

WATERLINE CONSTRUCTION NOTES, CONT:

22. The Contractor is responsible for dewatering trench as necessary where groundwater is encountered. All associated costs for dewatering shall be borne by the Contractor.
23. The use of known sewer pump trucks is prohibited for DOW projects for any use, including but not limited to dewatering and testing of new facilities.
24. The Contractor shall verify outside diameter of all existing asbestos-cement (ac) waterlines to be connected. Contractor shall verify use of proper gaskets prior to connection. Ac pipe and gasket information shall be submitted to Engineer for approval.
25. All removal, disposal and connection work that involves asbestos pipe/material shall be done in the presences of or by a licensed Asbestos Contractor.

The licensed Asbestos Contractor shall submit their plan for all associated removal, disposal and connecting work for the project to DOW for review and approval prior to conducting the work.

26. All connections to existing ac pipe shall be at the nearest ac pipe joint. Ac pipe shall be removed by entire length(s) to facilitate the connection. Cutting of ac pipe is prohibited.
27. The Contractor shall follow all applicable OSHA, HIOSH and Federal regulations in handling and disposal of asbestos-cement pipe. Disposal of the pipe shall be at an approved asbestos material disposal site.
28. All waterworks brass fittings shall be in compliance with the Amended Section 1417 of Safe Drinking Water Act (SDWA) which takes effect on January 4, 2014. The Amendment includes a change to the definition of "Lead-Free" by reducing lead content from 8% to a weighted average of not more than 0.25% in the wetted surface material. All waterworks brass fittings installed for potable water service on January 4, 2014 and beyond shall conform to the amended definition of "Lead-Free".

As indicated in section 211 of Water System Standards - Brass Products, all brass fittings shall conform to NSF Standard 61 and Section 1417 of the Safe Drinking Water Act (SDWA), in addition, all brass fittings shall conform to NSF Standard 372.

29. Contractor shall install water facilities only after reaching final subgrade or higher. The Department of Water will not allow installation of any water facilities until the final subgrade layer at minimum has been achieved.
30. Prior to installation of new water lines and/or facilities, the Contractor shall have all facilities surveyed and staked out by a licensed Surveyor and the Contractor shall expose, verify, and backfill all existing underground utilities and structures in close proximity to crossings and connections prior to excavation of pipeline trench. Contractor shall provide the licensed Surveyor cut sheet and the probing information to the DOW Construction Engineer for review and approval before moving forward with installation via the submittal review process.
31. The Department shall be provided twenty (20) working days for all submittal reviews from the time of submission by the Contractor.

32. Unless otherwise specified, all ductile iron pipes, valves, and fittings shall be encased in one layer of 8 mil minimum thickness polyethylene material in accordance with ANSI A-21.5 and AWWA C105. The polyethylene encasement film shall be manufactured from virgin polyethylene and shall consist of three layers of co-extruded linear low density polyethylene (LLDPE), fused into a single thickness of not less than 8 mils. The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of an antimicrobial to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion. Polyethylene material shall have permanent markings per AWWA C105.

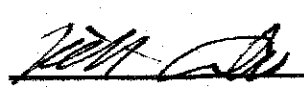
Copper service laterals shall be encased with polyethylene wrap from the connection to ductile iron pipes to the angle ball valve located in the water meter box.

33. The Contractor shall verify the connection points before laying out the water line alignment. Contractor shall adjust alignment accordingly with concurrence from Engineer.
34. Contractor shall provide shop drawings prior to installation of water line.
35. Contractor shall provide necessary fittings and piping to complete water line connection in place.

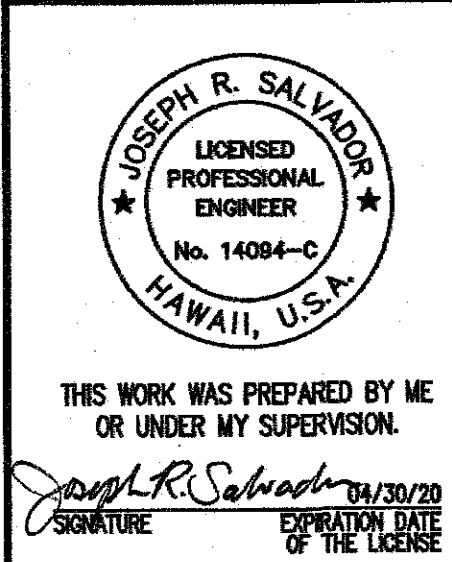
SPECIAL WATERLINE NOTES TO DEVELOPER:

1. Contractor shall maintain temporary water line until final design water line is constructed and conveyed to the Department of Water.

Approved:

 5/14/19
MANAGER AND CHIEF ENGINEER DATE
DEPARTMENT OF WATER
COUNTY OF KAUAI

5/10/19	Added Note, Revised Numbering
DATE	REVISION

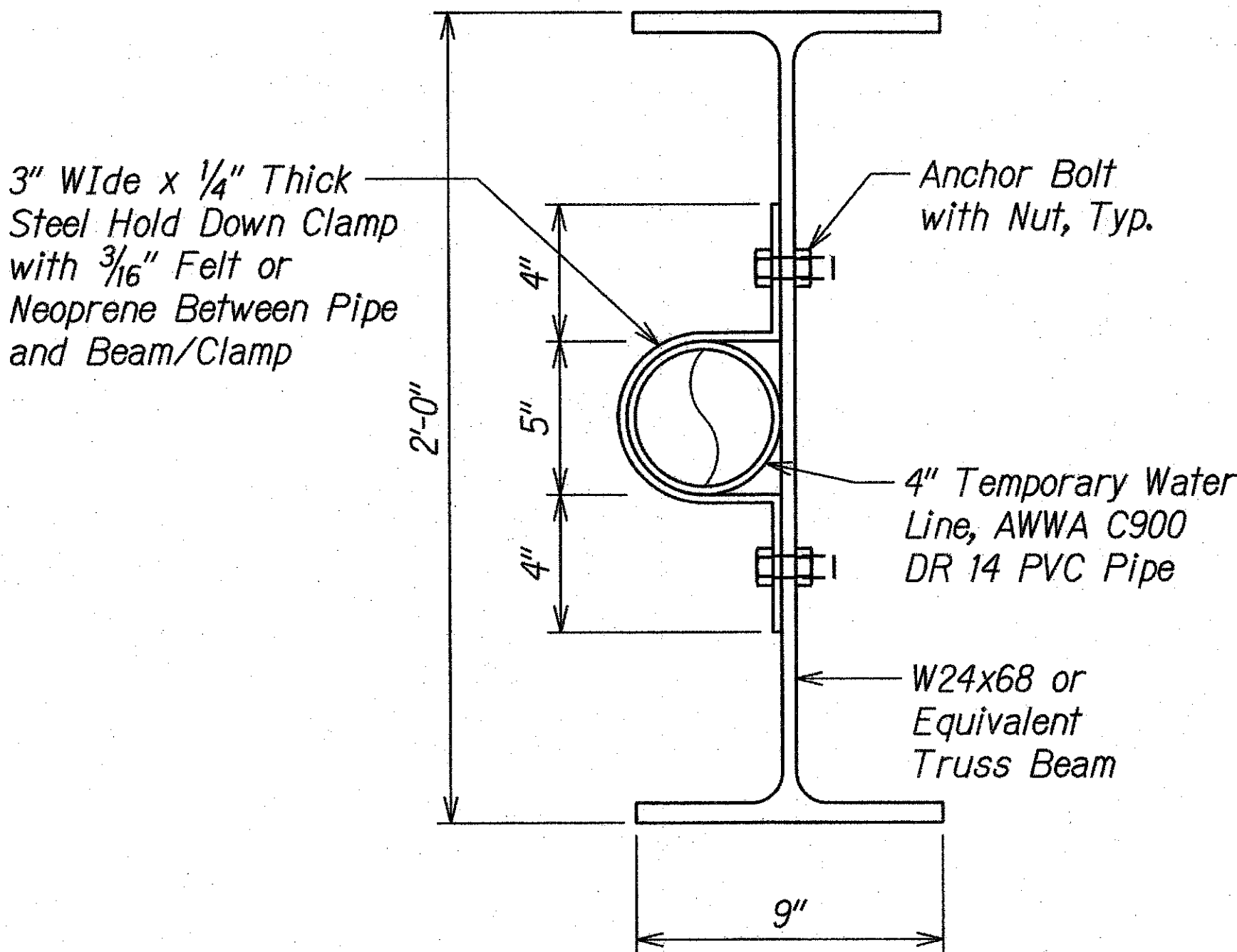


STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
WAIKOKO STREAM BRIDGE TEMPORARY WATERLINE NOTES	
KAUAI EMERGENCY FLOOD REPAIRS & CLEANUP At Various Locations April 2018, Rte. 560 Fed. Aid Proj. No. ER-19(007)	
Scale: None	Date: Oct. 2018

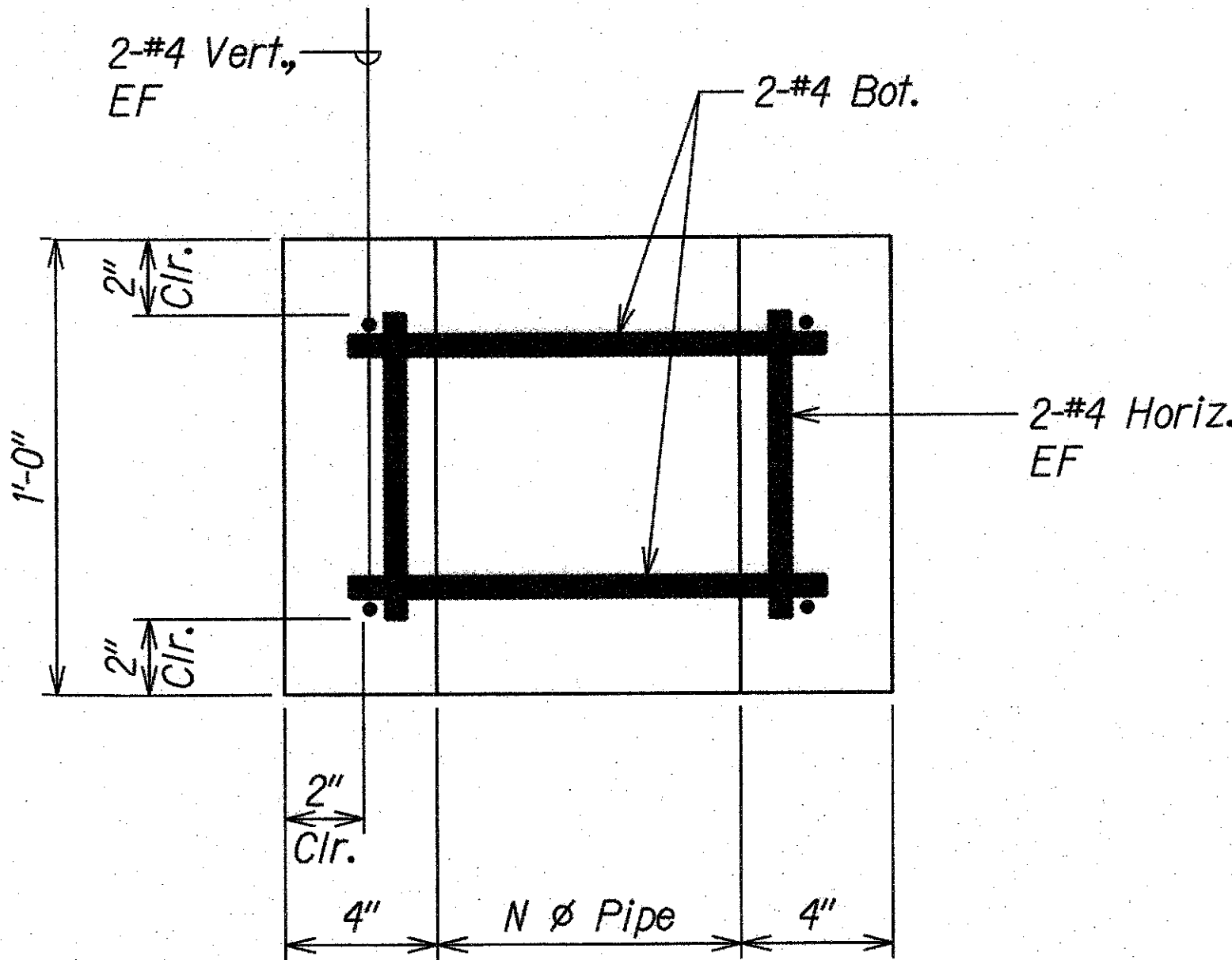
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTED BY	
DATE	

T:\165334-Emergency Flood Repair\CADD\Sheets\WAIKOKO Water Notes2.dgn

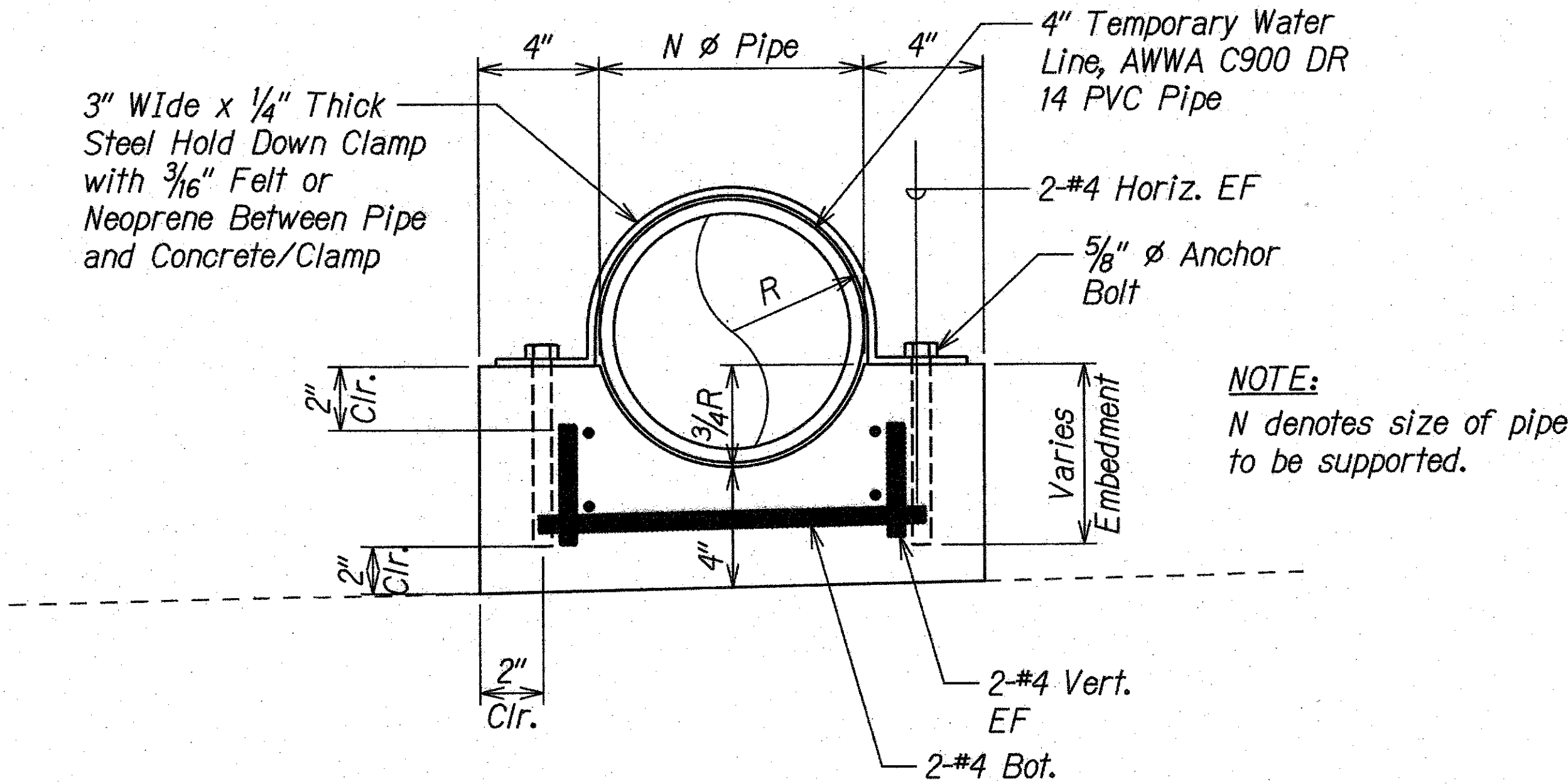
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-19(007)	2018	55	56



**WATERLINE TO BEAM
PIPE SUPPORT SECTION**
Not to Scale



PIPE SUPPORT PLAN
Not to Scale



PIPE SUPPORT SECTION
Not to Scale

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

Approved:

[Signature]
MANAGER AND CHIEF ENGINEER
DEPARTMENT OF WATER
COUNTY OF KAUAI

1/28/19
DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[Signature] 04/30/20
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

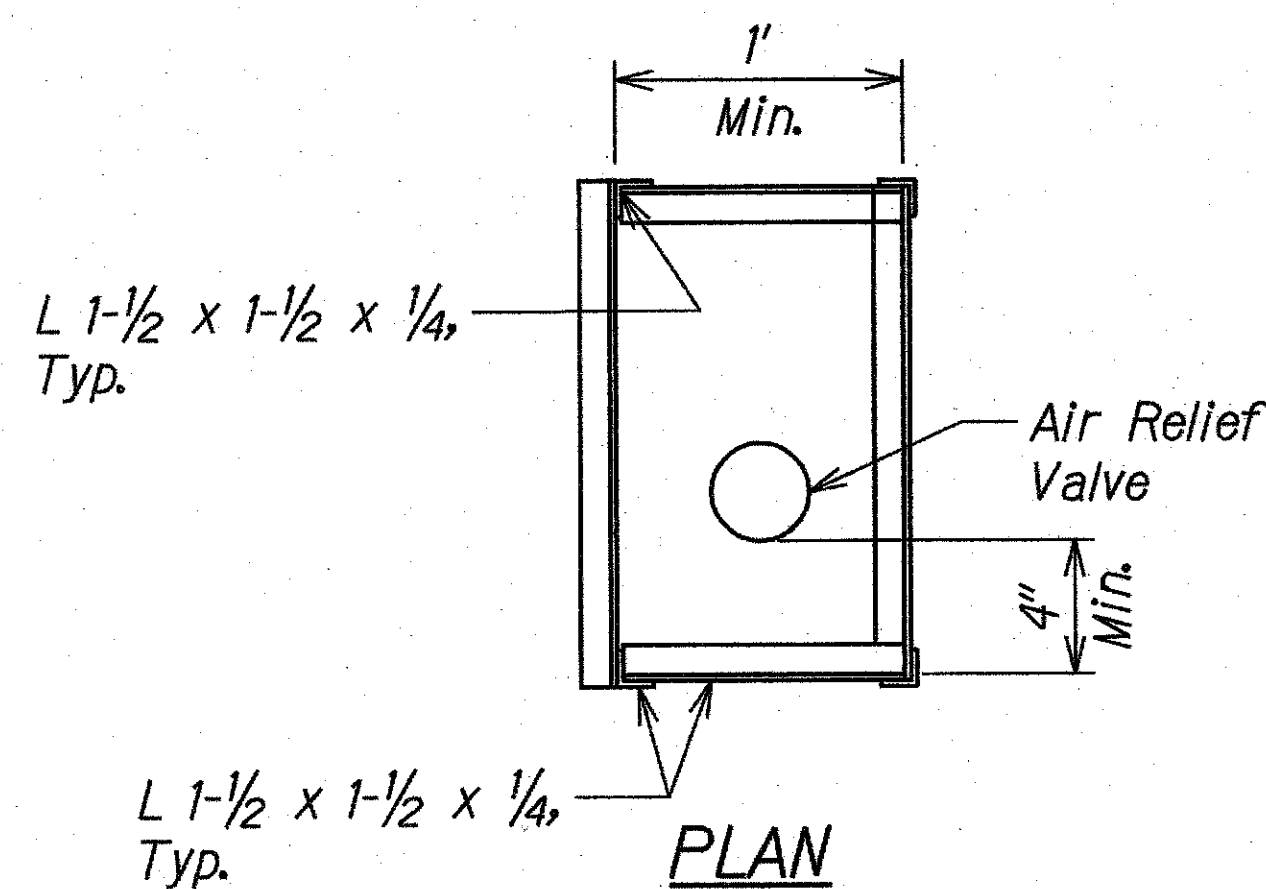
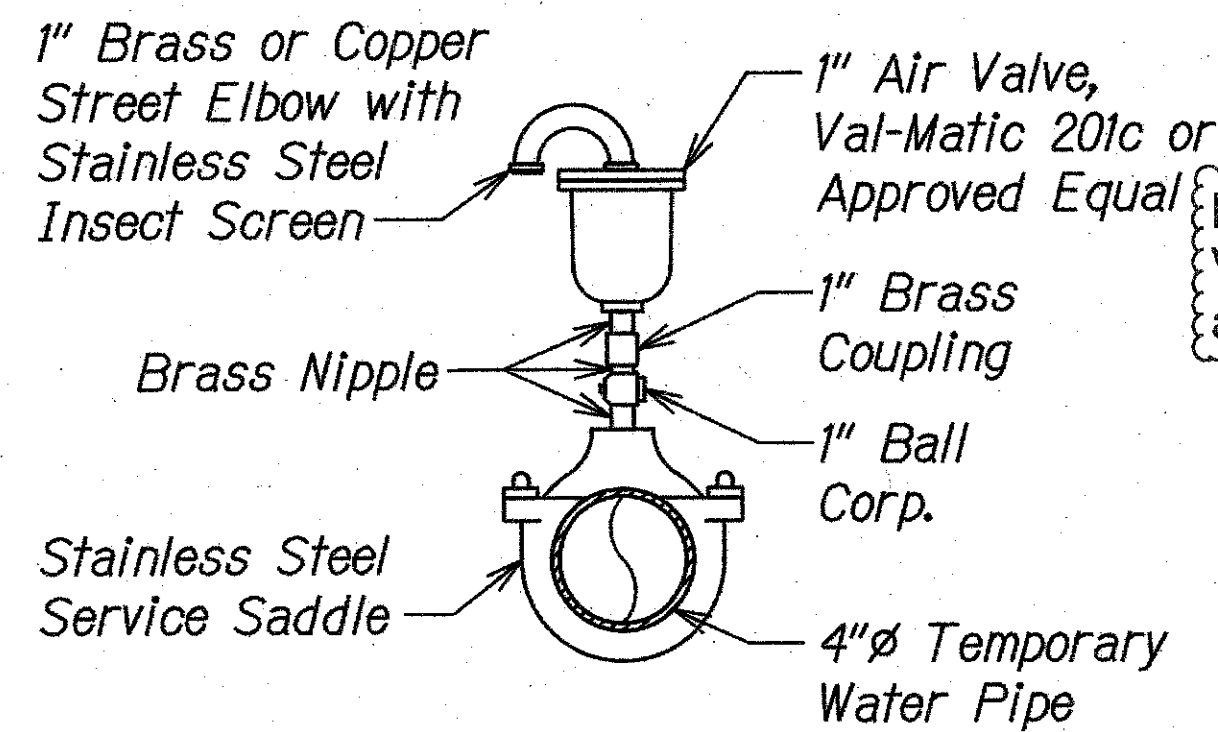
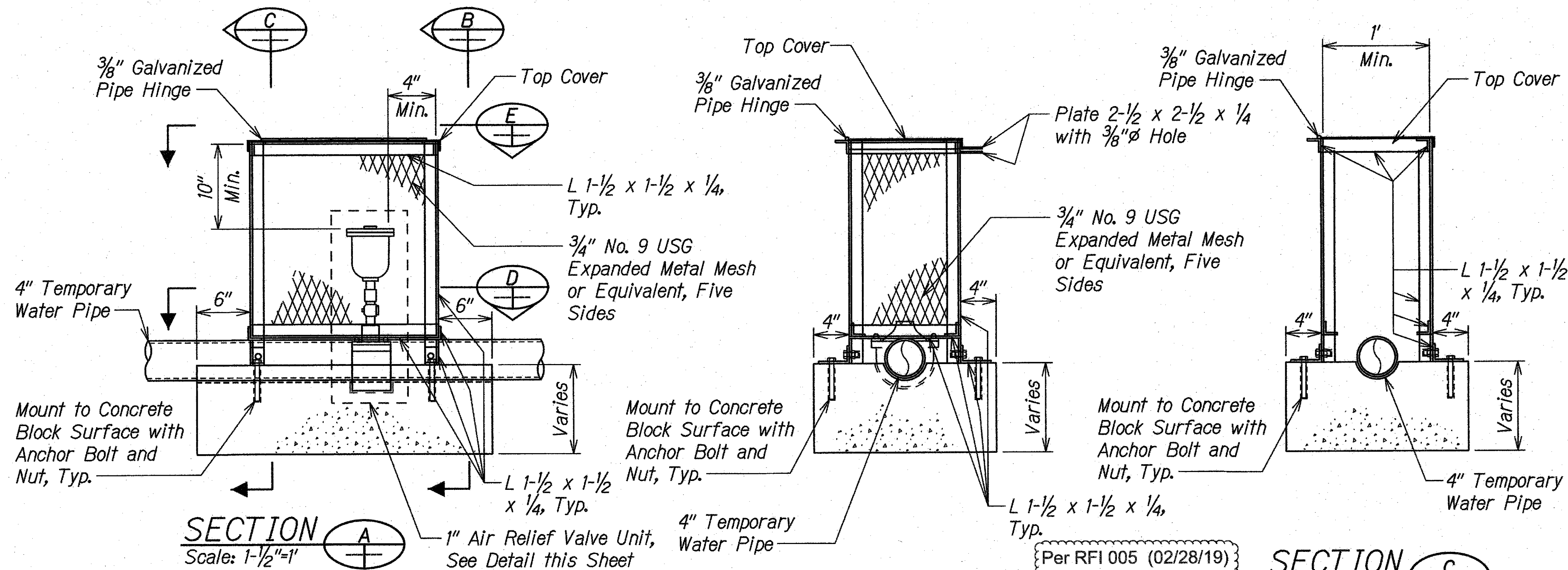
**TEMPORARY WATERLINE
PIPE SUPPORT DETAILS**

**KAUAI EMERGENCY FLOOD REPAIRS & CLEANUP
At Various Locations April 2018, Rte. 560
Fed. Aid Proj. No. ER-19(007)**

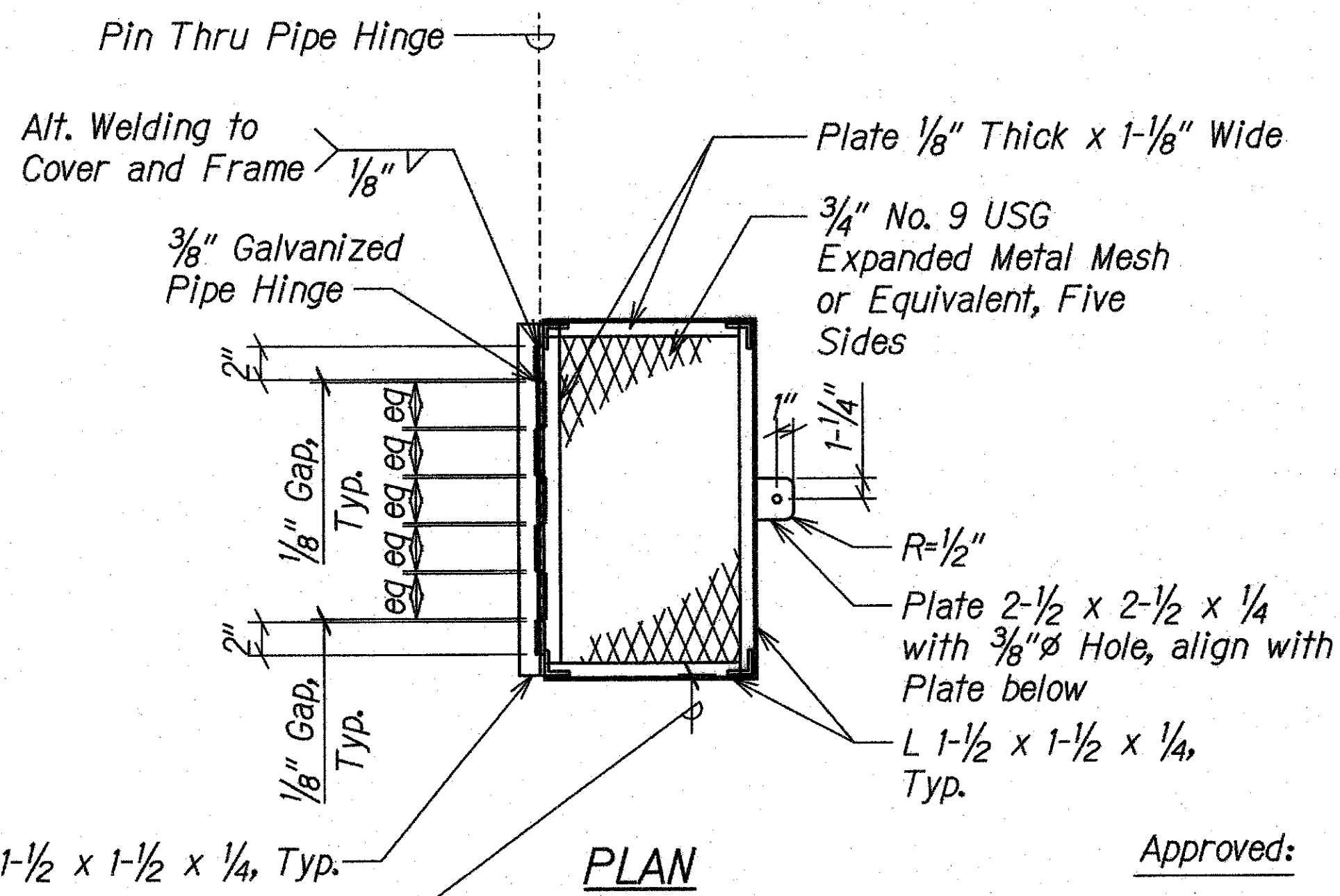
Scale: NTS Date: Oct. 2018

SHEET No. U-4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-19(007)	2018	56	56



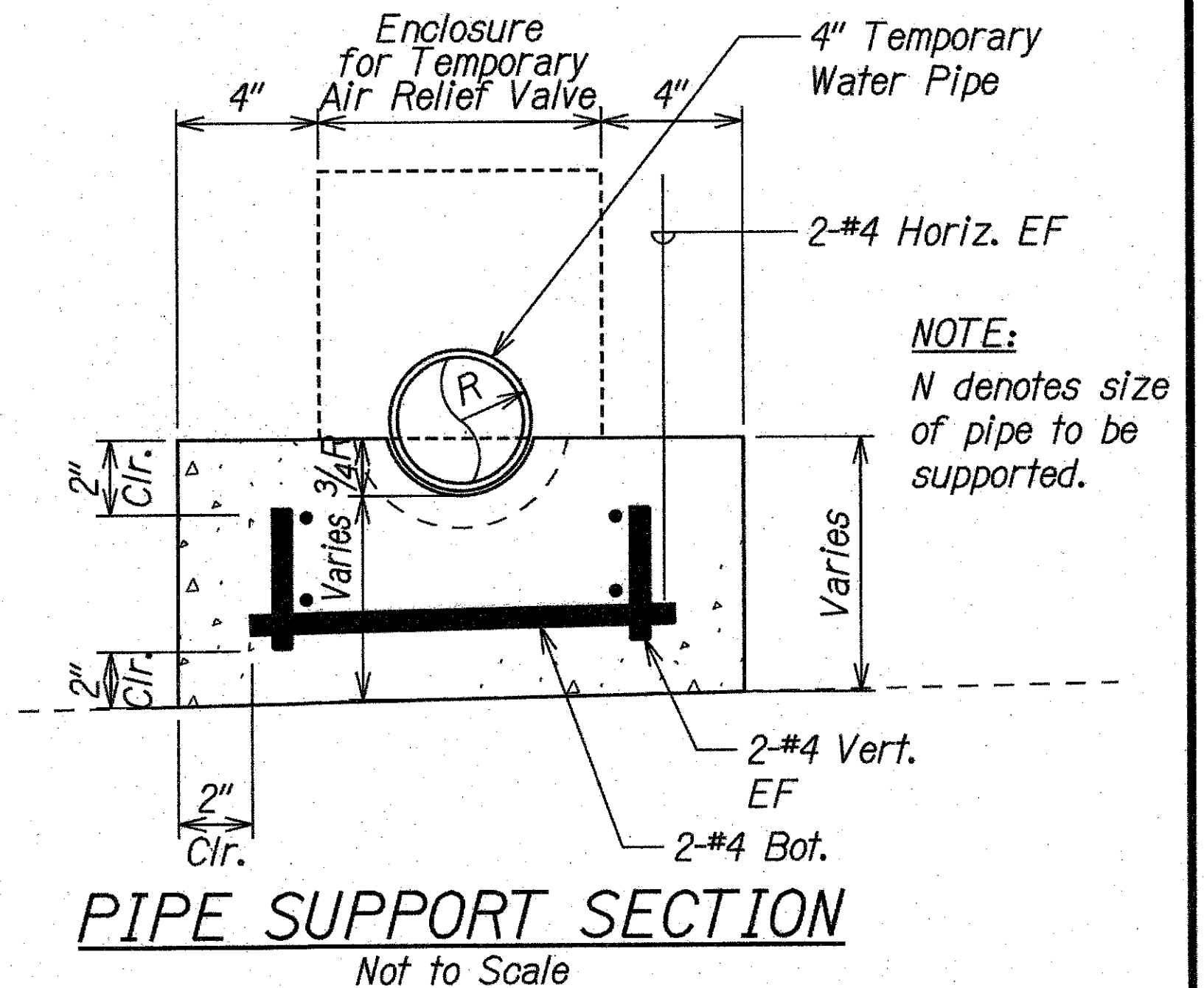
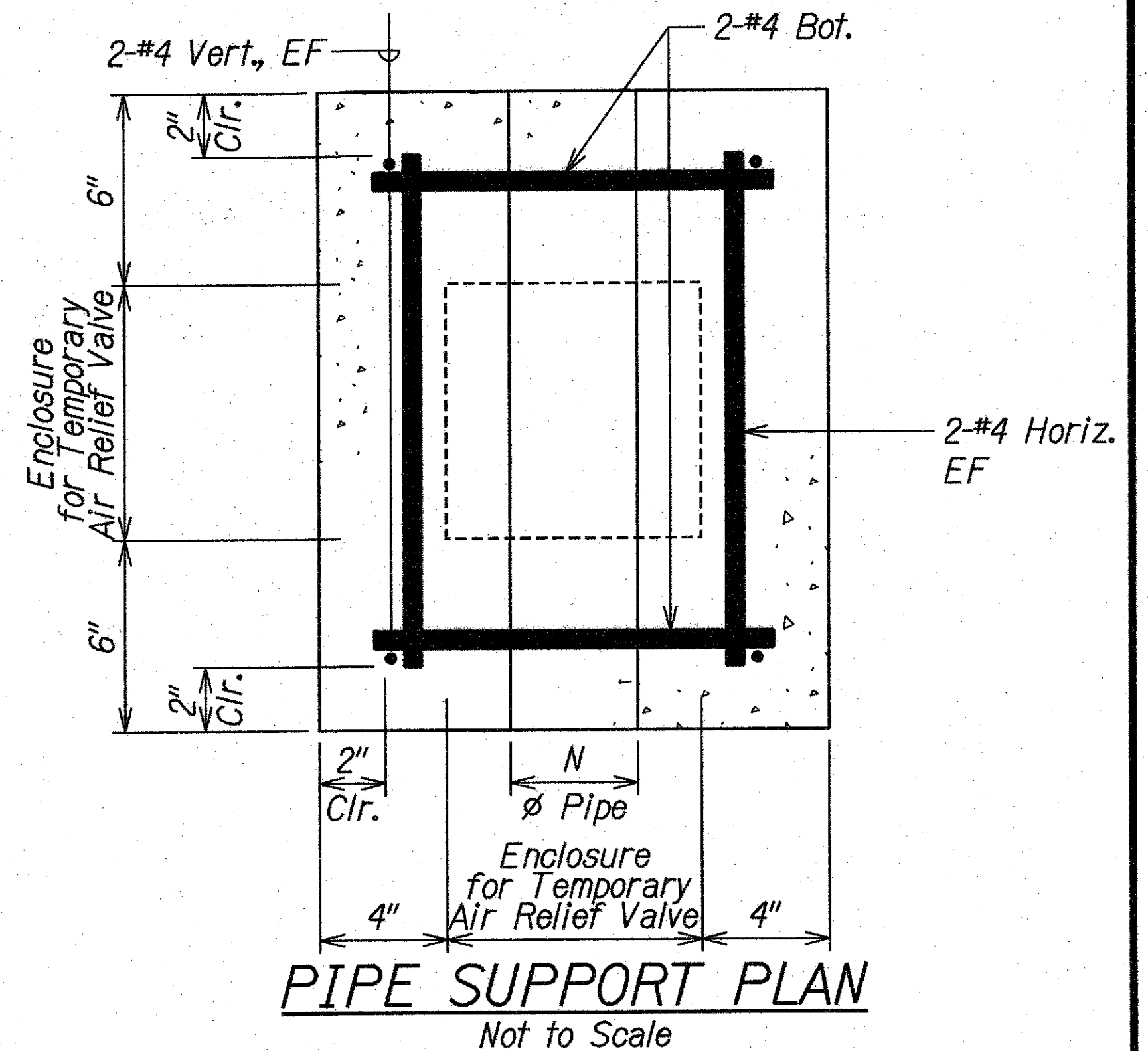
TOP FRAME
Scale: 1-1/2"=1"



TOP COVER
Scale: 1-1/2"=1"

NOTES:

1. All angle connections shall be 3/16" fillet welds unless noted otherwise.
2. Expanded metal mesh shall be welded to inside edges of angles then hot-dip galvanize entire enclosure.
3. Pin thru pipe hinge shall be inserted and welded to exterior 2" pipes after hot-dip galvanizing arv enclosure and cover. Apply zinc-rich paint to welded area.



JOSEPH R. SALVADOR
LICENSED PROFESSIONAL ENGINEER
No. 14094-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMPORARY AIR RELIEF VALVE ENCLOSURE DETAILS

KAUAI EMERGENCY FLOOD REPAIRS & CLEANUP
At Various Locations April 2018, Rte. 560
Fed. Aid Proj. No. ER-19(007)

Scale: 1-1/2"=1" Date: Oct. 2018

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 Signature: *Joseph R. Salvador*
 EXPIRATION DATE OF THE LICENSE: 04/30/20

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-19(007)	2018	56S-1	56

