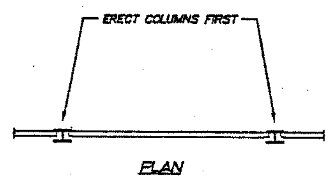
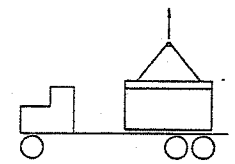
62720

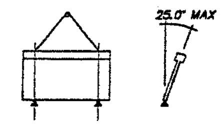
SHEET NO. 13



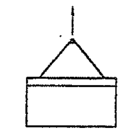
TYPICAL PRECAST ERECTION SEQUENCE (L)



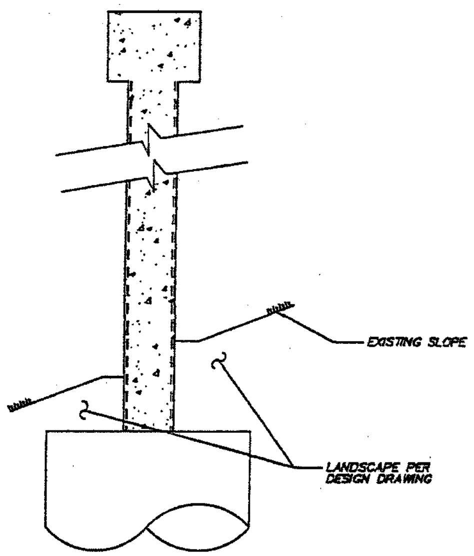
RIGGING TO REMOVE FROM TRUCK (F)



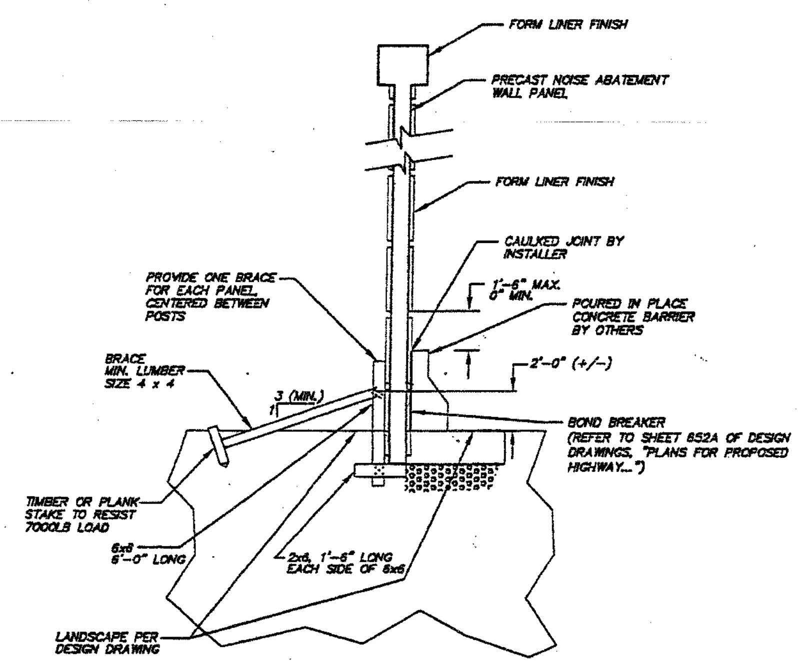
TEMPORARY STORAGE (I)



PRECAST ERECTING POSITION (E)



INSTALLATION DETAIL



CONSTRUCTION DETAIL AT BARRIER WALLS

THE ABOVE DETAIL APPLIES
TO THE FOLLOWING WALL LENGTHS:
- WALL B – 54m (POST B–14 TO END OF WALL B)
- WALL D – 480m (ENTIRE LENGTH)
- WALL E – 498m (ENTIRE LENGTH)
- WALL L – 98m (START OF WALL L TO POST L–17)

REMOVE TEMPORARY BRACES AFTER POURED IN PLACE CONCRETE BARRIER CONCRETE HAS CURED FOR A MINIMUM OF 24 HOURS.

FOR INFORMATION ONLY

NOTES

I. General
   - A. Field tolerance is in accordance with PCI MNL 127 and "PCI Recommended Practice for Erection of Precast Concrete" with the exception of the Center of the Caisson. (See Detail on Sheet 3.01)
   - B. Erection tolerances in accordance with "PCI Recommended Practice for Erection of Precast Concrete."
   - C. Contractor must be aware and prepared to coordinate shipments that allow for the least amount of time to unload for the products shipped. Contractor will have one hour to unload per truck. Shipments will consist of two to four pieces per truck load. In the unlikely event of an excessive amount of wait–time the load will either be off–loaded or returned to precast supplier.
   - D. Contractor to provide ample room for delivery of precast product in an area of flat, level ground on soils suitable to support wheel & outrigger loads.
   - E. Contractor must provide an area for storage of precast products on firm, level ground. Product must be stored on edge, as delivered until time of erection in properly designed storage racks (by Contractor).
   - F. Items provided by the Installation Contractor:
     - All shims under panels.
     - Caulk and backer rod.
   - G. Items provided by precast supplier:
     - Steel Posts
     - Precast Panels
   - H. Panel should not be erected in wind speeds of 32KPH (20MPH) or more.
   - I. Minimum concrete strength at stripping – 2000 psi, f'c = 4500 psi @ 28 days
   - J. Repair of panels is per Manufacturers Specifications.

II. Drilled Caisson Shaft Installation
   - Auger hole to required depths. See precast shop drawings for pier locations. Dewater as necessary.
   - Drilled caisson foundations shall be constructed in accordance with Article 734 of the Standard Specifications for Road and Bridge Construction (1997) and Guide Bridge Special Provision "Caisson Shafts" Revised July 30, 1998 except as modified herein. See sheet 3.01 for Construction Details
   - Place f'c = 4000 psi concrete in augured hole to the elevations specified as "Top of Foundation" elevation in this drawing set.

III. Panel Installation
   - Preset posts to the necessary elevation to obtain top of precast elevations specified on the layout drawings 2.01 through 2.92. See 4.01 for shim details.
   - Erect precast panel on the shims and into slot provided in steel post (reference figure 1 on sheet 4.01)
   - Release panel from the crane.
   - Alignment shim devices shall be installed before installing panel above.

IV. Material Specifications
   - Precast Concrete: f'c = 4,500 psi @ 28 days Density = 150 pcf
   - Caisson Concrete: IDOT Class SI (fc'=4000 psi) meeting "caisson shafts" special provision.
   - Reinforcing Steel: ASTM A615, fy = 60,000 psi
   - Steel posts ASTM A36, fy = 36000 psi, (or ASTM A709, fy = 50,000 psi)
   - Welded wire fabric: ASTM A497, fy = 70,000 psi

   * (Caisson design is based on f'c = 4,000 psi (at 14 days)

V. All posts will be galvanized according to AASHTO M111 and ASTM A385. Exposed Areas of posts will be painted as required by the special provisions.

MARK	DESCRIPTION		DATE	DWN	CHK
6					
5					
4					
3		FOR CONSTRUCTION	6-15-01	WJH	RGD
2	REVISED DETAIL	DSE REVIEW	5-25-01	WJH	RGD
1	REVISED DETAIL / SPECS.	IDOT REVIEW	5-4-01	WJH	RGD
	REVISIONS	DRAWING HISTORY			

SMITH ENGINEERING CONSULTANTS, INC.
ENGINEERS SURVEYORS PLANNERS

PREPARED BY:
PEC PRESTRESS ENGINEERING CORPORATION
2220 ROUTE 176 PRAIRIE GROVE, IL. 60012
815-459-4545 FAX 459-6865

INSTALLATION PROCEDURES
NOISE BARRIER-HILLSIDE INTERCHANGE, COOK CO. IL

C-91-279-99
CIP 1-99-5900

DATE: 3-09-2001 | SCALE: 1-250
DWN BY: WJH | CHK BY: RGD
SEO PROJECT NO. PRES-000753-14
PEC JOB NUMBER SW1055

6.01

COMP. NUMBER 000753dy