



PLANNING COMMISSION STAFF REPORT

Proposed Townhomes

FROM: Dan Olson, City Planner

TO: Planning Commission (for April 10 Meeting)

DATE: April 4, 2023

RE: PUBLIC HEARING – Subdivision (preliminary plat) and Rezoning to Planned Development for proposed townhomes at 3401-3415 Douglas Drive North (Application Number 2023-03)

A. INTRODUCTION

Hampton Companies is proposing to purchase the vacant property at 3401-3415 Douglas Dr N., which is owned by the city's Economic Development Authority (EDA), and construct eight new townhome units. The property is zoned Medium Density Residential (R-2). The applicant is proposing to subdivide the property into nine lots, comprised of eight townhome lots and one common lot, and rezone it to Planned Development (R2 - PD).

Notice of the April 10 public hearing was published in the Sun Post on March 30, mailed to the same property owners, renters and commercial tenants who received the neighborhood notice (see attachment A), and posted to all Crystal neighborhoods on Nextdoor.

Staff Report Attachments:

- A. Site location and neighborhood notice mailing map
- B. Existing zoning map
- C. 2040 Comprehensive Plan planned land use map
- D. Applicant's project narrative
- E. Site plan (19 sheets)

Staff Report Organization

Section	Page Number(s)	Information Provided
B (Background)	Pages 2 - 3	<ul style="list-style-type: none"> Neighborhood open house Existing use Surrounding land uses Proposed use Conformance to Comprehensive Plan
C (Site Plan and Subdivision Elements)	Pages 3 - 6	<ul style="list-style-type: none"> Parcel area details Lot dimensions and building setbacks Site plan elements
D (Subdivision criteria)	Page 6	
E (Rezoning to R2-PD)	Pages 6 - 9	<ul style="list-style-type: none"> PD district development standards Requested flexibility in site design
F (Requested Action)	Pages 8 - 9	<ul style="list-style-type: none"> Requested Planning Commission action Approval conditions

B. BACKGROUND

Neighborhood Open House

The applicant held a neighborhood open house on March 28, 2023, which was attended by ten area residents, one Planning Commission member, and the city planner. The purpose of the open house was to provide information on the proposed project to nearby property owners. Attendees asked questions about the site plan layout and townhome features, landscaping, and timing of construction.

Existing Use

The site is vacant, but previously contained two commercial buildings: a gas service station at 3401 Douglas and a commercial building last occupied by a water conditioning contractor at 3415 Douglas. Both buildings were demolished in 2010.

Surrounding Land Uses

The following are the existing zoning districts and land uses surrounding Hampton's proposed site:

- North. Eight-unit townhome building zoned Medium Density Residential (R-2).
- East. Across Douglas Drive are single-family homes zoned R-1.
- West. Single-family home and two vacant lots zoned R-1 and an insurance office zoned R-2.
- South. Across 34th Avenue are single-family homes zoned R-1 and a real estate office zoned R-2.

Proposed Use

The applicant is proposing to construct two four-unit townhome buildings for a total of eight units. The EDA has received a Hennepin County grant to remove contaminated soils for the former gas station prior to the construction of the townhomes. The table below provides a description of notable townhome elements.

Project Element	Townhome description
Owned or rented	Once construction is complete, Hampton will determine if the market-rate townhomes will be owner-occupied or rented
Building height	2 story (25 feet in height)
Size of each unit	Approximately 700 SF per unit on the main floor and 1,100 SF on the upper floor (total of 1,800 SF per unit)
No. bedrooms & bathrooms	3 BR and 2½ BA per unit
Attached garage size	Approximately 400 SF
Basements	No basements (slab on grade)
Patios	Each unit will have a patio

Conformance to Comprehensive Plan

According to the city's 2040 Comprehensive Plan, the site is designated as medium density residential, which allows for a gross density range of 6-16 units per acre. "Gross" includes in the density calculation the street rights-of-way measured out to the centerline of both streets. In the case of 3401-3415 Douglas Dr N., gross density is calculated as follows:

30,470 sq. ft. Size of both lots as shown on the preliminary plat dated March 14, 2023.

+18,141 sq. ft. Douglas Drive N. and 34th Avenue N. rights-of-way to the centerline

= 48,611 sq. ft. Total area included in the density calculation

= 6,076 sq. ft. Gross area per unit (48,611 / 8 units)

There are 43,560 sq. ft. in one acre

43,560 / 6,076 = 7.2 units per gross acre which is between 6 and 16

The Comprehensive Plan also designates the property as a redevelopment area called "Area D". This area extends along Douglas Drive from 27th to 36th Avenues. The plan does not identify any specific redevelopment standards for Area D.

C. SITE PLAN AND SUBDIVISION ELEMENTS

The properties included in the Planned Development consists of two platted lots addressed as 3401 and 3415 Douglas Dr. N. The applicant is requesting to replat these lots into nine lots with each townhome on its own lot plus a shared common lot. The following are the notable site plan elements for the proposed townhome development:

Parcel Area Details

30, 470 sq. ft. (0.69 acres) - Total area to be replatted as follows:

North townhome building:

- 1,654 sq. ft. (0.038 acre) Lot 1, Block 1 (new 3415 Douglas Dr. N)
- 1,534 sq. ft. (0.035 acre) Lot 2, Block 1 (new 3413 Douglas Dr. N)
- 1,534 sq. ft. (0.035 acre) Lot 3, Block 1 (new 3411 Douglas Dr. N)
- 1,654 sq. ft. (0.038 acre) Lot 4, Block 1 (new 3409 Douglas Dr. N)

South townhome building:

- 1,654 sq. ft. (0.038 acre) Lot 1, Block 2 (new 3407 Douglas Dr. N)
- 1,534 sq. ft. (0.035 acre) Lot 2, Block 2 (new 3405 Douglas Dr. N)
- 1,534 sq. ft. (0.035 acre) Lot 3, Block 2 (new 3403 Douglas Dr. N)
- 1,654 sq. ft. (0.038 acre) Lot 4, Block 2 (new 3401 Douglas Dr. N)

Outlot A:

- Outlot A will be the common area owned by the homeowner’s association, will be 16,013 sq. ft (0.37 acres) in size, and will be addressed as 3417 Douglas Dr. N.

Right-of-way dedication:

- Since the property is adjacent to a County road (Douglas Dr. N), the County reviewed the preliminary plat and requested dedication of approximately 1,705 sq. ft. (0.039 acres) of additional right-of-way for potential future improvements to Douglas Drive.

Lot dimensions and Building Setbacks. The R2-PD zoning designation allows flexibility with site development standards such as lot dimensions and building setbacks. The following are the requirements under R-2 zoning and the proposed requirements under the R2-PD zoning classification.

Requirements under R-2 district	Proposed requirements for R2- PD district
Lot area: 10,000 sq. ft per lot	1,534 – 1,654 sq. ft. per townhome lot, 30,470 sq. ft for the site
Lot depth: 100 feet	61 feet for each townhome lot, 109 feet for the site
Lot width: 100 feet	25 – 27 feet per townhome lot, 243 feet for the site
Setbacks for each four-unit building:	
East (along Douglas Dr N): 30 feet	13 feet
South (along 34 th Ave N): 30 feet	23 feet
North: 30 feet	10 feet
West: 15 feet	47 feet
Side setback for townhome lot: 15 feet	0 feet (zero lot line)

The proposed townhomes are not located in drainage or utility easements. Outlot A is covered by a drainage and utility easement in its entirety.

Site Plan Elements

- Parking. Each townhome will have a 2-car garage attached to the back of the unit that will be accessed from 34th Avenue. In addition the site plan provides for nine surface parking spaces along the back property line that will provide for overflow or visitor parking. The parking lot meets UDC requirements for setbacks and parking space and aisle dimensions.
- Stormwater management and erosion control measures. The applicant has provided a stormwater management plan, which provides for a drainage swale along the north property line and for a trench drain in the driveway south of the parking lot. Both the swale and trench drain will connect to the city's stormwater mains. The grading and erosion control plans are subject to review and approval by the Bassett Creek Watershed Management Commission. This review and approval has been made a condition of approval of the rezoning to R2-PD. The percentage of impervious surface will be 68%. This complies with the maximum coverage of 75% in the underlying R-2 zoning district, and represents a reduction from the 82% impervious coverage of the previous use. During building construction the city will require erosion control techniques to be used on-site including silt fences, inlet protection, and rock construction entrances.
- Utilities. The proposed townhomes will connect with existing and proposed water and sanitary sewer mains. There will be two water connections; the re-use of an existing connection to Douglas Drive and a new connection to 34th Avenue. The two alternate sources of water will provide a looped system for the townhomes. Three existing overhead utility poles are located along the west side of the property, but two of the utility poles will be removed as they are no longer needed. The existing overhead utilities will be located in drainage and utility easements that are dedicated with the new lot subdivision plat. If those lines are relocated or extended, then the lines and extensions must be buried underground. New private utility services to the proposed building, such as Xcel Energy, Lumen, and Comcast, will be buried underground.
- Access and circulation. The city's Public Works department and the West Metro Fire Rescue District staff have reviewed this traffic circulation plan and found it adequate to meet vehicle movement into and within the site, including fire trucks. Each townhome unit will have an interior fire sprinkler system.
- Building elevations. The proposed major exterior building material is lap siding, with cultured stone as an accent material. These materials meet the city's requirements. A rendering of the proposed building is attachment E.
- Landscaping. The site plan calls for 12 new trees to be planted: "American elm", "princeton sentry gingko", "thornless honeylocust", "coffee tree", "swamp white oak", and "boulevard linden". The applicant proposes to plant nine varieties of shrubs, including those that will screen the proposed building foundation from street view.
- Screening. Ground mechanical equipment behind the townhomes will be screened with landscaping. Since each townhome unit will have their own trash and recycling containers, a central dumpster enclosure will not be needed.

- Exterior Lighting. The applicant has not yet submitted an exterior lighting plan, but is not proposing any light poles for the property. As a condition of rezoning approval, the applicant shall submit a plan for the exterior wall lighting that meets city requirements.
- Pedestrian connections. There is an existing sidewalk along Douglas Drive that allows for pedestrian connections to the proposed townhome entrances.
- Signs. The applicant is not proposing any signage for the property.
- Park dedication. Based on the former commercial use, the UDC would have required a park dedication fee of \$3,450. The fee for a residential use is \$8,000. The fee is calculated by subtracting what would have been due for a commercial use from the residential fee, for a total park dedication fee of \$4,550. This park dedication fee would be paid by the applicant prior to the release of the final plat by the city for recording at Hennepin County. Park dedication fees go into the Parks Capital Fund for park system improvements.

D. SUBDIVISION CRITERIA

The following are the relevant criteria for approval of subdivisions in city code section 510.25.

1. The proposed subdivision must be in compliance to the provisions of this UDC.

Findings: The proposed subdivision meets UDC requirements if rezoned from R-2 to R2-PD.

2. The proposed subdivision must be in accordance with the objectives of the city's comprehensive plan.

Findings: The proposed subdivision meets the density requirements of the medium density residential (MDR) land use category.

3. The physical characteristics of the site, including but not limited to, topography, vegetation, susceptibility to erosion and sedimentation, susceptibility to flooding, water storage and retention, must be such that the site is suitable for the type of development of uses contemplated.

Findings: The characteristics of the site are conducive to the construction of two new four-unit townhome buildings.

E. REZONING TO PLANNED DEVELOPMENT (R2 - PD)

The applicant is requesting that the property be rezoned to Planned Development (R2 - PD), which allows flexibility in zoning requirements in planning for a development to have an efficient and effective use of land, open space and public facilities. The underlying zoning for the property would be Medium Density Residential (R-2).

PD district development standards. There are two relevant development standards related to this proposed R2-PD rezoning:

1. Minimum site area. The proposed development is .69 acres in size. The minimum site area for a PD is 2 acres, but the UDC provides an exception to this requirement if at least one of three criteria are met. The relevant criteria that is met by this development is as follows:

Criteria: The property is located in a transitional area between different land use categories or it is located on an arterial street as defined in the Comprehensive Plan.

Staff response: **As described in section B of this staff report, the property is located in Area D, which is a redevelopment area comprised of a mixture of land uses and Douglas Drive is a minor arterial street.**

2. Recreational Use. A residential PD must provide a minimum of ten percent of the gross project area in private recreational uses for project residents, but the UDC provides for this requirement to be waived if the following criteria is met:

Criteria: The city council finds that adequate recreational opportunities are available sufficiently near the PD to make this requirement duplicative, or the PD is too small for this requirement to be feasible.

Staff response: **The property is too small for this requirement to be feasible. The property is within a half-mile of Bassett Creek Park and Valley Place Park.**

Requested flexibility in site design. As part of the PD rezoning, the applicant is requesting flexibility with the following site design requirements. Staff is supportive of these requests which provide a means to efficiently and effectively utilize a smaller property without negatively impacting adjacent uses.

Building setbacks. Below are the minimum required building setbacks in the R-2 district and the proposed setbacks in the R2-PD district. The west setback of 47 feet exceeds the required setback of 15 feet so flexibility is not requested for that setback.

Standard R-2	Proposed R2-PD (four-unit building):
South (34 th Ave N) = 30 feet	= 23 feet
East (Douglas Dr N) = 30 feet	= 13 feet
North = 30 feet	= 10 feet
Standard R-2:	Proposed R2-PD (townhome lots):
= 15 feet	= 0 feet (zero lot line)

Lot dimensions. Below are the minimum required lot dimensions in the R-2 district and the proposed dimensions in the R2- PD district.

Standard R-2	Proposed R2-PD
Lot area = 10,000 sq. ft	1,534 – 1,654 sq. ft per townhome lot, 30,470 sq. ft for the site
Lot depth = 100 feet	61 feet per townhome lot, 109 feet for the site
Lot width = 100 feet	25 - 27 feet per townhome lot, 243 feet for the site

F. REQUESTED ACTION

The Planning Commission is being asked to make a recommendation to the City Council to either deny or approve the subdivision and rezoning to Planned Development (R2-PD) for the proposed townhomes at 3401-3415 Douglas Drive North. This recommendation should include findings of fact either for or against the proposal. The Commission may reference the findings for approval in sections C, D, and E above. Staff recommends approval of the rezoning to Planned Development with the following conditions of approval:

1. Site Plan. The development shall be constructed according to the site plan in attachment E.
2. Building permit. The following are the requirements for building permit issuance:
 - a. Submittal deadline. The applicant shall submit the permit application for the townhomes by May 2, 2024 or submit a request for City Council approval of a one-year extension by April 12, 2024.
 - b. Building permit issuance. Before the permit is issued, the applicant shall:
 - 1) Receive approval of the erosion and grading plans by the Bassett Creek Watershed Management Commission.
 - 2) Sign a site improvement agreement with the city and provide an escrow to guarantee installation of the parking lot, trench drain, and landscaping plan.
 - 3) Submit an exterior lighting plan that meets UDC requirements.
 - 4) Receive approval by the City Council of the subdivision final plat and the easement vacation applications and then provide documentation that the plat and notice of completion for the easement vacation have been recorded at Hennepin County.
3. Park dedication fee. Before the final plat is released by the city for recording at Hennepin County, applicant shall pay the park dedication fee of \$4,550.
4. Overhead utilities. If utility lines are installed, relocated or extended, the lines shall be buried underground. New private utilities, such as Xcel Energy, Center Point Energy, or Comcast shall be buried underground.
5. Special provisions related to Medium Density Residential - Planned Development (R2-PD) rezoning. The rezoning to R2-PD implements the following special provisions in place of the standard R-2 zoning requirements:
 - a. For each four-unit building, the minimum building setbacks are reduced as follows:

• South (34 th Ave N.):	23 feet
• East (Douglas Drive N.):	13 feet
• North:	10 feet

For each townhome lot, the minimum side setback within each lot is reduced to 0 feet.

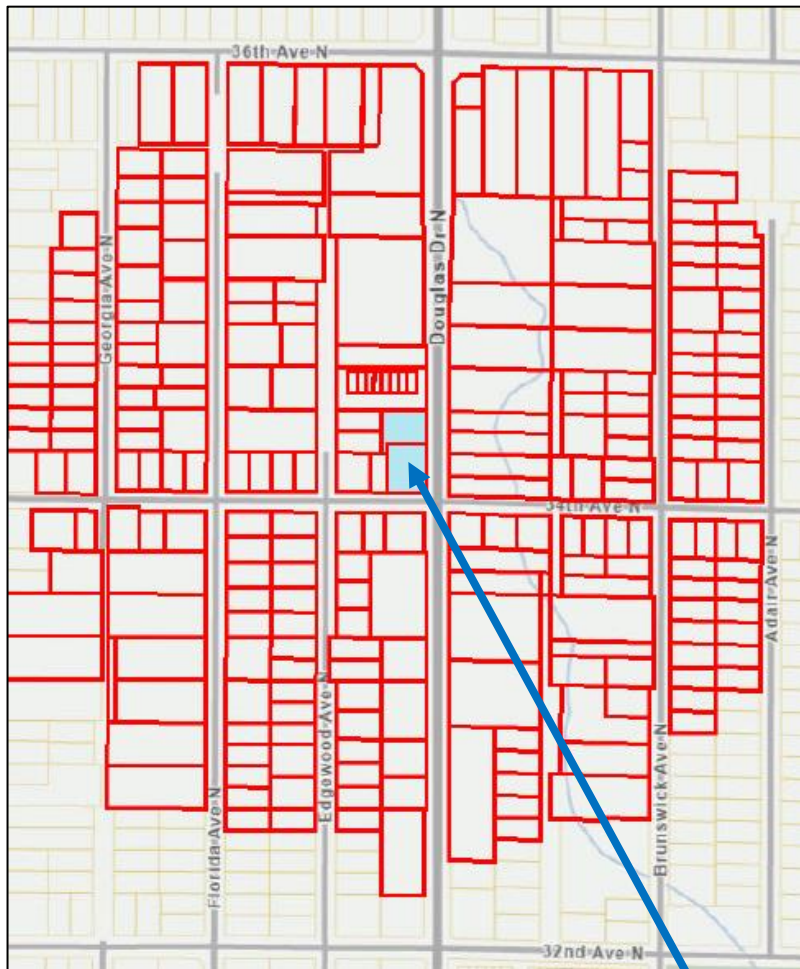
b. The minimum lot area, depth and width requirements are reduced as follows:

- Lot area: 1,534 – 1,654 sq. ft.
- Lot depth: 61 feet
- Lot width: 25-27 feet

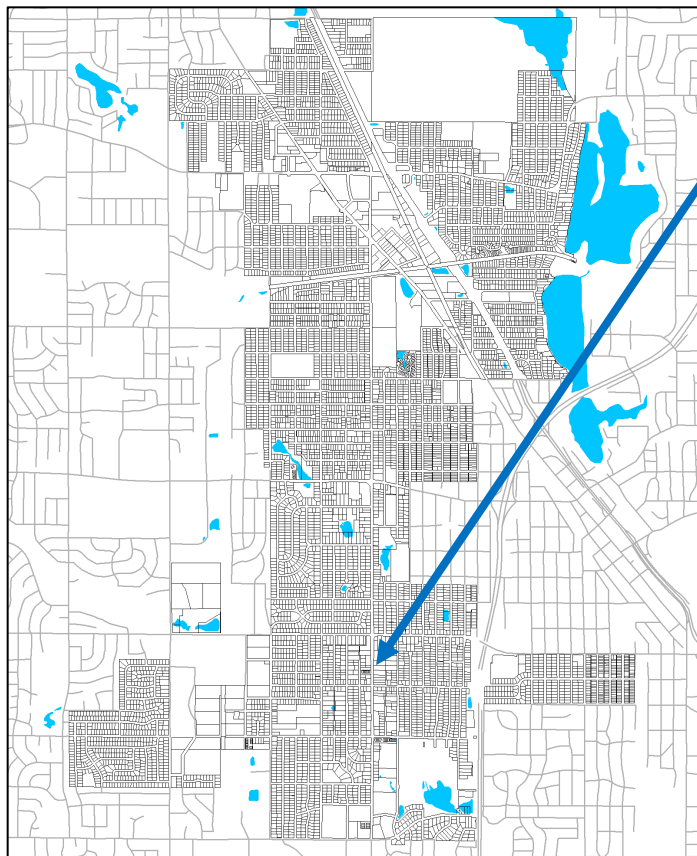
6. Compliance. Development of the plat is subject to the applicable requirements of the Crystal City Code. The applicant is required to comply with all applicable federal, state, and local laws, rules, regulations, and ordinances in developing the plat and is required to obtain such other permits and permissions as may be required.
7. No Waiver. Failure by the City to take action with respect to any violation of any condition, covenant or term of this plat approval shall not be deemed to be a waiver of such condition, covenant, or term or any subsequent violation of the same or any other condition, covenant, or term.
8. Binding Effect. The conditions placed on this preliminary approval are binding on the applicant, its successors and assigns, shall run with the property, and shall not in any way be affected by the subsequent sale, lease, or other change from current ownership. The obligations of the applicant under this approval shall also be the obligations of the current and any subsequent owners of the property.
9. Acceptance of Conditions. Utilization of the property for any of the uses allowed by this preliminary approval shall automatically be deemed acceptance of, and agreement to, the terms and conditions without qualification, reservation, or exception

City Council action of the subdivision (preliminary plat) and first reading of the ordinance rezoning the property to R2-PD is anticipated on March 21, 2023. If the Council approves first reading, then second reading of the rezoning ordinance would be considered at a future regularly scheduled Council meeting in which the final plat and easement vacation requests will also be considered.

Site Location and Neighborhood Open House Notice Mailing Map



Attachment A



3401-3415 Douglas Dr N



CITY of CRYSTAL

**4141 Douglas Dr. N.
Crystal MN 55422**

Zoning Map

Attachment B

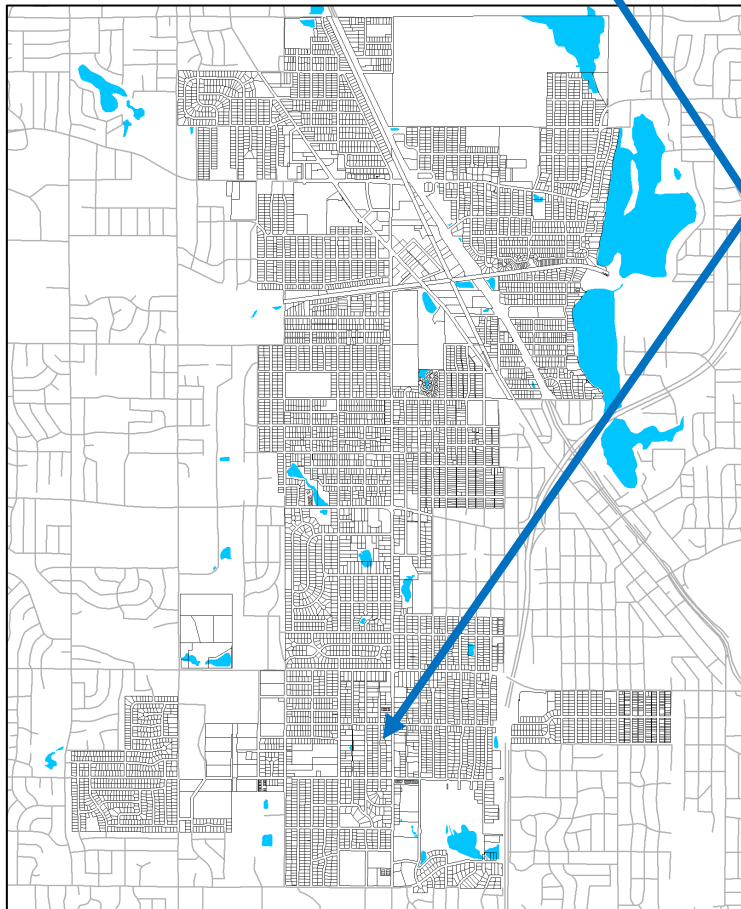


BASE ZONING DISTRICTS:

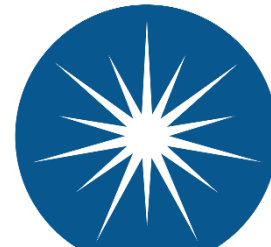
- R1 - LOW DENSITY RESIDENTIAL
- R2 - MEDIUM DENSITY RESIDENTIAL
- R3 - HIGH DENSITY RESIDENTIAL
- C - COMMERCIAL
- TC - TOWN CENTER
- I - INDUSTRIAL
- AP - AIRPORT DISTRICT

OVERLAY DISTRICTS:

- Planned Development Districts (PD)
- Town Center Planned Development (TC-PD)
- Properties Rezoned to TC-PD
- Floodplain Overlay District



3401-3415 Douglas Dr N

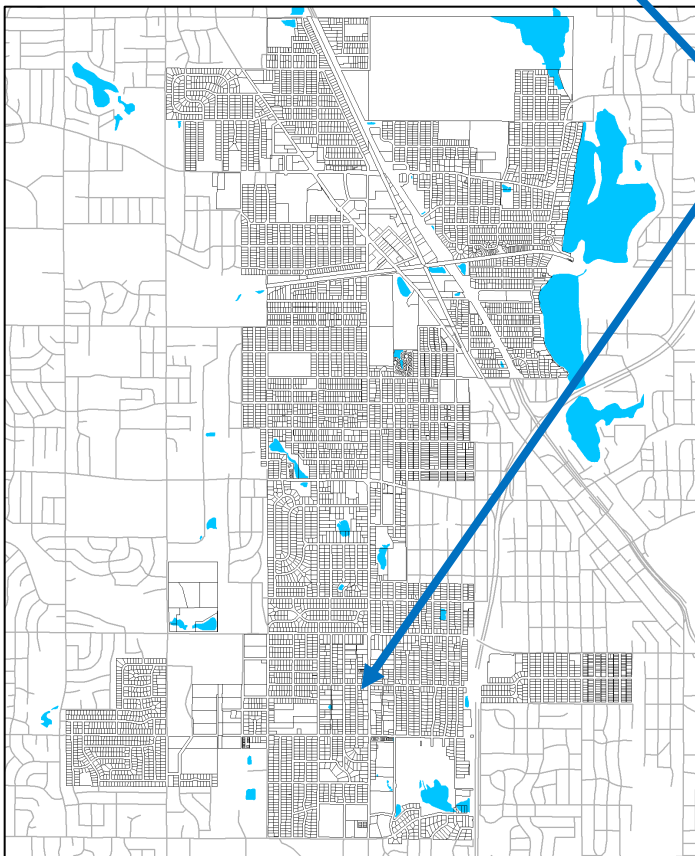
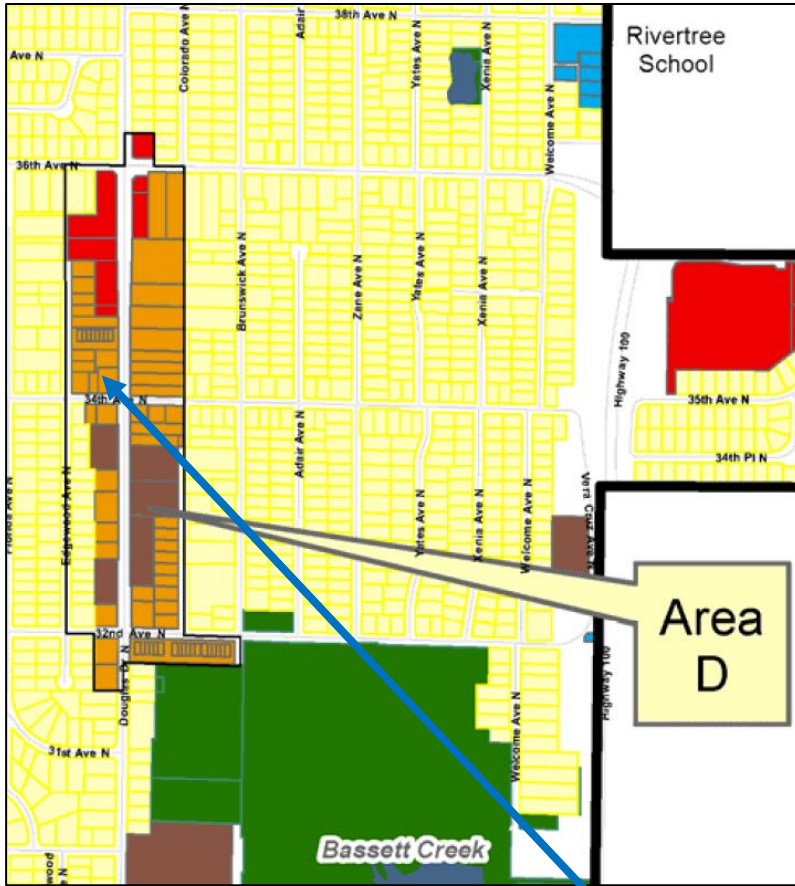


CITY of CRYSTAL

**4141 Douglas Dr. N.
Crystal MN 55422**

2040 Comprehensive Plan Map

Attachment C



3401-3415 Douglas Dr N



CITY of CRYSTAL

**4141 Douglas Dr. N.
Crystal MN 55422**

Hampton Companies, LLC
1824 Buerkle Road
White Bear Lake, MN 55110

Attachment D

PROJECT PROPOSAL: To Crystal Planning Commission and City Council

PROJECT NAME: Hampton addition of Crystal

PROPERTY ADDRESS: 3401-3415 Douglas Drive

APPLICANT: Hampton Companies, LLC
1824 Buerkle Road
White Bear Lake, MN 55110

DESCRIPTION OF PROPOSED DEVELOPMENT:

Hampton Companies is proposing to develop an 8 unit townhome development. Each unit will have 3 bedrooms and 3 bathrooms. They will be 2 story units. Each will have its own 2 car garage with additional off-street parking provided. Each unit will have a rear patio.

Land use Description:	Total Land Size:	.7 Acres-Approx.
	Building Size Each:	1,864 Sq. Ft.
	Occupancy:	(2) 4-unit townhome buildings

Architectural Design: The building will combine stone, LP Smartside siding materials, Gable roof details and architectural shingles.

PROJECT REQUESTS:

Rezoning from R-2 to Planned Development
Subdivision of lots
Final Plat
Vacate existing easements.

CONCLUSION:

Thank you for your time to review our proposal.

As we work thru the grading plan, special attention will be paid to the drainage and excavation plan to assure that the drainage of this site does not disturb the neighborhood.

By approving this project, the city is gaining an attractive, tax paying properties to the community in an otherwise idle property.

We look forward to continuing to work with the City staff, Planning Commission and City Council during the review and approval process for this application. Please contact me with any questions you have on any item as I would be more than happy to discuss it in further detail.

Sincerely,

Dan Brown
Hampton Companies, LLC

PRELIMINARY PLAT: HAMPTON ADDITION

DOUGLAS DRIVE TOWNHOMES

PERLICK

TEMP

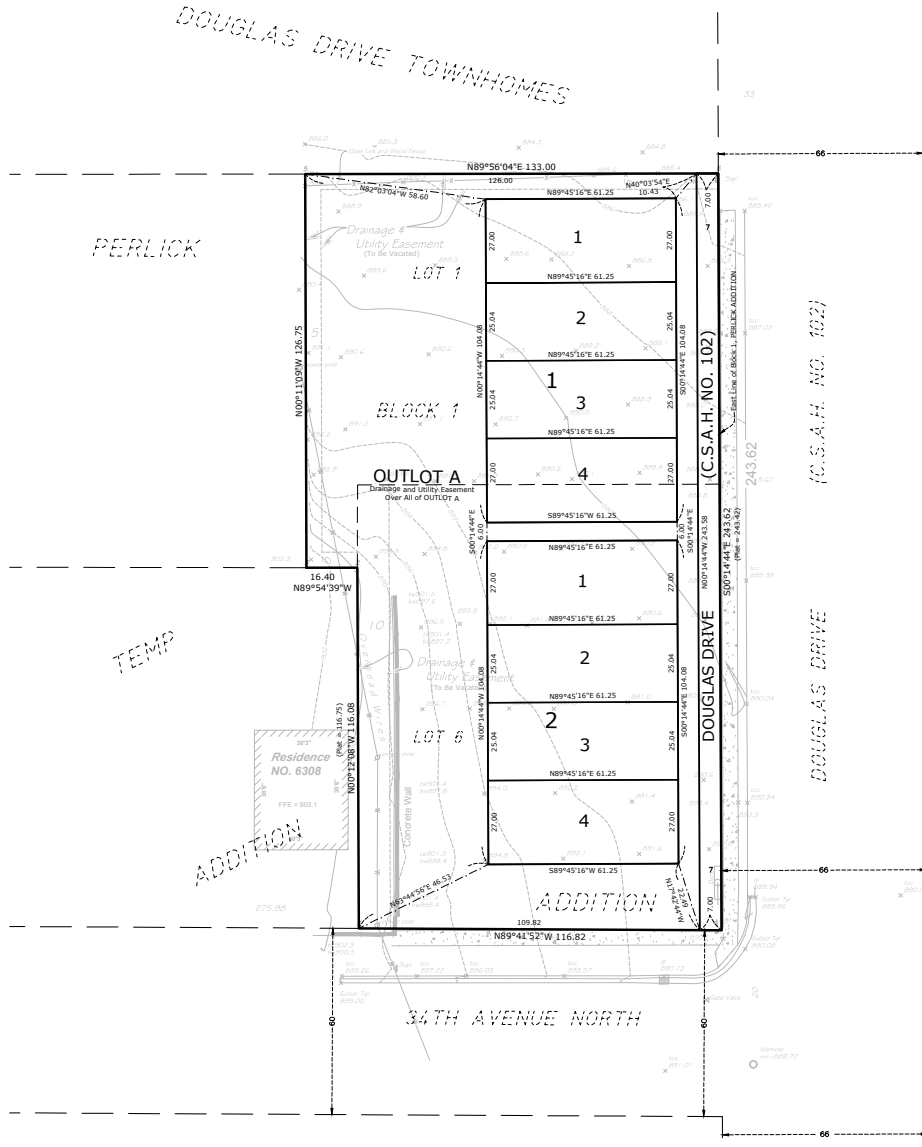
ADDITION

34TH AVENUE NORTH

DOUGLAS DRIVE (C.S.A.H. NO. 102)

DOUGLAS DRIVE (C.S.A.H. NO. 102)

DOUGLAS DRIVE



PRELIMINARY PLAT GENERAL NOTES

PROPERTY DESCRIPTION:
 Lot 1, Block 1, PERLICK ADDITION, Hennepin County, Minnesota.
 AND
 Lot 6, Block 1, PERLICK ADDITION, Hennepin County, Minnesota.

Please note that this Preliminary Plat was prepared without the benefit of a commitment for title insurance. The description above is per Surveyors Certificate of Existing Conditions prepared by Demarc Land Surveying and Engineering, dated April 21, 2023, provided to us by the client. There may be easements or other matters of record we are unaware of and thus not shown hereon.

DATE OF PREPARATION:
 03-14-2023

Please note that the background survey information, including the benchmark, is per Surveyors Certificate of Existing Conditions prepared by Demarc Land Surveying and Engineering, dated April 21, 2023, provided to us by the client.

APPLICANT:
 Hampton Companies
 Dan Brown
 651-295-2429
 1824 Buerkle Rd, White Bear Lake, MN 55110

BENCHMARKS:
 The benchmark is the top nut of a fire hydrant located in the northwest quadrant of the intersection of Douglas Drive N and 34th Avenue N.
 Elevation=893.08 feet (Datum not provided)

AREAS:
 Block 1
 Proposed Lot 1 = 1.654 +/- Sq. Ft. or 0.038 +/- Acres
 Proposed Lot 2 = 1.534 +/- Sq. Ft. or 0.035 +/- Acres
 Proposed Lot 3 = 1.534 +/- Sq. Ft. or 0.035 +/- Acres
 Proposed Lot 4 = 1.654 +/- Sq. Ft. or 0.038 +/- Acres
 Block 2
 Proposed Lot 1 = 1.654 +/- Sq. Ft. or 0.038 +/- Acres
 Proposed Lot 2 = 1.534 +/- Sq. Ft. or 0.035 +/- Acres
 Proposed Lot 3 = 1.534 +/- Sq. Ft. or 0.035 +/- Acres
 Proposed Lot 4 = 1.654 +/- Sq. Ft. or 0.038 +/- Acres

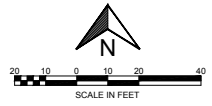
Proposed OUTLOT A = 16,013 +/- Sq. Ft. or 0.368 +/- Acres
 Proposed Dedicated Right of Way = 1,705 +/- Sq. Ft. or 0.039 +/- Acres

Total Property Area = 30.470 +/- Sq. Ft. or 0.700 Acres

Please note per comments from the City of Crystal that no part of the buildings including eaves and foundations, may be located within OUTLOT A.

FLOOD ZONE:
 This property is contained in Zone X (area determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map, Community Panel No. 2703C0231F, effective date of November 4, 2016.

Rory L. Synstallen
 Minnesota License No. 44565
 rory@civilsitegroup.com



Linetype & Symbol Legend

	ELECTRIC LINE		AIR CONDITIONER		UTILITY VAULT
	ELECTRIC LINE (RECORD)		CABLE TV BOX		UTILITY MANHOLE
	FIBER/COMM. LINE		ELECTRIC MANHOLE		ELECTRICAL OUTLET
	FIBER/COMM. LINE (RECORD)		ELECTRIC TRANSFORMER		HAND HOLE
	GASMAIN		ELECTRICAL METER		BOLLARD
	GASMAIN (RECORD)		FIBER/COMM. MANHOLE		FLAG POLE
	OVERHEAD UTILITIES		POWER POLE		FUEL TANK
	SANITARY SEWER		GUY WIRE		HANDICAP SYMBOL
	SANITARY SEWER (RECORD)		GAS METER		MAIL BOX
	STORM SEWER		GAS MANHOLE		SIGN
	STORM SEWER (RECORD)		GAS VALVE		CONFEDEROUS TREE
	TELEPHONE LINE		ROOF DRAIN		DECIDUOUS TREE
	TELEPHONE LINE (RECORD)		SEWER CLEAN OUT		SOIL BORING
	WATERMAIN		SANITARY MANHOLE		FOUND IRON MONUMENT
	WATERMAIN (RECORD)		STORM MANHOLE		SET IRON MONUMENT
	CHAULNK FENCELINE		CATCH BASIN		CAST IRON MONUMENT
	GUARDRAIL		FLARED END SECTION		
	ACCESS RESTRICTION		TELEPHONE BOX		
	CONCRETE SURFACE		FLARED END SECTION		
	PAVER SURFACE		TELEPHONE MANHOLE		
	BITUMINOUS SURFACE		TRAFFIC SIGNAL		
	GRAVEL/LANDSCAPE SURFACE		HYDRANT		
			FIRE CONNECTION		
			POST INDICATOR VALVE		
			WATER MANHOLE		
			WATER VALVE		
			WELL		

PROJECT:
 Hampton Addition
 3401-3415 Douglas Drive, Crystal, Hennepin County, Minnesota 55422

CLIENT:
 Hampton Companies
 1824 Buerkle Rd, White Bear Lake, MN 55110

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

RORY L. SYNSTALLAN
 DATE: 3-14-2023 LICENSE NO.: 44565

QA/QC

FIELD CREW	
DRAWN BY	BSW
REVIEWED BY	CJ
UPDATED BY	



REVISION SUMMARY

DATE	DESCRIPTION
3-28-2023	Civ. Comments

PROJECT NO.: 23036

PRELIMINARY PLAT

V2.0

DOUGLAS DRIVE TOWNHOMES

CRYSTAL, MINNESOTA

ISSUED FOR: CITY RESUBMITTAL



**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
1624 BUERKLE RD, WHITE BEAR LAKE, MN

HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE JURISDICTION OF THE BOARD OF ENGINEERS, MINNESOTA.
[Signature]
JOB: DANIELA C. CONJAN
DATE: 02/29/23 LICENSE NO.: 69923

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
02/29/23	CITY RESUBMITTAL

TITLE SHEET
C0.0

ARCHITECT:

THE ADKINS ASSOCIATION INC. ARCHITECTS
2586 SEVENTH AVE EAST
SAINT PAUL, MN 55109
CONTACT: MICHAEL W. OSTLIE
651-224-1358

DEVELOPER / PROPERTY OWNER:

HAMPTON COMPANIES
1824 BUERKLE RD
WHITE BEAR LAKE, MN 55110
CONTACT: DAN BROWN
651-295-2459

ENGINEER / LANDSCAPE ARCHITECT:

CIVIL SITE GROUP
5000 GLENWOOD AVE
GOLDEN VALLEY, MN 55422
CONTACT: ROBBIE LATTA
652-250-2200

SURVEYOR:

DEMARC
LAND SURVEYING & ENGINEERING
7801 73RD AVE N
MINNEAPOLIS, MN 55428
CONTACT: GREGORY R PRASCH
763-561-3263

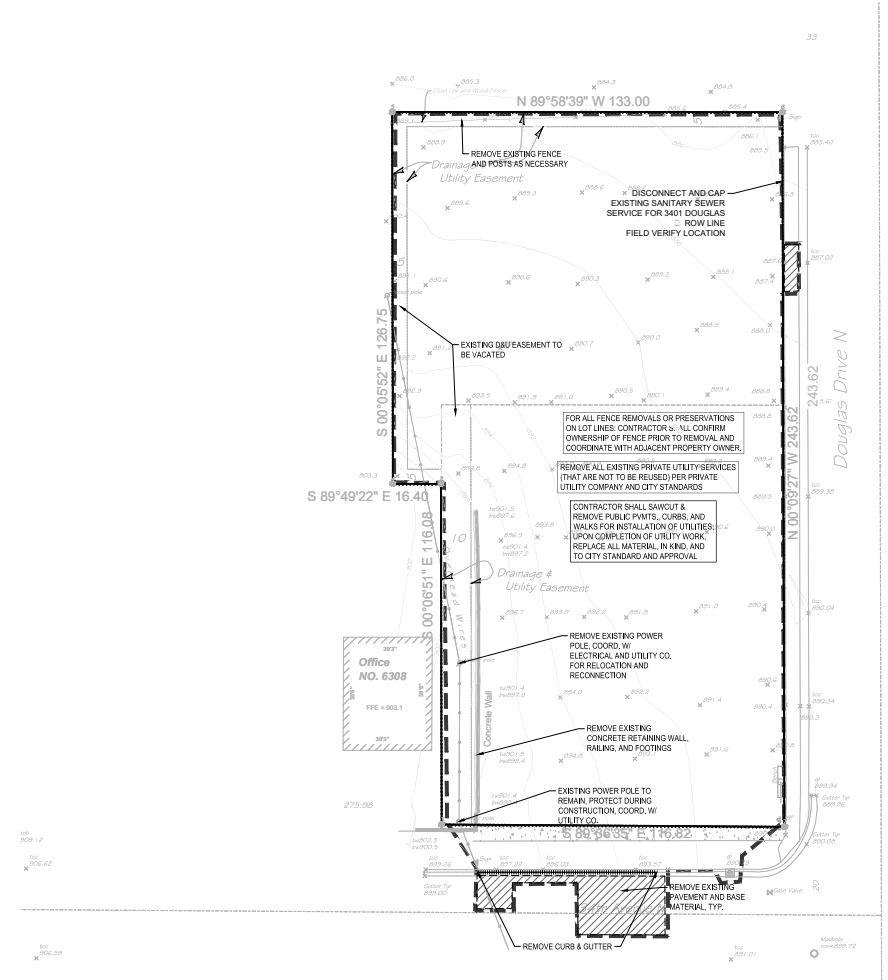
ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "Gopher State One Call" (855-464-0002 OR 609-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



**Know what's below.
Call before you dig.**

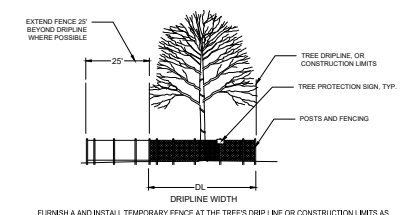
SHEET INDEX

SHEET NUMBER	SHEET TITLE
C0.0	TITLE SHEET
C1.0	REMOVALS PLAN
C2.0	SITE PLAN
C3.0	GRADING PLAN
C4.0	UTILITY PLAN
C5.0	CIVIL DETAILS
C5.1	CIVIL DETAILS
C5.2	CIVIL DETAILS
L1.0	LANDSCAPE PLAN NOTES & DETAILS
SW1.1	SWPPP - EXISTING CONDITIONS
SW1.2	SWPPP - PROPOSED CONDITIONS
SW1.2	SWPPP - DETAILS
SW1.3	SWPPP - NARRATIVE



REMOVAL NOTES:

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "Gopher State One Call" (851-454-0002 OR 800-253-1166) FOR UTILITY LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. SEE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLAN FOR CONSTRUCTION STORM WATER MANAGEMENT PLAN.
3. REMOVAL OF MATERIALS NOTED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH MNDOT, STATE AND LOCAL REGULATIONS.
4. REMOVAL OF PRIVATE UTILITIES SHALL BE COORDINATED WITH UTILITY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
5. EXISTING PAVEMENTS SHALL BE SAWCUT IN LOCATIONS AS SHOWN ON THE DRAWINGS OR THE NEAREST JOINT FOR PROPOSED PAVEMENT CONNECTIONS.
6. REMOVED MATERIALS SHALL BE DISPOSED OF TO A LEGAL OFF-SITE LOCATION AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
7. ABANDON, REMOVAL, CONNECTION, AND PROTECTION NOTES SHOWN ON THE DRAWINGS ARE APPROXIMATE, COORDINATE WITH PROPOSED PLANS.
8. EXISTING ON-SITE FEATURES NOT NOTED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONTRACT.
9. PROPERTY LINES SHALL BE CONSIDERED GENERAL CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED ON THE DRAWINGS. WORK WITHIN THE GENERAL CONSTRUCTION LIMITS SHALL INCLUDE STAGING, DEMOLITION AND CLEAN-UP OPERATIONS AS WELL AS CONSTRUCTION SHOWN ON THE DRAWINGS.
10. MINOR WORK OUTSIDE OF THE GENERAL CONSTRUCTION LIMITS SHALL BE ALLOWED AS SHOWN ON THE PLAN AND PER CITY REQUIREMENTS. FOR ANY WORK ON ADJACENT PRIVATE PROPERTY, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER PRIOR TO ANY WORK.
11. DAMAGE BEYOND THE PROPERTY LIMITS CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT OR IN ACCORDANCE WITH THE CITY.
12. PROPOSED WORK (BUILDING AND CIVIL) SHALL NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
13. SITE SECURITY MAY BE NECESSARY AND PROVIDED IN A MANNER TO PROHIBIT VANDALISM, AND THEFT, DURING AND AFTER NORMAL WORK HOURS, THROUGHOUT THE DURATION OF THE CONTRACT. SECURITY MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY.
14. VEHICULAR ACCESS TO THE SITE SHALL BE MAINTAINED FOR DELIVERY AND INSPECTION ACCESS DURING NORMAL OPERATING HOURS, AT NO POINT THROUGHOUT THE DURATION OF THE CONTRACT SHALL CIRCULATION OF ADJACENT STREETS BE BLOCKED WITHOUT APPROVAL BY THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
15. ALL TRAFFIC CONTROLS SHALL BE PROVIDED AND ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CITY. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
16. SHORING FOR BUILDING EXCAVATION MAY BE USED AT THE DISCRETION OF THE CONTRACTOR AND AS APPROVED BY THE OWNERS REPRESENTATIVE AND THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
17. STAGING, DEMOLITION, AND CLEAN-UP AREAS SHALL BE WITHIN THE PROPERTY LIMITS AS SHOWN ON THE DRAWINGS AND MAINTAINED IN A MANNER AS REQUIRED BY THE CITY.
18. ALL EXISTING SITE TRAFFIC/REGULATORY SIGNAGE TO BE INVENTORED AND IF REMOVED FOR CONSTRUCTION SHALL BE RETURNED TO LGS.
19. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "Gopher State One Call" (851-454-0002 OR 800-253-1166) FOR UTILITY LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SHOWN ON PLAN. PRIOR TO ANY CONSTRUCTION. WHERE POSSIBLE PLACE FENCE 2' BEYOND DRIP LINE. PLACE TREE PROTECTION SIGN ON POSTS. ONE PER INDIVIDUAL TREE. FACING CONSTRUCTION ACTIVITY, OR ONE EVERY 100' LF ALONG A GROVE OR MULTI-TREE PROTECTION AREA.

1 TREE PROTECTION NOTES

REMOVALS LEGEND:

- EX. 1/20 CONTOUR ELEVATION INTERVAL
- REMOVAL OF PAVEMENT AND ALL BASE MATERIAL, INCLUDING BIT., CONC., AND GRAVEL, PAVTS.
- REMOVAL OF STRUCTURE INCLUDING ALL FOOTINGS AND FOUNDATIONS.
- REMOVE CURB AND GUTTER, IF IN RIGHT-OF-WAY. COORDINATE WITH LOCAL GOVERNING UNIT.
- TREE PROTECTION
- TREE REMOVAL - INCLUDING ROOTS AND STUMPS

CITY OF CRYSTAL REMOVAL NOTES:

1. RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

EROSION CONTROL NOTES:
SEE SWPPP ON SHEETS SW1.0 - SW1.5



PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
524 MARLBOROUGH AVENUE SUITE 600 LAKE MINNAPOLIS, MN

PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER OR ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.
Jordan M. Conjan
DATE: 02/28/23 LICENSE NO. 28822

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
03/28/23	CITY PRELIMINARY
REVISION SUMMARY	
DATE	DESCRIPTION



**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
15th FLOOR 650 W. WATKINS BLVD. LAKE MINNEAPOLIS, MN 55425

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 OR ARCHITECT WITH THE STATE OF MINNESOTA.
Christopher L. Cerbin
CHRISTOPHER L. CERBIN
DATE: 02/29/23 LICENSE NO. 69932

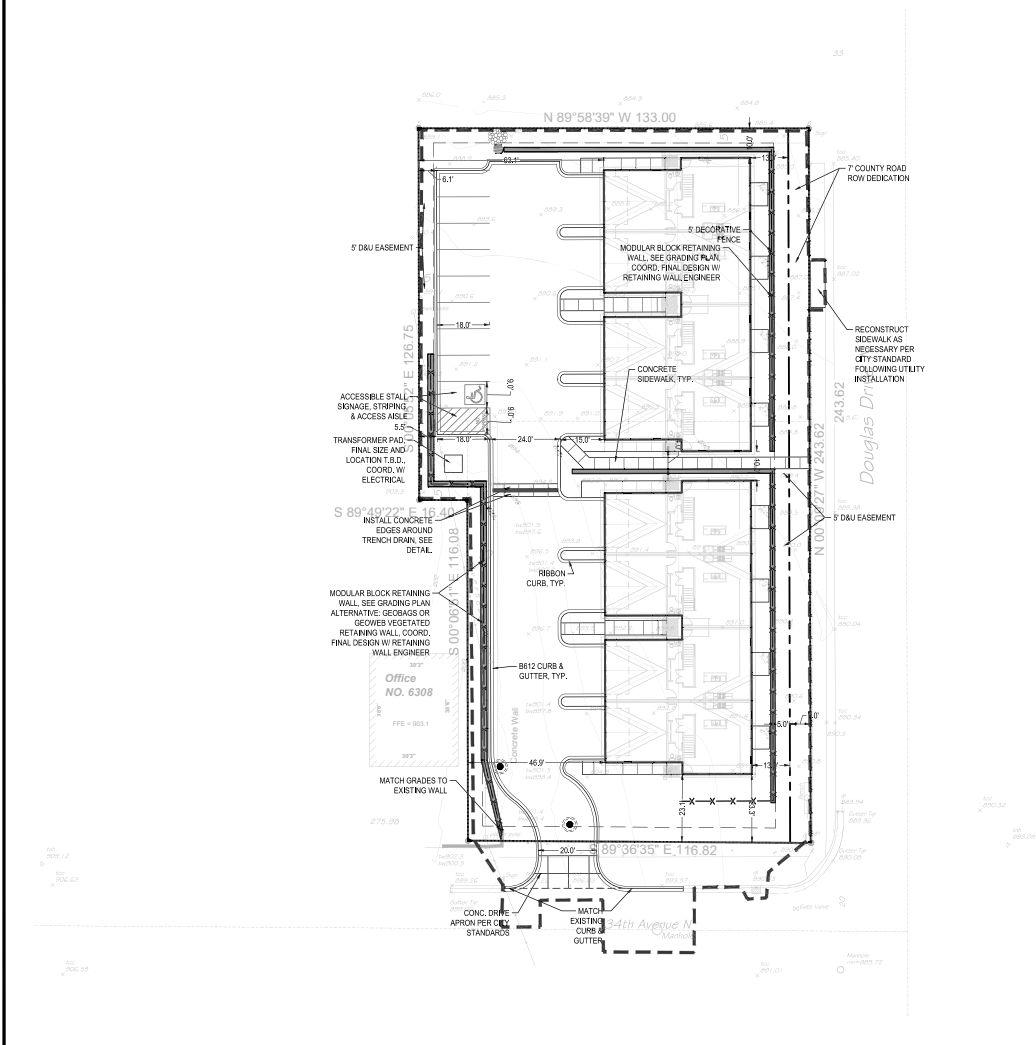
ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
03/09/2023	CITY SUBMITTAL

DRAWN BY: MD, MH REVIEWED BY: RL, JL
PROJECT NUMBER: 2305
REVISION SUMMARY
DATE DESCRIPTION

SITE LAYOUT NOTES:

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "OOPIER STATE ONE CALL" (855-454-0002 OR 800-255-1161) FOR UTILITY LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
4. THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
5. CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS & ELEVATIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
6. LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
7. CURB DIMENSIONS SHOWN ARE TO FACE OF CURB, BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
8. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING: FURNISHINGS, PAVEMENTS, WALLS, RAILING, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
9. FINGERSTRIP CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
10. CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY A.S.A. OR LOCAL GOVERNING BODIES.
11. SEE SITE PLAN FOR CURB AND GUTTER TYPE, TAPER BETWEEN CURB TYPES-SEE DETAIL.
12. ALL CURB RADIUS ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
13. CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
14. FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
15. PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
16. ALL PARKING LOT PAINT STRIPING TO BE WHITE, 4" WIDE TYP.
17. BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
18. ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.



CITY OF CRYSTAL SITE SPECIFIC NOTES:

1. RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

OPERATIONAL NOTES:

SNOW REMOVAL:	ALL SNOW SHALL BE STORED ON-SITE OUTSIDE PARKING LOT. WHEN FULL, REMOVAL CO. SHALL REMOVE EXCESS OR-SITE TRASH SHALL BE PLACED IN EXTERIOR TRASH AREA AND REMOVED BY COMMERCIAL CO. WEEKLY.
DELIVERIES:	DELIVERIES SHALL OCCUR AT THE FRONT DOOR VIA STANDARD COMMERCIAL DELIVERY VEHICLES (UPS, FED-EX, USPS).

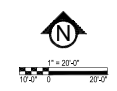
SITE AREA TABLE:

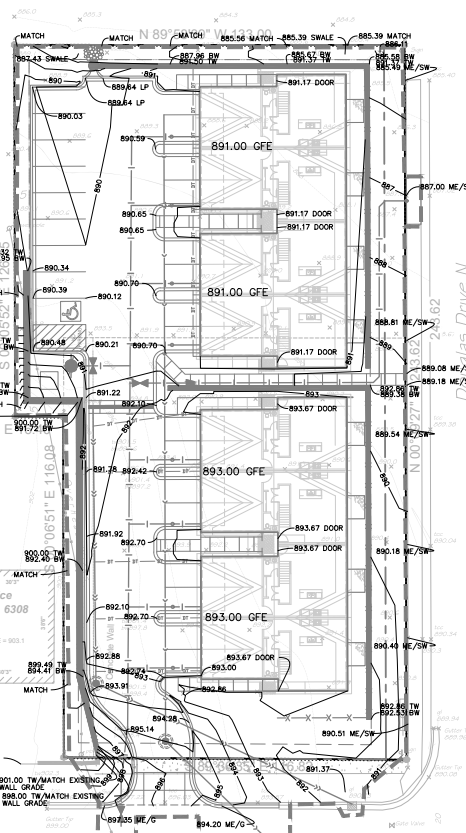
SITE AREA CALCULATIONS			
Zoning	EXISTING CONDITION	PROPOSED CONDITION	PUD
BUILDING COVERAGE	0 SF 0.0%	9,129 SF 31.7%	
ALL PAVEMENTS	0 SF 0.0%	11,497 SF 40.0%	
ALL NON-PAVEMENTS	30,470 SF 100.0%	8,139 SF 28.3%	
ROW DEDICATION		1,705 SF	
TOTAL SITE AREA	30,470 SF 100.0%	28,765 SF 100.0%	

IMPERVIOUS SURFACE	EXISTING CONDITION	PROPOSED CONDITION	DIFFERENCE (EX. VS PROP.)
	0 SF 0.0%	20,626 SF 67.7%	20,626 SF 67.7%

SITE PLAN LEGEND:

- [Symbol] LIGHT DUTY BITUMINOUS PAVEMENT (IF APPLICABLE). SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH. SEE DETAIL.
- [Symbol] CONCRETE PAVEMENT (IF APPLICABLE) AS SPECIFIED PAD OR WALK. SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTH. WITHIN ROW SEE CITY DETAIL. WITHIN PRIVATE PROPERTY SEE CSG DETAIL.
- [Symbol] PROPERTY LINE
- [Symbol] CONSTRUCTION LIMITS
- [Symbol] CURB AND GUTTER-SEE NOTES (T.O.) TOP OUT GUTTER WHERE APPLICABLE-SEE PLAN
- [Symbol] TRAFFIC: DIRECTIONAL ARROW PAVEMENT MARKINGS
- [Symbol] SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED. HC = ACCESSIBLE SIGN NP = NO PARKING FIRE LANE ST = STOP CP = CONTRACT CAR PARKING ONLY ACCESSIBILITY ARROW - IF APPLICABLE DO NOT PAINT.





GENERAL GRADING NOTES:

- CONTRACTOR SHALL VERIFY ALL BUILDING ELEVATIONS, (FFE, LFE, GFE), PRIOR TO CONSTRUCTION BY CROSS CHECKING WITH ARCHITECTURAL, STRUCTURAL AND CIVIL ELEVATIONS FOR EQUIVALENT "100" ELEVATIONS. THIS MUST BE DONE PRIOR TO EXCAVATION AND INSTALLATION OF ANY FOOTING MATERIALS. VERIFICATION OF THIS COORDINATION SHALL BE CONFIRMED IN WRITING BY CIVIL, SURVEYOR, ARCHITECTURAL, STRUCTURAL AND CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "OOPIER STATE ONE CALL" (651-454-0002 OR 800-252-1186) FOR UTILITY LOCATIONS. 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE SITE PLAN FOR HORIZONTAL LAYOUT AND GENERAL GRADING NOTES.
- THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION, EXCAVATION, EMBANKMENT, ETC. IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AND INSPECTIONS WITH THE SOILS ENGINEER.
- ANY ELEMENTS OF AN EARTH RETENTION SYSTEM AND RELATED EXCAVATIONS THAT FALL WITHIN THE PUBLIC RIGHT OF WAY WILL REQUIRE A RIGHT OF WAY EXCAVATION PERMIT. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THIS PERMIT PRIOR TO CONSTRUCTION IF APPLICABLE.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "OOPIER STATE ONE CALL" (651-454-0002 OR 800-252-1186) FOR UTILITY LOCATIONS. 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
- PROPOSED SPOT GRADES ARE FLOWLINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
- GRADES OF WALLS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE NOTED.
- PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:1.
- PROPOSED RETAINING WALLS, FREESTANDING WALLS, OR COMBINATION OF WALL TYPES GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED AND ENGINEERED BY A REGISTERED RETAINING WALL ENGINEER. DESIGN DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SEEDING ACTIVITIES.
- IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN AREA SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
- EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESEEDING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS WHERE TURF IS TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES, RESEED TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES.
- FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACENT TRANSITION AREAS. PROVIDE A SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES, AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BEEN RUPTURED BY TRAFFIC OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
- PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED HAYDEM WALK 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 OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENTION SYSTEMS.
- TOLERANCES
 - THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PREScribed ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
 - THE STREET OR PARKING AREA 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.
 - AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
 - TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.
- MAINTENANCE
 - THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
 - CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES, DURING THE CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD. ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEED AND MULCHED.
 - WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESEED, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

PRELIMINARY:
NOT FOR CONSTRUCTION

DOUGLAS DRIVE TOWNHOMES
 3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
 1543 HUBBARD DRIVE, MINNETONKA, MN 55345

MINNESOTA
JOBANNAS W. CEMIAN
 DATE: 02/29/23 LICENSE NO. 28982

DATE	DESCRIPTION
10/20/22	CITY SUBMITTAL

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION

REVISION SUMMARY

DATE	DESCRIPTION

CITY OF CRYSTAL GRADING NOTES:
 1. RESERVED FOR CITY SPECIFIC GRADING NOTES.

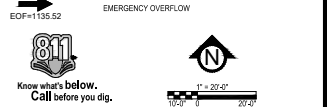
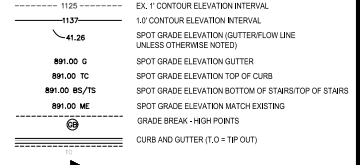
EROSION CONTROL NOTES:
 PER GEOTECHNICAL REPORT BY XXXX, INC., DATED XXX-XX-XX GROUNDWATER WAS OBSERVED AT ELEVATIONS RANGING FROM XXX.XX TO XXX.XX

GROUNDWATER INFORMATION:
 PER GEOTECHNICAL REPORT BY XXXX, INC., DATED XXX-XX-XX GROUNDWATER WAS OBSERVED AT ELEVATIONS RANGING FROM XXX.XX TO XXX.XX

THE BORINGS & GROUNDWATER ARE AS FOLLOWS:
 SB-1 XXX.XX
 SB-2 XXX.XX
 SB-3 XXX.XX
 SB-4 XXX.XX

PROPOSED FOOTING DRAIN TILE INVERT ELEVATION = XXX.XX

GRADING PLAN LEGEND:



GRADING PLAN
C3.0

GENERAL UTILITY NOTES:

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "Gopher State One Call" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
4. UTILITY INSTALLATION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION" AND "SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), AND SHALL CONFORM WITH THE REQUIREMENTS OF THE CITY AND THE PROJECT SPECIFICATIONS.
5. CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND REUSED OR PLACED AT THE DIRECTION OF THE OWNER.
6. ALL WATER PIPE SHALL BE CLASS 2 DUCTILE IRON PIPE (DIP) AWWA C151, AWWA B16.4, AWWA C110, AWWA C153 UNLESS OTHERWISE NOTED.
7. ALL SANITARY SEWER SHALL BE SDR 26 POLYVINYL CHLORIDE (PVC) ASTM D3034 & F797, OR SCH 40 ASTM D1785, 2065, ASTM F794, 1989 UNLESS OTHERWISE NOTED.
8. ALL STORM SEWER PIPE SHALL BE HDPE ASTM F714 & F2306 WITH ASTM D3212 SPEC FITTINGS UNLESS OTHERWISE NOTED.
9. PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
10. UTILITIES ON THE PLAN ARE SHOWN TO WITHIN 5' OF THE BUILDING FOOTPRINT. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR THE FINAL CONNECTION TO BUILDING LINES, COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS.
11. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE "SUMPED" 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE "SUMPED" 0.15 FEET PER DETAILS. BIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT "SUMPED" ELEVATIONS.
12. ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND CURB UNLESS OTHERWISE NOTED.
13. HYDRANT TYPE, VALVE, AND CONNECTION SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. HYDRANT EXTENSIONS ARE INCIDENTAL.
14. A MINIMUM OF 10 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
15. A MINIMUM OF 18" PILES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
16. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
17. CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
18. COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
19. COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
20. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNS, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
21. ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
22. CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
23. CONTRACTOR SHALL COORDINATE CONNECTION OF IRRIGATION SERVICE TO UTILITIES. COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES NECESSARY AS TO NOT IMPACT INSTALLATION OF UTILITIES.
24. CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
25. ALL JOINTS AND CONNECTIONS IN STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT, APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, OR OTHER STRUCTURES.
26. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MN RULES, CHAPTER 4714, SECTION 1109.0.
27. FOR ALL SITES LOCATED IN CLAY SOIL AREAS, DRAIN TILE MUST BE INSTALLED AT ALL LOW POINT CATCH BASINS IN EACH DIRECTION. SEE PLAN AND DETAIL. INSTALL LOW POINT DRAIN TILE PER PLANS AND GEOTECHNICAL REPORT RECOMMENDATIONS AND REQUIREMENTS.

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
 3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422

HAMPTON COMPANIES
 1631 MARSHALL RD. WYTHE BEACH, VA 24591

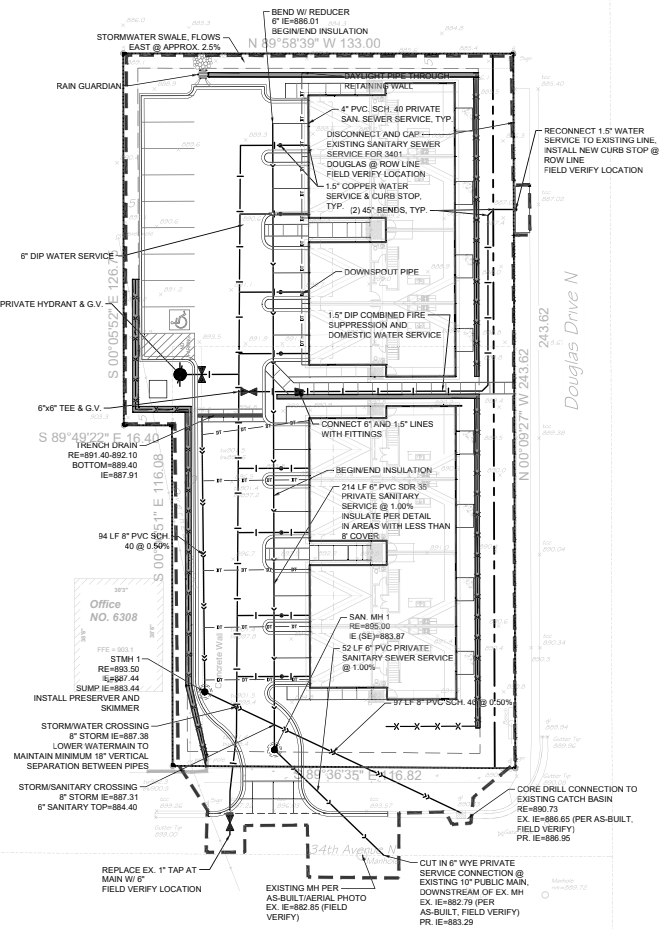
I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE PROVISIONS OF THE MINNESOTA ENGINEERING ACT OF 1927.

JOB: BANA / L. CEBARIAN
 DATE: 02/29/23 LICENSE NO. 89923

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
03/09/23	CITY SUBMITTAL
REVISION SUMMARY	
DATE	DESCRIPTION

UTILITY PLAN

C4.0



CITY OF CRYSTAL UTILITY NOTES:

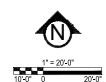
1. RESERVED FOR CITY SPECIFIC UTILITY NOTES.

UTILITY LEGEND:

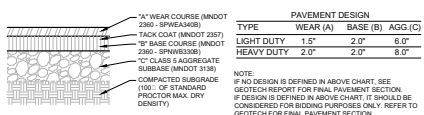
- MANHOLE
- CATCH BASIN
- GATE VALVE AND VALVE BOX
- PROPOSED FIRE HYDRANT
- WATER MAIN
- SANITARY SEWER
- STORM SEWER
- FES AND RP RAP



Know what's below.
 Call before you dig.

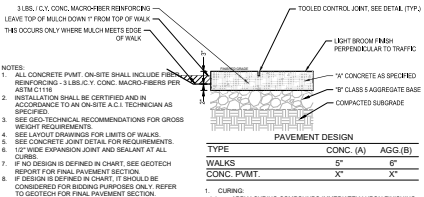


1" = 20'-0"
 12" 0 20'



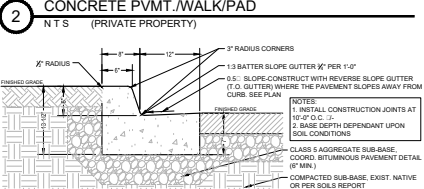
1 BITUMINOUS PAVEMENT - ALL TYPES

NTS



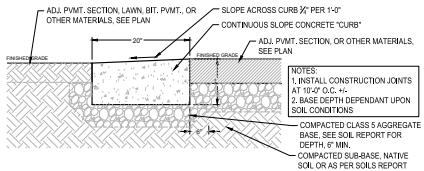
2 CONCRETE PAVMENT/WALK/PAD

NTS (PRIVATE PROPERTY)



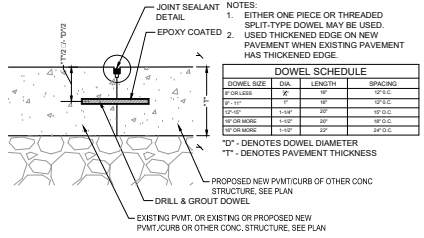
3 B-612 CONCRETE CURB AND GUTTER

NTS



4 RIBBON CURB

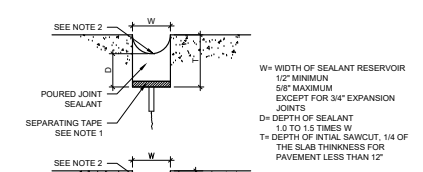
NTS



5 DOWELED JOINT BETWEEN TWO PAVEMENTS

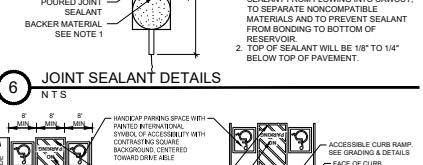
NTS

GENERAL DETAILS NOTES:
 ALL CONCRETE CURBS & ADJACENT CONCRETE FLAT WORK SHALL BE DOWELED PER DETAIL.
 ALL CONCRETE FLAT WORK SHALL HAVE WELDED WIRE MESH.
 CONTRACTOR SHALL REVIEW ALL CIVIL AND ARCHITECTURAL DETAILS PRIOR TO WORK. ANY REDUNDANT, CONTRADICTORY OR CONFLICTING INFORMATION PRESENTED IN ANY PLAN OR DETAIL, THROUGHOUT THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT AND CIVIL ENGINEER AND RESOLVED PRIOR TO WORK COMMENCING.



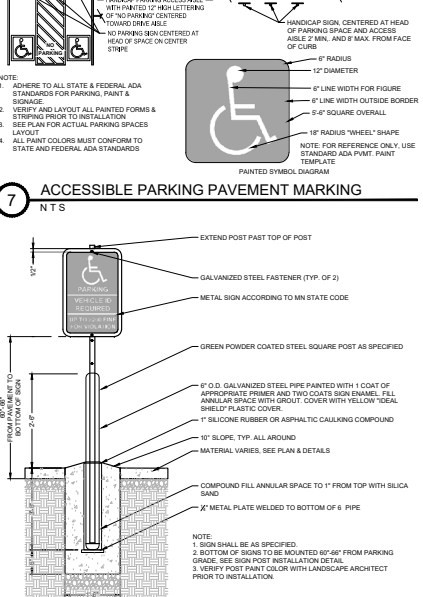
6 JOINT SEALANT DETAILS

NTS



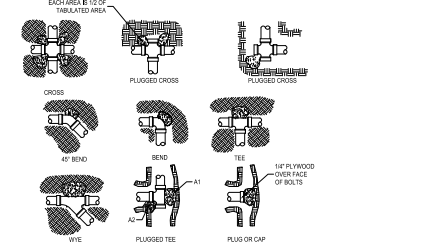
7 ACCESSIBLE PARKING PAVEMENT MARKING

NTS



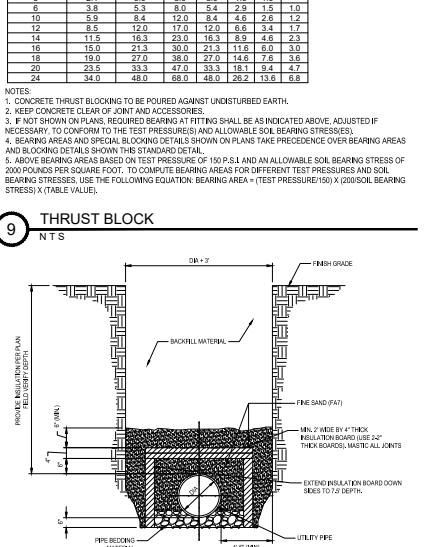
8 ACCESSIBLE SIGN AND POST

NTS



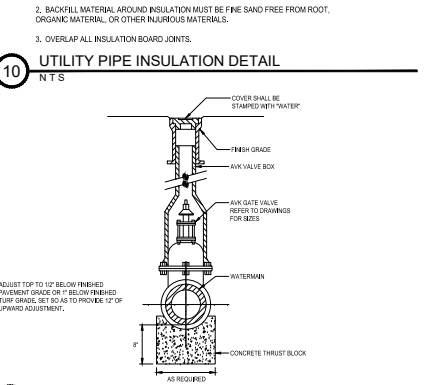
9 THRUST BLOCK

NTS



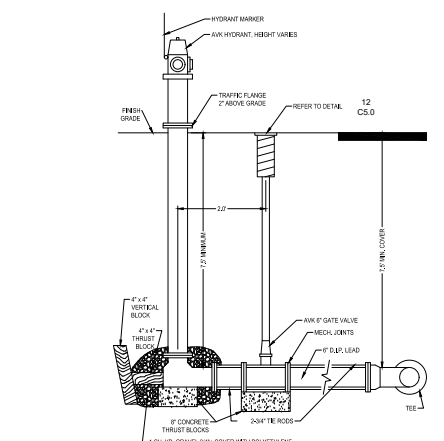
10 UTILITY PIPE INSULATION DETAIL

NTS



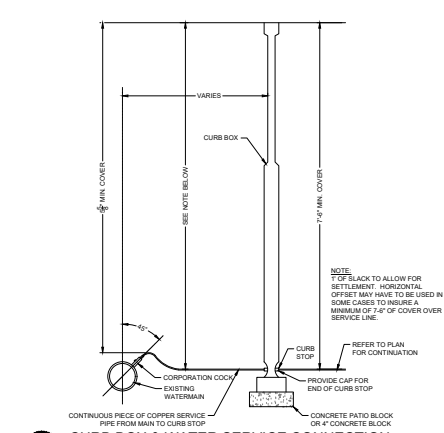
11 AVK GATE VALVE BOX

NTS



12 AVK FIRE HYDRANT

NTS



13 CURB BOX & WATER SERVICE CONNECTION

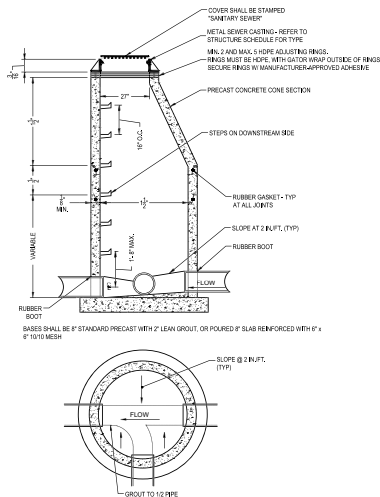
NTS

PRELIMINARY:
NOT FOR CONSTRUCTION

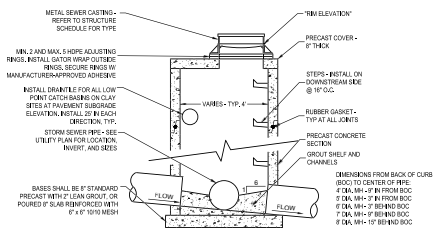
DOUGLAS DRIVE TOWNHOMES
 3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
 500 MARLBOROUGH AVENUE SUITE 500 LAKE MINNEAPOLIS, MN

PROJECT: **DOUGLAS DRIVE TOWNHOMES**
 PREPARED BY: ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALY LICENSED PROFESSIONAL ENGINEER OR ARCHITECT UNDER THE BOARD OF ENGINEERS & ARCHITECTS, MINNESOTA.
 DATE: **02/29/23** LICENSE NO.: **68882**
JORDAN M. LEBLANC
 ISSUE/SUBMITTAL SUMMARY
 DATE DESCRIPTION
 10/26/22 CIVIL SUBMITTAL
 REVISION SUMMARY
 DATE DESCRIPTION

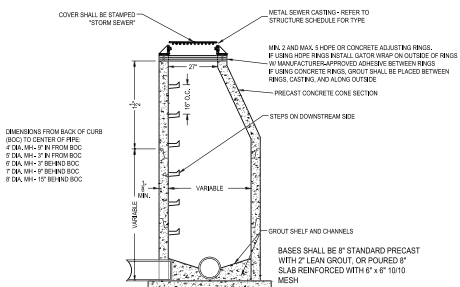
DRAWN BY: MD, MN REVIEWED BY: RL, IA
 PROJECT NUMBER: **2305**



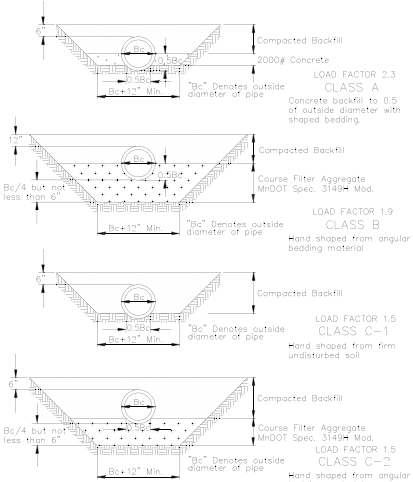
1 SANITARY SEWER MANHOLE
N T S



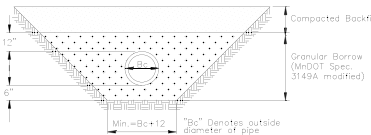
2 CATCH BASIN
N T S



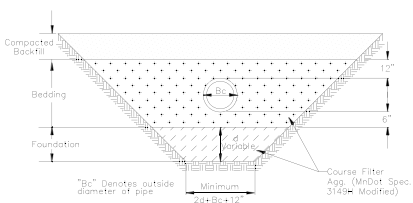
3 STORM MANHOLE
N T S



4 PIPE BEDDING - RCP & DIP
N T S

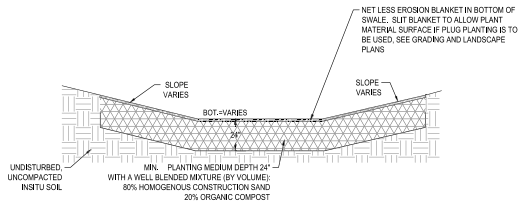


PIPE FOUNDATION & BEDDING IN GOOD SOILS

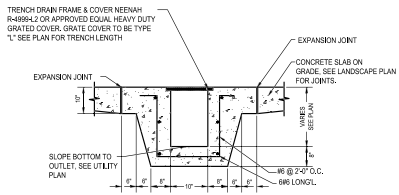


PIPE FOUNDATION & BEDDING IN POOR SOILS

5 PIPE BEDDING - PVC
N T S



6 SWALE - CROSS SECTION
N T S



7 TRENCH DRAIN
N T S

GENERAL DETAILS NOTES:

- ALL CONCRETE CURBS & ADJACENT CONCRETE FLAT WORK SHALL BE DOWELED PER DETAIL.
- ALL CONCRETE FLAT WORK SHALL HAVE WELDED WIRE MESH.
- CONTRACTOR SHALL REVIEW ALL CIVIL AND ARCHITECTURAL DETAILS PRIOR TO WORK. ANY REDUNDANT, CONTRADICTION OR CONFLICTING INFORMATION PRESENTED IN ANY PLAN OR DETAIL THROUGHOUT THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT AND CIVIL ENGINEER AND RESOLVED PRIOR TO WORK COMMENCING.

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
101 MAIN STREET, SUITE 201, LAKE MINNEAPOLIS, MN 55424

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 MINNESOTA ENGINEERING BOARD.

MINNESOTA
[Signature]
JORBANKA L. CERNIANN
DATE: 05/29/23 LICENSE NO. 69923

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
05/29/23	CITY PRESENTATION

DRAWN BY: MD, MH REVIEWED BY: RL, JL
PROJECT NUMBER: 2305

REVISION SUMMARY	
DATE	DESCRIPTION

**PRELIMINARY:
 NOT FOR
 CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
 3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
 100 W. MARSHALL RD. WINTER LAKE, FLA 32909

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.

Robert J. Conjan
 ROBERT J. CONJAN
 DATE: 02/29/23 LICENSE NO. 68892

DATE	DESCRIPTION
02/29/23	DATE SUBMITTED
	DATE REVISION
	REVISION SUMMARY
	DATE DESCRIPTION

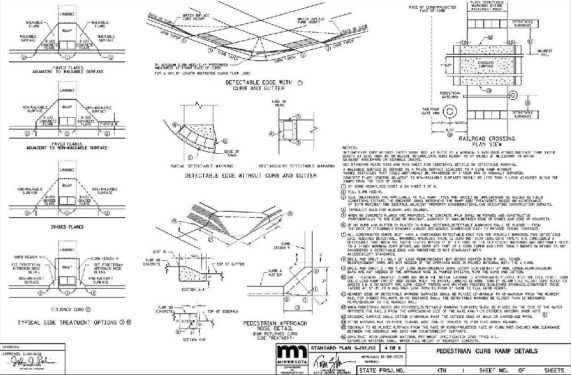
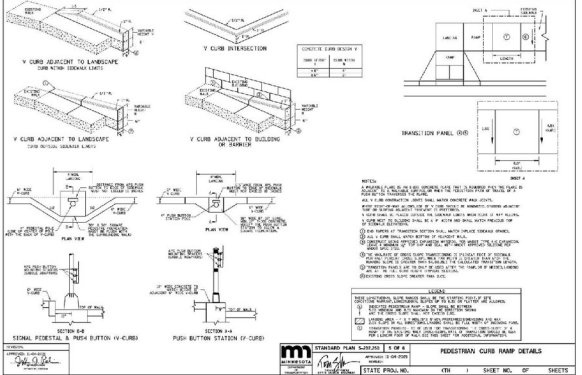
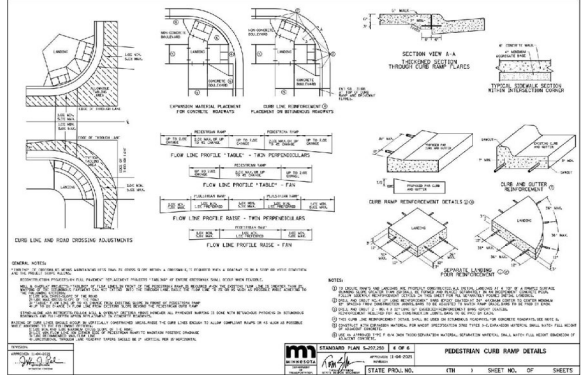
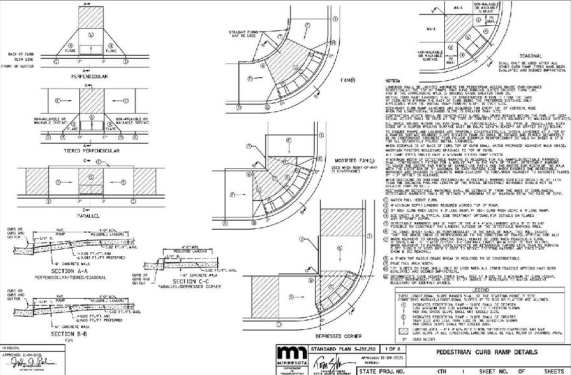
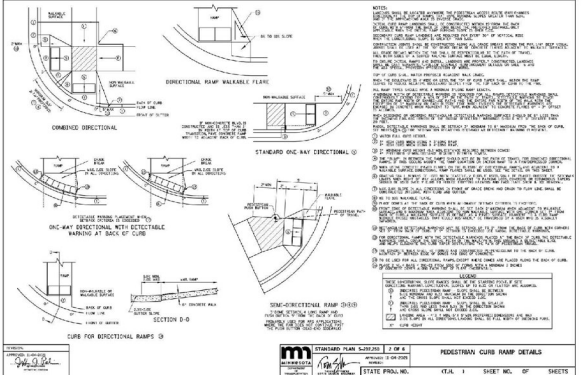
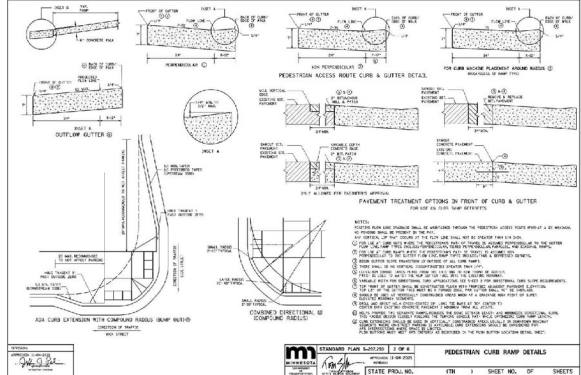
ISSUE/SUBMITTAL SUMMARY

DRAWN BY: M.S. M1 REVIEWED BY: R.L.S.
 PROJECT NUMBER: 2305

REVISION SUMMARY

CIVIL DETAILS

C5.2



PRELIMINARY NOT FOR CONSTRUCTION

DOUGLAS DRIVE TOWNHOMES 3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422 HAMPTON COMPANIES

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 IN THE STATE OF MINNESOTA

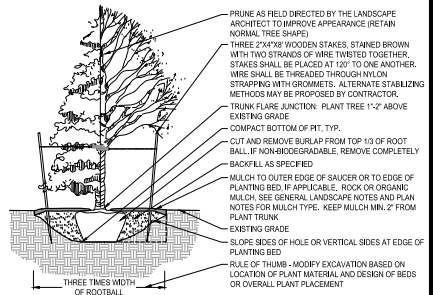
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LANDSCAPE PLAN

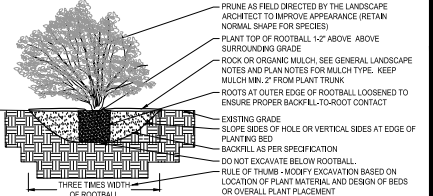
L1.0

LANDSCAPE NOTES:

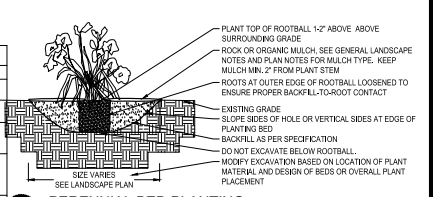
- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACT 'GOPHER STATE ONE CALL' (651-454-0002 OR 800-252-1168) FOR UTILITY LOCATIONS. 8 HOURS PRIOR TO CONSTRUCTION... 2. WHERE SHOWN, SHRUB & PERENNIAL BEDS SHALL BE MULCHED WITH 4" DEPTH (MINIMUM AFTER INSTALLATION) AND/OR TOP DRESSING OPERATIONS...



2 DECIDUOUS & CONIFEROUS TREE PLANTING NTS



3 DECIDUOUS & CONIFEROUS SHRUB PLANTING NTS



4 PERENNIAL BED PLANTING NTS

PLANT SCHEDULE

Table with columns: TREES, QTY, COMMON / BOTANICAL NAME, CONT, NATIVE PLANTS, POLLINATOR FRIENDLY. Lists items like Princeton Sentry, Little Quince, etc.

Table with columns: SHRUBS, QTY, COMMON / BOTANICAL NAME, SIZE, NATIVE PLANTS, POLLINATOR FRIENDLY. Lists items like Blueberry, Juniper, etc.

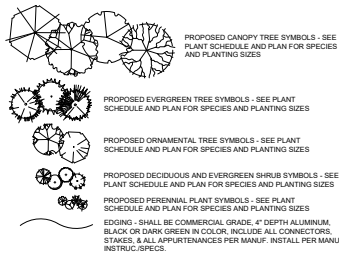
Table with columns: GRASSES, QTY, COMMON / BOTANICAL NAME, SIZE, NATIVE PLANTS, POLLINATOR FRIENDLY. Lists items like Blue Bluestem Grass, Little Bluestem Grass, etc.

Table with columns: PERENNIALS, QTY, COMMON / BOTANICAL NAME, SIZE, NATIVE PLANTS, POLLINATOR FRIENDLY. Lists items like Summer Breeze, Montigomer, etc.

IRRIGATION NOTES:

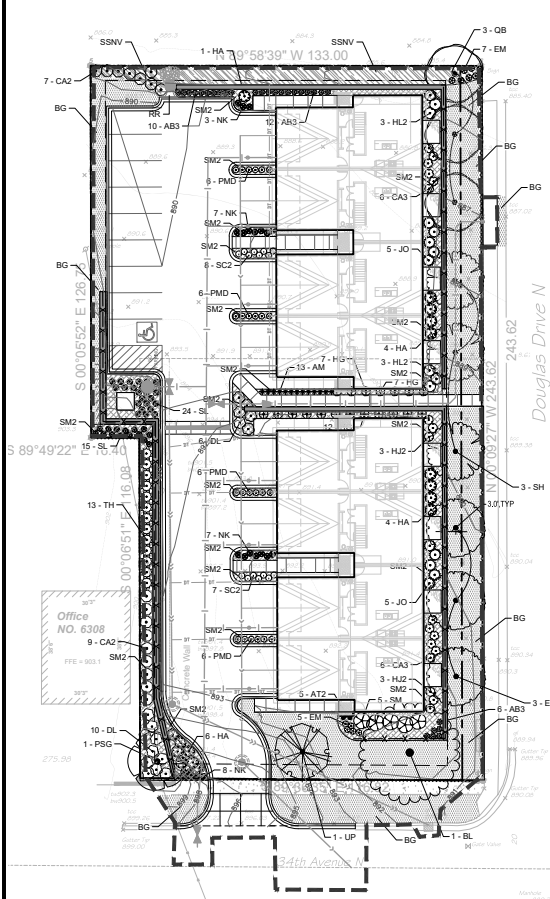
- 1. ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL... 2. SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS...

LEGEND



PLANT SCHEDULE

Table with columns: GROUND COVERS, CODE, COMMON / BOTANICAL NAME, SIZE, Seed Mix, Mulch, Sod. Lists items like SSVN, RR, SMZ, BG.



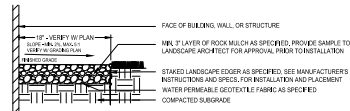
Required Landscape, Street Frontage, Trees Required, Trees Provided. SEE SHEET L1.1 FOR PLANTING SCHEDULE.

MULCH SCHEDULE table with columns: AREA, MULCH TYPE, EDGING, FABRIC, REMARKS. Lists items like Trees, Planting Beds, Native Seed Areas.

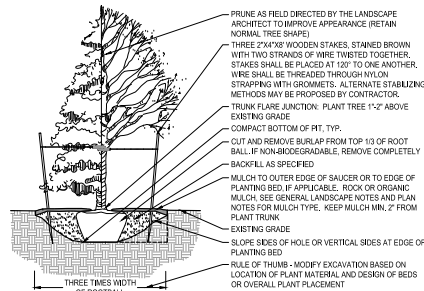


Know what's below. Call before you dig.

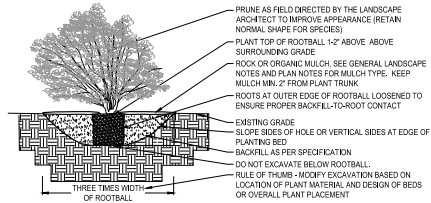




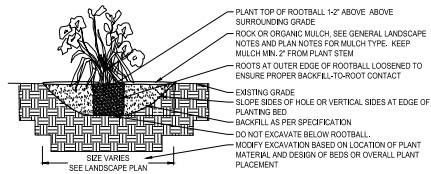
1 AGGREGATE MAINTENANCE STRIP
N T S



2 DECIDUOUS & CONIFEROUS TREE PLANTING
N T S



3 DECIDUOUS & CONIFEROUS SHRUB PLANTING
N T S



4 PERENNIAL BED PLANTING
N T S

IRRIGATION NOTES:

- ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION INSTALLATION. ANY DAMAGES TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE CONTRACTOR.
- SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
- CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED ELECTRICAL SERVICE AND METERING FACILITIES.
- IRRIGATION WATER LINE CONNECTION SIZE IS 1/2" AT BUILDING. VERIFY WITH MECHANICAL PLANS/COVERAGE.
- ALL MAIN LINES SHALL BE 1" BELOW FINISHED GRADE.
- ALL LATERAL LINES SHALL BE 12" BELOW FINISHED GRADE.
- ALL EXPOSED PVC RIEERS, IF ANY, SHALL BE GRAY IN COLOR.
- CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
- CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "EULED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
- FABRICATE ALL PIPE TO MANUFACTURER'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF CONNECTION.
- BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
- ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.
- GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE.
- IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.
- CONTROL WIRES: 14 GAUGE DIRECT BURIAL, SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPACERS AND SPACE ONLY AT VALVE AND BALL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER, LABEL OR COLOR CODE ALL WIRES.
- AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.
- ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.
- USE SCREENS ON ALL HEADS.
- A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.
- ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
- ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" FINEST GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTEND 3' BEYOND PERIMETER OF VALVE BOX.
- THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.

LEGEND

	SHREDED CYPRESS MULCH. SAMPLES REQUIRED PROVIDE EDGING AS SHOWN ON PLAN
	ROCK MULCH/RAP. SAMPLES REQUIRED PROVIDE EDGING AS SHOWN ON PLAN
	LAWN - SOD
	SEED TYPE 1. MNDOT 34-262 WET PRAIRIE. PER MNDOT SEEDING MANUAL SPECIFICATIONS (2014)
	SEED TYPE 2. MNDOT 34-221 DRY PRAIRIE. PER MNDOT SEEDING MANUAL SPECIFICATIONS (2014)
	1' DIA. ROCK MAINTENANCE STRIP OVER FILTER FABRIC. SAMPLES REQUIRED. PROVIDE EDGING AS SHOWN ON PLAN
	GEOTEXTILE (ADD TO SEED MIX HATCH)



PROPOSED CANOPY TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES



PROPOSED EVERGREEN TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES



PROPOSED ORNAMENTAL TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES



PROPOSED DECIDUOUS AND EVERGREEN SHRUB SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES



PROPOSED PERENNIAL PLANT SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES



EDGING
DECORATIVE BOULDERS (ROUNDED & BLOCK STYLE), 18"-30" DIA.



Know what's below.
Call before you dig.



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 PROVISIONS OF THE ENGINEERING BOARD ACT, CHAPTER 164.00, MINNESOTA.

JORBAN/WAL/CE/1291
DATE: 02/29/23 LICENSE NO. 28622

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
02/29/23	DT1 SUBMITTAL

DESIGNED BY: M.D. MI REVIEWED BY: R.L. A.
PROJECT NUMBER: 2305

REVISION SUMMARY

DATE	DESCRIPTION

**PRELIMINARY:
 NOT FOR
 CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
 3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
1541 MARSHALL RD. WHITE EARL LAKE, MN

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 IN THE STATE OF MINNESOTA.

Jonathan L. Cernian
 JORNBANWA, CERNIAN
 DATE: 02/29/23 LICENSE NO. 68822

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
10/20/22	CITY SUBMITTAL

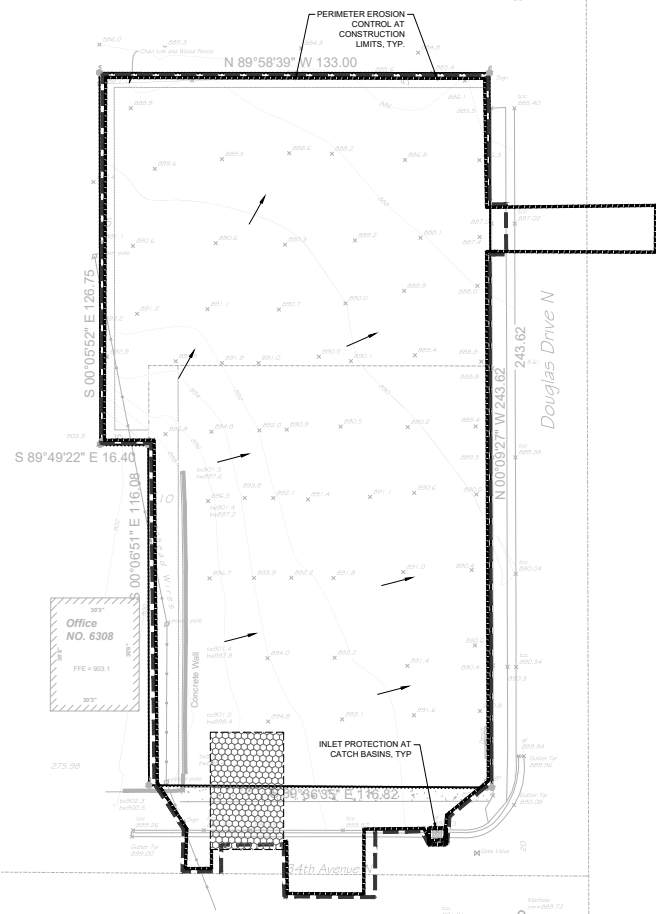
DESIGNED BY: MD, MH REVIEWED BY: RL, JL
 PROJECT NUMBER: 2305

REVISION SUMMARY

DATE	DESCRIPTION

SWPPP - EXISTING CONDITIONS

SW1.0

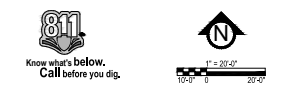


CITY OF CRYSTAL EROSION CONTROL NOTES:
 1. RESERVED FOR CITY SPECIFIC EROSION CONTROL NOTES.

- SWPPP NOTES:**
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (854-64-0022 OR 800-252-1166) FOR UTILITY LOCATIONS. 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
 - THIS PROJECT IS GREATER THAN ONE ACRE AND WILL REQUIRE AN MPCA NPDES PERMIT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY EROSION CONTROL PERMITS REQUIRED BY THE CITY.
 - SEE SHEETS SW1.0 - SW1.5 FOR ALL EROSION CONTROL NOTES, DESCRIPTIONS, AND PRACTICES.
 - SEE GRADING PLAN FOR ADDITIONAL GRADING AND EROSION CONTROL NOTES.
 - CONTRACTOR IS RESPONSIBLE FOR SWPPP IMPLEMENTATION, INSPECTIONS, AND COMPLIANCE WITH NPDES PERMIT.

ALL SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES, AND MEASURES CONTAINED IN THIS SWPPP ARE THE MINIMUM REQUIREMENTS. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

- LEGEND:**
- EX. 1' CONTOUR ELEVATION INTERVAL
 - 1.0' CONTOUR ELEVATION INTERVAL
 - DRAINAGE ARROW
 - SILT FENCE / BIOROLL - GRADING LIMIT
 - INLET PROTECTION
 - STABILIZED CONSTRUCTION ENTRANCE
 - EROSION CONTROL BLANKET



**PRELIMINARY:
NOT FOR
CONSTRUCTION**

DOUGLAS DRIVE TOWNHOMES

3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422

HAMPTON COMPANIES
NEW MARKET RD, WHITE BEAR LAKE, MN 55110

PROJECT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER OR ARCHITECT HOLDING THE LICENSE TO BE ENGAGED IN PRACTICE IN THE STATE OF MINNESOTA.

Jordan W. Cernian
JORDAN W. CERNIAN
DATE: 02/29/23 LICENSE NO. 88832

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
10/29/22	CITY SUBMITTAL

DESIGNED BY: MD, MS REVISIONS BY: RL, JL

PROJECT NUMBER: 2305

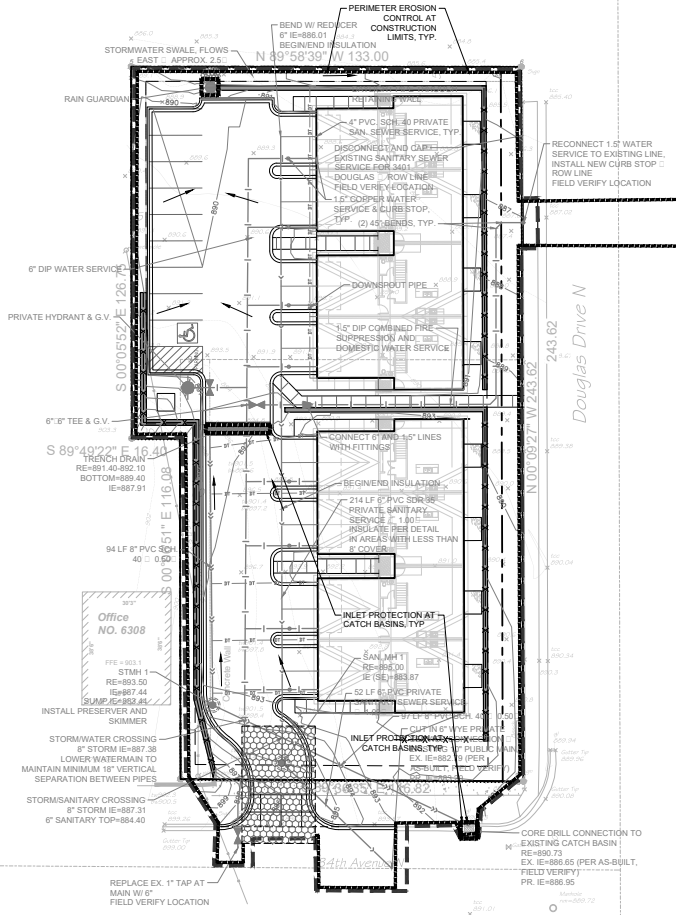
REVISION SUMMARY

DATE	DESCRIPTION

SWPPP - PROPOSED CONDITIONS

SW1.1

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CITY OF CRYSTAL EROSION CONTROL NOTES:
1. RESERVED FOR CITY SPECIFIC EROSION CONTROL NOTES.

- SWPPP NOTES:**
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (861-654-3002 OR 800-252-1186) FOR UTILITY LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
 - THIS PROJECT IS GREATER THAN ONE ACRE AND WILL REQUIRE AN NPDES PERMIT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY EROSION CONTROL PERMITS REQUIRED BY THE CITY.
 - SEE SHEETS SW1.0 - SW1.5 FOR ALL EROSION CONTROL NOTES, DESCRIPTIONS, AND PRACTICES.
 - SEE GRADING PLAN FOR ADDITIONAL GRADING AND EROSION CONTROL NOTES.
 - CONTRACTOR IS RESPONSIBLE FOR SWPPP IMPLEMENTATION, INSPECTIONS, AND COMPLIANCE WITH NPDES PERMIT.

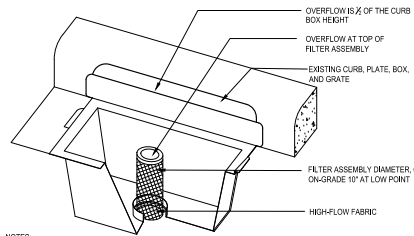
ALL SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES, AND MEASURES CONTAINED IN THIS SWPPP ARE THE MINIMUM REQUIREMENTS. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

LEGEND:

- 1125 --- 1137 --- EX. 1' CONTOUR ELEVATION INTERVAL
- 1137 --- DRAINAGE ARROW
- SILT FENCE / BARROLL - GRADING LIMIT
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET

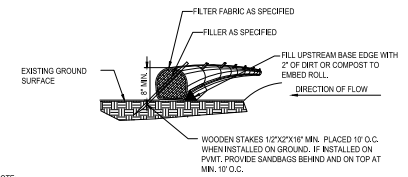
Know what's below.
Call before you dig.

N
Scale: 1" = 20'-0"
0 20' 40'



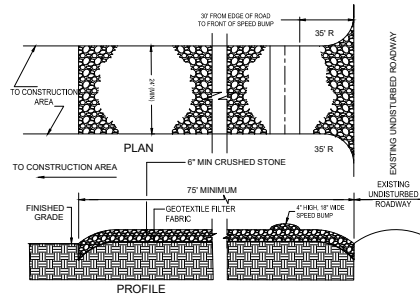
- NOTES:
1. REPLACE INLET GRATE UPON COMPLETE INSTALLATION OF INLET PROTECTION FABRIC.
2. CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM THE SURFACE OF THE SYSTEM AFTER EACH STORM EVENT AND AT THE COMPLETION OF THE CONTRACT.
3. REFERENCE APPLICABLE STANDARD PLATE EROSION.

1 CURB INLET FILTER
N T S



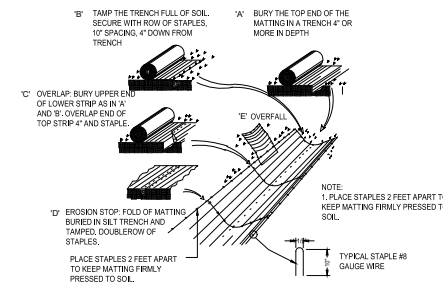
- NOTE:
1. COMPOST FILTER LOGS (80 ROLLS) SHALL BE FILTREXX EROSION CONTROL SOXX OR APPROVED EQUAL.
2. COMPOST FILLER TO BE MADE FROM A COMPOST BLEND 30%-40% GRADE 2 (SPEC 3880) AND 60%-70% PARTIALLY DECOMPOSED WOOD CHIPS, PER MNDOT SPEC 3895.
3. FILTER FABRIC SHALL BE GEOTEXTILE KNITTED MATERIAL WITH MAX. OPENINGS OF 3/8".
4. IF MULTIPLE ROLLS NEEDED, OVERLAP 9" MIN. 12" AT ENDS AND STAKE.
5. SET SHALL BE REMOVED ONCE IT REACHES 80% OF THE HEIGHT OF THE ROLL OR AS DEEMED NECESSARY BY SITE CONTRACTOR TO MAINTAIN PROPER FUNCTION.

4 SEDIMENT BIO-ROLL / COMPOST FILTER LOG
N T S

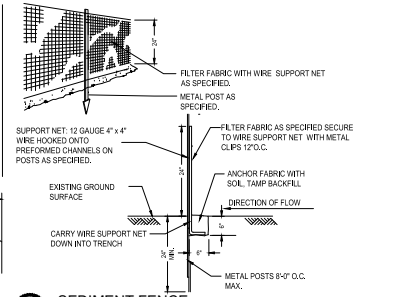


- NOTES:
1. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND UNDISTURBED ROADWAY.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO UNDISTURBED ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.
3. REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
4. ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO UNDISTURBED ROADWAY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
5. FINAL LOCATION AND INSTALLATION SHALL BE COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
6. CRUSHED STONE SHALL BE 1-1/2" DIA. CLOSE GRADED, AND IN ACCORDANCE TO MNDOT SECTION 211B.

2 STABILIZED CONSTRUCTION ACCESS
N T S



3 EROSION BLANKET
N T S



5 SEDIMENT FENCE
N T S

PRELIMINARY:
NOT FOR
CONSTRUCTION

PROJECT
DOUGLAS DRIVE TOWNHOMES

3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422

HAMPTON COMPANIES
MIN. NUMBER EQ. INVT. PER LAJ. 6A. 1914

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

JORDAN W. L. CROGAN
DATE: 02/29/23 LICENSE NO.: 88982

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
10/28/2019	CITY SUBMITTAL

ISSUED BY: M1 REVIEWED BY: RL, JL
PROJECT NUMBER: 2305

REVISION SUMMARY

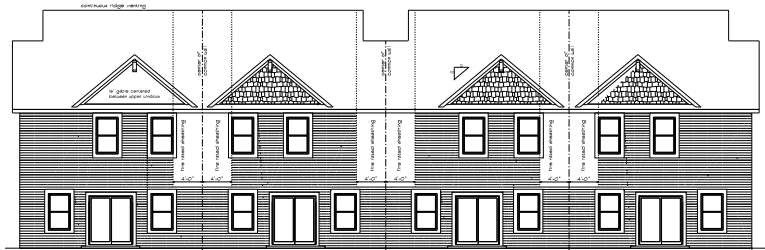
DATE	DESCRIPTION
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SWPPP - DETAILS

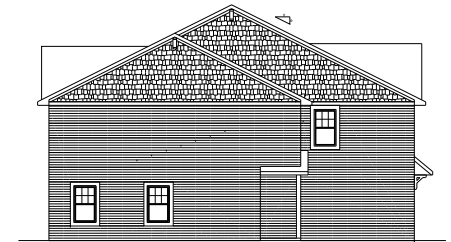
SW1.2



RIGHT ELEVATION



REAR ELEVATION



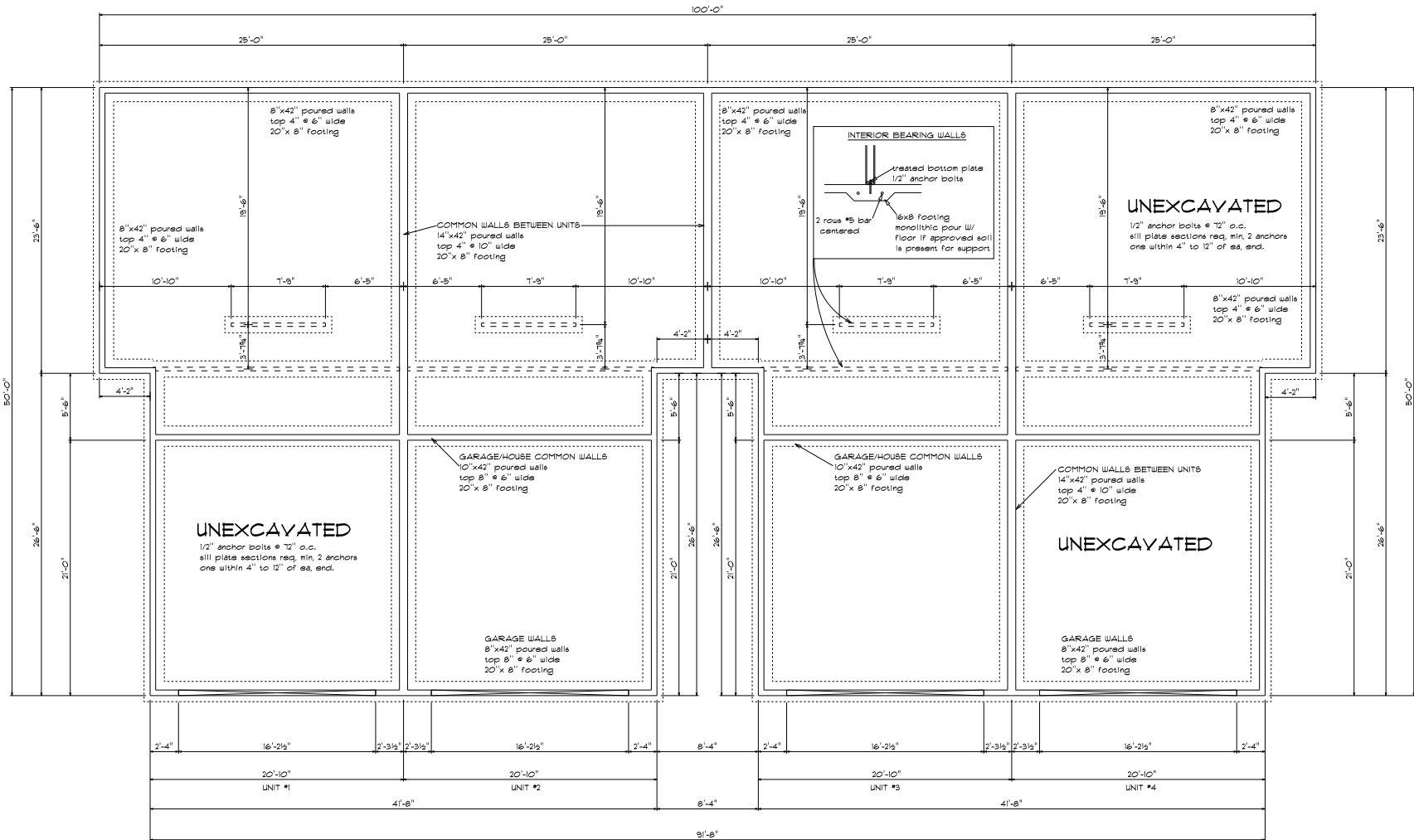
LEFT ELEVATION



NOTE:
All openings to exterior must be caulked & flashed. Flashing is req. where all roof & vertical surfaces meet or where siding material changes.

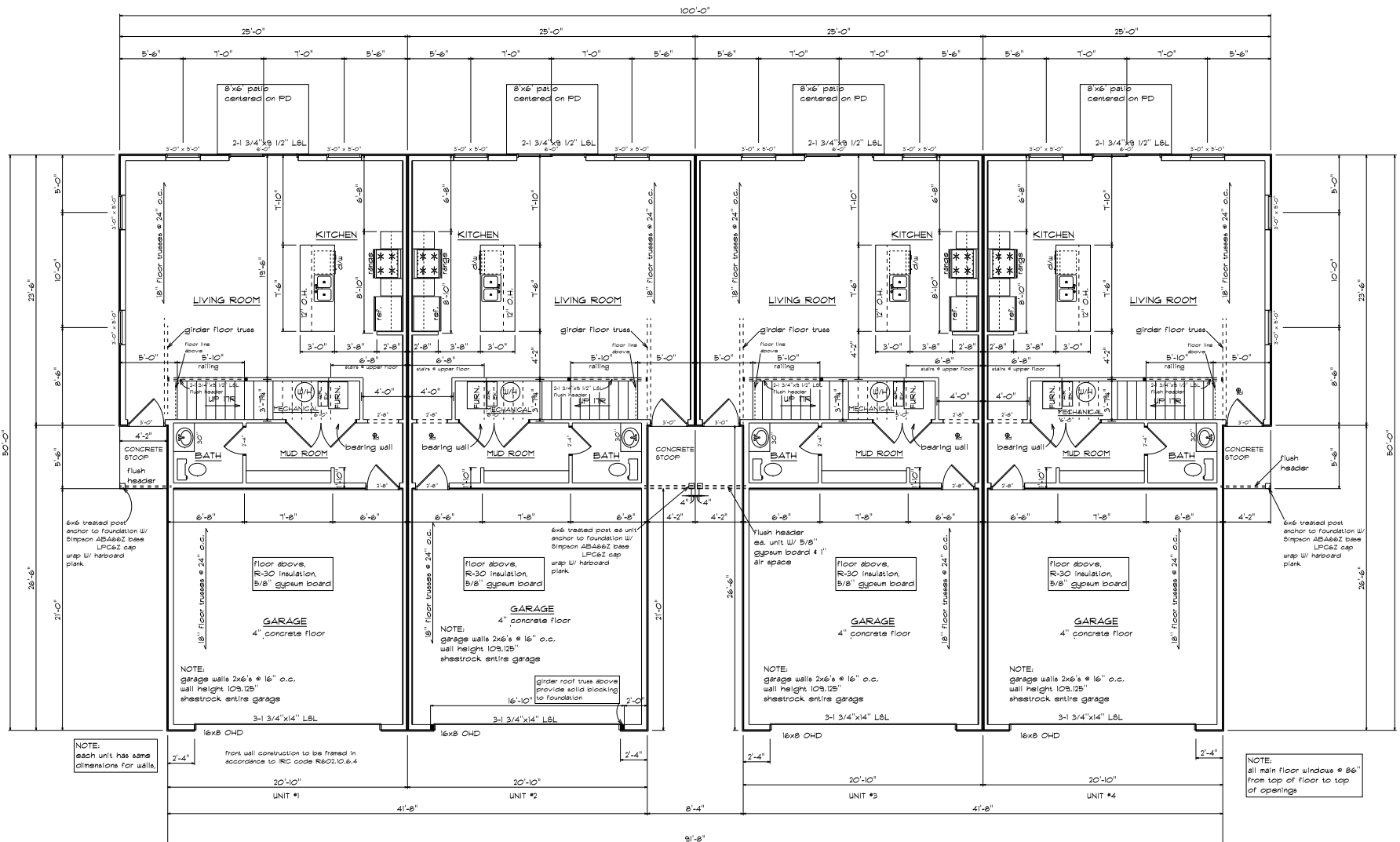
Due to various site conditions of individual lots, the grade lines represented by this print are for illustrative purposes only. They do not reflect actual finished grade.

FRONT ELEVATION
preliminary

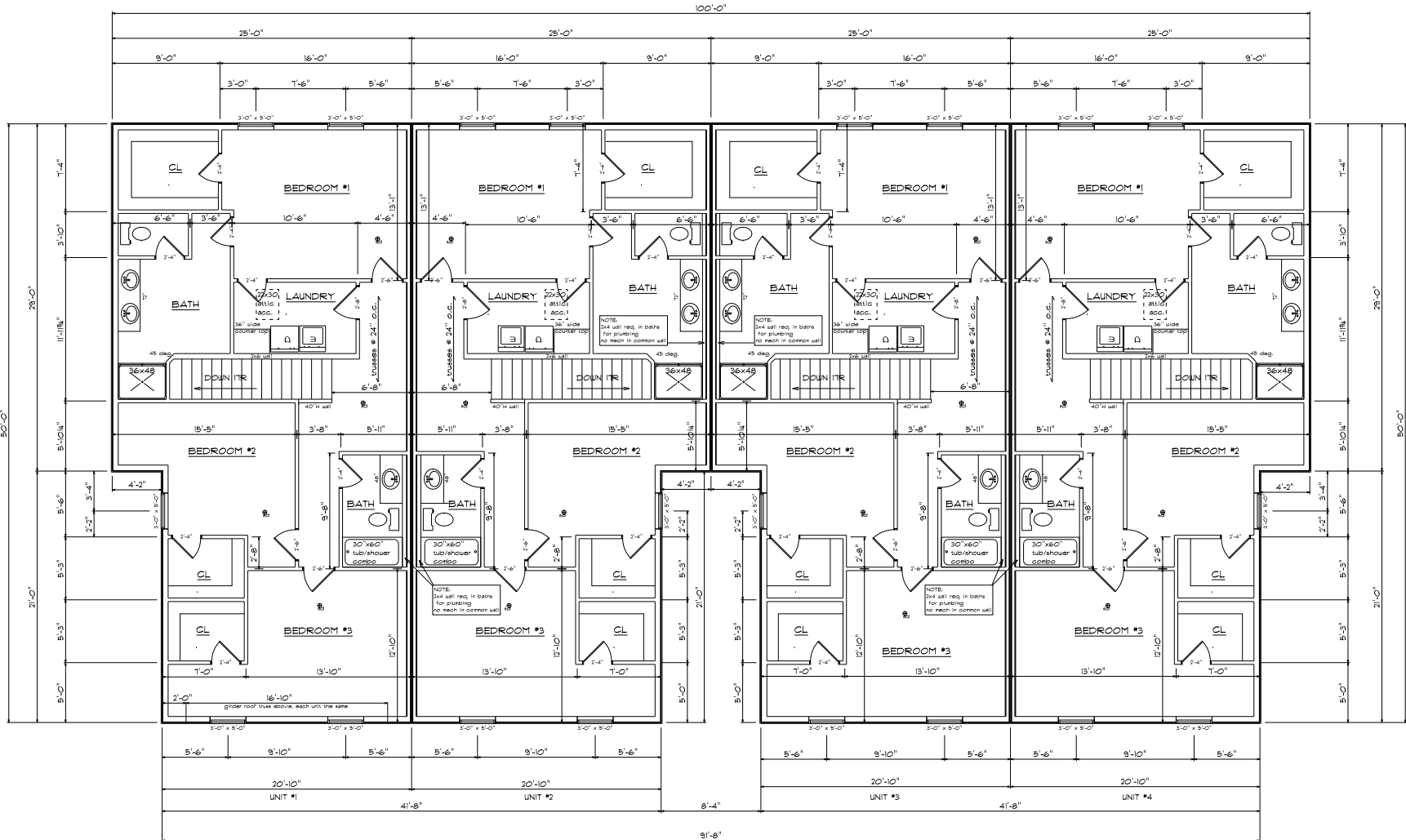


FOUNDATION PLAN

preliminary



MAIN FLOOR PLAN 702 sq.ft. ea. unit
preliminary 109.125' wall height



UPPER FLOOR PLAN 1162 sq.ft. ea. unit
 preliminary 91.25" wall height