



This topographic map of the Benning area in Atlanta, Georgia, shows the proposed Benning Station and surrounding infrastructure. The map includes the following features:

- Proposed Station:** A black rectangle labeled "SITE" is located at the intersection of Summit Ave and Benning.
- Streets:** Major streets shown include N. Industrial Rd, Benning, Summit Ave, N. 1st Ave, N. 2nd Ave, N. 3rd Ave, N. 4th Ave, N. 5th Ave, N. 6th Ave, N. 7th Ave, N. 8th Ave, N. 9th Ave, N. 10th Ave, N. 11th Ave, N. 12th Ave, N. 13th Ave, N. 14th Ave, N. 15th Ave, N. 16th Ave, N. 17th Ave, N. 18th Ave, N. 19th Ave, N. 20th Ave, N. 21st Ave, N. 22nd Ave, N. 23rd Ave, N. 24th Ave, N. 25th Ave, N. 26th Ave, N. 27th Ave, N. 28th Ave, N. 29th Ave, N. 30th Ave, N. 31st Ave, N. 32nd Ave, N. 33rd Ave, N. 34th Ave, N. 35th Ave, N. 36th Ave, N. 37th Ave, N. 38th Ave, N. 39th Ave, N. 40th Ave, N. 41st Ave, N. 42nd Ave, N. 43rd Ave, N. 44th Ave, N. 45th Ave, N. 46th Ave, N. 47th Ave, N. 48th Ave, N. 49th Ave, N. 50th Ave, N. 51st Ave, N. 52nd Ave, N. 53rd Ave, N. 54th Ave, N. 55th Ave, N. 56th Ave, N. 57th Ave, N. 58th Ave, N. 59th Ave, N. 60th Ave, N. 61st Ave, N. 62nd Ave, N. 63rd Ave, N. 64th Ave, N. 65th Ave, N. 66th Ave, N. 67th Ave, N. 68th Ave, N. 69th Ave, N. 70th Ave, N. 71st Ave, N. 72nd Ave, N. 73rd Ave, N. 74th Ave, N. 75th Ave, N. 76th Ave, N. 77th Ave, N. 78th Ave, N. 79th Ave, N. 80th Ave, N. 81st Ave, N. 82nd Ave, N. 83rd Ave, N. 84th Ave, N. 85th Ave, N. 86th Ave, N. 87th Ave, N. 88th Ave, N. 89th Ave, N. 90th Ave, N. 91st Ave, N. 92nd Ave, N. 93rd Ave, N. 94th Ave, N. 95th Ave, N. 96th Ave, N. 97th Ave, N. 98th Ave, N. 99th Ave, N. 100th Ave.
- Landmarks:** The map shows the "Hiner pond" (labeled "T108N R27W") and the "Benning" area. Other landmarks include the "Pillgrims' Rest Cem" and the "Good Counsel Cem".
- Topography:** The map includes contour lines indicating elevation, with peaks reaching up to 1000 feet. The "Thompson Ravine" is also shown.
- Infrastructure:** The map shows the "N. Industrial Rd" and the "N. 1st Ave" running through the area.
- Other Features:** The map includes a "SUNAL" label near the proposed station and a "SUNAL" label near the "Hiner pond".

C0.0	TITLE SHEET
C1.1	EXISTING CONDITIONS & REMOVALS PLAN
C2.1	SITE PLAN
C3.1	UTILITY PLAN
C4.1	GRADING AND DRAINAGE PLAN
C5.1	EROSION CONTROL PLAN, PHASE I
C5.2	EROSION CONTROL PLAN, PHASE II
C5.3	SWPPP NARRATIVE
C6.1	DETAILS
C6.2	DETAILS



I HEREBY CERTIFY THAT THIS PROJECT 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

NAME: JOSEPH T RADACH

SIGNATURE: Joe T. K

DATE: 10/03/25 LIC #: 458

REVISIONS	ISSUE DATE: 10/03/25	BY: JTR
1.		
2.		
3.		
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6.		

OWNER

CEMSTONE COMPANIES

25 Centre Pointe Blvd, Suite 300
Mendota Heights, MN 55120

TITLE SHEET

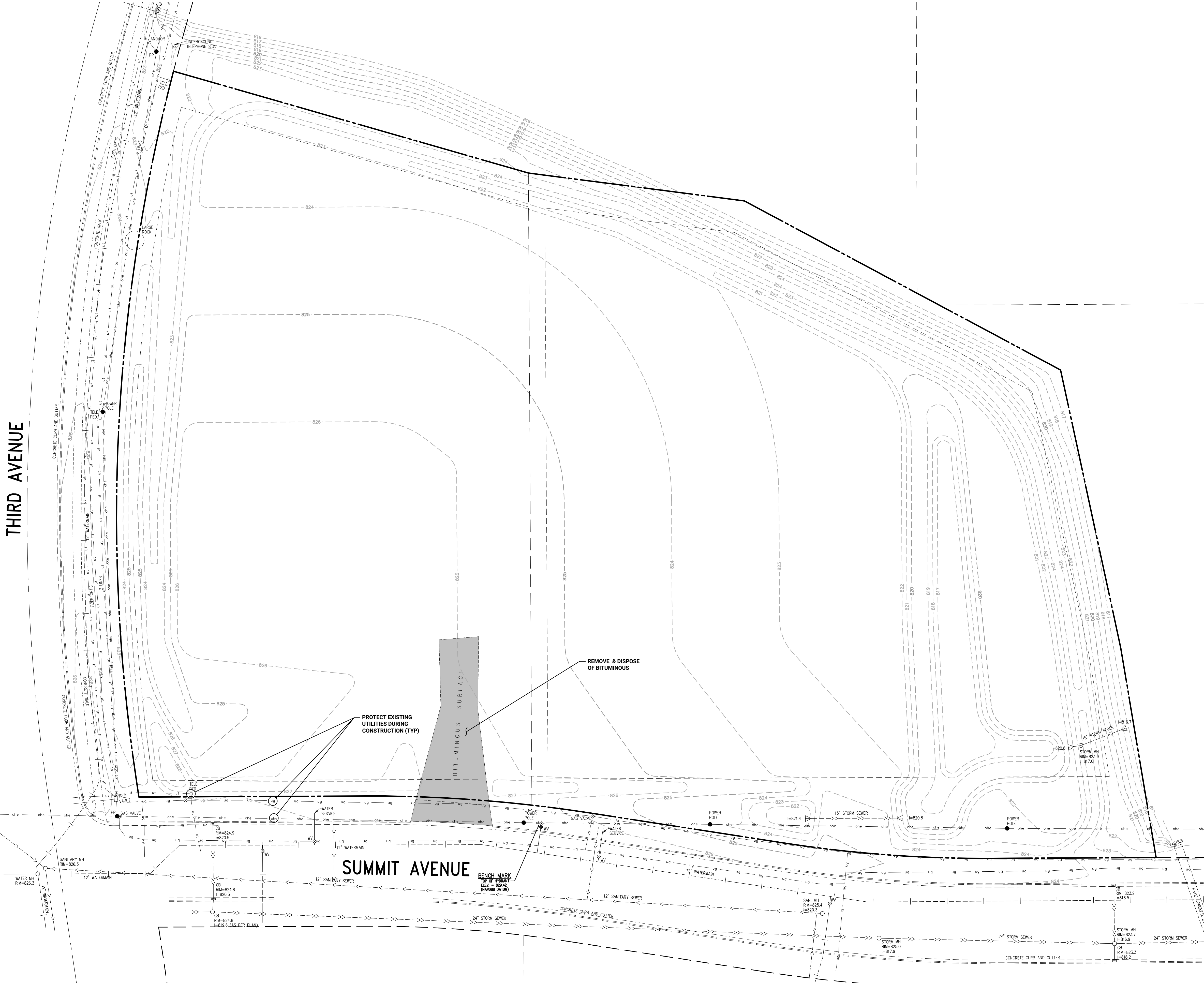
CEMSTONE MANKATO PLANT

100 Summit Avenue
Mankato, MN 56001

SHEET NUMBER

C0.0

THIRD AVENUE



LEGEND

EXISTING	REMOVAL	
=====	-----	PROPERTY LINE
=====	-----	EASEMENT LINE
=====	-----	CURB LINE
=====	-----	CONCRETE PAVEMENT
=====	-----	CL 5 AGGREGATE BASE
=====	-----	BITUMINOUS PAVEMENT
=====	-----	CONCRETE WALK
=====	-----	SANITARY SEWER
=====	-----	STORM SEWER
=====	-----	WATER MAIN
=====	-----	UNDERGROUND GAS
=====	-----	UNDERGROUND ELECTRIC
=====	-----	UNDERGROUND TELEPHONE
=====	-----	OVERHEAD ELECTRIC
=====	-----	MANHOLE
=====	-----	CATCH BASIN
=====	-----	HYDRANT
=====	-----	WATER VALVE
=====	-----	UTILITY POLE
=====	-----	ELECTRIC BOX
=====	-----	TELEPHONE PEDESTAL
=====	-----	GAS VALVE
=====	-----	GUY WIRE
=====	-----	TREE LINE
=====	-----	10' CONTOUR
=====	-----	2' CONTOUR

BENCHMARK

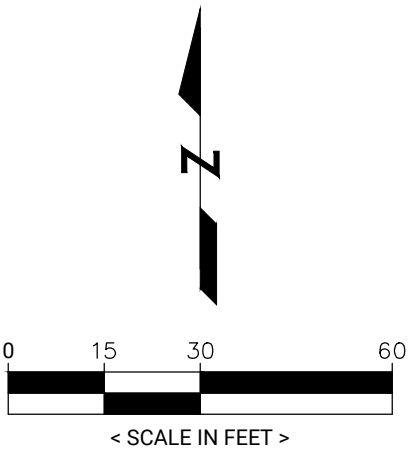
TOP NUT OF HYDRANT ON NORTH SIDE OF SUMMIT AVENUE, JUST EAST OF WEST ACCESS DRIVEWAY
ELEVATION: 829.42 (NAVD 88)

EXISTING CONDITIONS NOTES

- EXISTING CONDITIONS BASED ON TOPOGRAPHIC SURVEY PREPARED BY SURVEY SERVICES INC. DATED 4/28/16 AND SITE CONSTRUCTION PLANS PREPARED BY CARLSON MCCAIN INC. DATED 10/26/16.

REMOVAL PLAN NOTES

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, DEPTH, AND TYPES OF EXISTING UTILITIES AND TO NOTIFY THE OWNER AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS. UTILITY QUALITY LEVEL D PER C/ASCE 38-02.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, APPURTENANCES AND STRUCTURES NOT INDICATED FOR REMOVAL. DAMAGE CAUSED BY DEMOLITION OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR TO REMOVE/RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. THE CONTRACTOR SHALL COORDINATE THESE ACTIVITIES WITH THE UTILITY COMPANIES.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL THE REMOVALS SHOWN ON THE PLANS AND SHALL CONFORM/ADHERE TO ALL GOVERNING STATE AND LOCAL REGULATIONS. ALL PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL SAWCUTS SHALL BE FULL-DEPTH CUTS.
- ALL WORK WITHIN THE ADJACENT STREET RIGHTS OF WAY MUST BE COORDINATED WITH AND APPROVED BY THE CITY PUBLIC WORKS DEPARTMENT.



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NAME: JOSEPH T. RADACH PE
SIGNATURE: [Signature]
DATE: 10/03/25 LIC #: 45889

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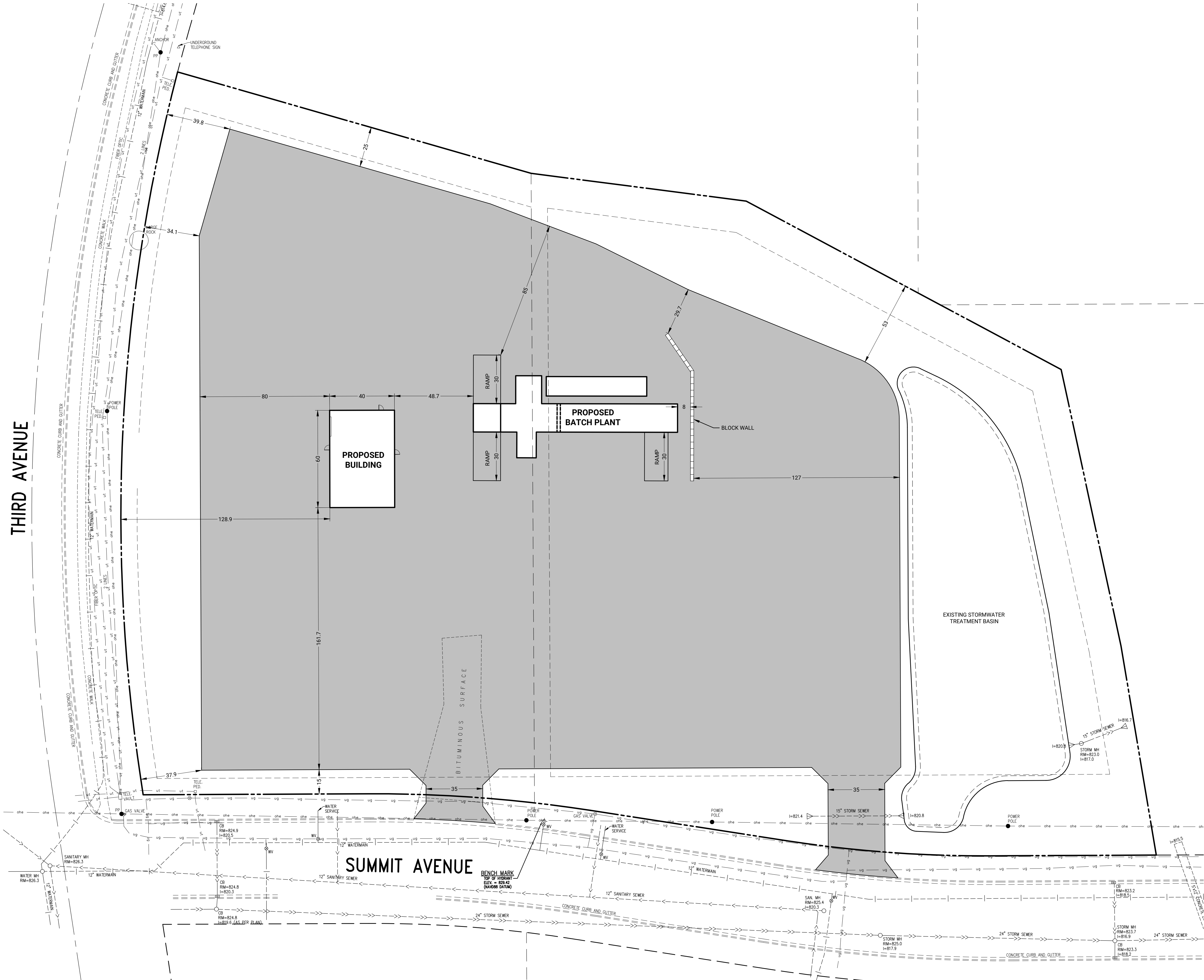
CEMSTONE COMPANIES
2025 Centre Pointe Blvd, Suite 300
Mendota Heights, MN 55120

EXISTING CONDITIONS
& REMOVALS PLAN
CEMSTONE MANKATO PLANT
100 Summit Avenue
Mankato, MN 56001

SHEET NUMBER
C1.1

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THIRD AVENUE

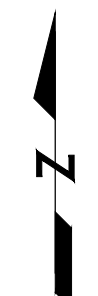


LEGEND	
EXISTING	PROPOSED
-----	-----
CONCRETE	CONCRETE PAVEMENT
BITUMINOUS	CL 5 AGGREGATE BASE
CONCRETE WALK	BITUMINOUS PAVEMENT
-----	CONCRETE WALK
-----	SANITARY SEWER
-----	STORM SEWER
-----	WATER MAIN
-----	UNDERGROUND GAS
-----	UNDERGROUND ELECTRIC
-----	UNDERGROUND TELEPHONE
-----	OVERHEAD ELECTRIC
-----	MANHOLE
-----	CATCH BASIN
-----	HYDRANT
-----	WATER VALVE
-----	UTILITY POLE
-----	ELECTRIC BOX
-----	TELEPHONE PEDESTAL
-----	GAS VALVE
-----	GUY WIRE
-----	TREE LINE

BENCHMARK	
TOP NUT OF HYDRANT ON NORTH SIDE OF SUMMIT AVENUE, JUST EAST OF WEST ACCESS DRIVEWAY	
ELEVATION:	829.42 (NAVD 88)

- SITE PLAN NOTES**
- ALL DIMENSIONS ARE TO EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
 - UNLESS OTHERWISE SHOWN IN THE PLANS, CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS, AND DRIVES PER THE FOLLOWING REQUIREMENTS:
- CONTROL JOINTS: WALKS @ 8' SPACING
OTHERS @ 10' SPACING
- SAWCUT CONTROL JOINTS MINIMUM 1/4" CONCRETE THICKNESS.
- EXPANSION JOINTS: WALKS @ 24' SPACING
OTHERS @ 40' SPACING
- PROVIDE EXPANSION JOINT AT ALL POINTS WHERE A CHANGE IN PAVEMENT THICKNESS OCCURS AND WHERE NEW PAVEMENT WILL MATCH EXISTING PAVEMENT.
- DOWEL ALL EXPANSION JOINTS AT 24" SPACING MAX.

SITE DATA	
PARCEL AREA:	230,865 SF
IMPERVIOUS AREA:	
BUILDING:	2,400 SF 1%
PLANT SLABS:	3,416 SF 1%
PAVEMENT:	137,584 SF 60%
TOTAL:	143,400 SF 62%
PERVIOUS AREA:	87,465 SF 38%


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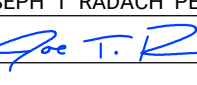

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OWNER

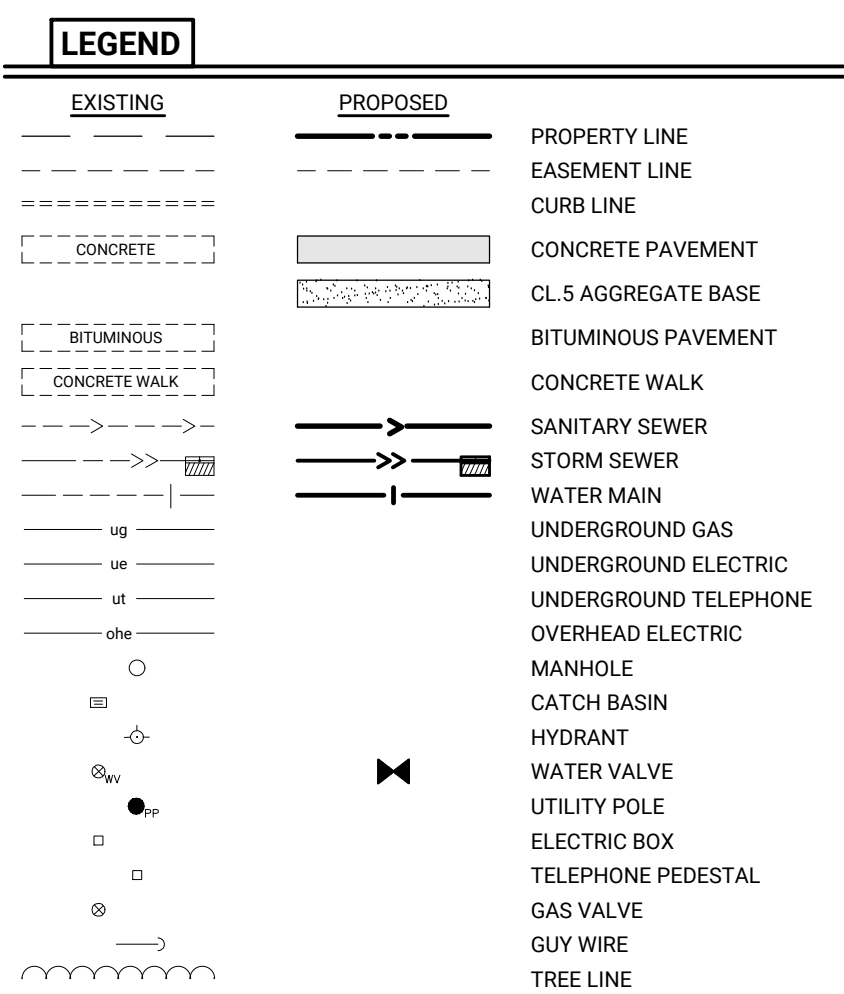
CEMSTONE COMPANIES
2025 Centre Pointe Blvd, Suite 300
Mendota Heights, MN 55120

SITE PLAN

CEMSTONE MANKATO PLANT
100 Summit Avenue
Mankato, MN 56001

SHEET NUMBER

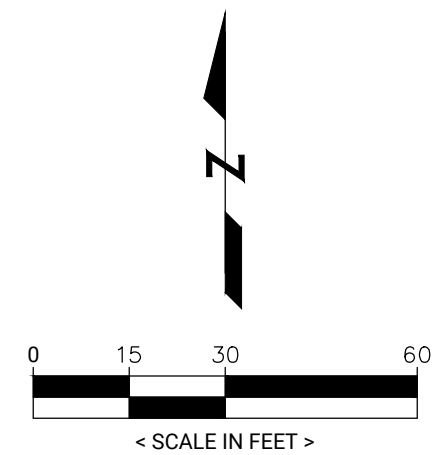
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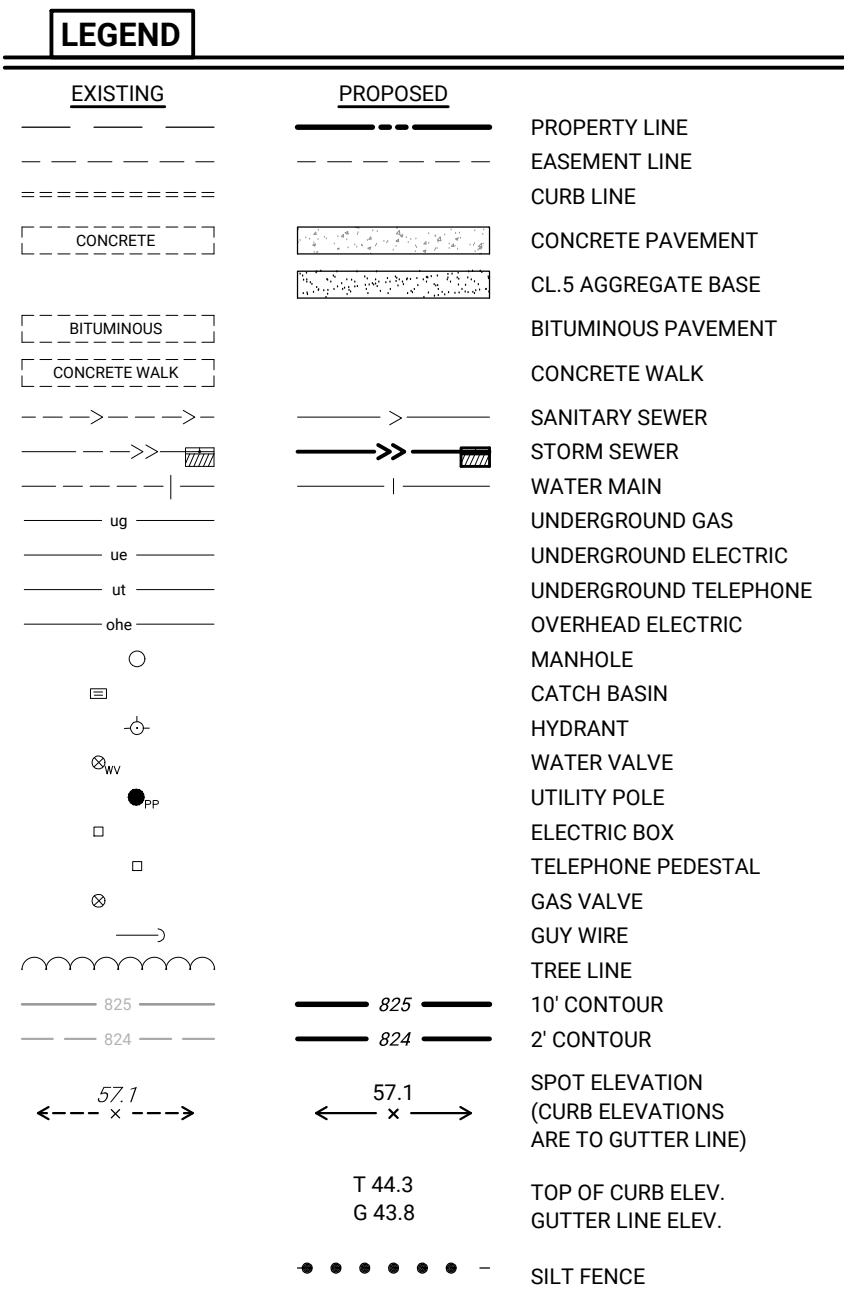
TOP NUT OF HYDRANT ON NORTH SIDE OF SUMMIT AVENUE, JUST EAST OF WEST ACCESS DRIVEWAY

ELEVATION: 829.42 (NAVD 88)

1. SANITARY SEWER, WATER MAIN, AND STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CITY'S STANDARD DETAIL SPECIFICATIONS AND THE MINNESOTA PLUMBING CODE.
2. A MINIMUM OF 7.5 FEET OF COVER SHALL BE REQUIRED FOR ALL WATER MAIN AND FORCEMAIN.
3. FIRE HYDRANTS AND GATE VALVES SHALL BE IN ACCORDANCE WITH THE CITY'S REQUIREMENTS.
4. A MINIMUM OF 2.0 FEET OF VERTICAL SEPARATION SHALL BE REQUIRED FOR ALL UTILITY CROSSINGS.
5. USE SOLID-CORE, SDR 35, ASTM D3834 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER AND SANITARY SEWER WITH APPROVED FITTINGS UNLESS OTHERWISE NOTED.
6. PVC PIPE DESIGNATED AS PVC SCHEDULE 40, SHALL MEET THE REQUIREMENTS OF ASTM D2665 FOR SCHEDULE 40.
7. RCP DRAIN DOWNSPOUT CONNECTIONS SHALL BE PVC SCHEDULE 40.
8. ALL WATER MAIN WORK AND TESTING SHALL BE COORDINATED WITH THE CITY'S PUBLIC WORKS DEPARTMENT.
9. ALL WATER MAIN MUST HAVE A CONDUCTIVITY TEST, HYDROSTATIC TEST, AND BACTERIA TEST BEFORE THE PROJECT IS COMPLETE AND TURNED ON.
10. FINAL BUILDING UTILITY SERVICES AND DOWNSPOUT LOCATIONS SHALL BE VERIFIED WITH ARCHITECTURAL AND PLUMBING PLANS.
11. LOCATING WIRES SHALL BE INSTALLED ON ALL NON-CONDUCTIVE STORM SEWER, SANITARY SEWER, AND WATER LINES IN ACCORDANCE WITH THE MINNESOTA RURAL WATER ASSOCIATION (MRWA) TRACE WIRE SPECIFICATION GUIDE AND DETAILS.
12. INSTALL METER BOX FRAME AND SOLID LID (NENAH R-191-A, OR APPROVED EQUAL) OVER ALL CLEANSOUTS.



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

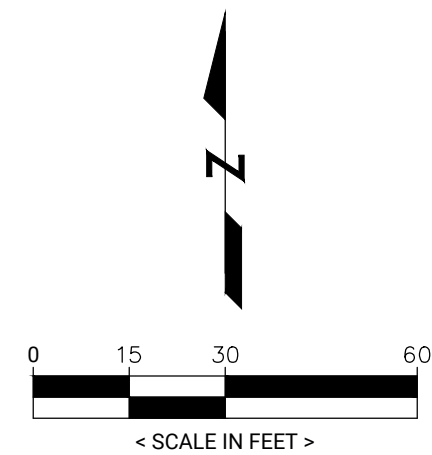


TOP NUT OF HYDRANT ON NORTH SIDE OF SUMMIT AVENUE, JUST EAST OF WEST ACCESS DRIVEWAY

ELEVATION: 829.42 (NAVD 88)

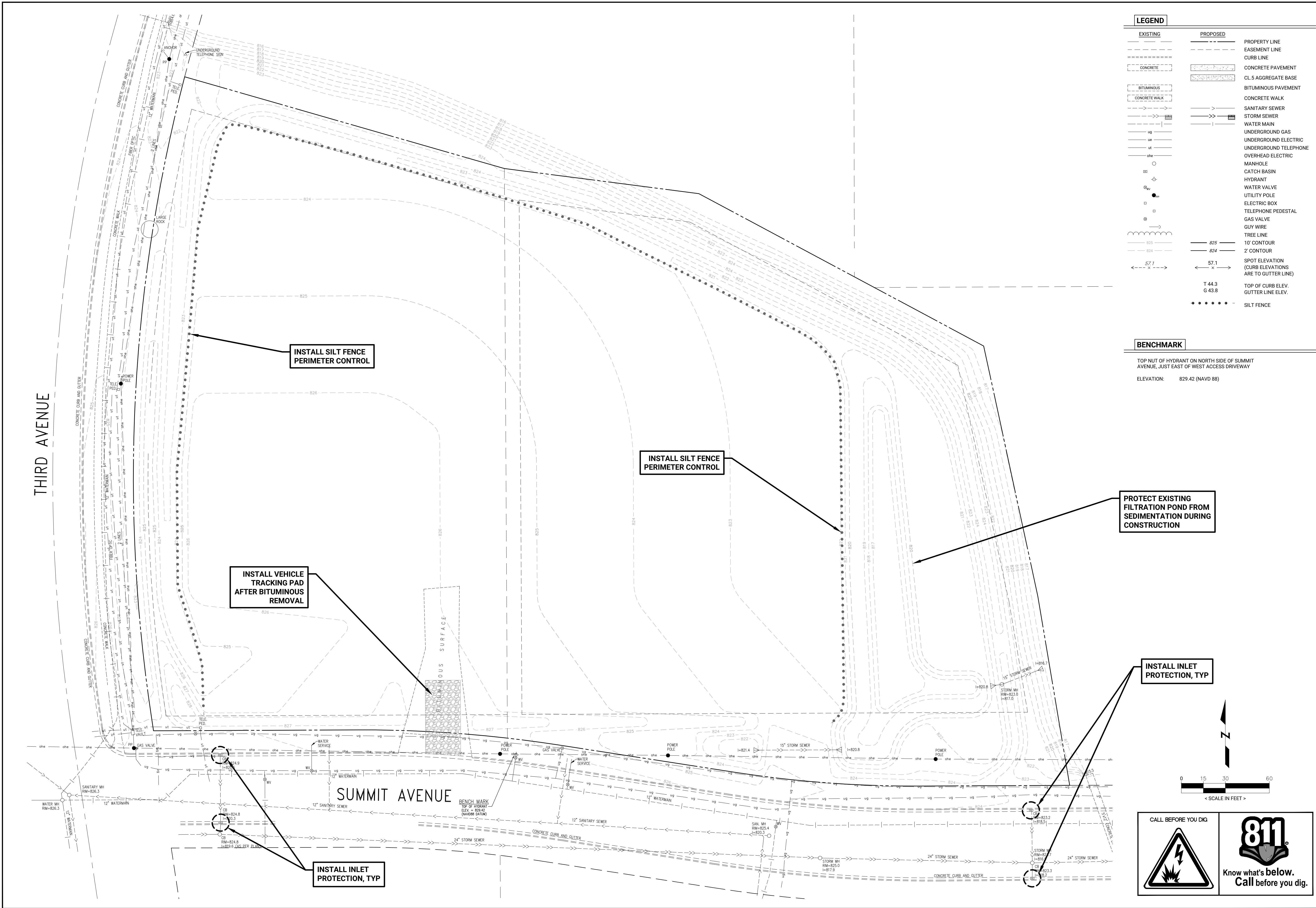
1. THE LATEST EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' AND THE CITY OF MANKATO SPECIFICATIONS.
2. THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
3. THE LATEST EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS.

1. VEHICLE TRACKING REDUCTION DEVICE, SILT FENCE, AND EXISTING CATCH BASIN INLET PROTECTION SHALL BE INSTALLED PRIOR TO GRADING CONSTRUCTION, AND SHALL BE MAINTAINED UNTIL THE SITE HAS BEEN STABILIZED.
2. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF GRADING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF DISCREPANCIES OR VARIATIONS FROM THE PLAN.
3. CONTRACTOR SHALL STRIP, STOCKPILE AND RESPREAD SUFFICIENT TOPSOIL TO PROVIDE A MINIMUM OF 6" OF TOPSOIL OVER ALL DISTURBED AREAS THAT WILL BE SODDED, SEEDED OR LANDSCAPED.
4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 14 CALENDARS DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED.
5. ALL SLOPES STEEPER THAN 3:1 SHALL HAVE MNDOT CAT. 1 EROSION CONTROL BLANKET AND SEED, OR APPROVED EQUIV.
6. STOCKPILES SHALL BE STABILIZED WITHIN 14 DAYS OF ROUGH GRADING OR INACTIVITY.
7. ALL WORK WITHIN THE ADJACENT STREET RIGHTS OF WAY MUST BE COORDINATED WITH AND APPROVED BY THE CITY PUBLIC WORKS DEPARTMENT.



Now what's below.
Call before you dig.

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BITUMINOUS	CL 5 AGGREGATE BASE
CONCRETE WALK	BITUMINOUS PAVEMENT
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----->----->	SANITARY SEWER
----->----->	STORM SEWER
ug	WATER MAIN
ug	UNDERGROUND GAS
ug	UNDERGROUND ELECTRIC
ug	UNDERGROUND TELEPHONE
oh	OVERHEAD ELECTRIC
○	MANHOLE
⊕	CATCH BASIN
⊕	HYDRANT
⊕	WATER VALVE
⊕	UTILITY POLE
⊕	ELECTRIC BOX
⊕	TELEPHONE PEDESTAL
⊕	GAS VALVE
⊕	GUY WIRE
-----	TREE LINE
-----	10' CONTOUR
-----	2' CONTOUR
57.1	SPOT ELEVATION
57.1	(CURB ELEVATIONS ARE TO GUTTER LINE)
T 44.3	TOP OF CURB ELEV.
G 43.8	GUTTER LINE ELEV.
.....	SILT FENCE

BENCHMARK

TOP NUT OF HYDRANT ON NORTH SIDE OF SUMMIT AVENUE, JUST EAST OF WEST ACCESS DRIVEWAY

ELEVATION: 829.42 (NAVD 88)

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TEL: 612.730.2265 | WWW.CONTOURCD.COM

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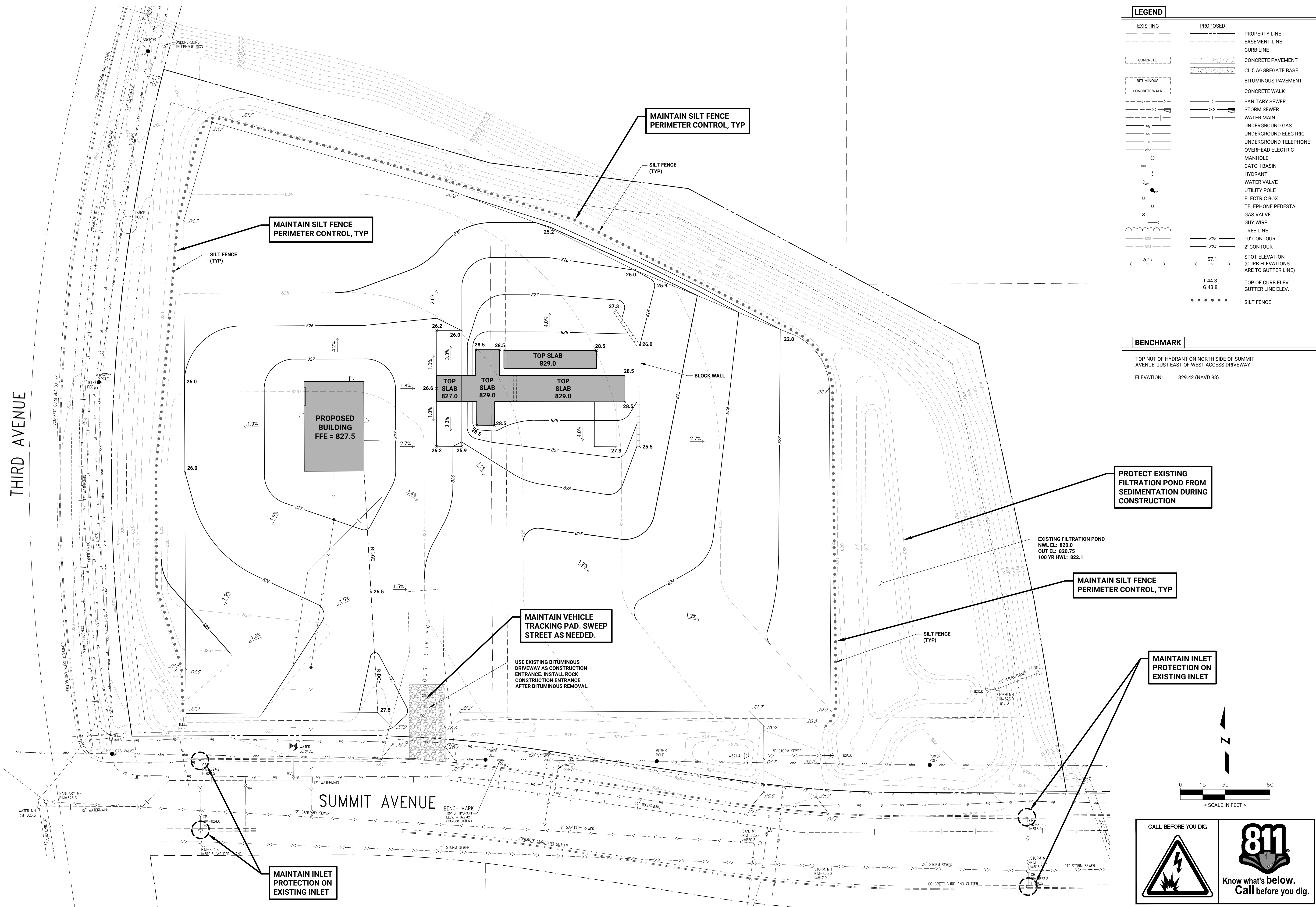
CEMSTONE COMPANIES
2025 Centre Pointe Blvd, Suite 300
Mendota Heights, MN 55120

CEMSTONE MANKATO PLANT
100 Summit Avenue
Mankato, MN 56001

OWNER

**EROSION CONTROL PLAN
PHASE I**

SHEET NUMBER
C5.1



BENCHMARK

PROTECT EXISTING FILTRATION POND FROM SEDIMENTATION DURING CONSTRUCTION

**MAINTAIN INLET
PROTECTION ON
EXISTING INLET**



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NAME: JOSEPH T RADACH PE
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CEMSTONE COMPANIES
2025 Centre Pointe Blvd, Suite 300
Mendota Heights, MN 55120

OWNER

EROSION CONTROL PLAN PHASE II

CEMSTONE MANKATO PLANT
100 Summit Avenue
Mankato, MN 56001

SHEET NUMBER
C5.2

<u>EROSION AND SEDIMENT CONTROL ESTIMATED QUANTITIES</u>	
VEHICLE TRACKING PAD	1 EA
SILT FENCE	1,110 LF
BIOROLL	AS NEEDED
INLET PROTECTION	4 EA
TURF ESTABLISHMENT	0.5 AC

A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPLAND PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER. [MINN. R. 7090]

9.6 PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE. [MINN. R. 7090]

9.7 PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPs DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET. [MINN. R. 7090]

9.8 PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/STATE OR DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP. [MINN. R. 7090]

9.9 PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER. [MINN. R. 7090]

9.10 PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER. [MINN. R. 7090]

9.11 PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. [MINN. R. 7090]

9.12 PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET. [MINN. R. 7090]

9.13 PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14. [MINN. R. 7090]

9.14 IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. [MINN. R. 7090]

9.15 PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE. [MINN. R. 7090]

9.16 PERMITTEES MUST DIRECT DISCHARGES FROM BMPs TO VEGETATED AREAS UNLESS INFEASIBLE. [MINN. R. 7090]

9.17 PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER [MINN. R. 7090]

9.18 PERMITTEES MUST USE POLYMERS, FLOCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES TO LOSSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE. [MINN. R. 7090]

10.1 DEWATERING AND BASIN DRAINING. [MINN. R. 7090]

10.2 PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPs SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES. [MINN. R. 7050.0210]

10.3 IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE. [MINN. R. 7090]

10.4 PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR RUINATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. [MINN. R. 7090]

10.5 IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST Haul THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. [MINN. R. 7090]

11.1 INSPECTIONS AND MAINTENANCE. [MINN. R. 7090]

11.2 PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 1/2 INCH IN 24 HOURS. [MINN. R. 7090]

11.3 PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPs. [MINN. R. 7090]

11.4 PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPs WITH FUNCTIONAL BMPs BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA. [MINN. R. 7090]

11.5 DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS AND TRENCHES AND 1/2 THE EROSION PREVENTION AND SEDIMENT DEPOSITION MEASURES. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DISCHARGED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, DITCH BASINS, AND OTHER DRAINAGE SYSTEMS AND STABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST COMPLETE REMOVAL AND RESTABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS. [MINN. R. 7090]

11.6 PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EIGHT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. [MINN. R. 7090]

11.7 PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. [MINN. R. 7090]

11.8 PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME. [MINN. R. 7090]

11.9 PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B. [MINN. R. 7090]

11.10 PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:

a. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE, OR

b. WHERE STATES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS WARRANT; OR

c. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST. [MINN. R. 7090]

11.11 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:

a. DATE AND TIME OF INSPECTIONS; AND

b. NAME OF PERSONS CONDUCTING INSPECTIONS; AND

c. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND

d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND

e. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES; AND

f. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND

g. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS. [MINN. R. 7090]

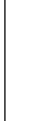
12.1 POLLUTION PREVENTION MANAGEMENT MEASURES. [MINN. R. 7090]

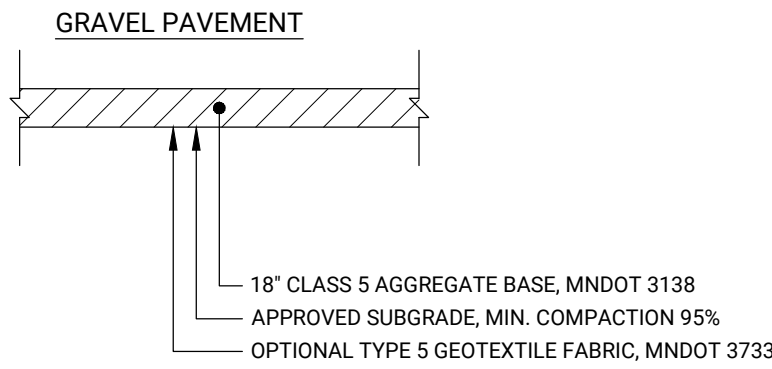
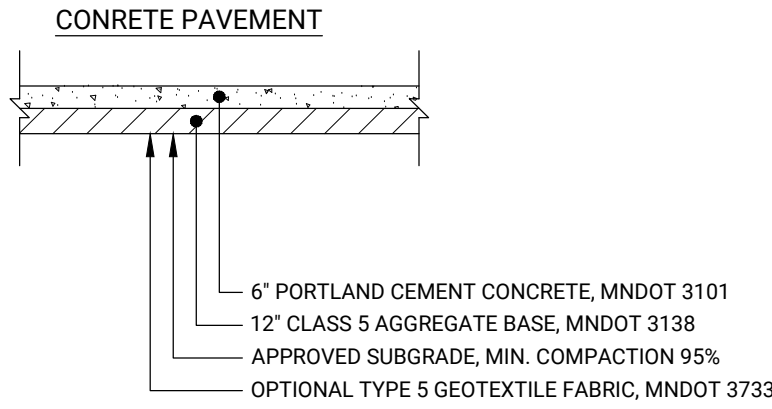
12.2 PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. PERMITTEES ARE NOT REQUIRED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER. [MINN. R. 7090]

12.3 PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. [MINN. R. 7090]

SITE LOCATION MAP

The map shows the Benning area in Atlanta, Georgia. A large circle is drawn around the Benning Site, with a 1-mile scale bar. The map includes major roads like N. Industrial Rd, N. Peachtree St, and N. Decatur Rd. It also shows Benning Park, Benning Cemetery, and the Benning Historic District. The map is labeled with 'SITE' and 'Benning'.

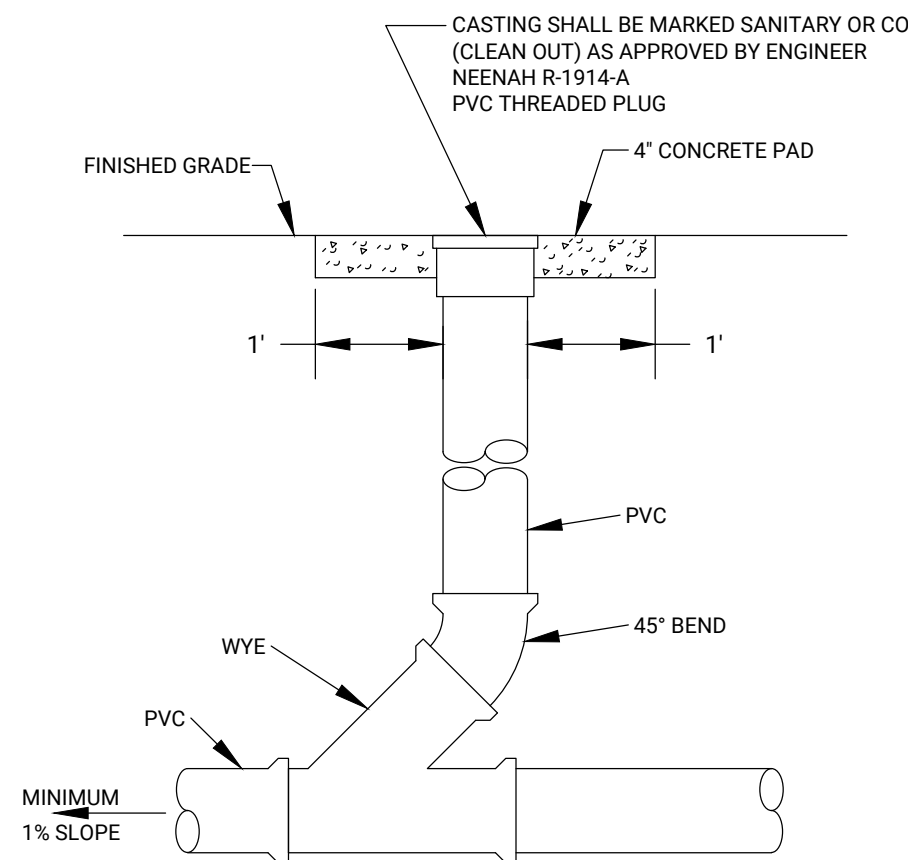
SWPPP NARRATIVE CEMSTONE MANKATO PLANT 100 Summit Avenue Mankato, MN 56001		OWNER		CEMSTONE COMPANIES 2025 Centre Pointe Blvd, Suite 300 Mendota Heights, MN 55120	
		SHEET NUMBER		C5.3	
1. 2. 3. 4. 5. 6. 7.		REVISIONS	ISSUE DATE: 10/03/25	BY: JTR	
		I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA			
		NAME: JOSEPH T RADACH PE			
		SIGNATURE: 			
		DATE: 10/03/25 LIC #: 45889			
					
		CONTOUR CIVIL DESIGN			
		8195 VERNON STREET, ROCKFORD, MN 55373 TEL: 612.730.2265 WWW.CONTOURCD.COM			



- NOTES
- FINAL PAVEMENT SECTIONS AND SUBGRADE COMPACTION REQUIREMENTS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER OF RECORD

1 PAVEMENT SECTIONS

NO SCALE



- NOTES:
- ALL JOINTS SHALL BE SOLVENT WELD EXCEPT AS NOTED.
 - CLEAN OUTS ARE REQUIRED AT 100' SPACING AND AT CHANGE OF DIRECTION.
 - ALL CLEAN OUTS SHALL BE EQUIPPED WITH A FROST SLEEVE.

2 CLEANOUT

NO SCALE

STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE.

TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH MNDOT 2575 AND SHALL BE AS FOLLOWS:

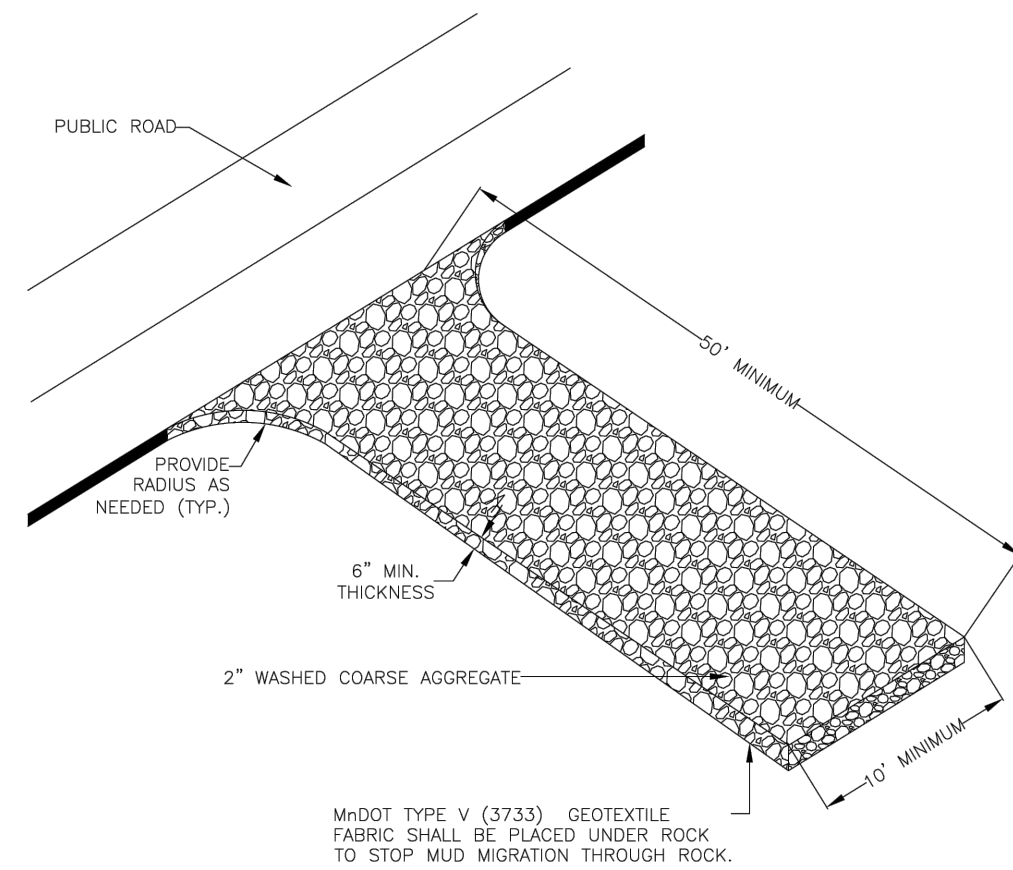
SEED: 21-111 AT 100 LBS PER ACRE OR 21-112 AT 100 LBS PER ACRE
MULCH: TYPE 1 AT 2 TONS PER ACRE
FERTILIZER: 10-20-20 AT 300 LBS PER ACRE

PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH MNDOT 2575 AND SHALL BE AS FOLLOWS, UNLESS SHOWN OTHERWISE ON THE PLANS:

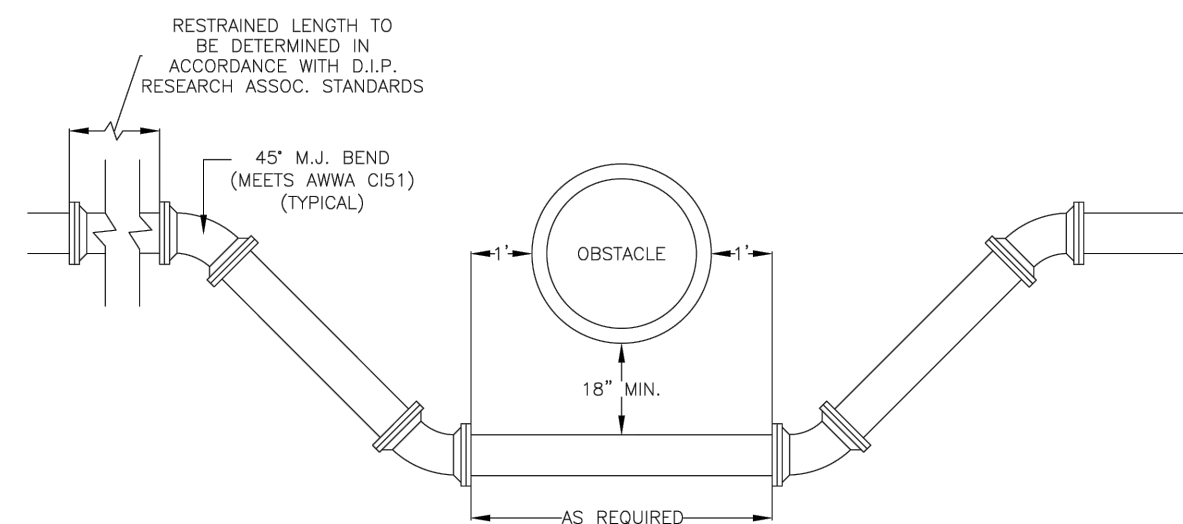
SEED: 25-131 AT 220 LBS PER ACRE OR 25-141 AT 59 LBS PER ACRE
MULCH: TYPE 1 AT 2 TONS PER ACRE
FERTILIZER: 10-10-10 AT 200 LBS PER ACRE

3 TURF ESTABLISHMENT

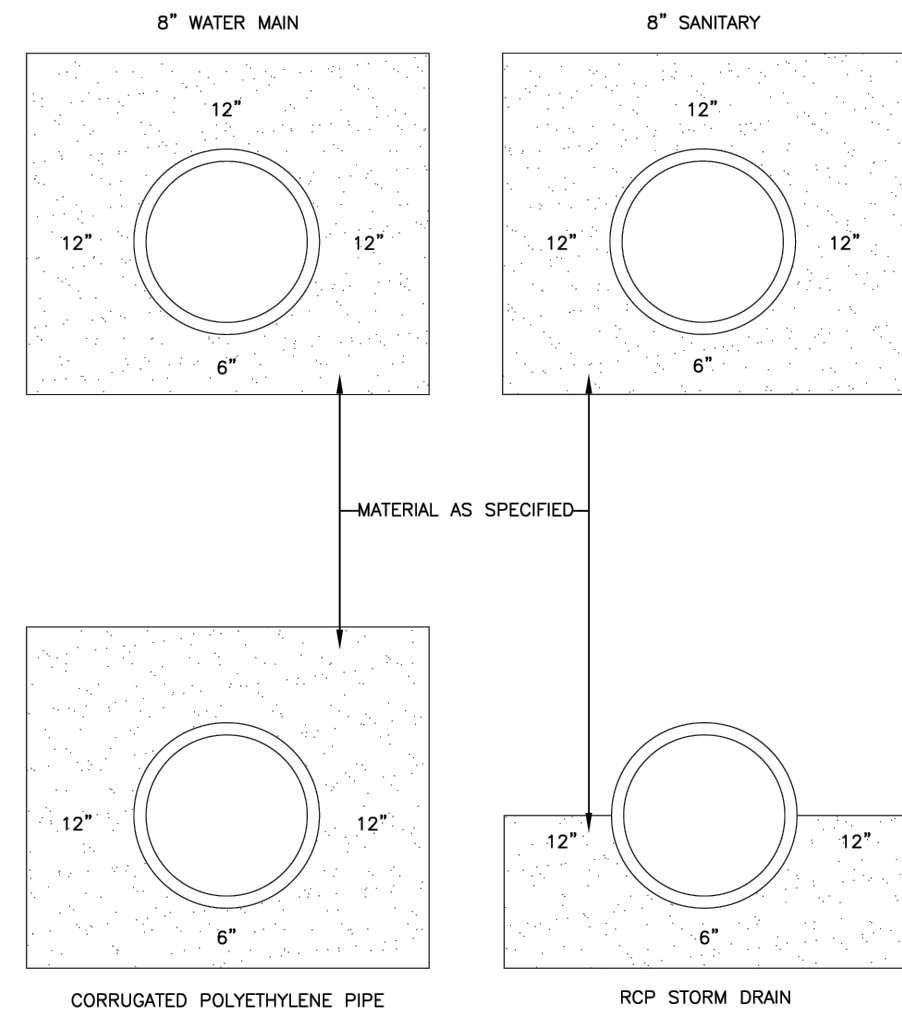
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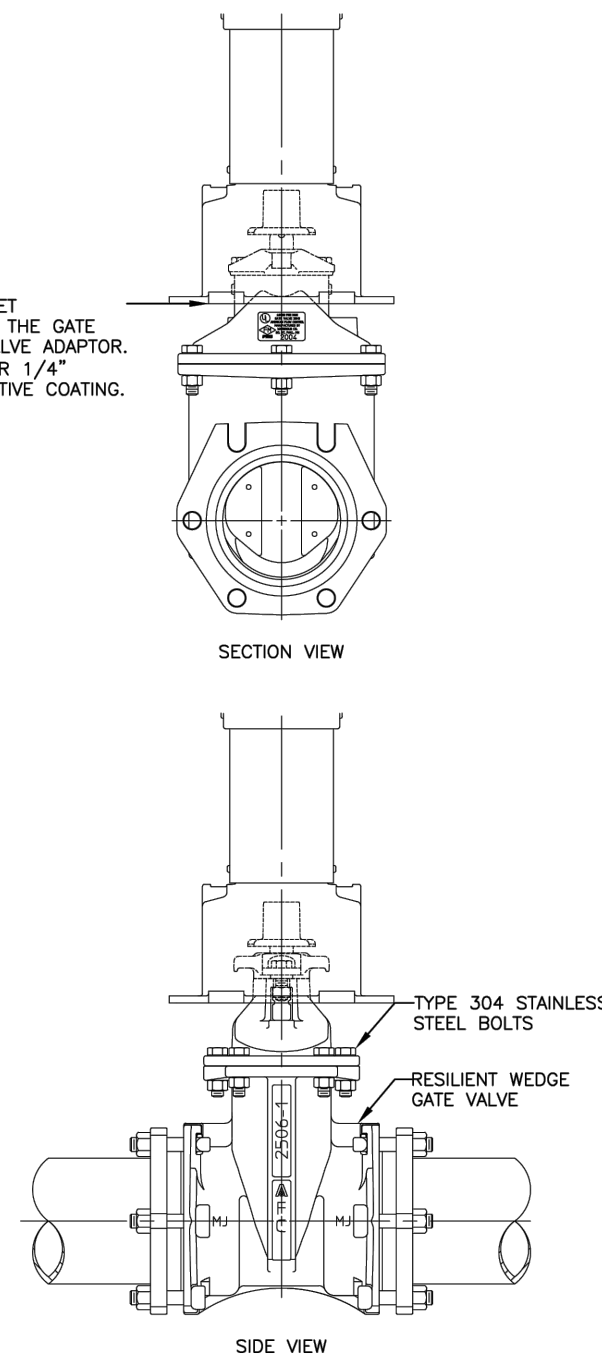
APPROVED	CITY OF MANKATO ENGINEERING	SPECIFICATION REFERENCE	STANDARD PLATE NO. 2003A 1 OF 1
Digitally signed by Michael J. McCarthy Date: 2022.10.28 12:14:45-0500	STABILIZED CONSTRUCTION EXIT		



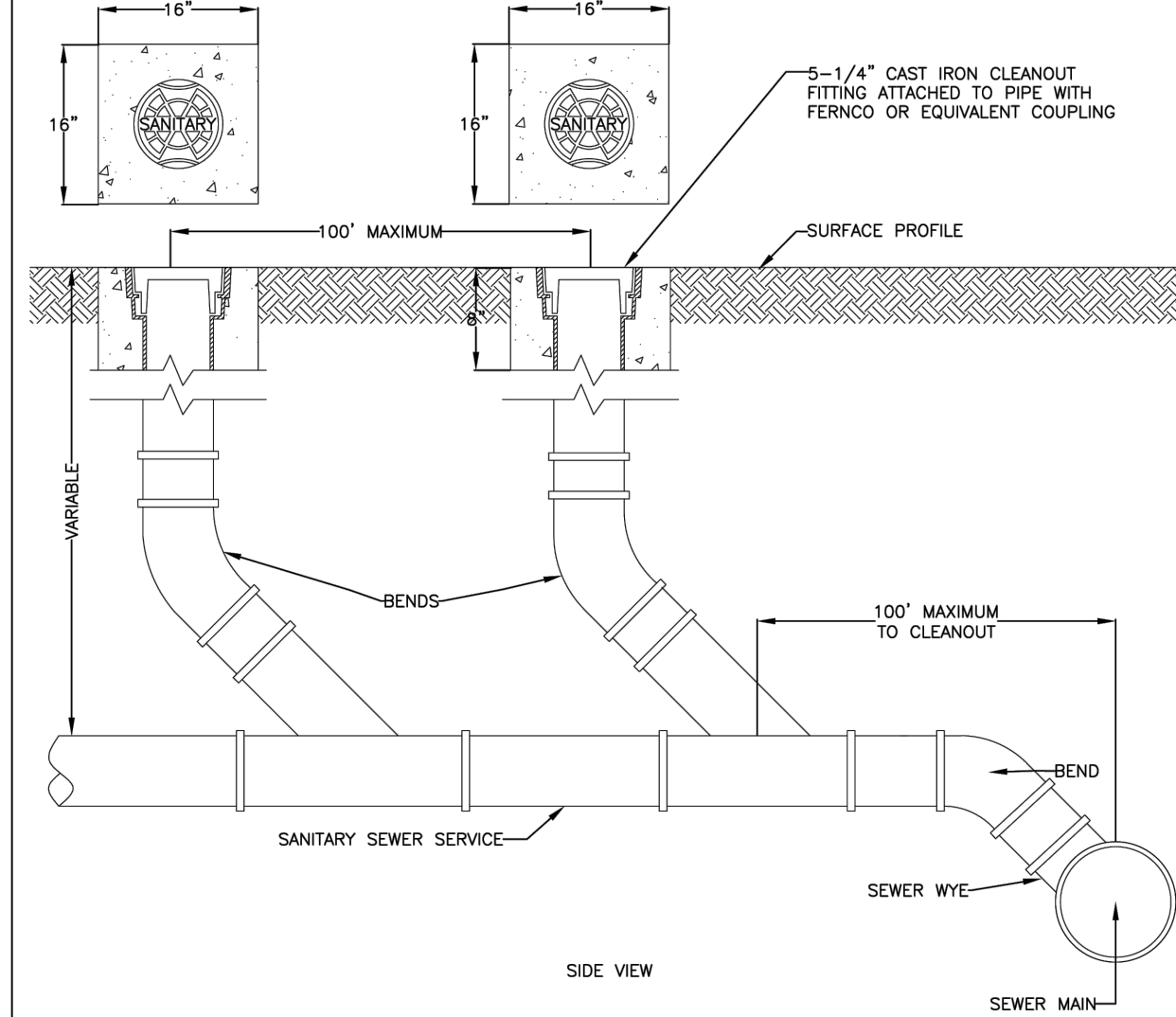
APPROVED	CITY OF MANKATO ENGINEERING	SPECIFICATION REFERENCE	STANDARD PLATE NO. 2320A 1 OF 1
Digitally signed by Michael J. McCarthy Date: 2022.10.28 12:14:45-0500	WATERMAIN CONSTRUCTION AROUND OBSTACLES		



APPROVED	CITY OF MANKATO ENGINEERING	SPECIFICATION REFERENCE	STANDARD PLATE NO. 2100A 1 OF 1
Digitally signed by Michael J. McCarthy Date: 2022.10.28 12:14:45-0500	GRANULAR BEDDING & ENCASEMENT		

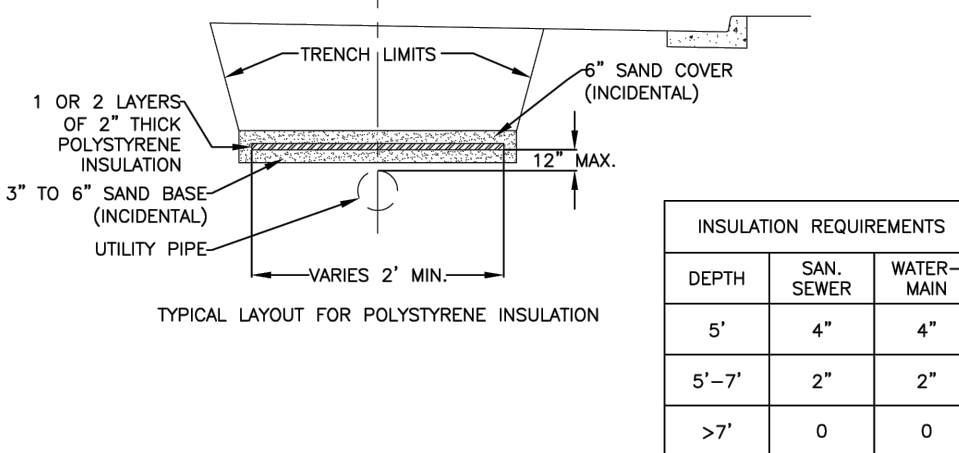
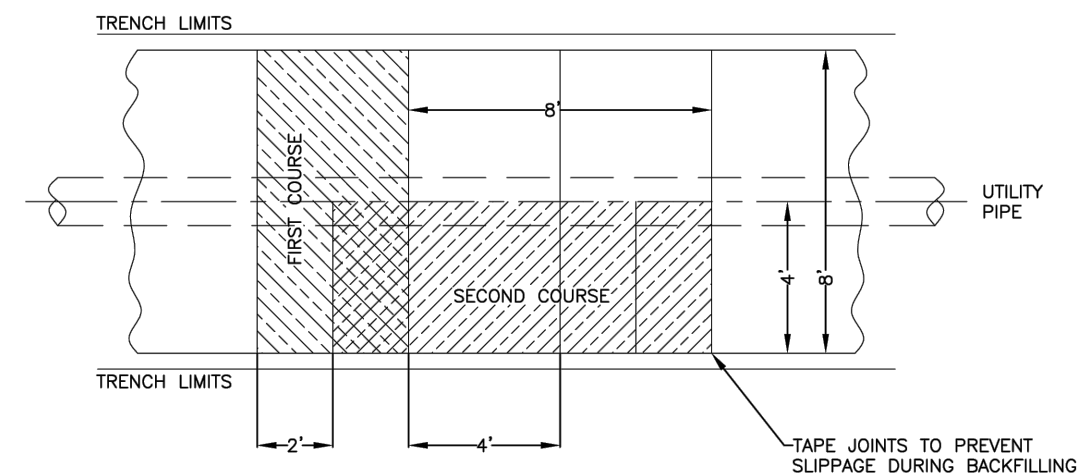


APPROVED	CITY OF MANKATO ENGINEERING	SPECIFICATION REFERENCE	STANDARD PLATE NO. 2321A 1 OF 1
Digitally signed by Michael J. McCarthy Date: 2022.10.28 12:14:45-0500	GATE VALVE ADAPTOR		



NOTE:
CLEANOUT IS TO BE WITHIN EASEMENT AREA BUT OUT OF DRIVING SURFACE. GRANULAR MATERIAL TO BE PLACED AROUND ALL PIPE.

APPROVED	CITY OF MANKATO ENGINEERING	SPECIFICATION REFERENCE	STANDARD PLATE NO. 2242A 1 OF 1
Digitally signed by Michael J. McCarthy Date: 2022.10.28 12:14:45-0500	SANITARY SERVICE CLEANOUT		



INSULATION REQUIREMENTS	DEPTH	SAN. SEWER	WATER-MAIN
5'-7'	4"	2"	4"
5'-7'	2"	2"	2"
>7'	0	0	0

- NOTES:
- INSULATION BOARD SHALL BE AS PER MN/DOT SPEC. 3760.
 - FOR WATERMAIN WITH NO SERVICE CONNECTIONS OR FOR WATERMAIN OUTSIDE OF PAVED AREAS WHERE SNOW IS NOT REMOVED, NO INSULATION IS REQUIRED IF COVER IS AT LEAST 6".
 - INSULATION BOARD SHALL BE PAID FOR AS 2503.604 2" OR 4" INSULATION WHERE APPLICABLE AT THE PRICE BID PER SQ. YD.
 - DEPTH FOR SANITARY AND STORM SHALL BE TO INVERT, DEPTH FOR WATERMAIN SHALL BE TO THE TOP OF THE PIPE.

APPROVED	CITY OF MANKATO ENGINEERING	SPECIFICATION REFERENCE	STANDARD PLATE NO. 2323A 1 OF 1
Digitally signed by Michael J. McCarthy Date: 2022.10.28 12:14:45-0500	POLYSTYRENE INSULATION		



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

NAME: JOSEPH T RADACH PE

SIGNATURE: *Joseph T. Radach*

DATE: 10/03/25 LIC #: 45889

REVISIONS	ISSUE DATE:	BY:	JTR
1.			
2.			
3.			
4.			
5.			
6.			
7.			

CEMSTONE COMPANIES
2025 Centre Pointe Blvd, Suite 300
Mendota Heights, MN 55120

OWNER

CEMSTONE MANKATO PLANT
100 Summit Avenue
Mankato, MN 56001

DETAILS

SHEET NUMBER
C6.1

