

KEY PLAN

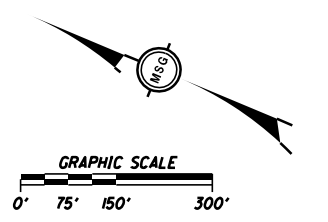
NO.	DATE	BY	DESCRIPTION
▲	11/9/2012	HMH	SITE PLAN SUBMITTAL
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PRINT NAME: Jeffrey Lynn Snyder
SIGNATURE: _____
DATE: _____ LICENSE # 50097

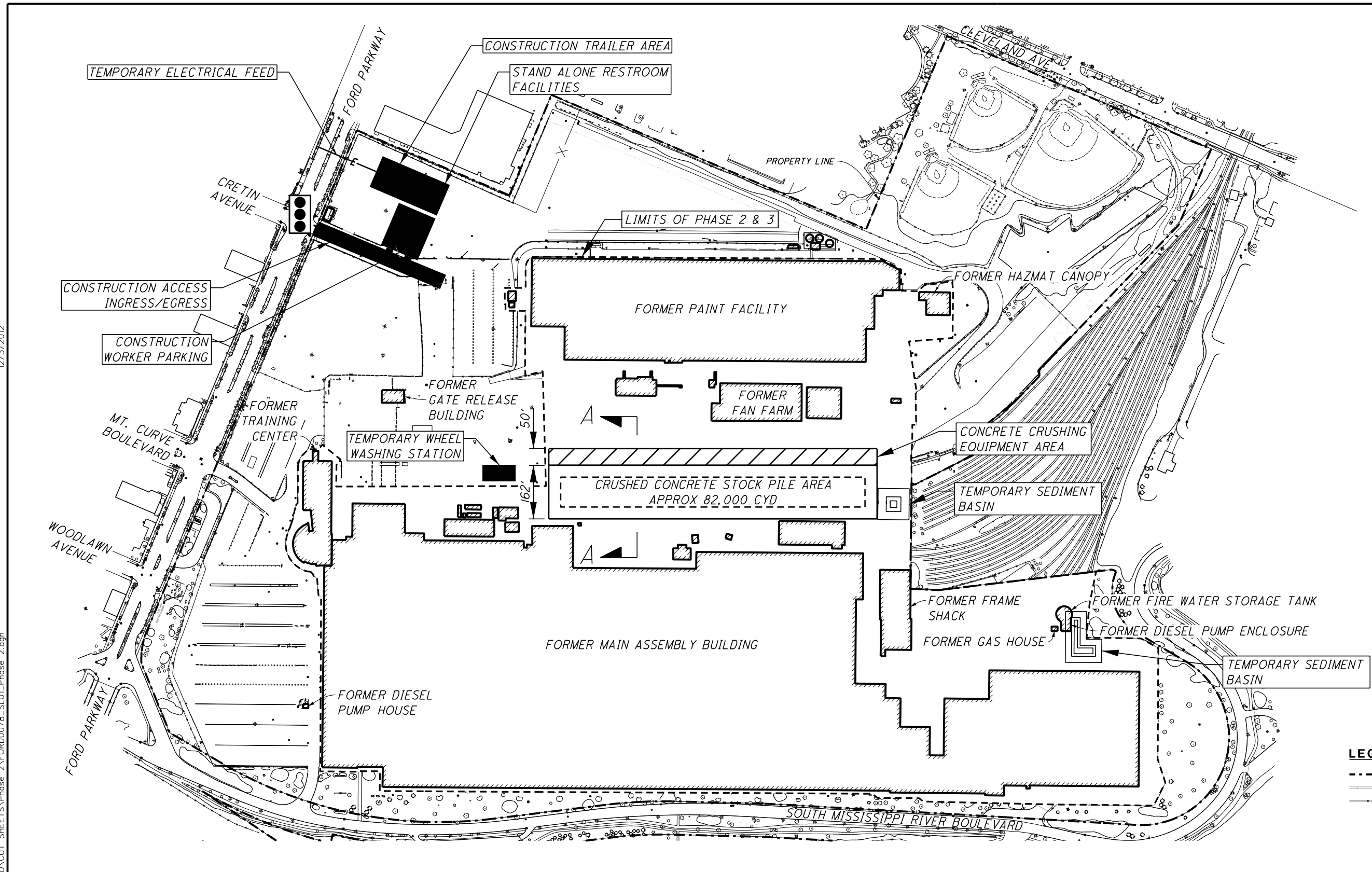
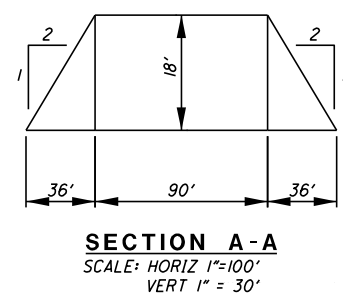
LEGEND

	PROPERTY LINE
	RAILROAD TRACK
	FENCE
	EXISTING SIGNAL



TRAFFIC NOTES

27	AVERAGE CONSTRUCTION TRUCKS PER DAY
35	AVERAGE CONSTRUCTION EMPLOYEE VEHICLES PER DAY
18	AVERAGE ADMINISTRATIVE EMPLOYEE VEHICLES PER DAY
4	AVERAGE DELIVERY TRUCKS PER DAY
6	AVERAGE SECURITY VEHICLES PER DAY



12/3/2012

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PROJECT
TWIN CITIES ASSEMBLY PLANT
SAINT PAUL, MINNESOTA
LOGISTICS AND
TRAFFIC IMPROVEMENT
PLAN (PHASE 2 & 3)
71
79



KEY PLAN

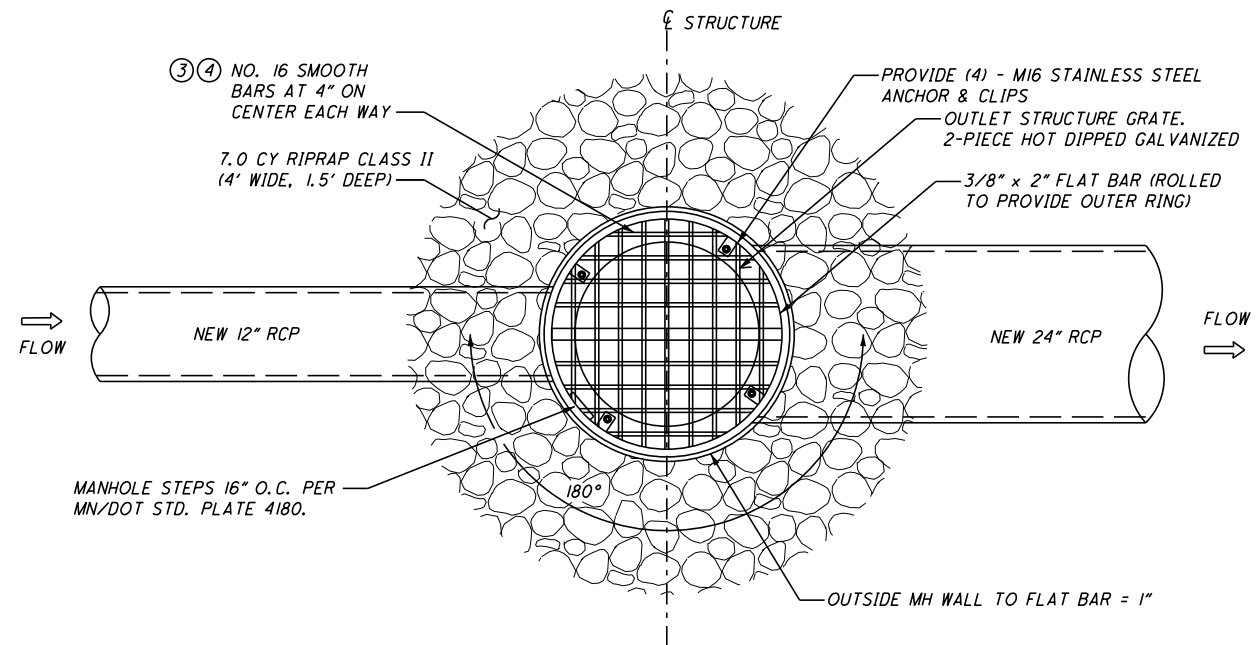
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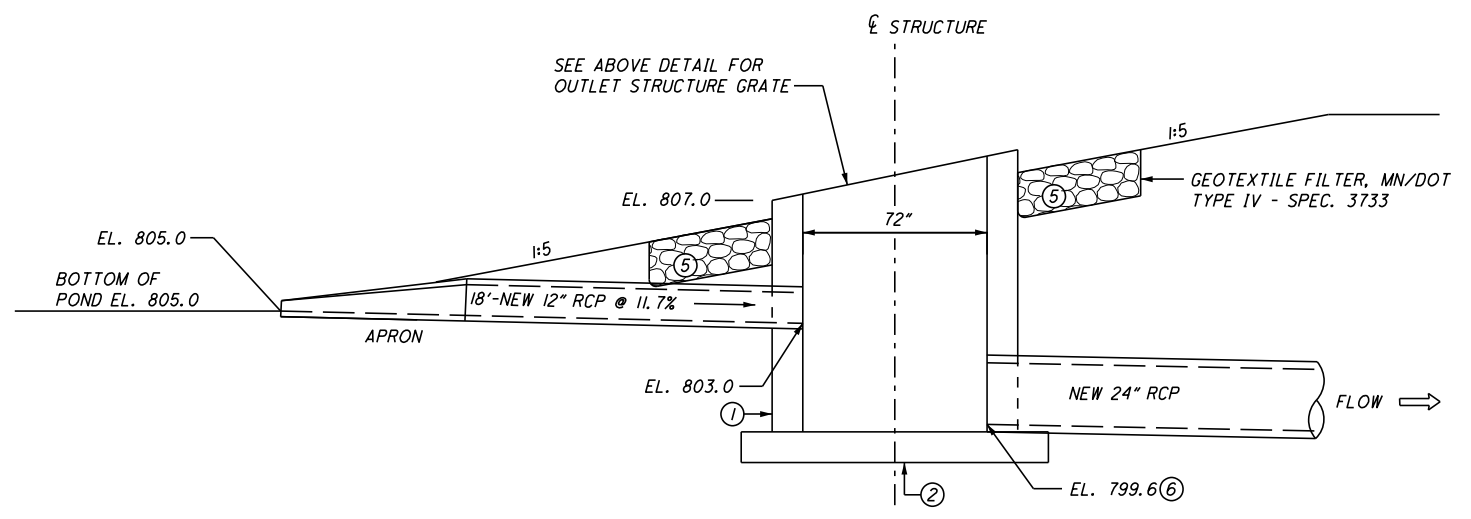
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DATE: _____ LICENSE # 50097



NOTES:

- ① PRECAST MANHOLE STRUCTURE TYPE 4020 WITH TAPERED RISER FOR GRATE PER MN/DOT STANDARD PLATE 4020.
- ② CONCRETE BASE PER MN/DOT STANDARD PLATE 4011.
- ③ PROVIDE FULL PENETRATION TACK WELD EVERY OTHER BAR (MINIMUM).
- ④ ALL REBAR SIZES ARE METRIC UNLESS NOTED OTHERWISE.
- ⑤ RIPRAP PLACED AROUND THE PERIMETER OF GRATE MUST BE FLUSH WITH FINISHED SOIL GRADE AS SHOWN IN DETAIL.



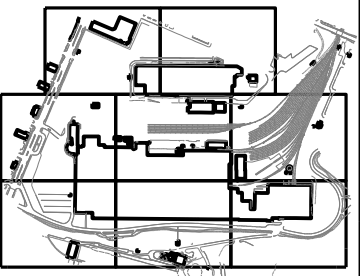
SOUTH DRY POND OUTLET CONTROL STRUCTURE
NO SCALE

12/3/2012

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PROJECT
TWIN CITIES ASSEMBLY PLANT
SAINT PAUL, MINNESOTA

DETAIL SHEET

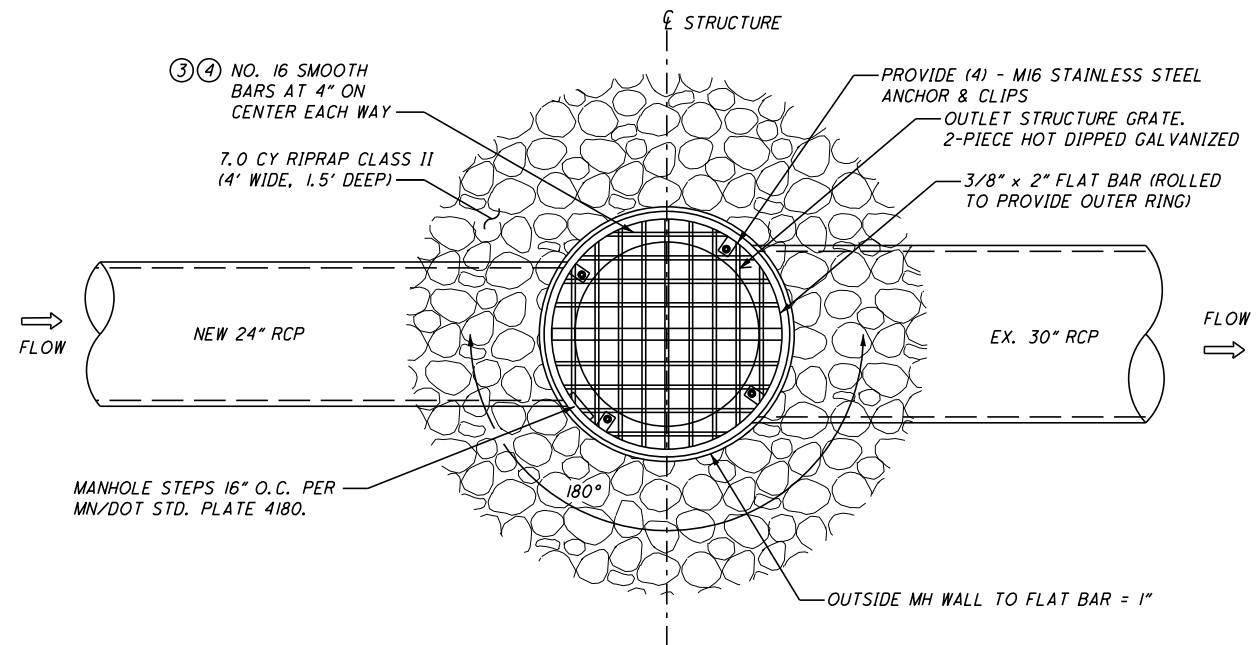


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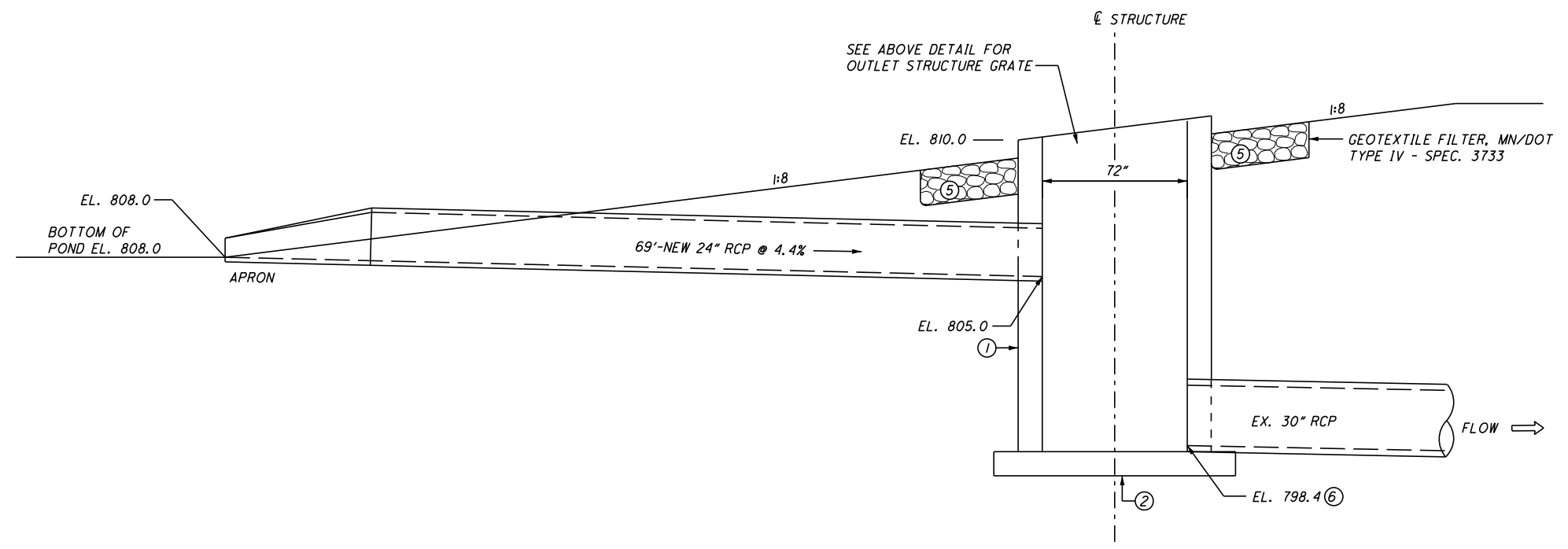
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- ② CONCRETE BASE PER MN/DOT STANDARD PLATE 4011.
- ③ PROVIDE FULL PENETRATION TACK WELD EVERY OTHER BAR (MINIMUM).
- ④ ALL REBAR SIZES ARE METRIC UNLESS NOTED OTHERWISE.
- ⑤ RIPRAP PLACED AROUND THE PERIMETER OF GRATE MUST BE FLUSH WITH FINISHED SOIL GRADE AS SHOWN IN DETAIL.
- ⑥ CONTRACTOR TO VERIFY EXISTING INVERT OF 30" RCP.



NORTH DRY POND OUTLET CONTROL STRUCTURE
NO SCALE

12/3/2012

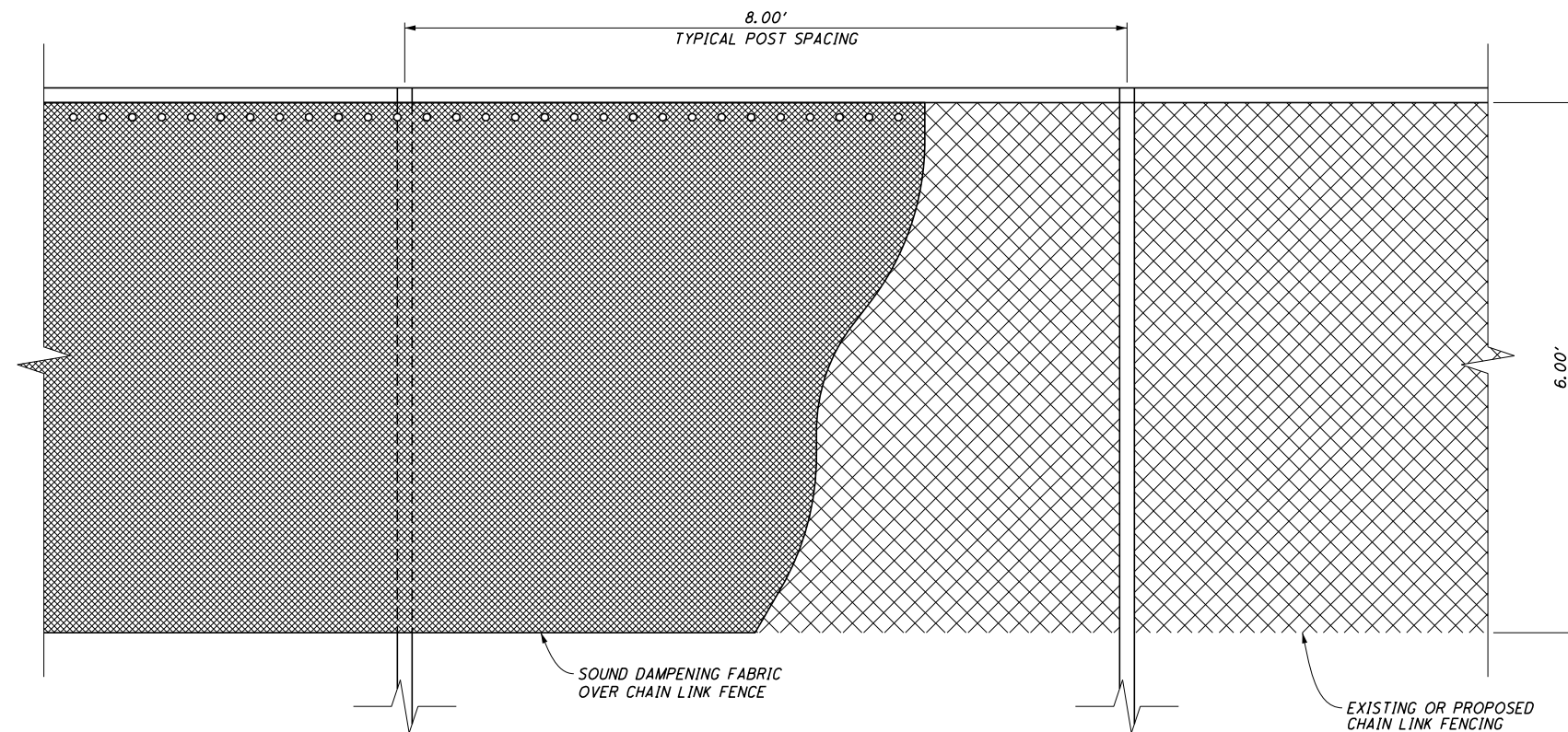
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PROJECT
TWIN CITIES ASSEMBLY PLANT
SAINT PAUL, MINNESOTA

DETAIL SHEET

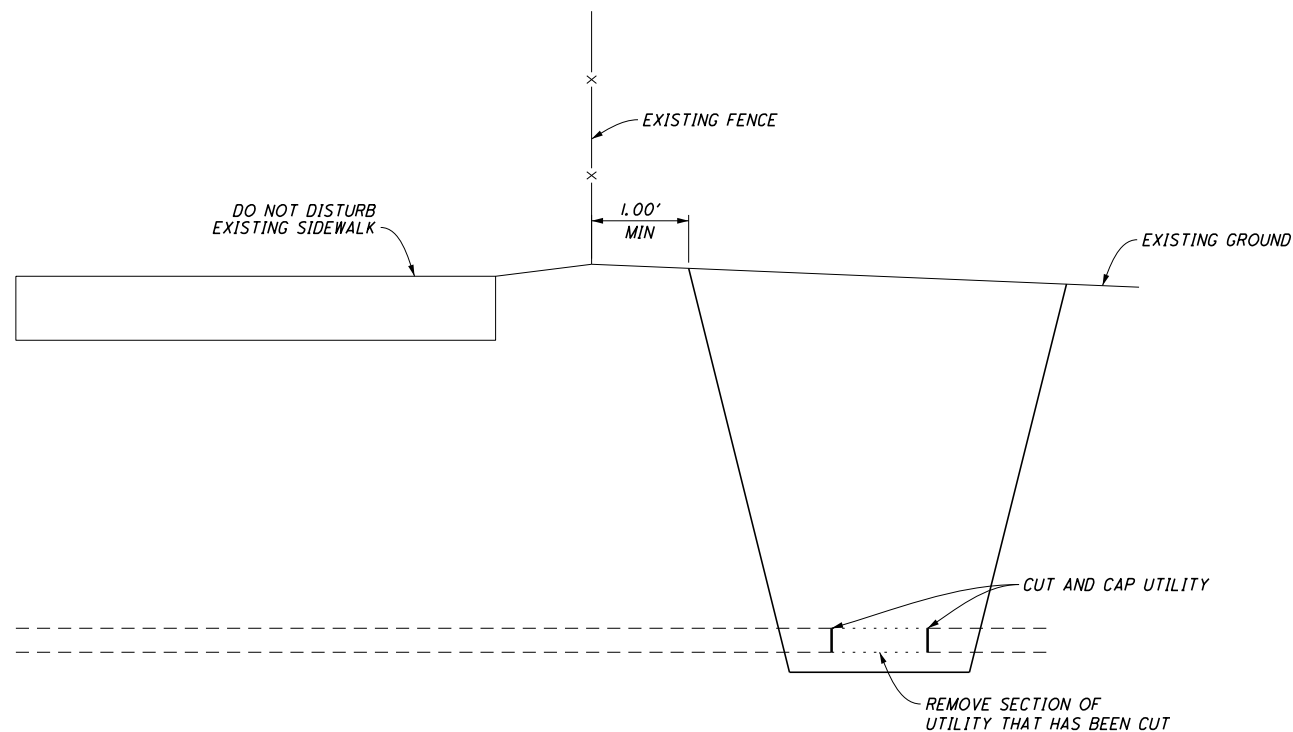
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FENCE DETAIL

- NOTES:
1. FOR SILT FENCE DETAIL SEE EROSION AND SEDIMENT CONTROL DETAILS ON SHEETS 60 AND 61
 2. FENCE INSTALLED WITH PHASE 1 WORK TO BE MAINTAIN AS SHOWN DURING PHASE 2 AND 3

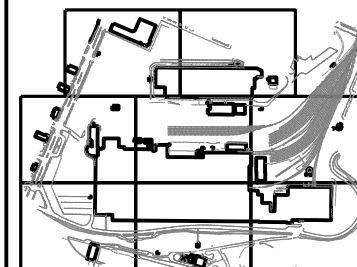


UTILITY DISCONNECTS NEAR SIDEWALKS



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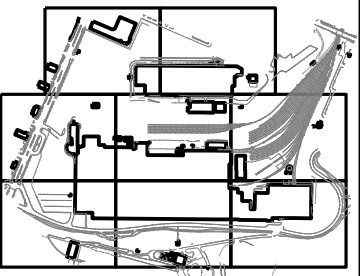
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PROJECT
TWIN CITIES ASSEMBLY PLANT
SAINT PAUL, MINNESOTA

DETAIL SHEET



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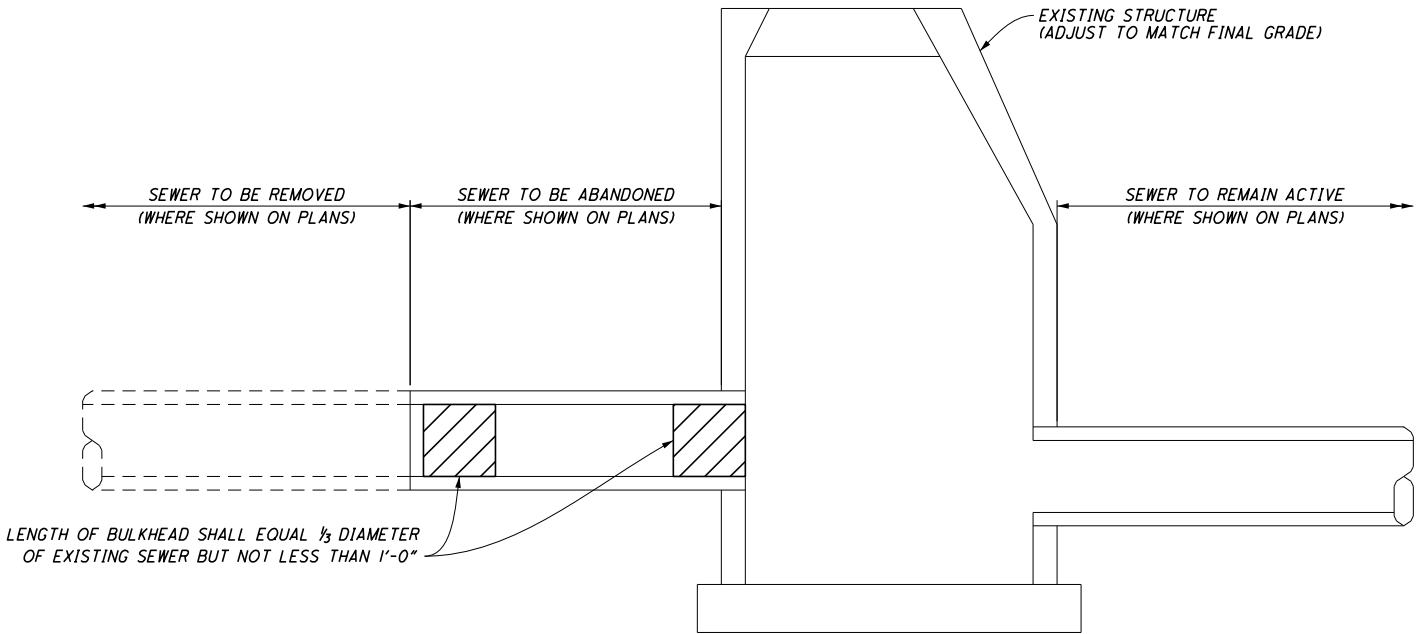
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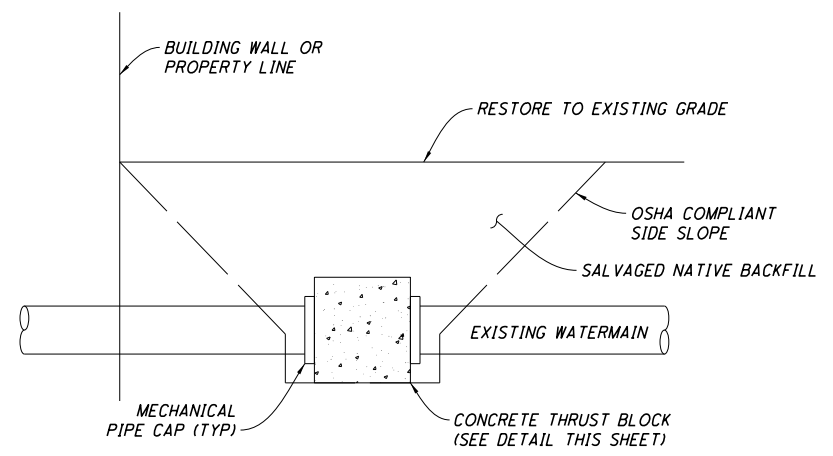
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TWIN CITIES ASSEMBLY PLANT
SAINT PAUL, MINNESOTA

DETAIL SHEET



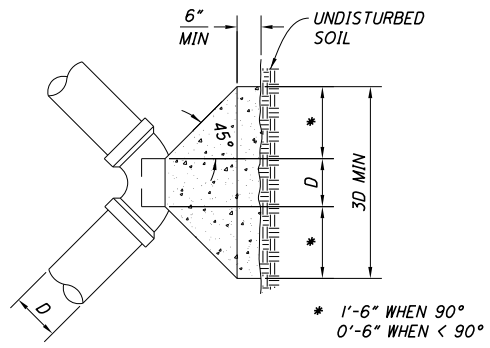
SEWER BULKHEAD DETAIL

- APPLIES:
- | | |
|------------------------|-------------------------|
| 3 LOCATIONS - SHEET 12 | 1 LOCATION - SHEET 16 |
| 2 LOCATIONS - SHEET 13 | 14 LOCATIONS - SHEET 17 |
| 2 LOCATIONS - SHEET 14 | 3 LOCATIONS - SHEET 18 |
| 5 LOCATIONS - SHEET 15 | 1 LOCATION - SHEET 19 |

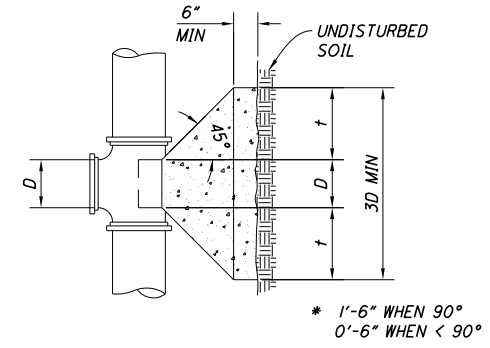


WATERMAIN CAPPING DETAIL

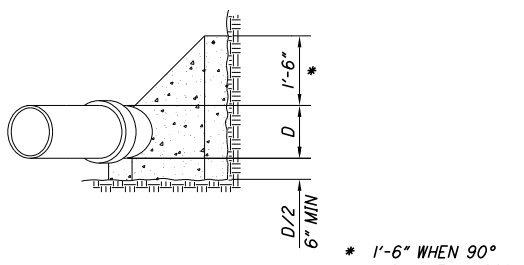
NO SCALE



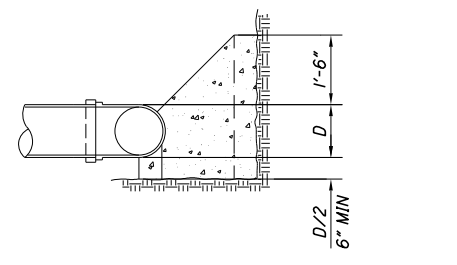
PLAN - BENDS



PLAN - TEES & PLUGS



SECTION - BENDS

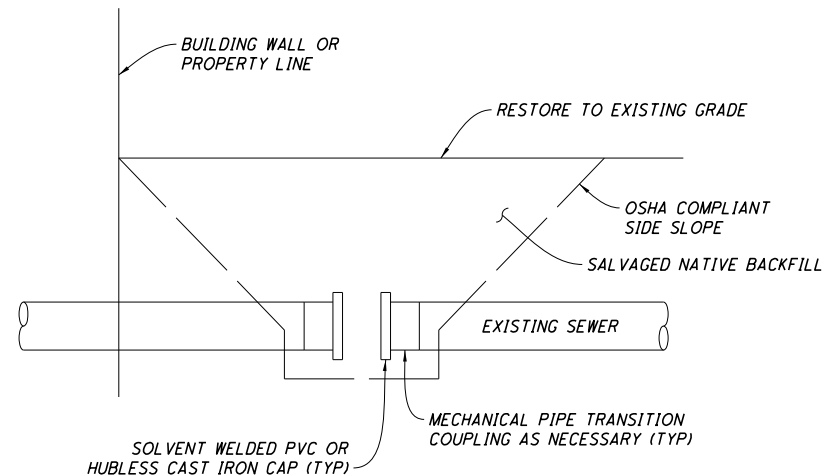


SECTION - TEES & PLUGS

- NOTES:
- 2500 PSI CONCRETE, 28 DAY STRENGTH
 - CONCRETE BLOCK TO BE PLACED UNDER ALL FITTINGS
 - COVER FITTINGS WITH POLYETHYLENE (4 MIL)

THRUST BLOCK DETAIL

NO SCALE



SEWER CAPPING DETAIL

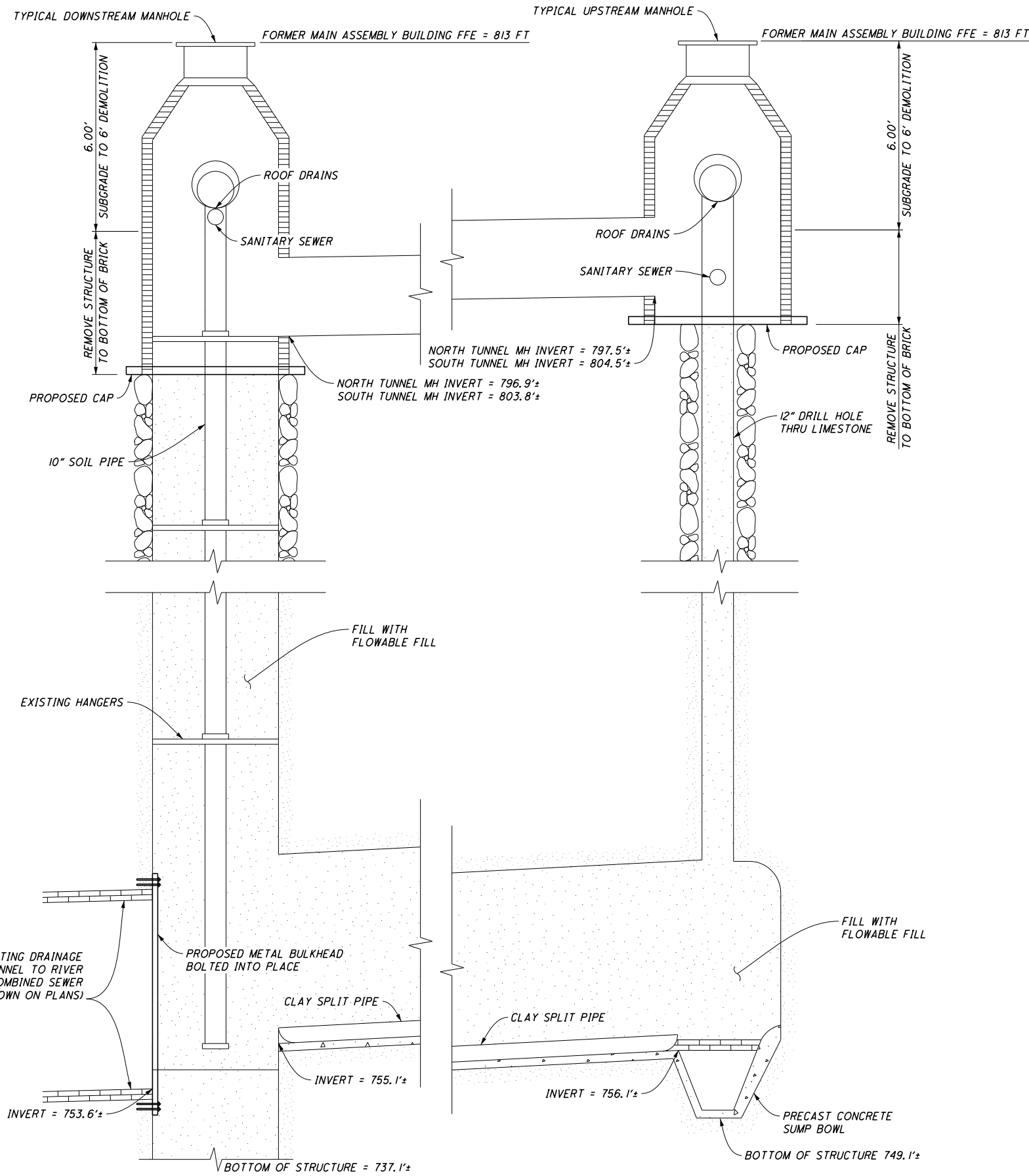
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12/3/2012

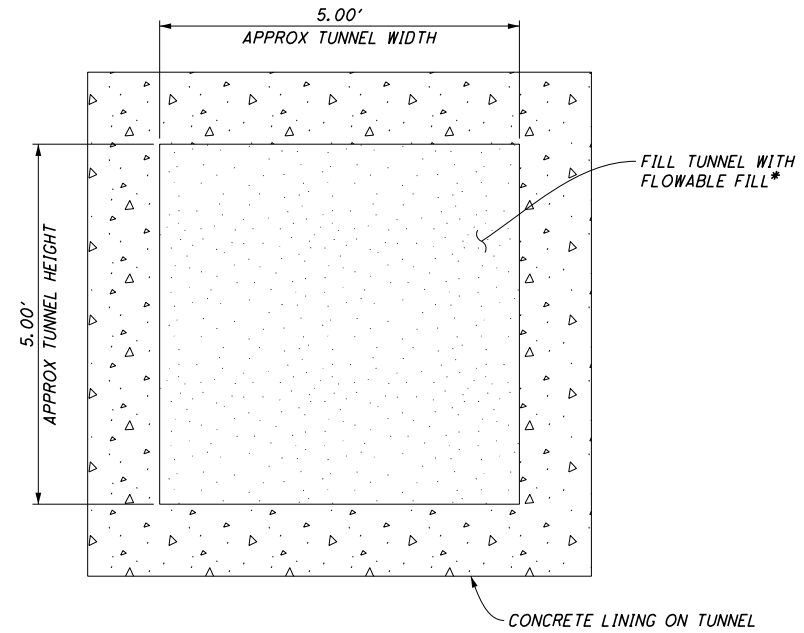
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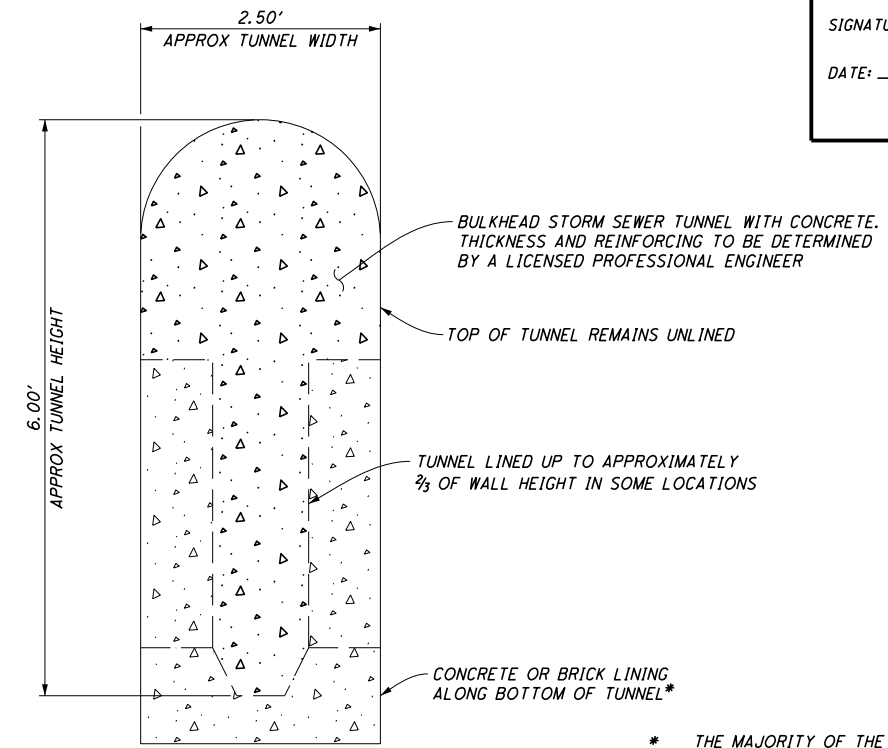
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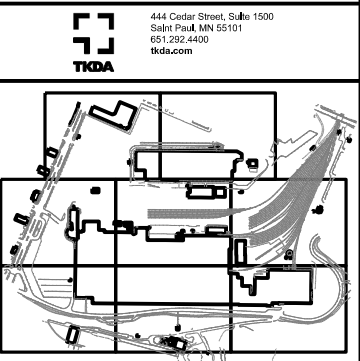
SANITARY TUNNEL BULKHEAD DETAIL



OIL TUNNEL ABANDONMENT DETAIL



STORM TUNNEL BULKHEAD DETAIL



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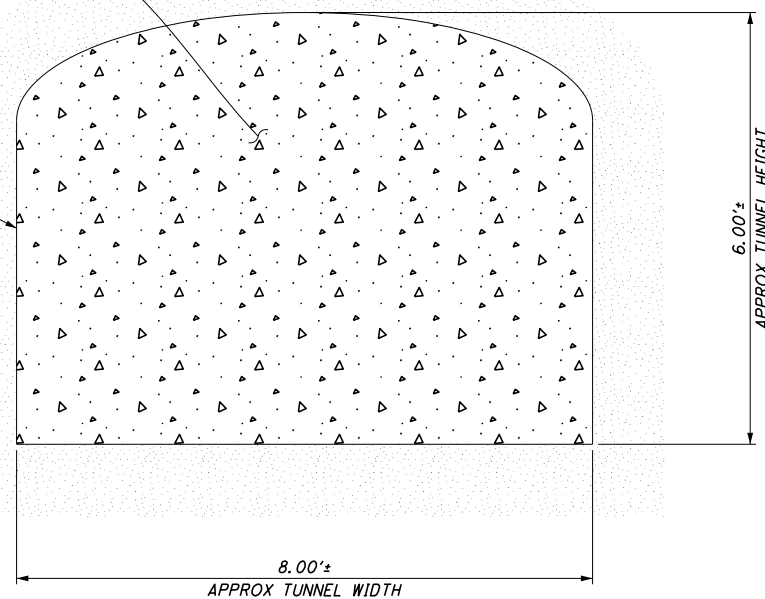
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BULKHEAD GAS TUNNEL WITH CONCRETE THICKNESS AND REINFORCING TO BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER

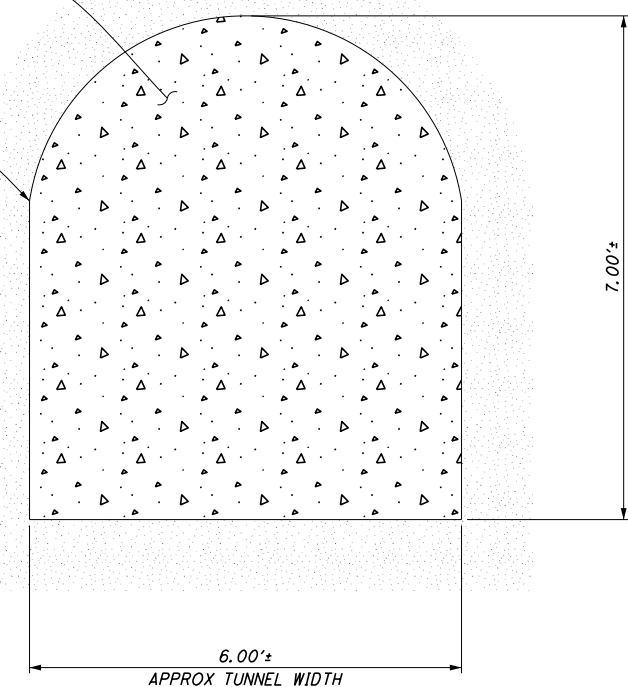
UNLINED TUNNEL IN SANDSTONE



GAS TUNNEL BULKHEAD DETAIL

BULKHEAD GAS TUNNEL WITH CONCRETE THICKNESS AND REINFORCING TO BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER

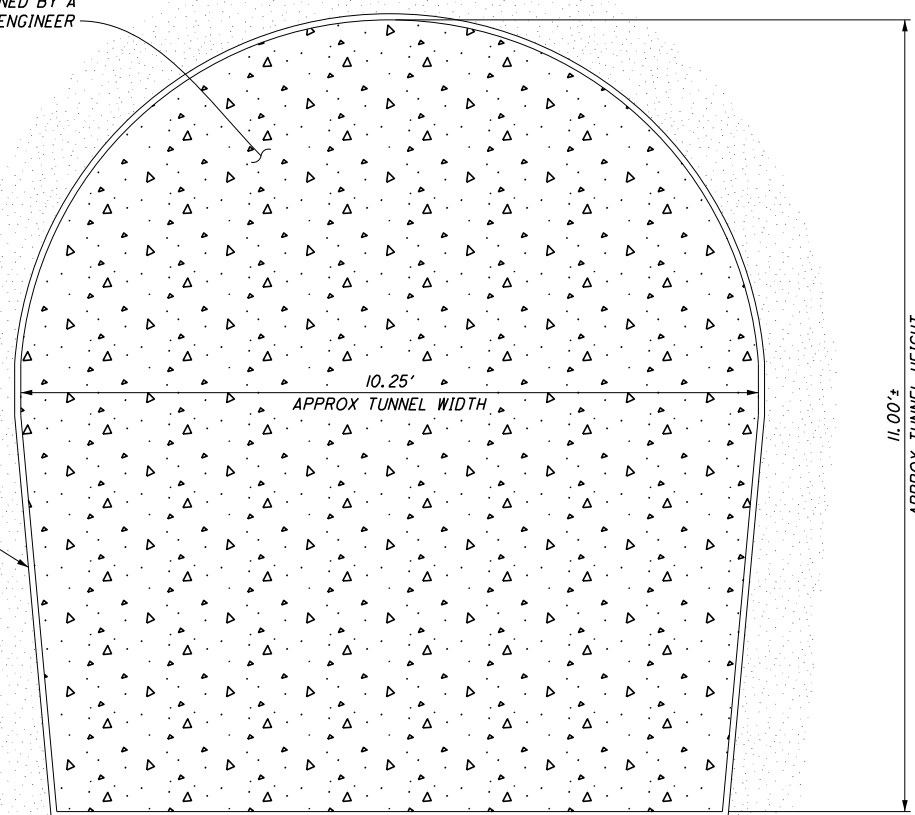
UNLINED TUNNEL IN SANDSTONE



CABLE TUNNEL BULKHEAD DETAIL

BULKHEAD GAS TUNNEL WITH CONCRETE THICKNESS AND REINFORCING TO BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER

1" SHOTCRETE LINED TUNNEL IN SANDSTONE

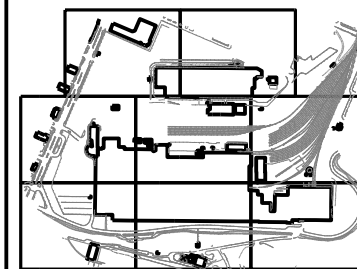


TRAFFIC TUNNEL BULKHEAD DETAIL



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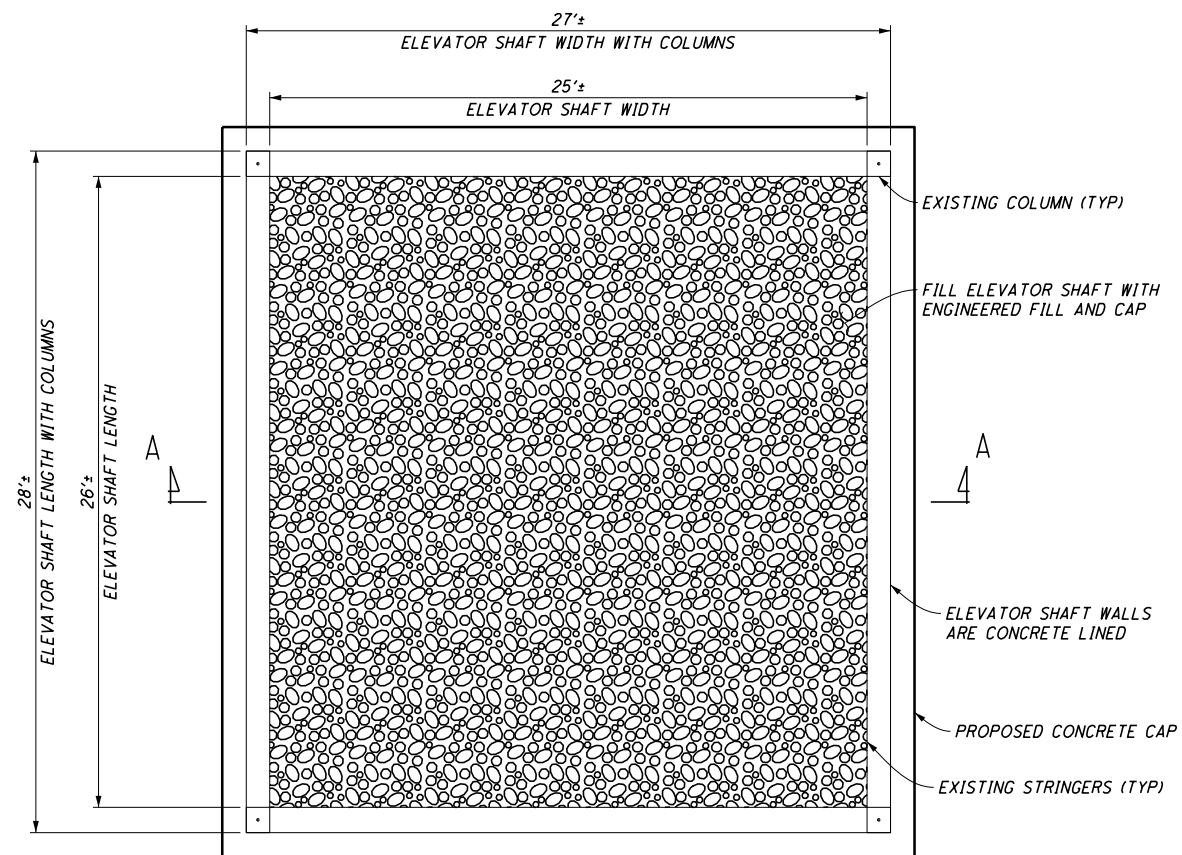
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PROJECT
TWIN CITIES ASSEMBLY PLANT
SAINT PAUL, MINNESOTA

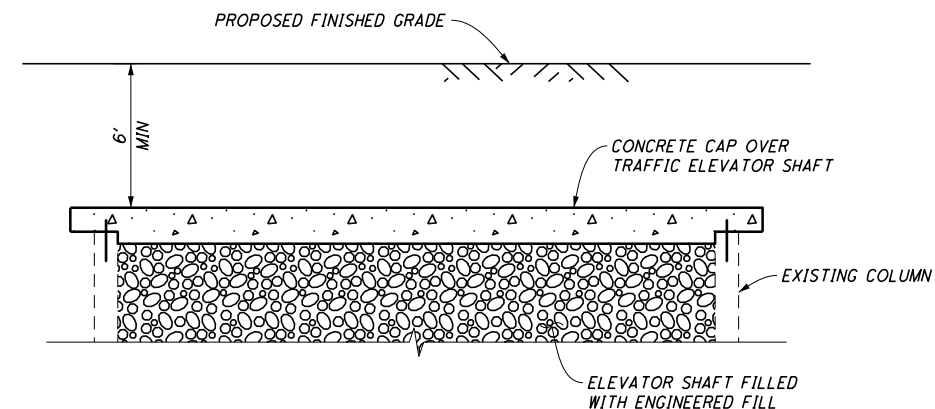
DETAIL SHEET

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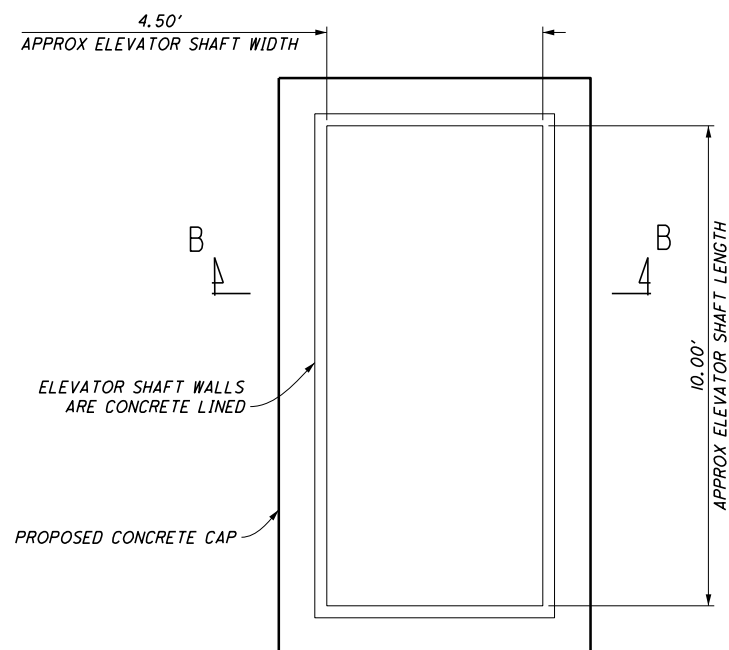


TRAFFIC TUNNEL ELEVATOR CAP DETAIL

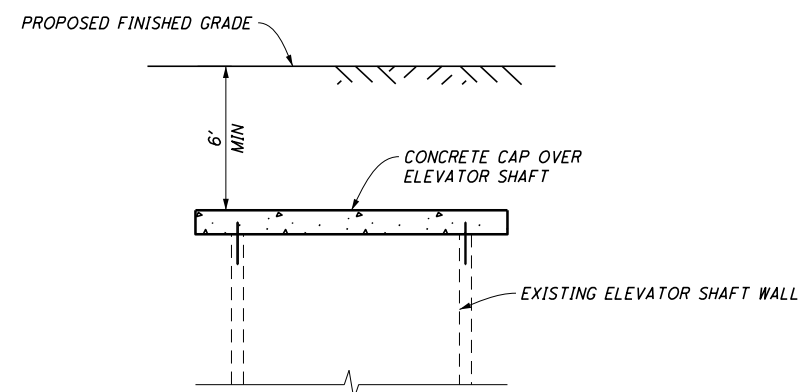


TRAFFIC TUNNEL ELEVATOR CAP SECTION A-A

CAP DESIGN DETAILS TO BE PART OF CONSTRUCTION DOCUMENTS
DESIGN BY PROFESSIONAL ENGINEER LICENSED IN MINNESOTA

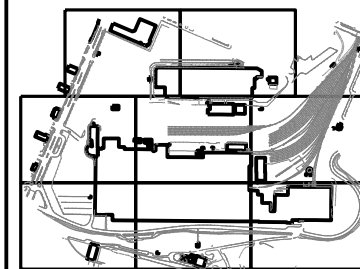


SAND AND GAS TUNNEL ELEVATOR CAP DETAIL



SAND AND GAS TUNNEL ELEVATOR CAP SECTION B-B

CAP DESIGN DETAILS TO BE PART OF CONSTRUCTION DOCUMENTS
DESIGN BY PROFESSIONAL ENGINEER LICENSED IN MINNESOTA



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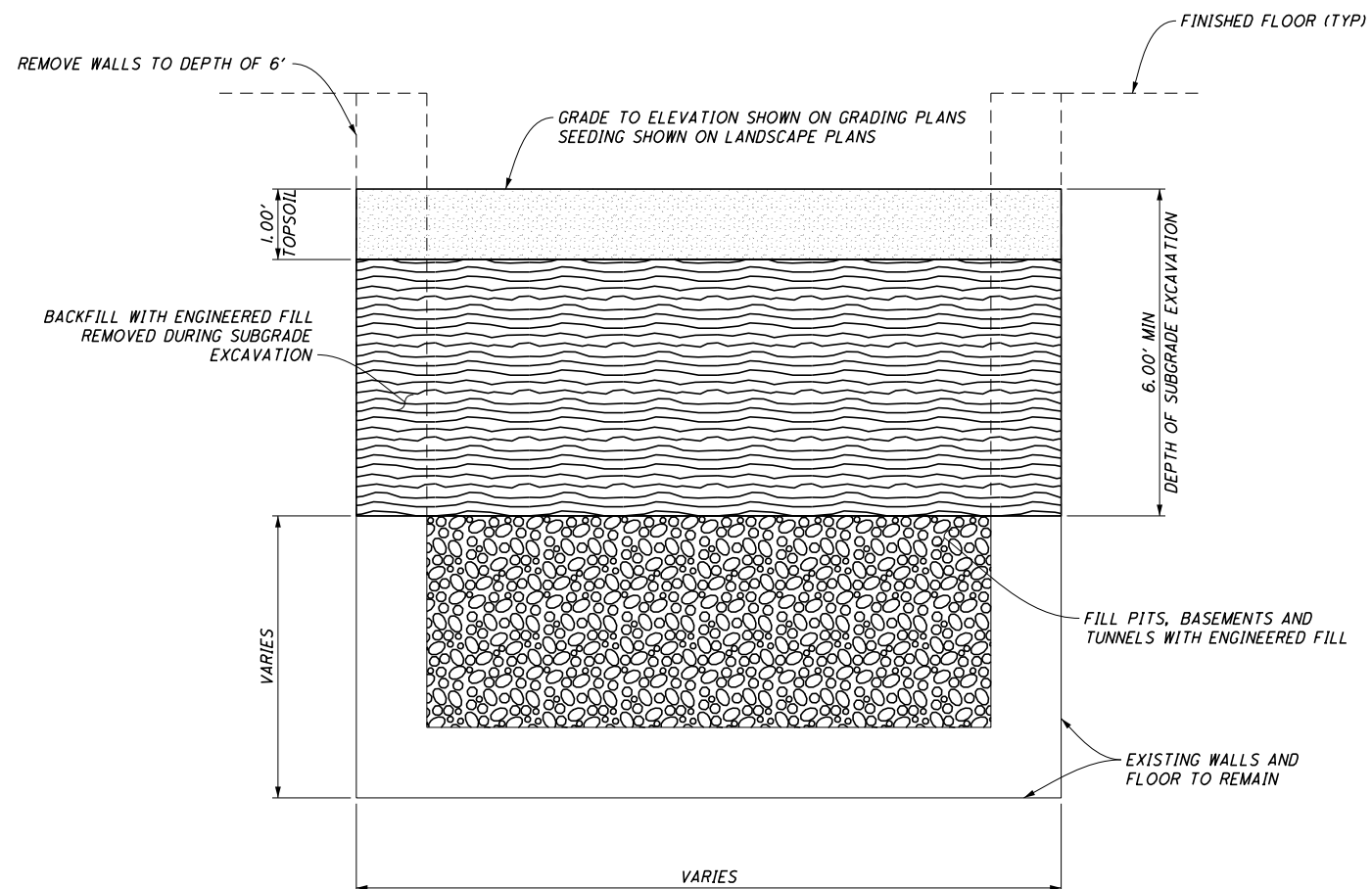
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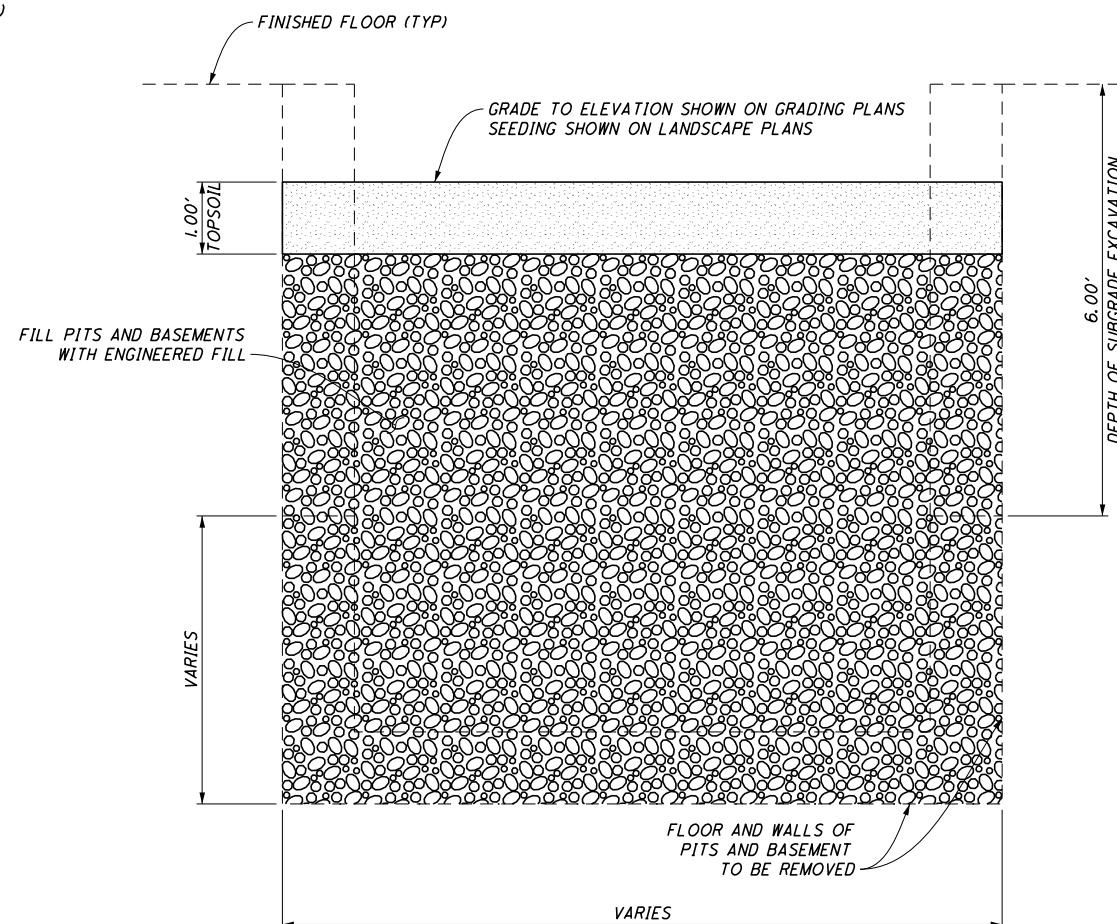
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ABANDON IN PLACE DETAIL

APPLIES AT: SUBSTATION BASEMENT
 STEAM TUNNEL
 PUMP ROOM
 WORK PIT (SHEET 25)



REMOVE AND FILL DETAIL

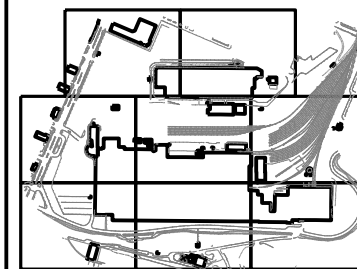
APPLIES AT: EXISTING PIT (2) (SHEET 22)
 CYLINDER PIT
 WORK PIT (2) (SHEETS 22 AND 25)
 PAINT SLUDGE PIT
 GLASS BASEMENT
 CONVEYOR PIT



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 SAINT PAUL, MINNESOTA

DETAIL SHEET