

April 2, 2020

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION
DEPARTMENT OF ADMINISTRATION

DIVISION OF PURCHASES BID NO. 7602830

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2019-CB-094

FEDERAL-AID PROJECT NO. FAP Nos: BRO-0600(005), STPG-0600(006)

Bridge Group 49 - Henderson

South Angell Street (Providence) to Massasoit Avenue (East Providence)

CITY/TOWN OF East Providence, Providence

COUNTY OF PROVIDENCE

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 2 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. Contract Dates

1. Bid-Opening Date

Bid-Opening Date has been revised to May 29, 2020 at 1:00 PM.

B. Specification Change/Addition

1. Item 824.9904

Delete Page JS-135 in its entirety and replace it with Page JS-135 (R-1) attached to this Addendum No. 2. Specification for Item 824.9904 has been revised.

C. Drawings/Plans - Change/Addition

1. Volume 2 – Construction Phasing Details

Delete Sheet 18 in its entirety and replace it with Sheet 18 (R-1) attached to this Addendum No 2. The sheet has been revised.

2. Volume 2 – Substructure Demolition 5

Delete Sheet 30 in its entirety and replace it with Sheet 30 (R-2) attached to this Addendum No 2. The sheet has been revised.

3. Volume 2 – Steel Pier Cap Details 3

Delete Sheet 83 in its entirety and replace it with Sheet 83 (R-1) attached to this Addendum No 2.
The sheet has been revised.



RI Department of Transportation

fa Manager, Division of Project Management

**CODE 824.9904
ACCESS HATCHES**

DESCRIPTION: This work shall consist of furnishing and installing access hatches at each end of the steel cap girders in accordance with the Standard Specifications Section 824, the plans and this special provision.

MATERIALS: All steel shall be in accordance with Section M.05 of the Standard Specifications.

Plate and bar steel shall be in accordance with M.05.04.1 conforming to AASHTO M270 Grade 50.

Welding shall be in accordance with M.05.04.5.

Access hatches shall be fabricated and coated in the shop. All surfaces of the access hatches shall be metalized and painted in accordance the standard specifications.

Fasteners shall be in accordance with M.05.04.4 and hex head high strength bolts shall conform to ASTM F3125 Grade A325.

Fasteners shall be galvanized in accordance with M.05.04.4.

Nylon washers shall be Nylon 6/6.

Chain shall be welded steel Grade 30 proof coil chain and shall be hot-dip galvanized.

Lap links used to connect the chain to the eye bolts shall be Grade 30 and hot-dip galvanized.

Steel shoulder eye bolts shall meet the requirements of ASME B30.26 and shall be hot-dip galvanized. Eye bolts used for locking pins shall be Crosby (or equivalent) ½ inch x 6-inch-long shank with 3-inch long threading. The shank shall be cut to 4 inches long. Where eye bolts will be permanently fastened to the steel hinge plate with a hex nut and washer, the eye bolt shall be fully threaded.

Cotter pin shall be mild steel, zinc plated and shall have extended prong end. Prong shall be bent after nut installation. Repair galvanizing shall consist of a zinc rich paint approved by the Engineer.

Shop drawings shall be submitted and approved by the Engineer prior to fabrications.

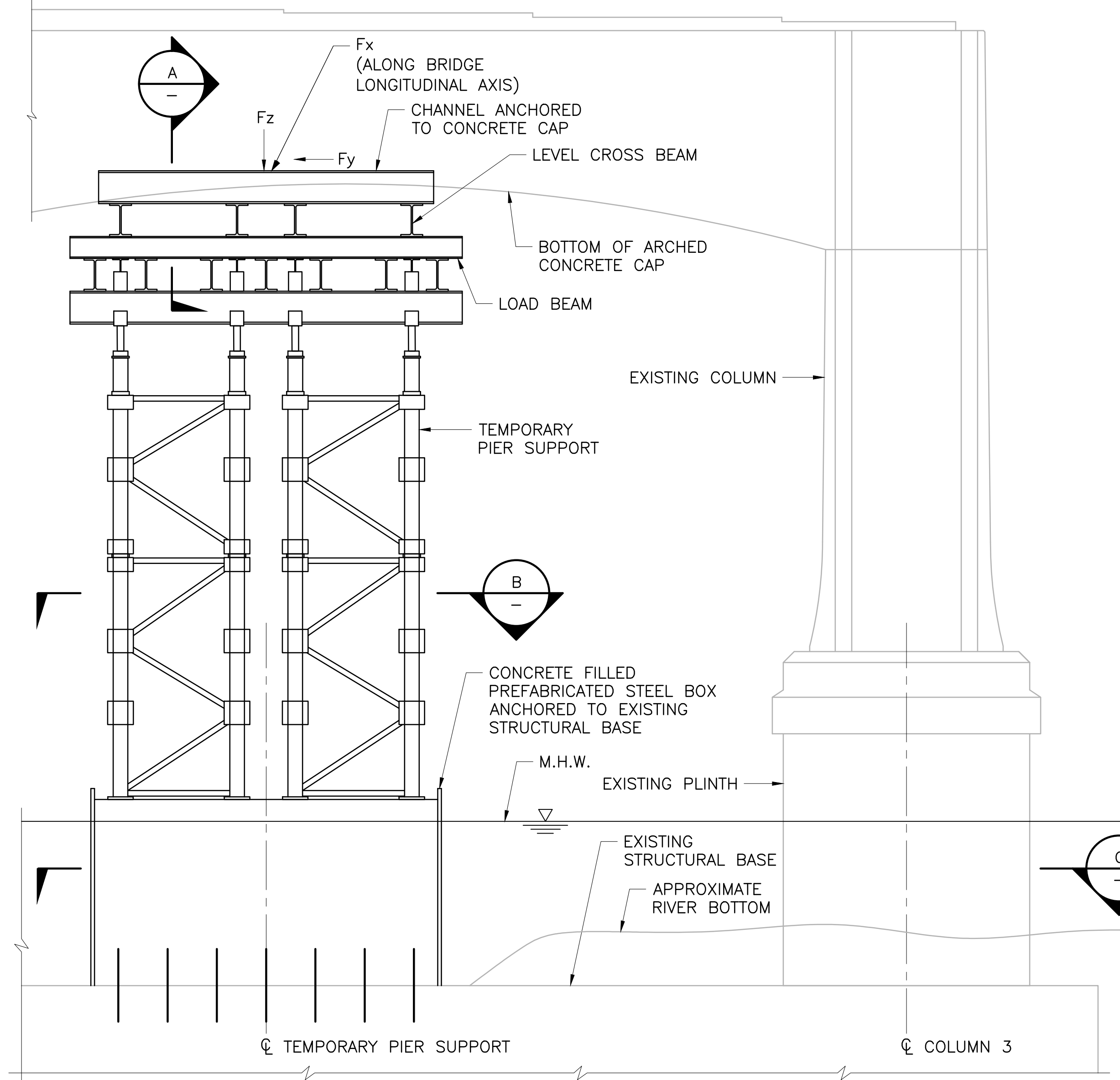
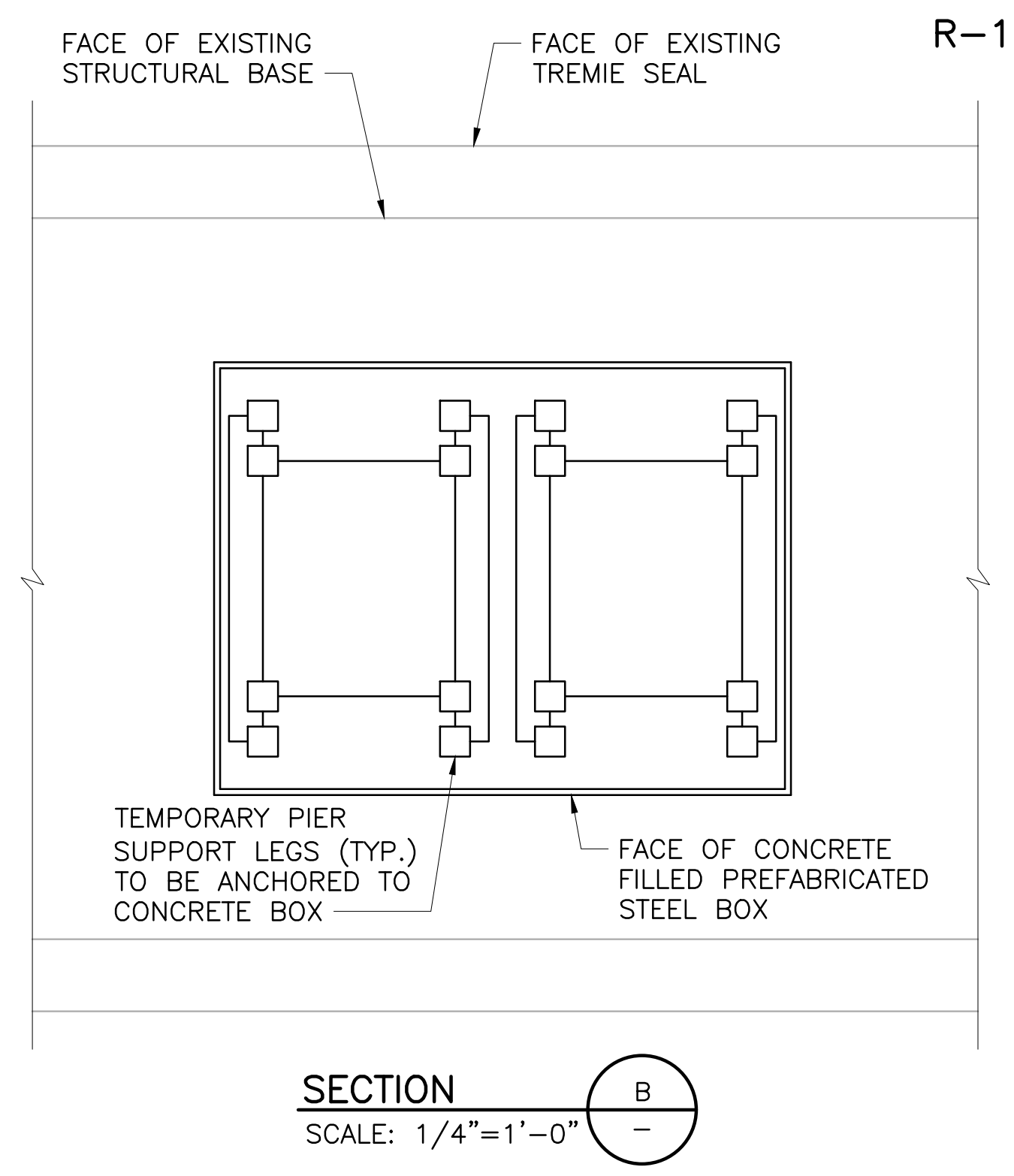
CONSTRUCTION METHODS: Hatches shall be installed such that the hinge bars are in line with the hinge support bars, the access hatch opens freely without binding, and the hatch can be locked with minimum effort.

METHOD OF MEASUREMENT: This item will not be measured for payment.

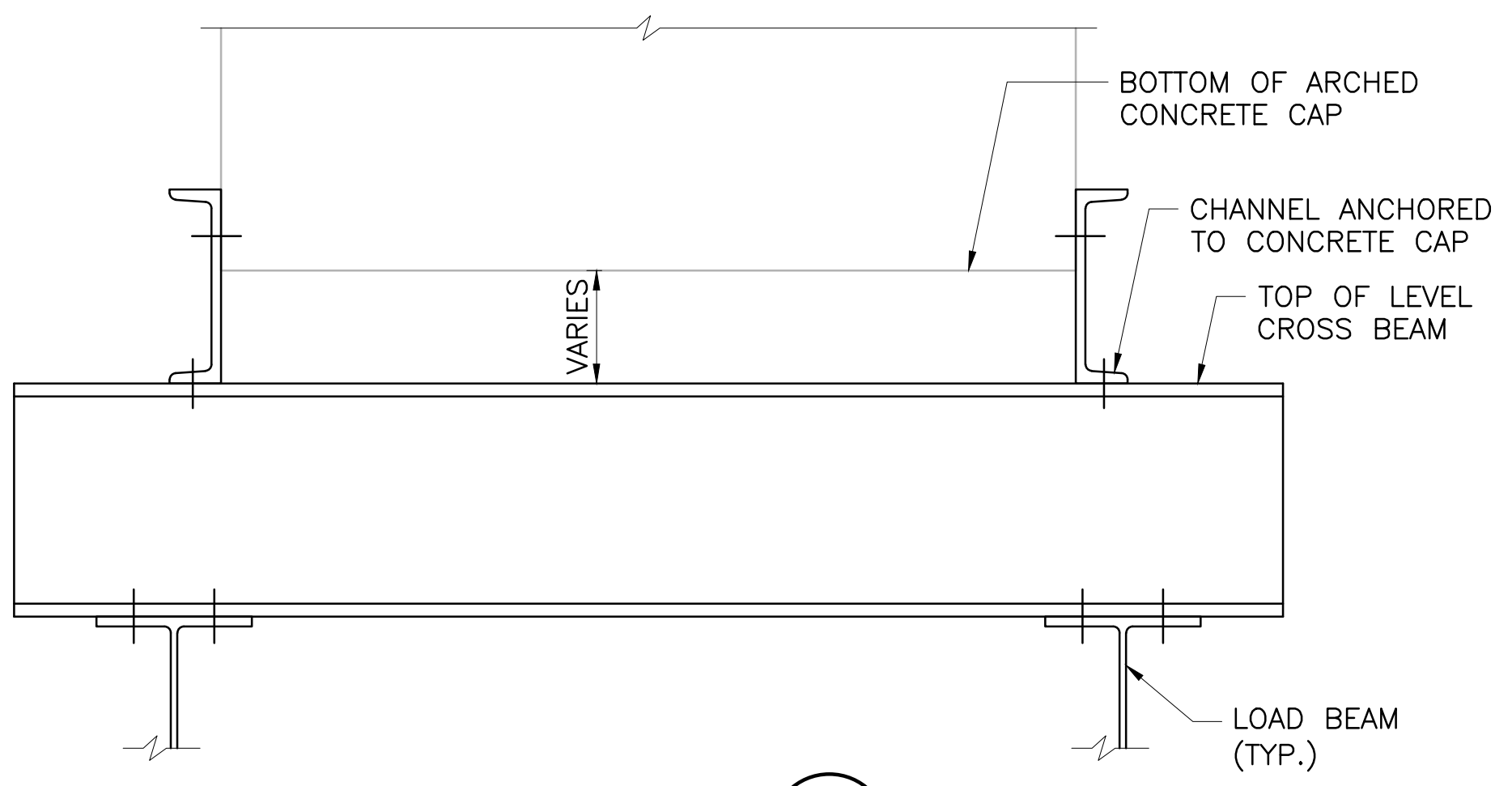
BASIS OF PAYMENT: No separate payment will be made for this item. Costs for this item shall be included in the lump sum bid prices of Code 800.9911 "Bridge No. 600 Substructure-Pier No. 1", Code 800.9912 "Bridge No. 600 Substructure-Pier No. 2", Code 800.9913 "Bridge No. 600 Substructure-Pier No. 3", Code 800.9914 "Bridge No. 600 Substructure-Pier No. 4", Code 800.9915 "Bridge No. 600 Substructure-Pier No. 5", Code 800.9916 "Bridge No. 600 Substructure-Pier No. 6" and Code 800.9917 "Bridge No. 600 Substructure-Pier No. 7" as listed in the Proposal.

FACTORED TEMPORARY PIER SUPPORT LOADS					
PIER LOCATION	LOAD COMBINATION	MAXIMUM (MINIMUM) APPLIED LOADS AT TOP OF PIER SUPPORT			MAXIMUM PIER SUPPORT WEIGHT* (Fz) (k)
		VERTICAL (Fz) (k)	TRANSVERSE (Fy) (k)	LONGITUDINAL (Fx) (k)	
PIER 2	STR I	1912	61	0	394
	STR III	1255	120	16	394
	STR V	1809	90	5	394
	SERV I	1392	70	4	315
PIER 3	STR I	2878	75	92	956
	STR III	2138	174	108	956
	STR V	2794	117	97	956
	SERV I	2156	92	96	765
PIER 4	STR I	2875	74	122	956
	STR III	2135	173	240	956
	STR V	2791	117	171	956
	SERV I	2154	92	154	765
PIER 5	STR I	1843	59	0	400
	STR III	1169	118	16	400
	STR V	1735	88	5	400
	SERV I	1333	69	4	320
PIER 6	STR I	2096	72	47	394
	STR III	1436	125	77	394
	STR V	2000	98	67	394
	SERV I	1539	77	49	315
EXIST. PIER 7	STR I	614 (-184)	40	67	SEE NOTE 7
	STR III	312 (54)	36	53	SEE NOTE 7
	STR V	550 (-132)	49	77	SEE NOTE 7
	SERV I	423 (-6)	41	66	SEE NOTE 7

* SEE NOTE 2



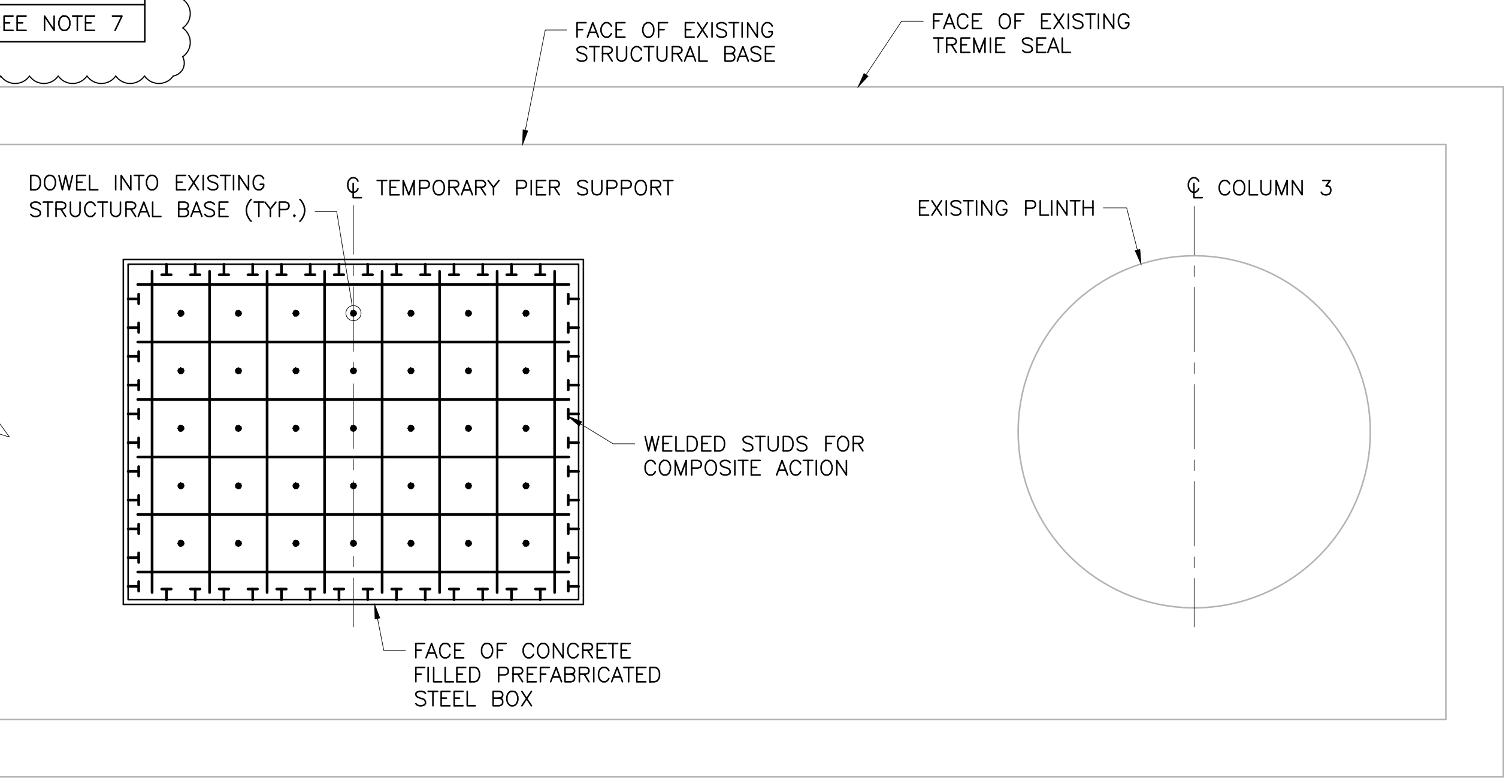
ELEVATION
(LOOKING EAST)
SCALE: 1/4" = 1'-0"



SECTION
SCALE: 1" = 1'-0"

TEMPORARY PIER SUPPORT

1. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, MAINTAIN, AND REMOVE THE TEMPORARY PIER SUPPORTS AS SHOWN SCHEMATICALLY ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR THE WORKMANSHIP, UPKEEP, AND SAFETY OF THE TEMPORARY PIER SUPPORT
2. MAXIMUM PIER SUPPORT WEIGHT IS THE MAXIMUM FACTORED WEIGHT OF THE TEMPORARY PIER SUPPORT SYSTEM THAT THE CONTRACTOR MAY PUT IN PLACE ON THE EXISTING STRUCTURAL BASE. THIS WEIGHT INCLUDES BOTH THE TEMPORARY PIER SUPPORT ABOVE MHW AND THE CONCRETE FILLED PREFABRICATED STEEL BOX BELOW MHW.
3. THE CONTRACTOR SHALL ANALYZE THE EXISTING ARCHED CONCRETE CAP TO ENSURE THAT THE REINFORCING IS ADEQUATE FOR THEIR PROPOSED TEMPORARY SUPPORT CONFIGURATION. ANY REINFORCING THAT IS COMPROMISED BY ANCHORING INTO THE CAP SHALL BE CONSIDERED IN THE DESIGN.
4. THE CONTRACTOR SHALL DESIGN THE CONNECTION BETWEEN THE CONCRETE FILLED PREFABRICATED STEEL BOX AND THE EXISTING CONCRETE STRUCTURAL BASE. IF THE STRUCTURAL BASE REINFORCING IS AT RISK OF BEING COMPROMISED BY THE PROPOSED CONNECTION, THEN THE EXISTING STRUCTURAL BASE WILL REQUIRE EVALUATION BY THE CONTRACTOR'S ENGINEER.
5. THE FACTORED TEMPORARY PIER SUPPORT LOADS TABLE SHALL BE USED TO DESIGN THE TEMPORARY PIER SUPPORT SYSTEM.
6. THE TEMPORARY PIER SUPPORT SHALL POSITIVELY ENGAGE THE EXISTING PIER CAP AND BE CAPABLE OF RESISTING ALL APPLICABLE DESIGN LOADS SHOWN IN THE FACTORED TEMPORARY PIER SUPPORT LOADS TABLE PRIOR TO CUTTING THE EXISTING PIER CAP.
7. THE CONTRACTOR SHALL DESIGN THE TEMPORARY PIER SUPPORT AND CONNECTIONS TO THE ARCHED CONCRETE CAP TO RESTRAIN UPLIFT OF THE CONCRETE CAP.



SECTION
SCALE: 1/4" = 1'-0"

REVISIONS		
NO.	DATE	BY
1	4/2/20	VHB

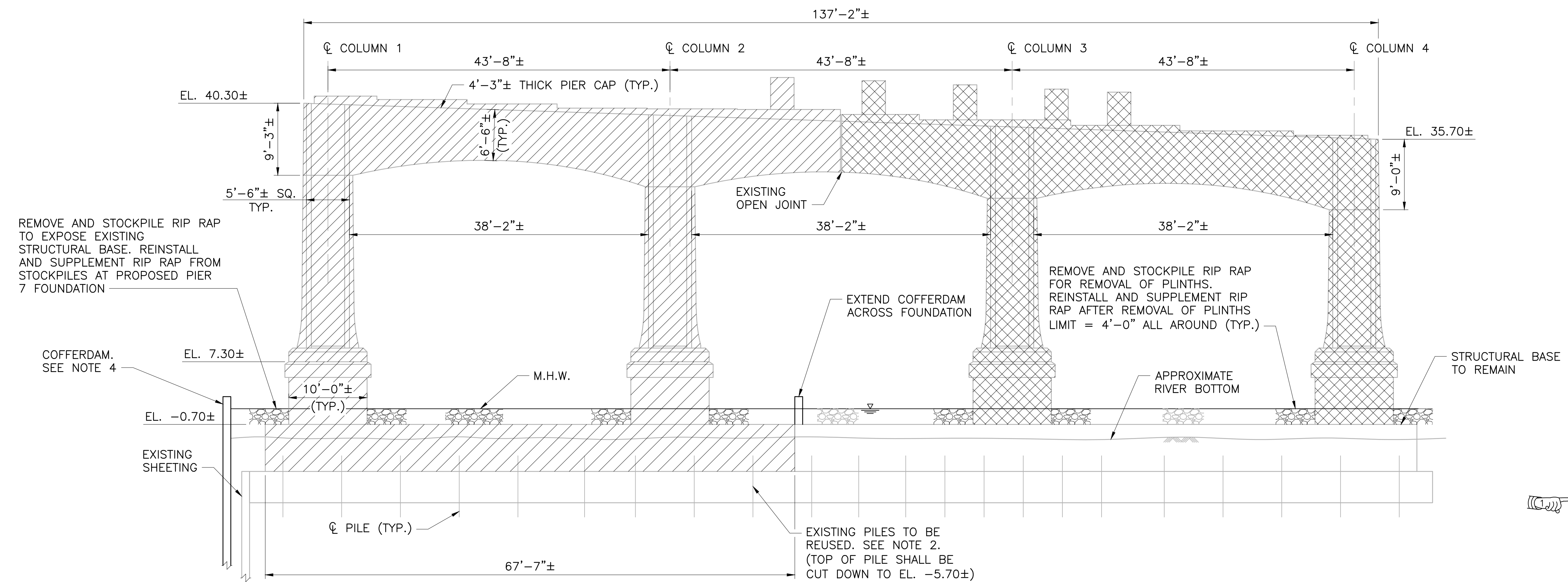
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 49 - HENDERSON
RECONSTRUCTION OF
HENDERSON BRIDGE NO. 600
PROVIDENCE/EAST PROVIDENCE, RHODE ISLAND

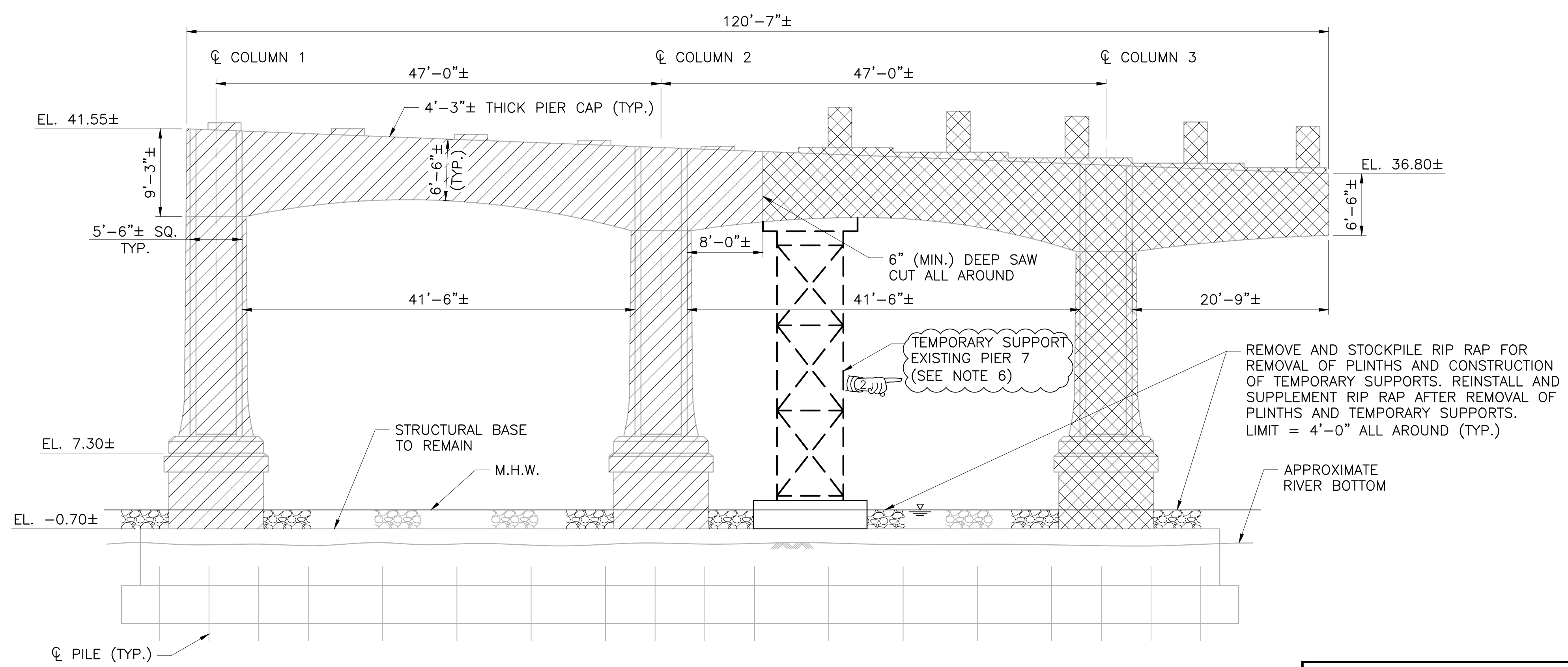
CONSTRUCTION PHASING
DETAILS

CHECKED BY _____ DATE _____ SCALE _____

vhb
1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100



WEST ELEVATION PIER 7 (EXISTING PIER 6)
SCALE: 1/8" = 1'-0"



WEST ELEVATION EXISTING PIER 7
SCALE: 1/8" = 1'-0"

NOTES

- CARE MUST BE TAKEN DURING THE REMOVAL OF THE DESIGNATED PORTIONS OF THE STRUCTURE TO AVOID DAMAGING THE PORTIONS THAT ARE TO REMAIN IN PLACE. ANY DAMAGE CAUSED BY THE CONTRACTOR TO THE EXISTING STRUCTURE THAT IS DESIGNATED TO REMAIN IN PLACE SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- DEMOLITION WITHIN 2'-0" OF GRANITE CAP AND PILES TO REMAIN SHALL BE PERFORMED WITH 30 LB (MAX.) CHIPPING HAMMER. CHIPPING HAMMERS TO REMOVE CONCRETE WITHIN 2 INCHES AROUND REINFORCING STEEL SHALL NOT BE HEAVIER THAN 15-POUND CLASS. TOOLS SHALL NOT CONTACT REINFORCING STEEL TO REMAIN.
- REINFORCING STEEL NOT SHOWN. FOR EXISTING PIERS 6 AND 7 PLANS REFER TO RIC CONTRACT CO_6553.
- FOR LIMITS OF COFFER DAM SEE PIER 7 FOUNDATION PLAN.
- COLUMNS SHOWN FOR COMPLETE REMOVAL AT EXISTING PIERS 1-7 SHALL BE REMOVED AND DISPOSED OF TO THE TOP OF FOUNDATION (-0", +6").
- TEMPORARY PIER SUPPORT SUBJECT TO UPLIFT FORCES. THE CONTRACTOR SHALL DESIGN THE TEMPORARY PIER SUPPORT TOWER AND ALL CONNECTIONS TO THE CONCRETE CAP TO RESTRAIN UPLIFT. SEE CONSTRUCTION PHASING DETAILS FOR DESIGN LOADS.

LEGEND

- REMOVE AND DISPOSE PHASE 2
- REMOVE AND DISPOSE PHASE 5
- DECK SAW CUT

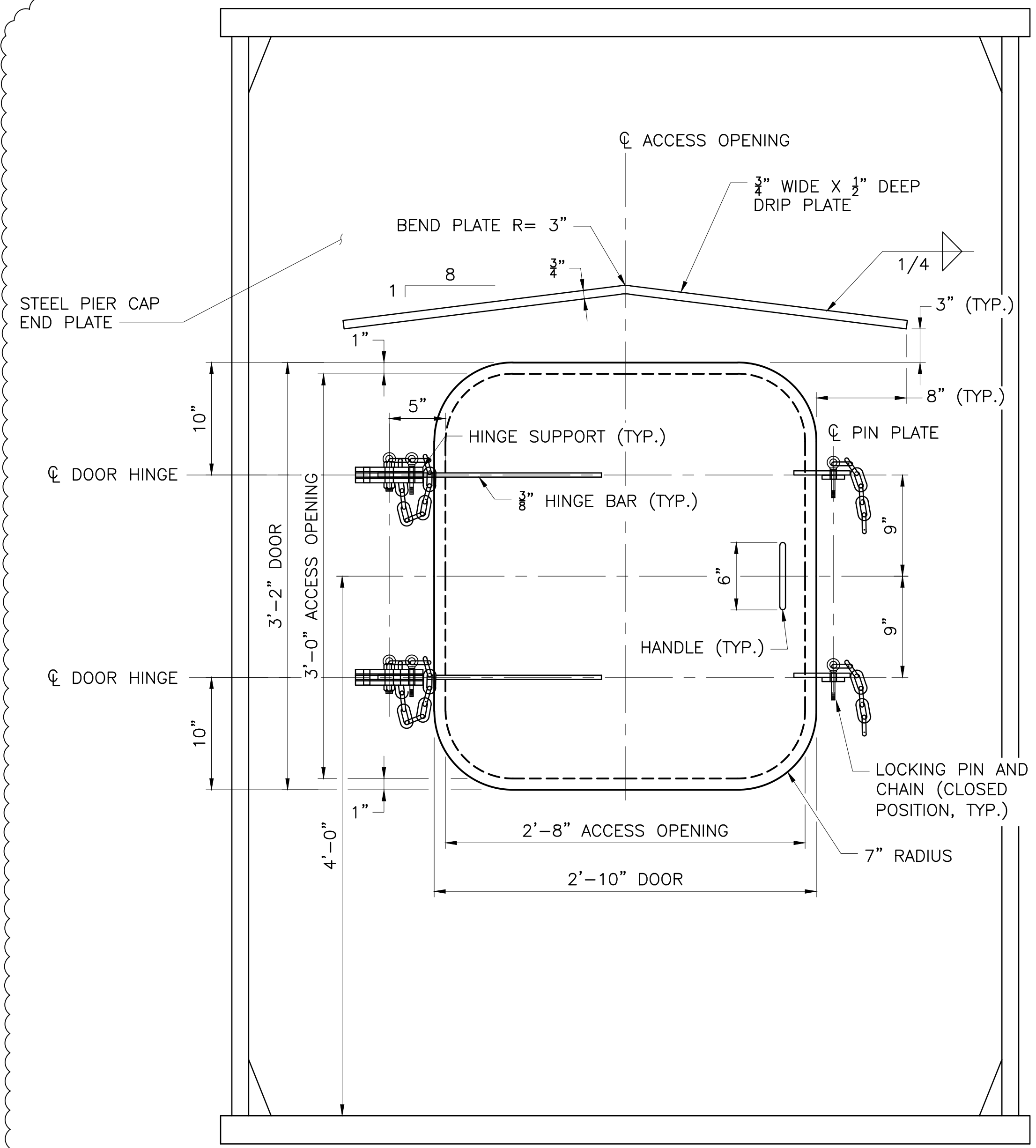
REVISIONS		
NO.	DATE	BY
1	3/24/20	VHB
2	4/2/20	VHB

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

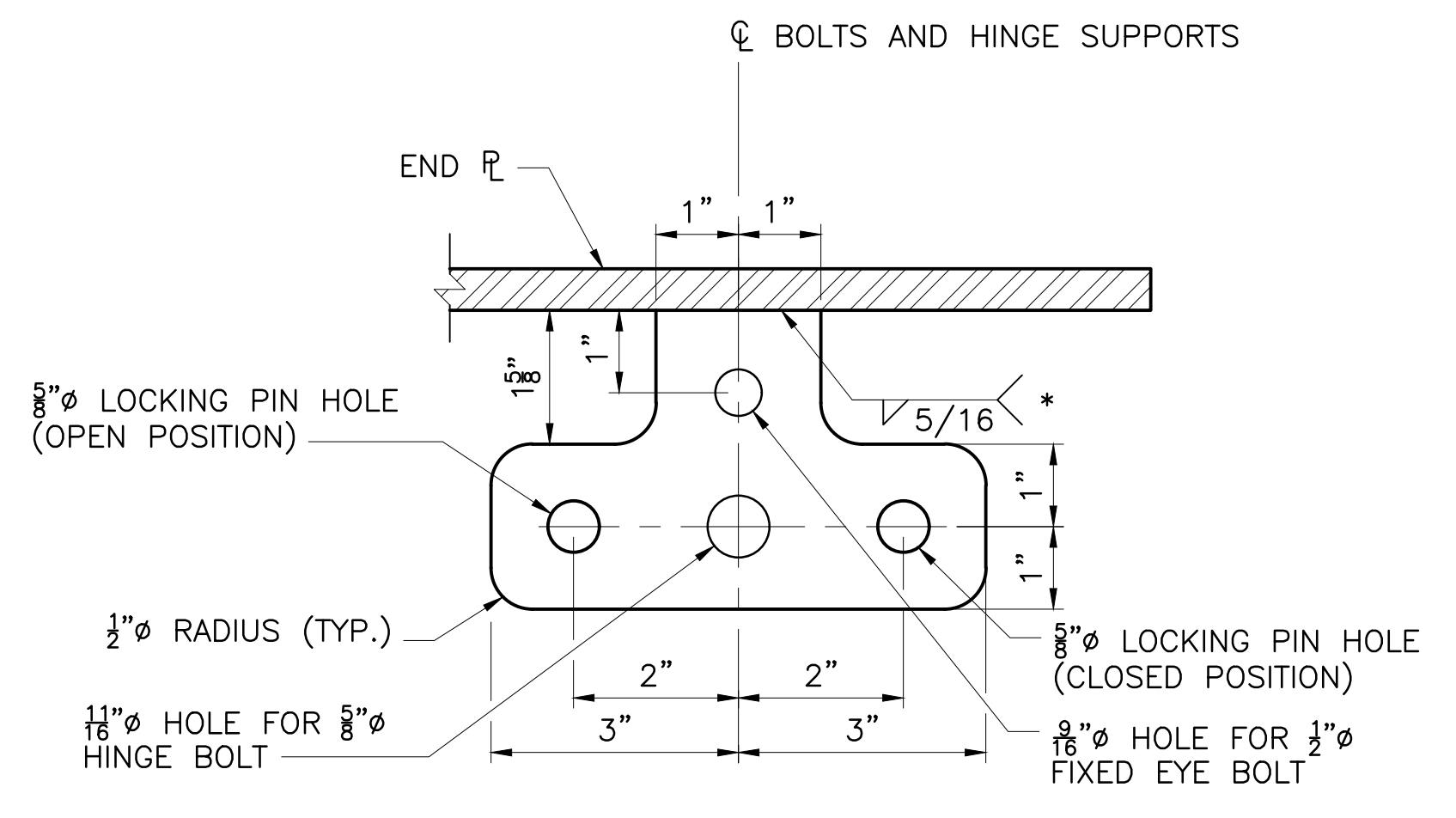
BRIDGE GROUP 49 - HENDERSON
RECONSTRUCTION OF
HENDERSON BRIDGE NO. 600
PROVIDENCE/EAST PROVIDENCE, RHODE ISLAND

**SUBSTRUCTURE
DEMOLITION 5**

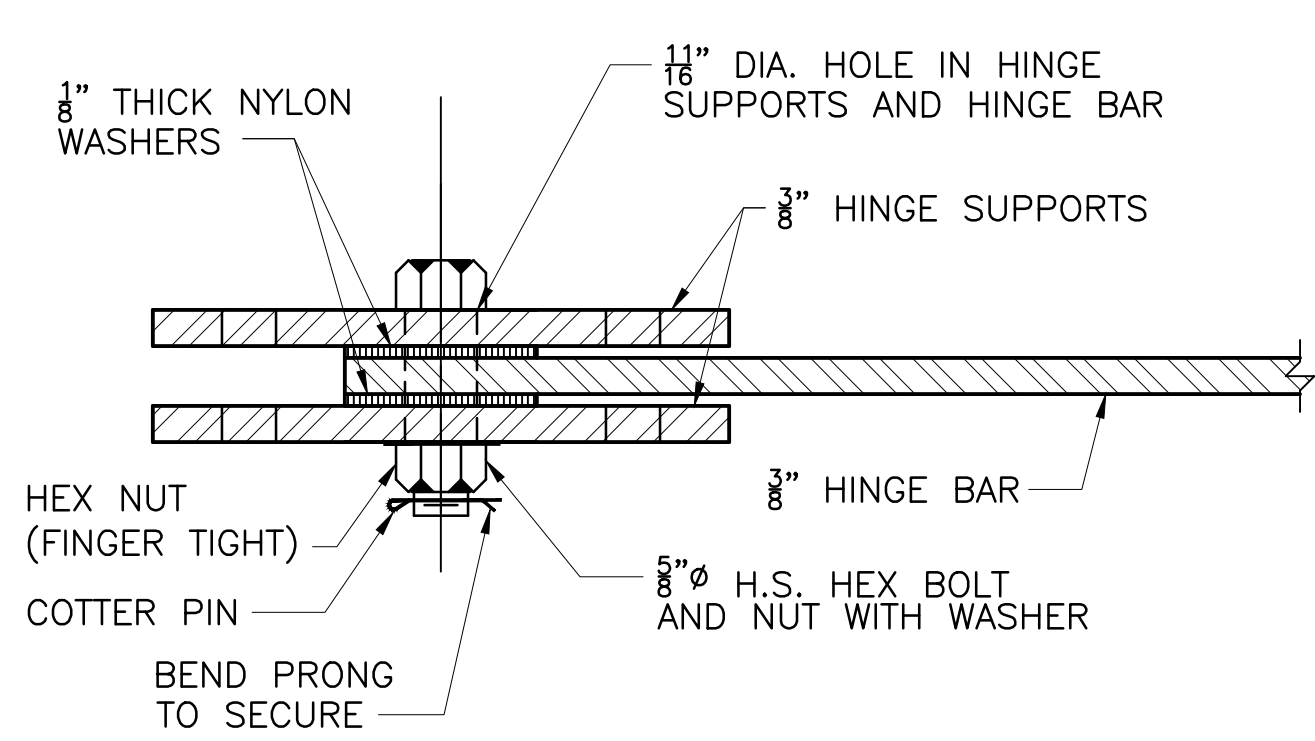
CHECKED BY _____ DATE _____ SCALE _____



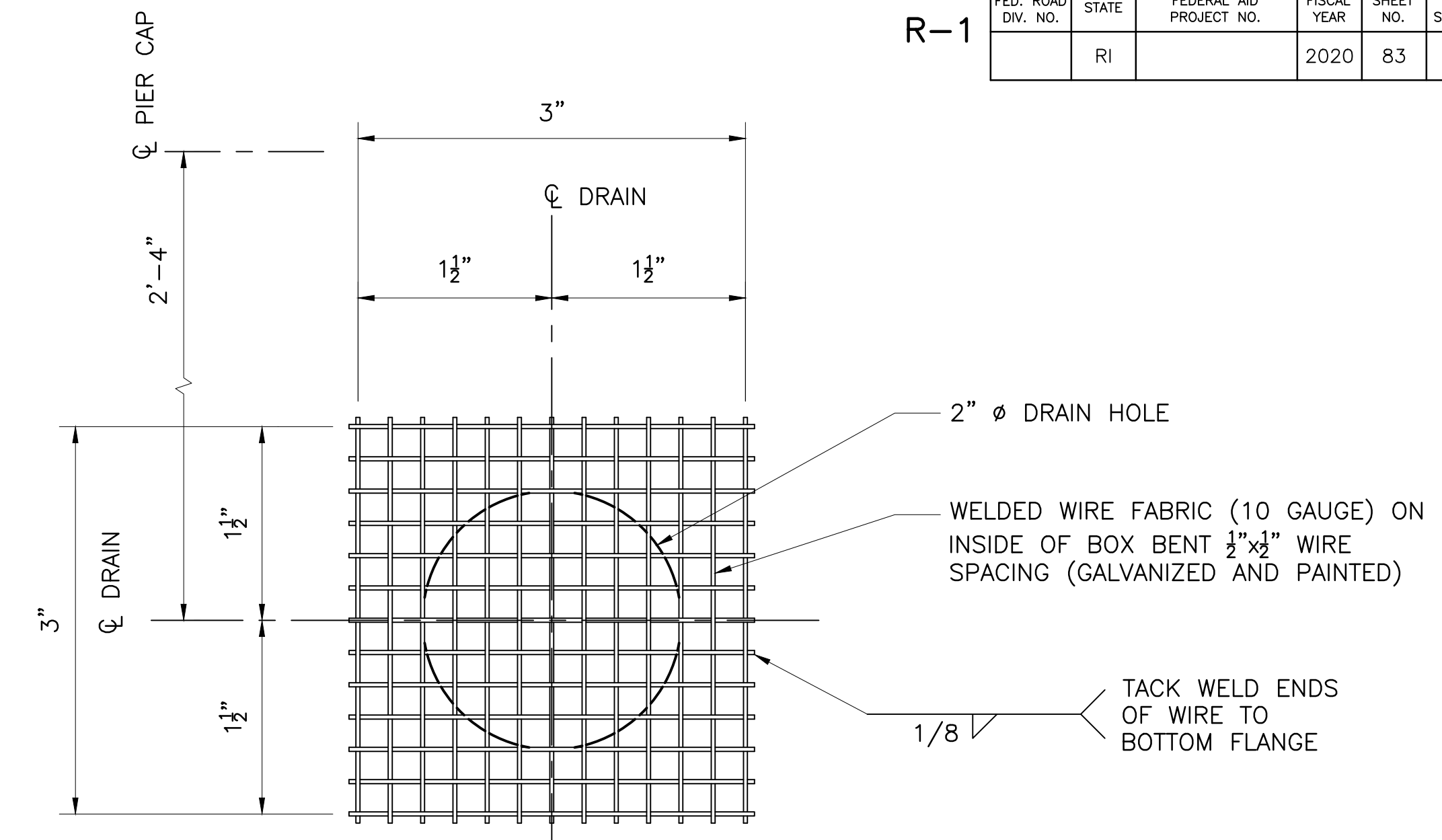
EXTERIOR ELEVATION-ACCESS DOOR
 SCALE: N.T.S.



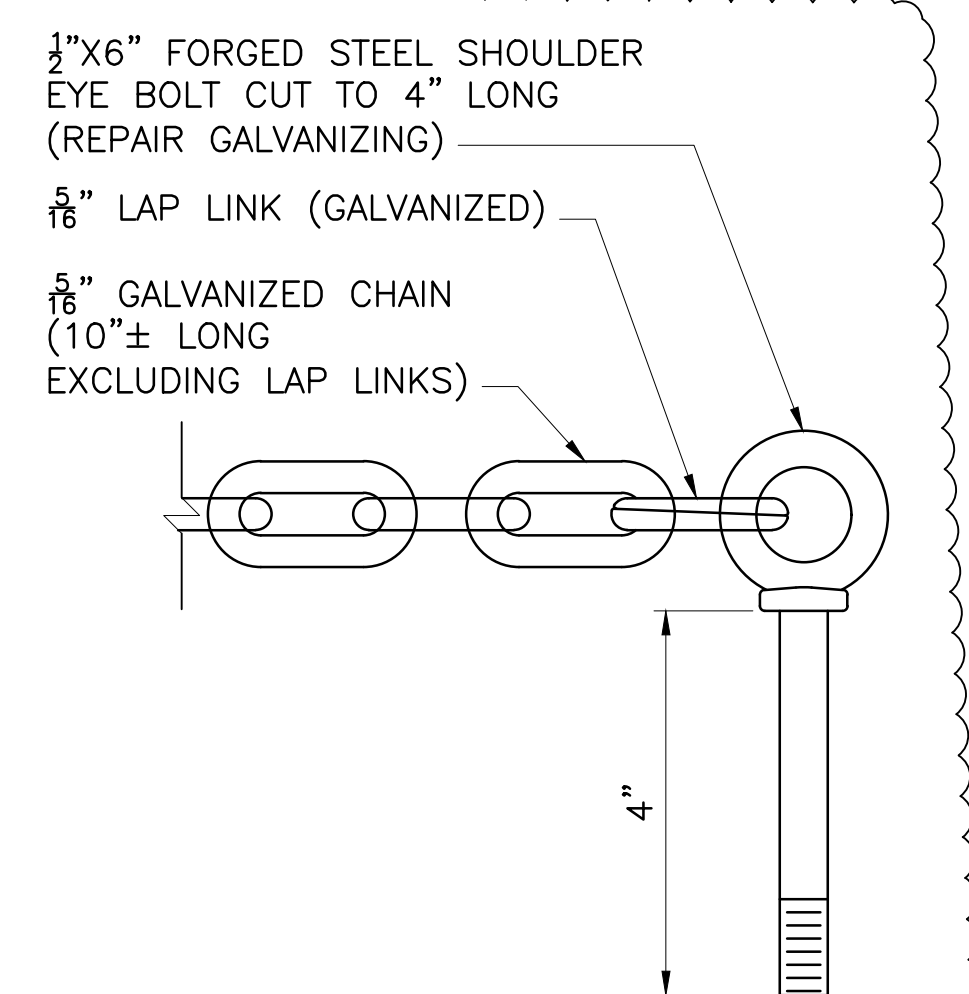
HINGE SUPPORT DETAIL
 SCALE: N.T.S.



DOOR HINGE DETAIL
 SCALE: N.T.S.



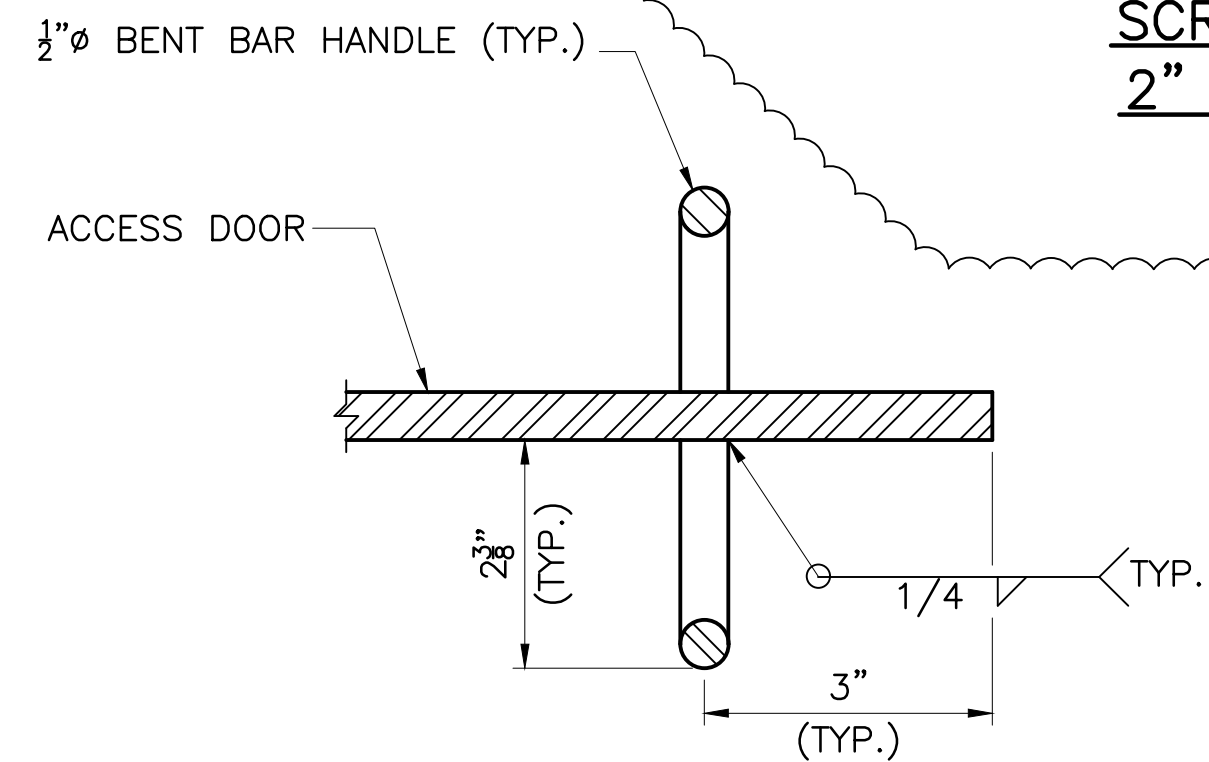
SCREEN DETAIL OVER 2" DIA. DRAIN HOLE
 SCALE: N.T.S.



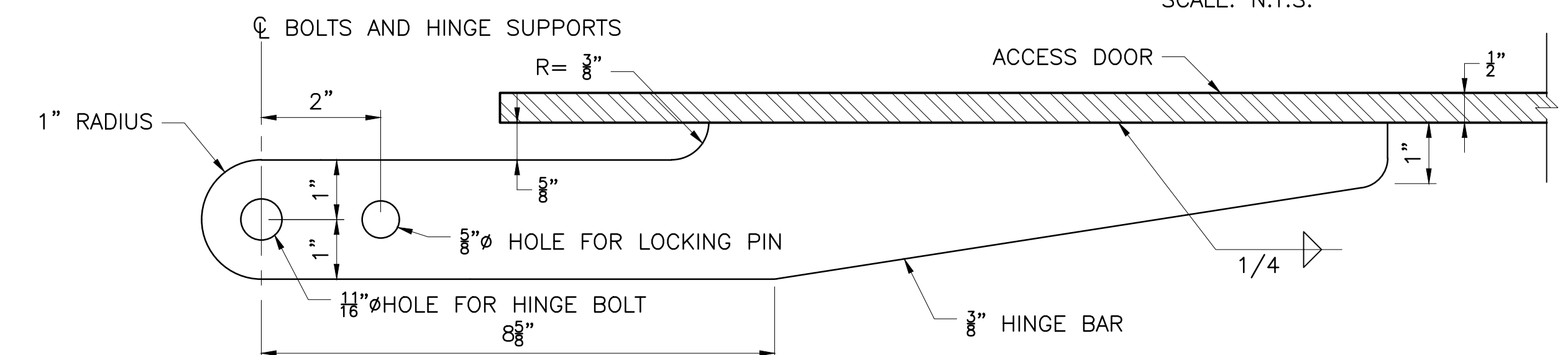
LOCKING PIN DETAIL
 SCALE: N.T.S.

ACCESS DOOR NOTES:

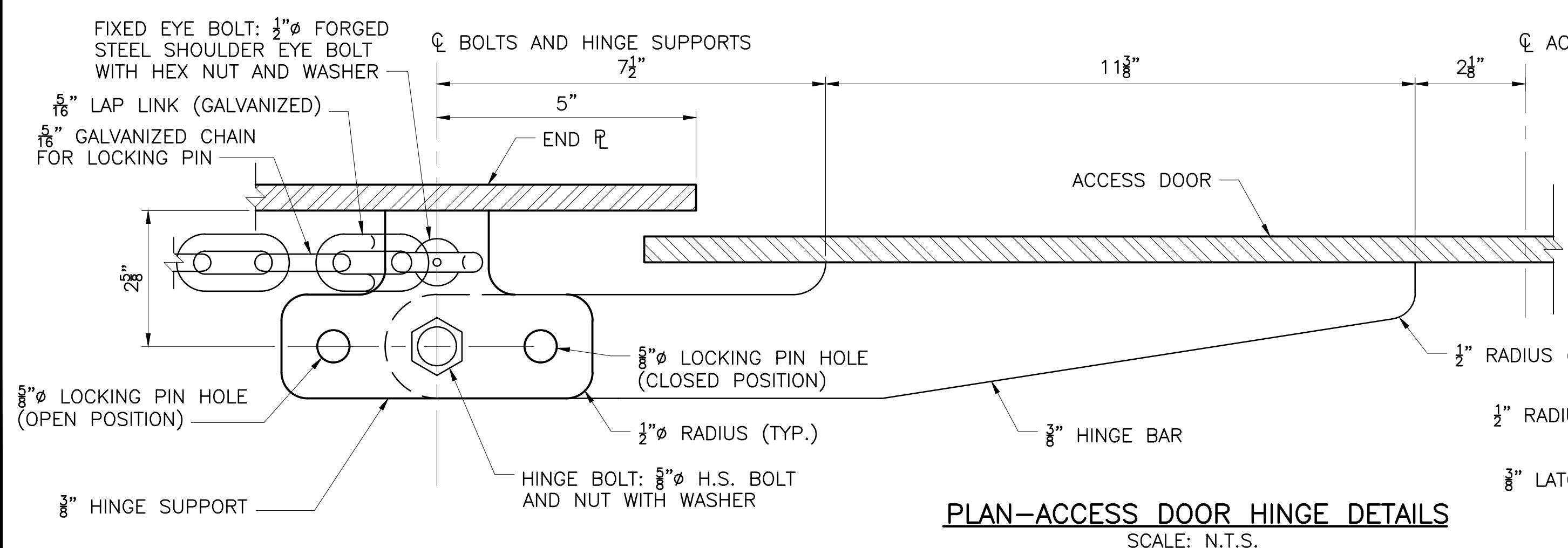
1. ALL STEEL HARDWARE FOR THE DOOR SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF M.05.04.4. WELDING OF ALL PARTS SHALL BE PERFORMED PRIOR TO GALVANIZING.
2. ALL STEEL COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M270 (ASTM A709) GRADE 50.
3. ACCESS MANHOLE DOOR SHALL BE PAINTED AND METALIZED.
4. 5/16" CHAIN SHALL BE WELDED STEEL GRADE 30 PROOF COIL CHAIN AND SHALL BE HOT DIP GALVANIZED.



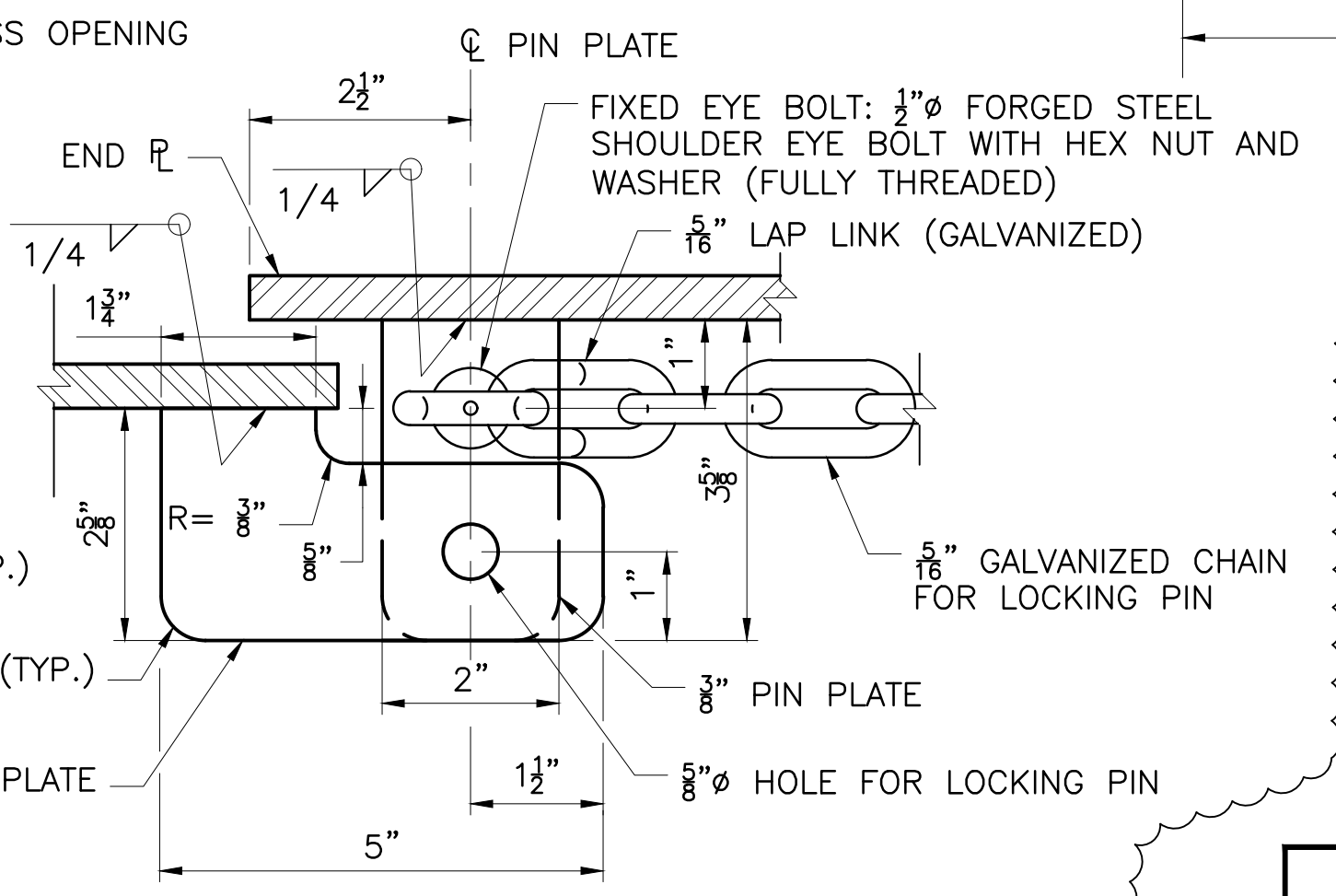
SECTION AT HANDLE
 SCALE: N.T.S.



HINGE BAR DETAIL
 SCALE: N.T.S.



PLAN-ACCESS DOOR HINGE DETAILS
 SCALE: N.T.S.



HINGE BAR DETAIL
 SCALE: N.T.S.

* WELD SHALL TERMINATE 1/4" FROM EDGE OF SUPPORT PLATE

REVISIONS		
NO.	DATE	BY
1	4/2/20	VHB

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 49 - HENDERSON
RECONSTRUCTION OF
HENDERSON BRIDGE NO. 600
 PROVIDENCE/EAST PROVIDENCE, RHODE ISLAND

STEEL PIER CAP DETAILS 3

CHECKED BY _____ DATE _____ SCALE AS SHOWN