PLANNING COMMISSION STAFF REPORT
Proposed Police Building Addition

FROM: **Dan Olson, City Planner**

TO: **Planning Commission (for October 12 Meeting)**

DATE: **October 6, 2020**

RE: **PUBLIC HEARING – Rezoning to Planned Development for a police building addition at 4141 Douglas Drive North (Application 2020-05)**

A. INTRODUCTION

The City of Crystal is proposing to construct a police building addition to the existing city hall at 4141 Douglas Drive North. The property is comprised of four separately platted lots zoned Low Density Residential (R-1). Public buildings are a conditional use in the R-1 district. The applicant is proposing to consolidate the lots into one parcel and rezone the property to Planned Development (R1 - PD). Notice of the October 12 public hearing was published in the Sun Post on October 1, mailed to property owners within 1000' of the property (see attachment A), posted in two locations on the site, 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. Project narrative
E. Site and building plans (28 pages)

Staff Report Organization:

Section	Page Number(s)	Information Provided
B. (Background)	Page 2	• Existing use • Surrounding land uses
C. (Proposed Police Building Addition)	Pages 2-6	• Proposed use • Site plan elements
D. (Rezoning to Planned Development)	Page 6-7	• Rezoning to R1-PD
E. Conditional use permit criteria	Pages 7-8	• City response to criteria
F. (Requested Action)	Page 8-9	• Requested Planning Commission action • Approval conditions

B. BACKGROUND

Existing Use

The 3.4 acre (147, 429 SF) property contains two existing buildings, with an associated surface parking lot:

- 4101 Douglas Dr N – The property contains an existing 6,533 square foot fire station building constructed in 1975.
- 4141 Douglas Dr N - The property contains an existing 19,961 square foot city hall and police building constructed in 1965.

Surrounding Land Uses

The following are the existing zoning districts and land uses surrounding the property:

- North: Across Douglas Drive north of the subject property are single-family homes zoned R-1, as well as a vehicle repair shop zoned Commercial.
- East: Across Douglas Drive are single-family homes zoned R-1 and a veterinary clinic zoned Commercial.
- West: To the west is another institutional use, the Hennepin County library, which is zoned R-1.
- South – To the south are single-family homes zoned R-1.

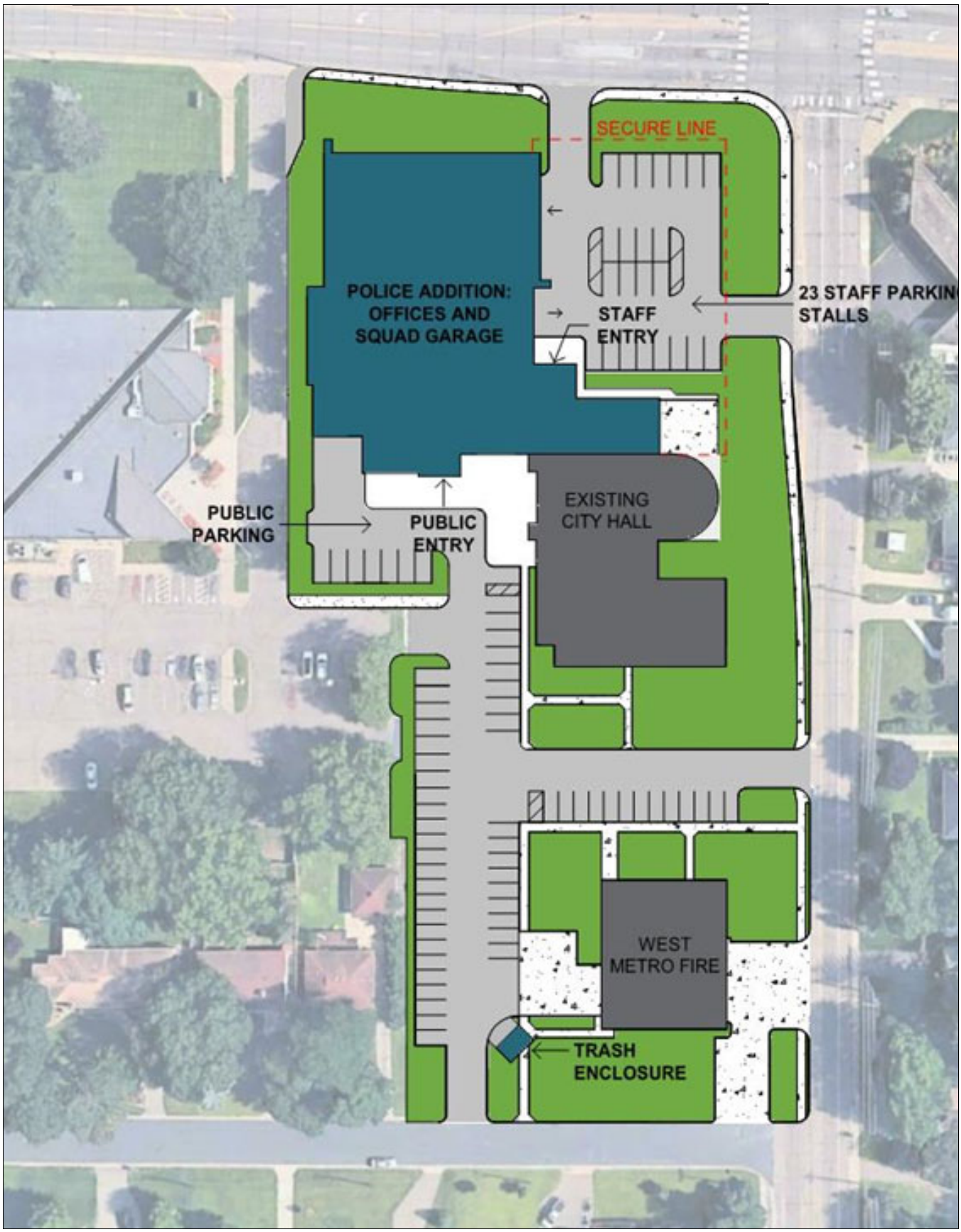
C. PROPOSED POLICE BUILDING ADDITION

Proposed Use

The proposed use is to remove 4,800 SF from the north end of the existing city hall and construct a 23,800 SF police building addition northwest of city hall. 14,700 SF of the existing city hall would remain and continue to be used.

The height of the building addition is 28 feet.

The illustration on the next page shows the proposed building addition location with the reconfigured parking areas.


SECURE LINE
POLICE ADDITION:
OFFICES AND
SQUAD GARAGE
STAFF
ENTRY
23 STAFF PARKIN
STALLS
PUBLIC
PARKING
PUBLIC
ENTRY
EXISTING
CITY HALL
WEST
METRO FIRE
TRASH
ENCLOSURE

Site Plan Elements

- The properties included in the Planned Development consists of four platted lots. The applicant will submit a lot consolidation application that will combine these lots into one parcel. According to the UDC, a lot consolidation application is approved by the City Council without the need for a public hearing. The following are the notable site plan elements for the proposed building addition:

- Building setbacks. Since the property fronts on three public streets, the property is defined in the UDC as a through corner lot. For these lots the front lot line is defined as that street upon which the building faces. Since the building's entrance faces the west side of the property, which is not located along a public street, staff has determined that for zoning purposes the front property line is the north property line. This interpretation follows the UDC requirement that the shortest street side is the front property line. Since the west property line is the only side not facing a public street, that side is the interior side yard.

  The following are the proposed setbacks for the building addition compared to the setback requirements in the underlying R-1 district. The Planned Development zoning classification allows for flexibility in zoning requirements.

  - North (front) property line: 31.6' (requirement is 30').

    As part of the lot consolidation plat, the county may request a 7-foot wide easement for widened or relocated sidewalk or trail along 42nd Avenue and Douglas Drive. This would reduce the building setback to 24.6'.

  - East (corner side) property line: 114.4' (requirement is 20')
  - South (rear) property line: 300+' (requirement is 30')
  - West (interior side) property line: 7' (requirement is 10')

  The proposed building addition is not located in an existing or proposed drainage or utility easement.

- Parking.
  - The property currently has 100 parking spaces: 8 in the existing police garage and 92 in surface lots. At this time, the lower (secure) lot is used for both Police Department and police employee vehicles. The upper lot is also used by Police Department and police employee vehicles in addition to its use by the public.
  - The site plan calls for removal of portions of the upper parking lot to accommodate the building addition, and expansion of the lower lot into areas occupied by the current police department wing of City Hall.
  - After the project is complete, the property will have 117 parking spaces: 33 in the new police garage and 84 in surface lots. Because Police Department vehicles will all be parked in the new garage, and police employee vehicles will be parked in the lower lot, fewer spaces will be needed in the upper lot when compared to the current parking arrangement.

- The UDC does not require a specific number of spaces for public buildings, but the overall number of spaces is greater than existing number and adequately meets the needs of the facility.

LOCATION	EXISTING	PROPOSED
Garage	8 spaces	33 spaces
Lower (secure) parking lot	19 spaces	27 spaces
Upper parking lot	73 spaces	57 spaces
Total Parking Spaces	100 spaces	117 spaces

- Stormwater management and erosion control measures. Due to the scope of the project, the stormwater plan is subject to Shingle Creek Watershed Management Commission standards.
  - The project includes expansion of an existing stormwater infiltration tank underneath the lower parking lot in the northeast corner of the property.
  - The percent impervious will increase from 68.7% to 75.2%. The maximum coverage is 70% for the R-1 district, but this requirement can be modified under PD zoning.
  - Despite the increase in impervious surface, the project will result in slightly reduced runoff due to stormwater management improvements to be installed. For example, in a 100-year rainfall event, the runoff rate will be 33.88 cubic feet per second vs. 35.02 CFS for the site as it exists today.
  - During building construction, erosion control techniques to be used including silt fences, sediment control logs, and erosion control blankets.

- Utilities. The proposed building addition will connect with existing water through City Hall, but it is proposed that a new sanitary sewer service connection be made to the main under 42nd Ave. Existing overhead utilities are located along 42nd Avenue. These utilities will be located in drainage and utility easements that are dedicated with the new lot consolidation 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, Century Link 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 sufficient to meet vehicle movement into and within the site, including fire trucks.

  As a part of the building addition, driveway access will change for both the city hall/police station and the adjacent Hennepin County library (6401 - 42nd Ave N):

  - City hall/police station: The existing northwest driveway access to city hall off of 42nd Avenue will be permanently closed and the building addition will be constructed in this area. Two existing accesses to the parking lot in the northeast corner of the property will remain: one off of 42nd Avenue and the other off of Douglas Drive, which will be slightly relocated to the south.

- Library: In 2019 the city and the county signed an agreement which provides mutual access on each other's property. It is planned to widen the existing library driveway access off of 42nd Avenue to allow for east and west turning movements for vehicles exiting the property. This access will continue to serve as the library's main entry point. An existing internal secondary access between the city hall parking lot and the library parking lot will be relocated slightly northward.

- Building elevations. The proposed major exterior building material is prefinished aluminum panels, with brick, glass, and stone veneer as accent materials. These materials meet the city's requirements. A rending of the proposed building is attachment E.

- Landscaping. The landscape plan shows 11 existing trees to be removed to accommodate the proposed building addition. The plan calls for 24 new trees to be planted. These trees are speckled alder, quaking aspen, American linden, and Japanese tree lilac. The landscape plan also shows ten varieties of shrubs. The entire length of the building foundation facing Douglas drive is not completely screened with shrubs as required by the UDC, but the foundation is sufficiently screened from street view by a combination of trees, shrubs, and a wrought iron fence along both 42nd Avenue and Douglas Drive.

- Screening. The existing dumpster enclosure on the west side of the property will be removed. A new enclosure will be installed near the fire station and will face inward to the parking lot. A new electrical transformer on the north side of the building addition will be screened by landscaping. No rooftop mechanical unit will be visible from public streets.

- Exterior Lighting. There are eleven existing light poles in the existing parking lots, seven of which will be removed. Four new light poles will be installed in the new parking areas. There will be three exterior lighting fixtures on the proposed building. This lighting meets the city's requirements.

- Pedestrian connections. There are existing sidewalks along 42nd Avenue and Douglas Drive, as well as interior sidewalks throughout the property. It's possible the County may require the city to dedicate a 7-foot wide easement for a future trail connection (see above).

- Signs. The applicant may install wall signs for the police building and must receive sign permit approval before installing any building signage.

D. REZONING TO PLANNED DEVELOPMENT (R1 - PD)

The applicant is requesting that the consolidated properties be rezoned to Planned Development (R1 - PD), which allows some flexibility in zoning requirements when planning campus-type land uses. The underlying zoning for the property would be Low Density Residential (R-1). The R1-PD zoning allows for the following differences from the underlying zoning requirements:

- More than one principal building on the property. This is a reasonable use of the property because it functions as a civic campus and already has multiple principal buildings city hall and fire station).
- Reduction of the west side building setback from 10 feet to 7 feet. This is necessary due to the grade change and secure parking area located between the building addition and Douglas Drive.
- Additional reduction in the setback required from any adjacent public road in the event that an additional roadway easement or sidewalk/trail easement is subsequently granted, declared or dedicated in the future. This is necessary to accommodate potential future widening or relocation of sidewalk or trail facilities along the adjacent county roads.
- Increase the amount of impervious surface to 75% of the property from the maximum allowed of 70%. This is reasonable based on the enhanced stormwater treatment systems proposed to be installed as part of the building addition project.

E. CONDITIONAL USE PERMIT CRITERIA

The following are the relevant criteria for approval of conditional use permits in city code section 510.19:

(a) The proposed use has been approved as a conditional use in the zoning district for which it is proposed.

Findings: **Public buildings are a conditional use in the R-1 district.**

(b) The conditional use will be in accordance with the general objectives, or with any specific objective, of the city's comprehensive plan and the unified development code (UDC).

Findings: **On the 2040 Planned Land Use map (attachment C), the property is guided as Institutional, which includes "churches, schools, cemeteries, and publicly-owned properties". The existing police building is in conformance with this land use designation.**

(c) The conditional use will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area.

Findings: **The property is located on the edge of a commercial area that transitions into a residential area. An institutional building has existed at this location since 1965, and the character of that use will not change.**

(d) Impacts such as noise, hours of activity, and exterior lighting have been sufficiently addressed to mitigate negative impacts on nearby uses.

Findings: **The proposed building addition will not generate unusual noise impacts. Hours of operation will continue to be the same as they have been for many years. New exterior lighting meets the city's requirements.**

(e) Parking is adequately provided for the proposed conditional use.

Findings: **There are not specific parking requirements for public buildings. As described in section C, above, parking is adequately provided for.**

(f) In the approval of a conditional use permit, the City Council may impose such conditions as it determines is necessary to make the use compatible with other uses allowed in the same district zone or vicinity.

Findings: **The proposed conditions of approval for the CUP and rezoning to R1-PD are found in section F of this staff report.**

F. REQUESTED ACTION

The Planning Commission is asked to make a recommendation to the City Council to either deny or approve the rezoning to Planned Development for the police building addition at 4141 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 B, C, D, and E above. Staff recommends approval of the rezoning to Planned Development (R1-PD) with the following conditions of approval:

1. Site Plan. The development shall be constructed according to the site plan in attachment E.

2. Lot consolidation. Prior to disturbing the site, the applicant shall receive approval by the City Council of a lot consolidation application to combine the applicant's four properties into one parcel and provide new easements on the final plat document.

3. 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.

4. Special provisions related to Planned Development rezoning. The rezoning to R1-PD implements the following special provisions in place of the standard R-1 requirements:

   a) More than one principal building on the property is permitted.

   b) The west side setback is reduced from 10 feet to 7 feet.

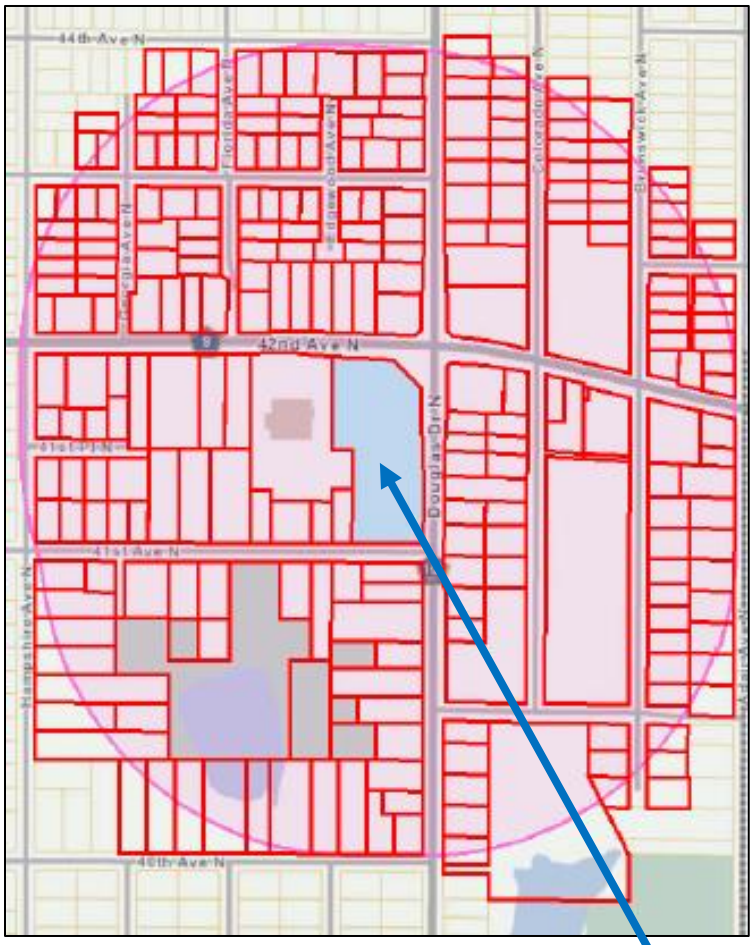
   c) If an additional roadway easement or sidewalk/trail easement is subsequently granted, declared or dedicated along an abutting public street or road, the minimum setback shall be automatically reduced by the width of the easement.

   d) The maximum impervious surface coverage on the property is increased from 70% to 75%.

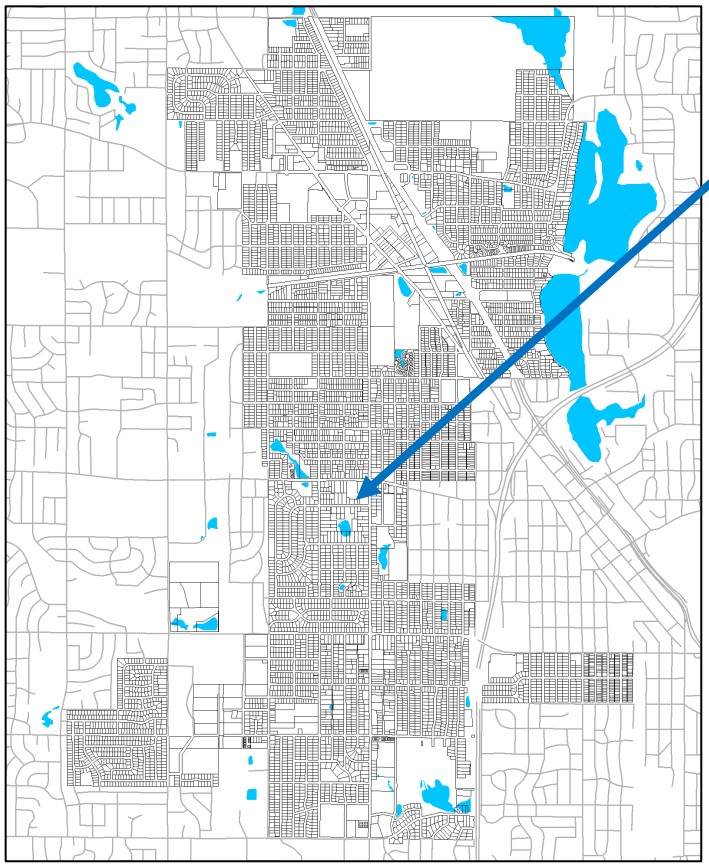
City Council action of the first reading of the ordinance rezoning the property to R1-PD is anticipated on October 20, 2020.

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 lot consolidation application will also be considered.

Site Location and Public Hearing Notice Mailing Map



Attachment A



4141 Douglas Dr N.

CITY of CRYSTAL

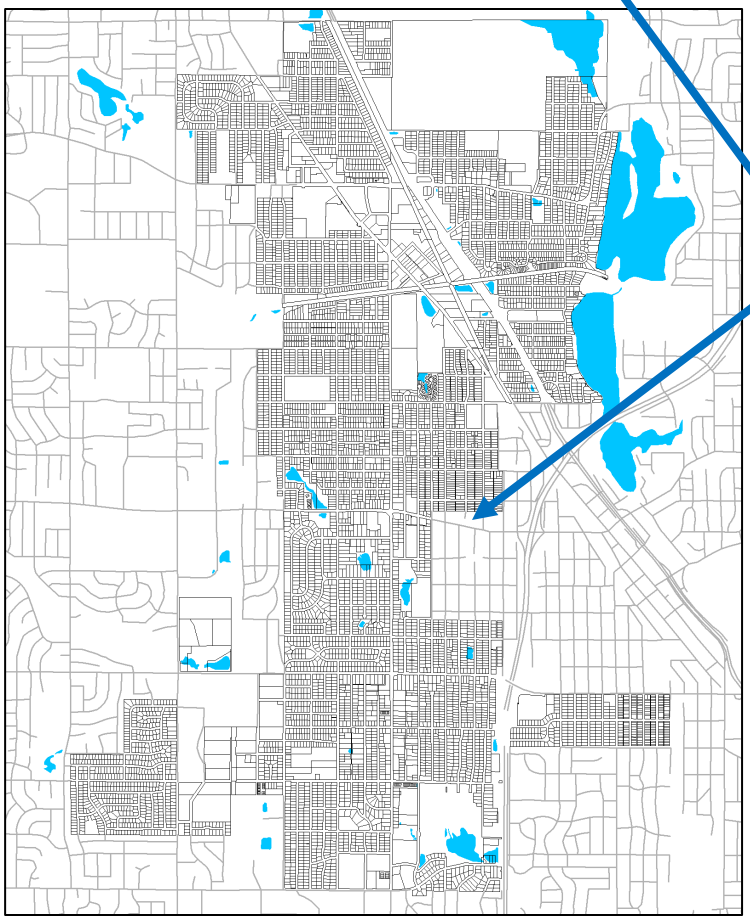
4141 Douglas Dr. N.
Crystal MN 55422

Zoning Map

Attachment B

ZONES:

- R-1 LOW DENSITY RESIDENTIAL
- R-2 MEDIUM DENSITY RESIDENTIAL
- R-3 HIGH DENSITY RESIDENTIAL
- C - COMMERCIAL
- I - INDUSTRIAL
- AP - AIRPORT DISTRICT



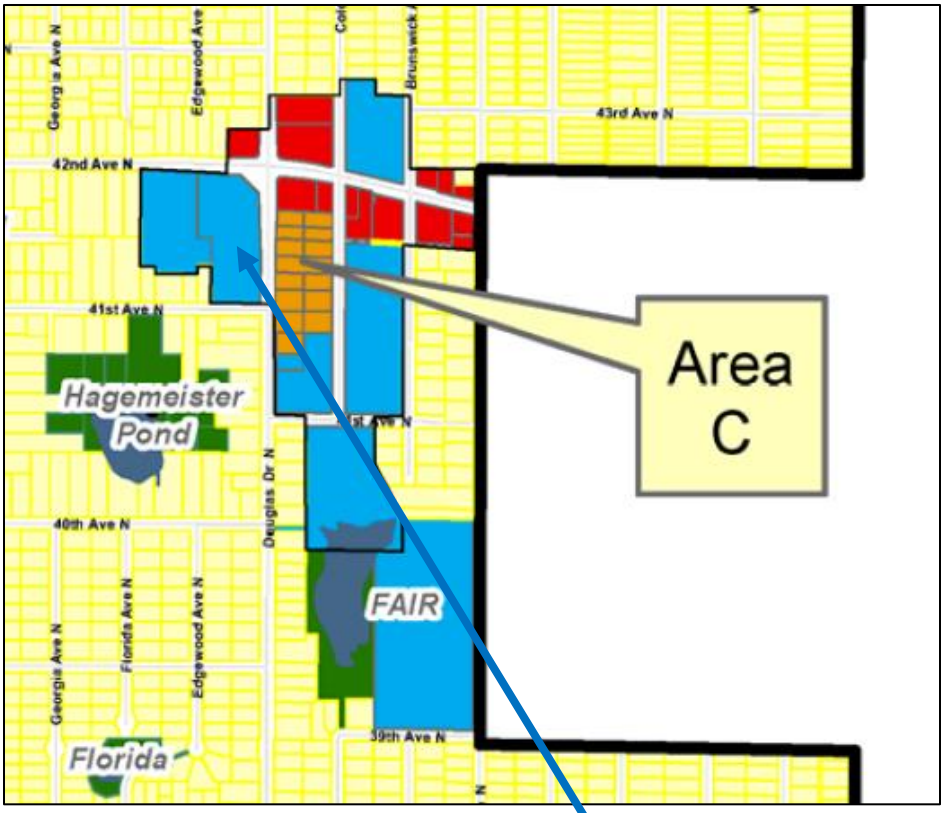
4141 Douglas Dr N.

CITY of CRYSTAL

4141 Douglas Dr. N.
Crystal MN 55422

2040 Comprehensive Plan Map

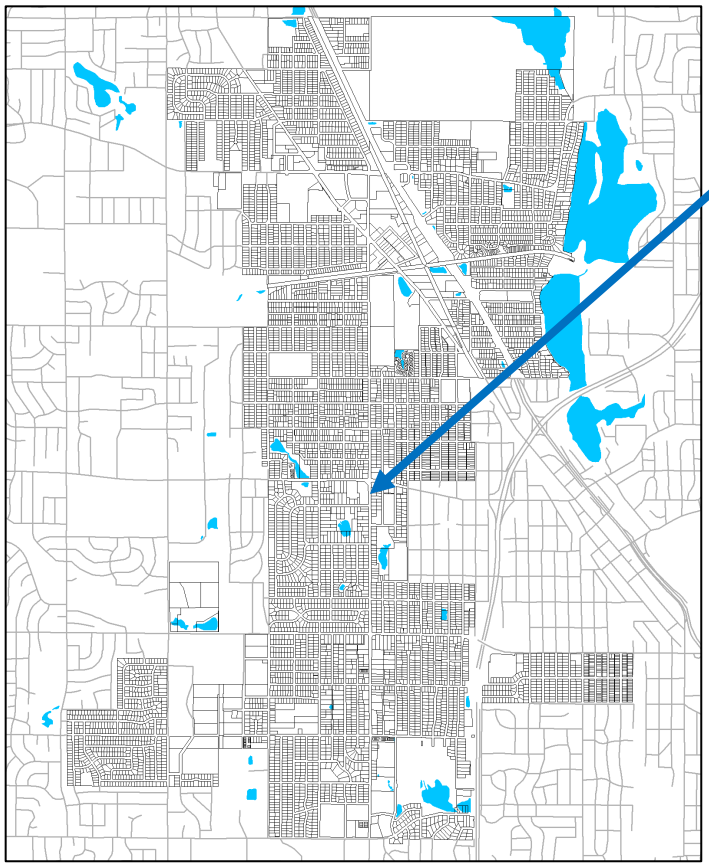
Attachment C



Map Legend

Planned Land Use:

- Low Density Residential (LDR)
- Med. Density Residential (MDR)
- High Density Residential (HDR)
- Commercial
- Mixed Use
- Industrial
- Park or Other Public Open Space*
- Institutional*
- Rail Corridor
- Crystal Airport
- Right-Of-Way
- Water



4141 Douglas Dr. N

CITY of CRYSTAL

4141 Douglas Dr. N.
Crystal MN 55422

September 15, 2020

City of Crystal
4141 Douglas Dr. North
Crystal, Minnesota 55427

Attachment D

Re: City of Crystal New Police Facility
Commission No. 192195

To Whom it may concern:

This projects primary goal is to provide the Police department with a facility that achieves the best functional organization for the department and while providing the safety separation between civilians and police staff while maintaining a friendly and welcoming environment for the public.

See the following responses to questions regarding this property:

1. **Comment:** What is the zoning district for the property?

   Response: R1 – Low Density Residential

2. **Comment:** What is the existing use for the property?

   Response: The property currently houses the City of Crystal City Hall, Police Department, and West Metro Fire Station.

3. **Comment:** What is the proposed use for the property?

   Response: The proposed use of the property will be the same as the existing use**.**

4. **Comment:** If applicable, describe how the existing adjacent residential uses will be protected from potential adverse effects of the proposed use.

   Response: The new building does not affect any of the surrounding residential areas.

5. **Comment:** Describe how the proposed site plan provides safe conditions for pedestrians or motorists and prevents the dangerous arrangement of pedestrian and vehicular ways**.**

   Response: The new building location reduces an access point on 42nd street which will help mitigate congestion. The new layout also provides direct access onto Douglas Drive for emergency vehicles allowing them to exit the property in a safe way. The proposed layout also modifies the existing parking lot and will add new pedestrian walkways to allow for safe passage from one building to another.

6. **Comments:** Have any use-specific standards for the proposed use been addressed (City code section 515)?

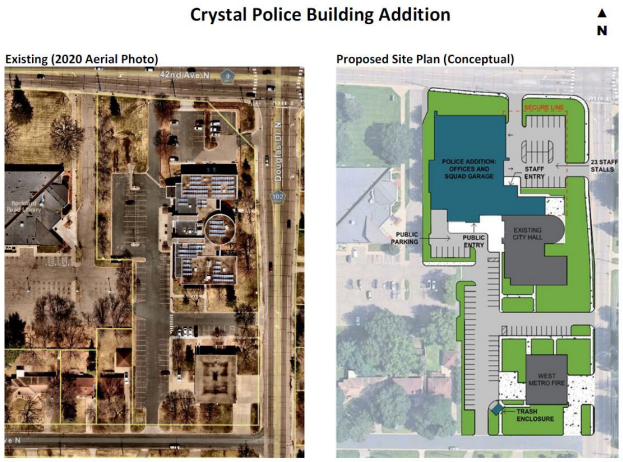
Response: The proposed building is considered an essential service within the Public Facilities category. Under this use the essential services is a permitted use and there are no use-specific standards listed as needed for this section.

I hope this give you a better understanding of the needs for the police facility.
Sincerely,

Wold Architects and Engineers

Melissa Stein
Associate

CRYSTAL POLICE BUILDING PROJECT



The City of Crystal is planning a new Crystal Police Department building on the existing city hall municipal campus at 4141 Douglas Dr. N. The site was chosen for its cost savings and a desire to keep administrative and police functions centrally located in the community.

The project includes a 23,800 sq. ft. police building northwest of the existing city hall, east of the Rockford Road library access road to 42nd Ave.

EXISTING BUILDING
The current city hall, which includes the police department and city administration, was built in 1965, and underwent a remodel in 1993. The police department portion has significant structural issues, including fleet, equipment and space inefficiencies. Technology upgrades have been postponed, equipment storage and locker room space are inadequate; and gun storage and the armory falls short of modern security standards. Also, the garage has structural issues and police vehicles are stored outside. A recent state audit recommends upgrades to the jail, while interview rooms lack soundproofing and the detention area needs security improvements.

NEW BUILDING FEATURES
The new police building will feature efficient, safe work spaces, including a secure, centralized evidence storage area; secure indoor fleet storage; a dedicated space for K9 officer(s); and an up-to-date detention space and expanded locker room space and capacity. Much of the current police department will be demolished, but some will remain to be repurposed as an additional community meeting room for city hall.

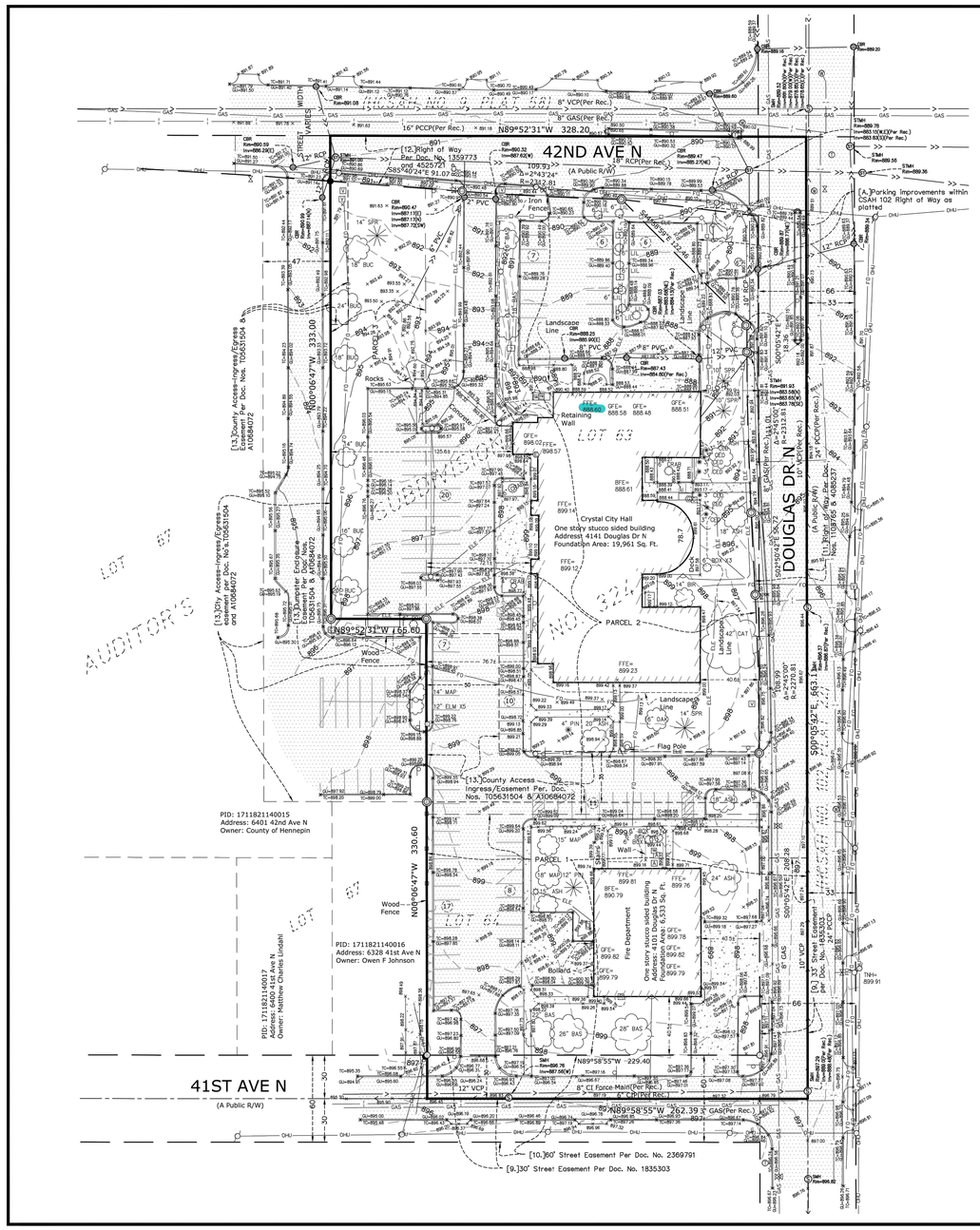
Numerous energy efficiencies are included in the building's design.

As part of the project in cooperation with Hennepin County, the library access road to 42nd Ave. will be reconstructed with a wider curb cut and right-turn lane, an existing city hall curb cut on 42nd will be removed, and the internal access drive will be relocated with a pedestrian connection between the library and city hall.

PROJECT COST
The project will cost $16 million, including construction, fixtures and design fees. It will be paid for using cash from the city's building fund and various other capital funds.

PROJECT TIMELINE
The design phase is expected to be complete in 2020, with project review by the planning commission and approval by the city council in the 4th quarter of 2020. Construction would start in the spring of 2021. Occupancy of new building is expected in early summer 2022.

Attachment E



DESCRIPTION OF PROPERTY SURVEYED

Parcel 1:

That part of the Southeast Quarter of the Northeast Quarter of Section 17, ownship 118 North, Range 21 West of the 5th Principal Meridian, Minnesota, described as follows: Commencing 497.67 feet South of the Northeast corner of said Southeast Quarter of the Northeast Quarter; thence South 165.88 feet; thence West 262.58 feet; thence North 165.98 feet; thence East to beginning, also being known as Lot 64, Auditor's Subdivision Number 324, Hennepin County, Minnesota.

Abstract Property Vesting Deed

Parcel 2:

Lot 63, Auditor's Subdivision Number 324, Hennepin County, Minnesota. Abstract Property Vesting Deed

Parcel 3:

The Easterly 65.6 feet of the Northerly 333 feet of Lot 67, Auditor's Subdivision No. 324, Hennepin County, Minn.
Being registered land as is evidenced by Certificate of Title No. 363595.

ALTA/NSPS Land Title Survey Notes

(numbered per Table A)

1. Bearings are based on the Henepin County Coordinate System (1986 Adjustment).

2. Site Address: 4141 Douglas Dr N, Crystal, MN 55422.

3. 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. 27053C0211F, effective date of November, 4 2016.

4. The Gross land area is 147,429 +/- square feet or 3.385 +/- acres.

5. Elevations are based on the NGVD 29 Datum. Site Benchmark is the top nut of fire hydrant located near the northeast corner of the intersection of 41st Ave N and Douglas Dr N. Elevation=899.91

6. The current Zoning for the subject property was not provided.

9. The number of parking stalls on this site are as follows: 89 Regular + 3 Handicap = 92 Total Parking Stalls.

11. We have shown the location of utilities to the best of our ability based on observed evidence together with evidence from the following sources: plans obtained from utility companies, plans provided by client, markings by utility companies and other appropriate sources. We have used this information to develop a view of the underground utilities for this site. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Also, please note that seasonal conditions may inhibit our ability to visibly observe all the utilities located on the subject property.

13. The names of the adjoining owners of the platted lands, as shown hereon, are based on information obtained from Hennepin County GIS.

SURVEY REPORT

1. This map and report was prepared with the benefit of a Commitment for Title Insurance issued by Old Republic National Insurance Company, File No. ORTE745988, dated September 25, 2019. We note the following with regards to Schedule B of the herein referenced Title Commitment:
   a. Item no.'s 1-8 are not survey related.

   b. The following are numbered per the referenced title Commitment:

   [9.]Easement for highway purposes as set forth in Deed filed April 27, 1936 as Document No. 1835303. *As shown hereon, along the south and the east side of the property.*

   [10.]Easement for Street purposes in favor of the City of Crystal filed May 22, 1946 as Document No. 2369791. *As shown hereon, along the south side of the property.*

   [11.] Right of Way as set forth in Hennepin County State Aid Highway No. 102, Plat 22 filed June 3, 1974 as Document No. 4085237 in the Office of the County Recorder and filed May 30, 1974 as Document No.1108765 in the Office of the Registrar of Titles. *As shown hereon, along the east side of the property.*

   [12.] Right of Way as set forth in Hennepin County State Aid Highway No. 9, Plat 58 filed November 30, 1979 as Document No. 4525721 in the Office of the County Recorder and filed November 28, 1979 as Document No. 1359773 in the Office of the Registrar of Titles. *As shown hereon, along the the north side of the property.*

   [13.] Terms and conditions of Easement Agreement by and between the City of Crystal and the County of Hennepin dated July 29, 2019, filed August 2, 2019 as Document No.A10684072, County, City and Dumpster Enclosure easements. *As shown hereon, along the west side, middle portion of the site and southerly half of the property.*

2. Conflicts such as (but not limited to): encroachments, protrusions, access, occupation, and easements and/or servitudes:
   [A.] Parking lot improvement within CSRH 102 Right of Way as platted, near the northeast corner of subject property.

ALTA CERTIFICATION

To: City of Crystal; and Old Republic National 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, 6, 8, 9, 11, and 13 of Table A thereof. The field work was completed on 10-17-2019.
Dated this 7th day of November, 2019.

Rory L. Synstelien — Minnesota License No. 44565
rory@civilsitegroup.com

N

40 20 0 20 40 80
SCALE IN FEET

Linetype & Symbol Legend

- FIBER OPTIC
- GASMAIN
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- OVERHEAD UTILITIES
- TELEPHONE LINE
- ELECTRIC LINE
- CABLE LINE
- CHAINLINK FENCELINE
- WOODEN FENCELINE
- GUARDRAIL
- CONCRETE SURFACE
- PAVER SURFACE
- BITUMINOUS SURFACE
- GRAVEL/LANDSCAPE SURFACE
- SIGN
- UTILITY MANHOLE
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- ROOF DRAIN
- TELEPHONE BOX
- TELEPHONE MANHOLE
- ELECTRIC TRANSFORMER
- TRAFFIC SIGNAL
- CABLE TV BOX
- ELECTRICAL METER
- GAS METER
- FOUND IRON MONUMENT
- SET IRON MONUMENT
- CAST IRON MONUMENT
- AIR CONDITIONER
- BOLLARD
- ELECTRIC MANHOLE
- FLAG POLE
- FLARED END SECTION
- GAS VALVE
- HANDICAP SYMBOL
- HYDRANT
- WATER MANHOLE
- WATER VALVE
- POWER POLE
- GUY WIRE
- CONIFEROUS TREE
- DECIDUOUS TREE

CivilSite GROUP
4931 W. 35TH ST. SUITE 200
ST. LOUIS PARK, MN 55416
CivilSiteGroup.com

PROJECT
Crystal City Hall
4141 Douglas Dr N, Crystal, Hennepin County, MN 55422

CLIENT
Community Development Director of the City of Crystal
4141 Douglas Dr N, Crystal, MN 55422

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 LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.

RORY L. SYNSTELIEN
DATE 11-7-2019 LICENSE NO. 44565

VICINITY MAP

REVISION SUMMARY

DATE	DESCRIPTION
11-11-19	Comments

PROJECT NO.: 19367

ALTA/NSPS LAND TITLE SURVEY

V1.0

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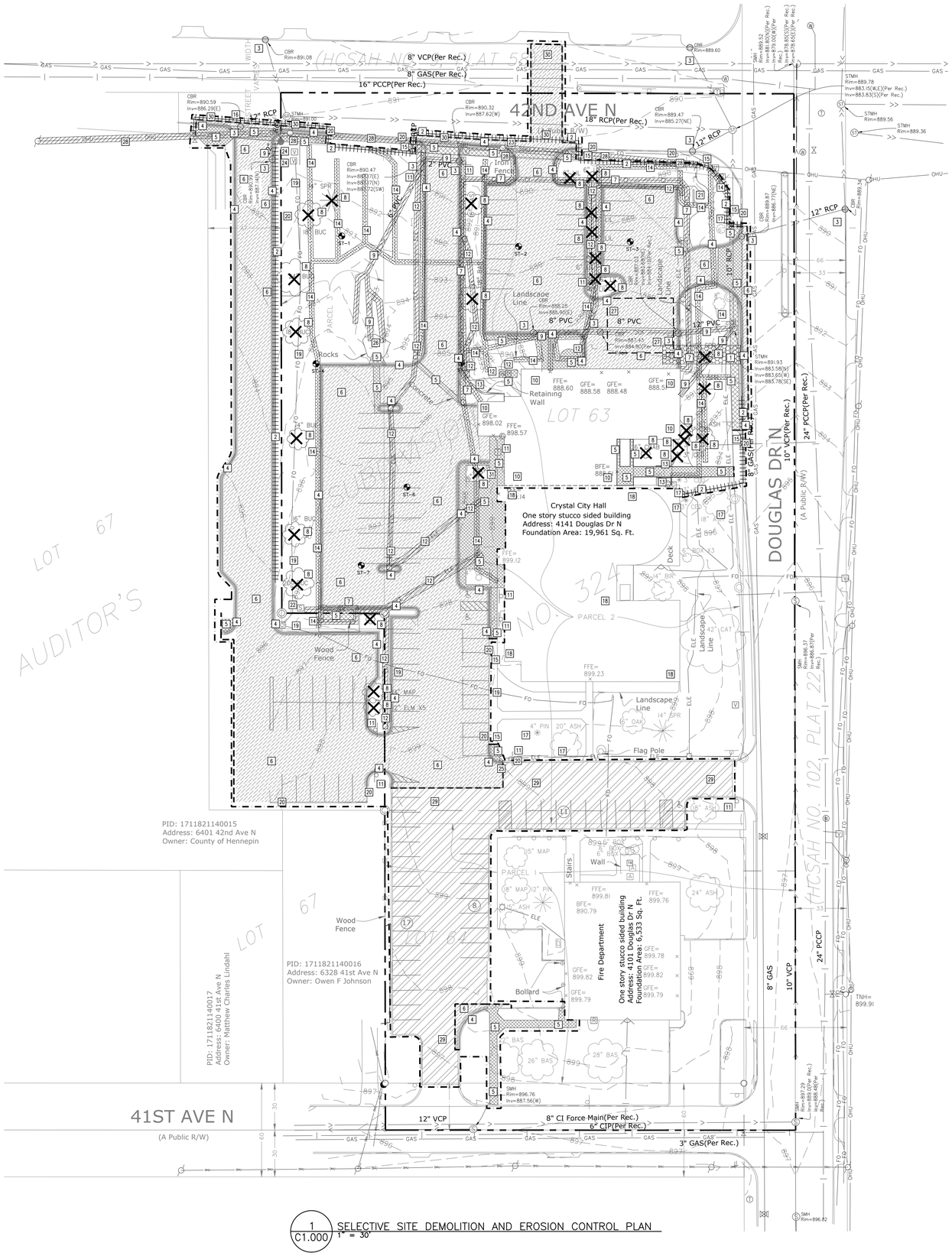
ALTA/NSPS LAND TITLE SURVEY

C0.000



1 / C1.000 SELECTIVE SITE DEMOLITION AND EROSION CONTROL PLAN
1" = 30'

PROPOSED PLAN SYMBOLS

- CONSTRUCTION LIMITS
- SILTATION FENCE
- SEDIMENT CONTROL LOG
- PROPERTY LINE
- SAWCUT LINE (APPROX.)
- STABILIZED CONSTRUCTION ENTRANCE
- BITUMINOUS REMOVAL
- 2 INCH BITUMINOUS MILL
- CONCRETE REMOVAL
- PIPE REMOVAL
- CURB REMOVAL
- FENCE REMOVAL
- UNDERGROUND POWER LINES REMOVAL
- OVERHEAD POWER LINES REMOVAL
- IRRIGATION LINES REMOVAL
- TREE REMOVAL

ABBREVIATIONS

BLDG	Building
BM	Bench Mark
CB	Catch Basin
CONC	Concrete
DIP	Ductile Iron Pipe
ELEV	Elevation
EX	Existing
FFE	Finished Floor Elevation
INV	Invert
MAX	Maximum
MH	Manhole
MIN	Minimum
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe

NOTE:
STORM SEWER INLETS NOT SHOWN ON PLAN MAY RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INSTALL INLET SEDIMENT PROTECTION PER DETAIL 2/C5.000 ON ALL STORM INLETS THAT MAY RECEIVE RUNOFF.

NOTE:
CONDITIONS SHOWN AT THE DRIVE ENTRANCE TO THE COUNTY LIBRARY FROM 42ND AVENUE ARE ANTICIPATED FUTURE CONDITIONS. REFER TO EXISTING SURVEY (SHEET C0.000) FOR EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING DRIVE THAT COULD HAVE BEEN ANTICIPATED BY PERFORMING THE ABOVE.

NOTE:
CONTRACTOR SHALL PROVIDE UNIT PRICES FOR THE FOLLOWING WORK:

UNIT PRICE #1 (LF) – REMOVAL AND REPLACEMENT OF EXISTING CURB AT LIBRARY WEST OF THE SITE. REFER TO DETAILS 8/C5.000, 9/C5.000, 13/C5.001, AND 14/C5.001 FOR PROPOSED CURB SECTION.

UNIT PRICE #2 (SY) – REMOVAL AND REPLACEMENT OF THE EXISTING ASPHALT PAVEMENT AT THE LIBRARY BUILDING WEST OF THE SITE. REFER TO DETAIL 12/C5.000.

N

30' 15' 0 30' 60'
SCALE 1" = 30'

KEYED NOTES

KEYED NOTES ARE DENOTED BY NO ON PLAN.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE. REFER TO DETAIL 1/C5.000.
2. INSTALL PERIMETER EROSION CONTROL. REFER TO DETAILS 3/C5.000 AND 4/C5.000.
3. INSTALL INLET SEDIMENT PROTECTION. REFER TO DETAIL 2/C5.000.
4. REMOVE CURB AND GUTTER IN ITS ENTIRETY TO THE APPROXIMATE EXTENTS SHOWN. SAWCUT AND REMOVE AT NEAREST JOINT.
5. REMOVE CONCRETE PAVEMENT IN ITS ENTIRETY TO THE APPROXIMATE EXTENTS SHOWN.
6. SAWCUT AND REMOVE BITUMINOUS PAVEMENT IN ITS ENTIRETY TO THE EXTENTS SHOWN.
7. REMOVE AND SALVAGE FENCE IN ITS ENTIRETY. REFER TO LANDSCAPE PLANS FOR DETAILS.
8. REMOVE TREE IN ITS ENTIRETY INCLUDING STUMP.
9. REMOVE STORM SEWER IN ITS ENTIRETY TO THE EXTENTS SHOWN. FOLLOW ALL CITY OF CRYSTAL STANDARDS AND SPECIFICATIONS.
10. REMOVE BUILDING INCLUDING OVERHANGS, FOOTINGS, AND SMALL UTILITIES. REFER TO ARCHITECTURAL PLANS FOR BUILDING REMOVAL LIMITS. COORDINATE REMOVAL OF SMALL UTILITIES WITH LOCAL UTILITY COMPANIES.
11. REMOVE SIGN IN ITS ENTIRETY INCLUDING FOOTING.
12. REMOVE ELECTRICAL LINES, POWER POLES, TRANSFORMERS, INCLUDING FOOTINGS AND FOUNDATIONS. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ON DEMOLITION LIMITS.
13. REMOVE RETAINING WALL IN ITS ENTIRETY INCLUDING FOOTING.
14. CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECTURAL PLANS FOR LIMITS OF SPRINKLER SYSTEM REMOVAL.
15. EXISTING CONCRETE SIDEWALK TO REMAIN. PROTECT AT ALL TIMES.
16. EXISTING BITUMINOUS TO REMAIN. PROTECT AT ALL TIMES.
17. EXISTING TREE TO REMAIN. PROTECT AT ALL TIMES.
18. EXISTING BUILDING TO REMAIN. PROTECT AT ALL TIMES. REFER TO ARCHITECTURAL PLANS FOR BUILDING REMOVAL LIMITS.
19. EXISTING FIBER OPTIC LINE TO REMAIN. PROTECT AT ALL TIMES. EXISTING COMMUNICATIONS BOX SHALL BE ADJUSTED TO MATCH PROPOSED GRADE.
20. EXISTING CONCRETE CURB AND GUTTER TO REMAIN. PROTECT AT ALL TIMES.
21. EXISTING MONUMENT SIGN TO REMAIN. PROTECT AT ALL TIMES.
22. EXISTING EMERGENCY WARNING SIREN TOWER TO REMAIN. PROTECT AT ALL TIMES.
23. EXISTING POWER POLES TO BE RELOCATED. REFER TO C3.000 FOR PROPOSED POLE LOCATION. CONTRACTOR SHALL COORDINATE RELOCATION WITH UTILITY OWNER, HENNEPIN COUNTY, AND CITY OF CRYSTAL.
24. EXISTING VAULTS TO BE RELOCATED. CONTRACTOR SHALL COORDINATE RELOCATION WITH UTILITY OWNER, HENNEPIN COUNTY, AND CITY OF CRYSTAL.
25. EXISTING LIGHT TO REMAIN. PROTECT AT ALL TIMES.
26. CONTRACTOR SHALL REMOVE EXISTING ROCK/RIPRAP IN ITS ENTIRETY.
27. EXISTING STORM SEWER RETENTION SYSTEM TO REMAIN. PROTECT AT ALL TIMES.
28. REMOVE EXISTING POWER POLES. EXISTING POWER LINES TO BE RELOCATED TO NEW POWER POLES. CONTRACTOR SHALL COORDINATE REMOVAL AND RELOCATION WITH UTILITY OWNERS PRIOR TO START OF CONSTRUCTION.
29. MILL EXISTING PARKING LOT, 2–INCHES IN DEPTH.
30. REMOVE EXISTING BITUMINOUS/CONCRETE PAVEMENT IN PUBLIC RIGHT OF WAY. REFER TO DETAIL 12/C5.001 FOR ANTICIPATED PAVEMENT SECTION.
31. REMOVE EXISTING TELECOMMUNICATIONS TOWER IN ITS ENTIRETY, INCLUDING BELOW GRADE FOUNDATIONS. COORDINATE REMOVAL WITH UTILITY OWNER PRIOR TO BIDDING.

DEMOLITION AND REMOVAL NOTES:

1. PRIOR TO START OF ANY CONSTRUCTION ACTIVITY, ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE CITY OF CRYSTAL AND SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION. PERIMETER SEDIMENT PROTECTION SHALL BE INSTALLED ALONG THE CONTOUR.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND MARK ALL EXISTING UTILITIES 48 HOURS BEFORE CONSTRUCTION STARTS. THE ENGINEER, ARCHITECT OR OWNER DOES NOT GUARANTEE THAT ALL THE UTILITIES ARE MAPPED, OR IF MAPPED, ARE SHOWN CORRECTLY. CONTACT GOPHER STATE ONE CALL AT 651–454–0002 FOR FIELD LOCATING EXISTING UTILITIES. CONTACT UTILITY OWNER IF DAMAGE OCCURS DUE TO CONSTRUCTION.
3. THERE MAY BE MISCELLANEOUS ITEMS TO BE REMOVED THAT ARE NOT IDENTIFIED ON THESE PLANS. THE CONTRACTOR SHALL VISIT THE SITE AND REVIEW THE DOCUMENTS TO OBTAIN A CLEAR UNDERSTANDING OF THE INTENDED SCOPE OF WORK.
4. PRIOR TO START OF CONSTRUCTION, DISCONNECT ALL GAS AND ELECTRIC SERVICES. COORDINATE DISCONNECTION OF EACH UTILITY WITH THE UTILITY OWNER. REMOVE ALL GAS AND ELECTRIC LINES UNDER PROPOSED BUILDING FOOTPRINT.
5. ANY UTILITIES NOT INDICATED FOR REMOVAL OR ABANDONMENT, ARE TO BE PROTECTED AT ALL TIMES.
6. EXISTING CONCRETE PAVEMENT AND CURB AND GUTTER SHOWN TO BE REMOVED WITHIN THE SCOPE OF THE PROJECT SHALL BE REMOVED FROM THE SAW CUT LINES TO THE NEAREST JOINT.
7. THE BACKGROUND INFORMATION WAS PREPARED BY CIVIL SITE GROUP. (612) 615–0060.
8. ALL WORK IN THE PUBLIC RIGHT OF WAY IS TO BE COORDINATED WITH THE CITY OF CRYSTAL AND HENNEPIN COUNTY. ROADWAY REPAIRS, BOULEVARD REPAIRS, AND TRAFFIC CONTROL ARE TO BE PER CITY OF CRYSTAL AND HENNEPIN COUNTY STANDARDS AND SPECIFICATIONS.

GENERAL NOTES:

1. CONCRETE CURB AND GUTTER REMOVAL, PAVEMENT REMOVAL, AND UTILITY REMOVAL LIMITS ARE TO BE COORDINATED THE CITY OF CRYSTAL AND HENNEPIN COUNTY. REFER TO ALL CONSTRUCTION DOCUMENTS.
2. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN WHILE WORKING WITHIN THE RIGHT–OF–WAY. THE TRAFFIC CONTROL PLAN SHALL BE APPROVED BY THE CITY AND HENNEPIN COUNTY ENGINEERING DEPARTMENT PRIOR TO STREET ENCROACHMENT.
3. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND REVIEW ALL CONSTRUCTION DOCUMENTS AND GEOTECHNICAL REPORTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ITEMS THAT SHOULD HAVE BEEN ANTICIPATED BY PERFORMING THE ABOVE.
4. THE ROCK CONSTRUCTION ENTRANCE INDICATED ON THE PLAN IS SHOWN IN AN APPROXIMATE LOCATION. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR IS TO COORDINATE WITH THE CITY OF CRYSTAL AND HENNEPIN COUNTY FOR THE EXACT ROCK CONSTRUCTION ENTRANCE LOCATION.

CRYSTAL CITY HALL

4141 DOUGLAS DRIVE N.
CRYSTAL, MN. 55422

CRYSTAL CITY HALL
4141 DOUGLAS DR. N.
CRYSTAL, MN. 55422

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101

woldac.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Drive, Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
www.bkbm.com

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BKBM JOB NUMBER: 20181

City Submittal PRELIMINARY

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.

Kevin A. Bohl
License Number: 52209 Date 10/01/2020

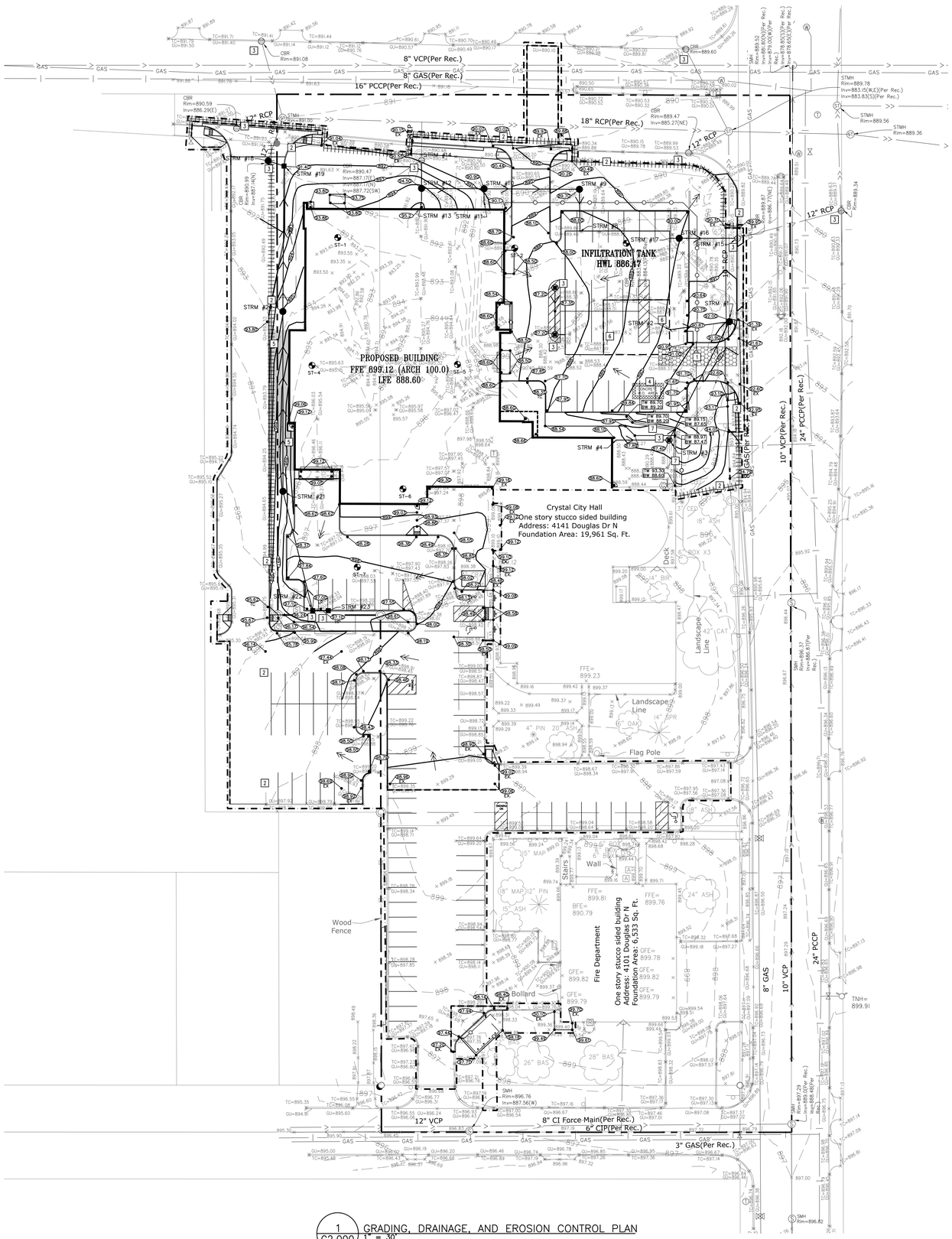
Revisions		
Description	Date	Num

Comm: 192195
Date: 10/01/2020
Drawn: WH
Check: KAB

North

SELECTIVE SITE DEMOLITION AND EROSION CONTROL PLAN

C1.000



1 C2.000 GRADING, DRAINAGE, AND EROSION CONTROL PLAN
1" = 30'

PROPOSED PLAN SYMBOLS

- CONSTRUCTION LIMITS
- SILTATION FENCE
- SEDIMENT CONTROL LOG
- PROPERTY LINE
- SAWCUT LINE (APPROX.)
- PROPOSED CONTOUR (890)
- DRAIN TILE
- STORM SEWER
- RETAINING WALL
- CATCH BASIN
- MANHOLE
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET (TEMPORARY)
- DRAINAGE FLOW ARROW
- RETAINING WALL SPOT ELEVATION (TW 87.92, BW 87.42)
- SPOT ELEVATION (87.70)
- SOIL BORING (SB-1)
- CONCRETE WASHOUT AREA (CONC. WASH. W.O. AREA)

ABBREVIATIONS

BLDG	Building
BM	Bench Mark
BW	Bottom of Wall
CB	Catch Basin
CONC	Concrete
ELEV	Elevation
EX	Existing
FFE	Finished Floor Elevation
INV	Invert
LFE	Lower Floor Elevation
MAX	Maximum
MH	Manhole
MIN	Minimum
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
TW	Top of Wall
W.O.	Washout

NOTE:
STORM SEWER INLETS NOT SHOWN ON PLAN MAY RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INSTALL INLET SEDIMENT PROTECTION PER DETAIL 2/C5.000 ON ALL STORM INLETS THAT MAY RECEIVE RUNOFF.

APPROXIMATE DISTURBED AREA IS 2.94 ACRES

NOTE:
CONDITIONS SHOWN AT THE DRIVE ENTRANCE TO THE COUNTY LIBRARY FROM 42ND AVENUE ARE ANTICIPATED FUTURE CONDITIONS. REFER TO EXISTING SURVEY (SHEET C0.000) FOR EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING DRIVE THAT COULD HAVE BEEN ANTICIPATED BY PERFORMING THE ABOVE.

N

30' 15' 0 30' 60'
SCALE 1" = 30'

RETAINING WALL NOTES:

1. ALL TOP AND BOTTOM ELEVATIONS CORRESPOND TO THE RESPECTIVE GRADE ELEVATIONS ON EACH SIDE OF THE WALL.
2. THE BOTTOM ELEVATION IS THE ELEVATION OF THE LOW-GRADE SIDE OF THE WALL, NOT THE TOP ELEVATION OF THE BURIED BLOCK COURSE.
3. ALL RETAINING WALLS SHALL HAVE PROTECTIVE FENCING AT THE TOP WHERE THE VERTICAL HEIGHT EXCEEDS 30 INCHES. REFER TO ARCHITECTURAL AND LANDSCAPE PLANS AND SPECIFICATIONS.
4. MODULAR BLOCK RETAINING WALL SHALL BE DESIGNED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER AND ARCHITECT AT LEAST THREE WEEKS PRIOR TO CONSTRUCTION OF WALL.

KEYED NOTES

KEYED NOTES ARE DENOTED BY NO ON PLAN.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE. REFER TO DETAIL 1/C5.000.
2. INSTALL PERIMETER EROSION CONTROL. REFER TO DETAILS 3/C5.000 AND 4/C5.000.
3. INSTALL INLET SEDIMENT PROTECTION. REFER TO DETAIL 2/C5.000.
4. APPROXIMATE LOCATION OF TEMPORARY CONTAINED CONCRETE WASH OUT BIN. REFER TO THE MINNESOTA'S NPDES/SDS GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY FOR MORE DETAILS. SELF CONTAINED CONCRETE WASHOUTS ON CONCRETE DELIVERY TRUCKS IS AN ACCEPTABLE ALTERNATIVE TO ON-SITE CONTAINMENT.
5. INSTALL MN/DOT 3885 CATEGORY 3 TEMPORARY STRAW FIBER EROSION CONTROL BLANKET.
6. EXISTING TRITON S-29 STORM WATER SYSTEM. REFER TO C3.000 FOR EXPANSION DETAILS. CONTRACTOR SHALL SUBCUT APPROXIMATELY 3.2-FEET BELOW PROPOSED INFILTRATION SYSTEM TO ELEVATION 879.80 OR SP-SM SOILS. FILL TO ELEVATION 882.50 WITH SELECT GRANULAR BORROW OR APPROVED ON-SITE SOILS. A GEOTECHNICAL ENGINEER SHALL CONFIRM EXCAVATION LIMITS. PRIOR TO BACKFILLING, CONTRACTOR SHALL PERFORM DOUBLE RING INFILTRAMETER TEST ON UNDERLYING SOILS TO VERIFY A MINIMUM INFILTRATION RATE OF 0.45 INCHES/HOUR.
7. REFER TO LANDSCAPE PLANS FOR RETAINING WALL DETAILS.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO ANY SITE GRADING OPERATIONS. THE CITY ENGINEERING DEPARTMENT AND SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION MUST BE NOTIFIED UPON COMPLETION OF THE INSTALLATION OF THE REQUIRED EROSION CONTROL FACILITIES AND PRIOR TO ANY GRADING OPERATION BEING COMMENCED. THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE A PRE-CONSTRUCTION GRADING MEETING ON-SITE WITH THE CITY AND SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION. IF DAMAGED OR REMOVED DURING CONSTRUCTION, ALL EROSION CONTROL FACILITIES SHALL BE RESTORED AND IN PLACE AT THE END OF EACH DAY.
2. ANY EROSION CONTROL FACILITIES DEEMED NECESSARY BY THE CITY OR SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION; BEFORE, DURING OR AFTER THE GRADING ACTIVITIES, SHALL BE INSTALLED AT THEIR REQUEST.
3. NO DEVIATIONS SHALL BE MADE FROM THE ELEVATIONS SHOWN ON THE APPROVED GRADING PLAN, WITHOUT PRIOR APPROVAL FROM THE CIVIL ENGINEER.
4. FOR SITES GREATER THAN 1.0 ACRE, AS REQUIRED BY THE MPCA PERMIT REQUIREMENTS, THE PERMIT APPLICANT MUST KEEP AN EROSION CONTROL INSPECTION LOG. INSPECTION MUST BE MADE ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS AFTER EVERY RAIN EVENT. THE INSPECTION RECORD MUST BE MADE AVAILABLE TO THE CITY AND SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION WITHIN 24 HOURS OF REQUEST.
5. FLOWS FROM DIVERSION CHANNELS OR PIPES (TEMPORARY OR PERMANENT) SHALL BE ROUTED TO SEDIMENTATION BASINS OR APPROPRIATE ENERGY DISSIPATERS TO PREVENT TRANSPORT OF SEDIMENT TO OUTFLOW TO LATERAL CONVEYORS AND TO PREVENT EROSION AND SEDIMENTATION WHEN RUNOFF FLOWS INTO THESE CONVEYORS.
6. SITE ACCESS ROADS SHALL BE GRADED OR OTHERWISE PROTECTED WITH SILT FENCES, DIVERSION CHANNELS, OR DIKES AND PIPES TO PREVENT SEDIMENT FROM EXITING THE SITE VIA THE ACCESS ROADS. SITE-ACCESS ROADS/DRIVEWAYS SHALL BE SURFACED WITH CRUSHED ROCK WHERE THEY ADJOIN EXISTING PAVED ROADWAYS.
7. SOILS TRACKED FROM THE SITE BY MOTOR VEHICLES OR EQUIPMENT SHALL BE CLEANED DAILY FROM PAVED ROADWAY SURFACES, OR MORE FREQUENTLY IF REQUESTED BY CITY OR SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION, THROUGHOUT THE DURATION OF CONSTRUCTION.
8. DUST CONTROL MEASURES SHALL BE PERFORMED PERIODICALLY WHEN CONDITIONS REQUIRE AND/OR AS DIRECTED BY THE CITY OR SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION.
9. ALL EROSION CONTROL MEASURES SHALL BE USED AND MAINTAINED FOR THE DURATION OF SITE CONSTRUCTION. IF CONSTRUCTION OPERATIONS OR NATURAL EVENTS DAMAGE OR INTERFERE WITH THESE EROSION CONTROL MEASURES, THEY SHALL BE RESTORED TO SERVE THEIR INTENDED FUNCTION AT THE END OF EACH DAY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
10. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AS SOON AS POSSIBLE. ANY AREAS WHICH HAVE BEEN FINISHED GRADED OR AREAS THAT HAVE BEEN DISTURBED AND FOR WHICH GRADING OR SITE BUILDING CONSTRUCTION OPERATIONS ARE NOT ACTIVELY UNDERWAY SHALL BE SEEDED AND MULCHED AS SET FORTH IN THE FOLLOWING PARAGRAPHS WITHIN 14 DAYS:
    - A. ALL SEEDED AREAS SHALL BE EITHER MULCHED AND DISC-ANCHORED OR COVERED BY FIBROUS BLANKETS TO PROTECT SEEDS AND LIMIT EROSION. TEMPORARY STRAW MULCH SHALL BE DISC-ANCHORED AND APPLIED AT A UNIFORM RATE OF NOT LESS THAN TWO TONS PER ACRE AND NOT LESS THAN 80% COVERAGE.
    - B. IF THE GRADED AREA IS ANTICIPATED TO BE RE-DISTURBED/DEVELOPED WITHIN SIX MONTHS, PROVIDE A TEMPORARY VEGETATIVE COVER CONSISTING OF MINNESOTA DEPARTMENT OF TRANSPORTATION (MNDOT) SEED MIXTURE 21-111 (OATS), OR 21-112 (WINTER WHEAT), AT A RATE OF 100 POUNDS PER ACRE.
    - C. IF GRADED AREA WILL NOT BE DEVELOPED FOR A PERIOD GREATER THAN SIX MONTHS, PROVIDE A SEMI-PERMANENT VEGETATIVE COVER OF SEED MIXTURE MNDOT 22-112 AT A RATE OF 40 POUNDS PER ACRE.
    - D. GRADING BONDS OR THE EQUIVALENT SECURITIES SHALL BE RETAINED UNTIL TURF HAS GERMINATED AND SURVIVED A 60-DAY GROWING PERIOD.
    - E. UNLESS SPECIFIED ELSEWHERE WITHIN THE CONSTRUCTION DOCUMENTS (I.E. ARCHITECTURAL SITE PLAN OR LANDSCAPE PLAN), PERMANENT TURF RESTORATION SHALL CONSIST OF SOD.
    - F. WHENEVER OTHER EROSION AND SEDIMENT CONTROL PRACTICES ARE INADEQUATE, TEMPORARY ON-SITE SEDIMENT BASINS THAT CONFORM TO THE CRITERIA FOR ON-SITE DETENTION BASINS SHALL BE PROVIDED.
    - G. MULCH, HYDROMULCH, AND TACKIFIERS MAY NOT BE USED FOR STABILIZATION IN SWALES OR DRAINAGE DITCHES UNLESS THE LONGITUDINAL SLOPE IS LESS THAN 2 PERCENT.
    - H. RUNOFF SHALL BE PREVENTED FROM ENTERING ALL STORM SEWER CATCH BASINS PROVIDING THEY ARE NOT NEEDED DURING CONSTRUCTION. WHERE STORM SEWER CATCH BASINS ARE NECESSARY FOR SITE DRAINAGE DURING CONSTRUCTION, A SILT FENCE OR SEDIMENT PROTECTION DEVICES AS DETAILED SHALL BE INSTALLED AND MAINTAINED AROUND ALL CATCH BASINS UNTIL THE TRIBUTARY AREA TO THE CATCH BASIN IS RESTORED.
11. GRADING ACTIVITIES PROPOSED TO BEGIN AFTER OCTOBER 15 WILL REQUIRE AN APPROVED PHASING SCHEDULE. THE AREA OF LAND THAT THE CITY WILL ALLOW TO BE DISTURBED AT THIS TIME OF YEAR WILL BE SEVERELY LIMITED. THE CITY WILL ALSO REQUIRE ADDITIONAL EROSION CONTROL DEVISES, I.E., TEMPORARY SEDIMENT BASINS, DORMANT SEEDING AND HIGH RATES OF APPLICATION OF BOTH SEED AND MULCH.
12. TO MINIMIZE EROSION, ALL 3:1 SLOPES SHALL BE COVERED WITH A MN/DOT 3885 CATEGORY 3 STRAW EROSION CONTROL BLANKETS OR STAKED SOD.
13. ACCUMULATION OF ALL SEDIMENT OCCURRING IN STORM SEWERS AND DITCHES SHALL BE REMOVED PRIOR TO, DURING AND AFTER COMPLETION OF GRADING ACTIVITIES.
14. EROSION CONTROL ITEMS AND DEVICES SHALL BE REMOVED ONLY AFTER THE AREA HAS RECEIVED FINAL STABILIZATION OR AS DIRECTED BY THE CITY AND/OR SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION.

GRADING NOTES:

1. THE CONTRACTOR SHALL VISIT THE SITE, REVIEW ALL CONSTRUCTION DOCUMENTS AND FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING. NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR WORK THAT COULD HAVE BEEN IDENTIFIED BY A SITE VISIT OR CONSTRUCTION DOCUMENT REVIEW.
2. THE BACKGROUND INFORMATION WAS PREPARED BY CIVIL SITE GROUP. (612) 615-0060.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND MARK ALL EXISTING UTILITIES 48 HOURS BEFORE CONSTRUCTION STARTS. THE ENGINEER, ARCHITECT OR OWNER DOES NOT GUARANTEE THAT ALL THE UTILITIES ARE MAPPED, OR IF MAPPED, ARE SHOWN CORRECTLY. CONTACT GOPHER ONE AT 651-454-0002 FOR FIELD LOCATING EXISTING UTILITIES. CONTACT UTILITY OWNER IF DAMAGE OCCURS DUE TO CONSTRUCTION.
4. PROTECT ALL EXISTING STRUCTURES AND UTILITIES WHICH ARE NOT SCHEDULED FOR REMOVAL.
5. NOTIFY CITY BUILDING INSPECTOR BEFORE TRENCHING AND EXCAVATION WORK COMMENCES. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS PRIOR TO START OF CONSTRUCTION.
6. ALL SPOT ELEVATIONS SHOWN AS 87.70, FOR EXAMPLE, ARE TO BE UNDERSTOOD TO MEAN 887.70.
7. ALL SPOT ELEVATIONS ALONG THE CURB-LINE INDICATE THE ELEVATION OF THE GUTTER, UNLESS NOTED OTHERWISE.
8. NO LANDSCAPED SLOPES ARE TO EXCEED 3:1 (3 FEET HORIZONTAL TO 1 FOOT VERTICAL) UNLESS NOTED OTHERWISE.
9. ACCESSIBLE PARKING AREAS SHALL NOT HAVE SLOPES IN ANY DIRECTION THAT EXCEED 2%.
10. PROVIDE POSITIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
11. **UPON COMPLETION OF THE GRADING AND UTILITY WORK, THE CONTRACTOR SHALL CERTIFY THAT ALL GRADING AND UTILITY WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED GRADING AND UTILITY PERMITS. AN AS-BUILT GRADING AND UTILITY PLAN SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR HIRED BY THE CONTRACTOR. SURVEY SHALL BE PROVIDED TO CIVIL ENGINEER.**
12. PRIOR TO ISSUANCE OF BUILDING PERMITS, ALL NECESSARY EROSION CONTROL DEVICES MUST BE IN PLACE AND FUNCTIONING. THE CITY AND SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION WILL INSPECT THE SITE TO DETERMINE ITS SUITABILITY FOR BUILDING ACTIVITIES. IF THE PUBLIC UTILITIES HAVE NOT BEEN INSTALLED AT THIS POINT, IT MAY BE NECESSARY TO WITHHOLD BUILDING PERMITS FOR VARIOUS LOTS TO ALLOW THE CONTRACTOR ADEQUATE SPACE TO PERFORM THIS WORK.
13. ALL DEBRIS CREATED IN THE PROCESS OF CLEARING AND GRADING THE SITE SHALL BE REMOVED FROM THE SITE. THIS INCLUDES TREES AND SHRUBS. UNDER NO CIRCUMSTANCES SHALL THIS TYPE OF MATERIAL BE BURIED OR BURNED ON THE SITE.
14. THE CONTRACTOR MAY STRIP AND SALVAGE TOPSOIL FOR POTENTIAL RE-SPREADING ON THE SITE FOR REUSE. SIX INCHES OF TOPSOIL – AFTER COMPACTION – SHALL BE RE-SPREAD PRIOR TO SEEDING AND MULCHING. EXCESS TOPSOIL MAY BE REMOVED FROM THE SITE PROVIDING THERE IS ADEQUATE TOPSOIL REMAINING TO PROPERLY FINISH THE SITE AS NOTED ABOVE. THE TOPSOIL STRIPPING, STOCKPILING AND RE-SPREADING SHALL BE DONE IN ACCORDANCE TO, AND NOTED ON, THE APPROVED GRADING PLAN AND SPECIFICATIONS. THE CONTRACTOR SHALL REFER TO THE LANDSCAPE DRAWINGS AND SPECIFICATIONS FOR ANY SPECIAL TOPSOIL OR PLANTING REQUIREMENTS.
15. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION. EROSION CONTROL MEASURES SHALL BE INSTALLED TO PREVENT SEDIMENT FROM RUNNING OFF ONTO ADJACENT PROPERTIES. ANY DAMAGE TO ADJACENT PROPERTIES MUST BE CORRECTED AND RESTORED AS SOON AS PERMISSION IS GRANTED FROM THE ADJACENT PROPERTY OWNER(S).
16. IF CONSTRUCTION OF THE SITE WORK PROCEEDS THROUGH THE WINTER MONTHS, ANY DISTURBED AREAS OUTSIDE THE BUILDING FOOTPRINTS ARE TO BE MINIMALLY STABILIZED PRIOR TO MARCH 1, AS FOLLOWS: AREAS PLANNED TO RECEIVE PAVEMENTS ARE TO HAVE CLASS 5 BASE INSTALLED; ALL OTHER DISTURBED AREAS ARE TO BE SEEDED, STRAW MULCH PLACED, AND DISC-ANCHORED.
17. WINTER MULCHING:
    - 17.A. SNOW MULCHING SHALL BE DEFINED AS MULCH MATERIAL SPREAD OVER THE TOP OF SNOW SO THAT THE MULCH MELTS THROUGH THE SNOW AND STICKS TO THE EXPOSED SOILS.
    - 17.B. FROZEN GROUND MULCHING SHALL BE DEFINED AS MULCH MATERIAL SPREAD OVER FROZEN GROUND. MULCH MATERIALS THAT DO NOT REQUIRE DISC-ANCHORING INTO THE SOIL MAY BE PLACED WITHOUT MODIFICATION. MULCH MATERIALS THAT REQUIRE DISC-ANCHORING MAYBE ANCHORED WITH HYDRAULIC SOIL STABILIZERS OR MAY BE FROZEN TO THE SOIL BY APPLYING WATER, AT A RATE OF 2000 GALLONS PER ACRE, OVER THE MULCH AS A SUBSTITUTION FOR DISC-ANCHORING.
18. RETAINING WALLS AND APPROPRIATE SAFETY FENCING ALONG THE TOP OF WALLS ARE TO BE DESIGNED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER. SUBMIT RETAINING WALL SHOP DRAWINGS TO PROJECT TEAM PRIOR TO CONSTRUCTION.
19. THE CONTRACTOR SHALL LIMIT THE DISTURBED AREA AS MUCH AS POSSIBLE.

CRYSTAL CITY HALL

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332 Minnesota Street, Suite W2000
Saint Paul, MN 55101

woldac.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Drive, Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
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BKBM JOB NUMBER: 20181

City Submittal
PRELIMINARY

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.

Kevin A. Bohl
License Number: 52209 Date 10/01/2020

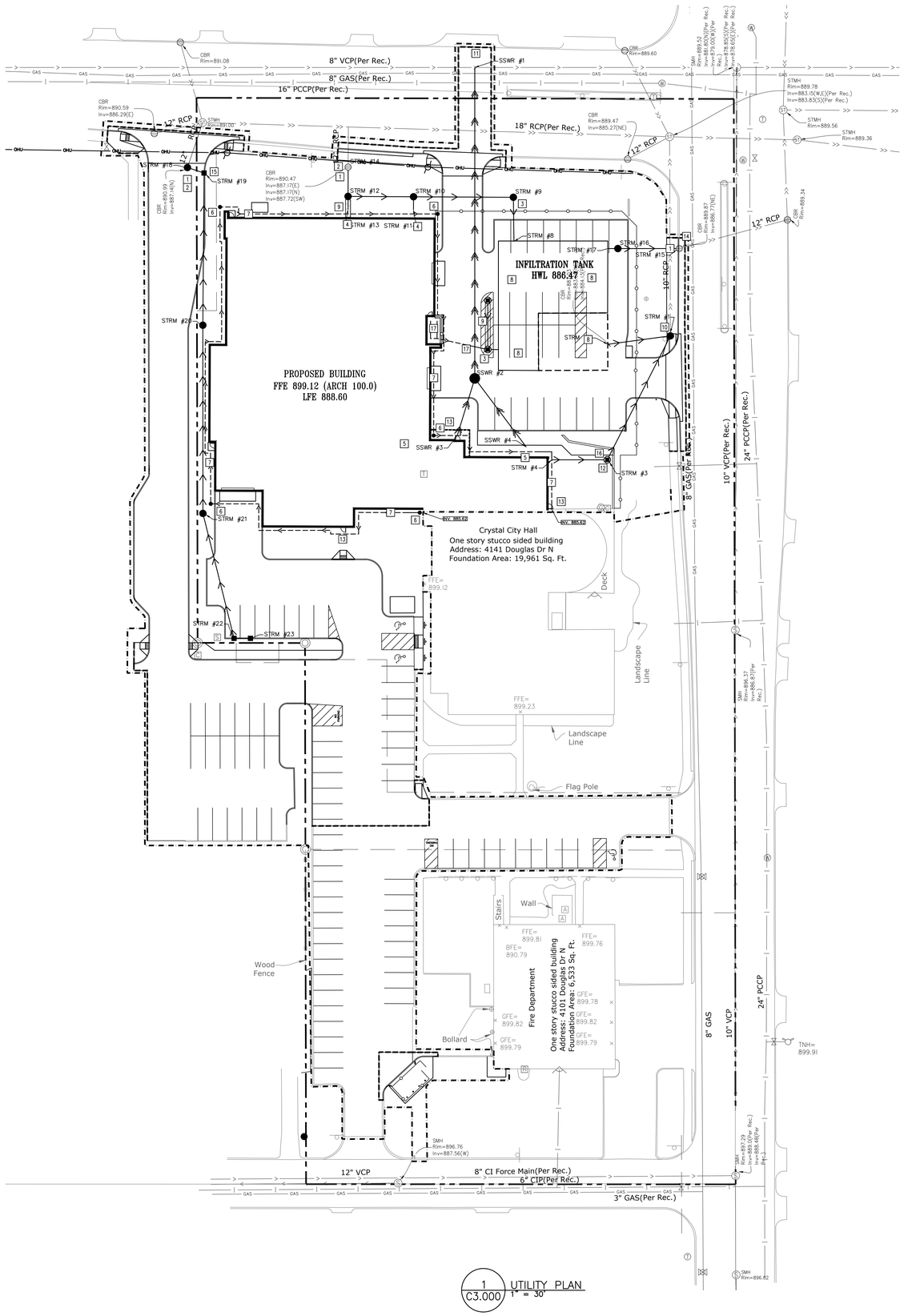
Revisions		
Description	Date	Num

Comm: 192195
Date: 10/01/2020
Drawn: WH
Check: KAB

North

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

C2.000



1 C3.000 UTILITY PLAN 1" = 30'

PROPOSED PLAN SYMBOLS

CONSTRUCTION LIMITS
PROPERTY LINE
SAWCUT LINE (APPROX.)
SANITARY SEWER
WATER PIPE
DRAIN TILE
STORM SEWER
RETAINING WALL
CLEANOUT
CATCH BASIN
MANHOLE
PIPE INSULATION
SEWER INVERT ELEVATION — INV. 884.39

NOTE:
CONDITIONS SHOWN AT THE DRIVE ENTRANCE TO THE COUNTY LIBRARY FROM 42ND AVENUE ARE ANTICIPATED FUTURE CONDITIONS. REFER TO EXISTING SURVEY (SHEET C0.000) FOR EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING DRIVE THAT COULD HAVE BEEN ANTICIPATED BY PERFORMING THE ABOVE.

ABBREVIATIONS

BLDG	Building
BM	Bench Mark
CB	Catch Basin
CONC	Concrete
DIP	Ductile Iron Pipe
ELEV	Elevation
EX	Existing
FFE	Finished Floor Elevation
HDPE	High Density Polyethylene
INV	Invert
MAX	Maximum
MH	Manhole
MIN	Minimum
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
RD	Roof Drain

NOTE:
AN AS-BUILT SURVEY OF ALL STORMWATER BMPS (FILTRATION BASIN, OUTLET STRUCTURES, DRAIN TILE, CLEAN OUTS, SUMP CATCH BASINS, ETC...) SHALL BE SUBMITTED TO SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION PRIOR TO PROJECT CLOSEOUT. THE AS-BUILT SURVEY SHALL INCLUDE THE FILTRATION BASIN DRAIN TILE INVERTS AND LAYOUT FOR VERIFICATION. THE SYSTEM WAS INSTALLED PROPERLY, AND THAT 18-INCHES OF SAND/FILTRATION MIX OVER THE TOP OF THE DRAIN TILE HAS BEEN PROVIDED.

N

30' 15' 0 30' 60'
SCALE 1" = 30'

KEYED NOTES

KEYED NOTES ARE DENOTED BY NO ON PLAN.

1. CORE DRILL EXISTING MANHOLE FOR PROPOSED PIPE CONNECTION. GROUT SEAL AROUND OPENING. FOLLOW ALL CITY OF CRYSTAL STANDARDS AND SPECIFICATIONS.
2. RECONSTRUCT EXISTING MANHOLE TO MATCH PROPOSED GRADE. INSTALL NEENAH R-1733 GRATE AND CASTING.
3. INSTALL SUMP CATCH BASIN WITH SNOUT, ENVIROHOOD OR APPROVED EQUAL. REFER TO DETAIL 1/C5.001.
4. LOCATION OF PROPOSED ROOF DRAIN LEAD. REFER TO STORM SEWER TABLE FOR INVERT ELEVATIONS AND PIPE SIZES. **COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH MECHANICAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.**
5. LOCATION OF PROPOSED SANITARY SEWER SERVICE. REFER TO SANITARY SEWER TABLE FOR INVERT ELEVATIONS AND PIPE SIZES. **COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH MECHANICAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.**
6. INSTALL DRAIN TILE CLEAN OUT. FOLLOW ALL CITY OF CRYSTAL STANDARDS AND SPECIFICATIONS. REFER TO 8/C5.001.DETAIL
7. INSTALL PERIMETER DRAIN TILE. REFER TO DETAIL 2/C5.001. PROVIDE SOLID PIPE AND WATER TIGHT CONNECTIONS TO 10-FEET OF EITHER SIDE OF ALL WATER CROSSINGS PER MN PLUMBING CODE.
8. INSTALL INFILTRATION SYSTEM. AN EXISTING TRITON S-29 SYSTEM IS CURRENTLY UNDER THE PARKING LOT. INTENT IS TO EXPAND THE EXISTING SYSTEM. INFILTRATION SYSTEM SHALL HAVE AN INFILTRATION VOLUME OF 6,219 CUBIC FEET A TOTAL VOLUME OF 13,780 CUBIC FEET, AND MEET THE RATE CONTROL REQUIREMENTS INDICATED ON SHEET C6.000. SYSTEM FOOTPRINT IS BASED ON TRITON S-29 DESIGN. EXISTING INVERT OF TRITON S-29 CHAMBERS IS 883.00. REFER TO DETAIL 6/C5.001.
9. INSTALL PIPE INSULATION. REFER TO DETAIL 14/C5.000.
10. CONTRACTOR SHALL INSTALL MANHOLE IN LINE WITH EXISTING 10-INCH RCP PIPE. APPROXIMATE INVERT OF EXISTING PIPE IS 883.58. PRIOR TO INSTALLATION ON MANHOLE, CONTRACTOR SHALL CONTACT CIVIL ENGINEER WITH EXACT INVERT ELEVATION. FOLLOW ALL CITY OF CRYSTAL STANDARDS AND SPECIFICATIONS.
11. CONTRACTOR SHALL CONNECT TO EXISTING 8-INCH VCP AT PROPOSED INVERT OF 879.47 AND INSTALL 8-INCH x 8-INCH WYE FOR PROPOSED PIPE CONNECTION. PRIOR TO START OF CONNECTION, CONTRACTOR SHALL CONTACT CIVIL ENGINEER WITH EXACT INVERT ELEVATION. FOLLOW ALL CITY OF CRYSTAL STANDARDS AND SPECIFICATIONS.
12. INSTALL BACK FLOW PREVENTER ON DRAIN TILE LINE WITHIN STRM STRUCTURE #3.
13. INSTALL DRAIN TILE FROST PROTECTION AT STOOPS. REFER TO DETAIL 9/C5.001.
14. RECONSTRUCT EXISTING MANHOLE TO MATCH PROPOSED GRADE. INSTALL NEENAH R-3067 GRATE AND CASTING. ANTICIPATED RIM ELEVATION OF 890.06.
15. STRM# 19 IS SHOWN AS A CATCH BASIN FOR FUTURE CONDITIONS. STRM# 19 SHALL BE CONSTRUCTED SUCH THAT 6-INCH OF ADJUSTING RINGS CAN BE REMOVED TO LOWER THE RIM ELEVATION AND A NEENAH R-3067 CASTING BE INSTALLED.
16. INSTALL AGRI DRAIN CHECK VALVE WITH CLEANOUT, MODEL CV08C OR APPROVED EQUAL, INSIDE PROPOSED MANHOLE. CHECK VALVE SHALL CONNECT TO PERIMETER DRAIN TILE INLET AND REST ON THE BOTTOM OF THE PROPOSED MANHOLE.
17. INSTALL 4-INCH DRAIN TILE UNDER DOG RUN. REFER TO LANDSCAPE PLANS. CONNECT TO STRM-6 AT INVERT 884.40.

STORM SEWER TABLE

STRUCTURE ID	STRUCTURE DIMENSION (INCHES)	NEENAH CASTING TYPE	RIM ELEVATION	INVERT ELEVATION(S)	PIPE LENGTH, DIAMETER, SLOPE & NEXT UPSTREAM STRUCTURE
STRM #1	60" MH	R-1733	891.95	N = 883.58 W = 884.00 SW = 883.78	-------- 39 L.F. OF 10" PVC @ 0.52%, STRM #2 85 L.F. OF 12" RCP @ 0.51%, STRM #3
STRM #2	TANK CONNECTION	NA		E = 884.20	--------
STRM #3	48" SUMP MH	R-2535	887.40	NE = 884.21 W = 884.90	-------- 34 L.F. OF 4" PVC @ 2.12%, STRM #4
STRM #4	DRAIN TILE CONNECTION	NA		E = 885.62	--------
STRM #5	TANK CONNECTION	NA		W = 883.83	7 L.F. OF 12" PVC @ 1.00%, STRM #6
STRM #6	48" SUMP MH	R-2535	887.20	E = 883.90 N = 883.90	-------- 30 L.F. OF 12" RCP @ 1.00%, STRM #7
STRM #7	27" CB	R-2535	887.20	S = 884.20	--------
STRM #8	TANK CONNECTION	NA		N = 884.12	27 L.F. OF 10" PVC @ 1.00%, STRM #9
STRM #9	48" SUMP MH	R-1733	889.70	S = 884.39 W = 884.39	-------- 61 L.F. OF 10" PVC @ 1.00%, STRM #10
STRM #10	48" MH	R-1733	890.90	E = 885.00 W = 885.00 S = 885.04	-------- 40 L.F. OF 6" PVC @ 1.00%, STRM #12 8 L.F. OF 10" PVC @ 1.01%, STRM #11
STRM #11	ROOF DRAIN CONNECTION	NA		N = 885.12	--------
STRM #12	60" MH	R-1733	894.50	E = 885.40 N = 887.35 S = 889.04	-------- -------- 8 L.F. OF 12" PVC @ 1.00%, STRM #13
STRM #13	ROOF DRAIN CONNECTION	NA		N = 889.12	--------
STRM #14	EX	R-1733	890.60	N = 887.17 S = 887.17	-------- 18 L.F. OF 12" RCP @ 1.00%, STRM #12
STRM #15	EX	EX	889.87	E = 886.77 W = 886.77	-------- 37 L.F. OF 12" RCP @ 0.99%, STRM #16
STRM #16	48" MH	R-1733	890.00	E = 887.14 W = 883.00	-------- 6 L.F. OF 24" PVC @ 0.00%, STRM #17
STRM #17	TANK CONNECTION	NA		E = 883.00	--------
STRM #18	48" MH	R-1733	890.99	N = 887.14 E = 887.14	-------- 11 L.F. OF 12" RCP @ 1.05%, STRM #19
STRM #19	48" MH	R-1878-B7L	891.40	W = 887.25 S = 887.25	-------- 93 L.F. OF 12" RCP @ 2.87%, STRM #20
STRM #20	48" MH	R-1733	895.00	N = 889.92 S = 889.92	-------- 115 L.F. OF 12" PVC @ 2.00%, STRM #21
STRM #21	48" MH	R-1733	897.00	N = 892.22 S = 892.22	-------- 79 L.F. OF 12" RCP @ 1.00%, STRM #22
STRM #22	48" MH	R-3067	897.00	N = 893.01 E = 893.01	-------- 10 L.F. OF 12" RCP @ 1.00%, STRM #23
STRM #23	24"x36" CB	R-3067	897.00	W = 893.11	--------

SANITARY SEWER TABLE

STRUCTURE ID	STRUCTURE DIMENSION (INCHES)	NEENAH CASTING TYPE	RIM ELEVATION	INVERT ELEVATION(S)	PIPE LENGTH, DIAMETER, SLOPE & NEXT UPSTREAM STRUCTURE
SSWR #1	8" WYE	NA		E = 879.47 W = 879.47 S = 879.47	-------- -------- 190 L.F. OF 8" PVC @ 1.00%, SSWR #2
SSWR #2	48" MH	R-1733	887.55	N = 881.37 S = 881.47 SE = 881.47	-------- 36 L.F. OF 6" PVC @ 1.99%, SSWR #3 52 L.F. OF 4" PVC @ 2.01%, SSWR #4
SSWR #3	Sanitary Sewer Service Connection	NA		N = 882.19	--------
SSWR #4	Sanitary Sewer Service Connection	NA		NW = 882.52	--------

UTILITY NOTES:

1. COORDINATE SERVICE CONNECTION LOCATIONS AT THE BUILDING WITH THE MECHANICAL CONTRACTOR PRIOR TO CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UNCOORDINATED WORK.
2. COORDINATE UTILITY INSTALLATION WITH STRUCTURAL PRIOR TO START OF CONSTRUCTION. UTILITIES SHALL NOT BE INSTALLED WITHIN THE ZONE OF INFLUENCE OF ANY STRUCTURAL ELEMENTS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR UNCOORDINATED WORK.
3. ALL SEWER SERVICE CONNECTIONS WITH LESS THEN 5 FEET OF COVER OVER THE TOP OF PIPE SHALL BE INSULATED. INSULATION SHALL BE INSTALLED FROM THE CONNECTION OF THE SERVICE AT THE BUILDING TO THE POINT WHICH THE SERVICE ATTAINS 5 FEET OF COVER. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM ARCHITECT OR ENGINEER PRIOR TO INSTALLATION OF INSULATION.
4. PROTECT ALL EXISTING STRUCTURES AND UTILITIES WHICH ARE NOT SCHEDULED TO BE REMOVED.
5. ALL SEWER AND WATER CROSSINGS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 1.5 FEET AND HORIZONTAL SEPARATION OF 10 FEET. FOLLOW ALL HEALTH DEPARTMENT AND CITY OF CRYSTAL AND HENNEPIN COUNTY STANDARDS.
6. SANITARY SEWER PIPING SHALL BE SDR 35 PVC UNLESS NOTED OTHERWISE.
7. STORM SEWER PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP), UNLESS NOTED OTHERWISE. ALL 12-INCH THROUGH 18-INCH RCP STORM SEWER PIPE SHALL BE CLASS 5. RCP PIPE LARGER THAN 18-INCH SHALL BE CLASS 3 UNLESS NOTED OTHERWISE. ALL STORM SEWER PIPE THAT IS EXTENDED TO THE BUILDING FOR ROOF DRAIN SERVICES SHALL BE SCHEDULE 40 PVC.
8. CONTRACTORS SHALL COORDINATE ALL WORK WITH GAS, ELECTRIC, TELEVISION AND TELEPHONE COMPANIES PRIOR TO START OF CONSTRUCTION.
9. WHERE PROPOSED GRADE OVER EXISTING SMALL UTILITIES IS PROPOSED TO BE LOWERED, CONTRACTOR SHALL COORDINATE WITH UTILITY OWNER FOR THE LOWERING OF THE EXISTING UTILITY TO PROVIDE THE MINIMUM COVER REQUIRED.
10. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10-FEET OF THE BUILDING OR WATER SERVICE LINE SHALL BE TESTED IN ACCORDANCE WITH MN PLUMBING CODE.
11. ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GAS TIGHT OR WATER TIGHT IN ACCORDANCE TO MN PLUMBING CODE. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATER TIGHT CONNECTIONS TO MANHOLES, CATCH BASINS, AND OTHER STRUCTURES. RESILIENT WATER-STOP GROUTING RINGS ARE AN ACCEPTABLE ALTERNATIVE. CEMENT MORTAR JOINTS ARE PERMITTED ONLY FOR REPAIRS AND CONNECTIONS OF EXISTING LINES CONSTRUCTED WITH SUCH JOINTS.

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City Submittal PRELIMINARY

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.

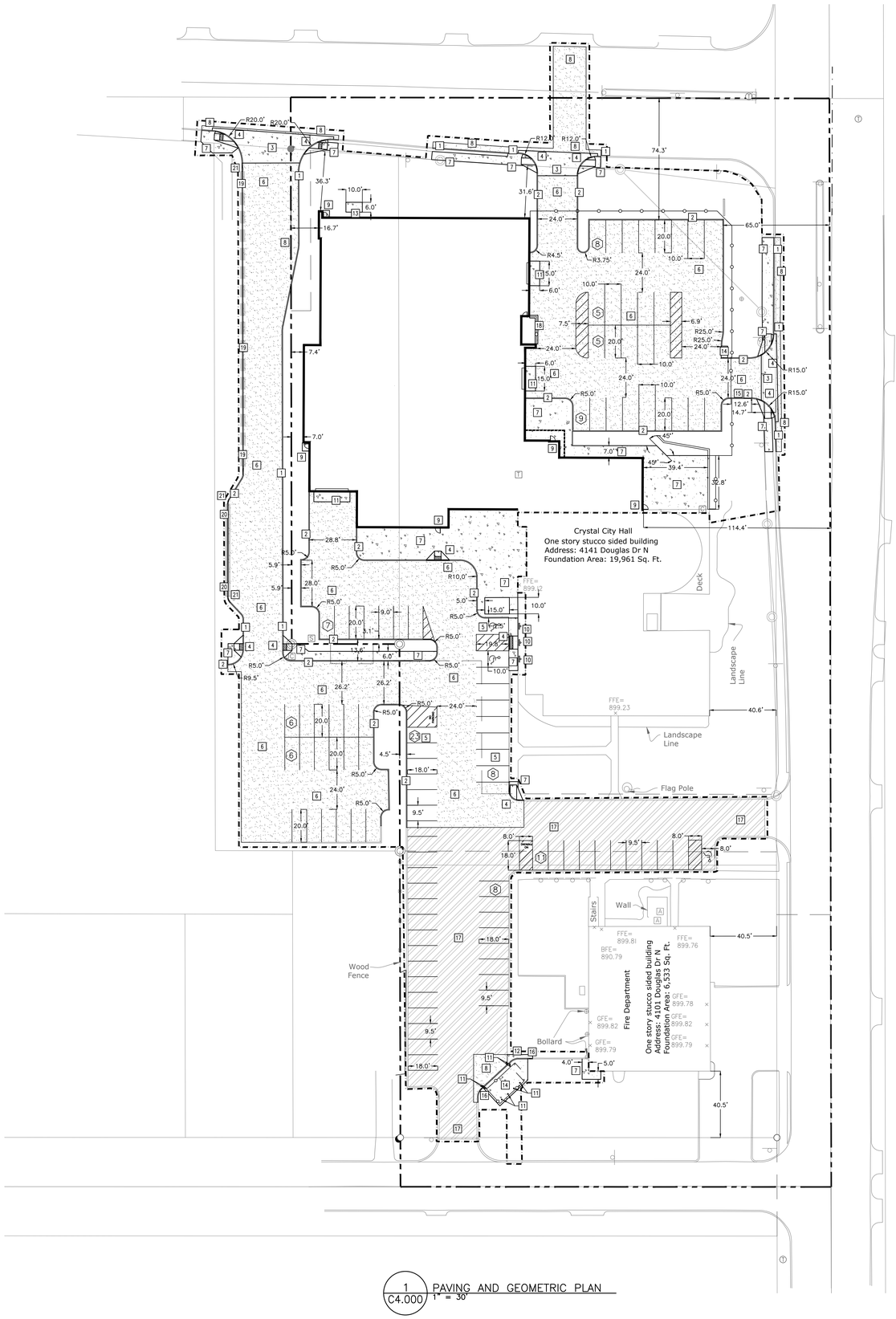
Kevin A. Bohl
License Number: 52209 Date 10/01/2020

Revisions		
Description	Date	Num

Comm: 192195
Date: 10/01/2020
Drawn: WH
Check: KAB
North

UTILITY PLAN

C3.000



1 C4.000 PAVING AND GEOMETRIC PLAN
1" = 30'

PROPOSED PLAN SYMBOLS

- CONSTRUCTION LIMITS
- PROPERTY LINE
- SAWCUT LINE (APPROX.)
- VERTICAL CURB
- SURMOUNTABLE CURB
- RETAINING WALL
- BITUMINOUS PAVEMENT
- 2 INCH BITUMINOUS PAVEMENT OVERLAY
- CONCRETE PAVEMENT/SIDEWALK
- PEDESTRIAN CURB RAMP
- ACCESSIBLE PARKING SYMBOL
- SIGN
- PARKING STALL COUNT

PARKING STALL COUNTSS:

EXISTING STALLS: 92

PROPOSED:
EXTERIOR: 84
INTERIOR: 32
TOTAL: 116

ABBREVIATIONS

BLDG	Building
BM	Bench Mark
CONC	Concrete
ELEV	Elevation
EX	Existing
FFE	Finished Floor Elevation
LFE	Lower Floor Elevation
MAX	Maximum
MIN	Minimum
R	Radius
TYP.	Typical
MNMUTCD	Minnesota Manual on Uniform Traffic Control Devices

NOTE:
CONDITIONS SHOWN AT THE DRIVE ENTRANCE TO THE COUNTY LIBRARY FROM 42ND AVENUE ARE ANTICIPATED FUTURE CONDITIONS. REFER TO EXISTING SURVEY (SHEET C0.000) FOR EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING DRIVE THAT COULD HAVE BEEN ANTICIPATED BY PERFORMING THE ABOVE

NOTE:
CONTRACTOR SHALL PROVIDE UNIT PRICES FOR THE FOLLOWING WORK:

UNIT PRICE #1 (LF) – REMOVAL AND REPLACEMENT OF EXISTING CURB AT LIBRARY WEST OF THE SITE. REFER TO DETAILS 8/C5.000, 9/C5.000, 13/C5.001, AND 14/C5.001 FOR PROPOSED CURB SECTION.

UNIT PRICE #2 (SY) – REMOVAL AND REPLACEMENT OF THE EXISTING ASPHALT PAVEMENT AT THE LIBRARY BUILDING WEST OF THE SITE. REFER TO DETAIL 12/C5.000.

N

30' 15' 0 30' 60'
SCALE 1" = 30'

NOTE:
BUILDING FOOTING SHALL NOT EXTEND INTO EXISTING DRAINAGE AND UTILITY EASEMENT (5 FEET FROM PROPERTY LINE), ALONG WEST PROPERTY LINE. VERIFY FOOTING LOCATIONS WITH RESPECT TO EASEMENT LOCATION PRIOR TO START OF CONSTRUCTION.

KEYED NOTES

KEYED NOTES ARE DENOTED BY NO ON PLAN.

1. INSTALL B618 CONCRETE CURB AND GUTTER. REFER TO DETAIL 8/C5.000.
2. INSTALL B612 CONCRETE CURB AND GUTTER. REFER TO DETAIL 9/C5.000.
3. INSTALL CONCRETE DRIVE ENTRANCE. REFER TO DETAIL 10/C5.000.
4. INSTALL PEDESTRIAN CURB RAMP. REFER TO MN/DOT STANDARD PLAN 5–297.250 AND MN/DOT STANDARD PLATE 7038. REFER TO DETAIL 10/C5.001.
5. INSTALL LIGHT–DUTY BITUMINOUS PAVEMENT. REFER TO DETAIL 11/C5.000.
6. INSTALL HEAVY–DUTY BITUMINOUS PAVEMENT. REFER TO DETAIL 12/C5.000.
7. INSTALL CONCRETE WALK. REFER TO DETAIL 13/C5.000.
8. INSTALL HEAVY–DUTY BITUMINOUS PAVEMENT. INTENT IS TO MATCH EXISTING PAVEMENT SECTION. FREFER TO DETAIL 11/C5.001.
9. INSTALL CONCRETE STOOP. REFER TO STRUCTURAL PLANS AND SPECIFICATIONS.
10. INSTALL ACCESSIBLE PARKING SIGN. REFER TO DETAIL 5/C5.001.
11. INSTALL BOLT DOWN BOLLARDS. REFER TO LANDSCAPE DRAWINGS.
12. INSTALL CONCRETE PAVEMENT. INTENT IS TO MATCH EXISTING CONCRETE PAVEMENT SECTION. FOR BIDDING PURPOSES REFER TO DETAIL 4/C5.001.
13. LOCATION OF PROPOSED TRANSFORMER. DIMENSIONS SHOWN ARE APPROXIMATE. COORDINATE PAD SIZE AND DESIGN WITH ELECTRICAL AND UTILITY OWNER.
14. INSTALL CONCRETE PAD. REFER TO DETAIL 7/C5.001.
15. INSTALL KEY FOB PEDESTAL. REFER TO LANDSCAPE DRAWINGS AND SPECIFICATIONS.
16. INSTALL NOSE–DOWN CURB SECTION. REFER TO DETAIL 3/C5.001.
17. PROVIDE 2" MILL AND OVERLAY ON EXISTING PARKING LOT TO REMAIN. OVERLAY MIX SHALL BE MN/DOT 2360 SPWEA240.
18. INSTALL CONCRETE MAINTENANCE STRIP. REFER TO DETAIL 11/C5.001.
19. INSTALL VERTICAL CONCRETE CURB AND GUTTER. REFER TO DETAIL 14/C5.001.
20. INSTALL SURMOUNTABLE CONCRETE CURB AND GUTTER. REFER TO DETAIL 13/C5.001.
21. PROVIDE 5–FOOT SMOOTH TRANSITION BETWEEN CURB TYPES.

PAVING NOTES:

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.
2. ALL CURB AND GUTTER PUBLIC RIGHT–OF–WAY IS TO BE B618 CONCRETE CURB AND GUTTER UNLESS NOTED OTHERWISE. CURB AND GUTTER WITHIN SITE SHALL BE B612 CONCRETE CURB AND GUTTER UNLESS NOTED OTHERWISE.
3. NO SIDEWALK IS TO HAVE MORE THAN A 2% CROSS SLOPE OR MORE THAN A 5% LONGITUDINAL SLOPE.
4. REFER TO ARCHITECTURAL PLANS FOR PROPOSED BUILDING LAYOUT.
5. FOLLOW ALL CITY OF CRYSTAL AND HENNEPIN COUNTY RULES, REGULATIONS AND SPECIFICATIONS WHEN WORKING IN PUBLIC RIGHT OF WAY.
6. ALL PARKING STALLS ARE TO BE 10 FEET WIDE BY 20 FEET LONG, UNLESS NOTED OTHERWISE.
7. ACCESSIBLE AISLES SHALL BE STRIPED PER MN CODE (SECTION 502). WHERE "NO PARKING" SIGNAGE WOULD OBSTRUCT A CURB RAMP OR ACCESSIBLE ROUTE, "NO PARKING" SHALL BE PRINTED ON THE SURFACE OF THE ACCESS AISLE.
8. THE CONTRACTOR IS TO CONTACT THE CITY OF CRYSTAL FIRE MARSHALL FOR THE EXACT PLACEMENT OF FIRE LANES, YELLOW–PAINTED CURBING AND NO PARKING AREAS FOR FIRE PROTECTION PURPOSES.
9. REFER TO STRUCTURAL PLANS FOR STOOP DETAILS. ALL WALKS ARE TO BE CENTERED ON THE DOORS.
10. INSTALL APPROPRIATE EXPANSION MATERIAL WHERE CONCRETE IS ADJACENT TO BUILDING FACE.
11. **ALL EXPANSION AND ISOLATION JOINTS SHALL BE SEALED PER SPECIFICATIONS.**
12. MATCH NEW PAVEMENT INTO EXISTING PAVEMENT. NO ABRUPT GRADE TRANSITIONS OR PONDING OF WATER WILL BE ALLOWED.
13. MATCH NEW CONCRETE CURB AND GUTTER INTO EXISTING. NO ABRUPT GRADE TRANSITIONS OR PONDING OF WATER WILL BE ALLOWED.
14. MATCH NEW SIDEWALK INTO EXISTING SIDEWALK. NO ABRUPT GRADE TRANSITIONS OR PONDING OF WATER WILL BE ALLOWED.
15. SAWCUT EXISTING PAVEMENT, SIDEWALK, AND CURB AND GUTTER TO NEAREST JOINT. COORDINATE REMOVAL LIMITS WITH SITE DEMOLITION CONTRACTOR AND CONSTRUCTION MANAGER.
16. INSTALL DRIVE ENTRANCE PER CITY OF CRYSTAL STANDARDS AND SPECIFICATIONS. FOLLOW ALL CITY OF CRYSTAL AND HENNEPIN COUNTY REQUIREMENTS FOR TRAFFIC CONTROL.
17. **REFER TO SPECIFICATIONS FOR GRADE VERIFICATION SURVEY REQUIREMENTS PRIOR TO PLACEMENT OF SUB–BASE MATERIAL, BASE MATERIAL, AND PAVEMENTS/SIDEWALKS.**

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License Number: **52209** Date **10/01/2020**

Revisions		
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Comm: **192195**
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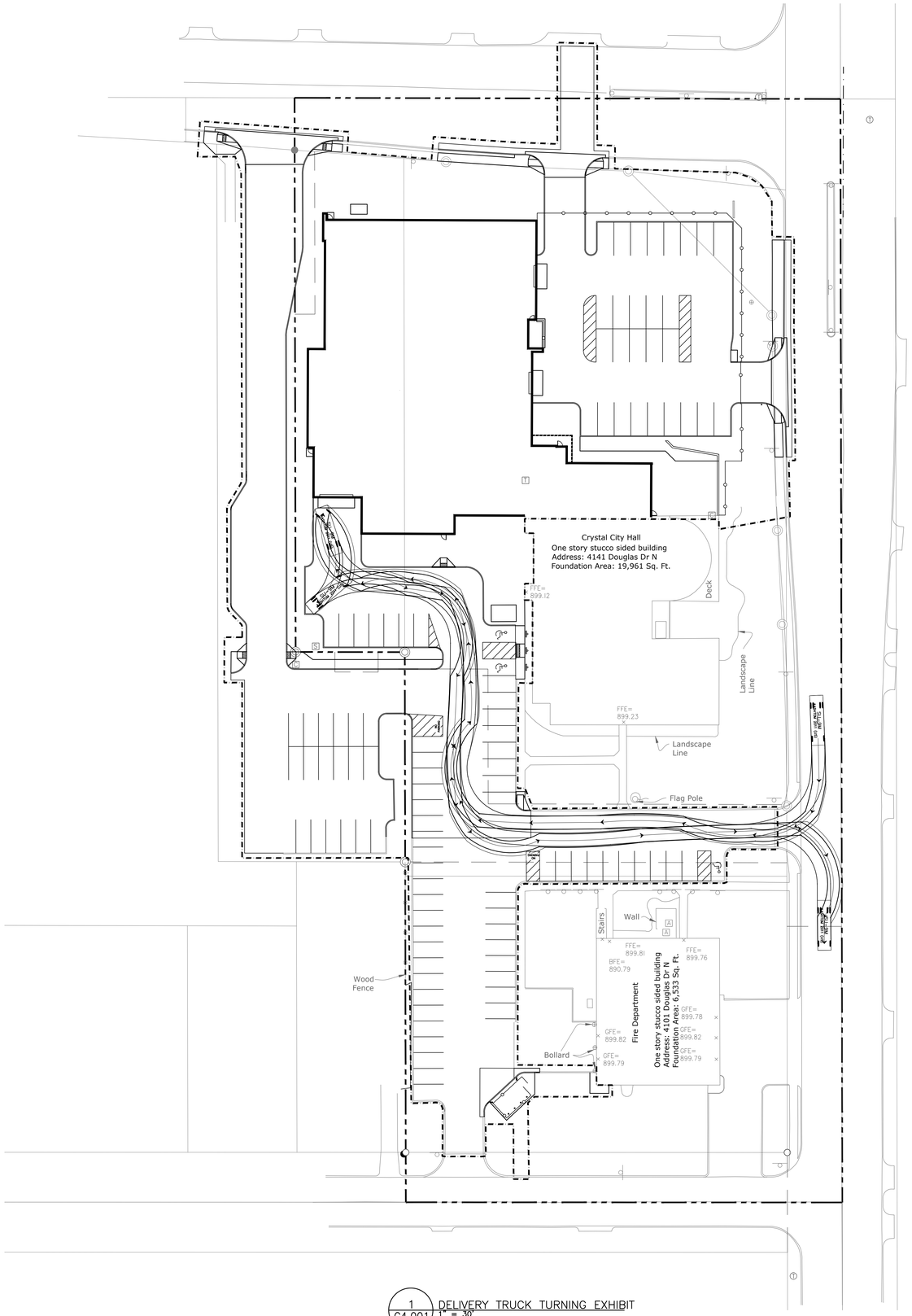
Check: **KAB**

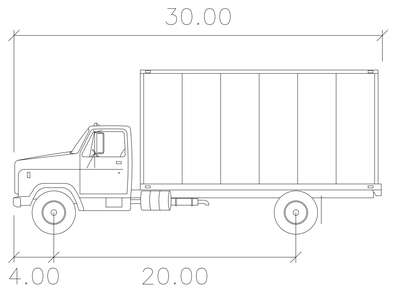
North

PAVING AND GEOMETRIC PLAN

C4.000



1 / C4.001 DELIVERY TRUCK TURNING EXHIBIT
1" = 30'



SU-9M

	feet
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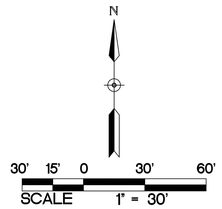
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

2 / C4.001 VEHICLE PROFILE
NOT TO SCALE



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City Submittal
PRELIMINARY

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.

Kevin A. Bohl
License Number: 52209 Date 10/01/2020

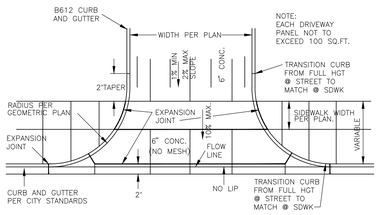
Revisions		
Description	Date	Num

Comm: 192195
Date: 10/01/2020
Drawn: WH
Check: KAB

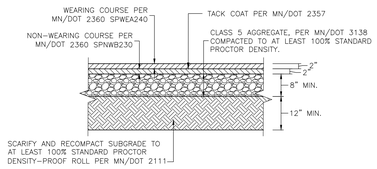
North

DELIVERY TRUCK TURNING EXHIBIT

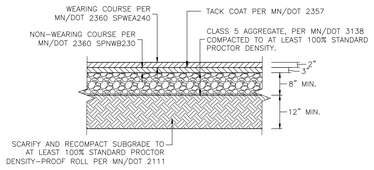
C4.001



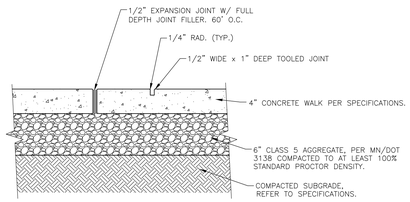
10 C5.000 CONCRETE DRIVE ENTRANCE
NOT TO SCALE



11 C5.000 LIGHT-DUTY BITUMINOUS PAVEMENT
NOT TO SCALE

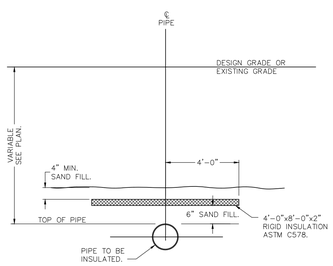


12 C5.000 HEAVY-DUTY BITUMINOUS PAVEMENT
NOT TO SCALE

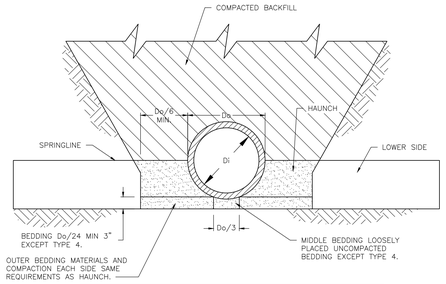


NOTE: JOINT SPACING SHALL BE A MAXIMUM OF 6-FEET ON CENTER.

13 C5.000 CONCRETE SIDEWALK (TYP.)
NOT TO SCALE



14 C5.000 PIPE INSULATION
NOT TO SCALE



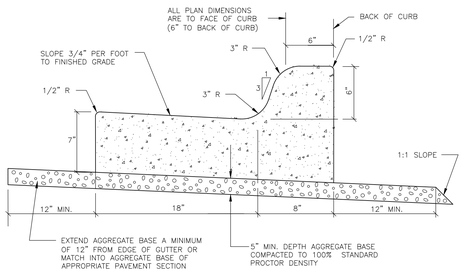
STANDARD TRENCH INSTALLATION SOIL AND MINIMUM STANDARD PROCTOR COMPACTION REQUIREMENTS		
INSTALLATION TYPE	HAUNCH AND OUTER BEDDING	LOWER SIDE
TYPE 1	95% CATEGORY I	90% CATEGORY I 95% CATEGORY II 100% CATEGORY III
TYPE 2	90% CATEGORY I 95% CATEGORY II	85% CATEGORY I 90% CATEGORY II 95% CATEGORY III
TYPE 3	85% CATEGORY I 90% CATEGORY II 95% CATEGORY III	85% CATEGORY I 90% CATEGORY II 95% CATEGORY III
TYPE 4	NO COMPACTION REQUIRED, EXCEPT IF CATEGORY III USE 85% CATEGORY III	NO COMPACTION REQUIRED, EXCEPT IF CATEGORY III USE 85% CATEGORY III

EQUIVALENT SOIL CLASSIFICATIONS FOR SOIL DESIGNATIONS		
SOIL	UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)	MN/DOT SPECIFICATION
CATEGORY I	CLEAN COURSE GRAINED SOILS: SW, SP, GW, GP, OR ANY SOIL BEGINNING WITH ONE OF THESE SYMBOLS WITH 12% OR LESS PASSING A #200 SIEVE	COARSE FILTER AGGREGATE MN/DOT 3149.2H
CATEGORY II	COURSE GRAINED SOILS WITH FINES: GM, GC, SM, SC, OR ANY SOIL BEGINNING WITH ONE OF THESE SYMBOLS CONTAINING MORE THAN 12% PASSING A #200 SIEVE	AGGREGATE BEDDING MN/DOT 3149.2G
CATEGORY III	FINE GRAINED SOILS: CL, ML, (OR CL-ML, CL-ML, ML/CL) WITH LESS THAN 30% RETAINED ON A #200 SIEVE.	NOT APPLICABLE

NOTES:

1. COMPACTION AND SOIL SYMBOLS-I.E. "95% CATEGORY I" REFERS TO CATEGORY I SOIL MATERIAL WITH MINIMUM STANDARD PROCTOR COMPACTION OF 95%.
2. SOIL IN BEDDING AND HAUNCH ZONES SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS SPECIFIED FOR THE MAJORITY OF SOIL IN THE BACKFILL ZONE.
3. THE TRENCH WIDTH SHALL BE WIDER THAN SHOWN IF REQUIRED FOR ADEQUATE SPACE TO ATTAIN SPECIFIED COMPACTION IN THE HAUNCH AND BEDDING ZONES.
4. FOR TRENCH WALLS WITH GREATER THAN 10 DEGREE SLOPES THAT CONSIST OF EMBANKMENT, THE LOWER SIDE SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS SPECIFIED FOR THE SOIL IN THE BACKFILL ZONE.
5. NO BEDDING IS REQUIRED FOR TYPE 4 STANDARD INSTALLATION.
6. REFER TO ASTM C1479-07 FOR DETAILS.
7. TYPE III BEDDING SHALL BE USED UNLESS NOTED OTHERWISE.

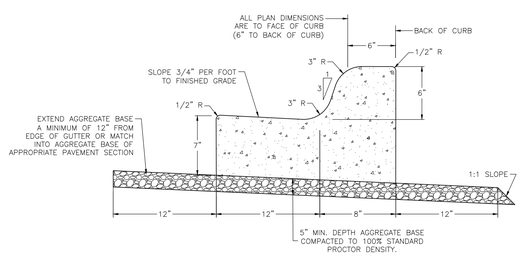
7 C5.000 TYPICAL PIPE BEDDING FOR RCP AND DIP
NOT TO SCALE



NOTES:

1. DIRECTION OF TRANSVERSE GUTTER SLOPE TO MATCH DIRECTION OF ADJACENT PAVEMENT SLOPE.
2. CONSTRUCT CURB AND GUTTER IN ACCORDANCE WITH MNDOT SPECIFICATION 2531.

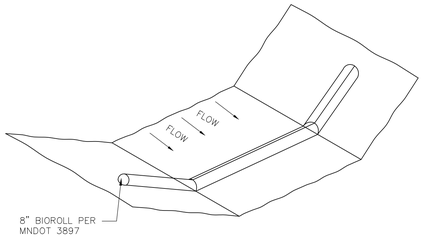
8 C5.000 B618 CURB AND GUTTER
NOT TO SCALE



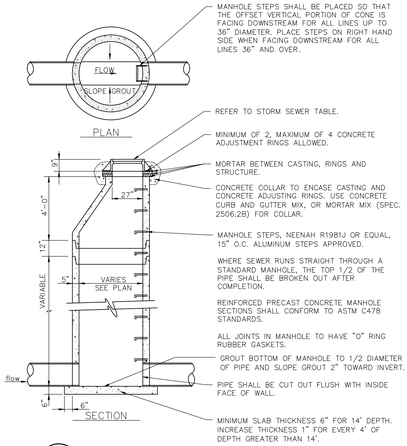
NOTES:

1. DIRECTION OF TRANSVERSE GUTTER SLOPE TO MATCH DIRECTION OF ADJACENT PAVEMENT SLOPE.
2. CONSTRUCT CURB AND GUTTER IN ACCORDANCE WITH MNDOT SPECIFICATION 2531.

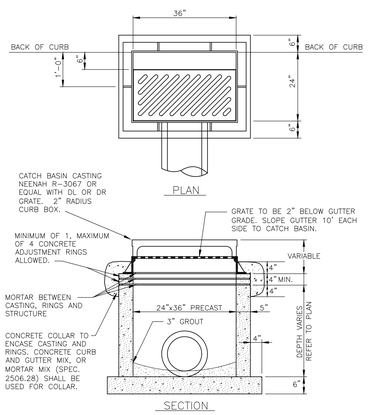
9 C5.000 B612 CONCRETE CURB AND GUTTER
NOT TO SCALE



4 C5.000 BIO ROLL
NOT TO SCALE



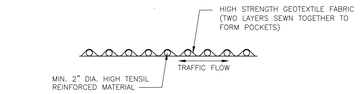
5 C5.000 STORM SEWER MANHOLE/CATCH BASIN
NOT TO SCALE



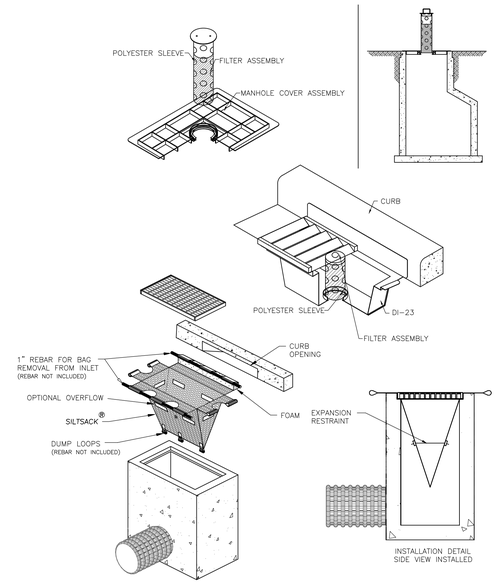
NOTES:

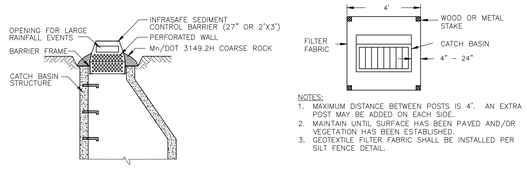
1. RIGHT HAND GRATE SHOWN IN PLAN VIEW.
2. REINFORCED PRECAST CONCRETE CATCH BASIN SECTIONS SHALL CONFORM TO ASTM C478 STANDARDS.

6 C5.000 24" x 36" PRECAST CATCH BASIN
NOT TO SCALE



1 C5.000 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

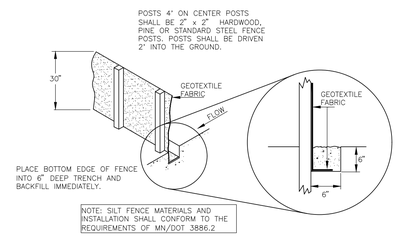




NOTES:

1. MAXIMUM DISTANCE BETWEEN POSTS IS 4'. AN EXTRA POST MAY BE ADDED ON EACH SIDE.
2. MAINTAIN UNTIL SURFACE HAS BEEN PAVED AND/OR VEGETATION HAS BEEN ESTABLISHED.
3. GEOTEXTILE FILTER FABRIC SHALL BE INSTALLED PER SILT FENCE DETAIL.

2 C5.000 INLETS SEDIMENTATION PROTECTION OPTIONS
NOT TO SCALE



NOTE: SILT FENCE MATERIALS AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF MN/DOT 3886.2

3 C5.000 SILTATION FENCE
NOT TO SCALE

CRYSTAL CITY HALL

4141 DOUGLAS DRIVE N.
CRYSTAL, MN. 55422

CRYSTAL CITY HALL
4141 DOUGLAS DR. N.
CRYSTAL, MN. 55422

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101

woldac.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Drive, Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
www.bkbm.com

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BKBM JOB NUMBER: 20181

City Submittal
PRELIMINARY

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.

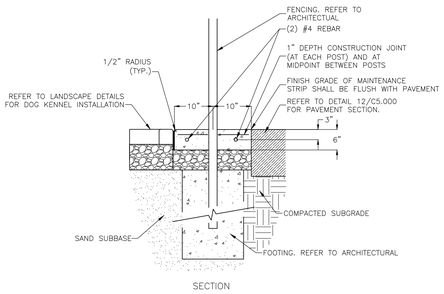
Kevin A. Bohl
License Number: 52209 Date 10/01/2020

Revisions		
Description	Date	Num

Comm: 192195
Date: 10/01/2020
Drawn: WH
Check: KAB
North

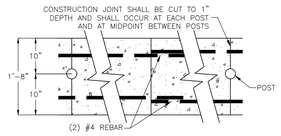
CIVIL DETAILS

C5.000

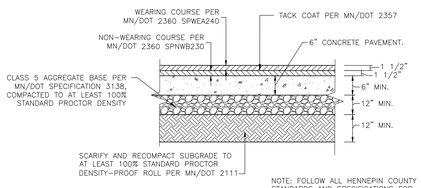


SECTION

PROVIDE 5" AGGREGATE BASE UNDER ALL MAINTENANCE STRIPS.

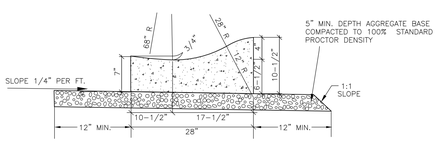


11 / C5.001 CONCRETE MAINTENANCE STRIP
NOT TO SCALE



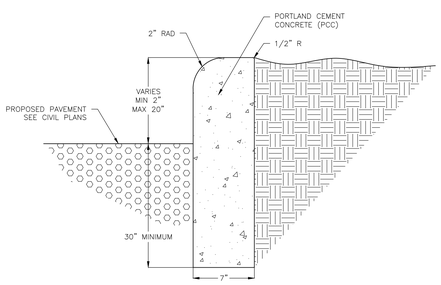
NOTE: FOLLOW ALL HENNEPIN COUNTY STANDARDS AND SPECIFICATIONS FOR PAVEMENT REPLACEMENT IN RIGHT OF WAY.

12 / C5.001 42nd STREET SECTION
NOT TO SCALE



NOTE:
DIRECTION OF TRANSVERSE GUTTER SLOPE TO MATCH DIRECTION OF ADJACENT PAVEMENT SLOPE.

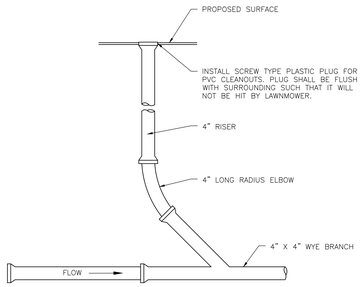
13 / C5.001 SURMOUNTABLE CURB SECTION
NOT TO SCALE



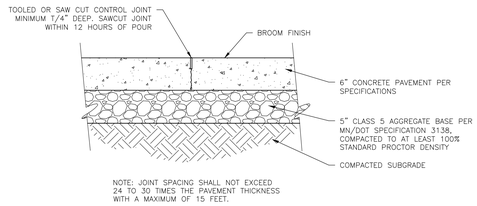
NOTE:

CONSTRUCT CURB AND GUTTER IN ACCORDANCE WITH MNDOT SPECIFICATION 2531.

14 / C5.001 VERTICAL CURB
NOT TO SCALE

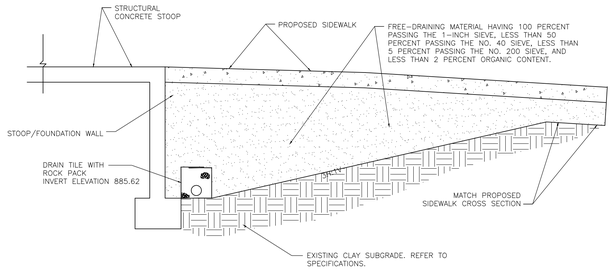


8 / C5.001 DRAIN TILE CLEANOUT DETAIL
NOT TO SCALE

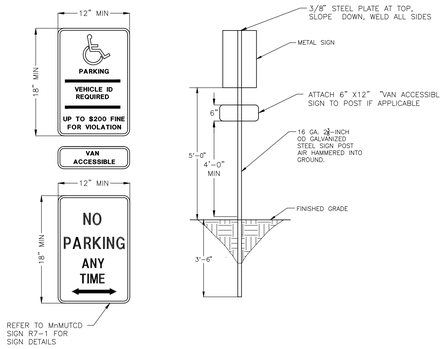


NOTE: JOINT SPACING SHALL NOT EXCEED 24 TO 30 TIMES THE PAVEMENT THICKNESS WITH A MAXIMUM OF 15 FEET.

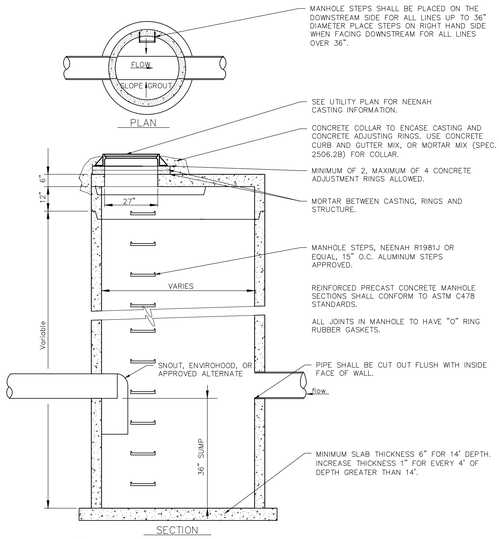
4 / C5.001 CONCRETE PAVEMENT
NOT TO SCALE



9 / C5.001 FROST PROTECTION-SIDEWALK TRANSITION
NOT TO SCALE

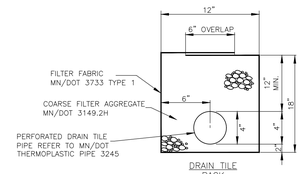


5 / C5.001 ACCESSIBLE SIGN AND POST – PERVIOUS SURFACE
NOT TO SCALE

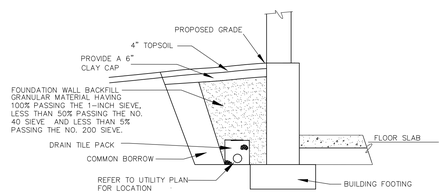


NOTE:
SNOUT OR ENVIROHOOD DEVICE SHALL HAVE GREATER THAN OR EQUAL TO THE CROSS-SECTIONAL AREA OF THE OUTLET PIPE OF THE SUMP MANHOLE.

1 / C5.001 SUMP CATCH BASIN MANHOLE
NOT TO SCALE

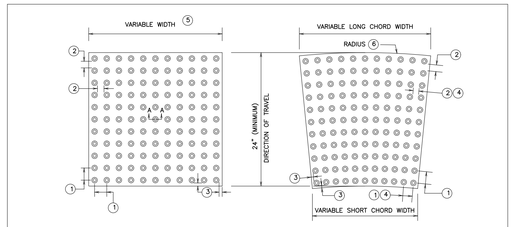


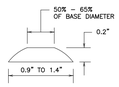
DRAIN TILE PACK



NOTE:
1. WHERE PAVEMENT IS ADJACENT TO FOUNDATION WALL, CONTRACTOR SHALL INSTALL PAVEMENT SECTION DIRECTLY OVER FOUNDATION WALL BACKFILL. CLAY CAP AND TOPSOIL SHALL NOT BE INSTALLED UNDER PROPOSED PAVEMENT SECTIONS.
2. DRAIN TILE SHALL NOT BE INSTALLED WITHIN THE ZONE OF INFLUENCE OF THE BUILDING FOOTING.

2 / C5.001 BUILDING PERIMETER DRAIN TILE
NOT TO SCALE





SECTION A–A
TRUNCATED DOME

TYPICAL RADIAL TRUNCATED DOME PLATES			
RADIUS (FEET) 7	LONG CHORD WIDTH (INCHES)	SQ. FT. PER PLATE	PLATES REQUIRED FOR 90 DEGREE TURN
10	23-1/2	3.53	8
15	18-13/16	2.93	15
15	23-1/2	3.67	12
20	18-13/16	3.00	20
20	18-7/8	2.98	20
25	20-1/2	3.28	23
25	23-9/16	3.77	20
30	22-5/8	3.65	25
35	22	3.56	30

NOTES:

DETECTABLE WARNING SURFACES SHALL FOLLOW THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).

DETECTABLE WARNINGS CONSIST OF TRUNCATED DOMES ALIGNED IN A SQUARE OR RADIAL GRID PATTERN.

DETECTABLE WARNINGS ARE REQUIRED:
–WHERE RAMPS, LANDINGS, OR BLENDED TRANSITIONS PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE ROADWAY.
–WHERE PEDESTRIAN ACCESS ROUTES CROSS COMMERCIAL DRIVEWAYS THAT ARE PROVIDED WITH TRAFFIC CONTROL DEVICES OR OTHERWISE PERMITTED TO OPERATE LIKE A PUBLIC ROADWAY.
–AT PEDESTRIAN RAILWAY CROSSINGS.
–ON RAIL PLATFORMS WHERE BOARDING EDGES ARE NOT PROTECTED.

DETECTABLE WARNINGS SHALL EXTEND:
–A MINIMUM OF 24" IN THE DIRECTION OF TRAVEL.
–THE FULL WIDTH OF THE RAMP, LANDING, OR BLENDED TRANSITION, WITHIN 3" OF FULL WIDTH ON EITHER END.
–THE FULL LENGTH OF THE PUBLIC USE AREA OF A RAIL PLATFORM.

DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, ROADWAY, OR WALKWAY, EITHER A LIGHT-ON-DARK OR DARK-ON-LIGHT. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE, EXCLUDING THE FLARED SIDES.

DETECTABLE WARNING PLATES SHALL BE NEENAH FOUNDRY, UNCOATED CAST IRON OR APPROVED EQUAL.

ALL TRUNCATED DOME SYSTEMS SHALL BE PLACED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.

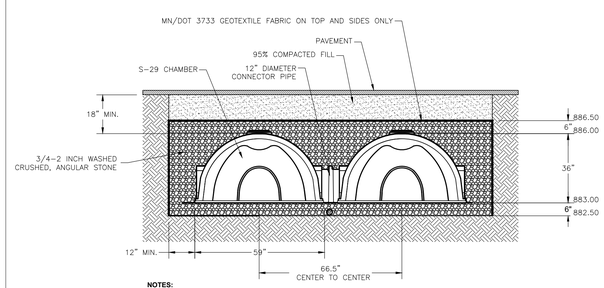
1. CENTER TO CENTER DOME SPACING: 1.6" MINIMUM, 2.4" MAXIMUM.
2. BASE TO BASE DOME SPACING: 0.65" MINIMUM.
3. DOME BASE TO PLATE EDGE SPACING: 0.35" MINIMUM, 0.75" MAXIMUM.
4. SPACING VARIES ON RADIAL PLATES.
5. TYPICAL WIDTHS AVAILABLE: 12", 18", 24", 30", 36". CHECK WITH MANUFACTURERS FOR AVAILABLE WIDTHS.
6. ON RADIAL PLATE, RADIUS DEFINED AT BACK OF CURB.
7. TYPICAL RADII. CHECK WITH MANUFACTURERS FOR AVAILABLE RADII.

	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE	STANDARD PLATE NO.
	DETECTABLE WARNING SURFACE TRUNCATED DOMES	2531	7038A

NOTE:
FOR ADA COMPLIANT PEDESTRIAN RAMPS, REFER TO MN/DOT STANDARD PLAN 5-297.250 PEDESTRIAN CURB RAMP DETAILS AT THE FOLLOWING WEB ADDRESS:
HTTP://STANDARDPLATES.DOT.STATE.MN.US/STDPLATE.ASPX

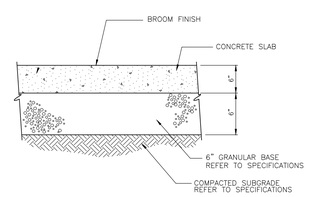
CONTRACTOR SHALL COORDINATE FINAL CURB RAMP LOCATION AND PEDESTRIAN CURB RAMP DETAIL WITH THE CITY AND OWNER PRIOR TO INSTALLATION.

10 / C5.001 PEDESTRIAN CURB RAMP – DETECTABLE WARNING
NOT TO SCALE

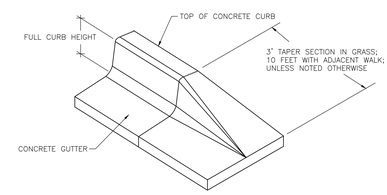


NOTES:
- PRIOR TO INSTALLING THE SYSTEM A DOUBLE RING INFILTROMETER TEST SHALL BE MADE ON UNDERLYING SOILS. TEST RESULTS SHALL BE PROVIDE TO ENGINEER TO VERIFY INFILTRATION CAPACITY OF UNDERLYING SOILS.
- EXISTING SYSTEM IS A TOTAL OF 3,761 CUBIC FEET. THE CONTRACTOR SHALL EXPAND THE SYSTEM BY 9,982 CUBIC FEET, SO THERE IS A TOTAL OF 13,743 CUBIC FEET STORAGE VOLUME.
- THE EXPANDED SYSTEM SHALL HAVE A TREATMENT VOLUME 6,219 CUBIC FEET.
- THE EXPANDED SYSTEM SHALL HAVE A FOOTPRINT OF 5,279 SQUARE FEET.
- SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- THE EXISTING HEADER ROW SHALL BE EXTEND TO THE WIDTH OF THE EXPANDED SYSTEM. HEADER ROW SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

6 / C5.001 TRITON S-29 CHAMBER SYSTEM
NOT TO SCALE



7 / C5.001 CONCRETE DUMPSTER PAD
NOT TO SCALE



3 / C5.001 NOSE-DOWN CURB SECTION
NOT TO SCALE

CRYSTAL CITY HALL

4141 DOUGLAS DRIVE N.
CRYSTAL, MN. 55422

CRYSTAL CITY HALL
4141 DOUGLAS DR. N.
CRYSTAL, MN. 55422

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101

woldac.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Drive, Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
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BKBM JOB NUMBER: 20181

City Submittal PRELIMINARY

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.

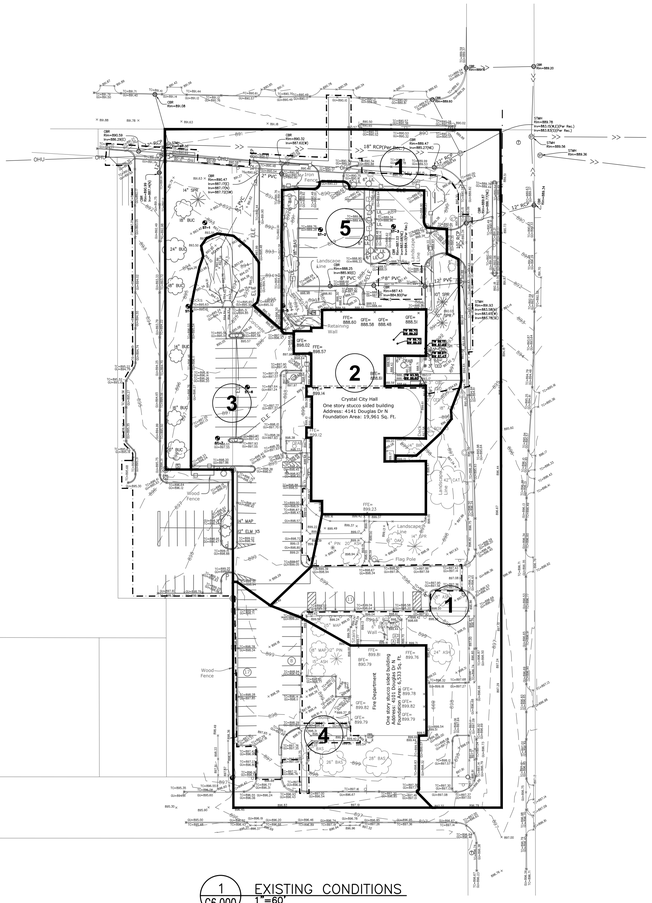
Kevin A. Bohl
License Number: 52209 Date 10/01/2020

Revisions		
Description	Date	Num

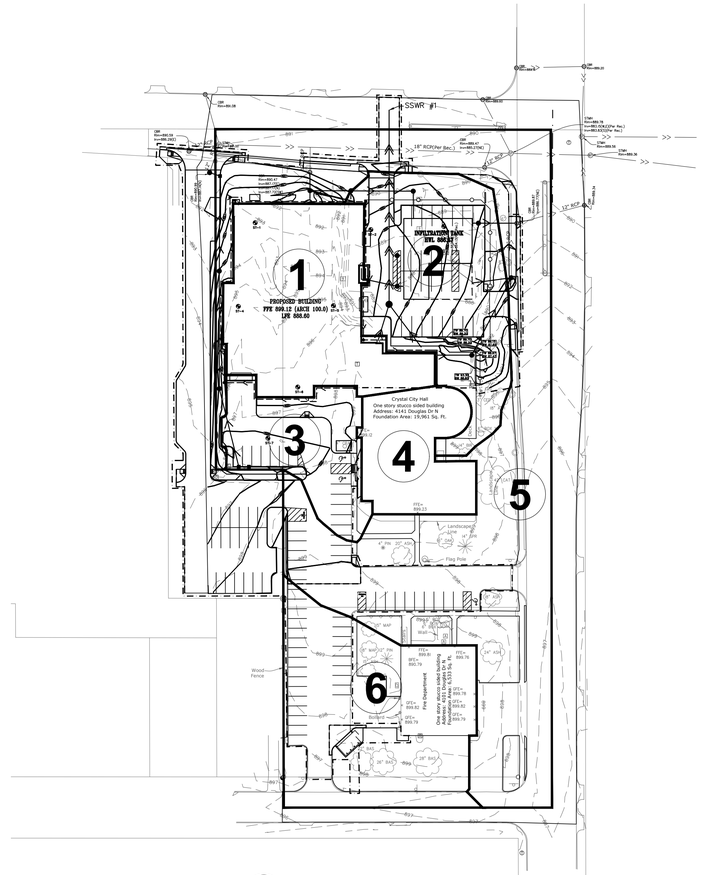
Comm: 192195
Date: 10/01/2020
Drawn: WH
Check: KAB
North

CIVIL DETAILS

C5.001



1 C6.000 EXISTING CONDITIONS
1"=60'



2 C6.000 PROPOSED CONDITIONS
1"=60'

ABBREVIATIONS	
BLDG	Building
BMP	Best Management Practice
BW	Bottom of Wall
CB	Catch Basin
CONC	Concrete
ELEV	Elevation
EX	Existing
FFE	Finished Floor Elevation
HWL	High Water Level
INV	Invert
MAX	Maximum
MH	Manhole
MIN	Minimum
MPCA	Minnesota Pollution Control Agency
NPDES	National Pollutant Discharge Elimination System
NWL	Normal Water Level
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
TW	Top of Wall
W.O.	Washout

N

60' 30' 0 60' 120'
SCALE 1" = 60'

CRYSTAL CITY HALL

4141 DOUGLAS DRIVE N.
CRYSTAL, MN. 55422

CRYSTAL CITY HALL
4141 DOUGLAS DR. N.
CRYSTAL, MN. 55422

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101

woldac.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Drive, Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
www.bkbm.com

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OTHER NOTES:

1. LONG TERM MAINTENANCE OF THE SITE WILL BE PERFORMED BY THE OWNER, CITY OF CRYSTAL. INCLUDED MAINTENANCE FOR STORMWATER DEVISES SHALL BE:
   - 1.1. INSPECT SUMP CATCH BASINS ON A BIANNUAL BASIS, ONCE IN THE SPRING AND ONCE IN THE FALL.
   - 1.2. CLEAN SUMP CATCH BASINS OF SEDIMENT AND DEBRIS ANNUALLY OR WHEN SEDIMENTS FILL $\frac{1}{3}$ OF THE STORAGE VOLUME.
   - 1.3. ADDITIONAL LONG TERM MAINTENANCE MEASURES: REMOVAL OF TRASH AND DEBRIS FROM INLETS AND OUTLETS OF SYSTEM. REMOVAL OF SEDIMENT FROM UNDERGROUND SYSTEM.
2. THIS SWPPP WAS PREPARED BY PERSONNEL THAT ARE CERTIFIED IN THE DESIGN OF CONSTRUCTION SWPPPS. COPIES OF THE CERTIFICATIONS ARE ON FILE WITH BKBM AND ARE AVAILABLE UPON REQUEST.
3. THIS SWPPP DOCUMENT MUST BE AMENDED AS NECESSARY DURING CONSTRUCTION IN ORDER TO KEEP IT CURRENT WITH THE POLLUTANT CONTROL MEASURES UTILIZED AS THE SITE. THE SITE MAP SHOWING LOCATIONS OF ALL STORM WATER CONTROLS MUST BE POSTED ON THE SITE AND UPDATED TO REFLECT THE PROGRESS OF CONSTRUCTION.

POLLUTION PREVENTION MANAGEMENT MEASURES

SOLID WASTE DISPOSED PROPERLY; COMPLY WITH MPCA REQUIREMENTS.

HAZARDOUS WASTE STORED (SECONDARY CONTAINMENT, RESTRICTED ACCESS) AND DISPOSED IN COMPLIANCE WITH MPCA REQUIREMENTS.

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.

NO ENGINE DEGREASING ALLOWED ON-SITE.

CONCRETE WASHOUT ON-SITE: 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 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. THE CONCRETE WASHOUT AREA INDICATED ON THE PLANS IS SHOWN IN AN APPROXIMATE LOCATION. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION IN ACCORDANCE WITH MPCA REQUIREMENTS.

STORAGE HANDLING AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTES:

BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER.

PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER.

HAZARDOUS MATERIALS, TOXIC WASTE (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS MUST BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGES.

HANDLING AND STORAGE OF HAZARDOUS MATERIALS:

IF THE CONTRACTOR INTENDS TO USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ON THE PROJECT SITE, THE CONTRACTOR MUST COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:

1. THE CONTRACTOR MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION TO ENSURE EFFECTIVE TREATMENT. CHEMICALS MAY ONLY BE APPLIED WHERE TREATED STORMWATER IS DIRECTED TO A SEDIMENT CONTROL SYSTEM WHICH ALLOWS FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.
2. CHEMICALS MUST BE SELECTED THAT ARE APPROPRIATELY SUITED TO THE TYPES OF SOILS LIKELY TO BE EXPOSED DURING CONSTRUCTION, AND TO THE EXPECTED TURBIDITY, PH AND FLOW RATE OF STORMWATER FLOWING INTO THE CHEMICAL TREATMENT SYSTEM OR AREA.
3. CHEMICALS MUST BE USED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, AND WITH DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR PROVIDER/SUPPLIER OF THE APPLICABLE CHEMICALS.

ON-SITE FUEL TANKS REQUIRE SECONDARY CONTAINMENT AS REQUIRED BY THE PERMIT. PORTABLE FUEL TRUCKS SHALL HAVE THEIR SPILL KITS AVAILABLE DURING FUELING. SPILLS GREATER THAN 5 GALLONS MUST BE REPORTED TO THE PROPER AUTHORITIES.

PROJECT NARRATIVE

EXISTING SITE DESCRIPTION -- THE EXISTING SITE IS 4.51 ACRES. THE SITE CONSISTS OF TWO BUILDINGS. THE CRYSTAL CITY HALL AND FIRE DEPARTMENT. IN ADDITION THERE ARE PARKING LOTS AND SIDEWALKS THAT SERVE THE TWO BUILDINGS. THERE IS AN EXISTING STORMWATER MANAGEMENT BASIN ON THE NORTHEAST SIDE OF THE SITE. A PORTION OF THE PARKING LOT DRAINS TO THE BASIN. THE REMAINING PORTION OF THE SITE SHEETS FLOW OFFSITE OR TO ONSITE STORM SEWER.

PROPOSE SITE DESCRIPTION -- THE PROPOSED DEVELOPMENT CONSISTS OF DEMOLISHING A PORTION OF THE CITY HALL BUILDING AND CONSTRUCTING A POLICE DEPARTMENT ADDITION. NEW PARKING LOTS AND SIDEWALKS WILL BE CONSTRUCTED TO SERVE THE NEW POLICE DEPARTMENT ADDITION. THE EXISTING STORMWATER MANAGEMENT BASIN WILL BE DEMOLISHED. AN UNDERGROUND FILTRATION BASIN WILL BE CONSTRUCTED TO MEET CITY AND WATERSHED REQUIREMENTS.

MECHANICAL AND NON STORMWATER DISCHARGES, EXISTING AND PROPOSED

1. WATER LINE FLUSHING
2. LANDSCAPE IRRIGATION
3. UNCONTAMINATED PUMPED GROUND WATER
4. DISCHARGE FROM POTABLE WATER SOURCES
5. FOUNDATION DRAINS
6. AIR CONDITIONING CONDENSATION

AGENCY CONTACTS

CITY OF CRYSTAL
ENGINEERING DEPARTMENT
PHONE: (763) 531-1000

MINNESOTA POLLUTION CONTROL AGENCY
PHONE: (651) 296-6300

SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION
PHONE: (763) 553-1144

OWNER
CITY OF CRYSTAL
4141 DOUGLAS DRIVE N.
CRYSTAL, MN 55422
PHONE: (763) 531-1000

NOTE:

THE CONTRACTOR MUST COMPLETE, SIGN, OBTAIN OWNERS SIGNATURE, PAY FEE, AND SEND IN THE NPDES PERMIT APPLICATION. CONTRACTOR SHALL PROVIDE A CERTIFIED EROSION CONTROL SUPERVISOR. SWPPP DOCUMENTATION, INCLUDING INSPECTION REPORTS SHALL BE RETAINED FOR A PERIOD OF THREE (3) YEARS. DESIGN CALCULATIONS ARE ON FILE AT BKBM.

THE OWNER AND CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS, BEFORE, DURING, AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED.

STOCKPILES:

ON-SITE STOCKPILES OF SOIL SHALL HAVE PERIMETER SEDIMENT CONTROL. STOCKPILES SHALL BE STABILIZED WITH BLANKETS, TARPS, OR HYDRO MULCH IF LEFT ON-SITE FOR MORE THAN 14 DAYS.

TEMPORARY SEDIMENT BASINS:

TEMPORARY SEDIMENT BASINS SHALL BE PROVIDED PER APPENDIX A, SECTION C.1.B OF THE MPCA GENERAL STORMWATER PERMIT.

ENGINEER ANTICIPATES THAT, PRIOR TO INSTALLATION OF FILTRATION MEDIA AND DRAIN TILE, CONTRACTOR WILL USE PROPOSED FILTRATION BASINS AS TEMPORARY SEDIMENT BASINS. CONTRACTOR SHALL EXCAVATE TEMPORARY BASINS AND CLAY LINE PRIOR TO USE. SURFACE WATER SHALL BE REMOVED BY SKIMMER DEVICE SUCH AS FAIRCLOTH SKIMMER OR THIRSTY DUCK, OR USING A PUMP WITH A FILTER. ALTERNATIVE TEMPORARY SEDIMENT BASINS SHALL BE APPROVED BY ENGINEER PRIOR TO USE.

NOTE:

AN AS-BUILT SURVEY OF ALL STORMWATER BMPS (FILTRATION BASIN, OUTLET STRUCTURES, DRAINTILE, CLEAN OUTS, SUMP CATCH BASINS, ETC..) SHALL BE SUBMITTED TO SHINGLE CREEK AND WEST MISSISSIPPI RIVER WATERSHED MANAGEMENT COMMISSION PRIOR TO PROJECT CLOSEOUT. THE AS-BUILT SURVEY SHALL INCLUDE THE FILTRATION BASIN TRAIN TILE INVERTS AND LAYOUT FOR VERIFICATION THE THE SYSTEM WAS INSTALLED PROPERLY AND THAT 18-INCHES OF SAND/FILTRATION MIX OVER THE TOP OF THE DRAIN TILE HAS BEEN PROVIDED.

SWPPP IMPLEMENTATION, INSTALLATION, INSPECTION, AND BMP MAINTENANCE SHALL BE PERFORMED BY THE CONTRACTOR.

NAME: _____

CERTIFICATION #:_____

DATE: _____

EXISTING DRAINAGE AREAS

DRAINAGE AREA	IMPERVIOUS AREA (ACRES)	PERVIOUS AREA (ACRES)	TOTAL AREA (ACRES)	Q OUT (CFS) STORM EVENT 2-YEAR (2.87")	10-YEAR (4.29")	100-YEAR (7.40")	ROUTING
1	1.20	0.79	1.99	5.06	8.51	15.56	SHEET FLOW FFSITE
2	0.47	0.00	0.47	1.95	2.93	4.69	ONSITE STORM SEWER
3	0.57	0.13	0.70	–	–	–	EXISTING POND
4	0.51	0.25	0.76	2.16	3.52	6.24	SHEET FLOW SOUTH OFFSITE
5	0.34	0.24	0.58	–	–	–	EXISTING TRITON SYSTEM
EXISTING POND	–	–	–	2.37	3.71	6.26	PUBLIC STORM SEWER
EXISTING TRITON SYSTEM	–	–	–	0.15	0.84	2.27	PUBLIC STORM SEWER
TOTAL	3.09	1.41	4.50	11.69	19.51	35.02	

PROPOSED DRAINAGE AREAS

DRAINAGE AREA	IMPERVIOUS AREA (ACRES)	PERVIOUS AREA (ACRES)	TOTAL AREA (ACRES)	Q OUT (CFS) STORM EVENT 2-YEAR (2.87")	10-YEAR (4.29")	100-YEAR (7.40")	ROUTING
1	0.62	0.00	0.62	–	–	–	TO EXPANDED TRITON SYSTEM
2	0.44	0.22	0.66	–	–	–	TO EXPANDED TRITON SYSTEM
3	0.30	0.03	0.33	1.24	1.89	3.09	TO CITY STORM SEWER
4	0.28	0.00	0.28	–	–	–	TO EXPANDED TRITON SYSTEM
5	1.24	0.62	1.86	5.24	8.55	15.22	SHEET FLOWS OFFSITE
6	0.52	0.25	0.77	2.17	3.53	6.26	SHEET FLOWS SOUTH OFFSITE
EXPANDED TRITON SYSTEM	–	–	–	0.62	1.82	4.59	TO CITY STORM SEWER
DIVERTER				1.31	2.52	4.72	TO CITY STORM SEWER
TOTAL	3.40	1.12	4.52	10.58	18.31	33.88	
PERCENTAGE OF IMPERVIOUS SURFACE							
BEFORE BUILDING ADDITION (% OF PROPERTY) =			68.70%				
AFTER BUILDING ADDITION (% OF PROPERTY) =			75.20%				

STORMWATER RUNOFF SUMMARY

	2-YR STORM (2.87") RUNOFF (CFS)	10-YR STORM (4.29") RUNOFF (CFS)	100-YR STORM (7.40") RUNOFF (CFS)
EXISTING SITE	11.69	19.51	35.02
PROPOSED SITE	10.58	18.31	33.88

INSPECTIONS

EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 1/2 INCH OVER 24 HOURS RAIN EVENT.

STABILIZED AREAS: ONCE EVERY 30 DAYS.

FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.

RECORDS: COPY OF THE GRADING, DRAINAGE EROSION CONTROL PLAN AND WATERSHED DATA & SWPPP PLANS AS WELL AS THE INSPECTIONS/MAINTENANCE LOGS ARE TO BE KEPT EITHER IN THE FIELD OFFICE, INSPECTOR'S VEHICLE OR CONTRACTOR'S VEHICLE.

FINAL STABILIZATION

STABILIZATION BY UNIFORM PERENNIAL VEGETATIVE COVER (70% DENSITY)

DRAINAGE DITCHES STABILIZED.

ALL TEMPORARY SYNTHETIC AND STRUCTURAL BMP'S REMOVED.

CLEAN OUT SEDIMENT FROM CONVEYANCES AND SEDIMENTATION BASINS (RETURN TO DESIGN CAPACITY).

GRADING & SOILS

BASED ON SOIL BORING(S) PROVIDED BY BRAUN INTERTEC SOILS TYPICALLY FOUND ON THIS PROJECT ARE: SM CL SP

REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

SPECIAL AND IMPAIRED WATERS

THESE SPECIAL AND IMPAIRED WATERS ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. DUE TO THE PROXIMITY OF THESE SPECIAL AND IMPAIRED WATERS, THE BMPS DESCRIBED IN APPENDIX A OF THE NPDES PERMIT WILL APPLY TO ALL AREAS OF THE SITE.

WATERBODY	IMPAIRMENT(S)
NONE	NA

MINIMUM ESTIMATED QUANTITIES FOR EROSION CONTROL

ITEM DESCRIPTION	ESTIMATED QUANTITY	
DRAINAGE STRUCT. INLET FILTER	12	EACH
ROCK CONSTRUCTION ENTRANCE	1	EACH
CONCRETE WASHOUT	1	EACH
BIO LOG	885	LF
EROSION CONTROL BLANKET	129	SY

NOTE: QUANTITIES SHOWN ARE THE MINIMUM REQUIRED, ADDITIONAL QUANTITIES MAY BE NEEDED IF REQUIRED BY THE MPCA, WATERSHED DISTRICT, OR CITY. CONTRACTOR IS RESPONSIBLE FOR FINAL DETERMINATION OF QUANTITIES PRIOR TO CONSTRUCTION.

CONSTRUCTION ACTIVITY EROSION PREVENTION PRACTICES

CONTRACTOR SHALL STABILIZE ALL EXPOSED SOIL AREAS (INCLUDING STOCKPILES). STABILIZATION WILL BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHENEVER ANY CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

FOR PUBLIC WATER THAT THE DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, ALL EXPOSED SOIL AREAS THAT ARE WITHIN 200 FEET OF THE WATER'S EDGE, AND DRAIN TO THESE WATERS MUST COMPLETE THE STABILIZATION ACTIVES WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.

PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24-HOURS AFTER CONNECTION TO A SURFACE WATER.

SEDIMENT CONTROL MEASURES MUST BE INSTALLED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UPGRADIENT LAND DISTURBING ACTIVITIES BEGIN.

NOTE:

THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT INCLUDES THE CIVIL ENGINEERING PLANS AND THE PROJECT MANUAL.

CONTRACTOR TO SUPPLY CONSTRUCTION PHASING NARRATIVE, ESTIMATED PRELIMINARY QUANTITIES OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMP'S ANTICIPATED AT THE START OF THE PROJECT AND FOR THE LIFE OF THE PROJECT, AND LOCATION OF AREAS WHERE CONSTRUCTION WILL BE PHASED TO MINIMIZE DURATION OF EXPOSED SOIL AREAS. CONTRACTOR IS TO REVIEW MINNESOTA POLLUTION CONTROL AGENCY'S INSTRUCTIONS FOR THE APPLICATION FOR MINNESOTA'S NPDES/SDS GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY PRIOR TO SUBMITTING APPLICATION.

SEDIMENT AND EROSION CONTROL MAINTENANCE

PERIMETER SEDIMENT CONTROL PRACTICES: WHEN SEDIMENT REACHES 1/3 THE HEIGHT OF THE BMP, THE SEDIMENT MUST BE REMOVED WITHIN 24 HOURS. IF PERIMETER SEDIMENT CONTROL HAS BEEN DAMAGED OR IS NOT FUNCTIONING PROPERLY, IT MUST BE REPAIRED AND/OR REPLACED WITHIN 24 HOURS. PERIMETER BMP MEASURES MAY INCLUDE SILT FENCING.

CONSTRUCTION SITE VEHICLE EXIT LOCATIONS: ALL TRACKED SEDIMENT ONTO PAVED SURFACES MUST BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR MORE FREQUENTLY IF REQUIRED BY CITY OR WATERSHED.

CONSTRUCTION SITE DEWATERING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS. DISCHARGE FROM ALL DEWATERING OPERATIONS SHALL BE DIRECTED TO ON-SITE DEPRESSIONS. NO DISCHARGE FROM DEWATERING OPERATIONS SHALL BE DIRECTED OFF-SITE TOWARDS A WATER OF THE STATE.

PORTABLE TOILET NOTES:

1. PORTABLE TOILETS POSE AN ENVIRONMENTAL HAZARD WHEN PLACED IN THE VICINITY OF STORM DRAINS OR BODIES OF WATER. PORTABLE TOILET CLEANING ACTIVITIES CAN ALSO GENERATE POLLUTANTS THAT CAN DEGRADE WATER QUALITY.
2. PORTABLE TOILET PLACEMENT:
   - 2.1. PLACE PORTABLE TOILETS ON FLAT STABLE GROUND WITH CLEAR ACCESS TO THE UNITS.
   - 2.2. LOCATE TOILETS A MINIMUM OF 20 FEET FROM ANY WATER BODY AND 10 FEET FROM ANY CURB AND GUTTER. IF UNFEASIBLE, AN EARTHERN BERM OR SAND BAG BERM SHALL BE PLACED AROUND THE UNIT FOR SPILL AND LEAK CONTAINMENT.
   - 2.3. AVOID PLACING TOILETS ON IMPERVIOUS SURFACES THAT WILL QUICKLY DRAIN TO STORM SEWERS.
   - 2.4. LOCATE TOILETS SO THAT EXPOSURE TO TRAFFIC AND MOVING EQUIPMENT IS MINIMIZED.
   - 2.5. SECURE TOILETS TO THE GROUND WITH STAKES OR CABLES.
   - 2.6. RINSE WATER FROM CLEANING ACTIVITIES SHALL NOT BE DISPOSED ON SITE.
3. REGULARLY CHECK TOILETS FOR DAMAGE, LEAKS AND SPILLS AS PART OF THE WEEKLY STORMWATER SITE INSPECTION.
4. OWNER IDENTIFICATION AND CONTACT INFORMATION SHALL BE DISPLAYED IN A PROMINENT LOCATION ON EACH UNIT.

VICINITY MAP
CRYSTAL, MINNESOTA

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.

Kevin A. Bohl
License Number: **52209** Date **10/01/2020**

Revisions		
Description	Date	Num

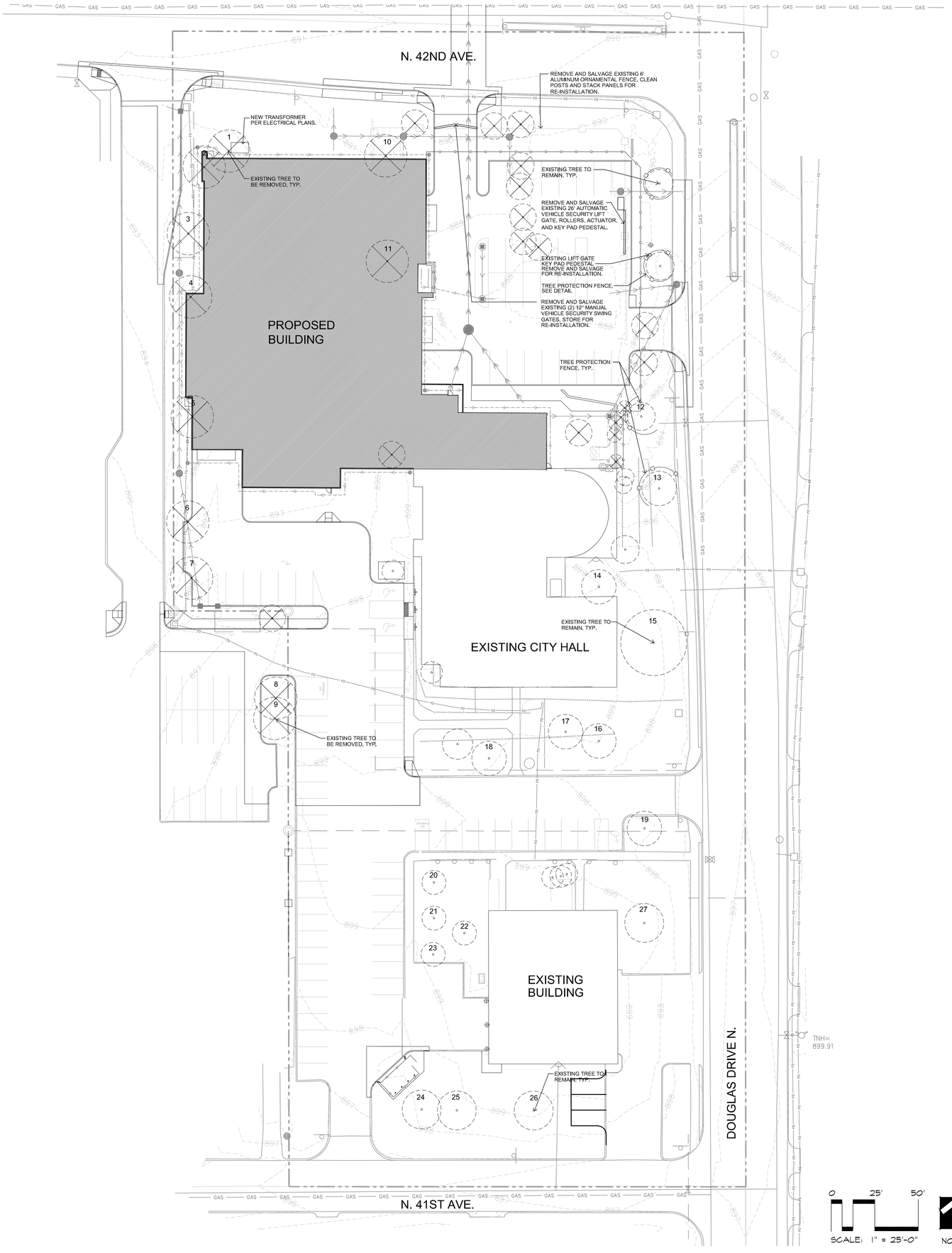
Comm: **192195**
Date: **10/01/2020**
Drawn: **WH**
Check: **KAB**

North

City Submittal PRELIMINARY

STORMWATER POLLUTION PREVENTION PLAN

C6.000



General Notes:

1. See Civil Engineer's plans for site plan layout and dimensions.
2. Contractor to coordinate all work in the city right-of-way with City of Crystal Public Works Department.
3. See Architect's plans for additional requirements regarding the site plan layout.
4. Place a minimum of 6" topsoil or slope dressing on all areas disturbed by construction, including right-of-way boulevards, unless specified otherwise.
5. See Civil Engineer's Plans for proposed utilities.
6. See Sheet L1.002 for Landscape Plan
7. See Sheet L1.003 for details, notes and schedules.

Symbol Legend:

- EXISTING TREE TO REMAIN
- EXISTING TREE WITH 12" OR GREATER DBH TO REMAIN
- EXISTING SHADE TREE 12" OR GREATER TO BE REMOVED
- EXISTING SMALL TREE OR SHRUB TO BE REMOVED
- TREE PROTECTION FENCE

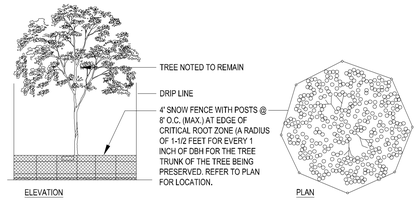
Existing Tree Information:

ID	Common Name	Botanical Name	Caliper	DBH +12"?	Remove?
1	Spruce	*Picea*	14	Y	Y
2	Ohio Buckeye	*Aesculus*	18	Y	Y
3	Ohio Buckeye	*Aesculus*	24	Y	Y
4	Ohio Buckeye	*Aesculus*	18	Y	Y
5	Ohio Buckeye	*Aesculus*	14	Y	Y
6	Ohio Buckeye	*Aesculus*	16	Y	Y
7	Ohio Buckeye	*Aesculus*	20	Y	Y
8	Maple	*Acer*	14	Y	Y
9	Elm	*Ulmus*	12	Y	Y
10	Basswood	*Tilia*	16	Y	Y
11	Basswood	*Tilia*	18	Y	Y
12	Ash	*Fraxinus*	16	Y	N
13	Ash	*Fraxinus*	18	Y	N
14	Birch	*Betula*	14	Y	N
15	Basswood	*Tilia*	42	Y	N
16	Fir	*Pseudotsuga*	14	Y	N
17	Oak	*Quercus*	16	Y	N
18	Ash	*Fraxinus*	24	Y	N
19	Ash	*Fraxinus*	18	Y	N
20	Maple	*Acer*	15	Y	N
21	Maple	*Acer*	18	Y	N
22	Oak	*Quercus*	12	Y	N
23	Ash	*Fraxinus*	15	Y	N
24	Basswood	*Tilia*	22	Y	N
25	Basswood	*Tilia*	26	Y	N
26	Basswood	*Tilia*	28	Y	N
27	Ash	*Fraxinus*	24	Y	N
	Total Existing Trees +12" DBH		27		
	Existing Trees 12" to 17" DBH To Be Removed		6		
	Existing Trees 18" to 23" DBH To Be Removed		4		
	Existing Trees +23" DBH To Be Removed		1		
	Total Replacement Trees Required		24		

Tree Protection Notes:

Existing boundary, location, topographic, and utility information shown on this plan is from a field survey provided by Sunde Land Surveying.

- Do not begin tree clearing work until tree protection measures are in place and to the permit approval of the City of Crystal Forestry Department has been granted.
- Critical Root Zone:
  Install high density polyethylene safety fence, 4 ft. high, international orange, at the Drip Line or at the Critical Root Zone whichever is greater, of trees to be preserved per detail 1, prior to commencement of earthwork activity. Field-staking of the fence location(s) subject to City of Crystal approval.
- Where silt fence and proposed tree protection fence overlap, place the tree protection fence on the outside of the silt fence, double-staked at the break-point.
- Refer to Tree Protection Detail 1, Sheet L.102.
- The contractor shall prune the canopy of existing trees to remain where the canopy is in jeopardy of damage due to the new improvements shown. It is recommended that the contractor hire a certified arborist to perform the pruning. Any branches broken during construction shall be immediately trimmed and wounds painted to prevent further damage.
- Perform work in accordance with the laws, ordinances, rules, regulations, and orders of public authority having jurisdiction. Secure and pay for permits, governmental fees and licenses necessary for the proper execution of the demolition work.
- Provide protective coverings and enclosures as necessary to prevent damage to existing work that is to remain. Existing work to remain may include items such as trees, shrubs, lawns, sidewalks, drives, curbs, utilities, buildings and/or other structures on or adjacent to the demolition site. Provide temporary fences and barricades as required for the safe and proper execution of the work and the protection of persons and property.
- Remove debris, waste, and rubbish promptly from the site. On-site burial of debris is not permitted. Burn no debris on the site. Salvage material not otherwise indicated to be reused shall become the Contractor's property and is to be removed promptly from the site and disposed of in strict accordance with all applicable laws, regulations, and/or statutes.
- Buildings, features, surfaces, and other descriptive references shown on this drawing are for informational purposes only. Field verify all information relevant to the project prior to proceeding with the work. Visit the site and determine all site conditions and hazards.
- This plan is a guide as to the anticipated amount of disturbance expected due to proposed improvements. The contractor is expected to take all necessary precautions to ensure trees noted to remain are not damaged during construction. Do not store material or drive within the drip line of existing trees to remain. Be aware of overhead branches for clearance of material and equipment.
- This plan is not a guarantee that existing trees will survive during/post construction, but rather a guide to help assure their protection and greatest chances of survival at the surface level. Further protection measures outside this scope could involve ecologists, foresters and arborists.
- Notify the Owner's Representative and Engineer when tree protection fencing is taken down to perform work in conjunction with the new improvements noted in this plan set. The contractor is responsible for re-erecting the tree protection fence immediately after the work is complete, when ever possible
- Trees shown as existing to remain (be preserved) that are damaged / killed as a result of construction activities are subject to replacement per the City of Crystal Tree Replacement penalty. Replacement trees are to be paid for at no additional expense to the Owner.



NOTE: TREE PROTECTION SHALL BE PROVIDED BY CONTRACTOR AS REQUIRED TO AIDE IN SURVIVABILITY OF EXISTING TREES TO REMAIN. DO NOT STORE MATERIALS OR DRIVE EQUIPMENT WITHIN THE TREE DRIP LINE AS DESIGNATED ABOVE, MAINTAIN THE FENCE INTEGRITY AT ALL TIMES THROUGHOUT CONSTRUCTION.

TREE PROTECTION FENCE SHALL BE IN PLACE PRIOR TO THE START OF DEMOLITION.

1 TYPICAL TREE PROTECTION DETAIL
NOT TO SCALE

Know what's below. Call before you dig.

LANDSCAPE REMOVALS AND TREE PRESERVATION PLAN:

CRYSTAL CITY HALL

4141 DOUGLAS DRIVE N.
CRYSTAL, MN. 55422

CRYSTAL CITY HALL
4141 DOUGLAS DR. N.
CRYSTAL, MN. 55422

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101
woldae.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Dr., Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
www.bkbm.com

City Submittal
PRELIMINARY

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of MINNESOTA.

BENJAMIN D. HARTBERG, PLA
Registration No. 48446 Date

Revisions		
Description	Date	Num

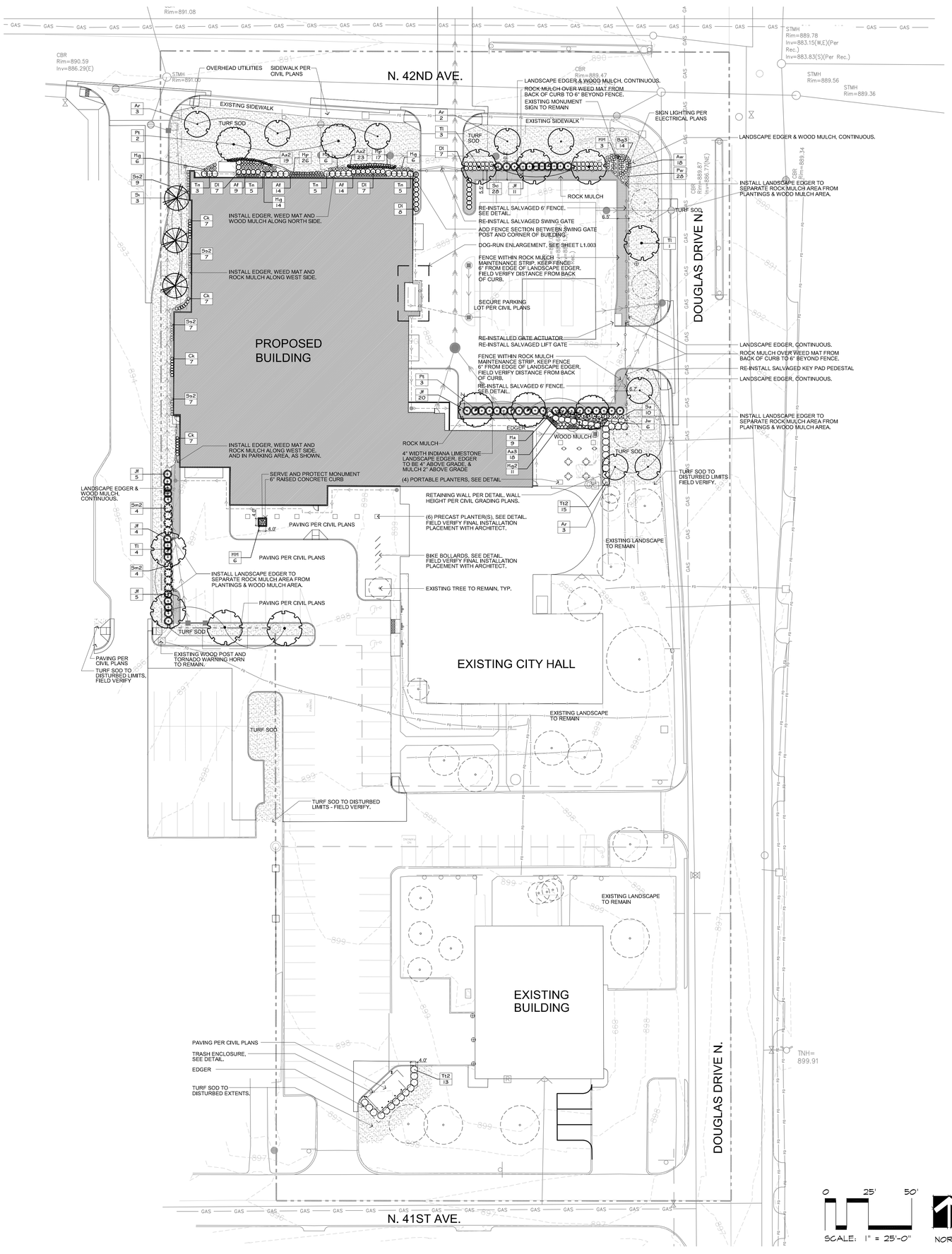
BKBM# 192195
Date: 09/14/2020
Drawn: MF
Check: BH
North

Sheet Name:

LANDSCAPE REMOVALS AND TREE PRESERVATION PLAN

Sheet #:

L1.001



General Notes:

1. See Civil Engineer's plans for site plan layout and dimensions.
2. Contractor to coordinate all work in the city right-of-way with City of Crystal Public Works Department.
3. See Architect's plans for additional requirements regarding the site plan layout.
4. Place a minimum of 6" topsoil or slope dressing on all areas disturbed by construction, including right-of-way boulevards, unless specified otherwise.
5. See Civil Engineer's Plans for proposed utilities.
6. See Sheet L1.001 for Tree Preservation Plans.
7. See Sheet L1.003 for Landscape details, notes and schedules.

Landscape Requirement:

- One overstory Tree for Every 30 Feet of Lot Frontage.
  - 1,268 Linear Feet / 30 = 42 Overstory Trees Required.
  - 24 Mitigation Trees + 27 Existing Trees (+3" DBH) = 51 Trees

Symbols Legend:

PROPOSED TURF

RE-INSTALLED, SALVAGED 6' SECURITY FENCE

PROPOSED ROCK MULCH

EXISTING TREE TO REMAIN

PLANT SCHEDULE

OVERSTORY TREE	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Ar	Alnus regosa	Speckled Alder	2.5" Cal.	B&B	8	
	Pt	Populus tremuloides	Quaking Aspen	2.5" Cal.	B&B	5	
	Tl	Tilia americana	American Linden	2.5" Cal.	B&B	8	

ORNAMENTAL TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Si	Syringa reticulata `Ivory Silk`	Ivory Silk Japanese Tree Lilac	2" Cal.	B&B	3	

SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Bg3	Berberis thunbergii `Golden Nugget`	Golden Nugget Japanese Barberry	2 gal.	Pot	14	
	Dl	Diervilla lonicera	Dwarf Bush Honeysuckle	3 gal.	Pot	29	
	Ha	Hydrangea arborescens `Annabelle`	Annabelle Hydrangea	5 gal.	Pot	9	
	Jf	Juniperus chinensis `Sea Green`	Sea Green Juniper	10 gal.	Pot	45	
	Jw	Juniperus horizontalis `Wiltonii`	Blue Rug Juniper	2 gal.	Pot	6	
	Sa	Spiraea x bumalda `Anthony Waterer`	Anthony Waterer Spiraea	3 gal.	Pot	10	
	Sm2	Syringa patula `Miss Kim`	Miss Kim Lilac	3 gal.	Pot	8	
	Sc	Syringa x `SMNJRPU` TM	Bloomerang Dwarf Purple Lilac	2 gal.	Pot	28	
	Tt2	Thuja occidentalis `Techny Globe`	Techny Globe Arborvitae	10 gal.	Pot	28	

ANNUALS/PERENNIALS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Aw	Aster	Woods Blue Aster	1 gal.	Pot	18	
	Aa2	Astilbe x arendsii `Amethyst`	Amethyst Astilbe	1 gal.	Pot	42	
	Aa3	Astilbe x arendsii `Amethyst`	Amethyst Astilbe	1 gal.	Pot	18	
	Af	Athyrium filix-femina	Common Lady Fern	1 gal.	Pot	37	
	HH	Hemerocallis x `Happy Returns`	Happy Returns Daylily	1 gal.	Pot	9	
	Hp	Heuchera micrantha `Palace Purple`	Palace Purple Coral Bells	1 gal.	Pot	43	
	Hg2	Hosta x `Guacamole`	Guacamole Hosta	2 gal.	Pot	11	
	Hg	Hosta x `Guacamole`	Guacamole Hosta	2 gal.	Pot	32	
	Pw	Phlox divaricata	Woodland Phlox	1 gal.	Pot	28	

GRASSES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Ck	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	1 gal.	Pot	28	
	Ss2	Schizachyrium scoparium `Standing Ovation`	Little Bluestem Grass	1 gal.	Pot	30	

EVERGREEN SHRUB	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	REMARKS
	Tn	Taxus cuspidata `Nana`	Dwarf Japanese Yew	3 gal.	Pot	18	

0 25' 50'
SCALE: 1" = 25'-0"

NORTH

Know what's below. Call before you dig.

PRELIMINARY LANDSCAPE PLAN

CRYSTAL CITY HALL

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woldae.com | 651 227 7773

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Phone: (763) 843-0420
Fax: (763) 843-0421
www.bkbm.com

City Submittal
PRELIMINARY

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Landscape Architect under the laws of the State of MINNESOTA.

BENJAMIN D. HARTBERG, PLA
Registration No. 49348 Date

Revisions		
Description	Date	Num

BKBM# 192195
Date: 09/14/2020
Drawn: MF
Check: BH

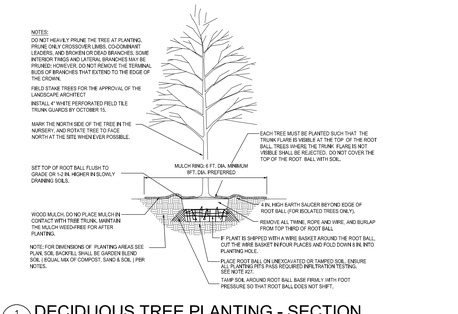
North

Sheet Name:

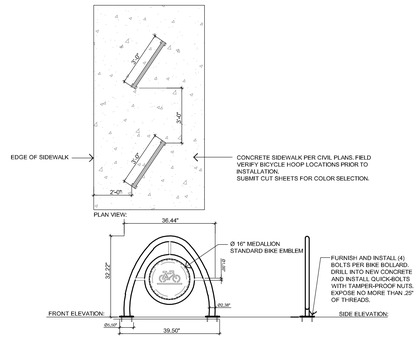
PRELIMINARY LANDSCAPE PLAN

Sheet #:

L1.002



1 L1.003 DECIDUOUS TREE PLANTING - SECTION
NOT TO SCALE



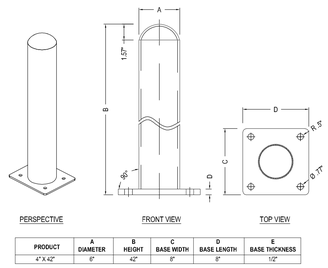
THE BIKE RACK ARRIVES ASSEMBLED AND READY TO BE INSTALLED. HARDWARE IS NOT INCLUDED. 5 YEAR COMPREHENSIVE WARRANTY.

PRODUCT: ARCH BIKE RACK W/CENTER MEDALLION
DESCRIPTION: PRODUCT #LBCBR
FRAME: STAINLESS STEEL

QUANTITY: (5)
WWW.ANOVAFURNISHINGS.COM

NOTES:
1. INSTALL SURFACE MOUNT BICYCLE BOLLARDS ACCORDING TO MANUFACTURERS' SPECIFICATIONS.
2. SUBMIT PRODUCT DATA SHEET FOR FINAL APPROVAL, PRIOR TO ORDERING.
3. SEE SITE PLAN FOR LOCATIONS OR CONSULT OWNER.
4. SITE FURNISHINGS CONTRACTOR TO INCLUDE ASSEMBLY, MOUNTING HARDWARE, AND LABOR IN BID.

7 L1.003 BICYCLE BOLLARD DETAIL
NOT TO SCALE



PRODUCT	A DIAMETER	B HEIGHT	C BASE WIDTH	D BASE LENGTH	E BASE THICKNESS
4" X 42"	6"	42"	8"	8"	1/2"

PRODUCT: BOLT DOWN SAFETY BOLLARD
DESCRIPTION: 4" X 42"
FRAME: SCH. 40 STEEL, POWDER COATED SAFETY YELLOW

QUANTITY: (6)
WWW.POSTGUARD.COM

NOTES:
1. INSTALL SURFACE BOLLARDS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. SUBMIT PRODUCT DATA SHEET FOR FINAL APPROVAL, PRIOR TO ORDERING.
3. SEE SITE PLAN FOR LOCATIONS OR CONSULT OWNER.
4. CONTRACTOR TO INCLUDE ASSEMBLY, MOUNTING HARDWARE, AND LABOR IN BID.

11 L1.003 SURFACE MOUNTED SAFETY BOLLARD
NOT TO SCALE

Landscape Notes:

1. Tree saucer mulch to be four inches (4") depth natural single-shred hardwood mulch for trees outside of a plant bed. Install per tree planting detail.

2. Refer to civil plan sheets for grading, drainage, site dimensions, survey, tree removal, proposed utilities & erosion control.

3. All plant material shall comply with the latest edition of the American Standard for Nursery Stock, American Association of Nurserymen. Unless noted otherwise, deciduous shrubs shall have at least 5 canes at the specified shrub height. Plant material shall be delivered as specified.

4. Plan takes precedence over plant schedule if discrepancies in quantities exist.

5. All proposed plants shall be located and staked as shown.

6. Adjustment in location of proposed plant material may be needed in field. Should an adjustment be required, the client will provide field approval. Significant changes may require city review and approval.

7. The project landscape contractor shall be held responsible for watering and properly handling all plant materials brought on the site both before and after installation. Schedule plant deliveries to coincide with expected installation time within 36 hours.

8. All plant materials shall be fertilized upon installation as specified.

9. The landscape contractor shall provide the owner with a watering schedule appropriate to the project site conditions and to plant material growth requirements.

10. If the landscape contractor is concerned or perceives any deficiencies in the plant selections, soil conditions, drainage or any other site condition that might negatively affect plant establishment, survival or guarantee, they must bring these deficiencies to the attention of the landscape architect & client prior to bid submission.

11. Contractor shall establish to his/ her satisfaction that soil and compaction conditions are adequate to allow for proper drainage at and around the building site.

12. Contractor is responsible for ongoing maintenance of all newly installed material until time of owner acceptance. Any acts of vandalism or damage which may occur prior to owner acceptance shall be the responsibility of the contractor. Contractor shall provide the owner with a maintenance program including, but not limited to, pruning, fertilization and disease/pest control.

13. The contractor shall guarantee newly planted material through one calendar year from the date of written owner acceptance. Plants that exhibit more than 10% die-back damage shall be replaced at no additional cost to the owner. The contractor shall also provide adequate tree wrap and deer/rodent protection measures for the plantings during the warranty period.

14. This layout plan constitutes our understanding of the landscape requirements listed in the ordinance. Changes and modifications may be requested by the city based on applicant information, public input, council decisions, etc.

15. The landscape contractor shall be responsible for obtaining any permits and coordinating inspections as required throughout the work process.

16. Plant size & species substitutions must be approved in writing prior to acceptance in the field.

17. All edger shall be professional grade black steel edger, 1/8" thickness. Anchor every 18" on-center (minimum). Submit sample.

18. Landscape Contractor is responsible for coordination with the General Contractor, to protect the new improvements on and off-site during landscape work activities. Report any damage to the General Contractor immediately.

19. All sod areas shall be prepared prior to planting with a harley power box rake or equal to provide a firm planting bed free of stones, sticks, construction debris, etc. Any alternate seed mixtures, rates, & application method noted shall be submitted to the landscape architect for approval.

20. The Landscape Contractor shall furnish samples of all landscape materials for approval prior to installation.

21. The Landscape Contractor shall clear and grub the underbrush from within the work limits to remove dead branches, leaves, trash, weeds and foreign materials. Remove trees where noted on the plan, including the stump to 30" below grade.

22. The landscape contractor shall contact Gopher State One Call no less than 48 hours before digging for field utility locations.

23. The landscape contractor shall be responsible for the removal of erosion control measures once vegetation has been established to the satisfaction of the municipal staff. This includes silt curtain fencing and sediment logs placed in the landscape.

24. The landscape contractor shall be responsible for visiting the site to become familiar with the conditions prior to bidding and installation. Coordinate with the general contractors on matters such as fine grading, landscaped area conditions, staging areas, irrigation connection to building, etc.

25. Irrigation: Landscape contractor shall repair any damaged existing irrigation per the new improvements and provide head-to-head coverage of all new tree, turf and shrub planting areas. Existing irrigation parts may be used, ensuring head-to-head coverage between new and existing landscape areas as irrigation layout pertains. Cap irrigation lines no longer in use. Submit irrigation layout plan to Landscape Architect prior to installation.

26. Topsoil Requirements: All graded areas of the site that are designated on the plan set for turf sod shall have no less than 6" of imported top soil, areas designated for shrubs, trees, and perennials shall have no less than 12" of imported top soil, meeting MnDOT classifications for planting soil for trees, shrubs, and turf. Slope away from building.

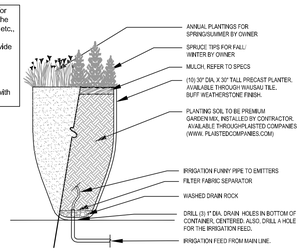
27. Landscape contractor must prove the open sub-grade of all planting areas after their excavation is capable of infiltrating a minimum requirement of 1/4-inch of water per hour prior to installation of plant materials, topsoil, irrigation, weed mat, and mulch. Planting areas not capable of meeting this requirement shall have 4" diameter X 48" depth holes augured every 36" on-center and filled with MnDOT Free-Draining Coarse Filter Aggregate. Re-test sub-grade percolation for compliance to infiltration minimum requirement.

28. Turf Sodding & Seeding activity shall conform to all rules and regulations as established in the MnDOT Seeding Manual, 2014 edition, for seed bed preparation, installation, maintenance, acceptability, and warranty. Full Sun Turf Sod: 70% Kentucky Bluegrass, 10% Chewings Red Fescue, 10% Perennial Rye, 10% Re-Green. Shade-Tolerant Sod: 50% Chewings Red Fescue, 35% Rough Bluegrass, 15% Re-Green. Submit turf sod vendor's turf grass blend schedule for review. Install turf sod within 24 hours of cutting. Where new sod meets existing turf, the contractor will sub-cut the soil to ensure thatch elevations of old and new turf match.

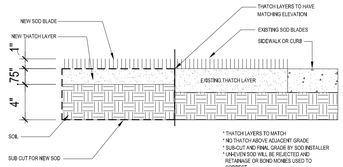
29. Where noted/indicated, plant beds shall receive 4" depth locally available 3/4" dia. river stone rock mulch, over weed mat. Submit mulch sample for Owner approval. Install rock mulch 1" below back of curbs or walks to prevent spill-over. Do not mound rock mulch. Coordinate finished grade condition with earthwork subcontractor.

30. Unless otherwise noted, all plant beds shall receive 4" depth of single-shred hardwood mulch. Do not install weed mat. Submit mulch sample for Owner approval. Apply Preen pre-emergent granule per manufacturer recommendations. Ensure to keep preen a minimum of 6" away from plant material.

NOTE: Landscape contractor is responsible for installation of planters. This includes putting the planter together, installing soil, mulch, plants etc., and installing internal irrigation insert & PVC vertical drain pipe. Planting contractor to provide list of annual plants that will be used for Landscape Architect's review, including a minimum of (3) seasonal plant change-outs (Spring, Summer, Fall / Winter). Planting contractor to include 1 year of maintenance with bid.



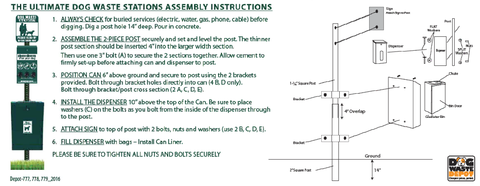
2 L1.003 MODULAR PLANTER DETAIL
NOT TO SCALE



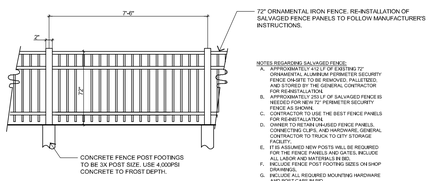
8 L1.003 SECTION - NEW TURF SOD AGAINST EXISTING
NOT TO SCALE

NOTES:
1. Install (1) DogiPot Pet Waste Station via wall mount inside the proposed dog run area.
2. Include any necessary hardware and assembly in pricing.

THE ULTIMATE DOG WASTE STATIONS ASSEMBLY INSTRUCTIONS

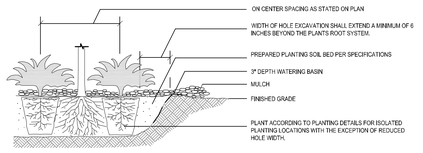


12 L1.003 PET WASTE STATION DETAIL
NOT TO SCALE

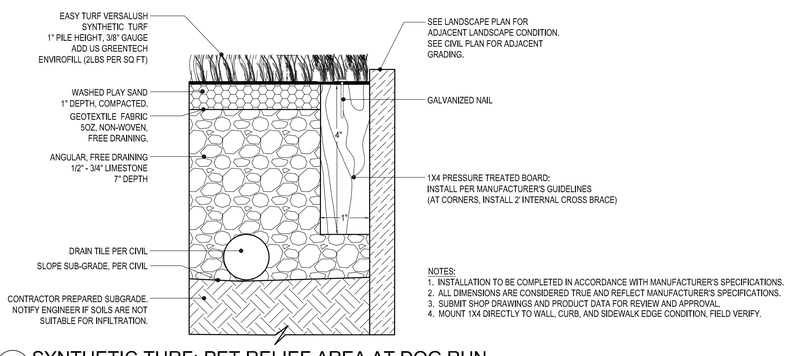


NOTES REGARDING SALVAGED FENCE:
A. APPROXIMATELY 412 LF OF EXISTING 72" ORNAMENTAL IRON PERIMETER SECURITY FENCE ON-SITE. TO BE REMOVED, PALLETIZED AND STORED BY THE GENERAL CONTRACTOR FOR RE-INSTALLATION.
B. APPROXIMATELY 253 LF OF SALVAGED FENCE IS TO BE RE-INSTALLED AS 72" PERIMETER SECURITY FENCE AS SHOWN.
C. CONTRACTOR TO USE THE BEST FENCE PANELS FOR RE-INSTALLATION.
D. OWNER TO RETAIN UN-USED FENCE PANELS, CONNECTING CLIPS, AND HARDWARE. GENERAL CONTRACTOR TO TRUCK TO CITY STORAGE FACILITY.
E. IT IS ASSUMED NEW POSTS WILL BE REQUIRED FOR THE FENCE PANELS AND GATES. INCLUDE ALL LABOR AND MATERIALS IN BID.
F. SEE CONCRETE FENCE POST FOOTING SIZES ON SHOP DRAWINGS.
G. INCLUDE ALL REQUIRED MOUNTING HARDWARE AND POST CAPS IN BID.
H. SUBMIT PRODUCT DATA AND FENCE / GATE SHOP DRAWINGS.

3 L1.003 SALVAGED 6' IRON FENCE
NOT TO SCALE

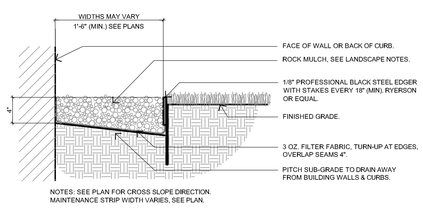


4 L1.003 TYP. SHRUB PLANTING - SECTION
NOT TO SCALE

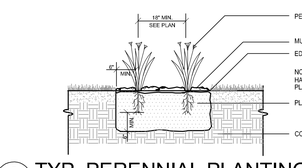


NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
3. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR REVIEW AND APPROVAL.
4. MOUNT 1X4 DIRECTLY TO WALL, CURB, AND SIDEWALK EDGE CONDITION, FIELD VERIFY.

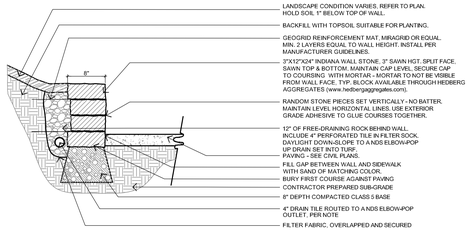
9 L1.003 SYNTHETIC TURF: PET RELIEF AREA AT DOG RUN
NOT TO SCALE



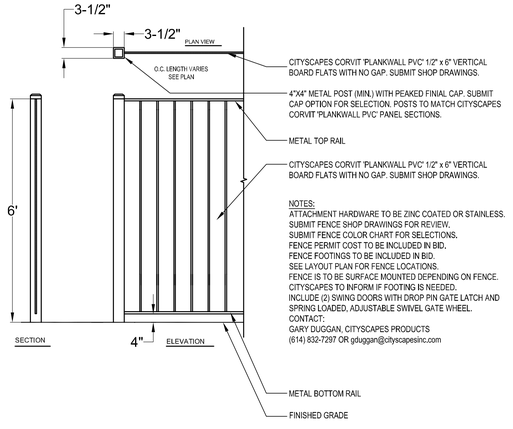
13 L1.003 ROCK MULCH, TYP. SECTION
NOT TO SCALE



5 L1.003 TYP. PERENNIAL PLANTING DETAIL
NOT TO SCALE

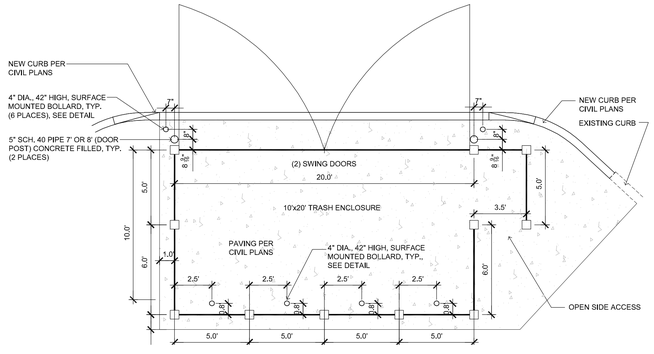


6 L1.003 SECTION AT RETAINING WALL
NOT TO SCALE

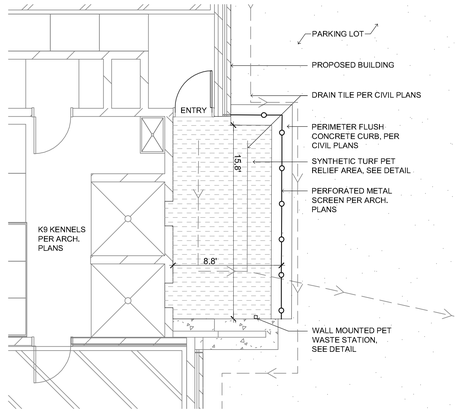


NOTES:
ATTACHMENT HARDWARE TO BE ZINC COATED OR STAINLESS.
SUBMIT FENCE SHOP DRAWINGS FOR REVIEW.
SUBMIT FENCE COLOR CHART FOR SELECTIONS.
FENCE PERMIT COST TO BE INCLUDED IN BID.
FENCE FOOTINGS TO BE INCLUDED IN BID.
SEE LAYOUT PLAN FOR FENCE LOCATIONS.
FENCE IS TO BE SURFACE MOUNTED DEPENDING ON FENCE.
CITYSCAPES TO INFORM IF FOOTING IS NEEDED.
INCLUDE (2) SWING DOORS WITH DROP PIN GATE LATCH AND SPRING LOADED, ADJUSTABLE SWIVEL GATE WHEEL.
CONTACT:
GARY DUGGAN, CITYSCAPES PRODUCTS
(614) 832-7297 OR gduggan@cityscapesinc.com

10 L1.003 SCREEN FENCE DETAIL - CITYSCAPES CORVIT
NOT TO SCALE



14 L1.003 ENLARGEMENT AT DOG-RUN
NOT TO SCALE



LANDSCAPE DETAILS:

REFER TO SHEET L1.001 FOR TREE PRESERVATION PLANS + SHEET L1.002 FOR LANDSCAPE LAYOUT PLAN

CRYSTAL CITY HALL

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BENJAMIN D. HARTBERG, PLA
Registration No. 49894 Date:

Revisions		
Description	Date	Num

BKBM# 192195
Date: 09/14/2020
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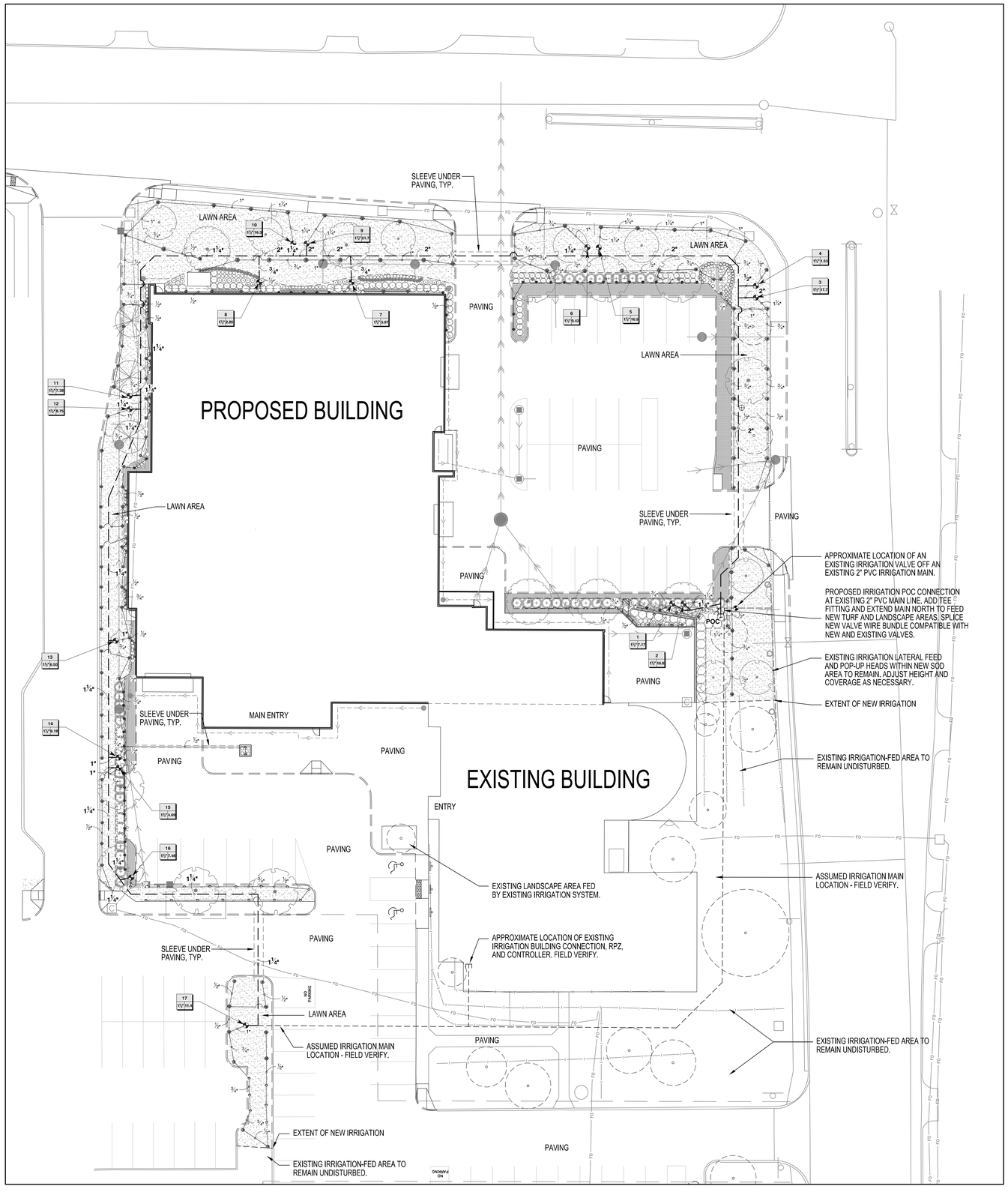
Check: BH
North

Sheet Name:

LANDSCAPE DETAILS

Sheet #:

L1.003



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
2Q 2H 4Q 4H 6Q 6H	Hunter PROS-04-PRS30 short radius nozzles Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	61	30
Q H F	Hunter PROS-04-PRS30 5` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	44	30
Q T H F	Hunter PROS-04-PRS30 8` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	51	30
Q T H F	Hunter PROS-04-PRS30 10` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	16	30
Q T H TT TQ F	Hunter PROS-04-PRS30 12` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	18	30
Q T H TT TQ F	Hunter PROS-04-PRS30 15` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	15	30
	Hunter PROS-04-PRS30 adjustable arc Turf Spray, 30 psi regulated 4.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.	29	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	Hunter PGV-151 Globe 1-1/2" 1-1/2" Plastic Electric Remote Control Valve, for Residential/Light Commercial Use. Female NPT Inlet/Outlet, With Flow Control. Globe Configuration.	17	
POC 1"	Point of Connection 2"	1	
	Irrigation Lateral Line: PVC Schedule 40 1/2"	1,263 l.f.	
	Irrigation Lateral Line: PVC Schedule 40 3/4"	530.3 l.f.	
	Irrigation Lateral Line: PVC Schedule 40 1"	195.3 l.f.	
	Irrigation Lateral Line: PVC Schedule 40 1 1/4"	212.6 l.f.	
	Irrigation Mainline: PVC Schedule 40 1/2"	7.7 l.f.	
	Irrigation Mainline: PVC Schedule 40 3/4"	22.7 l.f.	
	Irrigation Mainline: PVC Schedule 40 1"	12.2 l.f.	
	Irrigation Mainline: PVC Schedule 40 1 1/4"	491.3 l.f.	
	Irrigation Mainline: PVC Schedule 40 2"	389.5 l.f.	

Valve Callout

Valve Number

Valve Flow

Valve Size

CRITICAL ANALYSIS

Generated:	2020-09-14 11:24
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Point of Connection Size:	2"
Flow Available:	78.62 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	55.00 psi
Pressure Available:	55.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	21.65 gpm
Flow Available at POC:	78.62 gpm
Residual Flow Available:	56.97 gpm
Critical Station:	17
Design Pressure:	30.00 psi
Friction Loss:	4.27 psi
Fittings Loss:	0.43 psi
Elevation Loss:	0.00 psi
Loss through Valve:	3.00 psi
Pressure Req. at Critical Station:	37.71 psi
Loss for Fittings:	0.43 psi
Loss for Main Line:	4.33 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Critical Station Pressure at POC:	42.47 psi
Pressure Available:	55.00 psi
Residual Pressure Available:	12.53 psi

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	Hunter PGV-151 Globe	1-1/2"	Turf Spray	7.17		35.32	35.37	1.37 in/h
2	Hunter PGV-151 Globe	1-1/2"	Turf Spray	16.77		35.23	35.29	0.81 in/h
3	Hunter PGV-151 Globe	1-1/2"	Turf Spray	17.70		35.84	36.27	1.12 in/h
4	Hunter PGV-151 Globe	1-1/2"	Turf Spray	1.53		33.10	33.20	0.50 in/h
5	Hunter PGV-151 Globe	1-1/2"	Turf Spray	16.87		37.20	37.79	0.88 in/h
6	Hunter PGV-151 Globe	1-1/2"	Turf Spray	9.42		35.99	36.22	0.78 in/h
7	Hunter PGV-151 Globe	1-1/2"	Turf Spray	3.97		34.38	34.63	0.78 in/h
8	Hunter PGV-151 Globe	1-1/2"	Turf Spray	2.85		33.35	33.50	0.74 in/h
9	Hunter PGV-151 Globe	1-1/2"	Turf Spray	21.65		38.11	39.59	0.74 in/h
10	Hunter PGV-151 Globe	1-1/2"	Turf Spray	16.27		36.72	37.61	0.74 in/h
11	Hunter PGV-151 Globe	1-1/2"	Turf Spray	7.38		36.84	37.58	0.89 in/h
12	Hunter PGV-151 Globe	1-1/2"	Turf Spray	8.75		37.22	38.27	0.92 in/h
13	Hunter PGV-151 Globe	1-1/2"	Turf Spray	6.50		35.87	36.84	0.98 in/h
14	Hunter PGV-151 Globe	1-1/2"	Turf Spray	5.78		35.82	36.76	0.81 in/h
15	Hunter PGV-151 Globe	1-1/2"	Turf Spray	4.69		33.92	34.56	0.73 in/h
16	Hunter PGV-151 Globe	1-1/2"	Turf Spray	7.48		38.46	40.14	1.26 in/h
17	Hunter PGV-151 Globe	1-1/2"	Turf Spray	11.36		37.70	42.47	1.00 in/h

Irrigation Notes & Requirements:

1. LAYOUT WORK AS ACCURATELY AS POSSIBLE TO THE CONTRACTOR PROVIDED AND OWNER-APPROVED IRRIGATION LAYOUT PLANS. THE CONTRACTOR MAY MAKE MINOR ADJUSTMENTS TO THE LOCATION AND SPACING AS NECESSARY TO ACCOMMODATE ACTUAL CONDITIONS. HEAD LOCATIONS SHALL BE FLAGGED AND REVIEWED BY THE OWNER'S REP. PRIOR TO INSTALLATION.
2. COORDINATE SLEEVING AND IRRIGATION PIPE / HEAD / INTERNAL PLUMBING INSTALLATION WITH THE WORK OF OTHERS.
3. ALL MATERIALS SHALL BE INSTALLED AS DETAILED ON DRAWINGS. (HOWEVER, IF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS DO NOT THOROUGHLY DESCRIBE THE METHOD OR TECHNIQUES TO BE USED, THE CONTRACTOR SHALL FOLLOW THE INSTALLATION METHODS ISSUED BY THE MANUFACTURE. ALL SUCH LITERATURE MUST BE SUBMITTED 2 WEEKS PRIOR TO INSTALLATION FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT.)
4. CHECK AND VERIFY ALL EXISTING AND PROPOSED SITE CONDITIONS, UTILITIES AND SERVICES PRIOR TO TRENCHING.
5. LATERAL PIPING TO BE A MINIMUM OF 12 INCHES DEEP, MAXIMUM OF 18" DEEP AND MAINLINES A MINIMUM OF 18 INCHES DEEP, MAXIMUM OF 24" DEEP.
6. ALL MAIN LINE PIPING AND LATERAL PIPE OF 1-1/2" AND LARGER SHALL BE PVC (SDR 26 / CLASS 160). ALL OTHER LATERAL PIPE OF 1-1/4" AND SMALLER MAY BE POLYETHYLENE, UNLESS OTHERWISE NOTED ON THE PLANS. BUILDING CONNECTIONS ARE TO BE COPPER. TRACER WIRE IS REQUIRED ON ALL MAIN AND LATERAL LINES. SLEEVE LOCATIONS ARE TO BE MARKED ON THE SIDEWALK OR CURB, SO THEY CAN BE FOUND AFTER FINE GRADING.
7. ALL TEES AND ELBOWS ON MAIN LINES SHALL BE PVC (160 PSI).
8. IRRIGATION EQUIPMENT SHALL HUNTER HEADS, VALVES, AND ROTORS. DO NOT INSTALL 6" OR 10" ROUND VALVE BOXES.
9. ADJUST HEADS FOR GRADE, AS NECESSARY, AFTER TURF GRASS HAS BEEN ESTABLISHED AND ALL SETTLEMENT AT HEADS HAS OCCURRED.
10. SUBMIT IRRIGATION PRODUCT DATA TO OWNER FOR REVIEW AND APPROVAL.
11. USE TEFLON TAPE ON ALL THREADED JOINTS.
12. CONDUCT PERFORMANCE TEST IN THE PRESENCE OF OWNER AND LANDSCAPE ARCHITECT FOLLOWING COMPLETION OF SYSTEM INSTALLATION.
13. CONDUCT AND DEMONSTRATE WINTERIZATION AND SPRING START-UP PROCESS TO OWNER IN THE FALL OF COMPLETION.
14. LANDSCAPE ARCHITECT SHALL BE NOTIFIED TO VERIFY TRENCH DEPTHS BEFORE BACKFILLING.
15. OVER-SPRAY OF THE IRRIGATION SYSTEM ON TO ADJACENT WALKS AND ASPHALT PAVING IS NOT ACCEPTABLE.
16. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A COMPLETE IRRIGATION LAYOUT PLAN SET AND SUBMITTING TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF FIELD INSTALLATION.
17. SUBMIT LAYOUT PLAN AND PRODUCT DATA TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
18. IRRIGATION BID SHALL INCLUDE (1) FALL SHUT-DOWN AND (1) SPRING START-UP.
19. THIS PROJECT WILL USE HUNTER IRRIGATION PRODUCTS PER DISTRICT STANDARD.
20. PROVIDE THE OWNER WITH AN AS-BUILT PLAN, INCLUDING THE EXISTING SYSTEM AS WELL AS NEWLY INSTALLED MATERIALS.
21. IRRIGATION CONTRACTOR TO VERIFY WATER PRESSURE FOLLOWING CONSTRUCTION OF THE BUILDING UTILITIES. ADJUSTMENT OF PIPE AND VALVE SIZES MAY BE REQUIRED, BASED ON ACTUAL GPM AND PSI AVAILABLE.
22. IRRIGATION CONTRACTOR (IF DIFFERENT THAN THE LANDSCAPE CONTRACTOR) IS REQUIRED TO PROTECT THE EXISTING IRRIGATION SYSTEM OUTSIDE THE WORK LIMITS DURING CONSTRUCTION. WITHIN THE WORK LIMITS, CAP LINES AND MARK LOCATIONS IN THE FIELD. SUBMIT IRRIGATION LAYOUT PLAN SHOWING THE NEW HEADS AND PIPE CONNECTING TO THE EXISTING SYSTEM. ENSURE EXISTING IRRIGATION SYSTEM CONTINUES TO OPERATE NORMALLY DURING THE ENTIRE CONSTRUCTION PERIOD.
23. PROVIDE A PRINTED 8.5X11 MAP OF ALL ZONES AFTER NEW CONTROLLER IS WIRED AND TESTED.
24. THE INTENT OF THIS PLAN IS TO SHOW WHERE TO CONNECT TO THE EXISTING IRRIGATION SYSTEM AT THE SW AND NE SIDES OF THE SITE. ACTUAL LOCATIONS OF IRRIGATION MAIN AND WIRING TYPE/CONDITION MUST BE VERIFIED IN THE FIELD. ENSURE THE NEW SYSTEM PROPOSED IS COMPATIBLE WITH THE EXISTING CONTROLS. VERIFY CONDITION OF EXISTING BACKFLOW DEVICE AND ADVISE OWNER IF A NEW DEVICE IS NECESSARY. ENSURE A RAIN SENSOR IS PRESENT AND OPERATIONAL WITH THE EXISTING CONTROLS.

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

NOTES:
1. Refer to Sheet L1.002 for Landscape Layout Plan.
2. Refer to Civil Engineer's plans for grading, drainage, and site plan information.
3. See written specifications for additional requirements.
4. Protect new improvements from damage during landscape work.
5. Refer to Sheet L1.003 for Landscape Notes and Requirements.
6. This plan assumes the existing controller, backflow, meter, and rain sensor will continue operation and new improvements shown will fit into the existing system.

0 20' 40'
SCALE: 1" = 20'-0"
NORTH

IRRIGATION LAYOUT PLAN:

IRRIGATION NOTES AND SCHEDULES:

CRYSTAL CITY HALL

4141 DOUGLAS DRIVE N.
CRYSTAL, MN. 55422

CRYSTAL CITY HALL
4141 DOUGLAS DR. N.
CRYSTAL, MN. 55422

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101
woldae.com | 651 227 7773

BKBM ENGINEERS
6120 Earle Brown Dr., Suite 700
Minneapolis, MN 55430
Phone: (763) 843-0420
Fax: (763) 843-0421
www.bkbm.com

City Submittal
PRELIMINARY

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of MINNESOTA.

BENJAMIN D. HARTBERG, PLA
Registration No. Initials Date

Revisions		
Description	Date	Num

BKBM# 192195
Date: 09/14/2020
Drawn: MF
Check: BH

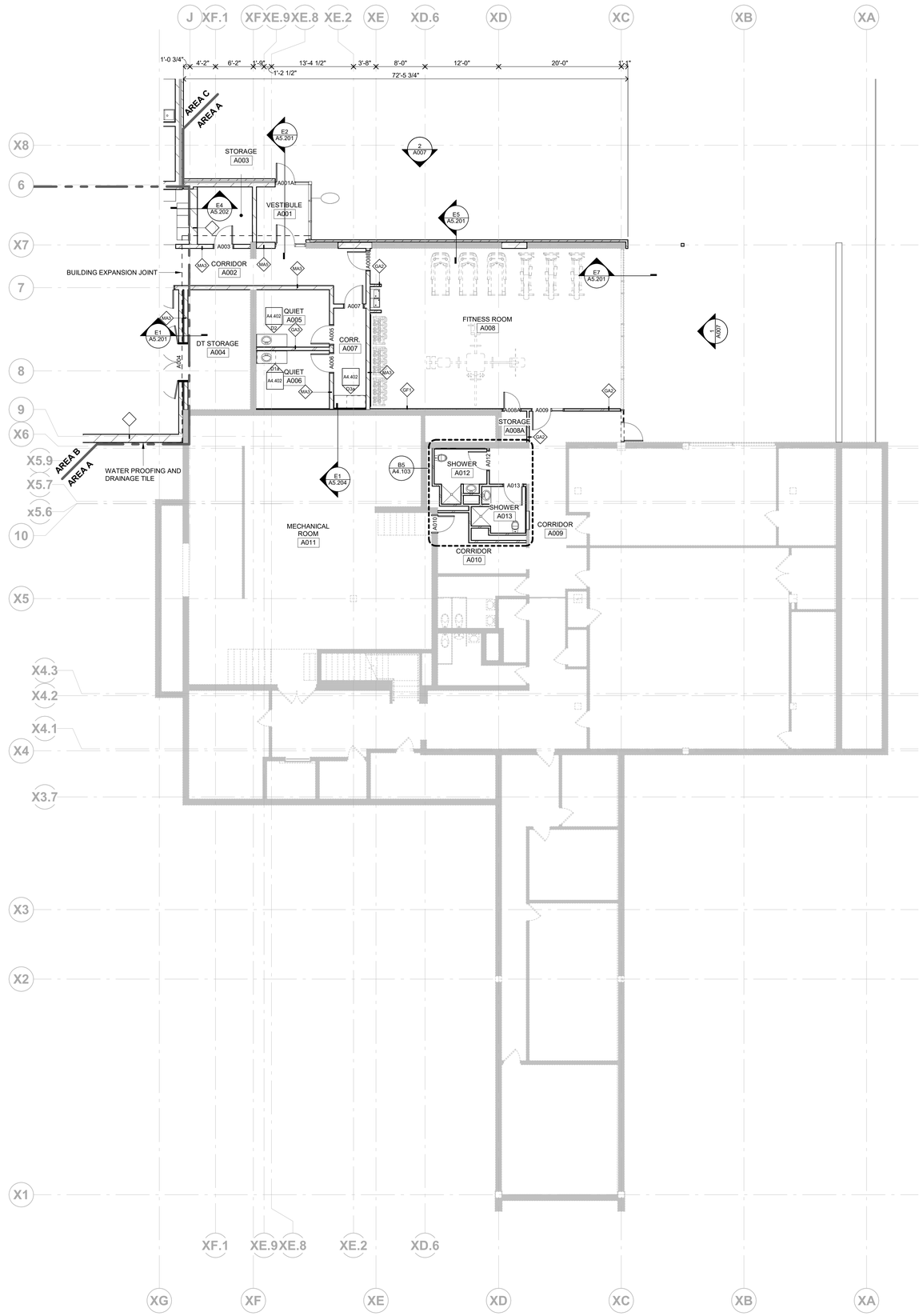
North

Sheet Name:

IRRIGATION LAYOUT PLAN

Sheet #:

L1.004



F1 LOWER LEVEL PLAN - AREA A
1/8" = 1'-0"
0 6' 12'

ROOM FINISH SCHEDULE REMARKS

1. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF GLAZED BLOCK, PAINTED BLOCK, BRICK, SOUND BLOCK, VWC AND PAINT.
2. PROVIDE CERAMIC TILE TO A HEIGHT OF 4'-6" WITH EPOXY PAINT ABOVE. SEE DETAIL 43008 FOR TILE PATTERN INFORMATION.
3. PROVIDE EPOXY PAINT UP TO 13'-2" ABOVE FINISH FLOOR IN THE GYMNASIUM (155)
4. PROVIDE GYPSUM BOARD SOFFIT ABOVE CASEWORK. (SEE CASEWORK ELEVATIONS AND REFLECTED CEILING PLANS.)
5. SEE A5.1 STAIR DETAILS, ELEVATIONS, AND SECTIONS FOR FINISH MATERIALS.
6. SEE DETAIL 43006 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
7. PAINT CEILING AND ALL EXPOSED STRUCTURE, PIPING, CONDUIT, MECHANICAL DUCTS AND VENTS.
8. ALL ELEVATOR FINISHES, OTHER THAN FLOOR MATERIAL ARE SPECIFIED TO BE PROVIDED BY ELEVATOR MANUFACTURER.
9. PROVIDE VINYL BASE AT CASEWORK.
10. PAINT ALL EXPOSED CEILING ITEMS, INC. STRUCTURE, DUCTWORK, ELECTRICAL, ETC. BLACK.
11. SEE DETAIL 4300X FOR CARPET CIRCLE ACTIVITY INFORMATION.
12. SEE INTERIOR ELEVATIONS SHEET A3.11 FOR GYP. BD. REVEAL LOCATIONS.
13. PROVIDE TACK WALL FINISH ON ENTIRE INDICATED WALL - SEE PLANS FOR LOCATIONS. PROVIDE FORM FINISHED FLOOOR TO 4" ABOVE THE CEILING, WALL TO WALL.
14. PROVIDE 16" V-SCORED BLOCK THROUGHOUT CORRIDOR. THIS INCLUDES CONTINUING THIS BLOCK INTO ADJACENT SPACES.
15. SEE DETAIL 43007 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
16. SEE DETAIL 43008 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
17. SEE ALTERNATE #1 FOR GYMNASIUM FLOOR FINISH ALTERNATE. REFERENCE SPECIFICATION, SECTIONS AND DETAILS FOR WOOD FLOOR INFORMATON.
18. SEE DETAIL 43012-43016 FOR FLOOR STRIPING INFORMATION.
19. SEE PLANS FOR GYM EQUIPMENT LOCATIONS (I.E. PULL-UP BARS, WALL PADS, ETC.).
20. SEE DETAIL 4300X FOR VCT FLOOR PATTERN INFORMATION.
21. SLOPE CONC. FLOOR TOWARDS EXTERIOR DOOR. SEE PLANS FOR FLOORSLOPING INFORMATION.
22. SEE STAIR SECTIONS FOR GLAZED BLOCK FINISH LOCATIONS.
23. xxxxxxx.

DOOR SCHEDULE GENERAL NOTES

1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. FOR FRAME DEPTH, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   GYPSUM BOARD PARTITIONS: THROAT OF FRAME TO MATCH WALL THICKNESS.

   MASONRY PARTITIONS:

   4" WALL: 3 3/4" FRAME
   6" WALL: 5 3/4" FRAME
   8" AND GREATER WALL: 7 3/4" FRAME

   FRAME DEPTHS ARE SCHEDULED IN NOMINAL DIMENSIONS. SEE FRAME/ DOOR TYPES (DETAIL SECTION 51000) FOR CORRESPONDING ACTUAL DIMENSIONS.

3. FOR GLASS TYPES, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   INTERIOR NON RATED:

   CLEAR (SAFETY WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

   INTERIOR AND EXTERIOR RATED:

   FIRE RATED

   EXTERIOR NON-RATED:

   CLEAR INSULATED (SAFETY INSULATED WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

4. SEE SHEET AX.XX FOR FRAME TYPES.
5. SEE SHEET AX.XX FOR DOOR TYPES.
6. AT DOOR SCHEDULE, LABEL DESIGNATION "45/20" INDICATES:

   FOR ALL OPENINGS WITH SIDE LITES AND SCHEDULED TO BE RATED FOR 20 MINUTES, THE DOOR AND ANY GLASS WITHIN THE DOOR IS TO BE RATED FOR 20 MINUTES; THE FRAME AND ADJACENT SIDELITE(S) GLASS AND FRAME IS TO BE RATED FOR 45 MINUTES."

DOOR SCHEDULE REMARKS

1. SEE DETAIL 43018 FOR USE WITH ALTERNATE #1
2. SEE DETAIL 54012 FOR USE WITH ALTERNATE #1
3. PROVIDE FIRE NUMBER AT EXTERIOR DOORS DOOR NUMBER IN "_".

FLOOR PLAN KEY NOTES:

1. DOOR ACTUATORS
2. BOLLARD - SEE DETAIL 21001.
3. TUB SINK - SEE MECHANICAL
4. CAN WASH - SEE DETAIL 43010.
5. EMERGENCY EYE WASH. SEE MECH.
6. CABINET UNIT HEATER. SEE DETAIL 43046. SEE MECH. FOR SPECIFICATIONS, COORDINATE LOCATION WITH MECH.
7. SALVAGED LOCKERS TO BE INSTALLED BY CONTRACTOR.
8. LOCATION OF SEMI-RECESSED DEFIBRILLATOR CABINET - SEE DETAIL B43004
9. LOCATION OF STACKED WASHER AND DRYER (NIC)
10. SQUARE BRICK ACCENT - SEE ELEVATIONS/ SECTIONS FOR ADDITIONAL INFORMATION

ROOM FINISH SCHEDULE

ROOM NO	ROOM NAME	FLOOR	BASE	N WALL - TYP MATL	N WALL - TYP FIN	E WALL MATL	E WALL FIN	S WALL MATL	S WALL FIN	W WALL MATL	W WALL FIN	REMARKS
A008	Room											
A001	VESTIBULE	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
A002	CORRIDOR	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
A003	STOR.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
A003	STORAGE											
A004	DT STORAGE	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
A005	QUIET	CARPET	CONCRETE	BLOCK	PAINT	BLOCK	PAINT	GYP	PAINT	BLOCK	PAINT	
A006	QUIET	CARPET	CONCRETE	GYP	PAINT	BLOCK	PAINT	BLOCK	PAINT	BLOCK	PAINT	
A007	CORR.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
A008	FITNESS ROOM	CARPET	CONCRETE	BLOCK				BLOCK AND GYP		BLOCK		
A008A	STORAGE	CARPET	CONCRETE	GYP		GYP		BLOCK		BLOCK		
A009	CORRIDOR	EXISTING	EXISTING	EXISTING		EXISTING		EXISTING		EXISTING		
A010	CORRIDOR	EXISTING	EXISTING	GYP		EXISTING		EXISTING		EXISTING		
A011	MECHANICAL ROOM	EXISTING	EXISTING	EXISTING		EXISTING		EXISTING		EXISTING		
A012	SHOWER	TILE	CONCRETE	TILE		TILE		TILE		TILE		
A013	SHOWER	TILE	CONCRETE	TILE		TILE		TILE		TILE		

DOOR / OPENING SCHEDULE

DOOR NO	DOOR / OPENING TYPE	QTY	WIDTH	HEIGHT	MATL	LABEL/ RATING	OVERALL WIDTH	FRAME TYPE	DEPTH	MATL	GL	MOUNTING CONDITIONS HEAD	JAMB	SILL	HDW GRP	REMARKS
A001A	AL	1	3'-0"	7'-0"	AL	--	3'-0"	CW X	--	AL	--					
A003	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A004	F	2	3'-0"	7'-0"	WD	--	6'-4"	FR 1	--	HM	--					
A005	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A006	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A007	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A008A	F	1	2'-8"	7'-0"	WD	--	3'-0"	FR 1	--	HM	--					
A008B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A009	F	1	3'-0"	7'-0"	WD	--	5'-4"	FR 3A	--	HM	--					
A010	F	1	2'-8"	7'-0"	WD	--	3'-0"	FR 1	--	HM	--					
A012	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A013	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					

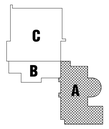
SITE PLAN SUBMITTAL
NOT FOR CONSTRUCTION

City of Crystal New Police Facility

4141 Douglas Dr. North
Crystal, MN 55427

City of Crystal
Minnesota
4141 Douglas Dr. North
Crystal, MN 55427

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101
woldac.com | 651 227 7773



KEY PLAN

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 **Reg State**

License Number: **Arch Num** Date **Issue Date**

Revisions

Description	Date	Num

Comm: **192195**
Date: **08/14/2020**
Drawn: **EP, DV, AP**
Check: **MS/JD**
North

LOWER LEVEL FLOOR PLAN - AREA A

Scale: **As Indicated**

A2.00a

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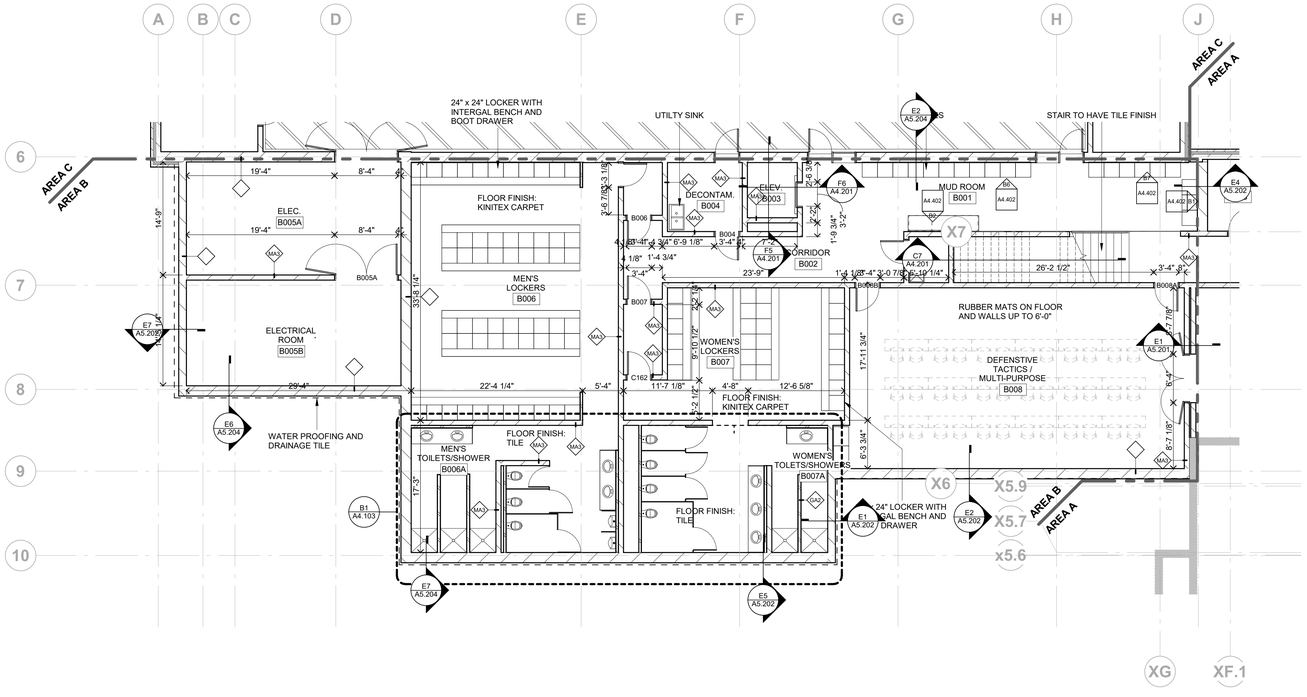
MN



C1 LOWER LEVEL PLAN - AREA B
1/8" = 1'-0"

ROOM FINISH SCHEDULE												
				N WALL - TYP		E WALL		S WALL		W WALL		
ROOM NO	ROOM NAME	FLOOR	BASE	MATL	FIN	MATL	FIN	MATL	FIN	MATL	FIN	REMARKS
B001	MUD ROOM	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B002	CORRIDOR	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B003	ELEV.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B004	DECONTAM.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B005A	ELEC.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B005B	ELECTRICAL ROOM	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B006	MEN'S LOCKERS	KINETEX CARPET	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B006A	MEN'S TOILETS/SHOWER	TILE	CONCRETE	TILE		TILE		TILE		TILE		
B007	WOMEN'S LOCKERS	KINETEX CARPET	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B007A	WOMEN'S TOLETS/SHOWERS	TILE	CONCRETE	TILE		TILE		TILE		TILE		
B008	DEFENSTIVE TACTICS / MULTI-PURPOSE	RUBBER MAT	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		

DOOR / OPENING SCHEDULE																	
	DOOR / OPENING					LABEL/	OVERALL	FRAME				MOUNTING CONDITIONS					
DOOR NO	TYPE	QTY	WIDTH	HEIGHT	MATL	RATING	WIDTH	TYPE	DEPTH	MATL	GL	HEAD	JAMB	SILL	HDW GRP	REMARKS
B004	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B005A	F	2	4'-0"	7'-0"	WD	--	8'-4"	FR 1	--	HM	--					
B006	F	1	3'-0"	7'-0"	AL	--	3'-4"	FR 1	--	AL	--					
B007	F	1	3'-0"	7'-0"	AL	--	3'-4"	FR 1	--	AL	--					
B008A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B008B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					

ROOM FINISH SCHEDULE REMARKS

1. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF GLAZED BLOCK, PAINTED BLOCK, BRICK, SOUND BLOCK, VWC AND PAINT.
2. PROVIDE CERAMIC TILE TO A HEIGHT OF 4'-6" WITH EPOXY PAINT ABOVE. SEE DETAIL 43008 FOR TILE PATTERN INFORMATION.
3. PROVIDE EPOXY PAINT UP TO 13'-2" ABOVE FINISH FLOOR IN THE GYMNASIUM (155)
4. PROVIDE GYPSUM BOARD SOFFIT ABOVE CASEWORK. (SEE CASEWORK ELEVATIONS AND REFLECTED CEILING PLANS.)
5. SEE A5.1 STAIR DETAILS, ELEVATIONS, AND SECTIONS FOR FINISH MATERIALS.
6. SEE DETAIL 43006 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
7. PAINT CEILING AND ALL EXPOSED STRUCTURE, PIPING, CONDUIT, MECHANICAL DUCTS AND VENTS.
8. ALL ELEVATOR FINISHES, OTHER THAN FLOOR MATERIAL ARE SPECIFIED TO BE PROVIDED BY ELEVATOR MANUFACTURER.
9. PROVIDE VINYL BASE AT CASEWORK.
10. PAINT ALL EXPOSED CEILING ITEMS, INC. STRUCTURE, DUCTWORK, ELECTRICAL, ETC. BLACK.
11. SEE DETAIL 4300X FOR CARPET CIRCLE ACTIVITY INFORMATION.
12. SEE INTERIOR ELEVATIONS SHEET A3.11 FOR GYP. BD. REVEAL LOCATIONS.
13. PROVIDE TACK WALL FINISH ON ENTIRE INDICATED WALL - SEE PLANS FOR LOCATIONS. PROVIDE FORM FINISHED FLOOR TO 4" ABOVE THE CEILING, WALL TO WALL.
14. PROVIDE 1/8" V-SCORED BLOCK THROUGHOUT CORRIDOR. THIS INCLUDES CONTINUING THIS BLOCK INTO ADJACENT SPACES.
15. SEE DETAIL 43007 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
16. SEE DETAIL 43008 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
17. SEE ALTERNATE #1 FOR GYMNASIUM FLOOR FINISH ALTERNATE. REFERENCE SPECIFICATION, SECTIONS AND DETAILS FOR WOOD FLOOR INFORMATON.
18. SEE DETAIL 43012-43016 FOR FLOOR STRIPING INFORMATION.
19. SEE PLANS FOR GYM EQUIPMENT LOCATIONS (I.E. PULL-UP BARS, WALL PADS, ETC.).
20. SEE DETAIL 4300X FOR VCT FLOOR PATTERN INFORMATION.
21. SLOPE CONC. FLOOR TOWARDS EXTERIOR DOOR. SEE PLANS FOR FLOORSLOPING INFORMATION.
22. SEE STAIR SECTIONS FOR GLAZED BLOCK FINISH LOCATIONS.
23. xxxxxxx.

DOOR SCHEDULE GENERAL NOTES

1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. FOR FRAME DEPTH, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   GYPSUM BOARD PARTITIONS: THROAT OF FRAME TO MATCH WALL THICKNESS.

   MASONRY PARTITIONS:

   4" WALL: 3 3/4" FRAME
   6" WALL: 5 3/4" FRAME
   8" AND GREATER WALL: 7 3/4" FRAME

   FRAME DEPTHS ARE SCHEDULED IN NOMINAL DIMENSIONS. SEE FRAME/ DOOR TYPES (DETAIL SECTION 51000) FOR CORRESPONDING ACTUAL DIMENSIONS.

3. FOR GLASS TYPES, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   INTERIOR NON RATED:

   CLEAR (SAFETY WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

   INTERIOR AND EXTERIOR RATED:

   FIRE RATED

   EXTERIOR NON-RATED:

   CLEAR INSULATED (SAFETY INSULATED WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

4. SEE SHEET AX.XX FOR FRAME TYPES.
5. SEE SHEET AX.XX FOR DOOR TYPES.
6. AT DOOR SCHEDULE, LABEL DESIGNATION "45/20" INDICATES:

   FOR ALL OPENINGS WITH SIDE LITES AND SCHEDULED TO BE RATED FOR 20 MINUTES, THE DOOR AND ANY GLASS WITHIN THE DOOR IS TO BE RATED FOR 20 MINUTES; THE FRAME AND ADJACENT SIDELITE(S) GLASS AND FRAME IS TO BE RATED FOR 45 MINUTES."

DOOR SCHEDULE REMARKS

1. SEE DETAIL 43018 FOR USE WITH ALTERNATE #1
2. SEE DETAIL 54012 FOR USE WITH ALTERNATE #1
3. PROVIDE FIRE NUMBER AT EXTERIOR DOORS DOOR NUMBER IN "_".

FLOOR PLAN KEY NOTES:

1. DOOR ACTUATORS
2. BOLLARD - SEE DETAIL 21001.
3. TUB SINK - SEE MECHANICAL
4. CAN WASH - SEE DETAIL 43010.
5. EMERGENCY EYE WASH. SEE MECH.
6. CABINET UNIT HEATER. SEE DETAIL 43046. SEE MECH. FOR SPECIFICATIONS, COORDINATE LOCATION WITH MECH.
7. SALVAGED LOCKERS TO BE INSTALLED BY CONTRACTOR.
8. LOCATION OF SEMI-RECESSED DEFIBRILLATOR CABINET - SEE DETAIL B/43004
9. LOCATION OF STACKED WASHER AND DRYER (NIC)
10. SQUARE BRICK ACCENT - SEE ELEVATIONS/ SECTIONS FOR ADDITIONAL INFORMATION

SITE PLAN SUBMITTAL
NOT FOR CONSTRUCTION

City of Crystal New Police Facility

4141 Douglas Dr. North
Crystal, MN 55427

City of Crystal
Minnesota
4141 Douglas Dr. North
Crystal, MN 55427

WOLD ARCHITECTS AND ENGINEERS
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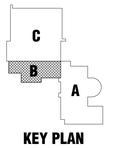


KEY PLAN

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 **Reg State**

License Number: **Arch Num** **Arch Name** Date **Issue Date**

Revisions		
Description	Date	Num

Comm: **192195**
Date: **08/14/2020**
Drawn: **EP,DV**
Check: **MS/JD**
North

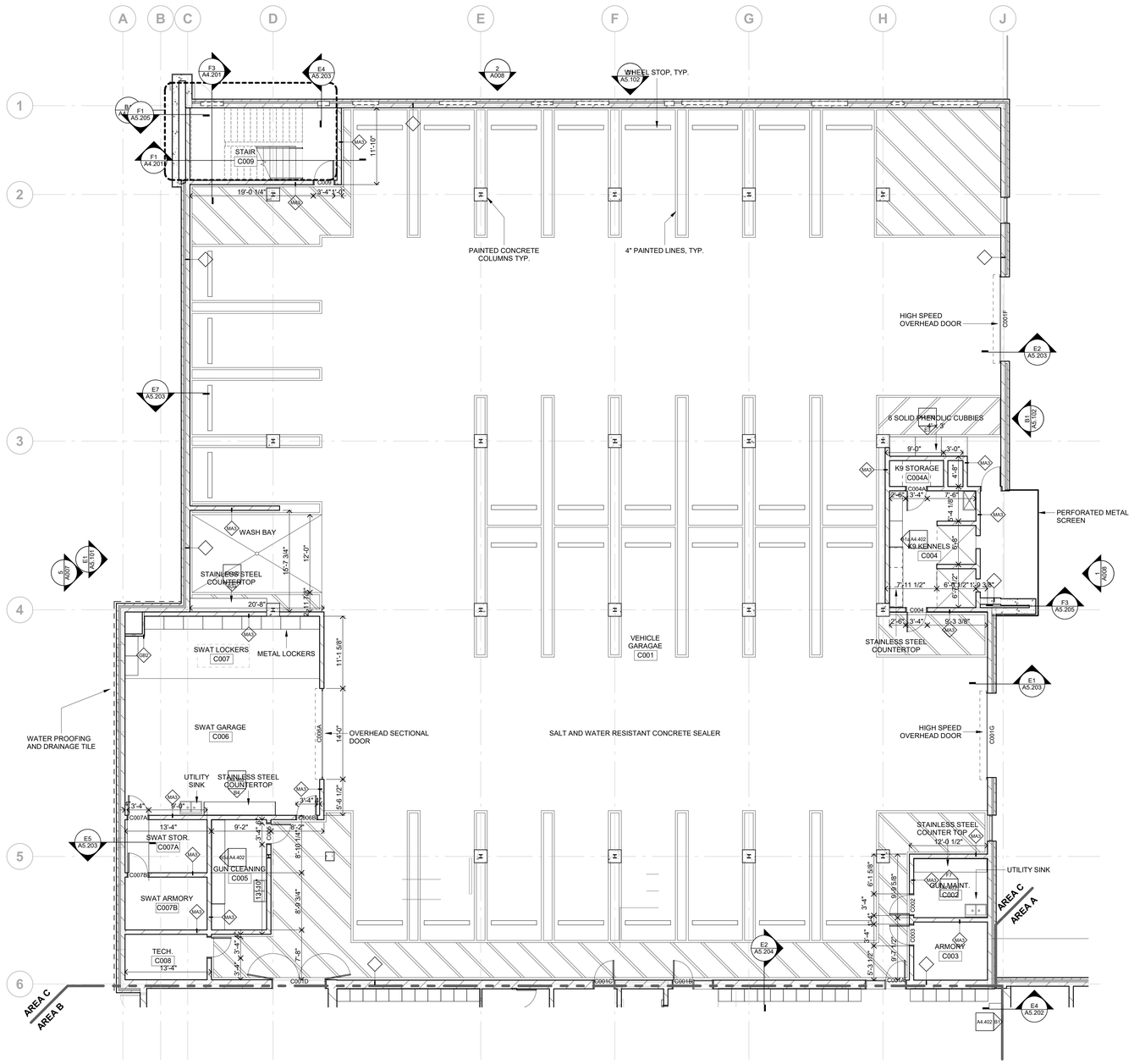
LOWER LEVEL FLOOR PLAN - AREA B

Scale: **As Indicated**

A2.00b

A

MN



E1 LOWER LEVEL PLAN - AREA C

1/8" = 1'-0"

0 6' 12'

ROOM FINISH SCHEDULE REMARKS

1. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF GLAZED BLOCK, PAINTED BLOCK, BRICK, SOUND BLOCK, VWC AND PAINT.
2. PROVIDE CERAMIC TILE TO A HEIGHT OF 4'-6" WITH EPOXY PAINT ABOVE. SEE DETAIL 43008 FOR TILE PATTERN INFORMATION.
3. PROVIDE EPOXY PAINT UP TO 13'-2" ABOVE FINISH FLOOR IN THE GYMNASIUM (155)
4. PROVIDE GYPSUM BOARD SOFFIT ABOVE CASEWORK. (SEE CASEWORK ELEVATIONS AND REFLECTED CEILING PLANS.)
5. SEE A5.1 STAIR DETAILS, ELEVATIONS, AND SECTIONS FOR FINISH MATERIALS.
6. SEE DETAIL 43006 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
7. PAINT CEILING AND ALL EXPOSED STRUCTURE, PIPING, CONDUIT, MECHANICAL DUCTS AND VENTS.
8. ALL ELEVATOR FINISHES, OTHER THAN FLOOR MATERIAL ARE SPECIFIED TO BE PROVIDED BY ELEVATOR MANUFACTURER.
9. PROVIDE VINYL BASE AT CASEWORK.
10. PAINT ALL EXPOSED CEILING ITEMS, INC. STRUCTURE, DUCTWORK, ELECTRICAL, ETC. BLACK.
11. SEE DETAIL 4300X FOR CARPET CIRCLE ACTIVITY INFORMATION.
12. SEE INTERIOR ELEVATIONS SHEET A3.11 FOR GYP. BD. REVEAL LOCATIONS.
13. PROVIDE TACK WALL FINISH ON ENTIRE INDICATED WALL - SEE PLANS FOR LOCATIONS. PROVIDE FORM FINISHED FLOOOR TO 4" ABOVE THE CEILING, WALL TO WALL.
14. PROVIDE 16" V-SCORED BLOCK THROUGHOUT CORRIDOR. THIS INCLUDES CONTINUING THIS BLOCK INTO ADJACENT SPACES.
15. SEE DETAIL 43007 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
16. SEE DETAIL 43008 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
17. SEE ALTERNATE #1 FOR GYMNASIUM FLOOR FINISH ALTERNATE. REFERENCE SPECIFICATION, SECTIONS AND DETAILS FOR WOOD FLOOR INFORMATON.
18. SEE DETAIL 43012-43016 FOR FLOOR STRIPING INFORMATION.
19. SEE PLANS FOR GYM EQUIPMENT LOCATIONS (I.E. PULL-UP BARS, WALL PADS, ETC.).
20. SEE DETAIL 4300X FOR VCT FLOOR PATTERN INFORMATION.
21. SLOPE CONC. FLOOR TOWARDS EXTERIOR DOOR. SEE PLANS FOR FLOORSLOPING INFORMATION.
22. SEE STAIR SECTIONS FOR GLAZED BLOCK FINISH LOCATIONS.
23. xxxxxxx.

DOOR SCHEDULE GENERAL NOTES

1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. FOR FRAME DEPTH, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   GYPSUM BOARD PARTITIONS: THROAT OF FRAME TO MATCH WALL THICKNESS.

   MASONRY PARTITIONS:

   4" WALL: 3 3/4" FRAME
   6" WALL: 5 3/4" FRAME
   8" AND GREATER WALL: 7 3/4" FRAME

   FRAME DEPTHS ARE SCHEDULED IN NOMINAL DIMENSIONS. SEE FRAME/ DOOR TYPES (DETAIL SECTION 51000) FOR CORRESPONDING ACTUAL DIMENSIONS.

3. FOR GLASS TYPES, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   INTERIOR NON RATED:

   CLEAR (SAFETY WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

   INTERIOR AND EXTERIOR RATED:

   FIRE RATED

   EXTERIOR NON-RATED:

   CLEAR INSULATED (SAFETY INSULATED WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

4. SEE SHEET AX.XX FOR FRAME TYPES.
5. SEE SHEET AX.XX FOR DOOR TYPES.
6. AT DOOR SCHEDULE, LABEL DESIGNATION "45/20" INDICATES:

   FOR ALL OPENINGS WITH SIDE LITES AND SCHEDULED TO BE RATED FOR,20 MINUTES, THE DOOR AND ANY GLASS WITHIN THE DOOR IS TO BE RATED FOR 20 MINUTES; THE FRAME AND ADJACENT SIDELITE(S) GLASS AND FRAME IS TO BE RATED FOR 45 MINUTES."

DOOR SCHEDULE REMARKS

1. SEE DETAIL 43018 FOR USE WITH ALTERNATE #1
2. SEE DETAIL 54012 FOR USE WITH ALTERNATE #1
3. PROVIDE FIRE NUMBER AT EXTERIOR DOORS DOOR NUMBER IN " ,".

FLOOR PLAN KEY NOTES:

1. DOOR ACTUATORS
2. BOLLARD - SEE DETAIL 21001.
3. TUB SINK - SEE MECHANICAL
4. CAN WASH - SEE DETAIL 43010.
5. EMERGENCY EYE WASH. SEE MECH.
6. CABINET UNIT HEATER. SEE DETAIL 43046. SEE MECH. FOR SPECIFICATIONS, COORDINATE LOCATION WITH MECH.
7. SALVAGED LOCKERS TO BE INSTALLED BY CONTRACTOR.
8. LOCATION OF SEMI-RECESSED DEFIBRILLATOR CABINET - SEE DETAIL B/43004
9. LOCATION OF STACKED WASHER AND DRYER (NIC)
10. SQUARE BRICK ACCENT - SEE ELEVATIONS/ SECTIONS FOR ADDITIONAL INFORMATION

DOOR / OPENING SCHEDULE

DOOR NO	TYPE	QTY	WIDTH	HEIGHT	MATL	LABEL/ RATING	OVERALL WIDTH	FRAME TYPE	FRAME DEPTH	FRAME MATL	GL	MOUNTING CONDITIONS HEAD	JAMB	SILL	HDW GRP	REMARKS
C001A	F	1	3'-0"	7'-0"	WD	--	6'-4"	FR 3A	--	HM	--					
C001B	F	1	3'-0"	7'-0"	WD	--	6'-4"	FR 3A	--	HM	--					
C001C	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C001D	F	2	4'-0"	7'-0"	WD	--	8'-4"	FR 1	--	HM	--					
C001F	MCDF	1	13'-0"	10'-8"	ST	--	13'-4"	MCDF	--	ST	--					
C001G	MCDF	1	13'-0"	10'-8"	ST	--	13'-4"	MCDF	--	ST	--					
C002	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C003	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C004	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C004A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C005	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C006A	MCDB	1	14'-0"	8'-0"	ST	--	14'-0"	MCDB	--	ST	--					
C006B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C007A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C007B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C009	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C019A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					

ROOM FINISH SCHEDULE

ROOM NO	ROOM NAME	FLOOR	BASE	N WALL - TYP MATL	N WALL - TYP FIN	E WALL MATL	E WALL FIN	S WALL MATL	S WALL FIN	W WALL MATL	W WALL FIN	REMARKS
C001A	WASH BAY	RESISTANT SEALER	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C004	K9	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C005	K9 STOR.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C001	VEHICLE GARAGAE	RESISTANT SEALER	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C002	GUN MAINT.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C003	ARMORY	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C004	K9 KENNELS	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		CHAINLINK GATE		
C004A	K9 STORAGE	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C005	GUN CLEANING	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C006	SWAT GARAGE	RESISTANT SEALER	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C007	SWAT LOCKERS	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C007A	SWAT STOR.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C007B	SWAT ARMORY	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C008	TECH.	CARPET	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C009	STAIR	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		

SITE PLAN SUBMITTAL
NOT FOR CONSTRUCTION

City of Crystal New Police Facility

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Crystal, MN 55427

City of Crystal Minnesota

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WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
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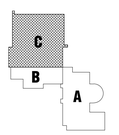

KEY PLAN

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 **Reg State**

License Number: **Arch Num** Date **Issue Date**

Revisions		
Description	Date	Num

Comm: **192195**
Date: **08/14/2020**
Drawn: **EP, DV**
Check: **MS/JD**

North

LOWER LEVEL FLOOR PLAN - AREA C

Scale: **As Indicated**

A2.00c

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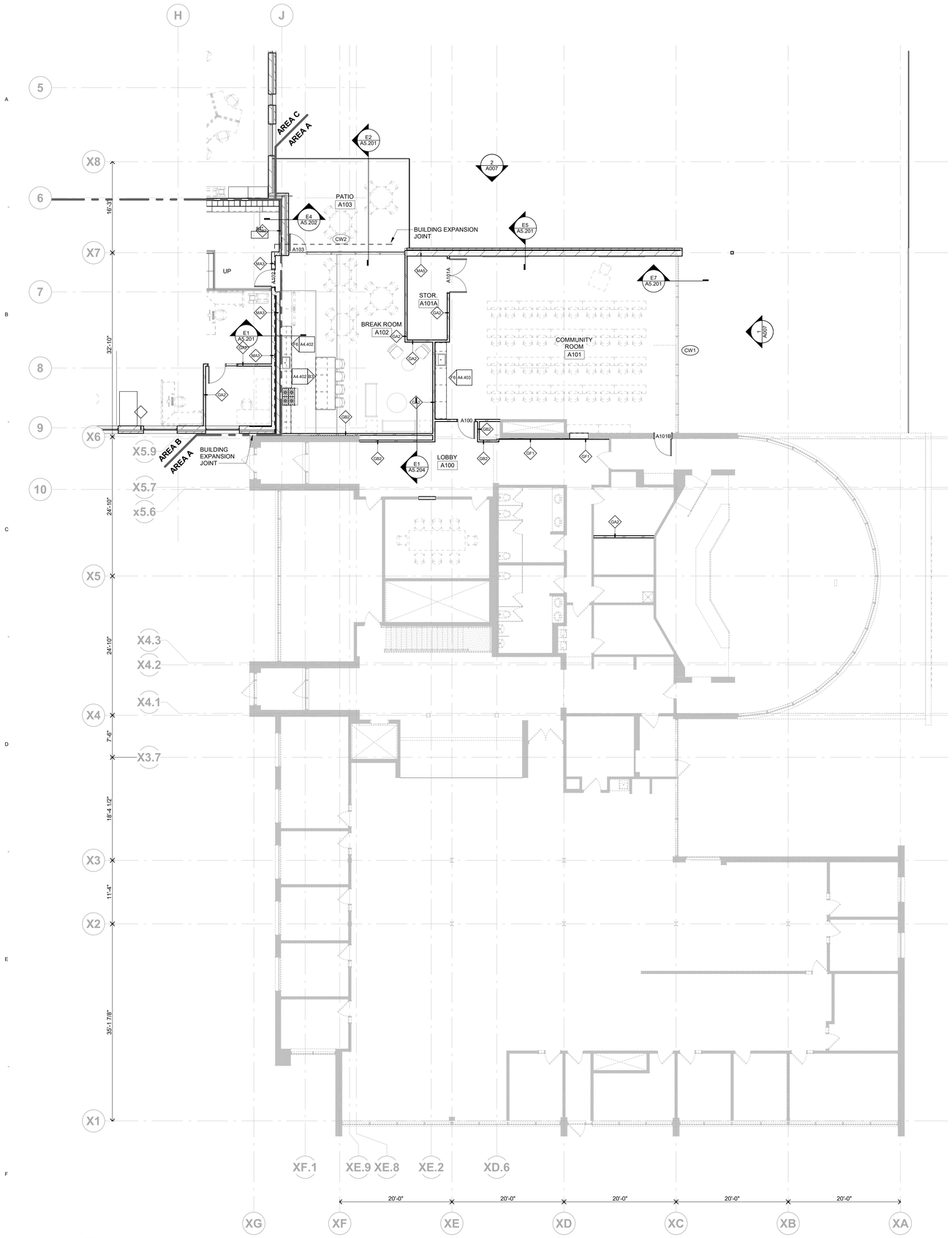
Contact Wold Architects and Engineers Immediately if the Instrument of Service Is Found to Be Incomplete or Changed
WOLD Project Number: 192195

MN



A

F1 MAIN LEVEL PLAN - AREA A
1/8" = 1'-0"
0 6' 12'

ROOM FINISH SCHEDULE REMARKS

1. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF GLAZED BLOCK, PAINTED BLOCK, BRICK, SOUND BLOCK, VWC AND PAINT.
2. PROVIDE CERAMIC TILE TO A HEIGHT OF 4'-6" WITH EPOXY PAINT ABOVE. SEE DETAIL 43008 FOR TILE PATTERN INFORMATION.
3. PROVIDE EPOXY PAINT UP TO 13'-2" ABOVE FINISH FLOOR IN THE GYMNASIUM (155)
4. PROVIDE GYPSUM BOARD SOFFIT ABOVE CASEWORK. (SEE CASEWORK ELEVATIONS AND REFLECTED CEILING PLANS.)
5. SEE A5.1 STAIR DETAILS, ELEVATIONS, AND SECTIONS FOR FINISH MATERIALS.
6. SEE DETAIL 43006 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
7. PAINT CEILING AND ALL EXPOSED STRUCTURE, PIPING, CONDUIT, MECHANICAL DUCTS AND VENTS.
8. ALL ELEVATOR FINISHES, OTHER THAN FLOOR MATERIAL ARE SPECIFIED TO BE PROVIDED BY ELEVATOR MANUFACTURER.
9. PROVIDE VINYL BASE AT CASEWORK.
10. PAINT ALL EXPOSED CEILING ITEMS, INC. STRUCTURE, DUCTWORK, ELECTRICAL, ETC. BLACK.
11. SEE DETAIL 4300X FOR CARPET CIRCLE ACTIVITY INFORMATION.
12. SEE INTERIOR ELEVATIONS SHEET A3.11 FOR GYP. BD. REVEAL LOCATIONS.
13. PROVIDE TACK WALL FINISH ON ENTIRE INDICATED WALL - SEE PLANS FOR LOCATIONS. PROVIDE FORM FINISHED FLOOOR TO 4" ABOVE THE CEILING, WALL TO WALL.
14. PROVIDE 16" V-SCORED BLOCK THROUGHOUT CORRIDOR. THIS INCLUDES CONTINUING THIS BLOCK INTO ADJACENT SPACES.
15. SEE DETAIL 43007 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
16. SEE DETAIL 43008 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
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18. SEE DETAIL 43012-43016 FOR FLOOR STRIPING INFORMATION.
19. SEE PLANS FOR GYM EQUIPMENT LOCATIONS (I.E. PULL-UP BARS, WALL PADS, ETC.).
20. SEE DETAIL 4300X FOR VCT FLOOR PATTERN INFORMATION.
21. SLOPE CONC. FLOOR TOWARDS EXTERIOR DOOR. SEE PLANS FOR FLOORSLOPING INFORMATION.
22. SEE STAIR SECTIONS FOR GLAZED BLOCK FINISH LOCATIONS.
23. xxxxxxx.

DOOR SCHEDULE GENERAL NOTES

1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. FOR FRAME DEPTH, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   GYPSUM BOARD PARTITIONS: THROAT OF FRAME TO MATCH WALL THICKNESS.

   MASONRY PARTITIONS:

   4" WALL: 3 3/4" FRAME
   6" WALL: 5 3/4" FRAME
   8" AND GREATER WALL: 7 3/4" FRAME

   FRAME DEPTHS ARE SCHEDULED IN NOMINAL DIMENSIONS. SEE FRAME/ DOOR TYPES (DETAIL SECTION 51000) FOR CORRESPONDING ACTUAL DIMENSIONS.

3. FOR GLASS TYPES, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   INTERIOR NON RATED:

   CLEAR (SAFETY WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

   INTERIOR AND EXTERIOR RATED:

   FIRE RATED

   EXTERIOR NON-RATED:

   CLEAR INSULATED (SAFETY INSULATED WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

4. SEE SHEET AX.XX FOR FRAME TYPES.
5. SEE SHEET AX.XX FOR DOOR TYPES.
6. AT DOOR SCHEDULE, LABEL DESIGNATION "45/20" INDICATES:

   FOR ALL OPENINGS WITH SIDE LITES AND SCHEDULED TO BE RATED FOR 20 MINUTES, THE DOOR AND ANY GLASS WITHIN THE DOOR IS TO BE RATED FOR 20 MINUTES; THE FRAME AND ADJACENT SIDELITE(S) GLASS AND FRAME IS TO BE RATED FOR 45 MINUTES."

DOOR SCHEDULE REMARKS

1. SEE DETAIL 43018 FOR USE WITH ALTERNATE #1
2. SEE DETAIL 54012 FOR USE WITH ALTERNATE #1
3. PROVIDE FIRE NUMBER AT EXTERIOR DOORS
   DOOR NUMBER IN "_".

FLOOR PLAN KEY NOTES:

1. DOOR ACTUATORS
2. BOLLARD - SEE DETAIL 21001.
3. TUB SINK - SEE MECHANICAL
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5. EMERGENCY EYE WASH. SEE MECH.
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9. LOCATION OF STACKED WASHER AND DRYER (NIC)
10. SQUARE BRICK ACCENT - SEE ELEVATIONS/ SECTIONS FOR ADDITIONAL INFORMATION

ROOM FINISH SCHEDULE

ROOM NO	ROOM NAME	FLOOR	BASE	N WALL - TYP MATL	N WALL - TYP FIN	E WALL MATL	E WALL FIN	S WALL MATL	S WALL FIN	W WALL MATL	W WALL FIN	REMARKS
A100	LOBBY	CARPET	CONCRETE	GYP		EXISTING		EXISTING		EXISTING		
A104	CONFERENCE ROOM											
A101	COMMUNITY ROOM	CARPET	CONCRETE	GYP		CW1		GYP		GYP		
A101A	STOR.	CARPET	CONCRETE	EXISTING		GYP		GYP		GYP		
A102	BREAK ROOM	TILE/CARPET	CONCRETE	CW2		GYP		GYP		GYP		
A103	PATIO	RUBBER PAVERS	CONCRETE	PERF. SCREEN		PERF. SCREEN		BLOCK		BLOCK		

DOOR / OPENING SCHEDULE

DOOR NO	DOOR / OPENING TYPE	QTY	WIDTH	HEIGHT	MATL	LABEL/ RATING	OVERALL WIDTH	FRAME TYPE	FRAME DEPTH	FRAME MATL	GL	MOUNTING CONDITIONS HEAD	JAMB	SILL	HDW GRP	REMARKS
A100	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A101A	F	2	3'-0"	7'-0"	WD	--	6'-4"	FR 1	--	HM	--					
A101B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A102	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
A103	AL	1	3'-0"	7'-0"	AL	--	3'-0"	CW X	--	AL	--					

SITE PLAN SUBMITTAL
NOT FOR CONSTRUCTION

City of Crystal New Police Facility

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Crystal, MN 55427

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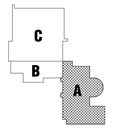


KEY PLAN

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 **Reg State**

License Number: **Arch Name** **Arch Num** Date **Issue Date**

Revisions		
Description	Date	Num

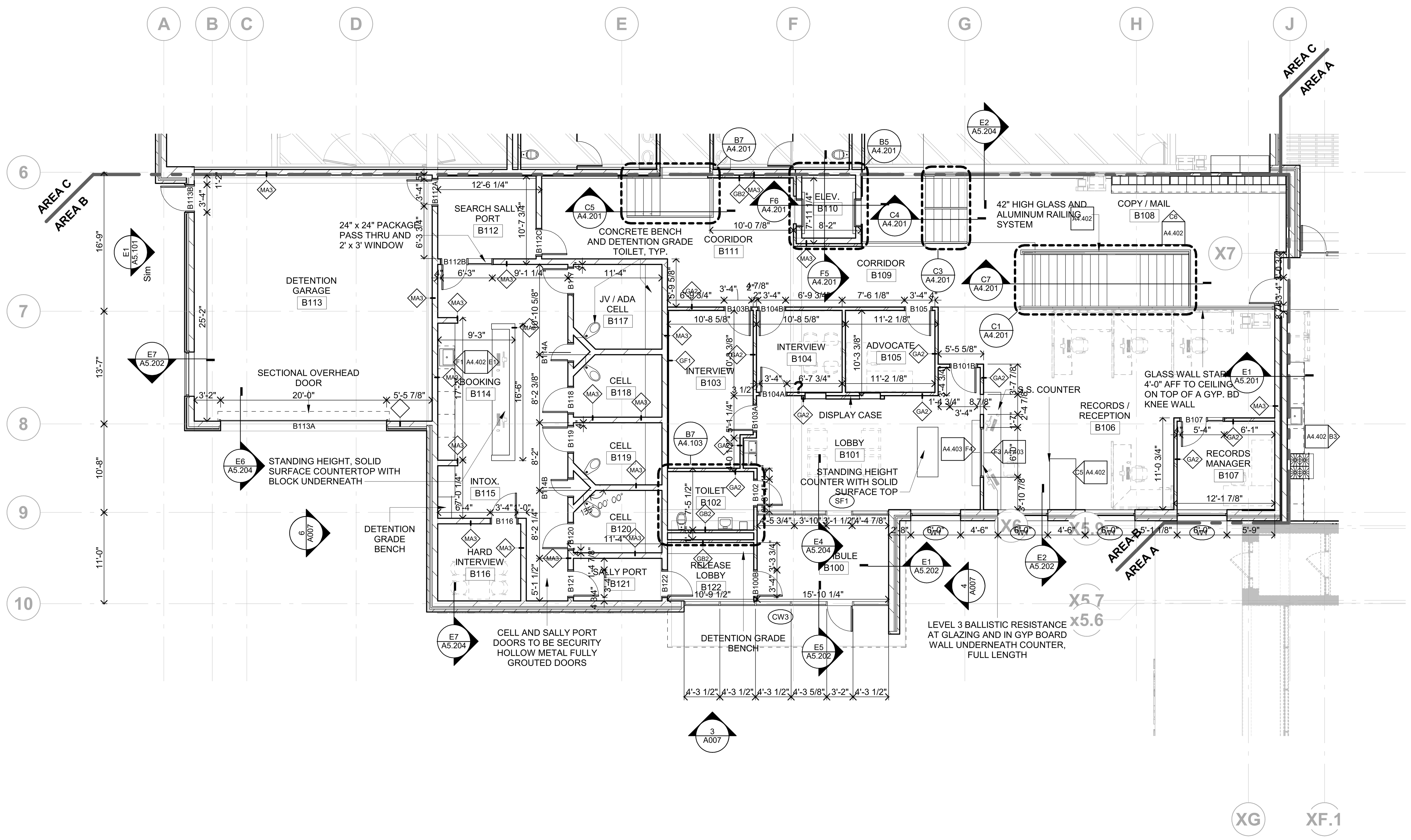
Comm: **192195**
Date: **08/14/2020**
Drawn: **EP, DV**
Check: **MS/JD**
North

MAIN LEVEL FLOOR PLAN - AREA A

Scale: **As indicated**

A2.01a

MN



C1 MAIN LEVEL PLAN - AREA B
1/8" = 1'-0"

ROOM FINISH SCHEDULE												
				N WALL - TYP		E WALL		S WALL		W WALL		
ROOM NO	ROOM NAME	FLOOR	BASE	MATL	FIN	MATL	FIN	MATL	FIN	MATL	FIN	REMARKS
B100	VESTIBULE	CARPET	CONCRETE	SF1/BLOCK		BLOCK		CW3/BLOCK		NLOCK		
B114	BOOKING	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B101	LOBBY	CARPET	CONCRETE	GYP		GYP		BLOCK		GYP		
B103	INTERVIEW	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
B104	INTERVIEW	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
B105	ADVOCATE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
B106	RECORDS / RECEPTION	CARPET	CONCRETE	GL/GYP		GYP		GYP		GYP		
B107	RECORDS MANAGER	CARPET	CONCRETE	GYP		GYP		BLOCK		GYP		
B109	CORRIDOR	CARPET	CONCRETE	GYP		GYP		GYP/BLOCK		BLOCK		
B110	ELEV.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B111	COORIDOR											
B112	SEARCH SALLY PORT	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B114	BOOKING											
B115	INTOX.	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B116	HARD INTERVIEW	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B117	JV / ADA CELL	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B118	CELL	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B119	CELL	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B120	CELL	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B121	SALLY PORT	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
B122	RELEASE LOBBY	CONCRETE	CONCRETE	BLOCK		BLOCK		CW5		BLOCK		
B100	VESTIBULE											
B102	TOILET	TILE	CONCRETE	GYP		GYP		GYP		GYP		
B108	COPY / MAIL	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
B113	DETENTION GARAGE	RESISTANT SEALER	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		

DOOR / OPENING SCHEDULE																
	DOOR / OPENING							FRAME				MOUNTING CONDITIONS				
DOOR NO	TYPE	QTY	WIDTH	HEIGHT	MATL	LABEL/ RATING	OVERALL WIDTH	TYPE	DEPTH	MATL	GL	HEAD	JAMB	SILL	HDW GRP	REMARKS
B122R	AL	1	3'-0"	7'-0"	AL	--	3'-0"	CW X EXISTING	--	AL	--					
B100B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B101B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B102	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B103A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B103B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B104A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B104B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B105	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B107	F	1	3'-0"	7'-0"	WD	--	5'-4"	FR 3A	--	HM	--					
B112A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B113A	MCDF	1	20'-0"	10'-0"	ST	--	20'-4"	MCDF	--	ST	--					
B113B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B114A	F	1	2'-0"	7'-0"	WD	--	2'-4"	FR 1	--	HM	--					
B114B	F	1	2'-0"	7'-0"	WD	--	2'-4"	FR 1	--	HM	--					
B116	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B117	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B118	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B119	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B120	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B121	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B122	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
B112B	F	1	3'-0"	7'-0"	WD	--	6'-4"	FR 2A	--	HM	--					
B112C	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					

A

ROOM FINISH SCHEDULE REMARKS

1. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF GLAZED BLOCK, PAINTED BLOCK, BRICK, SOUND BLOCK, VWC AND PAINT.
2. PROVIDE CERAMIC TILE TO A HEIGHT OF 4'-6" WITH EPOXY PAINT ABOVE. SEE DETAIL 43008 FOR TILE PATTERN INFORMATION.
3. PROVIDE EPOXY PAINT UP TO 13'-2" ABOVE FINISH FLOOR IN THE GYMNASIUM (155)
4. PROVIDE GYPSUM BOARD SOFFIT ABOVE CASEWORK. (SEE CASEWORK ELEVATIONS AND REFLECTED CEILING PLANS.)
5. SEE A5.1 STAIR DETAILS, ELEVATIONS, AND SECTIONS FOR FINISH MATERIALS.
6. SEE DETAIL 43006 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
7. PAINT CEILING AND ALL EXPOSED STRUCTURE, PIPING, CONDUIT, MECHANICAL DUCTS AND VENTS.
8. ALL ELEVATOR FINISHES, OTHER THAN FLOOR MATERIAL ARE SPECIFIED TO BE PROVIDED BY ELEVATOR MANUFACTURER.
9. PROVIDE VINYL BASE AT CASEWORK.
10. PAINT ALL EXPOSED CEILING ITEMS, INC. STRUCTURE, DUCTWORK, ELECTRICAL, ETC. BLACK.
11. SEE DETAIL 4300X FOR CARPET CIRCLE ACTIVITY INFORMATION.
12. SEE INTERIOR ELEVATIONS SHEET A3.11 FOR GYP. BD. REVEAL LOCATIONS.
13. PROVIDE TACK WALL FINISH ON ENTIRE INDICATED WALL - SEE PLANS FOR LOCATIONS. PROVIDE FORM FINISHED FLOO0R TO 4" ABOVE THE CEILING, WALL TO WALL.
14. PROVIDE 16" V-SCORED BLOCK THROUGHOUT CORRIDOR. THIS INCLUDES CONTINUING THIS BLOCK INTO ADJACENT SPACES.
15. SEE DETAIL 43007 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
16. SEE DETAIL 43008 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
17. SEE ALTERNATE #1 FOR GYMNASIUM FLOOR FINISH ALTERNATE. REFERENCE SPECIFICATION, SECTIONS AND DETAILS FOR WOOD FLOOR INFORMATON.
18. SEE DETAIL 43012-43016 FOR FLOOR STRIPING INFORMATION.
19. SEE PLANS FOR GYM EQUIPMENT LOCATIONS (I.E. PULL-UP BARS, WALL PADS, ETC.).
20. SEE DETAIL 4300X FOR VCT FLOOR PATTERN INFORMATION.
21. SLOPE CONC. FLOOR TOWARDS EXTERIOR DOOR. SEE PLANS FOR FLOORSLOPING INFORMATION.
22. SEE STAIR SECTIONS FOR GLAZED BLOCK FINISH LOCATIONS.
23. xxxxxxx.

DOOR SCHEDULE GENERAL NOTES

1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. FOR FRAME DEPTH, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   GYPSUM BOARD PARTITIONS: THROAT OF FRAME TO MATCH WALL THICKNESS.

   MASONRY PARTITIONS:

   4" WALL: 3 3/4" FRAME
   6" WALL: 5 3/4" FRAME
   8" AND GREATER WALL: 7 3/4" FRAME

   FRAME DEPTHS ARE SCHEDULED IN NOMINAL DIMENSIONS. SEE FRAME/ DOOR TYPES (DETAIL SECTION 51000) FOR CORRESPONDING ACTUAL DIMENSIONS.

3. FOR GLASS TYPES, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   INTERIOR NON RATED:

   CLEAR (SAFETY WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

   INTERIOR AND EXTERIOR RATED:

   FIRE RATED

   EXTERIOR NON-RATED:

   CLEAR INSULATED (SAFETY INSULATED WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

4. SEE SHEET AX.XX FOR FRAME TYPES.
5. SEE SHEET AX.XX FOR DOOR TYPES.
6. AT DOOR SCHEDULE, LABEL DESIGNATION "45/20" INDICATES:

   FOR ALL OPENINGS WITH SIDE LITES AND SCHEDULED TO BE RATED FOR 20 MINUTES, THE DOOR AND ANY GLASS WITHIN THE DOOR IS TO BE RATED FOR 20 MINUTES; THE FRAME AND ADJACENT SIDELITE(S) GLASS AND FRAME IS TO BE RATED FOR 45 MINUTES."

DOOR SCHEDULE REMARKS

1. SEE DETAIL 43018 FOR USE WITH ALTERNATE #1
2. SEE DETAIL 54012 FOR USE WITH ALTERNATE #1
3. PROVIDE FIRE NUMBER AT EXTERIOR DOORS DOOR NUMBER IN "_".

FLOOR PLAN KEY NOTES:

1. DOOR ACTUATORS
2. BOLLARD - SEE DETAIL 21001.
3. TUB SINK - SEE MECHANICAL
4. CAN WASH - SEE DETAIL 43010.
5. EMERGENCY EYE WASH. SEE MECH.
6. CABINET UNIT HEATER. SEE DETAIL 43046. SEE MECH. FOR SPECIFICATIONS, COORDINATE LOCATION WITH MECH.
7. SALVAGED LOCKERS TO BE INSTALLED BY CONTRACTOR.
8. LOCATION OF SEMI-RECESSED DEFIBRILLATOR CABINET - SEE DETAIL B/43004
9. LOCATION OF STACKED WASHER AND DRYER (NIC)
10. SQUARE BRICK ACCENT - SEE ELEVATIONS/ SECTIONS FOR ADDITIONAL INFORMATION

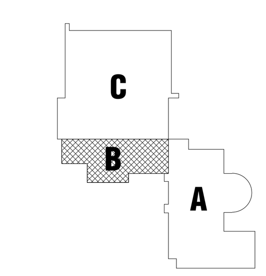
City of Crystal New Police Facility

4141 Douglas Dr. North
Crystal, MN 55427

City of Crystal Minnesota
4141 Douglas Dr. North
Crystal, MN 55427

WOLD ARCHITECTS AND ENGINEERS
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101

woldae.com | 651 227 7773



KEY PLAN

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 **Reg State**

License Number: **Arch Name** **Arch Num** Date **Issue Date**

Revisions		
Description	Date	Num

Comm: 192195
Date: 08/14/2020
Drawn: EP, DV
Check: MS/JD

North

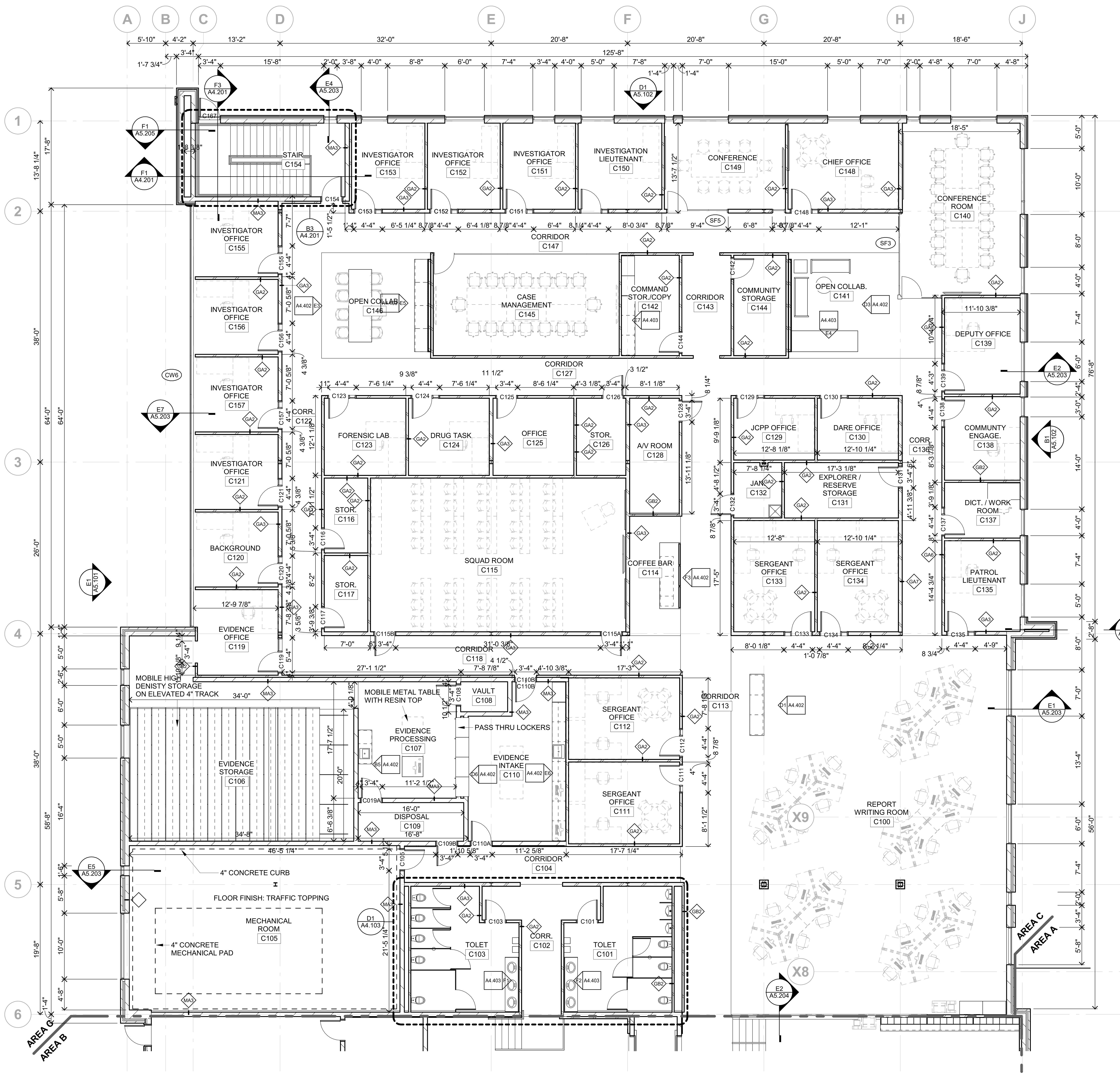
MAIN LEVEL FLOOR PLAN - AREA B

Scale: As indicated

SITE PLAN SUBMITTAL
NOT FOR CONSTRUCTION

A2.01b

UPPER LEVEL PLAN - AREA C



E1 UPPER LEVEL PLAN - AREA C
1/8" = 1'-0"

ROOM FINISH SCHEDULE

ROOM NO	ROOM NAME	FLOOR	BASE	N WALL - TYP MATL	N WALL - TYP FIN	E WALL MATL	E WALL FIN	S WALL MATL	S WALL FIN	W WALL MATL	W WALL FIN	REMARKS
C113	CORRIDOR	CARPET	CONCRETE	GYP		BLOCK		GYP		GYP		
C114	CORRIDOR	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C158	Room											
C160	WASH BAY											
C161	ELEV.											
C165	Room											
C166	Room											
C154	STAIR	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C159	Room											
C162	RECEPTION											
C163	RECEPTION											
C164	CELL	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C100	REPORT WRITING ROOM	CARPET	CONCRETE	GYP		BLOCK		GYP		GYP		
C101	TOLET	TILE	CONCRETE	TILE		TILE		TILE		TILE		
C102	CORR.	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C103	TOLET	TILE	CONCRETE	TILE		TILE		TILE		TILE		
C104	CORRIDOR	CARPET	CONCRETE	GYP		GYP		GYP		BLOCK		
C105	MECHANICAL ROOM	TRAFFIC TOPPING	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C106	EVIDENCE STORAGE	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C107	EVIDENCE PROCESSING	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C108	VAULT	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C109	DISPOSAL	CONCRETE	CONCRETE	BLOCK		BLOCK		BLOCK		BLOCK		
C110	EVIDENCE INTAKE	CONCRETE	CONCRETE	BLOCK		GYP		BLOCK		BLOCK		
C111	SERGEANT OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C112	SERGEANT OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C113	CORRIDOR											
C114	COFFEE BAR	TILE	CONCRETE	GYP		GYP		GYP		GYP		
C115	SQUAD ROOM	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C116	STOR.	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C117	STOR.	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C118	CORRIDOR	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C119	EVIDENCE OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C120	BACKGROUND	CARPET	CONCRETE	GYP		GYP		GYP		CW6		
C121	INVESTIGATOR OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		CW6		
C122	CORR.	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C123	FORENSIC LAB	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C124	DRUG TASK	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C125	OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C126	STOR.	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C127	CORRIDOR	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C128	A/V ROOM	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C129	JCPP OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C130	DARE OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C131	EXPLORER / RESERVE STORAGE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C132	JAN.	CONCRETE	CONCRETE	GYP		GYP		GYP		GYP		
C133	SERGEANT OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C134	SERGEANT OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C135	PATROL LIEUTENANT	CARPET	CONCRETE	GYP		CW8		GYP		GYP		
C136	CORR.	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C137	DICT. / WORK ROOM	CARPET	CONCRETE	GYP		CW8		GYP		GYP		
C138	COMMUNTY ENGAGE.	CARPET	CONCRETE	GYP		CW8		GYP		GYP		
C139	DEPUTY OFFICE	CARPET	CONCRETE	GYP		CW8		GYP		GYP		
C140	CONFERENCE ROOM	CARPET	CONCRETE	CW7		CW8		GYP/SF4		SF3		
C141	OPEN COLLAB.	CARPET	CONCRETE							GYP/WD PANEL		
C142	COMMAND STOR./COPY	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C143	CORRIDOR	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C144	COMMUNITY STORAGE	CARPET	CONCRETE	GYP		GYP		GYP		GYP		
C145	CASE MANAGEMENT	CARPET	CONCRETE	SF2		GYP		GYP		GYP		
C146	OPEN COLLAB.	CARPET	CONCRETE			GYP/WD PANEL						
C147	CORRIDOR	CARPET	CONCRETE	GYP/SF5		GYP		GYP/SF2		GYP		
C148	CHIEF OFFICE	CARPET	CONCRETE	CW7		GYP		GYP		GYP		
C149	CONFERENCE	CARPET	CONCRETE	CW7		GYP		SF5		GYP		
C150	INVESTIGATION LIEUTENANT	CARPET	CONCRETE	CW7		GYP		GYP		GYP		
C151	INVESTIGATOR OFFICE	CARPET	CONCRETE	CW7		GYP		GYP		GYP		
C152	INVESTIGATOR OFFICE	CARPET	CONCRETE	CW7		GYP		GYP		GYP		
C153	INVESTIGATOR OFFICE	CARPET	CONCRETE	CW7		GYP		GYP		GYP		
C155	INVESTIGATOR OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		CW6		
C156	INVESTIGATOR OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		CW6		
C157	INVESTIGATOR OFFICE	CARPET	CONCRETE	GYP		GYP		GYP		CW6		

DOOR / OPENING SCHEDULE

DOOR NO	DOOR / OPENING TYPE	QTY	WIDTH	HEIGHT	MATL	LABEL/ RATING	OVERALL WIDTH	FRAME TYPE	FRAME DEPTH	FRAME MATL	GL	MOUNTING CONDITIONS HEAD	JAMB	SILL	HDW GRP	REMARKS
C162	F	1	3'-0"	7'-0"	AL	--	3'-4"	FR 1	--	AL	--					
C163	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C164	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C172	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C178	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C179	AL	1	3'-0"	7'-0"	AL	--	3'-0"	CW X	--	AL	--					
C171	AL	1	3'-0"	7'-0"	AL	--	3'-0"	CW X	--	AL	--					
C101	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C103	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C105	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C108	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C109B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C110A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C110B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C111	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C112	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C115A	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C115B	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C116	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C117	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C119	F	1	3'-0"	7'-0"	WD	--	5'-4"	FR 2A	--	HM	--					
C120	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C121	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C123	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C124	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C125	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C126	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C128	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C129	F	1	3'-0"	7'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C130	F	1	3'-0"	7'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C131	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C132	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C133	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C134	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C135	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C137	F	1	3'-0"	7'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C138	F	1	3'-0"	7'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C139	F	1	3'-0"	7'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C142	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C144	F	1	3'-0"	7'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C148	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C151	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C152	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C153	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C154	F	1	3'-0"	8'-0"	WD	--	3'-4"	FR 1	--	HM	--					
C155	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C156	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C157	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C167	AL	1	3'-0"	7'-0"	AL	--	3'-0"	CW X	--	AL	--					
C168	F	1	3'-0"	8'-0"	WD	--	4'-4"	FR 3A	--	HM	--					
C175	GSW	1	3'-0"	8'-0"	GS	--	3'-0"	GS X	--	--						
C176	GSW	1	3'-0"	8'-0"	GS	--	3'-0"	GS X	--	--						
C177	GSW	1	3'-0"	8'-0"	GS	--	3'-0"	GS X	--	--						

ROOM FINISH SCHEDULE REMARKS

1. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF GLAZED BLOCK, PAINTED BLOCK, BRICK, SOUND BLOCK, VWC AND PAINT.
2. PROVIDE CERAMIC TILE TO A HEIGHT OF 4'-6" WITH EPOXY PAINT ABOVE. SEE DETAIL 43008 FOR TILE PATTERN INFORMATION.
3. PROVIDE EPOXY PAINT UP TO 13'-2" ABOVE FINISH FLOOR IN THE GYMNASIUM (155)
4. PROVIDE GYPSUM BOARD SOFFIT ABOVE CASEWORK. (SEE CASEWORK ELEVATIONS AND REFLECTED CEILING PLANS.)
5. SEE A5.1 STAIR DETAILS, ELEVATIONS, AND SECTIONS FOR FINISH MATERIALS.
6. SEE DETAIL 43006 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
7. PAINT CEILING AND ALL EXPOSED STRUCTURE, PIPING, CONDUIT, MECHANICAL DUCTS AND VENTS.
8. ALL ELEVATOR FINISHES, OTHER THAN FLOOR MATERIAL ARE SPECIFIED TO BE PROVIDED BY ELEVATOR MANUFACTURER.
9. PROVIDE VINYL BASE AT CASEWORK.
10. PAINT ALL EXPOSED CEILING ITEMS, INC. STRUCTURE, DUCTWORK, ELECTRICAL, ETC. BLACK.
11. SEE DETAIL 4300X FOR CARPET CIRCLE ACTIVITY INFORMATION.
12. SEE INTERIOR ELEVATIONS SHEET A3.11 FOR GYP. BD. REVEAL LOCATIONS.
13. PROVIDE TACK WALL FINISH ON ENTIRE INDICATED WALL - SEE PLANS FOR LOCATIONS. PROVIDE FORM FINISHED FLOO0R TO 4" ABOVE THE CEILING, WALL TO WALL.
14. PROVIDE 16" V-SCORED BLOCK THROUGHOUT CORRIDOR. THIS INCLUDES CONTINUING THIS BLOCK INTO ADJACENT SPACES.
15. SEE DETAIL 43007 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
16. SEE DETAIL 43008 FOR GLAZED BLOCK AND TILE FLOOR PATTERN INFORMATION.
17. SEE ALTERNATE #1 FOR GYMNASIUM FLOOR FINISH ALTERNATE. REFERENCE SPECIFICATION, SECTIONS AND DETAILS FOR WOOD FLOOR INFORMATON.

FLOOR PLAN KEY NOTES:

1. DOOR ACTUATORS
2. BOLLARD - SEE DETAIL 21001.
3. TUB SINK - SEE MECHANICAL
4. CAN WASH - SEE DETAIL 43010.
5. EMERGENCY EYE WASH. SEE MECH.
6. CABINET UNIT HEATER. SEE DETAIL 43046. SEE MECH. FOR SPECIFICATIONS, COORDINATE LOCATION WITH MECH.
7. SALVAGED LOCKERS TO BE INSTALLED BY CONTRACTOR.
8. LOCATION OF SEMI-RECESSED DEFIBRILLATOR CABINET - SEE DETAIL B/43004
9. LOCATION OF STACKED WASHER AND DRYER (NIC)
10. SQUARE BRICK ACCENT - SEE ELEVATIONS/ SECTIONS FOR ADDITIONAL INFORMATION

DOOR SCHEDULE GENERAL NOTES

1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. FOR FRAME DEPTH, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   GYPSUM BOARD PARTITIONS: THROAT OF FRAME TO MATCH WALL THICKNESS.

   MASONRY PARTITIONS:

   4" WALL: 3 3/4" FRAME
   6" WALL: 5 3/4" FRAME
   8" AND GREATER WALL: 7 3/4" FRAME

   FRAME DEPTHS ARE SCHEDULED IN NOMINAL DIMENSIONS. SEE FRAME/ DOOR TYPES (DETAIL SECTION 51000) FOR CORRESPONDING ACTUAL DIMENSIONS.
3. FOR GLASS TYPES, ONLY EXCEPTIONS TO THE FOLLOWING TABLE ARE SCHEDULED:

   INTERIOR NON RATED:

   CLEAR (SAFETY WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)

   INTERIOR AND EXTERIOR RATED:

   FIRE RATED

   EXTERIOR NON-RATED:

   CLEAR INSULATED (SAFETY INSULATED WHEN REQUIRED BY TABLE IN GLAZING SPECIFICATION.)
4. SEE SHEET AX.XX FOR FRAME TYPES.
5. SEE SHEET AX.XX FOR DOOR TYPES.
6. AT DOOR SCHEDULE, LABEL DESIGNATION "45/20" INDICATES:

   FOR ALL OPENINGS WITH SIDE LITES AND SCHEDULED TO BE RATED FOR 20 MINUTES, THE DOOR AND ANY GLASS WITHIN THE DOOR IS TO BE RATED FOR 20 MINUTES; THE FRAME AND ADJACENT SIDELITE(S) GLASS AND FRAME IS TO BE RATED FOR 45 MINUTES."

DOOR SCHEDULE REMARKS

1. SEE DETAIL 43018 FOR USE WITH ALTERNATE #1
2. SEE DETAIL 54012 FOR USE WITH ALTERNATE #1
3. PROVIDE FIRE NUMBER AT EXTERIOR DOORS DOOR NUMBER IN "_".

SITE PLAN SUBMITTAL

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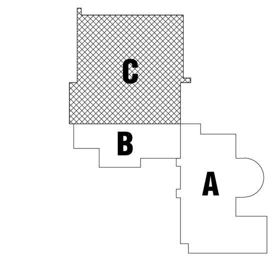

KEY PLAN

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Description	Date	Num

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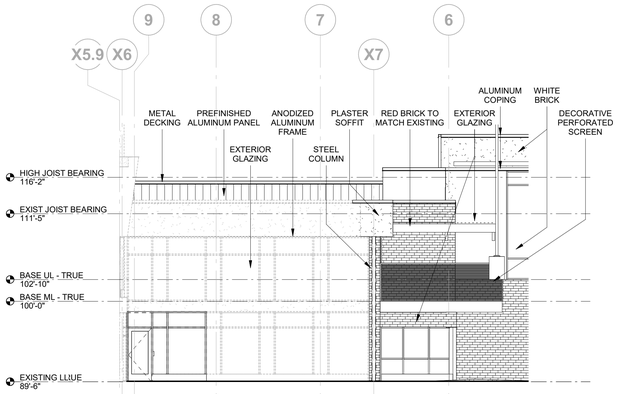
Check: MS/JD
North

UPPER LEVEL FLOOR PLAN - AREA C

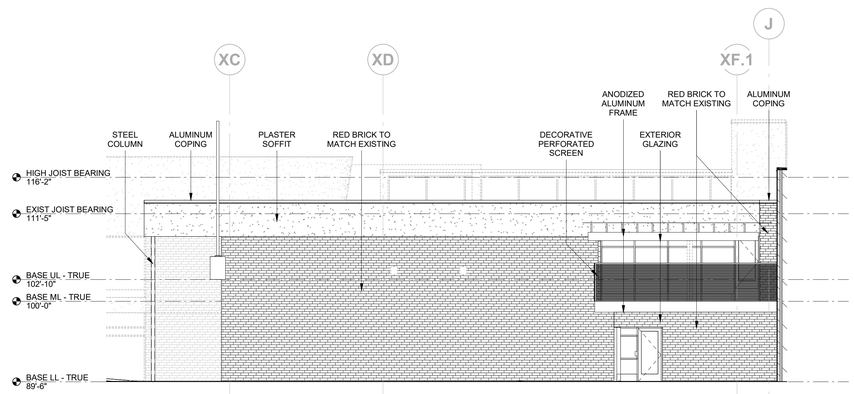
Scale: As indicated

A2.01c

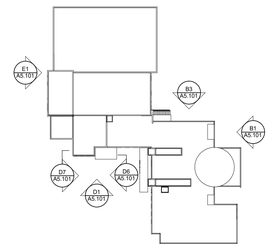
MN



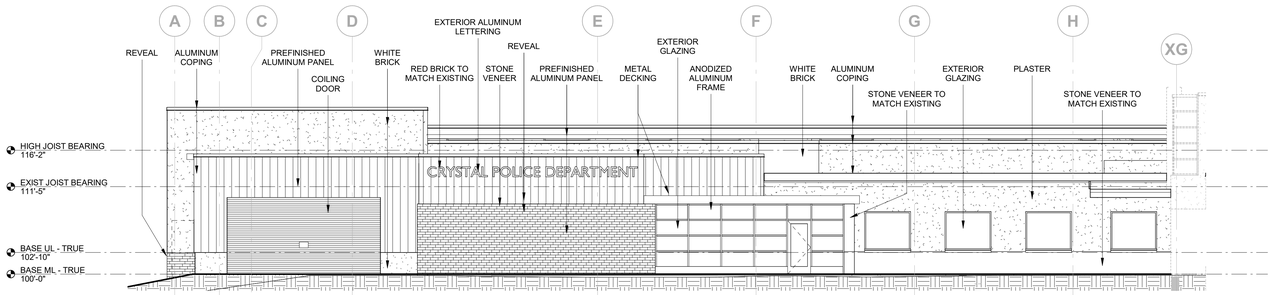
B1 PATIO ELEVATION
1/8" = 1'-0"
0 6' 12'



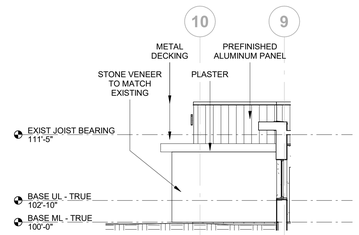
B3 STAFF ENTRY ELEVATION
1/8" = 1'-0"
0 6' 12'



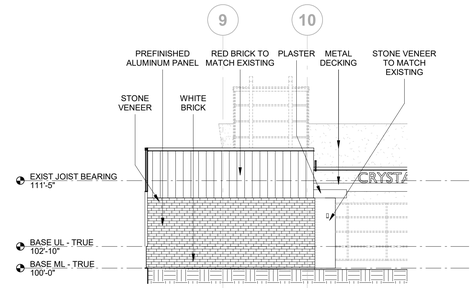
EXTERIOR ELEVATION KEY



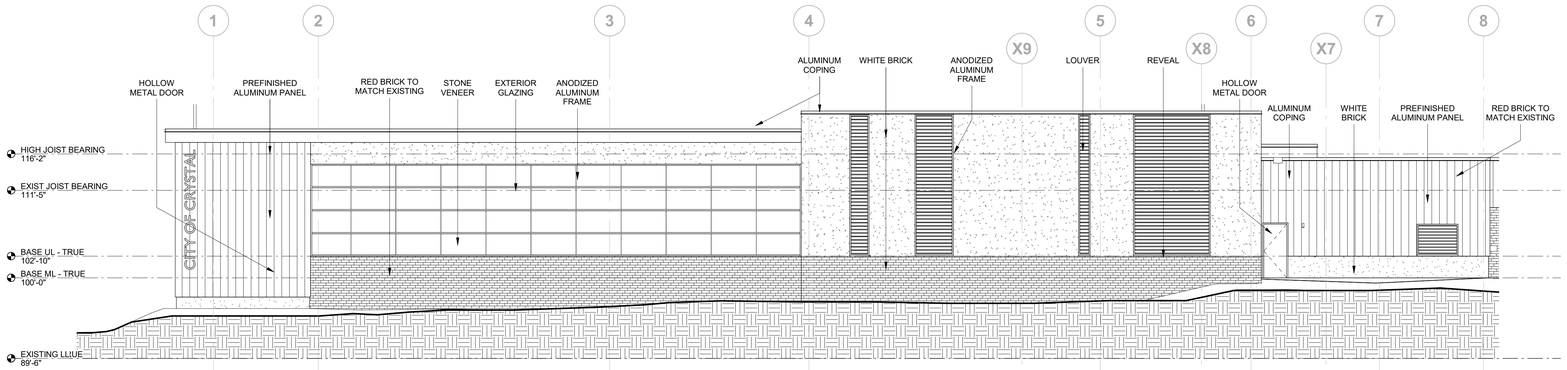
D1 SOUTH ELEVATION
1/8" = 1'-0"
0 6' 12'



D6 FRONT ENTRY EAST ELEVATION
1/8" = 1'-0"
0 6' 12'



D7 FRONT ENTRY WEST ELEVATION
1/8" = 1'-0"
0 6' 12'



E1 WEST ELEVATION
1/8" = 1'-0"
0 6' 12'

A

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City of Crystal Minnesota

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Revisions		
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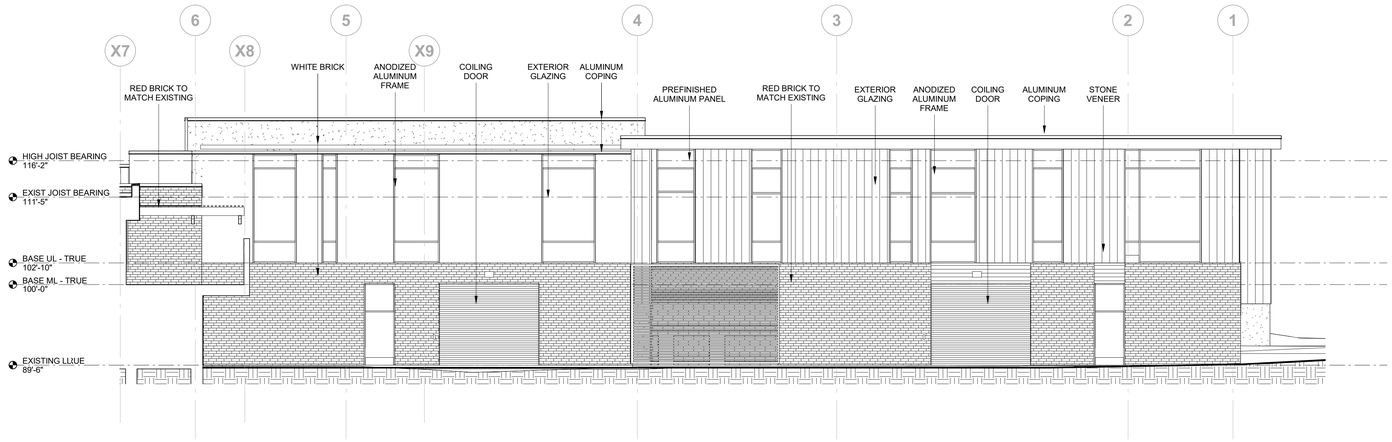
EXTERIOR ELEVATIONS

Scale: **As indicated**

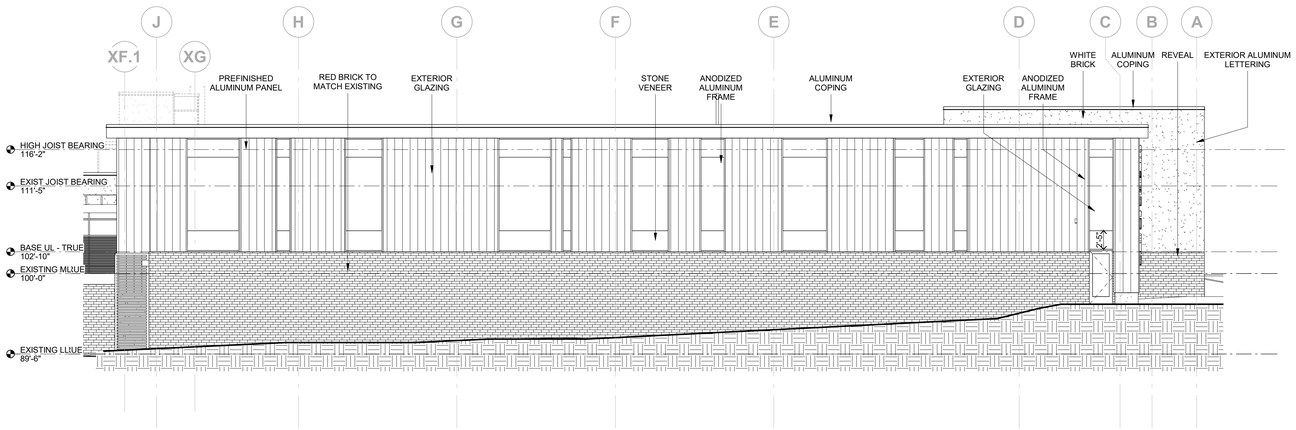
SITE PLAN SUBMITTAL
NOT FOR CONSTRUCTION

A5.101

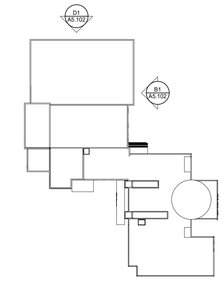
MN



B1 EAST ELEVATION
1/8" = 1'-0"
0 6' 12'



D1 NORTH ELEVATION
1/8" = 1'-0"
0 6' 12'



EXTERIOR ELEVATION KEY

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EXTERIOR ELEVATIONS

Scale: **As Indicated**

SITE PLAN SUBMITTAL
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A5.102

A

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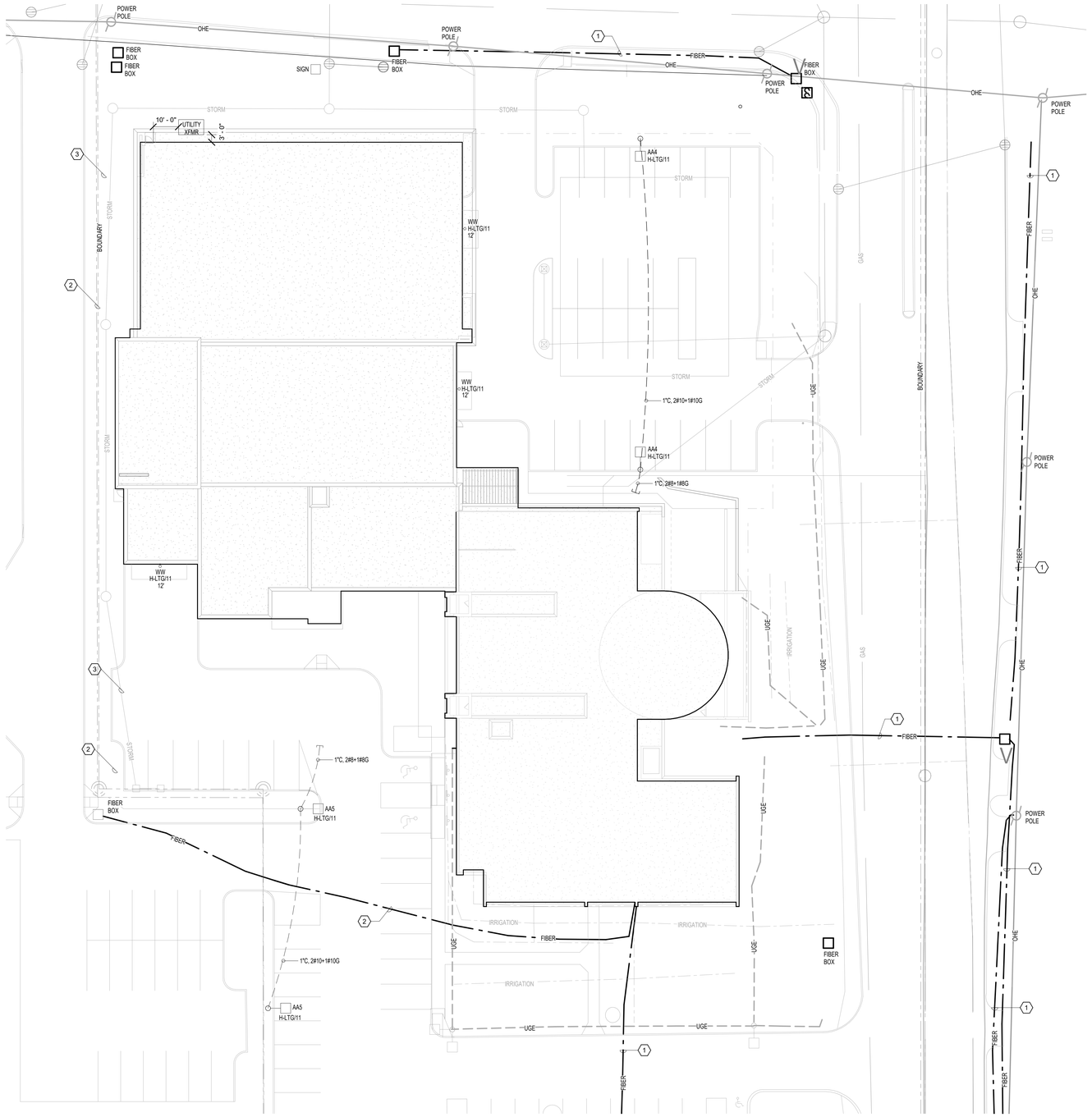
Drawing Title: exterior elevations.dwg
Drawing Location: J:\0200-0164A Crystal Bay Water Facility\Drawings\Wold Drawings\Exterior Elevations.dwg
Date & Time: Friday, August 14, 2020 4:00:00 PM

CITY OF CRYSTAL

CRYSTAL POLICE DEPARTMENT

CE DEPARTMENT

CITY OF CRYSTAL



E3 SITE PLAN - ELECTRICAL
1" = 20'-0"

GENERAL SHEET NOTES

A. ALL LIGHTING AND POWER CONDUCTORS SHALL BE INSTALLED BETWEEN 24" (MINIMUM) AND 36" (MAXIMUM) BELOW FINISHED GRADE.
B. ALL COMMUNICATIONS CONDUIT AND CABLES SHALL BE INSTALLED 36" (MINIMUM) BELOW FINISHED GRADE.
C. ALL CONDUCTORS FOR EXTERIOR LIGHTING AND POWER CIRCUITS SHALL BE #10 AWG MINIMUM.
D. PROVIDE PVC-40 IN GREEN SPACES AND PVC-80 UNDER HARD SURFACES.
E. PROVIDE PULL WIRE IN ALL EMPTY CONDUITS.
F. PROVIDE DETECTABLE UNDERGROUND TAPE ABOVE EACH UNDERGROUND CONDUIT.
G. SET BACK CENTER OF POLE BASES 6 FEET FROM FACE OF CURB OR SIDEWALK.
H. SEE LIGHTING PLANS FOR EXACT LOCATIONS OF BUILDING MOUNTED LIGHTING.
I. HANDHOLES AND PULLBOXES MAY NOT BE INDICATED ON PLANS. PROVIDE AS REQUIRED FOR INSTALLATION.

KEYED SHEET NOTES

1. EXISTING COMMUNICATION FIBER TO REMAIN. PROTECT FIBER THROUGH OUT CONSTRUCTION.
2. EXISTING COMMUNICATION FIBER. PREPARE TO REROUTE FIBER. ROUTING BY OTHERS.
3. EXISTING CENTURY LINK COMMUNICATION LINE. PREPARE TO REROUTE. ROUTING BY OTHERS.

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License Number: **BRADLEY R. JOHANNSEN** **43936** Date **Issue Date**

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ELECTRICAL SITE PLAN

Scale: As Indicated

DD DRAWING SET
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E0.02

MN

E

Plan View
Scale - 1" = 20ft

Schedule

Symbol	Label	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
	WW	Lithonia Lighting	WST LED P3 40K VF MVOLT	WST LED, Performance package 3, 4000 K, visual comfort forward throw, MVOLT	LED	6609	0.85	50
	AA4	Lithonia Lighting	DSX2 LED P1 40K T4M MVOLT HS	DSX2 LED P1 40K T4M MVOLT with houseside shield	LED	14397	0.85	140
	AA5	Lithonia Lighting	DSX2 LED P1 40K T5M MVOLT	DSX2 LED P1 40K T5M MVOLT	LED	19676	0.85	140

NOTES:

1. ALL POLE LIGHTING CALCS TAKEN AT 27' 6" AFF
2. WALL PACKS SHOWN AT 12' AFF

VISUAL

CRYSTAL PD PARKING LOT LIGHTING CALCULATIONS

Designer	
Date	10/2/2020
Scale	Not to Scale
Drawing No.	
Summary	