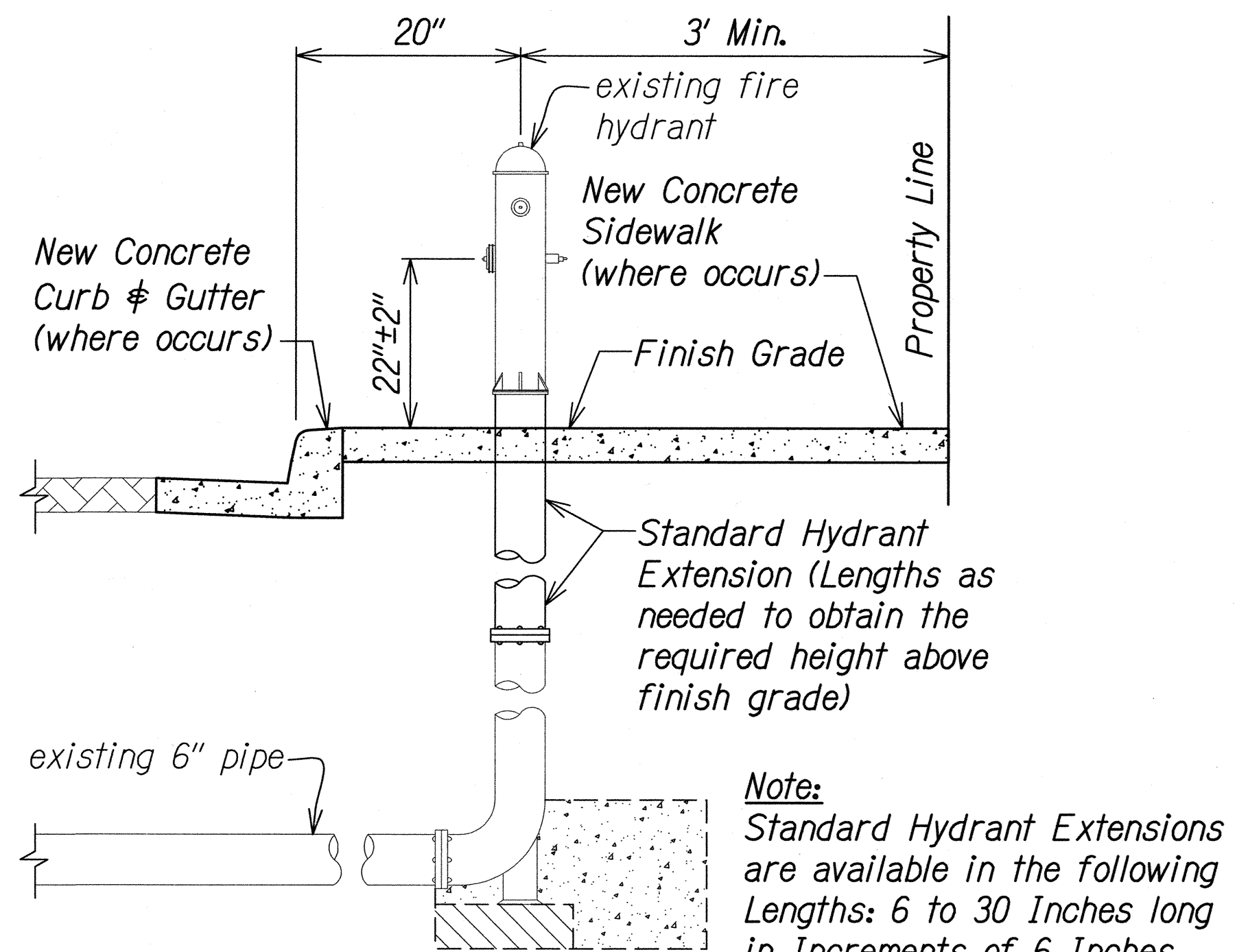
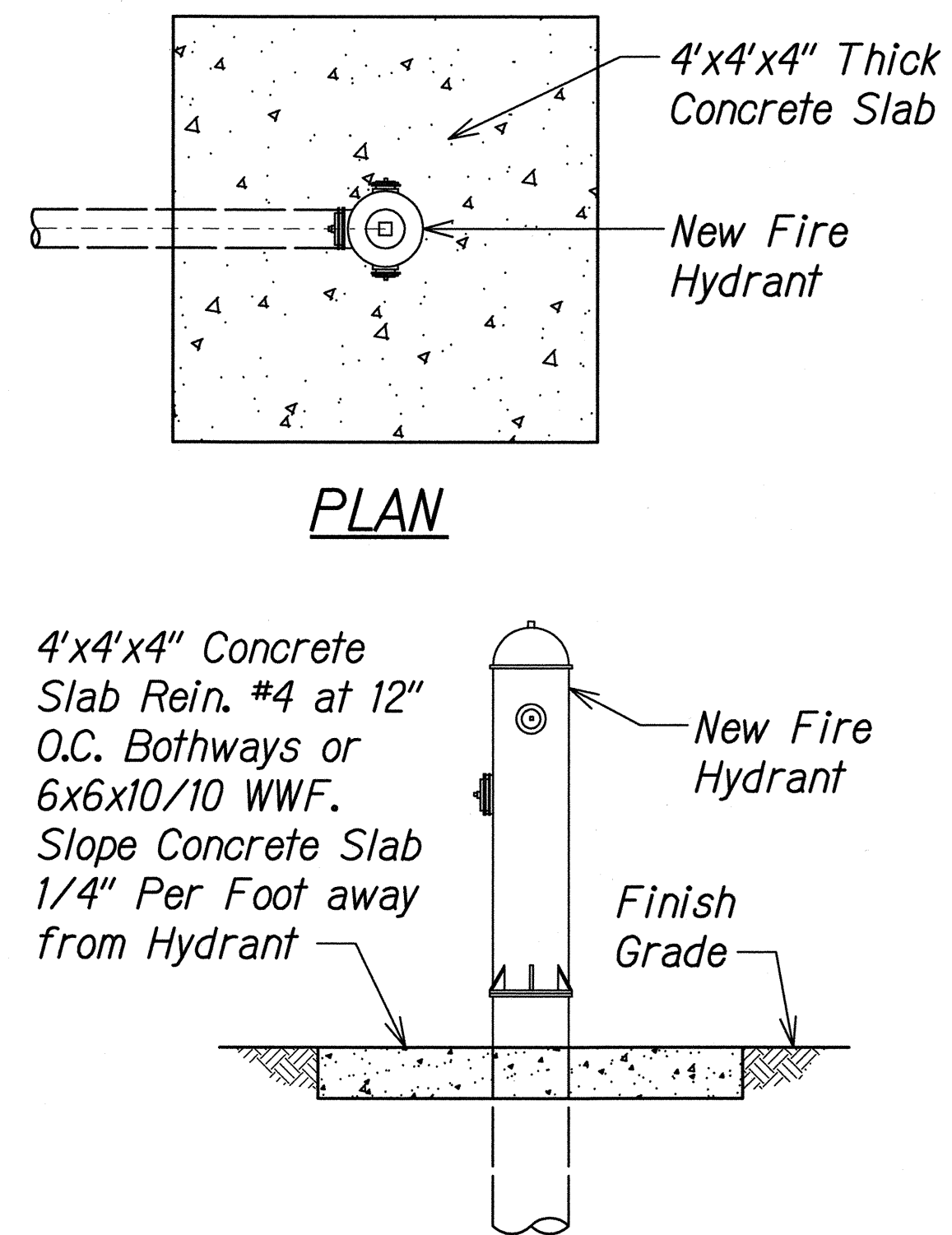
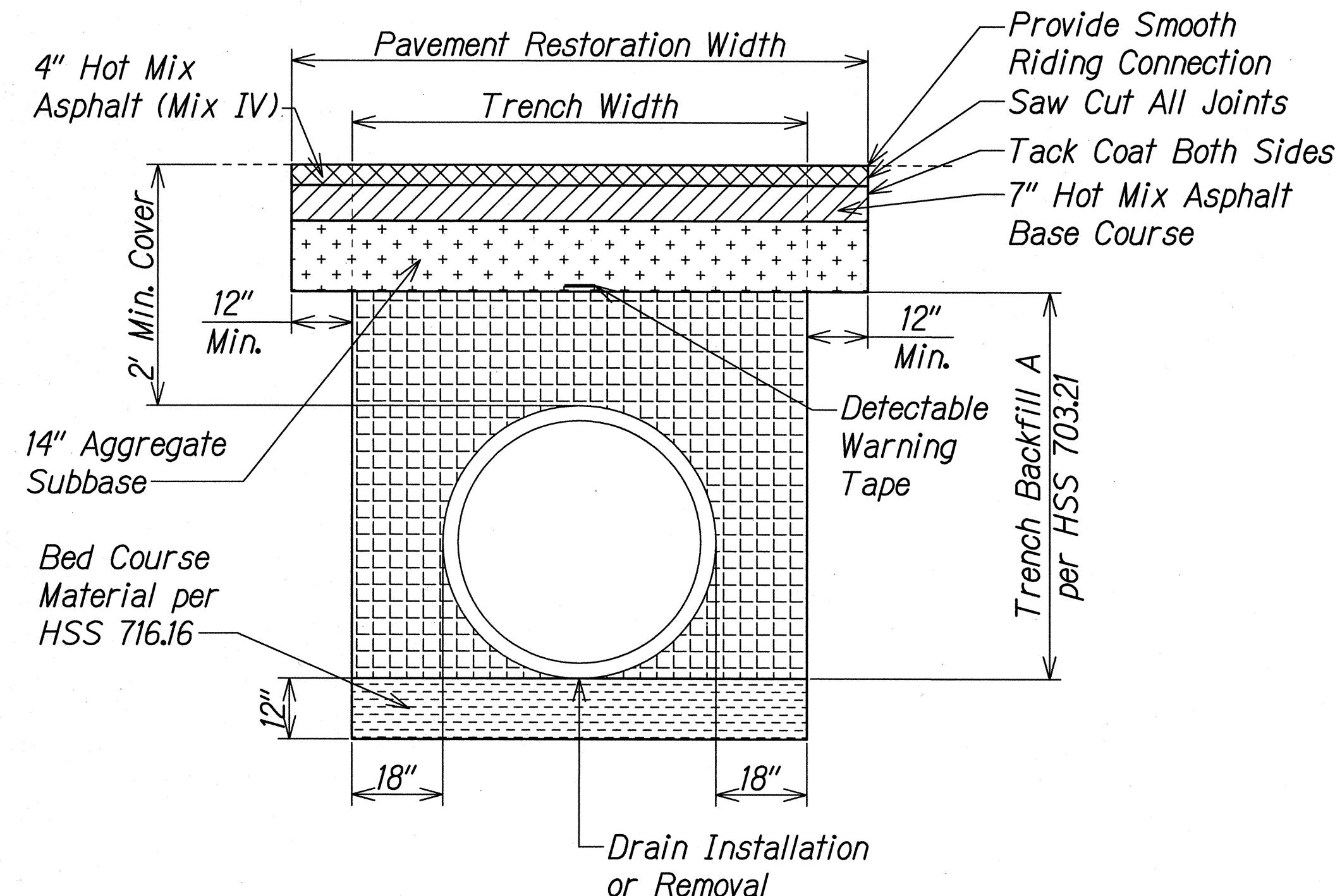
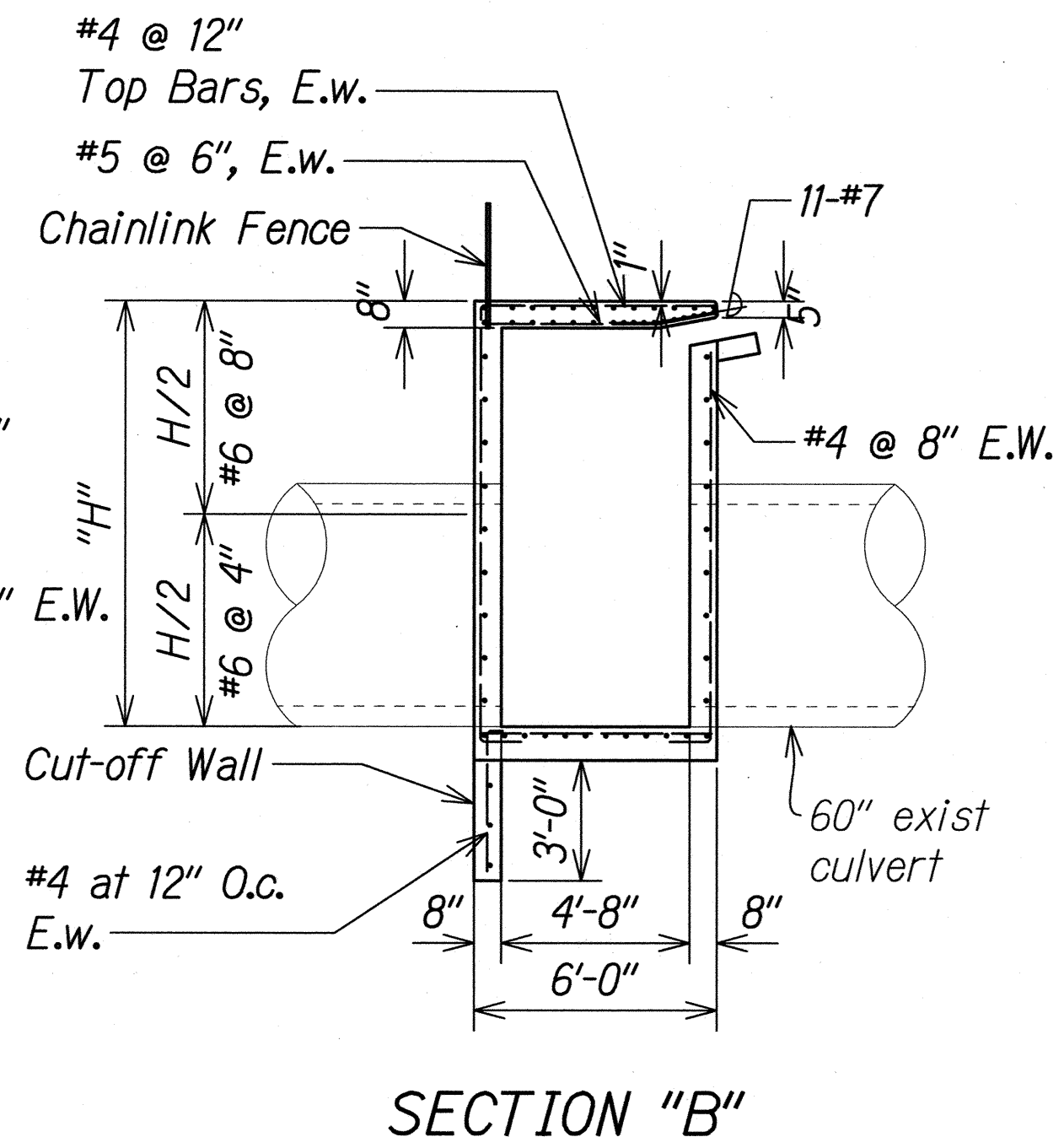
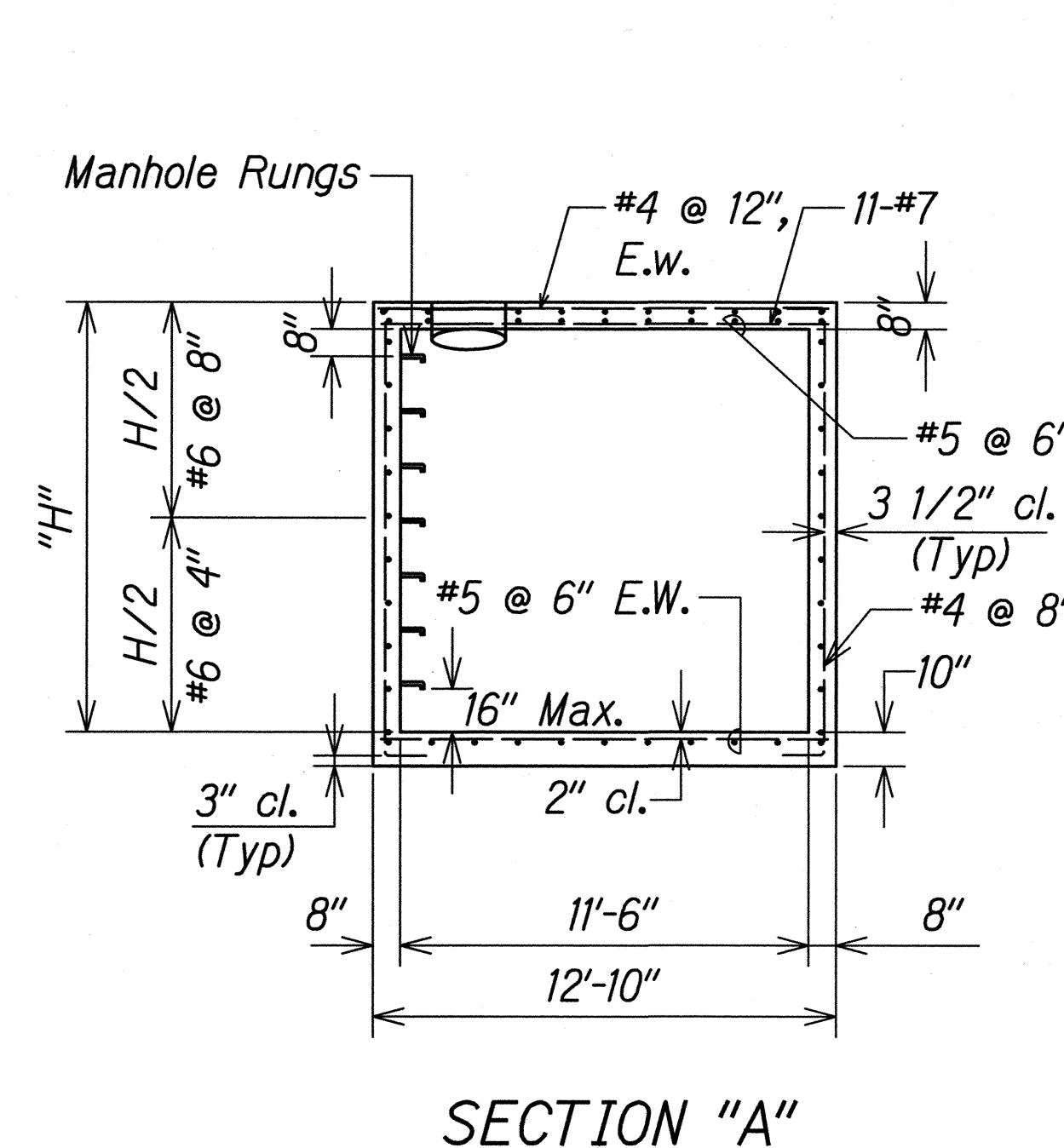
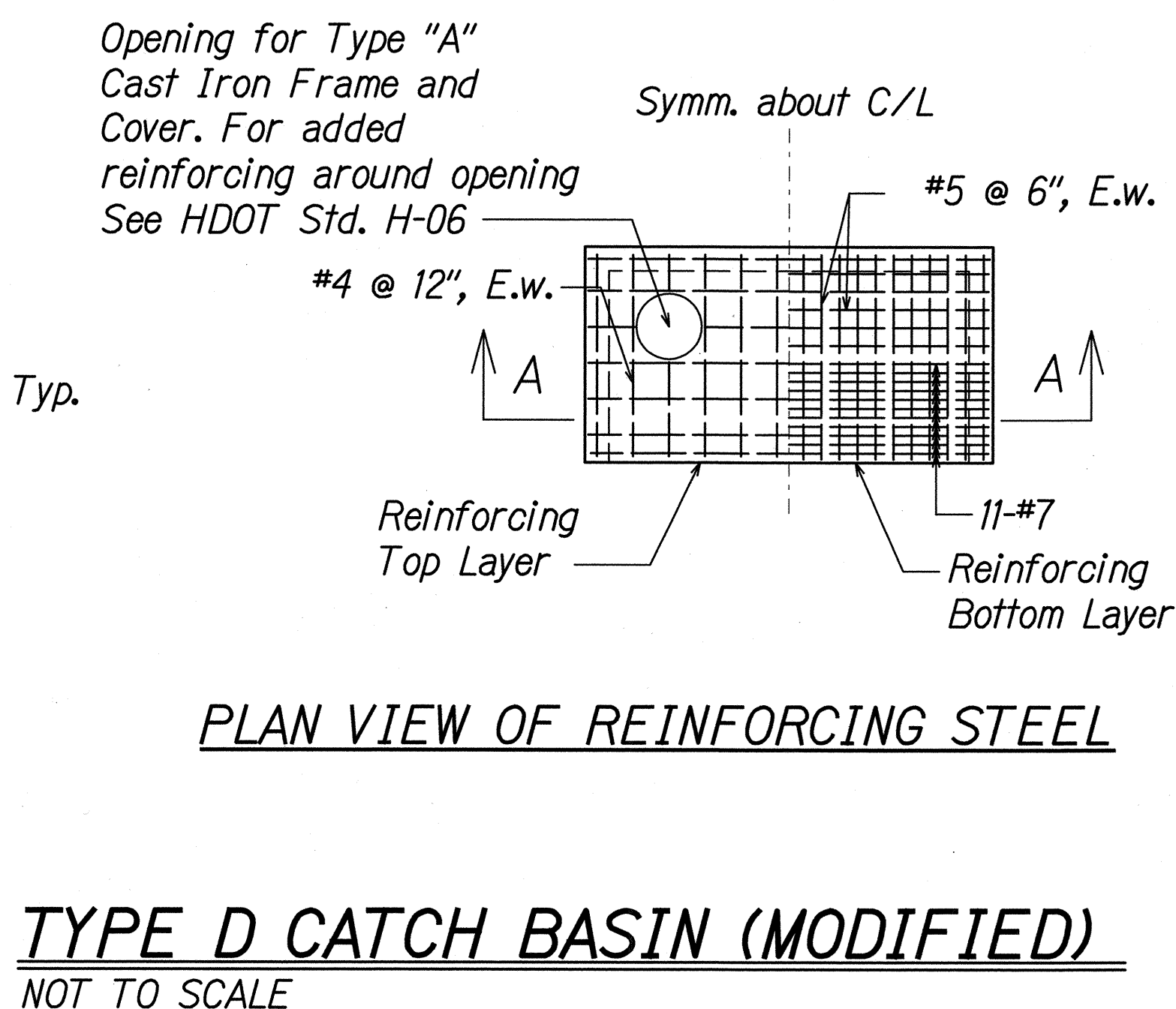
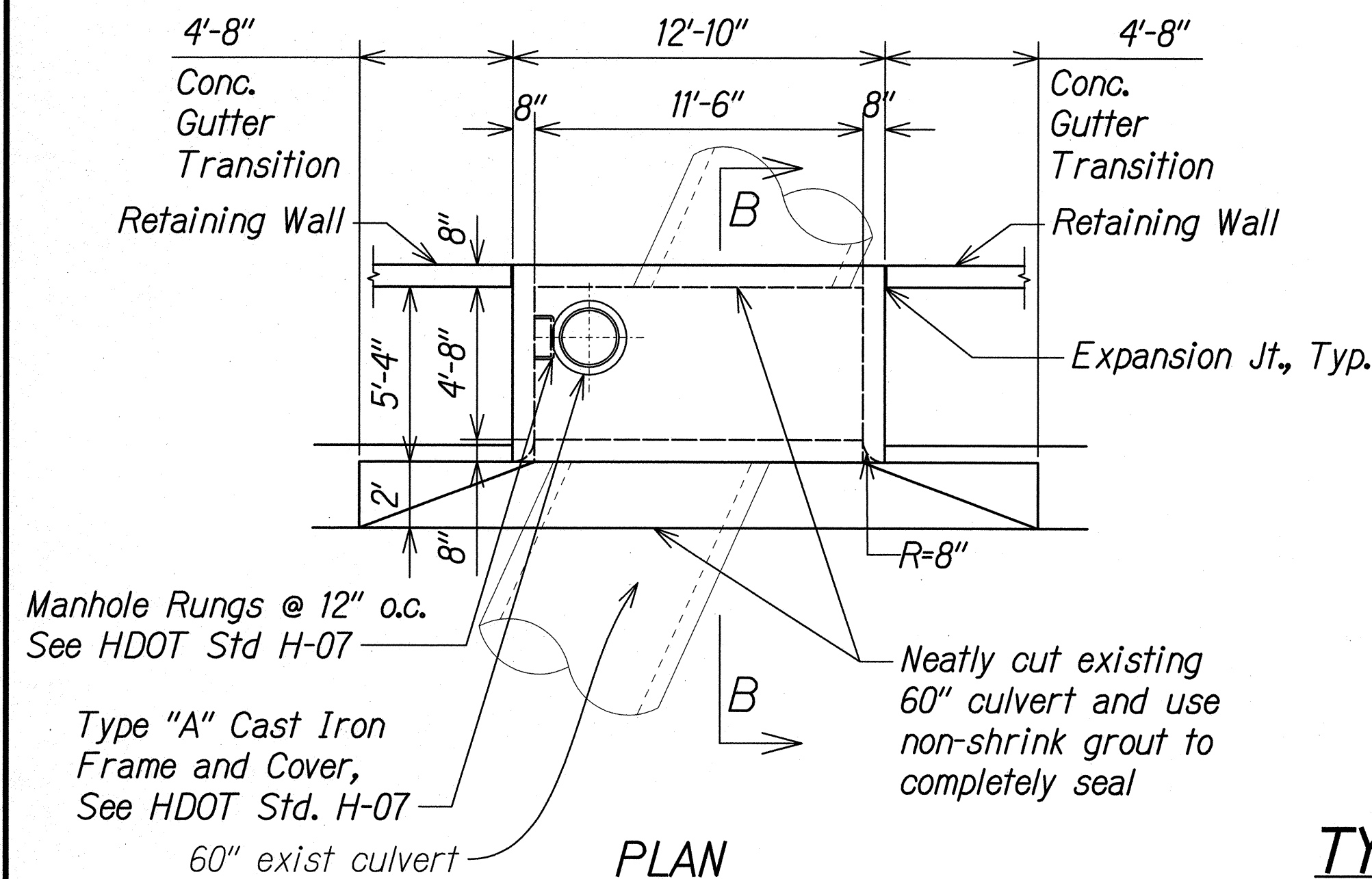


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	29	117



TYPICAL DRAINAGE TRENCH RESTORATION
NOT TO SCALE

HYDRANT CONCRETE SLAB
NOT TO SCALE

FIRE HYDRANT EXTENSION
NOT TO SCALE

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS
(For work affecting BWS Facilities in State R/W and BWS Easements only)

6-19-2015
DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE

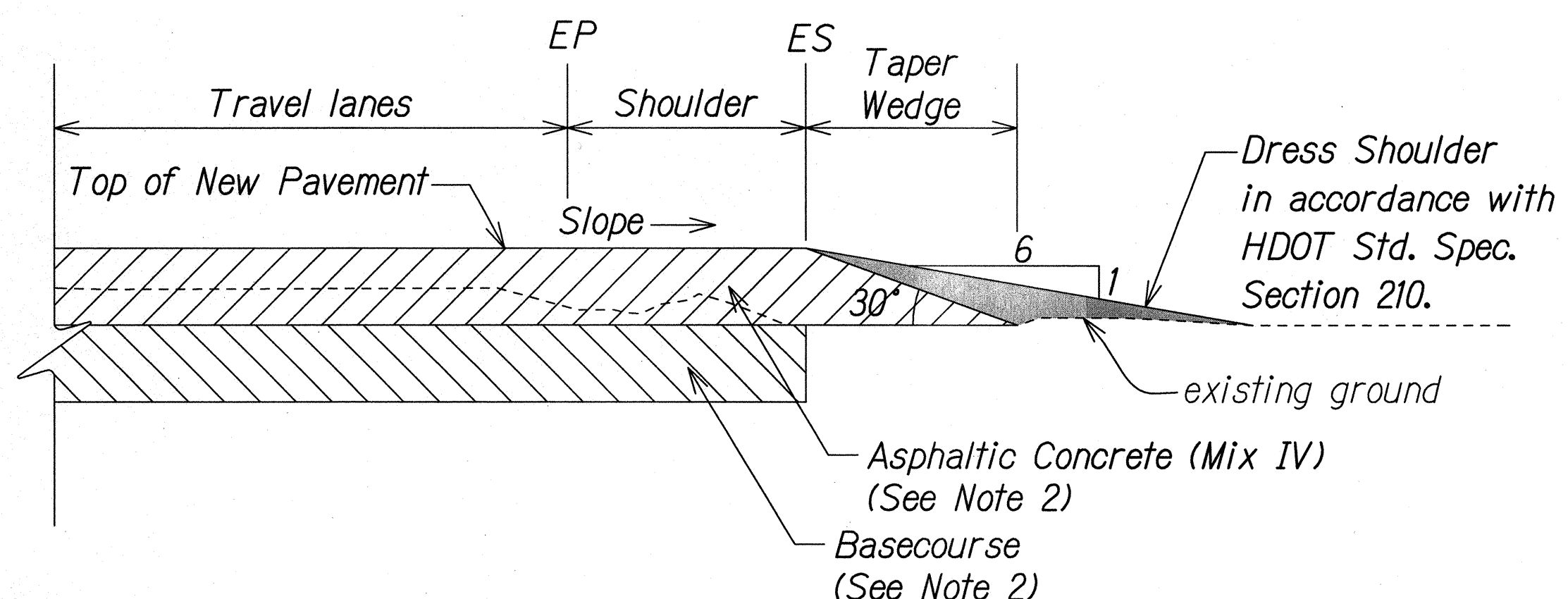
04/30/16
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CIVIL DETAILS
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-1(53)
Scale: AS NOTED Date: Feb., 2015
SHEET No. C29 OF 71 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-K(53)	2015	30	117

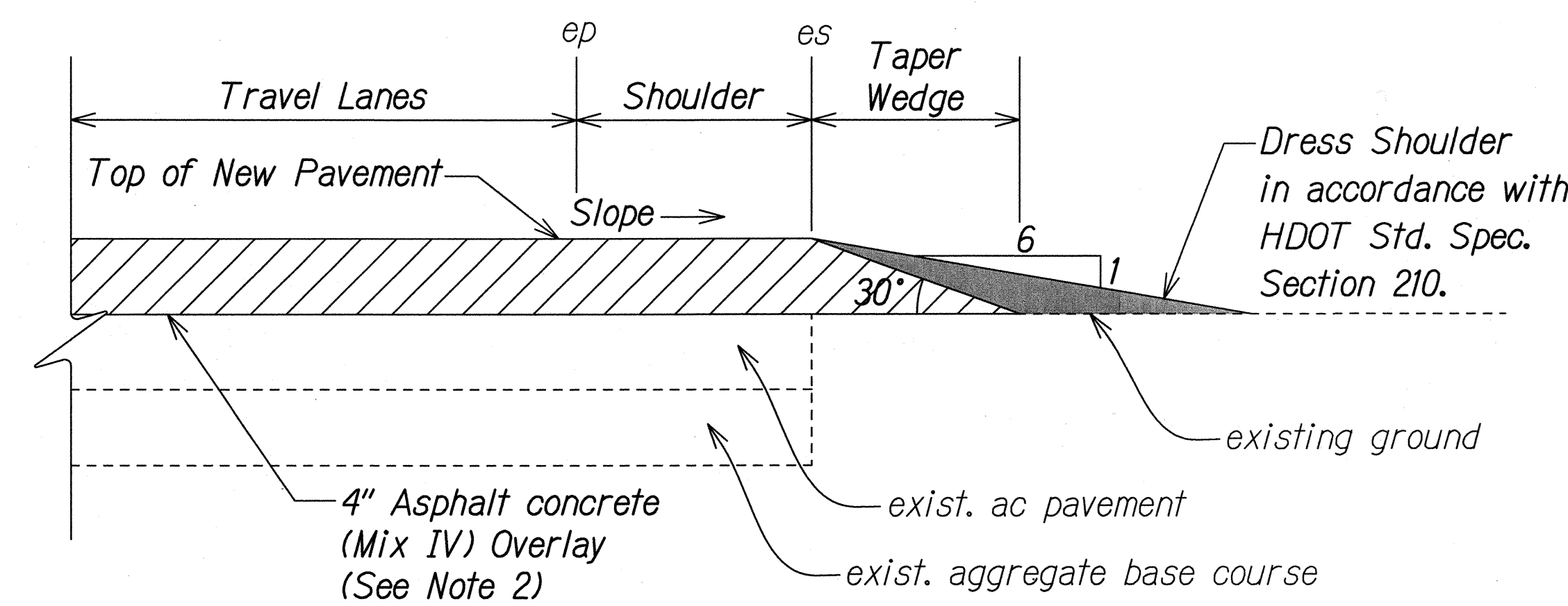
PAVEMENT EDGE DETAIL NOTES:

- Contractor shall mount a device directly on the paver screed extension to provide a 30° beveled shoulder edge.
- For Pavement Design Recommendations, See Geotechnical Report from Masa Fujioka & Associates, dated Nov. 11, 2013; Addendum 1 dated 11/18/13 & Responses to HWY-LG Comments dated 4/15/15.
- Pavement Edge Details and Dressing of Shoulders shall be considered incidental to item No. 401.0100.



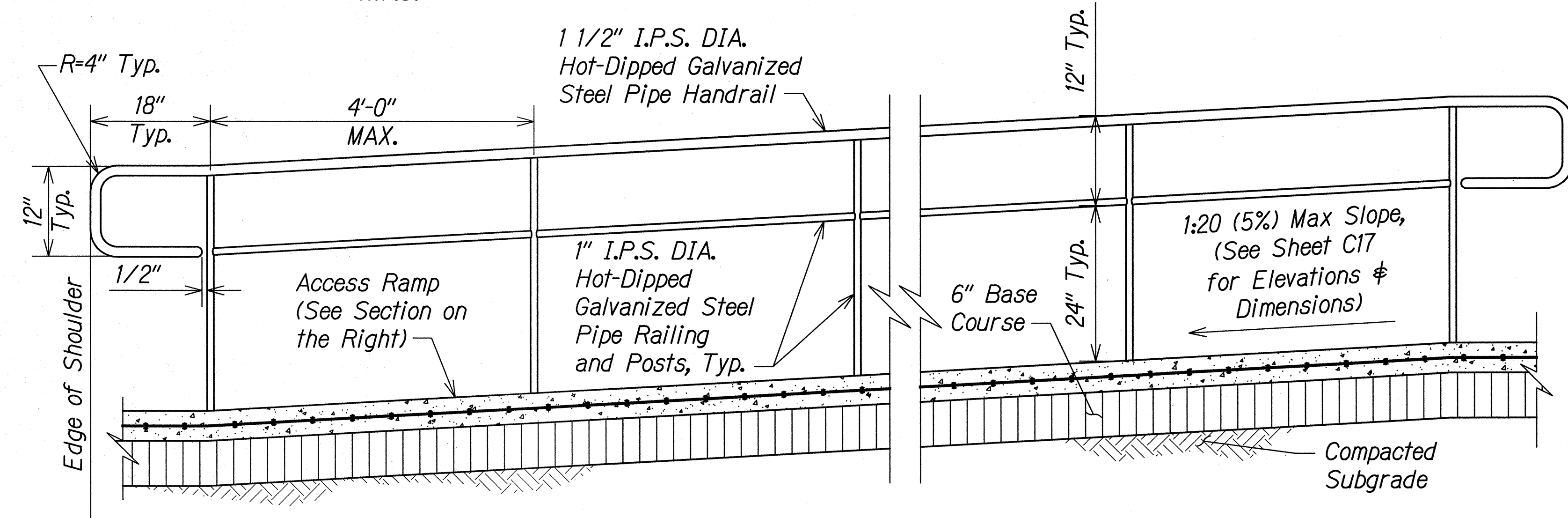
Typical Pavement Edge Detail (For New Pavement)

N.T.S.



Typical Pavement Edge Detail (For Overlay)

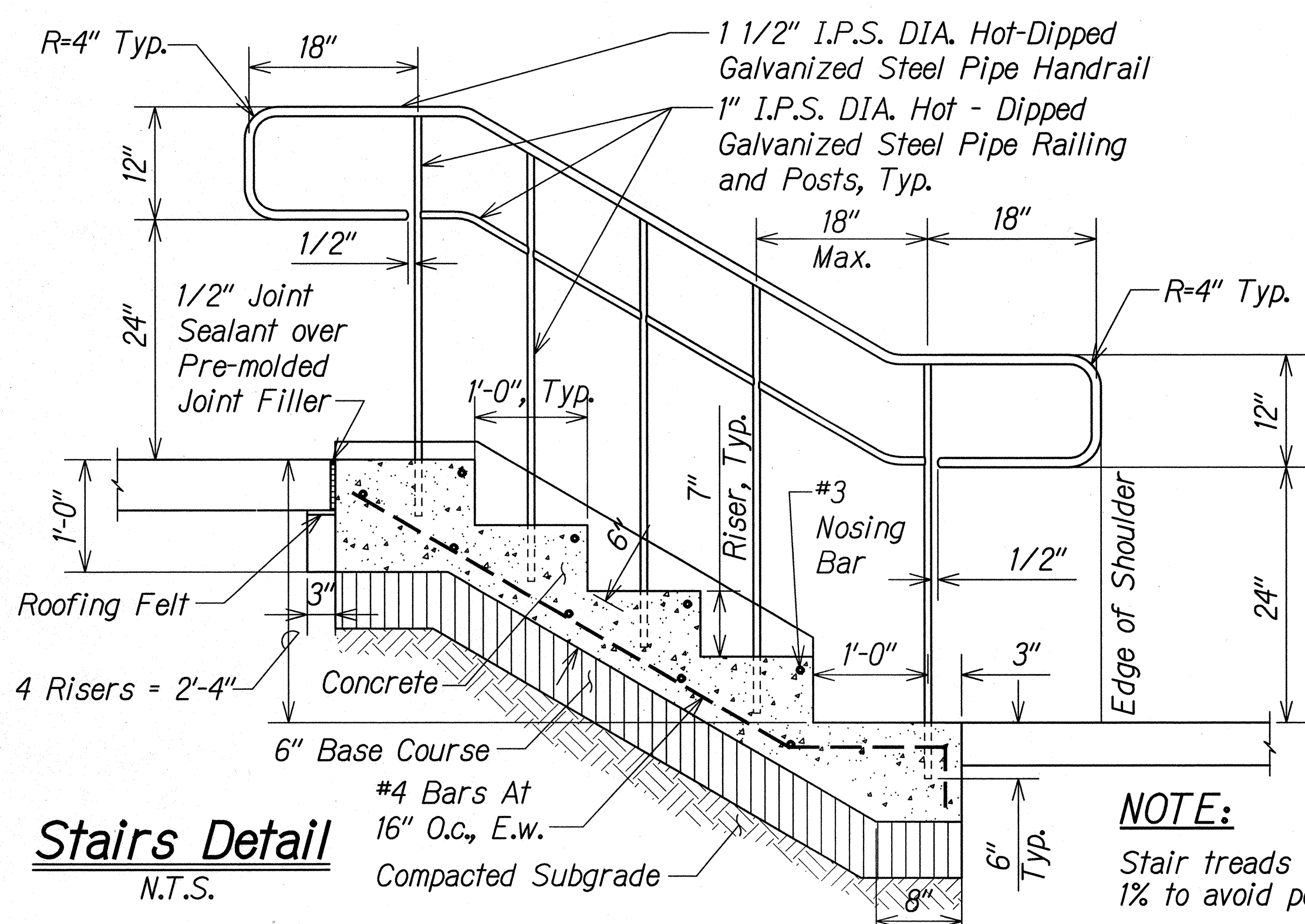
N.T.S.



Access Ramp Elevation

Access Ramp and Railing Details

N.T.S.

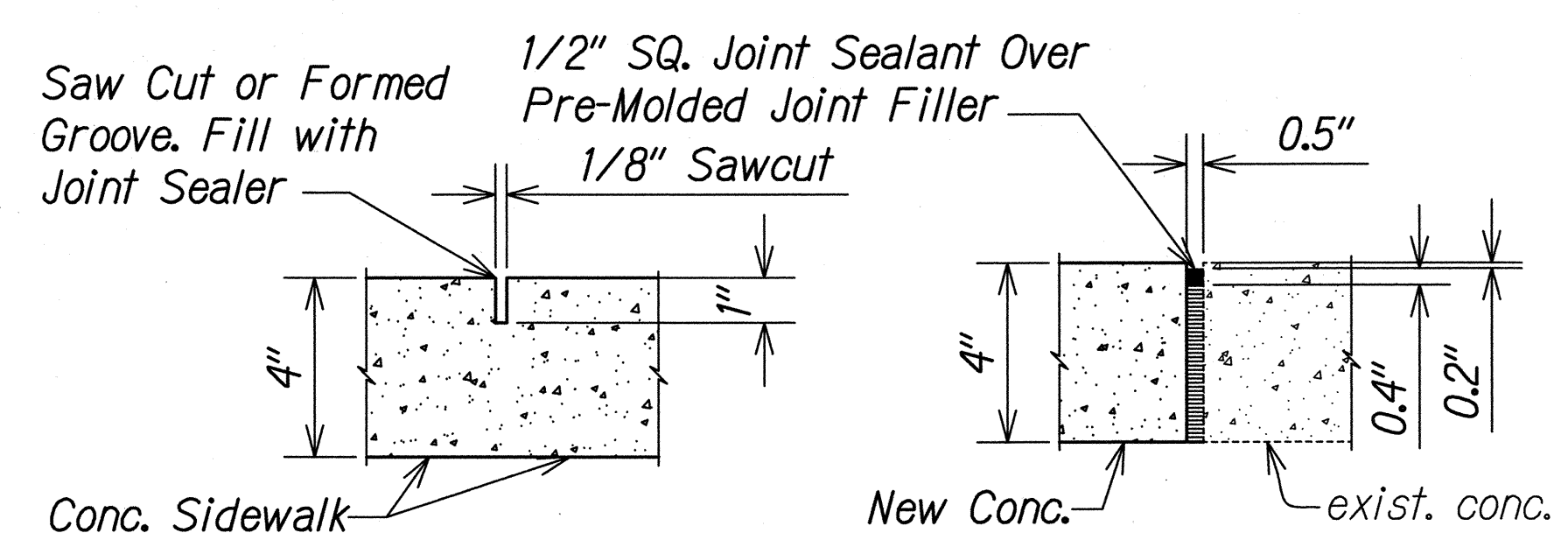


Stairs Detail

N.T.S.

NOTE:

Stair treads shall have positive slope 1% to avoid ponding of water.

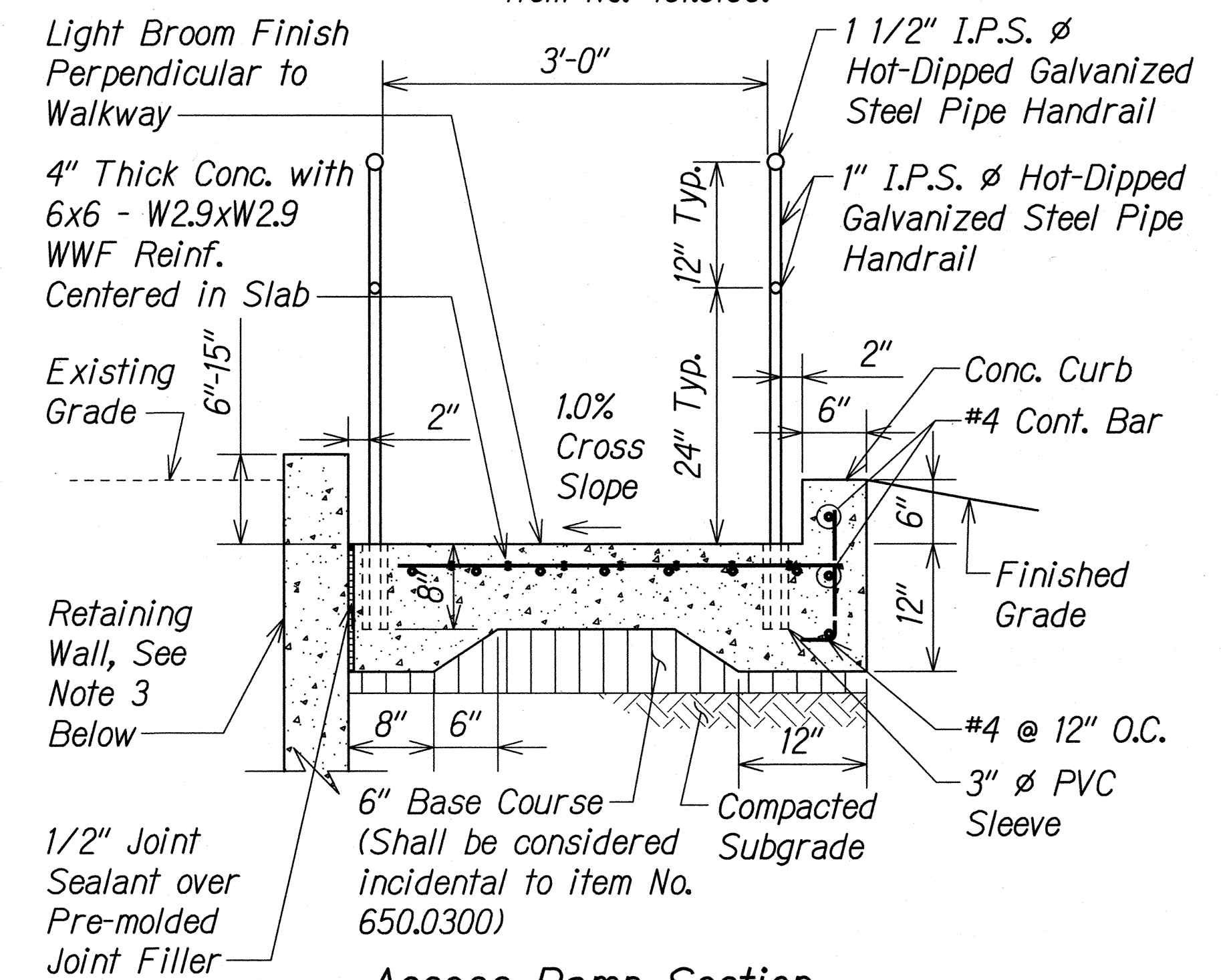


Saw Cut Joint

Expansion Joint

Typical Access Ramp Joint Details

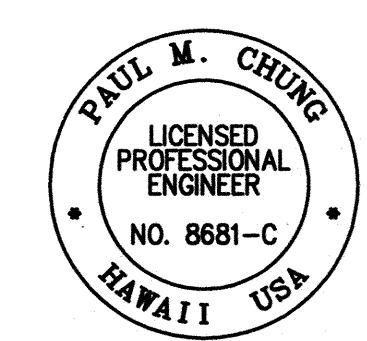
N.T.S.



Access Ramp Section

Access Ramp Notes:

- Sawcut Joint at 5' o.c. max, See Detail on this Plan unless otherwise indicated.
- Expansion Joint at 20' o.c. max, See Detail on this Plan unless otherwise indicated.
- For Retaining Wall Details, See Sheets S08 & S09.



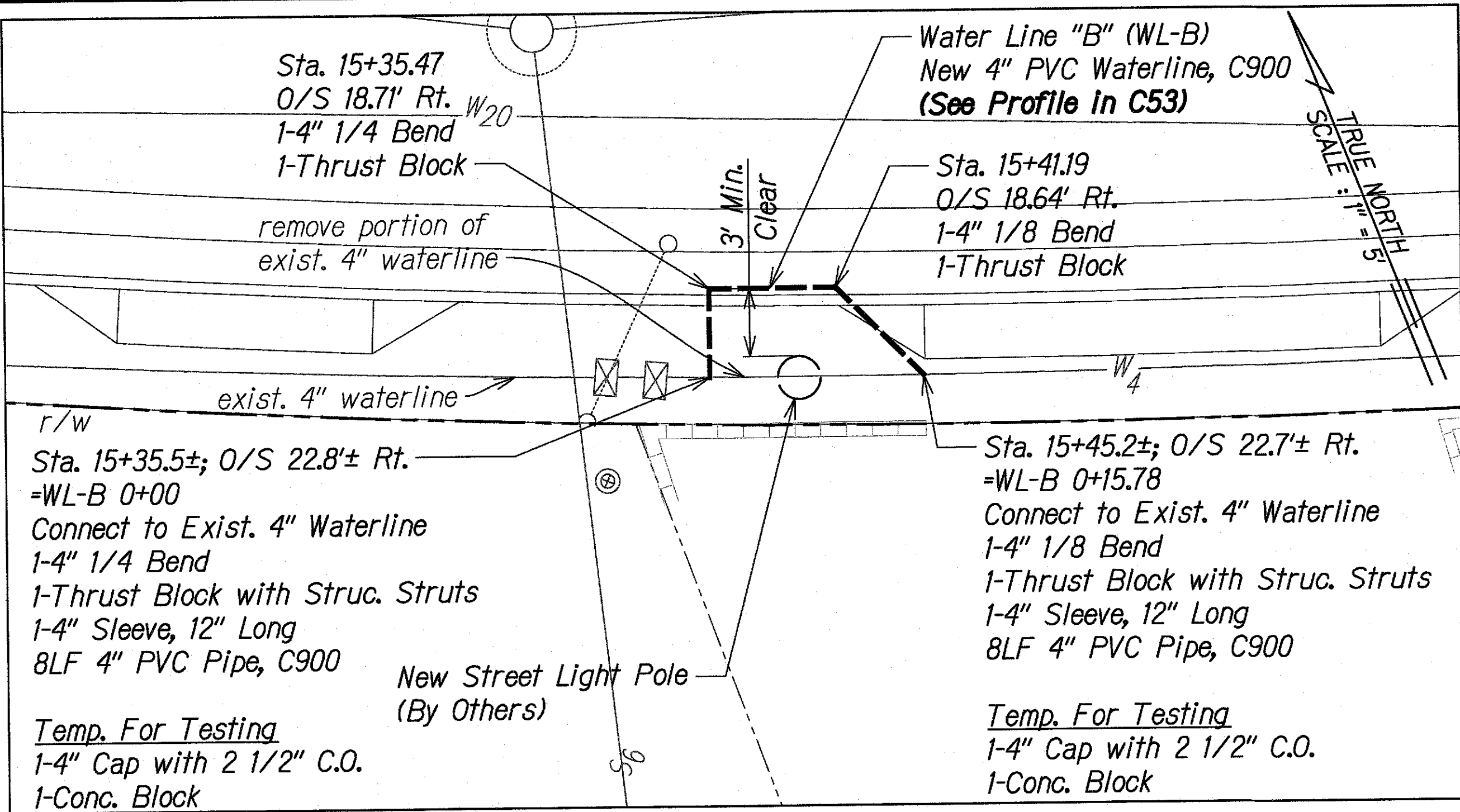
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE
EXPIRATION DATE OF THE LICENSE
04/30/16

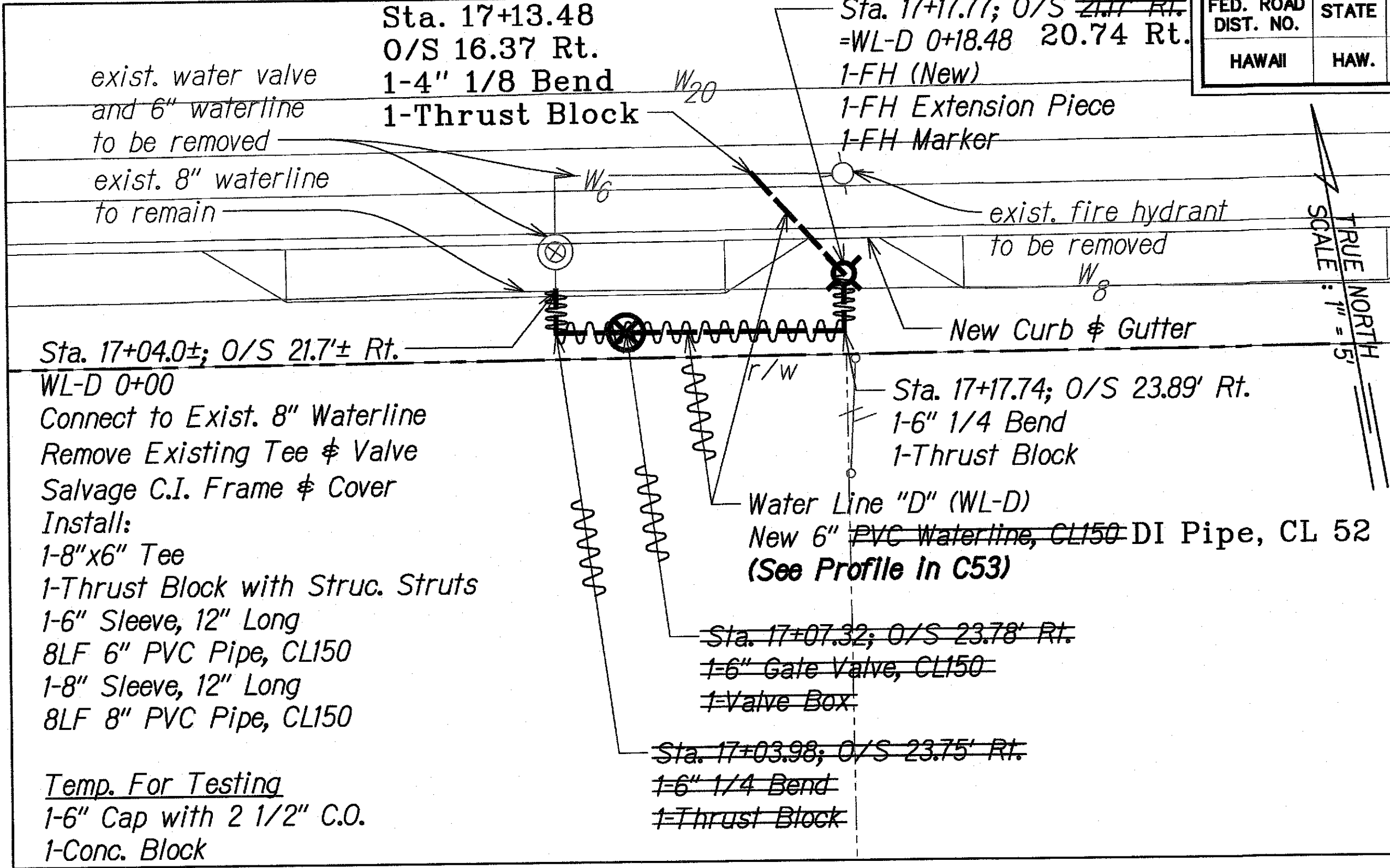
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CIVIL DETAILS
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-K(53)
Scale: AS NOTED
Date: Feb., 2015
SHEET No. C30 OF 71 SHEETS

30

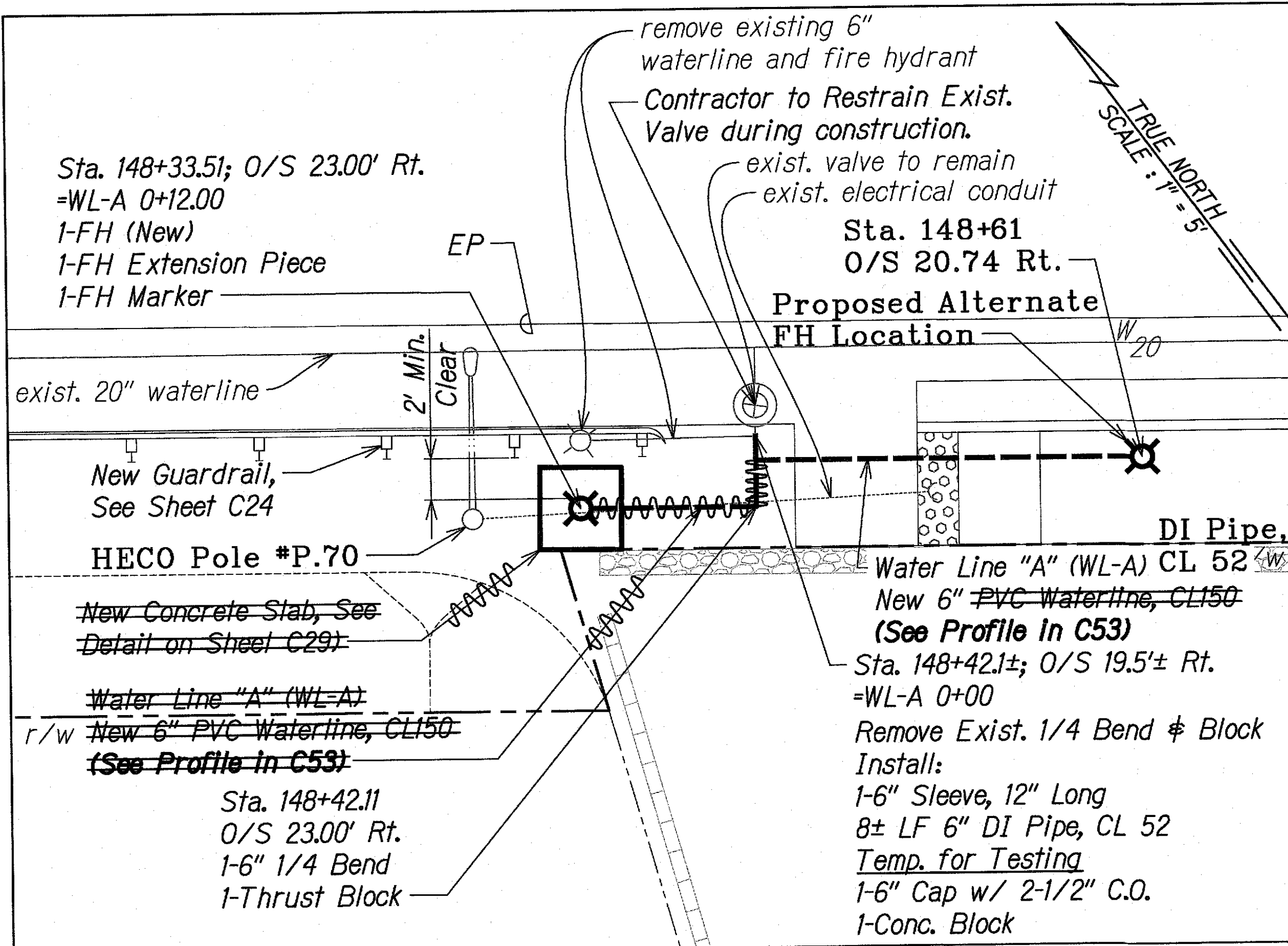
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-K(53)	2015	31	117



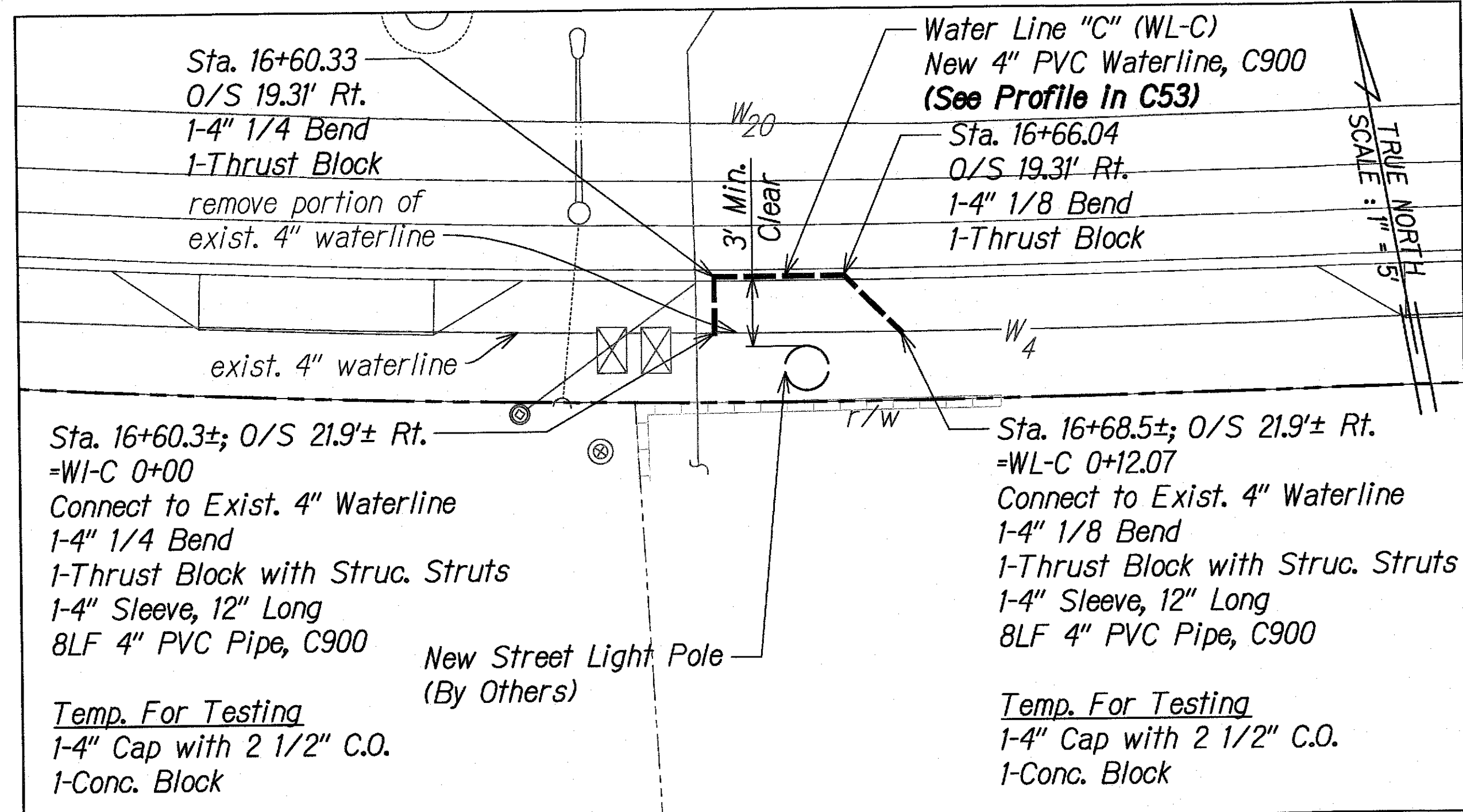
INSET B
SCALE: 1" = 5'



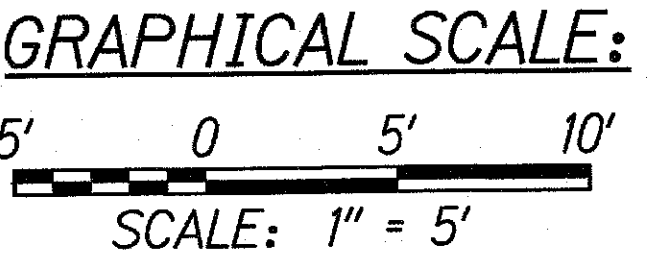
INSET D
SCALE: 1" = 5'
BWS ALTERNATE PROPOSAL



INSET A
SCALE: 1" = 5'



INSET C
SCALE: 1" = 5'



LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
	Roadway Text for as-built posting

APPROVED: _____ DATE _____

MANAGER AND CHIEF ENGINEER, BWS
(For work affecting BWS Facilities in State R/W and BWS Easements only)

NOTE:
The Contractor shall coordinate the pole locations with HECO and with the on-site BWS Inspectors to ensure that the required clearances are met.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CIVIL DETAILS

KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-K(53)

Scale: AS NOTED Date: March, 2019

SHEET No. C31 OF 73 SHEETS

"AS-BUILT"

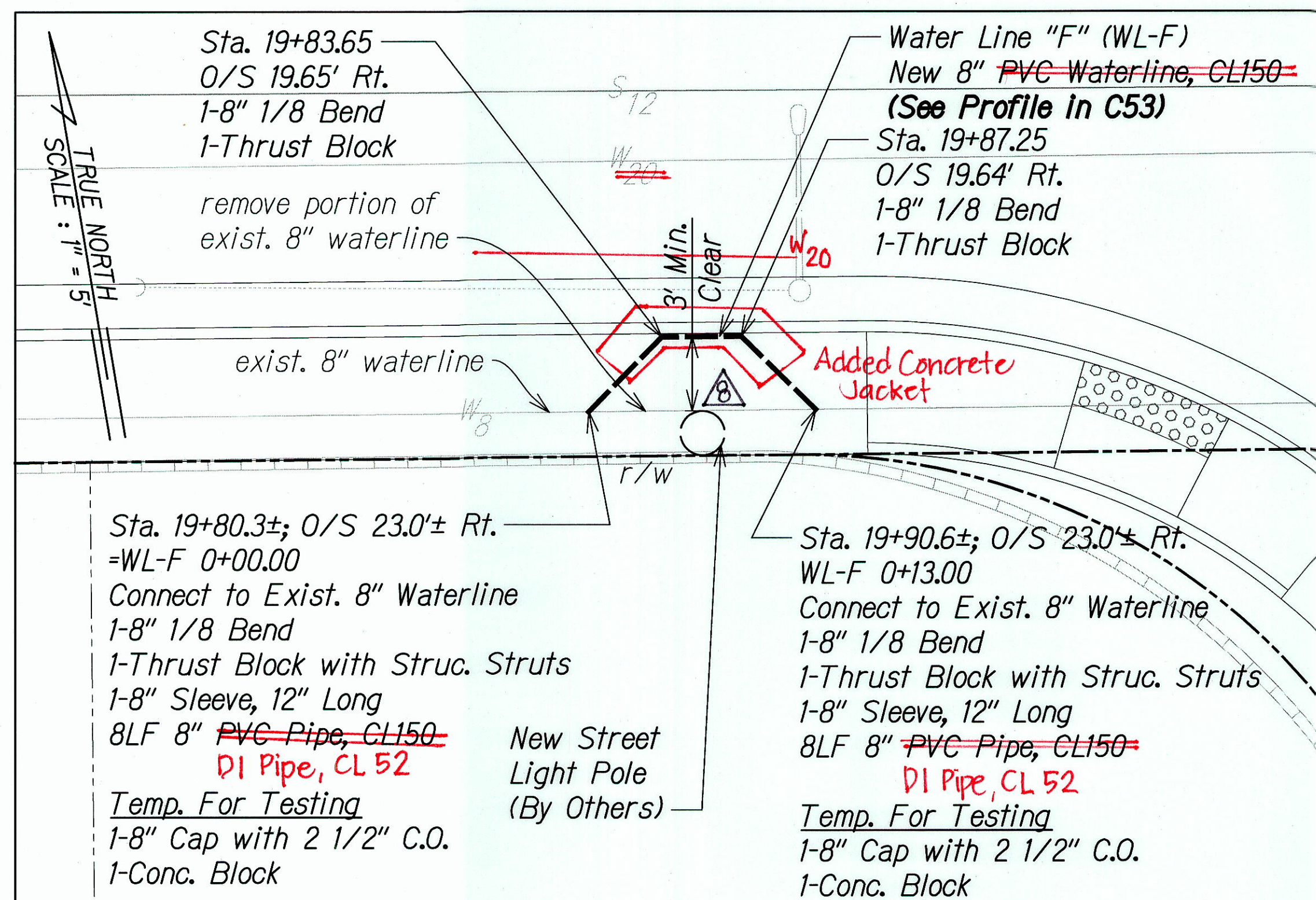
W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY IMP WAIMANALO PH 1\AS BUILT PLANS\CAD\C31-03 - CIVIL DETAILS.DWG 3/3/2020 4:30 PM

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
NOTE BOOK	
No.	

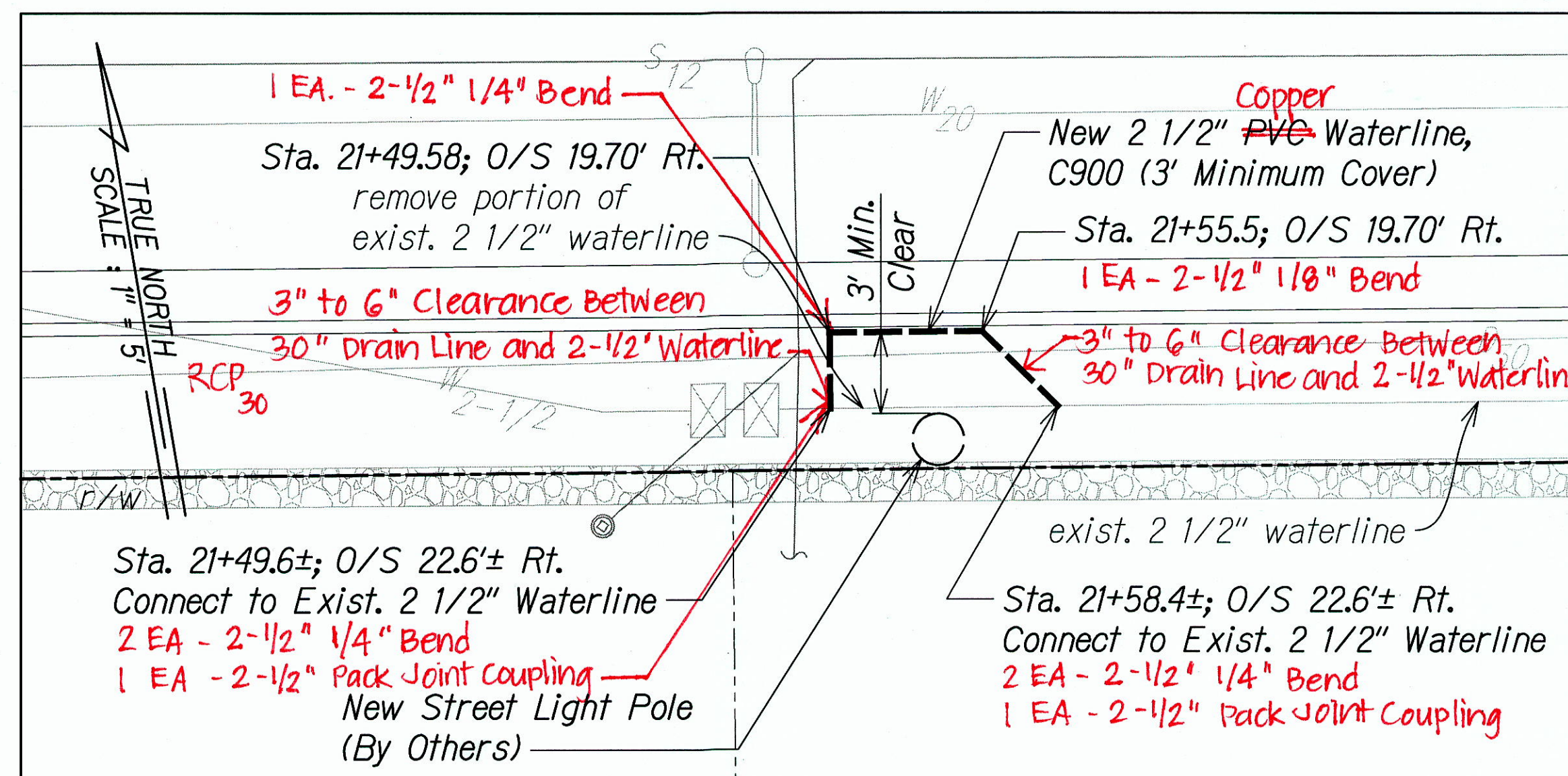
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	32	117

WATER RELOCATION NOTE:

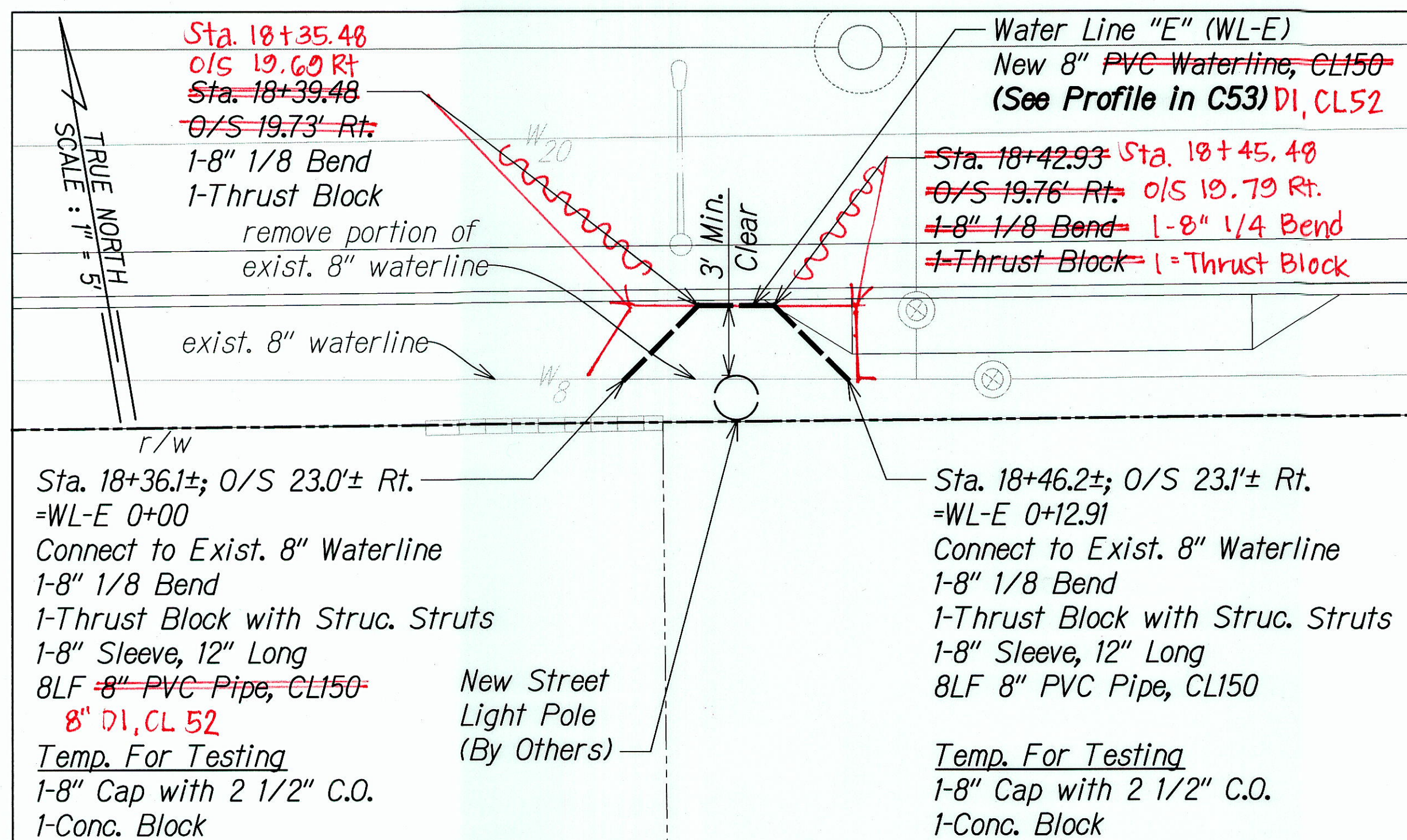
The Contractor shall coordinate the pole locations with HECO and with the on-site BWS Inspectors to ensure that the required clearances are met.



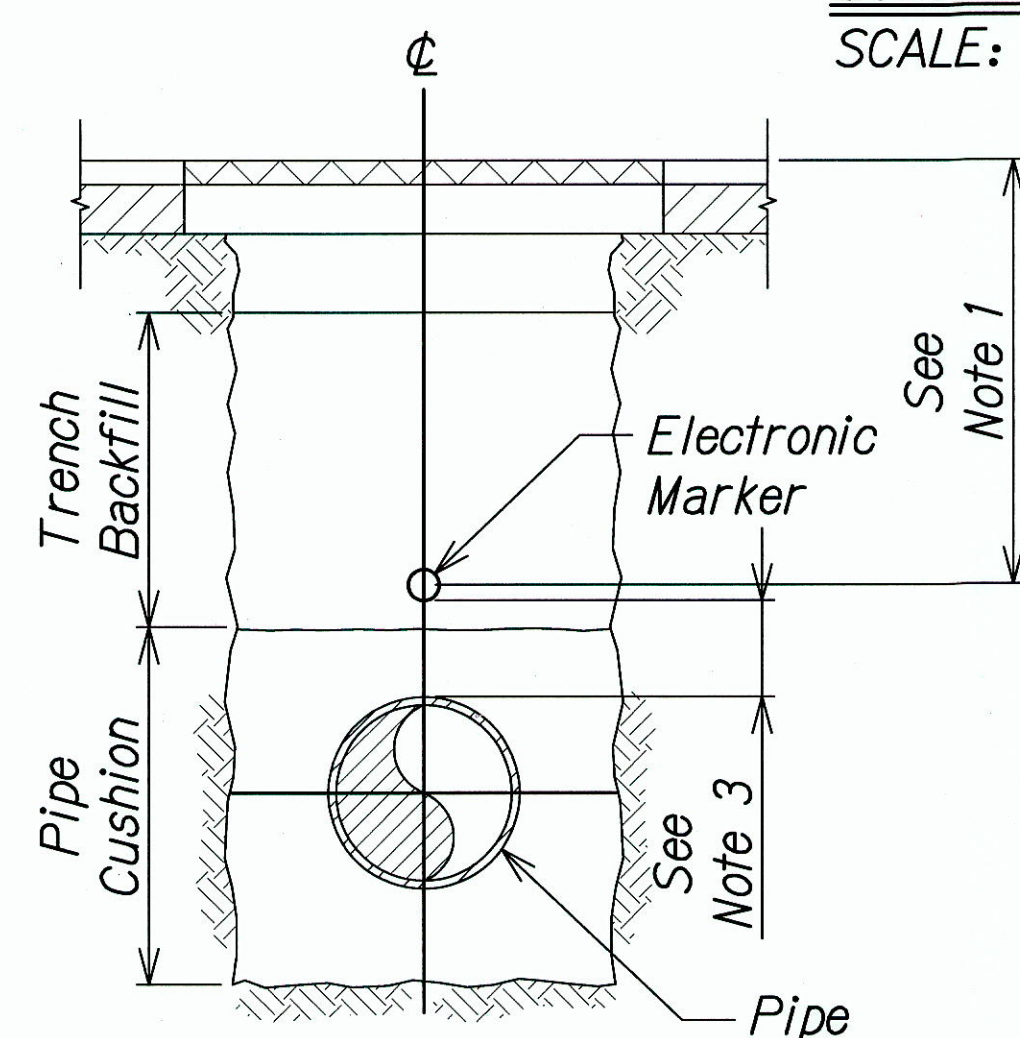
INSET F
SCALE: 1" = 5'



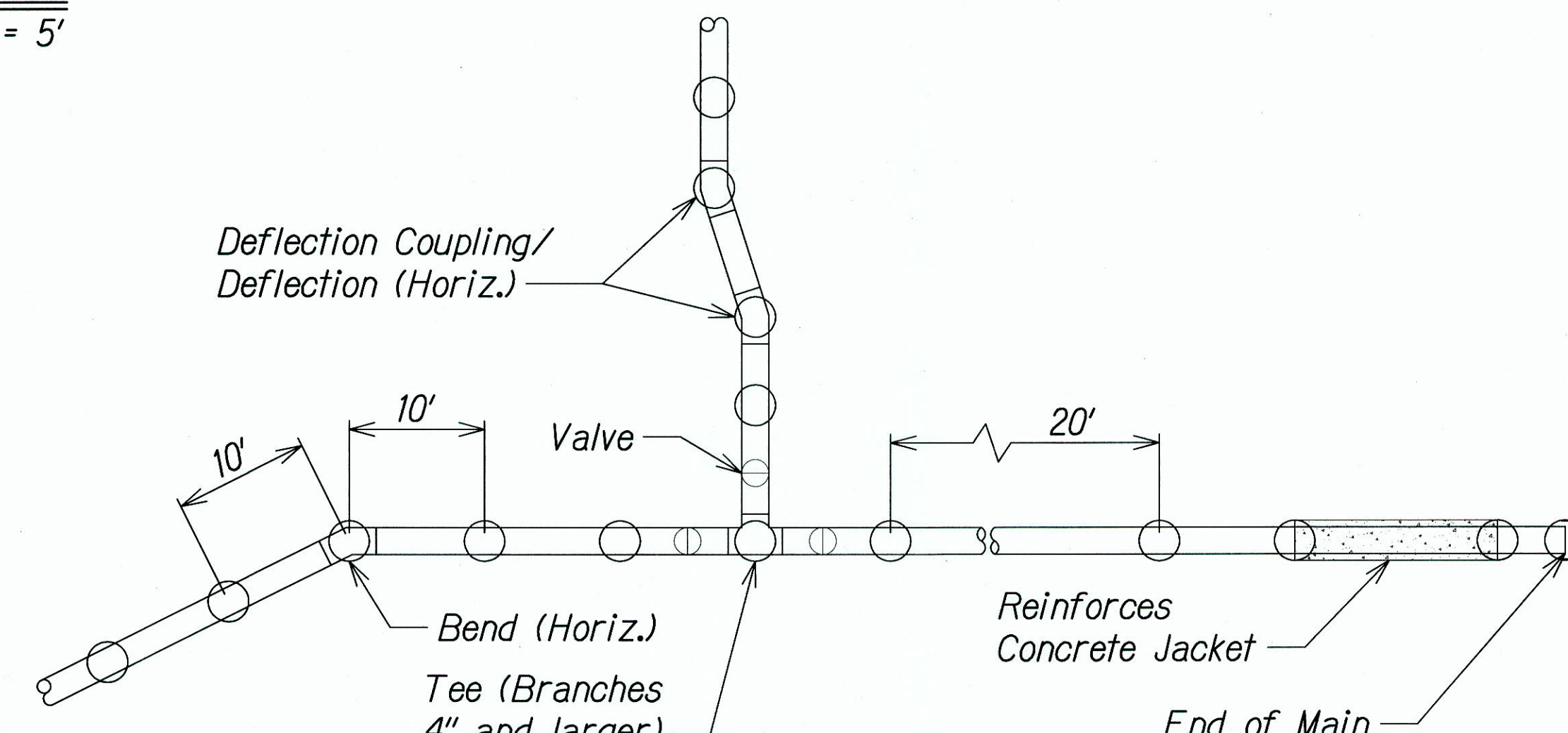
INSET G
SCALE: 1" = 5'



INSET E
SCALE: 1" = 5'



SECTION VIEW



PLAN VIEW

MARKER NOTES:

1. Install electronic marker over center line of pipe at a minimum depth of 2 feet and a maximum of 3 feet from finish grade.
2. Install trench backfill and pipe cushion material in accordance to the plans and specification.
3. Install electronic marker at a minimum clearance of 6-inches above the pipe or concrete jacket.

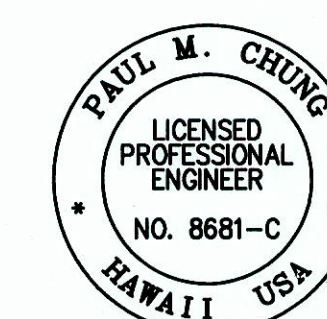
TYPICAL ELECTRONIC MARKER INSTALLATION

N.T.S.

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS
(For work affecting BWS Facilities in
State R/W and BWS Easements only)

DATE



THIS WORK WAS PREPARED BY ME OR
UNDER MY SUPERVISION

SIGNATURE

04/30/16
EXPIRATION DATE
OF THE LICENSE

02/28/17	Relocated Street Light Pole (P59)
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CIVIL DETAILS	
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1 Olomana Golf Course To Vicinity of Poalima St. Federal Aid Project No. NH-072-1(53)	
Scale: AS NOTED	Date: Feb., 2015
SHEET No. C32 OF 71 SHEETS	

"AS-BUILT"