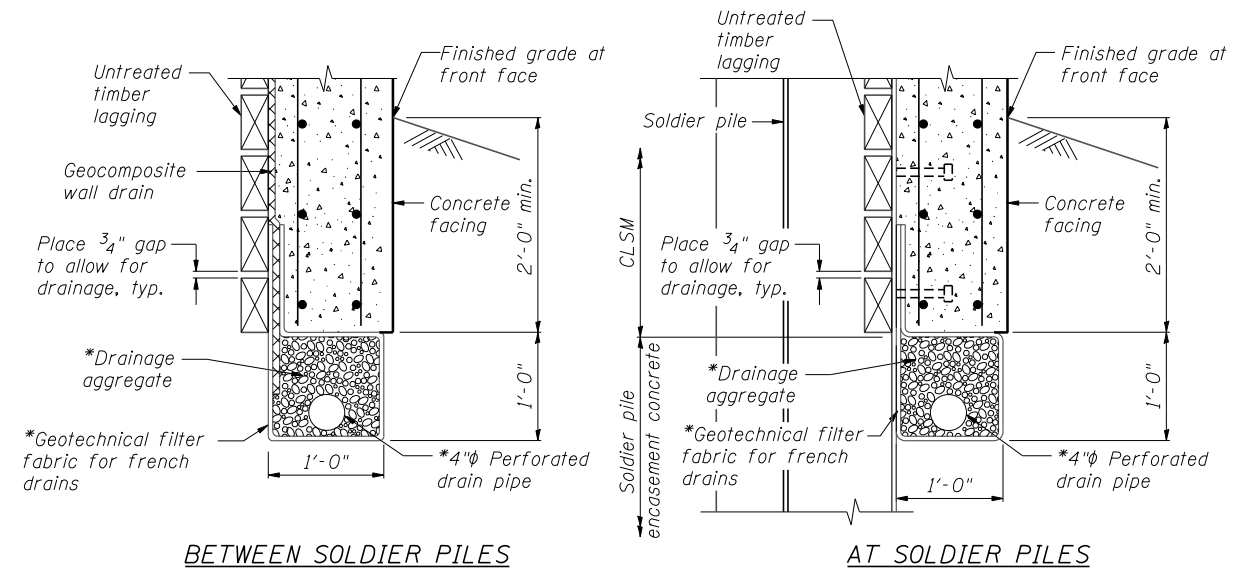


**SECTION THRU DRILLED SOLDIER PILE WALL**

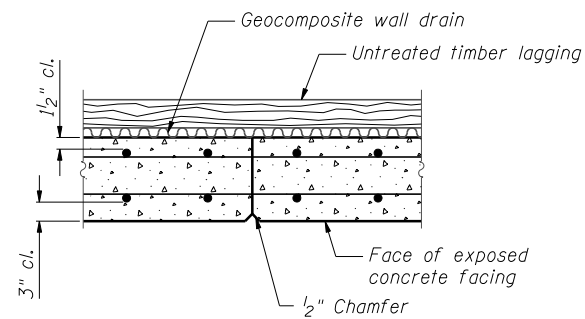


**BETWEEN SOLDIER PILES**

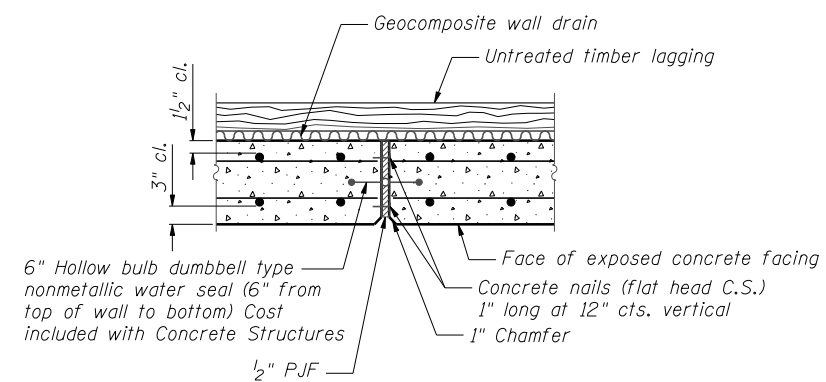
**AT SOLDIER PILES**

**PIPE UNDERDRAIN DETAIL**

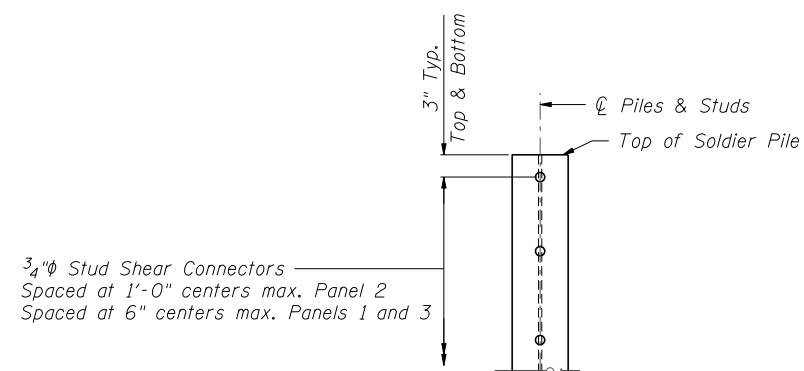
\*Included in the cost of "Pipe Underdrains for Structures"



**CONSTRUCTION JOINT DETAIL**



**EXPANSION JOINT DETAIL**



**DETAIL OF SHEAR STUD PLACEMENT**

FILE NAME = ...60R31-W048-005-Details.dgn



Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

DESIGNED - LAS	REVISED -
CHECKED - DAZ	REVISED -
DRAWN - SAW	REVISED -
CHECKED - LAS	REVISED -
SCALE - NONE	
DATE - 12/14/2012	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS  
STA. 3989 + 40.25 TO STA. 3991 + 85.47 SN 022-W048**

SHEET NO. SA-5 OF SA-10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	(112 & 113) WRS-6	DUPAGE	734	493
CONTRACT NO. 60R31				

ILLINOIS FED. AID PROJECT