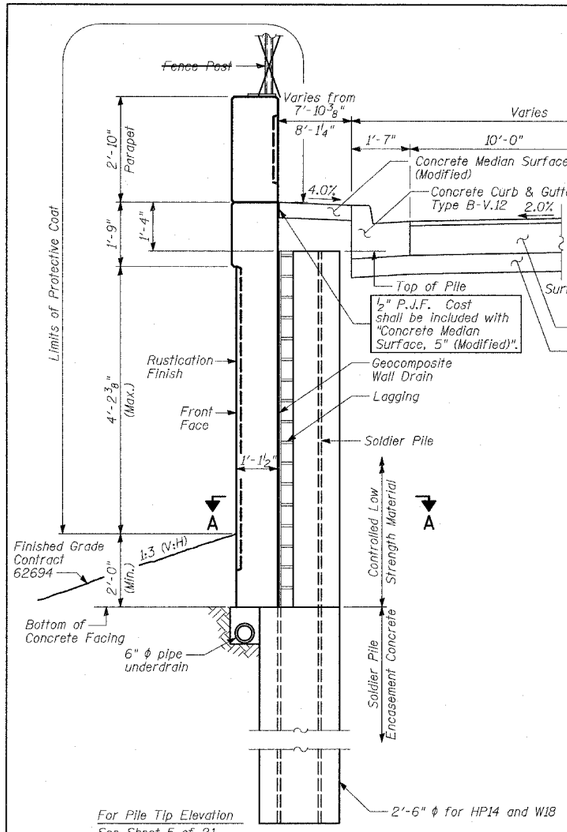
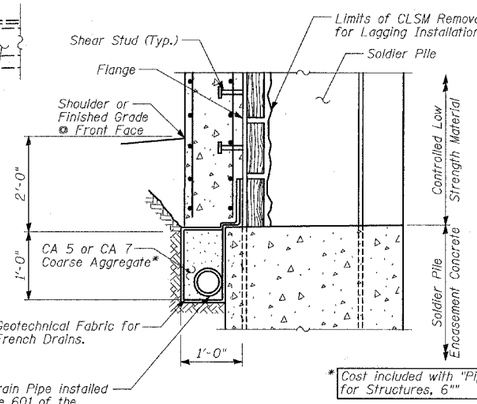
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	860	649
STA. 2200+00.00	TO STA. 2362+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (1516.1, 1717 & 1818) R-8				62694



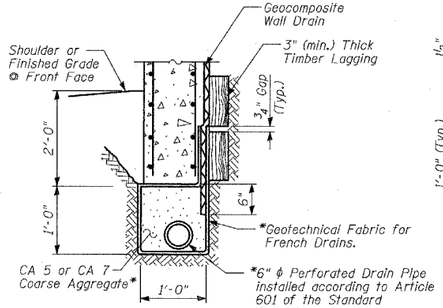
CROSS SECTION THRU WALL



* Cost included with "Pipe Underdrains for Structures, 6""

PIPE UNDERDRAIN DETAIL AT SOLDIER PILE

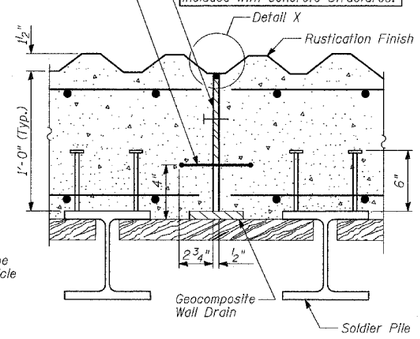
6" Hollow Bulb Type Non-Metallic Water Seal. Cost included with "Concrete Structures" Extend from bottom of facing to 6" below top of facing.



PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

6" Hollow Bulb Type Non-Metallic Water Seal. Cost included with "Concrete Structures" Extend from bottom of facing to 6" below top of facing.

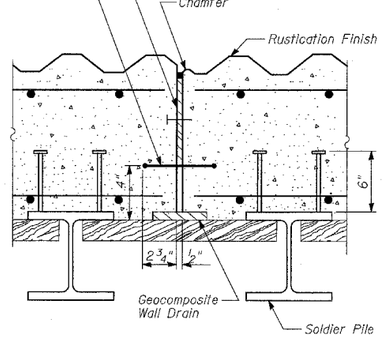
½" Preformed Joint Filler with Concrete Nails, Flat Head C.S. 1" Long @ 12" Cts. Vertical. Cost included with Concrete Structures.



EXPANSION JOIN DETAILS

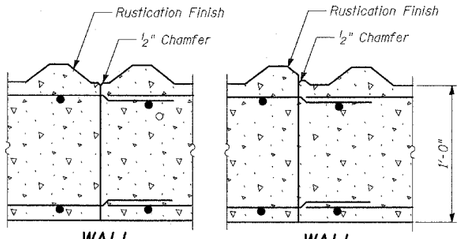
(Joint in Valley)

½" Preformed Joint Filler with Concrete Nails, Flat Head C.S. 1" Long @ 12" Cts. Vertical. Cost included with Concrete Structures.



EXPANSION JOINT DETAILS

(Joint on Diagonal)



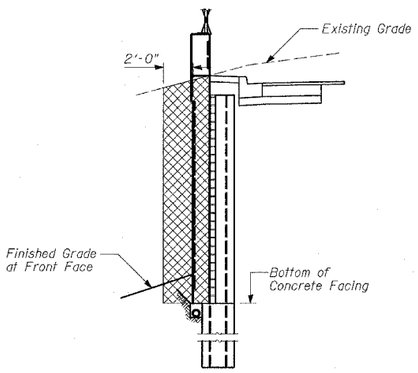
WALL

(Joint in Valley)

WALL

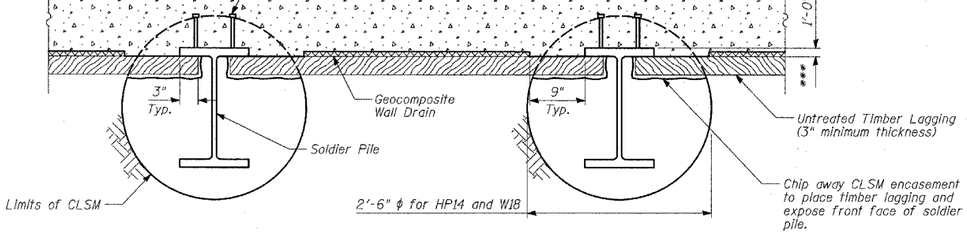
(Joint on Diagonal)

CONSTRUCTION JOINT DETAILS



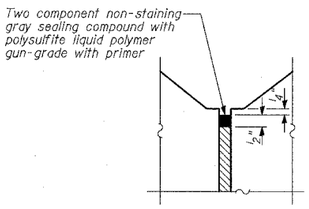
STRUCTURE EXCAVATION

(For Proposed Wall)



SECTION A-A

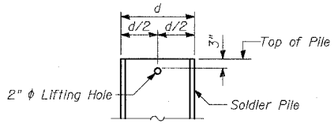
*** Cost of additional concrete between face of untreated timber lagging and face of pile included with "Concrete Structures".



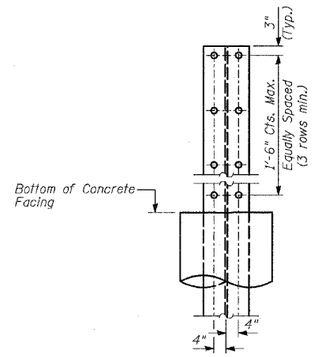
DETAIL X

NOTES:

1. The geocomposite wall drain shall be constructed according to Section 591 of the Standard Specifications.
2. The Contractor is responsible for the design and performance of the lagging using no less than 3" nominal rough-sawn thickness and the minimum tabulated unit stress in bending (F_b), used in the design of timber lagging shall be 1000 psi.
3. Stud shear connectors shall be ¾" ϕ x 6" granular or solid flux filled headed studs, automatically end welded to the front flange of the soldier piles.



LIFTING HOLE DETAIL



SHEAR STUD CONNECTOR DETAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	CU YD	333
Stud Shear Connectors	EACH	552
Untreated Timber Lagging	SQ FT	2,426
Geocomposite Wall Drain	SQ YD	294
Pipe Underdrains for Structures, 6"	FOOT	450

SHEET 9 OF 21

REVISIONS NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
EXIT RAMP AT AIS #2
AIS #2
WALL CROSS SECTIONS & DETAILS

S.N. 016-W960 DESIGNED BY: MI, DJR
SCALE: N.T.S. DRAWN BY: DJR, MAF
DATE: MARCH 18, 2005 CHECKED BY: TD, MI

TY·LIN INTERNATIONAL