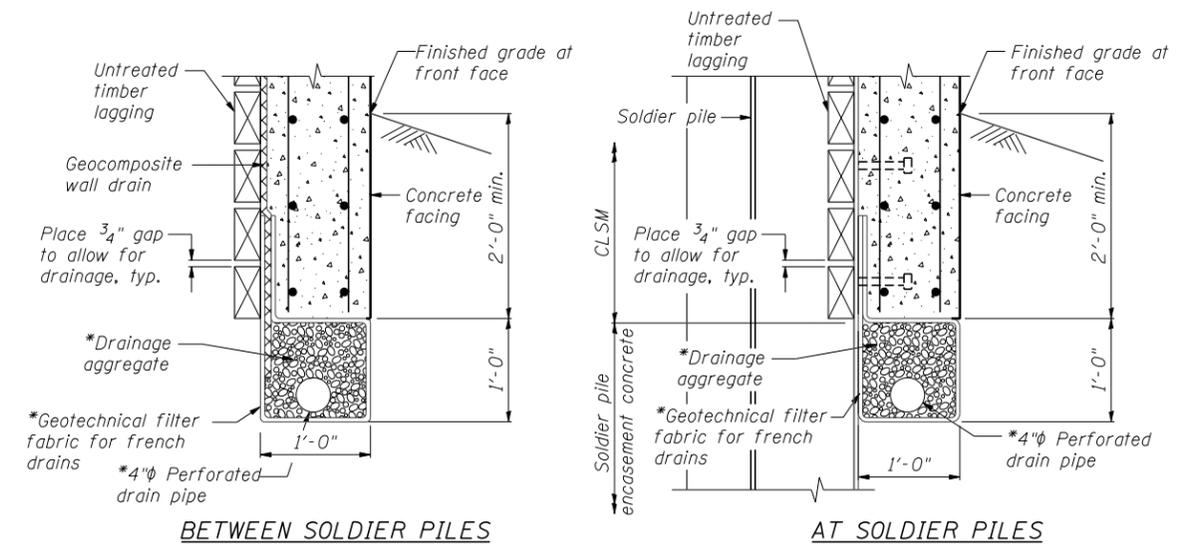
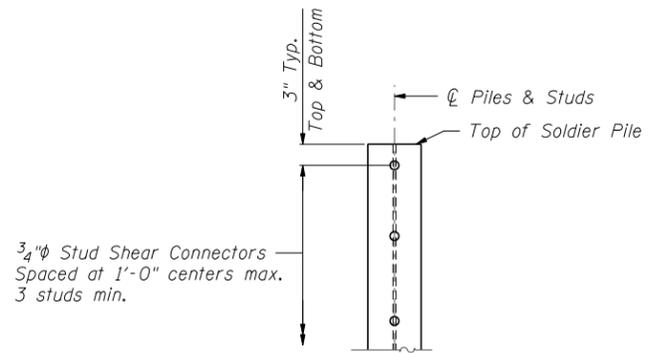


**SECTION THRU DRILLED SOLDIER PILE WALL**

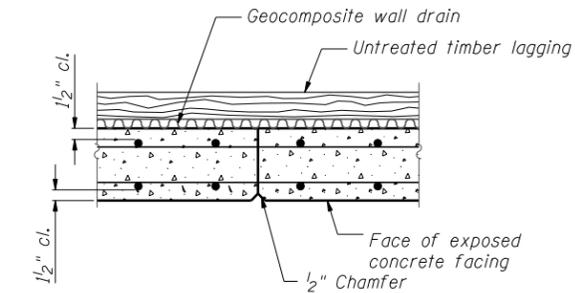


**PIPE UNDERDRAIN DETAIL**

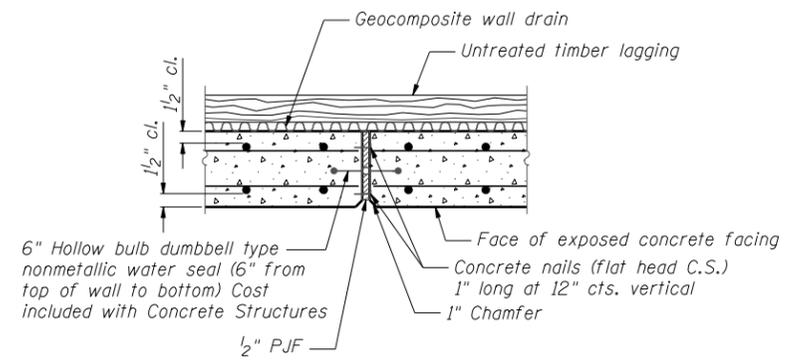
\*Included in the cost of Pipe Underdrains for Structures



**DETAIL OF SHEAR STUD PLACEMENT**



**CONSTRUCTION JOINT DETAIL**



**EXPANSION JOINT DETAIL**

FILE NAME = ...60R31-W049-005-Details.dgn

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

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

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DETAILS**  
**STA. 3998 + 14.82 TO STA. 4000 + 80.06 SN 022-W049**

SHEET NO. SB-5 OF SB-10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	(112 & 113) WRS-6	DUPAGE	734	503
CONTRACT NO. 60R31				

ILLINOIS FED. AID PROJECT