STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.P. 595	5HBR	Rock Island	139	53	33 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #64931

GEOTEXTILE WALL CONSTRUCTION PROCEDURE

$\frac{1}{3}$ to $\frac{1}{2}$ Reinforcement spacing
Form brace system
Wedge
Reinforcement spacing

Geotextile Fabric
Geotextile Fabric re-embedment length

Zone where re-embedment length will be placed.
Additional compacted material
Compacted backfill
Final lift height

Additional backfill
Re-embedment length placed in depression

Fabric readjustment
Pull form

Notes: The geotextile fabric shall have a minimum allowable tensile strength (T min.) of 84 lb./in. as determined by the procedure stated in the Special Provisions. The computations supporting the determination of (T min.) shall be submitted to the engineer for approval.
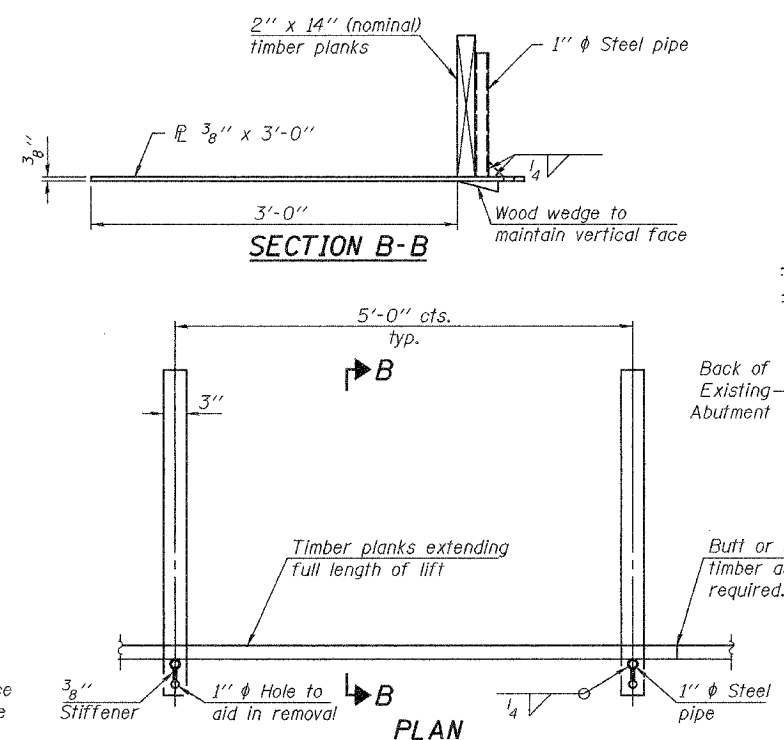
1. Place form brace system on completed reinforcement level; back from the finished fabric face a distance of $\frac{1}{3}$ to $\frac{1}{2}$ the reinforcement spacing.

2. Position fabric so that the required re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.

3. Compact backfill material in lifts to final lift height, create (±3″) depression in zone where re-embedment length will be located and place additional height of compacted material against form brace.

4. Fold fabric re-embedment length back over form brace into zone where depression was made in backfill and place additional compacted backfill. (±3″) to embed fabric and bring to final lift height.

5. Pull form brace outward allowing fabric face to slightly readjust to form tight round face and level with plan reinforcement spacing.
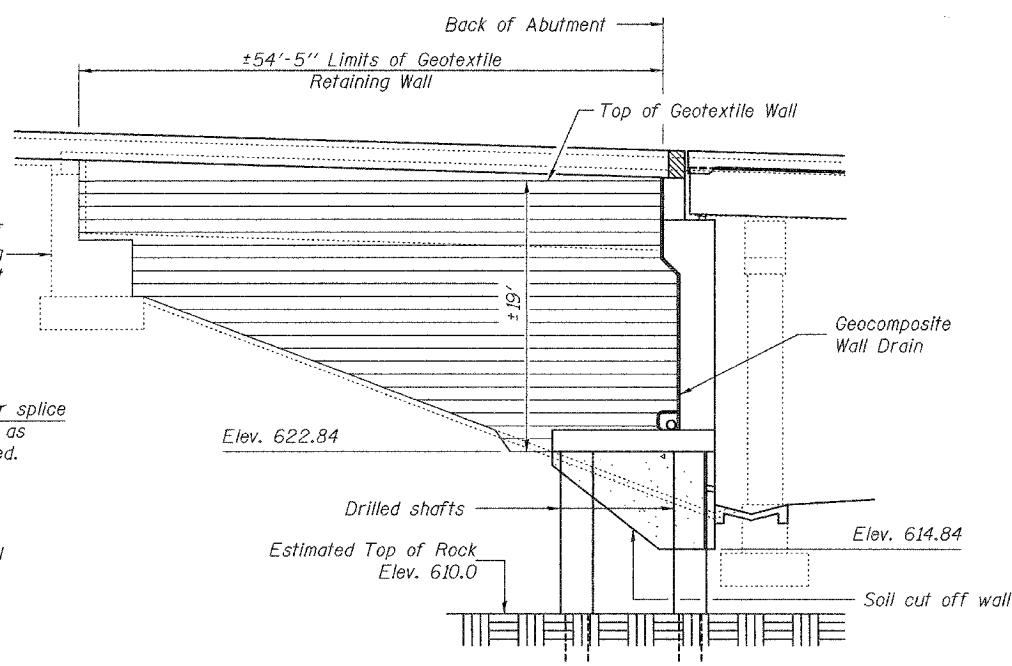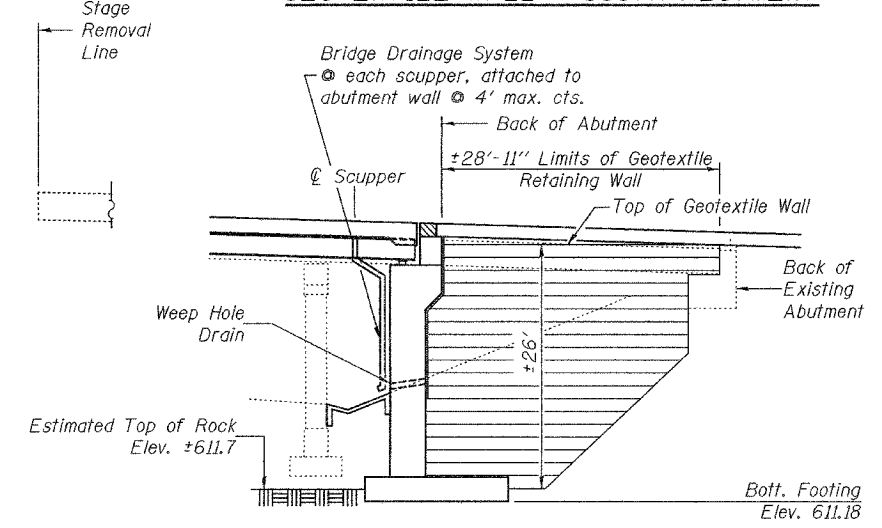
SECTION B-B

2″ x 14″ (nominal) timber planks
1″ ⌀ Steel pipe
Pl. $\frac{3}{8}$″ x 3'-0″
3'-0″
$\frac{3}{8}$″
Wood wedge to maintain vertical face

PLAN

5'-0″ cts. typ.
3″
B
Timber planks extending full length of lift
Butt or splice timber as required.
$\frac{3}{8}$″ Stiffener
1″ ⌀ Hole to aid in removal
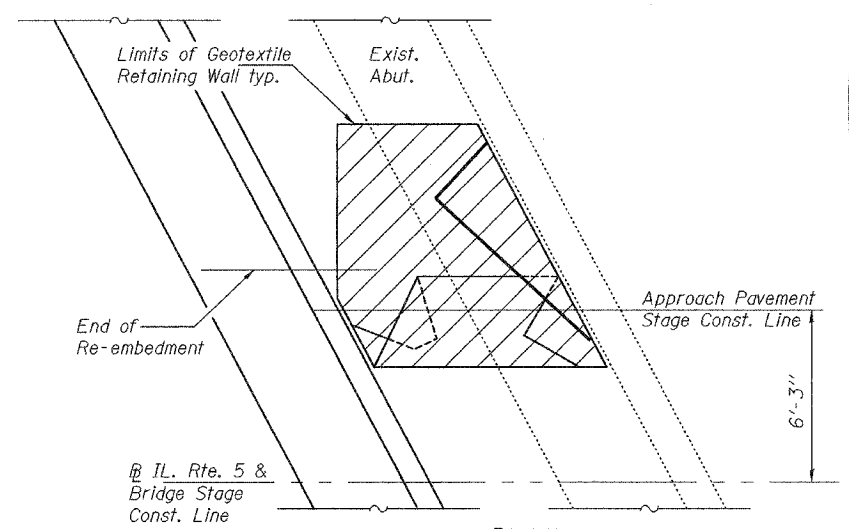1″ ⌀ Steel pipe

REMOVABLE FORM BRACE DETAIL

The temporary form brace detail is provided as a guide. The contractor is responsible for the design and performance of the form system used.
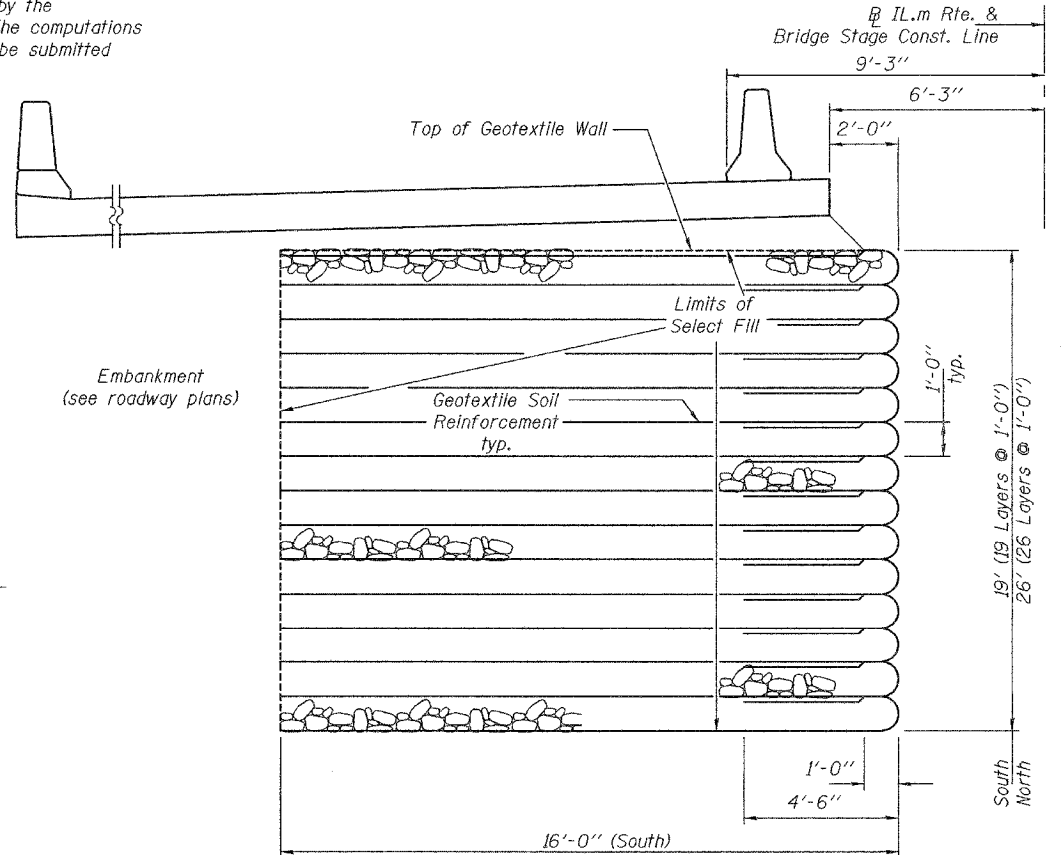
GEOTEXTILE WALL - SOUTH ABUTMENT

Back of Abutment
±54'-5″ Limits of Geotextile Retaining Wall
Top of Geotextile Wall
Back of Existing Abutment
±19'
Geocomposite Wall Drain
Elev. 622.84
Drilled shafts
Estimated Top of Rock Elev. 610.0
Elev. 614.84
Soil cut off wall

PLAN
(North Abutment shown, South Abutment similar)

Limits of Geotextile Retaining Wall typ.
Exist. Abut.
Approach Pavement Stage Const. Line
End of Re-embedment
6'-3″
Ꝕ IL. Rte. 5 & Bridge Stage Const. Line

GEOTEXTILE WALL - TYPICAL SECTION
(Looking North)

Ꝕ IL.m Rte. & Bridge Stage Const. Line
9'-3″
6'-3″
2'-0″
Top of Geotextile Wall
Stage Removal Line
Limits of Select Fill
Embankment (see roadway plans)
Geotextile Soil Reinforcement typ.
1'-0″ typ.
19' (19 Layers @ 1'-0″)
26' (26 Layers @ 1'-0″)
South North
1'-0″
4'-6″
16'-0″ (South)
21'-0″ (North)

GEOTEXTILE WALL - NORTH ABUTMENT

Bridge Drainage System @ each scupper, attached to abutment wall @ 4' max. cts.
Back of Abutment
±28'-11″ Limits of Geotextile Retaining Wall
Top of Geotextile Wall
Ꝗ Scupper
Back of Existing Abutment
±26'
Weep Hole Drain
Estimated Top of Rock Elev. ±611.7
Bott. Footing Elev. 611.18

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Geotextile Retaining Wall	Sq. Ft.	1362
Bridge Drainage System	L.S.	1

DESIGNED	Dewey H. Coultas
CHECKED	Chad E. Hodel
DRAWN	W.D. Collins
CHECKED	D.H.C./C.E.H.

EXAMINED October 5, 2007
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

GEOTEXTILE RETAINING WALL
IL. RTE. 5 OVER IL. RTE. 84
F.A.P. RTE. 595 - SECTION 5HBR
ROCK ISLAND COUNTY
STATION 623+65.69
S.N. 081-0169