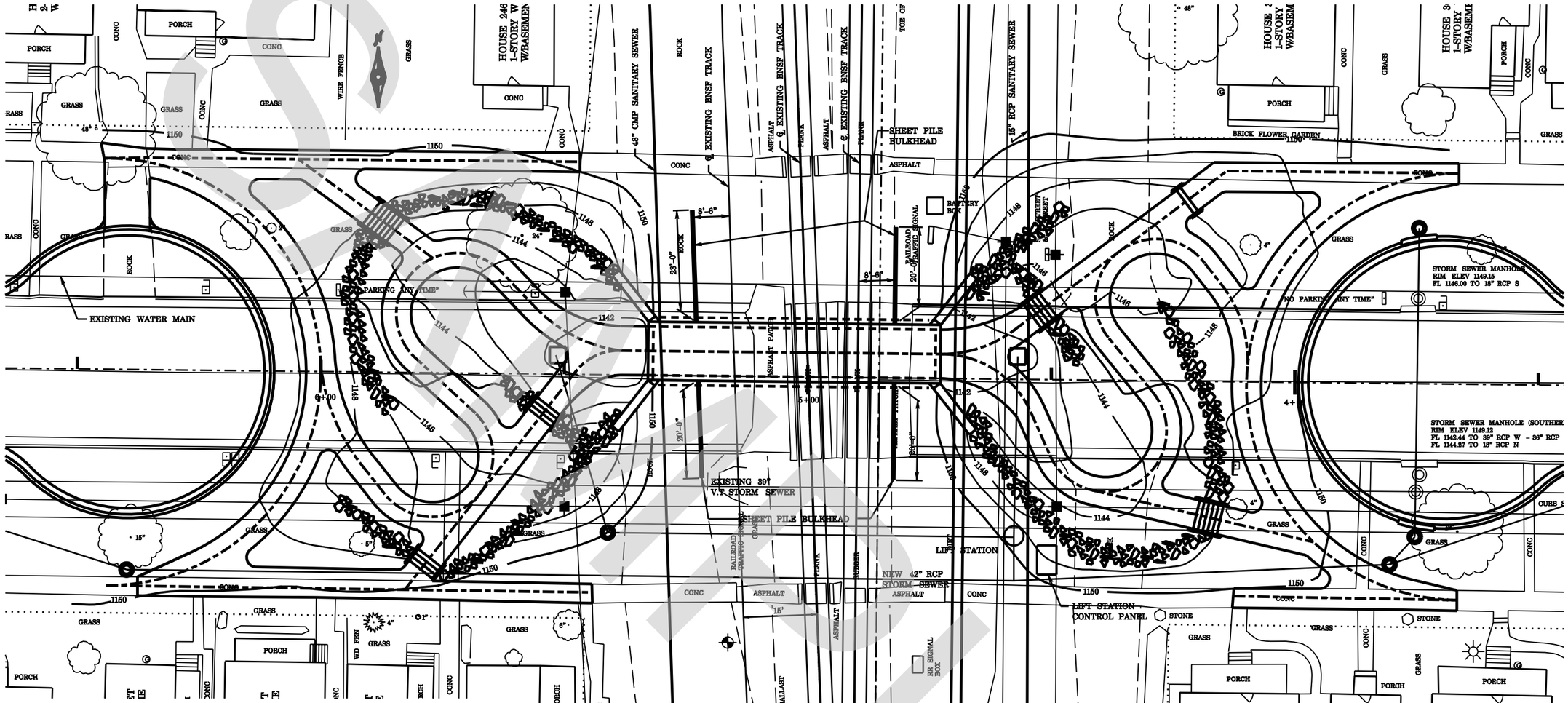
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	-	-		
-	-			
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. -
- SHEETS

Contract #



NOTES:

SHEET PILE BULKHEADS SHALL BE DESIGNED AND CERTIFIED BY A REGISTERED ENGINEER IN THE STATE OF NEBRASKA. A PLAN AND DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BY THE RAILROAD.

ALL SHEET PILE WALLS SHALL BE DESIGNED AS ANCHORED BULKHEADS. EXISTING GROUND LINE BEHIND THE SHEET PILE WALLS IS APPROXIMATELY ELEVATION 1152.0. EXCAVATION IN FRONT OF THE WALL WILL BE THE MINIMUM NECESSARY TO INSTALL THE CULVERT WINGWALLS, AND TO REPLACE FOUNDATION SOILS (APPROXIMATELY ELEV. 1138).

SHEET PILE BULKHEADS SHALL BE DESIGNED TO SUPPORT ANTICIPATED LATERAL EARTH PRESSURES AND COOPER E-80 LIVE LOAD SURCHARGE.

THE PLAN LIMITS OF SHEETPILE WALLS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT ACTUAL FIELD CONDITIONS.

THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES INCLUDING BNSF UTILITIES PRIOR TO DRIVING SHEET PILING.

SHEET PILING MUST BE CAREFULLY PLACED TO AVOID DAMAGING DRAIN PIPES ALONG CULVERT WALLS AND EXISTING WATER MAIN. SHEET PILE BULKHEADS SHOWN IN PLAN SHALL BE LEFT IN PLACE AND WALLS SHALL BE CUT OFF WHEN EXCAVATION IS BACKFILLED AT APPROXIMATELY ELEV. 1149.0, BUT NOT HIGHER THAN 3'-6" BELOW TOP OF RAIL.

DESIGNED -	- 200
CHECKED -	EXAMINED
DRAWN -	ENGINEER OF BRIDGE DESIGN
CHECKED -	PASSED
	ENGINEER OF BRIDGES AND STRUCTURES

WALKWAY PLAN

F STREET
PEDESTRIAN UNDERPASS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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- SHEETS

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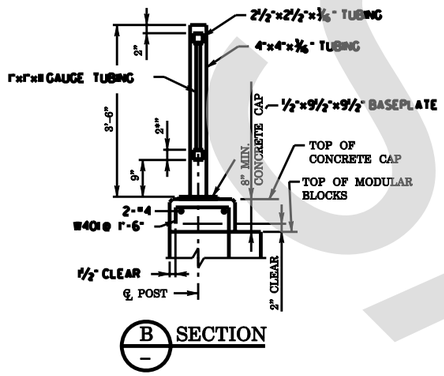
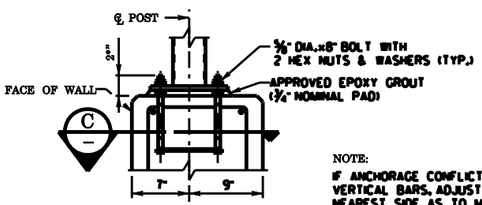
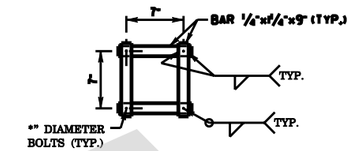


B SECTION

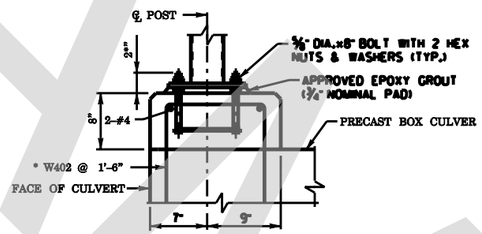


ANCHOR DETAIL
FOR CONCRETE CAP ON WINGWALL

NOTE:
IF ANCHORAGE CONFLICTS WITH VERTICAL BARS, ADJUST BAR TO NEAREST SIDE AS TO MAINTAIN 1'-6" SPACING.



C SECTION



ANCHOR DETAIL
FOR PRECAST CONCRETE CONCRETE CULVERT

* DRILL 1"DIA. x 6" DEEP HOLES FOR W402. GROUT WITH APPROVED EPOXY GROUT.

RETAINING WALL DETAILS:

1. THE MINIMUM DEPTH OF BLOCK EMBEDMENT SHALL BE 16" MEASURED PERPENDICULAR TO THE SLOPE UNLESS A DETAILED ANALYSIS SHOWS A GREATER DEPTH IS REQUIRED (AASHTO 5.8)
2. THE MINIMUM REINFORCEMENT LENGTH SHALL BE 70 PERCENT OF THE TOTAL WALL HEIGHT UNLESS A DETAILED ANALYSIS SHOWS A LONGER LENGTH IS REQUIRED (MIN. 7'-0") (AASHTO 5.8). GEOTEXTILE VERTICAL SPACING TO BE DETERMINED BY DETAILED ANALYSIS.
3. 4" P.V.C. PERFORATED DRAINAGE PIPE, (LINCOLN 22.02C), WRAPPED IN GEOTEXTILE FILTER FABRIC, (LINCOLN 21.02N). THE PROJECT ENGINEER HAS THE OPTION OF HAVING ADDITIONAL DRAINS PLACED TO INTERCEPT ANY WATER-BEARING SOIL STRATA DISCOVERED DURING CONSTRUCTION. CONNECT TO CULVERT UNDERDRAIN.
4. CONSTRUCTION LIMITS OF STRUCTURE EXCAVATION.
5. REINFORCED BACKFILL SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS.
6. ANY SUITABLE BACKFILL. COMPACTION TO BE IN ACCORDANCE WITH (LINCOLN 2.06B).
7. SLOPE DETERMINED BY IN-SITU SOILS AND/OR OSHA REGULATIONS. ANY EXCAVATION BEYOND "LIMITS OF EXCAVATION" SHALL BE AT THE CONTRACTOR'S EXPENSE.
8. GEOTEXTILE FILTER FABRIC TO BE PLACED ON BACK SIDE OF FACING BLOCKS AS SHOWN.
9. THE LEVELING PAD SHALL BE EITHER UNREINFORCED CONCRETE OR COMPACTED AGGREGATE. THE THICKNESS SHALL BE AS DETERMINED BY ANALYSIS BUT IN NO CASE SHALL BE LESS THAN 6 INCHES.
10. EXCAVATE FAT CLAY TO APPROXIMATELY ELEV. 138.0. REPLACE WITH COMPACTED GRAVEL.

RETAINING WALL NOTES:

BLOCKS SHALL BE NOMINAL 8"H x 18"W x 2½"D AND HAVE ROCK FACE (OR APPROVED EQUAL).

PLACE 3" TOPSOIL & SEED IN DISTURBED AREAS.

GRADE TO ELEVATIONS INDICATED.

THE WALL SHALL BE DESIGNED AND THE DETAILED DRAWINGS PREPARED BY A PROFESSIONAL ENGINEER EXPERENCED IN RETAINING WALL DESIGN WHO IS REGISTERED IN THE STATE OF NEBRASKA. THE DESIGN COMPUTATIONS AND THE PLANS SHALL BE CERTIFIED BY THE ENGINEER AND SUBMITTED TO THE OWNER FOR THEIR REVIEW AND PERMANENT RECORD. THE DESIGN SHALL BE PER AASHTO AND THE NE/DOT ROADWAY DESIGN MANUAL EXCEPT AS NOTED.

THE DETAILED DRAWINGS SHALL CONTAIN ALL THE NECESSARY INFORMATION FOR THE CONSTRUCTION OF THE WALL. INCLUDED SHALL BE A TYPICAL SECTION DETAILING EXCAVATION LIMITS, GEOTEXTILE LOCATIONS, BLOCK EMBEDMENTS, LEVELING PAD DIMENSIONS, BACKFILL, ETC. INCLUDE AS MANY SECTIONS AND OTHER VIEWS NECESSARY FOR THE CONSTRUCTION AND INSPECTION OF THE WALL. THE INFORMATION ON EMBEDMENT, GEOTEXTILE LOCATIONS, AND GEOTEXTILE LENGTHS AS THEY RELATE TO WALL HEIGHTS MAY BE SHOWN IN TABULAR FORM. ALSO INCLUDED SHALL BE THE PERTINENT INFORMATION ON THE INDIVIDUAL BLOCKS AND THE GEOTEXTILE MATERIAL.

ALL PLANS SHEETS SHALL CLEARLY IDENTIFY THE NAME OF THE RESPONSIBLE ENGINEERING FIRM AND THE NAME OF THE PERSON CERTIFYING THE PLAN.

A RAILING IS REQUIRED ALONG THE TOP OF THE WALL. THE WALL SHALL BE DESIGNED TO INCLUDE THE ADDITIONAL LOADING.

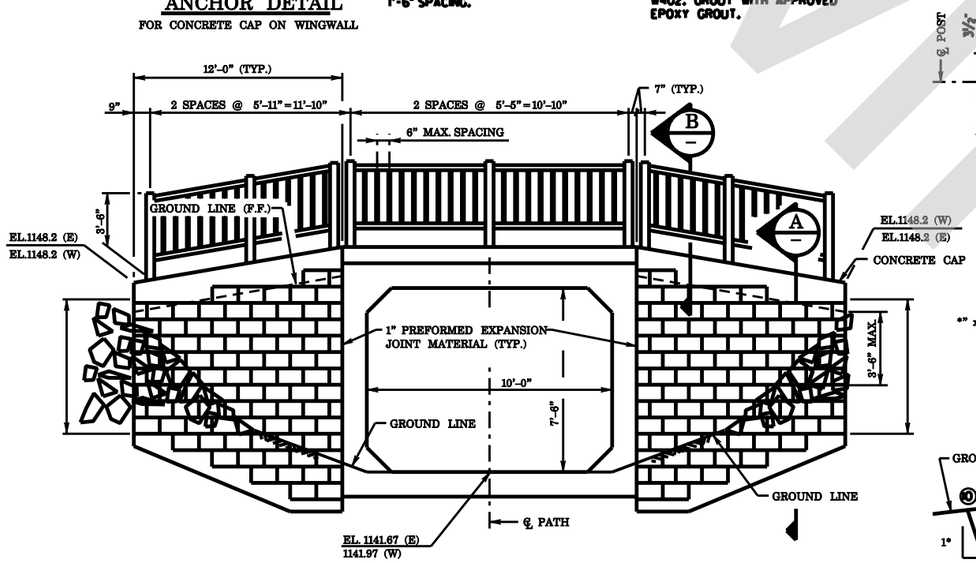
WHEN THE LONGITUDINAL SLOPE OF THE FOOTING IS GREATER THAN 10%, THE FOOTING MAY BE STEPPED.

ANY UTILITIES LOCATED WITHIN LIMITS OF EXCAVATION SHALL BE INSTALLED AS THE WALL IS BEING CONSTRUCTED. ONCE THE GEOTEXTILE LAYERS ARE INSTALLED, NEITHER THE GEOTEXTILE NOR THE UTILITY SHALL BE DISTURBED AT ANY TIME. ANY FUTURE MAINTENANCE ON THE UTILITY WILL REQUIRE DISMANTLING THE WALL.

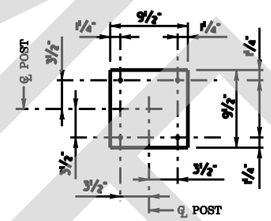
SHOW SLOPE AND/OR SURCHARGE LOADING ON FILL BEING RETAINED.

MAXIMUM BACKFILL HEIGHT IS 8.0 FT. WALLS MUST BE DESIGNED FOR RAILROAD SURCHARGE FROM TRACK LOCATED 17 FT (MIN.) FROM WALL.

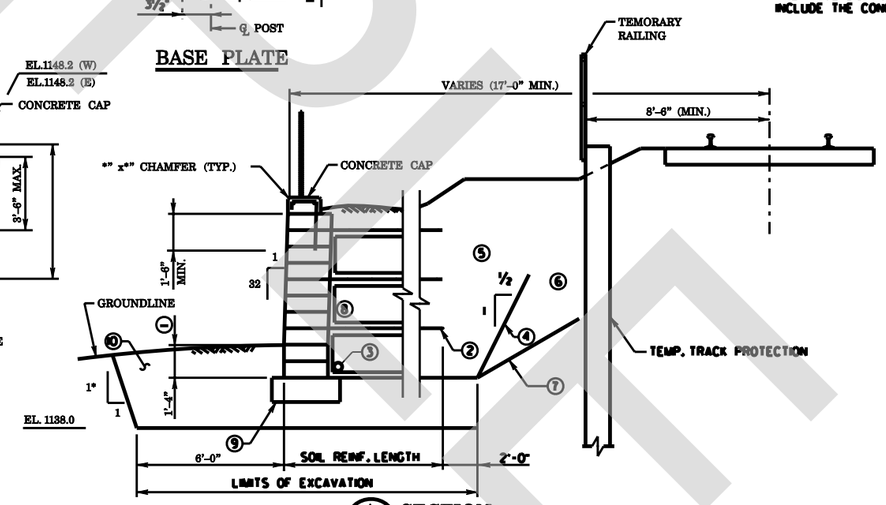
THE PRICE BID FOR MODULAR BLOCK RETAINING WALL SHALL INCLUDE THE CONCRETE CAP ON THE WALLS AND CULVERT.



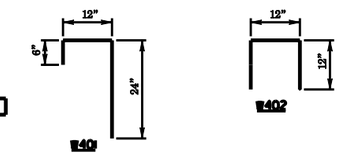
WALL ELEVATION



BASE PLATE



A SECTION



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DRAWN -	
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WINGWALL DETAILS

F STREET
PEDESTRIAN UNDERPASS

SAMPLE