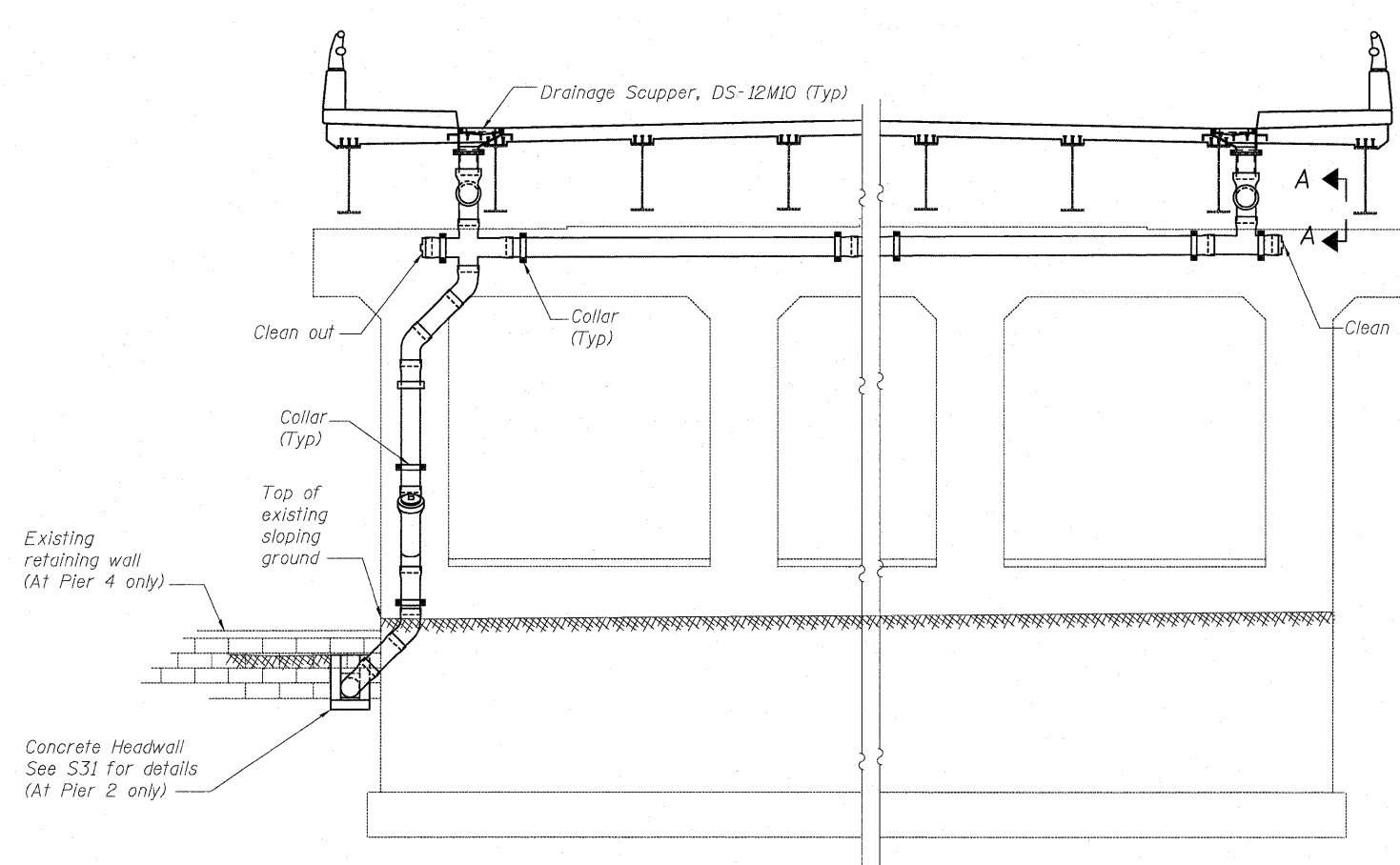
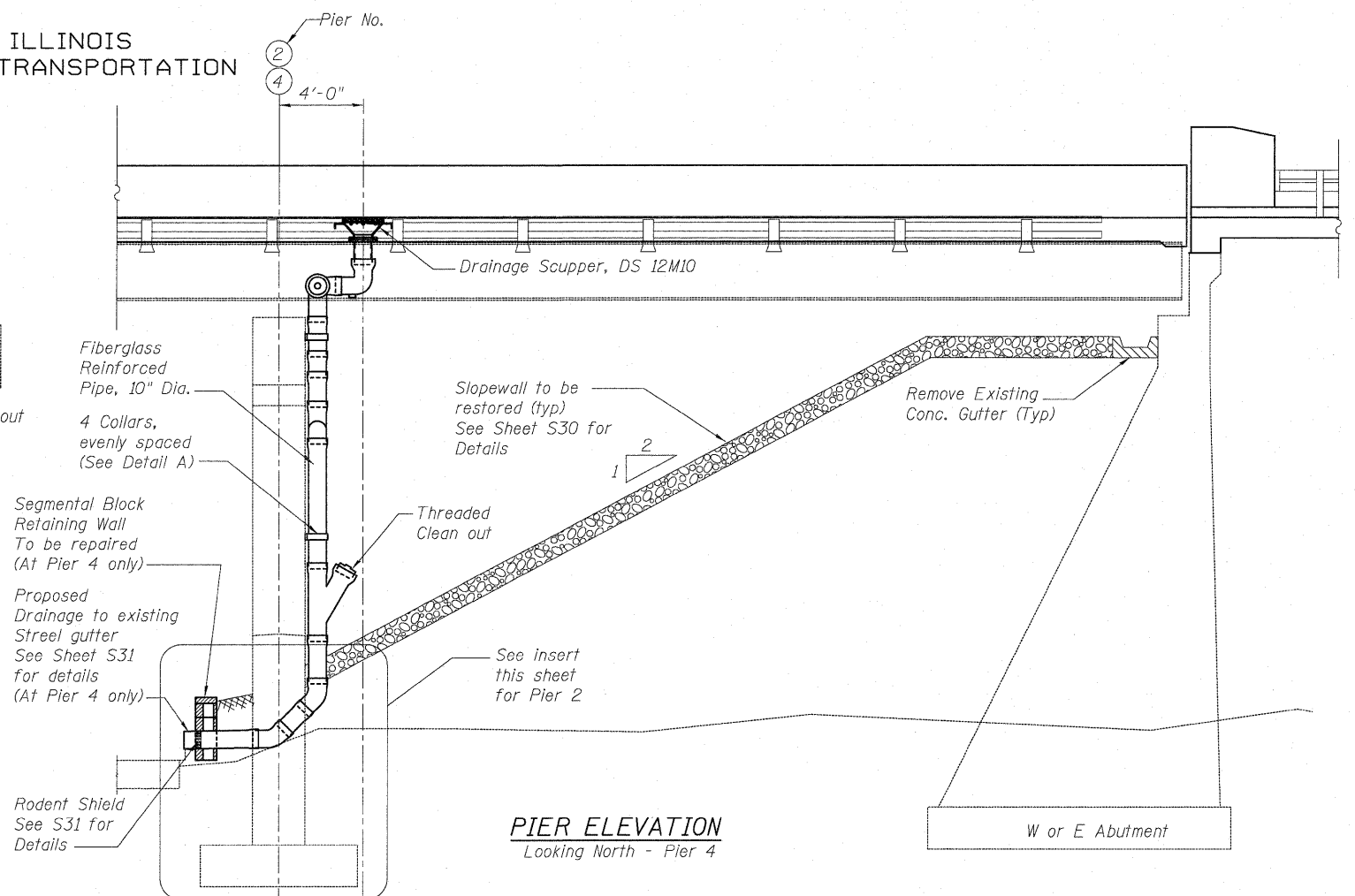


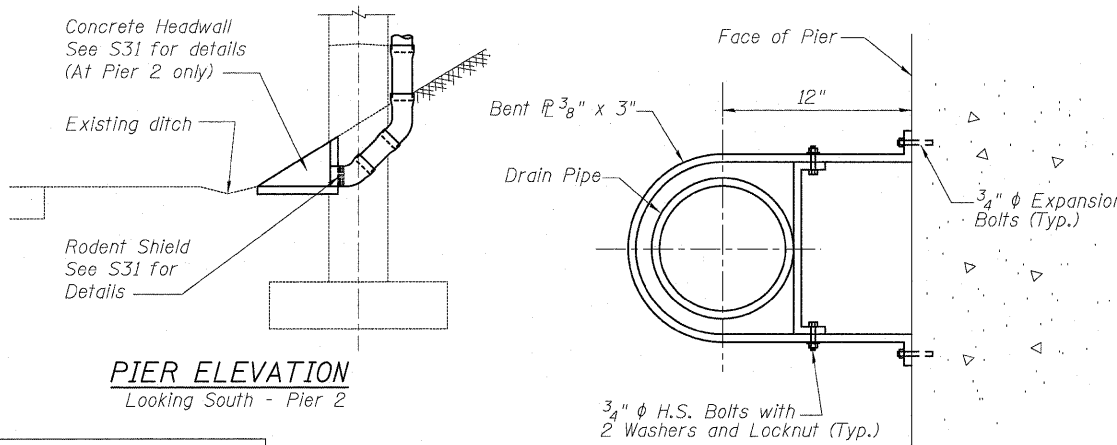
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**PIER ELEVATION**  
Looking East - Pier 2  
Looking West - Pier 4



**PIER ELEVATION**  
Looking North - Pier 4

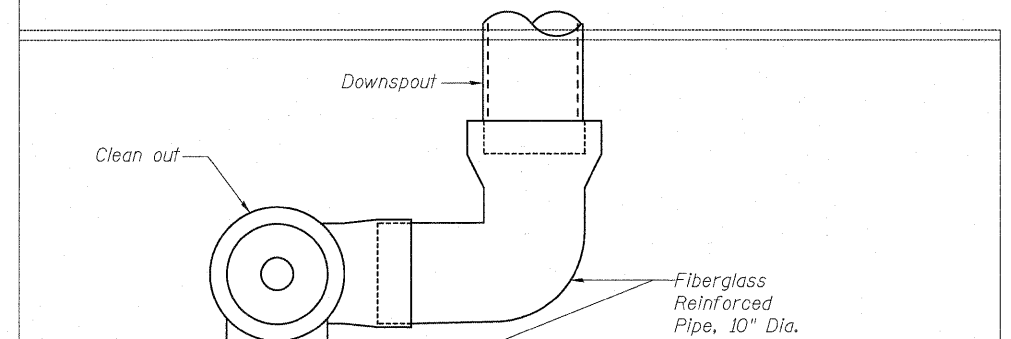


**PIER ELEVATION**  
Looking South - Pier 2

**DETAIL A-A**

NOTES:

1. The Pay Item " Drainage System" shall include providing and installing 10" Fiberglass pipe, Reducers, Elbows, Inserts, Anchors Hangers, Clamps, Drainage Structures, and all other items necessary to complete the underdeck drainage system. It also include connection to existing storm sewer line.
2. The elevations for proposed pipe inverts for the bridge drainage system shall be determined by the contractor in the field prior to fabrication and construction.
3. Areas disturbed by the installation of the bridge drainage system shall be restored in kind and the cost included with the Drainage System.
4. Locate anchors to miss existing reinforcement.
5. Bolts, nuts and washers for "Drainage System" shall conform to the requirement of ASTM A307.
6. Fiberglass pipe shall conform to ASTM D 2996 with short time rupture strength hoop tensile stress of 30,000 psi, minimum.
7. The surface of the fiberglass shall be free of bond inhibiting agents.
8. Drain shall be located clear of diaphragms.



**SECTION A-A**

**BILL OF MATERIAL**

Item	Unit	Quantity
Drainage System	L. Sum	1
Concrete Headwall for Pipe Drains	Each	1

**BRIDGE DRAINAGE SYSTEM DETAILS**  
**STRUCTURE NO. 016-0519**

DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG



180 S. WACKER DRIVE SUITE 700 - CHICAGO IL 60606 - P312-686-8918 F312-686-8415

SHEET NO. S33	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S34 SHEETS	1548	461 (VB&VF) I	COOK	52	45
CONTRACT NO. 60H65					
DATE: 06-22-2010		ILLINOIS FED. AID PROJECT			