AGENDA
CHASKA PLANNING COMMISSION
ONE CITY HALL PLAZA, CHASKA CITY HALL
Wednesday, June 12, 2019
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 Planning Commission Meeting Minutes from May 8, 2019
6. Consent Items
   - 6.A. Find that Sale of Excess City Property in SW Chaska (PID 300062220) is Consistent with Comprehensive Plan/City of Chaska
   - 6.B. Recommend Approval of the Final Plat for Harvest West/Traditions Development/PC #2019-15
7. Action Items
   - 7.A. Recommend Approval of the Preliminary Plat, Preliminary Site & Building Plan and Rezoning for Ess Lot & Ernst Home Redevelopment/Talle & Associates Inc./PC #2019-13
   - 7.B. Recommend Approval of the Conditional Use Permit Amendment for Bavaria Downs/A'Bulae/PC #2019-12
   - 7.C. Recommend Approval of the Concept Plan for Shepherd of the Hill Twin Home Development/Habitat for Humanity/PC #2019-14
8. Other Business

8.A. Receive Other Meeting Minutes

8.A.i. Receive the May 6th, 2019 City Council Minutes

9. Adjourn

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CHASKA PLANNNING COMMISSION
MINUTES
May 08, 2019

1. Call to Order
Chairperson Dahlke called the meeting to order at 7:00 pm.

2. Roll Call
Roll call was taken. Members present: Commissioners Brass, Cross, Dahlke, Pfeiffer, Sailer, Bowe, and Urbanski

Members absent: Commissioners Lacey and Olson

Also present: Luke Melchert, City Attorney; Kevin Ringwald, Community Development Director; and, Liz Hanson, City Planner

DRAFT

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

4. Visitor Presentation

There were no presentations.

5. Minutes
Motion by Commissioner Brass, second by Commissioner Urbanski to approve the Minutes of the April 10, 2019, Planning Commission meeting.
Motion carried.

6. Consent Items
Motion by Commissioner Cross, second by Commissioner Pfeiffer to approve the Consent Agenda as follows:

a. Approve the Final Site & Building Plan for China Pagoda at 798 Yellow Brick Road/ PC #2019-09, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
   a. Project Narrative (pgs 1-5), submitted by Jeff Hafferman, dated April 4, 2019.
   b. Site Plan (P100), submitted by InSpire Architects, dated February 25, 2019.
   c. Building Elevations (P101), submitted by InSpire Architects, dated February 1, 2019.
   d. Building Details (P102), submitted by InSpire Architects, dated February 1, 2019.
   e. Trash Enclosure (A002), submitted by InSpire Architects, dated February 25, 2019.
   f. Landscape Plan (L100, L200, L300 & L400), submitted by InSpire Architects, dated January 9, 2019.
   g. Lighting Photometric & Specs, submitted by Premium Quality Lighting (pgs 1-7), dated March 11, 2019
   h. The Klein Brick Yard Second Addition Plat
2. Compliance with section 9.11 Building Design/Materials and Site Design.

3. Provision of curb and gutter to be provided in parking lot design.
4. Provision to remove or re-face the existing monument sign on the southeast corner of the site.
5. Provision that signs will meet Section 10 of the zoning ordinance and a 10-foot setback from all property lines.
6. Provision that the Chaska brick blend is reviewed and approved by Planning staff prior to application.
7. Building fire suppression system to be implemented if required by Fire Department.
8. Compliance with applicable zoning requirements, in particular Chapter 9 (General Requirements).
9. Provision that all mechanical equipment will be fully screened from view.
10. Provision that full modular face brick will be used on the buildings in order to be classified as a Class I material.
11. Provision that drive aisles are at least 24 feet in width.

Motion carried.

7. Action Items:

7a. Review the Concept Plan for Market Rate Apartments and Transitional Housing at 401 Hickory Street/Community Asset Development Group/PC #2019-10

City Planner Liz Hanson presented the item to the Commission.

Commissioner Brass asked when the 2040 Comprehensive Plan would be approved.

City Planner Hanson stated that it may be sometime later this year, but there is no timeline. She stated that it can be somewhat unpredictable because the City will receive comments back that will need to be addressed, which adds additional time to the approval process.

Chair Dahlke confirmed with City Planner Hanson that for this to move forward, the land would have to be rezoned.

Commissioner Brass stated that it appears from the concept plan that the City owned site cuts right through the building and asked if there was any thought to making the building smaller.

City Planner Hanson stated that there is an alternate site plan that shifts it off the City owned parcel.

Commissioner Brass asked when the City would hear back from the Army Corps of Engineers.

City Planner Hanson stated that it is hard to predict when getting to the State level how much time it will take to get feedback from them.

Commissioner Sailer asked if it was possible that the Army Corps of Engineer may conclude that the plans won't work.

City Planner Hanson stated that is a possibility and this would need to be in place before this reached the Preliminary Plan phase.

Commissioner Urbanski asked if there was a history of the City selling or partnering with developers.

City Planner Hanson stated that it is not common.

Community Development Director Ringwald stated that they have done it before, if the City has excess property and doesn't have a designated purpose for it.

Commissioner Urbanski asked about the electric utility crossing the parcel.

Community Development Director Ringwald stated that the City would retain the easement in order to access the utility.

Chair Dahlke asked if the costs involved in moving utilities or sewer and water would be incurred by the developer.

Community Development Director Ringwald stated that those would be costs of development and would be the responsibility of the developer.

Commissioner Brass stated that there are two parcels and asked if the developer already had a purchase agreement on the other parcel. He questioned whether the owner was up to date on all taxes and assessments.

City Planner Hanson noted that it is owned by a private family that is working with the developer.

Commissioner Pfeiffer stated that she understands that this use does not fit what has been guided for the 2030 Comprehensive Plan so they are looking at the 2040 Plan. She asked what would happen if the 2040 Plan changed. She questioned whether this was breaking the rules to bank on what the Commission is "thinking" the City will do.

City Planner Hanson stated that the 2040 Plan can still change but noted the land use change is probably more rare, because of Met Council.

Commissioner Cross asked about the setback from old 212 and asked if that would impact this parcel.

City Planner Hanson stated that she believes it will hit right where they are showing the edge of their building.

Commissioner Cross stated that the trees along the railroad are not considered high grade trees, but they are a screen. She stated that the size of the building bothers her.

Commissioner Brass confirmed the access point location and stated that the plans indicate

underground parking but noted his concern with being able to drive in and turn and drive down to a garage because it doesn't seem like it would work.

City Planner Hanson stated that the parking will actually be the lower level of the building and there may be a portion excavated, but it is not a true underground parking lot.

Commissioner Pfeiffer stated that it is currently designated as Open Space in the Comprehensive Plan and asked City Planner Hanson to explain why it had this designation and why the Commission is being asked to consider a change.

City Planner Hanson explained the designation and stated that Open Space are areas that the City wants kept in its natural state or maintained as a buffer.

Commissioner Brass stated that this parcel is virtually unusable.

Dave Pokorney, Community Asset Development Group, 1110 Yellowbrick Road, gave a brief history of the site and some of the things they have been working on. He noted that the current plans are not for transitional housing which would mean tenants would have a limited amount of time to live here before having to move out. He gave an overview of the most recently Comprehensive Plan and noted that the changes were adopted by the City and they had nothing to do with them. He stated that the City has now stated that this land is designated as Mixed use and should have higher density. He noted that the trees along the edge provide a nice buffer. He stated that they do control the property and it was always assumed that the City owned parcel should be incorporated into the site. He noted that if it is determined that the City owned parcel should not be included, there is an alternate plan that decreases the size of the building. He stated that when this site is developed, they would like to eliminate the existing access point because it is not safe. He reviewed the agreement with the Corps of Engineers. He reiterated that their plans are an attempt to be consistent with the City's 2040 Comprehensive Plan. He noted that they had taken a look at other sites within the City and none of them worked for the project. He explained that the expected demographic population for the housing and noted that their services will be in conjunction with Launch Ministries.

Commissioner Cross asked who would actually own the buildings.

Mr. Pokorney stated that it is two separate parcels and will have two separate owners. The sixteen-unit building will be owned by the Community Asset Development Corporation and the other may be owned by DDK. He stated that for the sixteen-unit building there will be a professional building manager that has experience in market rate projects and also some affordable and subsidized buildings also.

Commissioner Brass asked if Mr. Pokorney was suggesting building the homeless transitional apartment units and the other building, with two separate tax I.D.s and owners, but share parking, cross access agreements and shared amenities as though it were one site. He asked about the size of the sixteen-unit apartments.

Mr. Pokorney stated that they will be owned separately and the sixteen-unit building will be all efficiency units and noted that they are planning to have 21 parking stalls for the apartments.

He noted that many people transitioning from being homeless will not own a vehicle, so that parking should be more than adequate.

Corey Magstadt, Executive Director of Launch Ministries, stated that he anticipates that at most, only half of the residents will have vehicles.

Commissioner Cross asked about the homeless transition building. She stated that her biggest concern is that typically young people will flock there with their friends and their cars because people who are homeless know other people that are homeless.

Mr. Magstadt stated that is an excellent point because one of the traits of the youth homeless population is loyalty to their peers, so this is where an excellent property manager would come into the picture. He stated that there will be a guest policy that will include how many nights people can stay. He stated that there will also be a full-time onsite case manager that will watch out for these types of things.

Commissioner Bowe asked if the units would be furnished.

Mr. Pokorney stated that the plan for the sixteen-unit building is to have the units furnished, but as they move out, the residents can take the furniture with them.

Chair Dahlke asked what would happen if one of the tenants loses their job.

Mr. Pokorney stated that everyone is required to be employed or have income. He explained that if they lose their job, they will still have to pay rent because this is not subsidized housing. He noted that the target rent is $475/month.

Mr. Magstadt stated that they will have processes in place for how long of a period they will let this go on and will also have partnerships with entities like the Work Force Center.

Commissioner Brass asked for clarification that the $475/month would cover all the costs and that there would not be any subsidized housing.

Mr. Pokorney noted that the average efficiency units in Carver County are $900 to $1,000/month. He explained that this building could not be built and operated with $475/month rent.

Commissioner Pfeiffer asked if that is where the Community Asset Development Foundation steps in.

Mr. Pokorney stated that they are submitting for funding through the State to cover the difference in costs.

Commissioner Brass asked if Mr. Pokorney saw any marketability problems with the other building having higher end units sharing the site with the homeless transition housing. He expressed concerns about the building being built and then sitting half vacant because people do not want to rent those units with what is next door.

Mr. Pokorney stated that they have not gotten fully into that process yet for the second site. He stated that one example of a similar project is in Edina which has a high-end condo next to this type of building.

Commissioner Urbanski asked if both of the buildings would be built simultaneously.

Mr. Pokorny stated that stated that there would be a lot of logic in building them at the same time. He stated that he thinks they will be built at the same time but cannot make plans like that at the concept level.

Chair Dahlke asked if the residents for the sixteen-unit building needed to be Carver County residents or Chaska residents.

Mr. Magstadt stated that they will need to be Carver County residents. He noted that currently there are 67 youth, 18-24 years old, on the waiting list from Carver County right now. He noted that as they are gathering information, they do not ask the youth what city they are from, only the county.

Chair Dahlke asked how long people would be occupying these units and if the management would give a gentle shove once they reach age 29, or are they just out at age 29.

Mr. Magstadt stated that their current contract with Carver County is to serve 18-25-year-olds and their policy is that they do not age out of the program if they continue to need services.

Commissioner Brass asked how this worked within fair housing laws.

Mr. Pokorny stated that you cannot discriminate based on race, religion or sex, however you can discriminate based on age. He stated that they will be giving preference to people to have a "relationship" with Carver County.

Commissioner Brass asked if it can be mandated that the residents of the sixteen-unit building must be on their program.

Mr. Pokorny stated that as part of the State grant program, they have to show there is a case manager. He gave examples of how they would fill the units if there was a vacancy and no one affiliated with Carver County was in need.

Commissioner Urbanski asked for a clearer definition of how they determine if someone is from Carver County.

Mr. Magstadt stated that if someone is homeless, couch hopping or living out of their car, they obviously don't have an address. He stated that they use the term "connected to" Carver County. He explained that how they would make that determination is whether they went to school here, have family here, is currently staying here or is somehow connected to Carver County.

Commissioner Cross stated that she understands that their proposal is for two separate buildings with separate owners, but questioned whether people from the sixteen-unit building will be able

to "graduate" to the other building with some sort of subsidy.

Mr. Magstadt stated that there is not a subsidy program that will be able to afford the expected rents in the other building.

Commissioner Brass confirmed that Community Asset Development Foundation would maintain ownership of the sixteen-unit building.

Chair Dahlke asked Mr. Pokorney if this would be a dead project if he did not receive the State funding.

Mr. Pokorney stated that if they did not receive funding during this calendar year, he expects that they would seek funding the following year. He stated that he expects them to have control of the land for at least the next two years and noted that the current owners are donating the property.

Commissioner Urbanski explained that he tends to think in terms of worst-case scenarios and gave an example of the foundation having trouble and disappearing in five years. He asked how the community would be protected if something like that happened.

Mr. Pokorney stated that the City will not be involved financially at all. He explained that the foundation has been around for about seven years and owns 16 buildings with a value of about $16 million. He stated that it is highly unlikely that 30 years from now the foundation will not be an operating entity. He noted that under this mortgage, the State could shift it to somebody else or it would convert back to market rate efficiency unit and it could be purchased. He stated that he sees this is a highly unlikely scenario.

Commissioner Pfeiffer stated that she believes the most important item looking long term at this project will be managing the property.

Commissioner Sailer expressed his surprise that the land they will control will be donated.

Chair Dahlke noted that this is not a public hearing, but they would like to get some input from the public. He noted that there is a sign-up sheet in the back for people who would like to be kept up to date on progress on this project.

Chuck Lieber, 1036 Bluff Trail, noted that he is president of the congregation at Shepherd of the Hill Presbyterian Church. He explained that he is familiar with a program that is similar to Launch Ministries, called Families Moving Forward. He stated that Families Moving Forward is a fantastic program and he hopes that Launch Ministries is similar and stated that he supports this kind of building in order to help the homeless people be productive in society.

Hunter Haas, 125 North Hickory Street, stated that he is an enthusiastic support of this plan. He gave an example of a friend who had been homeless during the last winter who received housing via the Salvation Army. He explained that he sees this building as a chance to save the lives of 16 people.

Daniel Russ, 321 West First Street, stated that he was a teacher at Chaska High School for 31 years. He stated that he has known many people who were given a chance and went on to dedicate their lives to helping others. He stated that if nothing is done to help these young people, the problem will only get worse. He stated that he urges the Commission to think positively about this program.

Shelly Haas, Hickory Street, stated that she had a personal experience with a 25-year-old homeless man. She stated that was able to help find him odd jobs and he was the best worker she ever had. She stated that many people are scared of homeless people and many times they shouldn't be. She stated that usually people do not intend to be homeless and this is a way to help them.

Marian Garrison Marlowe, 211 North Pine Street, stated that she also attends Shepherd of the Hill Presbyterian Church and has worked with Families Moving Forward. She stated that it is a wonderful program but does not serve the youth so she welcomes this program in the neighborhood.

Nancy Hulheim, 754 Ashley Drive, asked the Commissioners to find compassion and support this project.

Janice Nelson, 205 North Hickory Street, thinks the concept is wonderful, but she is concerned about the amount of extra traffic that will be brought to the area. She stated that people speed down that road right now and thinks the extra traffic will cause more problems. She asked that a traffic study be done to make sure that it won't adversely affect the people already living there.

Chair Dahlke asked about a traffic study for this project.

City Planner Hanson stated that it is a condition of approval, but would not happen until the Preliminary Plat approval.

Russ St. John, stated that he is the Board Chair of Love in the Name of Christ that represent 25 churches in the area. He stated that the churches that know about this project support it. He agreed that traffic may be an issue and asked the Commission to listen to the residents about that issue.

Judith Kopen, 4071 Volasec Bath, stated that she is very excited about this project and thinks there will not be a problem filling the other building and asked the Commission to support the project.

Margaret Morris, 212 North Elm Street, stated that her biggest concern is that the levy will stand.

Commissioner Urbanski stated that he is pretty proud to have a project like this proposed in the City and feels more projects like this are needed throughout the Country, but is concerned about the location and it seems a bit like trying to put a square peg in around hole.

Commissioner Bowe stated that she wants to go on record expressing her overwhelming support for a project like this.

Motion by Commissioner Urbanski, second by Commissioner Brass, to recommend to City Council approval the Concept Plan for Hickory Street Apartments (PC#2019-10), subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Concept Plan (pgs 1-16)
    b. Survey-Geyen Exhibit, submitted by Stantec, dated April 30, 2019
2. Compliance with section 9.11 Building Design/Materials in Commercial and Industrial Districts.
3. Provision of material boards showing the proposed material selections for the Market Rate Apartment and Transitional Housing Building to be submitted at preliminary.
4. Provision that both buildings show complementary qualities between each other and be designed to fit in with downtown Chaska.
5. Provision of planting islands to be at least 10 feet in width.
6. Provision of a parking summary for the Transitional Housing Building to be submitted at preliminary.
7. Provision of lighting specs and photometric to be submitted at preliminary.
8. Provision of a tree survey to be submitted at preliminary.
9. Provision to provide a detail drawing for each usable open space area to be submitted at preliminary.
10. Provision of a sidewalk on the west side of Hickory Street and safe pedestrian connection between the east and west sides of Hickory Street at the Chaska Blvd and Hickory St intersection.
11. Parking on Hickory Street between Chaska Blvd and 4th Street will be prohibited.
12. Provision of a compatibility study between the Transitional Housing Building and the Market Rate Apartment Building.
13. Provision to remove the driveway connection between both surface parking lots on the north side of the site.
14. Provision of a traffic study to be submitted at preliminary.
15. Provision of a transit need study of the homeless transitional housing occupants to be submitted at preliminary.
16. Coordination with the City Engineer for the provision of public utilities to the site.
17. Provision of closer evaluation of the Flood Channel and Electric Distribution Lines and their implications on the site to be addressed by preliminary submittal.
18. Compliance with applicable zoning requirements, in particular Chapter 9 (General Requirements).
19. Provision of a storm water management plan meeting City and Carver County WMO standards.
20. Provision of a wetland report be completed and submitted at preliminary.
21. Application for preliminary site plan, preliminary plat and rezoning cannot occur until the 2040 Comprehensive Plan is formally adopted by Met Council.

Commissioner Bowe noted that she wished the site had less complications and could happen sooner, but she would still support the project.

Commissioner Brass stated that he supports the concept, in general, and noted that he would like the two buildings to look similar. He stated that he shares the same concerns as Commissioner Bowe because there is a lot going on with the site, but thinks it is needed. He stated that he also has a few concerns about the ownership structure.

Commissioner Sailer stated that he was happy to know that the developer had alternate plans in case the building needs to be smaller.

Chair Dahlke reminded the audience that the Planning Commission is a recommending body and will not vote to approve the project but can only recommend that the Council take that action.

Commissioner Pfeiffer stated that she has one thing that she would like to add to the conditions that the City would receive information on the plans for management of the building.

Commissioner Urbanski accepted the suggested amendment to add an additional condition #22, that the City would receive information on the plans for management of the building. Commissioner Brass seconded the suggested amendment.

Commissioner Bowe noted that staff had asked the Commission to comment on the rezoning and she stated that she would support the rezoning to mixed use.

Commissioner Brass stated that he thinks mixed use is an appropriate zoning for this area and would be better than office use in this area.

Commissioner Pfeiffer stated that the City has been referring to this as "transitional" housing, but the developer has explained that it isn't. She suggested that perhaps moving forward, the City refer to it as something other than transitional housing.

Community Developer Ringwald stated that he thinks that terminology is a holdover from previous conversations and asked the developer to provide the City with the correct terminology for what this building will be.

Commissioner Cross stated that she supports the project, but there are many hoops to jump through at this stage. She stated that people need to understand that this will change as more information is gathered.

Chair Dahlke stated that he thinks Chaska has the responsibility to have this kind of housing and should lead the way throughout the County.

Commissioner Pfeiffer asked what a compatibility study would be as mentioned in condition #12.

City Planner Hanson stated that the Commission had already asked a lot of those questions tonight but the City would like a more formal summary of how the two buildings will interact with each other.

Motion carried.

8.Other Business

8.a. Receive Other Meeting Minutes

8.a.i. Receive the Minutes of the April 01, 2019 and Draft Minutes of the April 15th 2019 City Council Meetings.

8.a.ii. Receive the Draft Minutes of the April 15th, 2019 EDA Meeting.

8.a.iii. Receive the Minutes of the April 8th, 2019 Park Board Meeting.

Commissioner Cross

- Asked if the planting near 41 has been done by the City or DOT. She stated that she is hoping that they are planting the salt tolerant plantings.
- Noted that the Highway 5 project will be delayed because of the traffic study
- Stated that there were a few high schoolers observing the meeting in order to see how the community works.

Commissioner Sailer

- Big Woods Boulevard has had work done this week to knock down old farm buildings and asked when the interchange project would be moving forward. Community Development Director Ringwald stated that it was approved by the Council this week and will start soon.

Commissioner Pfeiffer

- Reported on the bad pot holes in the Westin Ridge area
- Reported the cement slabs outside of the Red Bench Bakery, are slanted and are a trip hazard.

Commissioner Brass

- Asked when Starbucks and Chipotle will be opening. Community Development Director Ringwald stated that it will be soon and believes they are waiting for the organization to be ready to open.

Chair Dahlke

- Happy that Schramm is open
- Stated that Pioneer will be closed tomorrow in order to fix the road, if the weather permits

Commissioner Bowe

- No update

Commissioner Urbanski

- No update

9. Adjourn

Motion by Commissioner Bowe, second by Commissioner Pfeiffer to adjourn the meeting at 9:20 pm.
Motion carried.

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
06/12/2019

Subject: **Sale of Excess City Property – SW Chaska**

Prepared By: **Kevin Ringwald**

In 2017, the City of Chaska purchased the right-of-way for the northern collector road in SW Chaska (Savanna Way). In doing so, the city caused the creation of a remnant parcel (the subject property – PID 300062220) as the road bifurcated this property from the landowner's holdings on the east side of the collector road (Savanna Way). The city purchased this remnant parcel as it needed to have a stormwater treatment pond in this general area.

As the collector road (Savanna Way) is now constructed and the preliminary plat of Harvest West is approved; we know exactly how big of a pond we need. The pond does not occupy all of the subject property. Therefore, the city is proposing to sell the balance of the property for development and to put this property back on the tax rolls.

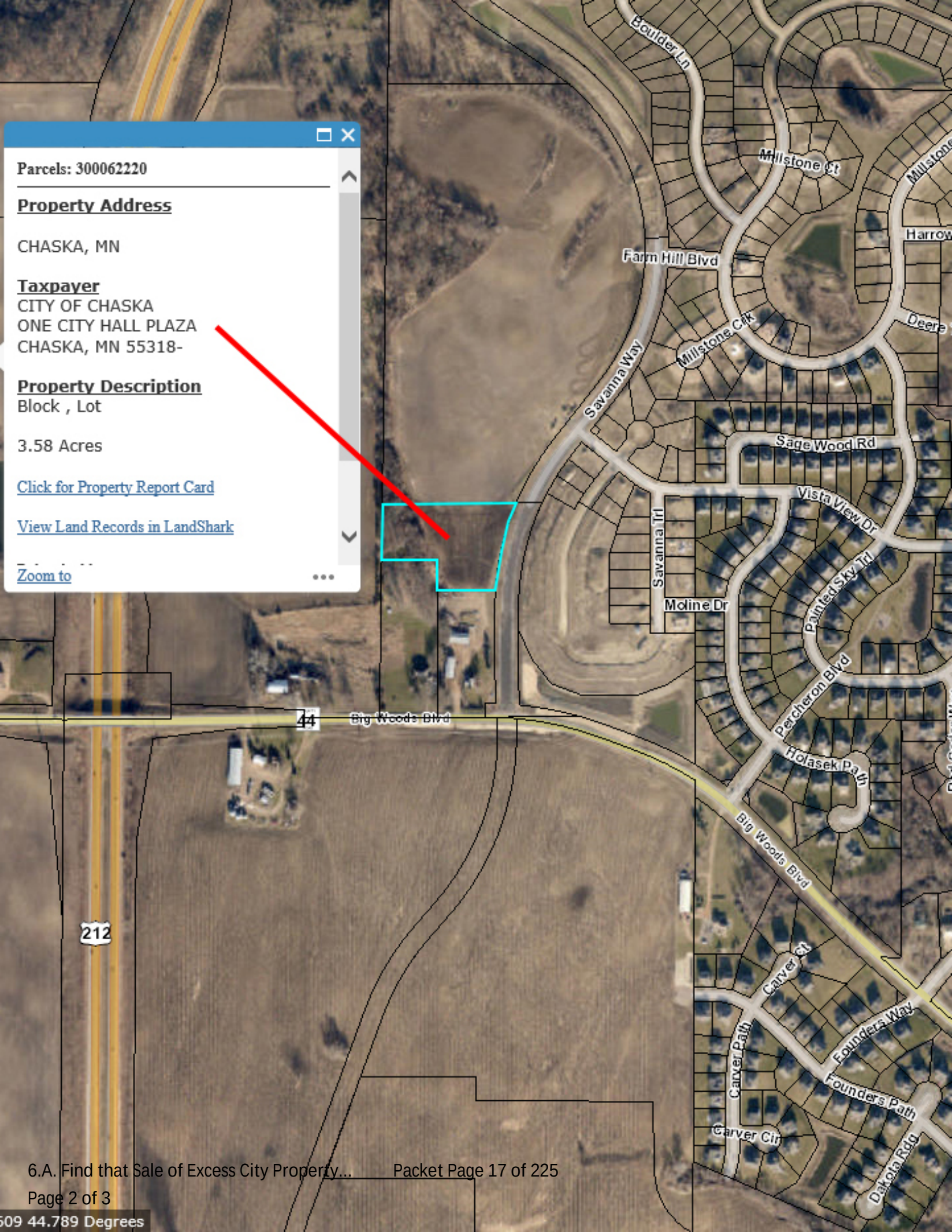
The City has approached all three adjacent property owners: Traditions (to the north and west); Taylor (to the southwest); and Wolff (to the southeast) to see if any of these three adjacent property owners had an interest in purchasing this property. The City only received interest from Traditions.

Minnesota State Statutes requires the Planning Commission to make a finding that the sale of the property would be consistent with the Comprehensive Plan (Mn State Statute, Chapter 462.356, Subd. 2). The Comprehensive Plan designates this property for Mixed Residential development. The Mixed Residential development designations allows for Residential, Commercial, Office, Park, Civic, and Open space uses. The proposed utilization of this property for single family residential is consistent with that designation.

The next step, after Planning Commission action, would be on June 17th when the City Council would be requested to authorize the execution of a purchase agreement with Traditions on the sale of the subject property.

PLANNING COMMISSION ACTION REQUESTED

Motion to Find that the Sale of Excess City Property in SW Chaska (PID – 300062220) is consistent with the Comprehensive Plan.



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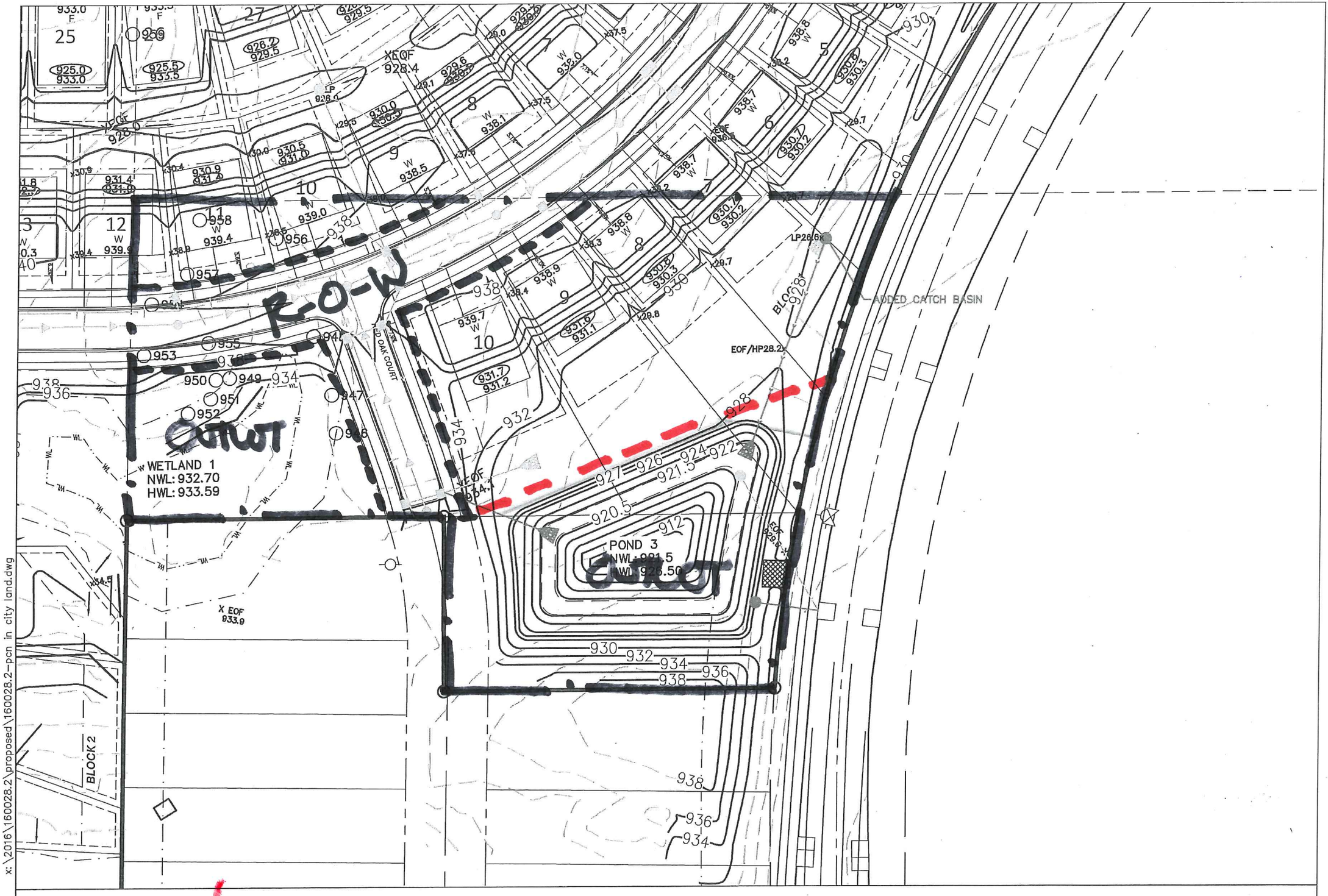

HARVEST WEST - REVISED P3 ON CITY LAND

CHASKA, MN

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ity Property

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
06/12/2019

Subject: **The Harvest West – Final Plat**

Applicant: Tradition Development

Location: North of County Road 44/Big Woods Blvd, west of Savanna Way

Case No.: 2019-15

Synopsis: Applicant seeks to obtain approval of a final plat for 72 lots (16 cottage lots, 56 village lots) in the SW Chaska Growth Area

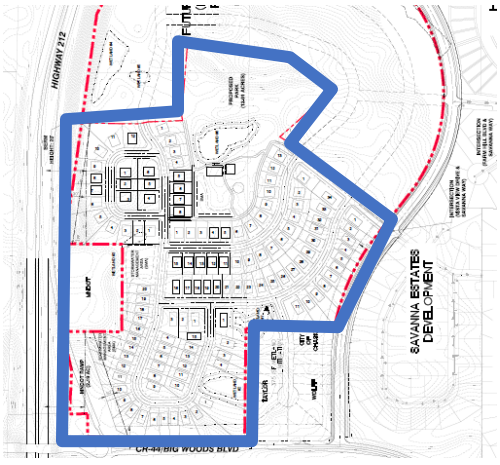
Prepared By: Elizabeth Hanson

Staff Recommendation: Recommendation of Approval

BACKGROUND

Club West Partners, LLC/Tradition Development hopes to continue their major role in the implementation of the SW Chaska Growth and Development Plan. Since 2004, they have assembled approximately 322 acres in this area lying north of CR 44 and east of Savanna Way.

A Concept Plan was approved in March 2018 (PC #2018-04), and a Preliminary Plat and Rezoning application was approved in July 2018 (PC #2018-20) for Harvest West. Please note the area denoted in blue below is the only area that was approved for Concept Plan, Preliminary Plat and Rezoning. The area to the north of this will be looked at for Concept Plan and subsequent approvals later.



Tonight we are coming forward with a final plat for the first phase of the Harvest West development.

CURRENT PROPOSAL

The 72-lot (16 cottage lots, 56 village lots) proposal is located north of County Road 44 and west of Savanna Way. This new addition will essentially be an extension of the existing Harvest

neighborhood, which is currently situated on the east side of Savanna Way. Please note this final plat will only encompass a portion of the lots of what has been previously approved in the preliminary plat. The second phase (56 remaining lots) of the development will come back later for another final plat.

Adjacent properties
The site is bound on the north by land owned by Club West Partners, Creek Road and a couple single family residences, to the west by Highway 212, the south by County Road 44 and a couple single family residences, and the east by Savanna Way, Savanna Estates and The Harvest.

Existing Conditions
The project area is approximately 57 acres and located north of County Road 44 (fka Co. Rd. 140) and directly west of proposed Savanna Way – a City collector road. The majority of the property is currently open farmland and consistent with surrounding land uses. There are a number of wetlands in the proposed development area that have been delineated and surveyed. There is a stand of mature trees that exist through the center of the development. In the north central area of the development there exists a large wooded area encompassing a wetland area.

Topography of the site currently varies from a peak elevation of 950 feet near the most northern boundary to the lower elevations of wetlands and the existing ponds along Highway 212 at approximately elevation 910. The majority of the project area ranges from elevations of 930-940. Topography of the site is generally rolling and consistent with an agricultural land use. Stormwater runoff generally drains west with the most easterly portion draining east to Savanna Way.

The site currently has an eight inch watermain and an eight inch sanitary sewer line extended to the eastern property line off of Savanna Way at the intersection with Vista View Drive. These two lines will be extended through the site.

Land Use
The applicant is proposing 72 lots; 16 cottage lots at an average of 53 feet in width, and 80 village lots (typical single family lots) at an average of 64 feet in width. This is slightly similar in dimensions to the existing neighborhood to the east (approximately 60 feet wide lots) and consistent with the SW Chaska Growth & Development Plan, as this area was shown as "Mixed Residential" and "Residential".

The "Mixed Residential" area is described in the Plan as follows:

> "*The neighborhood center located east of the CR 140 interchange with Hwy 212 is guided for a broader mix of housing types, as well as uses non-residential, appropriate for a neighborhood center. This area is guided for the Mixed Residential designation, which allows a mix of residential land uses from low to high density plus limited commercial, office, civic, park and open space.*"

This area was rezoned to Planned Residential District (PRD-72) in July 2018.

Layout
The initial access to the property will be from Vista View Drive to the east from the adjacent collector road, Savanna Way. This entrance will line up with Savanna Estates' entrance to the east. Additional access will also be provided to the north of the site when that area is developed in the future. The layout of the local streets would then continue throughout the development to access the 72 lots.

The village lots will be situated in the center and west side of the site; the 16 cottage lots will be oriented directly to the south and east of the park area.

A public park is situated on the north end of the subject site, mainly abutting the cottage lots. Two public entrances are proposed on the east and west sides of the park off of Vista View Drive and Edgewood Drive.

Transportation/ROW
The plan proposes to provide for a network of internal residential roadways with connectivity to arterial roadways consistent with the SW Chaska plan. In particular, access to the north-south collector road, Savanna Way, on the east is proposed and will be the primary access to the neighborhood.

The current plan is proposing road right-of-way widths that are consistent with the designs in the existing Club West/Harvest neighborhood.

It should be noted that there is an interchange planned for the intersection of Highway 212 and Co Rd 44/Big Woods Blvd. The design is currently in progress, and construction is anticipated to begin this summer. Co Rd 44 will also be improved in this area starting in 2020. The project improvement area will encompass the county road from Highway 212 into downtown.

Utilities
Sewer and water utilities are available. Minor extensions will need to be provided to service the proposed neighborhood. Utility connections will also be available from the collector road to the east.

It should be noted that there is a large diameter (16") water main running on the MN DOT Right of Way line. There is a permanent 20 foot easement on top of that line.

Setbacks
The setbacks will be generally consistent with the adjacent neighborhoods. Namely, the front yard setback should be no less than 23 feet for the village lots, with the front porch being allowed to encroach into the setback up to 8 feet. This essentially renders the front yard setback for the porch to 15 feet. The cottage lots will have a 20 foot front yard setback. The rear yard setback should be 30 feet for both the village and cottage lots. The side yard setback of 5 feet for the village and cottage lots. Corner lots should have a side yard setback of 23 feet for the village lots and 20 feet for the cottage lots.

In addition to these setbacks, there are other setbacks that apply to this site. See below:

SETBACKS	
Direction	**Setback**
Highway 212	225 feet from the centerline (from centerline of adjacent travel lane) of TH 212 or 50 feet from right of way (whichever is greater)
Savanna Way	100 feet from centerline
Co Rd 44	125 feet from centerline
Wooded Steep Slopes	50 feet building setback and 30 feet no grade/no mow setback
Wetlands	30 feet
Public Park	40 feet

The lots next to the public park would need to adhere to the 40 foot building setback in their rear properties that abut the park.

All other setbacks will be required to be shown and adhered to on all plans moving forward.

Architecture
Robert Thomas Homes will be the primary builder in this neighborhood for both the cottage and village homes proposed. One of the design principles of the SW Chaska Plan is that the area needs to "contain diversity in land uses, building types, building sizes, building prices, and styles of ownership". Although this portion of the concept is not rich in diversity, it is hoped that with future phases of this project that more high-value homes are provided along the edge of wooded slopes areas. The developer has provided several elevations of the product they are proposing here. This product will be a little different than what is seen in the current Club West/Harvest neighborhoods, which staff believes will be a favorable change in providing more variety. The developer will have to meet the Anti-Monotony ordinance.

Parkland
The plan is proposing a 12-acre park area within the center of it. The Southwest Chaska Plan has guided this specific area for a public park.

Please note the exhibits showing the layout and program of the park are purely illustrative at this point and thus will be finalized once a majority of the residents move in. The preference will be to include public engagement to determine the needs and desires of the park. The City and Parks Department will determine specifics for the park, including but not limited to the landscaping, equipment, and trails at that time.

The Parks Director envisions that the park will provide both passive and active functions. Again, these functions will be further analyzed out once park planning commences on this site.

Exposure into the Park

Because this is a public park it will be important to provide proper exposure into this park so that people can find it easily. The park is nestled in the center of this neighborhood so its exposure is not as apparent as it would be on a busy street. Currently the plan shows homes around the perimeter of this park.

The applicant provided several photo simulations during the preliminary submittal showing the zoomed out and zoomed in perspectives of someone approaching the park from the east side. It was determined that the exposure on the east side of the park is acceptable and apparent for future users. The applicant has also provided a photo simulation of the west side entrance into the park.

Parkland Credit
Parkland credit will be given for the areas of the park that are usable. It should be noted that the stormwater pond, wooded steep slopes, and wetland will not factor into the parkland credit given. The developer will have to determine the amount of usable space being donated for staff to determine if there is additional parkland credit required.

Trails & Sidewalks
The plan is proposing to include sidewalks. The developer will be required to provide sidewalks on both sides of the streets per City policy. The sidewalks will connect to the internal pedestrian walkways in the existing development. The sidewalks shall also provide connection to the trail proposed along Savanna Way.

There is a public trail that is planned on the east side of Savanna Way, plus a typical sidewalk on the west side. It will be important to provide an adequate and clear pedestrian connection from Savanna Way into the development off of Vista View Drive to connect people with the public park. There should also be a safe connection across Savanna Way by way of a cross walk or other suitable alternative as determined by the Engineering and Public Works Departments.

The regional trail that runs along the north side of County Road 44 today will be extended and provided at the time the road construction on the County Road will occur in 2020. This extension will essentially start at the Guardian Angels Cemetery and move westerly to the edge of Highway 212. This will complete a significant piece that is missing in the regional trail system, and provide a wonderful amenity to the residents.

Screening, Landscaping & Tree Preservation
Because this development abuts three major roadways (ie. Savanna Way, Co. Rd. 44, and Highway 212) it is important to provide adequate screening. The sides facing these roadways will be required to implement landscaping, and/or berming, to ensure adequate screening and separation is provided between the homes.

The screening provided on Savanna Way appears to be consistent with the same screening done on the east side of Savanna Way. There are different grades along Savanna Way, and thus the screening and berming will differ throughout. There will be berming on the east side of the site as it abuts Savanna Way and will taper as it moves south towards the stormwater pond. There is a drainage swale that is located across lots 6-7, block 1 that prohibits the continuation of this berm onto these lots. The swale is necessary to collect the water that is

being accumulated on the rear yards of the lots that abut Savanna Way. Pushing the swale westerly towards the building pads of Lots 6-7 would mean pushing the drainage closer to the building pads which in turn is concerning to the engineers. Staff and the Developer are amenable to bolstering the size of the plantings on lots 5-7 in lieu of getting a berm there.

When the 2nd phase comes in for final plat we will be able to review the screening being done adjacent to County Road 44 and Highway 212.

Trees will be required in the boulevard in order to meet the City's Boulevard Tree Policy. Landscaping will be required to enhance the development entrances, consistent with the adjacent Harvest development.

Tree Preservation will be an important piece of this development, specifically in the public park area and south of the designated park area where significant trees and clusters are present. The applicant will be saving a majority of the trees in the donated parkland space, but will also be preserving some oak trees near wetland #1. Staff is happy to see that preservation efforts are being exerted.

Excess Land

The City of Chaska currently owns a 3.5 acre parcel on the south side of the site. This parcel was acquired by the City a couple years ago for the purpose of stormwater ponding for the collector road and County road. The City has since acquired additional land on the south side of County Road 44 for the purpose of more ponding. With that said, the 3.5 acre parcel is much larger than what was initially needed for ponding. The City is selling off this area to the developer to be absorbed into the development. Some of this land will be used for ponding for the development and Savanna Way and transferred back to the City to own. In a previous item the Planning Commission was requested to make a motion that states the excess land sale is consistent with the City's Comprehensive Plan.

The next step after Planning Commission action, would be on June 17th when the City Council would be requested to authorize the execution of a purchase agreement with Traditions on the sale of the subject property.

Wetland #2 Improvement

During the development review process a drainage concern was raised by the adjoining landowner Karl and Bonnie Taylor of water level increases occurring within the wetland adjoining the proposed development. The wetland shown as wetland #2 that connects the Taylor's and Traditions properties is currently drained by a draintile that carries water and outlets through the Traditions property. The applicant has worked with all necessary agencies and will be installing storm sewer piping to control water levels of the wetland that will ultimately be a part of the future storm sewer system to serve the Harvest West Development. The engineering plans that are being approved include the storm sewer improvements and are being installed to control the water levels of the wetland.

Development Costs (Infrastructure Improvements)

The Heights of Chaska has a number of area-wide development cost such as:

- Arterial Road Network
- Collector Roads

- Storm Sewer
- Parks
- Interchange (Zone of Influence)

Prior to recording the final plat, Staff will need to work with the applicant to determine which of these are applicable and what those fees will be.

Final Plat

The request is for a 72-lot final plat. The outlot disposition is as follows:

- Outlot A: future development to be owned by the developer
- Outlot B: future park to be owned by the City of Chaska
- Outlot C: future development to be owned by the developer
- Outlot D: State Highway 212 on ramp ROW to be owned by MnDOT
- Outlot E: future development to be owned by the developer
- Outlot F: wetland to be owned by the City of Chaska
- Outlot G: stormwater pond to be owned by the City of Chaska

Conclusion

This will be a significant addition to the area and thus its overall design and accommodations will be important as it moves forward.

PLANNING COMMISSION ACTION REQUESTED:

Motion to recommend to City Council approval of The Harvest West Final Plat for a 72-lot subdivision in the SW Chaska Growth Area, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Cover Sheet, submitted by Alliant Engineering, dated May 22, 2019**
    b. **Site Plan (pgs 4), submitted by Alliant Engineering, dated May 22, 2019**
    c. **Erosion and Sediment Control Plan (pgs 1-4), submitted by Alliant Engineering, dated May 22, 2019.**
    d. **Street & Storm Sewer Plans (pgs 1-8), submitted by Alliant Engineering, dated May 22, 2019**
    e. **Pond 2 Draintile Detail, submitted by Alliant Engineering, dated May 22, 2019**
    f. **Intersection Details (pgs 1-2), submitted by Alliant Engineering, dated May 22, 2019**
    g. **Sanitary Sewer Plan & Profiles (pgs 1-7), submitted by Alliant Engineering, dated May 22, 2019**
    h. **Landscape Plan (pgs 1-5), submitted by Alliant Engineering, dated May 22, 2019**
    i. **Final Plat (pgs 1-4), submitted by Alliant Engineering, undated**
    j. **West Side Park Entrance photo simulation, submitted by Alliant Engineering, dated May 22, 2019.**
    k. **Harvest West – Savanna Way Landscaping, prepared by Alliant Engineering, dated June 6, 2019**
2. **Provision of a 60 feet Right of Way width for all local streets.**
3. **Adherence to the City's Boulevard Tree Policy and local street section design.**
4. **Provision of sidewalks on both sides of all local streets.**
5. **Adherence to the following building setbacks:**
    a. **Cottage Lots (Detached Townhomes):**

i. **Front: 20 feet**
ii. **Rear: 30 feet**
iii. **Side: 5 feet**
iv. **Side (corner): 20 feet**

b. **Village Lots (Single-Family):**
i. **Front (house): 23 feet**
ii. **Front (porch): 15 feet**
iii. **Side: 5 feet**
iv. **Side (corner): 23 feet**

c. **Highway 212: 225 feet from the centerline (from centerline of adjacent travel lane) of TH 212 or 50 feet from right of way (whichever is greater)**
d. **Savanna Way: 100 feet from the centerline**
e. **County Road 44: 125 feet from the centerline**
f. **Wetlands: 30 feet**
g. **Public Park: 40 feet (only applicable to rear setbacks)**

6. **Prior to final plat recording, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.**
7. **Preservation of the wooded steep slopes, including 30-foot buffer and a 50-foot setback from that wooded steep slope.**
8. **Provision of a pedestrian connection at the east development entry for the full extent of Vista View Drive to connect into the public park.**
9. **Provision of a safe pedestrian connection at Vista View Drive and Savanna Way for pedestrians to safely cross and gain access into the public park from neighboring areas, as determined by the Engineering and Public Works departments.**
10. **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.**
11. **Provision that screening on Savanna Way and County Road 44 will be provided in the form of landscaping and berming, and consistent with the screening on the east side of Savanna Way.**
12. **Provision of that the landscape plan be revised to show coniferous trees of at least 8-10 feet in height and deciduous trees of 4 inch caliper or more on the rears of Lots 5-7, Block 1.**
13. **Provision that adequate screening is provided along the edges of Highway 212 via berming, and landscaping.**
14. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
15. **Provision to continue working with the Parks and Recreation Director on the program necessities of the public park.**
16. **Provision that parkland credit will not be given for the stormwater pond, wooded steep slopes, and wetland areas.**
17. **Provision to determine the amount of usable space being donated as parkland credit for staff to determine if there is additional parkland credit required and to be determined prior to approving the final plat at City Council.**
18. **Adherence with Section 9.28 Anti-Monotony and Design Requirements in the**

Zoning Ordinance for both the cottage and village lots.

19. **Provision to adhere to MnDOT's memo (pgs 1-7) dated June 6, 2018.**
20. **Provision to dedicate right of way (ROW) for County Road 44 consistent with CSAH 44 corridor design.**
21. **Provision of wetland mitigation to be coordinated with the City Engineer.**
22. **Provision of review and approval of street names prior to recording of final plat, specifically changing the name of Edgewood Drive, Red Cedar Court, and Red Cedar Drive.**
23. **City Council approval of the purchase agreement for the excess 3.5 acre City parcel.**
24. **Provision of a temporary barricade at the end of all stub streets.**

PLAT FILE NO.
C.R. DOC. NO

HARVEST WEST

KNOW ALL PERSONS BY THESE PRESENTS: That Club West Partners, LLC, a Minnesota limited liability company, owner of the following described property:

The West Half of the Southeast Quarter of Section 6, Township 115, Range 23, Carver County, Minnesota excepting therefrom the following three tracts of land, to wit:

Commencing at the Southwest corner of Section 6, Township 115, Range 23 and running thence East along the South line of said Section 6, a distance of 2515.36 feet to a point, said point being the place of beginning of the parcel hereby excepted; thence continuing East along said South line of said Section 6, a distance of 450.32 feet to a point; thence deflecting left 90 degrees 00 minutes and running North a distance of 193.46 feet to a point; thence deflecting left 90 degrees 00 minutes and running West along a line parallel to said South section line, a distance of 450.32 feet to a point; thence deflecting left 90 degrees 00 minutes and running South to the place of beginning.

AND

The North 570.00 feet of the Northwest Quarter of the Southeast Quarter of said Section 6.

AND

Parcel No. 15, Minnesota Department of Transportation Right of Way Plat No. 10-28 (filed as Doc. No. 407172), Carver County, Minnesota.

AND

That part of the West half of the Northeast Quarter of Section 6, Township 115, Range 23, Carver County, Minnesota, lying Southerly of the centerline of County State Aid Road No. 110 and lying easterly of Parcel No.16, Minnesota Department of Transportation Right of Way Plat No. 10-27 (filed as Doc. No. 405657), except therefrom the following tract of land, to wit:

That part of the East 429.11 feet of said West half of the Northeast Quarter of Section 6 lying north of the south 415.62 feet of said West half of the Northeast Quarter.

AND

That part of the North 570.00 feet of the Northwest Quarter of the Southeast Quarter, Section 6, Township 115, Range 23, Carver County, Minnesota lying easterly of Parcel No. 16, Minnesota Department of Transportation Right of Way Plat No. 10-28, filed as Doc. No. 407172.

AND

Outlot M, CLUB WEST FOURTH ADDITION, filed as Doc. No. 635603, Carver County, Minnesota.

AND

Outlot F, CLUB WEST SIXTH ADDITION, filed as Doc. No. 648848, Carver County, Minnesota.

AND

That part of the East Half of the Southeast Quarter of Section 6, Township 115, Range 23, Carver County, Minnesota, lying westerly and southerly of the following described line:

Commencing at the southwest corner of said East Half; thence North 89 degrees 33 minutes 41 seconds East, assumed bearing along the south line of said East Half, a distance of 488.72 feet to the point of beginning; thence deflecting left 90 degrees on a bearing of North 00 degrees 26 minutes 19 seconds West, 448.03 feet; thence northerly and northeasterly 464.34 feet along a tangential curve concave to the southeast having a radius of 1149.00 feet and a central angle of 23 degrees 09 minutes 17 seconds to a line hereinafter referred to as Line "A"; thence westerly 563.93 feet along said Line "A" to the west line of said East Half and said line there terminating.

EXCEPTING THE FOLLOWING:

Beginning at the southwest corner of said East Half; thence North 89 degrees 33 minutes 41 seconds East, assumed bearing along the south line of said East Half, a distance of 488.72 feet; thence North 00 degrees 26 minutes 19 seconds West, 448.03 feet; thence northerly 107.62 feet along a tangential curve concave to the east having a radius of 1149.00 feet and a central angle of 3 degrees 27 minutes 03 seconds; thence South 89 degrees 33 minutes 41 seconds West not tangent to last described curve, 244.31 feet; thence North 00 degrees 26 minutes 19 seconds West, 129.57 feet; thence South 89 degrees 33 minutes 41 seconds West, 234.91 feet to the west line of said East Half of the Southeast Quarter; thence southerly 664.86 feet along said west line to the point of beginning.

AFOREMENTIONED Line "A" described as follows: Beginning at a point on the west line of said East Half of the Southeast Quarter of Section 6, Township 115, Range 23, Carver County, Minnesota, distant 900.00 feet north of the southwest corner of said East Half; thence easterly parallel with the south line of said East Half, a distance of 1062.00 feet and said line there terminating.

Has caused the same to be surveyed and platted as HARVEST WEST, 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 That Club West Partners, LLC, a Minnesota limited liability company has caused these presents to be signed by its proper officer this _____ day of _____, 20____.

Signed: Club West Partners, LLC

_____
Chief Manager

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me on _____ by _____, Chief Manager of Club West Partners, LLC, a Minnesota limited liability company, on behalf of the company.

_____
_____
(printed name)

Notary Public, _____ County, Minnesota
My Commission Expires _____

SURVEYOR'S CERTIFICATE

I Dennis B. Olmstead 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__

_____
Dennis B. Olmstead, Licensed Land Surveyor
Minnesota License No. 18425

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me on _____ by Dennis B. Olmstead, a Licensed Land Surveyor.

_____
_____
(PRINT)
Notary Public, _____ County, Minnesota
My Commission Expires _____

CHASKA, MINNESOTA

This plat of HARVEST WEST 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 Clerk

COUNTY SURVEYOR, CARVER COUNTY, MINNESOTA

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

Brian Praske, County Surveyor

By: _____

PROPERTY AND FINANCIAL SERVICES DIVISION, 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_____.

David Frischmon, Property and Financial Services Director

By: _____

COUNTY RECORDER, CARVER COUNTY, MINNESOTA

I hereby certify that this plat of HARVEST WEST was filed this _____ day of _____, 20_____ at _____ o'clock ___.M. as Document Number _____ .

Kaaren Lewis, County Recorder

By: _____

ALLIANT engineering

SHEET 1 OF 4 SHEETS

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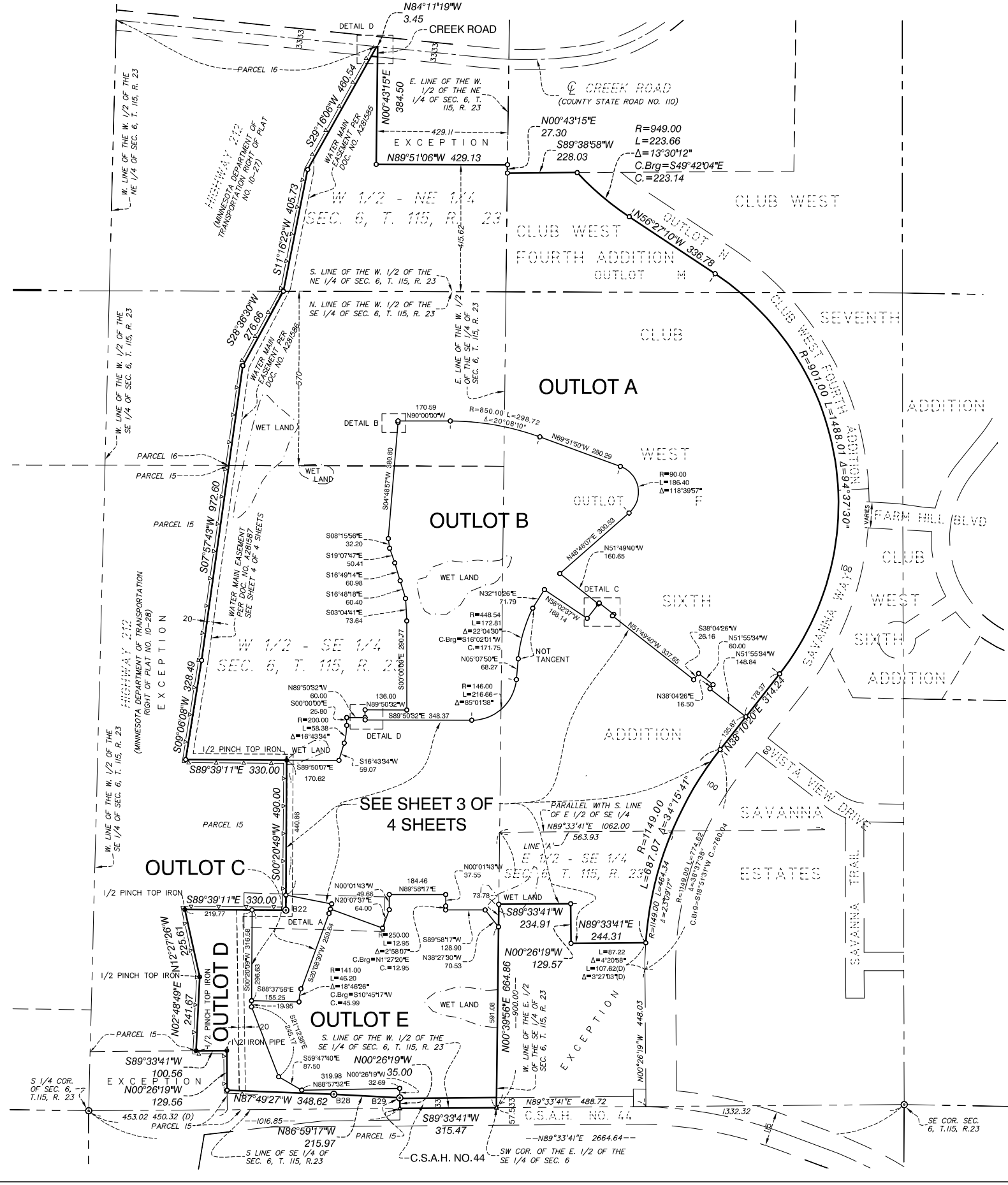
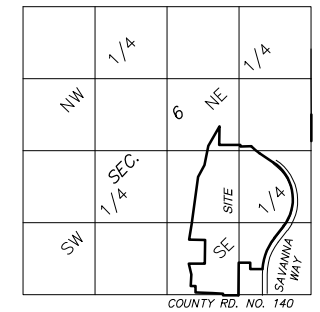
PLAT FILE NO.
C.R. DOC. NO

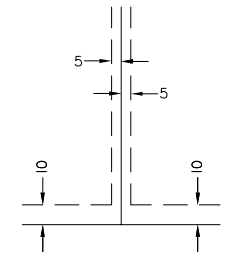
HARVEST WEST





VICINITY MAP
SECTION 6, T115N, R23W
NOT TO SCALE

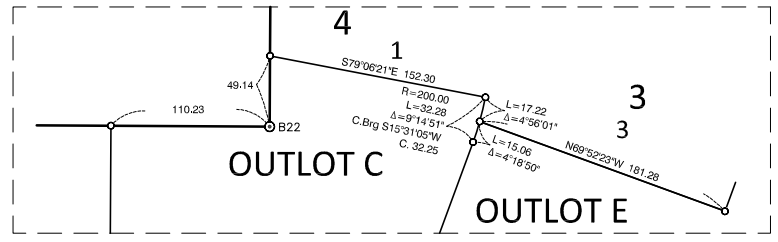
DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



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

DETAILS
NOT TO SCALE

DETAIL A



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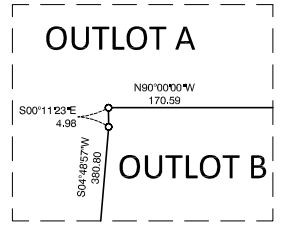

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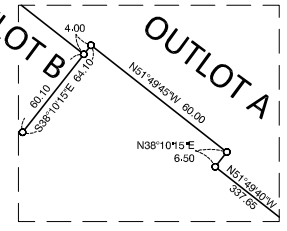

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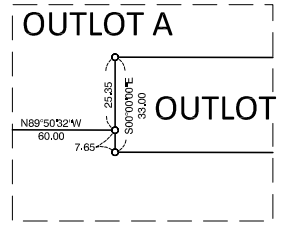

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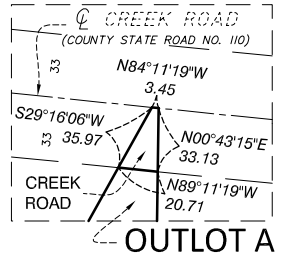

- Denotes monument found 1/2 inch iron pipe unless otherwise shown
- ○ Denotes 1/2 inch x 18 inch iron monument set marked by license no. 18425 unless otherwise shown
- B22 ⊙ Denotes found Right-of-Way Monument
- ⊙ Denotes Carver County Cast Iron Monument found
- (D) Dimensions per Deed
- —Δ— Restricted Access per MNDOT Right-of-Way Plat NOs. 10-27 and 10-28

THE SOUTH LINE OF THE WEST 1/2 OF THE SE 1/4 OF SEC. 6, T. 115, R. 23 IS ASSUMED TO HAVE A CARVER COUNTY BEARING OF S89°33'41"W (NAD83 86 ADJ).

Scale in feet
0 200 400 600
ONE INCH EQUALS TWO HUNDRED FEET

ALLIANT engineering

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HARVEST WEST

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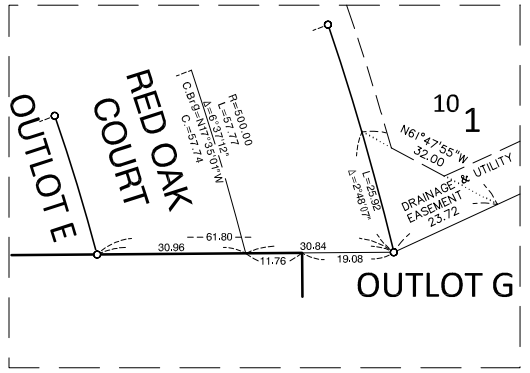
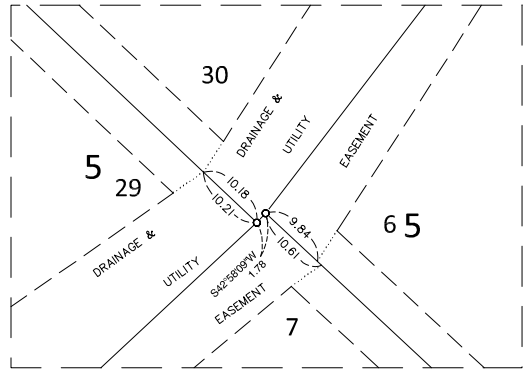
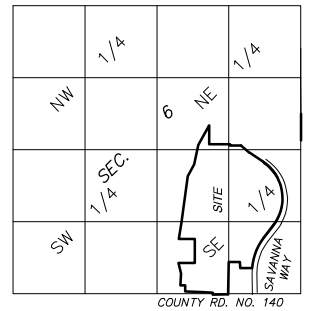
DETAILS
NOT TO SCALE

DETAIL F



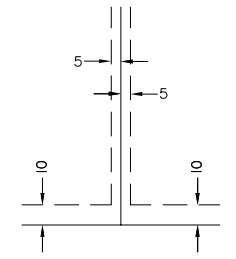
DETAIL G





VICINITY MAP
SECTION 6, T115N, R23W
NOT TO SCALE

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



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

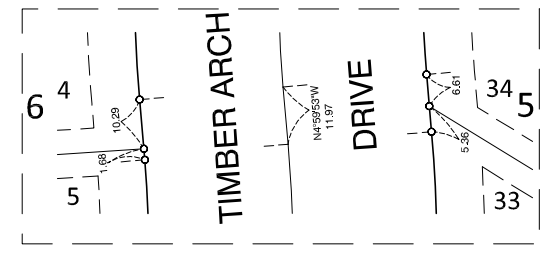
THE SOUTH LINE OF THE WEST 1/2 OF THE SE 1/4 OF SEC. 6, IS ASSUMED TO HAVE A BEARING OF S89° 33'41W.

- ● Denotes monument found 1/2 inch iron pipe unless otherwise shown
- ○ Denotes 1/2 inch x 18 inch iron monument set marked by license no. 18425 unless otherwise shown
- ⊙ Denotes found Right-of-Way Monument

D&U Denotes found Right-of-Way Monument

Scale in feet
0 60 120 180
ONE INCH EQUALS SIXTY FEET

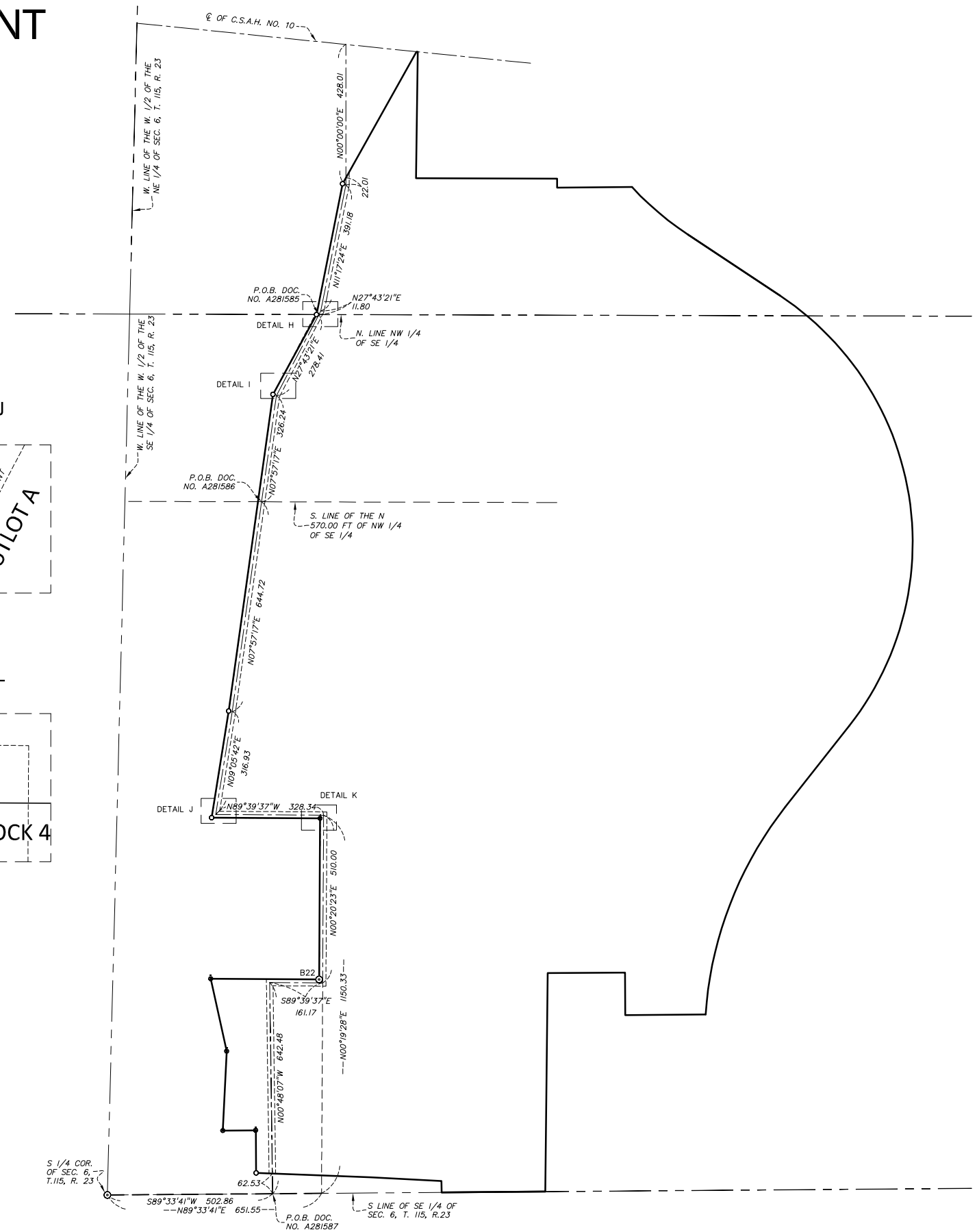
DETAIL H



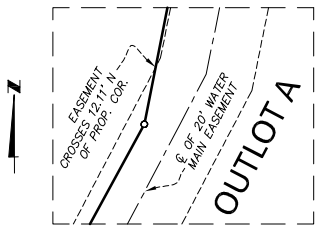
6.a Recommend Approval of the Final... Page 12 of 47
Packet Page 30 of 225

HARVEST WEST
WATER MAIN EASEMENT
DETAIL SHEET

PLAT FILE NO.
C.R. DOC. NO



DETAIL I
NOT TO SCALE



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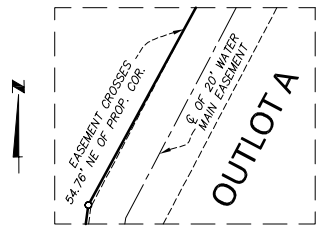

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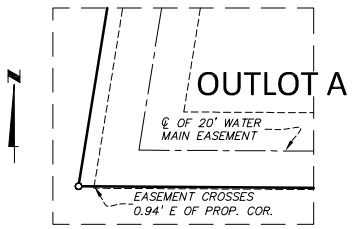

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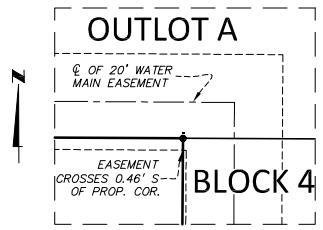
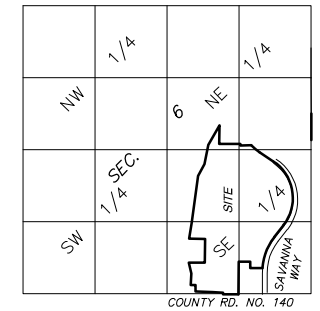
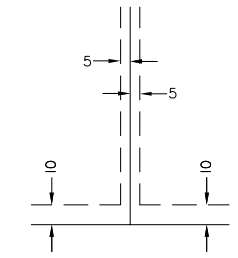




VICINITY MAP
SECTION 6, T115N, R23W
NOT TO SCALE

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



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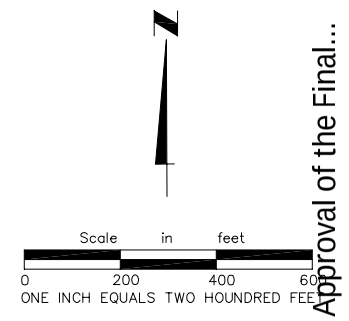
- ○ Denotes 1/2 inch x 18 inch iron monument set marked by license no. 18425 unless otherwise shown
- B22 ⊙ Denotes found Right–of–Way Monument

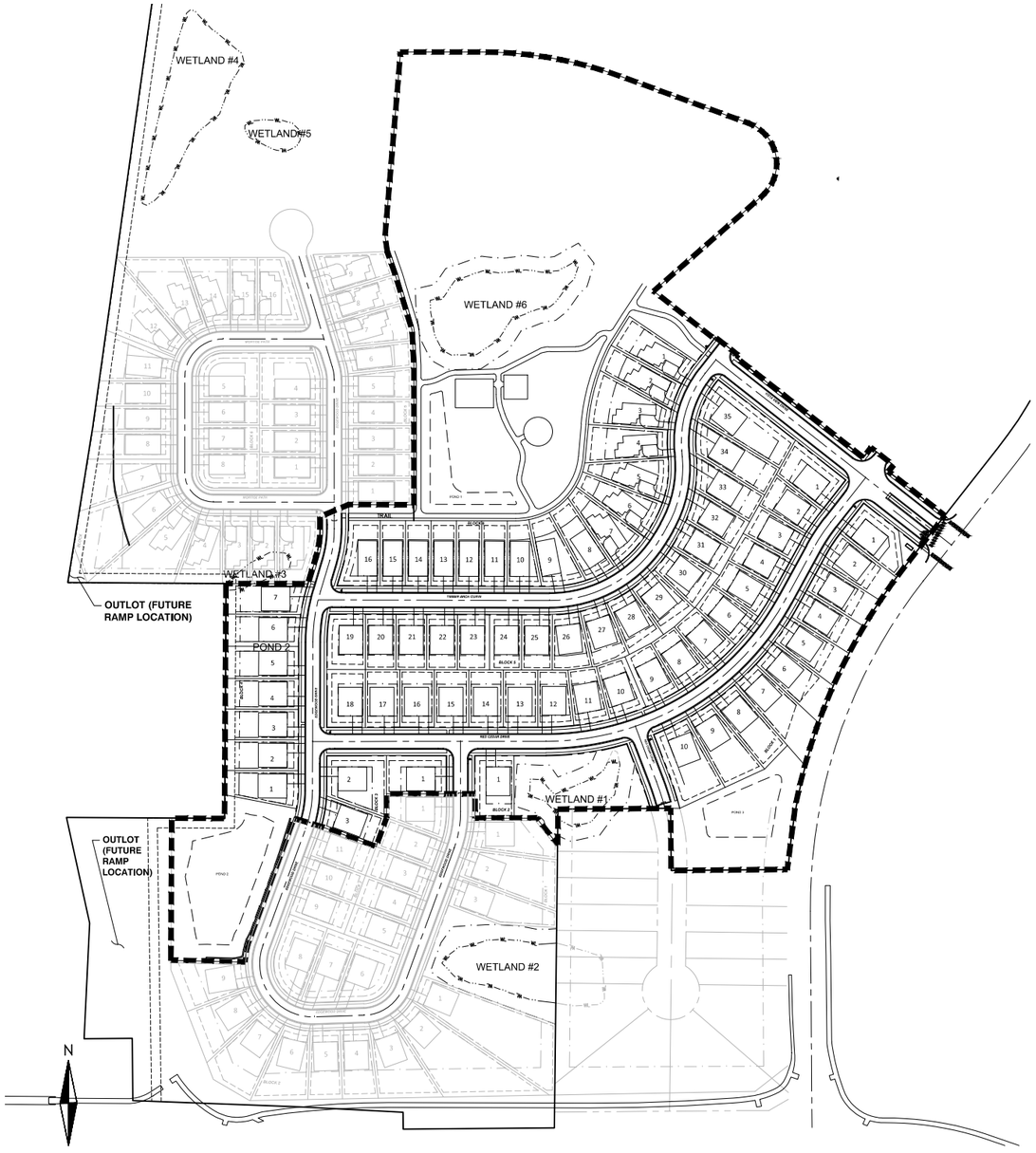


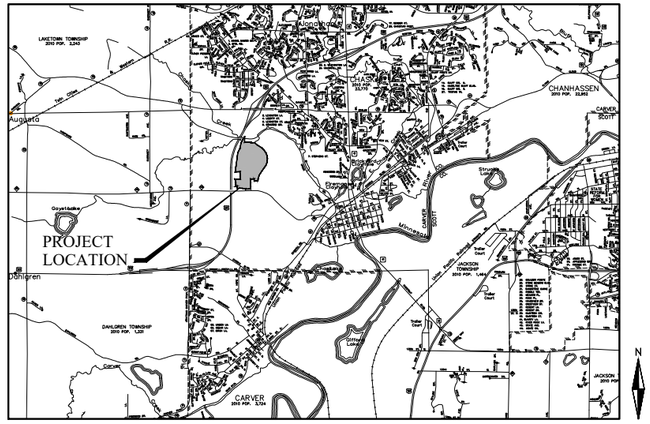
ALLIANT engineering

6.B. Recommend Approval of the Final... Page 13 of 47
Packet Page 31 of 225

HARVEST WEST

CHASKA, MINNESOTA





VICINITY MAP
NOT TO SCALE

SHEET INDEX	NO.
COVER SHEET	1
DETAILS	2-3
SITE PLAN	4
EROSION AND SEDIMENT CONTROL PLAN	5
EROSION AND SEDIMENT CONTROL PLAN VIEWS A-C	6-8
EROSION AND SEDIMENT CONTROL NOTES	9
STREET AND STORM SEWER PLAN	10
STREET AND STORM SEWER PLANS AND PROFILES	11-16
STREET AND STORM SEWER OCS DETAILS	17
POND 2 DRAINTILE DETAIL	18
INTERSECTION DETAILS	19-20
SANITARY SEWER AND WATERMAIN PLAN	21
SANITARY SEWER AND WATERMAIN PLAN AND PROFILES	22-27
LANDSCAPE PLAN	28
LANDSCAPE PLAN VIEWS A-C	29-31
LANDSCAPE NOTES	32

DEVELOPER

TRADITION DEVELOPMENT
16972 BRANDTJEN FARM DRIVE
LAKEVILLE, MN 55044
PAT WRASE
PH: 952-322-8704

CONSULTANT

ALLIANT ENGINEERING, INC.
733 MARQUETTE AVE
SUITE 700
MINNEAPOLIS, MN 55402
PH: 612-758-3080
FX: 612-758-3099

ENGINEER

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SURVEYOR

DENNIS B. OLMSTEAD
LICENSE NO. 18425
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LANDSCAPE ARCHITECT

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612.758.3080 MAIN
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www.alliant-inc.com

HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
COVER SHEET

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

DAVE NASH, PE
05-22-19 — Date
21836 — License No.

QUALITY ASSURANCE/CONTROL

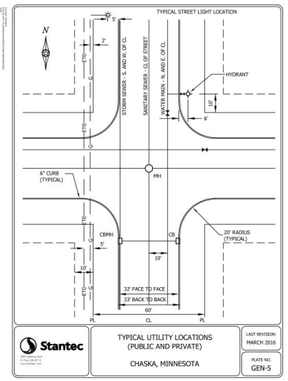
BY — DATE

DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

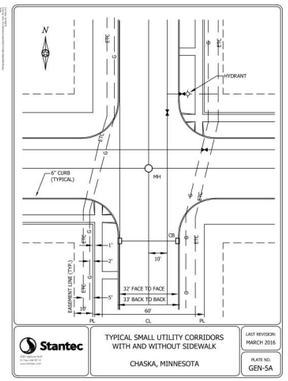
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: NS
PROJECT NO: 216-0028.2

1
SHEET 1 of 32

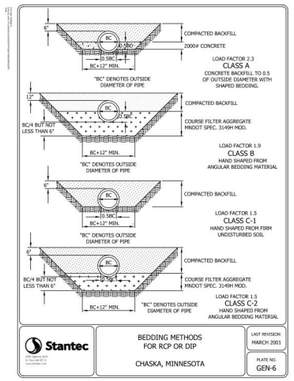
drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2cove.dwg Nov 22, 2019 - 10:38am



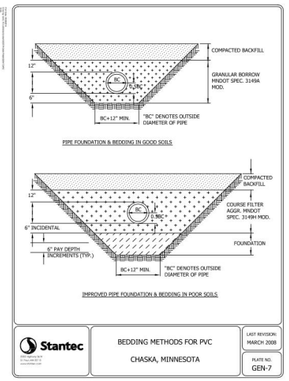
Stantec — TYPICAL UTILITY LOCATIONS (PUBLIC AND PRIVATE) — CHASKA, MINNESOTA — LAST REVISION: MARCH 2016 — PLATE NO. GEN-5



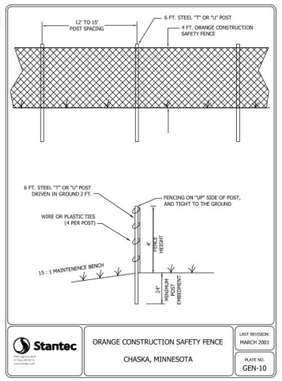
Stantec — TYPICAL SMALL UTILITY CORRIDORS WITH AND WITHOUT SIDEWALK — CHASKA, MINNESOTA — LAST REVISION: MARCH 2016 — PLATE NO. GEN-5A



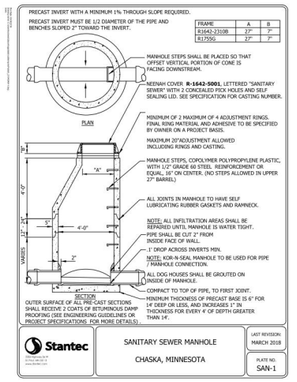
Stantec — BEDDING METHODS FOR RCP OR DIP — CHASKA, MINNESOTA — LAST REVISION: MARCH 2003 — PLATE NO. GEN-6



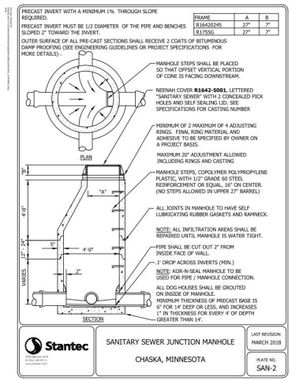
Stantec — BEDDING METHODS FOR PVC — CHASKA, MINNESOTA — LAST REVISION: MARCH 2008 — PLATE NO. GEN-7



Stantec — ORANGE CONSTRUCTION SAFETY FENCE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2003 — PLATE NO. GEN-10

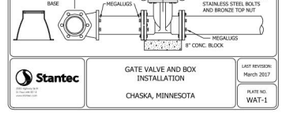


Stantec — SANITARY SEWER MANHOLE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. SAN-1

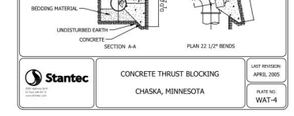


Stantec — SANITARY SEWER JUNCTION MANHOLE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. SAN-2

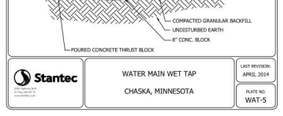
Stantec — SANITARY SEWER DROP INLET MANHOLE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. SAN-4



Stantec — GATE VALVE AND BOX INSTALLATION — CHASKA, MINNESOTA — LAST REVISION: March 2017 — PLATE NO. WAT-1

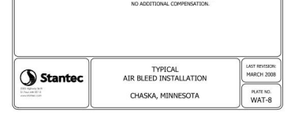


Stantec — CONCRETE THRUST BLOCKING — CHASKA, MINNESOTA — LAST REVISION: APRIL 2005 — PLATE NO. WAT-4



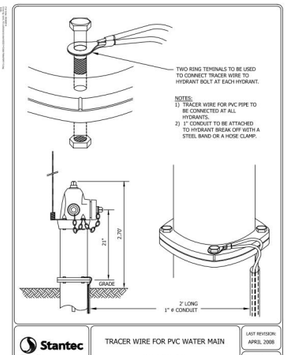
Stantec — WATER MAIN WET TAP — CHASKA, MINNESOTA — LAST REVISION: APRIL, 2014 — PLATE NO. WAT-5

Stantec — WATER MAIN LOWERING WITH INSULATION DETAIL — CHASKA, MINNESOTA — LAST REVISION: APRIL, 2004 — PLATE NO. WAT-6

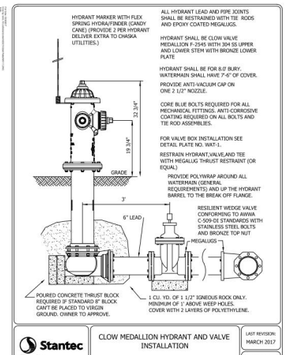


Stantec — TYPICAL AIR BLEED INSTALLATION — CHASKA, MINNESOTA — LAST REVISION: MARCH 2008 — PLATE NO. WAT-8

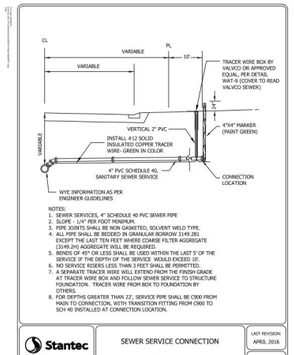
Stantec — DIP TO C900 WATERMAIN TRANSITION FOR TRACER WIRE — CHASKA, MINNESOTA — LAST REVISION: MAY 2016 — PLATE NO. WAT-9



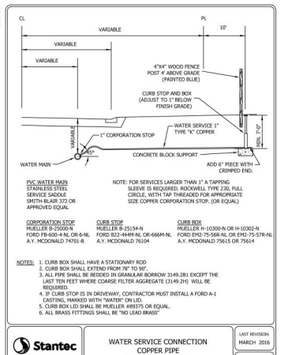
Stantec — TRACER WIRE FOR PVC WATER MAIN — CHASKA, MN — LAST REVISION: APRIL 2008 — PLATE NO. WAT-10



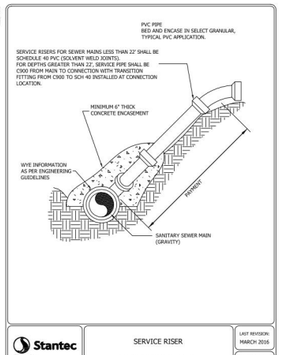
Stantec — CLOW MEDALLION HYDRANT AND VALVE INSTALLATION — CHASKA, MINNESOTA — LAST REVISION: MARCH 2017 — PLATE NO. WAT-11



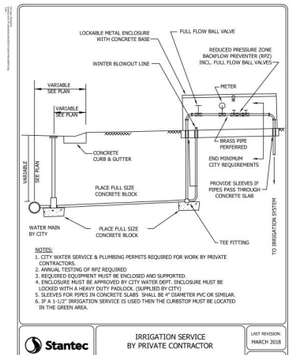
Stantec — SEWER SERVICE CONNECTION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. SER-1



Stantec — WATER SERVICE CONNECTION COPPER PIPE — CHASKA, MINNESOTA — LAST REVISION: APRIL, 2014 — PLATE NO. WAT-5



Stantec — SERVICE RISER — CHASKA, MINNESOTA — LAST REVISION: MARCH 2016 — PLATE NO. SER-3



Stantec — IRRIGATION SERVICE BY PRIVATE CONTRACTOR — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. SER-6

ALLIANT ENGINEERING
733 Marquette Ave
Suite 700
Minneapolis, MN 55402
612.758.3080 MAIN
612.758.3099 FAX
www.alliant-inc.com

HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
DETAILS

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

DAVE NASH, PE
05-22-19 — 21836
Date — License No.

QUALITY ASSURANCE/CONTROL
BY — DATE

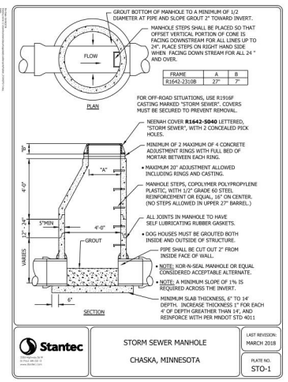
DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

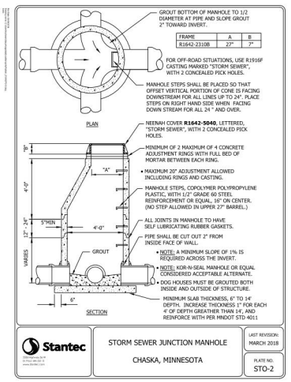
2

SHEET 2 of 32

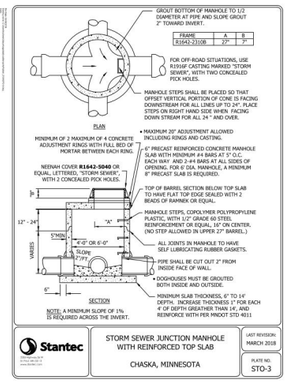
Plotted by: Nash, Dave
Plot date/time: May 22, 2019 - 10:38am
Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2det.dwg



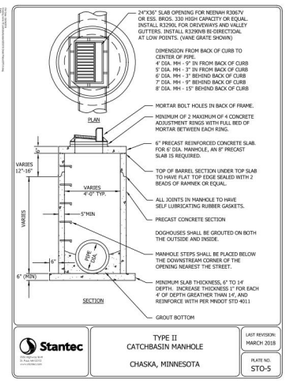
Stantec — STORM SEWER MANHOLE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-1



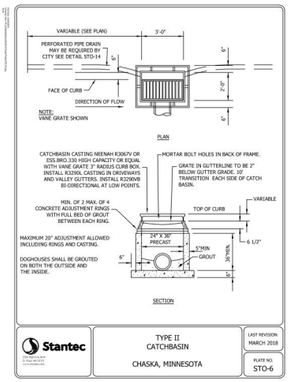
Stantec — STORM SEWER JUNCTION MANHOLE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-2



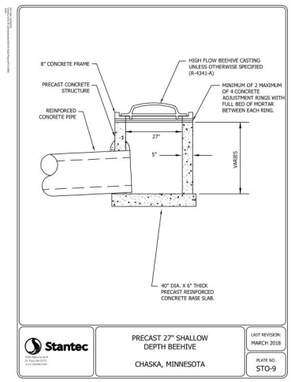
Stantec — STORM SEWER JUNCTION MANHOLE WITH REINFORCED TOP SLAB — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-3



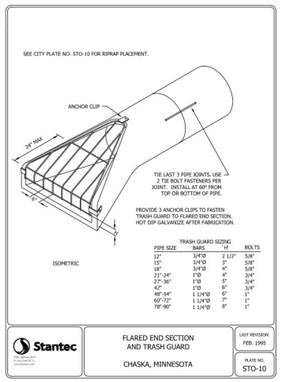
Stantec — TYPE II CATCHBASIN MANHOLE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-5



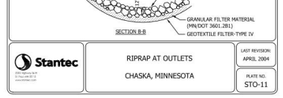
Stantec — TYPE II CATCHBASIN — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-6



Stantec — PRECAST 27" SHALLOW DEPTH BEEHIVE — CHASKA, MINNESOTA — LAST REVISION: MARCH 2018 — PLATE NO. STO-9



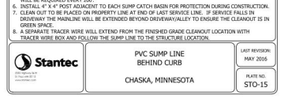
Stantec — FLARED END SECTION AND TRASH GUARD — CHASKA, MINNESOTA — LAST REVISION: FEB. 1995 — PLATE NO. STO-10



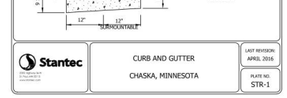
Stantec — RIPRAP AT OUTLETS — CHASKA, MINNESOTA — LAST REVISION: APRIL 2004 — PLATE NO. STO-11

Stantec — PERFORATED PVC DRAINTILE PIPE BELOW CONCRETE CURB — CHASKA, MINNESOTA — LAST REVISION: NOV. 2016 — PLATE NO. STO-12

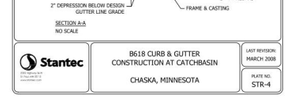
Stantec — DRAINTILE INSTALLATION INTO CATCHBASIN MANHOLE — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. STO-14



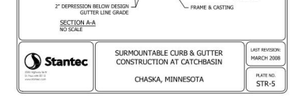
Stantec — PVC SUMP LINE BEHIND CURB — CHASKA, MINNESOTA — LAST REVISION: MAY 2016 — PLATE NO. STO-15



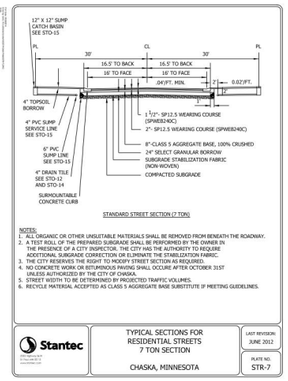
Stantec — CURB AND GUTTER — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. STR-1



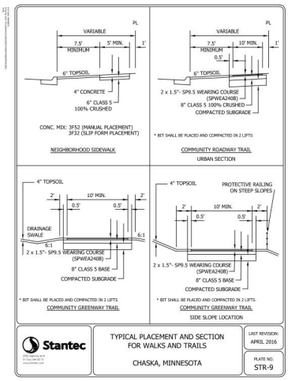
Stantec — B618 CURB & GUTTER CONSTRUCTION AT CATCHBASIN — CHASKA, MINNESOTA — LAST REVISION: MARCH 2008 — PLATE NO. STR-4



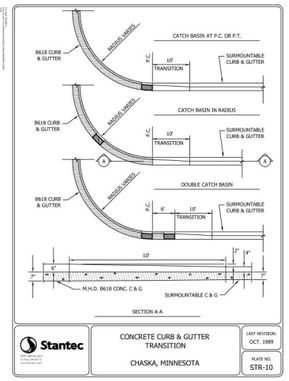
Stantec — SURMOUNTABLE CURB & GUTTER CONSTRUCTION AT CATCHBASIN — CHASKA, MINNESOTA — LAST REVISION: MARCH 2008 — PLATE NO. STR-5



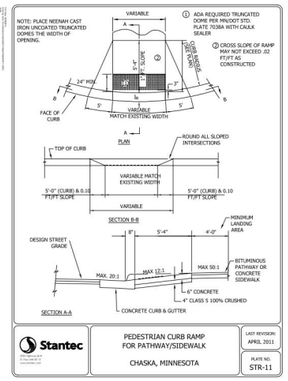
Stantec — TYPICAL SECTIONS FOR RESIDENTIAL STREETS 7 TON SECTION — CHASKA, MINNESOTA — LAST REVISION: JUNE 2012 — PLATE NO. STR-7



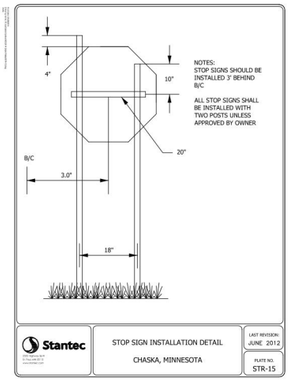
Stantec — TYPICAL PLACEMENT AND SECTION FOR WALKS AND TRAILS — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. STR-9



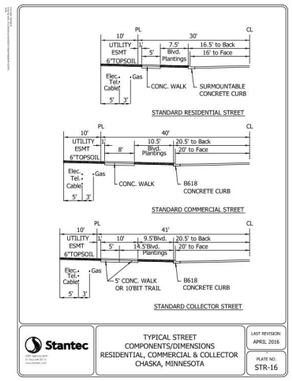
Stantec — CONCRETE CURB & GUTTER TRANSITION — CHASKA, MINNESOTA — LAST REVISION: OCT. 1989 — PLATE NO. STR-10



Stantec — PEDESTRIAN CURB RAMP FOR PATHWAY/SIDEWALK — CHASKA, MINNESOTA — LAST REVISION: APRIL 2011 — PLATE NO. STR-11



Stantec — STOP SIGN INSTALLATION DETAIL — CHASKA, MINNESOTA — LAST REVISION: JUNE 2012 — PLATE NO. STR-15



Stantec — TYPICAL STREET COMPONENTS/DIMENSIONS RESIDENTIAL, COMMERCIAL & COLLECTOR — CHASKA, MINNESOTA — LAST REVISION: APRIL 2016 — PLATE NO. STR-16

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HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
DETAILS

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

DAVE NASH, PE
05-22-19 — Date
21836 — License No.

QUALITY ASSURANCE/CONTROL

BY	DATE
DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

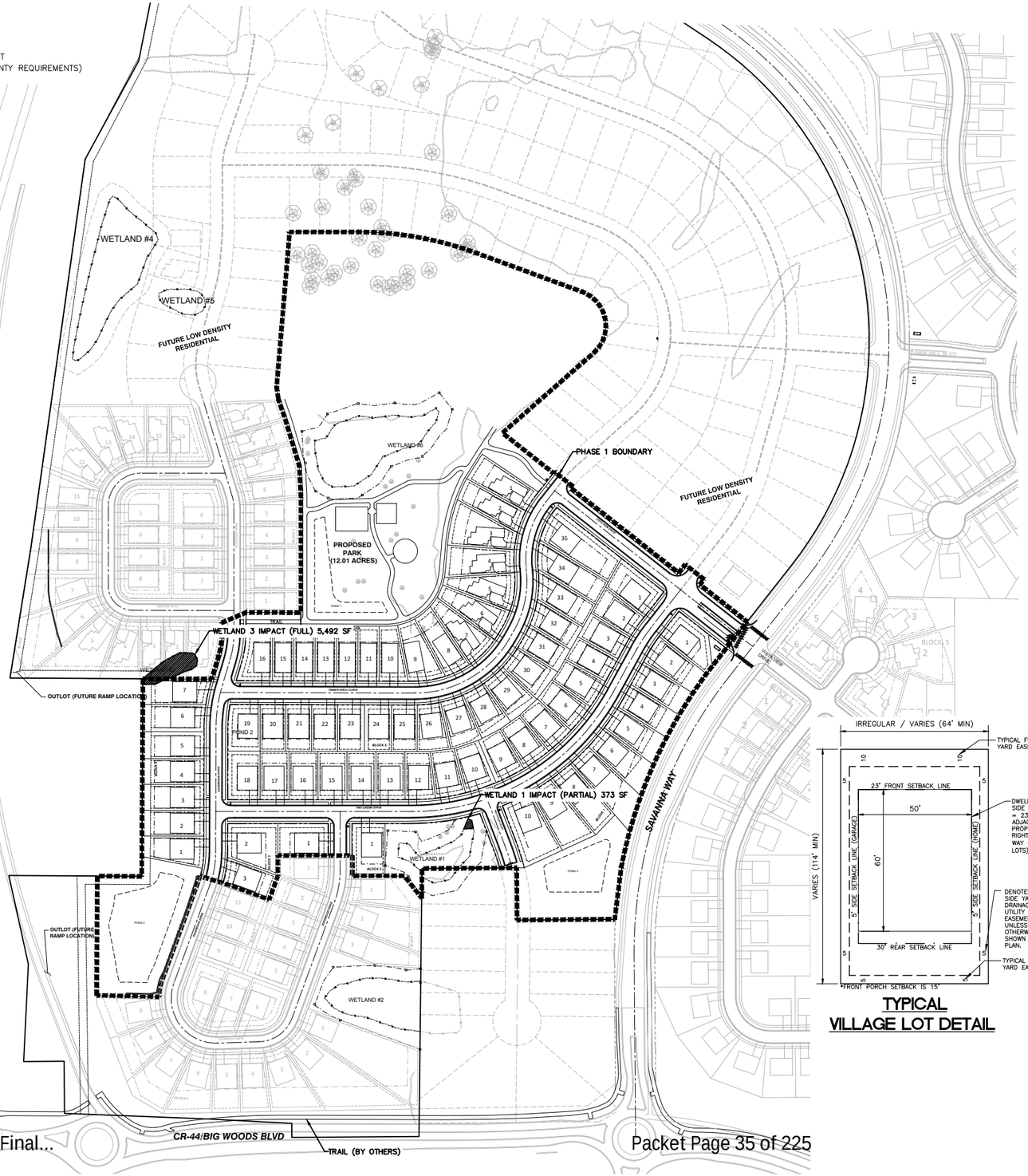
3
SHEET 3 of 32

Plotted by: Dave Nash
Plot date/time: May 22, 2019 - 10:38am
Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2det.dwg

LEGEND:

- EASEMENT LINE
- BUILDING SETBACK
- PROPERTY LINE
- LOT LINE
- ROW
- WETLAND DELINEATION
- WETLAND BUFFER
- WETLAND BUFFER MONUMENT (PER CITY OF CARVER COUNTY REQUIREMENTS)

WETLAND BUFFER SIGN



OVERALL SITE DATA

TOTAL SITE AREA	=106.63 AC
PHASE 1 AREA	= 57.62 AC
RESIDENTIAL R.O.W	= 8.97 AC
VILLAGE SF LOT AREA	= 19.37 AC
COTTAGE VILLA LOT AREA	= 11.16 AC
WETLAND AREA	= 1.78 AC
TRAIL CONNECTION	= 0.10 AC
STORMWATER AREA	= 1.50 AC
PARK AREA	= 12.01 AC
MONUMENT OUTLOT	= 0.03 AC
MNDOT RAMP AREA	= 3.34 AC

RESIDENTIAL R.O.W	= 60' WIDTH
STREET LENGTH	= 6,682 L.F.
REAR YARD PARK SETBACK	= 40'
COLLECTOR ROAD SETBACK	= 100' FROM ℄
COUNTY ROAD 44 SETBACK	= 125' FROM ℄
HWY 212 SETBACK	= GREATER OF 225' FROM ADJACENT LANE ℄ OR 50' FROM ROW

VILLAGE LOTS

FRONT/CORNER SETBACK	= 23' MIN.
REAR SETBACK	= 30' MIN.
SIDE SETBACK (SF)	= 5' MIN.
BUILDING PAD	= 50(W)'X60'(D)

COTTAGE LOTS

FRONT/CORNER SETBACK	= 20' MIN.
REAR SETBACK	= 30' MIN.
SIDE SETBACK (SF)	= 5' MIN.
SIDE-LOAD BUILDING PAD	= 44(W)'X90'(D)
FRONT-LOAD BUILDING PAD	= 40(W)X74'(D)

PHASE 1 LOT COUNT

PHASE 1 LOT COUNT

56 VILLAGE LOTS
64'X114' SINGLE FAMILY

16 COTTAGE LOTS
9 – FRONT LOAD – 53'X126'
7 – SIDE LOAD – 57'X142

72 TOTAL LOTS

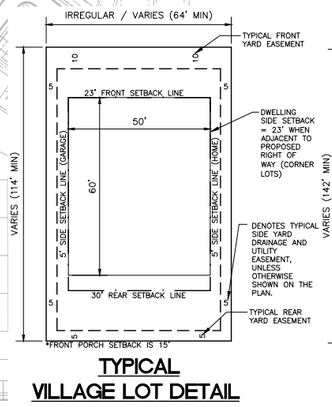
WETLAND SUMMARY

WETLAND BUFFER = 30' AVG. (20 ft MIN)

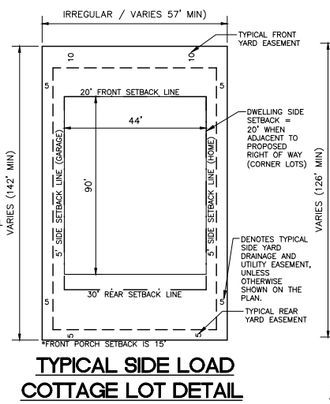
WETLAND 1 = TYPE 1 AND 2
WETLAND 2 = TYPE 2 AND 3
WETLAND 3 = TYPE 1
WETLAND 6 = TYPE 2
*PER KJOLHAUG ENVIRONMENTAL SERVICES REPORT DATED: MARCH 2, 2018

WETLAND IMPACTS

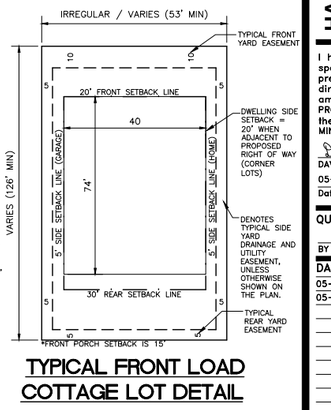
WETLAND 1 (PARTIAL)	373 SF
WETLAND 3 (FULL)	5,492 SF
TOTAL:	5,865 SF
2:1 MITIGATION REQUIRED: (VIA BANKING CREDITS)	11,730 SF



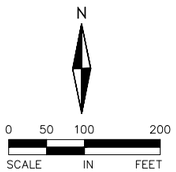
TYPICAL VILLAGE LOT DETAIL



TYPICAL SIDE LOAD COTTAGE LOT DETAIL



TYPICAL FRONT LOAD COTTAGE LOT DETAIL



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HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
SITE PLAN

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DAVE NASH, PE
05-22-19 21836
Date License No.

QUALITY ASSURANCE/CONTROL
BY DATE

DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

4

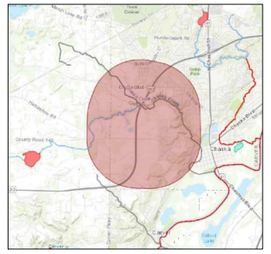
SHEET 4 of 32

plot name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2site.dwg May 22, 2019 – 10:39am

ACTIVE SWPPP LEGEND / SCHEDULE

CONSTRUCTION SEQUENCE	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
MULCH BERM													
FIBER ROLLS / MULCH SOCKS													
SILT FENCE													
TEMPORARY MULCH COVER													
TEMPORARY HYDROMULCH													
EROSION CONTROL BLANKET													
ROCK DRIVEWAY / ROCK PADS													
INLET PROTECTION DEVICES													
PAVEMENT (DRIVEWAY/ROADS)													
SOD													
STOCKPILES													

NOTE: CONTRACTOR, GENERAL CONTRACTOR OR SWPPP INSPECTOR TO COMPLETE TABLE AS GRADING PROGRESSES



VICINITY MAP

LEGEND:

- PRE-SF — DENOTES PRE-GRADING SEDIMENT BARRIER
- PST-SF — DENOTES POST-GRADING SEDIMENT BARRIER
- 980 — DENOTES EXISTING CONTOURS
- 980 — DENOTES PROPOSED CONTOURS
- DENOTES EXISTING STORM SEWER
- DENOTES PROPOSED STORM SEWER
- DENOTES TREE PROTECTION LIMITS
- DENOTES BIO-ROLL EROSION CHECKS
- E.O.F. — DENOTES EMERGENCY OVERFLOW ELEVATION
- ANTI-TRACKING CONTROL
- DENOTES STABILIZATION BMP (EROSION CONTROL BLANKET) (3:1 AND STEEPER SLOPES)
- DENOTES TEMPORARY SEDIMENTATION BASIN
- EXCESS MATERIAL STOCKPILE LOCATION

NOTE TO CONTRACTOR:

THE OWNER AND THE GENERAL CONTRACTOR ARE THE RESPONSIBLE PARTIES TO IMPLEMENT THE NPDES PERMIT. THE MASS GRADING CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) AS SHOWN IN THE MASS GRADING SWPPP (EXCEPT FOR POST GRADE BMPS NEEDED AFTER UTILITY CONSTRUCTION ACTIVITY). THE BMPS ARE TO BE INSTALLED AT A MINIMUM AS SHOWN IN THE PLAN, IF CONDITIONS ARISE, ADDITIONAL BMP SUPPLEMENTATION TO PREVENT SITE EROSION OR SEDIMENT TRANSPORT MAY BE NECESSARY. THE MASS GRADING CONTRACTOR IS RESPONSIBLE FOR ALL BMPS REQUIRED TO COMPLETE THE MASS GRADING ACTIVITIES AND SUBSEQUENT TEMPORARY SOIL STABILIZATION NECESSARY TO PREPARE SITE FOR STREET AND UTILITY CONSTRUCTION AND HOME BUILDING. AT THE COMPLETION OF MASS GRADING WORK AND SATISFACTORY SITE SOIL STABILIZATION, THE DEVELOPER AND MASS GRADING CONTRACTOR SHALL COORDINATE THE TRANSFER OF NPDES PERMIT RESPONSIBILITIES TO THE STREET AND UTILITY CONTRACTOR AND THE CITY.

THE STREET AND UTILITY CONTRACTOR AND CITY WILL THEN ASSUME THE RESPONSIBILITY TO PROVIDE INSPECTION AND MAINTENANCE OF ANY IN-PLACE BMPS AS WELL AS INSTALL THE ADDITIONAL BMPS REQUIRED IN THE STREET AND UTILITY CONSTRUCTION DOCUMENT SWPPP. UPON COMPLETION OF STREET AND UTILITY CONSTRUCTION, THE STREET AND UTILITY CONTRACTOR SHALL REMOVE ANY BMPS INSTALLED DURING THE STREET AND UTILITY PHASE THAT ARE NO LONGER REQUIRED AND COORDINATE THE TRANSFER OF NPDES PERMIT RESPONSIBILITIES BACK TO THE DEVELOPER OR TERMINATE THE PORTION OF THE NPDES PERMIT TRANSFERRED TO THE CITY AND THEIR CONTRACTOR.

SWPPP BMP QUANTITIES (PER PLAN):

1. STANDARD POST SILT FENCE	7,858 LF
2. INLET PROTECTION	46 EA

*CHASKA CREEK ULTIMATE DISCHARGE WATERWAY

CONSTRUCTION SEQUENCING

MASS GRADING PHASE:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
2. PREPARE TEMPORARY PARKING AND STORAGE AREA.
3. INSTALL THE PRE-GRADING SILT FENCES AND INLET PROTECTION BMPS ON THE SITE.
4. CONSTRUCT ALL PRE-GRADING EROSION AND SEDIMENTATION CONTROL BMPs.
5. COMPLETE MASS GRADING AND INSTALL TEMPORARY AND PERMANENT SEEDING AND PLANTING.
6. CONSTRUCT POST-GRADING SILT FENCE ON THE SITE.

STREET & UTILITY PHASE:

1. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
2. INSTALL RIP RAP AROUND OUTLET STRUCTURES.
3. INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES.
4. PREPARE SITE FOR PAVING.
5. PAVE SITE.
6. INSTALL INLET PROTECTION DEVICES.
7. INSTALL POST STREET AND UTILITY SILT FENCE.
8. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED), IF REQUIRED BY THE CONTRACT

EROSION CONTROL RESPONSIBLE PARTY:

TRADITION DEVELOPMENT

NOTE:

REFER TO SHEET 9 FOR EROSION CONTROL DETAILS.

N

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CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
EROSION AND SEDIMENT CONTROL PLAN

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DAVE NASH, PE
05-22-19 — 21836
Date — License No.

QUALITY ASSURANCE/CONTROL

BY — DATE

DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

5

SHEET 5 of 32

Plotted: May 22, 2019 — 10:40am
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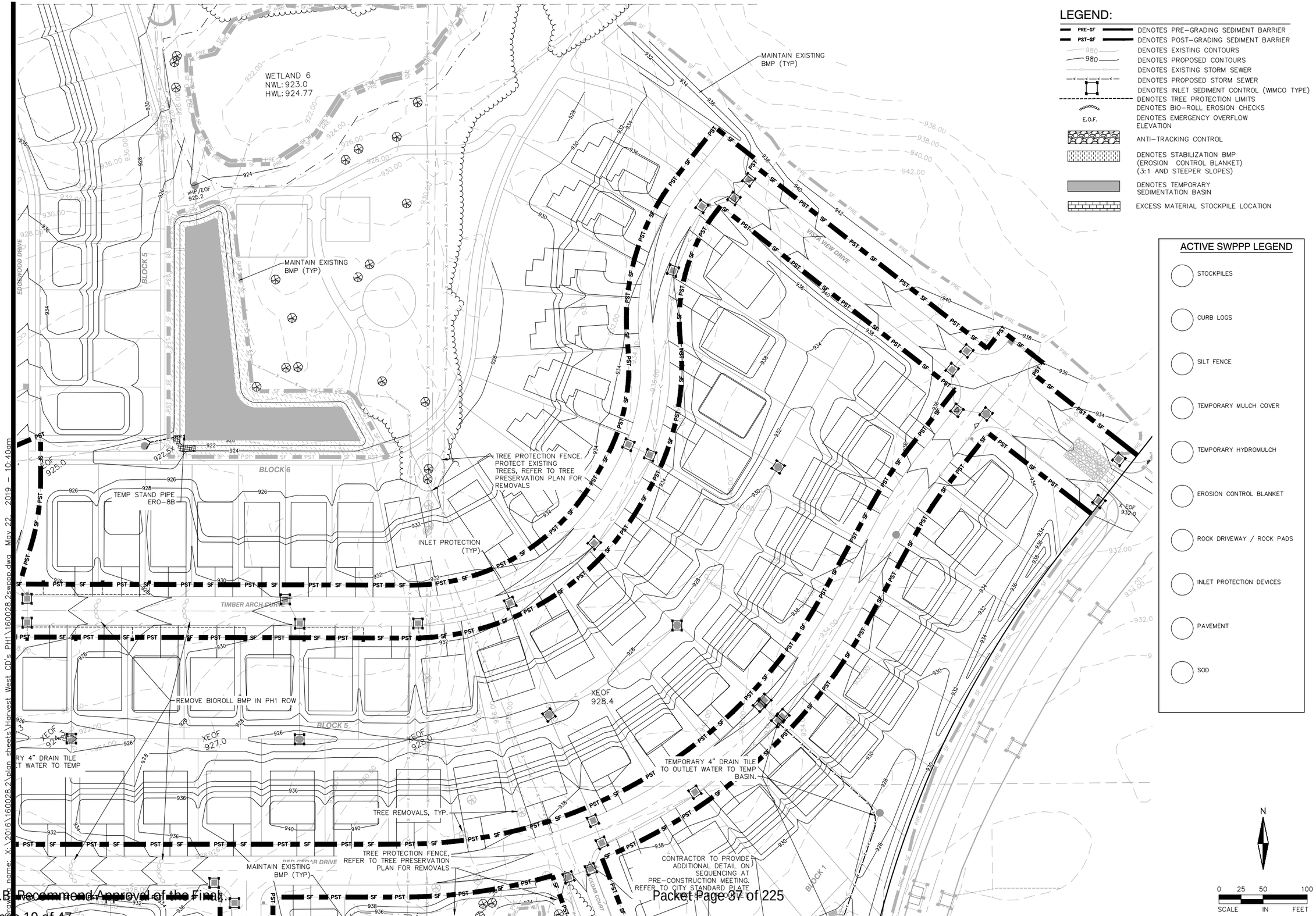

LEGEND:

- PRE-SF — DENOTES PRE-GRADING SEDIMENT BARRIER
- PST-SF — DENOTES POST-GRADING SEDIMENT BARRIER
- 980 — DENOTES EXISTING CONTOURS
- 980 — DENOTES PROPOSED CONTOURS
- DENOTES EXISTING STORM SEWER
- DENOTES PROPOSED STORM SEWER
- DENOTES INLET SEDIMENT CONTROL (WIMCO TYPE)
- DENOTES TREE PROTECTION LIMITS
- DENOTES BIO-ROLL EROSION CHECKS
- E.O.F. — DENOTES EMERGENCY OVERFLOW ELEVATION
- ANTI-TRACKING CONTROL
- DENOTES STABILIZATION BMP (EROSION CONTROL BLANKET) (3:1 AND STEEPER SLOPES)
- DENOTES TEMPORARY SEDIMENTATION BASIN
- EXCESS MATERIAL STOCKPILE LOCATION

ACTIVE SWPPP LEGEND

- STOCKPILES
- CURB LOGS
- SILT FENCE
- TEMPORARY MULCH COVER
- TEMPORARY HYDROMULCH
- EROSION CONTROL BLANKET
- ROCK DRIVEWAY / ROCK PADS
- INLET PROTECTION DEVICES
- PAVEMENT
- SOD

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HARVEST WEST
CHASKA, MN

CONSTRUCTION DOCUMENTS PHASE 1

EROSION AND SEDIMENT CONTROL PLAN - VIEW A

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05-22-19 — Date
21836 — License No.

QUALITY ASSURANCE/CONTROL

BY — DATE

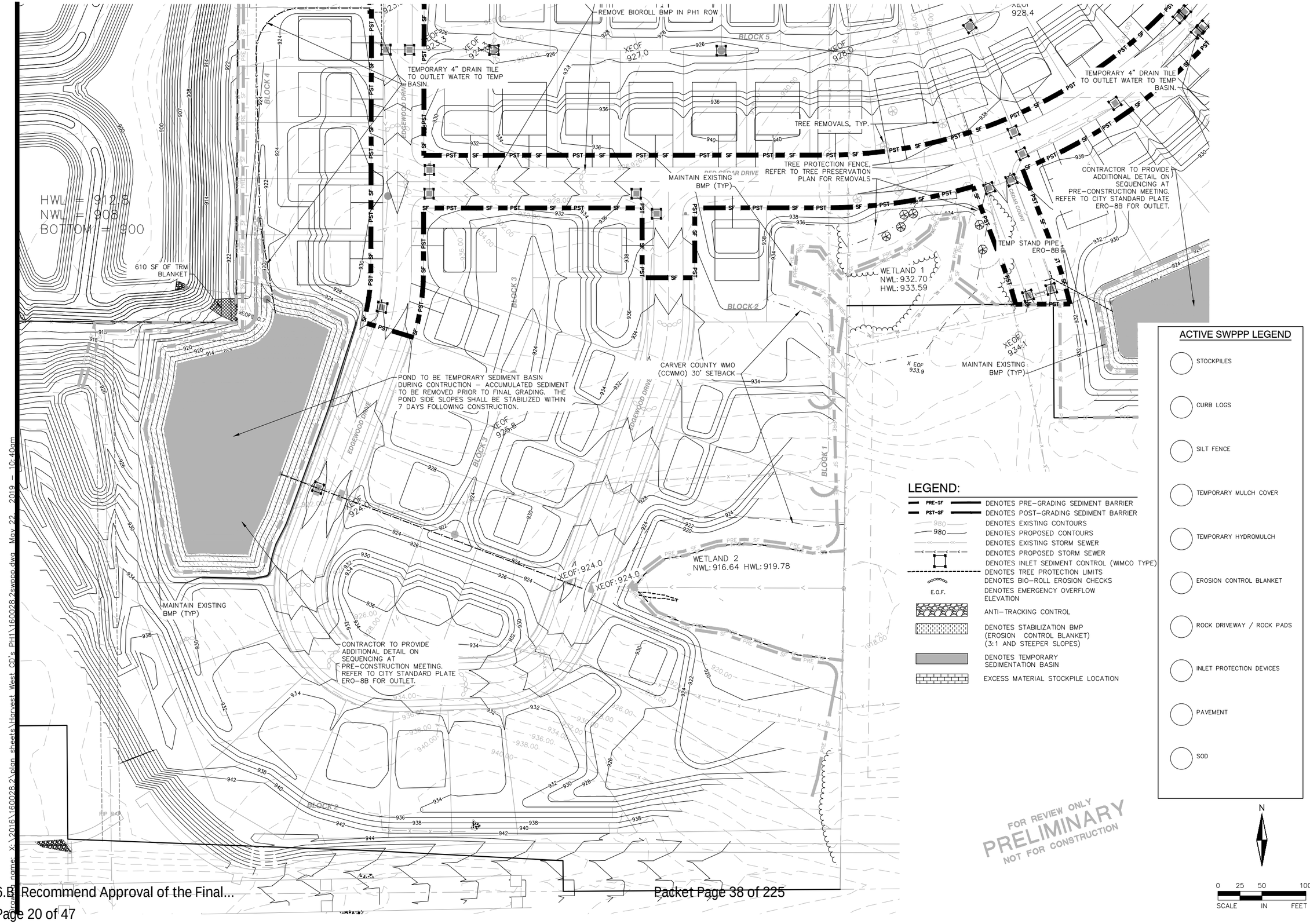
DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA

DESIGNED:	DN
DRAWN:	SL
PROJECT NO:	216-0028.2

6

SHEET 6 of 32



ACTIVE SWPPP LEGEND

- STOCKPILES
- CURB LOGS
- SILT FENCE
- TEMPORARY MULCH COVER
- TEMPORARY HYDROMULCH
- EROSION CONTROL BLANKET
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- INLET PROTECTION DEVICES
- PAVEMENT
- SOD

LEGEND:

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- EXCESS MATERIAL STOCKPILE LOCATION

FOR REVIEW ONLY
PRELIMINARY
NOT FOR CONSTRUCTION

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Date — License No.

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PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

7

SHEET 7 of 32

Plotted: May 22, 2019 — 10:40am
Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2swppp.dwg

LEGEND:

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ACTIVE SWPPP LEGEND

- STOCKPILES
- CURB LOGS
- SILT FENCE
- TEMPORARY MULCH COVER
- TEMPORARY HYDROMULCH
- EROSION CONTROL BLANKET
- ROCK DRIVEWAY / ROCK PADS
- INLET PROTECTION DEVICES
- PAVEMENT
- SOD

N

0 25 50 100
SCALE IN FEET

ALLIANT ENGINEERING
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HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
EROSION AND SEDIMENT CONTROL PLAN - VIEW C

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

Date: 05-22-19
DAVE NASH, PE
License No. 21836

QUALITY ASSURANCE/CONTROL

BY ____ DATE ____

DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

8
SHEET 8 of 32

Plotted: May 22, 2019 – 10:40am
Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2swppp.dwg

EROSION CONTROL GENERAL NOTES:

1. NO LAND DISTURBING ACTIVITY SHALL OCCUR UNTIL A GRADING PERMIT HAS BEEN ISSUED FROM THE CITY OF CHASKA AND THE WATERSHED DISTRICT.

2. BEST MANAGEMENT PRACTICES (BMP'S) REFER TO EROSION AND SEDIMENT CONTROL PRACTICES DEFINED IN THE MPCA PROTECTING WATER QUALITY IN URBAN AREAS AND THE MINNESOTA CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PLANNING HANDBOOK.

3. ALL BMP'S SELECTED SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND ESTIMATED DURATION OF USE.

4. THE SWPPP MAY BE REVISED AT ANYTIME OF THE PROJECT TIMELINE AS LONG AS THE BMP'S ARE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER SPECIFICATION AND ACCEPTED ENGINEERING PRACTICES (SECTION 7 OF MPCA NPDES PERMIT).

- ALL SWPPP CHANGES MUST BE DONE BY A QUALIFIED INDIVIDUAL (21.2A OR 21.2B OF MPCA NPDES PERMIT).

5. A COPY OF THESE PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

6. THE BOUNDARIES OF THE LAND DISTURBANCE LIMITS SHOWN ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. NO DISTURBANCE BEYOND THE DISTURBED LIMITS.

7. WHEREVER POSSIBLE, PRESERVE THE EXISTING TREES, GRASS AND OTHER VEGETATIVE COVER TO HELP FILTER RUNOFF.

8. ESTABLISH A PERMANENT VEGETATIVE COVER ON ALL EXPOSED SOILS WHERE LAND IS COMING OUT OF AGRICULTURAL PRODUCTION. PLANT AS SOON AS POSSIBLE TO ESTABLISH DENSE GRASS FILTER PRIOR TO CONSTRUCTION AND TO MINIMIZE WEED GROWTH.

9. ALL TREES NOT LISTED FOR REMOVAL SHALL BE PROTECTED. DO NOT OPERATE EQUIPMENT WITHIN THE DRIPLINE, ROOT ZONES OR WITHIN TREE PROTECTION FENCE AREAS.

10. ALL EROSION AND SEDIMENT CONTROL FACILITIES (BMP'S) SHALL BE INSTALLED AND IN OPERATION PRIOR TO LAND DISTURBANCE ACTIVITIES AND THEY SHALL BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR EROSION HAS PASSED.

11. SILT FENCE IS REQUIRED AT DOWN GRADIENT PERIMETER OF DISTURBED AREAS AND STOCKPILES. PROTECT WETLANDS, WATERCOURSES AND ADJACENT PROPERTIES FROM SEDIMENTATION AND STORMWATER RUNOFF.

12. THE BMP'S SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, THE PERMITTEE/CONTRACTOR SHALL ANTICIPATE THAT MORE BMP'S WILL BE NECESSARY TO ENSURE EROSION AND SEDIMENT CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY CONSTRUCTION ACTIVITIES AND/OR CLIMATIC EVENTS AND TO PROVIDE ADDITIONAL BMP'S OVER AND ABOVE THE MINIMUM REQUIREMENTS SHOWN ON THE PLANS, AS MAY BE NEEDED TO PROVIDE EFFECTIVE PROTECTION OF WATER AND SOIL RESOURCES.

13. THE BMP'S SHALL BE INSPECTED DAILY BY THE PERMITTEE/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. SILT FENCES CLEANED OR REPLACED AT SEDIMENT BUILDUP OF 1/2 OF THE FENCE HEIGHT.

14. LAND DISTURBING ACTIVITIES SHALL OCCUR IN INCREMENTS OF WORKABLE SIZE SUCH THAT ADEQUATE BMP CONTROL CAN BE PROVIDED THROUGHOUT ALL PHASES OF CONSTRUCTION. THE SMALLEST PRACTICAL AREA SHALL BE EXPOSED OR OTHERWISE DISTURBED AT ANY ONE TIME.

15. OPERATE TRACK EQUIPMENT (DOZER) UP AND DOWN EXPOSED SOIL SLOPES ON FINAL PASS, LEAVING TRACK GROOVES PERPENDICULAR TO THE SLOPE. DO NOT BACK-BLADE. LEAVE A SURFACE ROUGH TO MINIMIZE EROSION.

16. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED FROM EROSION WITHIN 7 DAYS OF SUBSTANTIAL COMPLETION OF GRADING IN THAT AREA. TEMPORARY SEED AND MULCH SHALL COVER ALL EXPOSED SOILS IF GRADING COMPLETION IS DELAYED LONGER THAN 7 DAYS. PERMANENT SEED AND MULCH OR SOD IS REQUIRED WITHIN 3 DAYS OF COMPLETION OF FINAL GRADING.

17. GENERAL TEMPORARY SEED SHALL BE MNDOT MIX 22-112 @ 100 LBS. PER ACRE OR APPROVED EQUAL. PERMANENT SEED SHALL BE MNDOT MIX 25-151 @ 120 LBS. PER ACRE OR APPROVED EQUAL. (PLANTING DATES PER SPEC 2575) MULCH SHALL BE MNDOT TYPE 1 (CLEAN OAT STRAW) @ 2 TONS PER ACRE AND DISK ANCHORED IN PLACE OR APPROVED EQUAL. FERTILIZER SHALL BE 80-80-80 NPK PER ACRE (UNLESS P RESTRICTIONS APPLY) AND INCORPORATED INTO THE SEED BED.

18. POND, BASIN AND WETLAND AREAS SHALL BE SEEDED IN ACCORDANCE WITH LANDSCAPE PLAN.

19. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

20. AN ALTERNATE EROSION & SEDIMENT CONTROL PLAN SHALL BE REQUIRED FOR LAND DISTURBANCES ON EACH LOT AS PART OF ANY FUTURE BUILDING PERMIT FOR THE CONSTRUCTION OF STRUCTURES AND DRIVEWAYS.

EROSION CONTROL SCHEDULE:

1. PRIOR TO ANY CONSTRUCTION OR DEMOLITION, SILT FENCE AND FILTERS SHALL BE INSTALLED AS SHOWN TO INTERCEPT RUNOFF.

2. ALL EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR UNTIL THE SITE HAS BEEN RE-VEGETATED. CONTRACTOR MAY REMOVE NECESSARY SILT FENCING/FILTERS TO CONSTRUCT ROADWAYS, WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREA.

3. SUFFICIENT TOPSOIL SHALL BE STOCKPILED TO ALLOW FOR THE REPLACEMENT OF 6" OF TOPSOIL FOR DISTURBED AREAS TO BE RE-VEGETATED.

4. THE CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND PAVEMENT CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. AREAS THAT WILL NOT BE SUBJECT TO CONSTRUCTION TRAFFIC SHALL BE SEEDED (MnDOT MIX 22-112 @ 100#/AC AND MULCHED OR SODDED WITHIN SEVEN (7) DAYS OF BEING DISTURBED.

5. CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES AS INDICATED ON THIS EROSION CONTROL PLAN AND ANY ADDITIONAL REQUIRED BASED ON MEANS, METHODS AND SEQUENCES OF CONSTRUCTION.

SEDIMENT CONTROL PRACTICES:

1. SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS.

2. SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMITERS BEFORE ANY UPGRADIENT LAND DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL PERMANENT COVER HAS BEEN ESTABLISHED.

3. THE TIMING OF THE INSTALLATION OF SEDIMENT CONTROL PRACTICES MAY BE ADJUSTED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES. ANY SHORT-TERM ACTIVITY MUST BE COMPLETED AS QUICKLY AS POSSIBLE AND THE SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IMMEDIATELY AFTER THE ACTIVITY IS COMPLETED. HOWEVER, SEDIMENT CONTROL PRACTICES MUST BE INSTALLED BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE ACTIVITY IS NOT COMPLETE.

4. ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED.

5. TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCES OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN SURFACE WATERS, INCLUDING STORM WATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES.

6. SITE CONSTRUCTION ENTRANCES WILL BE AS SHOWN ON THE PLAN. ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT EACH ENTRANCE.

PERMANENT COVER:

THE CONTRACTOR MUST ENSURE COMPLETE COVER OF THE SITE. THE CONTRACTOR MUST SUBMIT A NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS AFTER PERMANENT COVER IS COMPLETE, OR ANOTHER OWNER/OPERATOR (PERMITTEE) HAS ASSUMED CONTROL OF ALL AREAS OF THE SITE THAT HAVE NOT UNDERGONE PERMANENT COVER. PERMANENT COVER CAN BE ACHIEVED IN THE FOLLOWING WAY:

ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND ALL SOILS MUST BE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OVER THE ENTIRE PERVIOUS SURFACE AREA, OR OTHER EQUIVALENTMEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSIVE CONDITIONS AND;

A. ALL DRAINAGE DITCHES, CONSTRUCTED TO DRAIN WATER FROM THE SITE AFTER CONSTRUCTION IS COMPLETE, MUST BE STABILIZED TO PRECLUDE EROSION;
B. ALL TEMPORARY SYNTHETIC, AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPS (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE PERMANENT COVER; AND
C. THE CONTRACTORS MUST CLEAN OUT ALL SEDIMENT FROM CONVEYANCES AND FROM TEMPORARY SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS. SEDIMENT MUST BE STABILIZED TO PREVENT IT FROM BEING WASHED BACK INTO THE BASIN, CONVEYANCES OR DRAINAGE WAYS DISCHARGING OFF-SITE OR TO SURFACE WATERS. THE CLEAN OUT OF PERMANENT BASINS MUST BE SUFFICIENT TO RETURN THE BASIN TO DESIGN CAPACITY.

EROSION AND SEDIMENT CONTROL MAINTENANCE PROGRAM:

1. INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. IMMEDIATELY REPAIR FAILED OR FAILING SILT FENCE.

2. REPLACEMENT/REPAIR – BMP'S SHALL BE SHALL BE REPAIRED, REPLACED OR SUPPLEMENT OF ALL NONFUNCTIONAL BMP'S WITH FUNCITLAB BMP'S BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN SECTION 11.5 OR 11.6.

3. SEDIMENT REMOVAL – SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER. ANY SEDIMENT REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER FABRIC IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH EXISTING GRADE, PREPARED, AND SEEDED WITH THE APPROPRIATE SEED MIX, OR SODDED AS DIRECTED BY THE ENGINEER.

4. REMOVAL OF SILT FENCE – SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPWARD SLOPING AREA HAS BEEN PERMANENTLY STABILIZED. IF THE UPWARD SLOPING AREA IS TO BE EXPOSED LONGER THAN SIX (6) MONTHS, THAT AREA SHALL BE COVERED WITH TEMPORARY VEGETATION WHEN FIRST EXPOSED.

5. THE CONTRACTOR MUST ROUTINELY INSPECT THE CONSTRUCTION SITE ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. IF EVIDENCE OF EROSION AND SEDIMENT BMP DEPOSITION IS DISCOVERED CONTRACTOR MUST COMPLETE REMOVAL OR STABILIZATION WITHIN (7) CALENDER DAYS OF DISCOVERY.

6. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED IN WRITING AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP RECORDS OF EACH INSPECTION AND

MAINTENANCE ACTIVITY SHALL INCLUDE:

A. DATE AND TIME OF INSPECTIONS;
B. NAME OF PERSON(S) CONDUCTING INSPECTIONS;
C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
D. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVES.
E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCH (0.5 INCHES) IN 24 HOURS;
F. DOCUMENTS OF CHANGES MADE TO THE SWPPP AS REQUIRED IN SECTION 6.

7. WHERE PARTS OF THE CONSTRUCTION SITE HAVE UNDERGONE FINAL STABILIZATION, BUT WORK REMAINS ON OTHER PARTS OF SITE, INSPECTIONS OF THE STABILIZED AREAS MAY BE REDUCED TO ONCE PER MONTH. WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, THE REQUIRED INSPECTIONS AND MAINTENANCE MUST TAKE PLACE AS SOON AS RUNOFF OCCURS AT THE SITE OR PRIOR TO RESUMING CONSTRUCTION, WHICHEVER COMES FIRST.

POLLUTION PREVENTION MANAGEMENT MEASURES:

THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE:

1. SOLID WASTE: COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

2. HAZARDOUS MATERIAL: OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

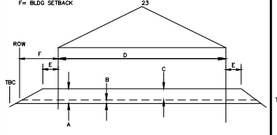
3. CONCRETE WASHOUT IS DONE TRUCK BY TRUCK WITH A MOBILE WASHOUT SYSTEM PROVIDED AND COMPLETED BY THE CONCRETE CONTRACTOR. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF.

4. NO ENGINE DEGREASING IS ALLOWED ON SITE.

STANDARD HOLD DOWN DETAILS

PAD WIDTH = 50' PAD TYPE = F

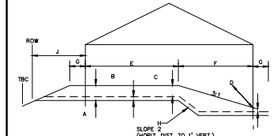
	(FT.)
A= GROSS H.D.	3.0
B= TOPSOIL RESPREAD	0.5
C= NET H.D.	2.5
D= PAD DEPTH	60
E= OVERSIZING	5
F= BLDG SETBACK	23



FULL BASEMENT PAD
NOT TO SCALE
ALL NUMBERS IN FEET

PAD WIDTH = 50' PAD TYPE = L, W

	(FT.)
A= GROSS H.D.	3.0
B= TOPSOIL RESPREAD	0.5
C= NET H.D.	2.5
D= F.G. OFE TO F.G. REAR EL	SEE PLAN (L), (W)
E= BENCH LENGTH	25
F= SLOPE & REAR FLAT LENGTH	35
G= OVERSIZING	5
H= X/Y SLOPE (X VERT. TO 1 HORIZ.)	2
I= F.F. TO TOP OF BLACK @ RFL	0
J= BLDG SETBACK	23

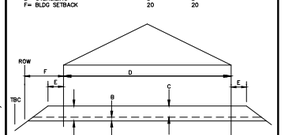


LOOK OUT AND WALK OUT PAD
NOT TO SCALE
ALL NUMBERS IN FEET

VILLA HOLD DOWN DETAILS

PAD WIDTH = 40', 44' PAD TYPE = F

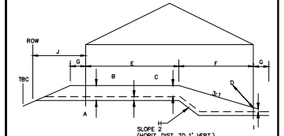
	FRONT LOAD (FT.)	SIDE LOAD (FT.)
A= GROSS H.D.	3	3
B= TOPSOIL RESPREAD	0.5	0.5
C= NET H.D.	2.5	2.5
D= PAD DEPTH	73.75	90
E= OVERSIZING	5	5
F= BLDG SETBACK	20	20



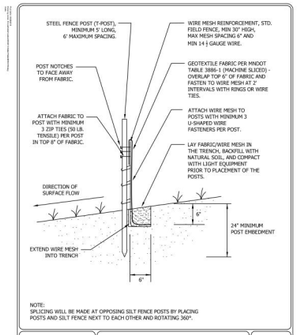
FULL BASEMENT PAD
NOT TO SCALE
ALL NUMBERS IN FEET

PAD WIDTH = 40', 44' PAD TYPE = L, W

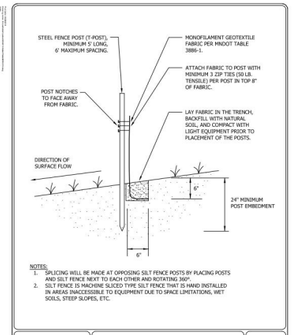
	FRONT LOAD (FT.)	SIDE LOAD (FT.)
A= GROSS H.D.	1.5	1.5
B= TOPSOIL RESPREAD	0.5	0.5
C= NET H.D.	1.0	1.0
D= F.G. OFE TO F.G. REAR EL	SEE PLAN (L), (W)	SEE PLAN
E= BENCH LENGTH	40	40
F= SLOPE & REAR FLAT LENGTH	33.75	50
G= OVERSIZING	5	5
H= X/Y SLOPE (X VERT. TO 1 HORIZ.)	2	2
I= F.F. TO TOP OF BLACK @ RFL	0	0
J= BLDG SETBACK	20	20



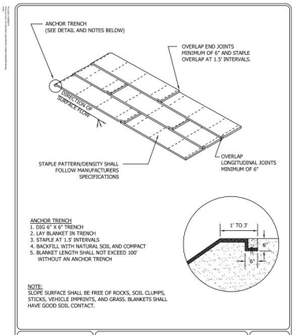
LOOK OUT AND WALK OUT PAD
NOT TO SCALE
ALL NUMBERS IN FEET



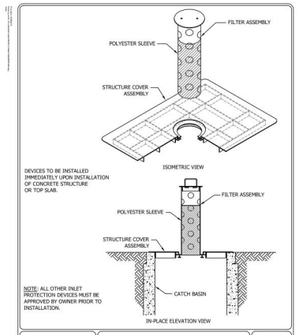
Stantec — SILT FENCE HEAVY DUTY — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-1B



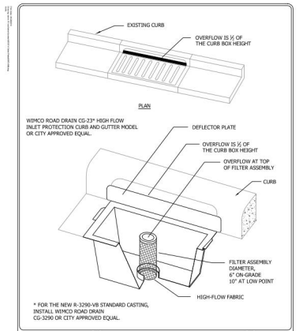
Stantec — SILT FENCE STANDARD — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-1C



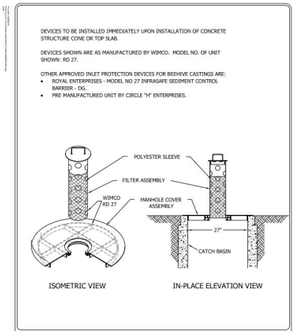
Stantec — EROSION CONTROL BLANKET INSTALLATION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-2



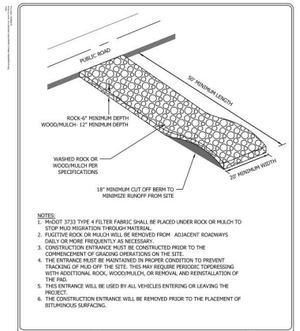
Stantec — INLET PROTECTION FOR CATCH BASIN BEFORE CURB CONSTRUCTION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-4A



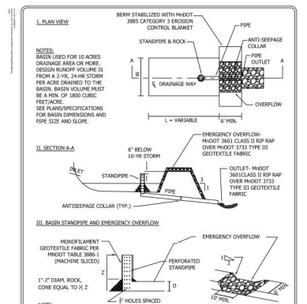
Stantec — INLET PROTECTION - CATCH BASIN INSERT AFTER CURB CONSTRUCTION — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-4B



Stantec — INLET PROTECTION BEEHIVE CASTING — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-4C

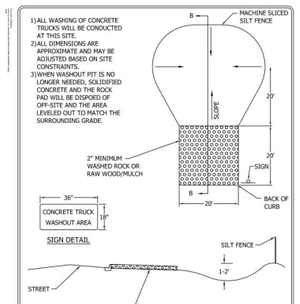


Stantec — ROCK CONSTRUCTION ENTRANCE — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-7

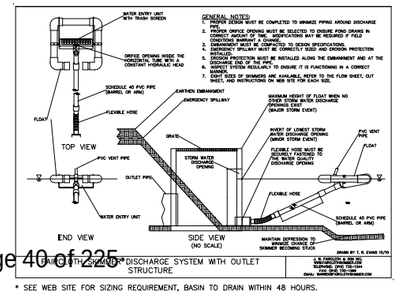


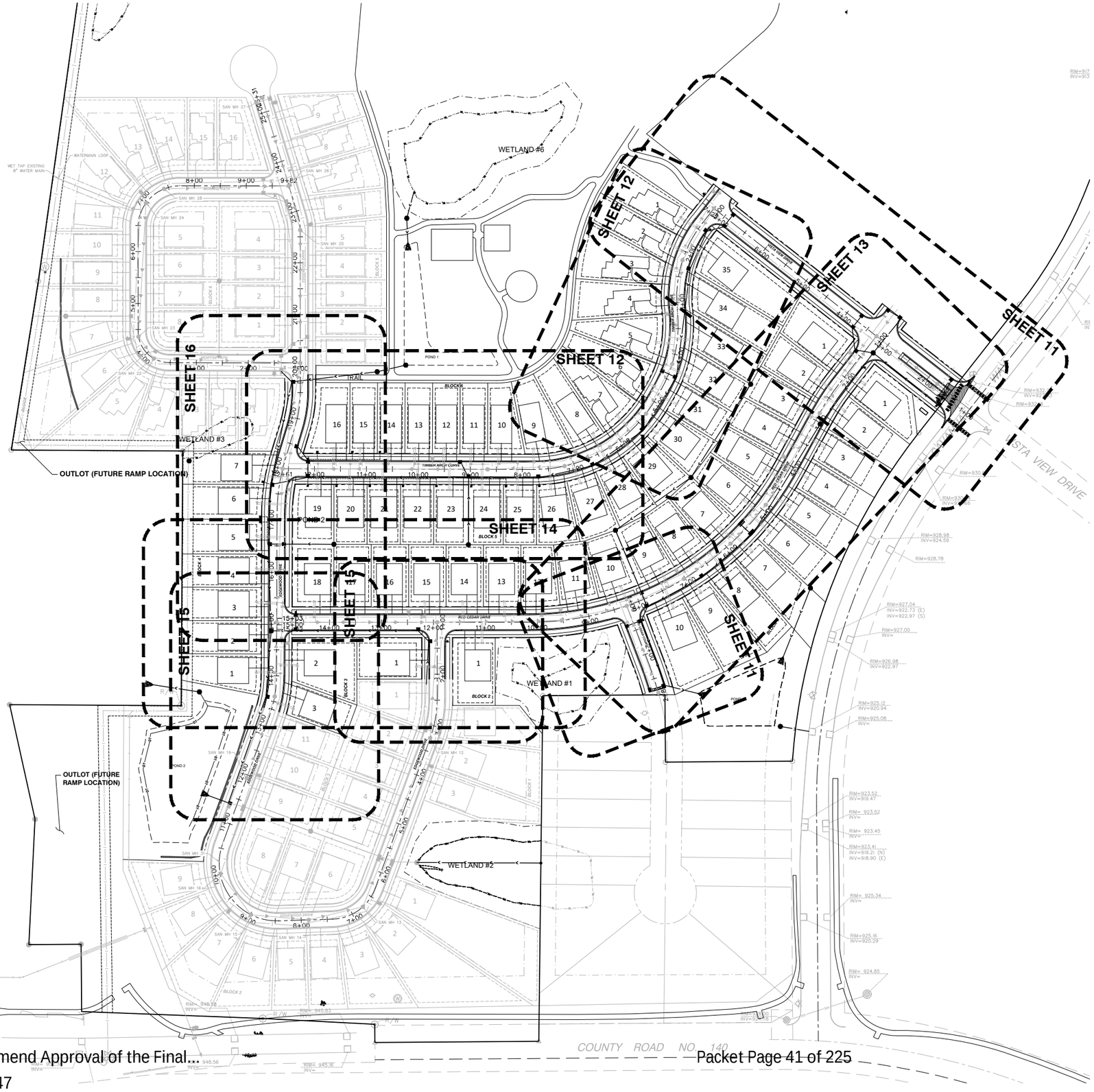
Stantec — TEMPORARY SEDIMENTATION BASIN STANDPIPE OUTLET — CHASKA, MINNESOTA — LAST REVISION: APRIL 2008 — PLATE NO. ERO-8B

Stantec — SLOPE TRACKING — CHASKA, MINNESOTA — LAST REVISION: FEB 2004 — PLATE NO. ERO-10



Stantec — CONCRETE WASHOUT PIT — CHASKA, MINNESOTA — LAST REVISION: April 2011 — PLATE NO. ERO-12


WATER ENTRY UNIT WITH TRASH SCREEN
GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT IT CHANGED.
3. ALL MATERIALS MUST BE INSTALLED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. WARNING SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.
ORIFICE OPENING INSIDE THE HORIZONTAL TUBE WITH A CONSTANT HYDRAULIC HEAD
SCHEDULE 40 PVC PIPE (BARREL OF ARM)
EARTHEN EMBANKMENT
EMERGENCY SPILLWAY
FLEXIBLE HOSE
SKIMMER WEIGHT OF FLOAT WHEN NO WATER IS DISCHARGING (OPENING'S EDGE) (MAJOR STORM EVENT)
GRATE
INVERT OF LOWEST STORM WATER DISCHARGE OPENING (MINOR STORM EVENT)
FLOAT
PVC VENT PIPE
TOP VIEW
PVC VENT PIPE
STORM WATER DISCHARGE OPENING
FLEXIBLE HOSE MUST BE SECURELY FASTENED TO THE STORM WATER DIS



LEGEND:

- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED CATCH BASIN
- PROPOSED SANITARY MANHOLE
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING WATERMAIN
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING STORM SEWER
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER

UTILITY NOTES:

1. EXISTING UTILITIES, SERVICE LOCATIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION.
2. MAINTAIN A MIN 18" VERTICAL SEPARATION AT ALL PIPE CROSSINGS. LOWER WATERMAIN AS NECESSARY.
3. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS PRIOR TO THE START OF CONSTRUCTION.
4. PROVIDE POLYSTYRENE INSULATION FOR ALL STORM SEWER AND WATERMAIN CROSSINGS WHERE VERTICAL OR HORIZONTAL SEPARATION IS LESS THAN 6'.
5. ALL UTILITY WORK WITHIN THE R.O.W. SHALL COMPLY WITH THE CITY OF CHASKA ENGINEERING GUIDELINES.
6. NOTIFY GOPHER STATE ONE CALL 48 HOURS IN ADVANCE OF ANY UTILITY WORK.
7. PROVIDE TEMPORARY TRAFFIC CONTROL IN COMPLIANCE WITH MNDOT "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS–FIELD MANUAL" LATEST REVISION, FOR ANY CONSTRUCTION WITHIN PUBLIC R.O.W.

N

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SCALE IN FEET

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HARVEST WEST
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CONSTRUCTION DOCUMENTS PHASE 1

STREET & STORM SEWER PLAN AND PROFILE LEGEND

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DAVE NASH, PE
05–22–19 21836
Date License No.

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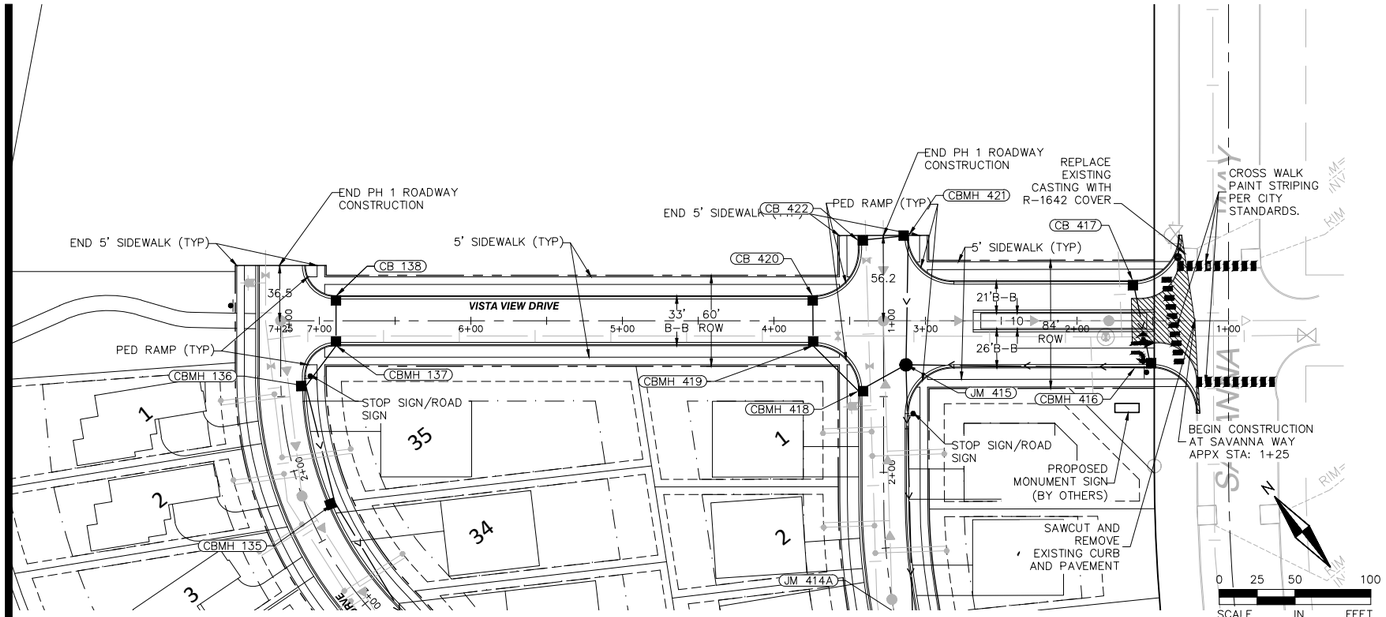
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216–0028.2

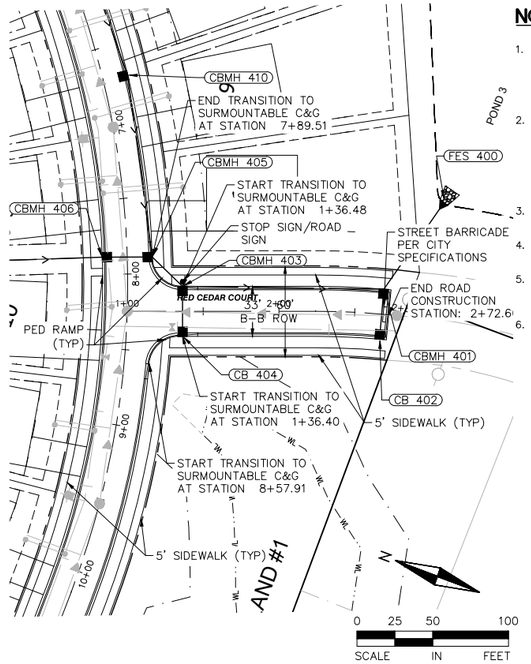
10

SHEET 10 of 32

Plotted: May 22, 2019 – 10:42am
Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2strm.dwg



VISTA VIEW DRIVE



RED CEDAR COURT

NOTES:

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6. ALL CATCH BASINS SHALL HAVE DRAINTILE INVERT AT 3' BELOW RIM.

STRUCTURE AND CASTING SCHEDULE

MH NO.	SIZE	CASTING
135	48" DIA	R-3067-V
136	48" DIA	R-3501-TL
137	48" DIA	R-3067-V
138	2'x3'	R-3067-V
401	72" DIA	R-3067-V
402	2'x3'	R-3067-V
403	60" DIA	R-3067-V
404	2'x3'	R-3067-V
405	60" DIA	R-3067-V
406	48" DIA	R-3105-TR
410	48" DIA	R-3067-V
416	48" DIA	R-3067-V
417	2'x3'	R-3067-V
418	48" DIA	R-3067-V
419	48" DIA	R-3067-V
420	2'x3'	R-3067-V

NOTES:
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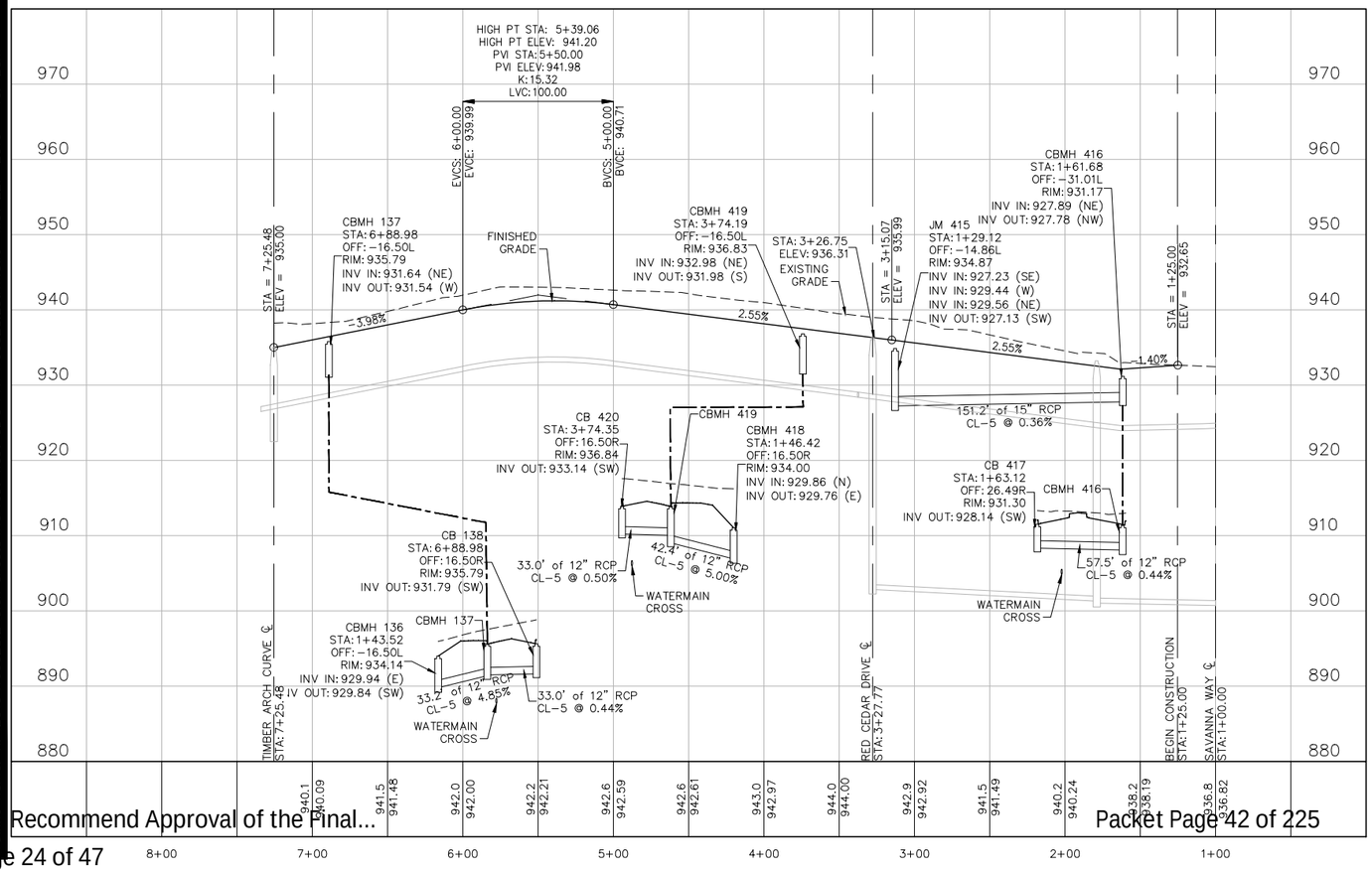
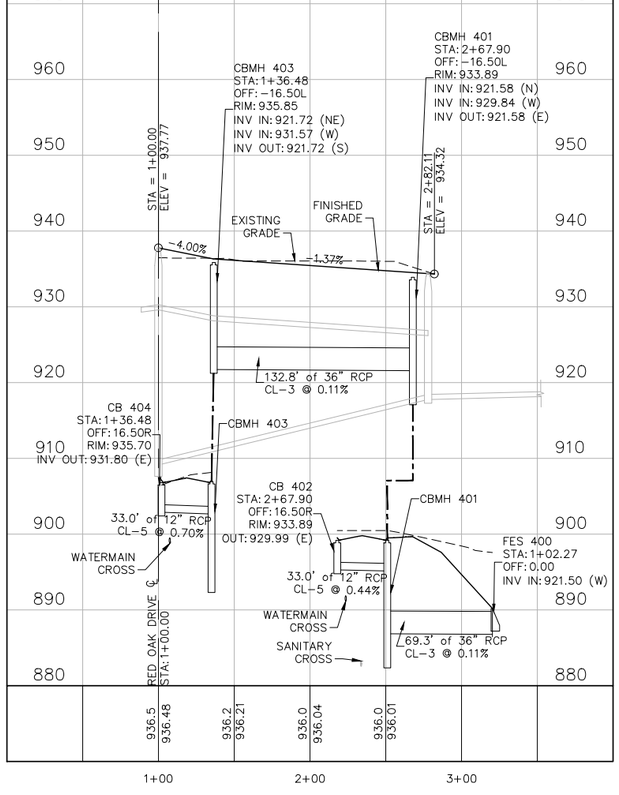
2) SEE OCS DETAIL & SCHEDULE ON SHEET 17





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DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

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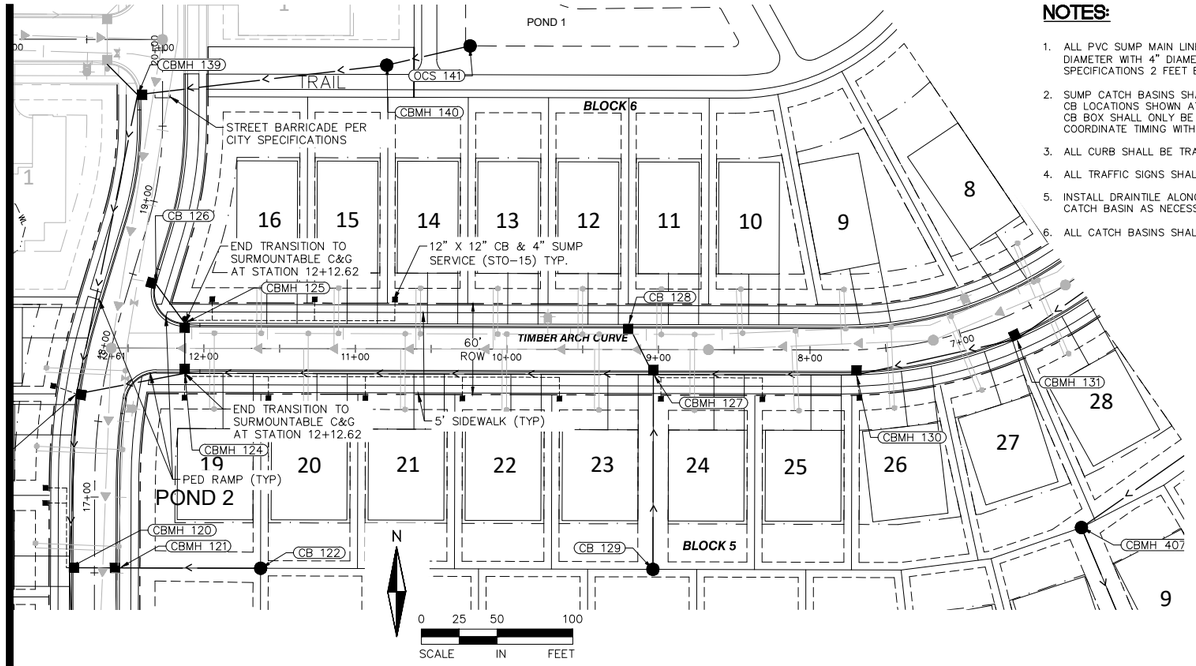
SHEET 11 of 32



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STRUCTURE AND CASTING SCHEDULE		
MH NO.	SIZE	CASTING
120	72" DIA	R-3501-TL
121	72" DIA	R-3067-V
122	60" DIA	R-4342
123	72" DIA	R-3501-TL
124	72" DIA	R-3067-V
125	48" DIA	R-3067-V
126	2'x3'	R-3067-V
127	60" DIA	R-3067-V
128	2'x3'	R-3067-V
129	27" DIA	R-4342
130	48" DIA	R-3067-V
131	48" DIA	R-3501-TL
132	48" DIA	R-3501-TL
133	60" DIA	R-3501-TL
134	2'x3'	R-3501-TR
135	48" DIA	R-3501-TL
136	48" DIA	R-3501-TL
137	48" DIA	R-3067-V
138	2'x3'	R-3067-V
139	60" DIA	R-3067-V
140	48" DIA	R-3067-V
141	60" DIA	OCS
407	48" DIA	R-4342
408	48" DIA	R-4342

NOTES:
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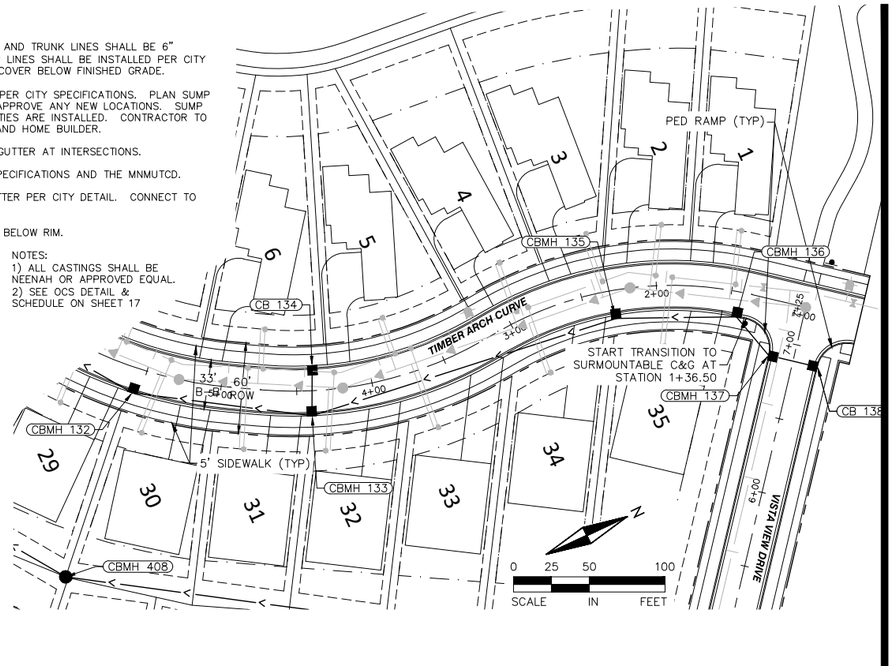
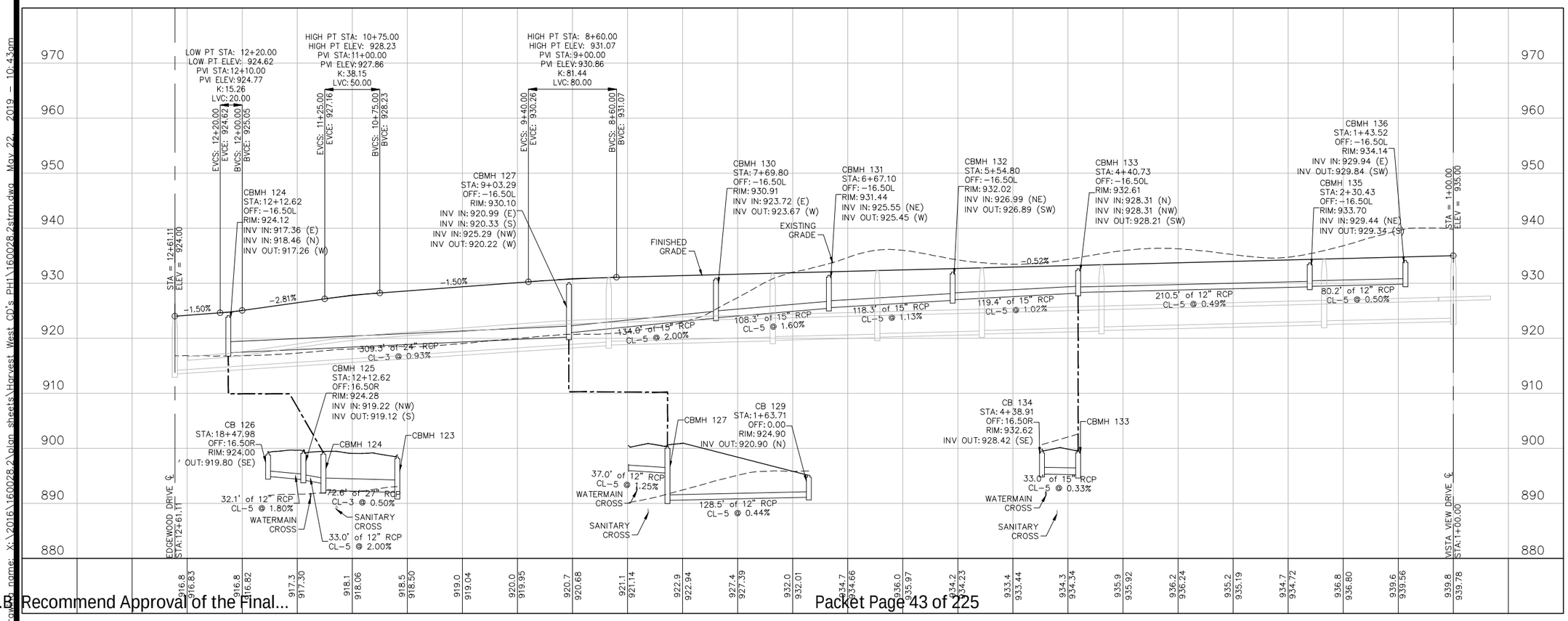


TIMBER ARCH CURVE



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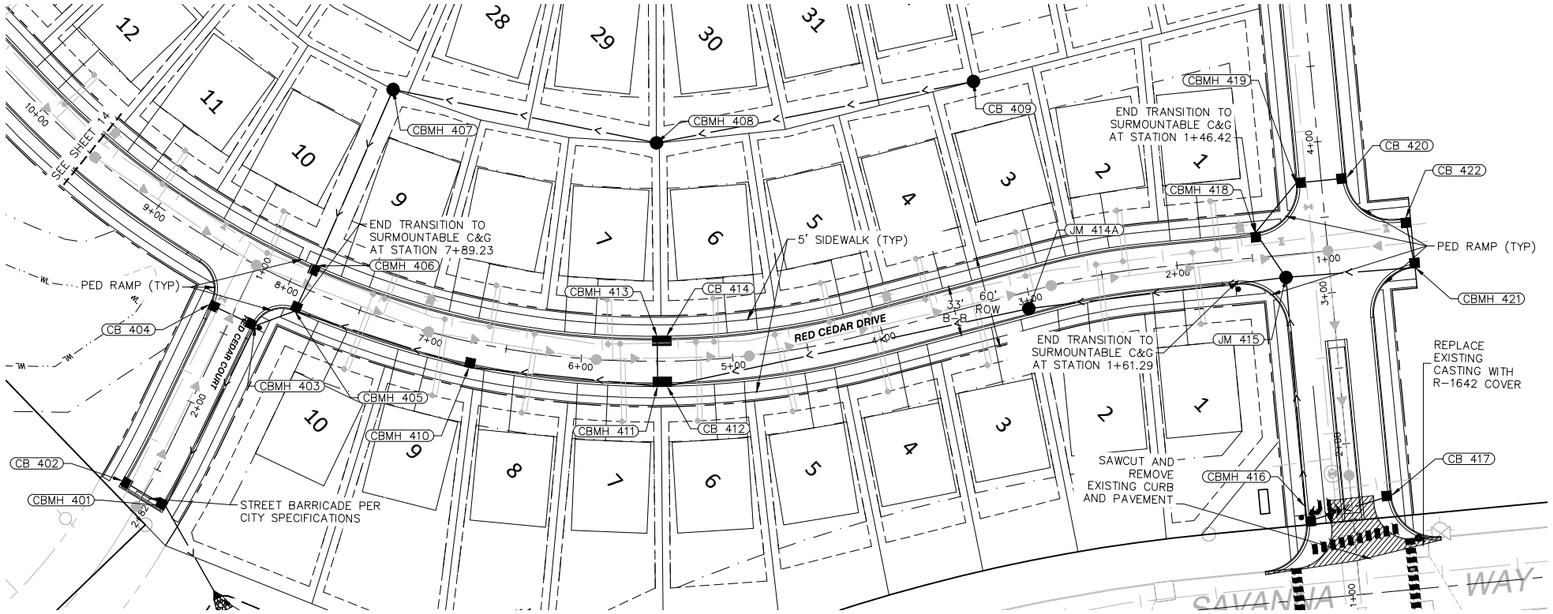
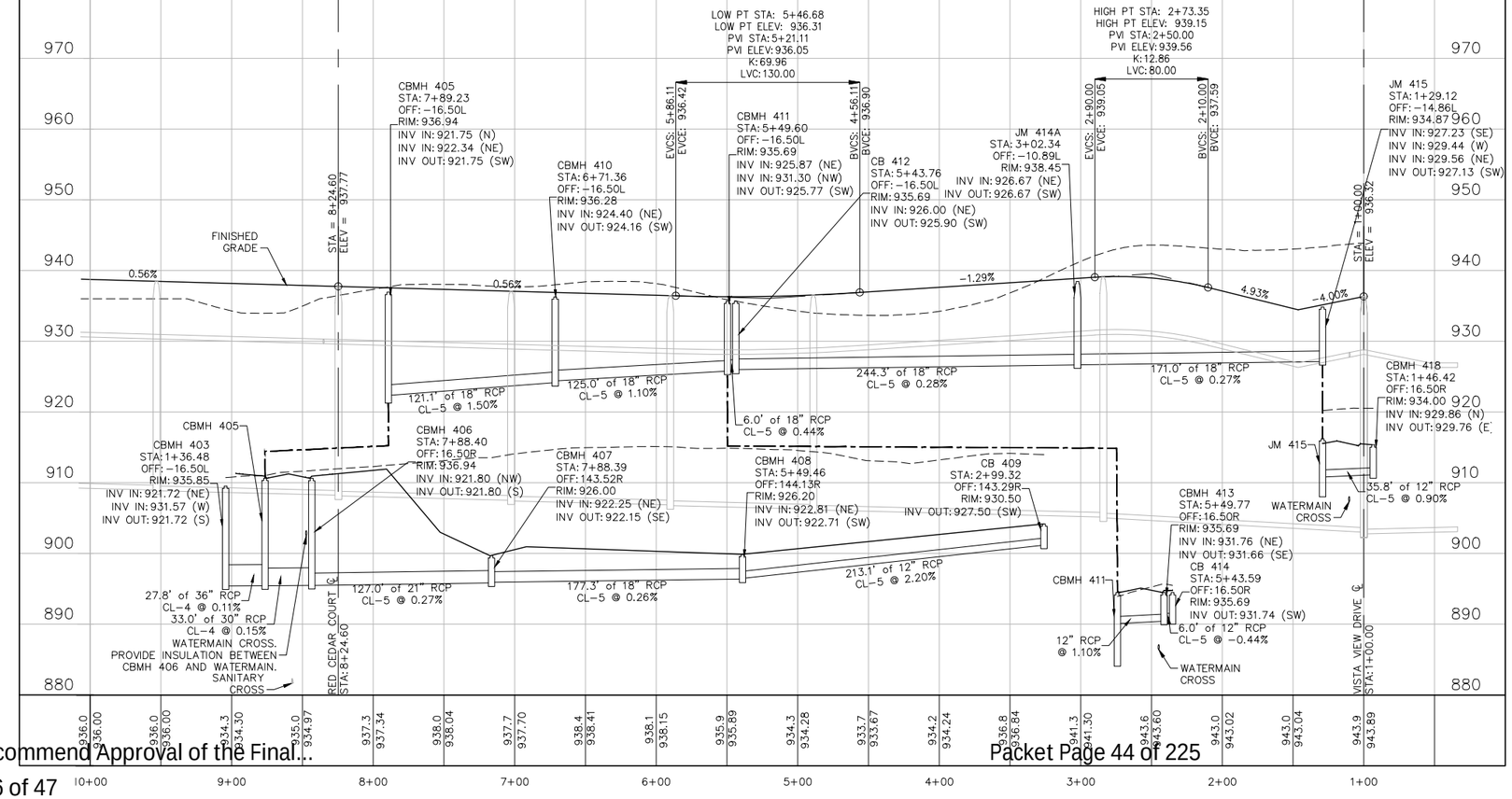
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

12
SHEET 12 of 32



RED CEDAR DRIVE



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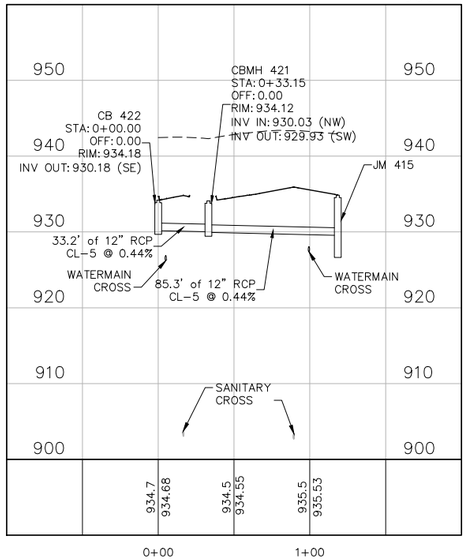

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STRUCTURE AND CASTING SCHEDULE		
MH NO.	SIZE	CASTING
401	72" DIA	R-3067-V
402	2'x3'	R-3067-V
403	60" DIA	R-3067-V
404	2'x3'	R-3067-V
405	60" DIA	R-3067-V
406	48" DIA	R-3501-TR
407	48" DIA	R-4342
408	48" DIA	R-4342
409	27" DIA	R-4342
410	48" DIA	R-3067-V
411	48" DIA	R-3067-V
412	48" DIA	R-3067-V
413	48" DIA	R-3067-V
414	2'x3'	R-3067-V
414A	48" DIA	R-1642
415	60" DIA	R-1642
416	48" DIA	R-3067-V
417	2'x3'	R-3067-V
418	48" DIA	R-3067-V
419	48" DIA	R-3067-V
420	2'x3'	R-3067-V
421	48" DIA	R-3067-V
422	2'x3'	R-3067-V

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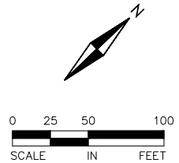

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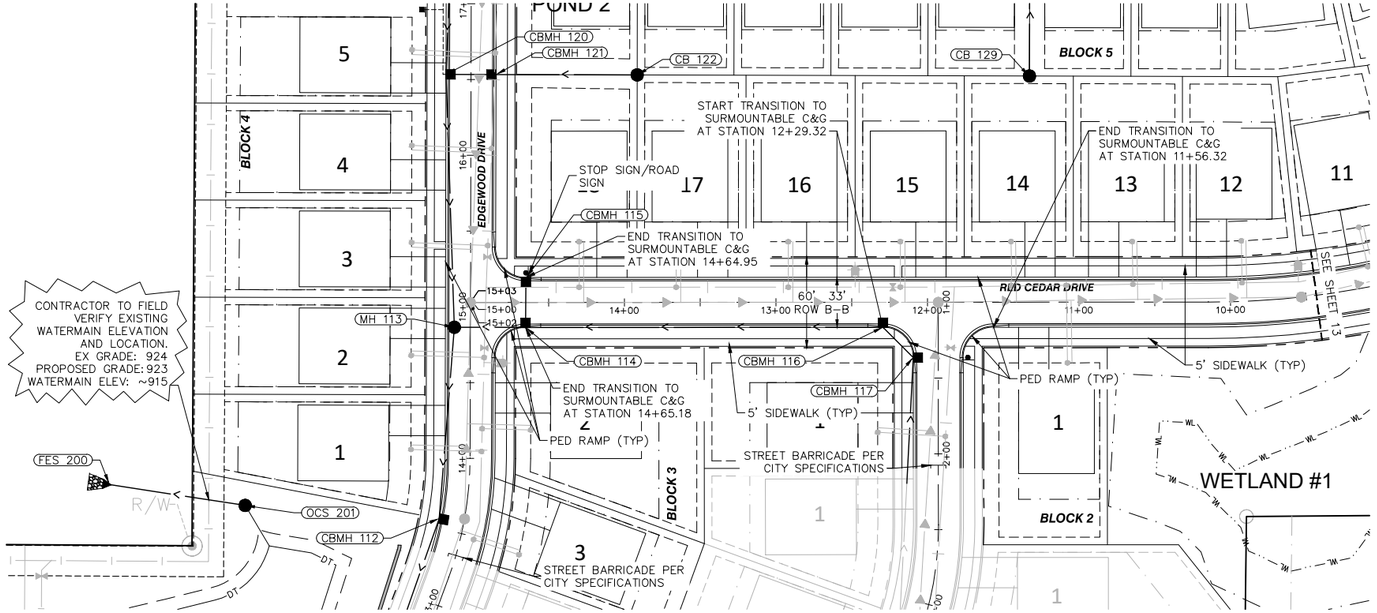
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

13

SHEET 13 of 32

drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2strm.dwg Nov 22, 2019 - 10:43am



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STRUCTURE AND CASTING SCHEDULE		
MH NO.	SIZE	CASTING
113	60" DIA	R-1642
114	48" DIA	R-3067-V
115	2'x3'	R-3067-V
116	48" DIA	R-3067-V
117	48" DIA	R-3067-V
120	72" DIA	R-3501-TL
121	72" DIA	R-3067
122	60" DIA	R-4342
129	27" DIA	R-4342
201	60" DIA	OCS

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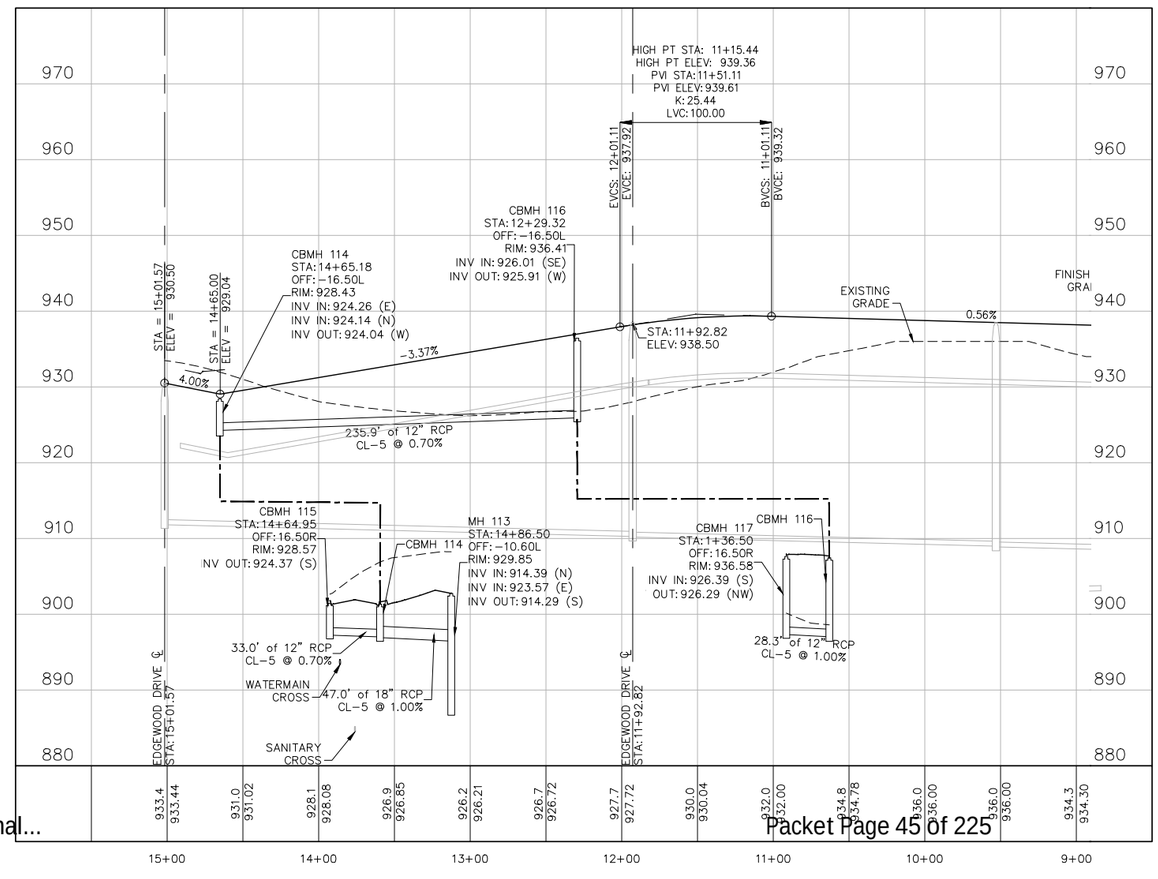
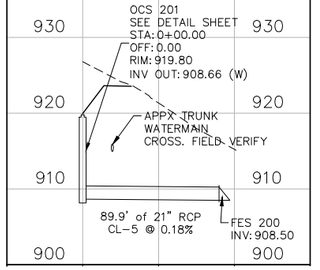
SCALE IN FEET

RED CEDAR DRIVE



OCS 200 - FES 200



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14
SHEET 14 of 32

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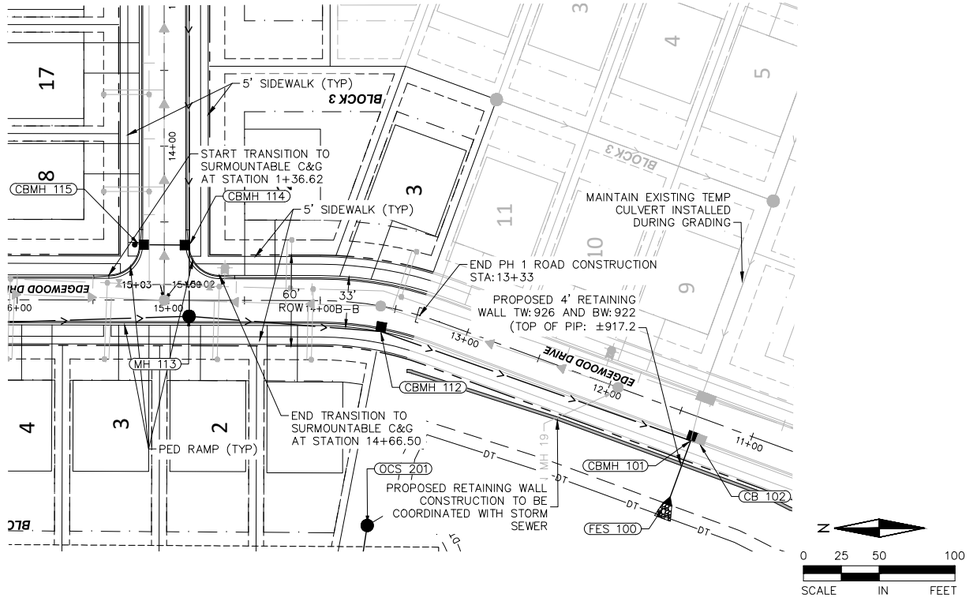

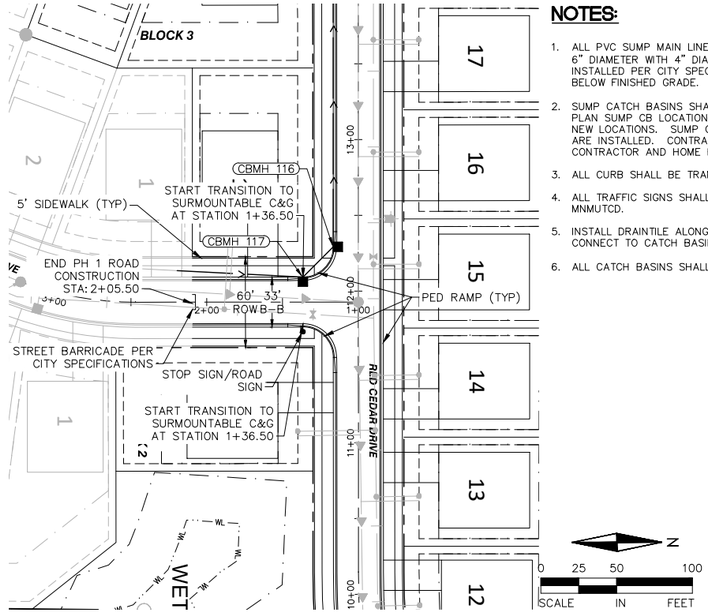

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113	60" DIA	R-1642
114	48" DIA	R-3067-V
115	2'x3'	R-3067-V
116	48" DIA	R-3067-V
117	48" DIA	R-3067-V
118	48" DIA	R-3067-V
119	2'x3'	R-3067-V
201	60" DIA	OCS

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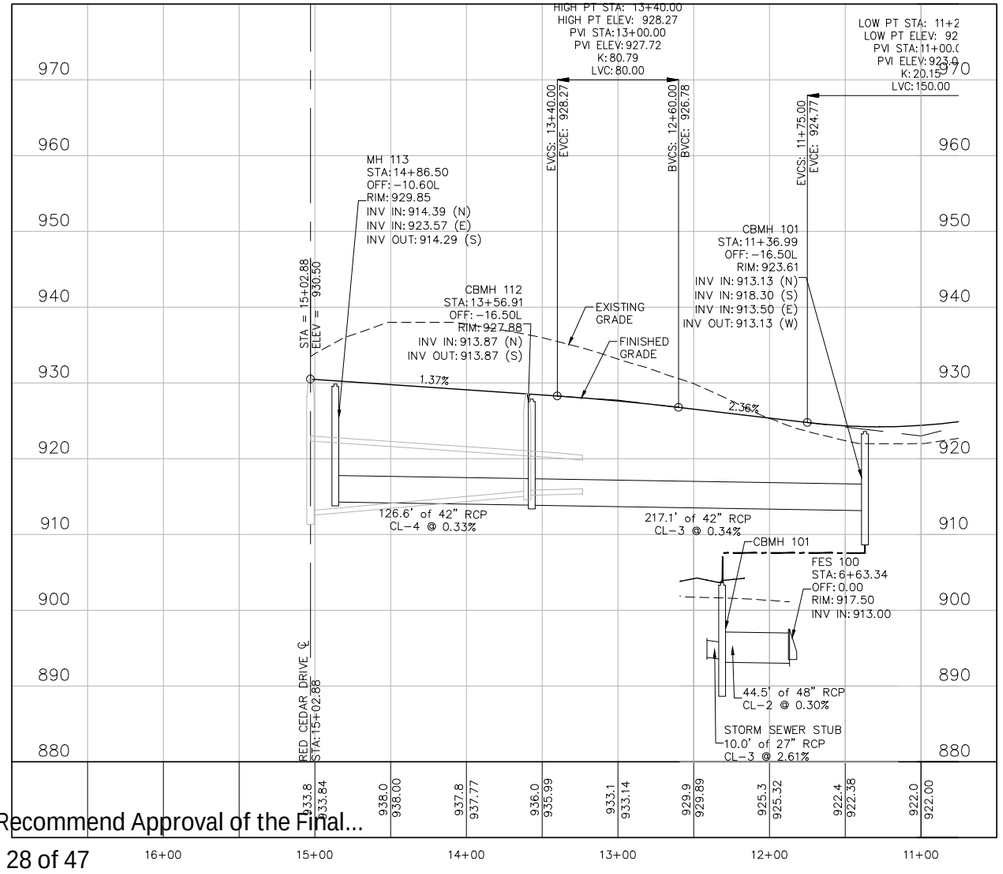
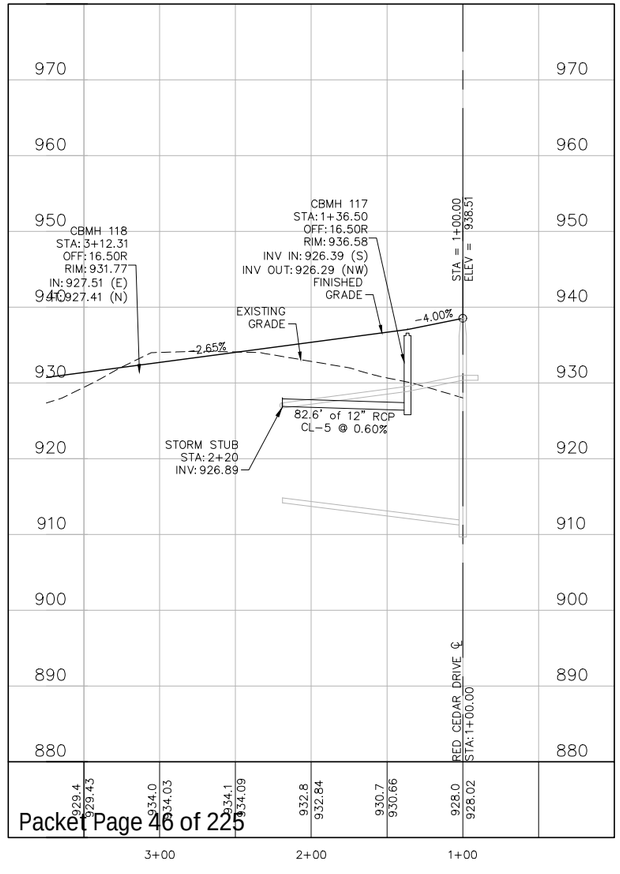
EDGEWOOD DRIVE



EDGEWOOD DRIVE



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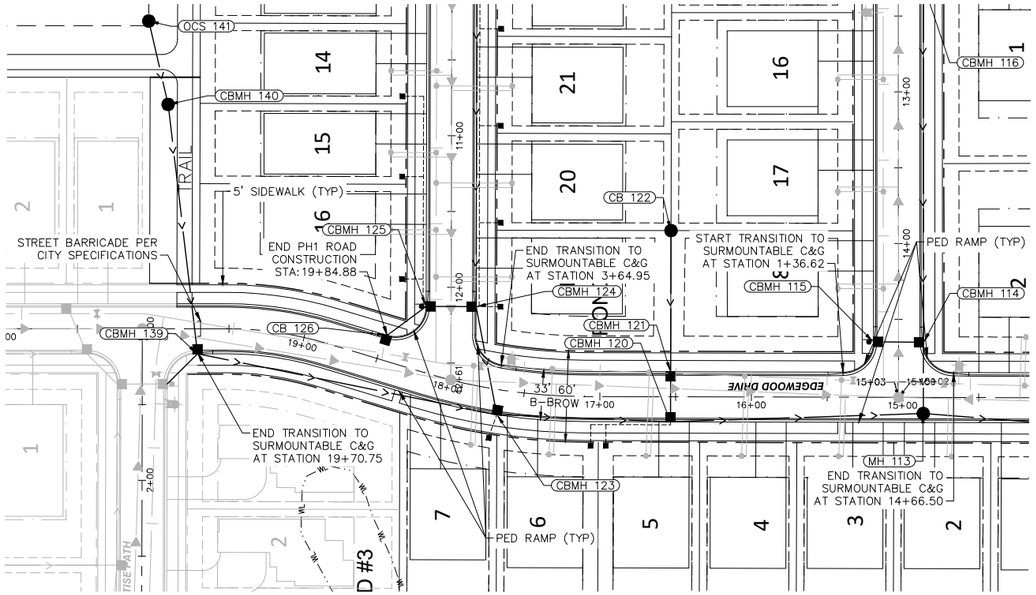
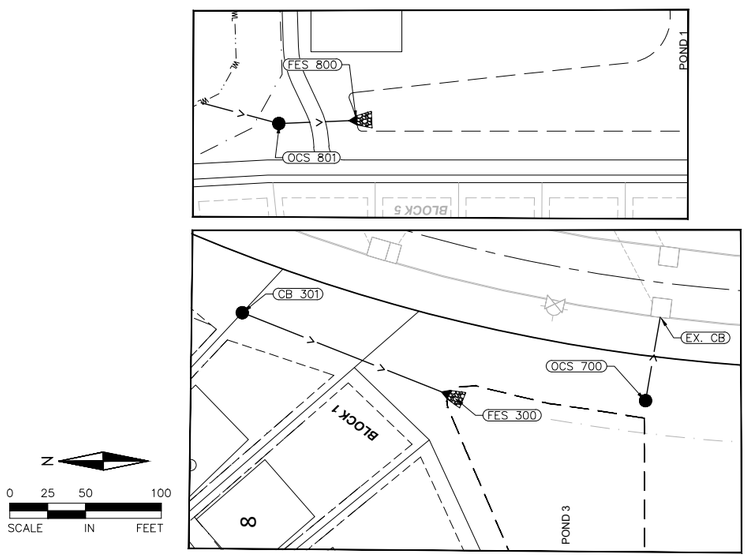
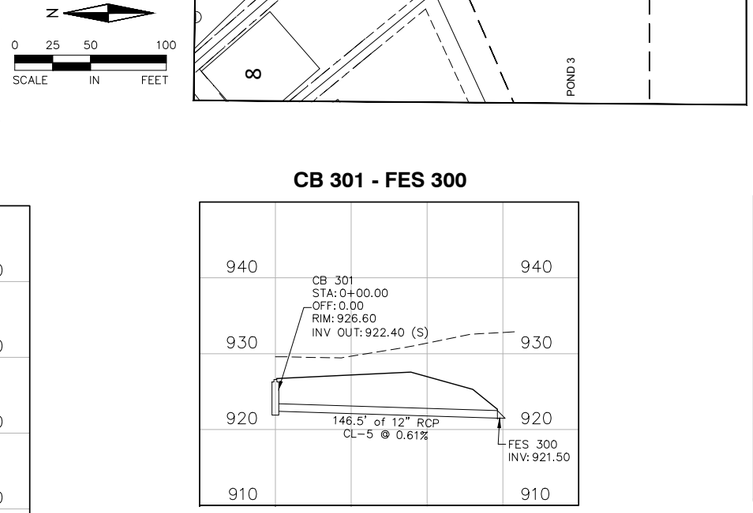
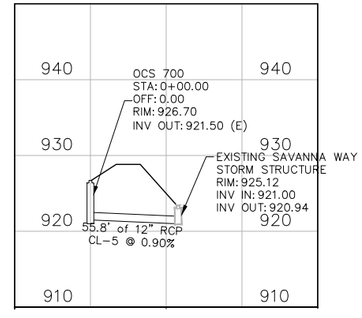
SHEET 15 of 32

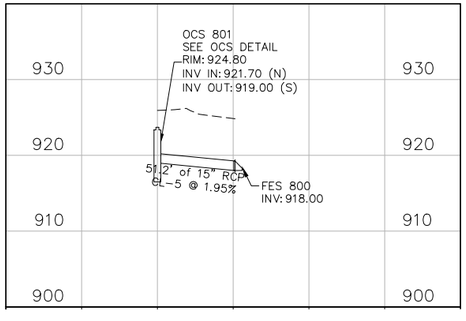
drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2strm.dwn May 22, 2019 - 10:44am

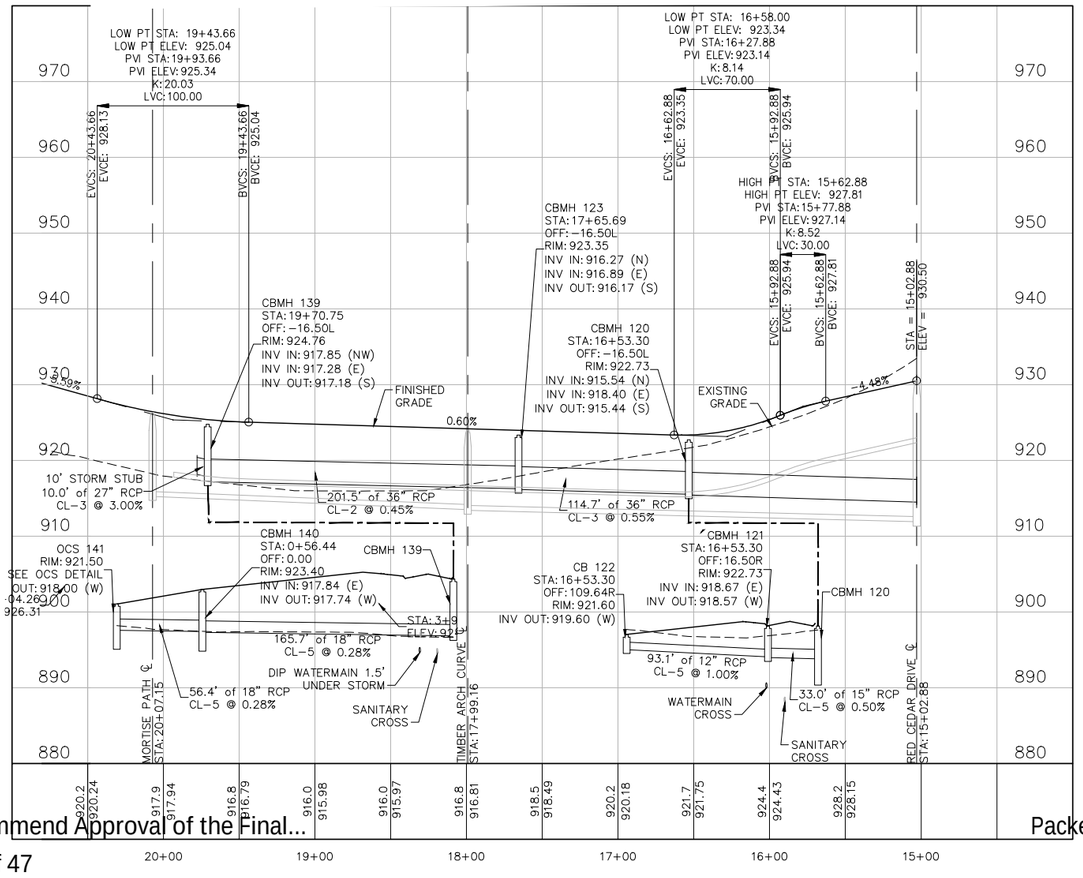












EDGEWOOD DRIVE

CB 301 - FES 300

OCS 700 - EX SAVANNA WAY

OCS 801 - FES 800

NOTES:

1. ALL PVC SUMP MAIN LINES SHALL BE SCHEDULE 40 PVC AND TRUNK LINES SHALL BE 6" DIAMETER WITH 4" DIAMETER SERVICE LEADS. PVC SUMP LINES SHALL BE INSTALLED PER CITY SPECIFICATIONS 2 FEET BEHIND CURB AND 2.0 FEET OF COVER BELOW FINISHED GRADE.
2. SUMP CATCH BASINS SHALL BE 12"X12" AND INSTALLED PER CITY SPECIFICATIONS. PLAN SUMP CB LOCATIONS SHOWN AT RIGHT OF WAY LINE, CITY TO APPROVE ANY NEW LOCATIONS. SUMP CB BOX SHALL ONLY BE INSTALLED AFTER PRIVATE UTILITIES ARE INSTALLED. CONTRACTOR TO COORDINATE TIMING WITH PRIVATE UTILITY CONTRACTOR AND HOME BUILDER.
3. ALL CURB SHALL BE TRANSITIONED TO B618 CURB AND GUTTER AT INTERSECTIONS.
4. ALL TRAFFIC SIGNS SHALL BE INSTALLED BE PER CITY SPECIFICATIONS AND THE MNMUTCD.
5. INSTALL DRAINTILE ALONG ALL PROPOSED CURB AND GUTTER PER CITY DETAIL. CONNECT TO CATCH BASIN AS NECESSARY.
6. ALL CATCH BASINS SHALL HAVE DRAINTILE INVERT AT 3' BELOW RIM.

STRUCTURE AND CASTING SCHEDULE		
MH NO.	SIZE	CASTING
113	60" DIA	R-1642
114	48" DIA	R-3067-V
115	2'x3'	R-3067-V
120	72" DIA	R-3501-TL
121	72" DIA	R-3067-V
122	60" DIA	R-4342
123	72" DIA	R-3501-TL
124	72" DIA	R-3067-V
125	48" DIA	R-3067-V
126	2'x3'	R-3067-V
139	60" DIA	R-3067-V
140	48" DIA	R-3067-V
141	60" DIA	OCS

NOTES:
1) ALL CASTINGS SHALL BE NEENAH OR APPROVED EQUAL.
2) SEE OCS DETAIL & SCHEDULE ON SHEET 17

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HARVEST WEST
CHASKA, MN

CONSTRUCTION DOCUMENTS PHASE 1

STREET & STORM SEWER PLAN & PROFILES

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

DAVE NASH, PE
05-22-19 — Date
21836 — License No.

QUALITY ASSURANCE/CONTROL

BY	DATE

DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

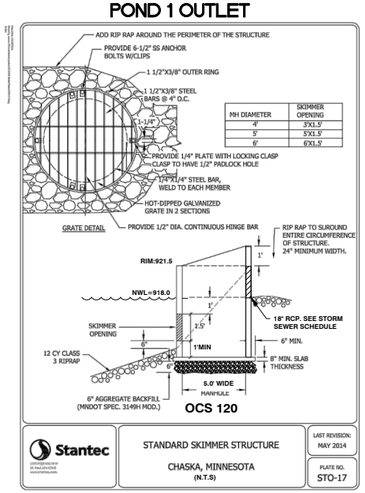
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

16

SHEET 16 of 32

Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2strm.dwg May 22, 2019 - 10:45am

POND 1 OUTLET



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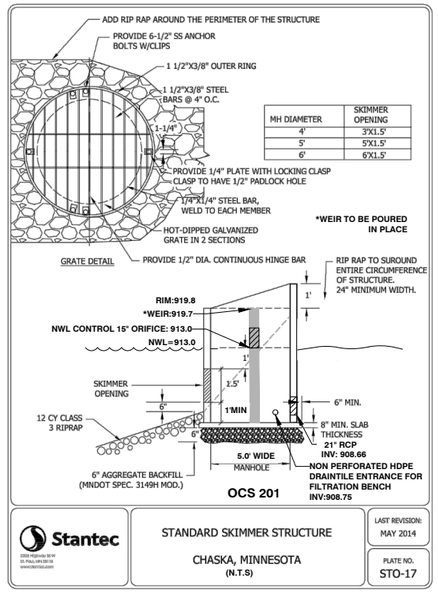

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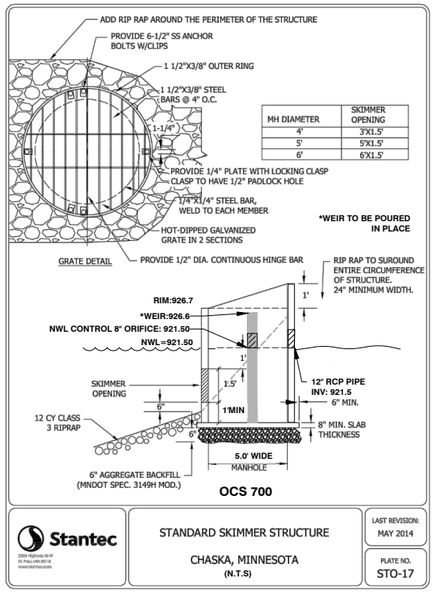
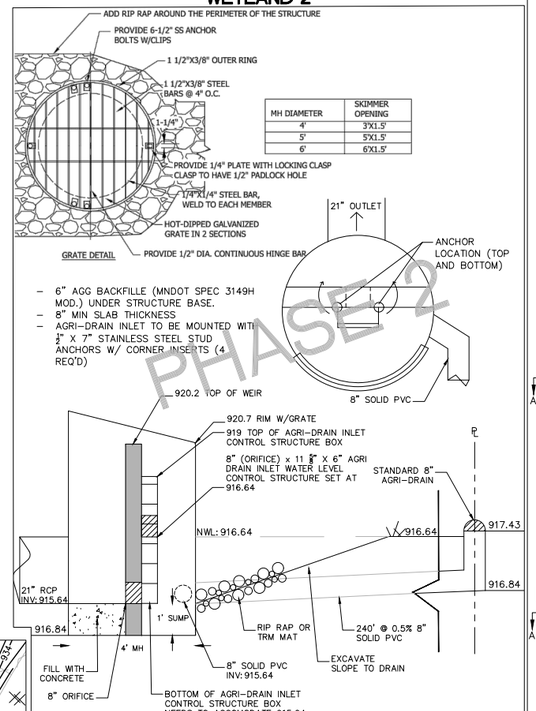


WETLAND 2



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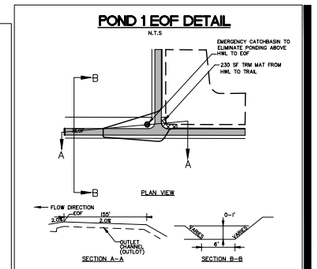

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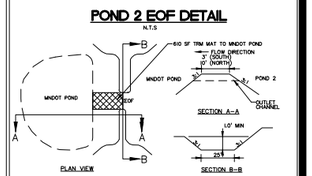

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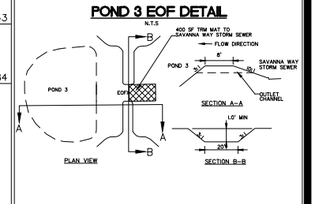

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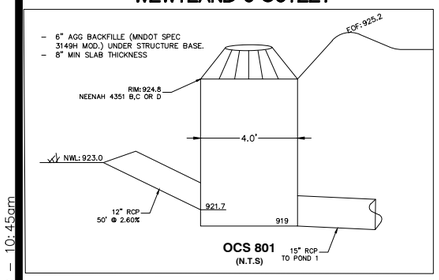

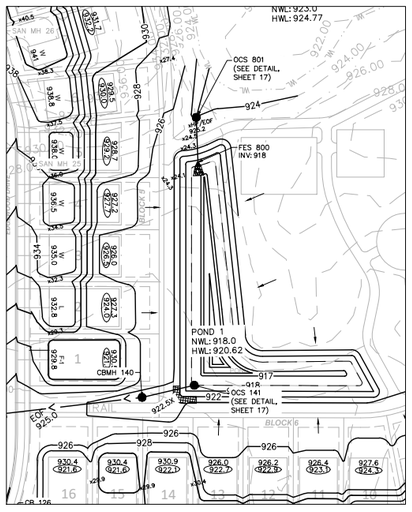

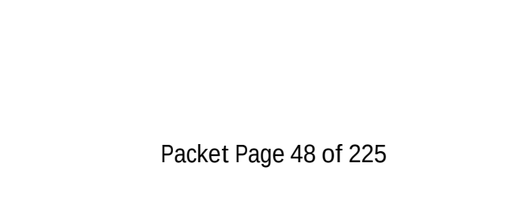

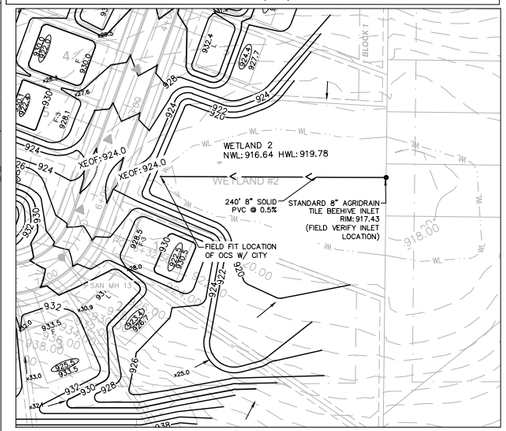

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CHASKA, MN

CONSTRUCTION DOCUMENTS PHASE 1

STREET & STORM SEWER OCS DETAILS

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DAVE NASH, PE
05-22-19 21836
Date License No.

QUALITY ASSURANCE/CONTROL

BY DATE

DATE	ISSUE
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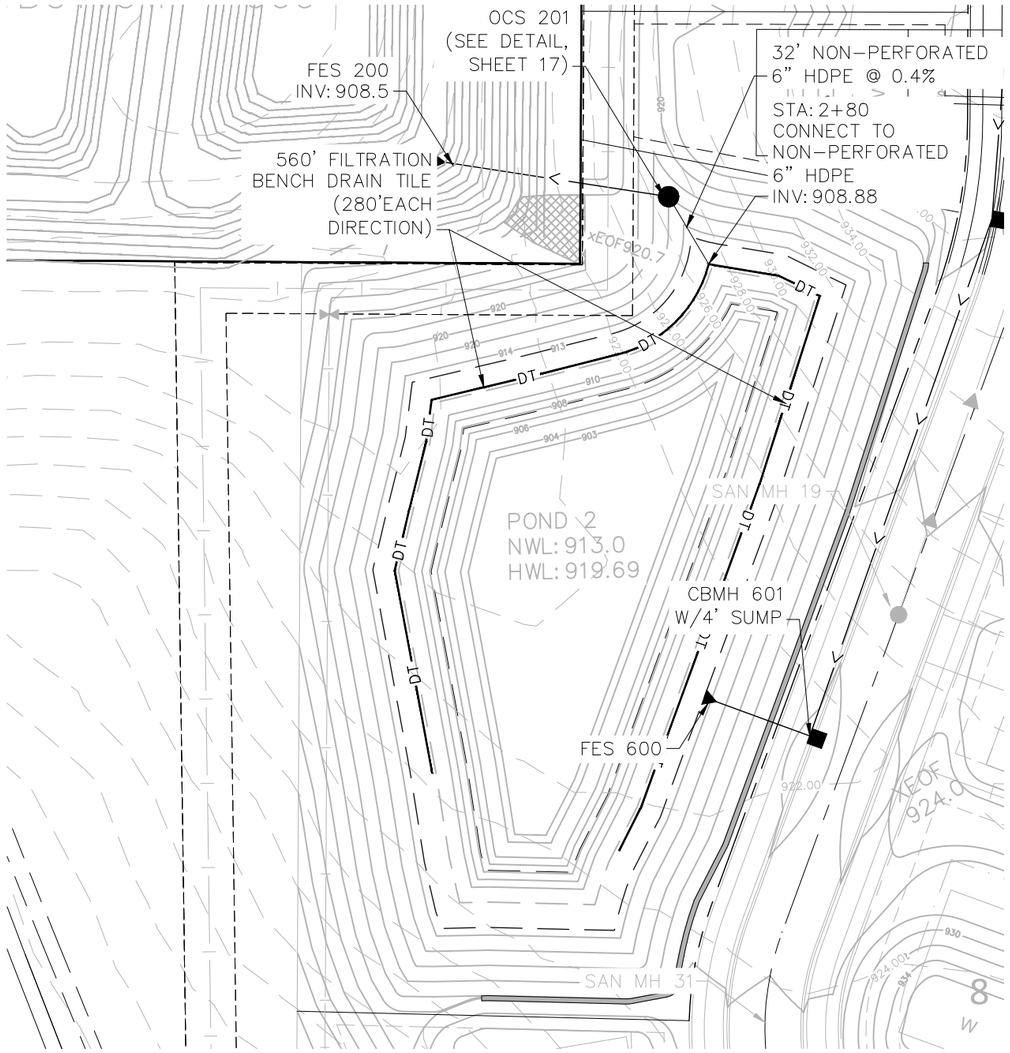
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

17

SHEET 17 of 32

Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2stsm2ocs.dwg May 22, 2019 - 10:45am



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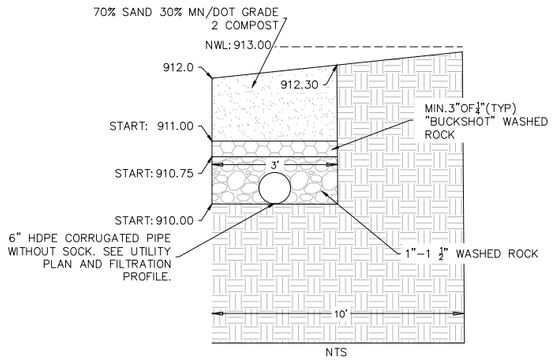

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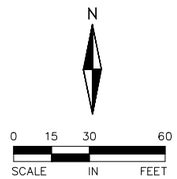

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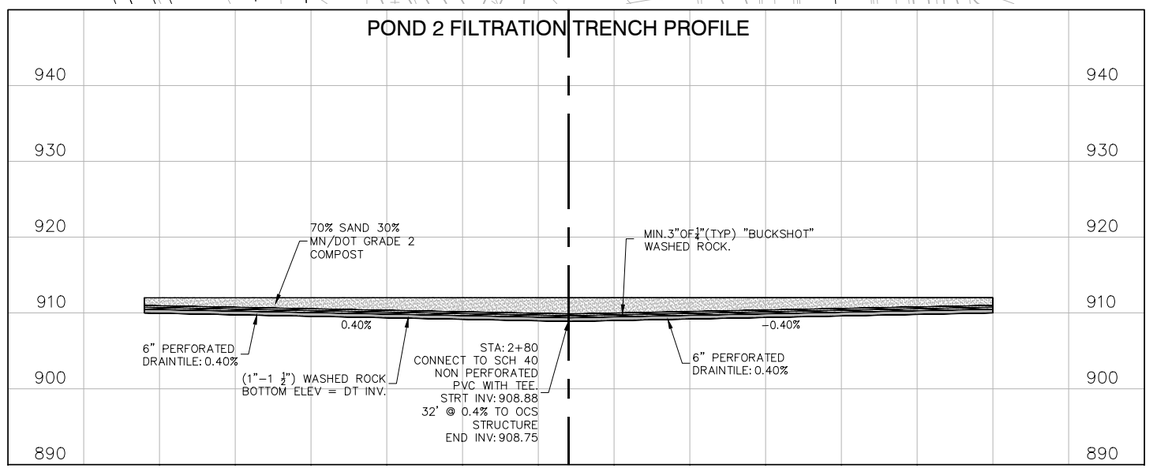

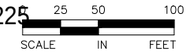

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CONSTRUCTION DOCUMENTS PHASE 1
POND 2 DRAINTILE DETAIL

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05-22-19 21836
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PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

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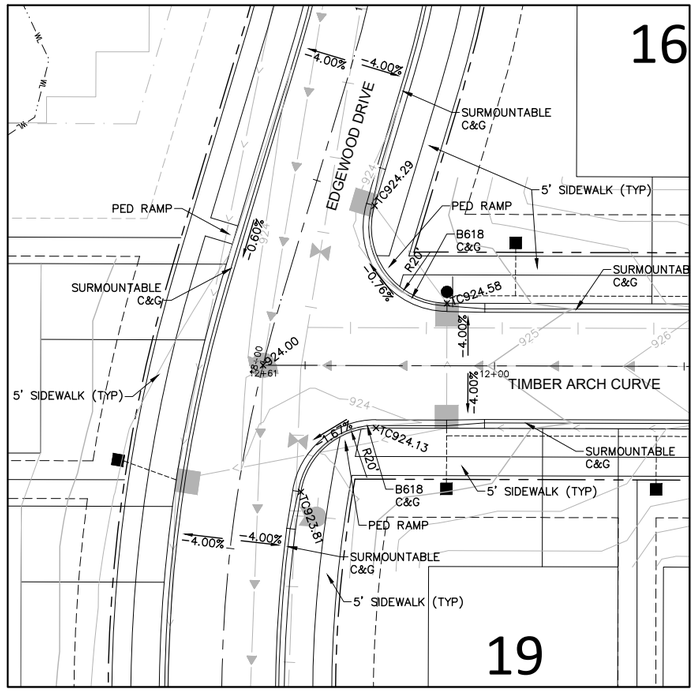
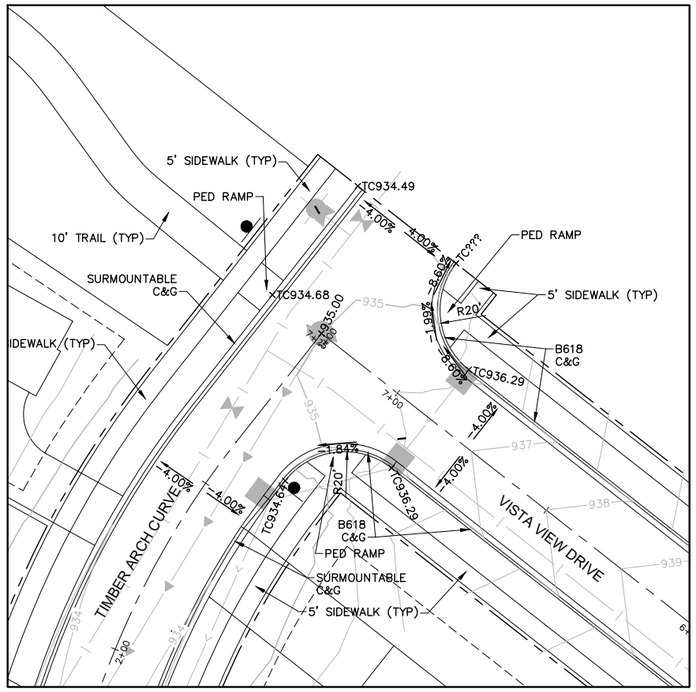
SHEET 18 of 32

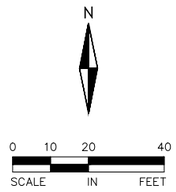
Plot name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2dtcross.dwg May 22, 2019 - 10:47am

TIMBER ARCH CURVE - EDGEWOOD DRIVE

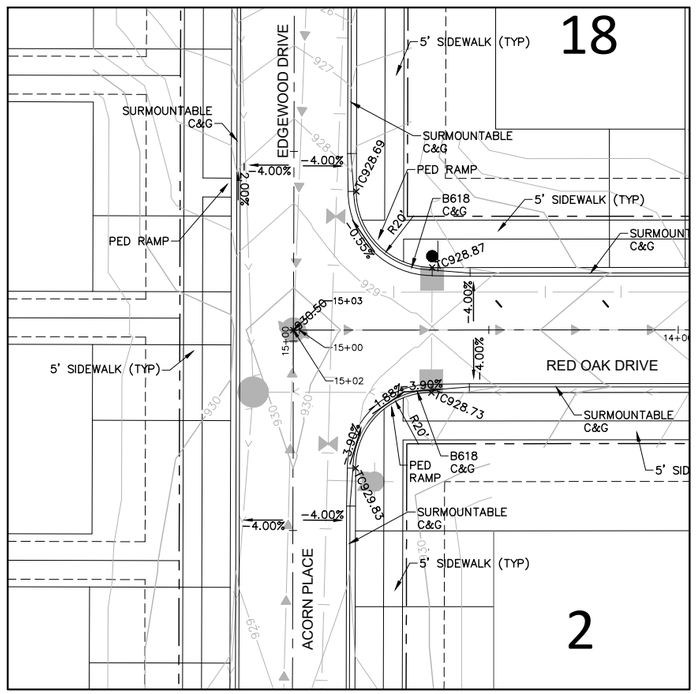


TIMBER ARCH CURVE - VISTA VIEW DRIVE

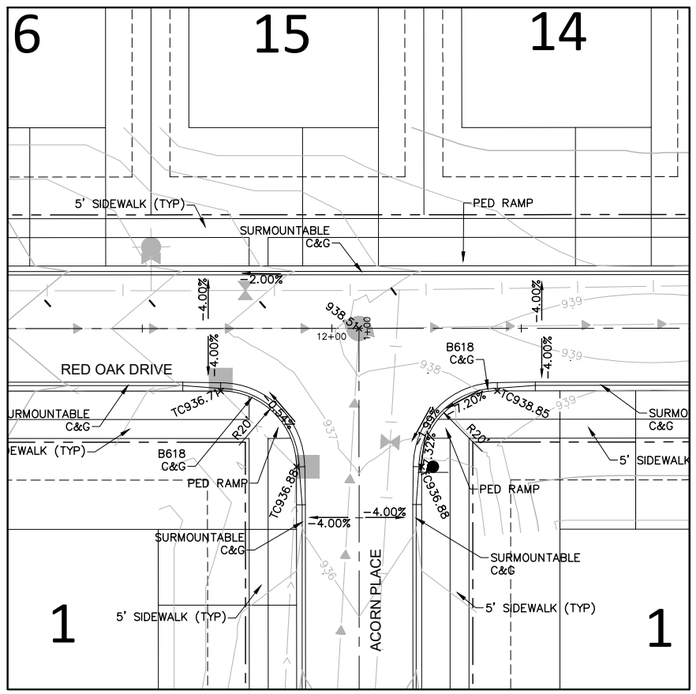




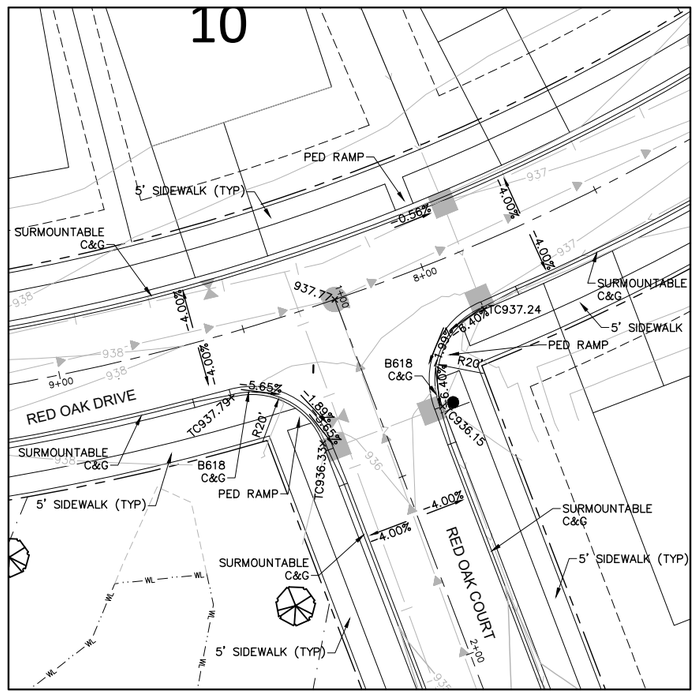
RED OAK DRIVE - EDGEWOOD DRIVE - ACORN PLACE



RED OAK DRIVE - ACORN PLACE



RED OAK DRIVE - RED OAK COURT



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CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
INTERSECTION DETAILS

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BY — DATE

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05-22-19	CITY COMMENTS

PROJECT TEAM DATA

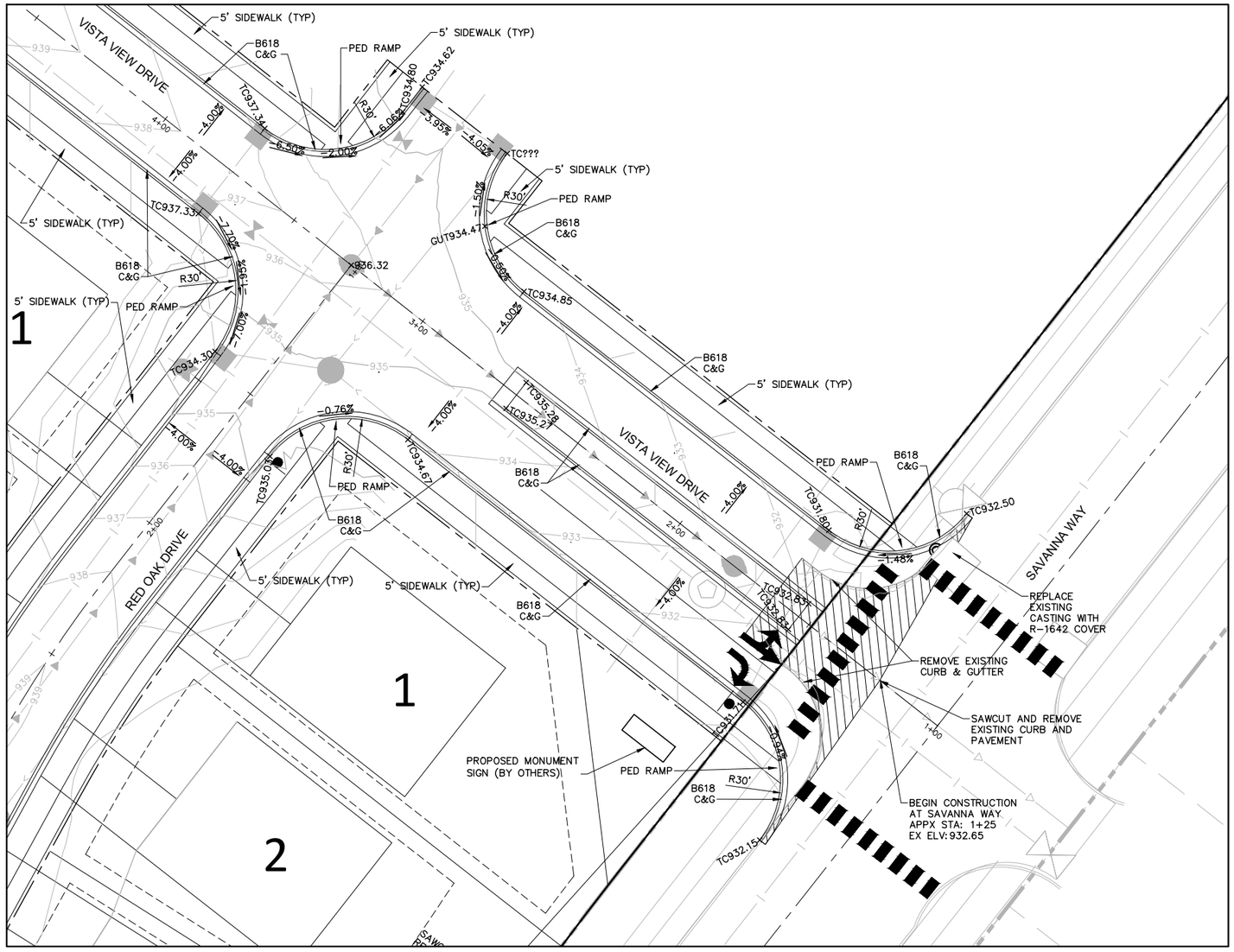
DESIGNED:	DN
DRAWN:	AA
PROJECT NO:	216-0028.2

19

SHEET 19 of 32

drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2inter.dwg May 22, 2019 - 10:49am

VISTA VIEW DRIVE - RED OAK DRIVE



VISTA VIEW DRIVE - RED OAK DRIVE

5' SIDEWALK (TYP)
B618 C&G
PED RAMP
VISTA VIEW DRIVE
RED OAK DRIVE
SAVANNA WAY
TC937.34
TC934.80
TC934.62
TC???
TC937.33
TC934.30
TC936.32
GUTT934.47
TC934.85
TC935.28
TC935.27
TC935.03
TC934.67
TC931.80
TC932.50
TC932.83
TC932.65
TC932.15
R30'
1
2
REPLACE EXISTING CASTING WITH R-1642 COVER
REMOVE EXISTING CURB & GUTTER
SAWCUT AND REMOVE EXISTING CURB AND PAVEMENT
BEGIN CONSTRUCTION AT SAVANNA WAY APPX STA: 1+25 EX ELV: 932.65
PROPOSED MONUMENT SIGN (BY OTHERS)

N

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SCALE IN FEET

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CONSTRUCTION DOCUMENTS PHASE 1
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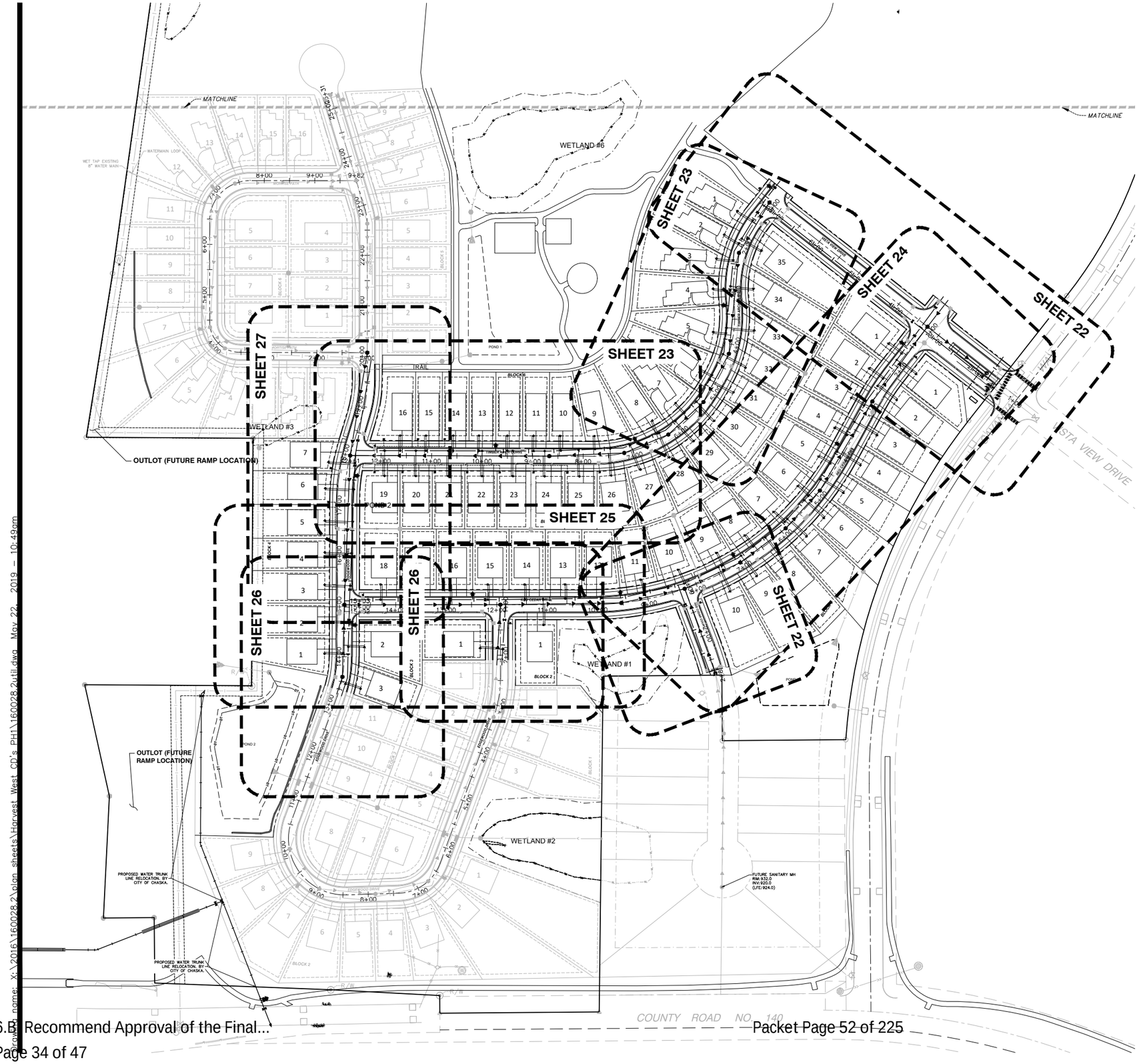
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

20
SHEET 20 of 32

drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2inter.dwg May 22, 2019 - 10:49am



LEGEND:

- PROPOSED STORM SEWER
- PROPOSED DRAINTILE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED CATCH BASIN
- PROPOSED SANITARY MANHOLE
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING WATERMAIN
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING STORM SEWER
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER

UTILITY NOTES:

1. EXISTING UTILITIES, SERVICE LOCATIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION.
2. MAINTAIN A MIN 18" VERTICAL SEPARATION AT ALL PIPE CROSSINGS. LOWER WATERMAIN AS NECESSARY.
3. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS PRIOR TO THE START OF CONSTRUCTION.
4. PROVIDE POLYSTYRENE INSULATION FOR ALL STORM SEWER AND WATERMAIN CROSSINGS WHERE VERTICAL OR HORIZONTAL SEPARATION IS LESS THAN 6'.
5. ALL UTILITY WORK WITHIN THE R.O.W. SHALL COMPLY WITH THE CITY OF CHASKA ENGINEERING GUIDELINES.
6. NOTIFY GOPHER STATE ONE CALL 48 HOURS IN ADVANCE OF ANY UTILITY WORK.
7. PROVIDE TEMPORARY TRAFFIC CONTROL IN COMPLIANCE WITH MNDOT "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS–FIELD MANUAL" LATEST REVISION, FOR ANY CONSTRUCTION WITHIN PUBLIC R.O.W.
8. ALL SANITARY MANHOLES TO BE 48" DIAMETER CONCRETE W/NEENAH R–1642 CASTING, UNLESS NOTED OTHERWISE.
9. WATERMAIN, SERVICES, AND VALVES SHALL BE INSTALLED WITH MINIMUM 7.5' OF COVER.
10. WATER SERVICES SHALL BE 1" DIA. TYPE "K" COPPER W/ 1" CORP. STOP AND 1" CURB BOX.
11. SEWER SERVICES SHALL BE 4" PVC, SCH 40, SDR 26, OR SDR 35 MINIMUM 2% SLOPE UNLESS OTHERWISE NOTED ON THE PLANS.
12. WATER SERVICES MAY BE PLACED IN SAME TRENCH AS SEWER SERVICES PROVIDED THAT A 24" VERTICAL & A 36" HORIZONTAL SEPARATION ARE MAINTAINED AND PIPE MATERIALS MEET THE CITY AND BUILDING CODES.
13. ALL CURB BOXES SHALL BE ADJUSTED TO AN ELEVATION OF 1" BELOW FINISHED GRADE.
14. ALL 6" HYDRANT LEADS AND 8" WATERMAIN SHALL BE C900 PVC.
15. ALL HYDRANTS TO BE CLOW MEDALLION. SEE CITY DETAIL WAT–11.

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SCALE IN FEET

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HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
SANITARY SEWER PLAN

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DAVE NASH, PE
05–22–19 21836
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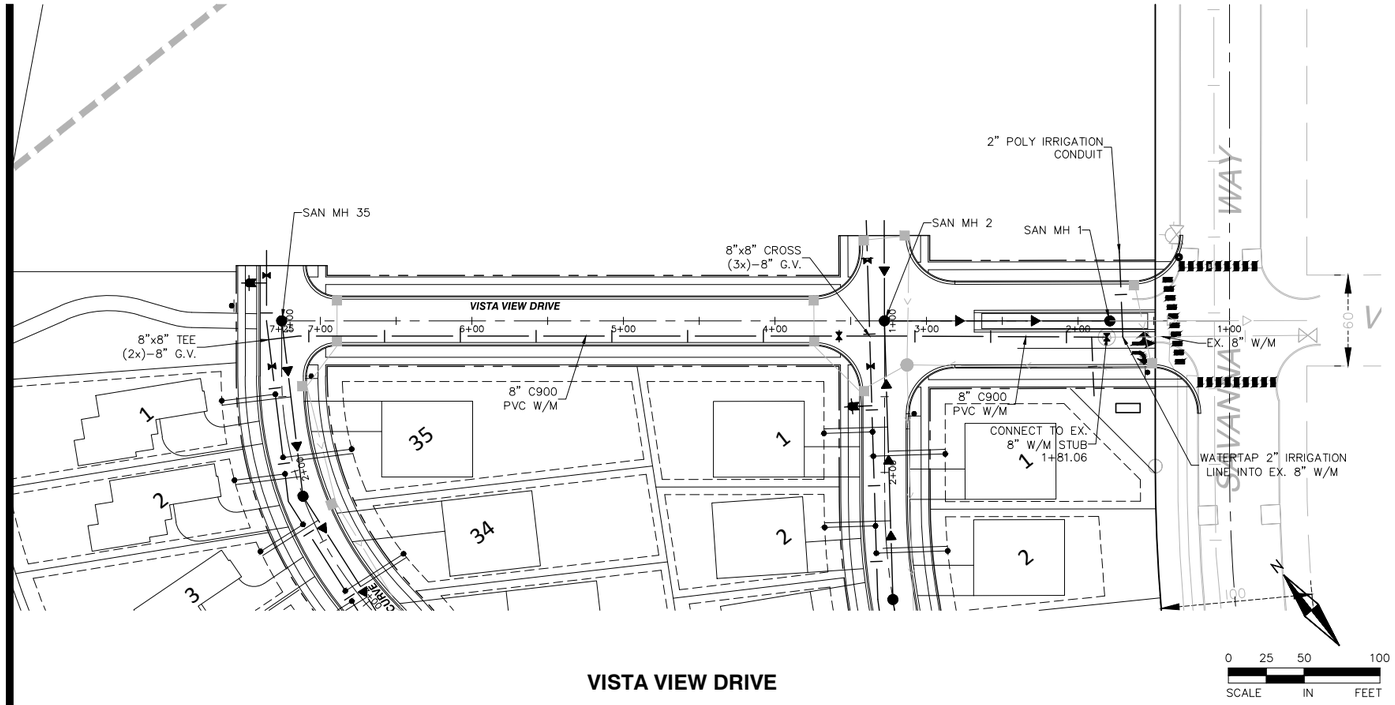
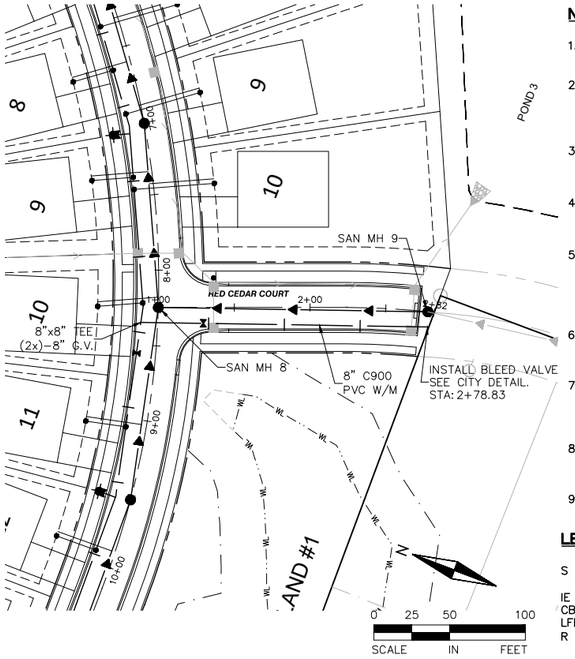
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216–0028.2

21
SHEET 21 of 32

drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2util.dwg May 22, 2019 – 10:49am



VISTA VIEW DRIVE



RED CEDAR COURT

NOTES:

1. ALL SANITARY SERVICES SHALL BE 4" PVC SCH 40 @ 2.0% MIN. SLOPE.
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9. BITUMINOUS COAT SANITARY MANHOLES SEE PLATE SAN-1.

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LFE = LOWEST FLOOR ELEVATION
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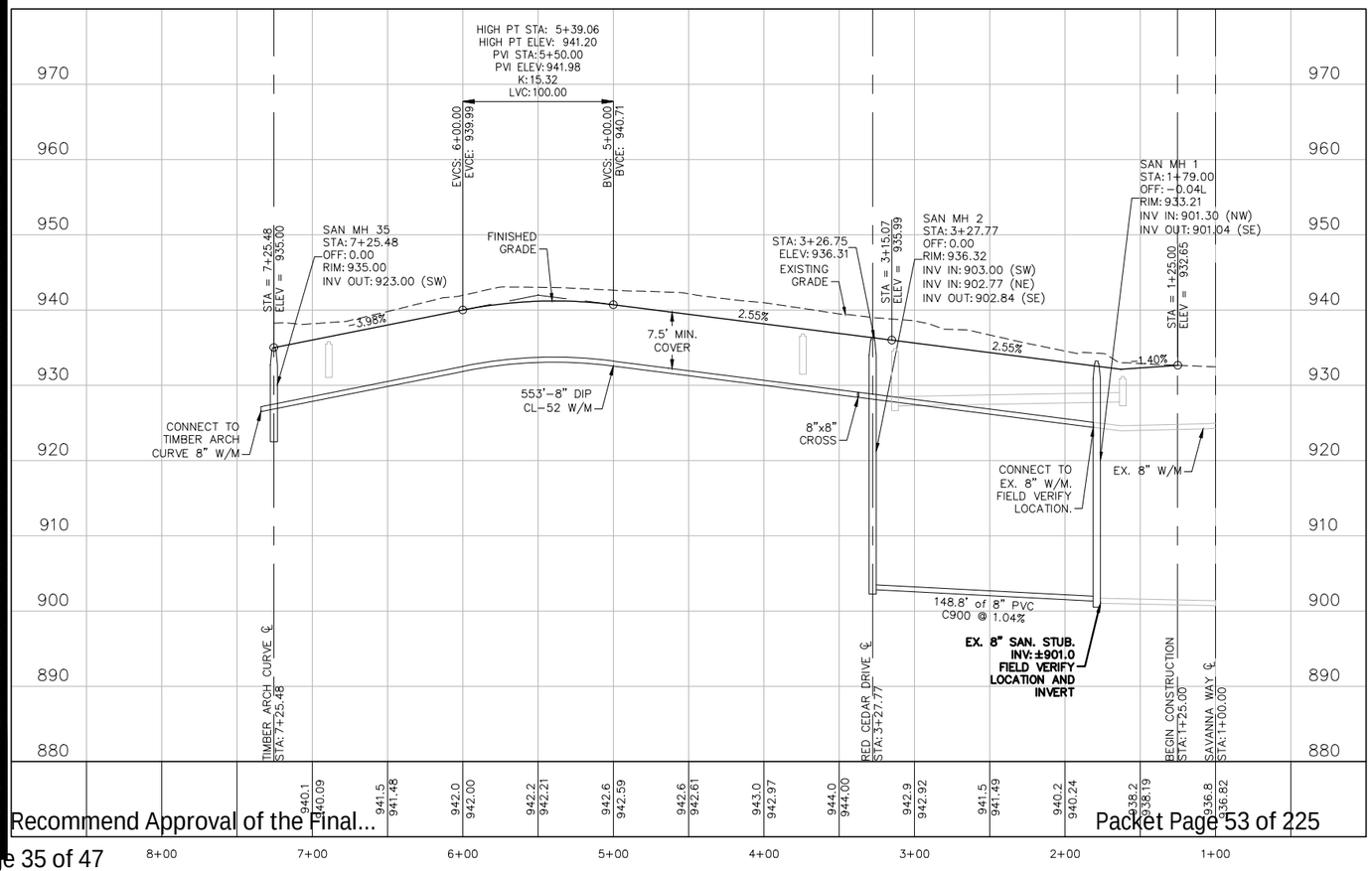

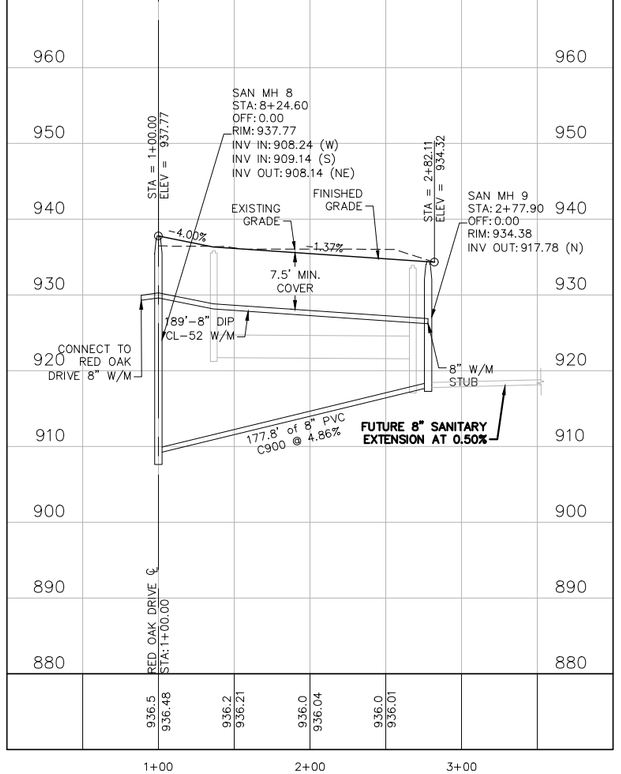

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HARVEST WEST
CHASKA, MN

CONSTRUCTION DOCUMENTS PHASE 1

SANITARY SEWER PLAN & PROFILES

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

DAVE NASH, PE
05-22-19 (Date) 21836 (License No.)

QUALITY ASSURANCE/CONTROL

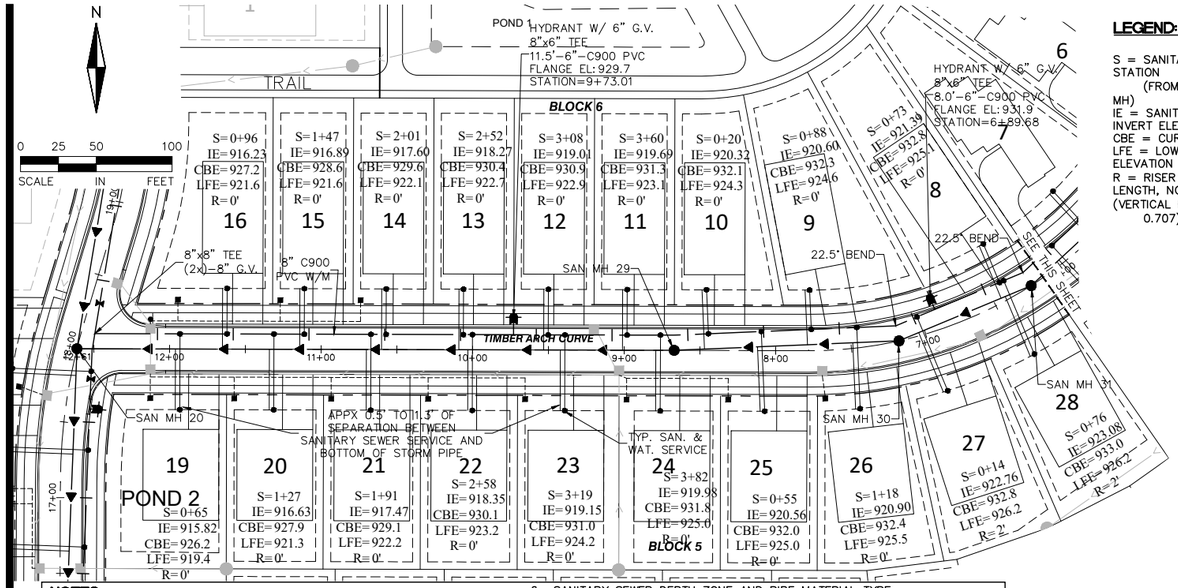
BY DATE

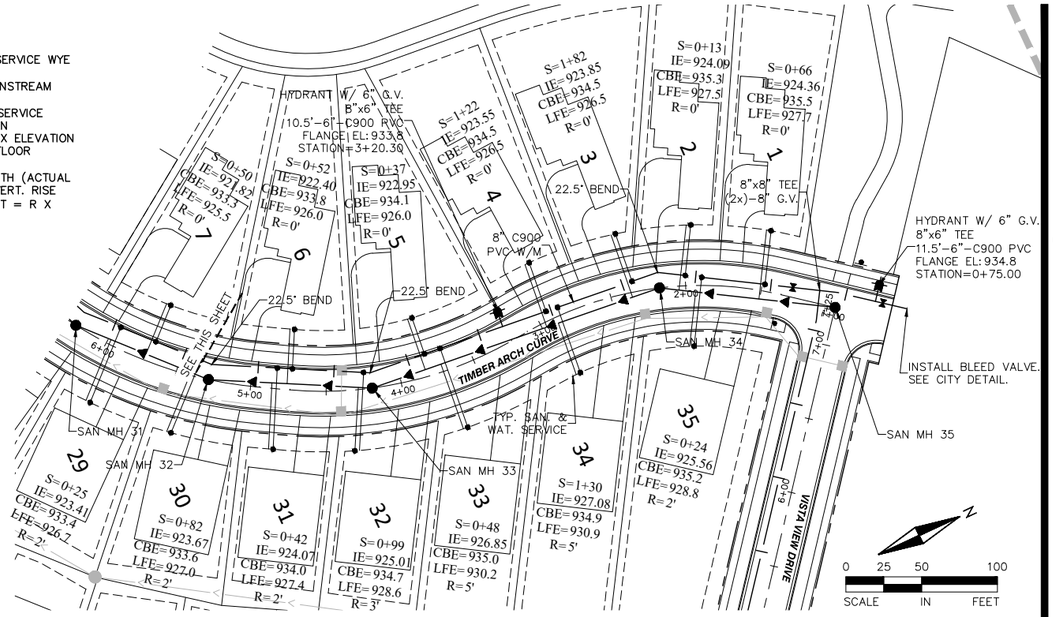
DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: AA
PROJECT NO: 216-0028.2

22

SHEET 22 of 32





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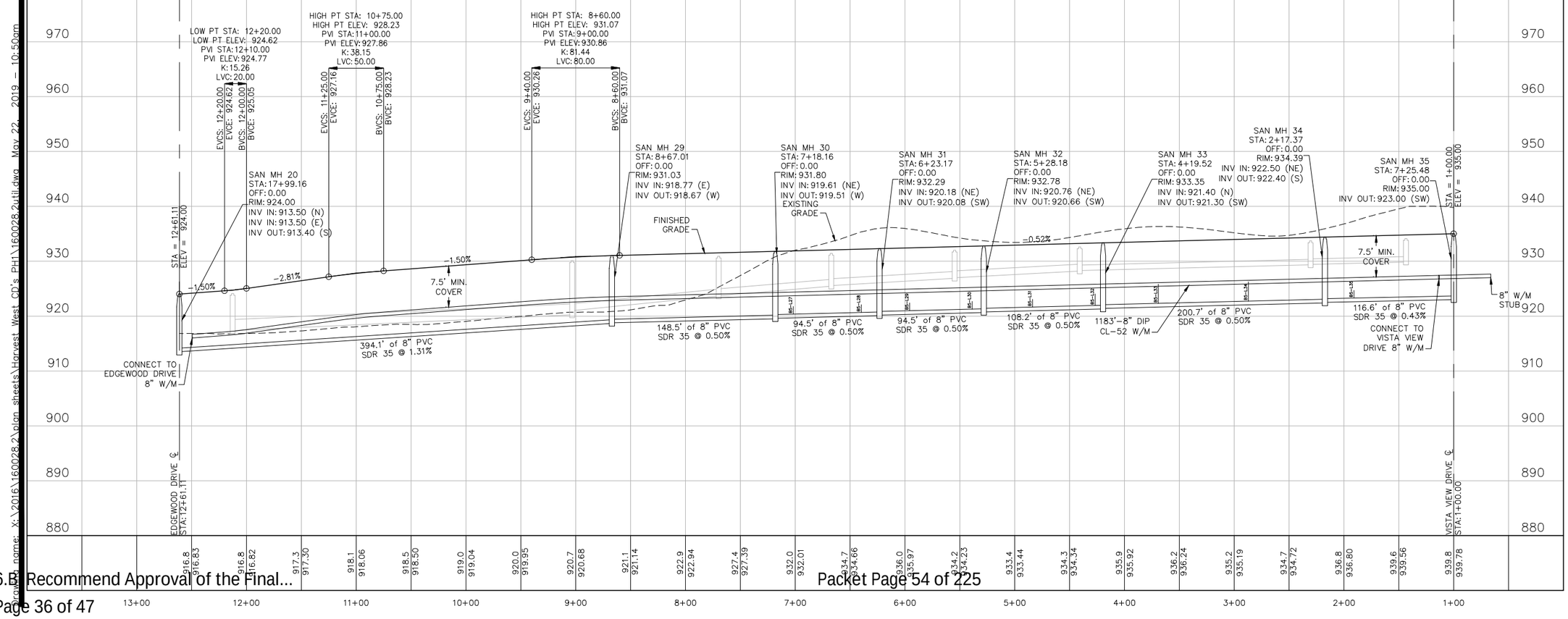
TIMBER ARCH CURVE



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23

SHEET 23 of 32

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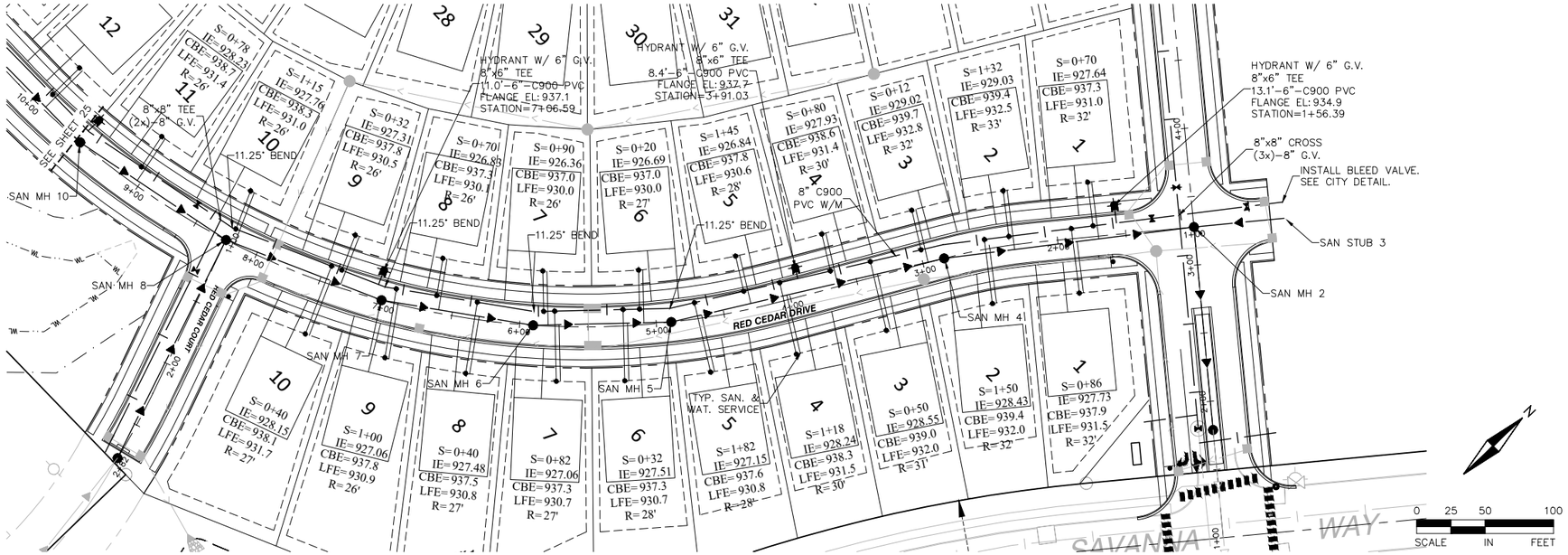
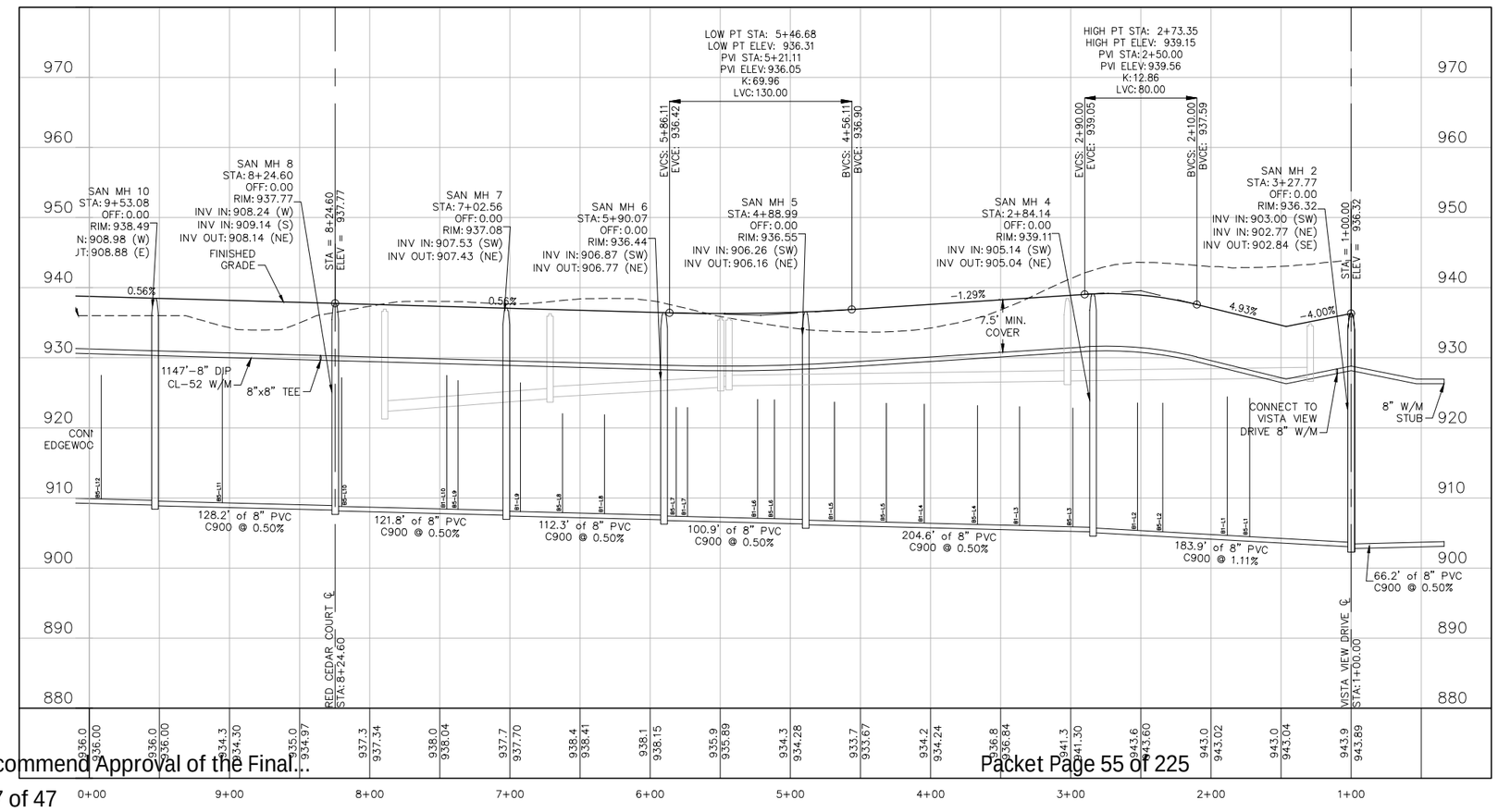


RED CEDAR DRIVE



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PROJECT TEAM DATA
DESIGNED: DN
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PROJECT NO: 216-0028.2

24
SHEET 24 of 32

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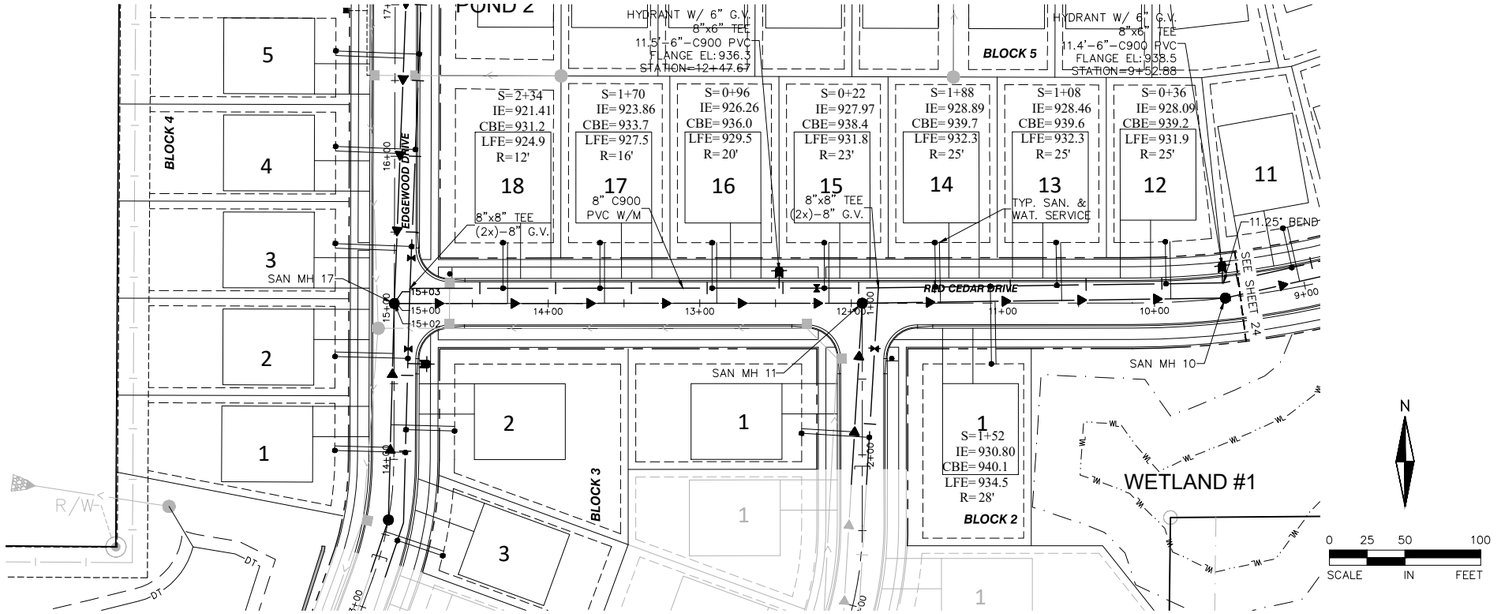
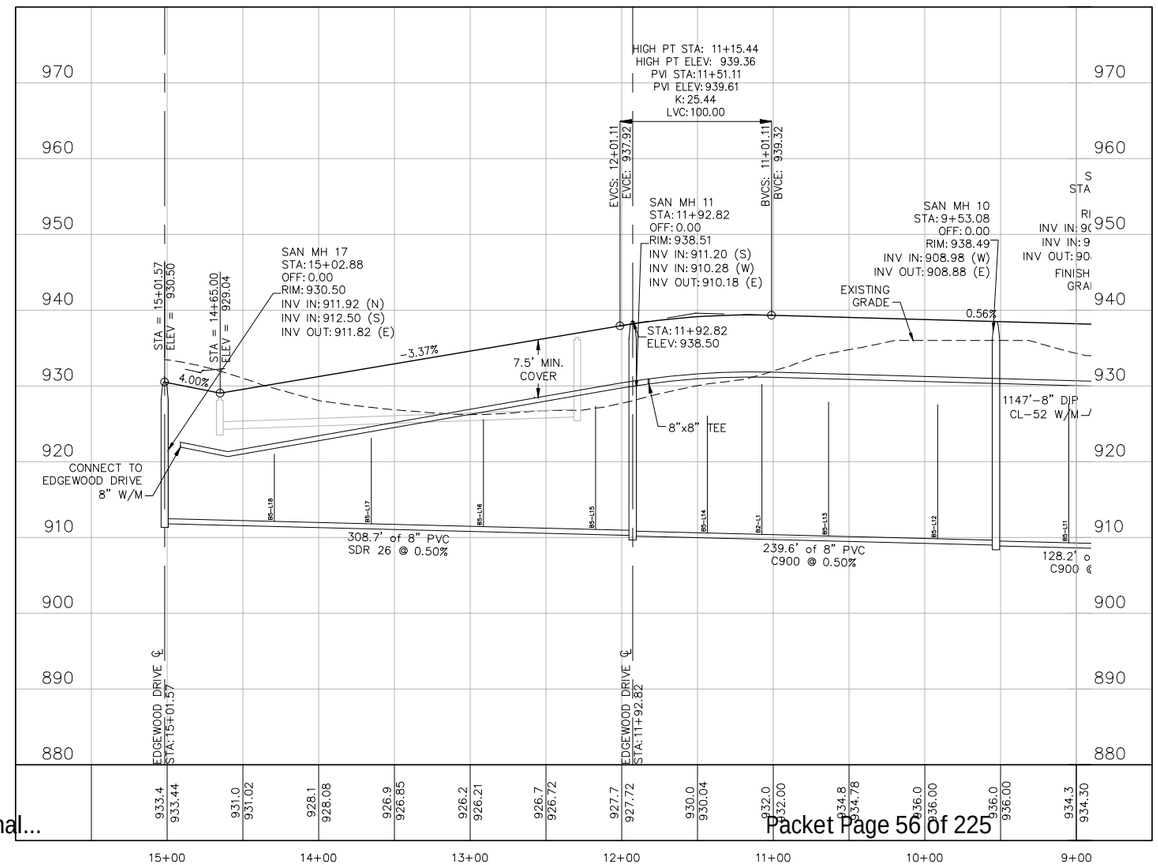


RED CEDAR DRIVE



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DESIGNED: DN
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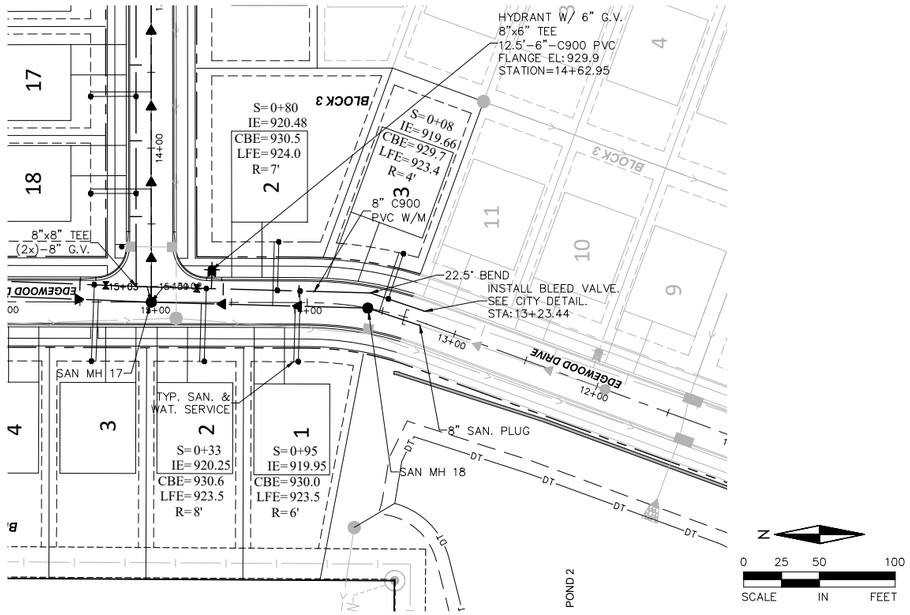
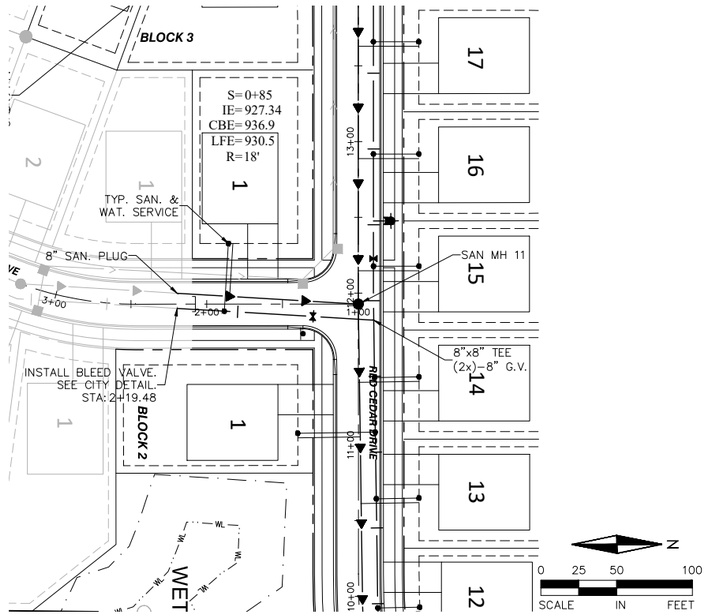
PROJECT NO: 216-0028.2

25
SHEET 25 of 32

Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2util.dwg May 22, 2019 - 10:51am



EDGEWOOD DRIVE



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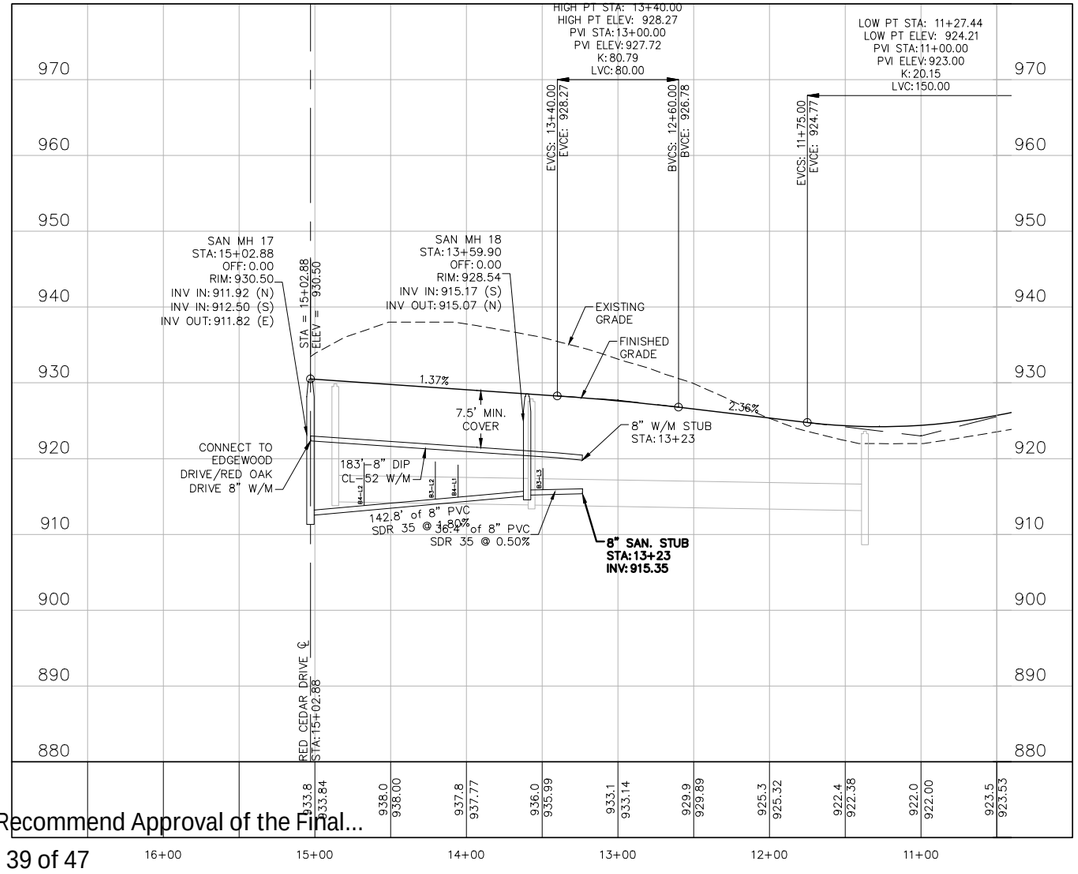

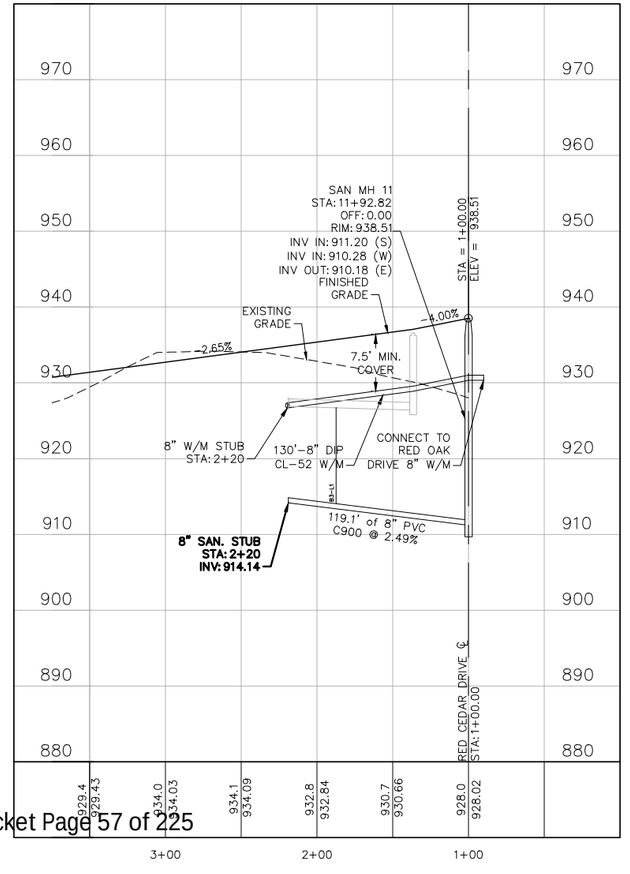

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HARVEST WEST
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26

SHEET 26 of 32

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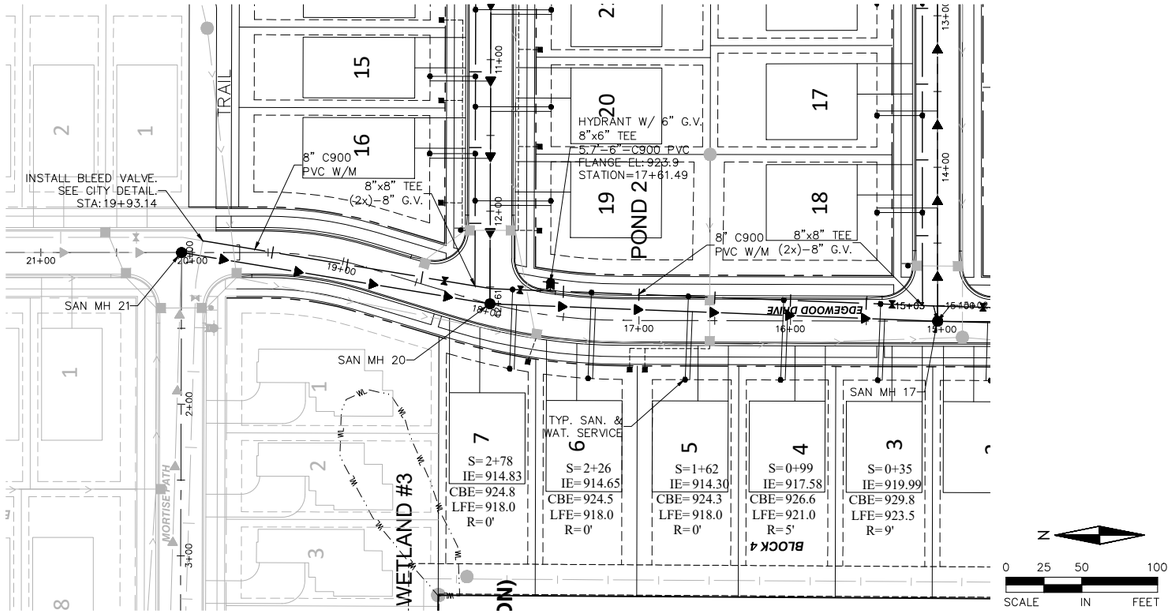

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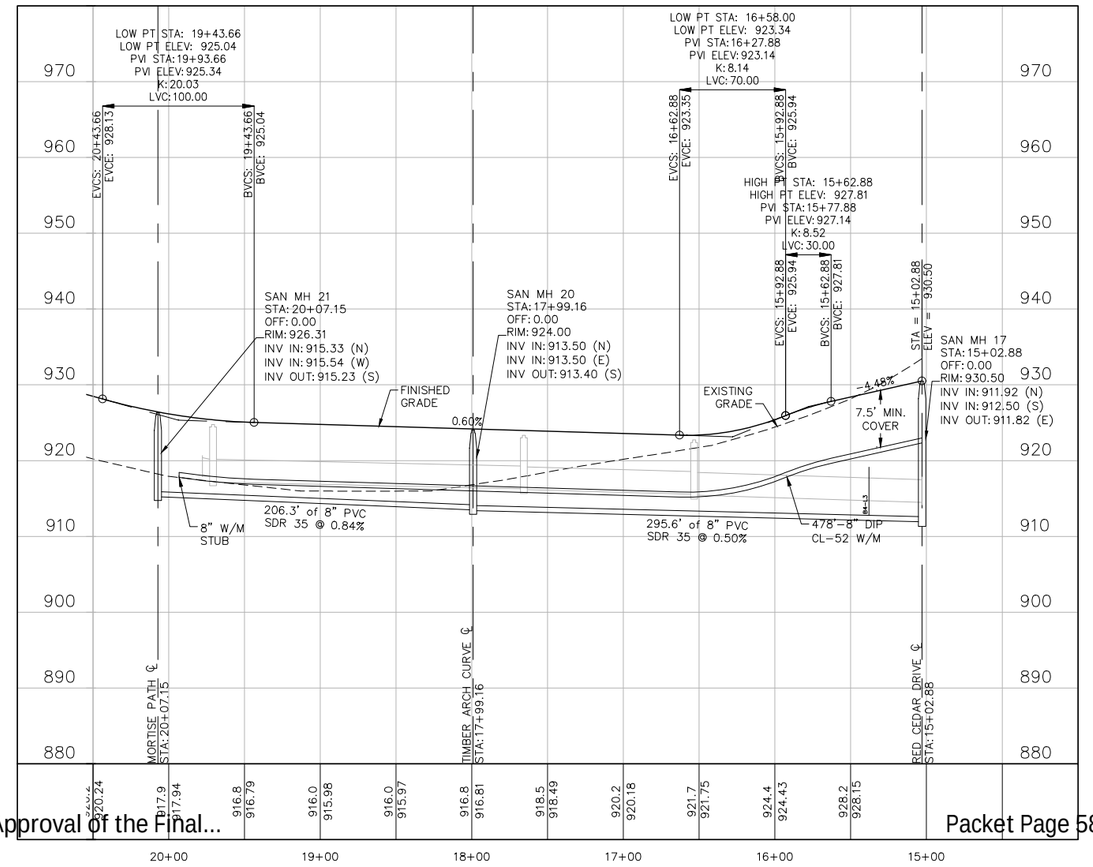

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05-22-19 21836
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27
SHEET 27 of 32

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LANDSCAPE REQUIREMENTS

PER CITY OF CHASKA ZONING ORDINANCE:
SECTION 9.6.4 REQUIREMENTS FOR ONE AND TWO FAMILY RESIDENTIAL SUBDIVISIONS: ONE OVERSTORY DECIDUOUS TREES PER EVERY 50 LF ALONG PUBLIC STREETS, ON EACH SIDE, MINIMUM 2.5" CALIPER (B&B).

REQUIRED TREE CALCULATIONS:	REQUIRED:	PROPOSED:
6,682 LF / 50 = 133.64 (2) = 267.28	268	270

NOTE:
PROPOSED DEVELOPMENT STREET (BOTH SIDES): 13,364 LF

LANDSCAPE LEGEND:

REQUIRED BOULEVARD TREES SHALL BE TWO AND ONE HALF (2.5") INCHES IN DIAMETER (B&B) AS MEASURED FROM SIX (6) INCHES ABOVE GROUND. REQUIRED TREES SHALL BE PLANTED WITHIN SIX (6) MONTHS OF HOME OCCUPANCY.

APPROVED BOULEVARD TREES:
- LARGE TREES: Hackberry (Celtis occidentalis), Kentucky Coffeetree (Gymnocladus dioicus), Swamp White Oak (Quercus bicolor), American Sentry Linden (Tilia americana 'American Sentry'), Autumn Blaze Maple Acer Freemanii 'Autumn Blaze'), Sienna Glen Maple (Acer Freemanii "Sienna'), Linden, American (Tilia americana), Linden, Redmond (Tilia x euchlora "Redmond"), Maple, Sugar (Acer saccharum), Oak, Bur (Quercus macrocarpa)
- MEDIUM TREES: Honeylocust (Gleditsia triacanthos "Inermis"), Ironwood (Ostrya virginiana), Linden, Greenspire (Tilia cordata "Greenspire"), Linden, Littleleaf (Tilia cordata), Maple, Red (Acer rubrum)

EXISTING SIGNIFICANT TREE

PROPOSED OVERSTORY TREE

PROPOSED CONIFEROUS TREE

POND–MNDOT SEED MIX: 33–261 (NATIVE/PONDS & WET AREAS IN CENTRAL, SOUTHERN AND WESTERN MN).

NATIVE–MNDOT SEED MIX: 35–241 (NATIVE/GENERAL ROADSIDE).

30' VISION SITE TRIANGLE

NOTES:

1. REFER TO SHEET 32 FOR WETLAND BUFFER SEEDING AND MAINTENANCE NOTES.
2. CITY OF CHASKA TO DESIGN AND COORDINATE THE VEGETATIVE SEEDING AND MAINTENANCE PLAN FRO WETLAND 6.

N

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SCALE IN FEET

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CONSTRUCTION DOCUMENTS PHASE 1
LANDSCAPE PLAN

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MALEAH M. MILLER, PLA
05-22-19 — Date
19507 — License No.

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28

SHEET 28 of 32

plotted: May 22, 2019 – 10:52am
drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2land.dwg

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30' VISION SITE TRIANGLE

WETLAND #6
WETLAND 6
NWL: 923.0
HWL: 924.77

NATIVE SEED MIX, REFER TO LEGEND

EXISTING TREES, TYP. REFER TO TREE PRESERVATION PLAN.

POND SEED MIX, REFER TO LEGEND

POND 1

TRAIL

BOULEVARD TREES IN OUTLOT 'K' BY DEVELOPER (TYP.)

BOULEVARD TREES IN PARK AREA BY DEVELOPER (TYP.)

BOULEVARD TREES ALONG ROAD 'A' BY DEVELOPER (TYP.)

VISTA VIEW DRIVE

C-900 WATERMAIN

BOULEVARD TREES IN MAIN ENTRY BY DEVELOPER (TYP.)

SAVANNA WAY

VISION CLEARANCE SITE TRIANGLE

MONUMENT SIGN TO BE LANDSCAPED BY OTHERS.

NATIVE SEED MIX, REFER TO LEGEND

BLOCK 5

BLOCK 6

TIMBER ARCH CURVE

RED CEDAR DRIVE

RED CEDAR COURT

BLOCK 1

S89°33'17"W 548.77

R=1250.00
L=235.37
Δ=10°47'19"
C.Brg=S29° 4'54"W

VIEW A

SCALE 0 25 50 100 IN FEET

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CONSTRUCTION DOCUMENTS PHASE 1
LANDSCAPE PLAN - VIEW A

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

MALEAH M. MILLER, PLA
05-22-19 19507
Date License No.

QUALITY ASSURANCE/CONTROL

BY DATE

DATE	ISSUE
05-07-19	CONSTRUCTION DOCUMENTS
05-22-19	CITY COMMENTS

PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SL
PROJECT NO: 216-0028.2

29

SHEET 29 of 32

Plotted: May 22, 2019 – 10:52am
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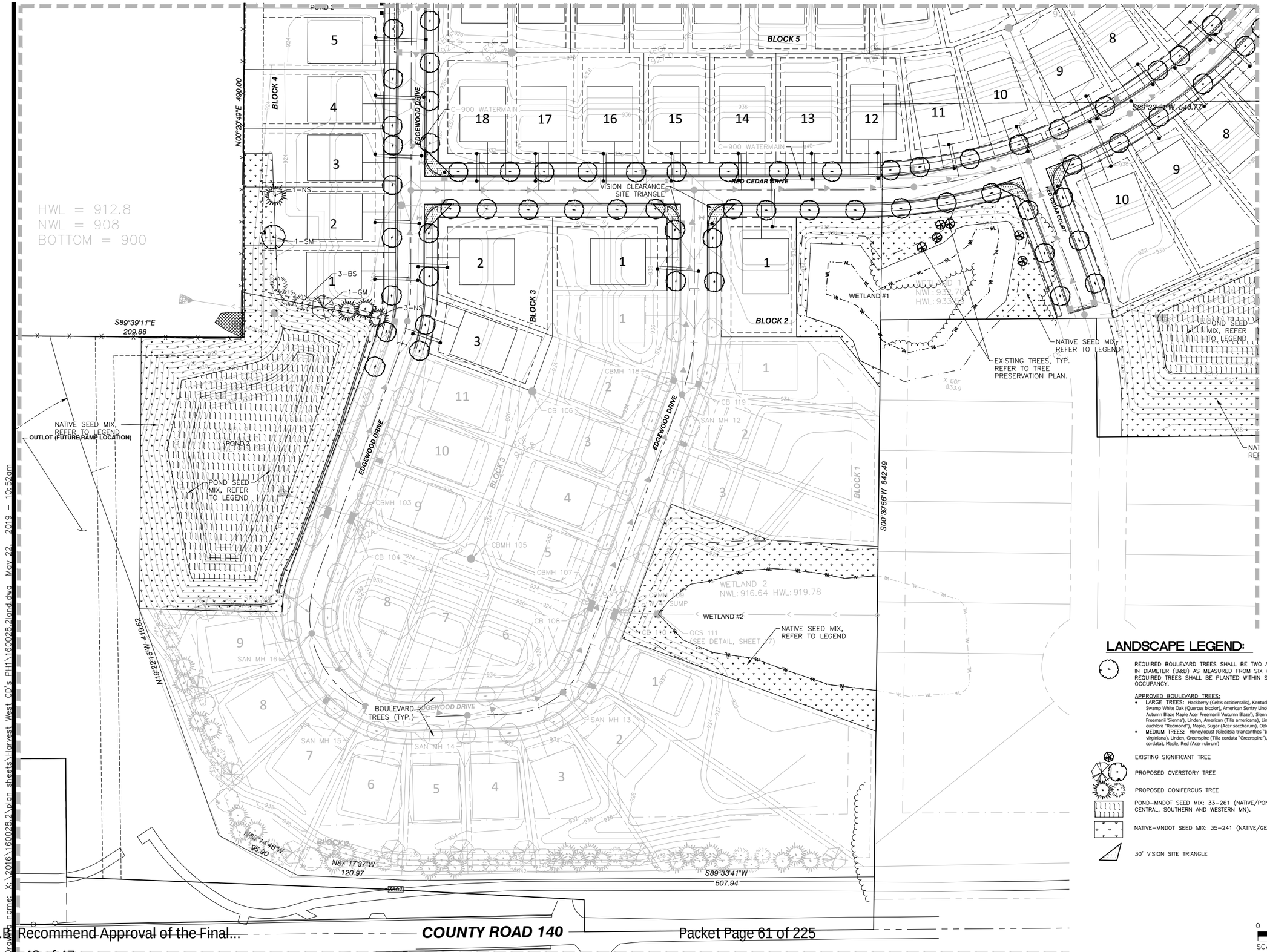

LANDSCAPE LEGEND:

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EXISTING SIGNIFICANT TREE

PROPOSED OVERSTORY TREE

PROPOSED CONIFEROUS TREE

POND–MNDOT SEED MIX: 33–261 (NATIVE/PONDS & WET AREAS IN CENTRAL, SOUTHERN AND WESTERN MN).

NATIVE–MNDOT SEED MIX: 35–241 (NATIVE/GENERAL ROADSIDE).

30' VISION SITE TRIANGLE

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ALLIANT ENGINEERING
733 Marquette Avenue
Suite 700
Minneapolis, MN 55402
612.758.3080
www.alliant-inc.com

HARVEST WEST
CHASKA, MN
CONSTRUCTION DOCUMENTS PHASE 1
LANDSCAPE PLAN - VIEW B

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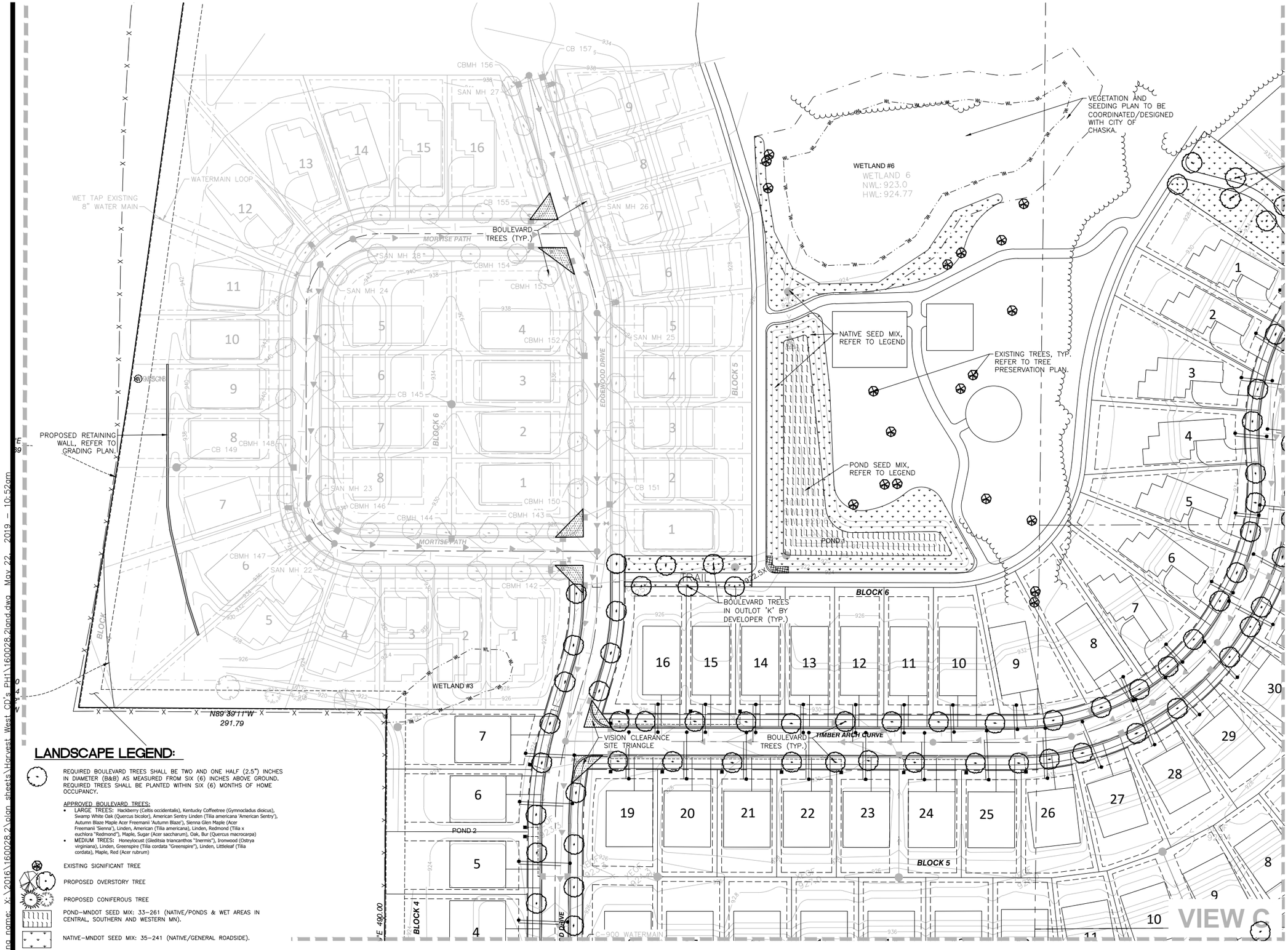
SHEET 30 of 32

plot name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2land.dwg May 22, 2019 - 10:52am



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SHEET 31 of 32

Drawing name: X:\2016\160028.2\plan sheets\Harvest West CD's PH1\160028.2land.dwg May 22, 2019 - 10:52am

SEED PLANTING NOTES:

POND AREA SEED MIX: MN STATE SEED MIX 33-261. (STORMWATER SOUTH & WEST)
SEEDING RATE TO BE 35 LBS/ACRE (PURE LIVE SEED).

NATIVE SEED MIX: MN STATE SEED MIX 35-241. (MESIC PRAIRIE GENERAL)
SEEDING RATE TO BE 36.5 LBS/ACRE (PURE LIVE SEED).

APPLY SEED PER THE FOLLOWING:
MULCH SEEDED AREAS WITH Mn/DOT TYPE 3 (MCIA CERTIFIED WEED FREE) MULCH AT A RATE OF 1 TON PER ACRE WITHIN 48 HOURS OF SEEDING. MULCH SHOULD THEN BE DISC ANCHORED TO KEEP IT FROM BLOWING AWAY.

SEEDING SHALL BE APPLIED FROM APRIL 15 – JULY 20 OR SEPTEMBER 20 – FREEZE UP.

IF HYDROSEEDING UTILIZE APPROXIMATELY 500 GALLONS OF WATER PER ACRE. REFER TO MN/DOT SPEC 3884 FOR PROPER INSTALLATION OF HYDRO-SEED. ALL NATIVE SEEDS USED ON THIS PROJECT SHALL BE CERTIFIED TO BE OF MINNESOTA ORIGIN BY THE MINNESOTA CROP IMPROVEMENT ASSOCIATION (MCIA). SITE TO BE PREPARED BY LOOSENING TOPSOIL TO A MINIMUM DEPTH OF 3 INCHES. THE SITE TO BE HARROWED OR RAKED FOLLOWING SEEDING, AND THEN PACKED USING A CULTI-PACKER OR EQUIVALENT. SEE MNDOT SEEDING MANUAL FOR REFERENCE.

MAINTAIN SEEDED AREAS BY WATERING, REMULCHING AND REPLANTING AS NECESSARY TO ESTABLISH A UNIFORMLY DENSE STAND OF THE SPECIFIED GRASSES UNTIL ACCEPTED. ANY AREAS FAILING TO ESTABLISH A STAND SHALL BE RESEEDED, REFERTILIZED AND REMULCHED WHENEVER 70% VEGETATIVE COVER IS NOT ACHIEVED. RESEEDING SHALL CONFORM IN ALL RESPECTS TO THESE SPECIFICATIONS. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE WORK AREAS RESULTING FROM EROSION AND/OR EQUIPMENT. THE CONTRACTOR SHALL REPAIR DAMAGE, INCLUDING REGRADING, RESEEDING, ETC. AS NECESSARY, BEFORE SIGNIFICANT DAMAGE OCCURS.

TEMPORARY STOCK PILE SEED AND STRAW MULCH:
MnDOT # 22-112 SEED MIXTURE DESIGNATIONS – 40 LBS PER ACRE.

SEEDING SHALL BE APPLIED FROM APRIL 1 – JULY 20 OR JULY 20 – FREEZE UP.

MULCH SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE. MULCH TO BE HIGH QUALITY WEED FREE MULCH, NATIVE GRASS MULCH, OR CLEAN STRAW. MULCH WITHIN 48 HOURS OF SEEDING.

MAINTAIN SEEDED AREAS BY WATERING, REMULCHING AND REPLANTING AS NECESSARY TO ESTABLISH A UNIFORMLY DENSE STAND OF THE SPECIFIED GRASSES UNTIL ACCEPTED.

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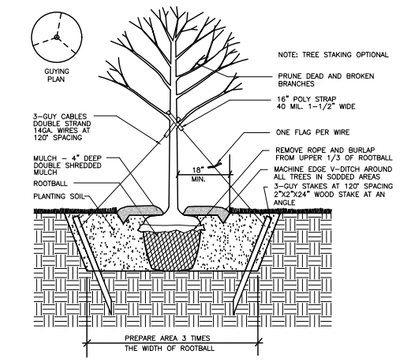
LANDSCAPE PLAN NOTES:

1. LANDSCAPE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID TO BECOME COMPLETELY FAMILIAR WITH SITE CONDITIONS.
2. CONTRACTOR WILL STAKE OR MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. THE STAKES SHALL INCLUDE THE TYPE/VARIETY OF TREES TO BE PLANTED. CONTRACTOR SHALL HAVE OWNERS REPRESENTATIVE APPROVE ALL STAKING PRIOR TO INSTALLATION. UPON COMPLETION OF THE STAKING/LABELING NOTIFY THE ASSISTANT CITY ENGINEER FOR REVIEW IN THE FIELD.
3. INSTALL 4-6" DEPTH SHREDDED HARDWOOD MULCH AROUND ROOT SAUCER OF ALL TREES ISOLATED FROM PLANT BEDS.
4. CONTRACTOR SHALL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF ACCEPTANCE. CONTRACTOR WILL MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).
5. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF WORK) WILL BE PROMPTLY REMOVED AND REPLACED. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. LANDSCAPE CONTRACTOR TO WATER AND MAINTAIN ALL PLANT MATERIALS AND SEED UNTIL INITIAL ACCEPTANCE.
7. ALL MATERIAL SHALL COMPLY WITH STATE AND LOCAL CONSTRUCTION STANDARDS.
8. LANDSCAPE CONTRACTOR SHALL REMOVE ALL OF THEIR OWN DEBRIS FROM SITE.
9. REPAIR AT NO COST TO OWNER ALL DAMAGE TO PROPERTY RESULTING FROM LANDSCAPE WORK.
10. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO UTILITIES DURING THE COURSE OF THE WORK. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO UTILITIES, SITE STRUCTURES, ETC., RESULTING FROM LANDSCAPE WORK.
11. LANDSCAPE CONTRACTOR TO COORDINATE INSTALLATION WITH GENERAL CONTRACTOR.
12. AFTER COMPLETION OF WORK AND PRIOR TO LEAVING SITE, SWEEP AND WASH ALL PAVED SURFACES AND REMOVE ALL DEBRIS RESULTING FROM LANDSCAPE OPERATIONS.
13. ALL PLANTING SOIL BELOW ROOT BALL SHALL BE COMPACTED AND THOROUGHLY WATERED PRIOR TO PLANTING.
14. DEVELOPER TO PROVIDE AN IRRIGATION PLAN FOR THE MAIN ENTRY ROAD 'A' AND PARK. REFER TO IRRIGATION PLAN BY OTHERS FOR DESIGN AND LIMITS.
15. GENERAL CONTRACTOR SHALL FOLLOW THE COUNTY/STATE SOIL & EROSION CONTROL SPECIFICATIONS FOR DISTURBED AREA STABILIZATION.
16. LANDSCAPE CONTRACTOR TO BLEND AREAS OF CONSTRUCTION LIMITS AT PROPERTY LINES.
17. ALL BOULEVARDS TO BE SODDED AS EACH LOT IS DEVELOPED UNLESS OTHERWISE SHOWN ON PLANS.
18. BOULEVARD TREES TO BE INSTALLED AS EACH LOT IS DEVELOPED UNLESS OTHERWISE SHOWN ON PLANS. DEVELOPER TO DETERMINE SPECIES & INSTALL TREES LOCATED ALONG ENTRY ROAD 'A', ENTRY TO PARK AND OUTLOT 'K' PER CITY TREE POLICY.

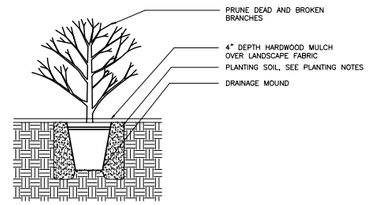
PHASE 1 LANDSCAPE SCHEDULE

QTY.	KEY	COMMON NAME/	BOTANICAL NAME	SIZE	REMARKS
		OVERSTORY TREES			
10	SM	SUGAR MAPLE	Acer saccharum	2.5' B&B	FULL FORM
10	GM	SIENNA GLEN MAPLE	Acer fremanii 'Sienna'	2.5' B&B	FULL FORM
		CONIFERS			
22	BS	BLACKHILLS SPRUCE	Picea glauca 'Densata'	6' HT. B&B	FULL FORM
19	NS	NORWAY SPRUCE	Picea abies	8' HT. B&B	FULL FORM
		BOULEVARD TREES			
175	--	BOULEVARD TREES – 1/50 LF (REFER TO NOTE)	SEE LEGEND FOR SPECIES LIST	2.5' B&B	STRAIGHT TRUNK, NO V-CROTCH
236		TOTAL PROVIDED TREES			

NOTES:
1. QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN EVENT OF DISCREPANCY.
2. LANDSCAPE SCHEDULE DOES NOT INCLUDE BOULEVARD TREES SPECIES (SEE LANDSCAPE LEGEND FOR SPECIES).
3. OVERSTORY AND CONIFER TREES ARE SHOWN AT MATURE SIZE.
4. BOULEVARD TREES ARE NOT SHOWN AT MATURE SIZE DUE TO THE VARIETY WILL CHOSEN BY HOME OWNER AND DEVELOPER.



1 **TREE PLANTING DETAIL**
NOT TO SCALE



2 **SHRUB PLANTING DETAIL**
NOT TO SCALE

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30' VISION SITE TRIANGLE

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WETLAND BUFFER SEEDING AND MAINTENANCE

WETLAND BUFFER SEEDING AND MAINTENANCE NOTES

Harvest West, City of Chaska, Minnesota

Buffer Establishment and Maintenance

1. The Project Developer shall be responsible for wetland buffer vegetation establishment and maintenance for 2 years.
2. Invasive plant species control shall be visually monitored at least 2 times per year during the first 2 years to help ensure successful control. Monitoring shall include a site inspection and photographs of vegetation conditions.

Seed Mixture Suppliers and Approval

1. Seed mixes shall be acquired from reputable native seed suppliers. Native seed suppliers shall be subject to approval by the Wetland Consultant.
2. Contractor shall submit seed tags and written certification of native seed mix composition to the Wetland Consultant prior to installation.
3. Substitutions of seed mixes or seed mix components must be approved by the Wetland Consultant.

Seedbed Preparation

1. Wetland buffer seedbed areas shall include zones between delineated wetland boundaries and the outer edges of wetland buffers as shown on the Landscape Plan.
2. After completion of final grading, the seedbeds shall be prepared and smoothed to break up root systems and soil clods so that the average clump is less than 2 inches in diameter.
3. Prior to seeding, the contractor shall spray, plow or disc vegetation that covers more than 20% of the ground in the area to be seeded.
4. Areas of existing vegetation that are not plowed or disced shall be killed by spraying an appropriate glyphosate herbicide at label rates.
5. The seedbed shall be prepared by loosening topsoil to a minimum depth of 3 inches.

Seeding Methods

1. Seed mixes shall be installed in accordance with the Minnesota Board of Water and Soil Resources Native Vegetation Establishment and Enhancement Guidelines (2017, http://www.bwsr.state.mn.us/native_vegetation/seeding_guidelines.pdf).
2. Seeding shall not be conducted between June 30 and October 15.
3. Minnesota State Seed Mix 35-241 (Mesic Prairie General) shall be planted above delineated wetland boundaries in buffer zones.
4. The seed mix shall be installed with a native grass drill or broadcast evenly by hand or by use of a mechanical broadcast seeder. The seed mix shall be installed at the rates specified in the Rate Table.
5. Areas planted to Seed Mix 35-241 shall be firmed with a rolling-type packer within 2 days after seeding. Packing will be considered adequate when only a slight footprint is left in the soil after walking across the area.
6. Seeded areas with more than 30% bare soil shall be mulched with Mn/DOT Type 3 mulch (MICA certified weed free grain straw) at a rate of 2 tons per acre. Mulch shall be anchored with a disc or tackifier.

Year 1 Maintenance

1. The seeded buffers shall be mowed at a height of 4 to 6 inches a minimum of two times during the first growing season and before September 30.
2. Invasive and non-native species in the buffers shall be spot sprayed twice annually at times that are effective for control of the problem species present.
3. Stands of reed canary grass in buffers shall be treated with an appropriate glyphosate herbicide in October and again early the following spring before most desirable species emerge.
4. Herbicide treatments shall be applied according to label instructions.

Year 2 Maintenance

1. Areas of invasive species such as reed canary grass and thistles shall be treated with herbicide early in spring prior to the emergence of most desirable species.
2. The seeded buffers shall be mowed to a height of 6 to 8 inches between June 1 and July 15 to allow for light penetration and to prevent seed set on weedy species.
3. Invasive and non-native species in wetland and buffer shall be spot sprayed twice annually at times that are effective for control of the problem species present.
4. Stands of reed canary grass in buffers shall be treated with an appropriate glyphosate herbicide in October.
5. Herbicide treatments shall be applied according to label instructions.

Rate Table: Seed Mix 35-241 (Mesic Prairie General)

Common Name	Scientific Name	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
Grasses				
Big bluestem	*Andropogon gerardii*	2.00	5.48	7.35
Side-oats grama	*Bouteloua curtipendula*	1.60	4.39	3.53
Kalm's brome	*Bromus kalmii*	0.50	1.37	1.47
Nodding wild rye	*Elymus canadensis*	1.17	3.20	2.23
Slender wheatgrass	*Elymus trachycaulus*	1.00	2.73	2.53
Switchgrass	*Panicum virgatum*	0.06	0.17	0.32
Little bluestem	*Schizachyrium scoparium*	1.60	4.39	8.82
Indian grass	*Sorghastrum nutans*	2.00	5.48	8.82
Prairie dropseed	*Sporobolus heterolepis*	0.07	0.18	0.39
	Total Grasses	**10.00**	**27.39**	**35.46**
Forbs				
Blue giant hyssop	*Agastache foeniculum*	0.06	0.15	1.82
Lead plant	*Amorpha canescens*	0.06	0.15	0.25
Common milkweed	*Asclepias exriaca*	0.04	0.10	0.06
Butterfly milkweed	*Asclepias tuberosa*	0.04	0.10	0.06
Canada milk vetch	*Astragalus canadensis*	0.06	0.17	0.39
White prairie clover	*Dalea candida*	0.06	0.17	0.44
Purple prairie clover	*Dalea purpurea*	0.19	0.51	1.03
Canada tick trefoil	*Desmodium canadense*	0.06	0.18	0.13
Stiff sunflower	*Helianthus pauciflorus*	0.06	0.17	0.09
Ox-eye	*Heliopsis helianthoides*	0.13	0.34	0.29
Rough blazing star	*Liatris aspera*	0.03	0.08	0.18
Great blazing star	*Liatris pycnostachya*	0.03	0.09	0.13
Wild bergamot	*Monarda fistulosa*	0.06	0.17	1.61
Stiff goldenrod	*Oligoneuron rigidum*	0.06	0.17	0.94
Black-eyed Susan	*Rudbeckia hirta*	0.31	0.86	10.56
Heath aster	*Symphyotrichum ericoides*	0.03	0.09	2.30
Smooth aster	*Symphyotrichum laeve*	0.06	0.17	1.26
Blue vervain	*Verbena hastata*	0.04	0.12	1.50
Hoary vervain	*Verbena stricta*	0.06	0.17	0.64
Golden alexanders	*Zizia aurea*	0.06	0.15	0.23
	Total Forbs	**1.50**	**4.11**	**23.89**
Cover Crop				
Oats or winter wheat		25.00	68.50	11.14
	Total Cover Crop	**25.00**	**68.50**	**11.14**
	Total Mix:	**36.50**	**100.00**	**70.49**
Purpose	General mesic prairie mix for native roadsides, ecological restoration, or conservation program plantings.			

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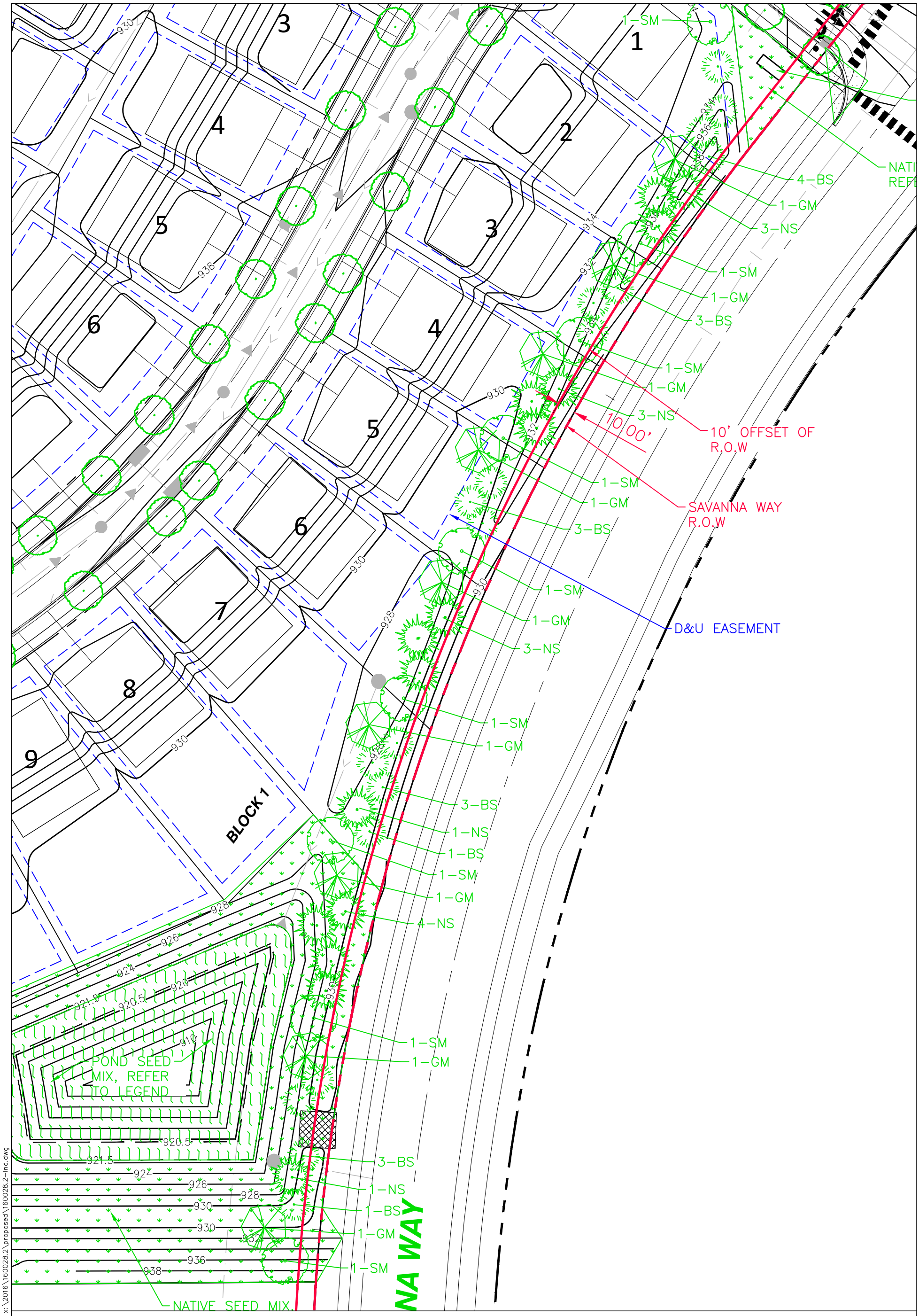

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HARVEST WEST - SAVANNA WAY LANDSCAPING

CHASKA, MN

N

1"
0' 25' 50'

DATE: 06–06–2019
DRAWN BY: AKA

ALLIANT ENGINEERING

EDGEWOOD DRIVE TRAIL | Harvest West

CHASKA, MINNESOTA

ALLIANT

05-22-19

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
06/12/2019

Subject: **Ess Lot & Ernst Home – Preliminary Site & Building Plan, Preliminary Plat & Rezoning**

Applicant: Talle & Associates, Inc.

Location: 217 Walnut Street and 211 Walnut Street

Case No.: 2019-13

Synopsis: Applicant seeks to obtain approval of a preliminary site & building plan, preliminary plat and rezoning to construct a new apartment building on 217 Walnut Street and restore the Ernst Home for apartment units

Prepared By: Elizabeth Hanson

Staff Recommendation: Recommendation of Approval

BACKGROUND

In the middle of 2014, the City approved the relocation of the Riedele House (Ernst House) from the Firemen's Park lot to the empty lot at 211 Walnut Street to help aid in the redevelopment efforts of Firemen's Park. The home has since been relocated and has been sitting vacant on this lot for some time.

In late 2014, a fire caused major damage to the Ess House at 217 Walnut Street, which is on the lot just north of the Ernst House. In 2015, the City stepped in to purchase it, with the express goal of saving the building. The City went through two grant cycles (2015 & 2016) with the State Historic Preservation Office (SHPO) in hopes of obtaining significant funds to help save the home. The City was unsuccessful in both of these grant applications and thus had no other option but to demolish the home, which was done in 2017.

The City currently owns both parcels. The City has been marketing the Ess lot and Ernst Home for redevelopment so that the Ess lot can be built on and the Ernst House can be rehabbed.

In December 2018, the Concept Plan was approved (PC #2018-36).

PROJECT GOALS

The developer has identified the following goals below for this project:

- Add high-quality rental housing to the town center to create new walkable housing options for residents
- Create an attractive and cohesive streetscape along Walnut that would help connect the town center to its historic commercial corridor;
- Integrate attractive landscape features to blend in with the natural environment;
- Contribute to the historic preservation of the city's architectural heritage.

CURRENT PROPOSAL

The applicant, Talle & Associates, Inc., is requesting approval of a preliminary site & building plan, preliminary plat and rezoning to combine the two existing lots (211 and 217 Walnut Street) and incorporate seven residential rental units: two units in the renovated Ernst House with private yards, three new construction townhomes with private yards, and two new construction apartments above the parking garages. One garage and one surface parking space would be provided for each 2-bedroom unit.

Adjacent properties

The site is bound on the north by commercial, to the west by an alleyway and commercial, the south by a city-owned parking lot, and the east by Walnut Street and residential.

Existing Conditions

The Ess lot (0.2 acres) and Ernst Home lot (0.2 acres) together are 0.4 acres in total. The Ess lot is currently vacant and used to house the Joseph Ess House. In 2014 a fire caused significant damage to the home and it was subsequently demolished in 2017. The Ernst Home was originally located on the Firemen's Park lot but was subsequently relocated to 211 Walnut Street to aid in the redevelopment of the park. It has been sitting vacant on 211 Walnut Street since 2015.

Land Use

The two lots are currently in the Downtown Commercial (C-3) zoning district. The site will be rezoned to a zoning district more applicable to this project.

Layout/Transportation/Sidewalks

Currently, the available vehicle access points for the property are in the rear from the alleyway via a small parking lot; there is a parking garage also situated near the rear of the property that will provide an interior stall for each apartment unit. The alleyway gains access from 3rd Street East, 2nd Street East and from the City-owned parking lot to the south. The proposed housing parking lot layout currently includes the access connection on the south side of the site connecting to the existing City alley. This access shall be 24 feet in width.

Both the Ernst Home and Townhome building will front Walnut Street. Sidewalks are proposed that will connect each unit to the sidewalk along Walnut Street. There is a sidewalk that runs between the Ernst Home and proposed townhome building to the north. This sidewalk also provides access to the rear of the property to connect to the parking garage, apartment units over the parking garage, and parking lot.

Paseo & Parking Lot Grade

It should be noted that as a part of the Downtown Master Plan, the paseo concept was mentioned as a part of the alleyway in the rear of these lots. Specifically, *"Main Street" will be complemented by attractive "Town Center" cross-streets, as well as the Brick City Paseo paralleling it to the east and west.* The paseo concept was a plan to mitigate noise, buffer and provide a beautiful walk for pedestrians. The alleyway behind the businesses fronting Highway 41 was targeted as a paseo opportunity to give pedestrians an alternative versus walking down the busy highway. HKGI put together a schematic design for the paseo that runs in between this block.

Because of this paseo concept, it will be important that the west side of this lot, which abuts the paseo, shows an appropriate edge. One area of concern from staff is the relationship between the cars parking in the surface parking lot and the paseo. The applicant has provided an initial analysis for the design of this edge. They have provided more buffer between the parking lot and alleyway by providing landscaping and a four-foot high decorative black aluminum fence. Staff will continue to work with the applicant on the design of this edge as the paseo continues to be refined. At this time we do not have any specific design details for the paseo area.

Because we do not have specific details of the paseo it will be important that the applicant continue to work with staff and the potential grades of the alleyway as it relates to the parking lot's access point. Currently the access point is being proposed on the south side of the site where the grades are steeper compared to the north side. Staff is concerned with turning movements and the changes that might occur with the future paseo reconstruction, and wants the applicant to be aware of that.

Utilities
Sewer and water utilities are available to serve the site.

Setbacks
The setbacks will be generally consistent with the surrounding area in the C-3 zoning district. Namely, the front yard setback is 0 feet, however the proposed townhome building is showing a 10.5 foot front setback, which is a little less than the Ernst Home. The rear yard setback should be 20 feet. The side yard setback is 3 feet. The applicant will have to ensure that the smaller setbacks on the north/south side of the site and between the buildings meet any building code requirements for fire rating and etc.

Architecture
The architecture of the new construction will be very important for this project as it is a site that is located in downtown Chaska and also a national district (Walnut Street Historic District). The Ernst Home will be relatively unchanged on the exterior, with the exception of maintenance work to secure the structure and front porch. An exterior staircase is proposed on the rear (west side) of the Ernst Home to provide access to the second floor apartment unit. This element should be designed in a way that is minimal and compatible with the structure in terms of design and material. Typically exterior staircases on historic homes have been constructed of wood or steel and painted to fit in with the overall look of the building. The applicant has indicated that this element will be made of wood and painted to match the building.

The townhome building to the north is proposing to be a 3-unit building with two-stories, to be similar the Ernst Home. The townhomes are organized such that their primary facades present the same iconic form as the Ernst house but with the porches tucked into the façade in lieu of adjacent. Each unit will have their own exterior access (one in the front and one in the rear). The units will be two-story in this building. A Chaska brick-blend is proposed as the main material on the first floor, which staff commends. It will be the same blend and vendor used on the Curling Center. The Ernst Home is made entirely of Chaska brick and there are other multiple buildings within the Walnut Street District that are Chaska brick so reinforcing this material and color palette on this building is appropriate. LP smartside lap siding will be used on the second floor of the townhome building, painted white to fit in with the accent color of

the Ernst Home. The lap siding is also found on other downtown residences and commercial buildings, and thus a complementary material choice. Windows on the first floor will use a double-rowlock brick detail reminiscent of historic details.

There is a parking garage, also known as the carriage house, proposed in the rear of the property that will house 7 parking stalls on the first floor, and two apartment units on the second floor. The building is proposed to be all LP Smartside, using lap and board & batten applications; painted all white to match the Ernst Home accent pieces and the townhome's second story. Both dwelling units will have their own private staircase leading up to their unit; these staircases are accessible from their parking garage stall and also from the exterior. As mentioned before this building will be the closest building facing the alleyway/paseo, and thus will be significant in terms of the design and architecture provided on its west façade. Staff will stress the importance of providing 360-degree architecture on this building to ensure its western edge is aesthetically pleasing as well as the southern edge as it abuts a public parking lot. That would also include looking at qualitative garage doors that provide an appealing edge. In this preliminary submittal, the applicant has designed this building well to provide depth in the massing through protrusions and recessions. The mix of lap siding and board and batten will also provide visual interest. Decorative garage doors will be used that have an 'oak stain' finish. This piece will provide additional aesthetic as well as a pop of color that will be pleasing on the edge facing the future paseo.

Both new structures on the site pay homage to the Ernst house and the historic use of the property but do not pretend to be original to the era. The Secretary of Interior's Standards recommend that newly constructed elements be compatible and deferential to the existing historic features but do not try to mimic those features in a way that creates a false sense of history. We believe these new buildings do just that. The form of the townhomes is similar to the Ernst House and echoes its materials and detailing, but subtle elements of form and detail, such as the repetition of the gable and the carved-out porches, signal the townhomes as a contemporary structure and not a historic one. While consistent in program, function, and aesthetics, the carriage house is intentionally presented as a subservient structure that is deferential to both the Ernst House and the townhomes. The HPC did review this design proposal and have found that it is complementary to the Ernst Home and Walnut Street district.

Landscaping

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	17 caliper inches (6 trees)	8
Understory Trees	2	2
Shrubs	17	38

Landscaping is being added all throughout the site. The front (east) will be landscaped generously with shrubs and ornamental trees. The rear (west) will also be landscaped with shrubs and a couple overstory trees.

Parking
The parking proposed will provide two parking spaces for each unit (one parking garage stall and one surface parking stall), except for the one-bedroom unit which will have access to one parking garage stall. In total, there will be 13 on-site parking stalls. Staff finds that this meets the parking requirements for this type and size of use. Additional on-street parking is provided in front of the buildings.

Surface Parking Lot & Future Parking Ramp
It was noted during the Concept Plan that a future parking ramp was being proposed over the top of the existing public parking lot. To summarize, in order to accommodate a second level parking ramp, significant changes would be required to the proposed layout of the site. City staff is recommending to no longer pursue the future ramp due to the physical and financial constraints as other options are available for public parking opportunities in downtown.

Signs
The applicant is proposing one monument sign on the site. It is located on the east side facing Walnut Street. The sign is allowed up to 12 square feet in area and six feet in height. The sign can only be illuminated from an external light source, like up-lighting or halo illumination. Internal illumination is not allowed. The sign must be setback at least ten feet from the property line. The design of the sign should also be designed to meet the City's downtown sign design guidelines.

Preliminary Plat
The project property will be platted into one lot (211 & 217 Walnut Street). Currently the lot is showing to encroach into the City-owned parking lot to the south. The site plan is showing to correct this encroachment by adjusting the southerly lot line more north outside of the public parking lot and encompassing the retaining wall. This will mean that the City-owned parking lot parcel will have to be platted as well to show the shift in property line. Therefore, the Ernst project will be one lot (Lot 1, Block 1) and subsequently owned by the developer, and the public parking lot will be one lot (Lot 2, Block 1) and owned by the City as a part of the overall plat. There are no outlots proposed.

Rezoning
The property is being rezoned to Planned Residential District (PRD-74).

HPC Meeting April 2, 2019:
The City and applicant conducted a Heritage Preservation Commission meeting on Tuesday, April 2, 2019. The HPC reviewed and approved the Site Alteration Permit (SAP) for the project at this meeting. They were favorable of the project and applauded the applicant for their work and achieving a complementary balance between the old and new buildings.

Deadline for Agency Action
The City of Chaska received the complete application for this request on Wednesday, May 29, 2019. Pursuant to Minnesota State Statutes the City is to act on this request by **Tuesday,**

July 28, 2019 (60 days), however the City can provide the petitioner with a written letter for an additional 60-day review period for further review if so needed. This additional review period can extend to Thursday, September 26, 2019. The City may, with the petitioner's consent, extend the review period beyond the Thursday, September 26, 2019 date for an additional 60 days. 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 TAKEN 12/12/18:

Motion to recommend to City Council approval of the Preliminary Site & Building Plan and Preliminary Plat for 7 apartment units on the Ess Lot and Ernst Home, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Project Narrative (pgs 1-7), prepared by Talle & Associates, dated May 20, 2019**
    b. **Cover Sheet (G000), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    c. **Aerial Site Exhibit (G001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    d. **Alta Survey, prepared by Sunde Land Surveying, dated February 12, 2019**
    e. **Demolition Plan (C100), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    f. **Paving & Dimension Plan (C200), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    g. **Grading and Erosion Control Plan (C300), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    h. **Utility Plan (C400), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    i. **Landscape Plan (L001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    j. **Irrigation Plan (L002), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    k. **Architectural Site Plan (A001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    l. **Sign Plan (A002), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    m. **Landscape Overlay Plan (A003), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    n. **Ernst House: Floor & Roof Plans (AE110), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    o. **Ernst House: Exterior Elevations (AE200), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    p. **Townhomes: Bsmnt & Roof Plans (AT110), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    q. **Townhomes: 1st & 2nd Flr Plans (AT111), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    r. **Townhomes: Exterior Elevations (AT200), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    s. **Carriage House: Fndn & Roof Plans (AC110), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    t. **Carriage House: 1st & 2nd Flr Plans (AC111), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    u. **Carriage House: Exterior Elevations (AC200 & AC201), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    v. **Trash Enclosure Details (A610), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    w. **Renderings (A700), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    x. **Photometric Plan (E001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019**
    y. **Preliminary Plat (pgs 1-2)**

2. **Provision that modular face brick is used for all brick applications.**
3. **Provision that mechanical equipment will be fully screened from view.**
4. **Provision that 4'x4' brick mockups for all Chaska brick blends are provided on site and reviewed and approved by the Planning Department prior to application.**
5. **Compliance with applicable zoning requirements, in particular Chapter 9 (Special Regulations).**
6. **Provision that building code is adhered to for all buildings in terms of fire rating, etc.**
7. **Provision that the identification sign cannot exceed twelve square feet in area, cannot exceed six feet in height, minimum setback of ten feet from property lines, and be illuminated by external light source of up-lighting or halo illumination, and be designed to meet Chaska's downtown sign design guidelines.**
8. **Provision that parking lot entrance on alleyway is at least 24 feet in width.**
9. **Provision of a vehicle turning radius exhibit at the parking lot's entrance and alleyway to be submitted at final submittal.**
10. **Coordination with City staff on the paseo concept and the project's parking lot entrance and west edge design.**
11. **Coordination with Electric Department on servicing electric utilities to and on the site.**
12. **Provision to comply with SHPO requirements, if any.**

Motion to recommend approval of the rezoning of Lot 1, Block 1 Ernst Home Apartments and Lot 2, Block 1 Ernst Home Apartments to Planned Residential District (PRD-74).

memo

To: Nate Kabat, Assistant City Administrator

Kevin Ringwald, Community Development Director

Liz Hanson, City Planner

From: Laura Russ, Talle & Associates

CC: Mark Burgess, U + B Architecture

Date: May 20, 2019 (rev 5/29/2019)

RE: Preliminary Plan Submission for Ernst House Parcel

We are pleased to present this application for Preliminary Plat approval and rezoning of the historic Ernst House and adjacent vacant lot. We have spent considerable effort to ensure that the project is compatible with its historic context and are excited about the prospect of this new development to blend old with new in the heart of downtown Chaska.

Intended Use

As presented at the December 2018 Planning Commission and City Council meetings, we are proposing a 7-unit residential rental development that includes two units in the renovated Ernst House, three new Walnut Street facing townhomes and two carriage house style units above the garages in the back. A thoughtful landscaping plan complements the apartment homes with private yards for the townhomes, and native grasses and low-maintenance plants throughout the site. The rear parking lot includes one garage and one surface parking space for each of the 2-bedroom and 3-bedroom units in the development. The single one-bedroom unit in the development is provided with one garage. The entry of the parking lot has been reoriented to accommodate concerns of the adjacent alley neighbor and to allow more appropriate trash collection and snow storage locations.

Historic Context and Use of Building Materials

1. Historic Compatible Use
    a. Between 1885 and 1951, the Sanborn maps clearly show that while 2nd Street and 3rd Street were primarily commercial in this area of the city, the properties on the west side of Walnut between 2nd and 3rd were always residential in nature. While they are not original to the site, the Ernst House in combination with the new townhomes re-establish this residential section of Walnut bookended on either side by the commercially oriented 2nd and 3rd Streets. In the period of significance for the Walnut Street Historic District, residential properties in the downtown district would have been expected to have their

primary façades formally addressing the public street with any utilitarian structures accessed off the alley. The space between the home and any utilitarian structures would then create a private garden/backyard for the residences. The Sanborn maps show structures on these properties that are consistent with this development pattern. For the proposed development, the inclusion of the carriage house on the alley side of the site recreates this relationship of primary and secondary structures with a garden space in between.

2. Compatible Form
    a. The form of the Ernst House, with its narrow blocky facades, modest roof pitches, regular pattern of punched windows, and covered porch tucked adjacent to an iconic gabled end, is typical of farmhouses from the era. The townhomes are organized such that their primary facades present the same iconic form as the Ernst house but with the porches tucked into the façade in lieu of adjacent. The carriage house, being a secondary structure, is less iconic in its form and presents a lower roof line with dormers. The model of a carriage house with vehicle parking below and small living units above is itself consistent with the period of significance.
3. Compatible Materials
    a. Beyond its simple form, the most iconic element of the Ernst house is its construction out of original Chaska brick. This brick will be restored. The townhomes will use a durable base of a modern brick veneer system using a "Chaska brick blend" selected for its compatibility and similarity to historic Chaska brick. The upper level of the townhomes would be clad in lap siding, evoking a farmhouse quality. The carriage house will be clad in lap siding. The use of a less precious material serves to lighten the mass of the building in deference to the Ernst House and townhomes and reinforce the carriage house as a symbolic secondary structure on the property.
4. Historic Context of Brick Application on New Structures
    a. Because of the historical importance of brick masonry in the City of Chaska, it has always been the development team's intention to play up masonry as an exterior finish in the context of the adjacent Ernst House and the surrounding historical district.
    b. One of the traditional brick properties that we feel is important is something that is typically referred to as "punched openings". Where windows and doors in exterior walls with a siding or stucco finish are traditionally flush with the exterior finish material, in brick masonry, windows and doors are traditionally recessed back from the face of the brick 4" or more. This has the effect of creating deeper shadow lines and reinforcing the masonry wall as a thick/massive assembly – hence the characterization of these openings as "punched".
    c. In an attempt to save costs, there's a prevailing construction trend towards the use of thin brick veneers. In addition to being less durable than a full depth masonry veneer, one of the things you lose with this type of application is the ability to recess the fenestration (windows and doors) into the wall. Windows and doors do not have the shadow line that they would otherwise have in a true masonry wall and the façade appears "flat" and loses a sense of depth to the construction.
    d. Another cost savings trend that is common in builder construction is the use of brick only on the front façade of some buildings. We find that this trend has a

similar effect to the use of thin brick veneers – it compromises the perception of brick construction as having mass/weight. In particular, at locations where the brick veneer terminates at an outside corner and where you can see the thickness of the brick adjacent to the long end of a different exterior finish material, the perception of the brick changes from seeing it as a cohesive block of material to seeing it only as a veil. This kind of veiled expression is not something you would ever see on a traditional brick building.

e. In traditional brick construction, it is not uncommon however, to have transitions from brick to other exterior finish materials at inside corners or at horizontal ledges where brick is below and a lighter material is above.
f. In general, the development team believes that brick exterior finishes should be applied in ways that maintain the perception of the brick as having a heavy/blocky quality. For this reason, we would avoid brick applications where the material terminated at an outside corner and would normally only feel comfortable making transitions to other exterior finish materials at inside corners and horizontal ledges. If a construction budget were such that it could only afford brick on a single façade, we would generally prefer not to use brick at all.
g. The design of the townhomes is viewed as complementary, compatible design to the adjacent Ernst House, and as such does not use a strict replication of specific design elements from that structure. Use of arch-top masonry window openings as executed on the Ernst House was explored for the design of the townhomes, and use of a flat window head was chosen for the masonry window openings.
    i. At the Ernst House, the arch-topped opening serves both aesthetic and functional purposes. The arches both visually and physically transfer the loads from above the window to the walls on either side. In modern construction, the functional aspect of this – transferring loads around the window - is typically done with steel, which is generally not visible. As such, the functional need for the brick arch (or any masonry lintel at all) no longer exists.
    ii. In addition, the aesthetic need is reduced by the use of white-painted lap siding on the second floor. The lighter structure above reduces the visual weight of the building – the need to “visually” transfer heavy masonry loads around the windows is likewise reduced. Adding larger windows to the front elevation (groups of three windows mulled together) would also make for an awkward use of arched openings. With these factors in mind, both the aesthetic and functional need for the arched masonry detail is reduced or eliminated.
    iii. While local, rural brick farmhouses as a type often had arched window opening, this detail was not exclusively uniform throughout the area. As you look “in town” for precedents, flat lintels become more prevalent. In lieu of replicating the Ernst House detail, we chose to use the double-rowlock brick detail in a flat lintel application as a simplification of the arched masonry openings, acknowledging the historic aesthetic (modern brick construction doesn’t require any acknowledgement of a brick lintel) while providing a solution that fits modern-day construction methods.
h. The townhomes have a Chaska brick blend on all four sides of the ground floor, and siding on the second floor above the brick.

i. Proposed brick: Summit Brick Company modular brick, “Chaska Blend” (blended Summit colors “Fawn” and “Ginger”), as recently used at the Chaska Curling Center.
ii. A horizontal ledge of cast stone is used to transition between the brick base and lap siding at the second floor.
iii. Where siding is used, we’ve opted to use a white lap siding which ties nicely to the existing color scheme of the Ernst house and would be consistent with non-brick farmhouses from the late 19th century.
iv. The carriage house is shown as all white siding (lap siding above, and a base of board and batten below). Again as a secondary structure, this would have been a strategy that would reasonably have been employed historically.

i. Some may consider taking all of the brick on the reduced scope townhome structure and applying it to the East façade. We disagree with this approach because it is an application that would not have been historically employed. Since the edge of the transition between brick and siding would be prominently visible at the Southeast corner of the townhome building, we fear the brick would appear as a veil or a mask over the townhomes and establish the perception of the townhomes as a cheap mimic of the Ernst House as opposed to the intended effect of creating a structure that has the mass and physical presence to stand in tandem with the Ernst house.

j. It is our opinion that employing a contiguous brick base around the townhomes with siding above does a better job of materially connecting the two structures together, using brick in a more historically appropriate way, and establishing the townhome building as deferential to the Ernst House while stately in its own way.

5. Repair and Replacement of Deteriorated Features on the Ernst House
   a. The existing brick has been damaged by water and weather in many locations. We are anticipating the need to repoint the entire façade using mortar materials that are compatible in color and composition to the existing brick and mortar materials. Existing brick openings will be maintained on the most visible East and West facades. In two locations on the West facade, existing brick openings will be enlarged to accommodate code compliant door openings into the building. Excess brick will be salvaged and cleaned for reuse as necessary. On the North façade, a brick opening that currently accommodates a pair of mulled windows will be infilled with a single window and an infill panel. The existing brick opening will be maintained so that a pair of windows could be reinstalled in this location in the future if so desired. Where needed, salvaged brick either from the building or from the city of Chaska’s stockpile will be used to replace existing damaged brick. We are not anticipating the need for an abrasive cleaning, but if pursued, this would involve a more gentle soda blast in lieu of a more damaging sand blast. On the west façade, the ghost of previous wood structures attached to the building are still visible. While the priority is to clean the brick and ensure its weather resistance, the preference would be to maintain this ghosting and preserve the historic evidence of these previous structures.
   b. Fenestration
      i. The existing wood double hung windows are in disrepair and do not meet modern performance, durability, and energy standards. The windows will be replaced with modern, double hung windows made of

durable materials and meeting current energy standards. The windows will be selected and custom fabricated, however, to match the size, muntin pattern, and function of the original windows. Exterior doors will be provided using similar criteria. New doors will be provided that meet modern durability and energy expectations, but with a high priority on matching the appearance of the original doors.

c. Porch
    i. Other than the brick, the most identifiable element of the home is the front porch. Unfortunately, the porch is structurally unsound and is not salvageable. Using record photographs from when the house was still in its original location, the porch will be completely rebuilt to match its original appearance as closely as possible, while upgrading the design to meet current code requirements.

d. Roof
    i. Similarly, where roof, roof fascia, and gutter materials have failed and cannot be maintained, these elements will be replaced with new materials similar to the existing.

6. Secretary of the Interior's Standards
    a. The Secretary of Interior's Standards recommend that newly constructed elements be compatible and deferential to the existing historic features but do not try to mimic those features in a way that creates a false sense of history.
        i. In an effort to preserve the independent integrity of the Ernst House, it will be provided with a significant buffer to adjacent new structures.
        ii. Where existing historic materials are failing, these materials will be replaced or repaired to be similar.
            1. In order to meet code and life-safety requirements, the front porch will be re-built with steel framing that is clad with synthetic materials in order to maintain the visually delicate characteristics that make it unique to the building.
        iii. Where new elements are added, such as the new exterior stair, these elements will be provided with code-complaint and structurally superior framing systems clad in contemporary materials that are visually consistent with the era and materials of the Ernst House, but without unique detail that makes conjectural assumptions about what an original stair might look like.
    b. Both new structures on the site pay homage to the Ernst house and the historic use of the property but do not pretend to be original to the era.
        i. The form of the townhomes is similar to the Ernst House and echoes its materials and detailing, but subtle elements of form and detail, such as the repetition of the gable and the carved out porches, signal the townhomes as a contemporary structure and not a historic one.
        ii. While consistent in program, function, and aesthetics, the carriage house is intentionally presented as a subservient structure that is deferential to both the Ernst House and the townhomes.

<u>Parking Lot Considerations</u>

1. As requested by the City, we explored strategies that would allow for the future construction of a parking deck over the City parking lot to the south of the Ernst House property. In collaboration with our structural engineer, civil engineer, and general

contractor, a design alternate was developed and included in our Schematic Design pricing set.

a. For the current development proposal, it's critical that the elevation of the garages at the south side of the property be similar to the elevation of the current Ernst House. This allows residents of the development to exit out of their garages and walk to their units without having to traverse a complex set of stairs and/or ramps in between.
    i. If the garages and parking lot were significantly elevated (approximately 8'-0" as shown in the Stantec plan dated 9/26/2018), large exterior stairs (up to 16'-0" long) would be required to make up the difference between the garages and the Ernst House & townhomes. With a compact site, accommodating an exterior stair of this size is not practical.
    ii. A more practical strategy is to keep the elevation of grade at the south side of the property more or less where it exists today.
        1. In order to accommodate that upper deck, the West side of the existing parking lot would have to the lowered by at least 5'-0". In order to facilitate the lowering of that parking lot in the future and not have it undermine our structures and parking lot, some kind of retaining/shoring structure to supplement the existing retaining wall would need to be built. Also, in order to prevent us from damaging the existing surface parking lot, we'd need to be able to install that retaining structure without having to excavate down lower than the existing parking lot elevation.
        2. A potential solution involves the installation of some steel H-Piles at 6' to 10' o.c. on the inside of the existing modular retaining wall. In order to lower the parking lot in the future, the existing modular retaining wall could be removed from the top down and boards or beams could be attached to the H-piles to replace that retaining wall. With the H-piles driven down to a much lower level than the current parking lot surface, this process could continue down past current grade thus allowing the parking lot to be lowered without affecting the structures on the Ernst House property.
b. Estimated costs for these H-Piles received from our chosen contractor (Reuter Walton) were **$111,000.**
    i. These costs are just for the installation of the H-Piles and <u>do not</u> include any accommodation for work that would happen in the future including but not limited to:
        1. Removal of the existing modular retaining wall
        2. Installation of boards/beams onto H-Piles.
        3. Excavation of grade and resurfacing of parking lot.
        4. Construction of parking deck structure.
c. Other concerns
    i. From a layout standpoint, a connection to a future parking deck to the south requires that the entrance to the developments parking lot be on the North side of the property. This creates a series of poor relationships.
        1. A representative of Von Hanson's Meats was in attendance at the April 2nd HPC meeting and identified that their existing

loading and trash area could be a nuisance to residents of the project. It was recommended that we move our trash enclosure to be adjacent to theirs on the north side of the site to help create a buffer between the two properties.

2. Drainage on the property is going to naturally flow from the north to the south. As we consider where snow storage might be placed on the site, an entrance at the North side of the site creates conditions that limit the amount of snow storage we can accommodate and also puts that snow storage on the high side of the parking lot.
    a. Moving the entrance to the South allows us to accommodate more snow storage and also places it at the low end of the site

2. Given the current cost, potential costs, and potential negative impacts a future parking deck to the South would have on the residential development, we have not included an option for future construction of an adjacent parking ramp.

Paseo Site Edge

To support the city's vision of the Paseo along the alley, the layout of the parking lot includes a buffer between the alley and the parking lot. It is anticipated that this buffer will include a concrete gutter at the parking lot, ornamental fencing, and low maintenance grass plantings. These items will serve as a screen to help make the alley more pedestrian friendly. Also, having the trash enclosure on the north side of the property near the Von Hanson's receiving and trash area serves to consolidate all of the utilitarian functions in lieu of spreading it out across the alley. The trash enclosure will consist of galvanized metal posts and framing with painted cedar slats. On the south side of the property a larger landscaping bed serves a dual function as a welcoming feature at the entrance to the development as well as a location to store snow in the winter.

Project Costs and Program

Due to the mix of structures on site, the constraints of the site itself and the high level of design detail, construction costs for this project are much higher than typical. Preliminary pricing is over $500,000 per apartment unit. We are continuing to refine the construction pricing to incorporate value engineering, but the project will result in higher equity needs than typical for a project of this size resulting in the need for contributions from the City as outlined in the Development Agreement. Our goal is to achieve rents in the $2000 average range, and provide full professional property management services.

Conclusion

As stated in the December meetings, we believe that this project will provide much needed infill housing to an increasingly vibrant Chaska Town Center, while honoring the historic connection of the Ernst House to the surrounding area. Thank you for your consideration of this project.

ERNST HOUSE REDEVELOPMENT

211 N Walnut Street, Chaska, MN 55318

Project Contacts

Developer

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O | 612-823-3489
josh@reuterwalton.com

2 G000 STREET VIEW FROM EAST
N.T.S.

Sheet Index

No	TITLE
G000	COVER SHEET
G001	AERIAL SITE EXHIBIT
G002	SURVEY
CIVIL DRAWINGS	
C100	DEMOLITION PLAN
C200	PAVING AND DIMENSION PLAN
C300	GRADING AND EROSION CONTROL PLAN
C400	UTILITY PLAN
C500	DETAILS
LANDSCAPE DRAWINGS	
L001	LANDSCAPE PLAN
L002	IRRIGATION PLAN
ARCHITECTURAL DRAWINGS	
A001	ARCHITECTURAL SITE PLAN
A002	SIGN PLAN
A003	LANSCAPE OVERLAY PLAN
AE110	ERNST HOUSE: FLOOR & ROOF PLANS
AE200	ERNST HOUSE: EXTERIOR ELEVATIONS
AT110	TOWNHOMES: BSMNT & ROOF PLANS
AT111	TOWNHOMES: 1ST & 2ND FLR PLANS
AT200	TOWNHOMES: EXTERIOR ELEVATIONS
AC110	CARRIAGE HOUSE: FNDN & ROOF PLANS
AC111	CARRIAGE HOUSE: 1ST & 2ND FLR PLANS
AC200	CARRIAGE HOUSE: EXTERIOR ELEVATIONS
AC201	CARRIAGE HOUSE: EXTERIOR ELEVATIONS
A610	TRASH ENCLOSURE DETAILS
A700	RENDERINGS
LIGHTING	
E001	PHOTOMETRIC PLAN

1 G000 STREET VIEW FROM EAST SIDEWALK
N.T.S.

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Preliminary Site Plan Review
5/29/19

Not For Construction

Ernst House Redevelopment
211 North Walnut Street
Chaska, MN 55318
Project: 2018007_211N

Drawings Issued	Date

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 Architect under the laws of the State of Minnesota

Signature

Printed Name

Registration Number

COVER SHEET

G000

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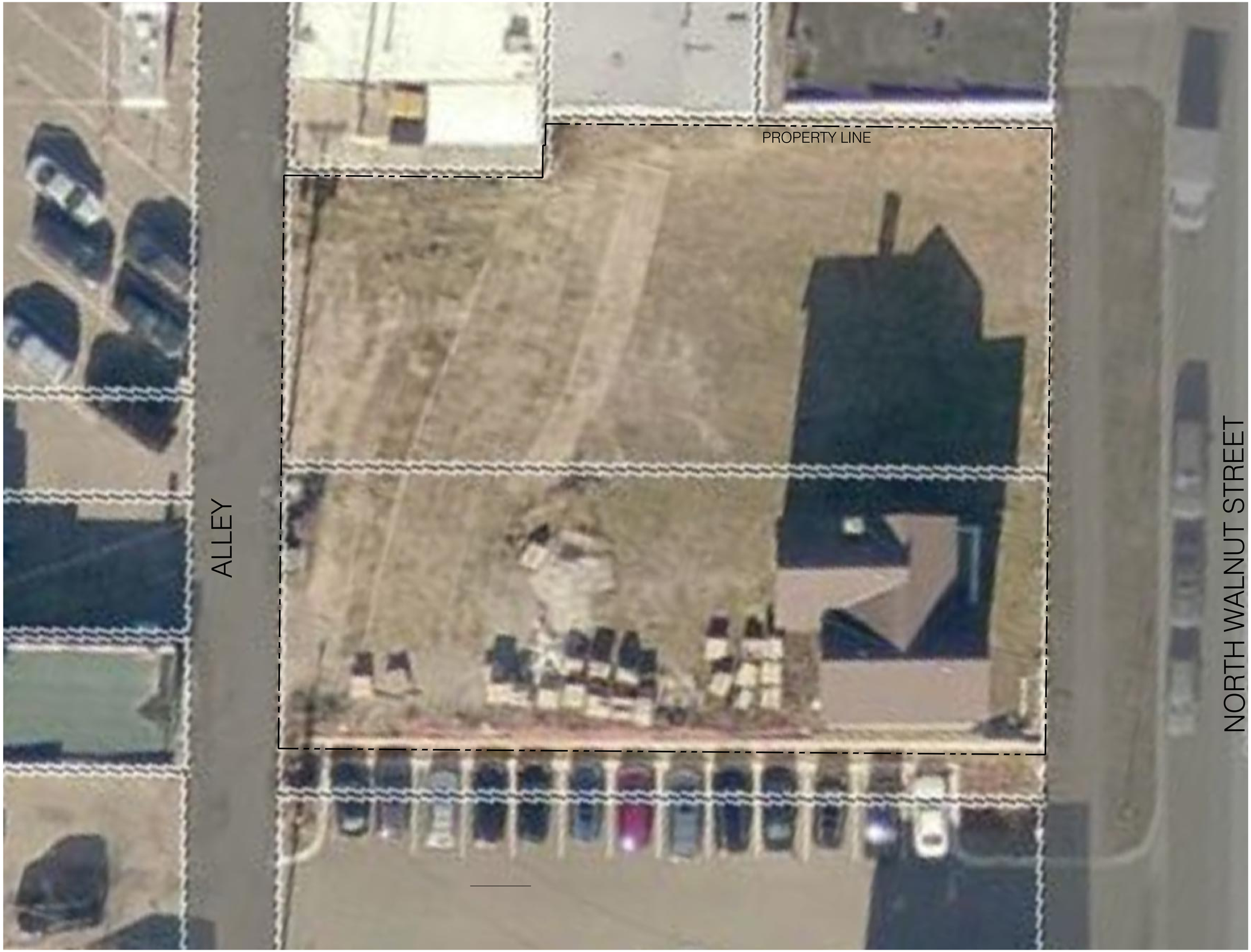

PLAN NORTH

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5/29/19

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Signature

Printed Name

Registration Number

AERIAL SITE EXHIBIT

G001

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BENCHMARKS (BM)

(NAVD 88)

1) MnDOT 1008R survey disk in bridge railing in Chaska, 2.2 miles south along Trunk Highway 41 from the junction of Trunk Highway 41 and Trunk Highway 212, in rail in the northeast corner bridge rail of Trunk Highway 41 bridge number 10012 over the Minnesota River, 29.8 feet east of Trunk Highway 41.
Elevation = 727.548 feet

2) Scribed "X" 2.0'± feet easterly of the west end of the concrete wall in the northwest corner of the subject property.
Elevation = 734.81 feet

3) Top of spike in the northwest side of the power pole located midway along the west boundary of the subject property.
Elevation = 733.64 feet

4) Top of top nut of fire hydrant in the southeast quadrant of 3rd Street and Walnut Street.
Elevation = 734.24 feet

GENERAL NOTES

1.) Survey coordinate and bearing basis: Carver County coordinates

2.) Adjoining ownership information shown hereon was obtained from the Carver County Property Tax Information web site.

3.) There was no evidence of recent earth moving work, building construction or building additions observed in the process of conducting the fieldwork.

4.) There are no proposed changes in street right of way lines per the City of Chaska Engineering Department. There was no evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

5.) There were no wetland delineation markers observed in the process of conducting the fieldwork.

6.) At the time fieldwork was performed for this survey, there was a significant amount of snow on the ground. Physical features were located to the best of our ability, but there may be additional features that were not visible and, therefore, not shown hereon.

UTILITY NOTES

1.) Utility information from plans and markings was combined with observed evidence of utilities to develop a view of the underground utilities shown hereon. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. In addition, Gopher State One Call locate requests from surveyors may be ignored or result in an incomplete response. Where additional or more detailed information is required, excavation and/or a private utility locate request may be necessary.

2.) Other underground utilities of which we are unaware may exist. Verify all utilities critical to construction or design.

3.) Some underground utility locations are shown as marked onsite by those utility companies whose locators responded to our Gopher State One Call, ticket number 190250334.

4.) Contact GOPHER STATE ONE CALL at 651-454-0002 (800-252-1166) for precise onsite location of utilities prior to any excavation.

FLOOD ZONE NOTES

1.) The subject property appears to lie within Other Areas Zone X (Areas determined to be outside the 0.2% annual chance floodplain), and Other Flood Areas Zone X (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood), per the National Flood Insurance Program, Flood Insurance Rate Map Community Panel No. 27523402360, dated December 21, 2018. This information was obtained from the FEMA Map Service Center web site.

2.) The flood zone demarcation line shown hereon is approximate only per scaled map location and/or graphic plotting. FEMA maps are not precisely drawn and do not scale uniformly. Contact FEMA for final determination.

PARKING

There are no parking spaces designated on the subject property.

AREA

Gross = 17,230 square feet or 0.396 acres

LEGEND

○	Denotes iron monument set marked with P.L.S. No. 44890
●	Denotes found iron monument
◉	Denotes 1.17 inch diameter copper magnetized marker with disc cap affixed stamped LS-44890 set
BE	Denotes building entrance
BTL	Denotes beavertail curb
CB	Denotes catch basin
CBX	Denotes communication box
CDS	Denotes civil defense siren
CHIM HI	Denotes chimney height
COL	Denotes building column
CONC	Denotes concrete
CS	Denotes curb stop
CWB	Denotes concrete wall base
CWT	Denotes concrete wall top
EB	Denotes electric box
EM	Denotes electric meter
FOL	Denotes fiber optic line
G	Denotes gutter
GAS V	Denotes gas valve
GM	Denotes gas meter
GW	Denotes guy wire
HCR	Denotes disabled ramp
HYD	Denotes fire hydrant
INV	Denotes structure invert
KWB	Denotes keystone wall top
LP	Denotes light pole
OHC	Denotes overhead communication line
OHE	Denotes overhead electric line
OVH	Denotes overhang
(P)	Denotes per plan
PPLP	Denotes power and light pole
PPT	Denotes power pole with transformer
PPU	Denotes power pole with underground utility
PVC	Denotes polyvinylchloride pipe
RCP	Denotes reinforced concrete pipe
RD	Denotes roof drain
ROOF ELEV	Denotes roof elevation
SAN	Denotes sanitary manhole
SAN S	Denotes sanitary sewer
SANC	Denotes sanitary cleanout
ST S	Denotes storm sewer
SWB	Denotes stone wall base
SWT	Denotes stone wall top
TC	Denotes top of concrete curb
TRANS	Denotes transformer
UGC	Denotes underground communication line
W	Denotes water line
BIR	Denotes Birch tree
LOC	Denotes Locust tree
MPL	Denotes Maple tree
SHB	Denotes shrub
TR	Denotes deciduous tree

DESCRIPTION OF PROPERTY SURVEYED

(Per First American Title Insurance Company Commitment for Title Insurance Commitment No. 1906676, commitment date January 25, 2019, issued by Title Mark, LLC)

Parcel 1:

Lot 2, Block 37, except the Northerly 6 feet of the Westerly 48 feet thereof and also including the South 4 feet of the Easterly 94 feet of Lot 1, Block 37, CITY LOTS OF CHASKA, Carver County, Minnesota.

Parcel 2:

Lot 3, Block 37, CITY LOTS OF CHASKA, Carver County, Minnesota.

Property is: Abstract

PLAT RECORDING INFORMATION

The plat of Map of Chaska Townsite was filed of record on February 15, 1868, in Book A of Townsites.

[ ] Bearings and/or dimensions listed within brackets are per plat or record documents.

TITLE COMMITMENT

First American Title Insurance Company Commitment for Title Insurance Commitment No. 1906676, commitment date January 25, 2019, issued by Title Mark, LLC, was relied upon as to matters of record.

Schedule B Exceptions:

(1) Exceptions are indicated on survey with circled numbers unless otherwise noted. Items not listed below are standard exceptions and/or are not survey related.

There are no easements listed in Schedule B – Section 2 of the title commitment to be shown.

LIST OF POSSIBLE ENCROACHMENTS

The following list of possible encroachments is only the opinion of this surveyor; should not be interpreted as a legal opinion and should not be interpreted as a complete listing.

[A] Possible encroachments are indicated on survey with boxed letters as listed below.

A.) Concrete curb, parking areas and sign lying within the subject property along the southeasterly property line.

B.) Transformer lying easterly of the southwesterly property line.

C.) Storm sewer lying within the property and draining towards the southeast without an easement.

SURVEYOR'S CERTIFICATION

To Chaska Economic Development Authority, Thies & Talle Management, Inc., Title Mark, LLC and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 7(a), 7(b)(1), 7(c), 8, 9, 11, 13, 16, 17, 18, 19 and 20 of Table A thereof. The fieldwork was completed on February 8, 2019.

Dated this 12th day of February, 2019

SUNDE LAND SURVEYING, LLC.

By: Leonard F. Carlson
Leonard F. Carlson, P.L.S. Minn. Lic. No. 44890

LEONARD F. CARLSON — LICENSED LAND SURVEYOR — 44890 — STATE OF MINNESOTA

N

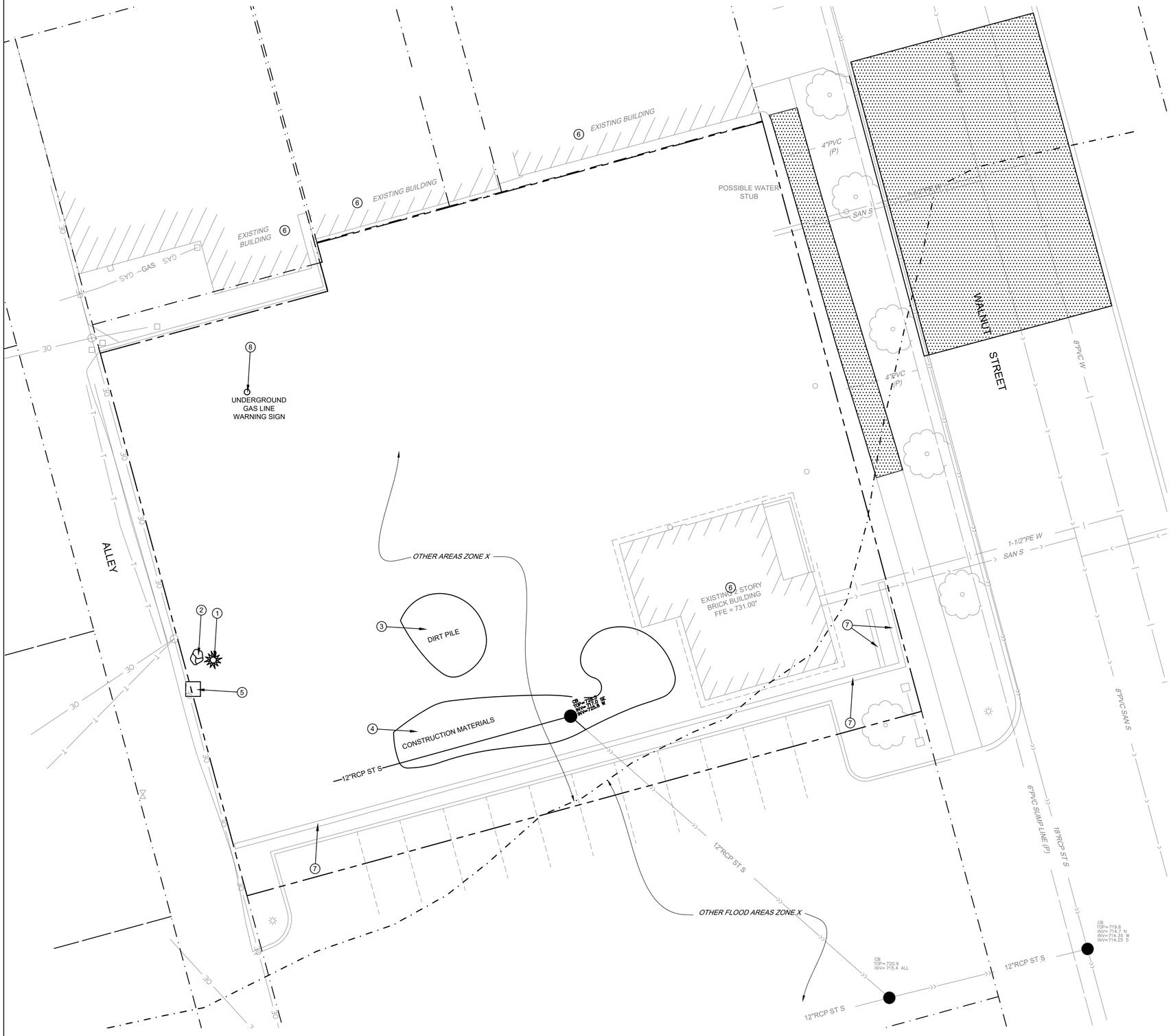
20 0 20 40
SCALE IN FEET

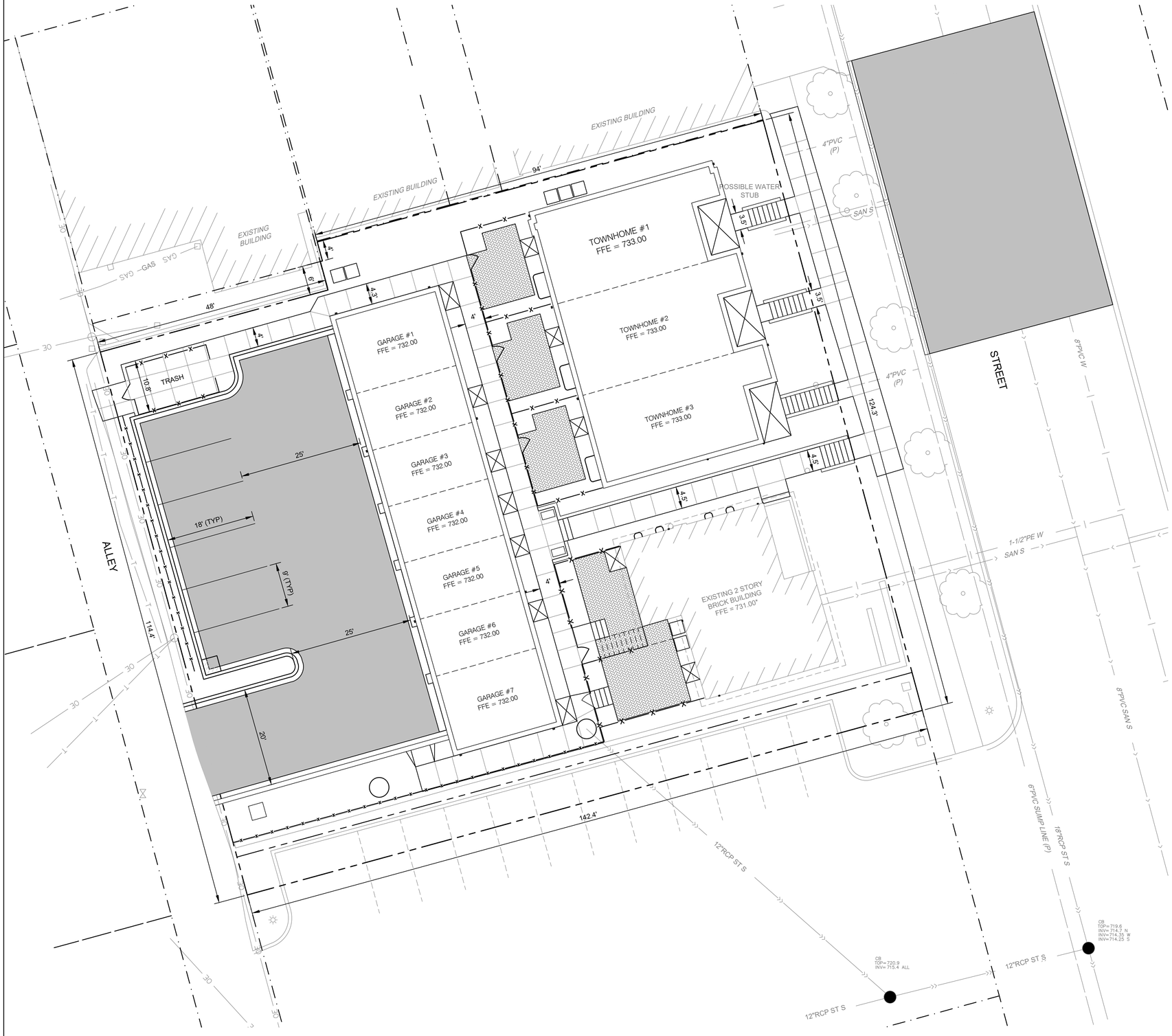
Revision	By	Date
	SMT	

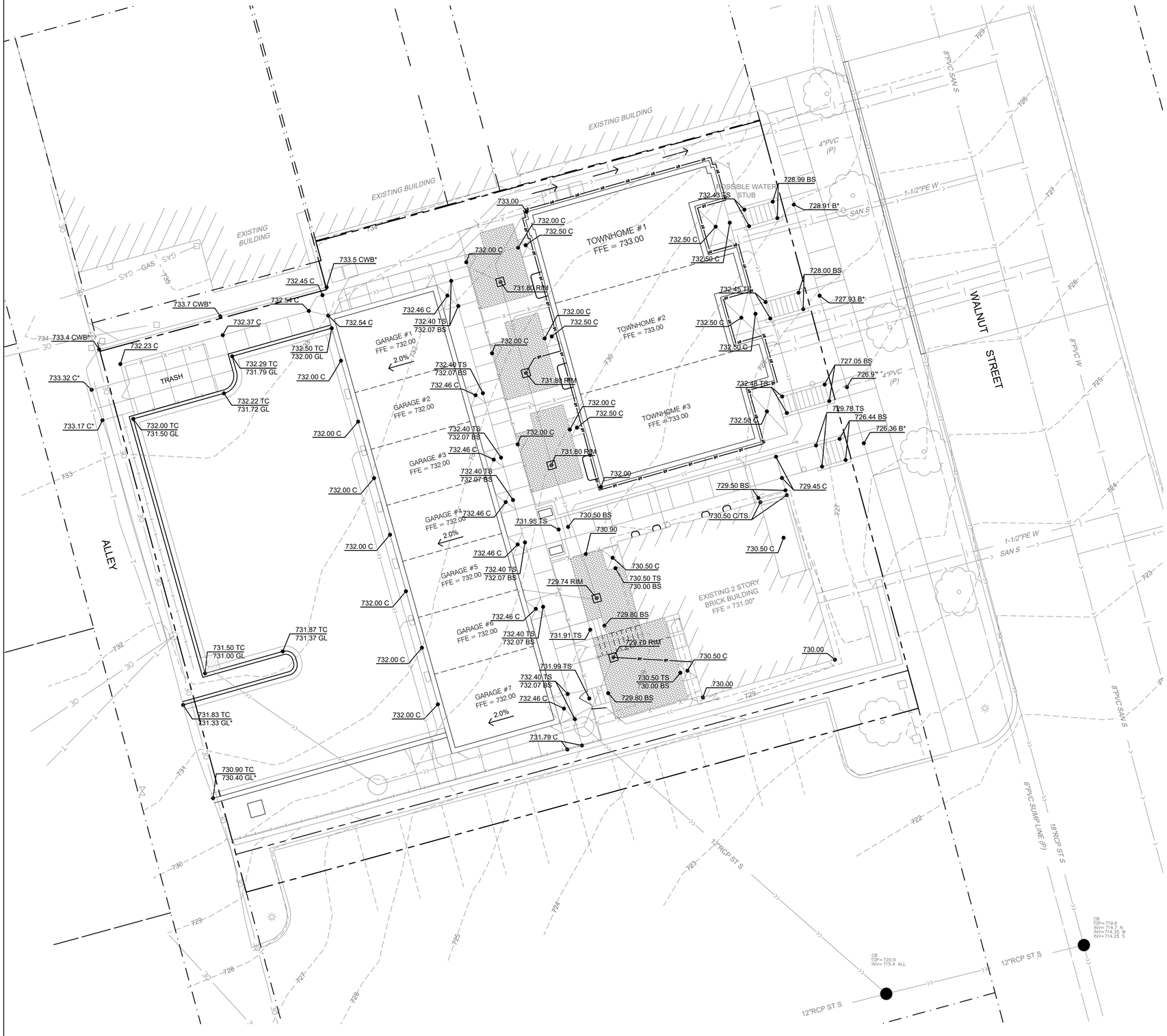
Drawing Title:
ALTA/NSPS LAND TITLE SURVEY FOR:
CITY OF CHASKA
Ernst House
211 and 217 Walnut Street, Chaska, MN

SUNDE LAND SURVEYING
www.sunde.com
Main Office:
9001 East Bloomington Freeway (35W) • Suite 118
Bloomington, Minnesota 55420-3435
952-881-2455 (Fax: 952-888-9526)

Project: 2019-007 Bk/Pg: 918/42
Township: 115 Range: 23 Section: 9
File: 201907001.dwg
Date: 02/12/2019
Sheet: 1 of 1


EXISTING BUILDING
EXISTING BUILDING
EXISTING BUILDING
POSSIBLE WATER STUB
4"PVC (P)
SAN S
WALNUT STREET
8"PVC W
4"PVC (P)
GAS
GAS
GAS
OE
OE
UNDERGROUND GAS LINE WARNING SIGN
ALLEY
OTHER AREAS ZONE X
DIRT PILE
CONSTRUCTION MATERIALS
EXISTING 2 STORY BRICK BUILDING FFE = 731.00*
CB TOP= 728.3 INV= 717.9 W INV= 716.8 E
12"RCP ST S
1-1/2"PE W
SAN S
8"PVC SAN S
6"PVC SUMP LINE (P)
18"RCP ST S
12"RCP ST S
OTHER FLOOD AREAS ZONE X
CB TOP= 720.9 INV= 715.4 ALL
12"RCP ST S
12"RCP ST S
CB TOP= 719.6 INV= 714.7 N INV= 714.35 W INV= 714.25 S
30
30
30


EXISTING BUILDING
EXISTING BUILDING
EXISTING BUILDING
94'
POSSIBLE WATER STUB
4"PVC (P)
SAN S
TOWNHOME #1
FFE = 733.00
TOWNHOME #2
FFE = 733.00
TOWNHOME #3
FFE = 733.00
3.5'
3.5'
4.5'
4.5'
4'
4'
4'
6'
5'
GAS
GAS
48'
TRASH
10.8'
GARAGE #1
FFE = 732.00
GARAGE #2
FFE = 732.00
GARAGE #3
FFE = 732.00
GARAGE #4
FFE = 732.00
GARAGE #5
FFE = 732.00
GARAGE #6
FFE = 732.00
GARAGE #7
FFE = 732.00
25'
18' (TYP)
9' (TYP)
25'
20'
114.4'
142.4'
124.3'
STREET
8"PVC W
1-1/2"PE W
SAN S
8"PVC SAN S
6"PVC SUMP LINE (P)
18"RCP ST S
12"RCP ST S
12"RCP ST S
12"RCP ST S
CB
TOP= 720.9
INV= 715.4 ALL
CB
TOP= 719.6
INV= 714.7 N
INV= 714.35 W
INV= 714.25 S
EXISTING 2 STORY
BRICK BUILDING
FFE = 731.00'
ALLEY
30
30
30



GRADING NOTES

1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. Restore all disturbed areas with 4" of good quality topsoil and seed.
5. All construction shall be performed in accordance with state and local standard specifications for construction.

EROSION CONTROL NOTES

1. See Sheet C500 for Erosion Control Notes.

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651.481.9120 (f) 651.481.9201
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Preliminary Site Plan Review

5/29/19

Not For Construction

Ernst House Redevelopment

211 North Walnut Street
Chaska, MN 55318
Project: 2018007_211N

Drawings Issued	Date

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.

Signature

Printed Name Eric G. Meyer

Registration Number 44592

GRADING AND EROSION CONTROL PLAN

C300

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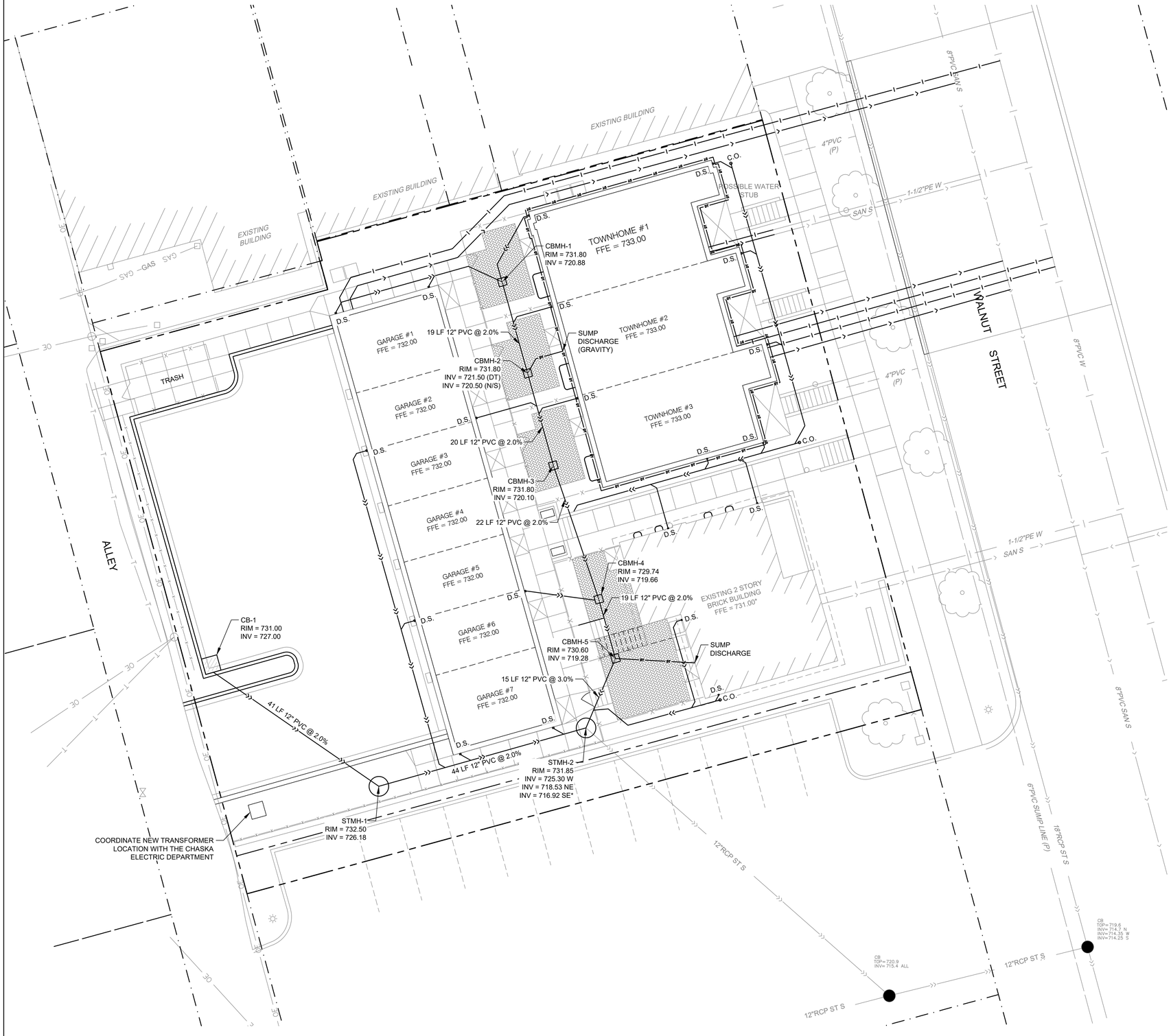

LEGEND

- STORM MANHOLE
- CATCH BASIN
- CURB INLET
- FLARED END
- SANITARY MANHOLE
- HYDRANT
- GATE VALVE & BOX
- WATER SHUTOFF
- LIGHT POLE

- CTV — CABLE UNDERGROUND LINE
- OE — ELECTRIC OVERHEAD LINE
- UE — ELECTRIC UNDERGROUND LINE
- FO — FIBER OPTIC UNDERGROUND LINE
- GAS — NATURAL GAS UNDERGROUND LINE
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- T — TELEPHONE UNDERGROUND LINE
- WATERMAIN PIPE
- DT — DRAINTILE PIPE

UTILITY NOTES

1. It is the responsibility of the contractor to perform or coordinate all necessary utility connections and relocations from existing utility locations to the proposed building, as well as to all onsite amenities. These connections include but are not limited to water, sanitary sewer, cable TV, telephone, gas, electric, site lighting, etc.
2. All service connections shall be performed in accordance with state and local standard specifications for construction. Utility connections (sanitary sewer, watermain, and storm sewer) may require a permit from the City.
3. The contractor shall verify the elevations at proposed connections to existing utilities prior to any demolition or excavation.
4. The contractor shall notify all appropriate engineering departments and utility companies 72 hours prior to construction. All necessary precautions shall be made to avoid damage to existing utilities.
5. Storm sewer requires testing in accordance with Minnesota plumbing code 4714.1109 where located within 10 feet of waterlines or the building.
6. HDPE storm sewer piping shall meet ASTM F2306 and fittings shall meet ASTM D3212 joint pressure test. Installation shall meet ASTM C2321.
7. All RCP pipe shown on the plans shall be MN/DOT class 3.
8. Maintain a minimum of 7 ½' of cover over all water lines and sanitary sewer lines. Where 7 ½' of cover is not provided, install 2" rigid polystyrene insulation (MN/DOT 3760) with a thermal resistance of at least 5 and a compressive strength of at least 25 psi. Insulation shall be 8' wide, centered over pipe with 6" sand cushion between pipe and insulation. Where depth is less than 5', use 4" of insulation.
9. Install water lines 12" above sewers. Where the sewer is less than 12" below the water line (or above), install sewer piping of materials approved for inside building use for 10 feet on each side of the crossing.
10. All watermain piping shall be class 52 ductile iron pipe unless noted otherwise.
11. See Project Specifications for bedding requirements.
12. Pressure test and disinfect all new watermains in accordance with state and local requirements.
13. Sanitary sewer piping shall be PVC, SDR-35 for depths less than 12', PVC SDR-26 for depths between 12' and 26', and class 52 D.I.P. for depths of 26' or more.
14. A structure adjustment shall include removing and salvaging the existing casting assembly, removing existing concrete rings to the precast section. Install new rings and salvaged casting to proposed grades, cleaning casting flange by mechanical means to insure a sound surface and install an external chimney seal from casting to precast section. Chimney seals shall be Infi-Shield Uni-Band or an approved equal.

NORTH

0 5 10 20

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Signature

Printed Name Eric G. Meyer

Registration Number 44592

UTILITY PLAN

C400

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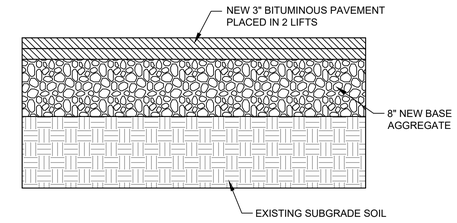
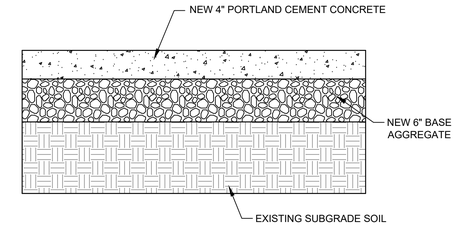


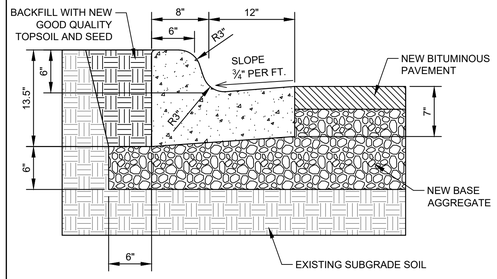
LIGHT-DUTY BITUMINOUS CONSTRUCTION DETAIL

NOT TO SCALE



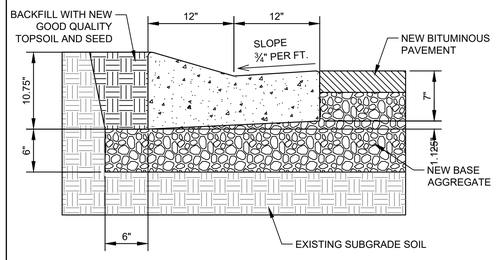
CONCRETE SIDEWALK CONSTRUCTION DETAIL

NOT TO SCALE



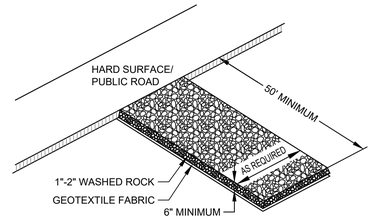
B612 CONCRETE CURB & GUTTER DETAIL

NOT TO SCALE



SURMOUNTABLE CURB & GUTTER DETAIL

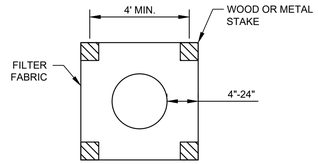
NOT TO SCALE



ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

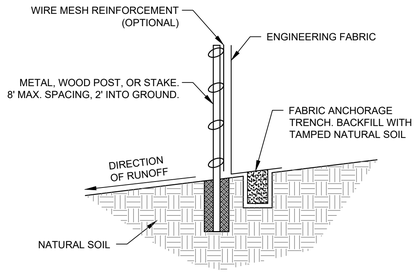
NOTE: FOR EXISTING CATCH BASINS IN PAVEMENT AREAS, SAND BAGS, AGGREGATE WRAPPED IN FILTER FABRIC, OR SEDIMENT TRAPS SHOULD BE USED.



MAXIMUM DISTANCE BETWEEN POSTS IS 2'. BOTTOM OF FENCE IS BURIED IN TRENCH, SIMILAR TO NORMAL SILT FENCE INSTALLATION.

SILT FENCE INLET SEDIMENT FILTER

NOT TO SCALE



NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH WIRES, OR WOOD POSTS WITH STAPLES.

SILT FENCE INSTALLATION DETAIL

NOT TO SCALE

EROSION CONTROL NOTES

1. Owner and Contractor shall obtain MPCA-NPDES permit. Contractor shall be responsible for all fees pertaining to this permit. The SWPPP shall be kept onsite at all times.
2. Install temporary erosion control measures (inlet protection, silt fence, and rock construction entrances) prior to beginning any excavation or demolition work at the site.
3. Erosion control measures shown on the erosion control plan are the absolute minimum. The contractor shall install temporary earth dikes, sediment traps or basins, additional siltation fencing, and/or disk the soil parallel to the contours as deemed necessary to further control erosion. All changes shall be recorded in the SWPPP.
4. All construction site entrances shall be surfaced with crushed rock across the entire width of the entrance and from the entrance to a point 50' into the construction zone.
5. The toe of the silt fence shall be trenched in a minimum of 6". The trench backfill shall be compacted with a vibratory plate compactor.
6. All grading operations shall be conducted in a manner to minimize the potential for site erosion. Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin.
7. All exposed soil areas must be stabilized as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement.
8. The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water. Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.
9. Pipe outlets must be provided with energy dissipation within 24 hours of connection to surface water.
10. All riprap shall be installed with a filter material or soil separation fabric and comply with the Minnesota Department of Transportation Standard Specifications.
11. All storm sewers discharging into wetlands or water bodies shall outlet at or below the normal water level of the respective wetland or water body at an elevation where the downstream slope is 1 percent or flatter. The normal water level shall be the invert elevation of the outlet of the wetland or water body.
12. All storm sewer catch basins not needed for site drainage during construction shall be covered to prevent runoff from entering the storm sewer system. Catch basins necessary for site drainage during construction shall be provided with inlet protection.
13. In areas where concentrated flows occur (such as swales and areas in front of storm catch basins and intakes) the erosion control facilities shall be backed by stabilization structure to protect those facilities from the concentrated flows.
14. Inspect the construction site once every seven days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. All inspections shall be recorded in the SWPPP.
15. All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access. All repairs shall be recorded in the SWPPP.
16. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.
17. All soils tracked onto pavement shall be removed daily.
18. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.
19. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.
20. Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
21. Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
22. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed onsite.
23. All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
24. Upon completion of the project and stabilization of all graded areas, all temporary erosion control facilities (silt fences, hay bales, etc.) shall be removed from the site.
25. All permanent sedimentation basins must be restored to their design condition immediately following stabilization of the site.
26. Contractor shall submit Notice of Termination for MPCA-NPDES permit within 30 days after Final Stabilization.

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Preliminary Site Plan Review

5/29/19

Not For Construction

Ernst House Redevelopment

211 North Walnut Street
Chaska, MN 55318
Project: 2018007_211N

Drawings Issued	Date

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.

Signature
Printed Name Eric G. Meyer
Registration Number 44592

DETAILS

C500

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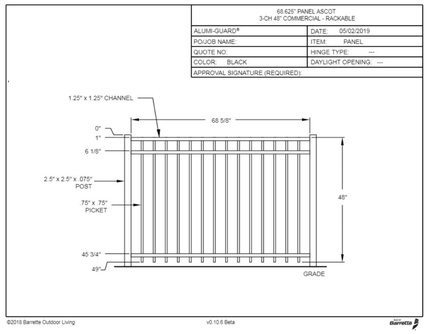
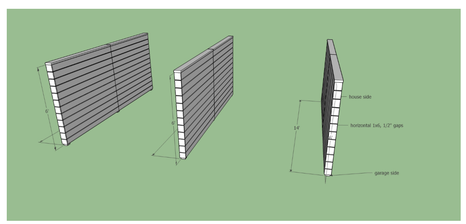
Plotted: 5/29/2019 2018\12186163 - Ernst House And Townhouse Dev\C. Design\Drawing Files\12186163 C500.dwg

Fence 1 - (FNC - 1)
HERITAGE RAILING

Fence 2 - (FNC - 2)



Fence 3 - (FNC - 3)
6' Cedar Privacy



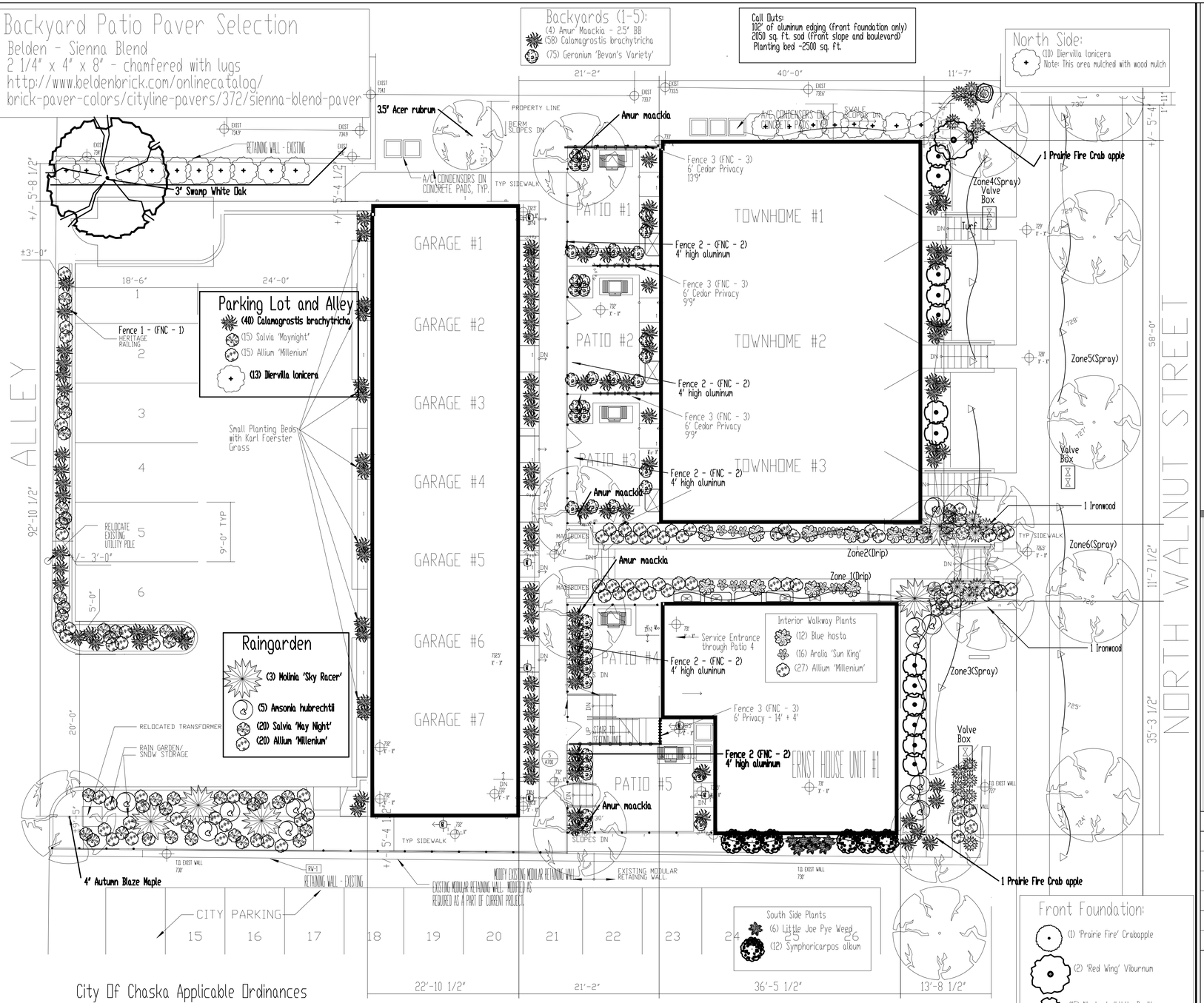
Backyard Patio Paver Selection

Belden - Sienna Blend
2 1/4" x 4" x 8" - chamfered with lugs
http://www.beldenbrick.com/onlinecatalog/brick-paver-colors/cityline-pavers/372/sienna-blend-paver

Backyards (1-5):

(4) Amur' Maackia - 2.5" BB
(58) Calamagrostis brachytricha
(75) Geranium 'Bevan's Variety'

Call Outs:
102" of aluminum edging (front foundation only)
2050 sq. ft. sod (front slope and boulevard)
Planting bed ~2500 sq. ft.



Front Foundation:

- (1) 'Prairie Fire' Crabapple
- (2) 'Red Wing' Viburnum
- (15) Ninebark 'Little Devil'
- (22) Calamagrostis brachytricha
- (15) Prairie Dropseed
- (8) Amsonia hubrechtii
- (5) Salvia 'Maynight'
- (10) Allium 'Millenium'
- (2) Molina 'Sky Racer'

Plant Table

(1)	4" B&B	Acer x freemanii 'Jeffersred'
(1)	3.5" B&B	Acer rubrum 'Armstrong'
(1)	3.0" B&B	Quercus bicolor
(2)	2.5" B&B	Ostrya virginiana
(4)	2" B&B	Amur maackia
(2)	2" B&B	Malus 'Prairie Fire'
(23)	#5	Diervilla lonicera
(13)	#5	Physocarpus opulifolius
(12)	#2	Symphoricarpos orbiculatus
(2)	#5	Viburnum 'Blue Muffin'
(98)	#1	Calamagrostis brachytricha
(5)	#1	Molinia 'Sky Racer'
(23)	#1	Sporobolus heterolepis

Plant Table

(40)	#1	Salvia 'May Night'
(45)	#1	Allium 'Millenium'
(13)	#1	Amsonia hubrechtii
(13)	#2	Aralia 'Sun King'
(6)	#1	Eupatorium 'Little Joe'
(75)	#1	Geranium 'Bevan's Variety'
(12)	#5	Hosta 'Blue Angel'
(3)	10T	Sedum kamtschaticum

City Of Chaska Applicable Ordinances

9.6.3.9 Species	Tree species subscribe to the City ordinance. The species choices are largely native cultivars - Acer x freemanii, Acer rubrum, Quercus bicolor and Ostrya virginiana. The Amur maackia was chosen because of its unique open canopy appropriate for a patio area.
9.6.5.1 Minimum Caliper	Based on the square footage of 5330 this project requires 17" of overstory tree caliper, with 10% each of 4", 3.5" and 3.0". Our totals exceed these requirements. Based on the required 6 overstory trees, we require 25% understory trees. Our two crabapples comply with this requirement. Based on the required shrubs per perimeter footage and/or building footprint we require 17 shrubs. We have 38 shrubs.
9.6.6.1 Screening	Parking screening is not required as the parking area is not seen from the public street.

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5/29/19

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LANDSCAPE PLAN

L001

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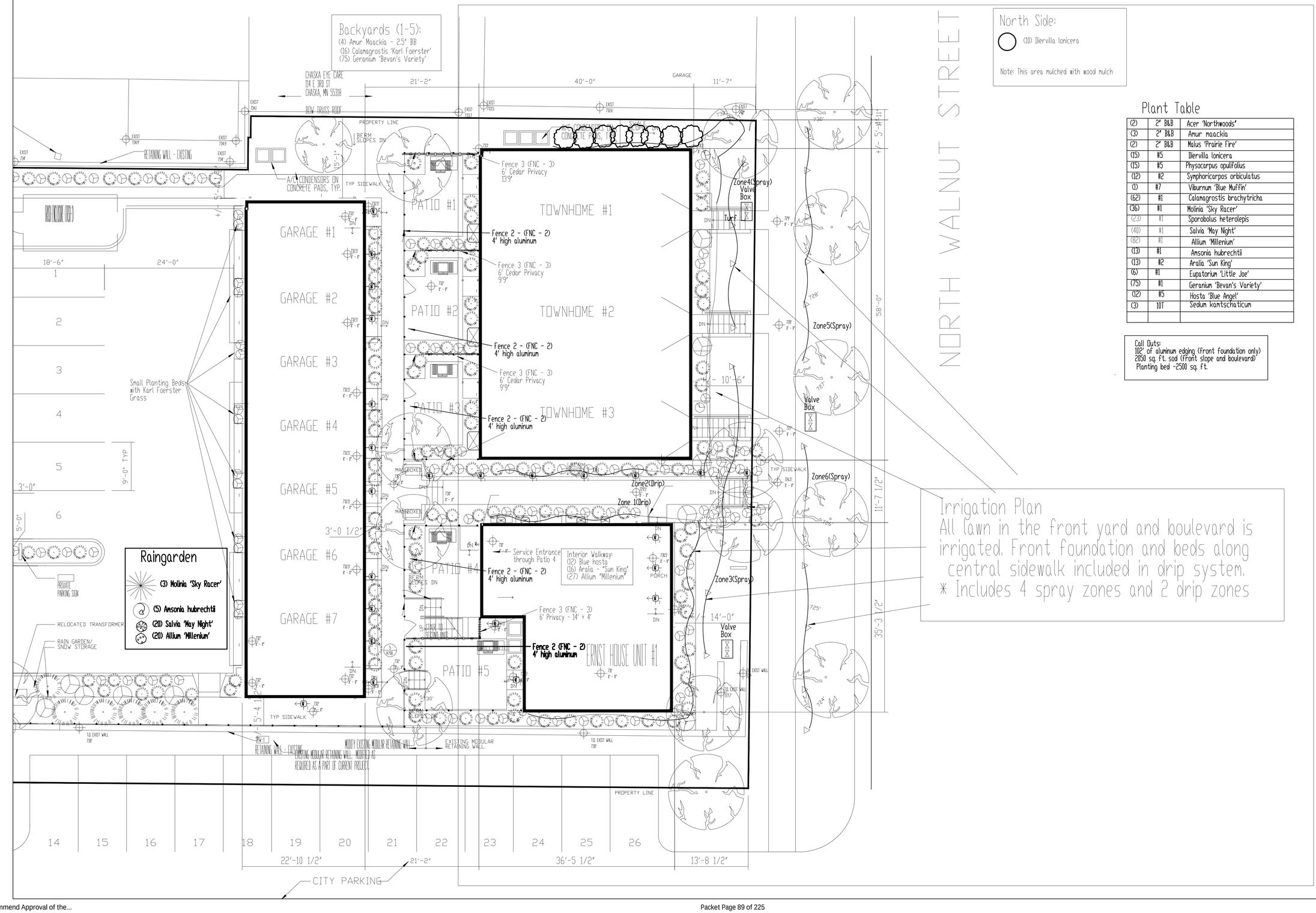
Irrigation Plan



North Side:

(10) Diervilla lonicera

Note: This area mulched with wood mulch

Plant Table

(2)	2" B&B	Acer 'Northwoods'
(3)	2" B&B	Amur maackia
(2)	2" B&B	Malus 'Prairie Fire'
(15)	#5	Diervilla lonicera
(15)	#5	Physocarpus opulifolius
(12)	#2	Symphoricarpos orbiculatus
(1)	#7	Viburnum 'Blue Muffin'
(62)	#1	Calamagrostis brachytricha
(36)	#1	Molinia 'Sky Racer'
(23)	#1	Sporobolus heterolepis
(40)	#1	Salvia 'May Night'
(82)	#1	Allium 'Millenium'
(13)	#1	Amsonia hubrechtii
(13)	#2	Aralia 'Sun King'
(6)	#1	Eupatorium 'Little Joe'
(75)	#1	Geranium 'Bevan's Variety'
(12)	#5	Hosta 'Blue Angel'
(3)	10T	Sedum kamtschaticum

Call Outs:
102" of aluminum edging (front foundation only)
2050 sq. ft. sod (front slope and boulevard)
Planting bed -2500 sq. ft.

Irrigation Plan
All lawn in the front yard and boulevard is irrigated. Front foundation and beds along central sidewalk included in drip system.
* Includes 4 spray zones and 2 drip zones

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IRRIGATION PLAN

L002

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ARCHITECTURAL SITE PLAN

A001

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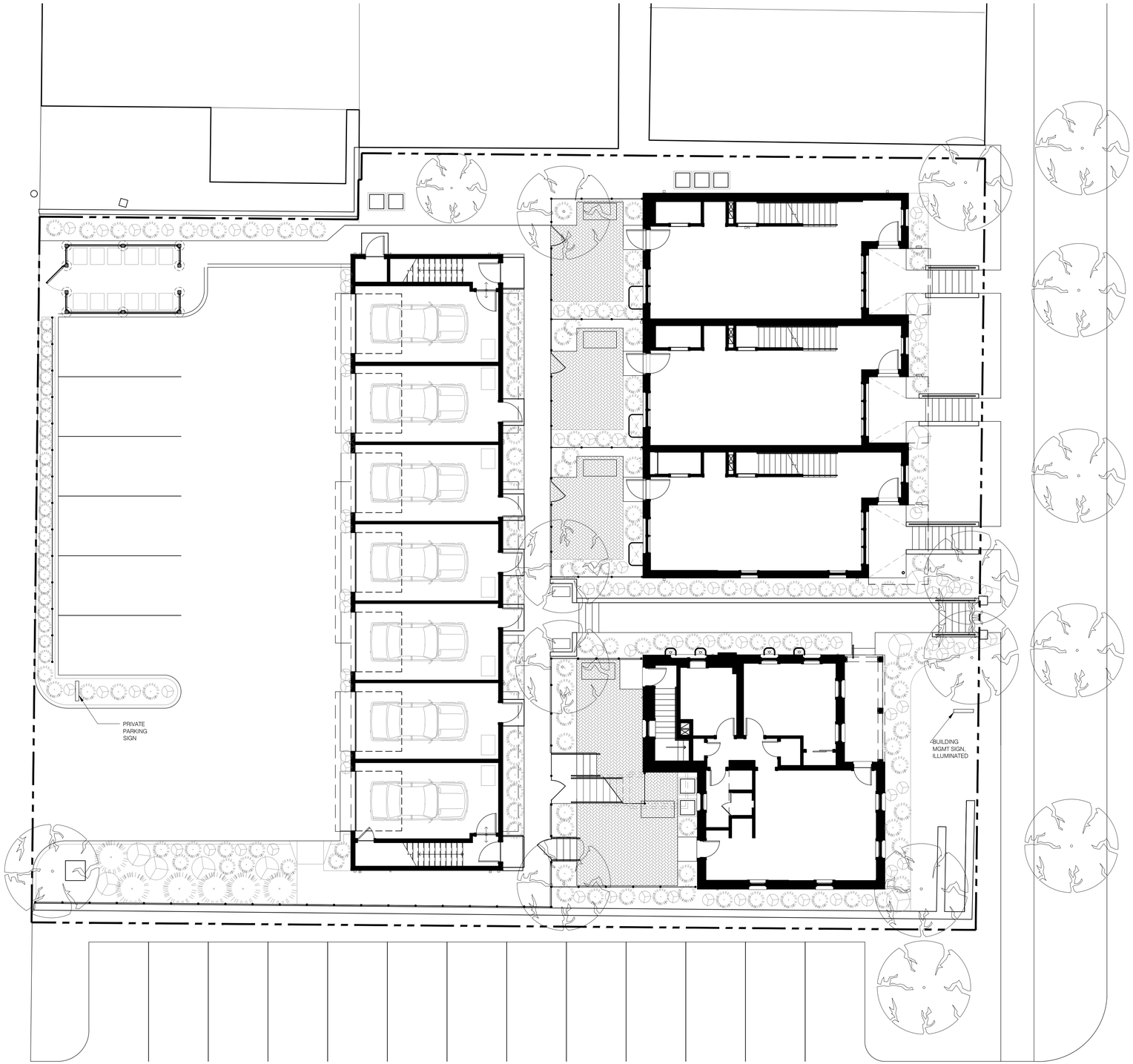

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SIGN PLAN

A002

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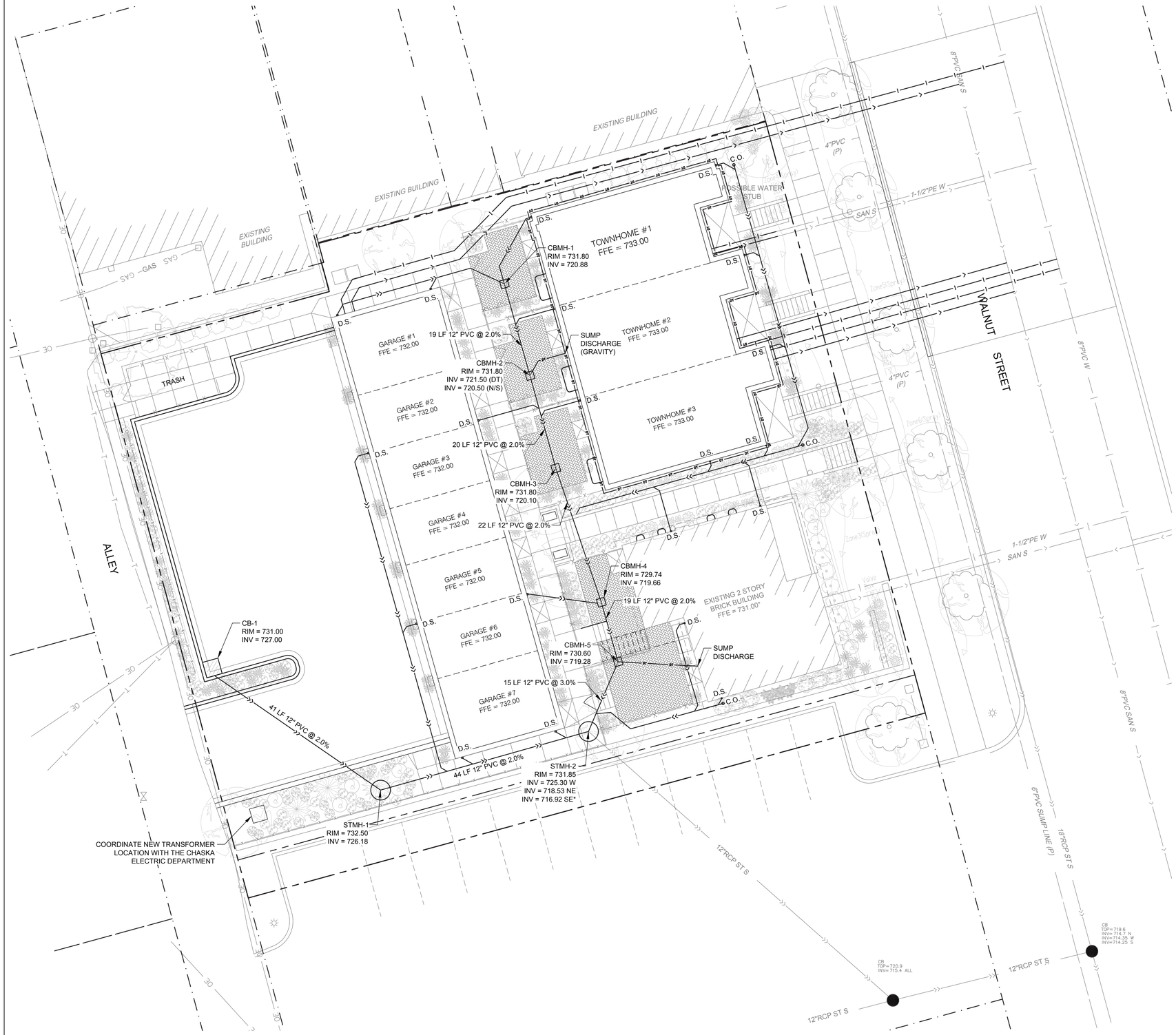

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LANDSCAPE OVERLAY PLAN

A003

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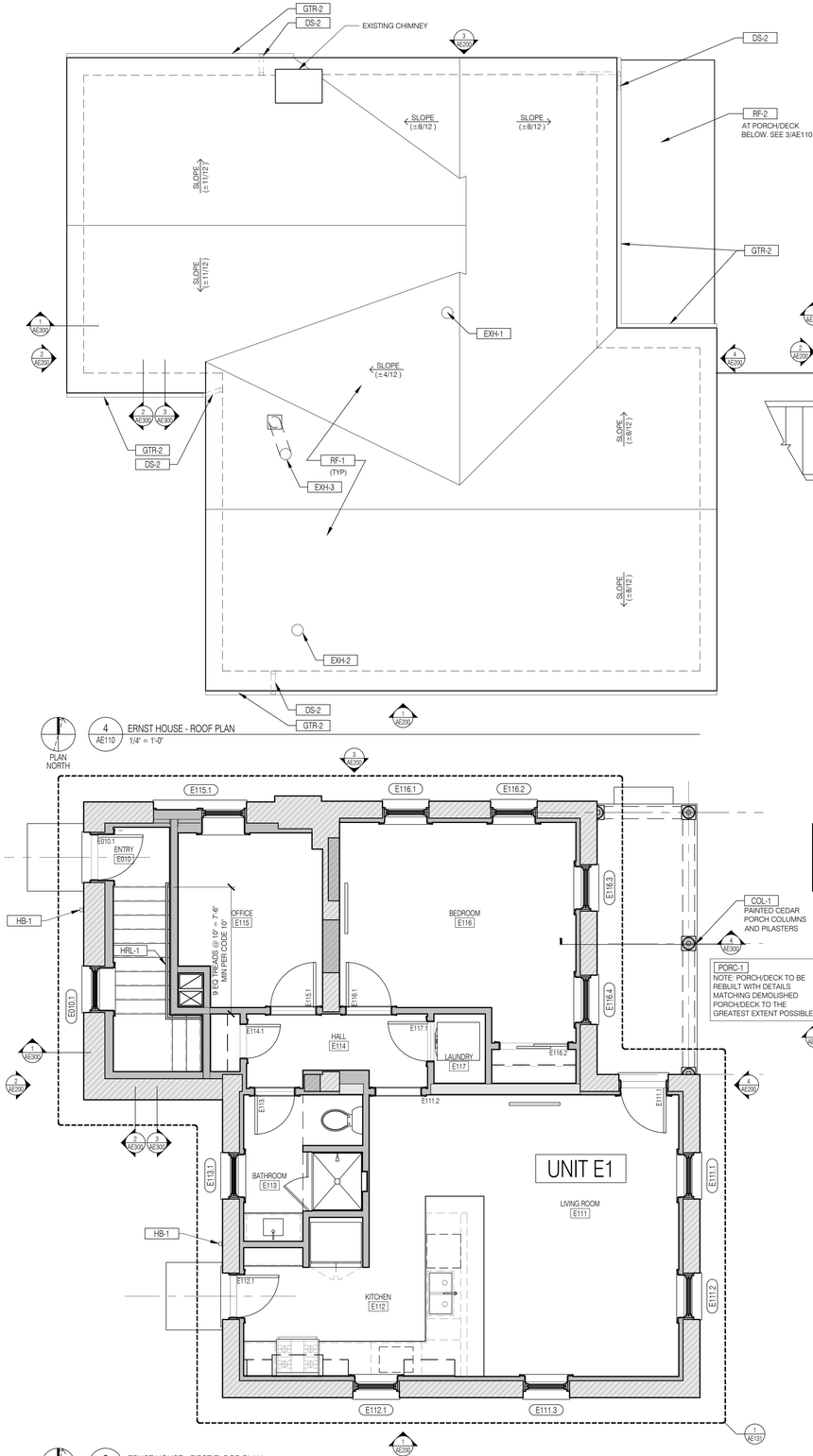
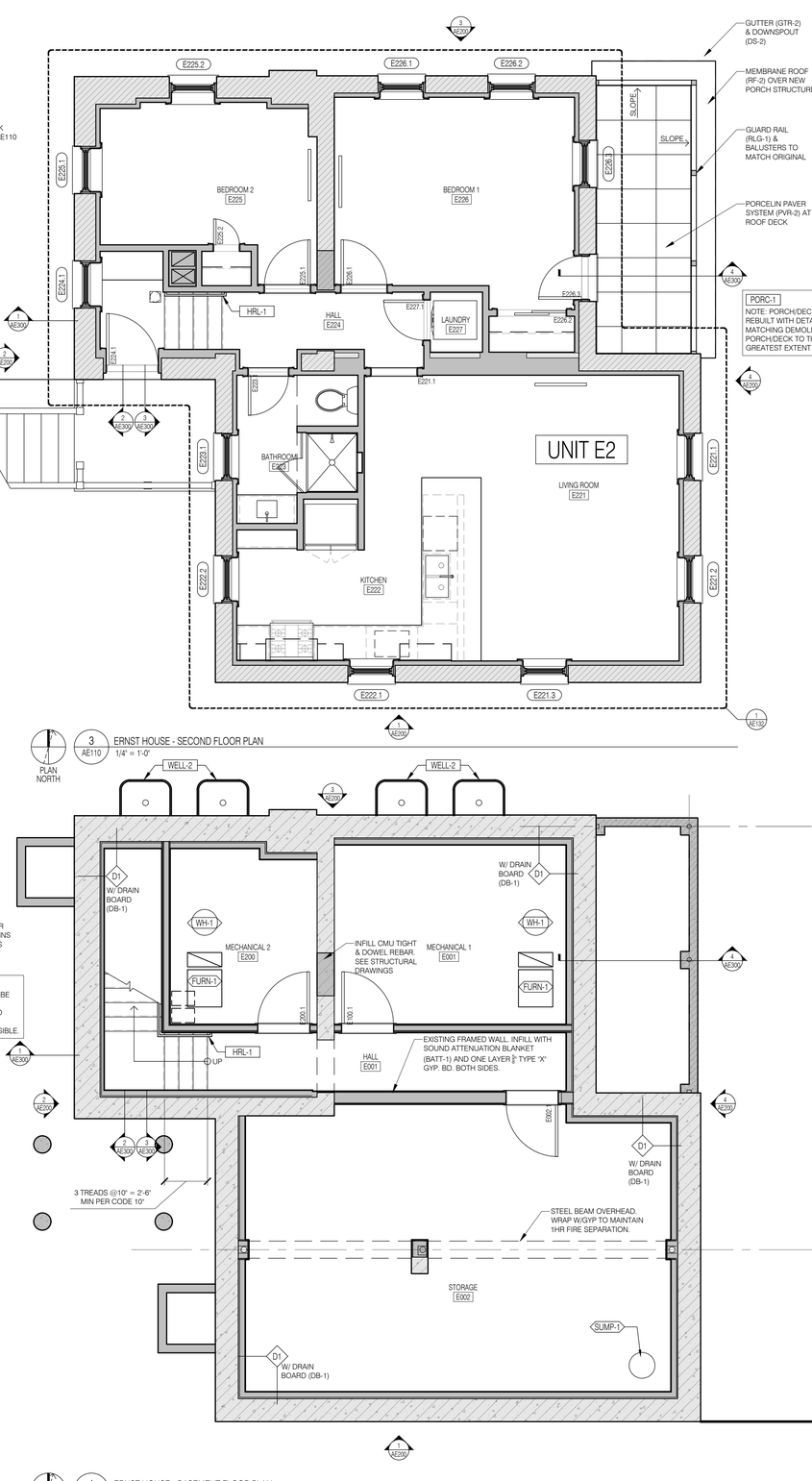


4 AE110 ERNST HOUSE - ROOF PLAN 1/4" = 1'-0"

2 AE110 ERNST HOUSE - FIRST FLOOR PLAN 1/4" = 1'-0"



3 AE110 ERNST HOUSE - SECOND FLOOR PLAN 1/4" = 1'-0"

1 AE110 ERNST HOUSE - BASEMENT FLOOR PLAN 1/4" = 1'-0"

FLOOR PLAN LEGEND

- EXISTING WALL TO REMAIN
- NEW WALL - SEE WALL TYPES
- ##### DENOTES DOOR NUMBER. REFER TO SHEET A6## FOR DOOR SCHEDULE & DOOR TYPE INFORMATION
- ## DENOTES WALL TYPE. REFER TO SHEET A600 FOR ADDITIONAL INFORMATION
- ## DENOTES WINDOW TAG. REFER TO A6## - WINDOW SCHEDULE FOR ADDITIONAL INFORMATION
- XMI ## DENOTES MILLWORK NUMBER. REFER TO INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION
- ### DENOTES EQUIPMENT NUMBER. SEE A6## - EQUIPMENT & APPLIANCE SCHEDULE FOR ADDITIONAL INFORMATION
- ##-# OR (##-#) DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- # DENOTES CONSTRUCTION KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

FLOOR PLAN GENERAL NOTES:

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE FROM FACE OF SHEATHING, MASONRY, OR CONCRETE TO FACE OF SHEATHING, MASONRY OR CONCRETE U.N.O.
2. ALL DIMENSIONS AT INTERIOR WALLS ARE FROM FACE OF STUD, MASONRY, OR CONCRETE TO FACE OF STUD, MASONRY OR CONCRETE U.N.O.
3. ALL INTERIOR WALL TO BE WALL TYPE "W4" UNLESS NOTED OTHERWISE. SEE WALL TYPES ON SHEET A600.
3. ALL FURRING WALLS AT EXTERIOR MASONRY TO BE WALL TYPE "D1" UNLESS NOTED OTHERWISE. SEE WALL TYPES ON SHEET A600.
4. EQUIPMENT & FURNITURE SHOWN DASHED IS PROVIDED BY OTHERS AND IS SHOWN FOR REFERENCE ONLY.
5. WHERE DRYWALL ABUTS DISSIMILAR MATERIALS, PROVIDE CAULK CHANNEL TEAR AWAY BEAD & SEALANT
6. ALL SURFACES DISTURBED BY DEMOLITION TO BE PATCHED/REPAIRED.
7. U.N.O. ALL WALL, CEILING, AND FLOOR PATCHES SHALL RECEIVE NEW FINISHES IN A LIKE NEW CONDITION TO MATCH ADJACENT FINISHES
8. ALL PIPE AND DUCT FLOOR PENETRATIONS SHALL BE SEALED WITH A UL LISTED FIRESTOP MATCHING THE RATING OF THE FLOOR AND RATED TO RESIST THE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION.

ROOF PLAN LEGEND

- SLOPE (#/12") EFFECTIVE ROOF SLOPE DUE TO SLOPED STRUCTURE
- SLOPE (#/12") EFFECTIVE ROOF SLOPE DUE TO TAPERED INSULATION
- AREAS OF FIRE TRTD PLYWD ROOF DECKING (SHT-5) IN LIEU OF STANDARD PLYWOOD ROOF DECKING (SHT-4)
- ##-# OR (##-#) DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- R# DENOTES CONSTRUCTION KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

ROOF PLAN GENERAL NOTES:

1. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. DIMENSIONS NOTED FOR EXISTING BUILDING ARE APPROXIMATE.
2. CONNECT ALL DOWNSPOUTS TO BELOW GRADE DRAIN LEADS TO CITY STORM SEWER.

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5/29/19

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ERNST HOUSE:
FLOOR & ROOF PLANS

AE110

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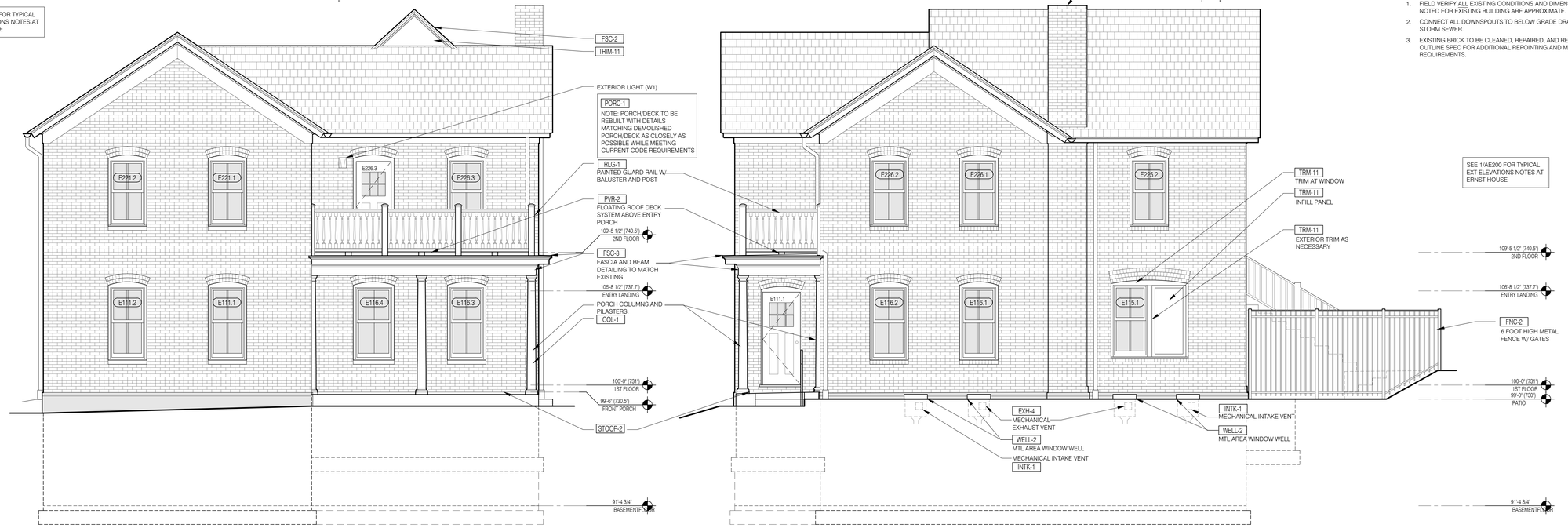
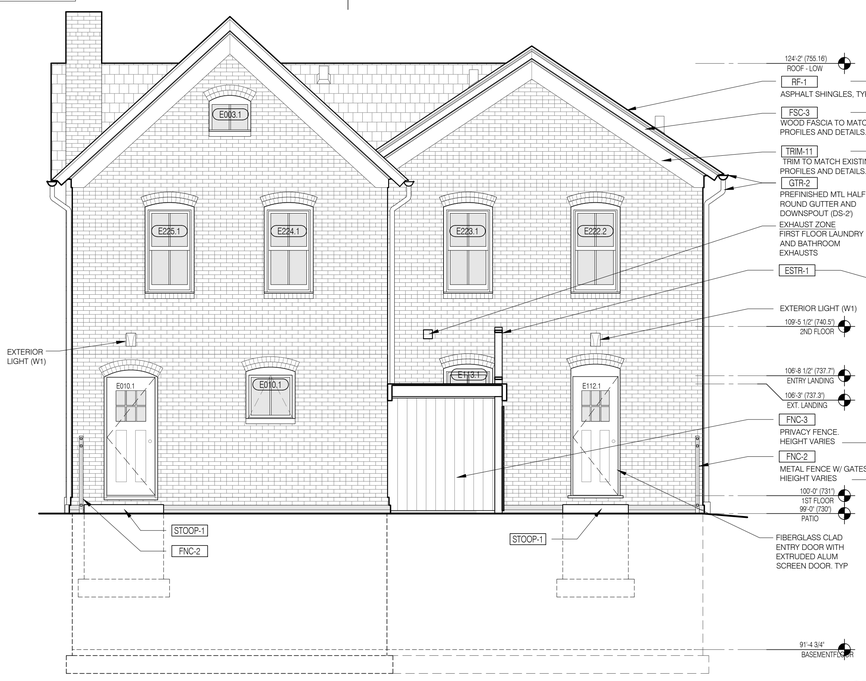
SEE 1/AE200 FOR TYPICAL EXT ELEVATIONS NOTES AT ERNST HOUSE



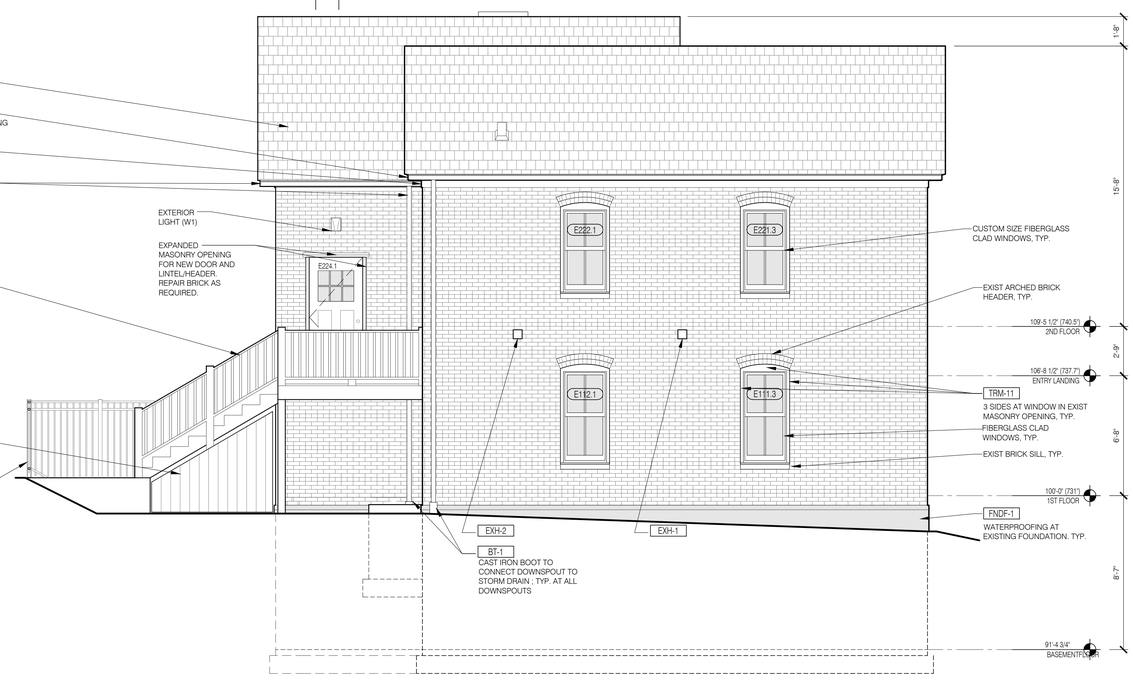
4 AE200 ERNST HOUSE - EAST ELEVATION
1/4" = 1'-0"

3 AE200 ERNST HOUSE - NORTH ELEVATION
1/4" = 1'-0"

SEE 1/AE200 FOR TYPICAL EXT ELEVATIONS NOTES AT ERNST HOUSE



2 AE200 ERNST HOUSE - WEST ELEVATION
1/4" = 1'-0"



1 AE200 ERNST HOUSE - SOUTH ELEVATION
1/4" = 1'-0"

EXTERIOR ELEVATION GENERAL NOTES:

1. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. DIMENSIONS NOTED FOR EXISTING BUILDING ARE APPROXIMATE.
2. CONNECT ALL DOWNSPOUTS TO BELOW GRADE DRAIN LEADING TO CITY STORM SEWER.
3. EXISTING BRICK TO BE CLEANED, REPAIRED, AND REPOINTED. SEE OUTLINE SPEC FOR ADDITIONAL REPOINTING AND MASONRY REQUIREMENTS.

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Registration Number

ERNST HOUSE:
EXTERIOR ELEVATIONS

AE200

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PLAN KEYNOTES (##)

FLOOR PLAN

A1 ###

FOUNDATION

F1 AREA DRAIN AT BOTTOM OF WINDOW WELL CONNECTED TO DRAIN TILE SYSTEM AND SUMP.

F2 PROVIDE INTERIOR AND EXTERIOR DRAIN TILE SYSTEM CONNECTED TO SUMP PUMP.

ROOF

R1 SEE 2/AT111 FOR ROOFING NOTES AT CANOPIES

R2 PROVIDE MEMBRANE ROOFING (RF-2) AT CANOPIES

ROOF PLAN LEGEND

- SLOPE (#/12) — EFFECTIVE ROOF SLOPE DUE TO SLOPED STRUCTURE
- SLOPE (#/12) — EFFECTIVE ROOF SLOPE DUE TO TAPERED INSULATION
- AREAS OF FIRE TRTD PLYWD ROOF DECKING (SHT-5) IN LIEU OF STANDARD PLYWOOD ROOF DECKING (SHT-4)
- ##-# OR (##-#) — DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- R# — DENOTES PLAN KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

ROOF PLAN GENERAL NOTES:

1. CONNECT ALL DOWNSPOUTS TO BELOW GRADE DRAIN LEADS TO CITY STORM SEWER.

FOUNDATION PLAN LEGEND

- STRUCTURAL CONCRETE STOOP; SEE STRUCTURAL DRAWINGS
- (##) — DENOTES WALL TYPE. REFER TO SHEET A600 FOR ADDITIONAL INFORMATION
- ##-# OR (##-#) — DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- F# — DENOTES PLAN KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

FOUNDATION PLAN GENERAL NOTES:

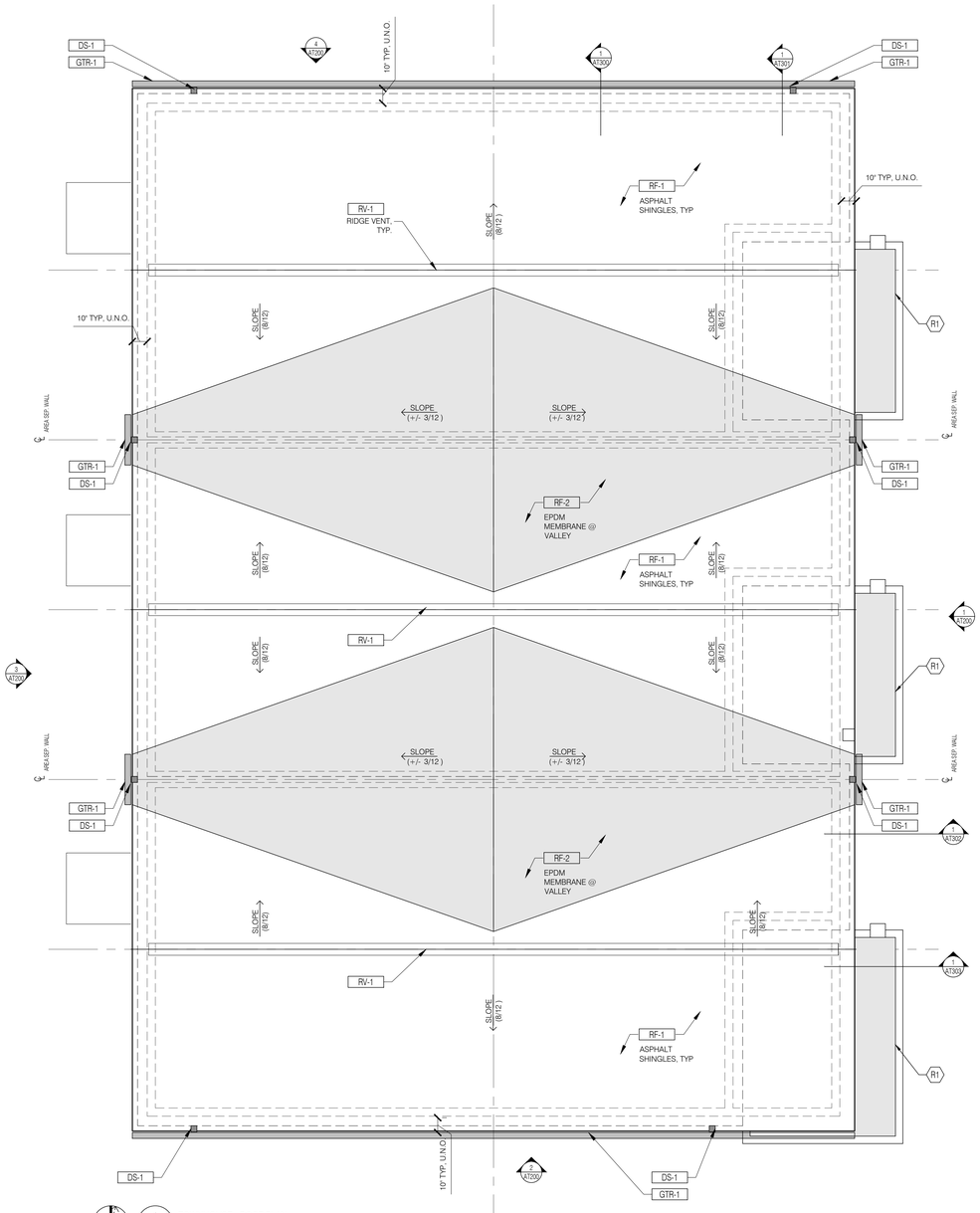
1. ALL DIMENSIONS ARE FROM FACE OF MASONRY OR CONCRETE TO FACE OF MASONRY OR CONCRETE U.N.O.
2. SEE STRUCTURAL PLANS FOR DIMENSIONS, SIZES AND NOTES NOT SHOWN HERE.

FLOOR PLAN GENERAL NOTES:

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE FROM FACE OF SHEATHING, MASONRY, OR CONCRETE TO FACE OF SHEATHING, MASONRY OR CONCRETE U.N.O.
2. ALL DIMENSIONS AT INTERIOR WALLS ARE FROM FACE OF STUD, MASONRY, OR CONCRETE TO FACE OF STUD, MASONRY OR CONCRETE U.N.O.
3. ALL INTERIOR WALL TO BE WALL TYPE "W4" UNLESS NOTED OTHERWISE. SEE WALL TYPES ON SHEET A600.
4. EQUIPMENT & FURNITURE SHOWN DASHED IS PROVIDED BY OTHERS AND IS SHOWN FOR REFERENCE ONLY.
5. WHERE DRYWALL ABUTS DISSIMILAR MATERIALS, PROVIDE CAULK CHANNEL TEAR AWAY BEAD & SEALANT

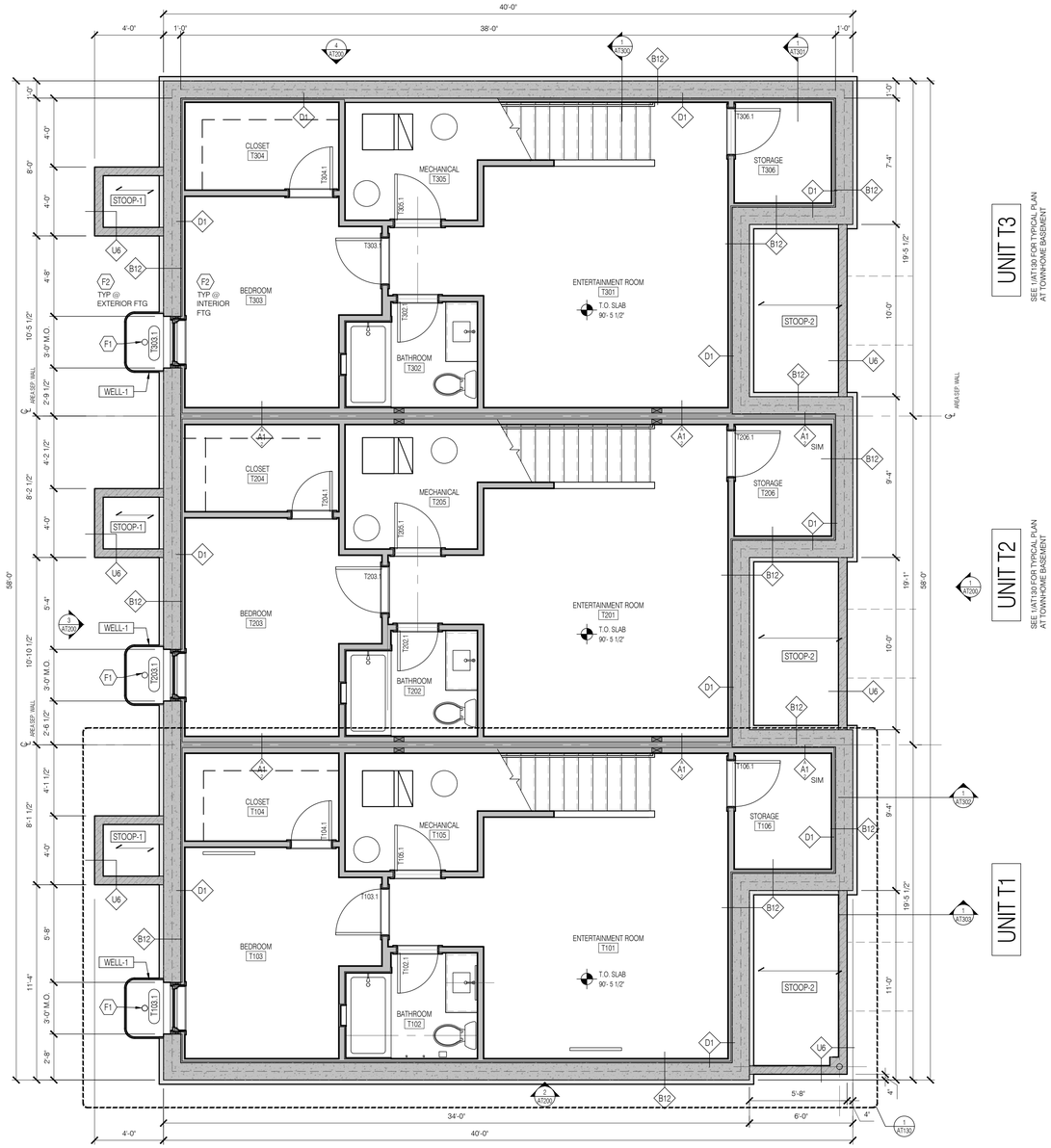
FLOOR PLAN LEGEND

- NEW WALL - SEE WALL TYPES
- ##### — DENOTES DOOR NUMBER. REFER TO SHEET A6## FOR DOOR SCHEDULE & DOOR TYPE INFORMATION
- (##) — DENOTES WALL TYPE. REFER TO SHEET A600 FOR ADDITIONAL INFORMATION
- ## — DENOTES WINDOW TAG. REFER TO A6## - WINDOW SCHEDULE FOR ADDITIONAL INFORMATION
- OMW ## — DENOTES MILLWORK NUMBER. REFER TO INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION
- ### — DENOTES EQUIPMENT NUMBER. SEE A6## - EQUIPMENT & APPLIANCE SCHEDULE FOR ADDITIONAL INFORMATION
- ##-# OR (##-#) — DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- A# — DENOTES PLAN KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS



1 AT110 TOWNHOUSE - ROOF PLAN
1/4" = 1'-0"

PLAN NORTH



1 AT110 TOWNHOUSE - BASEMENT FLOOR PLAN/FOUNDATION
1/4" = 1'-0"

PLAN NORTH

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Preliminary Site Plan Review
5/29/19

Not For Construction

Ernst House Redevelopment

211 North Walnut Street
Chaska, MN 55318
Project: 2018007_211N

Drawings Issued	Date

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Signature

Printed Name

Registration Number

TOWNHOMES:
BSMNT & ROOF PLANS

AT110

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PLAN KEYNOTES (##)

FLOOR PLAN

A1 ###

FOUNDATION

F1 AREA DRAIN AT BOTTOM OF WINDOW WELL CONNECTED TO DRAIN TILE SYSTEM AND SUMP.

F2 PROVIDE INTERIOR AND EXTERIOR DRAIN TILE SYSTEM CONNECTED TO SUMP PUMP.

ROOF

R1 SEE 2/AT111 FOR ROOFING NOTES AT CANOPIES

R2 PROVIDE MEMBRANE ROOFING (RF-2) AT CANOPIES

FLOOR PLAN GENERAL NOTES:

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE FROM FACE OF SHEATHING, MASONRY, OR CONCRETE TO FACE OF SHEATHING, MASONRY OR CONCRETE U.N.O.
2. ALL DIMENSIONS AT INTERIOR WALLS ARE FROM FACE OF STUD, MASONRY, OR CONCRETE TO FACE OF STUD, MASONRY OR CONCRETE U.N.O.
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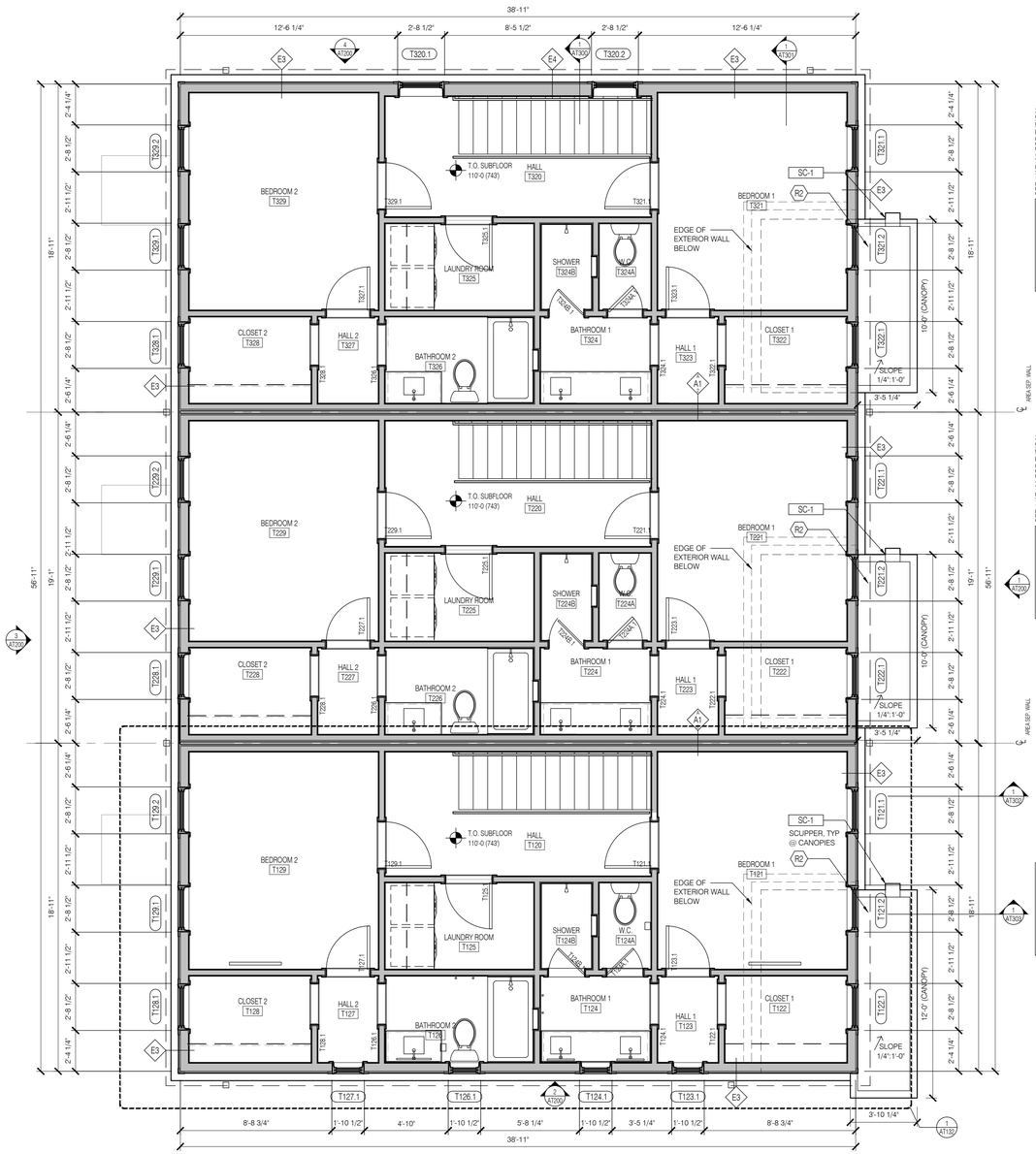
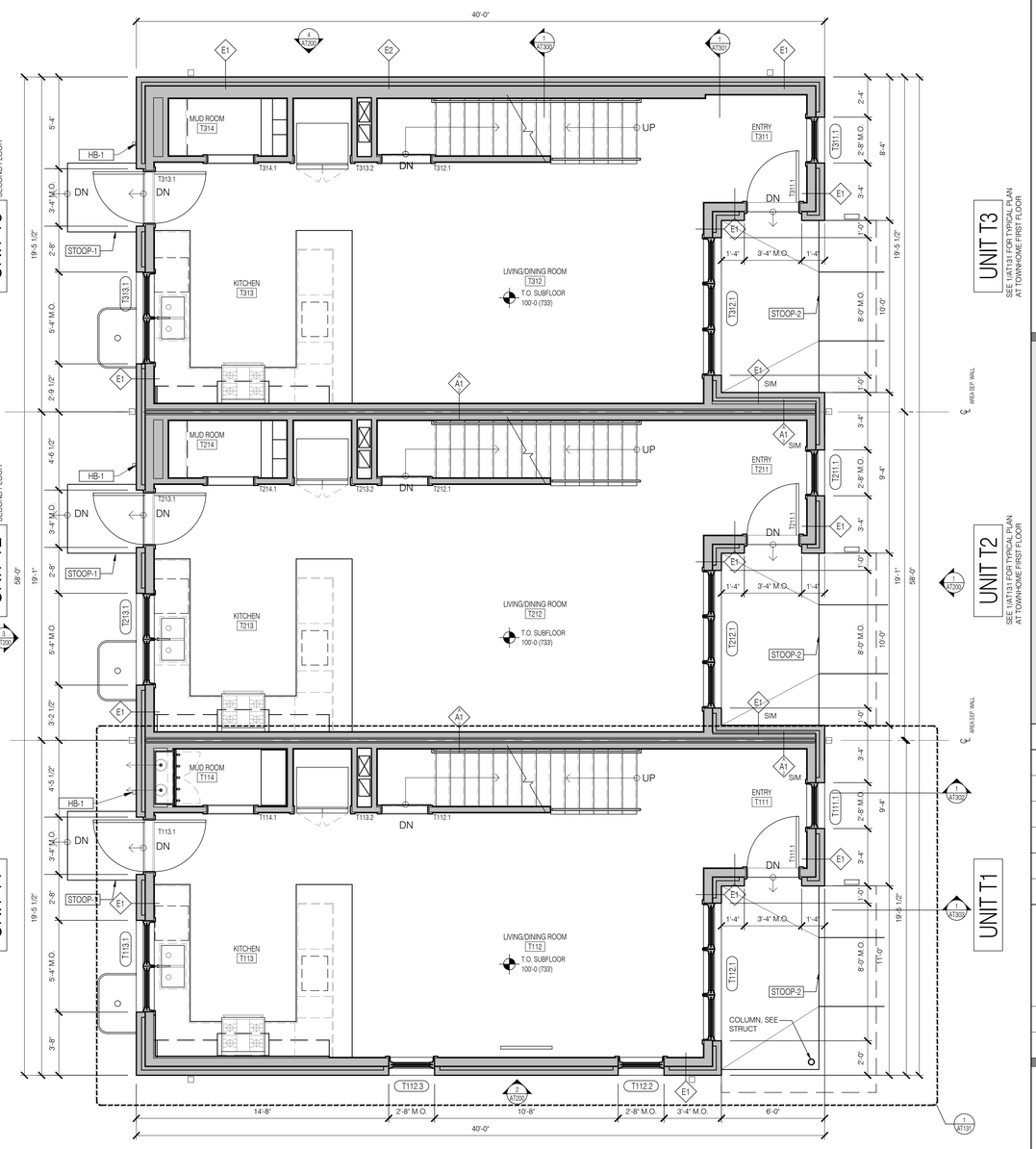
FLOOR PLAN LEGEND

- NEW WALL - SEE WALL TYPES
- ##### DENOTES DOOR NUMBER. REFER TO SHEET A6## FOR DOOR SCHEDULE & DOOR TYPE INFORMATION
- (##) DENOTES WALL TYPE. REFER TO SHEET A600 FOR ADDITIONAL INFORMATION
- ## DENOTES WINDOW TAG. REFER TO A6## - WINDOW SCHEDULE FOR ADDITIONAL INFORMATION
- OMW ## DENOTES MILLWORK NUMBER. REFER TO INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION
- ### DENOTES EQUIPMENT NUMBER. SEE A6## - EQUIPMENT & APPLIANCE SCHEDULE FOR ADDITIONAL INFORMATION
- ##-# OR (##-#) DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- A# DENOTES PLAN KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS



2 AT111 TOWNHOUSE - SECOND FLOOR PLAN
1/4" = 1'-0"

PLAN NORTH



1 AT111 TOWNHOUSE - FIRST FLOOR PLAN
1/4" = 1'-0"

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TOWNHOMES:
1ST & 2ND FLR PLANS

AT111

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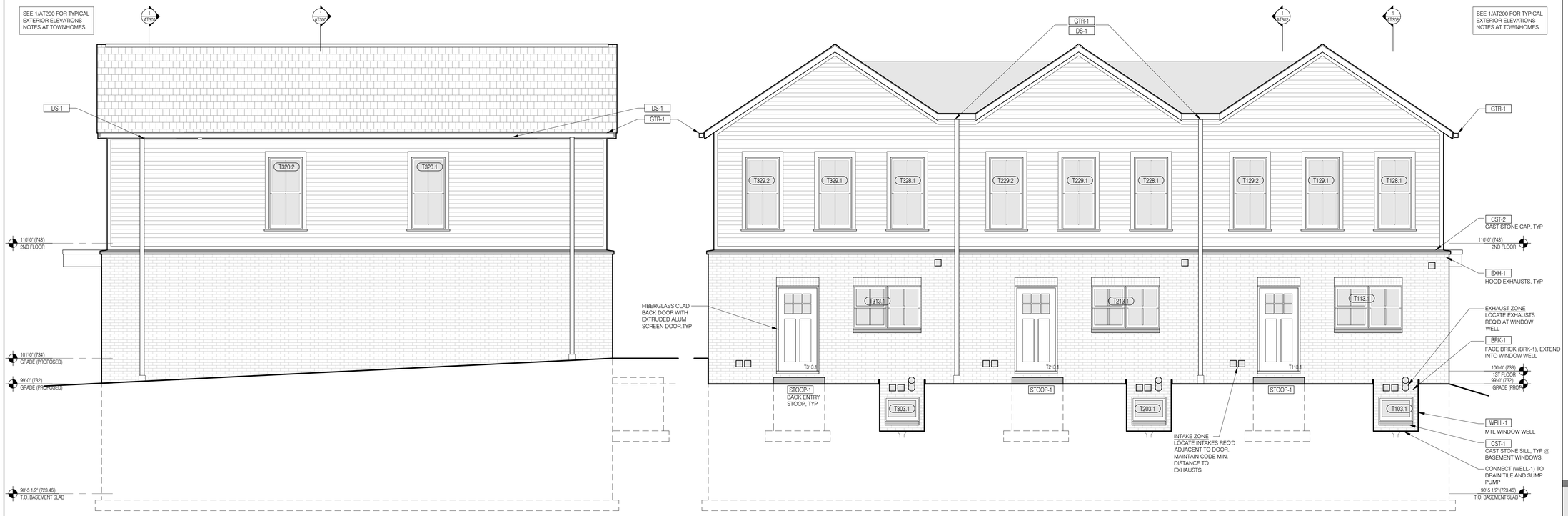

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TOWNHOMES:
EXTERIOR ELEVATIONS

AT200

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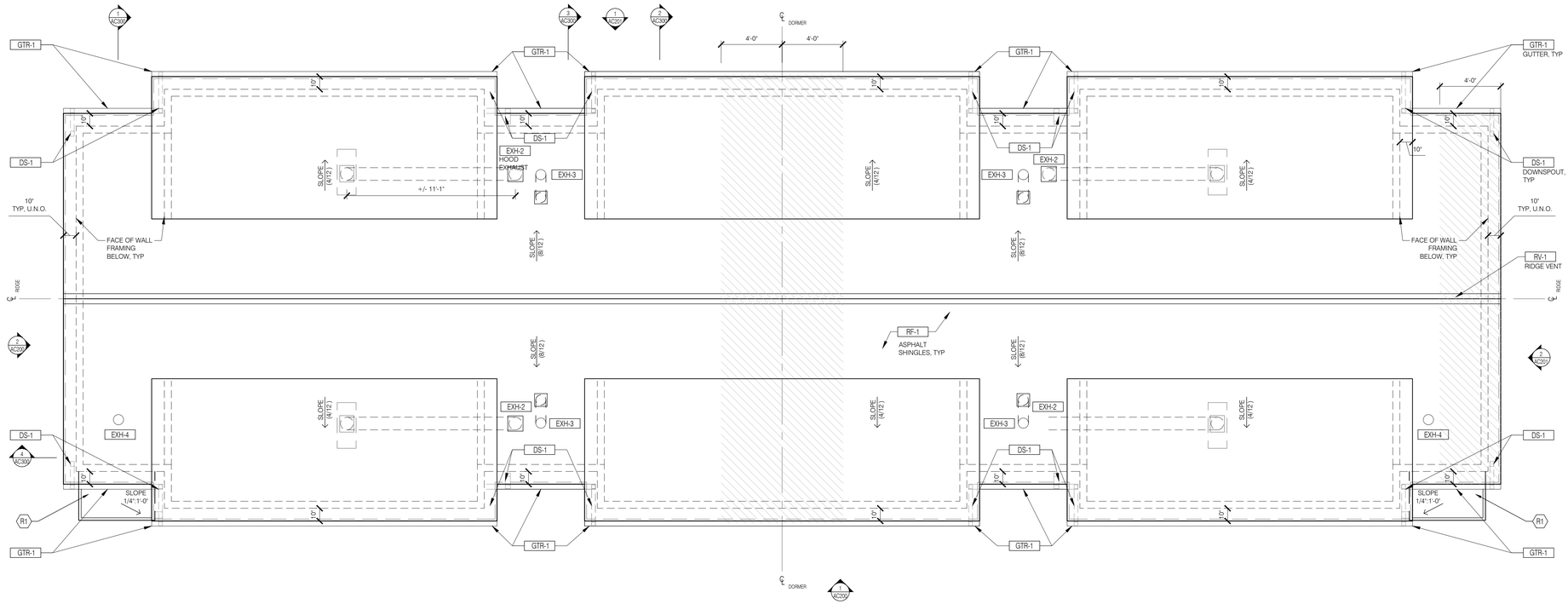
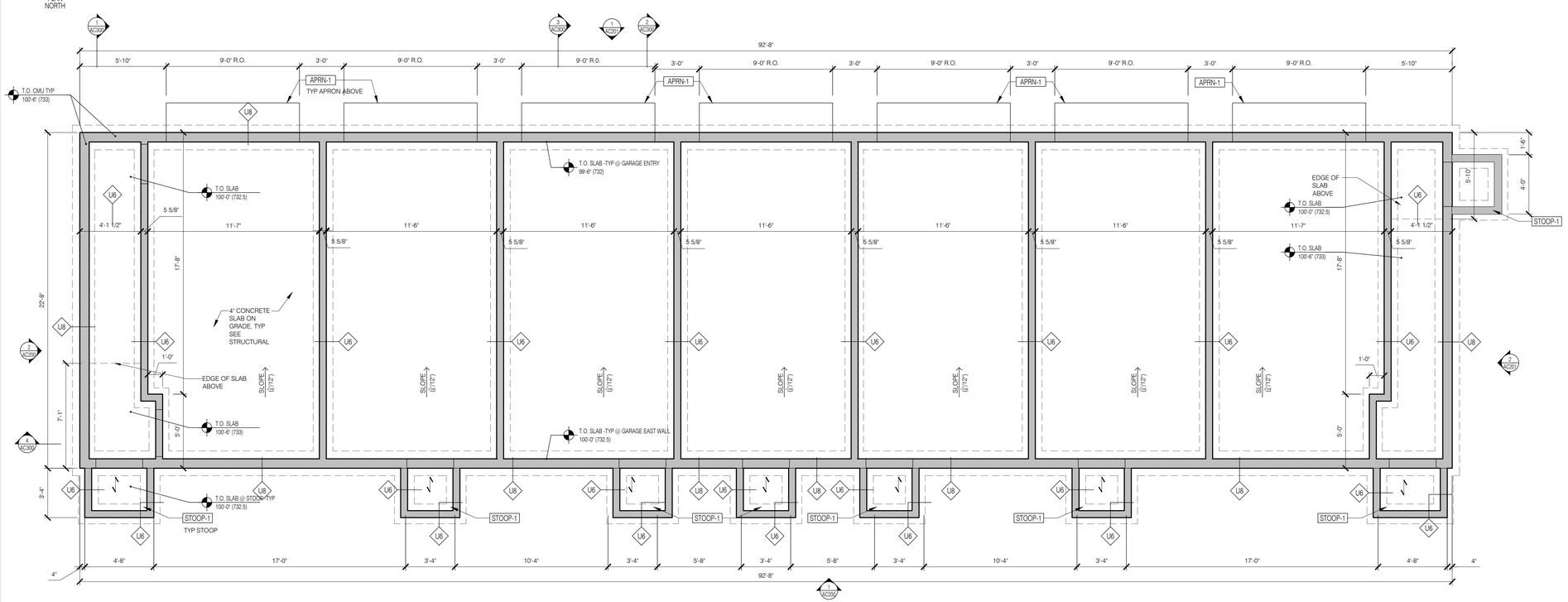


2 AC110 CARRIAGE HOUSE - ROOF PLAN
1/4" = 1'-0"

PLAN NORTH



1 AC110 CARRIAGE HOUSE - FOUNDATION PLAN
1/4" = 1'-0"

PLAN NORTH

ROOF PLAN LEGEND

- SLOPE (#/12) — EFFECTIVE ROOF SLOPE DUE TO SLOPED STRUCTURE
- SLOPE (#/12) — EFFECTIVE ROOF SLOPE DUE TO TAPERED INSULATION
- AREAS OF FIRE TRTD PLYWD ROOF DECKING (SHT-5) IN LIEU OF STANDARD PLYWOOD ROOF DECKING (SHT-4)
- ##-# OR (##-#) — DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- R# — DENOTES CONSTRUCTION KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

ROOF PLAN GENERAL NOTES:

1. CONNECT ALL DOWNSPOUTS TO BELOW GRADE DRAIN LEADS TO CITY STORM SEWER.

ROOF PLAN KEYNOTES (R#)

R1 SEE 2/AC111 FOR ROOFING NOTES AT CANOPIES
R2 PROVIDE MEMBRANE ROOFING (RF-2) AT CANOPIES

FOUNDATION PLAN LEGEND

- STRUCTURAL CONCRETE STOOP; SEE STRUCTURAL DRAWINGS
- ## — DENOTES WALL TYPE. REFER TO SHEET A4600 FOR ADDITIONAL INFORMATION
- ##-# OR (##-#) — DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- F# — DENOTES CONSTRUCTION KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

FOUNDATION PLAN GENERAL NOTES:

1. ALL DIMENSIONS ARE FROM FACE OF MASONRY OR CONCRETE TO FACE OF MASONRY OR CONCRETE U.N.O.
2. SEE STRUCTURAL PLANS FOR DIMENSIONS, SIZES AND NOTES NOT SHOWN HERE.

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CARRIAGE HOUSE: FNDN & ROOF PLANS

AC110

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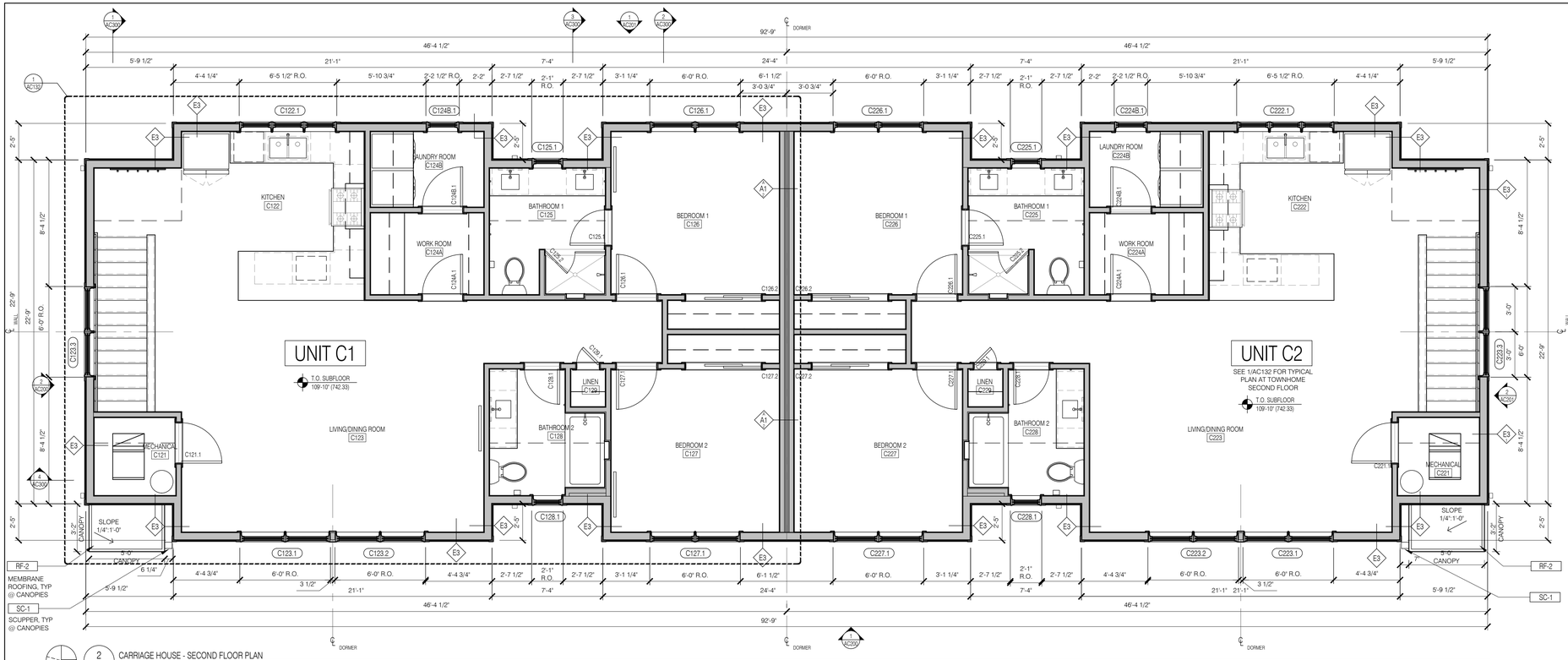
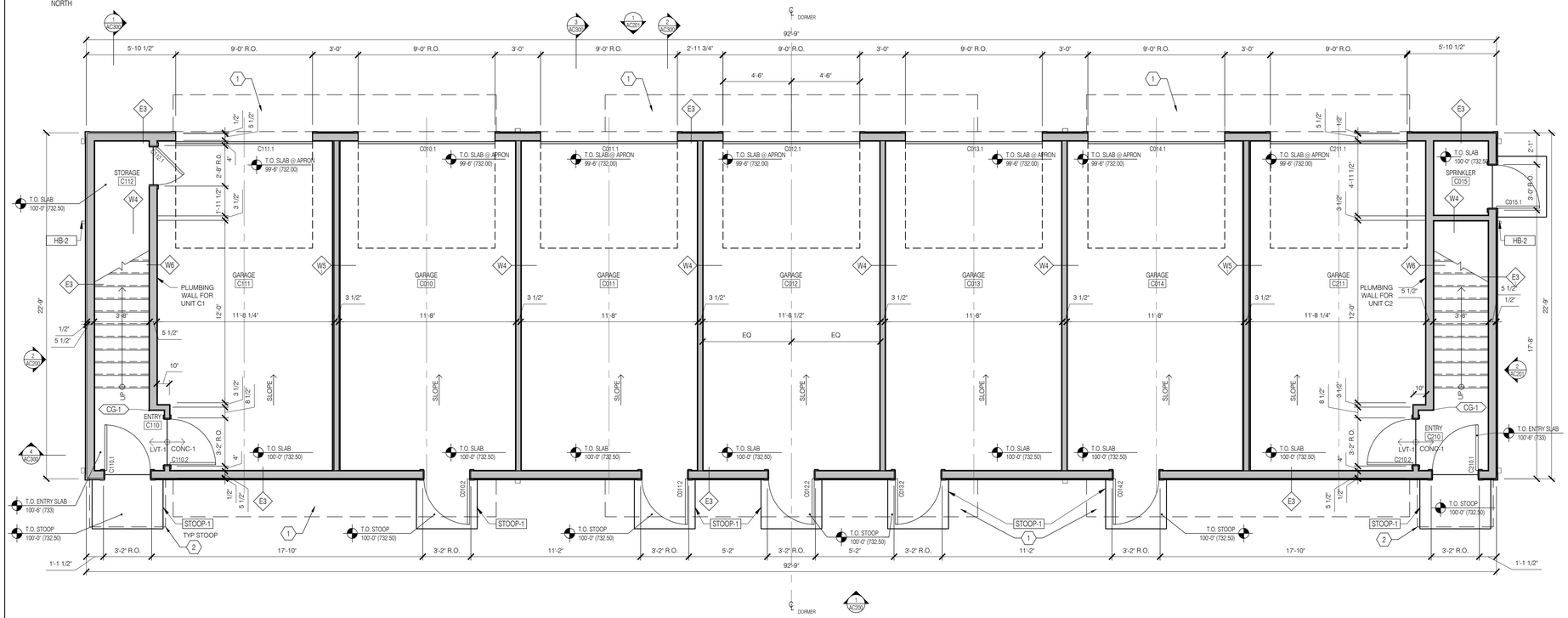


2 AC111 CARRIAGE HOUSE - SECOND FLOOR PLAN
1/4" = 1'-0"

PLAN NORTH



1 AC111 CARRIAGE HOUSE - FIRST FLOOR PLAN
1/4" = 1'-0"

PLAN NORTH

FLOOR PLAN LEGEND

- NEW WALL - SEE WALL TYPES
- ##### DENOTES DOOR NUMBER. REFER TO SHEET A6## FOR DOOR SCHEDULE & DOOR TYPE INFORMATION
- ## DENOTES WALL TYPE. REFER TO SHEET A600 FOR ADDITIONAL INFORMATION
- ## DENOTES WINDOW TAG. REFER TO A6## - WINDOW SCHEDULE FOR ADDITIONAL INFORMATION
- MIL#### DENOTES MILLWORK NUMBER. REFER TO INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION
- ### DENOTES EQUIPMENT NUMBER. SEE A6## - EQUIPMENT & APPLIANCE SCHEDULE FOR ADDITIONAL INFORMATION
- ##-# OR (##-#) DENOTES MATERIAL IDENTIFICATION NUMBER. SEE A6## - MATERIAL ID SCHEDULE FOR ADDITIONAL INFORMATION
- # DENOTES CONSTRUCTION KEYNOTE NUMBER. REFER TO THIS SHEET FOR DESCRIPTIONS

FLOOR PLAN GENERAL NOTES:

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5. WHERE DRYWALL ABUTS DISSIMILAR MATERIALS, PROVIDE CAULK CHANNEL TEAR AWAY BEAD & SEALANT
6. ALL PIPE AND DUCT FLOOR PENETRATIONS SHALL BE SEALED WITH A UL LISTED FIRESTOP MATCHING THE RATING OF THE FLOOR AND RATED TO RESIST THE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION.

FLOOR PLAN KEYNOTES (##)

1 BAY SOFFIT ABOVE. 1 HR FLOOR CONSTRUCTION TO CONTINUE OUT UNDER OVERHANG.

2 ROOF CANOPY ABOVE

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CARRIAGE HOUSE: 1ST & 2ND FLR PLANS

AC111

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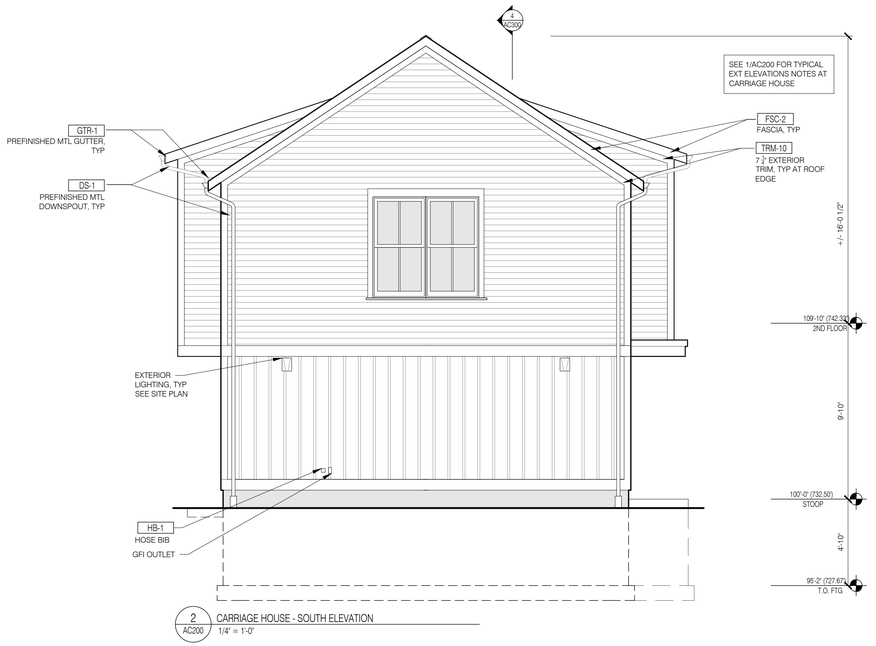

2 AC200 CARRIAGE HOUSE - SOUTH ELEVATION
1/4" = 1'-0"

1 AC200 CARRIAGE HOUSE - EAST ELEVATION
1/4" = 1'-0"

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Registration Number

CARRIAGE HOUSE: EXTERIOR ELEVATIONS

AC200

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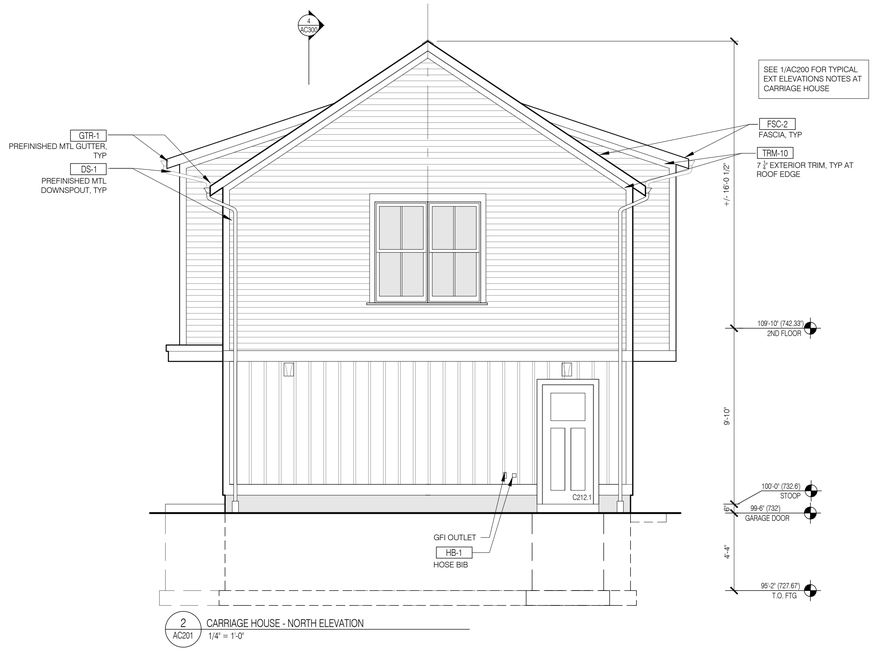

2 AC201 CARRIAGE HOUSE - NORTH ELEVATION
1/4" = 1'-0"

1 AC201 CARRIAGE HOUSE - WEST ELEVATION
1/4" = 1'-0"

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CARRIAGE HOUSE: EXTERIOR ELEVATIONS

AC201

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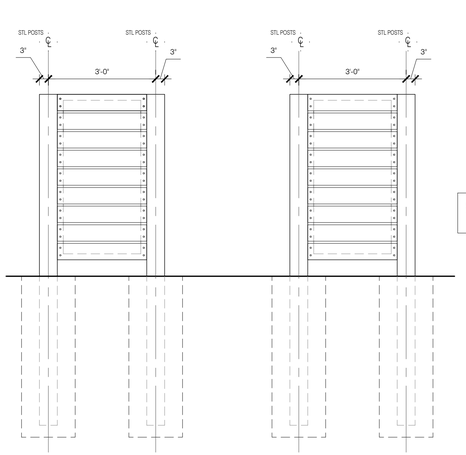
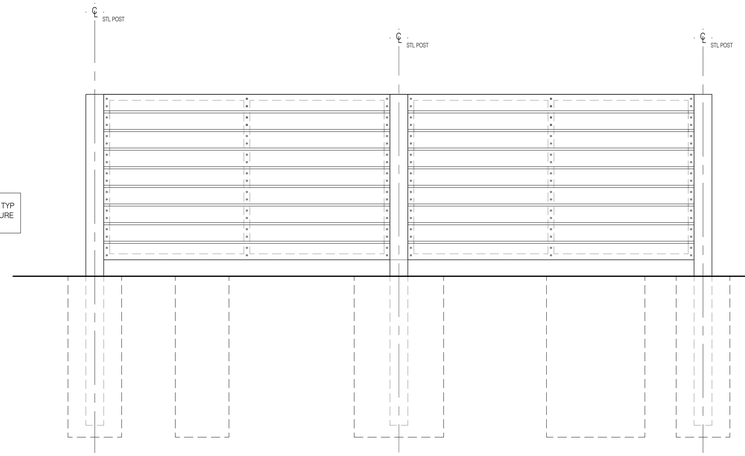
6 A610 TRASH ENCLOSURE
NTS

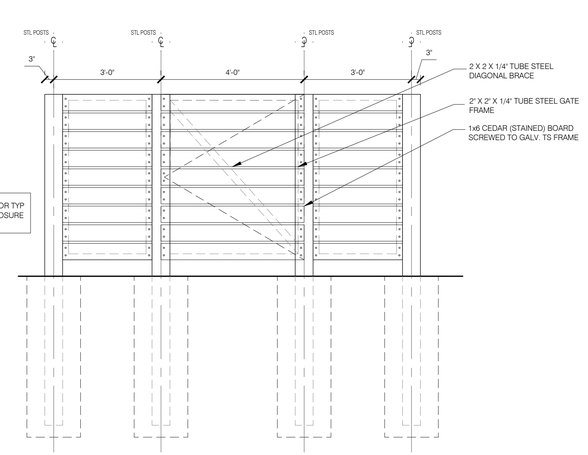


SEE 2/A610 FOR TYP TRASH ENCLOSURE NOTES

5 A610 TRASH ENCLOSURE ELEVATION - EAST
1/2" = 1'-0"

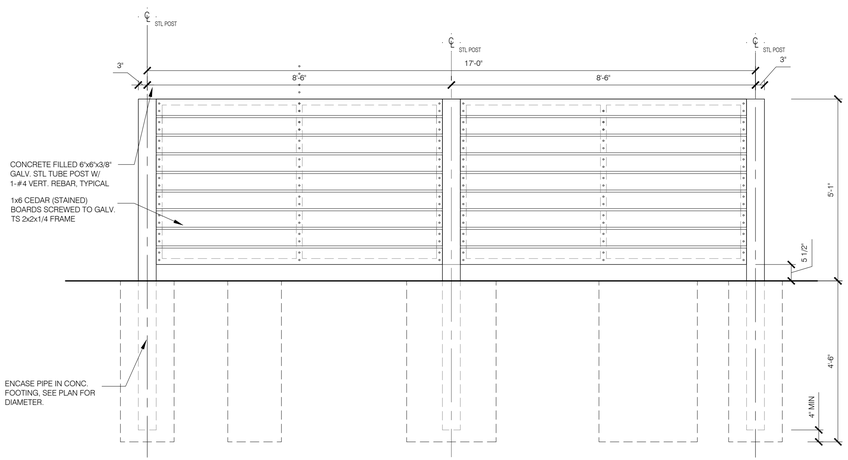


4 A610 TRASH ENCLOSURE ELEVATION - NORTH
1/2" = 1'-0"

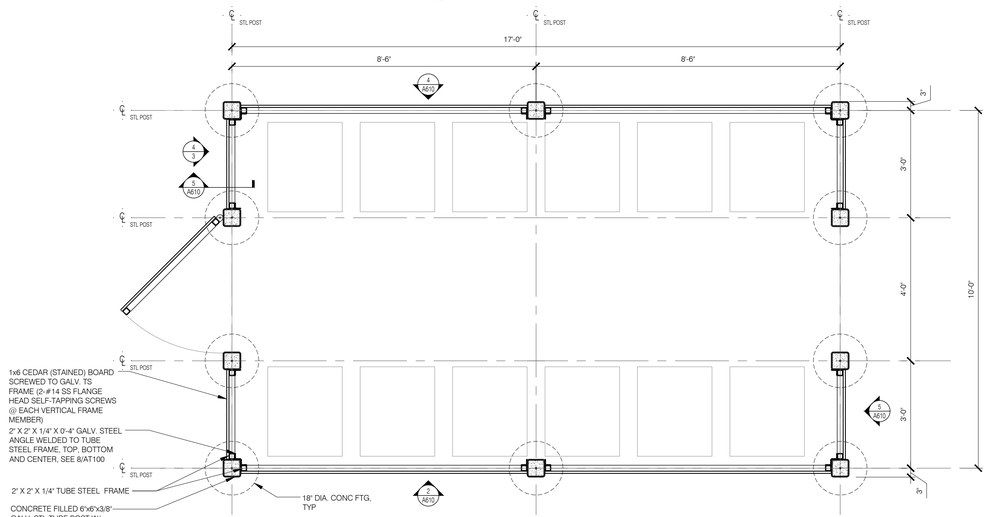


SEE 2/A610 FOR TYP TRASH ENCLOSURE NOTES

3 A610 TRASH ENCLOSURE ELEVATION - WEST
1/2" = 1'-0"



2 A610 TRASH ENCLOSURE ELEVATION - SOUTH
1/2" = 1'-0"



1 A610 TRASH ENCLOSURE PLAN
1/2" = 1'-0"

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TRASH ENCLOSURE DETAILS

A610

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6 A700 INTERIOR SIDEWALK AND YARDS N.T.S.

5 A700 STREET VIEW FROM NORTHEAST N.T.S.

4 A700 STREET VIEW FROM SOUTHWEST/ALLEY N.T.S.

3 A700 STREET VIEW FROM SOUTH N.T.S.

2 A700 STREET VIEW FROM SOUTHEAST N.T.S.

1 A700 AERIAL VIEW FROM SOUTHEAST N.T.S.

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RENDERINGS

A700

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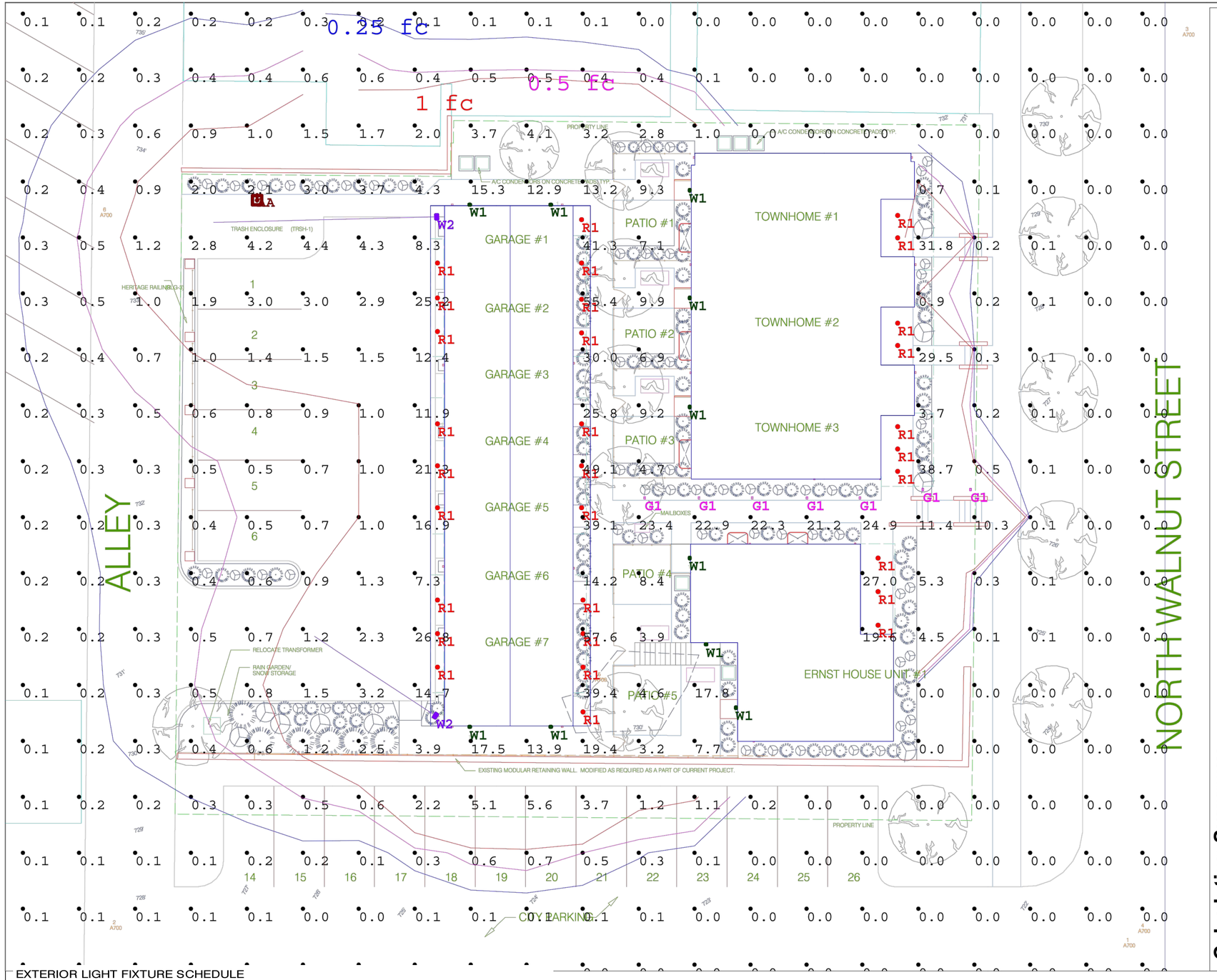

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Ground_Planar	Illuminanc	Fc	2.52	57.6	0.0	N.A.	N.A.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Lumens
	30	R1	SINGLE	0.910	FLD4BX30D010 EU4B3_58040 F4LBXVM1LI	2835
	10	W1	SINGLE	0.910	SLIM26N_D10, SLIM26N	3523
	2	W2	SINGLE	0.910	FFLED39N - (NEMA 7X6)	5698
	7	G1	SINGLE	0.910	BLED13N (Bollard)	1518
	1	AA	SINGLE	0.910	IVAT4	4856

EXTERIOR LIGHT FIXTURE SCHEDULE

TYPE	FIXTURE TYPE	MFR	MODEL	LAMP	NOTES
R1	4" ENCLOSED RECESSED DOWNLIGHT, VANDAL RESISTANT	EATON	**FAIL SAFE FLD4BX** HOUSING: FLD4BX30D010 POWER MODULE: FEU4B3/48030 TRIM: F4LBXVM1LI	LED	
G1	LANDSCAPE BOLLARD LIGHT	RAB LIGHTING	**BLED13N**	LED	
G2	POST MOUNTED AREA LIGHT	RAB LIGHTING	**ALED26Y**	LED	
G3	GROUND MOUNTED SIGN LIGHT	RAB LIGHTING	**FFLED** FFLED39Y	LED	
W1	WALL PACK	RAB LIGHTING	**SLIM26N** SLIM26Y/D10	LED	
W2	EXTERIOR FLOOD	RAB LIGHTING	**FFLED** FFLED39Y	LED	

VIKING electric
A Sonepar Company

#	Date	Comments

Revisions

Drawn By: Dan Budke
Checked By:
Date:5/24/2019
Scale:

211 North Ernst House

Redevelopment

Page M of 1

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PHOTOMETRIC PLAN

E001

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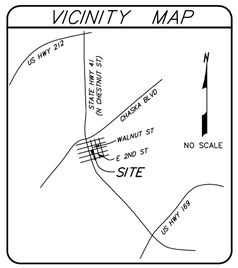
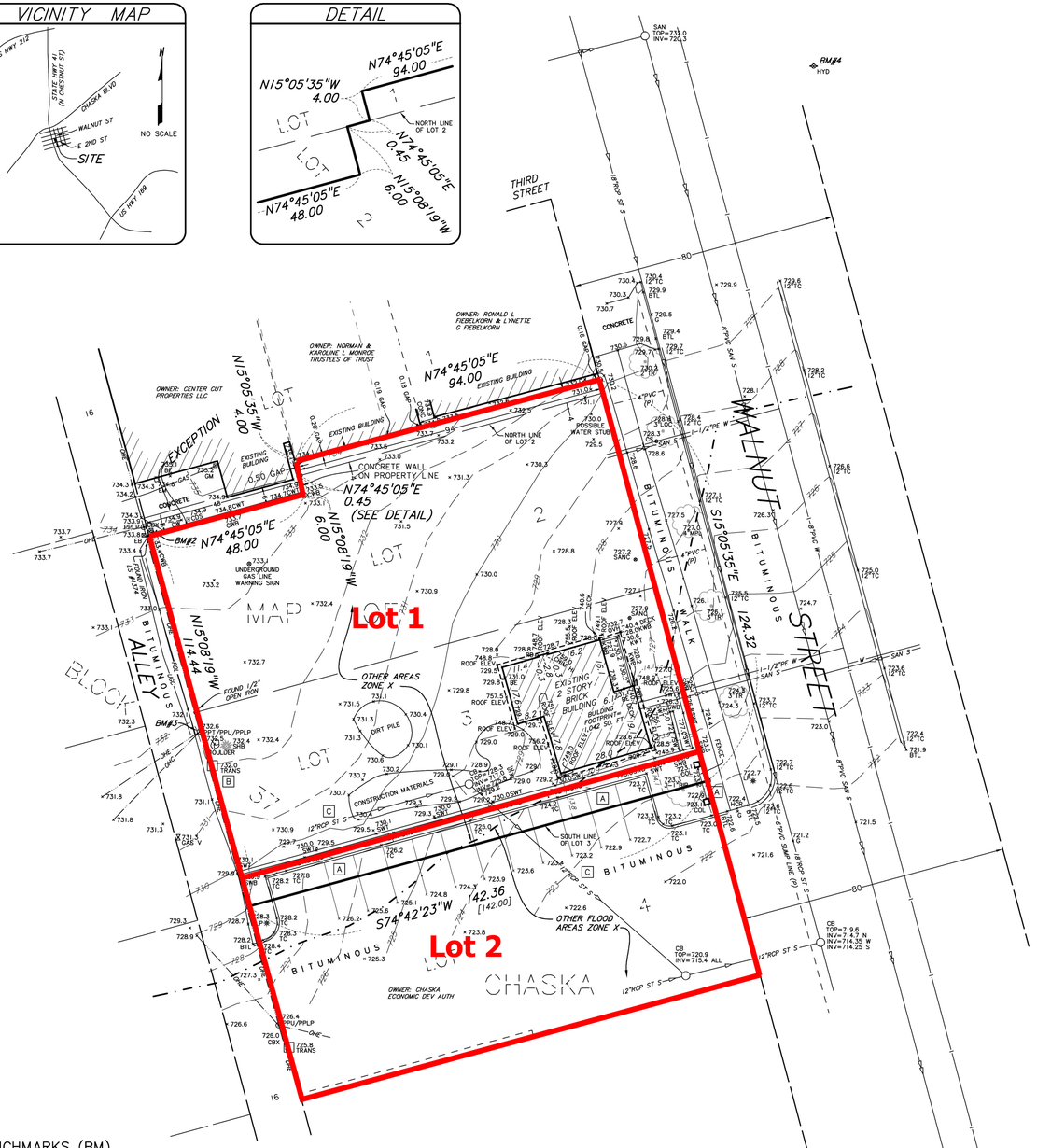
Ernst Home Apartments - Preliminary Plat





BENCHMARKS (BM)

(NAVD 88)

1) MnDOT 1008R survey disk in bridge railing in Chaska, 2.2 miles south along Trunk Highway 41 from the junction of Trunk Highway 41 and Trunk Highway 212, in rail in the northeast corner bridge rail of Trunk Highway 41 bridge number 10012 over the Minnesota River, 29.8 feet east of Trunk Highway 41.
Elevation = 727.548 feet

2) Scribed "X" 2.0± feet easterly of the west end of the concrete wall in the northwest corner of the subject property.
Elevation = 734.81 feet

3) Top of spike in the northwest side of the power pole located midway along the west boundary of the subject property.
Elevation = 733.64 feet

4) Top of top nut of fire hydrant in the southeast quadrant of 3rd Street and Walnut Street.
Elevation = 734.24 feet

GENERAL NOTES

1.) Survey coordinate and bearing basis: Carver County coordinates

2.) Adjoining ownership information shown hereon was obtained from the Carver County Property Tax Information web site.

3.) There was no evidence of recent earth moving work, building construction or building additions observed in the process of conducting the fieldwork.

4.) There are no proposed changes in street right of way lines per the City of Chaska Engineering Department. There was no evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

5.) There were no wetland delineation markers observed in the process of conducting the fieldwork.

6.) At the time fieldwork was performed for this survey, there was a significant amount of snow on the ground. Physical features were located to the best of our ability, but there may be additional features that were not visible and, therefore, not shown hereon.

UTILITY NOTES

1.) Utility information from plans and markings was combined with observed evidence of utilities to develop a view of the underground utilities shown hereon. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. In addition, Gopher State One Call locate requests from surveyors may be ignored or result in an incomplete response. Where additional or more detailed information is required, excavation and/or a private utility locate request may be necessary.

2.) Other underground utilities of which we are unaware may exist. Verify all utilities critical to construction or design.

3.) Some underground utility locations are shown as marked onsite by those utility companies whose locators responded to our Gopher State One Call, ticket number 190250334.

4.) Contact GOPHER STATE ONE CALL at 651-454-0002 (800-252-1166) for precise onsite location of utilities prior to any excavation.

FLOOD ZONE NOTES

1.) The subject property appears to lie within Other Areas Zone X (Areas determined to be outside the 0.2% annual chance floodplain), and Other Flood Areas Zone X (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood), per the National Flood Insurance Program, Flood Insurance Rate Map Community Panel No. 27523402360, dated December 21, 2018. This information was obtained from the FEMA Map Service Center web site.

2.) The flood zone demarcation line shown hereon is approximate only per scaled map location and/or graphic plotting. FEMA maps are not precisely drawn and do not scale uniformly. Contact FEMA for final determination.

PARKING

There are no parking spaces designated on the subject property.

AREA

Gross = 17,230 square feet or 0.396 acres

LEGEND

○	Denotes iron monument set marked with P.L.S. No. 44890
●	Denotes found iron monument
◉	Denotes 1.17 inch diameter copper magnetized marker with disc cap affixed stamped LS-44890 set
BE	Denotes building entrance
BTL	Denotes beavertail curb
CB	Denotes catch basin
CBX	Denotes communication box
CDS	Denotes civil defense siren
CHIM HI	Denotes chimney height
COL	Denotes building column
CONC	Denotes concrete
CS	Denotes curb stop
CWB	Denotes concrete wall base
CWT	Denotes concrete wall top
EB	Denotes electric box
EM	Denotes electric meter
FOL	Denotes fiber optic line
G	Denotes gutter
GAS V	Denotes gas valve
GM	Denotes gas meter
GW	Denotes guy wire
HCR	Denotes disabled ramp
HYD	Denotes fire hydrant
INV	Denotes structure invert
KWB	Denotes keystone wall top
LP	Denotes light pole
OHC	Denotes overhead communication line
OHE	Denotes overhead electric line
OVH	Denotes overhang
(P)	Denotes per plan
PPLP	Denotes power and light pole
PPT	Denotes power pole with transformer
PPU	Denotes power pole with underground utility
PVC	Denotes polyvinylchloride pipe
RCP	Denotes reinforced concrete pipe
RD	Denotes roof drain
ROOF ELEV	Denotes roof elevation
SAN	Denotes sanitary manhole
SAN S	Denotes sanitary sewer
SANC	Denotes sanitary cleanout
ST S	Denotes storm sewer
SWB	Denotes stone wall base
SWT	Denotes stone wall top
TC	Denotes top of concrete curb
TRANS	Denotes transformer
UGC	Denotes underground communication line
W	Denotes water line
BIR	Denotes Birch tree
LOC	Denotes Locust tree
MPL	Denotes Maple tree
SHB	Denotes shrub
TR	Denotes deciduous tree

DESCRIPTION OF PROPERTY SURVEYED

(Per First American Title Insurance Company Commitment for Title Insurance Commitment No. 1906676, commitment date January 25, 2019, issued by Title Mark, LLC)

Parcel 1:

Lot 2, Block 37, except the Northerly 6 feet of the Westerly 48 feet thereof and also including the South 4 feet of the Easterly 94 feet of Lot 1, Block 37, CITY LOTS OF CHASKA, Carver County, Minnesota.

Parcel 2:

Lot 3, Block 37, CITY LOTS OF CHASKA, Carver County, Minnesota.

Property is: Abstract

PLAT RECORDING INFORMATION

The plat of Map of Chaska Townsite was filed of record on February 15, 1868, in Book A of Townsites.

[ ] Bearings and/or dimensions listed within brackets are per plat or record documents.

TITLE COMMITMENT

First American Title Insurance Company Commitment for Title Insurance Commitment No. 1906676, commitment date January 25, 2019, issued by Title Mark, LLC, was relied upon as to matters of record.

Schedule B Exceptions:

(1) Exceptions are indicated on survey with circled numbers unless otherwise noted. Items not listed below are standard exceptions and/or are not survey related.

There are no easements listed in Schedule B – Section 2 of the title commitment to be shown.

LIST OF POSSIBLE ENCROACHMENTS

The following list of possible encroachments is only the opinion of this surveyor; should not be interpreted as a legal opinion and should not be interpreted as a complete listing.

[A] Possible encroachments are indicated on survey with boxed letters as listed below.

A.) Concrete curb, parking areas and sign lying within the subject property along the southeasterly property line.

B.) Transformer lying easterly of the southwesterly property line.

C.) Storm sewer lying within the property and draining towards the southeast without an easement.

SURVEYOR'S CERTIFICATION

To Chaska Economic Development Authority, Thies & Talle Management, Inc., Title Mark, LLC and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 7(a), 7(b)(1), 7(c), 8, 9, 11, 13, 16, 17, 18, 19 and 20 of Table A thereof. The fieldwork was completed on February 8, 2019.

Dated this 12th day of February, 2019

SUNDE LAND SURVEYING, LLC.

By: Leonard F. Carlson
Leonard F. Carlson, P.L.S. Minn. Lic. No. 44890

LEONARD F. CARLSON LICENSED LAND SURVEYOR 44890 STATE OF MINNESOTA

N

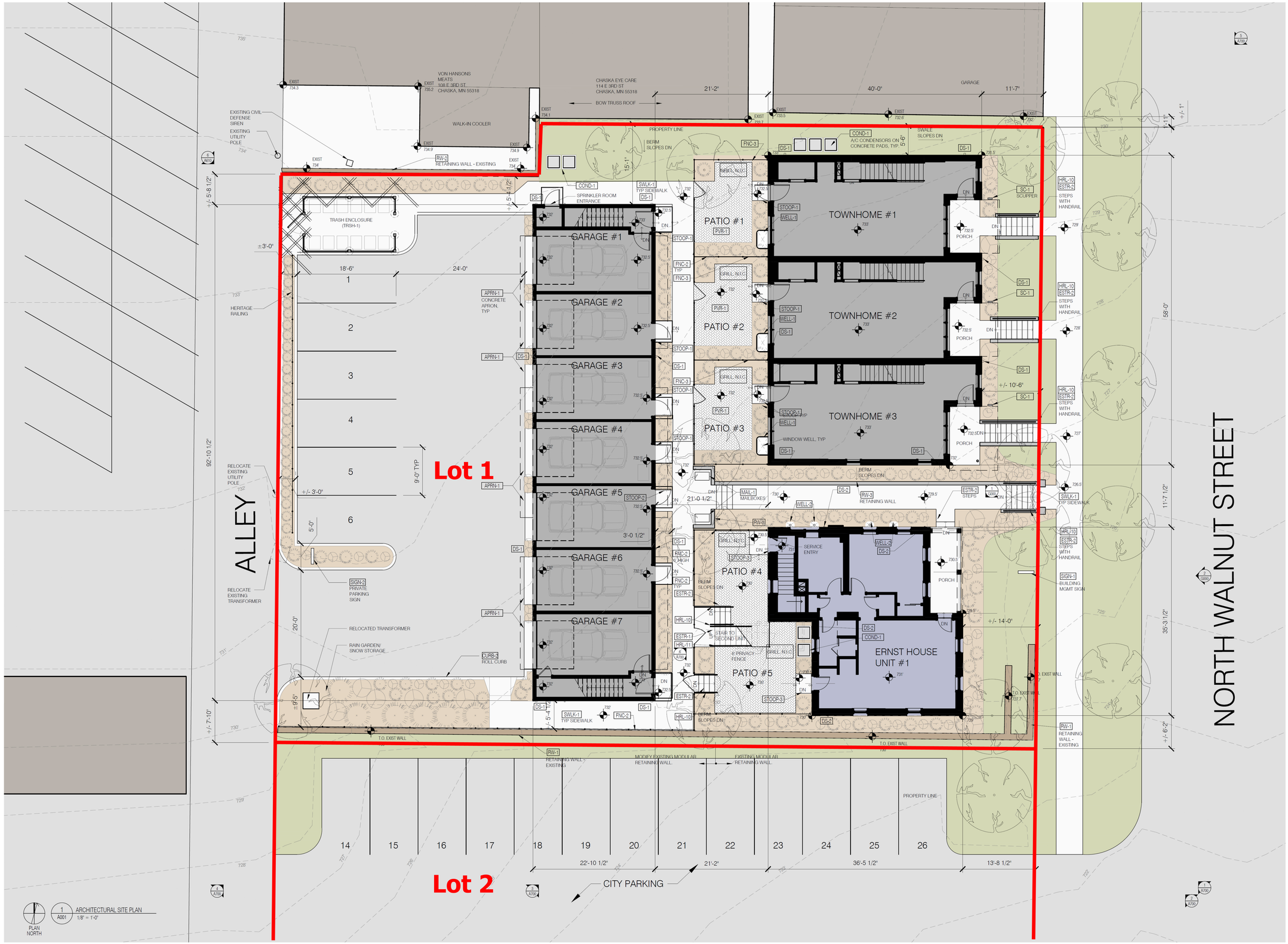
20 0 20 40
SCALE IN FEET

Revision	By	Date
	SMT	

Drawing Title:
ALTA/NSPS LAND TITLE SURVEY FOR:
CITY OF CHASKA
Ernst House
211 and 217 Walnut Street, Chaska, MN

SUNDE LAND SURVEYING
www.sunde.com
Main Office:
900 East Bloomington Freeway (35W) • Suite 118
Bloomington, Minnesota 55420-3435
952-881-2455 (Fax: 952-888-9526)

Project: 2019-007 Bk/Pg: 918/42 Date: 02/12/2019
Township: 115 Range: 23 Section: 9
File: 2019007001.dwg Sheet: 1 of 1



U+B architecture & design, inc.
2609 Aldrich Avenue South
Suite 100
Minneapolis, Minnesota 55408
T | 612-870-2538
www.uplusb.com

Project Contacts

Dan Peterson
P | 612-870-2538
dan.peterson@uplusb.com

Preliminary Site Plan Review
5/29/19

Not For Construction

Ernst House Redevelopment

211 North Walnut Street
Chaska, MN 55318
Project: 2018007_211N

Drawings Issued	Date

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 Architect under the laws of the State of Minnesota

Signature

Printed Name

Registration Number

ARCHITECTURAL SITE PLAN

A001

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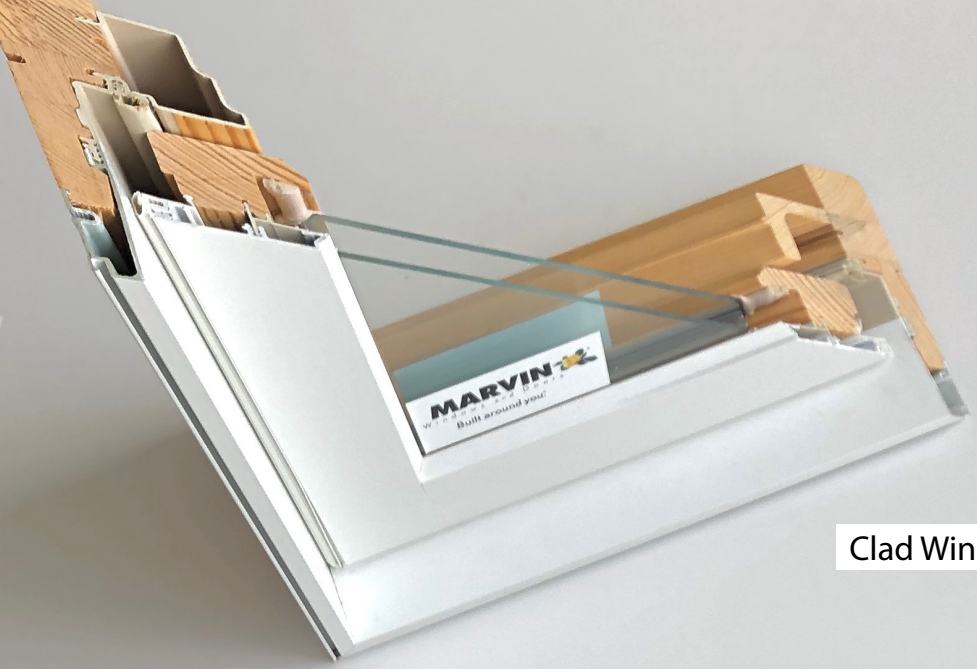


Clad Window

Fascia & Coping
Ext. Metal at canopies

Siding & Trim paint

Asphalt Shingles

Linear Wood Ceiling
at soffit

Brick - Townhomes
(to match existing Ernst House brick)

Siding, Trim, and
Roof Fascia

Sectional Garage
Door

211 NORTH WALNUT STREET
EXTERIOR MATERIALS

TYPICAL EXTERIOR DOORS
MANUFACTURER: THERMATRU
MODEL: CCA260-SDL
COLOR: TO BE SELECTED FROM MANUF. STANDARD COLORS

Share Print

Classic-Craft® American Style Collection™

Craftsman Lite 2 Panel Flush-Glazed | Style No. CCA260-SDL

(0) Write a review

1 Available Size

DESIGN YOUR ENTRYWAY | WHERE TO BUY

FINISH OPTIONS

Stain and Paint options may vary. Please contact your retailer for a complete list of their offering.

COLOR TBD

GLASS OPTIONS

Clear

Craftsman 6 Lite 3Wx2H Simulated Divided Lites

Don't see the glass design you want?

In addition to thousands of standard glass choices, we offer additional glass options through our Special Quote Program to help you find the right look for virtually any home.

Learn More >

Applied Products:

Garage Door	Carriage House Steel	9700 Panel 8' x 7'
Windows	Carriage House Steel 9700 Window	6 Square 7'
Oak		
Windows	Clear	
Hardware	Lift Handle	Conifer 8' x 7'

211 NORTH WALNUT STREET - CARRIAGE HOUSE GARAGE DOORS
Wayne Dalton Model 9700 3-section insulated steel garage door
9'-0" w X 7'-0" h, "Newport" trim with a 6-lite top section, "Oak Stain" finish.
www.wayne-dalton.com

Balustrades, Porch Posts & Columns

Balusters 203
Rails.....210
Installation Aids 212
Newel Posts 214
Post Accessories.....216
Structural Columns.....218
Structural Porch Posts.....219
Woodgrain Column 221
Woodgrain Post Wrap 221
Stone Balustrade System.....222
Stone Half-Round Column 223

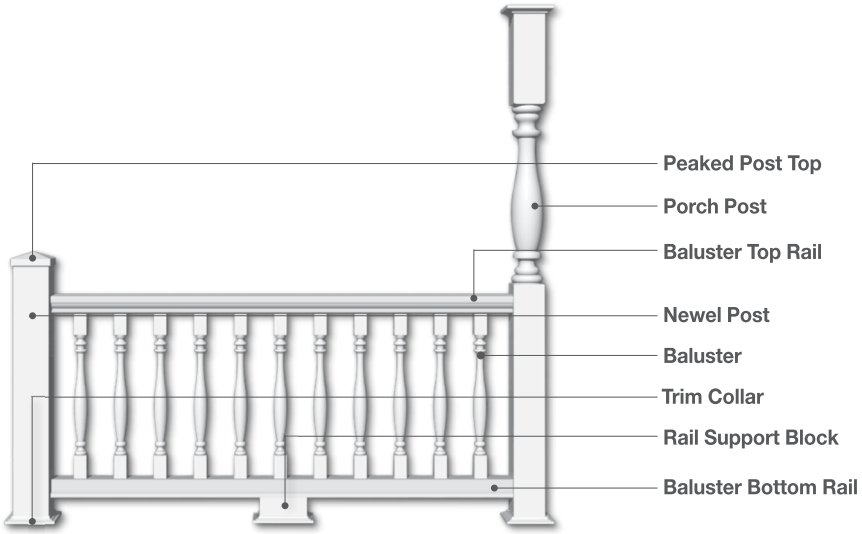
Add outdoor sophistication.

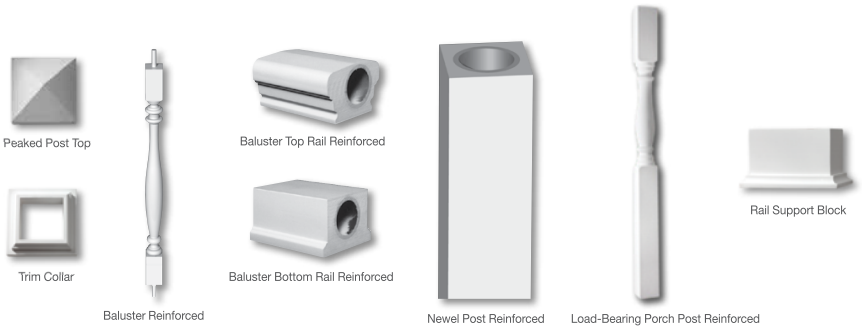
Transform any porch, patio or balcony into an impressive outdoor living area. An eye-catching accent for many home designs, our Balustrades, Porch Posts and Columns are beautiful and durable.

Product Shown:
Square Baluster – BAL2X32SQ
Top Straight Rail – BTR5X96
Bottom Straight Rail – BBR5X96
Newel Post – NP6X48
Post Top – PST7X7F
Trim Collar – TC6
Crush Block – RSB4X4X6

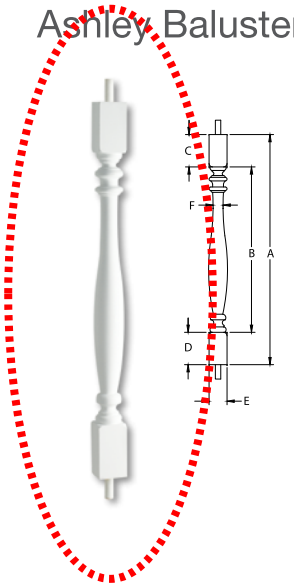
FYPON

211 NORTH WANUT STREET
ERNST HOUSE PORCH BALUSTER SYSTEM





Ashley Baluster

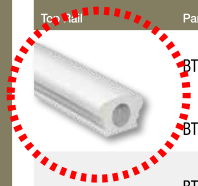


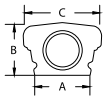
Part Number	Balustrade Rail System	A	B	C	D	E	F	Maximum Center-to-Center Distance
BAL2.5X15AY	5"	15"	9"	3"	3"	2 1/2"	1 7/8"	5 7/8"
BAL3X20AY	5"	20"	15"	2 1/2"	2 1/2"	2 1/2"	1 1/2"	5 3/8"
BAL3X24AY	5"	24"	15"	1 1/2"	4 1/2"	2 1/2"	1 3/8"	5 3/8"
BAL3X28AY	5"	28"	19"	4 1/2"	4 1/2"	2 1/2"	1 3/8"	5 3/8"
BAL3X32AY	5"	32"	23"	4 1/2"	4 1/2"	2 1/2"	1 3/8"	5 3/8"
BAL3X36AY	5"	36"	24"	6"	6"	2 1/2"	1 1/4"	5 1/4"
BAL4X24AY	7"	24"	15"	4 1/2"	4 1/2"	4 1/2"	3 1/2"	7 3/8"
BAL5X24AY	7"	24"	17"	3 1/2"	13 1/2"	4 1/2"	3 1/2"	7 3/8"
BAL5X32AY	7"	32"	23"	4 1/2"	4 1/2"	4 1/2"	3 3/8"	7 3/8"

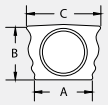
Note: Baluster images shown above may not be an accurate representation of every size within each category. For additional line art images, visit www.fypon.com.

Parts may be required to ship LTL (less than truckload) based on size and overall dimensions.

Top Straight Rails

Top Rail	Part Number	Balustrade Rail System	Length	A	B	C
	BTR5X96	5"	96"	3 1/4"	3 1/8"	4 5/8"
	BTR5X144^	5"	144"	3 1/4"	3 1/8"	4 5/8"
	BTR7X96	7"	96"	5 1/2"	5 1/4"	7"
	BTR7X120^	7"	120"	5 1/2"	5 1/4"	7"
	BTR7X144^	7"	144"	5 1/2"	5 1/4"	7"

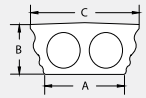




^ Maximum rail span distance for field applications is 96".

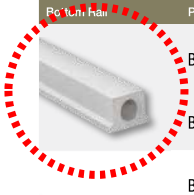
Top Straight Rails

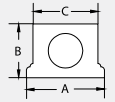
Top Rail	Part Number	Balustrade Rail System	Length	A	B	C
	BTR12X96	12"	96"	9"	5 1/4"	11 7/8"
	BTR12X120^	12"	120"	9"	5 1/4"	11 7/8"
	BTR12X144^	12"	144"	9"	5 1/4"	11 7/8"

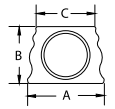


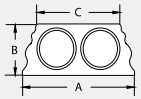
^ Maximum rail span distance for field applications is 96".

Bottom Straight Rails

Bottom Rail	Part Number	Balustrade Rail System	Length	A	B	C
	BBR5X96	5"	96"	4 1/2"	3 1/8"	3 3/4"
	BBR5X144^	5"	144"	4 1/2"	3 1/8"	3 3/4"
	BBR7X96	7"	96"	7"	5 1/4"	5 1/2"
	BBR7X120^	7"	120"	7"	5 1/4"	5 1/2"
	BBR7X144^	7"	144"	7"	5 1/4"	5 1/2"
	BBR12X96	12"	96"	11 7/8"	5 1/4"	9"
	BBR12X120^	12"	120"	11 7/8"	5 1/4"	9"
	BBR12X144^	12"	144"	11 7/8"	5 1/4"	9"







^ Maximum rail span distance for field applications is 96".

Parts may be required to ship LTL (less than truckload) based on size and overall dimensions.

SLIM26N

RAB Outdoor

12, 18 and 26 Watt SLIM wall packs are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.8 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	26W
120V	0.27A	Color Temp	4000K (Neutral)
208V	0.15A	Color Accuracy	74 CRI
240V	0.15A	L70 Lifespan	100,000
277V	0.13A	Lumens	3,524
Input Watts	29.9W	Efficacy	117.9 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

ADA Compliant:

SLIM™ is ADA Compliant

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities.
DLC Product Code: P96TPDJK

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Housing:

Precision die-cast aluminum housing

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation

Recommended Mounting Height:

Up to 22 ft

Lens:

Tempered glass lens

Reflector:

Specular thermoplastic

Gaskets:

High-temperature silicone

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LED:

Multi-chip, long-life LED

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period

Copyright © 2019 RAB Lighting Inc. All Rights Reserved Note: Specifications are subject to change at any time without notice

Technical Specifications (continued)

LED Characteristics

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Other

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

HID Replacement Range:

Replaces 175W Metal Halide

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at www.rablighting.com/legal#warranty

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G0

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 6KV surge protection, 120V: 0.28A, 208V: 0.16A, 240V: 0.14A, 277V: 0.12A

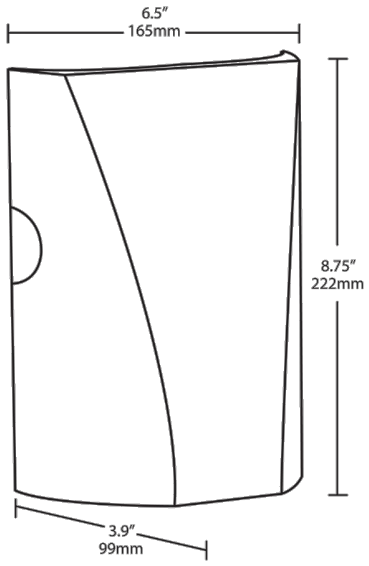
THD:

7.6% at 120V, 17.6% at 277V

Power Factor:

99.1% at 120V, 90.5% at 277V

Dimensions



Features

- Full cutoff, fully shielded LED wall pack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Wattage	Color Temp	Finish	Driver	Options
SLIM	26	N			
	12 = 12W **18 =** 18W **26 =** 26W	**Blank =** 5000K (Cool) **N =** 4000K (Neutral) **Y =** 3000K (Warm)	**Blank =** Bronze **W =** White	**Blank =** Standard (120-277V) **/D10 =** Dimmable	**Blank =** No Option **/PC =** 120V Button **/PC2 =** 277V Button **/LC =** Lightcloud® Controller

Copyright © 2019 RAB Lighting Inc. All Rights Reserved Note: Specifications are subject to change at any time without notice

BLED13N

RAB Outdoor

42" high rectangular Bollard with (1) 13 Watt (equivalent to a 150 Watt MH) LED fixture for low level lighting applications. Great for pathway lighting! IESNA Full Cutoff, Fully Shielded optics. 5-year, no-compromise warranty.

Color: Bronze Weight: 15.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	13W
120V	0.13A	Color Temp	4000K (Neutral)
208V	0.08A	Color Accuracy	86 CRI
240V	0.07A	L70 Lifespan	100,000
277V	0.06A	Lumens	1,530
Input Watts	15W	Efficacy	102 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Dark Sky Conformance:

Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Temperature:

4000K

Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 100,000 hours of operation

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Junction Box:

Junction Box Not Included

Maximum Ambient Temperature:

Suitable for use in 55°C (131°F)

Cold Weather Starting:

The minimum starting temperature is -30°C (-22°F)

Green Technology:

Mercury and UV free. RoHS-compliant components.

Housing:

Precision die cast aluminum housing, lens frame

Mounting:

42" Bollard

Gaskets:

High-temperature silicone

Finish:

Formulated for high durability and long-lasting color

Anchor Bolt:

The anchor bolts for the BLED's have the following dimensions 1/2 - 13 x 12 1/4" long with 2 3/4" hook.

Electrical

Surge Protection:

4kV

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Technical Specifications (continued)

Electrical

Driver:

Multi-chip 13W high output long life LED Driver Constant Current, Class 2 100V - 277V, 50/60 Hz

Other

Patents:

The design of the BLED is protected by patents pending in Canada, U.S. Pat. D599,050 and Pat. D599,049, and patents pending in China and Taiwan.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at www.rablighting.com/legal#warranty

Equivalency:

Equivalent to 70W Metal Halide

Buy American Act Compliance:

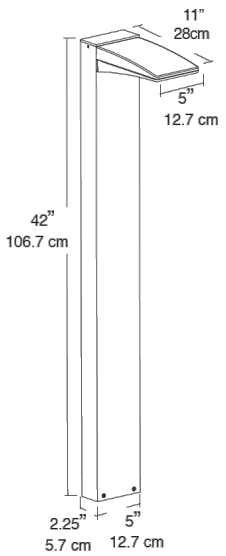
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G0

Dimensions



Features

- High output LED
- 100,000-hour life
- Superior heat sinking with die cast aluminum housing
- Meets ADA Requirements
- Cutting-Edge, Heat-Dissipating Design
- 5-Year, No-Compromise Warranty

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CITY OF CHASKA

ORDINANCE NO.

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 Downtown Historic Commercial (C3) zoning district and rezoned to Planned Residential District No. 74 (PRD-74) for all of Blocks 1 of the recorded plat of the Ernst Home Apartments.

The following graphic exhibits shall serve as the general guide for development of The Harvest West area:

1. Cover Sheet (G000), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
2. Aerial Site Exhibit (G001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
3. Alta Survey, prepared by Sunde Land Surveying, dated February 12, 2019
4. Demolition Plan (C100), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
5. Paving & Dimension Plan (C200), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
6. Grading and Erosion Control Plan (C300), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
7. Utility Plan (C400), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
8. Landscape Plan (L001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
9. Irrigation Plan (L002), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
10. Architectural Site Plan (A001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
11. Sign Plan (A002), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
12. Landscape Overlay Plan (A003), prepared by U+B Architecture & Design, Inc., dated May 29, 2019

13. Ernst House: Floor & Roof Plans (AE110), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
14. Ernst House: Exterior Elevations (AE200), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
15. Townhomes: Bsmnt & Roof Plans (AT110), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
16. Townhomes: 1st & 2nd Flr Plans (AT111), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
17. Townhomes: Exterior Elevations (AT200), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
18. Carriage House: Fndn & Roof Plans (AC110), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
19. Carriage House: 1st & 2nd Flr Plans (AC111), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
20. Carriage House: Exterior Elevations (AC200 & AC201), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
21. Trash Enclosure Details (A610), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
22. Renderings (A700), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
23. Photometric Plan (E001), prepared by U+B Architecture & Design, Inc., dated May 29, 2019
24. Preliminary Plat (pgs 1-2)

Section II. **PRD-74 District regulations.** Permitted uses and regulations applicable to the PRD-74 District shall be as follows:

A. Intent

The intent of PRD-74 is to create a unique and qualitative residential development that recognizes, complements and utilizes the downtown historic context and its services.

B. Permitted Uses

Permitted uses shall be the following:

1. Lot 1, Block 1, Ernst Home Apartments

a) Multi-Family Residential

2. Lot 2, Block 1, Ernst Home Apartments

a) Public Parking Lot

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 9 of the zoning ordinance.

2. Lot 1, Block 1, Ernst Home Apartments: One Monument Sign with the following regulations:
    a. Maximum 12 square feet in area
    b. Maximum 6 feet in height
    c. No internal illumination
    d. Setback 10 feet from property lines

D. Building Setbacks

Minimum building setbacks shall be as follows:

1. Front (east) Setback: 10 feet
2. Rear (west) Setback: 20 feet
3. Interior Property Lines: 5 feet

Minimum parking setbacks shall be as follows:

1. All Property Lines: 3 feet

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 17th day of June, 2019.

_____
Mark Windschitl, Mayor

Attest:_____
Deputy Clerk

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
06/12/2019

Subject: **Bavaria Downs –Conditional Use Permit (CUP) Amendment**

Applicant: A'BULAE

Location: 3919 Bavaria Road - North of Symphony Hills/Nickel Creek, East of Bavaria Road

Case No.: 2019-12

Synopsis: Applicant seeks to obtain approval of a Conditional Use Permit (CUP) Amendment to add a gravel parking lot at 3919 Bavaria Road near the main event center

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval to the City Council

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BACKGROUND

A'BULAE and its sister company, Bellagala, are renowned leaders in event-center design and event management. They operate a premier collection of award-winning properties and services. They currently operate two venues, A'BULAE, which is located on the 6th floor and rooftop of a building in the Lowertown area of St. Paul, and the Van Dusen Mansion, a historic property located just south of downtown Minneapolis. Their companies are known for their creative and innovative approach to venue design, and their dedication to providing exceptional services to wedding, corporate and social clients. Their properties and the services we supply have been honored with our industry's top awards including Minnesota Bride All-Around Best Wedding Vendor, Knot Pick, Wedding Wire Choice, Best Special Venue, Best Caterer, Best Historic Venue, Best Unique Venue, Best Twin Cities Venue, Best Menu Innovation, and Best Outdoor Reception Site.

In September 2017 the Conditional Use Permit and Preliminary Site Plan for Bavaria Downs were approved (PC# 17-20), and in November 2017 the Final Site Plan was approved (PC #17-24).

The house venue has been in operation for almost a year now. With that, they have been experiencing some logistical difficulties with the valet services provided. People who attend the events rely on the valet to get to and from their cars; some, who choose not to wait for valet, walk ¼ of a mile back to their cars on the narrow, unlit driveway. This has posed a safety concern for the venue. The venue operators are now starting to look into a more logistical approach of accommodating their patrons by providing a parking lot adjacent to the house venue.

CURRENT PROPOSAL

Tonight staff brings a conditional use permit (CUP) amendment proposal to add another gravel parking lot (170 stalls) to the wedding venue and event center on the site at 3919 Bavaria Road. This new gravel parking lot is situated towards the house venue, otherwise known as Phase I of Bavaria Downs.

Phase I of Bavaria Downs has already been constructed and in operation for almost one year. This phase included the complete restoration and repurposing of the home into a ranch-style event space. At the rear of the home, an accessory structure was built for the dinner and entertainment portions of the events.

Adjacent properties

The site is bound on the north and east by the existing greenbelt, residential properties, to the west by Bavaria Road, a residence/public stable and the Chevalle development, and the south by additional greenbelt residences and the Symphony Hills development.

Existing Conditions

The project area is approximately 270 acres. A very large 20,000 square foot home and several out buildings exist on the property. A large man-made lake exists near the east side of the property as well as wetlands along its site perimeter. Access to the site is gained off one driveway coming from Bavaria Road. Gravel parking lots are provided adjacent to the future barn venue. Water serves the property, but sewer does not. Private septic systems were put in place with the construction of Phase I.

Layout

The existing access into the property will be maintained from Bavaria Road to the west; this access was moved more south for better traffic movement on Bavaria Road. The driveway from Bavaria Road leads to the east of the property providing access to the existing home (Venue #1: The Redmond Estate) located towards the center of the site. The home has since been refurbished and has been operating for the last year as the main event space. The stable/barn buildings (Venue #2: Equestria West) and gravel parking lots are accessed off the same driveway and are located in between Bavaria Road and the existing home.

The new gravel parking lot will be situated by the house venue near its northwest corner. There is a grove of trees that encompass this area, however, there is a subtle opening that exists on the northwest corner near the home with a level grade compared to the surrounding area. The choice to locate the parking lot within the grove of trees was to help hide the parking lot more from adjacent properties, hide from the operating areas of the venue, and provide a natural screen.

(general area of parking lot shown in orange)

The parking lot will be accessed on the north and west sides of the existing driveway into the site. Two accesses are proposed into this lot; one on the south side and one on the east side of the lot.

The plan shows one wetland that is near the proposed parking lot. The improvements will impact this wetland slightly and the applicant will be working with the City and other agencies to provide mitigation. The applicant will be required to update their wetland impact study that was completed with the initial CUP/Site Plan approvals.

Views from Off-Site

Views of the site improvements will be very minimal from off-site because of the distance and topography between the venues and nearby parcels, as well as the development pattern in the area. Most adjacent parcels are single-family lots of substantial acreage, and the City's zoning and greenbelt designations ensure that this will remain immutably.

Parking/Circulation

Existing parking has been provided on site to accommodate 400 cars. At the time the preliminary and final approvals were done, the 400 stalls were considered an adequate amount of stalls to accommodate the wedding venue operations. It should be noted that this 400-stall number was based on the two venues (Venue #1 and #2) operating. In the future, if and when, Venue #3 is constructed, parking was going to be re-evaluated for adequate numbers.

The existing 400-stall parking lot is situated to the south of the barn/stables on gravel. Staff had advised using gravel parking lots versus bituminous as it would be less disruptive and more complementary to the Greenbelt area.

The proposal to add another parking lot is based on the applicant's logistical use of the site and not necessarily because of insufficient parking. They have stated that the reason to add another parking lot is for a couple reasons; one, they are in preparation of setting up the second venue (Equestria West) in the near future, and would like to have two separate parking areas immediately upon completion; two, they are currently having logistical challenges with

the valet services in place. Currently, attendees from the house venue park in the parking lots adjacent to the barn buildings and ultimately shuttle to the house. At the end of the evening or when people decide to leave, they are valeted back to their vehicles. The valet service is in operation for long hours, but cannot cover the entirety of an event and all the setup, takedown, and other parts of a full day; people may be waiting for a period of time to get shuttled back to their vehicles since attendees tend to leave at similar times for events. Lastly, there are safety concerns with the location of the existing parking lot near the barn site. Regardless of the option to use valet parking, there are still attendees who prefer to walk the ¼ mile back to their cars along a dark, narrow, and winding road.

With the addition of a new parking lot near the house venue it will allow the venue to phase out the valet service altogether, which in part, will be a significant financial saving. The applicant currently spends $150,000 a year on valet services.

The applicant used data from their events at Bavaria Downs to estimate the amount of additional parking that is needed to service the house venue. Typically, the parking count at the events is approximately 30-35% of attendance. Since the largest events at the main venue attract 400 guests, attendees require roughly 140 stalls. Considering employees and vendors, and adding just a few stalls extra for parking, they are proposing a parking lot of 170 stalls. The plan is to construct the parking lot the same as the existing parking lot; gravel with concrete sidewalks leading guests to the venue.

The location of the new parking lot was selected carefully to provide the best/most convenient location for attendees to walk from parking to the front entrance to the venue, provide an area that has suitable grades to accommodate a parking lot, provide a natural screen from adjacent properties and the venue, and to lessen the impact on tree removals in the most open area of the treed area.

Utilities

Water utilities are available to the south from the existing Symphony Hills development. Sewer is not readily available. It should be noted that the property is not located within the MUSA and thus is not required to connect to City utilities, however the applicant has already connected to City water to provide adequate fire suppression services.

Underground electric utilities are nearby the proposed parking lot site and thus the applicant will need to continue coordination with the electric department on any impacts.

Grading/Drainage/Stormwater Management

The proposed parking lot was chosen to limit the amount of site impact, including grading, that will occur. The area chosen is fairly flat, and the natural drainage patterns will continue. The applicant is prepared to provide stormwater management by whatever means necessary – as shown on the site plan – and have been encouraged by City staff to consider parking lot construction using methods beyond typical bituminous or concrete. This is a welcomed directive, and will fit the intent to provide a natural, environmentally-friendly setting. The applicant will have to meet all applicable agency requirements for stormwater and grading.

Tree Preservation & Screening
The applicant has provided a tree preservation plan. The impacts of the parking lot improvements will remove 85 trees including oaks, basswoods, cedars, and elms. Again, the applicant is trying to use an area that is fairly flat and near to the home, less impact on the adjacent wetland, and convenient for the attendees. From staff's perspective it does not appear that there is one area significant from the rest that needs to be preserved for trees.

Looking at the open areas of the site, unencumbered by trees (north of the ballroom structure or southeast of the home), for a parking lot would pose a couple different concerns. One being that putting the lot in the open area could be a concern for adjacent properties and potential headlight glare from the vehicles; the grades are also more challenging to work with compared to the selected area. Another being the proximity of the lot to the front door of the venue which faces west. Attendees would have to walk a further distance to get to the front door of the venue, and thus would create an inconvenient burden on the guests.

It appears that the applicant took the most logical approach in terms of location, grade and screening. The majority of the site and its natural characteristics will be maintained.

Staff sees one opportunity for screening on the east side of the proposed parking lot/stormwater ponding area adjacent to the gravel driveway. This edge is not covered by lush tree cover rather it fronts a large open area. Staff would advise that additional trees be added to this edge to help further screen potential headlight glare from vehicles. This can be done with either coniferous or deciduous trees/plantings or a mix of the two.

Lighting
The applicant has provided a photometric and lighting plan for this parking lot to show that the impacts from this new parking lot will be minimal if at all. The photometric plan indicates that foot candles from the parking lot and venues would zero out before reaching property lines.

The lighting specs provided show the use of full cutoff fixtures and heights that are within ordinance allowance (27 feet high).

CONDITIONAL USE PERMIT
The applicant obtained a Conditional Use Permit (CUP) in order to operate such a use in the Rural Residential (RR-2) zoning district in September 2017. Since the applicant is expanding the operation for an additional parking lot that was not included in the original approvals, a CUP amendment is required.

A Conditional Use Permit may be granted by the City Council after demonstration by evidence that:

a) The establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, comfort or general welfare;
b) The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within the neighborhood;
c) The establishment of the special use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;

d) Adequate utilities, access roads, drainage, and necessary facilities have been or will be provided;
e) Adequate measures have been or will be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets;
f) The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located.

The establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, comfort or general welfare. The use to add another parking lot will be on a piece of property that is significant in size (270 acres). Because of the size of the property it lends itself to provide adequate spacing from adjacent properties. Because of this, neighbors should not be significantly affected by the use that occurs there. As noted previously, the location of the proposed parking lot appears to be in the most logical location on the site and adjacent to the home. Natural screening will occur around the parking lot to hide it from adjacent properties.

The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within the neighborhood. As stated above, the use is on a large piece of property thus separates the use's potential impact on neighboring properties. Sight lines of the use will be at a minimum due to the large separation between other properties and the natural screening occurring around the parking lot.

The establishment of the special use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district. The proposal to add another parking lot will still maintain the low-density character of the Rural Residential (RR-2) area. A gravel parking lot is much more complementary to the rural context than a bituminous one. The impact on the area will be minimal and logistical for the operation of the venue.

Adequate utilities, access roads, drainage, and necessary facilities have been or will be provided, and adequate measures have and will be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets. The site has provided an access into the site consistent with staff's previous comments. The driveway into the site was also widened to provide for two-way movement. The proposed parking lot will connect into the existing system well and provide dimensions that are adequate for a parking lot. Stormwater ponding is proposed on the northeastern side of the proposed parking lot to accommodate drainage necessities.

The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located. The Rural-Residential district is intended to help preserve Chaska's identity as a separate free-standing community as urban expansion of the Twin Cities metropolitan area occurs around Chaska, and is also intended to preserve the significant natural resources within Chaska's current and ultimate corporate limits. The use proposed is maintaining the existing spatial relationship with neighboring properties, as well as utilizing the existing structures on site so as to provide minimal impacts to the natural features. The proposed parking lot will be close to the house venue and over 1,000 feet away from adjacent parcels, and thus the spatial characteristics should not be changing by much. The use will be consistent with the intention of this zoning district.

It appears that the applicant is meeting the intention of the zoning district that they are in, as well as the standards set forth for a Conditional Use Permit.

PLANNING COMMISSION ACTION REQUESTED

Motion to recommend to City Council approval of the amendment to the original Conditional Use Permit (Res. No. 2017-96) for an additional gravel parking lot at Bavaria Downs, subject to the added following conditions below:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Project Narrative (pgs 1-3), prepared by Tim George, dated May 9, 2019**
    b. **Cover Sheet, prepared by Campion Engineering Services, Inc., dated May 29, 2019**
    c. **Existing Conditions Plan, prepared by Campion Engineering Services, Inc., dated May 29, 2019**
    d. **Site Plan, prepared by Campion Engineering Services, Inc., dated May 29, 2019**
    e. **Grading & Drainage Plan, prepared by Campion Engineering Services, Inc., dated May 29, 2019**
    f. **Storm Water Pollution Prevention Plan, prepared by Campion Engineering Services, Inc., dated May 29, 2019**
    g. **Tree Inventory/Preservation Plan, prepared by Campion Engineering Services, Inc., dated May 29, 2019**
    h. **Photometric Plan, prepared by City View Electric, Inc., dated June 4, 2019.**
2. **Provision of a revised landscape plan to incorporate additional trees/plantings on the east edge of the parking lot/stormwater ponding area that abuts the gravel driveway to be approved by the Planning Department.**
3. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
4. **Provision to update stormwater management plan and wetland impact study done with original CUP and be approved by regulatory agencies.**
5. **Provision to use full cut off light fixtures in the new parking lot.**
6. **No parking associated with Bavaria Downs, or associated events, may occur on Bavaria Road, 86th Street West, or any other adjacent public Right-of-Way.**
7. **Provision to incorporate sidewalks or pedestrian connections from parking lot to house venue as shown on the plans.**
8. **Coordination with the Electric Department on any impacts to the existing underground electric system.**
9. **Compliance with 14.7.4 'Standards for Granting Conditional Use Permits' of the Zoning Ordinance.**
10. **Compliance with Section 9 of the Zoning Ordinance.**

BAVARIA

est. | DOWNS | 2017

Bavaria Downs
3919 Bavaria Road
Chaska, MN 55318

May 7, 2019

City of Chaska
One City Hall Plaza
Chaska, Minnesota 55318

RE: Special/Conditional Use Permit Amendment – Bavaria Downs

Dear Mayor Windschitl and City Council Members, Chair Dahlke and Planning Commissioners, and City Staff:

Thanks in large part to help from and the cooperation of the City of Chaska, Bavaria Downs opened in the fall of 2018 to great success. We hope that you have had a chance to visit and admire the setting and many amenities of the site. It has been an exciting start for this unique venue, and we are looking forward to the continued success we have experienced thus far.

To that end, we are requesting an amendment to our Conditional Use Permit to allow construction of a second parking lot, nearer the main event center. The reasons for this are many. One, we are in preparation for construction and use of the barn venue (Equestria West, which is Phase II of our intended use of the property) in the near future, and will need two parking areas immediately upon completion. Two, we anticipate continued logistical challenges with utilizing only valet parking, considering the times of arrival and/or departure of the vendors, early attendees, the wedding party, etc. The valet service is in operation for long hours, but cannot cover the entirety of an event and all the setup and takedown and other parts of a full day. Three, there are safety concerns with the location of the existing parking lot near the barn site; regardless of the option to use valet parking, there are still attendees who prefer to walk the ¼ mile back to their cars along a dark, narrow, and winding road.

Since we will need a second parking lot in the near future and considering these issues (along with the cost of providing valet service at roughly $150,000 per year), we feel the time is right to seek approval of an amendment to allow construction of the second lot as soon as possible.

We used data from our events to date at Bavaria Downs to estimate the amount of additional parking that is needed. Typically, the parking count at our events is approximately 30-35% of attendance. Since the largest events at the main venue attract 400 guests, attendees require roughly 140 stalls. Considering employees and vendors, and adding just a few stalls of extra parking, we are proposing a lot with 170 parking stalls.

The plan is for the lot to be constructed the same as the current lot (no bituminous or concrete), with a location in the most convenient place to the venue where we can be mindful of existing grades, tree preservation, etc. Attached, you will find a site plan and layout, showing the area to be cleared for construction of the lot. We are working with the City and County to provide mitigation of a small wetland that will be impacted by the site improvements. With all those

considerations, we feel that this is the optimal location for a new parking lot to serve the needs of event attendees at Bavaria Downs.

While this amendment application is only for a parking lot, we hope that you have found that all of the tenets of the City's development of a green belt and establishment of the RR-2 zoning for this property have been upheld with the use of the site as a destination for events, and that our construction to date has minimized impact on the natural surroundings to the extent possible on such a vast expanse of beautiful property. We strive to continue along that path, with a parking area constructed in a manner befitting the site and its venues, tucked away in the most thoughtful place to best utilize the site, have no impact on the neighboring area, and again, minimize impact on the site itself. With that in mind, the criteria for approval of a conditional use permit are listed below. We hope that you will agree that this necessary improvement meets all of these benchmarks and standards.

- The use must be consistent with the intent of the ordinance.
  The property is zoned RR-2. The ordinance reads as follows:
  This district is intended for application to land located at the edge of Chaska's corporate limits where a "green belt" separation from adjacent communities is desired. The district is intended to help preserve Chaska's identity as a separate free-standing community as urban expansion of the Twin Cities metropolitan area occurs around Chaska. Toward this end, the district provides for agricultural, horticulture and similar open space uses together with scattered non-farm dwellings at a maximum density of four dwellings per quarter quarter section (4 per 40 acres). Clustering of lots so as to leave large undeveloped areas that may be susceptible to future resubdividing shall be prohibited. Such low density development is intended to be a permanent land use pattern and is not considered a holding zone for future urban development. This district is not intended to be served with municipal sewer and water facilities. In addition to serving a "green belt" function and providing opportunities for ex-urban living in a rural/natural setting, this district is also intended to preserve the significant natural resources within Chaska's current and ultimate corporate limits.

- The use is consistent with the goals, policies, and objectives of the comprehensive plan.
  The City's Comprehensive Plan reads in part as follows:
  Rural Residential Lots or parcels of five (5) acres or more guided for single-family detached dwellings at four dwelling units per 1/4 1/4 section (40 acres). Conservation Development (Conservation Residential and Conservation Business Campus) on city sewer and water are desirable land uses within Chaska's Greenbelt. It is anticipated that the conversion of these areas would be post-2030.
  Policies: Chaska Greenbelt
  1) A permanent greenbelt shall be established around the edges of the City to the extent possible…
  The primary purposes of such greenbelt are:
  a) to help preserve and strengthen Chaska's sense of community and identity as a freestanding community,
  b) to help achieve a wide variety of housing choices within the City including a rural lifestyle, and
  c) to preserve and protect valuable open space and natural resources.
  …
  3) The protection of "rural character" will be an important land use strategy for implementing the "Greenbelt" concept. A cooperative preservation strategy between the City and "Key" property owners will enhance the rural character of the Greenbelt and strengthen the

historic relationship of Downtown Chaska and the agricultural lands that surrounded it. The preservation of very low density (minimum one housing unit per 80 acres) land uses at the "Key" entrances to the community is one method of to promoting the "rural character". Methods to preserve the "rural character" of these "Key" entrances are as follows:
a) "Key" entrances are those locations where an arterial road (planned or existing) as identified in Chapter 4 enters or exits the community.
b) The parcel to be preserved for agricultural purposes is 80 acres in size and is designated as being in the Greenbelt.
c) A permanent land use protection tool is put in place on the property to be preserved, such that the permanent and continued agricultural utilization of the land is ensured.
d) The building eligibilities of the area to be preserved, that would have been available if development had occurred under the RR-2 zoning district, can be transferred to adjacent land that is owned by the same owner of the land to be preserved, such that the minimum lot area and spacing requirements of the RR-2 zoning district would still apply to those transferred building eligibilities.
e) The area that the building eligibilities are to be transferred to will be visually remote from the "Key" entrance.

- The use does not have an undue, adverse impact on governmental facilities, utilities, services, or existing or proposed improvements.

- The use does not have an undue, adverse impact on the health, safety, or welfare of the community.

  We believe this addition to Bavaria Downs will be a use the meets the intent and goals of the City's long-standing and significant efforts to preserve the character of the area. As stated in the initial application for the conditional use permit: *because of the size of the site, the nature of the uses, and the natural buffer areas already in place, we are intent on providing a service that will not detract from neighbors' enjoyment of their own properties as they have come to expect.* We believe that the proposed expansion will do the same.

To summarize, we respectfully request that the City consider approval of our plans and an amended conditional use permit for the further development and future use of the property at 3919 Bavaria Road. Please do not hesitate to contact me with any questions or concerns in advance of the meetings at which this request will be heard. Thank you.

Respectfully submitted,

Tim George, Owner
Bavaria Downs

BAVARIA
est. | DOWNS | 2017

Bavaria Downs
3919 Bavaria Road
Chaska, MN 55318

May 29, 2019

City of Chaska Attn: Elizabeth Hanson
One City Hall Plaza
Chaska, Minnesota 55318

RE: Special/Conditional Use Permit Amendment – Bavaria Downs

Elizabeth:

Thank you for the letter outlining our submittal and the additional requests from the City. Please find our comments (*italicized*) in response to the letter in the following paragraphs.

1. Check of $1,176 covering application fees
Check was mailed to the City on 05/22
2. Narrative with these additives/changes:
▪ Clarification on if valet services will continue to be used after new parking lot installed
The intent is to no longer utilize valet parking when the new lot is installed, with the possible exception of a few events that have been booked that far in advance and would like to keep that service. However, valet services will be phased out as soon as and to the extent possible.
▪ Summarize how the site will continue to utilize the new parking lot and existing parking lots; will the existing parking lots be used for the house venue or will the new parking lot accommodate all that is needed for this venue
The new lot will accommodate parking needs for the house venue. There may be rare exceptions when staff needs to park in the existing lot, but in general, that lot will be only utilized for the future Phase II venue.
▪ Reason for the location of the proposed parking lot and any screening that will be achieved; is there additional screening or landscaping planned for the parking lot? Were other locations explored that may impact less trees, such as south of the driveway? Why is the proposed location the most optimal?
Other options for the location of the new parking lot were explored, but in addition to safety and logistics (for event flow), we chose this location due mainly to topography, tree preservation, and pedestrian access tying into the existing system. There is no additional screening planned, although we welcome any suggestions from the City on landscape enhancements near the parking lot (the addition of sidewalks inhibits installation of too much additional landscaping). With the natural screening in that area, the parking lot will remain hidden from view of

neighboring properties, and headlight glare is not a concern because of both the orientation of the lot and the area of the venue upon which those lights will shine.

3. Tree Preservation/Survey

Attached to this submittal. The tree survey shows and lists the trees to be removed. Again, this area had the least impact on the forest as a whole and on significant trees, and the area of grading necessary is minimized compared to other potential locations nearby the venue. As a percentage of the entire 268-acre site, the number of trees to remain far exceeds any tree preservation requirement.

4. Aerial photograph with site plan/parking lot shown on it

Attached to this submittal.

5. Photometric Plan & Lighting Specs of all new proposed parking lot lights

Spec sheets are attached to this submittal. Photometric plan is being completed and will be submitted in the coming days. Obviously, light spill onto neighboring properties is not a concern. The pole heights are listed, and with the natural vegetation and topography of the site, it is doubtful that the fixtures lighting the parking lot will be visible from off site. We are committed to providing a safely-lit parking lot and pedestrian system.

6. All Plans and Plat with these additives/changes:

▪ Show Minnesota Valley Electric Line if in the vicinity

We are unaware of any conflict with the electric line, but will work with the City and Minnesota Valley to ensure that no easements are encroached, or that the line and associated easements are rerouted, if necessary.

▪ Wetland location called out clearly

The delineated wetland is shown on the attached site plan.

▪ Pedestrian connections into venue

Pedestrian connections are shown on the attached site plan.

Please do not hesitate to contact me or my team with requests for any additional information or with questions. Thank you.

Respectfully submitted,

Tim George, Owner
Bavaria Downs

CITY OF CHASKA

Bavaria Downs

Date: 6/3/2019

0 0.0075 0.015 0.03 0.045 0.06 mi

N

Plot Date & Time:

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG
GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

BAVARIA DOWNS
HOUSE VENUE PARKING
CHASKA, MN

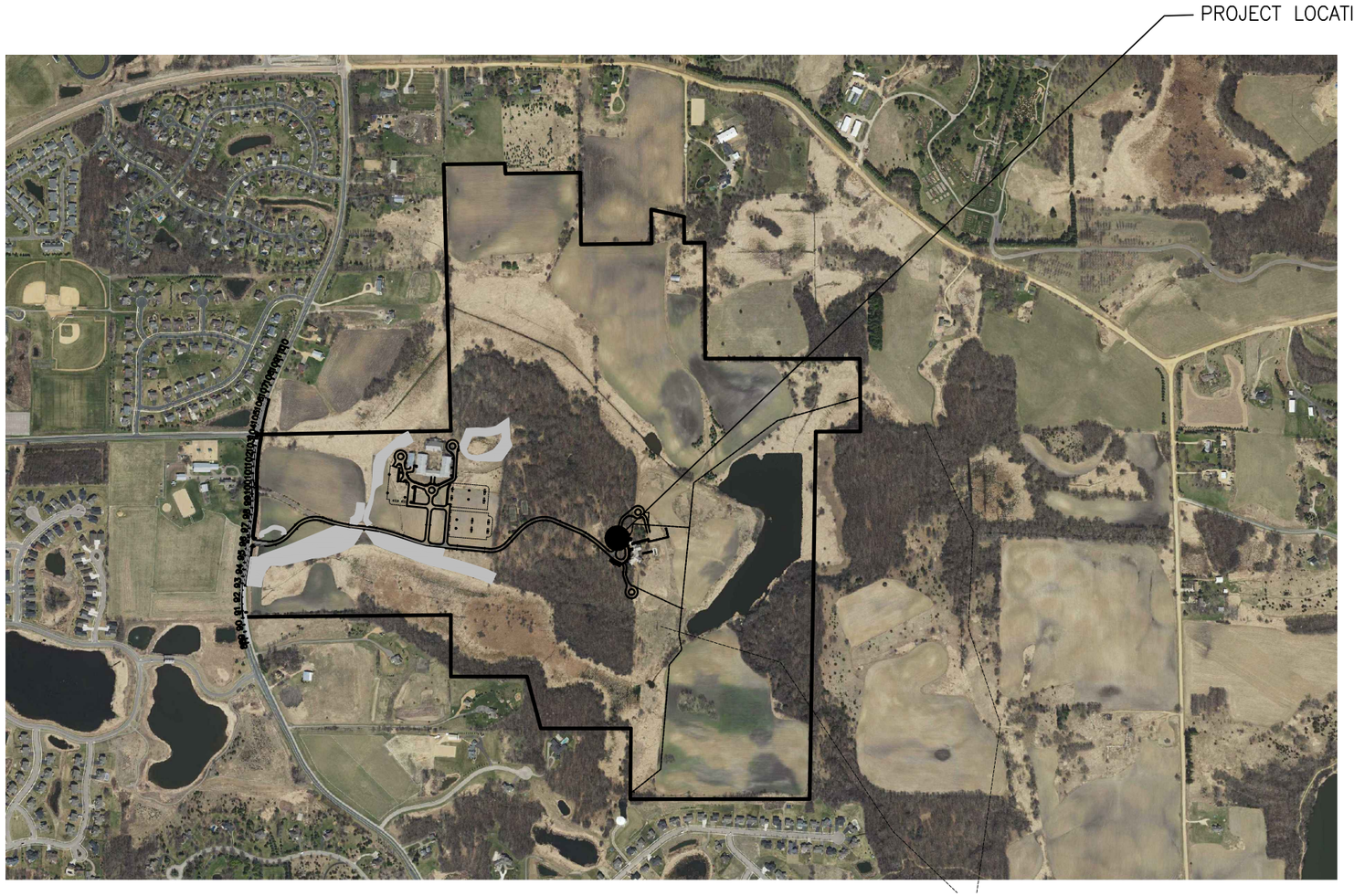
PROJECT DIRECTORY

OWNER:
A'BULAE
TIM GEORGE
255 6TH STREET -6TH FLOOR
ST PAUL, MN 55101
PH. 651.227.1202
EMAIL: TIM.GEORGE@BELLAGALA.COM

ENGINEER:
CAMPION ENGINEERING SERVICES, INC.
MARTY CAMPION
1800 PIONEER CREEK CENTER
MAPLE PLAIN, MN 55364
PH. 763.479.5172
EMAIL: MCAMPION@CAMPIONENG.COM

SURVEYOR:
WENCK
ROWDY SCHMIDT
1800 PIONEER CREEK CENTER
MAPLE PLAIN, MN 553645
PH. 763.479.4200
EMAIL:RSCHMIDT@WENCK.COM

WETLAND DELINEATOR
MIDWEST NATURAL RESOURCES, INC
KEN ARNDT
1032 WEST SEVENTH, #150
ST PAUL, MN 55102
PH. 651.788.0641
EMAIL: KEN.ARNDT@MNRINC.US



NOTE:
BOUNDARY INFORMATION PER ALTA SURVEY PREPARED BY ALLIANT ENGINEERING, DATED APRIL 19, 2005.
EXISTING CONTOURS PER LIDAR

GOVERNING SPECIFICATIONS:

1. THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" LATEST EDITION & SUPPLEMENTS.
2. CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD UTILITIES SPECIFICATIONS. (LATEST EDITION)
3. ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCE WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.
4. CITY OF CHASKA STANDARD SPECIFICATIONS & DETAILS.

INDEX

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	EXISTING CONDITIONS
3.	SITE PLAN - HOUSE VENUE
4.	GRADING & DRAINAGE PLAN
5.	STORM WATER POLLUTION PREVENTION PLAN
6.	TREE INVENTORY/PRESERVATION PLAN
7.	DETAILS

N

0 500 1000
GRAPHIC SCALE IN FEET

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NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.
● Civil Engineering ● Land Planning
1800 Pioneer Creek Center,
P.O. Box 249
Maple Plain, MN 55359
Phone: 763-479-5172
Fax: 763-479-4242
E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.
Martin P. Campion -Lic. # 19901 Date: 05/29/2019

BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

COVER SHEET

PROJECT NO: 17-029

SHEET NO. 1 OF 7 SHEETS

DATE: 05/29/2019

Plot Date & Time:

NOTE:
BOUNDARY INFORMATION PER ALTA SURVEY PREPARED BY ALLIANT ENGINEERING, DATED APRIL 19, 2005.
EXISTING CONTOURS PER LIDAR

REFER TO ALTA SURVEY FOR LEGAL DESCRIPTION

WETLAND DELINEATOR
MIDWEST NATURAL RESOURCES, INC
KEN ARNDT

12" HDPE FES W/ TRASHGUARD & CL III RIPRAP INV=999.0
EOF 1005.1
6" DRAINTILE
TOP OF BERM 1005.5
BOIFILTER 4 HWL=1004.6 EOF=1005.1 BOTTOM=1002.0
APPROXIMATE LOCATION OF BURIED PROPANE TANKS 4-1000 GAL TANKS (VERIFY LOCATION)
12" CMP INV=1004.55
12" CMP INV=1006.90
BITUMINOUS DRIVE
GRAVEL
FLOOR = 1015.0
FLOOR 1019.0
EXISTING BUILDING
BRICK PATH
CENTER OF CREEK
POOL
CHAIN LINK FENCE
RETAINING WALL
FE LOW GARAGE =1006.85
WET LAND
WET
SEC
NE 1/4
1 14

LEGEND

- SET CAP IRON MONUMENT 18425
- FOUND IRON MONUMENT
- SET MAG NAIL
- ELECTRICAL FACILITY
- HYDRANT
- WATER VALVE
- TELEPHONE BOX
- SANITARY MANHOLE
- CATCH BASIN
- STORM MANHOLE
- POWER POLE
- COLUMN
- POWER POLE AND LIGHT POLE
- (M) MEASURED DISTANCE
- WILLIAMS BROTHERS PIPELINE
- GAS
- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- FIBER OPTIC
- UNDERGROUND TELEPHONE
- OVERHEAD ELECTRIC
- GRAVEL
- APPROXIMATE WETLAND EDGE (DEPICTED FROM MN LANDMAGEMENT 2004 DIGITAL PHOTO)
- EDGE OF WATER
- CONCRETE
- BIRCK
- WET LAND FENCE
- WET EDGE OF DELINEATED WETLAND
- PROPOSED "NO PARKING" SIGN
- PROPOSED STREET LIGHT

N

0 50 100
GRAPHIC SCALE IN FEET

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NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.
● Civil Engineering ● Land Planning
1800 Pioneer Creek Center,
P.O. Box 249
Maple Plain, MN 55359
Phone: 763-479-5172
Fax: 763-479-4242
E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.
Martin P. Campion -Lic. # 19901 Date: 05/29/2019

BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

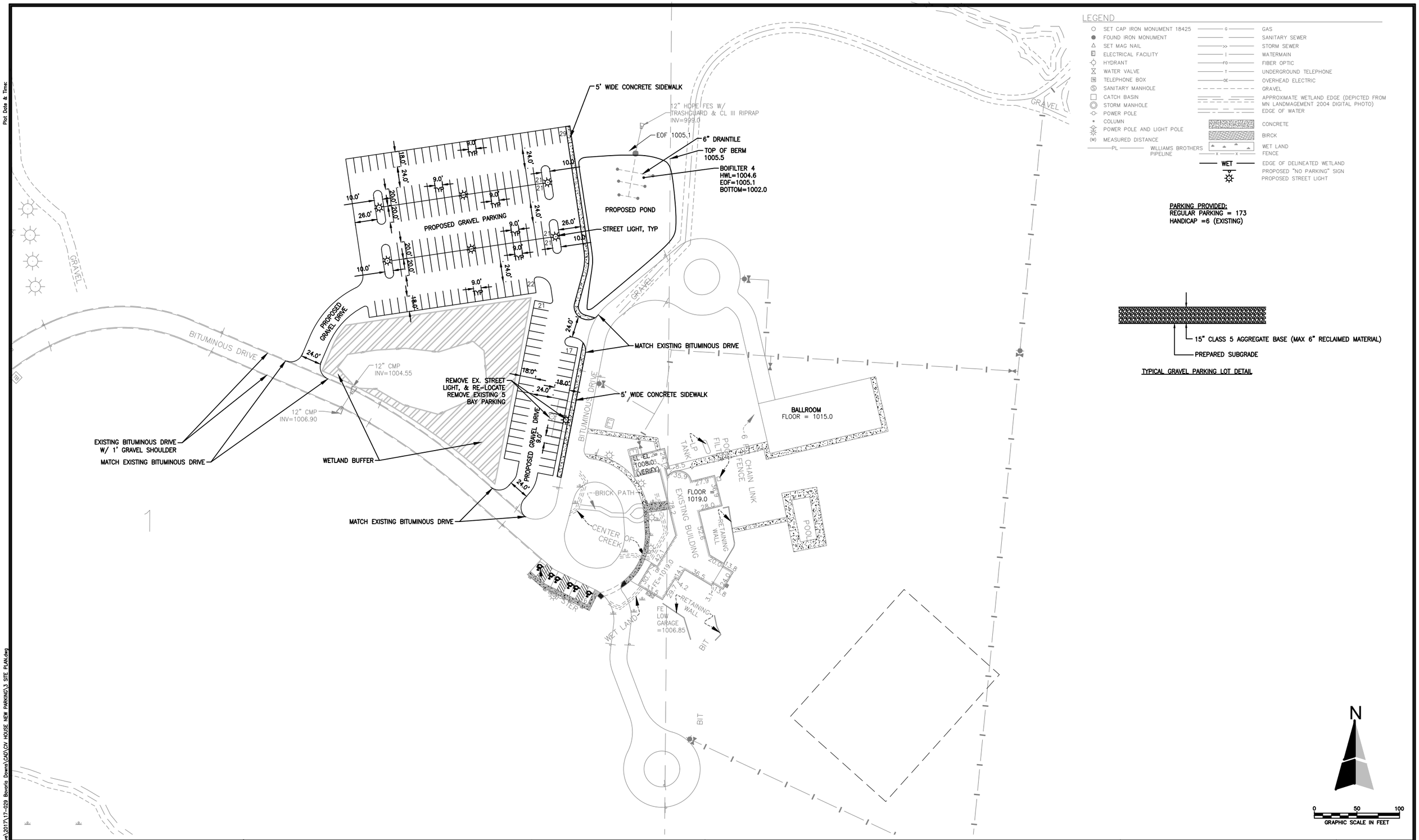
EXISTING CONDITIONS

PROJECT NO: 17-029

SHEET NO. 2 OF 7 SHEETS

DATE: 05/29/2019

Plot Date & Time:



LEGEND

SET CAP IRON MONUMENT 18425	GAS
FOUND IRON MONUMENT	SANITARY SEWER
SET MAG NAIL	STORM SEWER
ELECTRICAL FACILITY	WATERMAIN
HYDRANT	FIBER OPTIC
WATER VALVE	UNDERGROUND TELEPHONE
TELEPHONE BOX	OVERHEAD ELECTRIC
SANITARY MANHOLE	GRAVEL
CATCH BASIN	APPROXIMATE WETLAND EDGE (DEPICTED FROM MN LANDMAGEMENT 2004 DIGITAL PHOTO)
STORM MANHOLE	EDGE OF WATER
POWER POLE	CONCRETE
COLUMN	BIRCK
POWER POLE AND LIGHT POLE	WET LAND
(M) MEASURED DISTANCE	FENCE
PL WILLIAMS BROTHERS PIPELINE	EDGE OF DELINEATED WETLAND
	PROPOSED "NO PARKING" SIGN
	PROPOSED STREET LIGHT

PARKING PROVIDED:
REGULAR PARKING = 173
HANDICAP =6 (EXISTING)

TYPICAL GRAVEL PARKING LOT DETAIL

N

0 50 100
GRAPHIC SCALE IN FEET

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NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.

● Civil Engineering ● Land Planning
1800 Pioneer Creek Center,
P.O. Box 249
Maple Plain, MN 55359
Phone: 763-479-5172
Fax: 763-479-4242
E-Mail: mcampion@campioneng.com

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Martin P. Campion -Lic. # 19901 Date: 05/29/2019

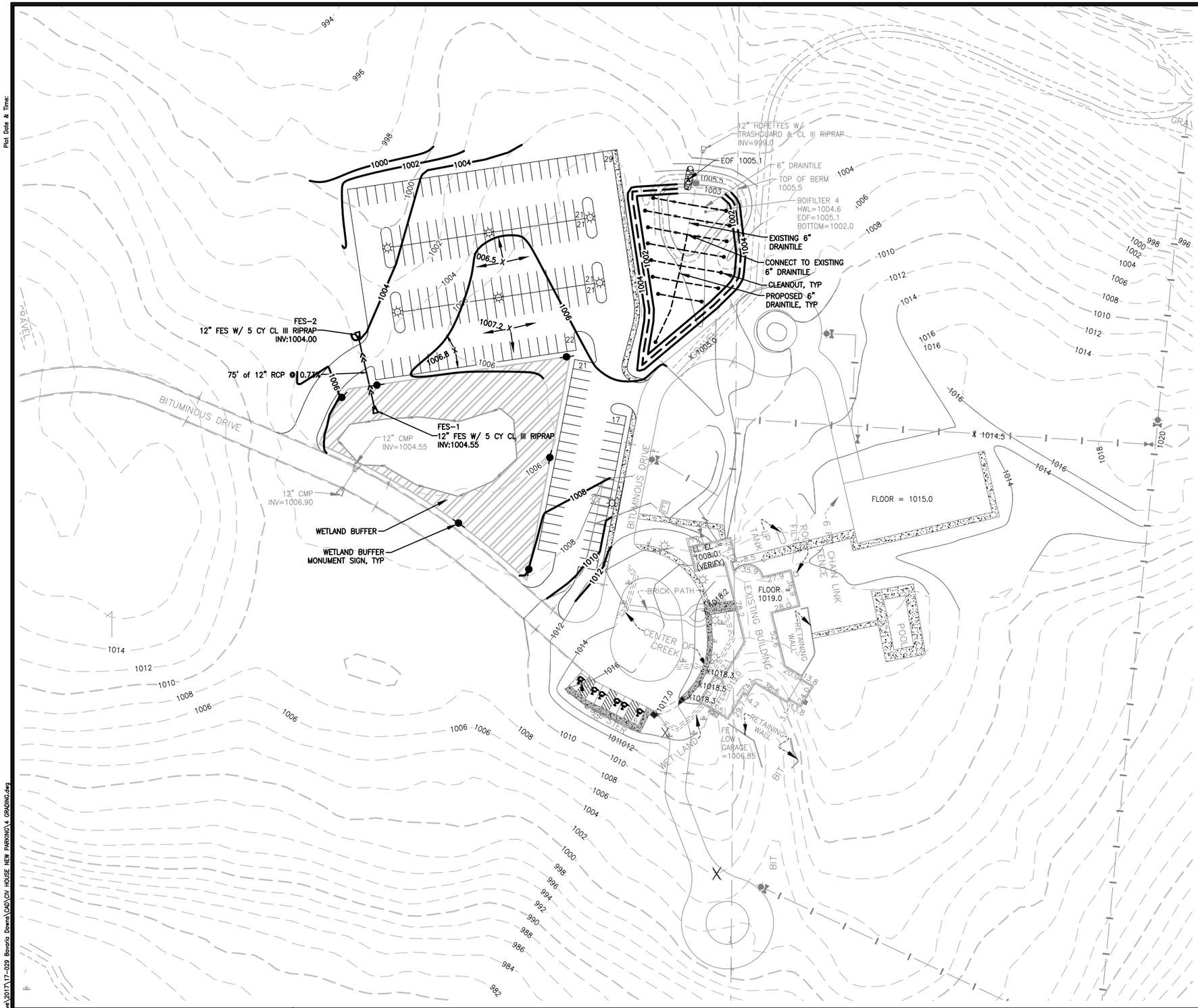
BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

SITE PLAN

SHEET NO. 3 OF 7 SHEETS

PROJECT NO: 17-029

DATE: 05/29/2019



CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MN. TOLL FREE 1-800-252-1166

GENERAL NOTES

1. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES.
2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
3. THE CONTRACTOR MUST CONTACT ALL APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING GOPHER STATE ONE CALL (1-800-252-1166).
4. SAFETY NOTICE TO CONTRACTORS: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON OR NEAR THE CONSTRUCTION SITE.
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. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
6. THE CONTRACTOR SHALL RESTRICT ALL GRADING AND CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON THE PLANS. ACTIVITIES PROHIBITED OUTSIDE THE CONSTRUCTION BOUNDARIES INCLUDE, BUT ARE NOT LIMITED TO: STOCKPILING SOILS AND OTHER MATERIAL, STORING EQUIPMENT OR OTHER MACHINERY, DRIVING VEHICLES, LEAKING OR SPILLING OF ANY "WASHOUT" OR OTHER TOXIC MATERIALS.
7. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTES AND INSPECTIONS WITH THE SOILS ENGINEER.
8. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A TEST ROLL WILL BE REQUIRED ON THE PARKING LOT SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER AND AS SPECIFIED.
9. THE SITE HAS NOT NECESSARILY BEEN DESIGNED TO BALANCE THE ON-SITE MATERIALS. AFTER THE SITE GRADING IS COMPLETE, IF EXCESS SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL OFF-SITE IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
10. THE EXISTING TOPSOIL ON THIS SITE VARIES IN DEPTH. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ALL SURFACE VEGETATION AND ANY TOPSOIL OR OTHER LOOSE, SOFT OR OTHERWISE UNSUITABLE MATERIAL BE REMOVED FROM THE STREET AND BUILDING PAD AREAS PRIOR TO PLACEMENT OF ANY EMBANKMENT IN ACCORDANCE WITH THE SOILS REPORT.
11. EMBANKMENT MATERIAL NOT PLACED IN THE PARKING LOT OR DRIVE AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE QUALITY COMPACTION METHOD AS OUTLINED IN MN/DOT 2105.3F2 OR AS DIRECTED BY THE SOILS ENGINEER.
12. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE SOILS ENGINEER. EMBANKMENT MATERIAL PLACED IN THE PARKING LOT SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MN/DOT 2105.3F1.
13. TOLERANCES:
    a. THE PARKING LOT SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
    b. AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED BY THE ENGINEER.
    c. TOPSOIL SHALL BE GRADED TO PLUS OR MINUS ½ INCH OF THE SPECIFIED THICKNESS.
14. ALL DISTURBED UNSURFACED AREAS ARE TO IMMEDIATELY RECEIVE SIX INCHES OF TOPSOIL, SEED AND MULCH AND BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
15. SPOT ELEVATIONS SHOWN INDICATE FINISHED GRADE ELEVATION UNLESS OTHERWISE NOTED.
16. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
17. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE ALONG MATCHING PAVEMENT AREAS.
18. THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
19. THE CONTRACTOR SHALL PROVIDE DEWATERING AS REQUIRED TO COMPLETE THE SITE GRADING CONSTRUCTION OR AS DIRECTED BY THE SOILS ENGINEER.
20. WETLAND BUFFER AREAS THAT ARE DISTURBED BY GRADING SHALL BE RESTORED AS FOLLOWS:
    a. SOILS MUST BE DECOMPACTED TO A DEPTH OF 18" PRIOR TO SEEDING OR PLANTING.
    b. ALL DISTURBED BUFFERS SHALL BE RESTORED WITH MNDOT SEED MIX 35-241.
21. VEGETATIVE COVER SHALL BE ESTABLISHED TO 90% IN ALL DISTURBED AREAS AND 100% IN AREAS OF CONCENTRATED FLOW PRIOR TO RELEASE OF WMO SECURITY.

POND GRADING

1. THE CONTRACTOR SHALL AVOID COMPACTING THE POND BOTTOM. RUBBER TIRED EQUIPMENT SHALL BE PROHIBITED WHEN WORKING IN THE POND AREA.
2. THE BOTTOM AND SIDE SLOPES SHALL BE STABILIZED WITH THE SPECIFIED PLANT MATERIALS WITHIN 7 DAYS OF COMPLETING THE POND GRADING.
3. POND SHALL BE GRADED 12" – 18" ABOVE FINAL GRADE UNTIL SITE GRADING IS SUBSTANTIALLY COMPLETE.
4. AS PART OF FINAL GRADING, NATIVE SOILS IN THE POND SHALL BE DE-COMPACTED TO A DEPTH OF 12" – 18".
5. PONDS AND BIOFILTRATION BASINS SHALL BE SEEDED WITH MNDOT SEED MIX 34-262 WITH HYDRAULIC MATRIX.

CAUTION NOTES:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.

THE CONTRACTOR MUST CONTACT ALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING GOPHER STATE ONE CALL AT 800-252-1166 OR 651-454-0002.

DENOTES WETLAND BUFFER MONUMENT
DENOTES ROCK CONSTRUCTION ENTRANCE
DENOTES SILT FENCE
1010 DENOTES PROPOSED CONTOURS

N

0 50 100
GRAPHIC SCALE IN FEET

NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.

Civil Engineering • Land Planning
1800 Pioneer Creek Center,
P.O. Box 249
Maple Plain, MN 55359
Phone: 763-479-5172
Fax: 763-479-4242
E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.
Martin P. Campion 05/29/2019
Martin P. Campion -Lic. # 19901 Date:

BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

GRADING & DRAINAGE PLAN

PROJECT NO: 17-029

SHEET NO. 4 OF 7 SHEETS

DATE: 05/29/2019

Plot Date & Time:
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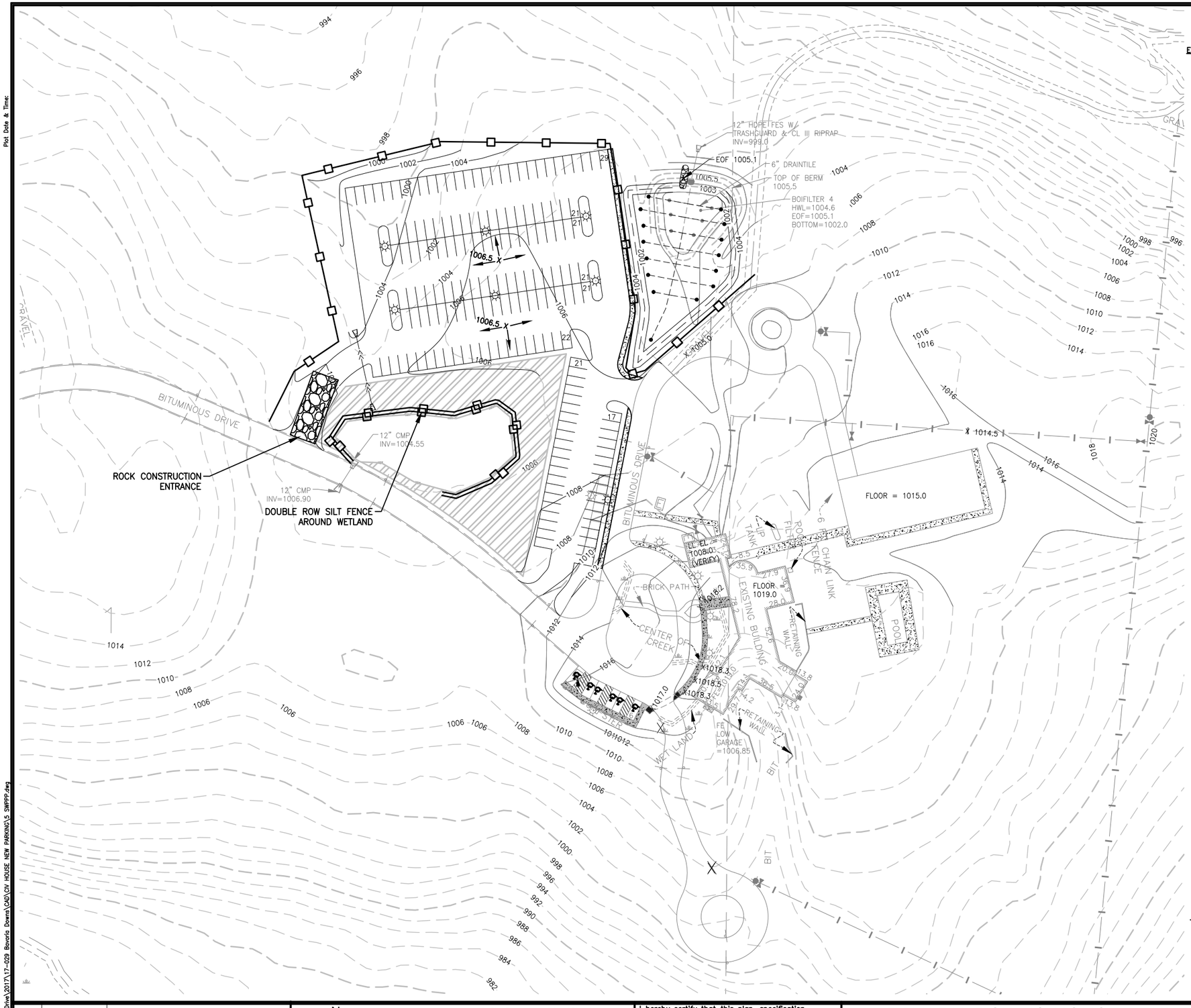
7.B. Recommend Approval of the...
Packet Page 136 of...
Page 17 of 56



Plot Date & Time:

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EROSION/SILTATION CONTROL

1. ALL EROSION CONTROL AND SILTATION CONTROL WILL COMPLY WITH MINNESOTA'S BEST MANAGEMENT PRACTICES MANUAL AND REGULATIONS OF THE CITY.
2. THE CONTRACTOR SHALL BE FAMILIAR WITH AND FOLLOW ALL REQUIREMENTS OF THE MPCA NPDES PHASE II PERMIT FOR CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO: WEEKLY EROSION CONTROL INSPECTIONS, INSPECTION AFTER 0.5" RAINFALL OR MORE AND DOCUMENTATION OF ALL CORRECTIVE MEASURES. BY BEGINNING CONSTRUCTION, THE CONTRACTOR ACKNOWLEDGES THE TERMS OF THIS PERMIT AND AGREES TO ABIDE BY THEM.
3. THE CONTRACTOR SHALL PERFORM ANY CORRECTIVE MEASURES ORDERED BY THE CITY OR THE MPCA WITHIN 24 HOURS OF NOTIFICATION. ALSO, ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY BY EITHER THE CITY OR THE MPCA SHALL BE INSTALLED WITHIN 24 HOURS OF NOTIFICATION.
4. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING PAVEMENT, IN TEMPORARY SEDIMENTATION BASINS, OR IN EXISTING STORM SEWERS OR SWALE'S SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED. REMOVAL FROM EXISTING PAVEMENTS SHALL BE ACCOMPLISHED BY SWEEPING.
5. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION INCLUDING BUT NOT LIMITED TO ROCK ENTRANCES AND/OR SILT FENCES. CONTROL SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY, AT HIS/HER OPTION DIRECT THE CONTRACTOR IN HIS/HER METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS.
6. ANY DEPOSITING OF SILT IN SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. THE SILT FENCES SHALL BE REMOVED AND THE SILT REMOVED FROM THE PONDING AREAS BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH AND MONITORING THE REQUIREMENT OF THE MPCA PERMIT.
8. ALL DISTURBED AREAS, EXCEPT ROADWAYS, BUILDING AREAS, PARKING AREAS, ISLANDS AND SIDEWALK, SHALL BE RESTORED WITH A MINIMUM 6 INCHES TOPSOIL, SEEDED AND MULCHED (TYPE I). SEEDING SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATION 2575, SEED MIX 25–142 @ 45 LBS/ACRE (OR APPROVED EQUAL). DORMANT SEEDING AREAS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH MNDOT SPECIFICATIONS, STRAW MULCHING QUANTITY SHALL BE TWO TONS PER ACRE, FERTILIZER (10–10–20) SHALL BE APPLIED AT A RATE OF 200 POUNDS PER ACRE (CAN BE OMITTED IN LANDSCAPED AREAS IF LANDSCAPED SEEDING IS DONE CONCURRENTLY). MNDOT SEED MIX 21–113 APPLIED AT A RATE OF 110 LBS/ACRE SHALL BE USED FOR TEMPORARY SEEDING IF NEEDED.
9. WETLAND BUFFER AREAS THAT ARE DISTURBED BY GRADING SHALL BE RESTORED AS FOLLOWS:
   a. SOILS MUST BE DECOMPACTED TO A DEPTH OF 18" PRIOR TO SEEDING OR PLANTING.
   b. ALL DISTURBED BUFFERS SHALL BE RESTORED WITH MNDOT SEED MIX 35–241.
10. PONDS AND BIOFILTRATION BASINS SHALL BE SEEDED WITH MNDOT SEED MIX 34–262 WITH HYDRAULIC MATRIX.
11. CONSTRUCTION SHALL PROCEED IN THE FOLLOWING SEQUENCE:
    a. CONTRACTOR SHALL SCHEDULE A PRE–CONSTRUCTION MEETING WITH THE CITY.
    b. INSTALL EROSION CONTROL MEASURES AND ROCK CONSTRUCTION ENTRANCE.
    c. CONTACT CITY FOR APPROVAL OF EROSION CONTROL INSTALLATION.
    d. CONSTRUCT TEMPORARY DRAINAGE DITCHES/SWALES/STORM SEWER TO DIVERT SURFACE RUNOFF TO TEMPORARY SEDIMENTATION PONDS.
    e. MAINTAIN EROSION MEASURE, I.E. SILT FENCE, ROCK CONSTRUCTION ENTRANCE.
    f. MAINTAIN ALL SEDIMENTATION PONDS. COMPLETE SITE GRADING TOLERANCING.
    g. INSTALL SEED AND MULCH ON AREAS THAT ARE NOT TO BE HARD SURFACES.
12. SLOPE PROTECTION AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH SECTION 02370 SLOPE PROTECTION, EROSION CONTROL AND STORM WATER POLLUTION PREVENTION PLAN OF THE PROJECT MANUAL.
13. ALL STORM SEWER INLETS AND FLARED END SECTIONS SHALL BE ADEQUATELY PROTECTED BEFORE AND AFTER PAVEMENT CONSTRUCTION UNTIL ALL DISTURBED AREAS ARE STABILIZED. CONTRACTOR SHALL PLACE MIRAFI FABRIC AND GRAVEL OVER ALL CATCH BASIN GRATE INLETS UNTIL PAVING SURFACES ARE PAVED AND THE LANDSCAPING IS COMPLETED.
14. STOCKPILE AREAS WHICH REMAIN ON THE SITE FOR MORE THAN SEVEN DAYS SHALL BE SEEDED, MULCHED, AND SURROUNDED BY SILT FENCE.
15. TEMPORARY AND PERMANENT SEDIMENTATION PONDS, AT LOCATION SELECTED BY OWNER, SHALL BE CONSTRUCTED WITH THE INITIAL GRADING. THE SEDIMENT MUST BE REMOVED FROM THE PONDS, AS NECESSARY, PRIOR TO COMPLETION OF THE PROJECT.
16. BIO LOGS SHALL BE INSTALLED AT PIPE INLETS AND OUTLETS UNTIL RIPRAP IS INSTALLED. PERMANENT ENERGY DISSIPATERS SHALL BE INSTALLED WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.
17. INSTALL SILT FENCE AROUND POND UPON COMPLETION OF GRADING.
18. EROSION AND SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE UNTIL THE SITE SOILS HAVE BEEN PERMANENTLY STABILIZED AND SHALL BE REMOVED WITHIN 30 DAYS THEREAFTER.
19. ALL STOCKPILES OF SOIL OR OTHER MATERIALS SUBJECT TO EROSION BY WIND OR WATER SHALL BE COVERED, VEGETATED, ENCLOSED, FENCED ON THE DOWN GRADIENT SIDE OR OTHERWISE EFFECTIVELY PROTECTED FROM EROSION IN ACCORDANCE WITH THE AMOUNT OF TIME THE MATERIAL WILL BE ON SITE AND THE MANNER OF ITS PROPOSED USE.
20. LOCATION OF CONCRETE WASHOUT AND HAZARDOUS MATERIALS STORAGE SHALL BE DETERMINED PRIOR TO START OF CONSTRUCTION. THE SWPPP WILL BE UPDATED AND LOCATIONS ADDED AT THAT TIME.
21. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION AND SHALL BE COMPLETED NOT LATER THAN SEVEN DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. INITIATED IMMEDIATELY MEANS TAKING AN ACTION TO COMMENCE STABILIZATION AS SOON AS PRACTICABLE, BUT NO LATER THAN THE END OF THE WORK DAY, FOLLOWING THE DAY WHEN THE EARTH–DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. INITIATED STABILIZATION IS DEFINED AS COMPLETING ONE (OR MORE) OF THE FOLLOWING: SOIL PREPARATION FOR VEGETATION, MULCHING (OR OTHER NON–VEGETATIVE BMP), SEEDING/PLANTING, OR SCHEDULING STABILIZATION MEASURES TO BE FULLY INSTALLED AND COMPLETED WITHIN THE 7 DAY TIMEFRAME.
22. THE CONTRACTOR SHALL PROVIDE AND INSTALL A SWPPP MAILBOX (INCIDENTAL).
23. VEGETATIVE COVER SHALL BE ESTABLISHED TO 90% IN ALL DISTURBED AREAS AND 100% IN AREAS OF CONCENTRATED FLOW PRIOR TO RELEASE OF WMO SECURITY.

LEGEND

- SET CAP IRON MONUMENT 18425
- FOUND IRON MONUMENT
- SET MAG NAIL
- ELECTRICAL FACILITY
- HYDRANT
- WATER VALVE
- TELEPHONE BOX
- SANITARY MANHOLE
- CATCH BASIN
- STORM MANHOLE
- POWER POLE
- COLUMN
- POWER POLE AND LIGHT POLE
- (M) MEASURED DISTANCE
- PL — WILLIAMS BROTHERS PIPELINE
- GAS
- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- FIBER OPTIC
- UNDERGROUND TELEPHONE
- OVERHEAD ELECTRIC
- GRAVEL
- APPROXIMATE WETLAND EDGE (DEPICTED FROM MN LANDMAGEMENT 2004 DIGITAL PHOTO)
- EDGE OF WATER
- CONCRETE
- BIRCH
- WET LAND
- FENCE
- WET — EDGE OF DELINEATED WETLAND
- PROPOSED "NO PARKING" SIGN
- PROPOSED STREET LIGHT

DENOTES WETLAND BUFFER MONUMENT

DENOTES ROCK CONSTRUCTION ENTRANCE

DENOTES SILT FENCE

1010 DENOTES PROPOSED CONTOURS

N

0 50 100
GRAPHIC SCALE IN FEET

SEE SHEET 8 FOR GRADING NOTES, SHEET 10 FOR SWPPP NOTES

NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.
● Civil Engineering ● Land Planning
1600 Pioneer Creek Center,
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I hereby certify that this plan, specification or report has been 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.

Martin P. Campion Date: 05/29/2019

Martin P. Campion –Lic. # 19901 Date:

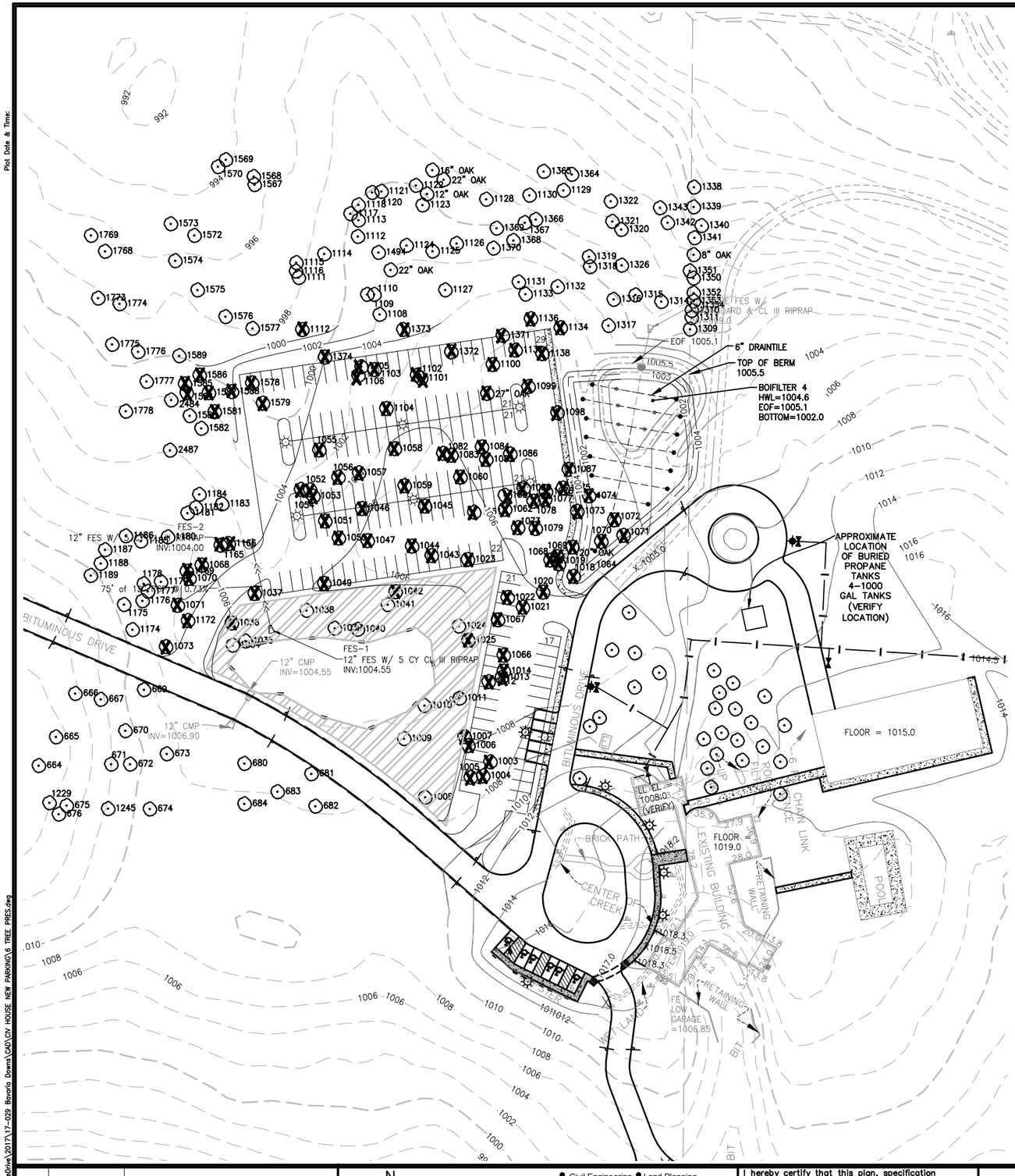
BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

STORM WATER POLLUTION PREVENTION PLAN

PROJECT NO: 17-029

SHEET NO. 5 OF 7 SHEETS

DATE: 05/29/2019



ID Number	Individual D.B.H. (IN.)	Common Name	REMOVE	SAVE	*Remarks*
664	27	WHITE OAK		X	
665	21	WHITE OAK		X	
666	23	WHITE OAK		X	
667	28	RED OAK		X	
668	11	HACKBERRY		X	
669	10	ITTERNUT HICKORY		X	
670	17	SUGAR MAPLE		X	
671	26	RED OAK		X	
672	17	ELM		X	
673	15	SUGAR MAPLE		X	*CAGE*
680	9	ITTERNUT HICKORY		X	
681	28	RED OAK		X	*S;NBK*
682	27	RED OAK		X	*DAM, HR*
683	38	RED OAK		X	
684	14	ELM		X	
1003	27	WHITE OAK	X		
1004	6	RED CEDAR	X		
1005	16	BASSWOOD	X		
1006	7	RED CEDAR	X		
1007	15	BURR OAK	X		
1008	14	SUGAR MAPLE		X	
1009	14	SUGAR MAPLE		X	
1010	24	BURR OAK		X	
1011				X	
1012	22	WHITE OAK	X		
1013	24	BURR OAK	X		
1014	24	RED OAK	X		
1018	33	RED OAK	X		
1019	6	RED CEDAR	X		
1020	24	RED OAK	X		
1021	34	RED OAK	X		
1022	26	RED OAK	X		
1023	22	BURR OAK	X		
1024	33	WHITE OAK		X	
1025	26	WHITE OAK	X		
1034	28	BURR OAK		X	
1035	29	BURR OAK		X	
1036	25	BURR OAK	X		
1037	25	WHITE OAK	X		
1038	10	SUGAR MAPLE		X	
1039	11	SUGAR MAPLE		X	
1040	7,5	GREEN ASH		X	
1041	27	BURR OAK		X	
1042	9	RED CEDAR		X	
1043	12	RED OAK	X		
1044	7	RED CEDAR	X		
1045	28	RED OAK	X		*DL*
1046	7	GREEN ASH	X		
1047	6	RED CEDAR	X		
1049	25	BURR OAK	X		*Sp*
1050	30	RED OAK	X		
1051	28	RED OAK	X		*LN*
1052	13	BURR OAK	X		
1053	16	GREEN ASH	X		
1054	25	BURR OAK	X		*LN*
1055	18	BURR OAK	X		
1056	17	BURR OAK	X		
1057	21	RED OAK	X		
1058	6	RED CEDAR	X		
1059	9	GREEN ASH	X		
1060	13	BASSWOOD	X		
1061	23	BURR OAK	X		
1062	11	ELM	X		
1063	10	ELM	X		
1066	9	ELM	X		
1067	6	ELM	X		
1068	5,4	BASSWOOD	X		*CDT*
1069	6	ELM	X		
1070	29	WHITE OAK	X		
1071			X		
1072			X		
1073	32	RED OAK	X		
1074	26	RED OAK	X		
1075	19	BURR OAK	X		
1076	3	RED CEDAR	X		
1077	7	ELM	X		
1078	8	ELM	X		
1079	7	ELM	X		
1080	6	ELM	X		
1081	34	RED OAK	X		
1082			X		
1083			X		
1084	34	RED OAK	X		*D,L, DAM*
1085	7	HACKBERRY	X		
1086	7	BASSWOOD	X		
1087	29	RED OAK	X		*PRUNED*
1098	28	RED OAK	X		*DAM SIDE, DL, S*
1099	9	ELM	X		
1100	28	RED OAK	X		*DAM,DL*
1101	31	RED OAK	X		*LDAM,LN*
1102	7	BASSWOOD	X		*LN*
1103	38	RED OAK	X		*CAV, DAM*
1104	23	BURR OAK	X		*Sp*
1105	21	RED OAK	X		*DL, DAM*
1106	11	ELM	X		
1108	13,12	BASSWOOD		X	*CDT*
1109	11	GREEN ASH		X	
1110	26	BURR OAK		X	
1111	18	RED OAK		X	
1112	31	RED OAK		X	*DAM*
1113				X	*NO SHOT*
1114	39	RED OAK		X	*HR,SEV,DAM, REM*
1115	10	GREEN ASH		X	*DAM*
1116	6	GREEN ASH		X	
1117	18	BURR OAK		X	
1118	21	BURR OAK		X	
1120	20	BURR OAK		X	
1121	12	BURR OAK		X	*DL,S,BURL*
1122	39	RED OAK		X	*DL,DAM*
1123	32	RED OAK		X	*SEVDAM,LN,REM*
1124	4	RED CEDAR		X	

ID Number	Individual D.B.H. (IN.)	Common Name	REMOVE	SAVE	*Remarks*
1125	10	GREEN ASH		X	*DEF*
1126	8	ITTERNUT HICKORY		X	
1127	38	RED OAK		X	
1128	33	RED OAK		X	*DL*
1129	5	RED CEDAR		X	
1130	10	ELM		X	
1131	11	BASSWOOD		X	
1132	30	RED OAK		X	*DL*
1133	34	BURR OAK		X	*Sp*
1134	29	RED OAK	X		*S;L*
1135	31	RED OAK	X		*DL*
1136			X		
1137	11	BASSWOOD	X		
1138	7	IRONWOOD	X		
1165			X		
1166			X		
1170			X		
1171			X		
1172			X		
1173			X		
1174	23	BURR OAK		X	
1175	31	RED OAK		X	
1176	13	BURR OAK		X	
1177	26	BURR OAK		X	
1178	8	SUGAR MAPLE		X	
1179	9	BLACK CHERRY		X	
1180	31	BURR OAK		X	
1181	25	BURR OAK		X	
1182	7	RED CEDAR		X	
1183	21	BURR OAK		X	*DAM,SEV*
1184	8			X	
1185	28	RED OAK		X	
1186	9	RED CEDAR		X	
1187	24	BURR OAK		X	
1188	8	GREEN ASH		X	
1189	25	BURR OAK		X	
1229	8	HACKBERRY		X	
1245					
1309	10	RED OAK		X	
1310	7	RED OAK		X	
1311	9	BASSWOOD		X	
1314				X	
1315	30	RED OAK		X	*DL*
1316	8	GREEN ASH		X	
1317	34	RED OAK		X	*SEVDAM TERM, REM*
1318				X	
1319				X	
1320	33	RED OAK		X	*DL*
1321	7	ELM		X	
1322	28	BURR OAK		X	*DL*
1326	5	RED CEDAR		X	
1337	18	RED OAK		X	*LN*
1338	8,6	GREEN ASH		X	
1339	8	HACKBERRY		X	
1340	6	RED OAK		X	
1341	10,11	RED OAK		X	*CDT,LN*
1342	32	RED OAK		X	
1343	22	BURR OAK		X	
1350	18,12	RED OAK		X	*CDT,LN*
1351	7	RED PINE		X	
1352	15	RED OAK		X	
1353	10	RED OAK		X	
1354	11	RED OAK		X	*LN*
1364	6	BASSWOOD		X	
1365	7	GREEN ASH		X	
1366	6	BASSWOOD		X	
1367	6	GREEN ASH		X	
1368	11	RED OAK		X	
1369	6	BASSWOOD		X	
1370	6	BASSWOOD		X	
1371				X	
1372	21	RED OAK		X	
1373	28	RED OAK		X	*DAM*
1374	11,9,9	BASSWOOD		X	*CDT*
1494	6	IRONWOOD		X	
1567				X	
1568	6	IRONWOOD		X	
1569	8	BASSWOOD		X	
1570	7	BASSWOOD		X	
1572	9	BASSWOOD		X	
1573	6	BASSWOOD		X	
1574	6	PAPER BIRCH		X	*Sp*
1575	27	BURR OAK		X	*Sp*
1576	10	BASSWOOD		X	
1577	27	RED OAK		X	*Sp*
1578	26	BURR OAK	X		
1579	22	BURR OAK	X		
1581	8	SUGAR MAPLE	X		
1582	27	RED OAK		X	
1583	6	ITTERNUT HICKORY		X	*TERMDAM*
1584	10	SUGAR MAPLE	X		
1585	6	ITTERNUT HICKORY		X	
1586	27	RED OAK	X		*DL*
1587	9	BURR OAK	X		
1588	12	BURR OAK		X	
1589				X	
1597	33	RED OAK		X	*SEVDAM,DL,HR*
1768	35	BURR OAK		X	*DAM*
1769	8,10	IRONWOOD		X	*CDT*
1773				X	
1774	13	GREEN ASH		X	
1775				X	
1776				X	
1777				X	
1778	27	BURR OAK		X	
2484	23	RED OAK		X	
2487	24	RED OAK		X	

NOTE:
1. TREES IDENTIFIED IN ABOVE INVENTORY ARE ADJACENT TO IMPROVEMENTS BEING PROPOSED. FULL INVENTORY OF TREES WITHIN PROPERTY WAS COMPLETED BY OTHERS.

DENOTES EXISTING TREE

DENOTES EXISTING TREE TO BE REMOVED

TOTAL TREES INVENTORIED IN AREA	218
TREES SAVED	133
TREES REMOVED	85

N

0 50 100
GRAPHIC SCALE IN FEET

Plot Date & Time:

C:\Users\bk-cat\OneDrive\2017\17-029 Bavaria Downs\CAD\CIV HOUSE NEW PARKING\6 TREE PRES.dwg

NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.

● Civil Engineering ● Land Planning
1800 Pioneer Creek Center,
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Maple Plain, MN 55359
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E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.
Martin P. Campion -Lic. # 19901 Date: 05/29/2019

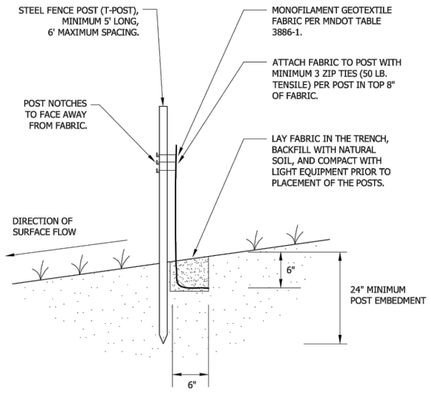
BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

TREE INVENTORY / PRESERVATION PLAN

PROJECT NO: 17-029

SHEET NO. 6 OF 7 SHEETS

DATE: 05/29/2019



NOTES:
1. SPLICING WILL BE MADE AT OPPOSING SILT FENCE POSTS BY PLACING POSTS AND SILT FENCE NEXT TO EACH OTHER AND ROTATING 360°.
2. SILT FENCE IS MACHINE SLICED TYPE SILT FENCE THAT IS HAND INSTALLED IN AREAS INACCESSIBLE TO EQUIPMENT DUE TO SPACE LIMITATIONS, WET SOILS, STEEP SLOPES, ETC.

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

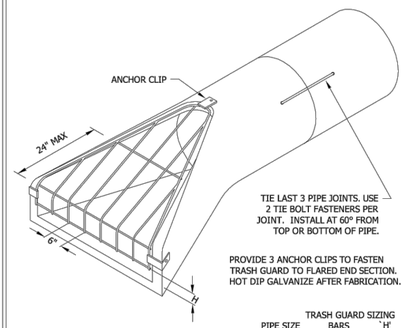
SILT FENCE
STANDARD

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-1C

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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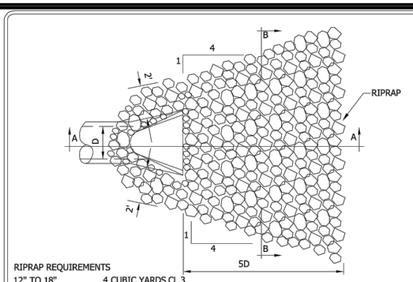
FLARED END SECTION
AND TRASH GUARD

CHASKA, MINNESOTA

LAST REVISION: FEB. 1995

PLATE NO. STO-10

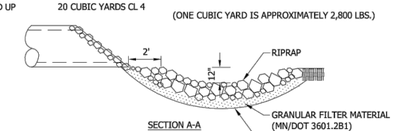


PLAN

RIPRAP REQUIREMENTS

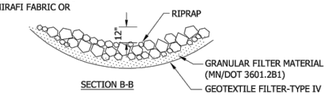
12" TO 18"	4 CUBIC YARDS CL.3
21" TO 27"	8 CUBIC YARDS CL.3
30" TO 36"	12 CUBIC YARDS CL.3
42" TO 48"	16 CUBIC YARDS CL.3
54" AND UP	20 CUBIC YARDS CL 4

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)



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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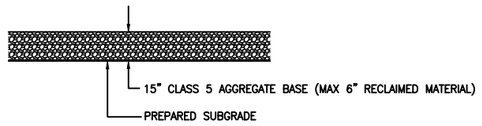
St. Paul, MN 55113
www.stantec.com

RIPRAP AT OUTLETS

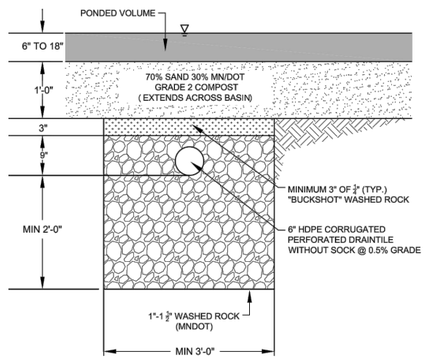
CHASKA, MINNESOTA

LAST REVISION: APRIL 2004

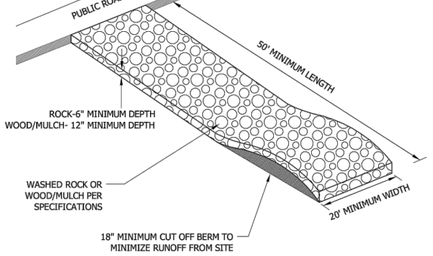
PLATE NO. STO-11



TYPICAL GRAVEL PARKING LOT DETAIL



BIOTENTION TRENCH



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

ROCK CONSTRUCTION ENTRANCE

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-7

NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.

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Phone: 763-479-5172
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E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.

Martin P. Campion -Lic. # 19901 Date: 05/29/2019

BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

DETAILS

SHEET NO. 7 OF 7 SHEETS

PROJECT NO: 17-029

DATE: 05/29/2019

Plot Date & Time:
C:\Users\kc-cot\OneDrive\2017\17-029 Bavaria Downs\CAD\CW HOUSE NEW PARKING\Y details.dwg

Plot Date & Time:

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NO.	DATE	DESCRIPTION
		REVISIONS

CAMPION ENGINEERING SERVICES, INC.

● Civil Engineering ● Land Planning

1800 Pioneer Creek Center,
P.O. Box 249
Maple Plain, MN 55359
Phone: 763-479-5172
Fax: 763-479-4242
E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.

Martin P. Campion -Lic. # 19901 Date: 05/29/2019

BAVARIA DOWNS-HOUSE VENUE PARKING
A'BULAE
CHASKA, MN

SITE PLAN EXHIBIT

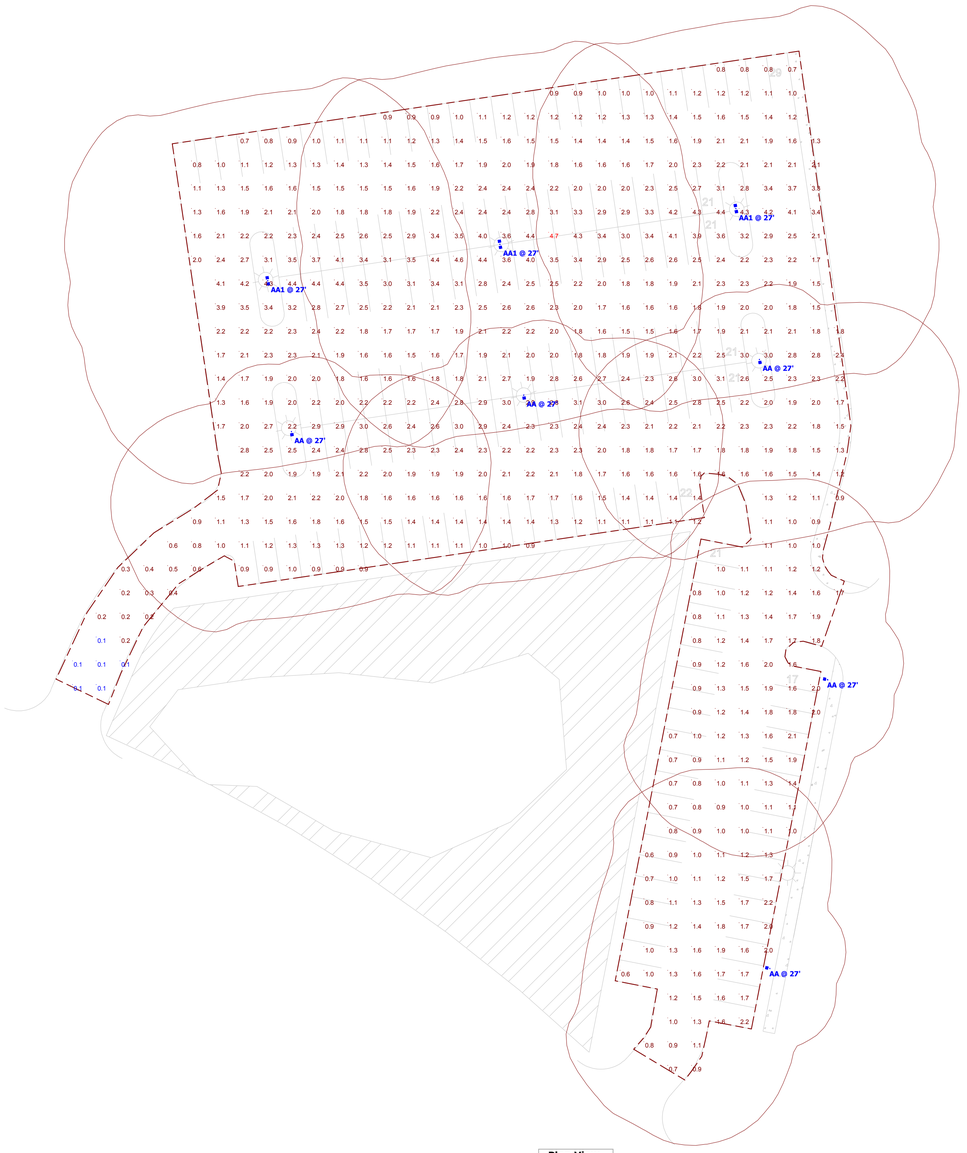
PROJECT NO: 17-029

SHEET NO. 1 OF 1 SHEETS

DATE: 05/29/2019

Filename

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	AA	5	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-A40-D-UNV-T4-BZ	PREVAIL AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K LEDS AND TYPE IV OPTICS		2	7580	1	143
	AA1	3	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-A40-D-UNV-T4-BZ	PREVAIL AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K LEDS AND TYPE IV OPTICS		2	7580	1	286



Plan View
Scale - 1" = 30ft

CITY VIEW ELECTRIC INC.

Bavaria Downs

Designer	
Amber Forester	
Date	
6/4/2019	
Scale	
Not to Scale	
Drawing No.	
L0.2	
Summary	
Lighting Calculations	
1 of 1	

CITY VIEW ELECTRIC INC.

Bavaria Downs

Chaska, MN

Lighting

Jason Kinsella
City View Electric, Inc.
14309 Lake Drive NE
Columbus, MN 55025
Phone 651.659.9496 ● Fax 651.659.0905
cityviewelectric.com

DESCRIPTION

The Prevail™ LED pole and fixture combination makes selection and installation of poles and fixtures simple. Included is the die-cast Prevail area, site and roadway luminaire with standard mounting arm, square straight steel pole, anchor bolts, base cover, template and hardware. Stock configurations are available in single and dual fixture combinations. The Prevail luminaire delivers a new level of versatility and value in patent pending, architectural design that delivers energy savings greater than 62% and replaces 150-450W metal halide fixtures. The Prevail fixture and pole combo is ideal for general area/site lighting applications.

Catalog #	PFPRV-1-A40-T4-20-9	**Type**
Project	Bavaria	AA
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction
Construction is comprised of a heavy-duty, single-piece die-cast aluminum housing in dark bronze polyester powder paint. The die-cast aluminum door is tethered to provide easy access to the driver if replacement is required. The optics is mounted on a versatile, aluminum plate that dissipates heat from the LEDs resulting in longer life of the fixture. The fixture is IP66 and 3G vibration rated (ANSI C136.31).

Optics
Available in Type III and IV distributions with lumen packages ranging from 6,173 to 18,992 nominal lumens. Light engine configurations consist of 1 or 2 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/60,000 hours at 25°C) per IESNA TM-21. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed.

Electrical
Available in 120-277V 50/60Hz. 10kV/10kA surge protection standard. 0-10V dimming driver is standard with leads external to the fixture to accommodate controls capability such as dimming and occupancy. Suitable for ambient temperatures from -40°C to 40°C.

Controls
An integrated dimming and occupancy sensor is available in bi-level dimming (MSP/DIM) operation.

Mounting
The versatile, patent pending, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the standard mounting arm enables wiring of the fixture without having to access the driver compartment. A knock-out on the standard mounting arm enables round pole mounting.

Pole
Shaft is one-piece construction ASTM A500 grade "B" steel, shot blasted and finished in dark bronze polyester powder coat. Anchor base is fabricated from ASTM grade steel. ASTM A366 steel full base cover is provided to enclose base plate and anchor bolts. Anchor bolts are per ASTM A576 with two nuts, two flat washers, and one lock washer. Hardware and threaded portion of bolt are hot dip galvanized. 3" hook for 3/4" bolt. 4" hook for 1" bolt.

Finish
Housing and cast parts finished in five-stage super TGIC polyester bronze powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear.

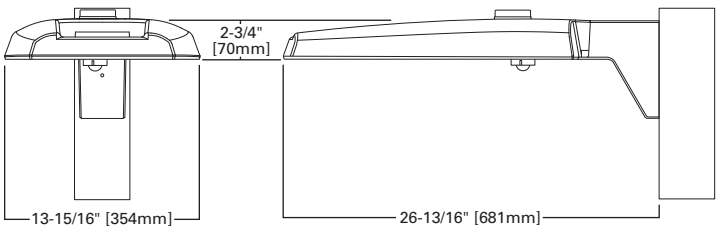
Warranty
Five-year warranty.

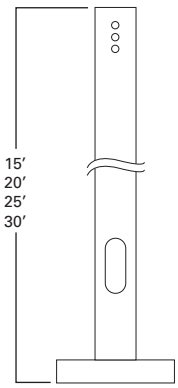
PFPRV PREVAIL POLE AND FIXTURE COMBO

LED

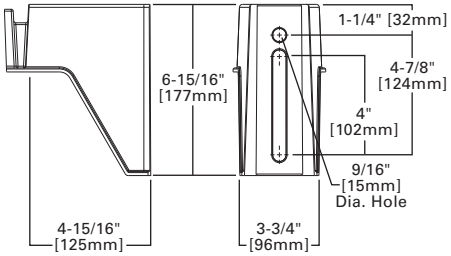
POLE AND FIXTURE COMBO

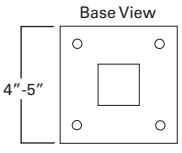
DIMENSIONS





POLE MOUNT ARM





CERTIFICATION DATA
UL and cUL Wet Location Listed
IP66-Rated
3G Vibration Rated
ISO 9001
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

EPA
Effective Projected Area (Sq. Ft.): 0.75
(1 fixture)

SHIPPING DATA
Approximate Net Weight:
20lbs. [9.09 kgs.] **(1 fixture)**

*www.designlights.org

ORDERING INFORMATION

Sample Number: PFPRV-1-A25-T3-15-N/AB

Series [1, 2, 3]	**Number of Fixtures**	**Light Engine**	**Distribution**	**Pole Height**	**Maximum Wind Zone** (MPH)	**Options** (Add as Suffix)	**Accessories** (Order Separately)
PFPRV=Prevail Pole and Fixture Combo	**1**=1 **2**=2 **3**=3 **4**=4	**A15**=(1 LED) 6,100 Nominal Lumens **A25**=(2 LED) 10,200 Nominal Lumens **A40**=(2 LED) 15,100 Nominal Lumens **A60**=(2 LED) 18,900 Nominal Lumens	**T3**=Type III **T4**=Type IV	**15**=15' **20**=20' **25**=25' **30**=30'	**Blank**=80 **9**=90 **0**=100	**N/AB**=No Anchor Bolts (Used when ordered separately) **HSS**=House Side Shield **MSP/DIM-L12**=Integrated Sensor for Dimming Operation, 8' - 12' Mounting Height **MSP/DIM-L30**=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height **PER**=NEMA 3PIN Twistlock Photocontrol Receptacle [4] **PER7**=NEMA 7PIN Twistlock Photocontrol Receptacle [4]	**HS/VERD**=House Side Shield

NOTES: 1 4000K CCT, standard bronze, 120-277V, 0-10V dimming. **2** Standard mount arm included with fixture. Supplied with straight steel shaft, anchor bolts, template, base cover and hardware. **3** DesignLights Consortium™ Qualified and classified for DLC standard, refer to www.designlights.org for details. **4** Not available with MSP options.

POWER AND LUMENS

Light Engine		**A15**	**A25**	**A40**	**A60**
Nominal Power (Watts)		57W	87W	143W	163W
Input Current @ 120V (A)		0.49	0.76	1.23	1.34
Input Current @ 277V (A)		0.22	0.35	0.54	0.60
Input Current @ 347V (A)		0.18	0.28	0.45	0.49
Input Current @ 480V (A)		0.13	0.21	0.33	0.35
Type II	Lumens	6,139	10,204	15,073	18,830
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
Type III	Lumens	6,192	10,292	15,203	18,992
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4
Type IV	Lumens	6,173	10,261	15,157	18,935
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G5
Type V	Lumens	6,393	10,627	15,697	19,610
	BUG Rating	B3-U0-G3	B4-U0-G3	B4-U0-G4	B5-U0-G4

NOTE: Lumen output for standard bronze fixture color. Different housing colors impact lumen output. IES files for the non-standard colors are available upon request.

LUMEN MAINTENANCE

Ambient Temperature	**25,000 Hours***	**50,000 Hours***	**60,000 Hours***	**Theoretical 100,000 Hours**	**Theoretical L70 (Hours)***
25ºC	> 96%	> 93%	> 92%	> 87%	> 260,000
40ºC	> 96%	> 93%	> 92%	> 87%	> 255,000
50ºC	> 95%	> 92%	> 91%	> 86%	> 250,000

* Per IESNA TM-21 data.

LUMEN MULTIPLIER

Ambient Temperature	**Lumen Multiplier**
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

ONE FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90 AND 100MPH WIND ZONES USE A 5" POLE)

EPA=0.75
T3=18,992
T4=18,935

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-1-A15-T3-15 [2]	PFPRV-1-A15-T3-15-9 [2]	PFPRV-1-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-1-A15-T4-15 [2]	PFPRV-1-A15-T4-15-9 [2]	PFPRV-1-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-1-A25-T3-15 [2]	PFPRV-1-A25-T3-15-9 [2]	PFPRV-1-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-1-A25-T4-15 [2]	PFPRV-1-A25-T4-15-9 [2]	PFPRV-1-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-1-A40-T3-15 [2]	PFPRV-1-A40-T3-15-9 [2]	PFPRV-1-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-1-A40-T4-15 [2]	PFPRV-1-A40-T4-15-9 [2]	PFPRV-1-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-1-A60-T3-15 [2]	PFPRV-1-A60-T3-15-9 [2]	PFPRV-1-A60-T3-15-0 [2]	450W
	18,935	Type IV	PFPRV-1-A60-T4-15 [2]	PFPRV-1-A60-T4-15-9 [2]	PFPRV-1-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-1-A15-T3-20 [2]	PFPRV-1-A15-T3-20-9 [2]	PFPRV-1-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-1-A15-T4-20 [2]	PFPRV-1-A15-T4-20-9 [2]	PFPRV-1-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-1-A25-T3-20 [2]	PFPRV-1-A25-T3-20-9 [2]	PFPRV-1-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-1-A25-T4-20 [2]	PFPRV-1-A25-T4-20-9 [2]	PFPRV-1-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-1-A40-T3-20 [2]	PFPRV-1-A40-T3-20-9 [2]	PFPRV-1-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-1-A40-T4-20 [2]	PFPRV-1-A40-T4-25-9 [2]	PFPRV-1-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-1-A60-T3-20 [2]	PFPRV-1-A60-T3-20-9 [2]	PFPRV-1-A60-T3-20-0 [2]	450W
	18,935	Type IV	PFPRV-1-A60-T4-20 [2]	PFPRV-1-A60-T4-20-9 [2]	PFPRV-1-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-1-A15-T3-25 [2]	PFPRV-1-A15-T3-25-9 [2]	PFPRV-1-A15-T3-25-0 [2]	150W
	6,173	Type IV	PFPRV-1-A15-T4-25 [2]	PFPRV-1-A15-T4-25-9 [2]	PFPRV-1-A15-T4-25-0 [2]	150W
	10,292	Type III	PFPRV-1-A25-T3-25 [2]	PFPRV-1-A25-T3-25-9 [2]	PFPRV-1-A25-T3-25-0 [2]	250W
	10,261	Type IV	PFPRV-1-A25-T4-25 [2]	PFPRV-1-A25-T4-25-9 [2]	PFPRV-1-A25-T4-25-0 [2]	250W
	15,203	Type III	PFPRV-1-A40-T3-25 [2]	PFPRV-1-A40-T3-25-9 [2]	PFPRV-1-A40-T3-25-0 [2]	400W
	15,157	Type IV	PFPRV-1-A40-T4-25 [2]	PFPRV-1-A40-T4-25-9 [2]	PFPRV-1-A40-T4-25-0 [2]	400W
	18,992	Type III	PFPRV-1-A60-T3-25 [2]	PFPRV-1-A60-T3-25-9 [2]	PFPRV-1-A60-T3-25-0 [2]	450W
	18,935	Type IV	PFPRV-1-A60-T4-25 [2]	PFPRV-1-A60-T4-25-9 [2]	PFPRV-1-A60-T4-25-0 [2]	450W
30'	6,192	Type III	PFPRV-1-A15-T3-30 [3]	PFPRV-1-A15-T3-30-9 [3]	PFPRV-1-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-1-A15-T4-30 [3]	PFPRV-1-A15-T4-30-9 [3]	PFPRV-1-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-1-A25-T3-30 [3]	PFPRV-1-A25-T3-30-9 [3]	PFPRV-1-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-1-A25-T4-30 [3]	PFPRV-1-A25-T4-30-9 [3]	PFPRV-1-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-1-A40-T3-30 [3]	PFPRV-1-A40-T3-30-9 [3]	PFPRV-1-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-1-A40-T4-30 [3]	PFPRV-1-A40-T4-30-9 [3]	PFPRV-1-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-1-A60-T3-30 [3]	PFPRV-1-A60-T3-30-9 [3]	PFPRV-1-A60-T3-30-0 [4]	450W
	18,935	Type IV	PFPRV-1-A60-T4-30 [3]	PFPRV-1-A60-T4-30-9 [3]	PFPRV-1-A60-T4-30-0 [4]	450W

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.

2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.

3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5A30SFM4.

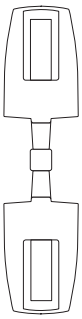
4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.

5. Refer to In Stock Guide for stocked configurations and availability.

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TWO FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90, 100MPH WIND ZONES AND 25FT CONFIGURATIONS WITH 100MPH WIND ZONE USE 5" POLES)



EPA=1.50

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-2-A15-T3-15 [2]	PFPRV-2-A15-T3-15-9 [2]	PFPRV-2-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-2-A15-T4-15 [2]	PFPRV-2-A15-T4-15-9 [2]	PFPRV-2-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-2-A25-T3-15 [2]	PFPRV-2-A25-T3-15-9 [2]	PFPRV-2-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-2-A25-T4-15 [2]	PFPRV-2-A25-T4-15-9 [2]	PFPRV-2-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-2-A40-T3-15 [2]	PFPRV-2-A40-T3-15-9 [2]	PFPRV-2-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-2-A40-T4-15 [2]	PFPRV-2-A40-T4-15-9 [2]	PFPRV-2-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-2-A60-T3-15 [2]	PFPRV-2-A60-T3-15-9 [2]	PFPRV-2-A60-T3-15-0 [2]	450W
	18,935	Type IV	PFPRV-2-A60-T4-15 [2]	PFPRV-2-A60-T4-15-9 [2]	PFPRV-2-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-2-A15-T3-20 [2]	PFPRV-2-A15-T3-20-9 [2]	PFPRV-2-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-2-A15-T4-20 [2]	PFPRV-2-A15-T4-20-9 [2]	PFPRV-2-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-2-A25-T3-20 [2]	PFPRV-2-A25-T3-20-9 [2]	PFPRV-2-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-2-A25-T4-20 [2]	PFPRV-2-A25-T4-20-9 [2]	PFPRV-2-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-2-A40-T3-20 [2]	PFPRV-2-A40-T3-20-9 [2]	PFPRV-2-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-2-A40-T4-20 [2]	PFPRV-2-A40-T4-25-9 [2]	PFPRV-2-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-2-A60-T3-20 [2]	PFPRV-2-A60-T3-20-9 [2]	PFPRV-2-A60-T3-20-0 [2]	450W
	18,935	Type IV	PFPRV-2-A60-T4-20 [2]	PFPRV-2-A60-T4-20-9 [2]	PFPRV-2-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-2-A15-T3-25 [2]	PFPRV-2-A15-T3-25-9 [2]	PFPRV-2-A15-T3-25-0 [3]	150W
	6,173	Type IV	PFPRV-2-A15-T4-25 [2]	PFPRV-2-A15-T4-25-9 [2]	PFPRV-2-A15-T4-25-0 [3]	150W
	10,292	Type III	PFPRV-2-A25-T3-25 [2]	PFPRV-2-A25-T3-25-9 [2]	PFPRV-2-A25-T3-25-0 [3]	250W
	10,261	Type IV	PFPRV-2-A25-T4-25 [2]	PFPRV-2-A25-T4-25-9 [2]	PFPRV-2-A25-T4-25-0 [3]	250W
	15,203	Type III	PFPRV-2-A40-T3-25 [2]	PFPRV-2-A40-T3-25-9 [2]	PFPRV-2-A40-T3-25-0 [3]	400W
	15,157	Type IV	PFPRV-2-A40-T4-25 [2]	PFPRV-2-A40-T4-25-9 [2]	PFPRV-2-A40-T4-25-0 [3]	400W
	18,992	Type III	PFPRV-2-A60-T3-25 [2]	PFPRV-2-A60-T3-25-9 [2]	PFPRV-2-A60-T3-25-0 [3]	450W
	18,935	Type IV	PFPRV-2-A60-T4-25 [2]	PFPRV-2-A60-T4-25-9 [2]	PFPRV-2-A60-T4-25-0 [3]	450W
30'	6,192	Type III	PFPRV-2-A15-T3-30 [3]	PFPRV-2-A15-T3-30-9 [3]	PFPRV-2-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-2-A15-T4-30 [3]	PFPRV-2-A15-T4-30-9 [3]	PFPRV-2-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-2-A25-T3-30 [3]	PFPRV-2-A25-T3-30-9 [3]	PFPRV-2-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-2-A25-T4-30 [3]	PFPRV-2-A25-T4-30-9 [3]	PFPRV-2-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-2-A40-T3-30 [3]	PFPRV-2-A40-T3-30-9 [3]	PFPRV-2-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-2-A40-T4-30 [3]	PFPRV-2-A40-T4-30-9 [3]	PFPRV-2-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-2-A60-T3-30 [3]	PFPRV-2-A60-T3-30-9 [3]	PFPRV-2-A60-T3-30-0 [4]	450W
	18,935	Type IV	PFPRV-2-A60-T4-30 [3]	PFPRV-2-A60-T4-30-9 [3]	PFPRV-2-A60-T4-30-0 [4]	450W

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.

2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.

3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 25' combo SS5A25SFM4 and 30' combo SS5A30SFM4.

4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.

5. Refer to In Stock Guide for stocked configurations and availability.

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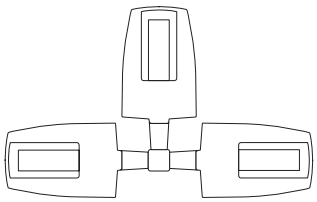
THREE FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90, 100MPH WIND ZONES AND 25FT CONFIGURATIONS WITH 90, 100MPH WIND ZONE USE 5" POLES)



EPA=2.25

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-3-A15-T3-15 [2]	PFPRV-3-A15-T3-15-9 [2]	PFPRV-3-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-3-A15-T4-15 [2]	PFPRV-3-A15-T4-15-9 [2]	PFPRV-3-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-3-A25-T3-15 [2]	PFPRV-3-A25-T3-15-9 [2]	PFPRV-3-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-3-A25-T4-15 [2]	PFPRV-3-A25-T4-15-9 [2]	PFPRV-3-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-3-A40-T3-15 [2]	PFPRV-3-A40-T3-15-9 [2]	PFPRV-3-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-3-A40-T4-15 [2]	PFPRV-3-A40-T4-15-9 [2]	PFPRV-3-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-3-A60-T3-15 [2]	PFPRV-3-A60-T3-15-9 [2]	PFPRV-3-A60-T3-15-0 [2]	450W
	18,935	Type IV	PFPRV-3-A60-T4-15 [2]	PFPRV-3-A60-T4-15-9 [2]	PFPRV-3-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-3-A15-T3-20 [2]	PFPRV-3-A15-T3-20-9 [2]	PFPRV-3-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-3-A15-T4-20 [2]	PFPRV-3-A15-T4-20-9 [2]	PFPRV-3-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-3-A25-T3-20 [2]	PFPRV-3-A25-T3-20-9 [2]	PFPRV-3-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-3-A25-T4-20 [2]	PFPRV-3-A25-T4-20-9 [2]	PFPRV-3-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-3-A40-T3-20 [2]	PFPRV-3-A40-T3-20-9 [2]	PFPRV-3-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-3-A40-T4-20 [2]	PFPRV-3-A40-T4-25-9 [2]	PFPRV-3-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-3-A60-T3-20 [2]	PFPRV-3-A60-T3-20-9 [2]	PFPRV-3-A60-T3-20-0 [2]	450W
	18,935	Type IV	PFPRV-3-A60-T4-20 [2]	PFPRV-3-A60-T4-20-9 [2]	PFPRV-3-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-3-A15-T3-25 [2]	PFPRV-3-A15-T3-25-9 [3]	PFPRV-3-A15-T3-25-0 [3]	150W
	6,173	Type IV	PFPRV-3-A15-T4-25 [2]	PFPRV-3-A15-T4-25-9 [3]	PFPRV-3-A15-T4-25-0 [3]	150W
	10,292	Type III	PFPRV-3-A25-T3-25 [2]	PFPRV-3-A25-T3-25-9 [3]	PFPRV-3-A25-T3-25-0 [3]	250W
	10,261	Type IV	PFPRV-3-A25-T4-25 [2]	PFPRV-3-A25-T4-25-9 [3]	PFPRV-3-A25-T4-25-0 [3]	250W
	15,203	Type III	PFPRV-3-A40-T3-25 [2]	PFPRV-3-A40-T3-25-9 [3]	PFPRV-3-A40-T3-25-0 [3]	400W
	15,157	Type IV	PFPRV-3-A40-T4-25 [2]	PFPRV-3-A40-T4-25-9 [3]	PFPRV-3-A40-T4-25-0 [3]	400W
	18,992	Type III	PFPRV-3-A60-T3-25 [2]	PFPRV-3-A60-T3-25-9 [3]	PFPRV-3-A60-T3-25-0 [3]	450W
	18,935	Type IV	PFPRV-3-A60-T4-25 [2]	PFPRV-3-A60-T4-25-9 [3]	PFPRV-3-A60-T4-25-0 [3]	450W
30'	6,192	Type III	PFPRV-3-A15-T3-30 [3]	PFPRV-3-A15-T3-30-9 [4]	PFPRV-3-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-3-A15-T4-30 [3]	PFPRV-3-A15-T4-30-9 [4]	PFPRV-3-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-3-A25-T3-30 [3]	PFPRV-3-A25-T3-30-9 [4]	PFPRV-3-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-3-A25-T4-30 [3]	PFPRV-3-A25-T4-30-9 [4]	PFPRV-3-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-3-A40-T3-30 [3]	PFPRV-3-A40-T3-30-9 [4]	PFPRV-3-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-3-A40-T4-30 [3]	PFPRV-3-A40-T4-30-9 [4]	PFPRV-3-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-3-A60-T3-30 [3]	PFPRV-3-A60-T3-30-9 [4]	PFPRV-3-A60-T3-30-0 [4]	450W
	18,935	Type IV	PFPRV-3-A60-T4-30 [3]	PFPRV-3-A60-T4-30-9 [4]	PFPRV-3-A60-T4-30-0 [4]	450W

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.
3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 25' combo SS5A25SFM4 and 30' combo SS5A30SFM4.
4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.
5. Refer to In Stock Guide for availability.

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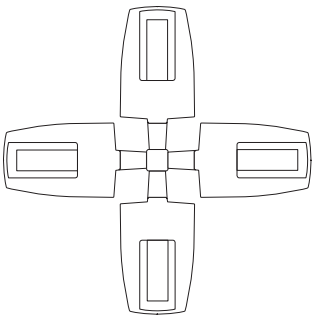
FOUR FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90, 100MPH WIND ZONES AND 25FT CONFIGURATIONS WITH 100MPH WIND ZONE USE 5" POLES)



EPA=3.00

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-4-A15-T3-15 [2]	PFPRV-4-A15-T3-15-9 [2]	PFPRV-4-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-4-A15-T4-15 [2]	PFPRV-4-A15-T4-15-9 [2]	PFPRV-4-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-4-A25-T3-15 [2]	PFPRV-4-A25-T3-15-9 [2]	PFPRV-4-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-4-A25-T4-15 [2]	PFPRV-4-A25-T4-15-9 [2]	PFPRV-4-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-4-A40-T3-15 [2]	PFPRV-4-A40-T3-15-9 [2]	PFPRV-4-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-4-A40-T4-15 [2]	PFPRV-4-A40-T4-15-9 [2]	PFPRV-4-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-4-A60-T4-15 [2]	PFPRV-4-A60-T4-15-9 [2]	PFPRV-4-A60-T4-15-0 [2]	450W
	18,935	Type IV	PFPRV-4-A60-T4-15 [2]	PFPRV-4-A60-T4-15-9 [2]	PFPRV-4-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-4-A15-T3-20 [2]	PFPRV-4-A15-T3-20-9 [2]	PFPRV-4-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-4-A15-T4-20 [2]	PFPRV-4-A15-T4-20-9 [2]	PFPRV-4-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-4-A25-T3-20 [2]	PFPRV-4-A25-T3-20-9 [2]	PFPRV-4-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-4-A25-T4-20 [2]	PFPRV-4-A25-T4-20-9 [2]	PFPRV-4-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-4-A40-T3-20 [2]	PFPRV-4-A40-T3-20-9 [2]	PFPRV-4-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-4-A40-T4-20 [2]	PFPRV-4-A40-T4-25-9 [2]	PFPRV-4-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-4-A60-T4-20 [2]	PFPRV-4-A60-T4-20-9 [2]	PFPRV-4-A60-T4-20-0 [2]	450W
	18,935	Type IV	PFPRV-4-A60-T4-20 [2]	PFPRV-4-A60-T4-20-9 [2]	PFPRV-4-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-4-A15-T3-25 [2]	PFPRV-4-A15-T3-25-9 [3]	PFPRV-4-A15-T3-25-0 [3]	150W
	6,173	Type IV	PFPRV-4-A15-T4-25 [2]	PFPRV-4-A15-T4-25-9 [3]	PFPRV-4-A15-T4-25-0 [3]	150W
	10,292	Type III	PFPRV-4-A25-T3-25 [2]	PFPRV-4-A25-T3-25-9 [3]	PFPRV-4-A25-T3-25-0 [3]	250W
	10,261	Type IV	PFPRV-4-A25-T4-25 [2]	PFPRV-4-A25-T4-25-9 [3]	PFPRV-4-A25-T4-25-0 [3]	250W
	15,203	Type III	PFPRV-4-A40-T3-25 [2]	PFPRV-4-A40-T3-25-9 [3]	PFPRV-4-A40-T3-25-0 [3]	400W
	15,157	Type IV	PFPRV-4-A40-T4-25 [2]	PFPRV-4-A40-T4-25-9 [3]	PFPRV-4-A40-T4-25-0 [3]	400W
	18,992	Type III	PFPRV-4-A60-T4-25 [2]	PFPRV-4-A60-T4-25-9 [3]	PFPRV-4-A60-T4-25-0 [3]	450W
	18,935	Type IV	PFPRV-4-A60-T4-25 [2]	PFPRV-4-A60-T4-25-9 [3]	PFPRV-4-A60-T4-25-0 [3]	450W
30'	6,192	Type III	PFPRV-4-A15-T3-30 [3]	PFPRV-4-A15-T3-30-9 [4]	PFPRV-4-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-4-A15-T4-30 [3]	PFPRV-4-A15-T4-30-9 [4]	PFPRV-4-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-4-A25-T3-30 [3]	PFPRV-4-A25-T3-30-9 [4]	PFPRV-4-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-4-A25-T4-30 [3]	PFPRV-4-A25-T4-30-9 [4]	PFPRV-4-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-4-A40-T3-30 [3]	PFPRV-4-A40-T3-30-9 [4]	PFPRV-4-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-4-A40-T4-30 [3]	PFPRV-4-A40-T4-30-9 [4]	PFPRV-4-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-4-A60-T4-30 [3]	PFPRV-4-A60-T4-30-9 [4]	PFPRV-4-A60-T4-30-0 [4]	450W
	18,935	Type IV	PFPRV-4-A60-T4-30 [3]	PFPRV-4-A60-T4-30-9 [4]	PFPRV-4-A60-T4-30-0 [4]	450W

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.
3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 25' combo SS5A25SFM4 and 30' combo SS5A30SFM4.
4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.
5. Refer to In Stock Guide for availability.

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DESCRIPTION

The Prevail™ LED pole and fixture combination makes selection and installation of poles and fixtures simple. Included is the die-cast Prevail area, site and roadway luminaire with standard mounting arm, square straight steel pole, anchor bolts, base cover, template and hardware. Stock configurations are available in single and dual fixture combinations. The Prevail luminaire delivers a new level of versatility and value in patent pending, architectural design that delivers energy savings greater than 62% and replaces 150-450W metal halide fixtures. The Prevail fixture and pole combo is ideal for general area/site lighting applications.

Catalog #	PFPRV-2-A40-T4-20-9	**Type**
Project	Bavaria	AA1
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction
Construction is comprised of a heavy-duty, single-piece die-cast aluminum housing in dark bronze polyester powder paint. The die-cast aluminum door is tethered to provide easy access to the driver if replacement is required. The optics is mounted on a versatile, aluminum plate that dissipates heat from the LEDs resulting in longer life of the fixture. The fixture is IP66 and 3G vibration rated (ANSI C136.31).

Optics
Available in Type III and IV distributions with lumen packages ranging from 6,173 to 18,992 nominal lumens. Light engine configurations consist of 1 or 2 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/60,000 hours at 25°C) per IESNA TM-21. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed.

Electrical
Available in 120-277V 50/60Hz. 10kV/10kA surge protection standard. 0-10V dimming driver is standard with leads external to the fixture to accommodate controls capability such as dimming and occupancy. Suitable for ambient temperatures from -40°C to 40°C.

Controls
An integrated dimming and occupancy sensor is available in bi-level dimming (MSP/DIM) operation.

Mounting
The versatile, patent pending, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the standard mounting arm enables wiring of the fixture without having to access the driver compartment. A knock-out on the standard mounting arm enables round pole mounting.

Pole
Shaft is one-piece construction ASTM A500 grade "B" steel, shot blasted and finished in dark bronze polyester powder coat. Anchor base is fabricated from ASTM grade steel. ASTM A366 steel full base cover is provided to enclose base plate and anchor bolts. Anchor bolts are per ASTM A576 with two nuts, two flat washers, and one lock washer. Hardware and threaded portion of bolt are hot dip galvanized. 3" hook for 3/4" bolt. 4" hook for 1" bolt.

Finish
Housing and cast parts finished in five-stage super TGIC polyester bronze powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear.

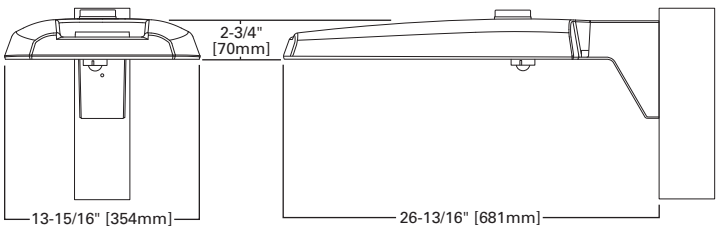
Warranty
Five-year warranty.

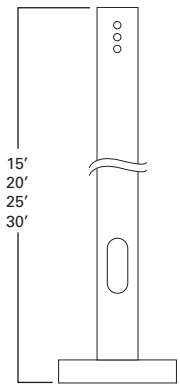
PFPRV PREVAIL POLE AND FIXTURE COMBO

LED

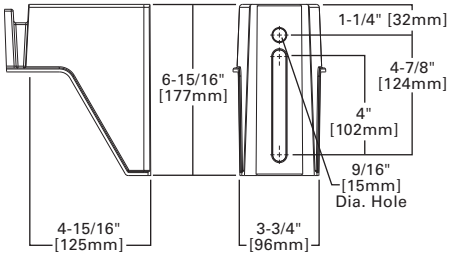
POLE AND FIXTURE COMBO

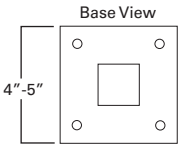
DIMENSIONS





POLE MOUNT ARM





CERTIFICATION DATA
UL and cUL Wet Location Listed
IP66-Rated
3G Vibration Rated
ISO 9001
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

EPA
Effective Projected Area (Sq. Ft.): 0.75
(1 fixture)

SHIPPING DATA
Approximate Net Weight:
20lbs. [9.09 kgs.] **(1 fixture)**

*www.designlights.org

ORDERING INFORMATION

Sample Number: PFPRV-1-A25-T3-15-N/AB

Series [1, 2, 3]	**Number of Fixtures**	**Light Engine**	**Distribution**	**Pole Height**	**Maximum Wind Zone** (MPH)	**Options** (Add as Suffix)	**Accessories** (Order Separately)
PFPRV=Prevail Pole and Fixture Combo	**1**=1 **2**=2 **3**=3 **4**=4	**A15**=(1 LED) 6,100 Nominal Lumens **A25**=(2 LED) 10,200 Nominal Lumens **A40**=(2 LED) 15,100 Nominal Lumens **A60**=(2 LED) 18,900 Nominal Lumens	**T3**=Type III **T4**=Type IV	**15**=15' **20**=20' **25**=25' **30**=30'	**Blank**=80 **9**=90 **0**=100	**N/AB**=No Anchor Bolts (Used when ordered separately) **HSS**=House Side Shield **MSP/DIM-L12**=Integrated Sensor for Dimming Operation, 8' - 12' Mounting Height **MSP/DIM-L30**=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height **PER**=NEMA 3PIN Twistlock Photocontrol Receptacle [4] **PER7**=NEMA 7PIN Twistlock Photocontrol Receptacle [4]	**HS/VERD**=House Side Shield

NOTES: 1 4000K CCT, standard bronze, 120-277V, 0-10V dimming. **2** Standard mount arm included with fixture. Supplied with straight steel shaft, anchor bolts, template, base cover and hardware. **3** DesignLights Consortium™ Qualified and classified for DLC standard, refer to www.designlights.org for details. **4** Not available with MSP options.

POWER AND LUMENS

Light Engine		**A15**	**A25**	**A40**	**A60**
Nominal Power (Watts)		57W	87W	143W	163W
Input Current @ 120V (A)		0.49	0.76	1.23	1.34
Input Current @ 277V (A)		0.22	0.35	0.54	0.60
Input Current @ 347V (A)		0.18	0.28	0.45	0.49
Input Current @ 480V (A)		0.13	0.21	0.33	0.35
Type II	Lumens	6,139	10,204	15,073	18,830
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
Type III	Lumens	6,192	10,292	15,203	18,992
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4
Type IV	Lumens	6,173	10,261	15,157	18,935
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G5
Type V	Lumens	6,393	10,627	15,697	19,610
	BUG Rating	B3-U0-G3	B4-U0-G3	B4-U0-G4	B5-U0-G4

NOTE: Lumen output for standard bronze fixture color. Different housing colors impact lumen output. IES files for the non-standard colors are available upon request.

LUMEN MAINTENANCE

Ambient Temperature	**25,000 Hours***	**50,000 Hours***	**60,000 Hours***	**Theoretical 100,000 Hours**	**Theoretical L70 (Hours)***
25ºC	> 96%	> 93%	> 92%	> 87%	> 260,000
40ºC	> 96%	> 93%	> 92%	> 87%	> 255,000
50ºC	> 95%	> 92%	> 91%	> 86%	> 250,000

* Per IESNA TM-21 data.

LUMEN MULTIPLIER

Ambient Temperature	**Lumen Multiplier**
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99

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ONE FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90 AND 100MPH WIND ZONES USE A 5" POLE)

EPA=0.75
T3=18,992
T4=18,935

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-1-A15-T3-15 [2]	PFPRV-1-A15-T3-15-9 [2]	PFPRV-1-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-1-A15-T4-15 [2]	PFPRV-1-A15-T4-15-9 [2]	PFPRV-1-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-1-A25-T3-15 [2]	PFPRV-1-A25-T3-15-9 [2]	PFPRV-1-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-1-A25-T4-15 [2]	PFPRV-1-A25-T4-15-9 [2]	PFPRV-1-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-1-A40-T3-15 [2]	PFPRV-1-A40-T3-15-9 [2]	PFPRV-1-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-1-A40-T4-15 [2]	PFPRV-1-A40-T4-15-9 [2]	PFPRV-1-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-1-A60-T3-15 [2]	PFPRV-1-A60-T3-15-9 [2]	PFPRV-1-A60-T3-15-0 [2]	450W
	18,935	Type IV	PFPRV-1-A60-T4-15 [2]	PFPRV-1-A60-T4-15-9 [2]	PFPRV-1-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-1-A15-T3-20 [2]	PFPRV-1-A15-T3-20-9 [2]	PFPRV-1-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-1-A15-T4-20 [2]	PFPRV-1-A15-T4-20-9 [2]	PFPRV-1-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-1-A25-T3-20 [2]	PFPRV-1-A25-T3-20-9 [2]	PFPRV-1-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-1-A25-T4-20 [2]	PFPRV-1-A25-T4-20-9 [2]	PFPRV-1-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-1-A40-T3-20 [2]	PFPRV-1-A40-T3-20-9 [2]	PFPRV-1-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-1-A40-T4-20 [2]	PFPRV-1-A40-T4-25-9 [2]	PFPRV-1-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-1-A60-T3-20 [2]	PFPRV-1-A60-T3-20-9 [2]	PFPRV-1-A60-T3-20-0 [2]	450W
	18,935	Type IV	PFPRV-1-A60-T4-20 [2]	PFPRV-1-A60-T4-20-9 [2]	PFPRV-1-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-1-A15-T3-25 [2]	PFPRV-1-A15-T3-25-9 [2]	PFPRV-1-A15-T3-25-0 [2]	150W
	6,173	Type IV	PFPRV-1-A15-T4-25 [2]	PFPRV-1-A15-T4-25-9 [2]	PFPRV-1-A15-T4-25-0 [2]	150W
	10,292	Type III	PFPRV-1-A25-T3-25 [2]	PFPRV-1-A25-T3-25-9 [2]	PFPRV-1-A25-T3-25-0 [2]	250W
	10,261	Type IV	PFPRV-1-A25-T4-25 [2]	PFPRV-1-A25-T4-25-9 [2]	PFPRV-1-A25-T4-25-0 [2]	250W
	15,203	Type III	PFPRV-1-A40-T3-25 [2]	PFPRV-1-A40-T3-25-9 [2]	PFPRV-1-A40-T3-25-0 [2]	400W
	15,157	Type IV	PFPRV-1-A40-T4-25 [2]	PFPRV-1-A40-T4-25-9 [2]	PFPRV-1-A40-T4-25-0 [2]	400W
	18,992	Type III	PFPRV-1-A60-T3-25 [2]	PFPRV-1-A60-T3-25-9 [2]	PFPRV-1-A60-T3-25-0 [2]	450W
	18,935	Type IV	PFPRV-1-A60-T4-25 [2]	PFPRV-1-A60-T4-25-9 [2]	PFPRV-1-A60-T4-25-0 [2]	450W
30'	6,192	Type III	PFPRV-1-A15-T3-30 [3]	PFPRV-1-A15-T3-30-9 [3]	PFPRV-1-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-1-A15-T4-30 [3]	PFPRV-1-A15-T4-30-9 [3]	PFPRV-1-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-1-A25-T3-30 [3]	PFPRV-1-A25-T3-30-9 [3]	PFPRV-1-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-1-A25-T4-30 [3]	PFPRV-1-A25-T4-30-9 [3]	PFPRV-1-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-1-A40-T3-30 [3]	PFPRV-1-A40-T3-30-9 [3]	PFPRV-1-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-1-A40-T4-30 [3]	PFPRV-1-A40-T4-30-9 [3]	PFPRV-1-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-1-A60-T3-30 [3]	PFPRV-1-A60-T3-30-9 [3]	PFPRV-1-A60-T3-30-0 [4]	450W
	18,935	Type IV	PFPRV-1-A60-T4-30 [3]	PFPRV-1-A60-T4-30-9 [3]	PFPRV-1-A60-T4-30-0 [4]	450W

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.

2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.

3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5A30SFM4.

4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.

5. Refer to In Stock Guide for stocked configurations and availability.

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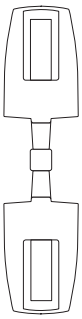
TWO FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90, 100MPH WIND ZONES AND 25FT CONFIGURATIONS WITH 100MPH WIND ZONE USE 5" POLES)



EPA=1.50

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-2-A15-T3-15 [2]	PFPRV-2-A15-T3-15-9 [2]	PFPRV-2-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-2-A15-T4-15 [2]	PFPRV-2-A15-T4-15-9 [2]	PFPRV-2-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-2-A25-T3-15 [2]	PFPRV-2-A25-T3-15-9 [2]	PFPRV-2-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-2-A25-T4-15 [2]	PFPRV-2-A25-T4-15-9 [2]	PFPRV-2-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-2-A40-T3-15 [2]	PFPRV-2-A40-T3-15-9 [2]	PFPRV-2-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-2-A40-T4-15 [2]	PFPRV-2-A40-T4-15-9 [2]	PFPRV-2-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-2-A60-T3-15 [2]	PFPRV-2-A60-T3-15-9 [2]	PFPRV-2-A60-T3-15-0 [2]	450W
	18,935	Type IV	PFPRV-2-A60-T4-15 [2]	PFPRV-2-A60-T4-15-9 [2]	PFPRV-2-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-2-A15-T3-20 [2]	PFPRV-2-A15-T3-20-9 [2]	PFPRV-2-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-2-A15-T4-20 [2]	PFPRV-2-A15-T4-20-9 [2]	PFPRV-2-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-2-A25-T3-20 [2]	PFPRV-2-A25-T3-20-9 [2]	PFPRV-2-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-2-A25-T4-20 [2]	PFPRV-2-A25-T4-20-9 [2]	PFPRV-2-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-2-A40-T3-20 [2]	PFPRV-2-A40-T3-20-9 [2]	PFPRV-2-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-2-A40-T4-20 [2]	PFPRV-2-A40-T4-25-9 [2]	PFPRV-2-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-2-A60-T3-20 [2]	PFPRV-2-A60-T3-20-9 [2]	PFPRV-2-A60-T3-20-0 [2]	450W
	18,935	Type IV	PFPRV-2-A60-T4-20 [2]	PFPRV-2-A60-T4-20-9 [2]	PFPRV-2-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-2-A15-T3-25 [2]	PFPRV-2-A15-T3-25-9 [2]	PFPRV-2-A15-T3-25-0 [3]	150W
	6,173	Type IV	PFPRV-2-A15-T4-25 [2]	PFPRV-2-A15-T4-25-9 [2]	PFPRV-2-A15-T4-25-0 [3]	150W
	10,292	Type III	PFPRV-2-A25-T3-25 [2]	PFPRV-2-A25-T3-25-9 [2]	PFPRV-2-A25-T3-25-0 [3]	250W
	10,261	Type IV	PFPRV-2-A25-T4-25 [2]	PFPRV-2-A25-T4-25-9 [2]	PFPRV-2-A25-T4-25-0 [3]	250W
	15,203	Type III	PFPRV-2-A40-T3-25 [2]	PFPRV-2-A40-T3-25-9 [2]	PFPRV-2-A40-T3-25-0 [3]	400W
	15,157	Type IV	PFPRV-2-A40-T4-25 [2]	PFPRV-2-A40-T4-25-9 [2]	PFPRV-2-A40-T4-25-0 [3]	400W
	18,992	Type III	PFPRV-2-A60-T3-25 [2]	PFPRV-2-A60-T3-25-9 [2]	PFPRV-2-A60-T3-25-0 [3]	450W
	18,935	Type IV	PFPRV-2-A60-T4-25 [2]	PFPRV-2-A60-T4-25-9 [2]	PFPRV-2-A60-T4-25-0 [3]	450W
30'	6,192	Type III	PFPRV-2-A15-T3-30 [3]	PFPRV-2-A15-T3-30-9 [3]	PFPRV-2-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-2-A15-T4-30 [3]	PFPRV-2-A15-T4-30-9 [3]	PFPRV-2-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-2-A25-T3-30 [3]	PFPRV-2-A25-T3-30-9 [3]	PFPRV-2-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-2-A25-T4-30 [3]	PFPRV-2-A25-T4-30-9 [3]	PFPRV-2-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-2-A40-T3-30 [3]	PFPRV-2-A40-T3-30-9 [3]	PFPRV-2-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-2-A40-T4-30 [3]	PFPRV-2-A40-T4-30-9 [3]	PFPRV-2-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-2-A60-T3-30 [3]	PFPRV-2-A60-T3-30-9 [3]	PFPRV-2-A60-T3-30-0 [4]	450W
	18,935	Type IV	PFPRV-2-A60-T4-30 [3]	PFPRV-2-A60-T4-30-9 [3]	PFPRV-2-A60-T4-30-0 [4]	450W

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.
3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 25' combo SS5A25SFM4 and 30' combo SS5A30SFM4.
4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.
5. Refer to In Stock Guide for stocked configurations and availability.

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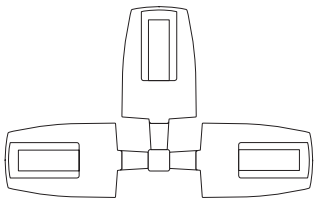
Specifications and dimensions subject to change without notice.

THREE FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90, 100MPH WIND ZONES AND 25FT CONFIGURATIONS WITH 90, 100MPH WIND ZONE USE 5" POLES)



EPA=2.25

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-3-A15-T3-15 [2]	PFPRV-3-A15-T3-15-9 [2]	PFPRV-3-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-3-A15-T4-15 [2]	PFPRV-3-A15-T4-15-9 [2]	PFPRV-3-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-3-A25-T3-15 [2]	PFPRV-3-A25-T3-15-9 [2]	PFPRV-3-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-3-A25-T4-15 [2]	PFPRV-3-A25-T4-15-9 [2]	PFPRV-3-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-3-A40-T3-15 [2]	PFPRV-3-A40-T3-15-9 [2]	PFPRV-3-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-3-A40-T4-15 [2]	PFPRV-3-A40-T4-15-9 [2]	PFPRV-3-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-3-A60-T3-15 [2]	PFPRV-3-A60-T3-15-9 [2]	PFPRV-3-A60-T3-15-0 [2]	450W
	18,935	Type IV	PFPRV-3-A60-T4-15 [2]	PFPRV-3-A60-T4-15-9 [2]	PFPRV-3-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-3-A15-T3-20 [2]	PFPRV-3-A15-T3-20-9 [2]	PFPRV-3-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-3-A15-T4-20 [2]	PFPRV-3-A15-T4-20-9 [2]	PFPRV-3-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-3-A25-T3-20 [2]	PFPRV-3-A25-T3-20-9 [2]	PFPRV-3-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-3-A25-T4-20 [2]	PFPRV-3-A25-T4-20-9 [2]	PFPRV-3-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-3-A40-T3-20 [2]	PFPRV-3-A40-T3-20-9 [2]	PFPRV-3-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-3-A40-T4-20 [2]	PFPRV-3-A40-T4-25-9 [2]	PFPRV-3-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-3-A60-T3-20 [2]	PFPRV-3-A60-T3-20-9 [2]	PFPRV-3-A60-T3-20-0 [2]	450W
	18,935	Type IV	PFPRV-3-A60-T4-20 [2]	PFPRV-3-A60-T4-20-9 [2]	PFPRV-3-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-3-A15-T3-25 [2]	PFPRV-3-A15-T3-25-9 [3]	PFPRV-3-A15-T3-25-0 [3]	150W
	6,173	Type IV	PFPRV-3-A15-T4-25 [2]	PFPRV-3-A15-T4-25-9 [3]	PFPRV-3-A15-T4-25-0 [3]	150W
	10,292	Type III	PFPRV-3-A25-T3-25 [2]	PFPRV-3-A25-T3-25-9 [3]	PFPRV-3-A25-T3-25-0 [3]	250W
	10,261	Type IV	PFPRV-3-A25-T4-25 [2]	PFPRV-3-A25-T4-25-9 [3]	PFPRV-3-A25-T4-25-0 [3]	250W
	15,203	Type III	PFPRV-3-A40-T3-25 [2]	PFPRV-3-A40-T3-25-9 [3]	PFPRV-3-A40-T3-25-0 [3]	400W
	15,157	Type IV	PFPRV-3-A40-T4-25 [2]	PFPRV-3-A40-T4-25-9 [3]	PFPRV-3-A40-T4-25-0 [3]	400W
	18,992	Type III	PFPRV-3-A60-T3-25 [2]	PFPRV-3-A60-T3-25-9 [3]	PFPRV-3-A60-T3-25-0 [3]	450W
	18,935	Type IV	PFPRV-3-A60-T4-25 [2]	PFPRV-3-A60-T4-25-9 [3]	PFPRV-3-A60-T4-25-0 [3]	450W
30'	6,192	Type III	PFPRV-3-A15-T3-30 [3]	PFPRV-3-A15-T3-30-9 [4]	PFPRV-3-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-3-A15-T4-30 [3]	PFPRV-3-A15-T4-30-9 [4]	PFPRV-3-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-3-A25-T3-30 [3]	PFPRV-3-A25-T3-30-9 [4]	PFPRV-3-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-3-A25-T4-30 [3]	PFPRV-3-A25-T4-30-9 [4]	PFPRV-3-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-3-A40-T3-30 [3]	PFPRV-3-A40-T3-30-9 [4]	PFPRV-3-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-3-A40-T4-30 [3]	PFPRV-3-A40-T4-30-9 [4]	PFPRV-3-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-3-A60-T3-30 [3]	PFPRV-3-A60-T3-30-9 [4]	PFPRV-3-A60-T3-30-0 [4]	450W
	18,935	Type IV	PFPRV-3-A60-T4-30 [3]	PFPRV-3-A60-T4-30-9 [4]	PFPRV-3-A60-T4-30-0 [4]	450W

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.

2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.

3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 25' combo SS5A25SFM4 and 30' combo SS5A30SFM4.

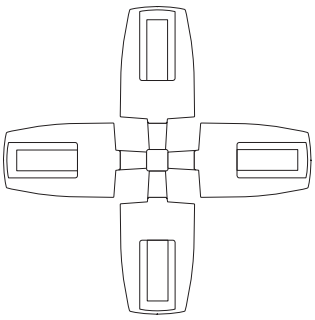
4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.

5. Refer to In Stock Guide for availability.

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

FOUR FIXTURE CONFIGURATION
(30FT CONFIGURATIONS WITH 80, 90, 100MPH WIND ZONES AND 25FT CONFIGURATIONS WITH 100MPH WIND ZONE USE 5" POLES)



EPA=3.00

Mounting Height (Feet)	Lumens (Nominal)	Distribution	Maximum Wind Zone (MPH)			HID Equivalent (Wattage)
			80	90	100	
15'	6,192	Type III	PFPRV-4-A15-T3-15 [2]	PFPRV-4-A15-T3-15-9 [2]	PFPRV-4-A15-T3-15-0 [2]	150W
	6,173	Type IV	PFPRV-4-A15-T4-15 [2]	PFPRV-4-A15-T4-15-9 [2]	PFPRV-4-A15-T4-15-0 [2]	150W
	10,292	Type III	PFPRV-4-A25-T3-15 [2]	PFPRV-4-A25-T3-15-9 [2]	PFPRV-4-A25-T3-15-0 [2]	250W
	10,261	Type IV	PFPRV-4-A25-T4-15 [2]	PFPRV-4-A25-T4-15-9 [2]	PFPRV-4-A25-T4-15-0 [2]	250W
	15,203	Type III	PFPRV-4-A40-T3-15 [2]	PFPRV-4-A40-T3-15-9 [2]	PFPRV-4-A40-T3-15-0 [2]	400W
	15,157	Type IV	PFPRV-4-A40-T4-15 [2]	PFPRV-4-A40-T4-15-9 [2]	PFPRV-4-A40-T4-15-0 [2]	400W
	18,992	Type III	PFPRV-4-A60-T4-15 [2]	PFPRV-4-A60-T4-15-9 [2]	PFPRV-4-A60-T4-15-0 [2]	450W
	18,935	Type IV	PFPRV-4-A60-T4-15 [2]	PFPRV-4-A60-T4-15-9 [2]	PFPRV-4-A60-T4-15-0 [2]	450W
20'	6,192	Type III	PFPRV-4-A15-T3-20 [2]	PFPRV-4-A15-T3-20-9 [2]	PFPRV-4-A15-T3-20-0 [2]	150W
	6,173	Type IV	PFPRV-4-A15-T4-20 [2]	PFPRV-4-A15-T4-20-9 [2]	PFPRV-4-A15-T4-20-0 [2]	150W
	10,292	Type III	PFPRV-4-A25-T3-20 [2]	PFPRV-4-A25-T3-20-9 [2]	PFPRV-4-A25-T3-20-0 [2]	250W
	10,261	Type IV	PFPRV-4-A25-T4-20 [2]	PFPRV-4-A25-T4-20-9 [2]	PFPRV-4-A25-T4-20-0 [2]	250W
	15,203	Type III	PFPRV-4-A40-T3-20 [2]	PFPRV-4-A40-T3-20-9 [2]	PFPRV-4-A40-T3-20-0 [2]	400W
	15,157	Type IV	PFPRV-4-A40-T4-20 [2]	PFPRV-4-A40-T4-25-9 [2]	PFPRV-4-A40-T4-20-0 [2]	400W
	18,992	Type III	PFPRV-4-A60-T4-20 [2]	PFPRV-4-A60-T4-20-9 [2]	PFPRV-4-A60-T4-20-0 [2]	450W
	18,935	Type IV	PFPRV-4-A60-T4-20 [2]	PFPRV-4-A60-T4-20-9 [2]	PFPRV-4-A60-T4-20-0 [2]	450W
25'	6,192	Type III	PFPRV-4-A15-T3-25 [2]	PFPRV-4-A15-T3-25-9 [3]	PFPRV-4-A15-T3-25-0 [3]	150W
	6,173	Type IV	PFPRV-4-A15-T4-25 [2]	PFPRV-4-A15-T4-25-9 [3]	PFPRV-4-A15-T4-25-0 [3]	150W
	10,292	Type III	PFPRV-4-A25-T3-25 [2]	PFPRV-4-A25-T3-25-9 [3]	PFPRV-4-A25-T3-25-0 [3]	250W
	10,261	Type IV	PFPRV-4-A25-T4-25 [2]	PFPRV-4-A25-T4-25-9 [3]	PFPRV-4-A25-T4-25-0 [3]	250W
	15,203	Type III	PFPRV-4-A40-T3-25 [2]	PFPRV-4-A40-T3-25-9 [3]	PFPRV-4-A40-T3-25-0 [3]	400W
	15,157	Type IV	PFPRV-4-A40-T4-25 [2]	PFPRV-4-A40-T4-25-9 [3]	PFPRV-4-A40-T4-25-0 [3]	400W
	18,992	Type III	PFPRV-4-A60-T4-25 [2]	PFPRV-4-A60-T4-25-9 [3]	PFPRV-4-A60-T4-25-0 [3]	450W
	18,935	Type IV	PFPRV-4-A60-T4-25 [2]	PFPRV-4-A60-T4-25-9 [3]	PFPRV-4-A60-T4-25-0 [3]	450W
30'	6,192	Type III	PFPRV-4-A15-T3-30 [3]	PFPRV-4-A15-T3-30-9 [4]	PFPRV-4-A15-T3-30-0 [4]	150W
	6,173	Type IV	PFPRV-4-A15-T4-30 [3]	PFPRV-4-A15-T4-30-9 [4]	PFPRV-4-A15-T4-30-0 [4]	150W
	10,292	Type III	PFPRV-4-A25-T3-30 [3]	PFPRV-4-A25-T3-30-9 [4]	PFPRV-4-A25-T3-30-0 [4]	250W
	10,261	Type IV	PFPRV-4-A25-T4-30 [3]	PFPRV-4-A25-T4-30-9 [4]	PFPRV-4-A25-T4-30-0 [4]	250W
	15,203	Type III	PFPRV-4-A40-T3-30 [3]	PFPRV-4-A40-T3-30-9 [4]	PFPRV-4-A40-T3-30-0 [4]	400W
	15,157	Type IV	PFPRV-4-A40-T4-30 [3]	PFPRV-4-A40-T4-30-9 [4]	PFPRV-4-A40-T4-30-0 [4]	400W
	18,992	Type III	PFPRV-4-A60-T4-30 [3]	PFPRV-4-A60-T4-30-9 [4]	PFPRV-4-A60-T4-30-0 [4]	450W
	18,935	Type IV	PFPRV-4-A60-T4-30 [3]	PFPRV-4-A60-T4-30-9 [4]	PFPRV-4-A60-T4-30-0 [4]	450W

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
2. Supplied with 4A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 15' combo SS4A15SFM4, 20' combo SS4A20SFM4, and 25' combo SS4A25SFM4.
3. Supplied with 5A Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 25' combo SS5A25SFM4 and 30' combo SS5A30SFM4.
4. Supplied with 5M Square Straight Steel Shaft (SSS), Anchor Bolts (AB1), Template (TMP1), hardware and base cover. 30' combo SS5M30SFM4.
5. Refer to In Stock Guide for availability.

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Specifications and dimensions subject to change without notice.

DESCRIPTION

The patented Lumark Crosstour™ MAXX LED wall pack series of luminaries provides low-profile architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, stainless steel hardware along with a sealed and gasketed optical compartment make Crosstour impervious to contaminants. The Crosstour MAXX wall luminaire is ideal for wall/surface, inverted mount for facade/canopy illumination, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

		Type
Catalog #	XTOR6B-W	BB
Project	Bavaria	
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Matching housing styles incorporate both a full cutoff and refractive lens design. Full cutoff and refractive lens models are available in 58W, 81W and 102W. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes four 1/2" NPT threaded conduit entry points. The back box is secured by four lag bolts (supplied by others). External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Not recommended for car wash applications.

Optical
Silicone sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full cutoff models integrate an impact-resistant molded refractive prism optical lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a molded lens assembly designed for maximum forward throw. Solid state LED Crosstour MAXX luminaries are thermally optimized with eight lumen packages in cool 5000K, neutral 4000K, or warm 3000K LED color temperature (CCT).

Electrical
LED driver is mounted to the die-cast aluminum housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 58W, 81W and 102W models operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C [122°F] models available in 58W and 81W models only. Crosstour MAXX luminaires maintain greater than 89% of initial light output after 72,000 hours of operation. Four half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz, 480V 60Hz, or 347V 60Hz electrical operation. 480V is compatible for use with 480V Wye systems only.

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch (available in 58W and 81W models only), an AC-ON indicator light and a premium extended rated sealed maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Area and Site Pole Mounting
Optional extruded aluminum 6-1/2" arm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional tenon adapter fits 2-3/8" or 3-1/2" O.D. Tenon.

Finish
Crosstour MAXX is protected with a super TGIC carbon bronze or summit white polyester powder coat paint. Super TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

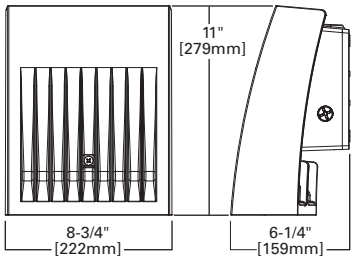
Warranty
Five-year warranty.

XTOR
CROSSTOUR
MAXX LED

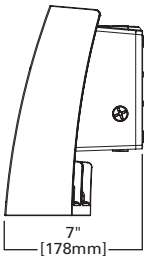
APPLICATIONS:
WALL / SURFACE
INVERTED
SITE LIGHTING

DIMENSIONS

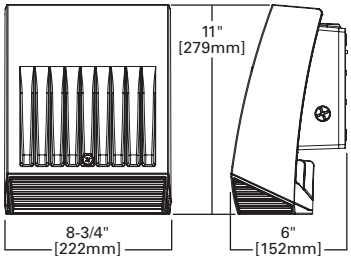
FULL CUTOFF



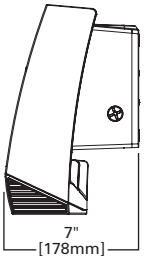
DEEP BACK BOX



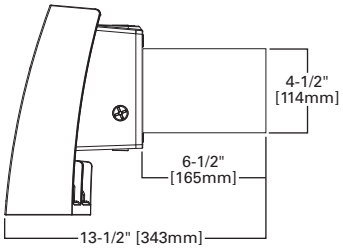
REFRACTIVE LENS



DEEP BACK BOX

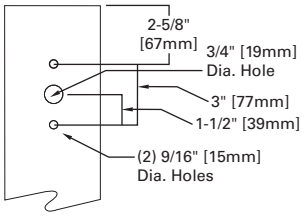


OPTIONAL POLE MOUNT ARM

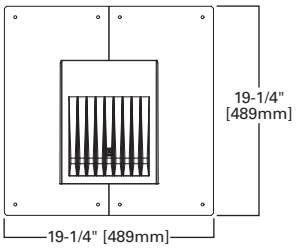


ARM DRILLING

TYPE "C"



ESCUTCHEON PLATES



CERTIFICATION DATA
UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
NOM Compliant Models
3G Vibration Tested
UL924 Listed (CBP Models)
IP66 Rated
DesignLights Consortium® Qualified*

TECHNICAL DATA
40°C Ambient Temperature
External Supply Wiring 90°C Minimum

EPA
Effective Projected Area (Sq. Ft.):
XTOR6B, XTOR8B, XTOR12B=0.54
With Pole Mount Arm=0.98

SHIPPING DATA:
Approximate Net Weight:
12-15 lbs. [5.4-6.8 kgs.]

*www.designlights.org

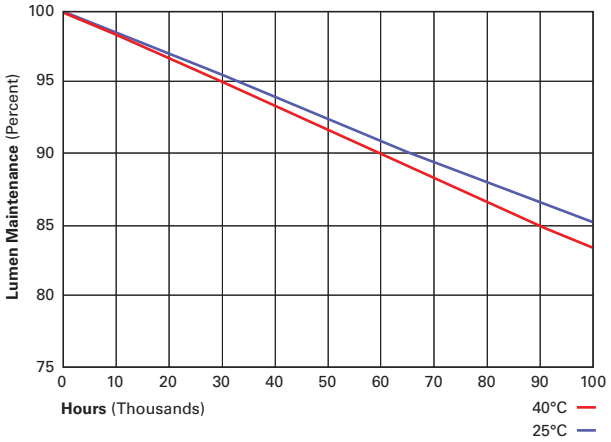
POWER AND LUMENS BY FIXTURE MODEL

58W Series						
LED Information	**XTOR6B**	**XTOR6BRL**	**XTOR6B-W**	**XTOR6BRL-W**	**XTOR6B-Y**	**XTOR6BRL-Y**
Delivered Lumens	6,129	6,225	6,038	6,133	5,611	5,826
B.U.G. Rating	B1-U0-G1	B2-U4-G3	B1-U0-G1	B2-U4-G3	B1-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	58W	58W	58W	58W	58W	58W
81W Series						
LED Information	**XTOR8B**	**XTOR8BRL**	**XTOR8B-W**	**XTOR8BRL-W**	**XTOR8B-Y**	**XTOR8BRL-Y**
Delivered Lumens	8,502	8,635	8,373	8,504	7,748	8,079
B.U.G. Rating	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	81W	81W	81W	81W	81W	81W
102W Series						
LED Information	**XTOR12B**	**XTOR12BRL**	**XTOR12B-W**	**XTOR12BRL-W**	**XTOR12B-Y**	**XTOR12BRL-Y**
Delivered Lumens	12,728	13,458	12,539	13,258	11,861	12,595
B.U.G. Rating	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	102W	102W	102W	102W	102W	102W

EGRESS Information	**XTOR6B, XTOR8B and XTOR12B Full Cutoff CBP Egress LED**	**XTOR6B, XTOR8B and XTOR12B Refractive Lens CBP Egress LED**
Delivered Lumens	509	468
B.U.G. Rating	N.A.	N.A.
CCT (Kelvin)	4000K	4000K
CRI (Color Rendering Index)	65	65
Power Consumption (Watts)	1.8W	1.8W

LUMEN MAINTENANCE

Ambient Temperature	**TM-21 Lumen Maintenance** (72,000 Hours)	**Theoretical L70** (Hours)
XTOR6B Model		
25°C	> 90%	246,000
40°C	> 88%	217,000
50°C	> 88%	201,000
XTOR8B Model		
25°C	> 89%	219,000
40°C	> 87%	195,000
50°C	> 86%	181,000
XTOR12B Model		
25°C	> 89%	222,000
40°C	> 87%	198,000



CURRENT DRAW

Voltage	**Model Series**				
	XTOR6B	**XTOR8B**	**XTOR12B**	**XTOR6B-CBP (Fixture/Battery)**	**XTOR8B-CBP (Fixture/Battery)**
120V	0.51	0.71	0.94	0.60/0.25	0.92/0.25
208V	0.25	0.39	0.52	- -	- -
240V	0.25	0.35	0.45	- -	- -
277V	0.22	0.31	0.39	0.36/0.21	0.50/0.21
347V	0.19	0.25	0.33		- -
480V	0.14	0.19	0.24		- -

Eaton
1121 Highway 74 South
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P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

ORDERING INFORMATION

Sample Number: XTOR6B-W-WT-PC1

Series [1]	**LED Kelvin Color**	**Housing Color**	**Options** (Add as Suffix)
Full Cutoff **XTOR6B**=58W **XTOR8B**=81W **XTOR12B**=102W **Refractive Lens** **XTOR6BRL**=58W **XTOR8BRL**=81W **XTOR12BRL**=102W	**[Blank]**=Bright White (Standard) 5000K **W**=Neutral, 4000K **Y**=Warm, 3000K	**[Blank]**=Carbon Bronze (Standard) **WT**=Summit White **BK**=Black **BZ**=Bronze **AP**=Grey **GM**=Graphite Metallic **DP**=Dark Platinum	**347V**=347V [2, 3, 4, 5] **480V**=480V [2, 3, 4, 5, 6] **PC1**=Photocontrol 120V [7] **PC2**=Photocontrol 208-277V [7, 8] **PMA**=Pole Mount Arm (C Drilling) with Round Adapter [3, 9] **MS-L20**=Motion Sensor for ON/OFF Operation [2, 3, 10, 11] **MS/DIM-L20**=Motion Sensor for Dimming Operation [2, 3, 10, 11, 12, 13, 14] **CBP**=Cold Weather Battery Pack [2, 3, 11, 15, 17] **HA**=50°C High Ambient [17]

Accessories (Order Separately)	
WG-XTORMX=Crosstour MAXX Wire Guard **PB120V**=Field Installed 120V Photocontrol **PB277V BUTTON PC**=Field Installed 208-277V Photocontrol [8] **VA1040-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon [16] **VA1041-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon [16] **VA1042-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon [16] **VA1043-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon [16] **VA1044-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon [16] **VA1045-XX**=3@90° Tenon Adapter for 3-1/2" O.D. Tenon [16] **VA1046-XX**=2@120° Tenon Adapter for 3-1/2" O.D. Tenon [16]	**VA1033-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon [16] **VA1034-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon [16] **VA1035-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon [16] **VA1036-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon [16] **VA1037-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon [16] **VA1038-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon [16] **VA1039-XX**=2@120° Tenon Adapter for 2-3/8" O.D. Tenon [16] **EWP/XTORMX**=Escutcheon Wall Plate, Carbon Bronze **EWP/XTORMX-WT**=Escutcheon Wall Plate, Summit White **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [14]

NOTES:

1. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
2. Not available with HA option.
3. Deep back box is standard for 347V, 480V, CBP, PMA, MS-L20 and MS/DIM-L20.
4. Not available with CBP option.
5. Thru-branch wiring not available with HA option or with 347V.
6. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
7. Not available with MS-L20 and MS/DIM-L20 options.
8. Use PC2 with 347V or 480V option for photocontrol. Factory wired to 208-277V lead.
9. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
10. For use in downlight orientation only. Optimal coverage at mounting heights of 9'-20'.
11. 120V thru 277V only.
12. Factory set to 50% power reduction after 15-minutes of inactivity. Dimming driver included.
13. Includes integral photo sensor.
14. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff, and more. Consult your lighting representative at Eaton for more information.
15. Operating temperatures -20°C to 25°C.
16. Replace XX with housing color.
17. Not available in XTOR12B or XTOR12BRL models.

STOCK ORDERING INFORMATION

58W Series	**81W Series**	**102W Series**
Full Cutoff		
XTOR6B=58W, 5000K, Carbon Bronze	**XTOR8B**=81W, 5000K, Carbon Bronze	**XTOR12B**=102W, 5000K, Carbon Bronze
XTOR6B-PC1=58W, 5000K, 120V PC, Carbon Bronze	**XTOR8B-PC1**=81W, 5000K, 120V PC, Carbon Bronze	**XTOR12B-PC1**=102W, 5000K, 120V PC, Carbon Bronze
XTOR6B-WT= 58W, 5000K, Summit White	**XTOR8B-WT**=81W, 5000K, Summit White	**XTOR12B-WT**=102W, 5000K, Summit White
XTOR6B-W=58W, 4000K, Carbon Bronze	**XTOR8B-PC2**=81W, 5000K, 208-277V PC, Carbon Bronze	**XTOR12B-PC2**=102W, 5000K, 208-277V PC, Carbon Bronze
XTOR6B-PMA= 58W, 5000K, Pole Mount Arm, Carbon Bronze	**XTOR8B-PMA**=81W, 5000K, Pole Mount Arm, Carbon Bronze	**XTOR12B-PMA**=102W, 5000K, Pole Mount Arm, Carbon Bronze
XTOR6B-W-PMA=58W, 4000K, Pole Mount Arm, Carbon Bronze	**XTOR8B-W**=81W, 4000K, Carbon Bronze	**XTOR12B-W**=102W, 4000K, Carbon Bronze
XTOR6B-PC2= 58W, 5000K, 208-277V PC, Carbon Bronze	**XTOR8B-W-PC1**=81W, 4000K, 120V PC, Carbon Bronze	**XTOR12B-W-PC1**=102W, 4000K, 120V PC, Carbon Bronze
XTOR6B-W-PC2=58W, 4000K, 208-277V PC, Carbon Bronze	**XTOR8B-W-PC2**=81W, 4000K, 208-277V PC, Carbon Bronze	**XTOR12B-W-PC2**=102W, 4000K, 208-277V PC, Carbon Bronze
XTOR6B-W-PC1=58W, 4000K, 120V PC, Carbon Bronze	**XTOR8B-W-PMA**=81W,4000K, Pole Mount Arm, Carbon Bronze	**XTOR12B-W-PMA**=102W,4000K, Pole Mount Arm, Carbon Bronze
Refractive Lens		
XTOR6BRL=58W, 5000K, Refractive Lens, Carbon Bronze	**XTOR8BRL**=81W, 5000K, Refractive Lens, Carbon Bronze	**XTOR12BRL**=102W, 5000K, Refractive Lens, Carbon Bronze
XTOR6BRL-PC1=58W, 5000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR8BRL-PC1**=81W, 5000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR12BRL-PC1**=102W, 5000K, Refractive Lens, 120V PC, Carbon Bronze
XTOR6BRL-WT=58W, 5000K, Refractive Lens, Summit White	**XTOR8BRL-WT**=81W, 5000K, Refractive Lens, Summit White	**XTOR2BRL-WT**=102W, 5000K, Refractive Lens, Summit White
XTOR6BRL-W=58W, 4000K, Refractive Lens, Carbon Bronze	**XTOR8BRL-PC2**=81W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR12BRL-PC2**=102W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze
XTOR6BRL-PMA=58W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR8BRL-PMA**=81W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR12BRL-PMA**=102W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze
XTOR6BRL-W-PMA=58W,4000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR8BRL-W**=81W, 4000K, Refractive Lens, Carbon Bronze	**XTOR12BRL-W**=102W, 4000K, Refractive Lens, Carbon Bronze
XTOR6BRL-PC2=58W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR8BRL-W-PC1**=81W, 4000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR12BRL-W-PC1**=102W, 4000K, Refractive Lens, 120V PC, Carbon Bronze
XTOR6BRL-W-PC2=58W, 4000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR8BRL-W-PC2**=81W, 4000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR12BRL-W-PC2**=102W, 4000K, Refractive Lens, 208-277V PC, Carbon Bronze
XTOR6BRL-W-PC1=58W, 4000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR8BRL-W-PMA**=81W,4000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR12BRL-W-PMA**=102W,4000K, Refractive Lens, Pole Mount Arm, Carbon Bronze

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

Type: DD
Project: Bavaria

American Revolution Full Cutoff LED
Series 247CL

PRODUCT OVERVIEW

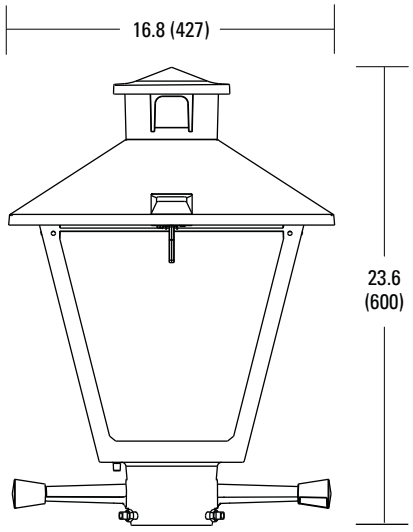
Features:

- Die-cast aluminum housing and hood for long-life performance
- Die-cast trigger latch (TL) and captive thumb screws option available for easy access to internal components
- Optical assembly designed for maximum performance, available in Type II, Type III and Type V
- Hinged hood and captive thumb screws provision afford quick, easy access to electrical and optical area for servicing
- Slipfitter with three set screws allows secure installation to pole sizes 2-3/8" or 3" O.D.
- Surge protection device (standard) exceeds ANSI C62.41 Category C1 criteria (surge tested at 10kV/5kA)
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 30°C ambient
- Rated L70, LED life greater than 100,000 hours at 25°C
- Replaces up to 150W HPS light source incumbant models
- LED electronic 0V-10V dimmable driver
- 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.

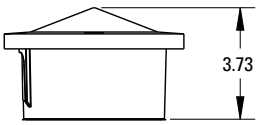
Applications:

Streetscapes
Walkways
Pathways
Parks

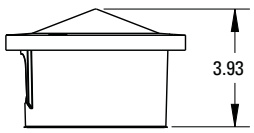
DIMENSIONS



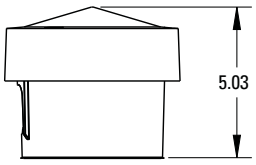
Effective Projected Area (EPA)
The EPA for the American Revolution Series 247CL is 1.0 sq. ft.
P5 or P7 option total height is 24.9 (633).
Approx. Wt. = 36 lbs.



Cupola height
P3 without ROAM
Shown in line diagram



Cupola height
P5/P7 without ROAM



Cupola height
P5/P7 with ROAM

All dimensions are inches (millimeters) unless otherwise noted.

American Revolution Full Cutoff LED
Series 247CL

ORDERING INFORMATION

Example: 247CL 20LEDE70 MVOLT 4K R3

Series

247CL	American Revolution Full Cutoff LED

Performance Package

20LEDE10	20 Chips, 1050 mA Driver, 73 input watts
20LEDE70	20 Chips, 700 mA Driver, 46 input watts
10LEDE10	10 Chips, 1050 mA Driver, 39 input watts
10LEDE70	10 Chips, 700 mA Driver, 26 input watts
10LEDE53	10 Chips, 525 mA Driver, 19 input watts
10LEDE35	10 Chips, 350 mA Driver, 14 input watts

Voltage

MVOLT	Multi-volt, 120-277V
347	347V
480	480V

Color Temperature (CCT)

3K	3000K
4K	4000K
5K	5000K

Distribution

R2	Type II
R3	Type III
R5	Type V

Options

Paint [1]

(blank)	Black (standard)
GY	Gray
DDB	Dark Bronze
WH	White
BZ	Bronze

Photocontrol

(blank)	3 pin NEMA Photocontrol Receptacle (standard)
NR [2]	No Photocontrol Receptacle
P5 [3]	5 pin NEMA Photocontrol Receptacle (dimmable driver included)
P7 [3]	7 pin NEMA Photocontrol Receptacle (dimmable driver included)
PCLL [4,5]	Solid State Long Life Photocontrol
PCSS [4,5,6]	Not CSA Listed Solid State Long Life Photocontrol (120-277V)

Miscellaneous

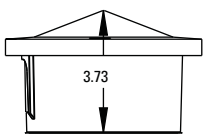
SS	Stainless steel hardware
NL	NEMA Label
XL	Not CSA Listed
TL	Tool-less Entry
LDR [7]	Ladder Rest
SH	Shorting Cap
SHX[6]	Not CSA Listed Shorting Cap
HSS	House Side Shield
CR	Enhanced Corrosion Resistant Finish
RCC [8]	ROAM Dimming Node Cupola Cover

Accessories

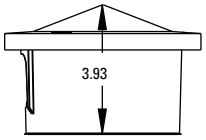
RNC57 [3]	ROAM Dimming Node Cupola Cover

Notes:
1. Other colors available, please contact factory
2. PC and SH not available with NR option
3. Taller cupola cover (RCC) is required when used with ROAM or other similar wireless monitoring control systems
4. Standard failure mode="Fail On"
5. Photocontrols supplied with ANSI Standard Turn-On levels
6. XL option is required
7. Ships with unit, field installed
8. Required when using ROAM or other similar wireless monitoring control systems

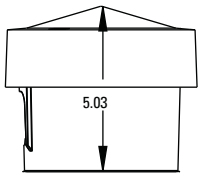
Cupola size based on type of control and receptacle



P3 Receptacle Selection
Non-ROAM Control
Blank



P5/P7 Receptacle Selection
Non-ROAM Control
P5 or
P7



P5/P7 Receptacle Selection
ROAM Control
RNC is required with:
P5 + RCC or
P7 + RCC

AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
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.

Please contact your sales representative for the latest product information.

OPERATING CHARACTERISTICS

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.

		TOTAL LUMENS					
LED Quantity, mA, CCT	Input Watts	R2	LPW	R3	LPW	R5	LPW
20LEDE10 3K	73	6,275	86	6,352	87	6,800	93
20LEDE10 4K	73	6,739	92	6,821	93	7,303	100
20LEDE10 5K	73	6,781	93	6,864	94	7,348	101
20LEDE70 3K	46	4,687	102	4,744	103	5,080	110
20LEDE70 4K	46	5,033	109	5,094	111	5,454	119
20LEDE70 5K	46	5,065	110	5,127	111	5,489	119
10LEDE10 3K	39	3,354	86	3,395	87	3,635	93
10LEDE10 4K	39	3,602	92	3,646	93	3,902	100
10LEDE10 5K	39	3,623	93	3,668	94	3,927	101
10LEDE70 3K	26	2,415	93	2,445	94	2,617	101
10LEDE70 4K	26	2,594	100	2,625	101	2,810	108
10LEDE70 5K	26	2,609	100	2,641	102	2,829	109
10LEDE53 3K	19	1,899	100	1,922	101	2,058	108
10LEDE53 4K	19	2,039	107	2,064	109	2,210	116
10LEDE53 5K	19	2,051	108	2,077	109	2,224	117
10LEDE35 3K	14	1,313	94	1,330	95	1,424	102
10LEDE35 4K	14	1,411	101	1,428	102	1,528	109
10LEDE35 5K	14	1,418	101	1,436	103	1,537	110

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.

		TOTAL LUMENS w/HSS (HOUSE SIDE SHIELD)					
LED Quantity, mA, CCT	Input Watts	R2	LPW	R3	LPW	R5	LPW
20LEDE10 3K	73	5,300	73	5,341	73	4,814	66
20LEDE10 4K	73	5,690	78	5,736	79	5,169	71
20LEDE10 5K	73	5,725	78	5,772	79	5,202	71
20LEDE70 3K	46	3,957	86	3,989	87	3,595	78
20LEDE70 4K	46	4,250	92	4,284	93	3,862	84
20LEDE70 5K	46	4,277	93	4,311	94	3,885	84
10LEDE10 3K	39	2,832	73	2,855	73	2,573	66
10LEDE10 4K	39	3,042	78	3,065	79	2,763	71
10LEDE10 5K	39	3,060	78	3,085	79	2,780	71
10LEDE70 3K	26	2,039	78	2,056	79	1,853	71
10LEDE70 4K	26	2,190	84	2,207	85	1,990	77
10LEDE70 5K	26	2,204	85	2,222	85	2,002	77
10LEDE53 3K	19	1,603	84	1,616	85	1,456	77
10LEDE53 4K	19	1,723	91	1,735	91	1,564	82
10LEDE53 5K	19	1,732	91	1,746	92	1,574	83
10LEDE35 3K	14	1,109	79	1,118	80	1,008	72
10LEDE35 4K	14	1,191	85	1,200	86	1,081	77
10LEDE35 5K	14	1,198	86	1,208	86	1,089	78

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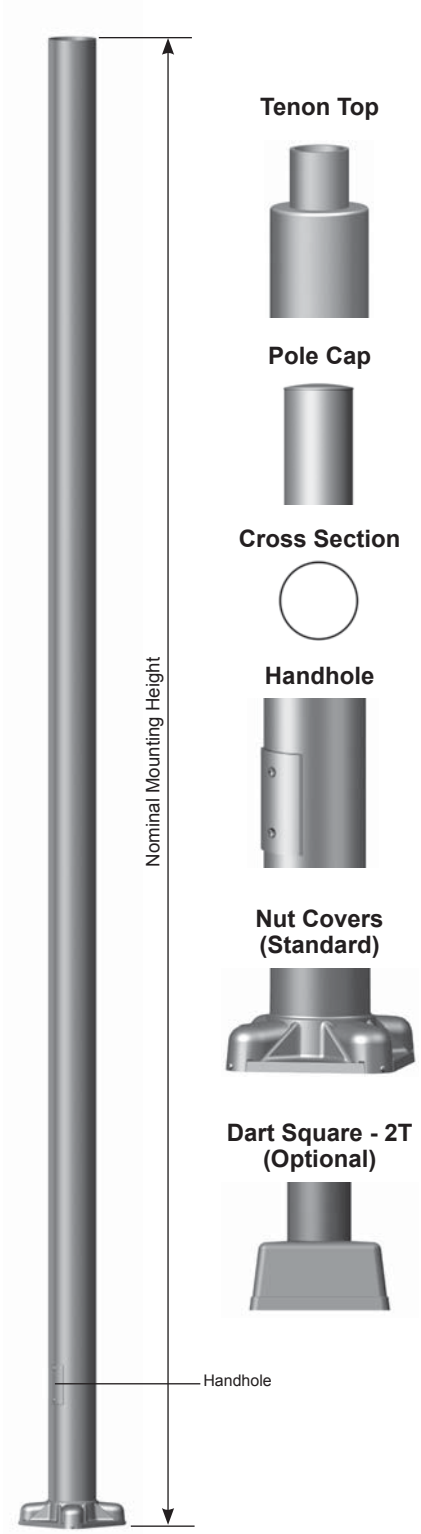
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

valmont STRUCTURES

8' to 14' ROUND NON-TAPERED ALUMINUM
4-Bolt Anchor Base

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: Quote:	Customer Approval: Date:



Tenon Top

Pole Cap

Cross Section

Handhole

Nut Covers (Standard)

Dart Square - 2T (Optional)

SPECIFICATIONS

Pole - The pole shaft is extruded from seamless alloy aluminum.

Pole Top - A pole top tenon is provided for top mount luminaire and/or bracket. A removable pole cap is available for poles receiving drilling patterns for side-mount luminaire arm assemblies.

Handhole - A covered handhole with hardware and grounding provision are provided.

Base Cover - Optional Dart Square-2T cast and decorative base covers available as special order.

Anchor Base - The anchor base is cast from 356 alloy aluminum. The completed assembly is heat-treated to a T6 temper. Aluminum nut covers are included with anchor base unless otherwise specified.

Anchor Bolts - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an “L” bend on one end and are galvanized a minimum of 12” on the threaded end.

Finish - The standard finish for the pole assembly and components is satin brushed, natural anodize, duranodic or polyester powder applied coating in accordance with Valmont’s Specifications. Additional finish options available upon request.

Design Criteria - Please reference Design Criteria Specification for appropriate design conditions.

VALMONT INDUSTRIES, INC. 28800 IDA STREET, PO BOX 358 - VALLEY, NE 68064 USA 800.825.6668 VALMONTSTRUCTURES.COM

8' to 14' ROUND NON-TAPERED ALUMINUM
4-Bolt Anchor Base

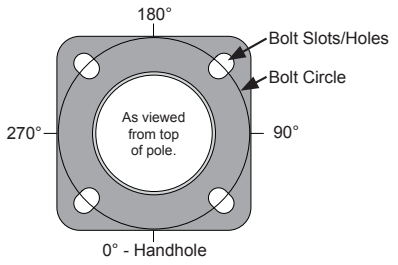
valmont STRUCTURES

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: Quote:	Customer Approval: Date:

ANCHORAGE DATA

POLE		BASE PLATE				ANCHOR BOLTS		
BASE OD (IN)	WALL THK (GA)	BOLT CIRCLE DIA (IN)	BOLT CIRCLE ± (IN)	SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)
4.00	0.125	7.50	0.75	8.91	0.630	0.75 x 17.00 x 3.00	3.25	N/A
4.50	0.125	7.84	0.78	9.26	0.630	0.75 x 17.00 x 3.00	3.25	N/A
4.50	0.188	7.84	0.78	9.26	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.125	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.156	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.188	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A

Anchor Base Detail



LOAD AND DIMENSIONAL DATA

DESIGN INFORMATION											POLE DIMENSIONS					
	70 MPH w/1.3 GUST		80 MPH w/1.3 GUST		90 MPH w/1.3 GUST		100 MPH w/1.3 GUST		110 MPH w/1.3 GUST							
NOMINAL MOUNTING HEIGHT	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	POLE HEIGHT	BASE OD (IN)	TOP OD (IN)	WALL THK (IN)	STRUTURE WEIGHT2 (LBS)	MODEL NUMBER
8'-0"	10.7	75	7.9	75	6.0	75	4.7	75	3.9	75	8'-0"	4.00	4.00	0.125	19	080040404S4
	14.9	75	11.2	75	8.6	75	6.9	75	5.7	75	8'-0"	4.50	4.50	0.125	21	080045454S4
	22.0	75	16.6	75	12.9	75	10.4	75	8.5	75	8'-0"	4.50	4.50	0.188	29	080045456S4
10'-0"	8.1	75	5.9	75	4.3	75	3.3	75	2.7	75	10'-0"	4.00	4.00	0.125	22	100040404S4
	11.5	100	8.4	100	6.4	100	5.1	100	4.1	100	10'-0"	4.50	4.50	0.125	25	100045454S4
	17.3	100	12.8	100	9.9	100	7.9	100	6.5	100	10'-0"	4.50	4.50	0.188	35	100045456S4
	15.4	100	11.5	100	8.9	100	7.1	100	5.8	100	10'-0"	5.00	5.00	0.125	27	100050504S4
12'-0"	6.2	75	4.3	75	3.0	75	2.2	75	1.7	75	12'-0"	4.00	4.00	0.125	26	120040404S4
	9.0	75	6.5	75	4.8	75	3.8	75	3.0	75	12'-0"	4.50	4.50	0.125	29	120045454S4
	13.9	75	10.2	75	7.7	75	6.2	75	5.0	75	12'-0"	4.50	4.50	0.188	41	120045456S4
	12.2	100	9.0	100	6.9	100	5.5	100	4.4	100	12'-0"	5.00	5.00	0.125	32	120050504S4
	15.5	100	11.5	100	8.9	100	7.1	100	5.8	100	12'-0"	5.00	5.00	0.156	38	120050505S4
	18.8	100	14.0	100	10.9	100	8.7	100	7.1	100	12'-0"	5.00	5.00	0.188	45	120050506S4
14'-0"	4.6	100	3.0	100	1.9	100	1.2	100	0.9	100	14'-0"	4.00	4.00	0.125	30	140040404S4
	6.9	100	4.7	100	3.4	100	2.6	100	2.0	100	14'-0"	4.50	4.50	0.125	33	140045454S4
	11.1	100	7.9	100	5.9	100	4.6	100	3.7	100	14'-0"	4.50	4.50	0.188	47	140045456S4
	9.7	100	6.9	100	5.3	100	4.1	100	3.3	100	14'-0"	5.00	5.00	0.125	36	140050504S4
	12.5	100	9.1	100	7.0	100	5.5	100	4.4	100	14'-0"	5.00	5.00	0.156	44	140050505S4
	15.3	100	11.2	100	8.7	100	6.9	100	5.6	100	14'-0"	5.00	5.00	0.125	52	140050506S4

1. EPA represents the Effective Projected Area of each luminaire. Designs are limited to top mount or side-mount luminaires. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
2. Structure weight is a nominal value which includes the pole shaft and base plate.

PRODUCT ORDERING CODES

CROSS SECTION	MODEL NUMBER	FIXTURE MOUNTING	COLOR		OPTIONS
R		--		_	
R = Round	080040404S4 080045454S4 080045456S4 100040404S4 100045454S4 100045456S4 100050504S4 120040404S4 120045454S4 120045456S4 120050504S4 120050505S4 120050506S4 140040404S4 140045454S4 140045456S4 140050504S4 140050505S4 140050506S4	**Drill Mounting** D1 = 1 Luminaire D2 = 2 @ 180° D3 = 3 @ 120° D4 = 4 @ 90° D5 = 2 @ 90° D6 = 3 @ 90° **Tenon Mounting** P2 = 2.38" OD x 4.00" P3 = 3.50" OD x 6.00" P4 = 4.00" OD x 6.00" P5 = 2.88" OD x 4.00" P7 = 2.38" OD x 5.00" PQ = 2.38" OD x 12.00" PD = 3.00" OD x 3.00" -- = Plain Top P9 = Other Tenon (Contact Factory)	**Polyester Powder** DWH = White DSS = Sandstone BR = Burgundy HG = Hunter Green DNA = Natural Aluminum DCG = Charcoal Gray DMB = Medium Bronze SBN = Sanded Brown DNB = New Dark Bronze DDB = Dark Bronze SBK = Sanded Black DBL = Black DSB = Steel Blue DTG = Dark Green DBR = Red SC = Special Color (Contact Factory)	**Anodized** 204 = Clear Natural 311 = Light Bronze* 312 = Medium Bronze* 313 = Dark Bronze* 335 = Black* *Duranodic Anodize **Brushed** SBF = Satin Brushed	See Accessories at valmontstructures.com (Please Specify with Code)

SPC7074 08/12 valmontstructures.com carries the most current spec information and supersedes these guidelines.

VALMONT INDUSTRIES, INC. 28800 IDA STREET, PO BOX 358 - VALLEY, NE 68064 USA 800.825.6668 VALMONTSTRUCTURES.COM

Type: DD1
Project: Bavaria

American Revolution Full Cutoff LED
Series 247CL

PRODUCT OVERVIEW

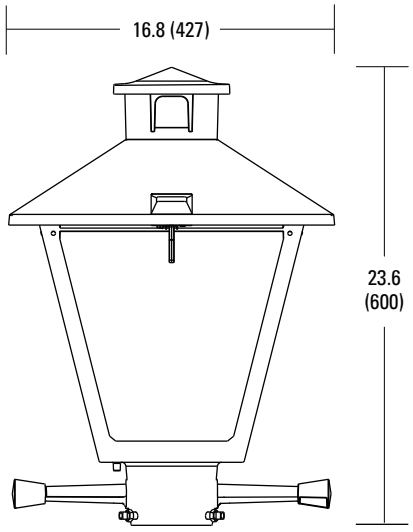
Features:

- Die-cast aluminum housing and hood for long-life performance
- Die-cast trigger latch (TL) and captive thumb screws option available for easy access to internal components
- Optical assembly designed for maximum performance, available in Type II, Type III and Type V
- Hinged hood and captive thumb screws provision afford quick, easy access to electrical and optical area for servicing
- Slipfitter with three set screws allows secure installation to pole sizes 2-3/8" or 3" O.D.
- Surge protection device (standard) exceeds ANSI C62.41 Category C1 criteria (surge tested at 10kV/5kA)
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 30°C ambient
- Rated L70, LED life greater than 100,000 hours at 25°C
- Replaces up to 150W HPS light source incumbant models
- LED electronic 0V-10V dimmable driver
- 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.

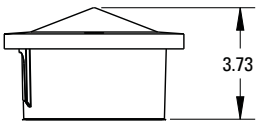
Applications:

Streetscapes
Walkways
Pathways
Parks

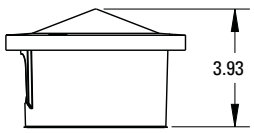
DIMENSIONS



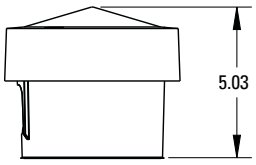
Effective Projected Area (EPA)
The EPA for the American Revolution Series 247CL is 1.0 sq. ft.
P5 or P7 option total height is 24.9 (633).
Approx. Wt. = 36 lbs.



Cupola height
P3 without ROAM
Shown in line diagram



Cupola height
P5/P7 without ROAM



Cupola height
P5/P7 with ROAM

All dimensions are inches (millimeters) unless otherwise noted.

American Revolution Full Cutoff LED
Series 247CL

ORDERING INFORMATION

Example: 247CL 20LEDE70 MVOLT 4K R3

Series

247CL	American Revolution Full Cutoff LED

Performance Package

20LEDE10	20 Chips, 1050 mA Driver, 73 input watts
20LEDE70	20 Chips, 700 mA Driver, 46 input watts
10LEDE10	10 Chips, 1050 mA Driver, 39 input watts
10LEDE70	10 Chips, 700 mA Driver, 26 input watts
10LEDE53	10 Chips, 525 mA Driver, 19 input watts
10LEDE35	10 Chips, 350 mA Driver, 14 input watts

Voltage

MVOLT	Multi-volt, 120-277V
347	347V
480	480V

Color Temperature (CCT)

3K	3000K
4K	4000K
5K	5000K

Distribution

R2	Type II
R3	Type III
R5	Type V

Options

Paint [1]

(blank)	Black (standard)
GY	Gray
DDB	Dark Bronze
WH	White
BZ	Bronze

Photocontrol

(blank)	3 pin NEMA Photocontrol Receptacle (standard)
NR [2]	No Photocontrol Receptacle
P5 [3]	5 pin NEMA Photocontrol Receptacle (dimmable driver included)
P7 [3]	7 pin NEMA Photocontrol Receptacle (dimmable driver included)
PCLL [4,5]	Solid State Long Life Photocontrol
PCSS [4,5,6]	Not CSA Listed Solid State Long Life Photocontrol (120-277V)

Miscellaneous

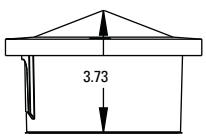
SS	Stainless steel hardware
NL	NEMA Label
XL	Not CSA Listed
TL	Tool-less Entry
LDR [7]	Ladder Rest
SH	Shorting Cap
SHX[6]	Not CSA Listed Shorting Cap
HSS	House Side Shield
CR	Enhanced Corrosion Resistant Finish
RCC [8]	ROAM Dimming Node Cupola Cover

Accessories

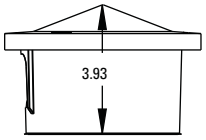
RNC57 [3]	ROAM Dimming Node Cupola Cover

Notes:
1. Other colors available, please contact factory
2. PC and SH not available with NR option
3. Taller cupola cover (RCC) is required when used with ROAM or other similar wireless monitoring control systems
4. Standard failure mode="Fail On"
5. Photocontrols supplied with ANSI Standard Turn-On levels
6. XL option is required
7. Ships with unit, field installed
8. Required when using ROAM or other similar wireless monitoring control systems

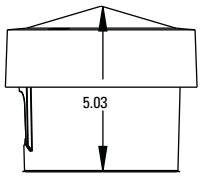
Cupola size based on type of control and receptacle



P3 Receptacle Selection
Non-ROAM Control
Blank



P5/P7 Receptacle Selection
Non-ROAM Control
P5 or
P7



P5/P7 Receptacle Selection
ROAM Control
RNC is required with:
P5 + RCC or
P7 + RCC

AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
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.

Please contact your sales representative for the latest product information.

OPERATING CHARACTERISTICS

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.

		TOTAL LUMENS					
LED Quantity, mA, CCT	Input Watts	R2	LPW	R3	LPW	R5	LPW
20LEDE10 3K	73	6,275	86	6,352	87	6,800	93
20LEDE10 4K	73	6,739	92	6,821	93	7,303	100
20LEDE10 5K	73	6,781	93	6,864	94	7,348	101
20LEDE70 3K	46	4,687	102	4,744	103	5,080	110
20LEDE70 4K	46	5,033	109	5,094	111	5,454	119
20LEDE70 5K	46	5,065	110	5,127	111	5,489	119
10LEDE10 3K	39	3,354	86	3,395	87	3,635	93
10LEDE10 4K	39	3,602	92	3,646	93	3,902	100
10LEDE10 5K	39	3,623	93	3,668	94	3,927	101
10LEDE70 3K	26	2,415	93	2,445	94	2,617	101
10LEDE70 4K	26	2,594	100	2,625	101	2,810	108
10LEDE70 5K	26	2,609	100	2,641	102	2,829	109
10LEDE53 3K	19	1,899	100	1,922	101	2,058	108
10LEDE53 4K	19	2,039	107	2,064	109	2,210	116
10LEDE53 5K	19	2,051	108	2,077	109	2,224	117
10LEDE35 3K	14	1,313	94	1,330	95	1,424	102
10LEDE35 4K	14	1,411	101	1,428	102	1,528	109
10LEDE35 5K	14	1,418	101	1,436	103	1,537	110

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.

		TOTAL LUMENS w/HSS (HOUSE SIDE SHIELD)					
LED Quantity, mA, CCT	Input Watts	R2	LPW	R3	LPW	R5	LPW
20LEDE10 3K	73	5,300	73	5,341	73	4,814	66
20LEDE10 4K	73	5,690	78	5,736	79	5,169	71
20LEDE10 5K	73	5,725	78	5,772	79	5,202	71
20LEDE70 3K	46	3,957	86	3,989	87	3,595	78
20LEDE70 4K	46	4,250	92	4,284	93	3,862	84
20LEDE70 5K	46	4,277	93	4,311	94	3,885	84
10LEDE10 3K	39	2,832	73	2,855	73	2,573	66
10LEDE10 4K	39	3,042	78	3,065	79	2,763	71
10LEDE10 5K	39	3,060	78	3,085	79	2,780	71
10LEDE70 3K	26	2,039	78	2,056	79	1,853	71
10LEDE70 4K	26	2,190	84	2,207	85	1,990	77
10LEDE70 5K	26	2,204	85	2,222	85	2,002	77
10LEDE53 3K	19	1,603	84	1,616	85	1,456	77
10LEDE53 4K	19	1,723	91	1,735	91	1,564	82
10LEDE53 5K	19	1,732	91	1,746	92	1,574	83
10LEDE35 3K	14	1,109	79	1,118	80	1,008	72
10LEDE35 4K	14	1,191	85	1,200	86	1,081	77
10LEDE35 5K	14	1,198	86	1,208	86	1,089	78

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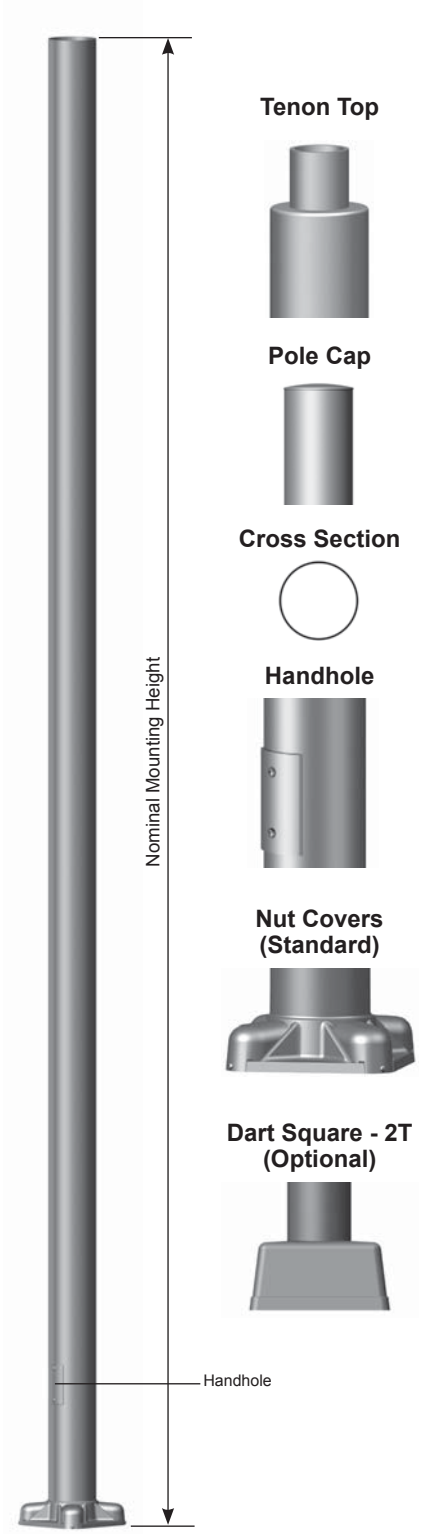
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

valmont STRUCTURES

8' to 14' ROUND NON-TAPERED ALUMINUM
4-Bolt Anchor Base

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: Quote:	Customer Approval: Date:



Tenon Top

Pole Cap

Cross Section

Handhole

Nut Covers (Standard)

Dart Square - 2T (Optional)

SPECIFICATIONS

Pole - The pole shaft is extruded from seamless alloy aluminum.

Pole Top - A pole top tenon is provided for top mount luminaire and/or bracket. A removable pole cap is available for poles receiving drilling patterns for side-mount luminaire arm assemblies.

Handhole - A covered handhole with hardware and grounding provision are provided.

Base Cover - Optional Dart Square-2T cast and decorative base covers available as special order.

Anchor Base - The anchor base is cast from 356 alloy aluminum. The completed assembly is heat-treated to a T6 temper. Aluminum nut covers are included with anchor base unless otherwise specified.

Anchor Bolts - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an “L” bend on one end and are galvanized a minimum of 12” on the threaded end.

Finish - The standard finish for the pole assembly and components is satin brushed, natural anodize, duranodic or polyester powder applied coating in accordance with Valmont’s Specifications. Additional finish options available upon request.

Design Criteria - Please reference Design Criteria Specification for appropriate design conditions.

VALMONT INDUSTRIES, INC. 28800 IDA STREET, PO BOX 358 - VALLEY, NE 68064 USA 800.825.6668 VALMONTSTRUCTURES.COM

8' to 14' ROUND NON-TAPERED ALUMINUM
4-Bolt Anchor Base

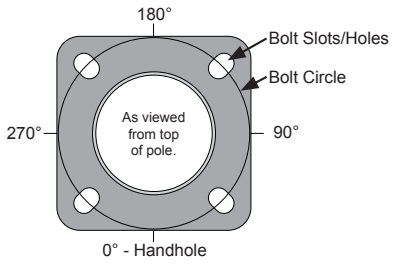
valmont STRUCTURES

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: Quote:	Customer Approval: Date:

ANCHORAGE DATA

POLE		BASE PLATE				ANCHOR BOLTS		
BASE OD (IN)	WALL THK (GA)	BOLT CIRCLE DIA (IN)	BOLT CIRCLE ± (IN)	SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)
4.00	0.125	7.50	0.75	8.91	0.630	0.75 x 17.00 x 3.00	3.25	N/A
4.50	0.125	7.84	0.78	9.26	0.630	0.75 x 17.00 x 3.00	3.25	N/A
4.50	0.188	7.84	0.78	9.26	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.125	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.156	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.188	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A

Anchor Base Detail



LOAD AND DIMENSIONAL DATA

DESIGN INFORMATION											POLE DIMENSIONS					
	70 MPH w/1.3 GUST		80 MPH w/1.3 GUST		90 MPH w/1.3 GUST		100 MPH w/1.3 GUST		110 MPH w/1.3 GUST							
NOMINAL MOUNTING HEIGHT	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	POLE HEIGHT	BASE OD (IN)	TOP OD (IN)	WALL THK (IN)	STRUTURE WEIGHT2 (LBS)	MODEL NUMBER
8'-0"	10.7	75	7.9	75	6.0	75	4.7	75	3.9	75	8'-0"	4.00	4.00	0.125	19	080040404S4
	14.9	75	11.2	75	8.6	75	6.9	75	5.7	75	8'-0"	4.50	4.50	0.125	21	080045454S4
	22.0	75	16.6	75	12.9	75	10.4	75	8.5	75	8'-0"	4.50	4.50	0.188	29	080045456S4
10'-0"	8.1	75	5.9	75	4.3	75	3.3	75	2.7	75	10'-0"	4.00	4.00	0.125	22	100040404S4
	11.5	100	8.4	100	6.4	100	5.1	100	4.1	100	10'-0"	4.50	4.50	0.125	25	100045454S4
	17.3	100	12.8	100	9.9	100	7.9	100	6.5	100	10'-0"	4.50	4.50	0.188	35	100045456S4
	15.4	100	11.5	100	8.9	100	7.1	100	5.8	100	10'-0"	5.00	5.00	0.125	27	100050504S4
12'-0"	6.2	75	4.3	75	3.0	75	2.2	75	1.7	75	12'-0"	4.00	4.00	0.125	26	120040404S4
	9.0	75	6.5	75	4.8	75	3.8	75	3.0	75	12'-0"	4.50	4.50	0.125	29	120045454S4
	13.9	75	10.2	75	7.7	75	6.2	75	5.0	75	12'-0"	4.50	4.50	0.188	41	120045456S4
	12.2	100	9.0	100	6.9	100	5.5	100	4.4	100	12'-0"	5.00	5.00	0.125	32	120050504S4
	15.5	100	11.5	100	8.9	100	7.1	100	5.8	100	12'-0"	5.00	5.00	0.156	38	120050505S4
	18.8	100	14.0	100	10.9	100	8.7	100	7.1	100	12'-0"	5.00	5.00	0.188	45	120050506S4
14'-0"	4.6	100	3.0	100	1.9	100	1.2	100	0.9	100	14'-0"	4.00	4.00	0.125	30	140040404S4
	6.9	100	4.7	100	3.4	100	2.6	100	2.0	100	14'-0"	4.50	4.50	0.125	33	140045454S4
	11.1	100	7.9	100	5.9	100	4.6	100	3.7	100	14'-0"	4.50	4.50	0.188	47	140045456S4
	9.7	100	6.9	100	5.3	100	4.1	100	3.3	100	14'-0"	5.00	5.00	0.125	36	140050504S4
	12.5	100	9.1	100	7.0	100	5.5	100	4.4	100	14'-0"	5.00	5.00	0.156	44	140050505S4
	15.3	100	11.2	100	8.7	100	6.9	100	5.6	100	14'-0"	5.00	5.00	0.125	52	140050506S4

1. EPA represents the Effective Projected Area of each luminaire. Designs are limited to top mount or side-mount luminaires. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
2. Structure weight is a nominal value which includes the pole shaft and base plate.

PRODUCT ORDERING CODES

CROSS SECTION	MODEL NUMBER	FIXTURE MOUNTING	COLOR		OPTIONS
R		--		_	
R = Round	080040404S4 080045454S4 080045456S4 100040404S4 100045454S4 100045456S4 100050504S4 120040404S4 120045454S4 120045456S4 120050504S4 120050505S4 120050506S4 140040404S4 140045454S4 140045456S4 140050504S4 140050505S4 140050506S4	**Drill Mounting** D1 = 1 Luminaire D2 = 2 @ 180° D3 = 3 @ 120° D4 = 4 @ 90° D5 = 2 @ 90° D6 = 3 @ 90° **Tenon Mounting** P2 = 2.38" OD x 4.00" P3 = 3.50" OD x 6.00" P4 = 4.00" OD x 6.00" P5 = 2.88" OD x 4.00" P7 = 2.38" OD x 5.00" PQ = 2.38" OD x 12.00" PD = 3.00" OD x 3.00" -- = Plain Top P9 = Other Tenon (Contact Factory)	**Polyester Powder** DWH = White DSS = Sandstone BR = Burgundy HG = Hunter Green DNA = Natural Aluminum DCG = Charcoal Gray DMB = Medium Bronze SBN = Sanded Brown DNB = New Dark Bronze DDB = Dark Bronze SBK = Sanded Black DBL = Black DSB = Steel Blue DTG = Dark Green DBR = Red SC = Special Color (Contact Factory)	**Anodized** 204 = Clear Natural 311 = Light Bronze* 312 = Medium Bronze* 313 = Dark Bronze* 335 = Black* *Duranodic Anodize **Brushed** SBF = Satin Brushed	See Accessories at valmontstructures.com (Please Specify with Code)

SPC7074 08/12 valmontstructures.com carries the most current spec information and supersedes these guidelines.

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Type: DD2
Project: Bavaria

American Revolution Full Cutoff LED
Series 247CL

PRODUCT OVERVIEW

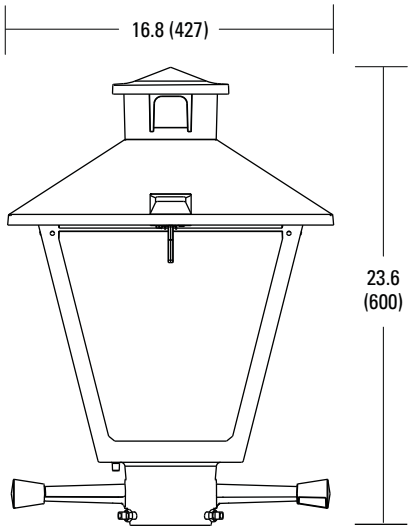
Features:

- Die-cast aluminum housing and hood for long-life performance
- Die-cast trigger latch (TL) and captive thumb screws option available for easy access to internal components
- Optical assembly designed for maximum performance, available in Type II, Type III and Type V
- Hinged hood and captive thumb screws provision afford quick, easy access to electrical and optical area for servicing
- Slipfitter with three set screws allows secure installation to pole sizes 2-3/8" or 3" O.D.
- Surge protection device (standard) exceeds ANSI C62.41 Category C1 criteria (surge tested at 10kV/5kA)
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 30°C ambient
- Rated L70, LED life greater than 100,000 hours at 25°C
- Replaces up to 150W HPS light source incumbant models
- LED electronic 0V-10V dimmable driver
- 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.

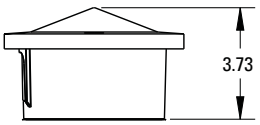
Applications:

Streetscapes
Walkways
Pathways
Parks

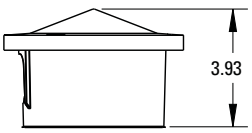
DIMENSIONS



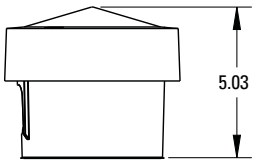
Effective Projected Area (EPA)
The EPA for the American Revolution Series 247CL is 1.0 sq. ft.
P5 or P7 option total height is 24.9 (633).
Approx. Wt. = 36 lbs.



Cupola height
P3 without ROAM
Shown in line diagram



Cupola height
P5/P7 without ROAM



Cupola height
P5/P7 with ROAM

All dimensions are inches (millimeters) unless otherwise noted.

American Revolution Full Cutoff LED
Series 247CL

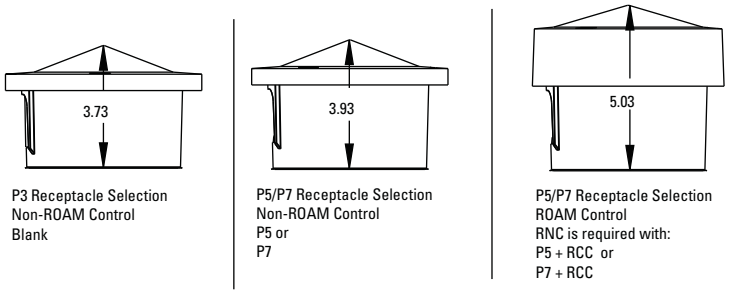
ORDERING INFORMATION

Example: 247CL 20LEDE70 MVOLT 4K R3

Series	Performance Package	Voltage	Color Temperature (CCT)
247CL American Revolution Full Cutoff LED	**20LEDE10** 20 Chips, 1050 mA Driver, 73 input watts **20LEDE70** 20 Chips, 700 mA Driver, 46 input watts **10LEDE10** 10 Chips, 1050 mA Driver, 39 input watts **10LEDE70** 10 Chips, 700 mA Driver, 26 input watts **10LEDE53** 10 Chips, 525 mA Driver, 19 input watts **10LEDE35** 10 Chips, 350 mA Driver, 14 input watts	**MVOLT** Multi-volt, 120-277V **347** 347V **480** 480V	**3K** 3000K **4K** 4000K **5K** 5000K

Distribution	Options
R2 Type II **R3** Type III **R5** Type V	Paint [1] **(blank)** Black (standard) **GY** Gray **DDB** Dark Bronze **WH** White **BZ** Bronze Photocontrol **(blank)** 3 pin NEMA Photocontrol Receptacle (standard) **NR** [2] No Photocontrol Receptacle **P5** [3] 5 pin NEMA Photocontrol Receptacle (dimmable driver included) **P7** [3] 7 pin NEMA Photocontrol Receptacle (dimmable driver included) **PCLL** [4,5] Solid State Long Life Photocontrol **PCSS** [4,5,6] Not CSA Listed Solid State Long Life Photocontrol (120-277V) Miscellaneous **SS** Stainless steel hardware **NL** NEMA Label **XL** Not CSA Listed **TL** Tool-less Entry **LDR** [7] Ladder Rest **SH** Shorting Cap **SHX**[6] Not CSA Listed Shorting Cap **HSS** House Side Shield **CR** Enhanced Corrosion Resistant Finish **RCC** [8] ROAM Dimming Node Cupola Cover Accessories **RNC57** [3] ROAM Dimming Node Cupola Cover

Cupola size based on type of control and receptacle



P3 Receptacle Selection
Non-ROAM Control
Blank

P5/P7 Receptacle Selection
Non-ROAM Control
P5 or
P7

P5/P7 Receptacle Selection
ROAM Control
RNC is required with:
P5 + RCC or
P7 + RCC

Notes:
1. Other colors available, please contact factory
2. PC and SH not available with NR option
3. Taller cupola cover (RCC) is required when used with ROAM or other similar wireless monitoring control systems
4. Standard failure mode="Fail On"
5. Photocontrols supplied with ANSI Standard Turn-On levels
6. XL option is required
7. Ships with unit, field installed
8. Required when using ROAM or other similar wireless monitoring control systems

AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
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.

Please contact your sales representative for the latest product information.

OPERATING CHARACTERISTICS

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.

		TOTAL LUMENS					
LED Quantity, mA, CCT	Input Watts	R2	LPW	R3	LPW	R5	LPW
20LEDE10 3K	73	6,275	86	6,352	87	6,800	93
20LEDE10 4K	73	6,739	92	6,821	93	7,303	100
20LEDE10 5K	73	6,781	93	6,864	94	7,348	101
20LEDE70 3K	46	4,687	102	4,744	103	5,080	110
20LEDE70 4K	46	5,033	109	5,094	111	5,454	119
20LEDE70 5K	46	5,065	110	5,127	111	5,489	119
10LEDE10 3K	39	3,354	86	3,395	87	3,635	93
10LEDE10 4K	39	3,602	92	3,646	93	3,902	100
10LEDE10 5K	39	3,623	93	3,668	94	3,927	101
10LEDE70 3K	26	2,415	93	2,445	94	2,617	101
10LEDE70 4K	26	2,594	100	2,625	101	2,810	108
10LEDE70 5K	26	2,609	100	2,641	102	2,829	109
10LEDE53 3K	19	1,899	100	1,922	101	2,058	108
10LEDE53 4K	19	2,039	107	2,064	109	2,210	116
10LEDE53 5K	19	2,051	108	2,077	109	2,224	117
10LEDE35 3K	14	1,313	94	1,330	95	1,424	102
10LEDE35 4K	14	1,411	101	1,428	102	1,528	109
10LEDE35 5K	14	1,418	101	1,436	103	1,537	110

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.

		TOTAL LUMENS w/HSS (HOUSE SIDE SHIELD)					
LED Quantity, mA, CCT	Input Watts	R2	LPW	R3	LPW	R5	LPW
20LEDE10 3K	73	5,300	73	5,341	73	4,814	66
20LEDE10 4K	73	5,690	78	5,736	79	5,169	71
20LEDE10 5K	73	5,725	78	5,772	79	5,202	71
20LEDE70 3K	46	3,957	86	3,989	87	3,595	78
20LEDE70 4K	46	4,250	92	4,284	93	3,862	84
20LEDE70 5K	46	4,277	93	4,311	94	3,885	84
10LEDE10 3K	39	2,832	73	2,855	73	2,573	66
10LEDE10 4K	39	3,042	78	3,065	79	2,763	71
10LEDE10 5K	39	3,060	78	3,085	79	2,780	71
10LEDE70 3K	26	2,039	78	2,056	79	1,853	71
10LEDE70 4K	26	2,190	84	2,207	85	1,990	77
10LEDE70 5K	26	2,204	85	2,222	85	2,002	77
10LEDE53 3K	19	1,603	84	1,616	85	1,456	77
10LEDE53 4K	19	1,723	91	1,735	91	1,564	82
10LEDE53 5K	19	1,732	91	1,746	92	1,574	83
10LEDE35 3K	14	1,109	79	1,118	80	1,008	72
10LEDE35 4K	14	1,191	85	1,200	86	1,081	77
10LEDE35 5K	14	1,198	86	1,208	86	1,089	78

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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
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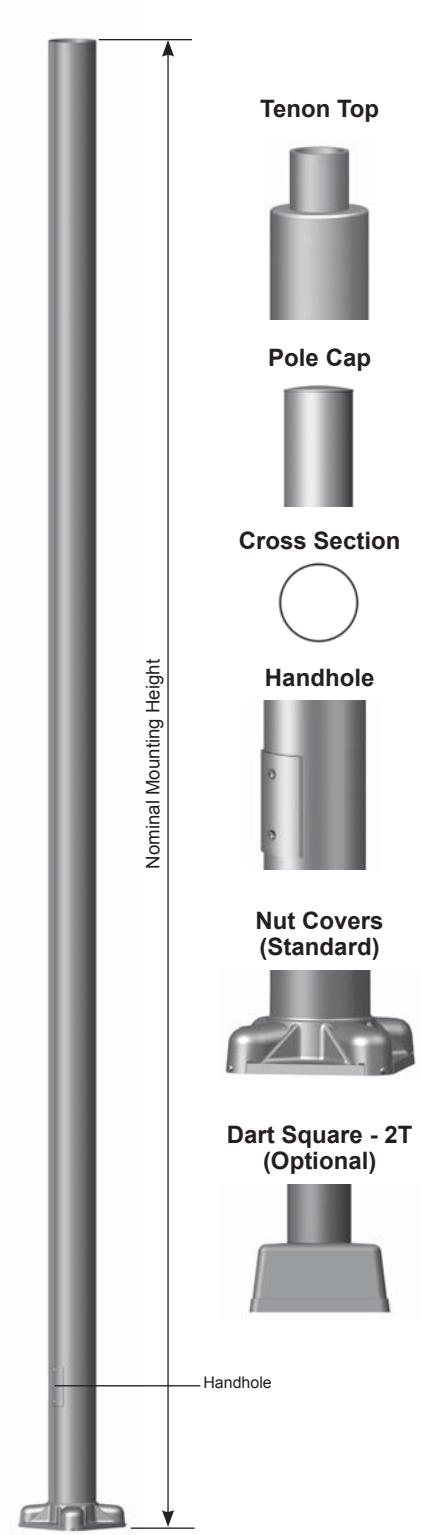
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

valmont STRUCTURES

8' to 14' ROUND NON-TAPERED ALUMINUM
4-Bolt Anchor Base

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: Quote:	Customer Approval: Date:



Tenon Top

Pole Cap

Cross Section

Handhole

Nut Covers (Standard)

Dart Square - 2T (Optional)

SPECIFICATIONS

Pole - The pole shaft is extruded from seamless alloy aluminum.

Pole Top - A pole top tenon is provided for top mount luminaire and/or bracket. A removable pole cap is available for poles receiving drilling patterns for side-mount luminaire arm assemblies.

Handhole - A covered handhole with hardware and grounding provision are provided.

Base Cover - Optional Dart Square-2T cast and decorative base covers available as special order.

Anchor Base - The anchor base is cast from 356 alloy aluminum. The completed assembly is heat-treated to a T6 temper. Aluminum nut covers are included with anchor base unless otherwise specified.

Anchor Bolts - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an “L” bend on one end and are galvanized a minimum of 12” on the threaded end.

Finish - The standard finish for the pole assembly and components is satin brushed, natural anodize, duranodic or polyester powder applied coating in accordance with Valmont’s Specifications. Additional finish options available upon request.

Design Criteria - Please reference Design Criteria Specification for appropriate design conditions.

VALMONT INDUSTRIES, INC. 28800 IDA STREET, PO BOX 358 - VALLEY, NE 68064 USA 800.825.6668 VALMONTSTRUCTURES.COM

8' to 14' ROUND NON-TAPERED ALUMINUM
4-Bolt Anchor Base

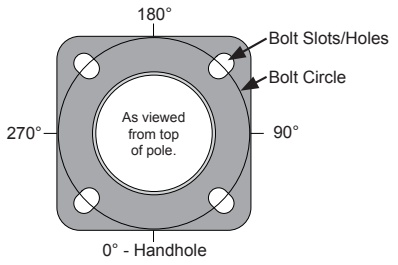
valmont STRUCTURES

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: Quote:	Customer Approval: Date:

ANCHORAGE DATA

POLE		BASE PLATE				ANCHOR BOLTS		
BASE OD (IN)	WALL THK (GA)	BOLT CIRCLE DIA (IN)	BOLT CIRCLE ± (IN)	SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)
4.00	0.125	7.50	0.75	8.91	0.630	0.75 x 17.00 x 3.00	3.25	N/A
4.50	0.125	7.84	0.78	9.26	0.630	0.75 x 17.00 x 3.00	3.25	N/A
4.50	0.188	7.84	0.78	9.26	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.125	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.156	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A
5.00	0.188	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A

Anchor Base Detail



LOAD AND DIMENSIONAL DATA

DESIGN INFORMATION											POLE DIMENSIONS					
	70 MPH w/1.3 GUST		80 MPH w/1.3 GUST		90 MPH w/1.3 GUST		100 MPH w/1.3 GUST		110 MPH w/1.3 GUST							
NOMINAL MOUNTING HEIGHT	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	POLE HEIGHT	BASE OD (IN)	TOP OD (IN)	WALL THK (IN)	STRUTURE WEIGHT2 (LBS)	MODEL NUMBER
8'-0"	10.7	75	7.9	75	6.0	75	4.7	75	3.9	75	8'-0"	4.00	4.00	0.125	19	080040404S4
	14.9	75	11.2	75	8.6	75	6.9	75	5.7	75	8'-0"	4.50	4.50	0.125	21	080045454S4
	22.0	75	16.6	75	12.9	75	10.4	75	8.5	75	8'-0"	4.50	4.50	0.188	29	080045456S4
10'-0"	8.1	75	5.9	75	4.3	75	3.3	75	2.7	75	10'-0"	4.00	4.00	0.125	22	100040404S4
	11.5	100	8.4	100	6.4	100	5.1	100	4.1	100	10'-0"	4.50	4.50	0.125	25	100045454S4
	17.3	100	12.8	100	9.9	100	7.9	100	6.5	100	10'-0"	4.50	4.50	0.188	35	100045456S4
	15.4	100	11.5	100	8.9	100	7.1	100	5.8	100	10'-0"	5.00	5.00	0.125	27	100050504S4
12'-0"	6.2	75	4.3	75	3.0	75	2.2	75	1.7	75	12'-0"	4.00	4.00	0.125	26	120040404S4
	9.0	75	6.5	75	4.8	75	3.8	75	3.0	75	12'-0"	4.50	4.50	0.125	29	120045454S4
	13.9	75	10.2	75	7.7	75	6.2	75	5.0	75	12'-0"	4.50	4.50	0.188	41	120045456S4
	12.2	100	9.0	100	6.9	100	5.5	100	4.4	100	12'-0"	5.00	5.00	0.125	32	120050504S4
	15.5	100	11.5	100	8.9	100	7.1	100	5.8	100	12'-0"	5.00	5.00	0.156	38	120050505S4
	18.8	100	14.0	100	10.9	100	8.7	100	7.1	100	12'-0"	5.00	5.00	0.188	45	120050506S4
14'-0"	4.6	100	3.0	100	1.9	100	1.2	100	0.9	100	14'-0"	4.00	4.00	0.125	30	140040404S4
	6.9	100	4.7	100	3.4	100	2.6	100	2.0	100	14'-0"	4.50	4.50	0.125	33	140045454S4
	11.1	100	7.9	100	5.9	100	4.6	100	3.7	100	14'-0"	4.50	4.50	0.188	47	140045456S4
	9.7	100	6.9	100	5.3	100	4.1	100	3.3	100	14'-0"	5.00	5.00	0.125	36	140050504S4
	12.5	100	9.1	100	7.0	100	5.5	100	4.4	100	14'-0"	5.00	5.00	0.156	44	140050505S4
	15.3	100	11.2	100	8.7	100	6.9	100	5.6	100	14'-0"	5.00	5.00	0.125	52	140050506S4

1. EPA represents the Effective Projected Area of each luminaire. Designs are limited to top mount or side-mount luminaires. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
2. Structure weight is a nominal value which includes the pole shaft and base plate.

PRODUCT ORDERING CODES

CROSS SECTION	MODEL NUMBER	FIXTURE MOUNTING	COLOR		OPTIONS
R		--		_	
R = Round	080040404S4 080045454S4 080045456S4 100040404S4 100045454S4 100045456S4 100050504S4 120040404S4 120045454S4 120045456S4 120050504S4 120050505S4 120050506S4 140040404S4 140045454S4 140045456S4 140050504S4 140050505S4 140050506S4	**Drill Mounting** D1 = 1 Luminaire D2 = 2 @ 180° D3 = 3 @ 120° D4 = 4 @ 90° D5 = 2 @ 90° D6 = 3 @ 90° **Tenon Mounting** P2 = 2.38" OD x 4.00" P3 = 3.50" OD x 6.00" P4 = 4.00" OD x 6.00" P5 = 2.88" OD x 4.00" P7 = 2.38" OD x 5.00" PQ = 2.38" OD x 12.00" PD = 3.00" OD x 3.00" -- = Plain Top P9 = Other Tenon (Contact Factory)	**Polyester Powder** DWH = White DSS = Sandstone BR = Burgundy HG = Hunter Green DNA = Natural Aluminum DCG = Charcoal Gray DMB = Medium Bronze SBN = Sanded Brown DNB = New Dark Bronze DDB = Dark Bronze SBK = Sanded Black DBL = Black DSB = Steel Blue DTG = Dark Green DBR = Red SC = Special Color (Contact Factory)	**Anodized** 204 = Clear Natural 311 = Light Bronze* 312 = Medium Bronze* 313 = Dark Bronze* 335 = Black* *Duranodic Anodize **Brushed** SBF = Satin Brushed	See Accessories at valmontstructures.com (Please Specify with Code)

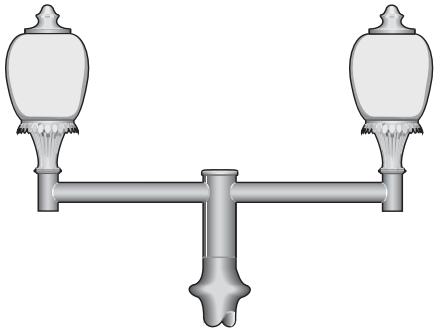
SPC7074 08/12 valmontstructures.com carries the most current spec information and supersedes these guidelines.

VALMONT INDUSTRIES, INC. 28800 IDA STREET, PO BOX 358 - VALLEY, NE 68064 USA 800.825.6668 VALMONTSTRUCTURES.COM

LIGHT BRACKETS
HERITAGE SERIES DECORATIVE POLES

valmont STRUCTURES ALUMINUM

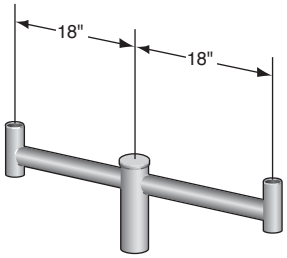
- 2-7/8" O.D. bracket and pole tenons - additional sizes available.



SPECIFICATIONS

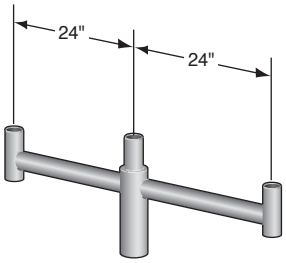
HERITAGE series light brackets are constructed out of seamless aluminum tubing. These products include: factory installed rubber grommets for wireways, press-on end caps and hub/set screw shaft mounting connection for easy orientation adjustment in the field.

2 - TENON 180° VERTICAL MOUNT



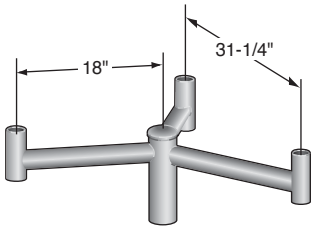
Model Number: 2VTH180
EPA of Bracket: 1.15
Typical Wt. Load Per Tenon: 50 Lbs.
Max. EPA Load Per Tenon: 6.0

3 - TENON 180° VERTICAL MOUNT



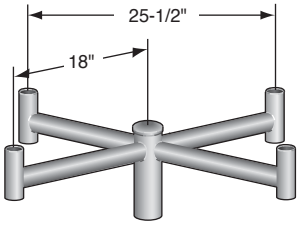
Model Number: 3VTH180
EPA of Bracket: 1.64
Typical Wt. Load Per Tenon: 50 Lbs.
Max. EPA Load Per Tenon: 6.0

3 - TENON 120° VERTICAL MOUNT



Model Number: 3VTH120
EPA of Bracket: 1.34
Typical Wt. Load Per Tenon: 50 Lbs.
Max. EPA Load Per Tenon: 6.0

4 - TENON 90° VERTICAL MOUNT



Model Number: 4VTH90
EPA of Bracket: 1.89
Typical Wt. Load Per Tenon: 50 Lbs.
Max. EPA Load Per Tenon: 6.0

Tenon loading has been calculated for weights based on a 100 M.P.H constant wind with a 1.3 gust factor. When loading requirements exceed these limits contact your Valmont representative or Valmont Industries. Variations from sizes listed above are available upon inquiry at the factory.

CATALOG LOGIC

NUMBER OF ARMS	TYPE OF ARMS	TYPE OF SERIES	ORIENTATION OF ARMS	FINISHES	OPTIONS
___	V T	H	___ ___ ___	___ ___ ___	___

NUMBER OF ARMS
2 = Double
3 = Triple
4 = Quad

TYPE OF ARMS
VT = Vertical Tenon

TYPE OF SERIES
H = Heritage

ORIENTATION OF ARMS
90 = 4 @ 90°
120 = 3 @ 120°
180 = 2 @ 180° or 3 @ 180°

STANDARD FINISHES

POLYESTER POWDER

DBL = Black
DBR = Bright Red
DCG = Charcoal Gray
DDB = Dark Bronze
DMB = Med Bronze
DNA = Natural Alum
DSB = Steel Blue
DSS = Sandstone
DTG = Dark Green
DWH = White

OPTIONS
Different Size Slipfitters
Consult Factory

SPC7082 05/05 - This spec supercedes all previous publications.

Valmont Industries, Inc. ~ 20805 Eaton Avenue ~ Farmington, Minnesota 55024-0228 (800)899-7577 ~ www.valmont.com

D-Series
LED Bollard

d-series

Catalog Number	DSXB LED 16C 700 30K SYM MVOLT DDBXD
Notes	
Type	FF

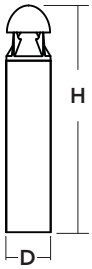
Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Diameter: 8" Round *(20.3 cm)*

Height: 42" *(106.7 cm)*

Weight (max): 27 lbs *(12.25 kg)*



Introduction

The D-Series LED Bollard is a stylish, energy-saving, long-life solution designed to perform the way a bollard should—with zero uplight. An optical leap forward, this full cut-off luminaire will meet the most stringent of lighting codes. The D-Series LED Bollard's rugged construction, durable finish and long-lasting LEDs will provide years of maintenance-free service.

Ordering Information

EXAMPLE: DSXB LED 16C 700 40K SYM MVOLT DDBXD

DSXB LED								
Series	**LEDs**	**Drive current**	**Color temperature**	**Distribution**	**Voltage**	**Control options**	**Other options**	**Finish** *(required)*
DSXB LED	**Asymmetric** 12C 12 LEDs[1] **Symmetric** 16C 16 LEDs[2]	350 350 mA 450 450 mA [3,4] 530 530 mA 700 700 mA	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted AMBLW Amber limited wavelength [3,4]	ASY Asymmetric [1] SYM Symmetric [2]	MVOLT [5] 120 [5] 208 [5] 240 [5] 277 [5] 347 [4]	**Shipped installed** PE Photoelectric cell, button type DMG 0-10V dim-ming driver (no controls) ELCW Emergency battery backup[6]	**Shipped installed** SF Single fuse (120, 277, 347V) [4,7] DF Double fuse (208, 240V) [4,7] H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault festoon outlet L/AB Without anchor bolts L/AB4 4-bolt retrofit base without anchor bolts [8]	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories

Ordered and shipped separately.

MRAB U Anchor bolts for DSXB [8]

NOTES

1. Only available in the 12C, ASY version.
2. Only available in the 16C, SYM version.
3. Only available with 450 AMBLW version.
4. Not available with ELCW.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6. Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
7. Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
8. MRAB U not available with L/AB4 option.

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Performance Data

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. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Engines	Drive Current	System Watts	3000 K					4000 K					5000 K					Limited Wavelength Amber				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
Asymmetric (12 LEDs)	350	16	1,194	75	1	0	1	1,283	80	1	0	1	1,291	81	1	0	1					
	530	22	1,719	78	1	0	1	1,847	84	1	0	1	1,859	85	1	0	1					
	700	31	2,173	70	1	0	1	2,335	75	1	0	1	2,349	76	1	0	1					
	Amber 450	16																348	22	1	0	1
Symmetric (16 LEDs)	350	20	1,558	78	1	0	0	1,674	84	1	0	0	1,685	84	1	0	0					
	530	28	2,232	80	2	0	1	2,397	86	2	0	1	2,412	86	2	0	1					
	700	39	2,802	72	2	0	1	3,009	77	2	0	1	3,028	78	2	0	1					
	Amber 450	20																419	21	1	0	1

Note: Available with phosphor-converted amber LED's (nomenclature AMBPC). These LED's produce light with 97+% >530 nm. Output can be calculated by applying a 0.7 factor to 4000 K lumen values and photometric files.

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted 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	1.00	0.98	0.97	0.95

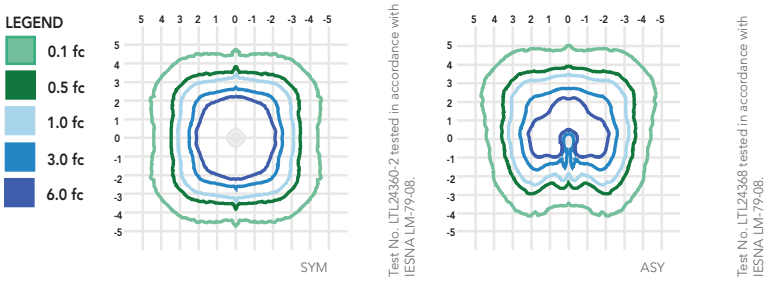
Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A) 120	208	240	277	347
12C	350	16W	0.158	0.118	0.114	0.109	0.105
	530	22W	0.217	0.146	0.136	0.128	0.118
	700	31W	0.296	0.185	0.168	0.153	0.139
	Amber 450	16W	0.161	0.120	0.115	0.110	0.106
16C	350	20W	0.197	0.137	0.128	0.121	0.114
	530	28W	0.282	0.178	0.162	0.148	0.135
	700	39W	0.385	0.231	0.207	0.185	0.163
	Amber 450	20W	0.199	0.139	0.130	0.123	0.116

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Bollard homepage.

Isofootcandle plots for the DSXB LED 700 40K. Distances are in units of mounting height (3').



FEATURES & SPECIFICATIONS

INTENDED USE
The rugged construction and maintenance-free performance of the D-Series LED Bollard is ideal for illuminating building entryways, walking paths and pedestrian plazas, as well as any other location requiring a low-mounting-height light source.

CONSTRUCTION
One-piece 8-inch-round extruded aluminum shaft with thick side walls for extreme durability, and die-cast aluminum reflector and top cap. Die-cast aluminum mounting ring allows for easy leveling even in uneven areas and full 360-degree rotation for precise alignment during installation. Three ½" x 11" anchor bolts with double nuts and washers and 3-5/8" max. bolt circle template ensure stability. Overall height is 42" standard.

FINISH
Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering for maximum retention of gloss and luster. A tightly controlled multi-stage process ensures a minimum 3-mil thickness for a finish that can withstand the elements without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Two 0% uplight optical distributions are available: symmetrical and asymmetrical. IP66 sealed LED light engine provides smoothly graduated illumination without uplight. Light engines are available in standard 4000 K (>70 CRI) or optional 3000 K (>80 CRI) or 5000 K (67 CRI). Limited-wavelength amber LEDs are also available.

ELECTRICAL
Light engines consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (L95/100,000 hours at 700mA at 25°C). Class 2 electronic drivers are designed for an expected life of 100,000 hours with < 1% failure rate. Electrical components are mounted on a removable power tray.

LISTINGS
CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for -40°C minimum ambient. Cold-weather emergency battery backup rated for -20°C minimum ambient.

WARRANTY
Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

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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REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
06/12/2019

Subject: **Shepherd of the Hill Twin Homes – Concept Plan**

Applicant: Habitat for Humanity

Location: East of Highway 41, south of Engler Boulevard and west of Crest Drive

Case No.: 2019-14

Synopsis: Applicant seeks to obtain approval of 4 twin homes (8 total dwelling units) on approximately 2 acres of land on the Shepherd of the Hill Church property

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval to the City Council

---

BACKGROUND

Habitat for Humanity is a national non-profit organization that works in local communities with a mission to provide everyone a decent place to live. Habitat works toward their vision by building strength, stability and self-reliance in partnership with families in need of decent and affordable housing. Habitat homeowners help build their own homes alongside volunteers and pay an affordable mortgage. This organization has built homes in Chaska before, specifically in the Clover Ridge development.

PROJECT GOALS

The developer has identified the following goals below in creating this new neighborhood:

- Provide high-quality housing that is affordable for a wide range of families who currently live or work in Chaska or adjacent communities
- Maximize the use of the available property allowed within the zoning district without the need for variances or rezoning
- Provide a type of life-cycle housing that meets the needs of limited mobility residents and visitors
- Have the project fit in seamlessly into the existing fabric of the neighborhood, influenced by the characters of the site and previously stated goals.

Land Use & Comprehensive Plan

The land is currently zoned Low Density Residential (R1); duplexes are allowed by Conditional Use Permit (CUP). The proposal tonight is consistent with the zoning and Comprehensive Plan's guidance. A conditional use permit (CUP) will be required to be obtained for the duplex/twin home use. We are not planning a rezoning as a part of this request as it is the applicant's intention/goal to meet the minimum requirements for twin homes within this zoning district.

CURRENT PROPOSAL

The 4 twin home proposal on approximately 2-acres is proposed on land that will be sold off by Shepherd of the Hill Church. This new addition will provide 4 twin homes, totaling 8 dwelling units that will be owner-occupied, being accessed off a cul de sac coming from Crest Drive

Adjacent properties

The site is bound on the north by Engler Boulevard and Shepherd of the Hill Church, to the west by Shepherd of the Hill Church and Highway 41, the south by single-family residential, and the east by Crest Drive and single-family residential.

Existing Conditions

The approximately 2-acre site is currently excess open land on the Church property. The property slopes from a highpoint on the northeast side to a low point on the southeast side toward the single-family residential. There are no trees within the area being developed.

Layout

The development will be accessed via a public street from Crest Drive to the east and terminate into a cul de sac. All 8 dwelling units will be accessed from this cul de sac. Each unit will have their own driveways.

The lot sizes appear to meet minimum requirements for duplexes. The lots are averaging at 0.38 acres in size (0.19 acres per dwelling unit) with 120 feet in width and 105 feet in depth.

Park space is not proposed for this development, nor does the Comprehensive Plan call out an area for parkland in this vicinity. Parkland dedication fees will be required for this development.

Transportation/ROW

The Concept Plan proposes to provide for a public street that will be accessed off Crest Drive. This street will terminate into a cul de sac to access the 8 dwelling units.

The current concept plan appears to show road right-of-way widths that are consistent with the designs in the existing adjacent developments, however, this should be shown on the plans during the preliminary submittal.

It should be noted that the project area will only encompass the southeast corner of Shepherd of the Hill's property. Carver County has expressed a future plan of potentially eliminating the Church's north access onto Engler Boulevard due to future improvements planned. An easterly access from Crest Drive into the Church's parking lot can still be achieved if necessary. This access opportunity should be maintained moving forward in the event that the County requires removal of the Engler Boulevard access.

Utilities

Sewer and water utilities are available. Minor extensions will need to be provided to service the proposed neighborhood.

Stormwater
Stormwater ponding is conceptually shown on the north and south sides of the access into the site from Crest Drive, but outside of the right-of-way. Storm water ponding is conceptually shown but further evaluation is needed in the preliminary process. Stormwater ponding will have to meet all Carver County WMO and City standards. Staff is encouraging that if the plan moves forward that the applicant evaluate the opportunities to reduce the amount of storm water runoff to the neighboring properties.

Setbacks
The setbacks will be consistent with the R1 standards. Namely, the front yard setback shall be no less than 30 feet. The rear yard setback shall be 30 feet. The side yard setback shall be 10 feet for the house, 7 feet for the garage. Corner lots shall have a side yard setback of 15 feet. The applicant will be required to delineate the wooded steep slope edges and their applicable setbacks in the field so that staff can verify for accuracy. This will need to be done prior to preliminary submittal.

Architecture
Habitat for Humanity will be the builder for these twin homes. The proposed housing type is front-loaded garage, two-level and single-level twin homes. The houses on the north side of the cul de sac will be slab on grade, with two-story front facades (~ 2,100 finished square footage per dwelling unit, not including garage). The houses on the south side of the cul de sac are look-out ranches with one-story front facades (~ 2,000 finished square footage per unit, not including garage). The at-grade floor plans are the same as the non-at-grade floor plans. Both types of housing provide a visitable first floor (zero-step entry, bath on at-grade-floor, 2'8" wide doorways), while dealing with the slope of the site from northwest to southeast.

The homes will be constructed of LP Smartside, utilize Andersen windows, and provide energy star appliances within. These units are estimated to be valued at $275,000.

The homes across the street are traditional detached single-family homes. Having the twin homes accessed off their own cul de sac will provide a natural separation from the traditional detached single-family homes. This layout, or intermixing of units, is not unlike what is present in southeast Chaska off of Ravoux Road and Ravoux Circle. Because of this, staff does not see a significant concern with the product in this context.

Landscaping
Trees will be required in the boulevard in order to meet the City's Boulevard Tree Policy.

Development Costs (Infrastructure Improvements)
Some development area fees are the following:

- Storm Sewer
- Parks
- Trails

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

Neighborhood Meeting February 26, 2019
The applicant conducted a neighborhood meeting for their concept plan on February 26, 2019. In sum, there was one concern raised on drainage, but overall the developer indicated that the concept plan was well received.

The applicant will have an opportunity to address this concern in their preliminary submittal.

PLANNING COMMISSION ACTION REQUESTED
Motion to recommend to City Council approval of the Shepherd of the Hill Twin Home Concept Plan, subject to the following conditions:

1. **Approvals shall be based on the following graphic exhibits:**
    a. **Twin Home Development Proposal (pgs 1-34), prepared by Habitat for Humanity**
    b. **Project Location & Sheet Index (G-01), prepared by BARR Engineering Co., dated April 4, 2019**
    c. **Existing Conditions and Survey (C-01), prepared by BARR Engineering Co., dated April 4, 2019**
    d. **Site Plan (C-03), prepared by BARR Engineering Co., dated April 4, 2019**
    e. **Grading Plan (C-04), prepared by BARR Engineering Co., dated April 4, 2019**
    f. **One-Story House Rendering & Floor Plan, prepared by Habitat for Humanity**
    g. **Two-Story House Rendering & Floor Plan, prepared by Habitat for Humanity**
2. **Provision of a 60 feet Right of Way width for all local streets.**
3. **Adherence to the City's Boulevard Tree Policy and local street section design.**
4. **Provision that an easterly parking lot access is available on Crest Drive for the Church site.**
5. **Adherence to the following building setbacks:**
    a. **Front: 30 feet**
    b. **Rear: 30 feet**
    c. **Side: 10 feet house/ 7 feet garage**
    d. **Side (corner): 15 feet**
6. **Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs.**
7. **Provision of a storm water management plan meeting City and Carver County WMO standards.**
8. **Conditional Use Permit is obtained for the duplex use.**

CITY OF CHASKA

Shepherd of the Hill Church

Date: 6/6/2019

0 0.0075 0.015 0.03 0.045 0.06 mi

N

Twin Cities Habitat for Humanity®

Shepherd of the Hill Presbyterian Church

Twin Home Development Proposal

Habitat houses in Chaska

Project Goals

- The goal of the project is to fulfill the missions of Shepherd of the Hill Church, Twin Cities Habitat for Humanity and the Carver County Land Trust to provide high-quality housing that is affordable for a wide range of families who currently live or work in Chaska or adjacent communities. We aim to achieve this by maximizing the use of the available property as allowed within the zoning code without the need for variances or rezoning. The project will include 8 units of land-trusted, ownership housing that will provide high-quality, low-maintenance, appropriately sized and situated housing, including providing visitability for the units to create life-cycle housing that meets the needs of limited-mobility residents and visitors. We intend for this project to fit as seamlessly into the existing fabric of the neighborhood as possible, as influenced by the characteristics of the site and previously stated goals.

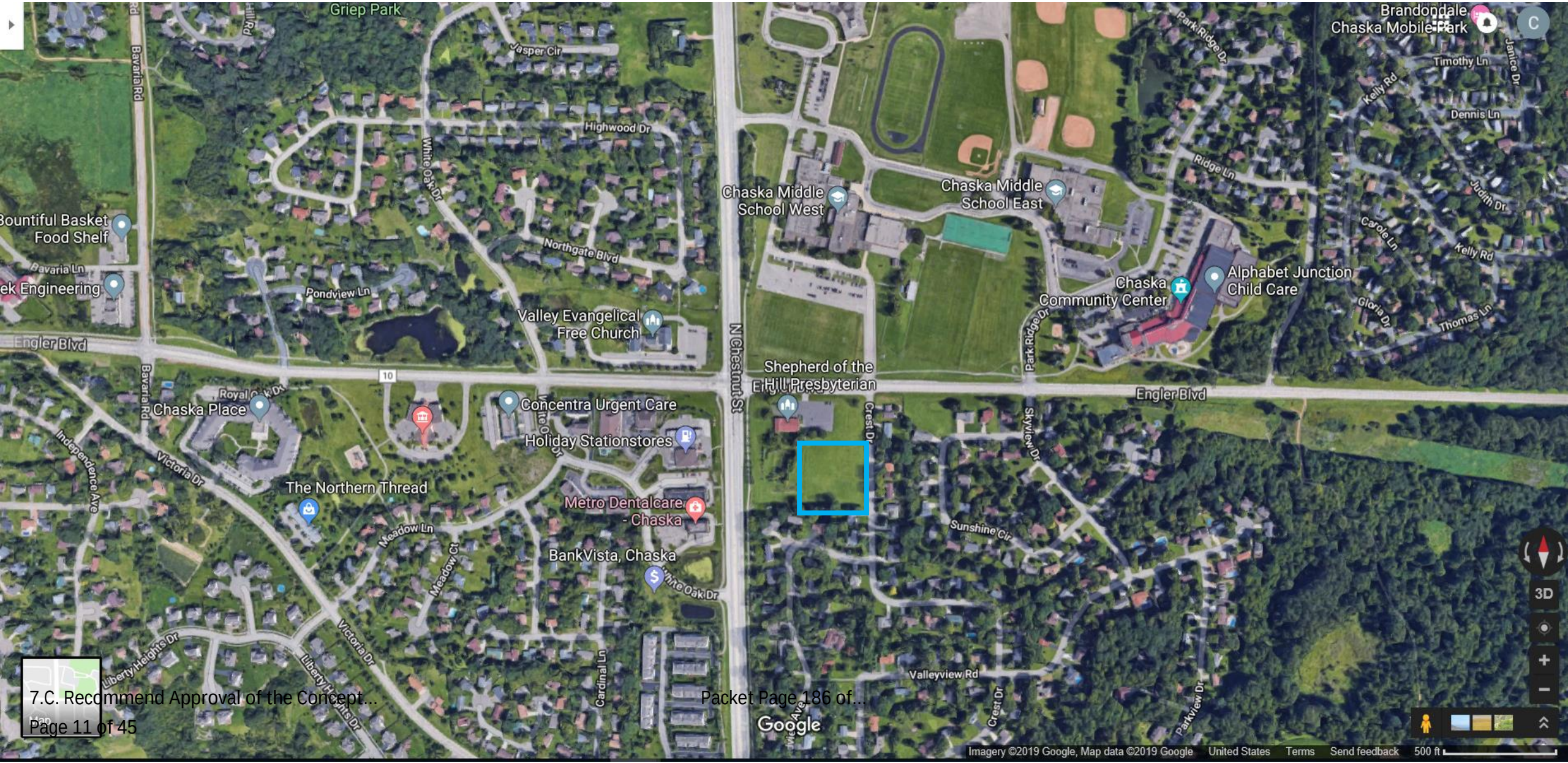
Project relation to Chaska's Mission

- The project supports Chaska's mission to create balanced residential development consistent with local demands that expands the tax base. It does so by bringing to the market ownership housing opportunities that are attainable for a broad cross section of the community while converting tax-exempt land into tax-paying land.
- The project will support Chaska's values by:
  - Enhancing quality of life through the provision of an under-represented housing type that will permit residents and workers who might otherwise not be able to achieve home-ownership in Chaska to do so.
  - Developing the site consistently with the Comprehensive Plan in balance with the community's infrastructure as well as meeting the requirements of the Zoning Code. The proposed layout and housing types make cost-effective use of the available land and integrate well with the adjacent neighborhood while acknowledging the demands of the sloped site.
  - Providing housing that is affordable to all residents of Chaska (Comp Plan Goal)

Local context

- The local area of the project includes a diverse array of uses and building types including institutional uses such as the church itself and the school/community center complex to the north, commercial uses to the west and north west, and a range of residential types further west, south, east and north east. These types include a large mobile home park, single family and multifamily dwellings.
- We use twinhome and duplex interchangeably, but mean a two family detached dwelling as contemplated by the zoning code, with separate ownership of units.
- Please see the attached house and site plans for more detail.

Site and Local Area



Zoning

- Like the area to the east and south, the church property is zoned R1 - Low Density Residence
- The proposed project will maintain the existing zoning.

Zoning

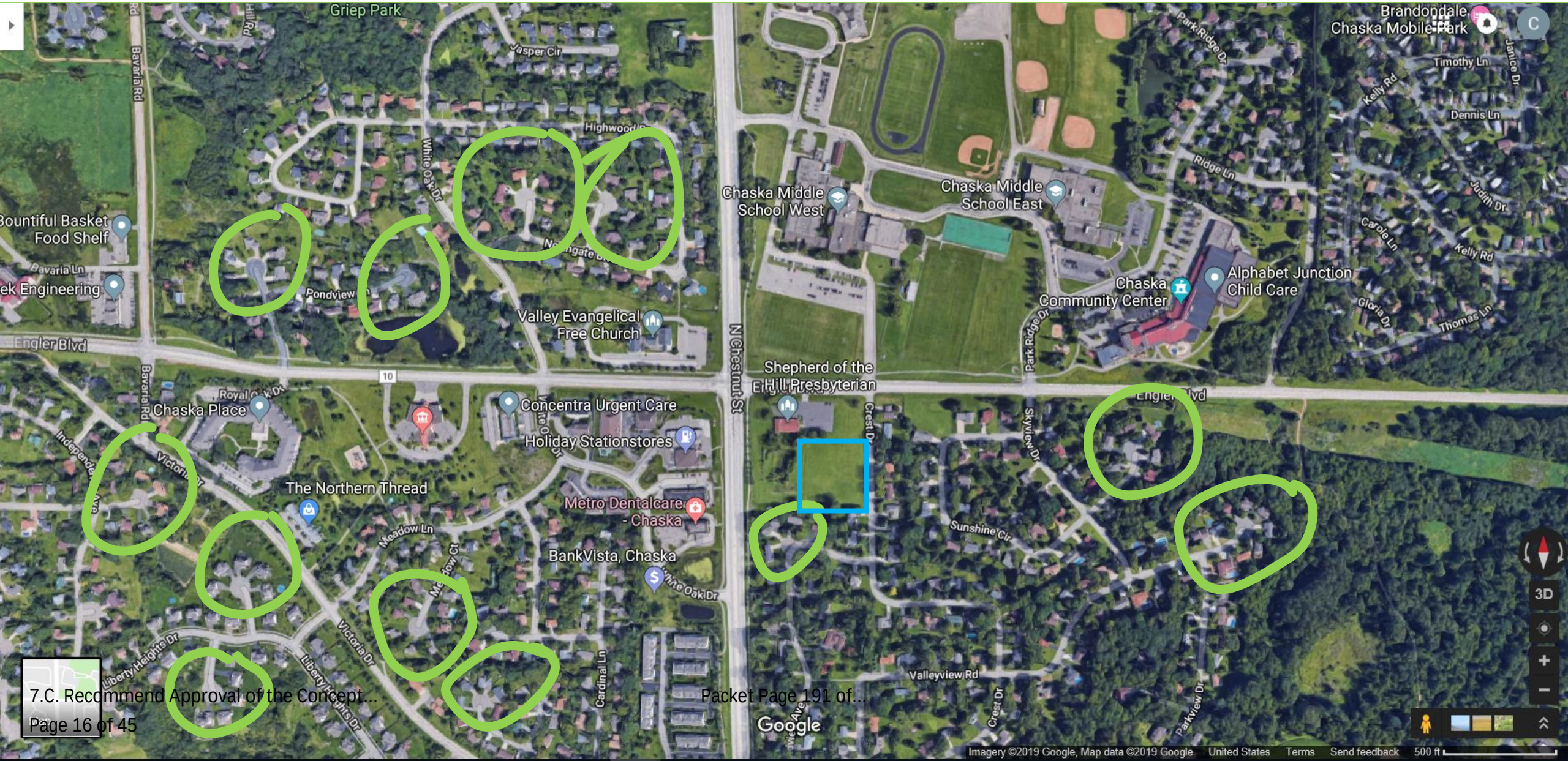
or place
R1
PRD 33
P1
O
R1A
PCD 14
PRD 10
P2
PRD 14
R2
Park Ridge Dr
Engler Blvd
PMD 03
PCD 12
PRD 04
PRD 49
PRD 51
PRD 05
Zoning Districts
O - Open Development
R - Rural
F - Flood
P1 - Public Open Space
P2 - Public Buildings
C2 - General Commerce
C3 - Downtown District
PCD - Planned Commercial Development
I - Industrial
I2 - Restricted Industrial
PID - Planned Industrial Development
PMD - Planned Multi-Use Development
PRD - Planned Residence Development
PRD-R-LS - Planned Residence-Rural-Lakeshore
R1 - Low Density Residence
R1A/B - Low Density Single Family Residence
R2/3 - Medium Density Residence
RR - Rural Residential

Zoning overlay

Proposed development pattern

- The proposed project includes a cul-de-sac in order to create the greatest reach into the site in order to maximize the use of the property.
- There are many local examples of cul-de-sac development both in the immediate neighborhood to the southeast and beyond

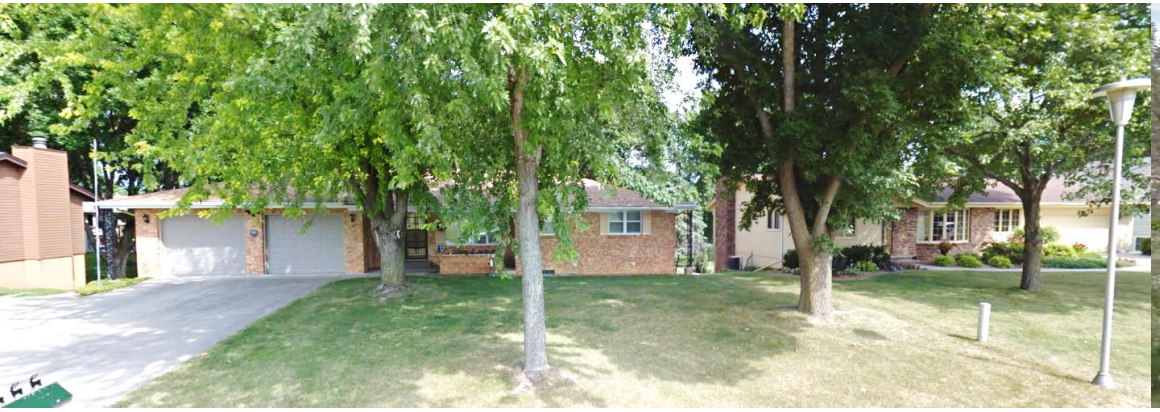
Local evidence of cul-de-sacs



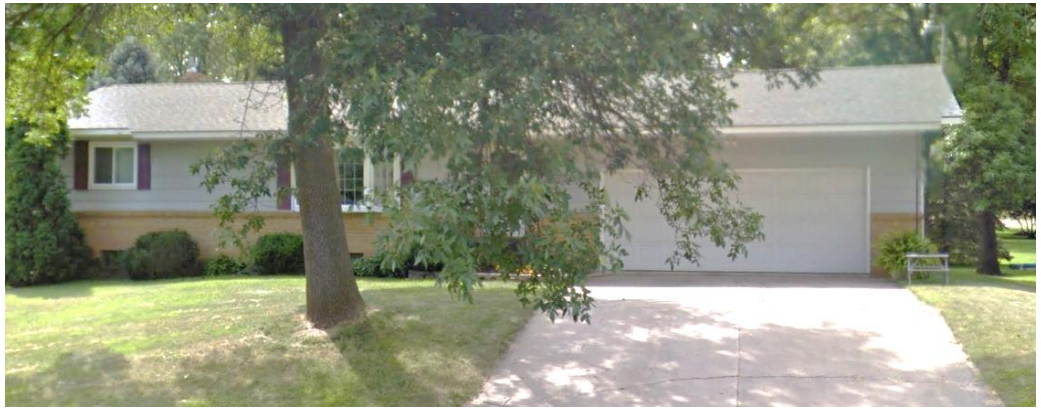
Proposed housing type

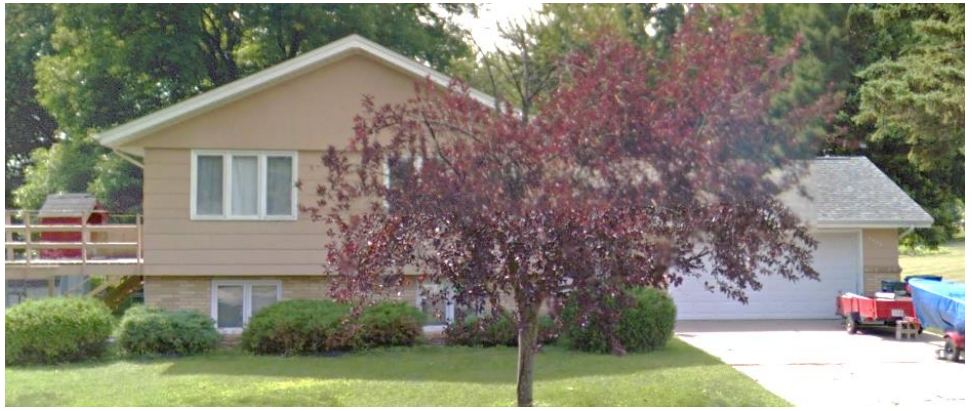
- The proposed housing type is front-loaded garage, two-level twinhomes. The houses on the north side of the cul-de-sac are slab on grade with two story front facades. The houses on the south side of the cul-de-sac are look-out ranches with one story front facades. The at-grade floor plans are the same, as are the non-at-grade floors. Both types of house provide a visitable first floor (zero-step entry, bath on at-grade floor, 2’8” doorways), while dealing with the slope of the site from northwest to south east.
- The adjacent neighborhood to the south and east contains a remarkable mix of housing types, including ranch, split-entry and two-story houses. Immediately adjacent to the site are ranches and split entries, all with front facing garages.
- Although not represented in the immediate neighborhood, within a mile of the site there are mobile homes, twinhomes, townhomes and multi-story condo/rental buildings, with the closest example being townhomes within 1000’.

Houses to east-southeast

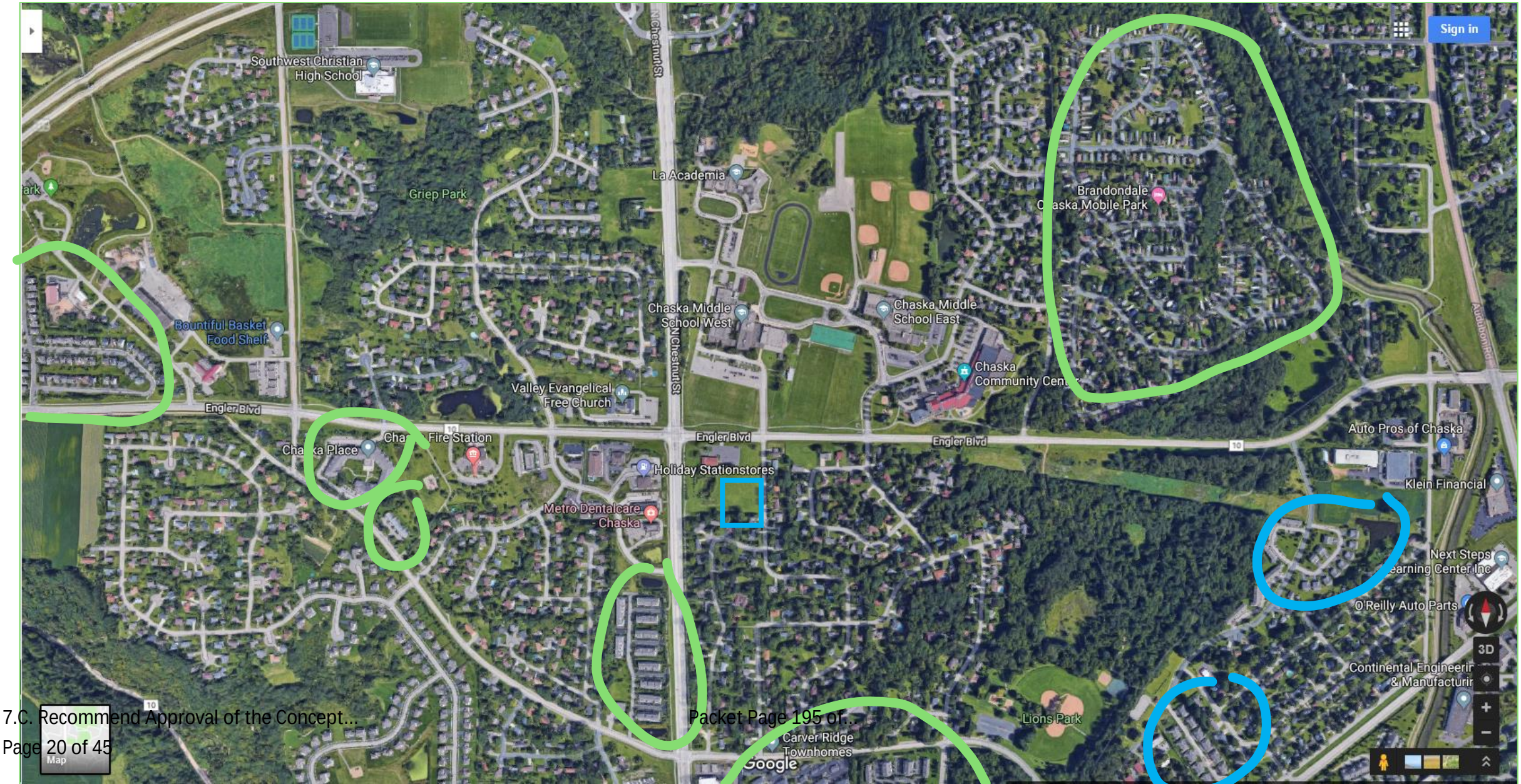


Houses to south





Local evidence of higher density and/or attached hsg



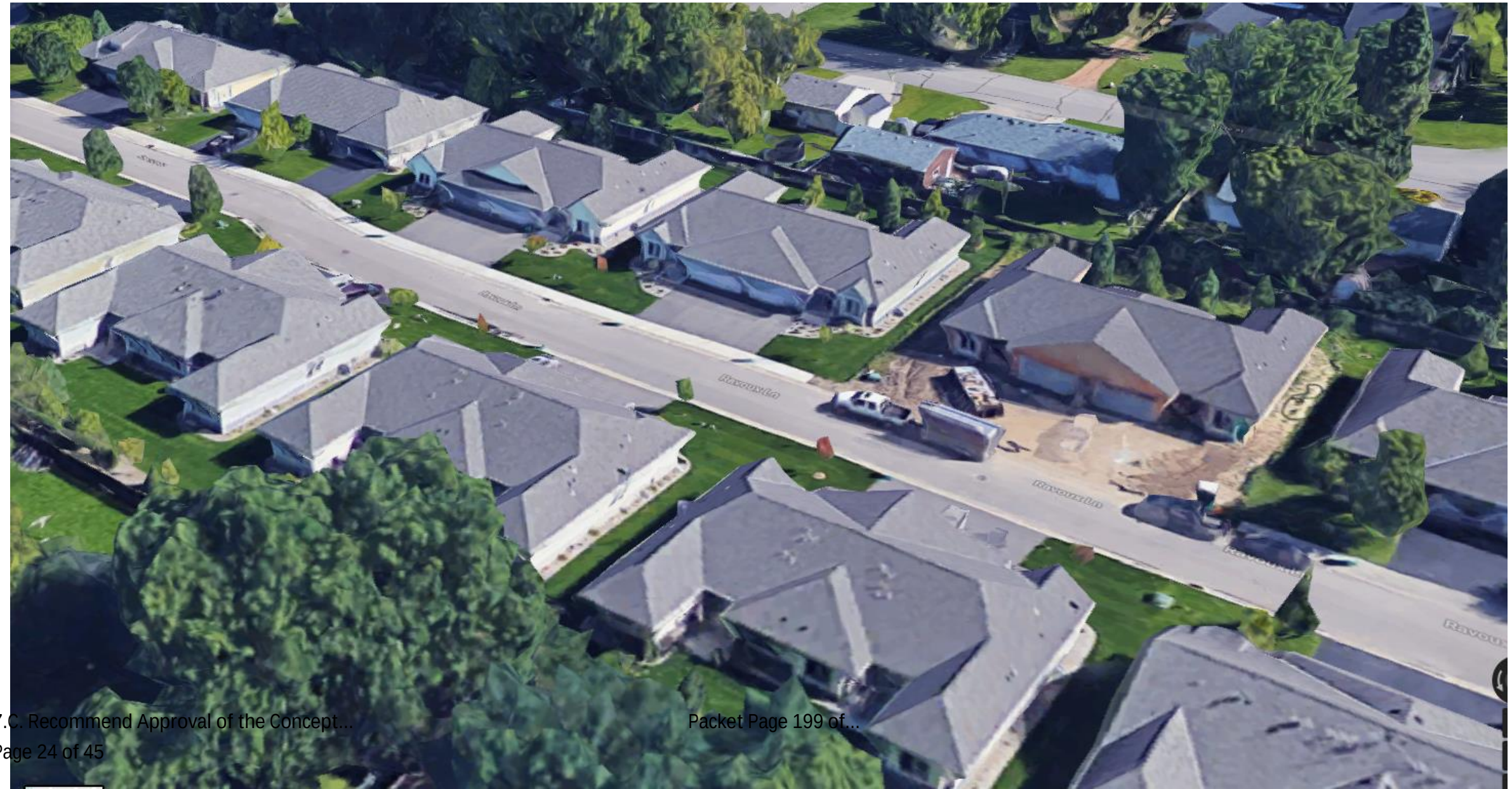
Proposed housing type

- Of the examples of attached housing in the vicinity, there are few instances of twin home development. The closest examples are Ravoux Circle and Ravoux Lane, about 4000’ to the southeast. (Circled in blue on previous page)
- The twin-home style is proposed in order to maximize the density of the site within the existing zoning to facilitate cost effective delivery of moderately priced housing.

Local twinhome example

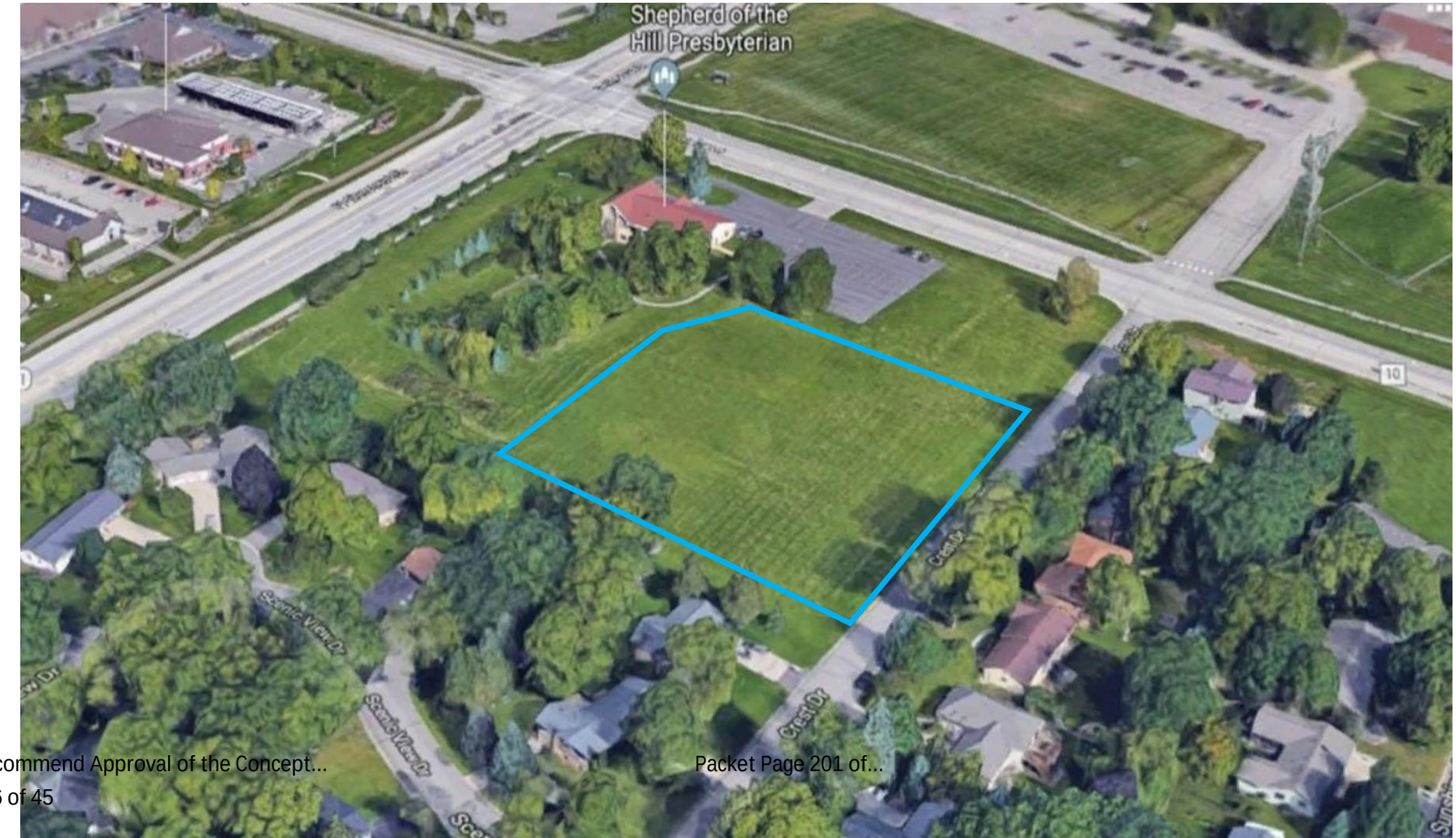
Local twinhome example

Local twinhome example



Local twinhome example

Bird’s-eye view of project area



Bird’s-eye view of project area

Rendering of proposed project, looking west

From North

From Southwest

From Southeast

House features

- LP SmartSide engineered wood siding
- Andersen Windows
- Energy Star appliances
- HERS rating ~48
- Estimated FMV = $275,000

Site plan

- The site plan meets all the requirements of the existing R1 zoning. It meets the intent of the district and requires no variances. Two family detached dwellings (aka twinhomes) are allowed by special permit.

R1 Zoning intent

- To recognize relatively low density, single-family residential areas that have been developed primarily after 1950, together with supporting public and semi-public facilities, and to protect the low intensity living environment from encroachment by potential conflicting uses. It is intended that after October 5, 1992, this District will no longer be used for new developments except possibly for the following in the sole discretion of City Council:
- a) In conjunction with a mixed density PRD where the overall gross density would not exceed 2.3 lots per acre;
- b) As a minor expansion of an existing R1 District where such expansion is limited and well-defined, and where development of larger lots would be inappropriate;
- c) As a transition between higher and lower density development or adjacent to commercial/industrial areas and to State or Federal highways.
- As a general guide, scattered use of the R1 District in relatively small developments (10 to 20 acres) may be permitted.

R1 Zoning Allowable Uses

- **3.1.2.3 Uses by Special Permit**
- a) Two family detached dwellings: duplex and/or double bungalow;

R1 Zoning Requirements

3.2 DENSITY / INTENSITY REGULATIONS

It shall be unlawful to erect or alter any building within the City of Chaska unless density/intensity regulations set forth in the following tabulations are provided and maintained.

DISTRICT	MINIMUM REQUIREMENTS								MAXIMUM REQUIREMENTS		
	Lot Size		Yard Setback (Feet)(g)				Site	Usable	Floor		Density
	Area (sq. ft.)	Width Depth (feet)	Front (a)	Rear	Side (b) Interior	Side (b) Corner	Area Per DU (sq. ft.)	Open (c) space per DU (sq. ft.)	Area Ratio (FAR)	Building Coverage (%)	(DU's per gross residential acre)
R											
All Uses	43,560	165	75	40	25	75					
RR-1											
Rural Residential	43,560	200	75	40	25	75	(See Section 3.1.1A)				
RR-2											
Rural Residential	217,800	200	75	40	25	75	(See Section 3.1.1B)				
R1											
One Family Dwellings	9,000	75	30	30	10/7 (d)	15	9,000		0.25		4
Two Family Dwellings	14,000	90	30	30	10/7 (d)	15	7,000		0.25		6
Deck				20							
Accessory Buildings & Uses			30	5	5	30					
Other Uses	15,000	100	30	30	15	30			0.4		

- Project site is ~2 acres = ~12 units allowed
- All area and setback requirements are met

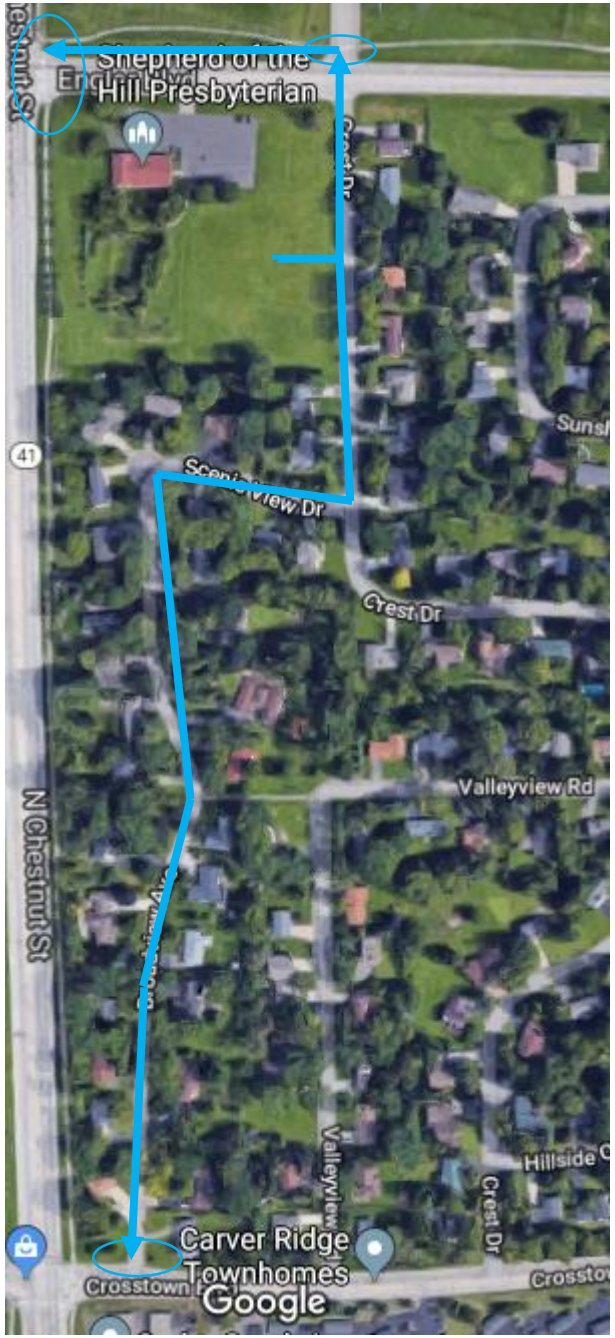
Stormwater management

- The City of Chaska does not appear to have specific stormwater management requirements, but appears to yield stormwater requirements and review to Carver County. The Carver County Resource Management Ordinance (referred to as the Water Rules) regulates construction sites that are more than one acre. §153.56 STORMWATER MANAGEMENT STANDARDS states that "[redevelopment] sites adding 1 acre or more of new impervious must meet the treatment requirements ... for rate, water quality, and volume for new impervious created as part of the project." Since the proposed project does not add 1 acre or more of new impervious surfaces, the project will not be required to meet the Carver County Water Rules treatment requirements for rate, water quality, and volume.

- Majority of runoff from the existing project site flows to the south toward other single family homes. To minimize actual or perceived negative impacts to the single family home properties, the project will direct majority of runoff from the new impervious areas to existing storm sewer in Crest Avenue and ensure that proposed runoff rates do not exceed existing runoff rates to the single family homes to the south. Stormwater management BMPs may be implemented on individual properties, as needed, to achieve this rate control to the south. Potential locations of stormwater management BMPs are shown on the Site Plan.

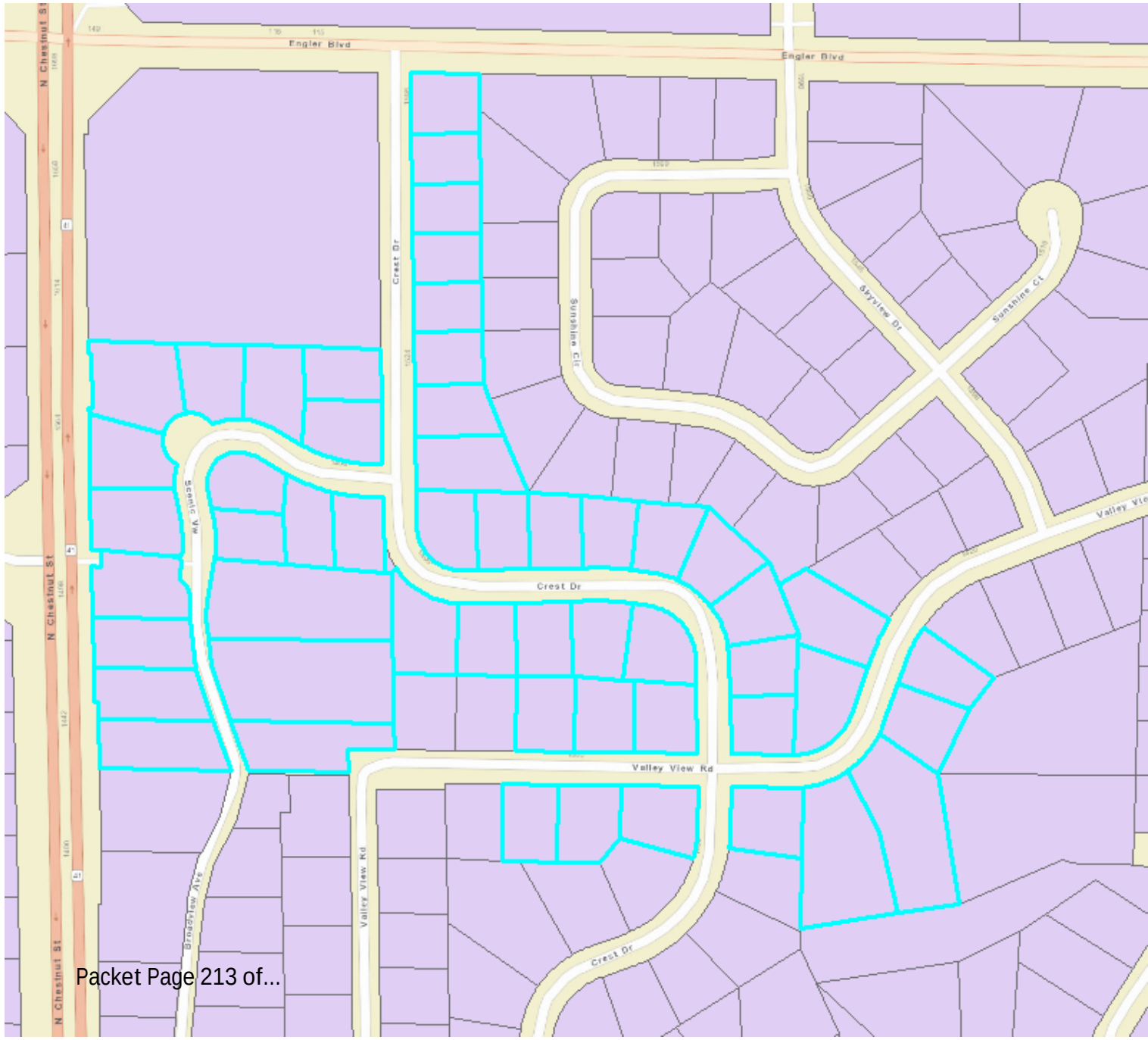
Connections

- The site is landlocked on the north west and south, and bordered on the east by Crest Dr.
- Vehicles will enter and exit the site onto Crest Dr. (see traffic impacts on next slide)
- Pedestrians and bikers will enter and exit onto Crest Dr., which has no sidewalk or bikeway. As with all other properties on Crest Dr. walkers and bikers will have to travel in the roadway until they cross Engler to north, reach Chestnut on the west, or make their way to Crosstown to the south



Traffic impacts

- Approximately 50 homes make frequent use of Crest Dr.
- 8 additional units is an increase of 16%
- Main traffic flow will be north to Engler Blvd, with primary increase in traffic in front of three adjacent houses



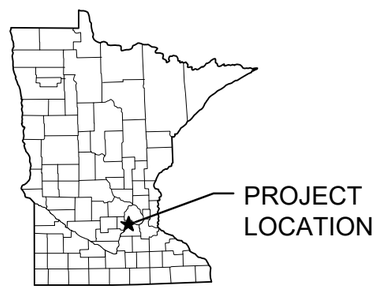
Neighborhood Meeting

- Held Feb 26, 2019 at SOH Church
- 10-15 church members, 10-15 neighbors present
- Presentation well received, lots of great questions
- 1 concern raised concerned the creation of more run-off to Crest Dr.
  - We are attempting to address this per the stormwater notes above. Stormwater management plan still underdevelopment.

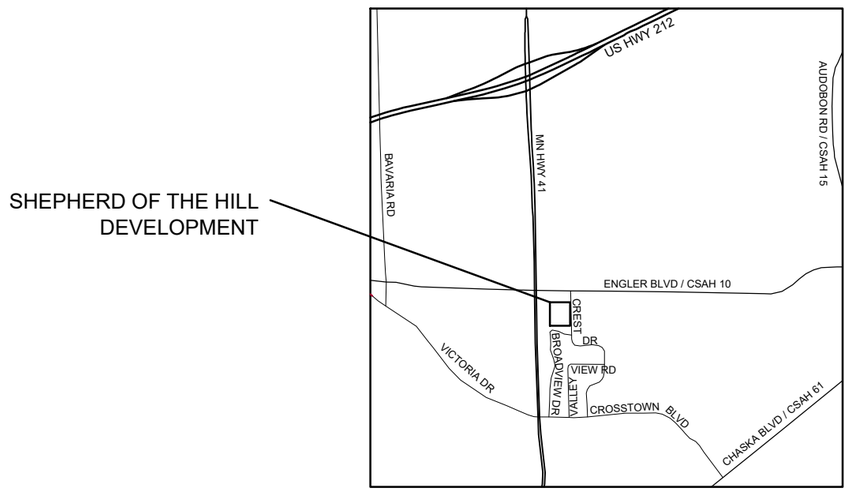
TWIN CITIES HABITAT FOR HUMANITY

SHEPHERD OF THE HILL DEVELOPMENT

CHASKA, MINNESOTA



LOCATION MAP



VICINITY MAP

SHEET INDEX

SHEET NO.	TITLE
G-01	..... PROJECT LOCATION AND SHEET INDEX
G-02	..... CREST DRIVE TEMPORARY TRAFFIC CONTROL PLAN
C-01	..... EXISTING CONDITIONS SURVEY
C-02	..... DEMOLITION PLAN
C-03	..... SITE PLAN
C-04	..... GRADING PLAN
C-05	..... UTILITY PLAN
C-06	..... UTILITY SECTIONS AND DETAILS
C-07	..... STORMWATER PLAN
C-08	..... STORMWATER SECTIONS AND DETAILS
C-09	..... PAVING SECTIONS AND DETAILS
C-10	..... EROSION AND SEDIMENT CONTROL PLAN
C-11	..... EROSION AND SEDIMENT CONTROL DETAILS
C-12	..... LANDSCAPE PLAN
C-13	..... LANDSCAPE DETAILS
D-01	..... EXISTING DRAINAGE AREAS
D-02	..... PROPOSED DRAINAGE AREAS

PRELIMINARY
DRAFT

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
1	JPP	NDC		04/4/2019	PRELIMINARY DRAFT FOR CITY REVIEW

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.

PRINTED NAME NATHAN CAMPEAU

SIGNATURE

DATE _____ LICENSE # _____

	04/04/19						
CLIENT							
BID							
CONSTRUCTION							
RELEASED TO/FOR	A	B	C	0	1	2	3
	DATE RELEASED						

BARR

Corporate Headquarters:
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Ph: 1-800-632-2277

Project Office:
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4300 MARKETPOINTE DRIVE
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Minneapolis, Minnesota 55435
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

Scale	AS SHOWN
Date	04/04/2019
Drawn	JPP
Checked	NDC
Designed	JPP
Approved	

TWIN CITIES HABITAT FOR HUMANITY
ST. PAUL, MN

SHEPHERD OF THE HILL DEVELOPMENT
CHASKA, MN

PROJECT LOCATION AND SHEET INDEX

BARR PROJECT No.	
23/10-1029.00	
CLIENT PROJECT No.	
DWG. No.	REV. No.
G-01	A

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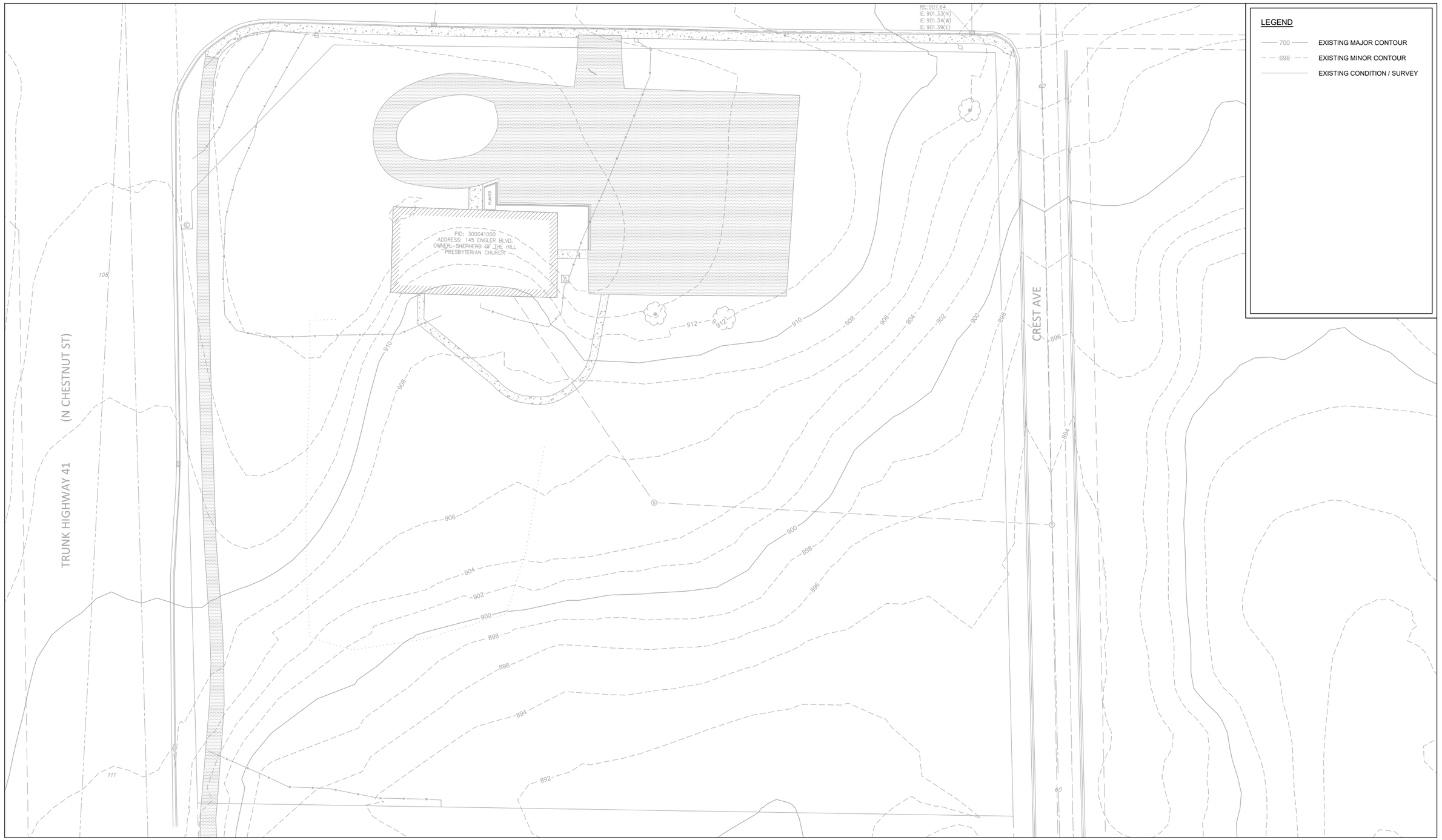

1 EXISTING CONDITIONS AND SURVEY

0 30 60
SCALE IN FEET

PRELIMINARY DRAFT

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PRINTED NAME NATHAN D. CAMPEAU

SIGNATURE

DATE _____ LICENSE # _____

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CLIENT	04/04/19							
BID								
CONSTRUCTION								
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TWIN CITIES HABITAT FOR HUMANITY
ST. PAUL, MN

SHEPHERD OF THE HILL DEVELOPMENT
CHASKA, MN

EXISTING CONDITIONS AND SURVEY

BARR PROJECT No.	
23/10-1029.00	
CLIENT PROJECT No.	
DWG. No.	REV. No.
C-01	A

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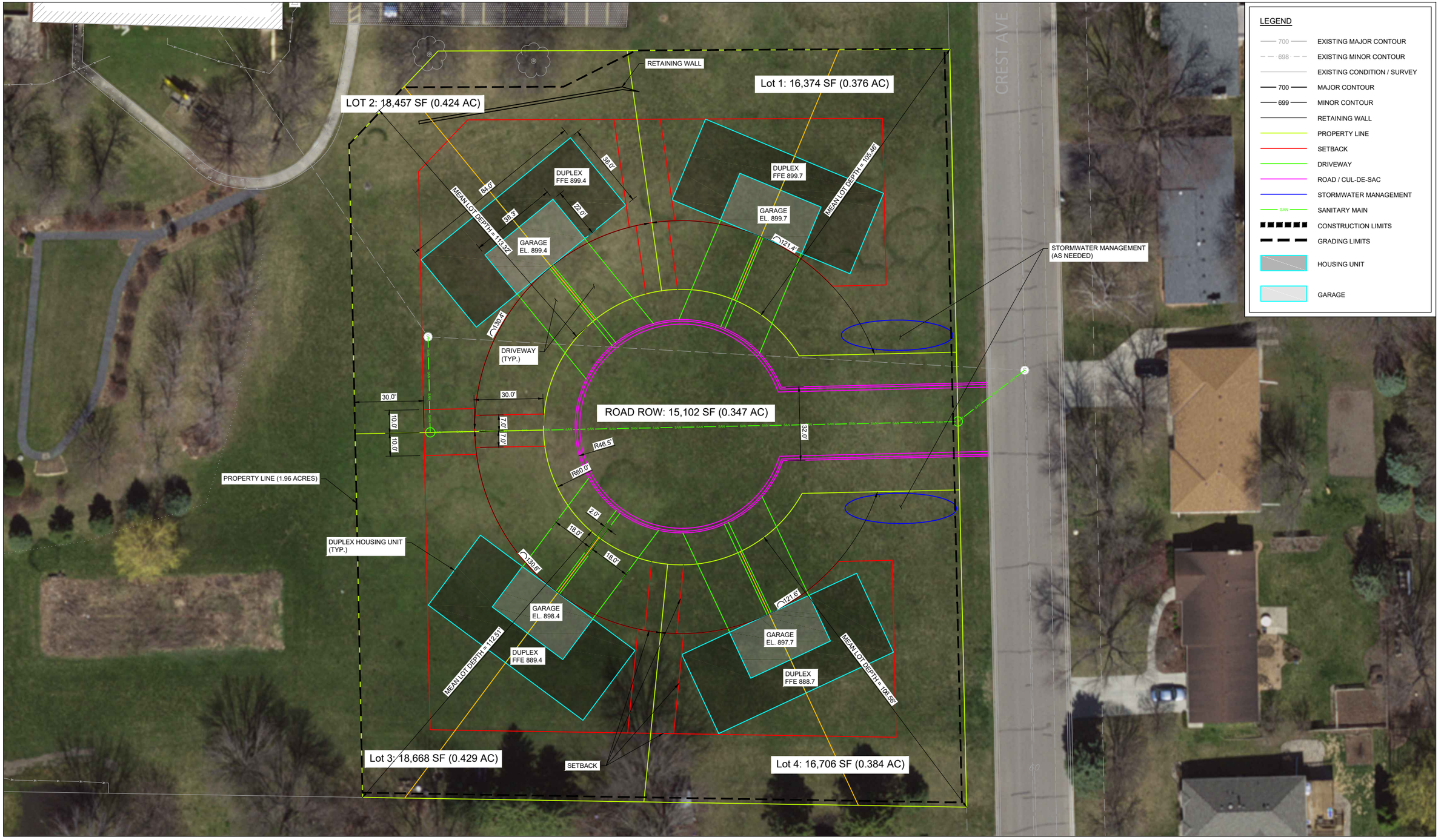

1 SITE PLAN

0 20 40
SCALE IN FEET

PRELIMINARY DRAFT

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SIGNATURE

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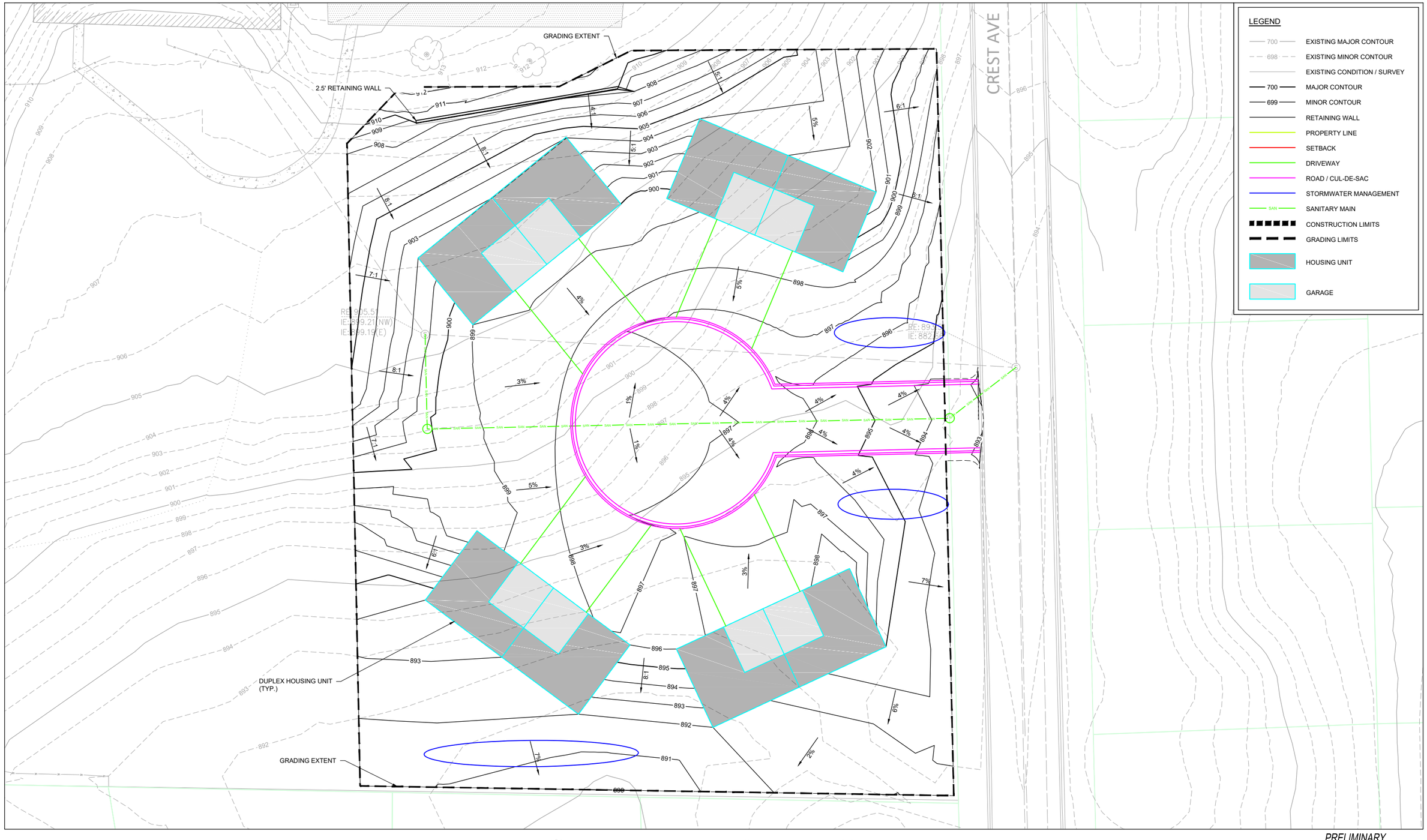
TWIN CITIES HABITAT FOR HUMANITY
ST. PAUL, MN

SHEPHERD OF THE HILL DEVELOPMENT
CHASKA, MN

SITE PLAN

BARR PROJECT No.	23/10-1029.00
CLIENT PROJECT No.	
DWG. No.	C-03
REV. No.	A



1 GRADING PLAN

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SCALE IN FEET

PRELIMINARY DRAFT

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
A	GWB	NDC		4/4/2019	PRELIMINARY DRAFT FOR CITY REVIEW

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PRINTED NAME NATHAN D. CAMPEAU

SIGNATURE

DATE LICENSE #

	04/04/19						
CLIENT							
BID							
CONSTRUCTION							
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	DATE RELEASED						

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Designed	GWB
Approved	

TWIN CITIES HABITAT FOR HUMANITY
ST. PAUL, MN

SHEPHERD OF THE HILL DEVELOPMENT
CHASKA, MN

GRADING PLAN

BARR PROJECT No. 23/10-1029.00
CLIENT PROJECT No.
DWG. No. C-04
REV. No. A

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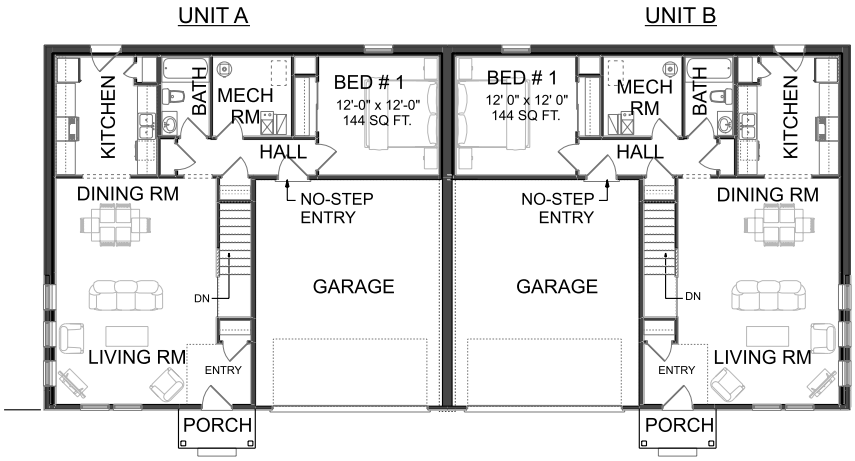
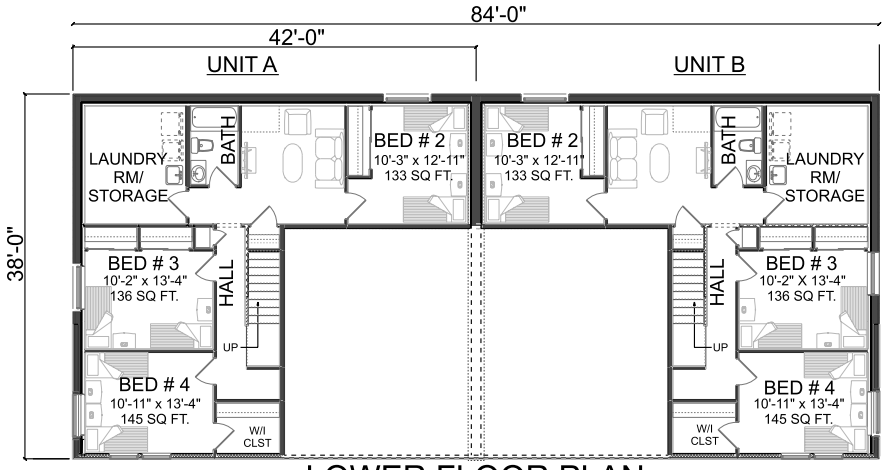
RENDERING MAY NOT REFLECT ACTUAL CONSTRUCTED HOUSE



UPPER FLOOR PLAN



LOWER FLOOR PLAN

Twin Cities Habitat for Humanity Building Community

1954 UNIVERSITY AVE. W.
ST. PAUL, MN 55104

OFFICE: 651-207-1700
FAX: 651-641-8641

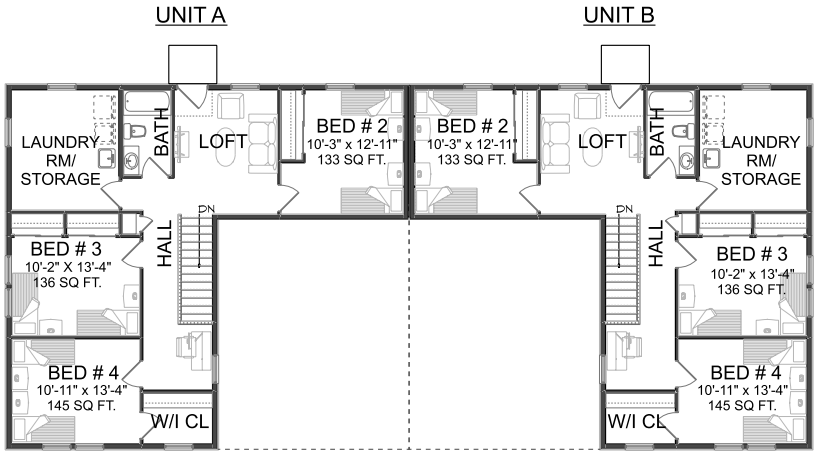
MULTI FAMILY DWELLING
SHEPHERD OF THE HILL
CHASKA, MN

MODEL: 26TS4-2 (TWIN)
UPPER LEVEL ENTRANCE

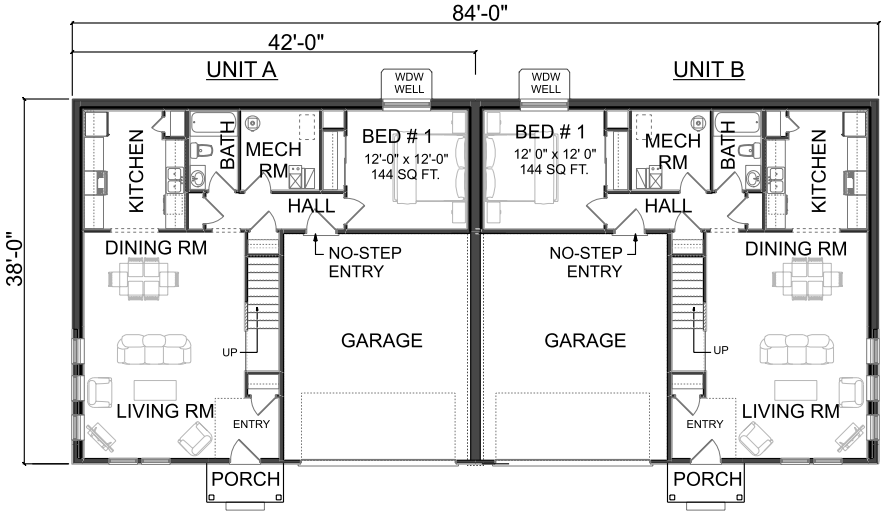
LOWER LEVEL UNFINISHED SQ. FT. = 190
LOWER LEVEL FINISHED SQ. FT. = 928
UPPER LEVEL SQ. FT. = 1118
TOTAL FINISHED SQ. FT. = 2046
TOTAL SQ. FT. (1 UNIT) = 2236

*SQUARE FOOTAGE INCLUDES WALLS
**UTIILTY ROOM IS INCLUDED IN THE UNFINISHED SQ. FOOTAGE
GARAGE IS NOT INCLUDED IN SQ. FOOTAGE

RENDERING MAY NOT REFLECT ACTUAL CONSTRUCTED HOUSE



UPPER FLOOR PLAN



LOWER FLOOR PLAN

1954 UNIVERSITY AVE. W.
ST. PAUL, MN 55104

OFFICE: 651-207-1700
FAX: 651-641-8641

MULTI FAMILY DWELLING
SHEPHERD OF THE HILL
CHASKA, MN

MODEL: 26TS4-2 (TWIN)

LOWER LEVEL UNFINISHED SQ. FT. = 134
LOWER LEVEL FINISHED SQ. FT. = 984
UPPER LEVEL SQ. FT. = 1118
TOTAL FINISHED SQ. FT. = 2102
TOTAL SQ. FT. (1 UNIT) = 2236

*SQUARE FOOTAGE INCLUDES WALLS
**UTIILTY ROOM IS INCLUDED IN THE UNFINISHED SQ. FOOTAGE
GARAGE IS NOT INCLUDED IN SQ. FOOTAGE

- MINUTES -
CHASKA CITY COUNCIL
MAY 6, 2019

1. Call to Order
The meeting was called to order by Mayor Windschitl at 7 pm.

2.Pledge of Allegiance

3. Roll Call
Roll call was taken. Present: Councilmembers Hatfield, Bostrom, Huang, Grau, and Mayor Windschitl. Absent: None.

Also Present: Kevin Ringwald, Community Development Director; Liz Hanson, City Planner; Luke Melchert, City Attorney; Nate Kabat, Assistant Administrator; Matt Clark, City Engineer; and Matt Podhradsky, City Administrator.

Mayor Windschitl said a few words regarding recent happenings at Chaska High School and City Administrator Podhradsky provided clarification for next steps.

4. Adopt the Agenda
Motion by Councilmember Huang, second by Councilmember Hatfield to adopt the agenda as presented.
Motion carried.

5. Visitor
~~5.A. Recognition of Dave and Cindy Just~~

5.B. Presentation of Proclamation Recognizing the 50th Anniversary of the Municipal Clerks Week
Mayor Windschitl read the Proclamation recognizing the 50th Anniversary of Municipal Clerks Week and recognized the work City Clerk Wetzel does for the City.

5.C. Tour de Tonka
Jenny Bodueka, Minnetonka Community Education Youth and Adult Program Coordinator, detailed the Tour de Tonka event on August 3, 2019.

5.D. HisHouse Foundation
Martha Brannon, Founder/Executive Director, gave the Council information regarding the service provided by HisHouse Foundation.

Mayor Windschitl inquired if the surrounding counties are aware of this service.

Ms. Brannon responded that they are aware.

Councilmember Huang invited Ms. Brannon to share why preventing homelessness is important.

Councilmember Hatfield asked what those who want to help can do.

Ms. Brannon detailed that information.

Councilmember Huang noted that the food recovery program is a great concept.

6. Minutes

Motion by Councilmember Bostrom, second by Councilmember Grau to approve the minutes of the April 15, 2019 City Council meeting.
Motion carried.

7. Consent Agenda

City Administrator Podhradsky noted that the resolution for Item 7.A listed the wrong bid recipient and that GMH Asphalt is the correct recipient of the bid. He also pointed out the bid for the 212 Interchange Project was 5% under.

Motion by Councilmember Huang, second by Councilmember Bostrom to approve the Consent Agenda Items A through L with correction to the resolution to list GMH Asphalt as the bid recipient and the bid amount as $315,695.49 in item 7A:

A. Adopt Resolution No. 2019-40, Approving the 2019 Overlay Program
   Motion to Approve Resolution No. 2019-40 awarding the bid for the 2019 Overlay Program to GMH Asphalt in the low bid amount of $315,695.49.
B. Adopt Resolution 2019-41, Transient Permit - Fireman's Barbeque
   Motion to Adopt Resolution No. 2019-41 approving Transient Permit TRA.19-05 in the name of Justin Spande of Fireman’s Barbeque of 331 Louisa St, Hamburg, Minnesota 55339, valid May 6, 2019 through December 31, 2019.
C. Adopt Resolution No. 2019-42, Solicitor Permit for Edward Jones, Financial Consultants
   Motion to adopt Resolution No. 2019-42 approving Solicitor Permit No. SOL.19-10 for Marianne J. Laurent of Edward Jones, 464 Second Street, Suite 209, Excelsior, Minnesota, 55331, effective May 6, 2019, through December 31, 2019.
D. Adopt Resolution No. 2019-43, Transient Permit - Pretty Great Cheesecake
   Motion to adopt Resolution No. 2019-43 approving Transient Permit TRA.19-06 in the name of Pretty Great Cheesecake of 867 Woodridge Dr. South, Chaska, Minnesota, 55318, valid May 6, 2019 through December 31, 2019.
E. Adopt Resolution No.’s 2019-44 and 2019-45, Amending 2018 Budget and 2019 Budget
   Motion to adopt Resolution No.2019-44 amending 2018 Fund Budgets, Resolution 2019-45 amending 2019 Fund Budgets.
F. Adopt Resolution No.’s 2019-46, 2019-47 and 2019-48, Accepting Gifts and Donations
   Motion to adopt Resolution No. 2019-46 acknowledging and accepting gifts to the City of Chaska received during the period July 01, 2018 through September 30, 2018, Resolution No. 2019-47 acknowledging and accepting gifts to the City of Chaska received during the period October 01, 2018 through December 31, 2019, Resolution No. 2019-48 acknowledging and accepting gifts to the City of Chaska

received during the period January 01, 2019 through March 31, 2019.

G. Adopt Resolution No.'s 2019-49 and 2019-50, Approving the Lot Split and Lot Consolidations between 522 & 528 Stoughton Avenue and between 528 Stoughton Avenue and 614 6th Street East/Scott Bakkelund/PC #2019-11

Motion to adopt Resolution No. 2019-49 approving the Lot Split and Lot Consolidation between 522 and 528 Stoughton Avenue, subject to the stipulations included in said resolution and the following conditions:

1. Approvals shall be based on the following graphic exhibits:
   a. Certificate of Survey, prepared by Trosen Land Surveying (pgs 1-2), dated May 1, 2019
2. Area-X is consolidated into Parcel 4 (522 Stoughton Avenue) and Area-Y is consolidated into Parcel 2 (528 Stoughton Avenue)
3. Lot Consolidation is obtained through Carver County

Motion to Adopt Resolution No. 2019-50 approving the Lot Split and Lot Consolidation between 528 Stoughton Avenue and 614 6th Street East, subject to the stipulations included in said resolution and the following conditions:

1. Approvals shall be based on the following graphic exhibits:
   a. Certificate of Survey, prepared by Trosen Land Surveying (pgs 1-2), dated May 1, 2019
2. Parcel 3 and Area-Z are consolidated into Parcel 1 (614 6th Street East)
3. Lot Consolidation is obtained through Carver County

H. Adopt Resolution No. 2019-51, Solicitor Permits for Aptive Environmental

Motion to adopt Resolution No. 2019-51 approving Solicitor Permit Nos. SOL.19-11 through SOL.19-27, for the above representatives of Aptive Environmental, located at 5251 West 73rd Street, Unit C, Edina, Minnesota, 55439, for the period of May 6, 201p, through September 30, 2019.

I. Adopt Resolution No. 2019-52, Transient Permit for Lisa Koehler of Borealis Bowls

Motion to adopt Resolution No.2019-52 approving Transient Permit TRA.19-07 valid June 7, 2019 and TRA.19-08 valid May 6, 2019 through December 31, 2019 in the name of Borealis Bowls of 1325 Lexington Lane, Chaska, Minnesota, 55318.

J. Approving liquor licenses for Chipotle Mexican Grill

Motion to approve On-Sale Intoxicating and Sunday Liquor Licenses for Chipotle Mexican Grill, located at 1112 Hazeltine Boulevard, Chaska.

K. Adopt Resolution No. 2019-53, Awarding Bid for the TH 212 Interchange and CSAH 44 Improvement Project

Motion to adopt Resolution No. 2019-53 awarding the bid for the TH 212 Interchange and CSAH 44 Improvement Project to S.M. Hentges & Sons Inc., in the low bid total amount of $12,853,563.71.

L. Approve Resolution No. 2019-54, Approving TH 212 Interchange and CSAH 44 Improvements MnDot Cooperative Construction Agreement

Motion to adopt Resolution No. 2019-54 approving the TH 212 Interchange and CSAH 44 Improvement MnDOT Cooperative Construction Agreement.

Motion carried.

City Administrator Podhradsky noted the bids were 15% over for the Lyman Construction Project and that Chanhassen is going to reject the bid. He explained Staff will update next steps soon.

Councilmember Huang inquired if there is a chance that funding would be lost due to this.

City Administrator Podhradsky gave more information regarding potential risk.

Councilmember Bostrom asked for clarification regarding why the bid was 15% over.

City Administrator Podhradsky gave his opinion regarding the overage.

8. Action Items
There were no action items.

9. Bills
9.A. Accounts Payable Council Roster 5-6-19

Councilmember Huang requested further detail regarding bills on pages 3, 14, and 16.

City Administrator Podhradsky gave clarification regarding those bills.

Motion by Councilmember Huang, second by Councilmember Grau to approve the bills as presented. Roll call was taken. Voting aye: Councilmembers Hatfield, Bostrom, Huang, Grau and Mayor Windschitl. Voting nay: None
Motion carried.

10. Other Business
10.A. City Administrator's Report
10.B. Administrator's Bi-Weekly Report
10.C. Other Meeting Minutes
10.C.i. Receive the Minutes of the April 10, 2019 Planning Commission Meeting
10.C.ii. Receive the Minutes of the April 8, 2019 Park & Rec Board

Councilmember Hatfield:
- Wished all the mothers out there a Happy Mother's Day.

Councilmember Bostrom:
- Thanked the crew he was a part of for Christmas in May.

Councilmember Huang:
- Noted Christmas in May was a great opportunity and wonderful experience.
- Reminded folks Taste of Chaska is rescheduled to May 15th.
- Commented that he attended the open house for the Jonathan-Carver Parkway and noted they are starting work in 2021-2022.
- Congratulated Aldi and Schram House Brewery for their openings this past week.

- Noted the Chaska Bash was on Friday and was a great celebration and fundraiser.
- Announced that Fishing with Friends is Saturday, June 1st from 9am to noon at the Chaska Event Center.
- Noted Southwest Christian is having their 18th Annual Golf Tournament on Monday, June 24th at the Chaska Town Course and that those interested should contact Leslie Robertson.
- Commented that May 6-10 is Teacher Appreciation Week.
- Noted that Southwest Transit could possibly lose funding due to bills in the State Legislature. Councilmember Bostrom commented that the loss of transportation could be devastating to the community.
- Inquired when Chipotle and Starbucks are going to open. City Administrator Podhradsky commented that it shouldn't be too far off.

Councilmember Grau:

- Noted that a small group of citizens attended his listening session a couple of weeks ago and that he plans to continue doing these.
- Noted Launch Ministry is having an informational session regarding the Hickory Street Project with proposed market-rate housing and homeless/transitional shelter will occur May 7th at 7pm at Crown of Glory.
- Began discussion with the Council regarding the City's ordinance on horse trail requirements.

City Administrator Podhradsky:

- Thanked all the Christmas in May volunteers.
- Noted in-person voting begins May 7, 2019 and that there are voting hours on Saturday, May 11 from 10am to 3pm.
- Noted discussion with the City of Carver regarding re-looking at how the Carver-Chaska Park & Rec Agreement will occur at a future date.

Mayor Windschitl:

- Noted Chaska Cubs had their lead-off party and how wonderful the levy project has been for their season.
- Commented that Pioneer Trail will be closed between 41 and Village for repairs Thursday and Friday May 9th and 10th.
- Noted there is a damaged power pole down by the river near the power plant and the trail will be closed as needed for pole repair.
- Commented that Fishing Opener is Saturday, May 11.

11. Adjourn

Motion by Councilmember Huang, second by Councilmember Hatfield to adjourn the meeting at 8:36 pm.
Motion carried.