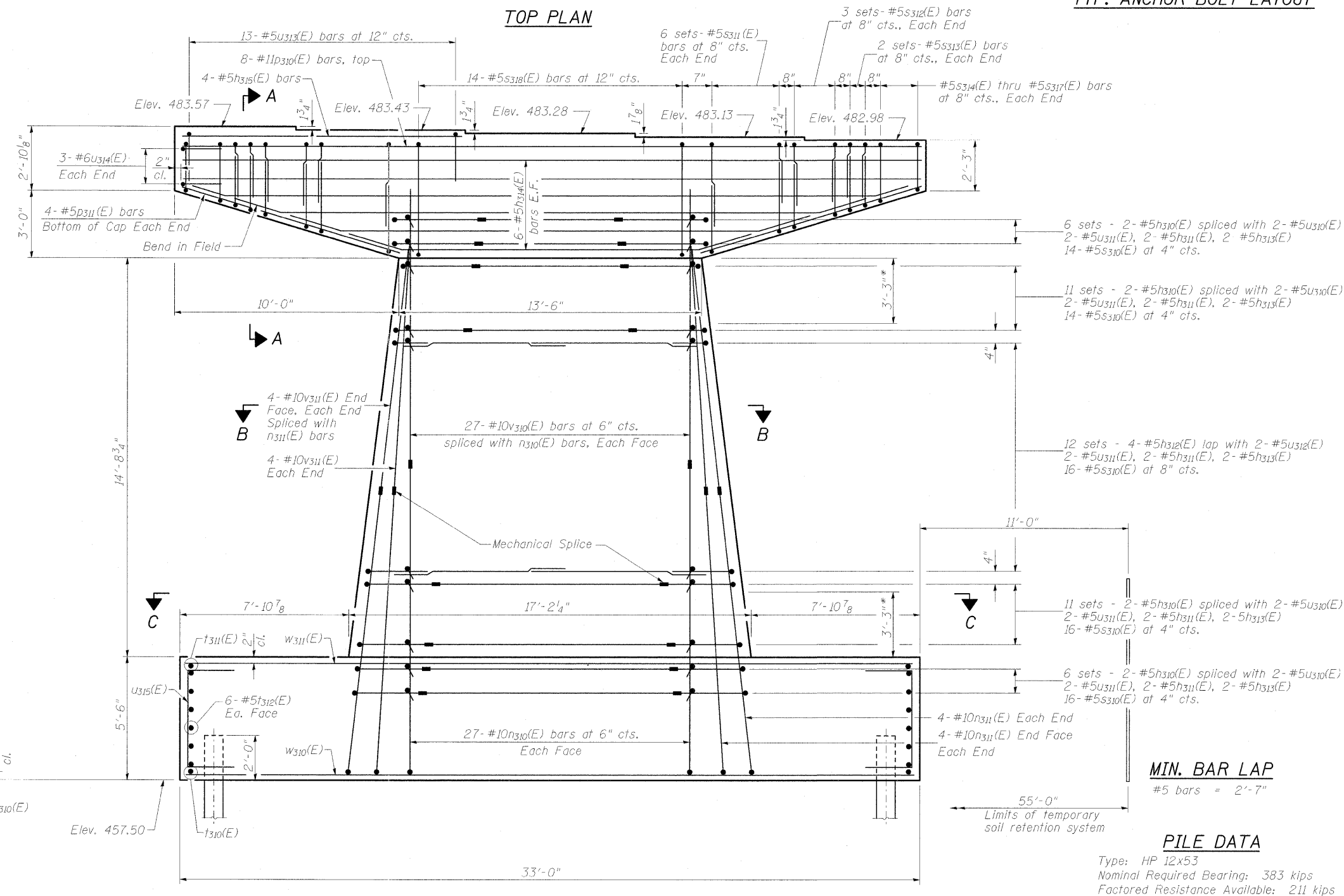
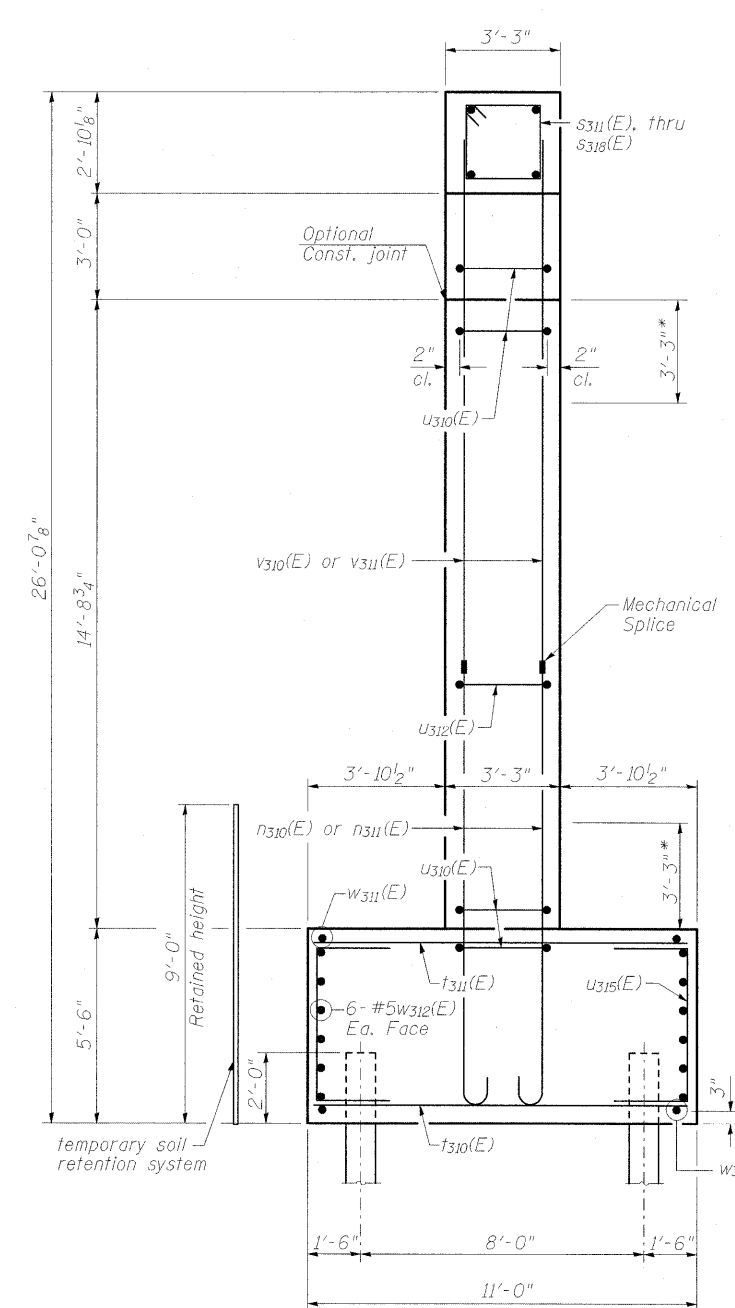
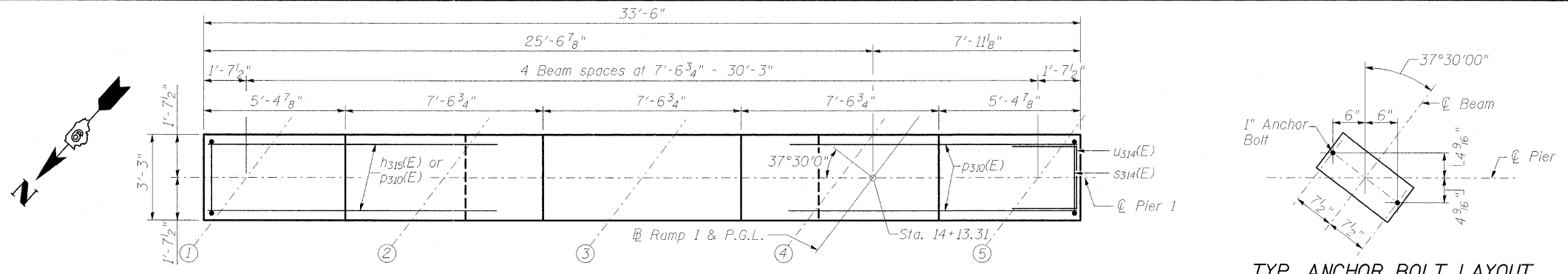


Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 21 of 23.
 Each set of $s_{311}(E)$, $s_{312}(E)$ and $s_{313}(E)$ bars has 2 bars (1 top and 1 bottom). See Section A-A.
 For details of Mechanical Splice, see sheet 19 of 23.
 Concrete Sealer shall be applied to both faces, both ends and top of pier.
 A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



MIN. BAR LAP
 #5 bars = 2'-7"

PILE DATA
 Type: HP 12x53
 Nominal Required Bearing: 383 kips
 Factored Resistance Available: 211 kips
 Est. Length: 13 ft.
 No. Production Piles: 11
 No. Test Piles: 1

CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ ALTOONA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

FILE NAME = ...Ramp \PIER 1.016.dgn	USER NAME = Rob Heady	DESIGNED - BPD	REVISIONS -
PLOT SCALE =	PLOT DATE = 10/7/2011	CHECKED - REB	REVISIONS -
		DRAWN - GLD	REVISIONS -
		CHECKED - BPD	REVISIONS -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 1
 STRUCTURE NO. 100-0097**
 SHEET NO. 15 OF 23 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	01-6-21HB-1	WILLIAMSON	968	675
* F.A.I. 57 AND F.A.P. 331 CONTRACT NO. 78182				
ILLINOIS FED. AID PROJECT				