Purchasing Division
Finance Department

Room 120
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Duluth, Minnesota 55802

218-730-5340
purchasing@duluthmn.gov

Addendum 1
Solicitation 24-99397
Lakewood Water Treatment Plant Power Improvements - Construction

This addendum serves to notify all bidders of the following changes to the solicitation documents:

- Please see the attached documents.

Please acknowledge receipt of this Addendum by checking the acknowledgement box within the www.bidexpress.com solicitation.

Posted: **April 4, 2024**

ADDENDUM #1
24-99397
LAKEWOOD WATER TREATMENT PLANT POWER SYSTEM IMPROVMENTS CITY OF DULUTH - CONSTRUCTION
PROJECT 00616197
MARCH 21, 2024

CERTIFICATION

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Scott Chilson

Signature: Scott R. Chilson

Date: 3/21/24 License #: 44287

NOTICE

This Addendum is issued to modify, explain or correct the original drawings, specifications and/or previous addendums and is hereby made a part of the Contract Documents. Please attach this Addendum to the specifications in your possession and note receipt of this Addendum on page 00 41 00-2 of the bid. The bid date remains unchanged.

SPECIAL PROVISIONS

SP15 (1806) DETERMINATION AND EXTENSION OF CONTRACT TIME

REPLACE "Substantial Completion/Milestone 2 (2024 Work):" paragraph with the following:

Substantial Completion/Milestone 2 (2024 Work): shall include a minimum of the following:

- Damages including but not limited to Substantial Completion Liquidated Damages apply to minimum deliverable and performance required to satisfy this milestone.
- Conduct Pre-Construction, pre-installation, and construction progress meetings.
- Coordinate with the following:
  - MN-Power
  - SCADA Contractor
  - Power System Integrator
  - Transformer Supplier
  - Generator Supplier
- Maintain and protect automatic operation of existing electric service, existing controls, existing SCADA, existing Lakewood WTP and facilities.
- Clearing and grubbing and site grading
- Construct erosion control.
- Construct STR910 Point of Service to be ready for installation of gear and equipment.
- Construct underground feeders and duct banks. Including the concrete encased duct bank crossing of Congdon Blvd with traffic control and complete restoration within the ROW.
- ***Temporary structure spanning concrete encased duct bank crossing of Congdon Blvd***
- Construct Str 940 Powerhouse to be ready for switch gear installation.
- Construct STR 960 Generator base slab to be ready for equipment delivery.

- Construct and extend new electrical feeder ducts into STR 100 Transformer room.
- Receive, unload, store, and protect all equipment that may be delivered for this project.
- Construct base for access drive to STR 910 and Str 940/960.
- Deliver partial Record Drawing.

SP 57 TRAFFIC CONTROL TEMPORARY STRUCTURES
ADD the following section:

"SP-57 TRAFIC CONTROL TEMPORARY STRUCTURE

Construction of temporary structure shall conform to the requirements of Section 01 54 24."

ENGINEERING TECHNICAL SPECIFICATIONS

DIVISION 01 – GENERAL REQUIRMENTS

SECTION 01 54 24 Traffic Control Temporary Access Structures
ADD the attached SECTION in its entirety.

SECTION 01 55 26 Traffic Control
ADD the attached SECTION in its entirety.

DRAWINGS

SHEET 000-G002 – SHEET INDEX AND INENTIFIERS
REPLACE SHEET in its entirety with attached sheet.

SHEET 005-G103 – TRAFFICE CONTROL PLAN
REPLACE SHEET in its entirety with attached sheet.

SHEET 005-G104 – TRAFFICE CONTROL PLAN
ADD SHEET in its entirety with attached sheet.

SHEET 005-G105 – TRAFFICE CONTROL PLAN
ADD SHEET in its entirety with attached sheet.

SHEET 005-G106 – TRAFFICE CONTROL PLAN DETAILS
ADD SHEET in its entirety with attached sheet.

SHEET 005-G107 – TRAFFICE CONTROL PLAN DETAILS
ADD SHEET in its entirety with attached sheet.

SHEET 910-C102 – SITE UTILITY PLAN
REPLACE SHEET in its entirety with attached sheet.

SHEET 910-C103 – SITE GRADING PLAN
REPLACE SHEET in its entirety with attached sheet.

SHEET 910-C104 – EROSION CONTROL PLAN
REPLACE SHEET in its entirety with attached sheet.

SHEET 940-C102 – SITE UTILITY PLAN

REPLACE SHEET in its entirety with attached sheet.

SHEET 999-C506 – FILTRATION BASIN DETAILS

REPLACE SHEET in its entirety with attached sheet.

END OF ADDENDUM

SECTION 01 54 24
TRAFFIC CONTROL TEMPORARY ACCESS STRUCTURE

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Work consists of designing, furnishing, installing, maintaining, and removing a Temporary Structure to accommodate pedestrian and bicycle traffic.

PART 2 PRODUCTS AND MATERIALS

2.01 The contractor may incorporate used materials in the structure if they are sound and suitable for the purpose intended. Materials to be used for temporary structure shall be reviewed by engineer.

PART 3 CONSTRUCTION REQUIREMENTS

3.01 Design the temporary structure conforming to the current AASHTO pedestrian load (90 psf), or H-10 Vehicle, whichever creates the greatest stresses.

A. Additional Design Requirements
1. Minimum width of 8'.
2. Handrail must be 34"-38" in height and have a consistent height.
3. Handrail must extend 12" long min (measured to the start of the return radius). in the same direction of travel at the top and bottom of runs to provide support before entering or existing ramp. Extensions must return to guard wall or floor.
4. Handrails must be continuous the full length of run and tops and sides of gripping surface cannot be obstructed. Bottom gripping surface can be obstructed up to 20% of the length.
5. Minimum clearance between handrails of 36".
6. Construct temporary ramps to and from temporary structure according to applicable sections of MnDOT Standard Plan 5-297.813.
7. Construct Pedestrian Channelizers throughout the work area leading to and from temporary structure according MnDOT Standard Plan 5-297.813.

B. For grade crossing temporary structures, ensure that the temporary structure spans across utility trench.

C. Open metal grate or wood will not be allowed as the finished surface on the temporary structure.

D. If contractor owned structural steel beams are utilized for the temporary widening, they are to be sound continuous material, free from large holes and defects. Use of these members is subject to acceptance by the engineer. Welded splices of existing steel beams are not permitted.

E. Design and construct temporary structures to avoid conflicts with underground and overhead utilities within the project area.

F. Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of offsite. Contractor-furnished materials remain the contractor's property upon removal.

END OF SECTION

SECTION 01 55 26
TRAFFIC CONTROL

PART 1 GENERAL

1.01 APPLICABLE PROVISIONS

A. Applicable provisions of Division 01 shall govern work of this section.

1.02 APPLICABLE PUBLICATIONS

A. The following publications of the issues listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the reference thereto.
   1. Minnesota Manual on Uniform Traffic Control Devices (Mn MUTCD) for Streets and Highways, current edition.

1.03 DESCRIPTION OF WORK

A. The work covered under this section shall include installing and maintaining traffic control devices to safely and efficiently direct traffic through or around the construction site.

B. The work also includes removing temporary traffic control devices at the completion of the project.

C. The Contractor shall coordinate relocation of bus stop with City and DTA.

1.04 RELATED WORK ELSEWHERE

A. Procurement and Contracting Requirements - Division 00 (All Sections)

B. Work Restrictions and Provisions – Division 01

C. Submittals – Division 01

1.05 SUBMITTALS

A. If a detailed traffic control plan is not included in the Contract Drawings, the Contractor shall submit a traffic control plan. Information shall be in conformance with requirements of Submittals - Division 01 of these specifications.

1.06 OPERATION/MAINTENANCE MANUALS AND INSTRUCTIONS (N/A)

PART 2 PRODUCTS AND MATERIALS

2.01 GENERAL

A. Traffic control devices and materials shall conform to the Mn MUTCD and applicable State Department of Transportation specifications.

PART 3 CONSTRUCTION METHODS

3.01 TRAFFIC CONTROL

A. All Contractors shall comply with the approved detour plan. It shall be the Contractor's responsibility to notify the Emergency Services and coordinate the installation and removal of said detour.

END OF SECTION

DISCIPLINE IDENTIFICATION & SHEET ORDER

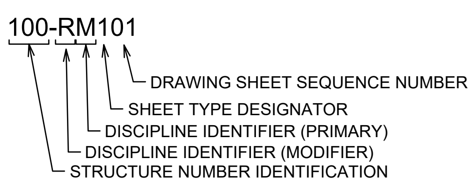
DESIGNATION	DISCIPLINE
G	GENERAL
C	SITE CIVIL
L	LANDSCAPE
S	STRUCTURAL
A	ARCHITECTURAL
M	PROCESS MECHANICAL
P	PLUMBING
H	HVAC
E	ELECTRICAL
O	OPERATIONS
R (MODIFIER ONLY)	REMOVAL/DEMOLITION

NOTE: FOR CLARITY, PORTIONS OF WORK FOR A DISCIPLINE MAY BE SHOWN ON A SHEET WITH A DIFFERENT DISCIPLINE DESIGNATION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE THE WORK OF ALL DISCIPLINES SO THAT ALL WORK IS COMPLETED AS SHOWN.

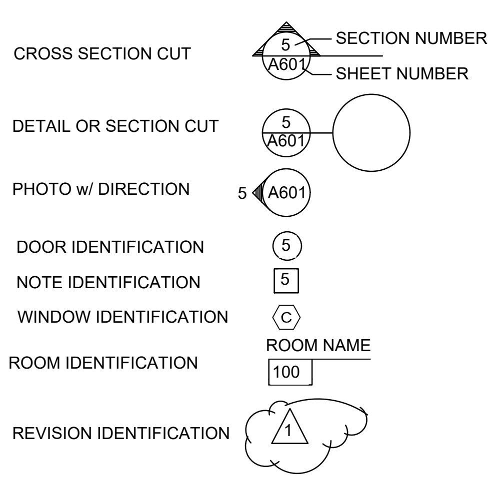
SHEET TYPE DESIGNATOR

DESIGNATOR	SHEET TYPE
0	GENERAL
1	PLANS
2	ELEVATIONS (EXTERIOR)
3	SECTIONS
4	LARGE-SCALE VIEWS
5	DETAILS
6	SCHEDULES & DIAGRAMS
7	USER DEFINED
8	USER DEFINED
9	ISOMETRICS

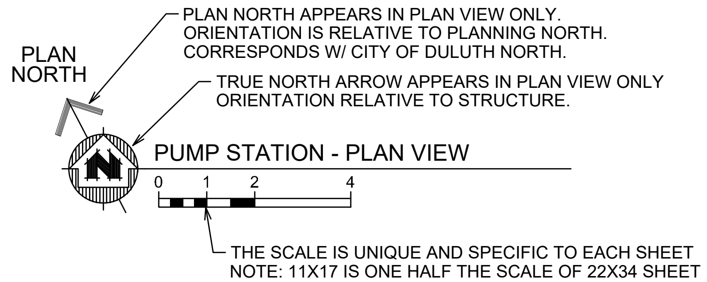
SHEET IDENTIFICATION NUMBERING EXAMPLE



ARCHITECTURAL SYMBOLS

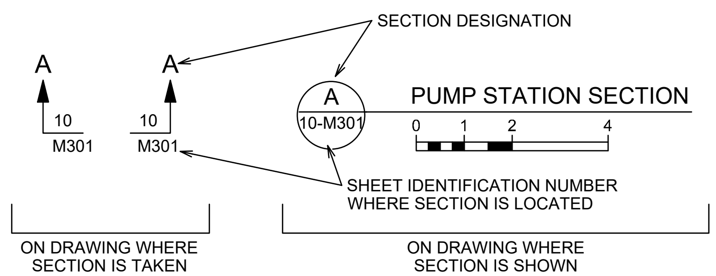


PLAN VIEW LABEL

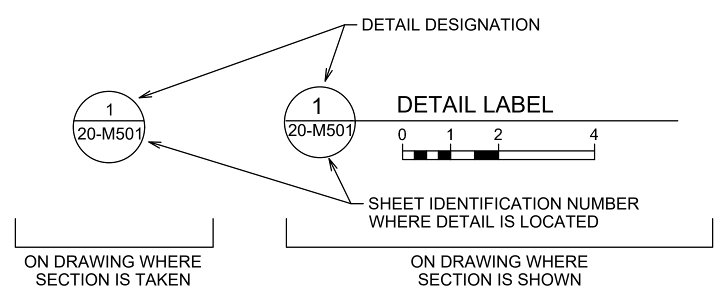


NOTE: ALL NOTES IDENTIFYING CARDINAL DIRECTIONS ARE BASED ON CITY OF DULUTH NORTH.

SECTION DESIGNATION



DETAIL DESIGNATION



SHEET INDEX

			No	DATE	REVISIONS	BY
PROJECT DATE:	FEBRUARY 16, 2024	DRAWN BY: CJP	1	3/18/2024	ADDENDUM NO.1	SRC
		DESIGNED BY: SRC	.	.	.	.
		CHECKED BY: Init	.	.	.	.

I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: March 18, 2024

ENGINEER: SCOTT R. CHILSON
LICENSE #: 44287

PLOT DATE: 3/18/2024 5:47 PM, G:\00\00616\00616197\CADD\Const

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LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

SHEET INDEX AND IDENTIFIERS

PROJECT NO. 00616197

SHEET 000-G002

NOTES & GUIDELINES

GENERAL INFORMATION

1. THE CONTRACTOR SHALL FURNISH, INSTALL, ADJUST, MAINTAIN, AND REMOVE ALL NECESSARY TRAFFIC CONTROL SIGNS AND DEVICES IN THE APPROPRIATE TEMPORARY TRAFFIC CONTROL ZONE LAYOUT.
2. ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE *MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MN MUTCD)*, INCLUDING THE LATEST EDITION MINNESOTA TEMPORARY TRAFFIC CONTROL MANUAL.
3. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE LAYOUTS SHOWN IN THIS PLAN AS DEEMED NECESSARY BY THE ENGINEER.
4. LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE ACTUAL LOCATIONS AND SPACING SHALL BE ADJUSTED AS APPROVED BY THE ENGINEER TO MEET FIELD CONDITIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE MN MUTCD.
6. IF THE CONTRACTOR DECIDES TO PERFORM THE CONSTRUCTION WORK IN A SEQUENCE OTHER THAN SHOWN IN THIS TRAFFIC CONTROL PLAN THE CONTRACTOR SHALL PROVIDE COMPLETE REVISED TRAFFIC CONTROL PLANS TO BE APPROVED BY THE ENGINEER.
7. BARRICADES SHALL BE FABRICATED WITH SIGN SHEETING MATERIAL AS LISTED ON THE MnDOT APPROVED PRODUCT LIST FOR BARRICADE SHEETING.
8. **THE CONTRACTOR SHALL RECEIVE COMPENSATION FOR ALL NECESSARY TRAFFIC CONTROL WORK, WHETHER SHOWN IN THIS PLAN OR OTHERWISE, ON THE BASIS OF A LUMP SUM PAYMENT FOR ITEM MILESTONE 2/ 2024 WORK.**
9. ALL TRAFFIC CONTROL DEVICES ON ROADS OPEN TO TRAFFIC THAT ARE NOT CONSISTENT WITH TRAFFIC OPERATION, SHALL BE COVERED, REMOVED, OR REVISED AS DIRECTED BY THE ENGINEER.
10. ALL DEVICES SHALL BE MOVED OR COVERED AS SOON AS THEY ARE NO LONGER REQUIRED OR APPROPRIATE.
11. CONTRACTOR TO VERIFY ALL EXISTING SIGN SIZES AND PREPARE CUSTOM SIGNS APPROPRIATELY.
12. WORK PERFORMED WITHOUT APPROPRIATE TRAFFIC CONTROL IN PLACE MAY BE CONSIDERED UNAUTHORIZED WORK AND MAY BE SUBJECT TO NONPAYMENT.
13. BEFORE LANE OR ROAD CLOSURES, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST ALONG WITH A PROPOSED TRAFFIC CONTROL PLAN 7 DAYS PRIOR TO BEGINNING WORK FOR APPROVAL BY THE ENGINEER. ADVANCED WARNING SIGNAGE SHALL BE POSTED WITH TWO WEEK NOTICE OF LANE OR ROAD CLOSURES.
14. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT RESIDENTS ALONG CONGDON BLVD., LAKEWOOD RD., AND S LAKEWOOD RD. AT ALL TIMES.
15. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS OF ACCESS, AS REQUIRED ABOVE, WITH THE ENGINEER, BUSINESSES, UTILITIES, RESIDENTS, AND EMERGENCY SERVICES. A MINIMUM OF 24 HOURS SHALL BE PROVIDED TO RESIDENTS
16. **CONTRACTOR SHALL MAINTAIN ACCESS TO PEDESTRIAN AND BICYCLIST THROUGH THE CONSTRUCTION SITE AT ALL TIMES.**
17. CONTRACTOR TO OBTAIN R.O.W. PERMIT FROM MNDOT FOR WORK DONE WITHIN MNDOT R.O.W.
18. CONTRACTOR SHALL OBTAIN OBSTRUCTION PERMIT FROM THE CITY OF DULUTH.
19. PRIOR TO CLOSING ROADS THE CONTRACTOR SHALL CONTACT THE FOLLOWING AUTHORITIES 48 HOURS IN ADVANCE OF CLOSURE:

19.1. 911	
19.2. DULUTH FIRE DEPARTMENT	730-4400
19.3. DULUTH POLICE DEPARTMENT	730-5400
19.4. ENGINEERING FRONT DESK	730-5200
19.5. DTA (ONLY WHEN IT AFFECTS A BUS ROUTES)	
ROD FOURNIER	623-4336
DISPATCHERS	623-4328 (SHORT NOTICE)
19.6. DULUTH SCHOOL DISTRICT/BUS (NOTIFY ALL THREE CONTACTS)	
STEVEN JOHNSON (TRANSPORTATION)	336-8700 EXT 4005
DALE HONKALA (TRANSPORTAION)	348-5879
VOYAGER BUS (RUDY, JOSH, OR DEB)	724-1707
19.7. ST. LOUIS COUNTY COMMUNICATIONS SUPERVISOR	
EMILY WARNYGORA	336-434

SIGNING

1. ALL TEMPORARY SIGNS ARE REQUIRED TO BE CRASHWORTHY PER THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE 2016 (MASH-2016). TEMPORARY SIGN STRUCTURES THAT ARE CRASHWORTHY UNDER THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP-350) MAY BE USED PROVIDED THE DEVICES WERE ACQUIRED BY THE CONTRACTOR PRIOR TO DECEMBER 31ST, 2019. **THE MINNESOTA TYPE "C" AND "D" BRACED LEG U-CHANNEL (KNEE BRACE) SIGN SUPPORT IS NOT ALLOWED.**
2. WHEN MULTIPLE GROUND MOUNTED SIGN STRUCTURES ARE PLACED ADJACENT TO EACH OTHER THERE SHOULD BE NO MORE THAN 2 POSTS WITHIN 84" OF EACH OTHER. WHEN THIS SPACING CANNOT BE MAINTAINED, THEN SIGN STRUCTURES SHALL BE OFFSET AND STAGGERED WITH A MINIMUM OF 4' BETWEEN SIGN STRUCTURES, BOTH LATERALLY AND LONGITUDINALLY.
3. WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO ROAD USERS, INCLUDING BIKES AND PEDESTRIANS, IS REDUCED ENOUGH TO CAUSE A HAZARD, DELINEATE THE SIGN/BARRICADE WITH APPROPRIATE DEVICES.
4. TEMPORARY SIGNS SHALL BE PLACED SUCH THAT OBSTACLES DO NOT BLOCK THEM FROM BEING VIEWED BY APPROACHING ROAD USERS. OBSTACLES MAY INCLUDE BUT ARE NOT LIMITED TO LIGHT POLES, TREES, SIGNS, AND BUILDINGS.
5. TEMPORARY SIGNS SHALL BE PLACED AND ORIENTED APPROXIMATELY AS SHOWN IN THE PLAN, AT RIGHT ANGLES TO DIRECTION OF, AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE, UNLESS OTHERWISE SPECIFIED.
6. LONGITUDINAL DROP-OFFS SHALL BE SIGNED AND DELINEATED AS SHOWN IN THE *MINNESOTA TEMPORARY TRAFFIC CONTROL FIELD MANUAL* PAGES (6K-aj) THROUGH (6K-al) UNLESS OTHERWISE SPECIFIED IN THESE PLANS.

FLAGGING

1. THE CONTRACTOR IS HEREBY NOTIFIED OF THE *MINNESOTA FLAGGING HANDBOOK LATEST EDITION*.
2. ALL FLAGGERS PROVIDED FOR LAYOUTS REQUIRING FLAGGING MUST MEET THE REQUIREMENTS IN THE *MINNESOTA FLAGGING HANDBOOK*.
3. FLAGGERS SHOULD BE ABLE TO PROVIDE THEIR FLAGGING QUALIFICATION CARD UPON REQUEST.

M SERIES

SIGN	SIGN NUMBER	COLOR	SIZE (W X H) (INCHES)	ASSEMBLY (W X H) (INCHES)	NUMBER OF POSTS
DETOUR ← M4-9L 30"X24" / DETOUR → M4-9R 30"X24"	M4-9L,R	BLACK ON ORANGE	30" x 24" (B) 42" x 36" (C)	30" x 24" (B) 42" x 36" (C)	1
DETOUR → / ← DETOUR	M4-10L,R	ORANGE ON BLACK	48" x 18"	-	(A)

W SERIES

SIGN	SIGN NUMBER	COLOR	SIZE (W X H) (INCHES)	ASSEMBLY (W X H) (INCHES)	NUMBER OF POSTS
ROAD WORK AHEAD	W20-1	BLACK ON ORANGE	48" x 48"	48" x 48"	1
DETOUR AHEAD	W20-2	BLACK ON ORANGE	48" x 48"	48" x 48"	1
ROAD CLOSED AHEAD	W20-3	BLACK ON ORANGE	48" x 48"	48" x 48"	1

R SERIES

SIGN	SIGN NUMBER	COLOR	SIZE (W X H) (INCHES)	ASSEMBLY (W X H) (INCHES)	NUMBER OF POSTS
ROAD CLOSED R11-2 48"X30"	R11-2	BLACK ON WHITE	48" x 30"	-	(A)
ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30"	R11-4	BLACK ON WHITE	60" x 30"	-	(A)

G SERIES

SIGN	SIGN NUMBER	COLOR	SIZE (W X H) (INCHES)	ASSEMBLY (W X H) (INCHES)	NUMBER OF POSTS
ROAD CLOSED BEGINNING MONTH DY	CUSTOM (D)	BLACK ON ORANGE	72" x 60"	72" x 60"	(A)
CONGDON BLVD	CUSTOM	BLACK ON ORANGE	VARIES x 12" (B) VARIES x 18" (C)	30" x 24" (B) 42" x 36" (C)	1
TRAFFIC ONLY	CUSTOM	BLACK ON ORANGE	24" x 24"	24" x 24"	(A)
CAUTION WALK YOUR BIKE	CUSTOM	BLACK ON ORANGE	18" x 24"	18" x 24"	1

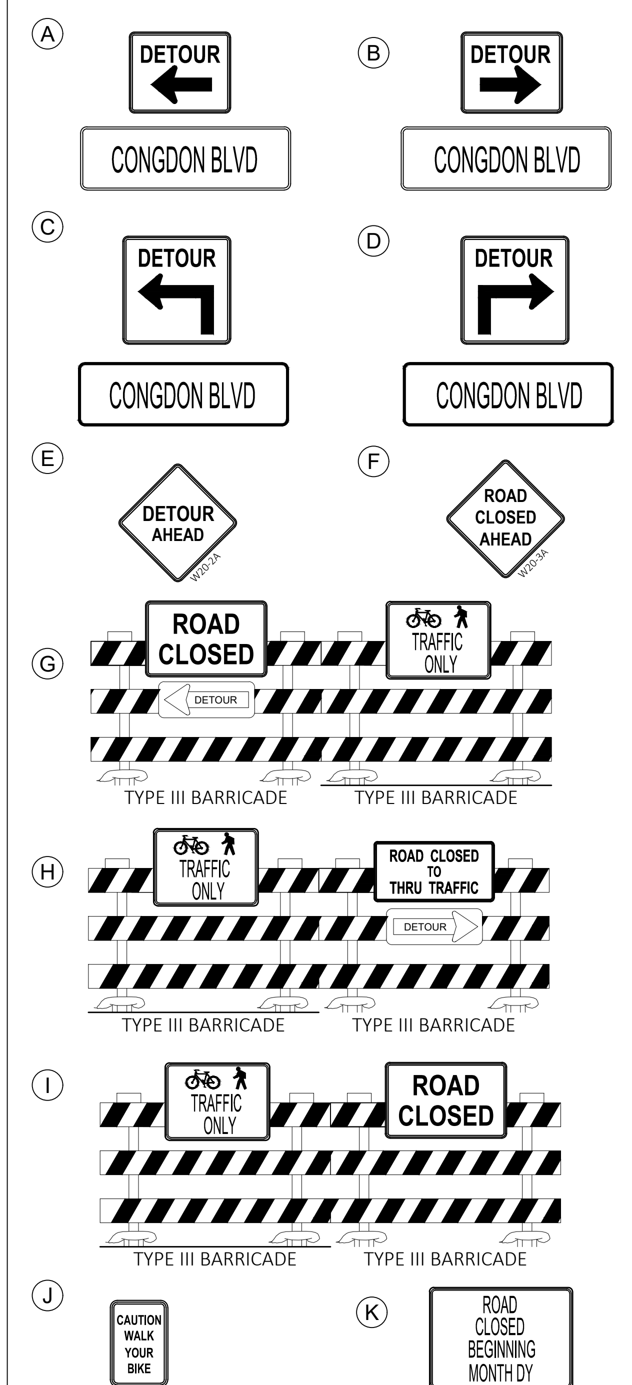
SPECIFIC NOTES

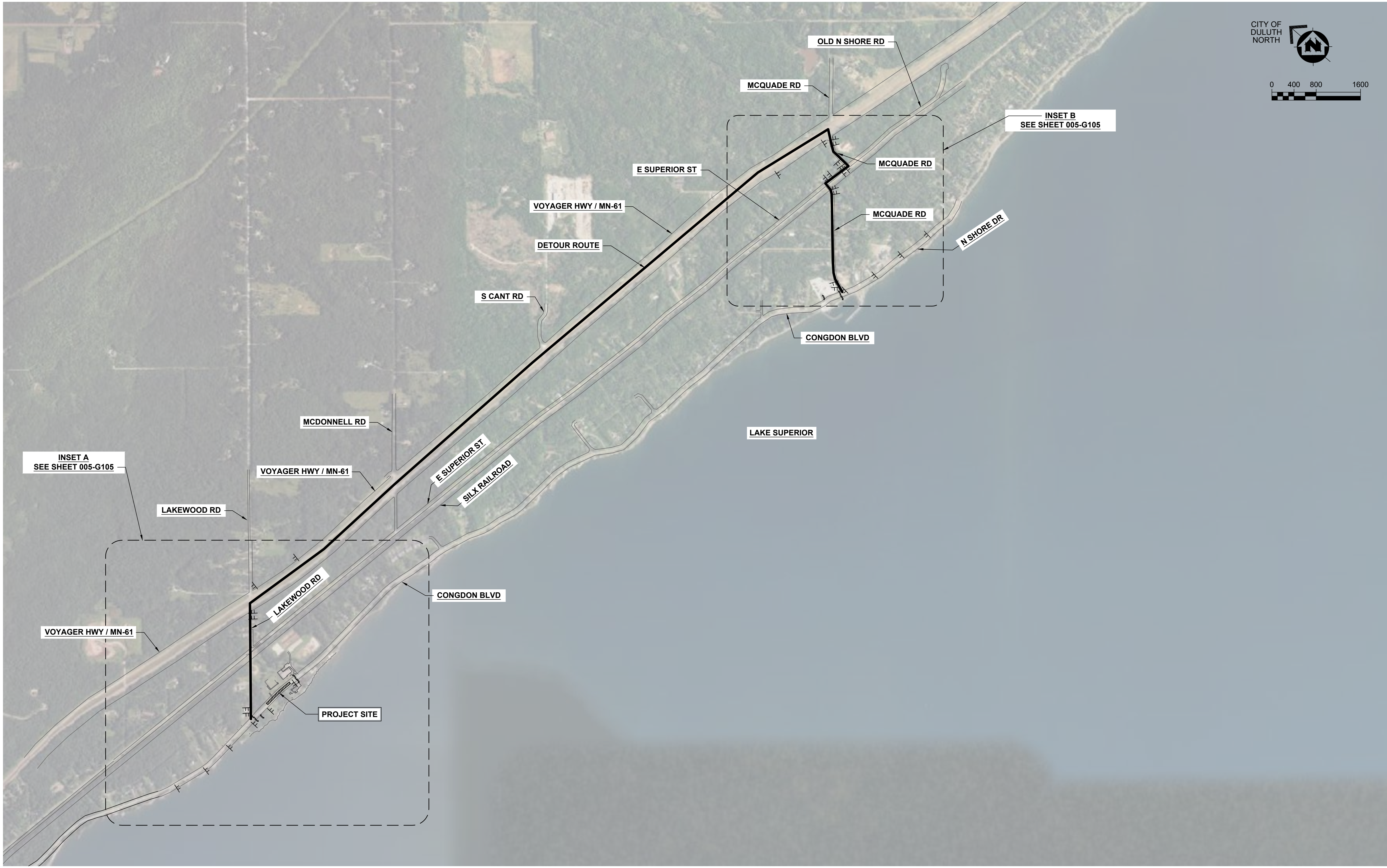
(A) MOUNT ON TYPE III BARRICADE
(B) SIZE OF SIGN PLACED ON ALL CONVENTIONAL ROADS EXCEPT MN-61/VOYAGER HWY
(C) SIZE OF SIGN PLACED ON MN-61/VOYAGER HWY
(D) MONTH DY TO BE DETERMINED BY CONTRACTOR

TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL DESCRIPTION

(hatched box)	AREA CLOSED TO TRAFFIC/WORK AREA
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	SIGN ON TEMPORARY SUPPORT
(solid line)	DETOUR ROUTE
(red dashed line)	PEDESTRIAN CHANNELIZERS





		No	DATE	REVISIONS	BY
PROJECT DATE: FEBRUARY 16, 2024	DRAWN BY: CJP	.	.	.	.
	DESIGNED BY: SRC	.	.	.	.
	CHECKED BY: Init	.	.	.	.

I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: March 14, 2024 ENGINEER: JON LOYE, P.E. LICENSE #: 52222

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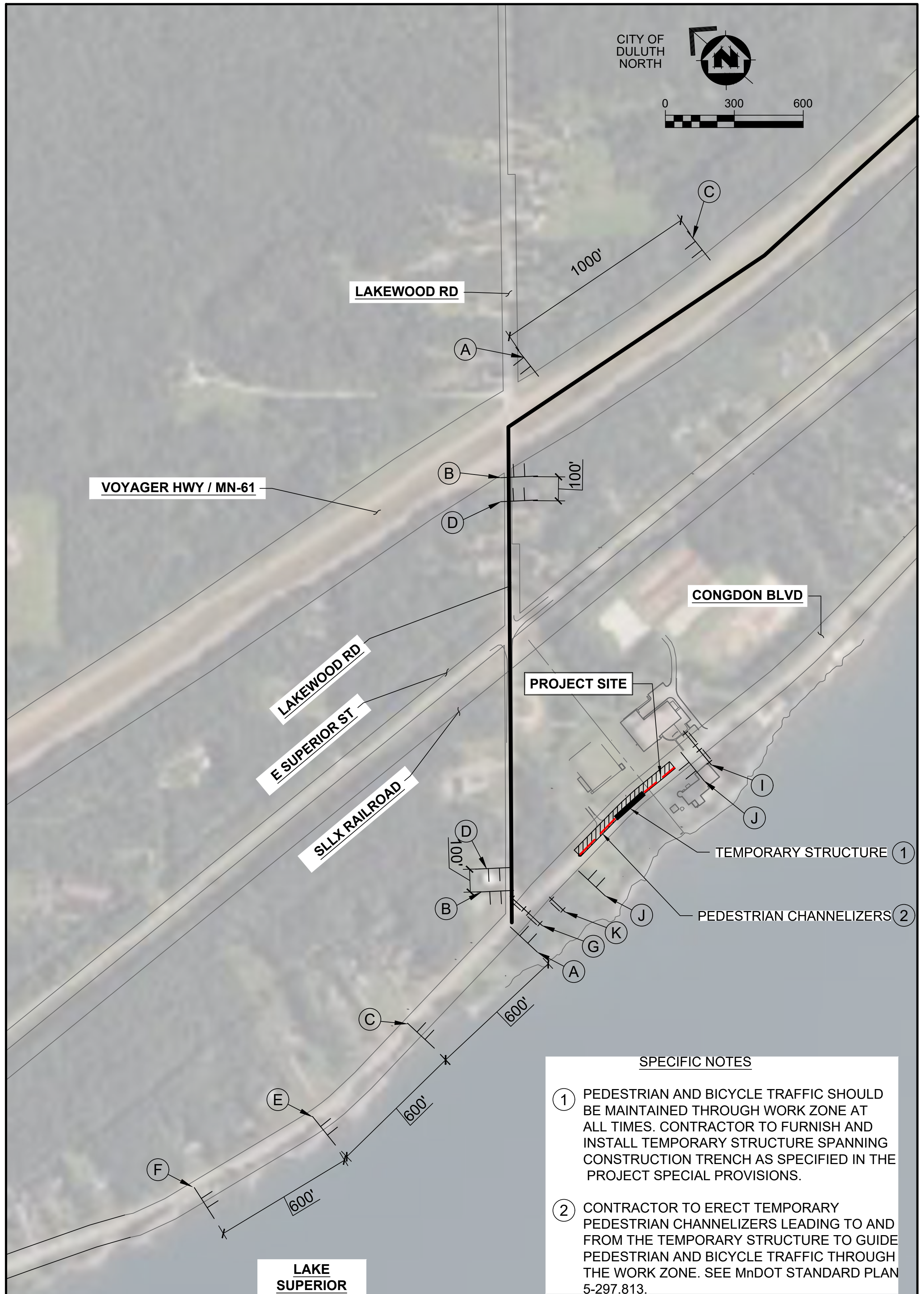
LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

TRAFFIC CONTROL PLAN

PROJECT NO. 00616197

SHEET 005-G104

PLOT DATE: 3/14/2024 4:56 PM



INSET A

SPECIFIC NOTES

1. PEDESTRIAN AND BICYCLE TRAFFIC SHOULD BE MAINTAINED THROUGH WORK ZONE AT ALL TIMES. CONTRACTOR TO FURNISH AND INSTALL TEMPORARY STRUCTURE SPANNING CONSTRUCTION TRENCH AS SPECIFIED IN THE PROJECT SPECIAL PROVISIONS.
2. CONTRACTOR TO ERECT TEMPORARY PEDESTRIAN CHANNELIZERS LEADING TO AND FROM THE TEMPORARY STRUCTURE TO GUIDE PEDESTRIAN AND BICYCLE TRAFFIC THROUGH THE WORK ZONE. SEE MnDOT STANDARD PLAN 5-297.813.

INSET B

PROJECT DATE:	FEBRUARY 16, 2024	DRAWN BY: CJP	No	DATE	REVISIONS	BY
		DESIGNED BY: SRC	.	.	.	.
		CHECKED BY: Init	.	.	.	.

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PLOT DATE: 3/14/2024 4:56 PM

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LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

TRAFFIC CONTROL PLAN

PROJECT NO. 00616197
SHEET 005-G105

NOTES;

TPAR SHOULD BE KEPT FREE OF TRASH, SEDIMENT, AND DEBRIS.

RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4" INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27" ABOVE THE WALKWAY SURFACE.

USE CRASHWORTHY TEMPORARY BARRIERS WHEN USED AS A PEDESTRIAN CHANNELIZERS.

PLACE SIDEWALK BARRICADES ACROSS THE ENTIRE WIDTH OF THE WALKWAYSURFACE, WHEN USED.

USE INTERLOCKING DEVICES TO CHANNELIZE PEDESTRIAN FLOW TO PREVENT GAPS THAT COULD ALLOW PEDESTRIANS TO STRAY FROM THE CHANNELIZED PATH.

① PROVIDE DETECTABLE EDGE TO ANY TRIPPING HAZARD IN THE WALKWAY. LOCATE BALLAST BEHIND THE DETECTABLE EDGE OR INTEGRAL TO THE DEVICE. ANY SUPPORT ON THE FRONT OF THE DEVICE SHOULD NOT EXTEND INTO THE 48" MINIMUM WALKWAY CLEAR SPACE. ANY SUPPORT THAT EXTENDS INTO THE WALKWAY SHALL NOT EXCEED ½" HEIGHT ABOVE THE WALKWAY SURFACE; IF GREATER THAN ¼", BEVEL AS SHOWN IN THE TRIP HAZARD DETAIL.

② PROVIDE CONTINUOUS DETECTABLE EDGES EXTENDING AT LEAST 6" ABOVE THE WALKWAY SURFACE. MARK DETECTABLE EDGES WITH A COLOR THAT CONTRASTS WITH THE WALKWAY SURFACE. PLACE THE DETECTABLE EDGE AROUND ANY PORTABLE SIGN STAND IN THE WALKWAY AREA WHERE THE SIGN POSES A HAZARD TO A VISUALLY-IMPAIRED PEDESTRIAN.

③ DEVICES AND DETECTABLE EDGES SHALL NOT BLOCK WATER DRAINAGE FROM THE WALKWAY. A GAP HEIGHT OR OPENING FROM THE WALKWAY SURFACE UP TO A MAXIMUM OF 2" IS ALLOWED FOR DRAINAGE PURPOSES.

④ USE HAND AND GUIDE RAILS WHEN REQUIRED. INSTALL TOP RAIL OR TOP SURFACE IN A VERTICAL PLANE PERPENDICULAR TO THE WALKWAY, ABOVE THE DETECTABLE EDGE. PROVIDE CONTINUOUS RAIL AT A HEIGHT OF 34" TO 38" ABOVE THE WALKWAY SURFACE. USE RAIL SUPPORTS THAT MINIMIZE CONTACT WITH PEDESTRIAN'S HANDS AND FINGERS. SEE "PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG) 2005" FOR ADDITIONAL GUIDANCE ON USE OF HAND AND GUIDE RAILS.

⑤ USE DEVICES FREE OF SHARP OR ROUGH EDGES, AND USE ROUNDED FASTENERS (BOLTS) TO PREVENT HARM TO A PEDESTRIAN'S HANDS, ARMS, AND CLOTHING.

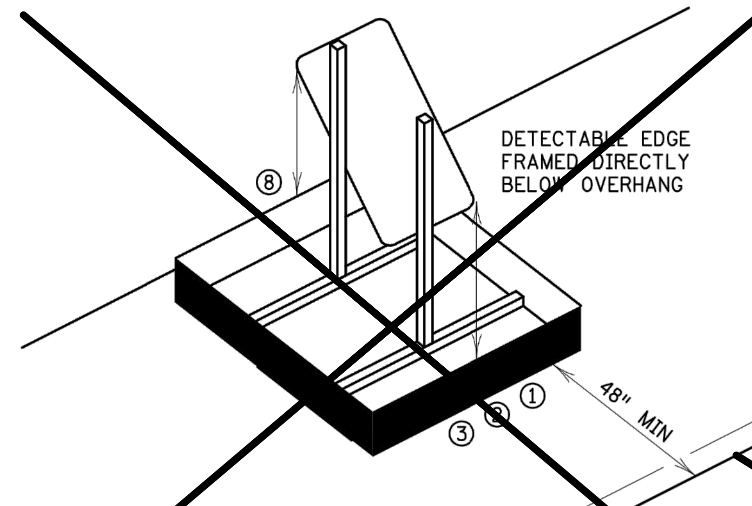
~~⑥ REGARDLESS OF WEATHER CONDITIONS PROVIDE FIRM, STABLE, FREE DRAINING, AND NON SLIP TEMPORARY WALKWAY SURFACES. TEMPORARY WALKWAY SURFACES SHALL ALLOW NORMAL USAGE OF WHEELCHAIRS, WALKERS, STROLLERS, OR OTHER MOBILITY DEVICES. CONCRETE, BITUMINOUS, STEEL, RUBBER, WOOD (¾" OR THICKER), AND PLASTIC ARE ACCEPTABLE SURFACE MATERIALS FOR A TEMPORARY WALKWAY SURFACE. GRAVEL, MILLINGS, AND OTHER UNEVEN SURFACES ARE NOT ACCEPTABLE SURFACE MATERIALS.~~

⑦ PROVIDE 32" HIGH OR GREATER LONGITUDINAL CHANNELIZING DEVICES FOR PEDESTRIANS.

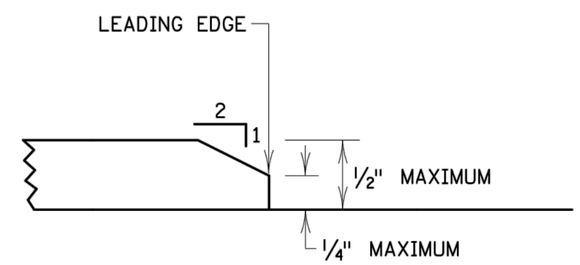
~~⑧ AN EDGE OF THE FRAMING MAY BE REMOVED IF IT IS NOT NEEDED FOR PEDESTRIAN GUIDANCE. STABILITY OF THE DETECTABLE EDGE SHOULD BE MAINTAINED.~~

~~⑨ TYPICAL. SEE SIGNING PLAN FOR DETAILS.~~

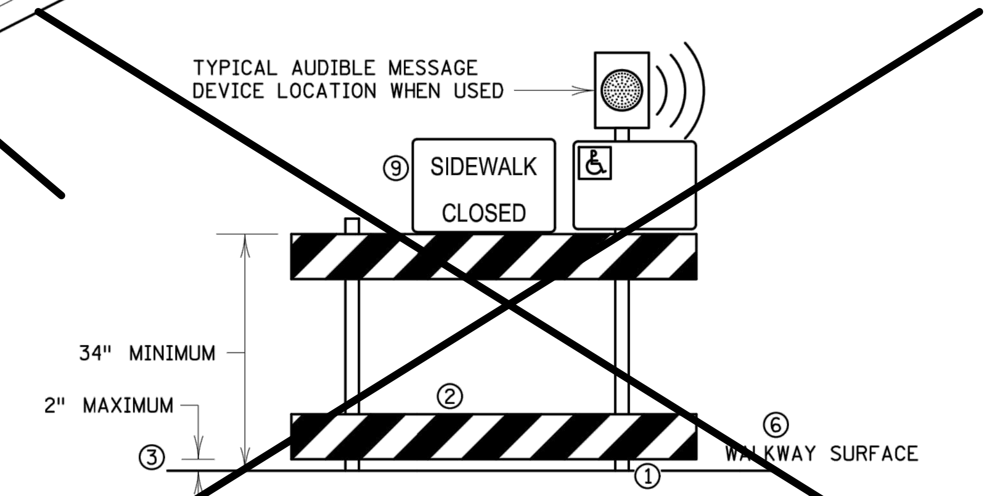
WORK UNDER THIS PROJECT INCLUDES MAINTAINING LOCAL, EMERGENCY, BICYCLE, AND PEDESTRIAN ACCESS ALONG CONGDON BLVD DURING CONSTRUCTION. THESE TYPICAL DETAILS PROVIDE GUIDANCE FOR CONTRACTOR DETERMINED MEANS AND METHODS. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION MEANS AND METHODS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER AND ENGINEER FOR THE REQUIRED PEDESTRIAN CHANNELIZER AND THE APPROACH RAMPS TO THE REQUIRED TEMPORARY STRUCTURE CROSSING THE UTILITY TRENCH ACROSS CONGDON BLVD.



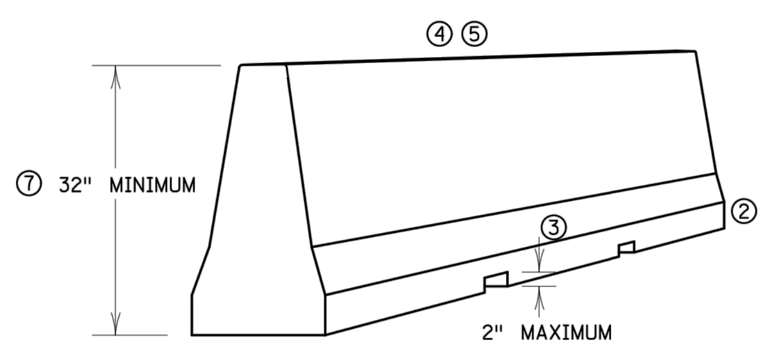
DETECTABLE EDGE FOR SIGN ON PORTABLE STAND



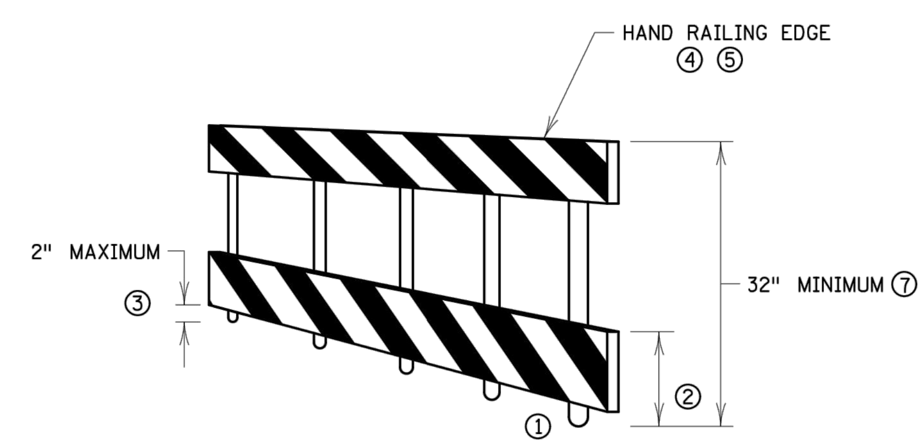
TRIP HAZARD



SIDEWALK BARRICADE



PEDESTRIAN CHANNELIZER DEVICE USING A PORTABLE CONCRETE BARRIER



PEDESTRIAN CHANNELIZER

MODIFIED

LEAD EXPERT OFFICE	BRIAN SORENSON STATE TRAFFIC ENGINEER OFFICE OF TRAFFIC ENGINEERING	TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) DEVICES CHANNELIZERS, SIDEWALK BARRICADES, AND PORTABLE STANDS	APPROVED: 03-18-2021 REVISED:	STANDARD PLAN 5-297.813	1 OF 2

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN

STATE PROJ. NO.	SHEET NO.
TRUNK HWY.	TOTAL SHEETS

PLOT DATE: 3/14/2024 4:56 PM, G:\00\00616\00616197\CADD\Const...

PROJECT DATE:	FEBRUARY 16, 2024	DRAWN BY:	CJP	No	DATE	REVISIONS	BY
		DESIGNED BY:	SRC	.	.	.	.
		CHECKED BY:	Init	.	.	.	.

I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: March 14, 2024 ENGINEER: JON LOYE, P.E. LICENSE #: 52222

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LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

TRAFFIC CONTROL PLAN DETAILS

PROJECT NO. 00616197
SHEET 005-G106

WORK UNDER THIS PROJECT INCLUDES MAINTAINING LOCAL, EMERGENCY, BICYCLE, AND PEDESTRIAN ACCESS ALONG CONGDON BLVD DURING CONSTRUCTION. THESE TYPICAL DETAILS PROVIDE GUIDANCE FOR CONTRACTOR DETERMINED MEANS AND METHODS. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION MEANS AND METHODS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER AND ENGINEER FOR THE REQUIRED PEDESTRIAN CHANNELIZER AND THE APPROACH RAMPS TO THE REQUIRED TEMPORARY STRUCTURE CROSSING THE UTILITY TRENCH ACROSS CONGDON BLVD.

NOTES:

CONSTRUCT SLOPES AS INDICATED OR FLATTER, BUT NOT STEEPER.

TPAR SHOULD BE KEPT FREE OF TRASH, SEDIMENT, AND DEBRIS.

① CONSTRUCT CURB RAMPS AT LEAST 48" WIDE WITH A FIRM, STABLE, AND SLIP-RESISTANT SURFACE.

② PLACE PROTECTIVE EDGING WITH A 2" MINIMUM HEIGHT WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1V:3H. CONSIDER PROTECTIVE EDGING WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ PLACE DETECTABLE EDGING WITH 6" MINIMUM HEIGHT AND CONTRASTING COLOR ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION.

④ CONSTRUCT CURB RAMPS AND LANDINGS WITH A 2% OR FLATTER CROSS SLOPE.

⑤ PROVIDE A CLEAR SPACE OF AT LEAST 48" X 48" ABOVE AND BELOW THE CURB RAMP.

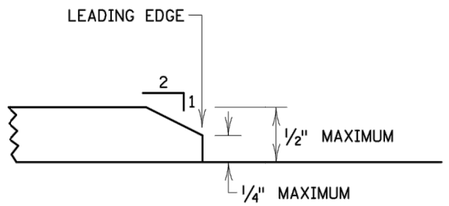
⑥ MARK THE CURB RAMP WALKWAY EDGE WITH A 2" TO 4" WIDE MARKING OF CONTRASTING COLOR. THE MARKING IS OPTIONAL WHERE COLOR-CONTRASTING EDGING IS USED.

⑦ DO NOT IMPEDE WATER FLOW IN THE GUTTER SYSTEM.

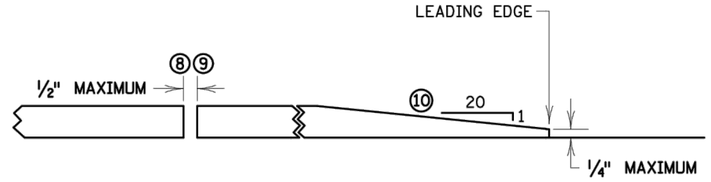
⑧ NO LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL EXCEED ½" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". USE VERTICAL LATERAL EDGES UP TO ¼" HIGH, AND BEVELED AT 1V:2H FOR LATERAL EDGES BETWEEN ¼" AND ½" HEIGHT.

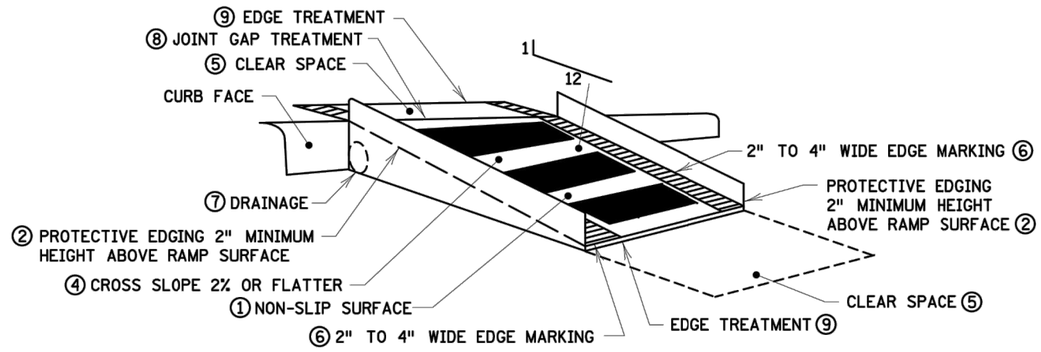
⑩ BEVEL THE EDGE OF TEMPORARY WALKWAY SURFACES ½" OR THINNER AT 1V:2H. FOR THICKER WALKWAY SURFACE BEVEL EDGE 1V:20H OR FLATTER.



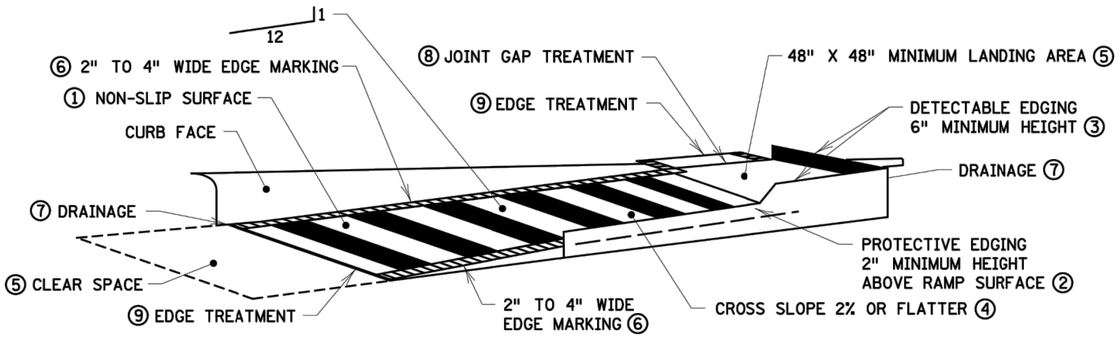
EDGE TREATMENT ⑨



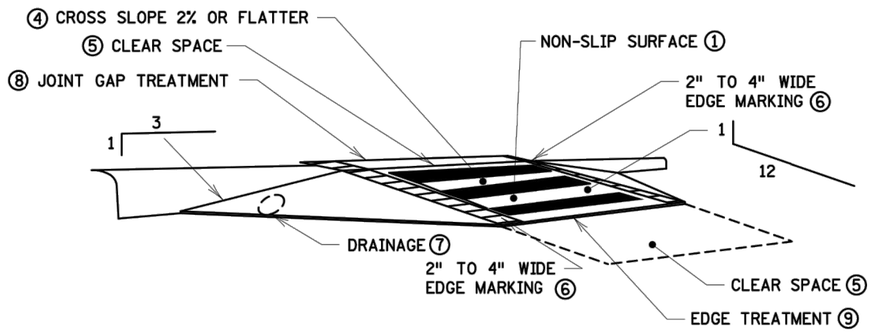
TEMPORARY WALKWAY SURFACE



TEMPORARY CURB RAMP PERPENDICULAR TO CURB
SHOWN WITH PROTECTIVE EDGE



TEMPORARY CURB RAMP
PARALLEL TO CURB



TEMPORARY CURB RAMP PERPENDICULAR TO CURB
SHOWN WITH SIDE APRON

MODIFIED

LEAD EXPERT OFFICE	BRIAN SORENSON STATE TRAFFIC ENGINEER OFFICE OF TRAFFIC ENGINEERING		TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) DEVICES TEMPORARY CURB RAMPS AND WALKWAY SURFACES	APPROVED: 03-18-2021 REVISED:		STANDARD PLAN 5-297.813	2 OF 2

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN

STATE PROJ. NO.	SHEET NO.
TRUNK HWY.	TOTAL SHEETS

PROJECT DATE:	FEBRUARY 16, 2024	DRAWN BY:	CJP
		DESIGNED BY:	SRC
		CHECKED BY:	Init

No	DATE	REVISIONS	BY
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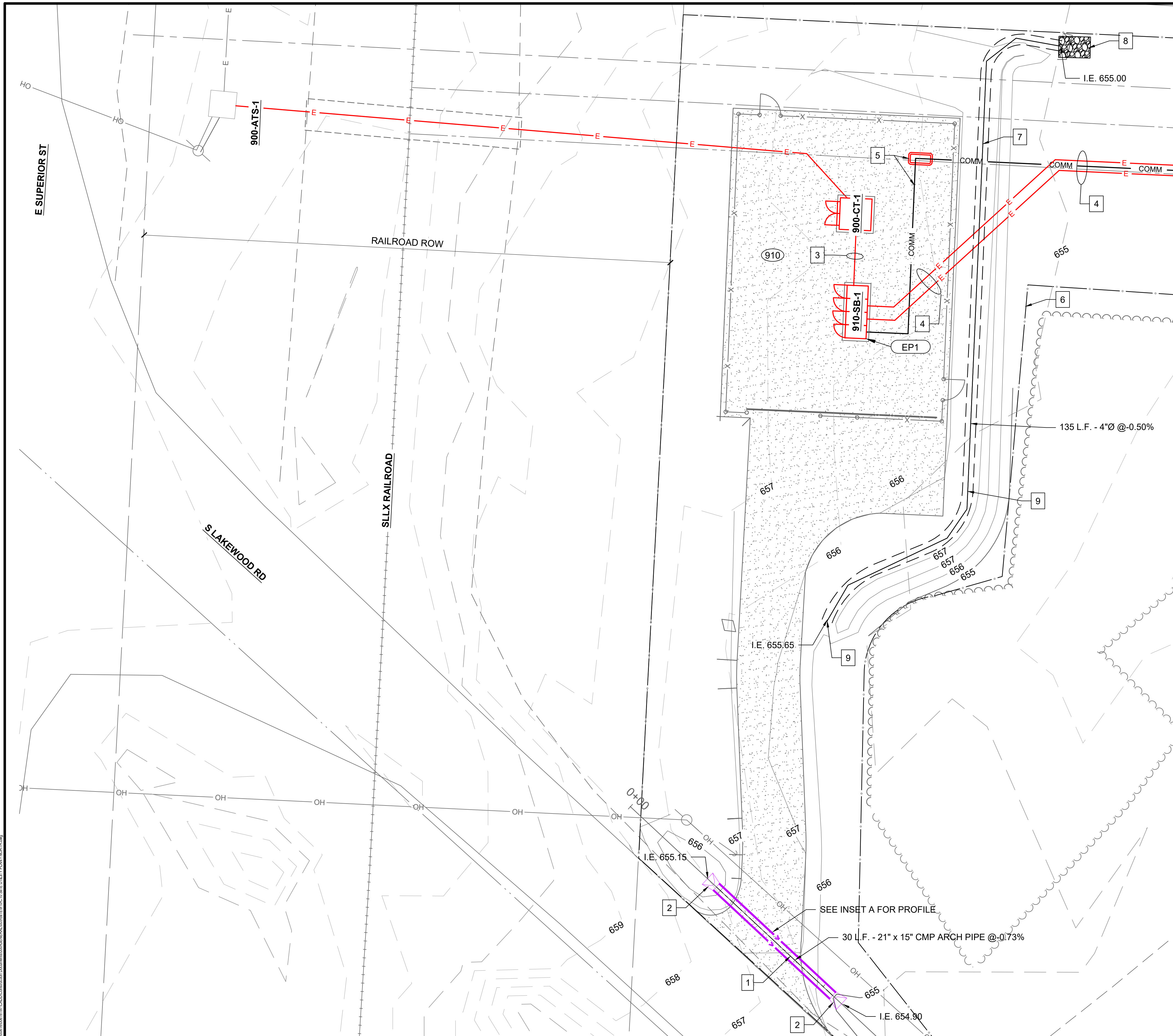
LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

TRAFFIC CONTROL PLAN DETAILS

PROJECT NO. 00616197
SHEET 005-G107



CITY OF DULUTH NORTH

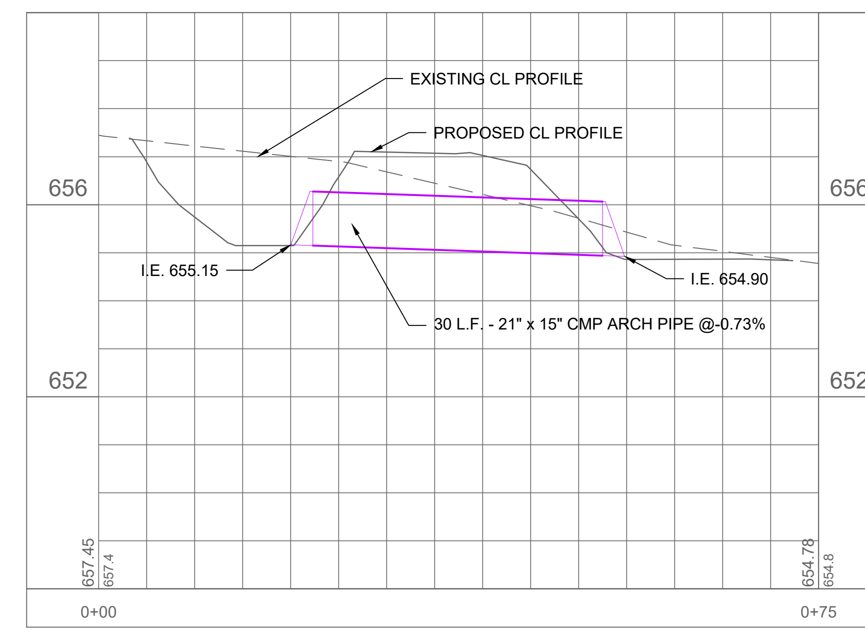
0 5 10 20

GENERAL NOTES

A. REFER TO ELECTRICAL SITE PLAN ON SHEET 910-CE101 FOR ADDITIONAL UTILITIES, SITE LIGHTING, AND HOMERUNS.

KEY NOTES [X]

1. PROVIDE 21" x 15" CMP ARCH PIPE CULVERT (18" DIA EQUIVALENT)
2. PROVIDE METAL FLARED END SECTION
3. BURIED ELECTRICAL CONDUCTORS & CONTROLS - REFER TO ELECTRICAL SITE PLAN
4. BURIED ELECTRICAL CONDUCTORS AND CONTROLS - REFER TO POWER PLAN AND PROFILE SHEETS
5. BURIED FIBER AND SIGNAL COMMUNICATIONS WIRING AND PULL BOX - REFER TO ELECTRICAL SITE PLAN.
6. PROPOSED CONSTRUCTION LIMITS
7. FILTRATION SWALE SEE DETAILS AND NOTES ON SHEET 2/999-C506
8. CLASS I RIPRAP
9. INSTALL CLEANOUTS ONE PER 100' OR AS DIRECTED BY THE ENGINEER PER DETAIL 3/999-C506.



INSET A

SITE STRUCTURES/BUILDINGS:

100	PUMP HOUSE
105	INTAKE BUILDING
190	SURGE VALVE BUILDING
200	WATER TREATMENT FACILITY
300	FLOCCULATION FACILITY
400	WASH WATER RECOVERY FACILITY
490	DECANT STORAGE FACILITY
900	POWER & CONTROL FACILITY
910	ELECTRICAL UTILITY SERVICE
940	POWER DISTRIBUTION FACILITY
960	STANDBY POWER GENERATION FACILITY

		No	DATE	REVISIONS	BY
PROJECT DATE: FEBRUARY 16, 2024	DRAWN BY: CJP	.	.	.	.
	DESIGNED BY: SRC	.	.	.	.
	CHECKED BY: Init	.	.	.	.

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LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

SITE UTILITY PLAN

PROJECT NO. 00616197
SHEET 910-C102

PLOT DATE: 3/15/2024 2:07 PM

CITY OF DULUTH NORTH

0 5 10 20

KEY NOTES [X]

1. RAISED GRAVEL EDGE, TYP.
2. FILTRATION SWALE SEE DETAILS AND NOTES ON SHEET 2/999-C506
3. CLASS I RIPRAP
4. FILTRATION SWALE BOTTOM

SITE GRADING - LEGEND

FLOW ARROW: DIRECTION OF OVERLAND FLOW

PAVEMENT SLOPE ARROW: DIRECTION PREVAILING SLOPE

GRADE ARROW: DIRECTION AND MAGNITUDE OF GRADE

SITE STRUCTURES/BUILDINGS:

100	PUMP HOUSE
105	INTAKE BUILDING
190	SURGE VALVE BUILDING
200	WATER TREATMENT FACILITY
300	FLOCCULATION FACILITY
400	WASH WATER RECOVERY FACILITY
490	DECANT STORAGE FACILITY
900	POWER & CONTROL FACILITY
910	ELECTRICAL UTILITY SERVICE
940	POWER DISTRIBUTION FACILITY
960	STANDBY POWER GENERATION FACILITY

PLOT DATE: 3/15/2024 2:09 PM

				No	DATE	REVISIONS	BY
PROJECT DATE:	FEBRUARY 16, 2024	DRAWN BY:	CJP	.	.	.	.
		DESIGNED BY:	SRC	.	.	.	.
		CHECKED BY:	Init	.	.	.	.

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LAKEWOOD WTP POWER SYSTEM
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DULUTH, MN

SITE GRADING PLAN

PROJECT NO. 00616197

SHEET 910-C103

CITY OF DULUTH NORTH

0 5 10 20

GENERAL NOTES

A. ALL DISTURBED AREAS, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATIONS, SHALL BE RESTORED WITH SEED PER MNDOT 3878.

B. ALL SLOPES STEEPER THAN 4:1 (H:V) SHALL BE PROTECTED FROM EROSION WITH EROSION CONTROL BLANKETS PER MNDOT 2575. ALL ROLLED EROSION PRODUCTS SHALL BE CATEGORY 3N.

C. CONTRACTOR MAY PROPOSE HYDRAULIC EROSION CONTROL PRODUCT AS AN ALTERNATE AT NO ADDITIONAL COST TO THE OWNER.

D. CONTRACTOR SHALL INSPECT THE WORK AREA AND ADJACENT STREETS FOR SEDIMENT TRACKING. SEDIMENT TRACKED ONTO PAVED SURFACES SHALL BE SWEPT WITHIN 24 HOURS.

E. CONTRACTOR SHALL CONSTRUCT AND FULLY STABILIZE THE CONTRIBUTING DRAINAGE AREA UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS ARE INSTALLED TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE FILTRATION AREA PRIOR TO INSTALLING FILTER MEDIA IN FILTRATION SYSTEM.

LEGEND - ONE

FLOW ARROW: INDICATES DIRECTION OF EXISTING OVERLAND FLOW

FLOW ARROW: INDICATES DIRECTION OF PROPOSED OVERLAND FLOW

				No	DATE	REVISIONS	BY
PROJECT DATE:	FEBRUARY 16, 2024	DRAWN BY:	CJP	.	.	.	.
		DESIGNED BY:	SRC	.	.	.	.
		CHECKED BY:	Init	.	.	.	.

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LAKEWOOD WTP POWER SYSTEM
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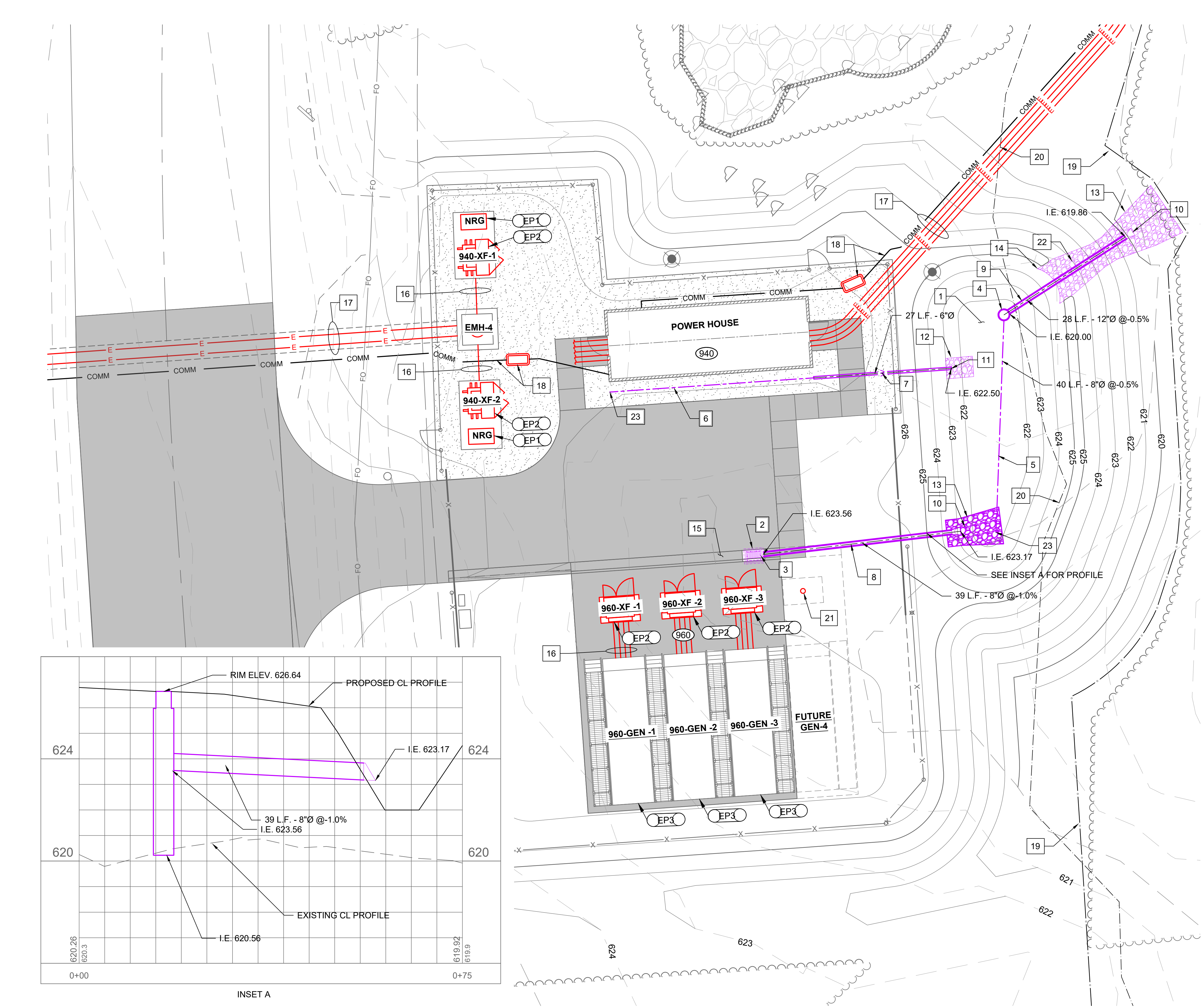
EROSION CONTROL PLAN

PROJECT NO. 00616197
SHEET 910-C104

PLOT DATE: 3/15/2024 2:11 PM, G:\00\00616\00616197\CADD\Construction Documents\000-GENERAL\005-SITE\910-C104 EROSION CONTROL PLAN.dwg



CITY OF DULUTH NORTH

0 5 10 20

GENERAL NOTES

A. REFER TO ELECTRICAL SITE PLAN ON SHEET 940-CE101 FOR ADDITIONAL UTILITIES, SITE LIGHTING, AND HOMERUNS.

KEY NOTES X

1. PROVIDE FILTRATION BASIN - REFER TO FILTRATION BASIN DETAILS AND NOTES ON SHEET 999-C506
2. PROVIDE CATCH BASIN AND CURB INLET PER DETAIL 1/999-C504
3. PROVIDE SNOUT OIL-WATER GREASE SEPARATOR HOOD PER DETAILS 1 & 2 ON SHEET 999-C504
4. PROVIDE FILTRATION BASIN OUTLET STRUCTURE - SEE DETAIL 4/999-C504
5. PROVIDE 8" PERFORATED PIPE. PERFORATIONS SHALL BE ORIENTED DOWNWARD.
6. PERFORATED PIPE AT BUILDING FOUNDATION - SEE DETAIL 5/999-C504
7. PROVIDE 6"Ø DR35 PVC. PROVIDE COUPLING CONNECTION TO PERFORATED PIPE AT BUILDING FOUNDATION.
8. PROVIDE 8"Ø DR35 PVC
9. PROVIDE 12"Ø DR35 PVC
10. PROVIDE METAL FLARED END SECTION
11. PROVIDE CRITTER GUARD AT PIPE OUTLET
12. PROVIDE CLASS II RIP RAP AT OUTLET
13. PROVIDE CLASS II RIP RAP AT OUTLET PER DETAIL 2/999-C504
14. PROVIDE OVERFLOW WEIR WITH CLASS II RIP RAP PER DETAIL 3/999-C504
15. PROVIDE GUTTER STAMP PER DETAIL 6/999-C504
16. BURIED SITE ELECTRICAL CONDUCTORS & CONTROLS - REFER TO ELECTRICAL SITE PLAN
17. BURIED ELECTRICAL CONDUCTORS AND CONTROLS - REFER TO POWER PLAN AND PROFILE SHEETS
18. BURIED FIBER OPTIC AND PULL BOX - REFER TO ELECTRICAL SITE PLAN.
19. PROPOSED CONSTRUCTION LIMITS
20. SHORELAND BUFFER ZONE LIMIT
21. ROUTE CONDUIT FOR FUTURE TRANSFORMER AND GENERATOR PAIR AND STUB CONDUIT ABOVE GRADE FOR FUTURE CONNECTION. PROVIDE MARKER POST TO LOCATE CONDUIT STUB.
22. RIPRAP SHALL BE PLACED STARTING AT THE LOWEST ELEVATIONS AND WORKING UP THE SLOPE. STONES SHALL NOT BE DROPPED ON THE FABRIC FROM A HEIGHT OF GREATER THAN ONE (1) FOOT. THE ENGINEER MAY ORDER THE REMOVAL OF RIPRAP TO INSPECT FOR FABRIC OR PIPE DAMAGE. IN NO INSTANCE SHALL THE RIPRAP BE PUSHED DOWN THE SLOPE WITH A DOZER OR OTHER EQUIPMENT TRAVELING ON TOP OF THE GEOTEXTILE OR RIPRAP. THE RIPRAP SHALL BE PLACED USING A BACKHOE WITH A WIDE BUCKET OR OTHER SIMILAR EQUIPMENT.
23. INSTALL CLEANOUT PER DETAIL 3/999-C506

SITE STRUCTURES/BUILDINGS:

100	PUMP HOUSE
105	INTAKE BUILDING
190	SURGE VALVE BUILDING
200	WATER TREATMENT FACILITY
300	FLOCCULATION FACILITY
400	WASH WATER RECOVERY FACILITY
490	DECANT STORAGE FACILITY
900	POWER & CONTROL FACILITY
910	ELECTRICAL UTILITY SERVICE
940	POWER DISTRIBUTION FACILITY
960	STANDBY POWER GENERATION FACILITY

PROJECT DATE: FEBRUARY 16, 2024 | DRAWN BY: CJP | DESIGNED BY: SRC | CHECKED BY: Init

No	DATE	REVISIONS	BY

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DATE: March 15, 2024 ENGINEER: SCOTT R. CHILSON LICENSE #: 44287

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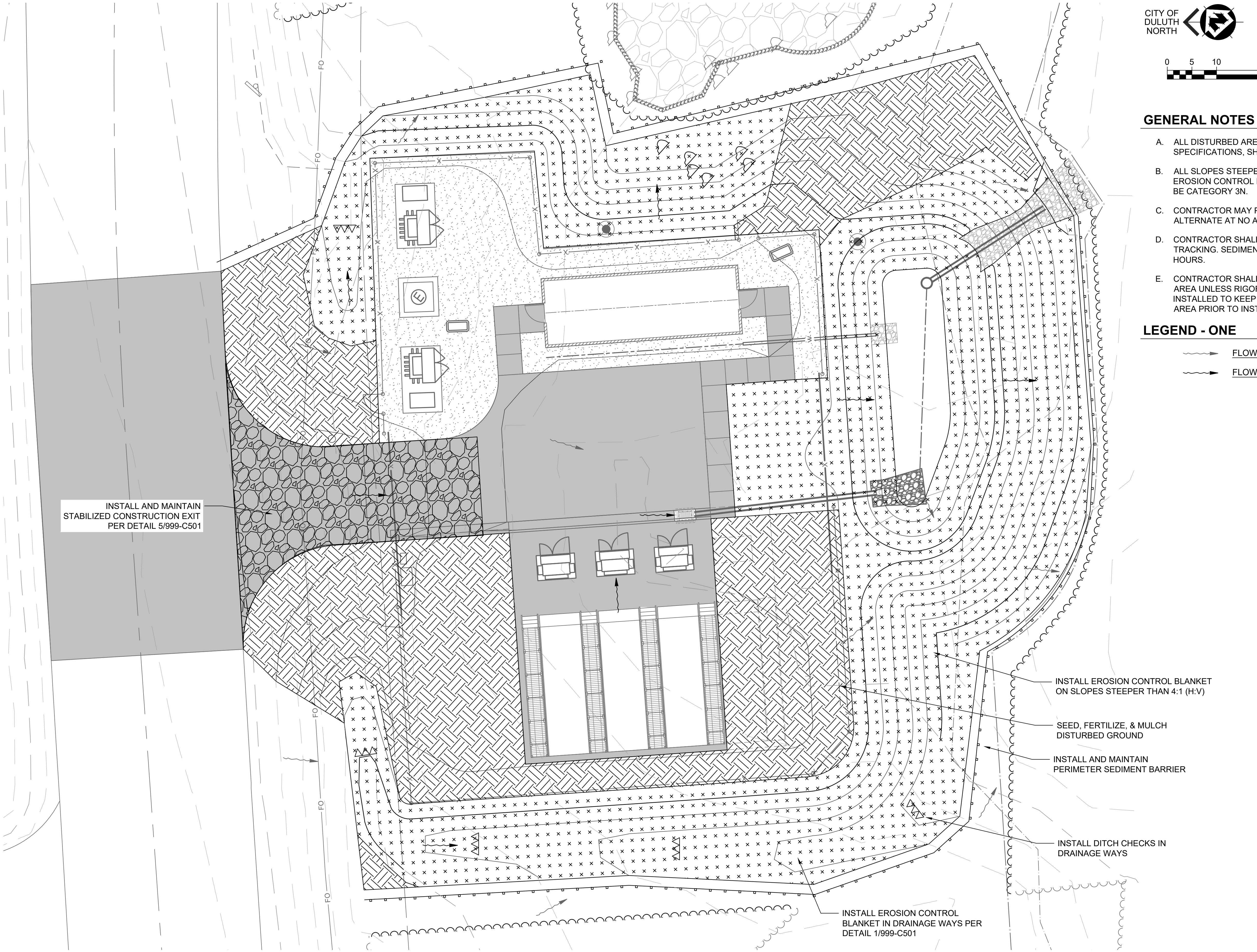
LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

SITE UTILITY PLAN

PROJECT NO. 00616197

SHEET 940-C102



GENERAL NOTES

A. ALL DISTURBED AREAS, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATIONS, SHALL BE RESTORED WITH SEED PER MNDOT 3878.

B. ALL SLOPES STEEPER THAN 4:1 (H:V) SHALL BE PROTECTED FROM EROSION WITH EROSION CONTROL BLANKETS PER MNDOT 2575. ALL ROLLED EROSION PRODUCTS SHALL BE CATEGORY 3N.

C. CONTRACTOR MAY PROPOSE HYDRAULIC EROSION CONTROL PRODUCT AS AN ALTERNATE AT NO ADDITIONAL COST TO THE OWNER.

D. CONTRACTOR SHALL INSPECT THE WORK AREA AND ADJACENT STREETS FOR SEDIMENT TRACKING. SEDIMENT TRACKED ONTO PAVED SURFACES SHALL BE SWEPT WITHIN 24 HOURS.

E. CONTRACTOR SHALL CONSTRUCT AND FULLY STABILIZE THE CONTRIBUTING DRAINAGE AREA UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS ARE INSTALLED TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE FILTRATION AREA PRIOR TO INSTALLING FILTER MEDIA IN FILTRATION SYSTEM.

LEGEND - ONE

FLOW ARROW: INDICATES DIRECTION OF EXISTING OVERLAND FLOW

FLOW ARROW: INDICATES DIRECTION OF PROPOSED OVERLAND FLOW

		No	DATE	REVISIONS	BY
PROJECT DATE: FEBRUARY 16, 2024	DRAWN BY: CJP	.	.	.	.
	DESIGNED BY: SRC	.	.	.	.
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ENGINEER: SCOTT R. CHILSON
LICENSE #: 44287

PLOT DATE: 3/15/2024 2:13 PM, G:\00\00616\00616197\CADD\Construction Documents\000-GENERAL\005-SITE\940-C104 EROSION CONTROL PLAN.dwg

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LAKEWOOD WTP POWER SYSTEM
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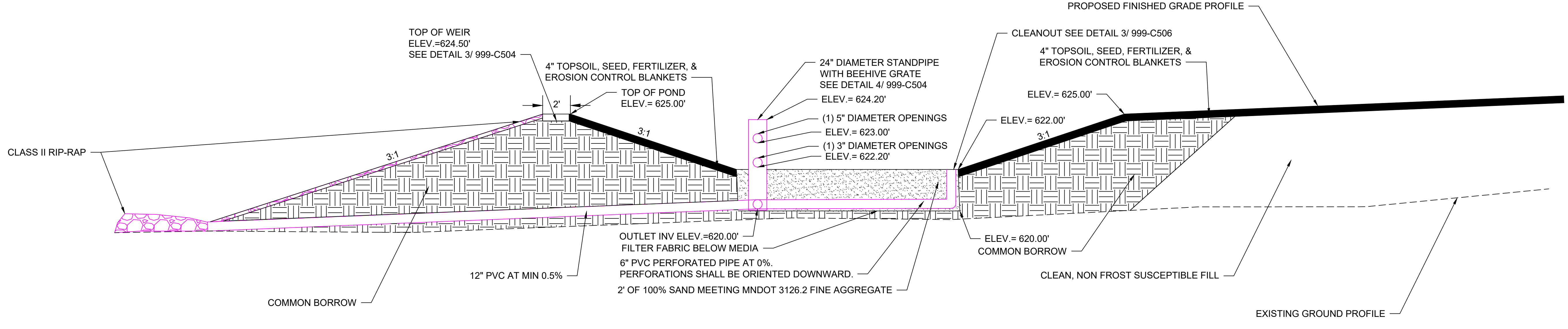
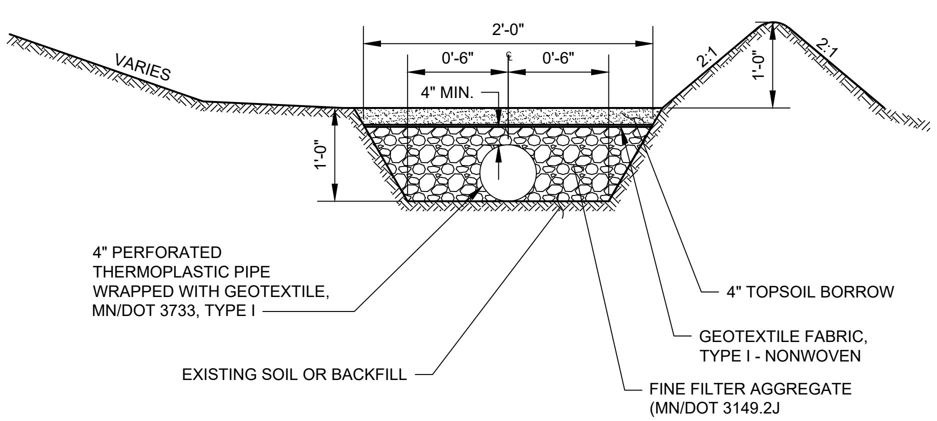
EROSION CONTROL PLAN

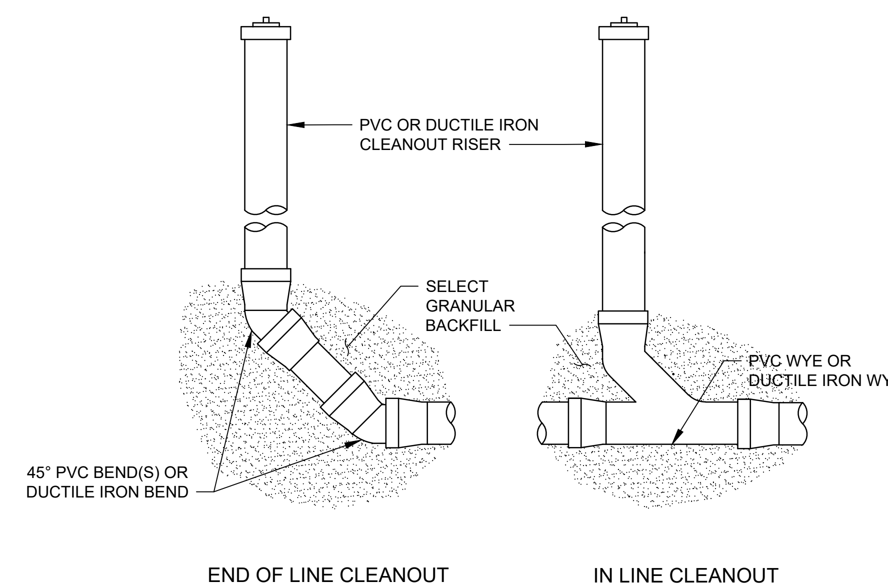
PROJECT NO. 00616197
SHEET 940-C104



1 FILTRATION BASIN DETAIL
999-C506



2 FILTRATION SWALE DETAIL
999-C506



NOTE:
THE RISER PIPE SHALL BE EXTENDED ABOVE GROUND LEVEL INITIALLY & THEN CUT BACK TO MATCH THE FINAL GRADE

3 CLEANOUT DETAIL
999-C506

		No	DATE	REVISIONS	BY
PROJECT DATE: FEBRUARY 16, 2024	DRAWN BY: CJP	.	.	.	.
	DESIGNED BY: SRC	.	.	.	.
	CHECKED BY: Init	.	.	.	.

I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: March 15, 2024

ENGINEER: SCOTT R. CHILSON
LICENSE #: 44287

MSA
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LAKEWOOD WTP POWER SYSTEM
CITY OF DULUTH
DULUTH, MN

FILTRATION BASIN DETAILS

PROJECT NO. 00616197
SHEET 999-C506

PLOT DATE: 3/15/2024 2:13 PM