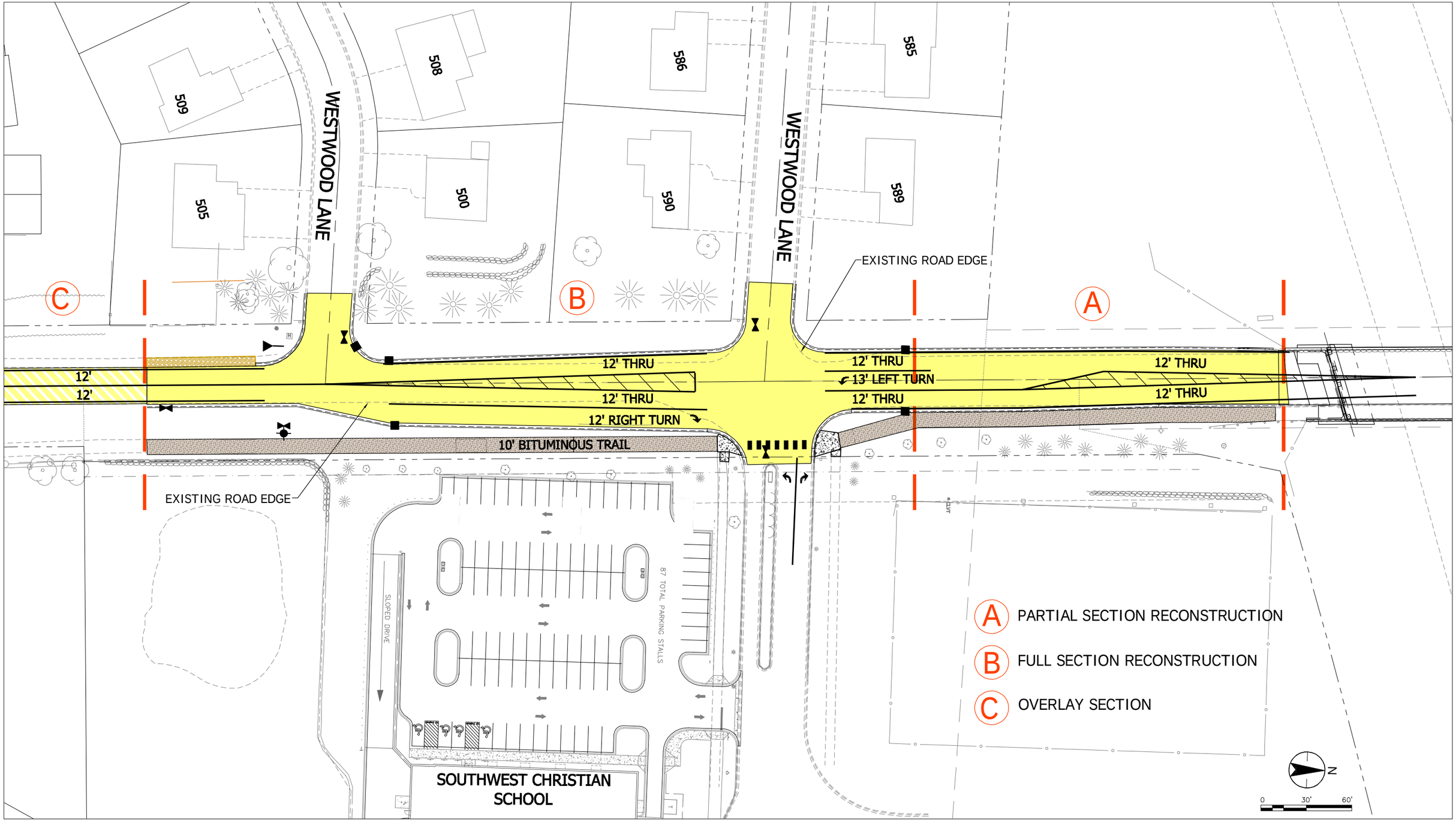
Back in 2011, Site/Building Plans and a Conditional Use Permit were approved for Southwest Christian High School to construct a new school on the east side of Bavaria Road, south of Highway 212. In 2017 the SWCHS building expansion occurred which planned accommodate an anticipated increase in enrollment. It was understood that if enrollment increases, it would cause an increase in traffic entering and exiting the school's single-site access on Bavaria Road.

No improvements were required on Bavaria Road to accommodate turn movements as the SWCHS campus was originally constructed. However, a condition of that initial site plan included a provision that SWCHS would enter into an agreement be partially responsible for installation of turn lanes on Bavaria Road as traffic volumes indicated the need.

The delay of improvements has occurred due to the well-known pandemic which has impacted schools over the last several years. With enrollment nearing capacity, combined with the final buildout being planned, the improvements are now in order. City staff plans to work closely with SouthWest Christian to develop a schedule for timing for construction the necessary turn lane improvements.

Separate from the road improvements, the stormwater management plan that was prepared for the full campus expansion will need to be updated to include the most current campus plan to ensure storm water management for the site are being properly accommodated.

ONE CITY HALL PLAZA/CHASKA, MN 55318-1962/PH: (952) 448-2851/ FX: (952) 448-9300



TURN LANE LAYOUT AT SW CHRISTIAN SCHOOL ENTRANCE

CITY OF CHASKA

BAVARIA ROAD TURN LANES AT SW CHRISTIAN SCHOOL

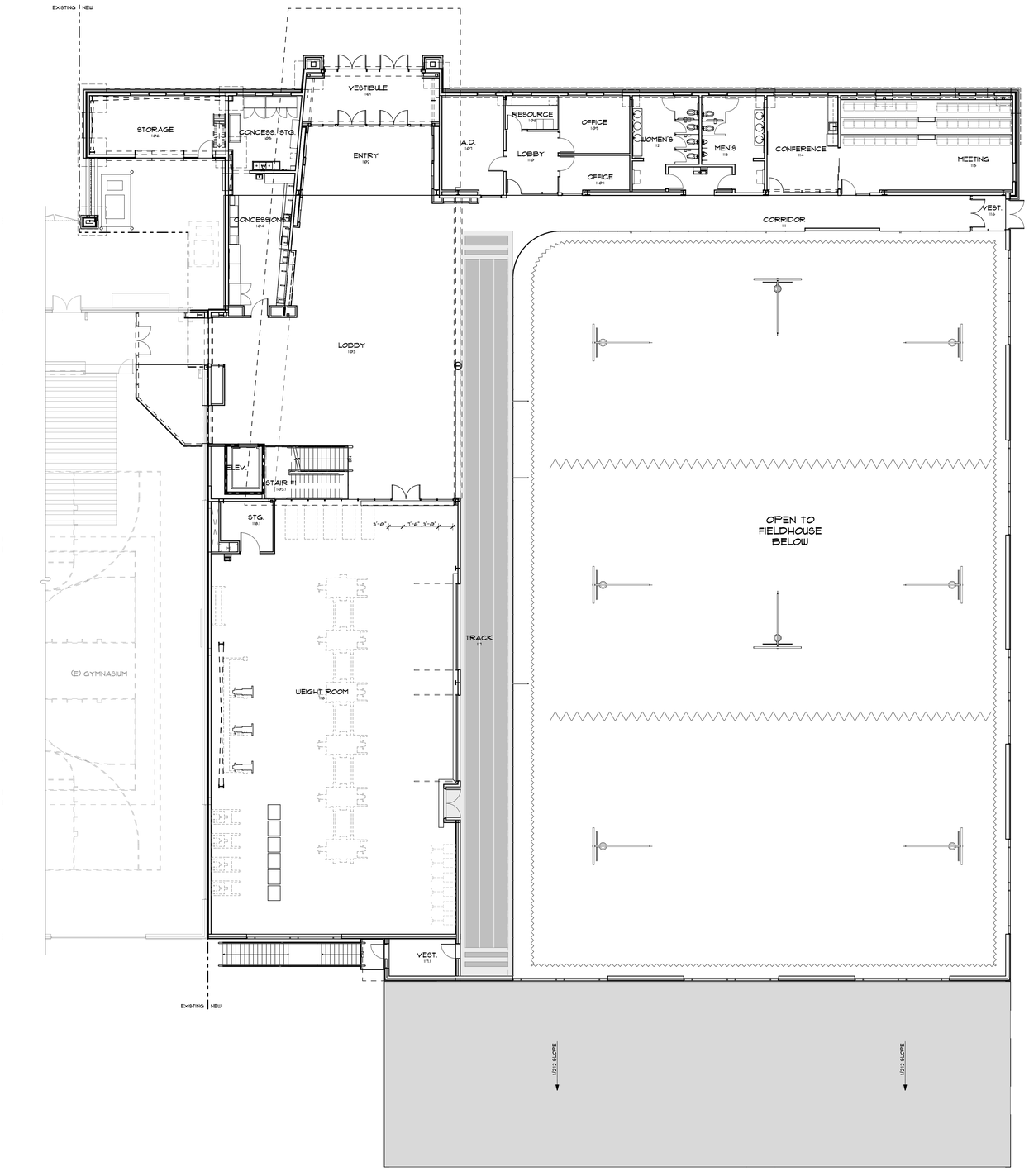
FIGURE 4

Stantec

2335 Highway 36 W
St. Paul, MN 55113
www.stantec.com

DATE: DECEMBER, 2018 PROJ. NO.: 193804165

Date: 12/17/2018 - 10:37am
Drawing name: V:\1938\active\193804165\CAD Dwg\FeasibilityReport\193804165-Figure5Street.dwg
Xref: 193804165-XSPL, 193804165-XSS, 00109723P01, 193804165-XSNO, 193804165-XSVI



MAIN FLOOR AREA: 15,222 S.F.
LOWER FLOOR AREA: 32,327 S.F.
TOTAL BUILDING AREA: 47,549 S.F.

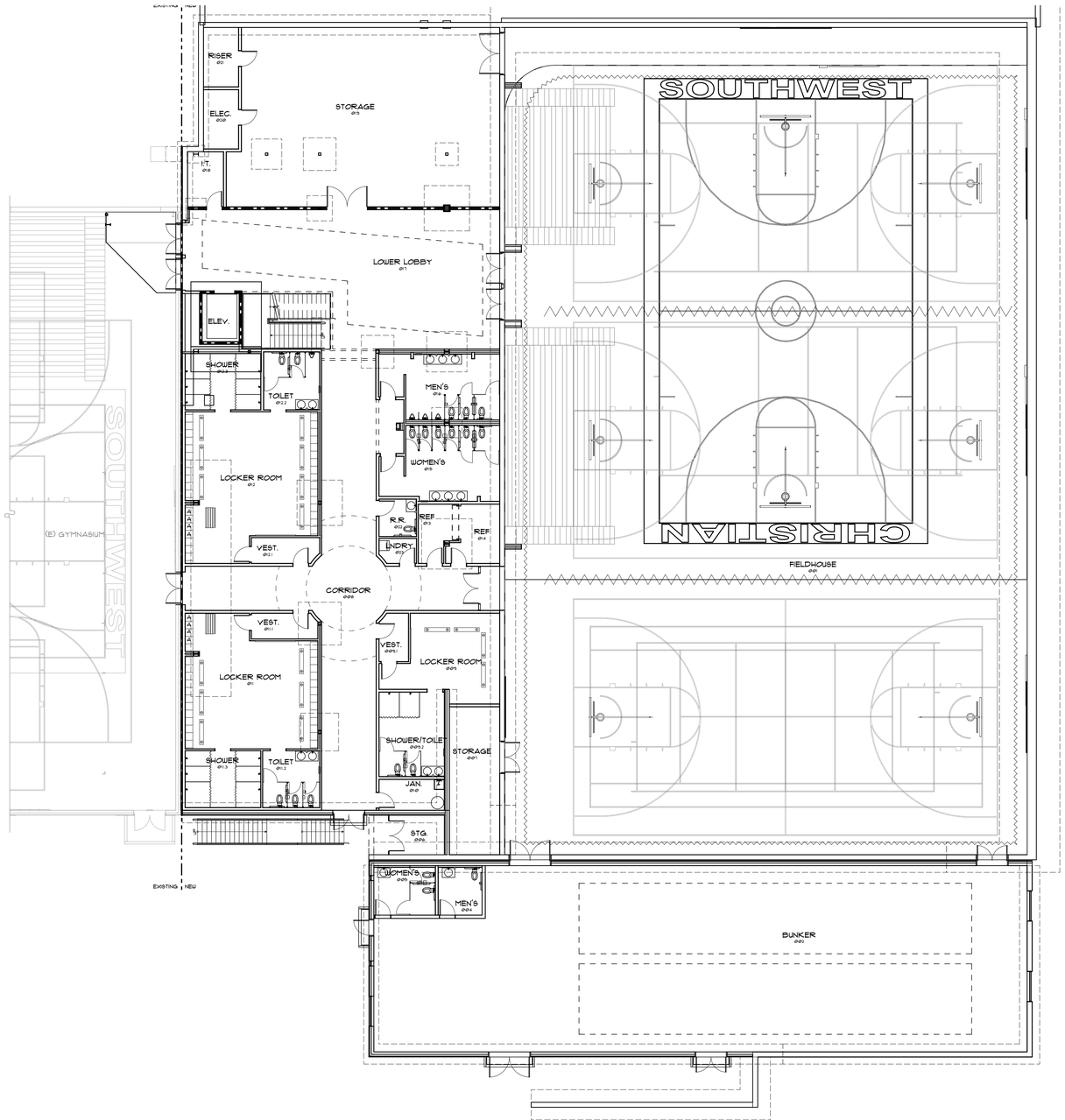
PLAN NORTH

2 MAIN FLOOR PLAN

NEW FIELDHOUSE

3/3/22

BGW ARCHITECTS



MAIN FLOOR AREA: 15,222 S.F.
LOWER FLOOR AREA: 32,327 S.F.
TOTAL BUILDING AREA: 47,549 S.F.

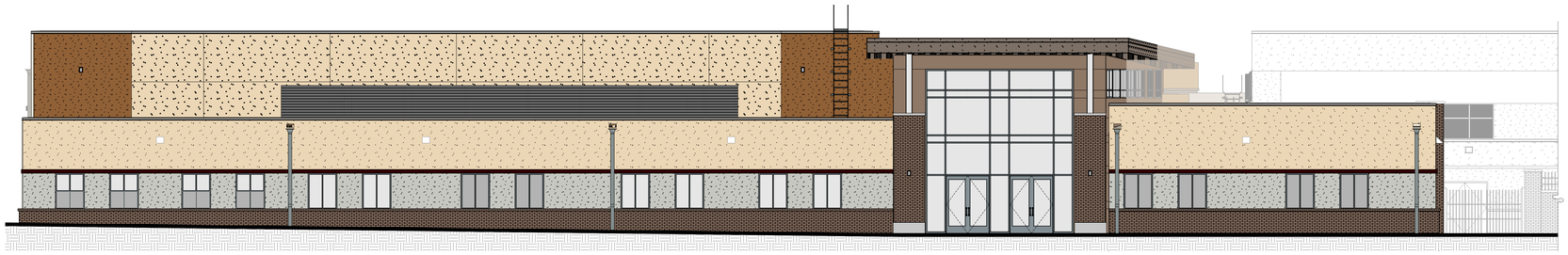
PLAN NORTH

3 LOWER FLOOR PLAN

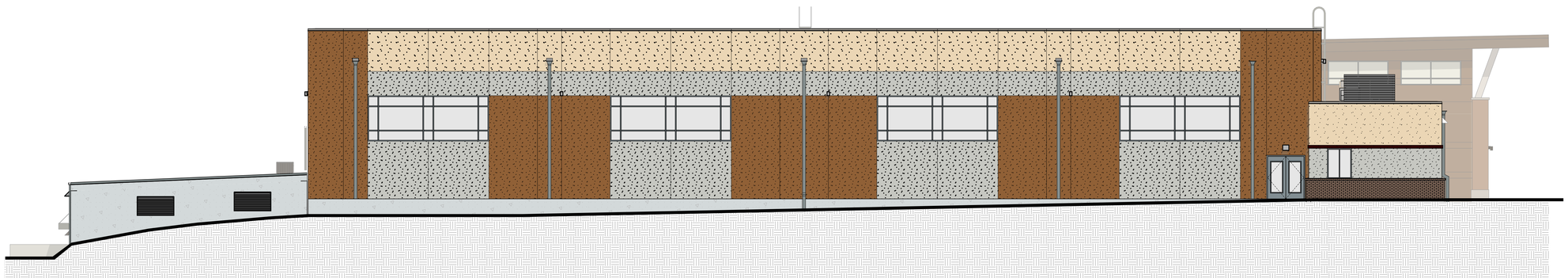
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3/3/22

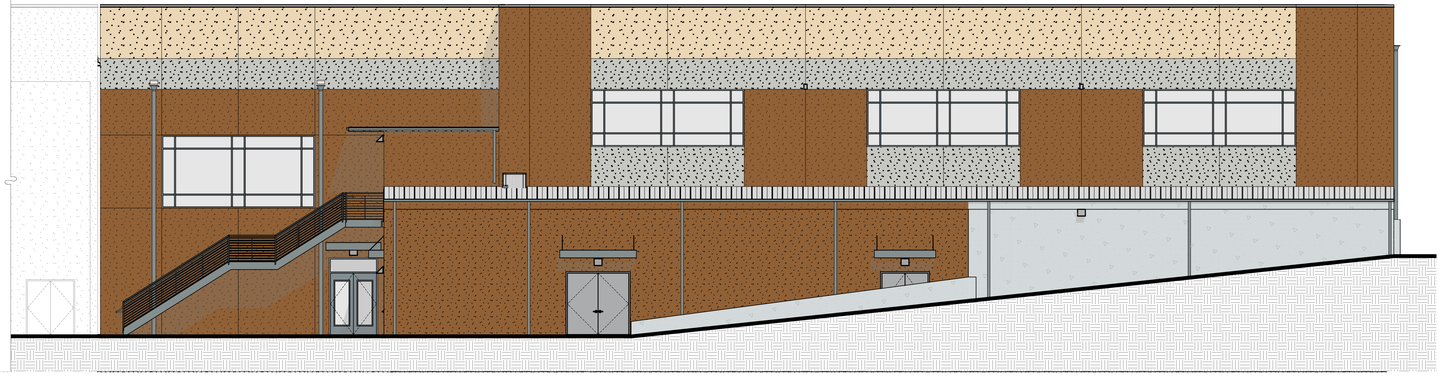
BGW ARCHITECTS



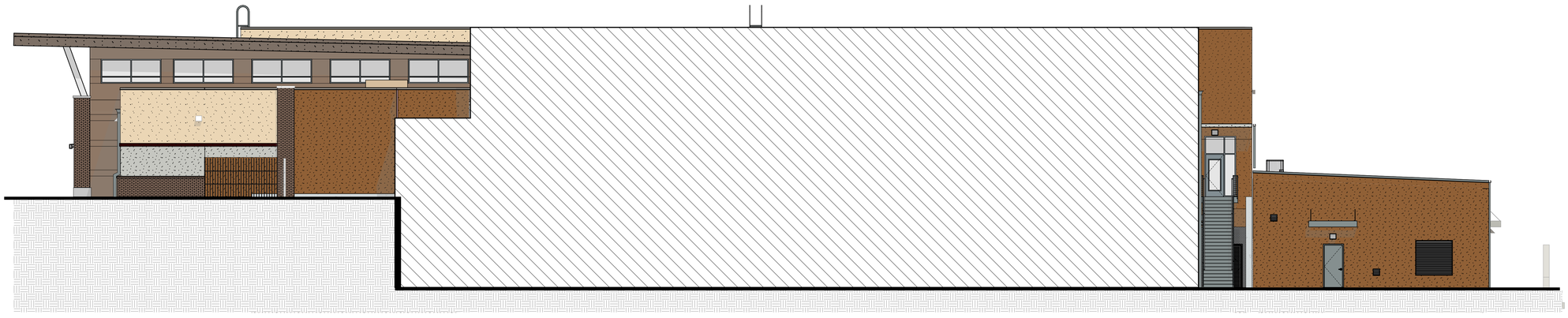
1 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



2 EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 WEST ELEVATION
SCALE: 1/8" = 1'-0"

5 EXTERIOR ELEVATIONS

3/3/22

NEW FIELDHOUSE

SW

BGW ARCHITECTS

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
April 13, 2022

Subject: **North Water Treatment Plant – City of Chaska – Concept Plan**

Applicant: City of Chaska Water & Sewer Department

Location: Site of Chaska City Well 7, east of Hundertmark Road and north of Pioneer Trail (PID #300280340 and 300280360)

Case No.: 2022-22

Synopsis: Applicant seeks to obtain approval of a concept plan for a water treatment facility on the western edge of the Hazeltine National Golf Course

Prepared By: Nate Kabat

Staff Recommendation: Motion to recommend approval of the North Water Treatment Plant - Concept Plan (PC#2022-22), subject to the following conditions.

Background

The City of Chaska Well 7 is located east of Hundertmark Road and north of Pioneer Trail on the western edge of Hazeltine National Golf Course. Currently the water supply from Well 7 is not treated. With the water being presently untreated, the well is limited to use on high demand days primarily in the summer when irrigation use drives peak demand for water.

As the City has grown and continues to develop, Well 7 is becoming more critical as a standard contributor to the City's water supply. Providing compliant water quality is a cornerstone for meeting high standards of life. This project provides the Chaska Water Utility the ability to optimize a highly productive existing water supply resource in Well 7 while also increasing the capacity of treated water available to the community. The overarching goal of the proposed treatment facility at Well 7 is to supplement current treated water supply with an additional source in an important geography within the distribution system.

The purpose of the proposed North Water Treatment Plant (NWTP) is to provide a water treatment facility capable of treating the existing water supply at Well 7 to the standards that the other water supply wells receive at the South Water Treatment Plant (SWTP) located on Victoria Drive adjacent to the Municipal Services Building.

City staff have conducted studies to determine the best location to add wells to the City system. Those studies indicated utilizing the existing asset at Well 7 by adding water treatment is the most cost-effective approach.

Existing Conditions
The site is .56 acres across the two parcel and currently serves at the site of a pumphouse structure that contains Chaska Well 7, several electrical cabinets, and communications cabinets that are leased to various telecommunications companies. The well extends well below grade to access the aquifer. The site is owned by the City of Chaska. The land is currently graded with substantial earth berm containing grasses, vegetation, and various types of deciduous and coniferous trees. The property slopes to the south and drains surface water runoff into a wetland marsh area along the south property line.

Current zoning on the site is O-Open, which effectively allows the current use to continue. With the change to a water treatment plant from the current well use, the site will be rezoned to P2 which is in line with other sites where City facilities are located including the South Water Treatment Plant.

Comprehensive Plan
The site of the proposed North Water Treatment Plant currently contains a well. With the site presently used for public purpose and anticipating the need for the proposed treatment facility on this site, the 2040 Comprehensive Plan guides the parcels proposed for this project as Public/Semi-Public.

The 2040 Comprehensive Plan defines the Public/Semi-Public land use as follows:

Lots or parcels guided for public, semi-public and private educational facilities, places of worship, hospitals, convalescent homes, penal facilities, and facilities of local, state, and federal governments.

Neighboring the site for the proposed North Water Treatment Plant, Hazeltine National Golf Course (proper) is guided as Golf Course, and the approximately 500 feet wide strip adjacent to Hundertmark Road is guided as Neighborhood Mixed Use with a portion of land between those two guided as Open Space. Neighborhood Mixed Use, per the Comp Plan, are afford area for residential, commercial, office, park, civic, and open space uses. Low, Medium, and High-Density Residential uses are allowed. In particular, the area adjacent south of this site at the corner of Hundertmark Road and Pioneer Trail has a concept plan that was approved in 2013 for a neighborhood commercial development.

Project Goals. The applicant stated their project goals as:

- *To supplement current treated water supply with an additional source in an important geography within the distribution system.*
- *To ensure that residents have adequate and equitable access to safe and compliant drinking water.*
- *To fit respectfully into the neighboring community with high regards to appearance, access, sustainability, storm water handling and landscape.*

Concept Plan
Construction of the proposed building will require removal of the existing pumphouse building serving Well 7 to create the opportunity for the most efficient use of the buildable site. A portion of the proposed water treatment plant structure will be located directly over the

foundation of the existing pumphouse, yet the proposed structure will extend further east into the site allowing the building to optimize the land available on the east side of the existing pumphouse building. The additional space is critical for chemical storage for the future facility.

The proposed water treatment plant structure is intended to nestle into the existing earthen berm that arches around the north and east boundaries of the site. The proposed location leverages the berm to provide additional cover against the water treatment plant structure hence helping the building fit naturally into the existing topography.

The height and configuration of the water treatment plant is driven by the process within. The treatment process harnesses gravity to help the water flow through the various stages of treatment. In essence the WTP building encloses an indoor waterfall beginning at the highest point which drives the filtration process through the building to distribution. Therefore, the roof line and building envelope are strictly driven by the treatment process. As a result, adjustments to the building height and configuration are much more difficult to modify. The highest part of the proposed structure is expected to be less than the 35' height ordinance and most of the structure will be 25' with portions housing the well and chemicals closer to 15' above grade.

Facility Design

The proposed exterior building design is intended to align with other City of Chaska public service buildings including the existing water treatment plant at Engler and Victoria Drive, the fire station on Engler, the Chaska Community Center, and Chaska City Hall. All of these facilities contribute to a signature look that includes a Chaska brick blend exterior, incorporation of white metal façade and windows, and red metal gabled roof. This signature look contributes to Chaska's distinct small-town community feel, and clearly establishes City facilities. The proposed design incorporated 360-degree architecture due to its exposure on all sides.

Stantec, who is leading the design and engineering for the facility has developed two options for the facility's roof. Option one would install the signature red metal roof. Option two would install a more muted grey metal roof in line with the roof of the Chaska Curling and Event Center and intended to blend in more with the color palate of the Chaska Commons shopping center buildings. Staff, along with Stantec, seek direction from the Planning Commission and City Council on these options.

Access/Parking

The concept plan proposes to continue using the existing access onto Hundertmark Road that is used Well 7. The water treatment facility will not house permanent staff. Water and Sewer Department staff will visit the facility on a regular basis. Vehicles needed to service the facility will be accommodated in the planned access drive. The driveway is proposed to be configured with an extended paved surface to allow trucks to back out and exit the site in the forward direction onto Hundertmark.

Setbacks
The required setbacks for the site are as follows:

BUILDING SETBACKS	
Direction	**Setback**
Hundertmark Road	100 feet from centerline
From North, South and East Property Lines	15 feet

Due to the nature of deep well infrastructure the well must remain in the current location to remain compliant with Minnesota Department of Health (MDH) standards. It is believed that the well was constructed in compliance with the well setback requirements established at that time it was drilled. The impact is that the face of the pumphouse structure is approximately 5' closer to Hundertmark than the current setback requirements allow. Due to the location of the well within the pumphouse structure the portion of new water treatment plant structure proposed to be constructed over the existing well will need to follow the existing foundation of the pumphouse and will need to encroach the setback by 5' as it does now. The balance of the proposed water treatment plant structure will comply with the current setback requirements.

Another slight divergence to note, due to the nature of the proposed water treatment building it is expected that underground tanks will be required. Given the constraints of the proposed site it is anticipated that a portion of one of the holding tanks will need to be located within the 100' setback. The top of the proposed tank(s) will be exposed concrete or covered with earth and vegetation.

Utilities
Water and sewer are available to the site. A permanent easement acquired by the City from Hazeltine National Golf Club in December 2014 will be utilized to route sanitary sewer from the proposed site across the open field to the nearest sanitary sewer. The City Engineer is actively involved in ensuring appropriate connections to the facility.

Temporary easements may be required from Hazeltine National Golf Club to conduct some of the grading construction activities and utility installations.

Fees
Staff will work to define the appropriate approach to fees for the City facility.

Trails/Pedestrian Facilities
A City trail currently exists on the west side of Hundertmark Road. No trail is planned on the east side of Hundertmark Road. However, the site will need to be designed to accommodate provision of future sidewalk along the east side of Hundertmark Road when development occurs.

Landscaping
Landscaping will have to meet the City's ordinance in terms of quantity and size. The applicant will be required to submit a landscape plan with the preliminary submittal to show how they meet this ordinance. City staff will be working with Hazeltine to create a buffer that softens visual impact to the golf course.

Lighting
The parking lot lighting and lighting attached to the building proposed for this plan should be fully screened and face downward. Full details of the lighting and photometric analysis will be necessary with the preliminary submission.

Stormwater
With the size of the proposed development being less than an acre, stormwater management requirements do not apply. However, the grading plan should ensure that drainage is routed away from neighboring properties and either captured onsite with smaller scale BMPs like rain gardens or directed towards existing stormwater systems on Hundertmark Road.

Platting
The development is currently platted, so a re-platting is not being considered for this proposal. However, the project is proposed across two separate lots that will need to be combined as part of the process.

Rezoning
The site will need to be rezoned from O-open to P2 which is in line with other sites where City facilities are located including the South Water Treatment Plant as part of the preliminary process..

Neighborhood Meeting
City staff have had conversations with Hazeltine. They have expressed interest in understanding visual impacts from the height of the building to the golf course. City staff have explained that the height of the proposed building is necessary to accommodate necessary water treatment equipment and processes. Visual impacts will be addressed through landscaping.

Deadline for Agency Actions
The City of Chaska received the complete application for this request on Wednesday, March 2, 2013. Pursuant to Minnesota State Statutes the City must act on this request by Sunday, May 1, 2022 (60 days), unless the City provides the petitioner with written reasons for an additional 60-day review period. The additional review period would extend to Thursday, June 30, 2022. The City may with the petitioner's consent extend the review period beyond the Thursday, June 30, 2022. Lastly, if the City denies the petitioners request "… it must state in writing the reasons for the denial at the time it denies the request."

PLANNING COMMISSION ACTION REQUESTED:
Motion to recommend approval of the North Water Treatment Plant - Concept Plan (PC# 2022-22), subject to the following conditions:

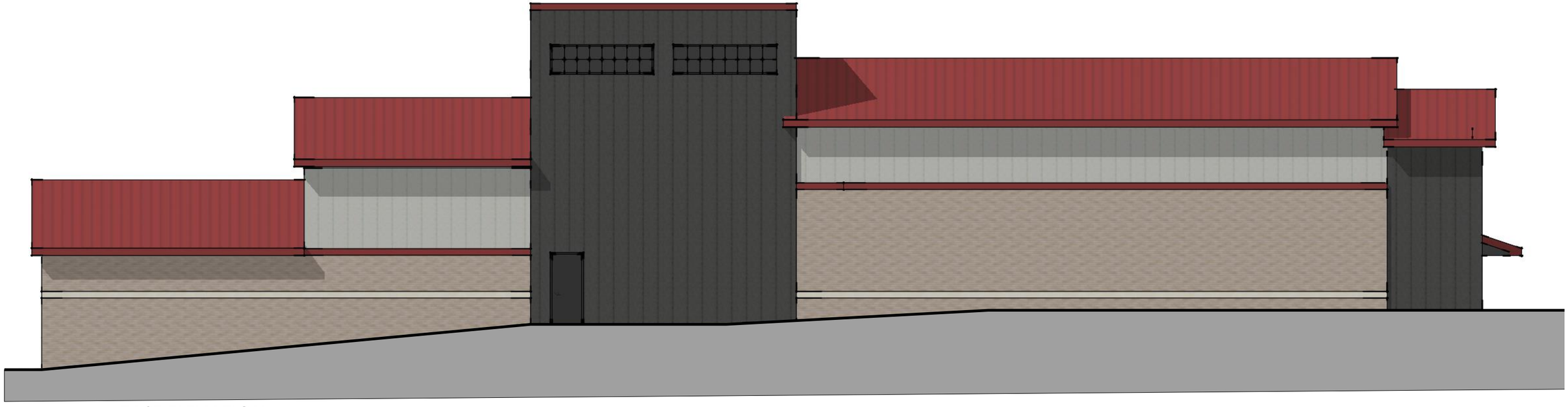
1. **Approvals shall be based on the following graphic exhibits:**
    a. **Chaska WTP Concept Progress (pgs 1-6), submitted by City of Chaska, drafted by Stantec, dated 03/01/2022**
    b. **Chaska WTP Site Relationship Views (pgs 1-9), submitted by City of Chaska, drafted by Stantec, dated 01/26/2022**
    c. **Figure 1 - Site Plan Concept Overview (pg 1), submitted by City of Chaska, drafted by Stantec, dated 02/28/2022**

d. **Figure 2 - Site Plan Concept (pg 1), submitted by City of Chaska, drafted by Stantec, dated 02/28/2022**
e. **Figure 3 - Site Plan Concept No Contures (pg 1), submitted by City of Chaska, drafted by Stantec, dated 02/28/2022**
f. **Figure 4 Existing Site Images (pg 1), submitted by City of Chaska, drafted by Stantec, dated 02/28/2022**
g. **Figure 5 Materials (pg 1), submitted by City of Chaska, drafted by Stantec, dated 02/28/2022**
h. **Chaska WTP and SWTP Bldg Comparision (pg 1), submitted by City of Chaska, drafted by Stantec, dated 03/11/2022**
i. **Chaska WTP Site Forces Graphic (pg 1), submitted by City of Chaska, drafted by Stantec, dated 03/01/2022**
j. **NWTP Narrative Letter 3-1-22- signed, submitted by Stantec, dated**

2. **Approval of rezoning from Open to P2 – Public Buildings.**
3. **Compliance with the zoning P2 (Section 15.12.180) of the Chaska Zoning Ordinance).**
4. **Compliance with section 15.28.120 Building Design/Materials for Commercial, Industrial, Public, & Institutional.**
5. **Compliance with applicable zoning requirements, in particular Chapter 9 (General Requirements).**
6. **Provision of 360-degree architecture be used on all facades.**
7. **Provision that if masonry is used that they are natural stone and/or full-face modular brick in order to be considered Class I materials.**
8. **Provision of a landscape plan meeting all applicable requirements of Chapter 15.28.070 of the Zoning Code.**
9. **Provision of adequate screening and landscaping to neighboring properties to be addressed at Preliminary submittal.**
10. **Adherence to the following building setbacks:**
    a. **Hundertmark Road: 100 feet from centerline**
    b. **From North, South and East Property Lines property lines: 15 feet**
11. **Provision of lighting specs to be submitted with preliminary site plan submittal.**
12. **Coordination with the City Engineer for the provision of public utilities to the site.**
13. **Provision of a grading plan should route drainage away from neighboring properties.**
14. **Provision to combine the two lots of the proposed development site into a single lot.**
15. **Provision to obtain necessary temporary easements from Hazeltine National Golf Club to conduct grading construction activities and utility installations.**



WEST ELEVATION



EAST ELEVATION

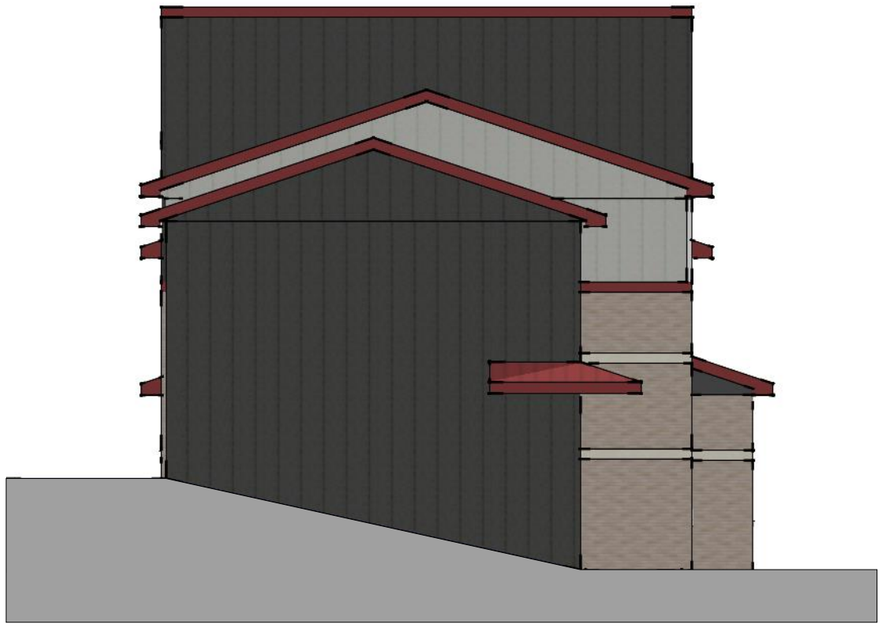
CONCEPT BUILDING ELEVATIONS

COLOR OPTION 1

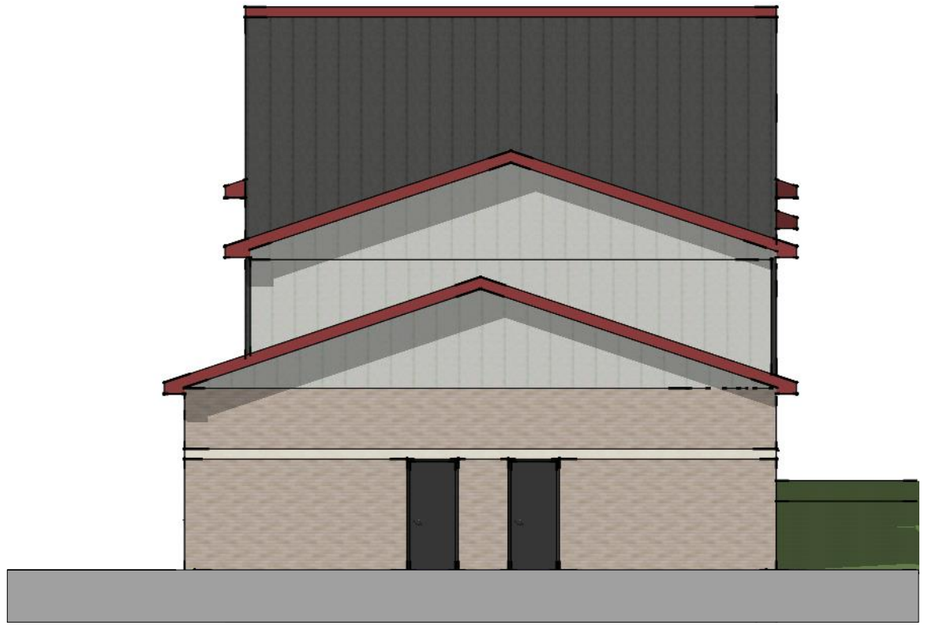
CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 03-04-2022 PROJ. NO. 193805386

Stantec



NORTH ELEVATION



SOUTH ELEVATION



CONCEPT BUILDING ELEVATIONS & PERSPECTIVE

COLOR OPTION 1

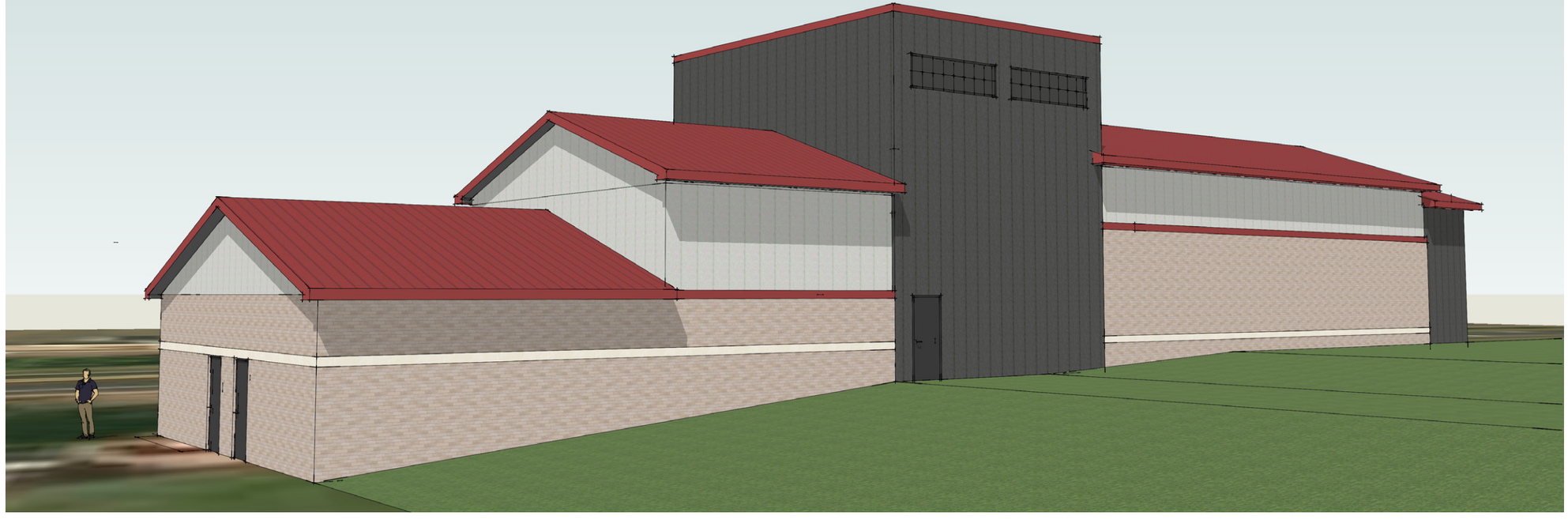
CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 03-01-2022

PROJ. NO. 193805386

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CONCEPT BUILDING PERSPECTIVES

COLOR OPTION 1

CITY OF CHASKA, MN
WATER TREATMENT PLANT

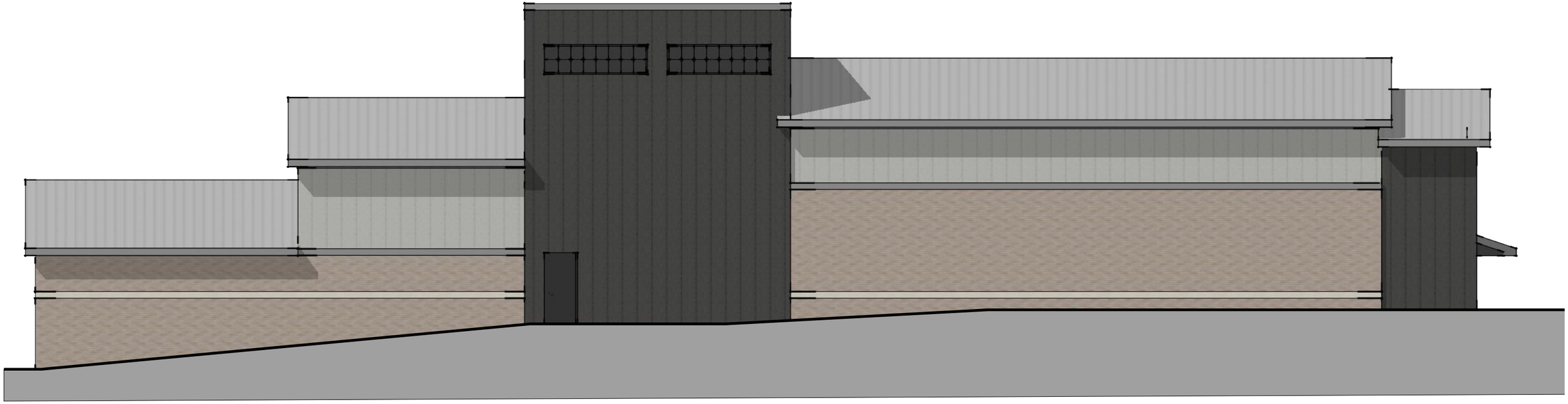
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PROJ. NO. 193805386

Stantec



WEST ELEVATION



EAST ELEVATION

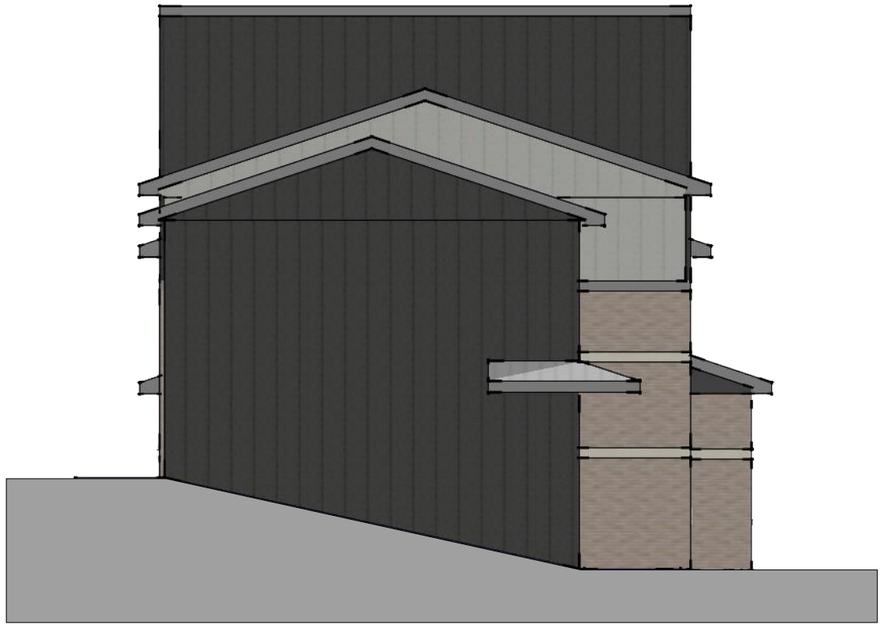
CONCEPT BUILDING ELEVATIONS

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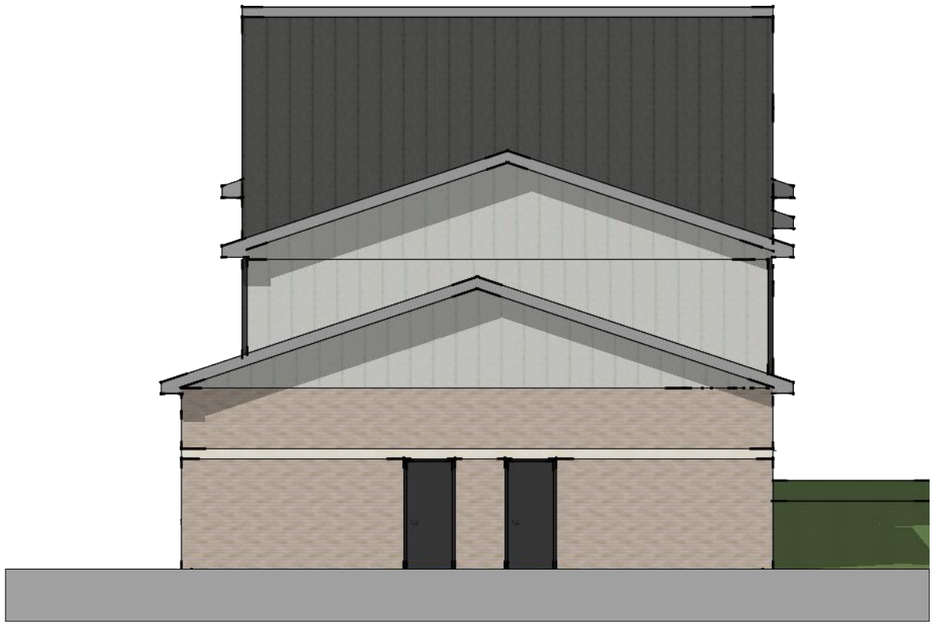
CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 03-01-2022 PROJ. NO. 193805386

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NORTH ELEVATION



SOUTH ELEVATION



CONCEPT BUILDING ELEVATIONS & PERSPECTIVE

COLOR OPTION 2

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 03-01-2022

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CONCEPT BUILDING PERSPECTIVES

COLOR OPTION 2

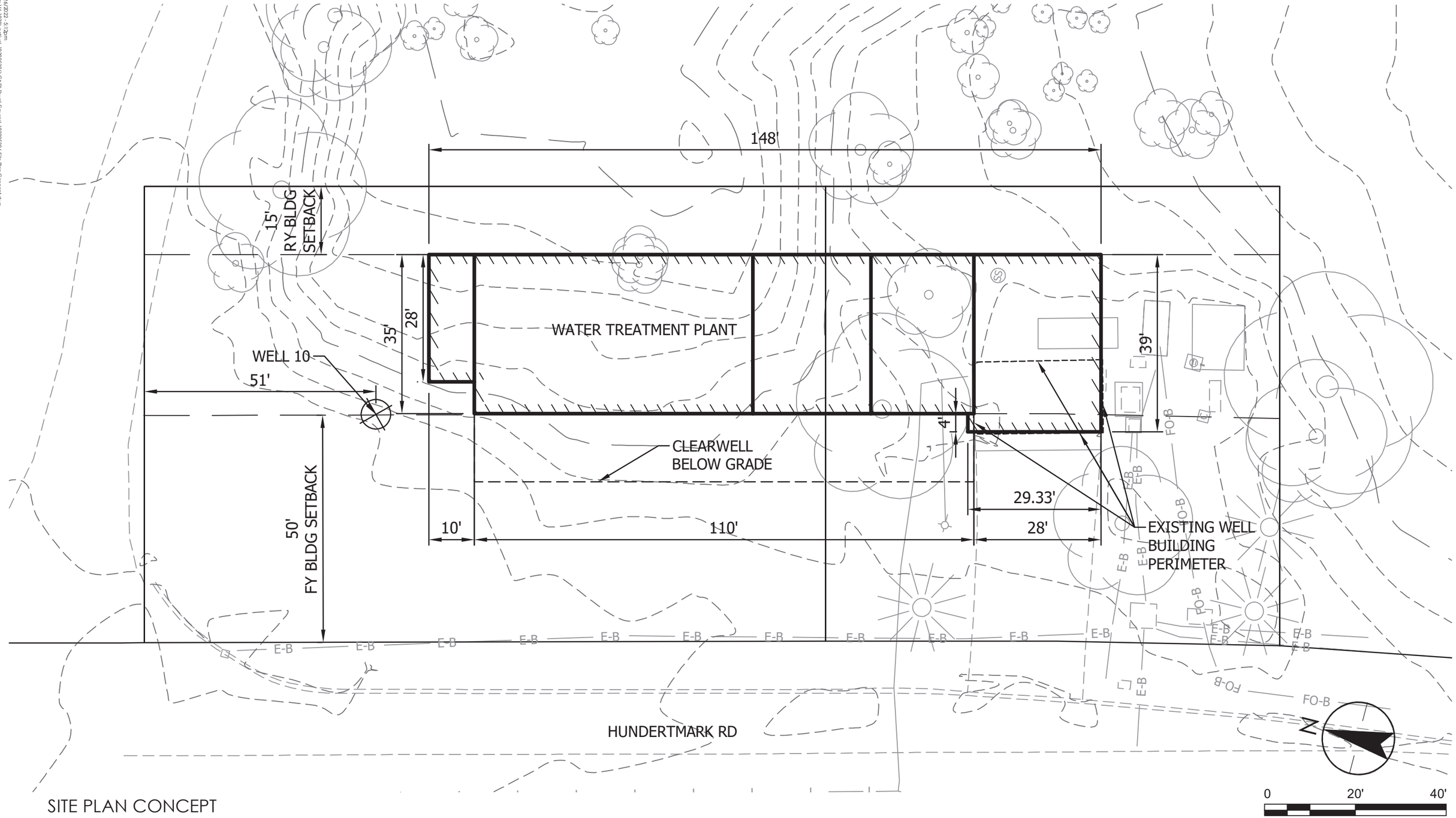
CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 03-01-2022

PROJ. NO. 193805386

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SITE PLAN CONCEPT

CITY OF CHASKA, MN

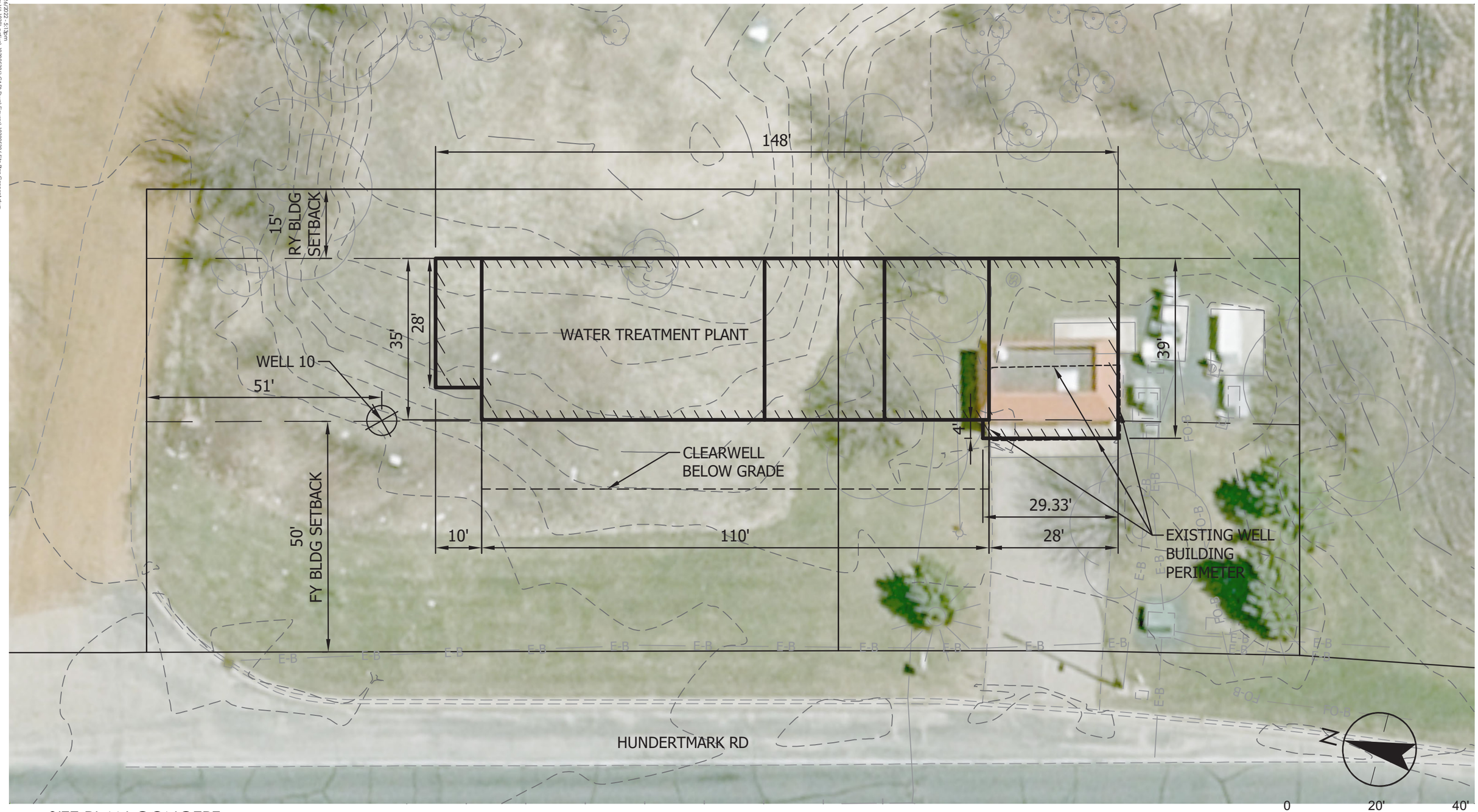
WATER TREATMENT PLANT

FIGURE 1

Stantec

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SITE PLAN CONCEPT

CITY OF CHASKA, MN

WATER TREATMENT PLANT

FIGURE 1

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AERIAL VIEW LOOKING NORTH EAST

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022 PROJ. NO. 193805386

Stantec



VIEW FROM GOLF COURSE LOOKING SOUTH WEST

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022 PROJ. NO. 193805386

Stantec



VIEW LOOKING SOUTH WEST

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022

PROJ. NO. 193805386

Stantec



VIEW LOOKING SOUTH EAST

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022

PROJ. NO. 193805386

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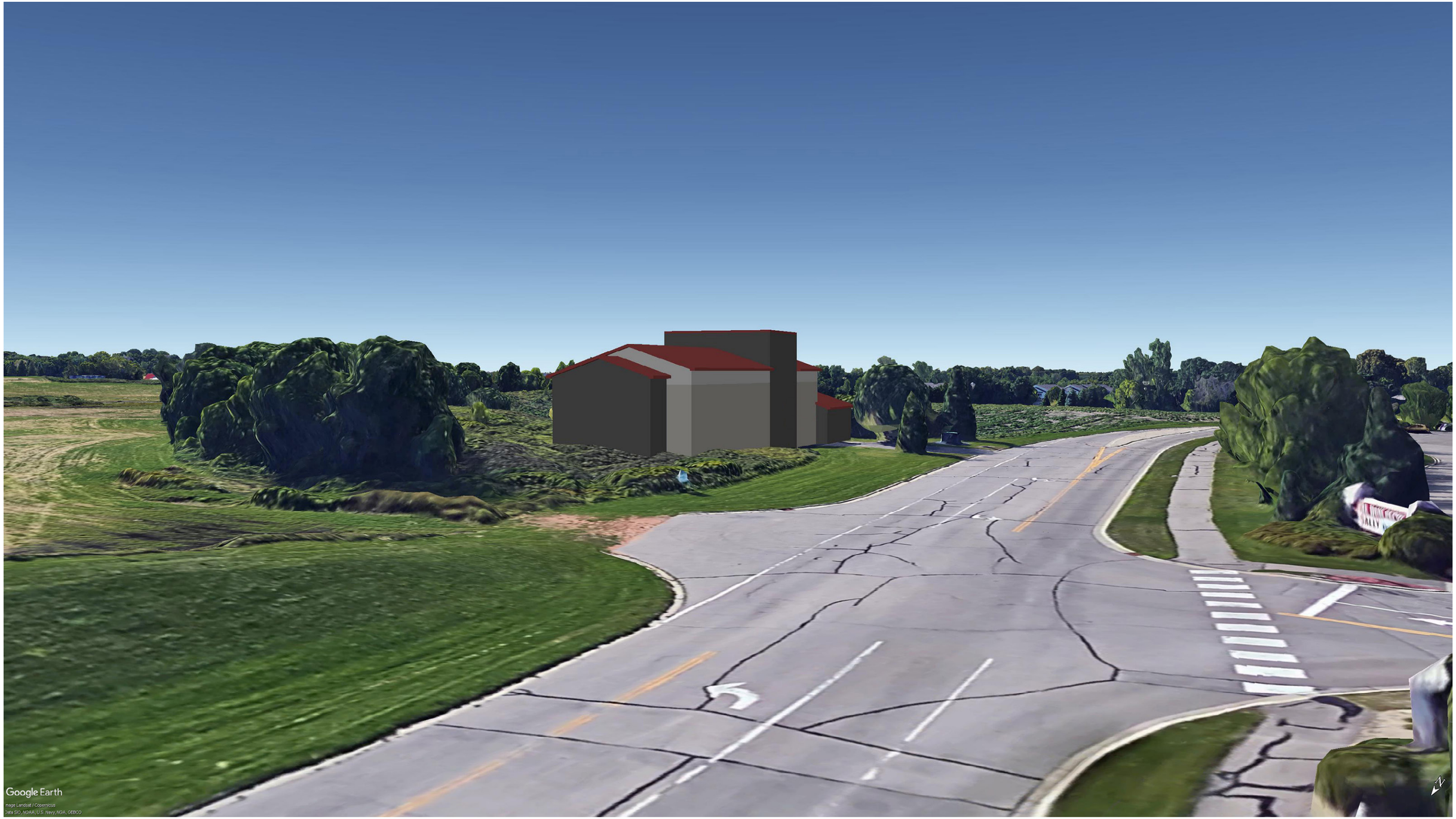


VIEW LOOKING NORTH ALONG HUNDERTMARK RD

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022 PROJ. NO. 193805386

Stantec



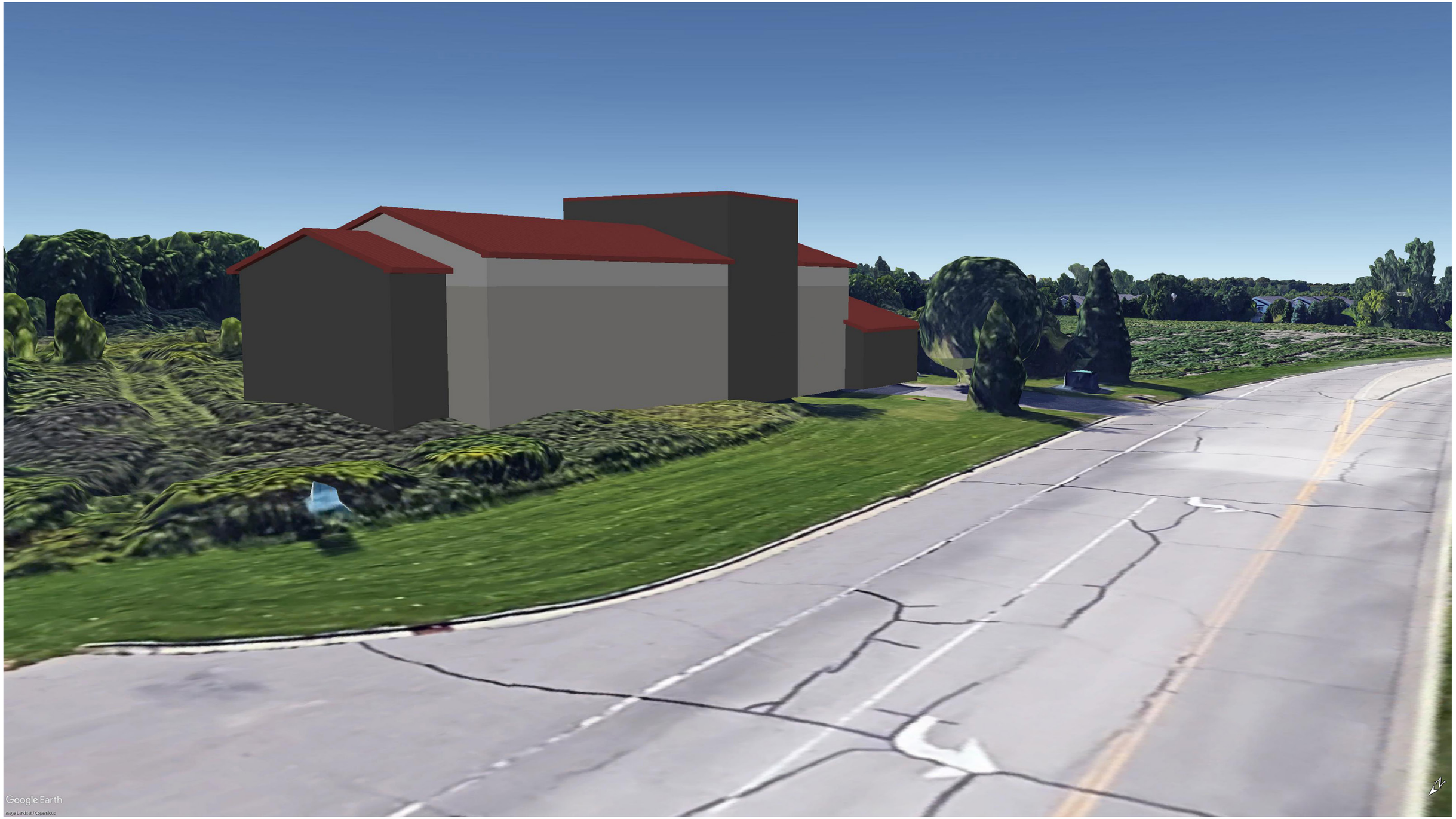
VIEW LOOKING SOUTH ALONG HUNDERTMARK RD

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022

PROJ. NO. 193805386

Stantec



VIEW LOOKING SOUTH ALONG HUNDERTMARK RD

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 01-21-2022

PROJ. NO. 193805386

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EXISTING SANITARY SEWER MANHOLE

EXISTING SANITARY SEWER LINE

EXISTING SANITARY SEWER EASEMENT

PROPOSED SANITARY SEWER SERVICE

WELL 10

TWO PARCELS OWNED BY CITY OF CHASKA

EXISTING WATERMAIN

WATER TREATMENT PLANT

HUNDERTMARK RD

PIONEER TRAIL

N

0 200' 400'

SITE PLAN CONCEPT OVERVIEW

CITY OF CHASKA, MN

WATER TREATMENT PLANT

FIGURE 1

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DATE 02/28/2022 PROJ. NO. 193805386

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EXISTING SANITARY SEWER EASEMENT

PROPOSED SANITARY SEWER SERVICE

TWO PARCELS OWNED BY CITY OF CHASKA

EXISTING WELL BUILDING PERIMETER

WELL 10

WATER TREATMENT PLANT

CHEMICAL DELIVERY TURNAROUND

(2) PARKING LOCATIONS

6' CONCRETE SIDEWALK

CLEARWELL BELOW GRADE

PLANTING AREA

CONNECT TO EXISTING WATERMAIN

PROPOSED BITUMINOUS DRIVEWAY

HUNDERTMARK RD

15' FRONT BLDG SETBACK

50' REAR BLDG SETBACK

51'

35'

28'

39'

4'

10'

110'

100'

29.33'

28'

146'

971 970 969 968 967 966 965 964 963 962 961 960 959 958 957 956 955

N

0 25' 50'

SITE PLAN CONCEPT

CITY OF CHASKA, MN

WATER TREATMENT PLANT

FIGURE 2

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DATE 02/28/2022 PROJ. NO. 193805386

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EXISTING SANITARY SEWER EASEMENT

PROPOSED SANITARY SEWER SERVICE

TWO PARCELS OWNED BY CITY OF CHASKA

148'

EXISTING WELL BUILDING PERIMETER

15' RY BLDG SETBACK

WELL 10

35'

28'

WATER TREATMENT PLANT

51'

39'

4'

50' FY BLDG SETBACK

10'

110'

29.33'

28'

CHEMICAL DELIVERY TURNAROUND

6' CONCRETE SIDEWALK

(2) PARKING LOCATIONS

CLEARWELL BELOW GRADE

CONNECT TO EXISTING WATERMAIN

PLANTING AREA

100'

PROPOSED BITUMINOUS DRIVEWAY

HUNDERTMARK RD

N

0 25' 50'

SITE PLAN CONCEPT

CITY OF CHASKA, MN

WATER TREATMENT PLANT

FIGURE 3

Stantec

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LOOKING SOUTHWEST TOWARDS HUNDERMARK ROAD



AT HUNDERMARK LOOKING NORTHEAST TOWARDS SITE



LOOKING WEST FROM SITE TOWARD SHOPPING CENTER



LOOKING NORTHWEST FROM THE SITE

CITY OF CHASKA, MN

WATER TREATMENT PLANT

FIGURE 4

DATE 2/28/2022 PROJ. NO. 193805386

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Minneapolis, MN 55402
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EXISTING SHOPPING CENTER BUILDING WEST OF SITE



CHASKA SOUTH TREATMENT PLANT

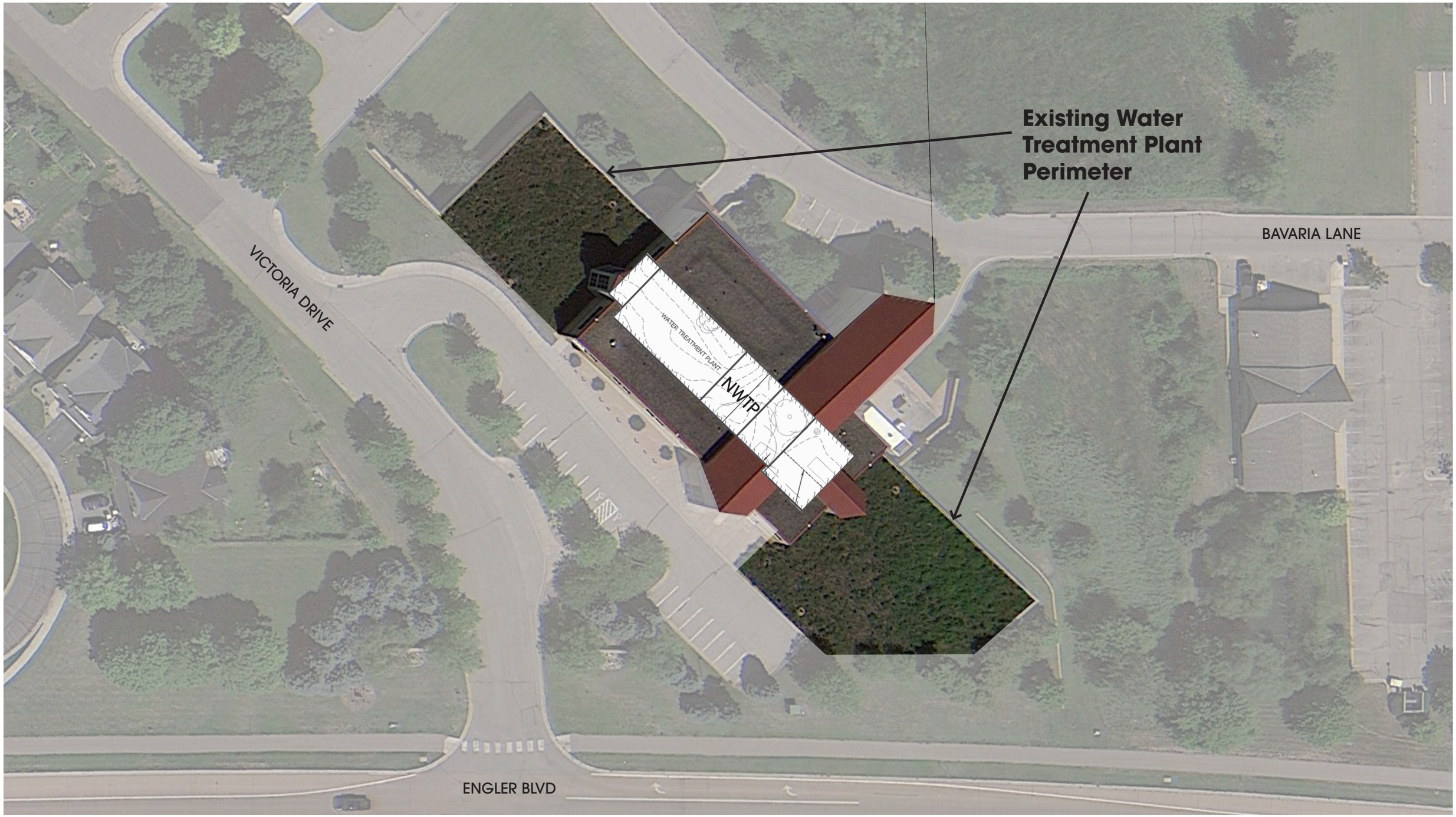


EXISTING CHASKA BRICK BLEND



METAL FACADE AND ALUMINUM WINDOW

Stantec
733 Marquette Avenue, Suite 1000
Minneapolis, MN 55402
www.stantec.com



NWTP to SWTP SIZE COMPARISION

SCALE: 1"=50'

CITY OF CHASKA, MN
WATER TREATMENT PLANT

DATE: 03/11

PROJ. NO. 193805386

Stantec

Plot Date: 03/09/2022 - 3:21 pm
Drawing name: V:\1938\active\193805386\CADD\Dwg\Figures\193805386-Site Plan Concept.dwg
Xrefs: 193805386XREF, 193805386XSTU, 193805386_XSEC, 193805386_XSNC, 193805386_XSV



SITE FORCES PLAN

SCALE: 1"=60'

CITY OF CHASKA, MN
NORTH WATER TREATMENT PLANT

DATE: 03/09/2022 PROJ. NO. 193805386

Stantec

Stantec Consulting Services Inc.
733 Marquette Avenue Suite 1000, Minneapolis MN 55402-2314

March 1, 2022
File: 193805386

Attention: Liz Hanson
City Planner
Chaska City Hall
One City Hall Plaza
Chaska, 55318

Dear Liz,

Reference: Concept Site Plan Review for North Water Treatment Plant - Chaska, MN

The purpose of the proposed North Water Treatment Plant (NWTP) is to provide a water treatment facility capable of treating the existing water supply at Well 7 to the standards that the other water supply wells receive at the South WTP located on Victoria Drive (SWTP) adjacent to the Municipal Services Building.

Currently the water supply from Well 7 is not treated. Providing compliant water quality is a cornerstone for meeting high standards of life. This project provides the Chaska Water Utility the ability to optimize a highly productive existing water supply resource in Well 7 while also increasing the capacity of treated water available to the community. The overarching goal of the proposed treatment facility at Well 7 is to supplement current treated water supply with an additional source in an important geography within the distribution system.

As part of its strategy to maintain its small-town values one of the missions in Chaska is to ensure that residents have adequate and equitable access to safe and compliant drinking water. The proposed project incorporates quality physical characteristics representative of other municipal structures in the community and demonstrates a commitment to providing excellent drinking water quality to all customers.

Another goal for the proposed NWTP project is to fit respectfully into the neighboring community with high regards to appearance, access, sustainability, storm water handling and landscape. With these in mind there are two primary architectural philosophies that will be illustrated for consideration. One approach is to utilize building materials and colors that rhyme more closely with the adjacent shopping and dining center along Hundertmark. An alternative approach is to utilize the architectural elements similar to other municipal buildings in the community. Each approach is believed to have merit and will be accommodated based on feedback received from Planning Commission and Staff pertaining to your priorities for this site/location.

Building Materials

The structure will primarily consist of concrete structure finished with a primarily brick facade consistent with the City's water treatment plant located on the corner of Engler Blvd and Victoria Drive. Please note that both color alternatives propose to utilize a blend of buff, gold and yellow brick (also known as the "Chaska Blend"), with portions of white and/or light grey metal wall panels and darker metal wall panels. The roof is proposed to be a standing metal seam roof consistent with other City of Chaska public buildings. The base

color shown is red. We have provided an alternative option as requested by staff for consideration. The doors and windows are proposed to be aluminum.

General Building Information:

The proposed structure will have the following probable characteristics:
Proposed Finished Square feet : 5175 SF on the Main Level, 1305 SF Upper Level, and 6000 SF Lower Level (includes the clearwell bump out)
Building Occupancy: The occupancy for Chemical Storage Rooms is H4, occupancy for other spaces is F2, low hazard

Site:

The proposed site for the WTP project is a 150' x 100' tract of land located on the east side of Hundertmark Road beginning 150' north of Pioneer Trail. The land is currently graded with substantial earth berm containing grasses, vegetation, and various types of deciduous and coniferous trees. The property slopes to the south and drains surface water runoff into a wetland marsh area along the south property line.

The property currently houses the City's Well 7 pumphouse structure, several electrical cabinets, and communications cabinets that are leased to various telecommunications companies. The existing well house structure is constructed with a blend of yellow brick (Chaska Blend) with a burnt orange standing seam perimeter. The setbacks for the site include a 100' setback from the centerline of Hundertmark Road which extends into the proposed property by approximately 50' from the east edge of the property. The back and side lot setbacks are understood to be 15'. These setbacks exist on the north, east and south property lines. It understood that the 100' setback from Hundertmark Road is intended to establish the required setback distance to the face of above grade building. Due to the nature of the proposed water treatment building it is expected that underground tanks will be required. Given the constraints of the proposed site it is anticipated that a portion of one of the holding tanks will need to be located within the 100' setback. The top of the proposed tank(s) will be exposed concrete or covered with earth and vegetation.

Construction of the proposed building will require removal of the existing pumphouse building serving Well 7 to create the opportunity for the most efficient use of the buildable site. A portion of the proposed WTP structure will be located directly over the foundation of the existing pumphouse yet the proposed structure will extend further east into the site allowing the building to optimize the land available on the east side of the existing pumphouse building. This space is critical for chemical storage for the future facility. It is noted that the existing Well 7 resides within the pumphouse structure and extends well below grade to access the aquifer.

Due to the nature of deep well infrastructure the well must remain in the current location to remain compliant with Minnesota Department of Health (MDH) standards. It is believed that the well was constructed in compliance with the well setback requirements established at that time it was drilled.
The impact is that the face of the pumphouse structure is approximately 5' closer to Hundertmark than the current setback requirements allow. Due to the location of the well within the pumphouse structure the portion of new NWTP structure proposed to be constructed over the existing well will need to follow the existing foundation of the pumphouse and will need to encroach the setback by 5' as it does now. The balance of the proposed NWTP structure will comply with the current setback requirements.

Reference: Concept Site Plan Review for North Water Treatment Plant - Chaska, MN

Plant Operation and Utilities:

The proposed NWTP structure is intended to nestle into the existing earthen berm that arches around the north and east boundaries of the site. The proposed location leverages the berm to provide additional cover against the NWTP structure hence helping the building fit naturally into the existing topography. Temporary easements may be required from Hazeltine National Golf Club to conduct some of the grading construction activities and utility installations. A permanent easement acquired by the City from Hazeltine National Golf Club in December 2014 will be utilized to route sanitary sewer from the proposed site across the open field to the nearest sanitary sewer. The proposed sanitary alignment and existing easement are shown on the Site Plan Overview Figure 1. The need for this utility access point has been known for several years and Hazeltine is aware of this proposed sewer installation. The sewer is proposed to directionally drill this sewer as to minimize disruption to the Hazeltine's property. It is anticipated that the contours of the existing land surface will be returned to as close to existing as possible and vegetation will be restored.

Unlike other facilities, the height and configuration of a WTP is driven by the process within. The treatment process that is anticipated to be employed at the proposed WTP is one that harnesses gravity to help the water flow through the various stages of treatment. In essence the WTP building encloses an indoor waterfall beginning at the highest point with the aeration tower extending to detention, filtration with finished water being stored in a clearwell tank prior to being pumped to distribution. The roof line and building envelope are strictly driven by the treatment process. As a result, adjustments to the building height and configuration are much more difficult to modify. The highest part of the proposed structure is expected to be less than the 35' height ordinance and the majority of the structure will be 25' with portions housing the well and chemicals closer to 15' above grade. Elevation views of the proposed facility are provided in the attached concept figures.

Public work staff will access to the site daily to check on the well, chemical feed systems and water treatment process. Chemical deliveries may range from weekly to monthly. It is anticipated that the existing driveway to the pumphouse structure will be sufficient for these chemical deliveries as long as adequate pavement for turning is provided. The driveway is proposed to be configured with an extended paved surface to allow trucks to back out and exit the site in the forward direction onto Hundertmark. This is generally depicted on the proposed the site plans.

Reference: Concept Site Plan Review for North Water Treatment Plant - Chaska, MN

We are grateful for your comments regarding this submittal and look forward to working with you and other City staff to answer any questions or concerns you may have.

Regards,

Stantec Consulting Services Inc.

Ryan Capelle PE (MN, ND, WI)
Senior Associate
Phone: 651-604-4857
Ryan.Capelle@stantec.com

Eric Lembke PE (MN, ND, WI, IL)
Principal
Phone: 651-775-5156
Eric.Lembke@stantec.com

Attachments: Building Rendering Concept Plans
Site Plan, Images and Materials Figures 1-5

c. Matt Haefner
Matt Clark

Chaska
Parks and Recreation Commission
Meeting Minutes
February 8, 2022

1. **Call to Order**

   The February 8, 2022, meeting of the Chaska Parks and Recreation Commission was called to order by Chair David Downs at 7:00 pm.

2. **Roll Call**

   Attendance: Chair David Downs, Vice Chair Jason Branch, Karli Cich, Donelle Heieie, Georgiann Keyport, Zach Saueressig, and Elizabeth Wyveen

   Absent: None

   Staff: Parks and Recreation Director Marshall Grange, Assistant to the Director Mary Monteith, and IS Assistant Michelle Blasko

3. **Adopt Agenda**

   Motion by Vice Chair Branch, second by Wyveen, to adopt the February 8, 2022, meeting Agenda.

   Roll Call for Approval

4. **Visitor Presentation**

   None in attendance

5. **Approve Previous Meeting Minutes**

   5A. Motion by Cich, second by Vice Chair Branch, to approve the Chaska Parks Commission meeting minutes of January 11, 2022.

   Roll Call for Approval

6. **Receive Council and Planning Meeting Minutes**

   6A. City Council Minutes December 20, 2021

   Heieie questioned the purpose of the land on Highwood Drive across from the Fire Station, that a strip of park land was determined to give back to landowners. Grange stated the original purpose was a possible trail but was decided it was not needed, so the land was given back to the landowners.

   6B. Planning Minutes December 8, 2021

   Grange noted appointments on Parks and Recreation Board for the current year. Chair Downs and Vice Chair Branch will continue as Chair and Vice Chair, respectively. Grange named the two new board members who were appointed and will set up a meeting with Chair and Vice Chair to

bring them up to speed on projects. There is currently still a vacancy for a youth representative. Chair Downs noted Monteith to update contact information for the new members.

7. Action Items

7A. Recommend Consultant for the Community Center Master Plan Architectural Services

Grange provided a brief review of the 2 proposals contained in the packet. He updated City staff on the interviews done by the project management team. Upon conclusion of the interviews, City staff unanimously recommended Perkins and Will as the best architectural firm for the master plan. Grange provided a brief overview of Perkins and Will's architectural history and work experience. Grange also noted a key component to the Master Plan is bringing in the sub consultant, Jeff King with Ballard*King. They are highly regarded in the park and recreation industry. They are one of the top when it comes to market analysis, looking into operations and cost. They will help us understand not only the cost for improvements but also what it will cost to own it and operate it going forward. How we can be set up for a sustainable future. He noted King has 20 + years of experience with Perkins & Will, on lead operations and analysis. Grange recommends this company to the Parks Commission.

Chair Downs was impressed with their proposal, it was thorough and specific to our needs. Grange expressed his confidence with the highly regarded architectural firm, noted the years in business, since 1935. The firm has offices in Minneapolis and in Colorado. John Slack, lead architect is based out of the Minneapolis office and will be the community engagement facilitator.

Keyport wondered about the scope of the Community Center and if the firm has done projects like this before. Grange stated the firm has experience with new builds and renovations of current buildings. He also stated Perkins and Will looked at functionality and multi-purpose ahead of aesthetics if a remodel was decided versus a new build. We have to come out of this with an implementable plan, and mindful of the cost. Heieie questioned whether the current City code requiring a bomb shelter is in place or if it can be retrofitted if necessary. Grange stated if a code is required, the City would comply as soon as renovations begin.

Motion by Keyport, second by Heieie, to recommend to City Council to authorize staff to enter into the service agreement with Perkins and Will.

Roll Call for Approval

8. Discussion Items

8A. Community Center Master Plan Update

Grange provided an update on the Master Plan and stated representatives from the Parks Commission, City Council, Planning Commission, Human Rights Commission, school district, community education, and the school board will be on the task force team. Grange stated they received 37 applications for the 8 vacant positions; 4 of which will be Community Center members and 4 will be non-members. The team that rates the applications include Parks Commissioners and City Council representatives. The team will rate and bring in 16 applicants: 8 members and 8 non-members. Grange stated the process and recommendations will be brought

back to the City Council for approval on Feb. 28th. The recent recommendation of Perkins and Will goes to City Council for approval also on February 28th. Saueressig commented on the time and effort people put into their applications. Grange stated the team is also currently still looking for a youth representative.

8B. Review and Comment on Frenz and Worm Properties-Concept Plan

Grange reviewed the Concept plan submitted to the City and stated it goes to the Planning Commission then to City Council on February 28th for approval to discuss the open space and the preservation components of the plan.

Stephen Gardner, from the Forestar Group was on Zoom, available to help answer any questions the Parks Commission may have.

Grange gave a presentation showing the two properties and providing background information. Keyport wondered if there is currently green space in that area, yes. Grange replied the 2040 Comprehensive Plan has to keep the open green space. Grange also read aloud to the Parks Commission, the history on "The Big Woods." Grange stated 42 of the 128 acres will be part of this plan and is included in the packet. Grange noted a condition for approval in the Concept Plan, that could require the City and Developer to enter into a letter of intent to designate and preserve the open green space as a condition upon approval. Saueressig questioned if the City is looking to own all of the preserved woods in the future. Grange stated they are looking into opportunities to purchase all of the preserved woods through grants. Chair Downs wondered if the preserved woods would still be available to create trails. Gardner stated yes it could be a great idea to create trails in there. Gardner stated it is surprisingly flat and nice for a trail system. Heieie summarized stating if the City did not purchase it, there would be enough buildable land for approximately 40 lots. Grange also discussed other ways to fund the purchase of the preserved woods if they do not receive funding through grants. Saueressig asked about pricing of acreage and value of property. Cich wondered about the condition of invasive species in the preserved woods.

Chair Downs noted he would like the minutes to reflect the Parks Commission request to preserve the green space and recommend the Concept Plan to go to the Planning Commission.

8C. Facility Naming Rights and Sponsorship Update

Grange recommended to City Council last night the use of Superlative Group and approval to execute the Professional Services Agreement within the City Council packet to authorize the Parks Commission to move forward with naming rights and sponsorship. Grange discussed the general feeling at the City Council meeting, there was a sense of community and council wanting the residents to weigh in and be heard. Grange discussed Superlative looking at various city assets and generating the value of those assets. He also explained what the process would be to get cost estimates and bring it to City Council for discussion. The motion was ultimately approved 5-0.

Chair Downs expressed his excitement. Grange stated the curling and event center has regional and out of state functions that draw in visitors. The desire would be to expand the Player's Lounge decreasing patrons visiting other competing establishments. Grange explained this is

potential revenue without affecting taxpayer dollars. Grange stated the next step is to meet with the Superlative Group and get things organized and meet. Grange suggested a project team. Saueressig stated he, along with City Council members would like to be part of this team. Grange stated this will remain a regular agenda item to keep the Parks Commission updated and informed on continued progress.

8D. Pedestrian and Bicycle Master Plan Update

Wynveen stated the Open House in February will be online. Grange stated the project will be transitioned to the City's website for 30 days to allow the consultant time to create videos so residents can preview the plan. These efforts should ideally produce more community engagement instead of hosting a single Open House event.

8E. Department Happenings

Grange mentioned all of the indoor and outdoor events going on in February and March to get people outdoors and involved in the community. He recognized his staff for the opportunities they continue to put on for the community.

9. Other Business

9A. Commissioner Round Table

Cich expressed her excitement to tour some of the natural resource projects going on around the city.

Heieie commented on the professionalism and attentiveness of the lifeguards at the Open Swim.

Saueressig also noted the professionalism of the Community Center lifeguards and commented how great it was to see people at the ice rink.

Vice Chair Branch noted the various opportunities the City of Chaska provides. Excited for what is to come.

Wyveen looking forward to the Ice Gardens coming up. Encouraged more posts to the Community Center social media accounts. Grange appreciated the comment and will have his staff look into it.

Keyport enjoyed visiting the ice fishing contest.

Chair Downs was invited to a focus group to review facilities that are in need of repair or renovation. He noted the building most in need is the police station. One such option that came out of the focus group would be to combine the fire hall and police station to create a new emergency services building.

10. Adjourn

Motion to Adjourn the February 8, 2022, meeting by Saueressig, second by Keyport.

Roll Call to Adjourn at 8:13 p.m.

Next meeting: March 8, 2022

- MINUTES -
CHASKA CITY COUNCIL
FEBRUARY 28, 2022

1. Call to Order
The meeting was called to order by Mayor Windschitl at 7:00 pm.

2.Pledge of Allegiance

3. Roll Call
Roll call was taken. Present: Councilmembers Grau, Hatfield, Hubbard, Huang, and Mayor Windschitl

Absent: None.

Also Present: Matt Podhradsky, City Administrator; Noel Graczyk, Administrative Services Director; Kevin Wright, Communication Director; Elise Durbin, Assistant Administrator; Parks and Recreation Director Marshall Grange; Nate Kabat, Community Development Director; Liz Hanson, City Planner; Jake Saufley, City Attorney; and Matt Clark, City Engineer.

4. Adopt the Agenda
Councilmember Hatfield noted that agenda item 7.C. needs to be corrected to read "Wetland Replacement Plan for Oak Ridge Commons".

Motion by Councilmember Hatfield, second by Councilmember Hubbard to adopt the agenda with the noted correction. Motion carried.

5. Visitor Presentation
City Administrator Podhradsky introduced Elise Durbin, the new Assistant Administrator.

Assistant Administrator Durbin addressed the Council and shared her background with them. She stated she previously worked for Carver County CDA as the Economic Development Director and she is excited to be working with the City of Chaska now.

Mayor Windschitl welcomed Assistant Administrator Durbin and stated he looks forward to working with her. The Council echoed his sentiments.

Mayor Windschitl stated he would like to recognize some Commission members who are no longer serving the City and thank them for their hard work. He noted the Commissions do a lot of work for the City and noted the following:

Aaron Saylor, Planning Commission
Jalen Destin, Parks and Recreation Commission
Seth Spreadbury, Human Rights Commission
Russell St. John, Heritage Preservation Commission

6. Minutes

6.A. Approve February 7, 2022 City Council Meeting Minutes
Motion by Councilmember Hatfield, second by Councilmember Grau to approve the minutes of the February 7, 2022 City Council meeting.
Motion carried.

7. Consent Agenda
_Motion by Councilmember Hubbard, second by Councilmember Hatfield to approve the Consent Agenda Items A through H:

A. Temporary Liquor License for Southwest Chamber of Commerce
Motion to approve Temporary On-Sale Intoxicating License TW.22-01 and Temporary On-Sale 3.2% Malt Liquor License T32.22-01 for the SW Metro Chamber of Commerce at Taste of Chaska.

B. Adopt Resolution 2022-14, Standard Allowance under the Revenue Loss Provision of ARPA
Motion to adopt Resolution 2022-14 to Elect the Standard Allowance Available Under the Revenue Loss Provision of the Coronavirus Local Fiscal Recovery Fund Established Under the American Rescue Plan Act.

C. Wetland Replacement Plan for Oat Ridge Commons
Motion to approve the wetland replacement plan for Oak Ridge Commons Development.

D. Appointment of Human Rights Commission Chair and Vice-Chair
Motion to appoint Sarah Carlson as Human Rights Commission Chairperson and to appoint Celi Haga as Human Rights Commission Vice-Chairperson.

E. Adopt Resolution 2022-18, Local Decision Making Authority in Planning, Zoning & Housing
Motion to adopt Resolution 2022-18, supporting Local Decision Making Authority in Planning, Zoning and Housing.

F. 2022 LELS Union Contracts (SRGT_Officer)
Motion to approve employment contracts for 2022 between the City of Chaska and LELS Local 210, LELS Local 447 and LELS Local 385, with these agreements becoming effective January 1, 2022.

G. Adopt Resolution 2022-19, 2022 Downtown Reconstruction Project Feasibility Study
Motion to approve Resolution No. 2022-19 Accepting the Feasibility Study and Scheduling a Public Improvement Hearing for the 2022 Downtown Street Reconstruction Project.

H. Reserve at Autumn Woods Wetland Replacement Plan
Motion to approve the wetland replacement plan for Reserve at Autumn Woods Development.
Motion carried.

8. Action Items
8.A. Chaska Community Center Master Plan Citizen Task Force

City Administrator Podhradsky introduced this item.

Parks and Recreation Director Grange provided background and information on this item. He stated Kelsey McNutt, Community Center Manager is also present this evening. He reviewed the process and steps taken to date and now they are looking for the Council to appoint the Citizen

Task Force to the Community Center Master Plan project. He stated the applicants they have for the 16 person Committee are a great representation of all areas of the community.

City Administrator Podhradsky stated they were very happy about the 37 applications that came in and it was made clear that the Community Center is a place most see as a central gathering location for them all and some stated they moved into Chaska because of the Community Center. He noted they will be following up with the people not chosen to be on the board to ensure they are aware that they will still have many other ways to provide input on the process.

Councilmember Hubbard noted the different viewpoints were so interesting and it solidified the need for a diverse board and it was very hard to rank all the applicants because they were all so great.

Councilmember Grau stated he was blown away by the number of applicants and noted it was nice to see so much passion for the Community.

Councilmember Huang stated he has to ask because it is something that will come up probably at some point and he wants to know if Councilmember Hubbard feels having her husband on the Board could be an issue.

Councilmember Hubbard stated she wasn't actually aware her husband had an interest in this board because they hadn't discussed it and because it was an internal Human Rights discussion and decision which she had no part in.

City Administrator Podhradsky stated they had all the Commissioners discuss this issue and they ultimately decided he was a good fit for the Board.

Mayor Windschitl stated all applicants appointed and not appointed will have a chance to be a part of the process and stated it shows how much people care about the Community.

Motion by Councilmember Hatfield, seconded by Councilmember Huang to appoint the Citizen Task Force to the Community Center Master Plan project.
Motion carried.

8.B. Recommend Consultant for the Community Center Master Plan Architectural Services

Parks and Recreation Director Grange provided background and information on this item. He noted John Slack with Perkins&Will is also present via Zoom tonight. He reviewed the process and steps taken to date and noted it was a unanimous decision to name Perkins&Will as the Architectural Services Consulting Company for the Community Center Master Plan.

Councilmember Huang asked if specific members of Perkins&Will such as John Slack will be named in the contract as members who will be working on the project for its entirety or is there potential for members to change at some point during the process.

Parks and Recreation Director Grange stated all of the four named individuals verbally agreed to be part of the team and they can get it in writing as well.

John Slack, Perkins&Will, addressed the Council and stated Mr. King, Mr. Costellic, and himself all bring many different types of experience to this project and noted they will be the ones representing them at all of the meetings throughout the process and are very excited to be a part of it.

Motion by Councilmember Huang, second by Councilmember Grau to Motion to authorize City Administrator, Matt Podhradsky, to execute a service agreement with Perkins&Will for architectural services.
Motion carried.

8.C. Adopt Resolution 2022-15, Approving the Concept Plan for a Building Addition at Southwest Christian High School/Southwest Christian High School/PC #2022-10

City Planner Hanson provided a presentation on this item and reviewed the Concept Plan.

Dan Beckering of Southwest Christian High School addressed the Council and thanked them for the support they have received going back to the beginning of the process several years.

Councilmember Hubbard asked when construction will start pending approval.

City Planner Hanson stated they plan to start right away.

Councilmember Huang stated it is nice to see the vision coming to life, it looks great and he hears great things about the students coming from their school.

Motion by Councilmember Huang, second by Councilmember Hatfield to adopt Resolution No. 2022-15 approving the Concept Plan for the fieldhouse building addition at Southwest Christian High School (PC#2022-10).
Motion carried.

8.D. Adopt Resolution 2022-16, Approving the Concept Plan for Frenz & Worm Properties/Forestar Group - Midwest/PC #2022-09
City Administrator Podhradsky introduced this item.

Community Development Director Kabat provided a presentation on this item.

Councilmember Hatfield asked if there have been any conversations with Carver County regarding how the road connecting to Mt. Hope Road because she worries about the amount of traffic in that area as well as how the school will be impacted by traffic.

City Administrator Podhradsky stated they will do a full traffic analysis and make sure those points are safe for the community.

Councilmember Huang stated he knows Elementary schools are usually planned for buses and staff mainly, but in this case he would suggest keeping that in mind because they don't want parent parking at events to take over the neighborhood to the south.

Councilmember Hubbard noted Clover Ridge is her road and the main complaint is the traffic flow into the school pick up and drop off areas so she would like to remind them to be conscientious of that and safe school crossing.

Mayor Windschitl stated he thinks they need to think about the athletic complex and plan for overflow parking that can be used for big events. He noted he would like to see a provision for any homes sold in the development that states there is a lighted ball field next door so home buyers are very clear on that and it isn't an issue later.

Councilmember Huang echoed Mayor Windschitl and added he would like to see large signs placed in that are saying lit ball fields will be going in so no one is under the impression that area is going to stay an open green pastoral farmland forever.

Councilmember Grau stated he would like to see them plan accordingly for the grading so there isn't a huge impact on the areas surrounding it because that has been an issue in the past due to construction.

City Admin stated they can put a condition in there that says they will address the concerns regarding marketing materials that state there will be lit ballfields in that space by this housing development and that they would like to have signs put up near the open green space indicating those will be lit ballfields at some point in the future.

Motion by Councilmember Hubbard, second by Councilmember Grau to adopt Resolution No. 2022-16 approving the approving the Concept Plan for the Frenz & Worm Properties development proposal by Forestar Group – Midwest (PC#2022-09) with the condition that home buys will be notified of the plans to have a lit ball field near the development and that there will be some sort of signage on or near the fields indicating it will be a lit ball field in the near future. Motion carried.

8.E. Adopt Resolution 2022-17, Approving the Concept Plan for the Chaska Tech Center/Amcon Construction/PC #2022-11

City Administrator Podhradsky introduced this item.

City Planner Hanson provided a presentation and overview of this concept plan.

Bruce Hellier with Amcon Construction addressed the Council. He stated they are looking to start construction this spring and summer and stated it should be completed within a year potentially. He noted they will move tenants in as spaces become available.

It was the consensus of the Council that this will be a great addition to the City and is something they see being in high demand.

Motion by Councilmember Huang, second by Councilmember Hatfield to adopt Resolution No. 2022-17 approving the Concept Plan for Phase III of the Chaska Building Center (Chaska Tech Center) (PC #2022-11).
Motion carried.

8.F. Purchase of Property at 216 4th Street West
City Administrator Podhradsky introduced this item.

Motion by Councilmember Hubbard, second by Councilmember Huang to approve the Purchase Agreement for the purchase of the property at 216 4th Street West, authorizing the Mayor and City Administrator to enter into the purchase agreement with the seller of this property.
Motion carried.

9. Bills
9.A. Accounts Payable Council Roster 2-28-2022

Council requested further information on page 1, 8, and 19.

City Administrator Podhradsky provided further information regarding those bills.

Motion by Councilmember Huang, second by Councilmember Grau to approve the bills as presented. Roll call was taken. Voting aye: Councilmembers Grau, Hatfield, Hubbard, Huang, and Mayor Windschitl. Voting nay: None
Motion carried.

10. Other Business
10.A. City Administrator's Report
10.A.i. Bi-Weekly Report February 28, 2022
Councilmember Grau asked how the redistricting is done.

City Administrator Podhradsky provided an overview of how the process is done. He stated it happens two years after the census is done and it's a process that makes sure they have equal representation at the different levels of government. He noted Chaska will be divided in half in a way once the redistricting is completed.

10.B. Hawk Pride Recap

Councilmember Huang:
- Stated the Ice Sculptures were nice and thanked the Downtown Business Alliance
- SouthWest Transit CEO Len Simich officially retired and thanked him for all his hard work
- Noted they are working with KL2 Consulting to help with the CEO position search, they have several applications so far, however none have been from Minnesota yet
- Noted on February 18th there was a bus fire due to an electrical issue, and that it is being investigated further by insurance, he stated the fire happened while it was stored in a garage and it was taken care of by the fire department without causing damage to any people

- He stated SouthWest Prime service is being expanded and noted they are looking at their data retention practices
- He noted he is concerned about the traffic at the stoplight heading south on 41at the light on Angler

Councilmember Hubbard:

- Stated the Communities of Belonging Group met and discussed the future of Chaska Cares and thanked City Staff
- Noted she used SouthWest Prime to and from the airport and it went really great
- Stated with break-ins that have happened recently she wanted to remind everyone to be vigilant
- Wished her son a Happy Birthday, noted they celebrated at the Community Center and it was great

Councilmember Hatfield:

- Noted she attended the Ice Gardens and it was beautiful outside
- Stated she is impressed by the Community Center staff and their attitudes in the morning they are always so kind
- Stated she has noticed a lot of speeding at certain times of the day and would like to make people aware

City Administrator Podhradsky:

- Noted he is appreciative of the Police Officers for checking in on him when his garage was open the other night with the break-ins occurring, he stated they go above and beyond

Mayor Windschitl:

- Congratulated SouthWest Transit CEO on his retirement and thanked him for his service to the City
- Congratulated Zach Bonnema on becoming the first Chief of Training for Chaska Fire Department
- Noted he would like to change some of the Commission questions at some point
- Stated he got calls from both new Representatives for the City after the boundary changes occurred and stated it is nice they reached out
- Stated the situation in Ukraine is sad and wishes all involved the best, specifically Irenea and Bob who help with the retreat
- Noted they are back to a normal meeting schedule for the Council meetings in March

11. Adjourn

Motion by Councilmember Hatfield, second by Councilmember Grau to adjourn the meeting at 10:09 pm.
Motion carried.

- MINUTES -
CHASKA ECONOMIC DEVELOPMENT AUTHORITY
FEBRUARY 28, 2022

1. Call to Order
President Windschitl called the meeting to order at 10:10 pm.

2. Roll Call
Roll call was taken. Present: Commissioners Grau, Hatfield, Hubbard, Huang, and President Windschitl.

Absent: None.

Also Present: Elise Durbin, Assistant Executive Director and Matt Podhradsky, Executive Director.

3. Agenda
Motion by Commissioner Hubbard, second by Commissioner Huang adopt the agenda as presented.
Motion carried.

4. Minutes
4.A. Approve EDA Meeting Minutes 12-20-2021
Motion by Commissioner Huang, second by Commissioner Grau to approve the December 20, 2021 EDA Meeting Minutes.
Motion carried.

4.B. Approve EDA Meeting Minutes 01-03-2022
Motion by Commissioner Hatfield, second by Commissioner Hubbard to approve the January 3, 2022 EDA Meeting Minutes.
Motion carried.

5.A. Adopt Resolution EDA 2022-1, Resolution Approving Sale of Property to Pulte Homes for the Del Webb Development
Community Development Director Nate Kabat presented this item to the Commission and provided some background.

Motion by Commissioner Hatfield, second by Commissioner Huang to approve Resolution EDA 2022-1 approving sale of property to Pulte Homes for the Del Webb Development.
Motion carried.

6. Other Business
None.

7. Adjourn
Motion by Commissioner Hatfield, second by Commissioner Huang to adjourn the meeting at 10:16 pm.
Motion carried.