

TIP PROJECT: F-5004 /F-5005

CONTRACT: DO00149

STATE OF NORTH CAROLINA

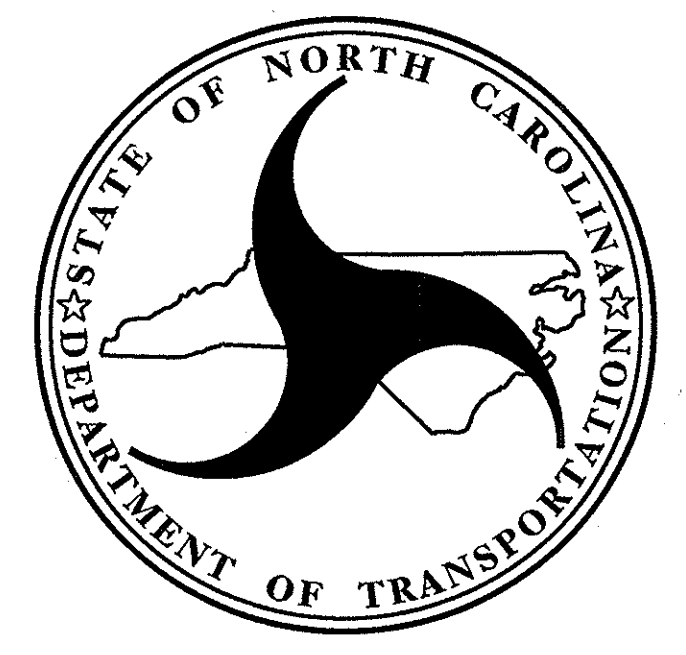
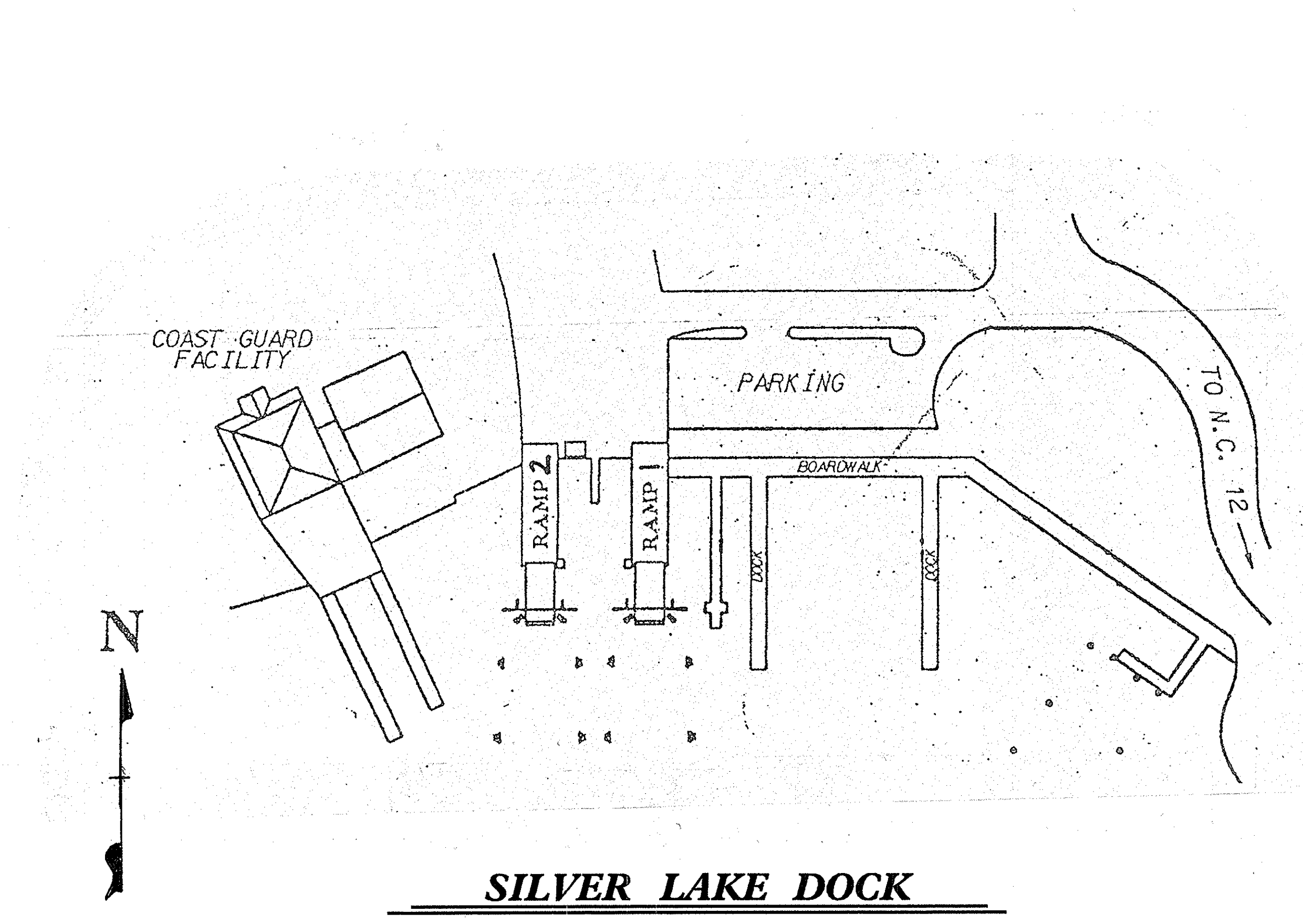
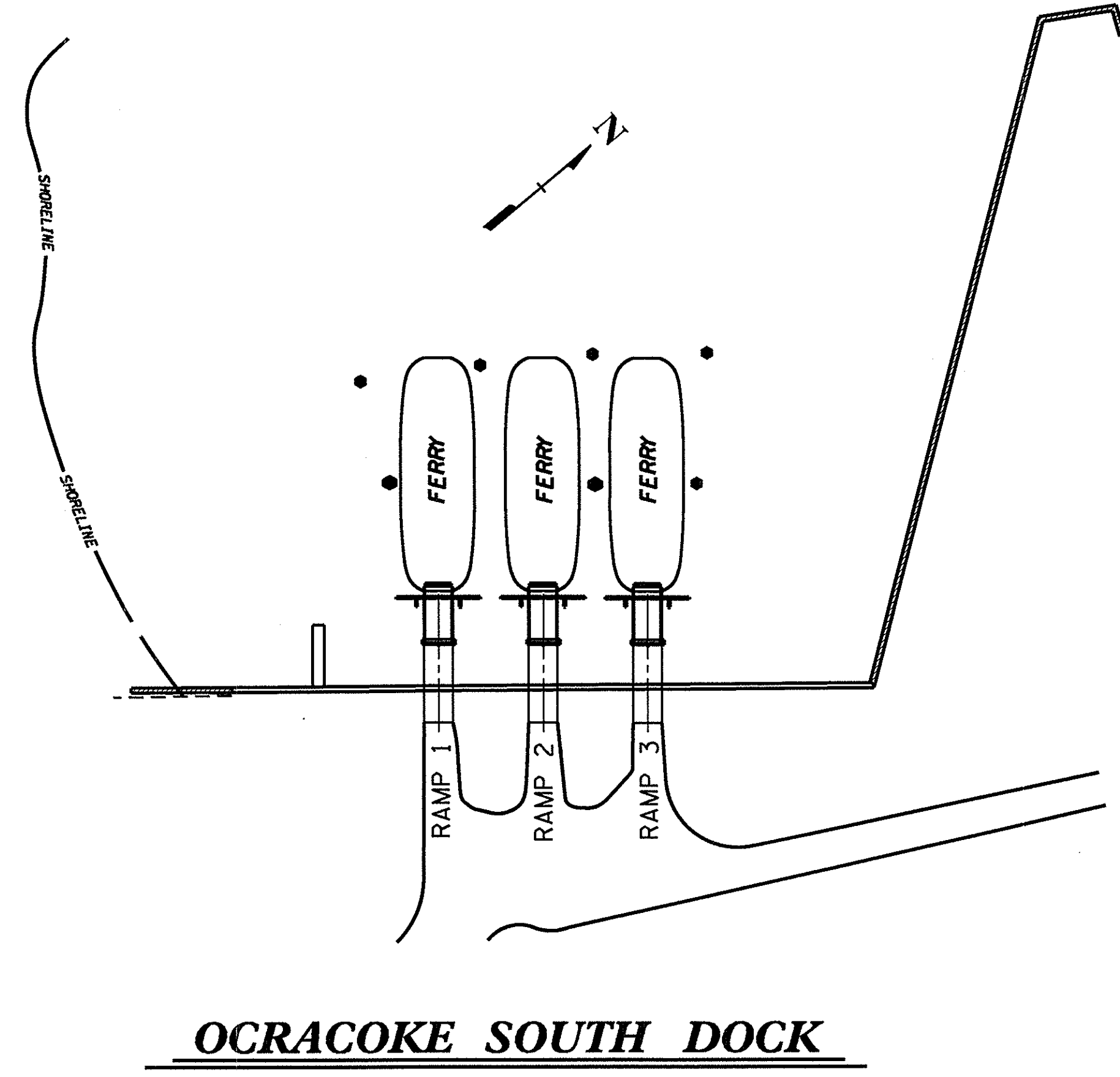
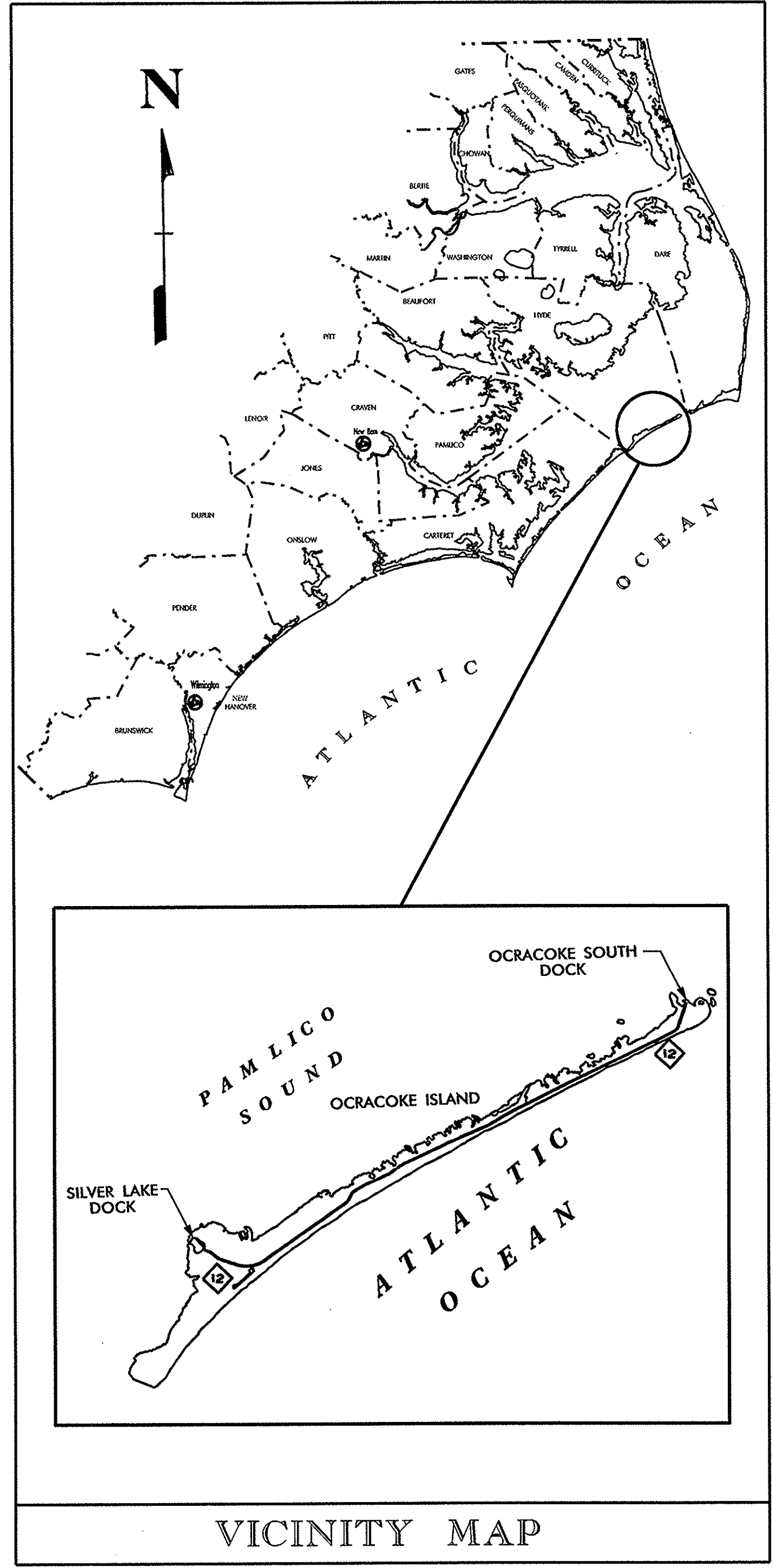
DIVISION OF HIGHWAYS

HYDE COUNTY

LOCATION: OCRACOKE ISLAND FERRY BASINS -
OCRACOKE SOUTH DOCK & SILVER LAKE DOCK

TYPE OF WORK: SAFETY IMPROVEMENTS, PAINTING, LIFT SYSTEM REPLACEMENT,
& STRUCTURAL MAINTENANCE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	F-5004 /F-5005		
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
F-5004			
41150.1.1		P.E.	
41150.2.1		RW & UTIL.	
41150.3.1		CONST.	
F-5005			
41151.1.1		P.E.	
41151.2.1		RW & UTIL.	
41151.3.1		CONST.	



Prepared In the Office of:

DIVISION OF HIGHWAYS
1000 BIRCH RIDGE DR. RALEIGH, NC 27610

2006 STANDARD SPECIFICATIONS

LETTING DATE:
JANUARY 26, 2012

N.N. BULLOCK, PE
PROJECT ENGINEER

D.R. CALHOUN, PE
PROJECT DESIGN ENGINEER

STRUCTURE DESIGN UNIT

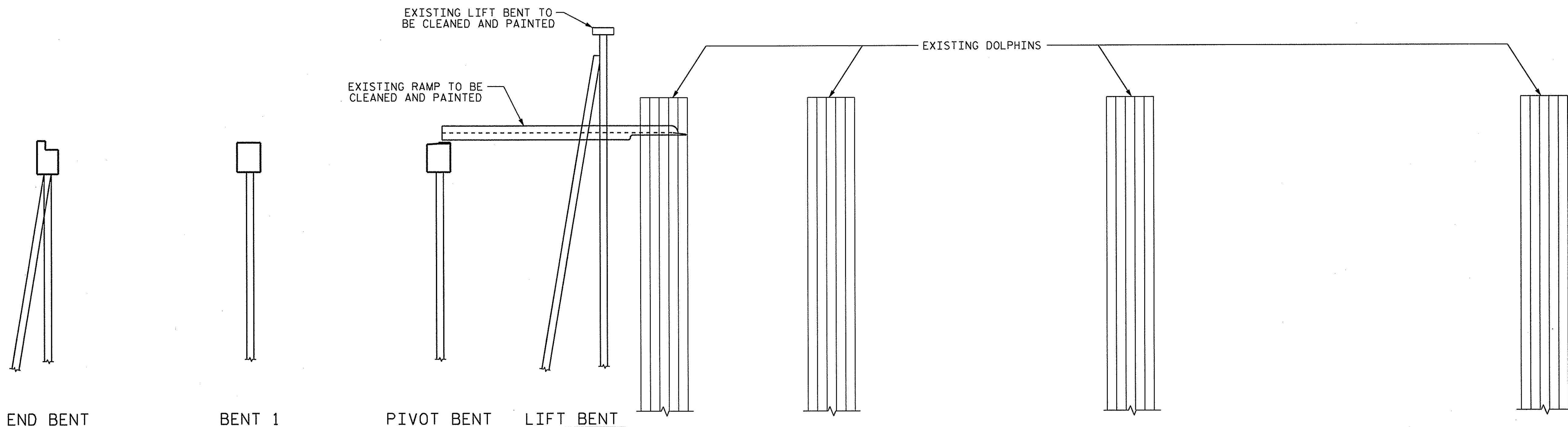
1/9/2012

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

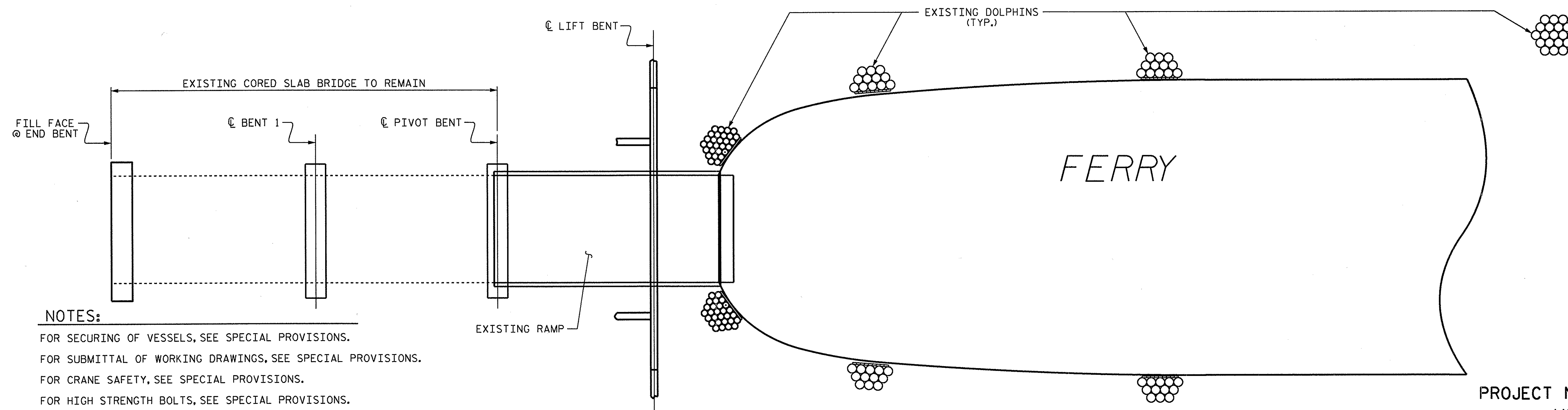
STATE DESIGN ENGINEER
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE



SECTION ALONG C RAMP
(TYPICAL BOTH RAMPS)



PLAN
(TYPICAL BOTH RAMPS)

NOTES:

- FOR SECURING OF VESSELS, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR HIGH STRENGTH BOLTS, SEE SPECIAL PROVISIONS.
- FOR SCOPE OF WORK, SEE SPECIAL PROVISIONS.
- FOR CLEANING AND PAINTING THE EXISTING LIFT BENTS, SEE SPECIAL PROVISIONS.
- FOR CLEANING AND PAINTING THE EXISTING RAMPS, SEE SPECIAL PROVISIONS.
- FOR REPAIR OF THE EXISTING LIFT BENT STRUCTURAL STEEL, SEE SPECIAL PROVISIONS.
- FOR ANGLE REPLACEMENT, SEE SPECIAL PROVISIONS.
- FOR LIFT SYSTEM, SEE SPECIAL PROVISIONS.
- FOR SKID RESISTANT COATING, SEE SPECIAL PROVISIONS.
- FOR REPLACEMENT OF STRUCTURAL BOLTS, SEE SPECIAL PROVISIONS.
- FOR LOWER BRACING REPAIR, SEE SPECIAL PROVISIONS.
- FOR FLANGE REPAIR, SEE SPECIAL PROVISIONS.

THE CONSTRUCTION SHALL BE STAGED SO THAT ONLY ONE OF THE RAMPS WILL BE UNDER CONSTRUCTION AT EACH SITE. FERRY SERVICE WILL BE MAINTAINED AT ALL TIMES.

TOTAL BILL OF MATERIAL									
	MOBILIZATION	REPLACE LIFT SYSTEM	SKID RESISTANT COATING	CLEANING & PAINTING OF THE EXISTING LIFT BENT	CLEANING & PAINTING THE EXISTING RAMP	ANGLE REPLACEMENT	BOLT REPLACEMENT	LOWER BRACING REPAIR	FLANGE REPAIR
	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	EACH	LUMP SUM	LUMP SUM
RAMP 1	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM		10		LUMP SUM
RAMP 2		LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	10	LUMP SUM	LUMP SUM
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	20	LUMP SUM	LUMP SUM

DRAWN BY : B.N. GRADY DATE : 10/5/11
CHECKED BY : N.N. BULLOCK DATE : 10/11/11

06-JAN-2012 12:45
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tbeach

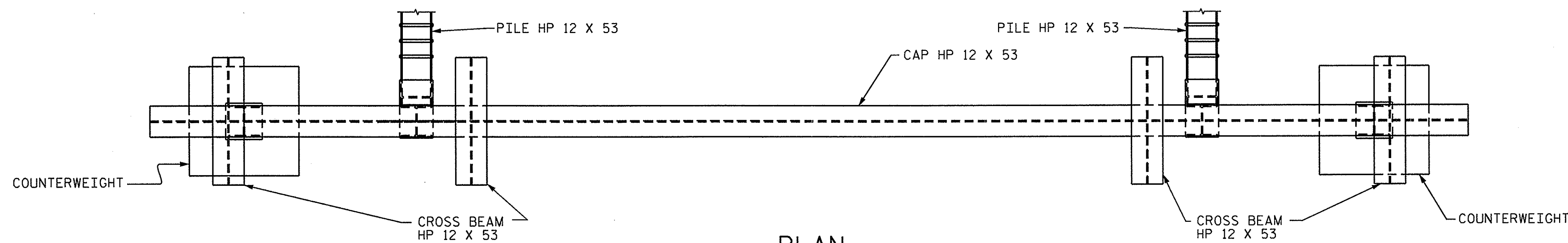


PROJECT NO. F-5004
HYDE COUNTY

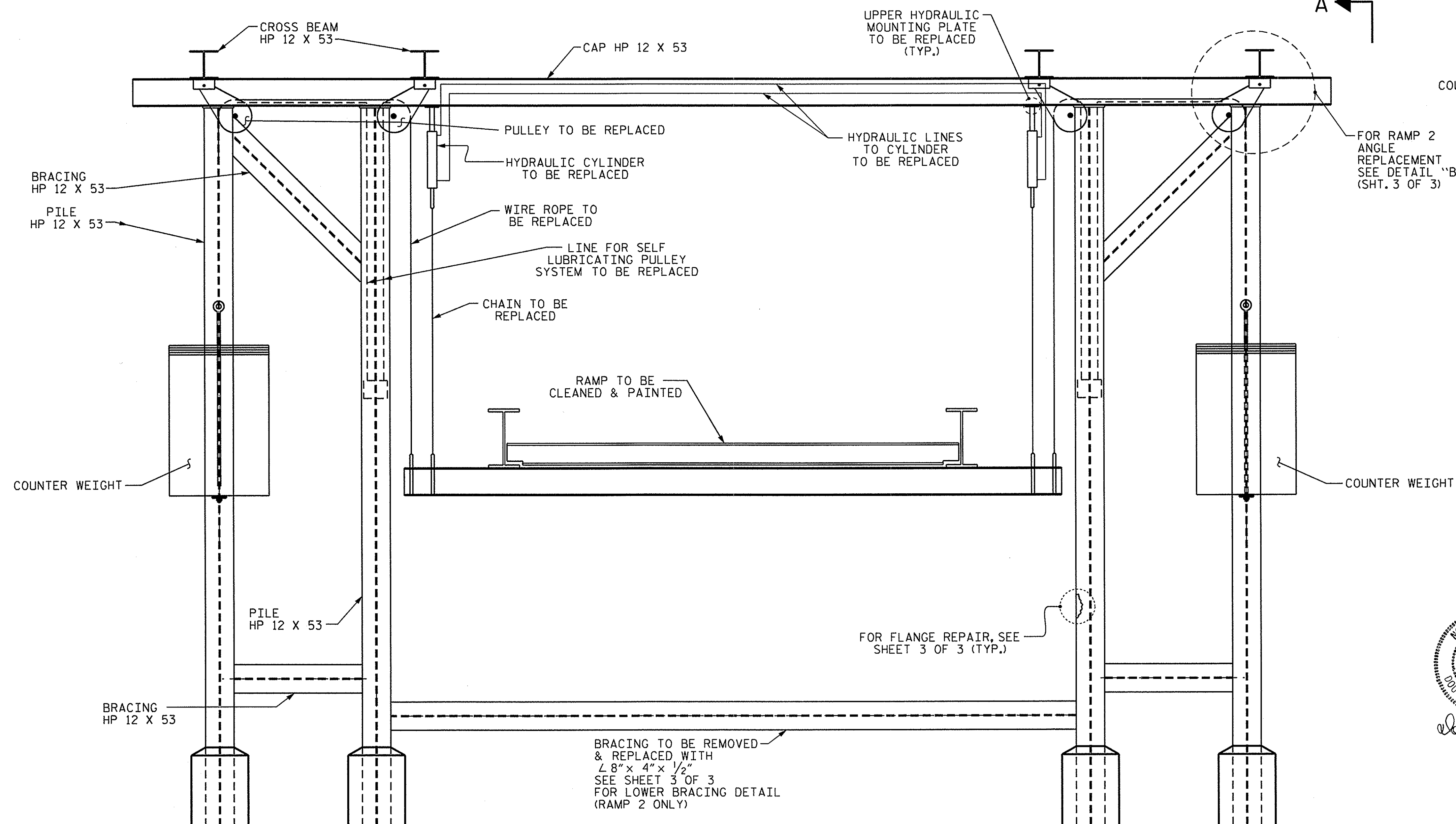
STATION: _____

SHEET 1 OF 3

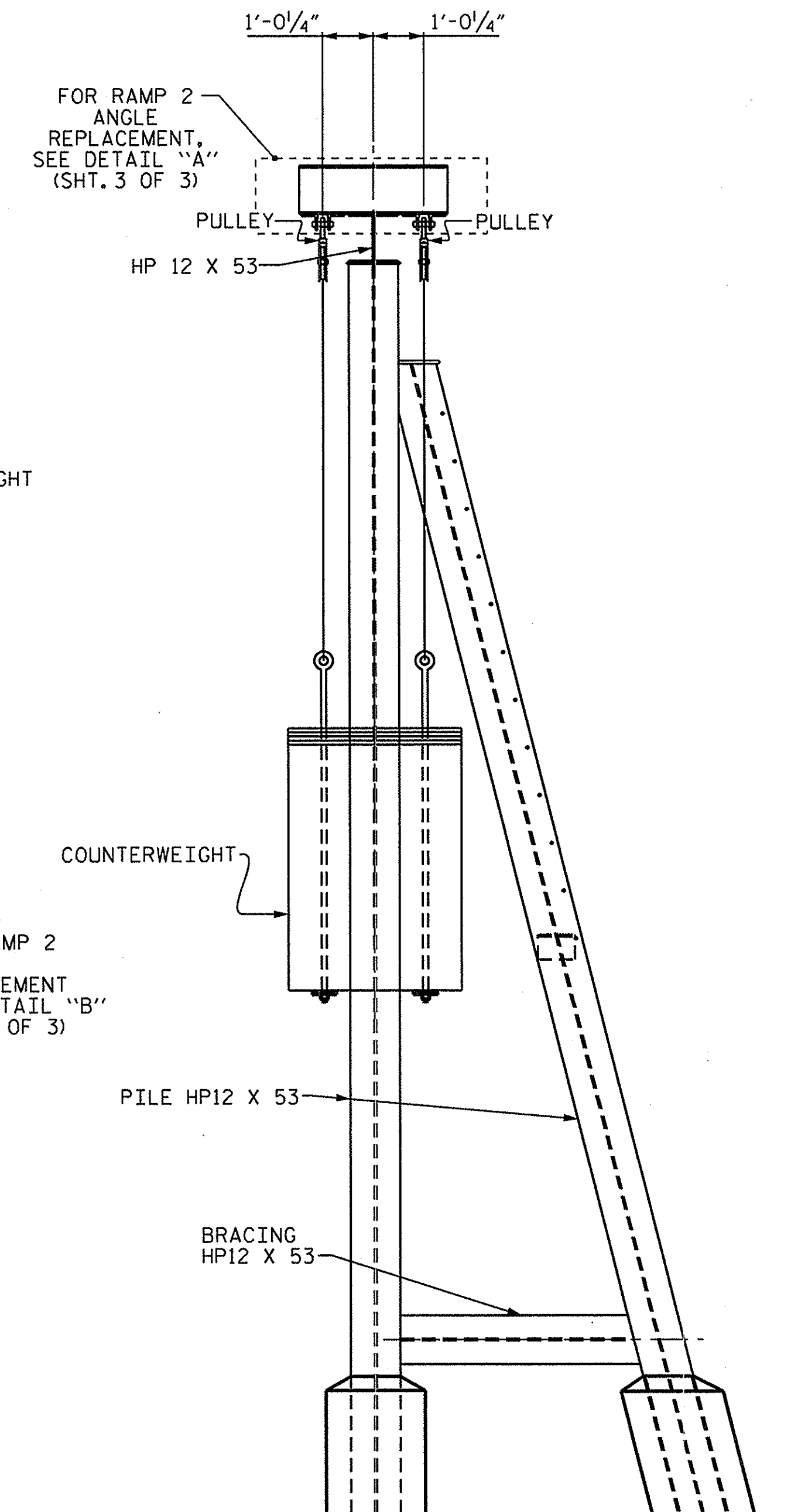
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
GENERAL DRAWING SILVER LAKE DOCK					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					5-1
					9



PLAN



ELEVATION



VIEW A-A

PROJECT NO. F-5004
HYDE COUNTY
STATION: _____

SHEET 2 OF 3



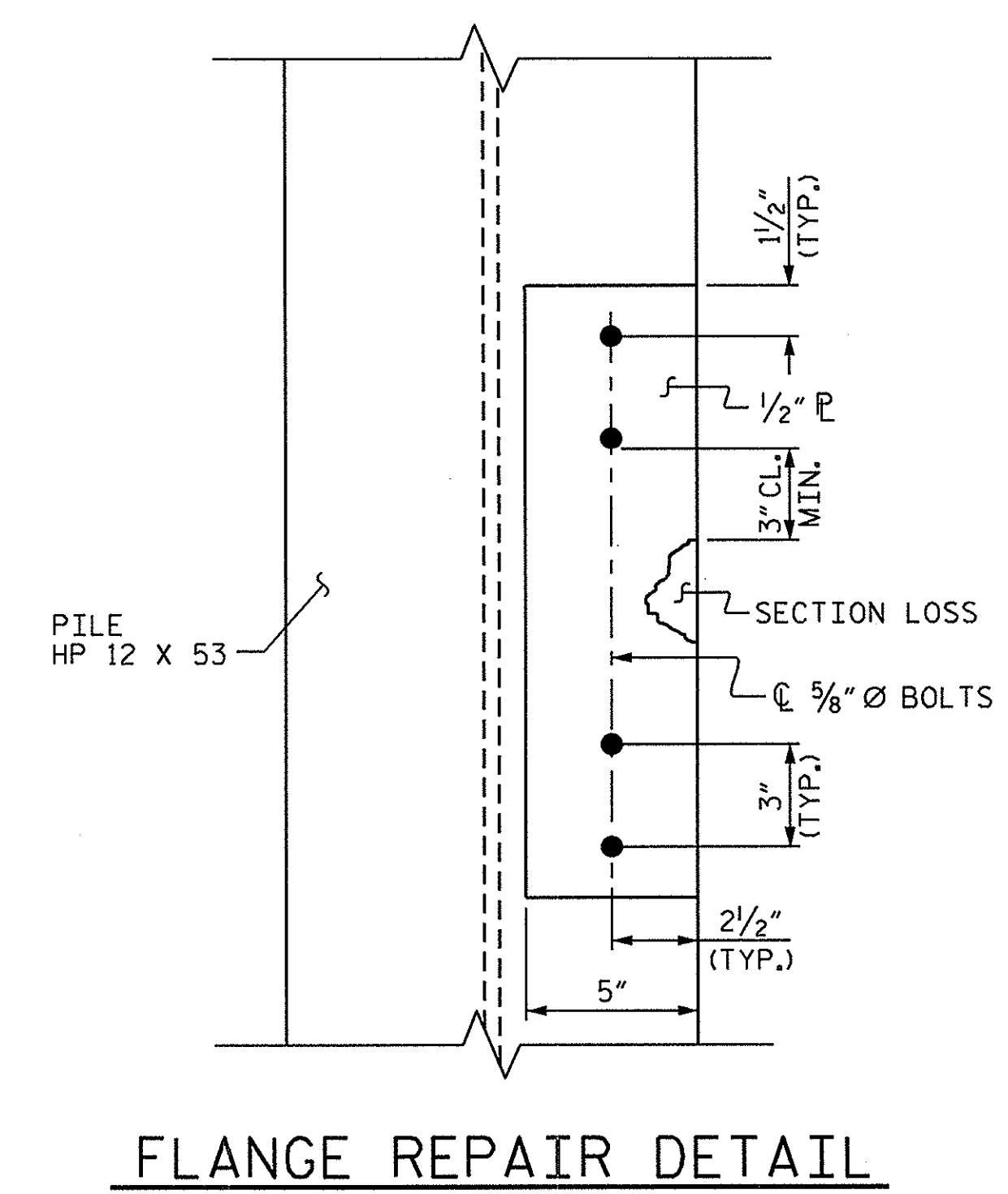
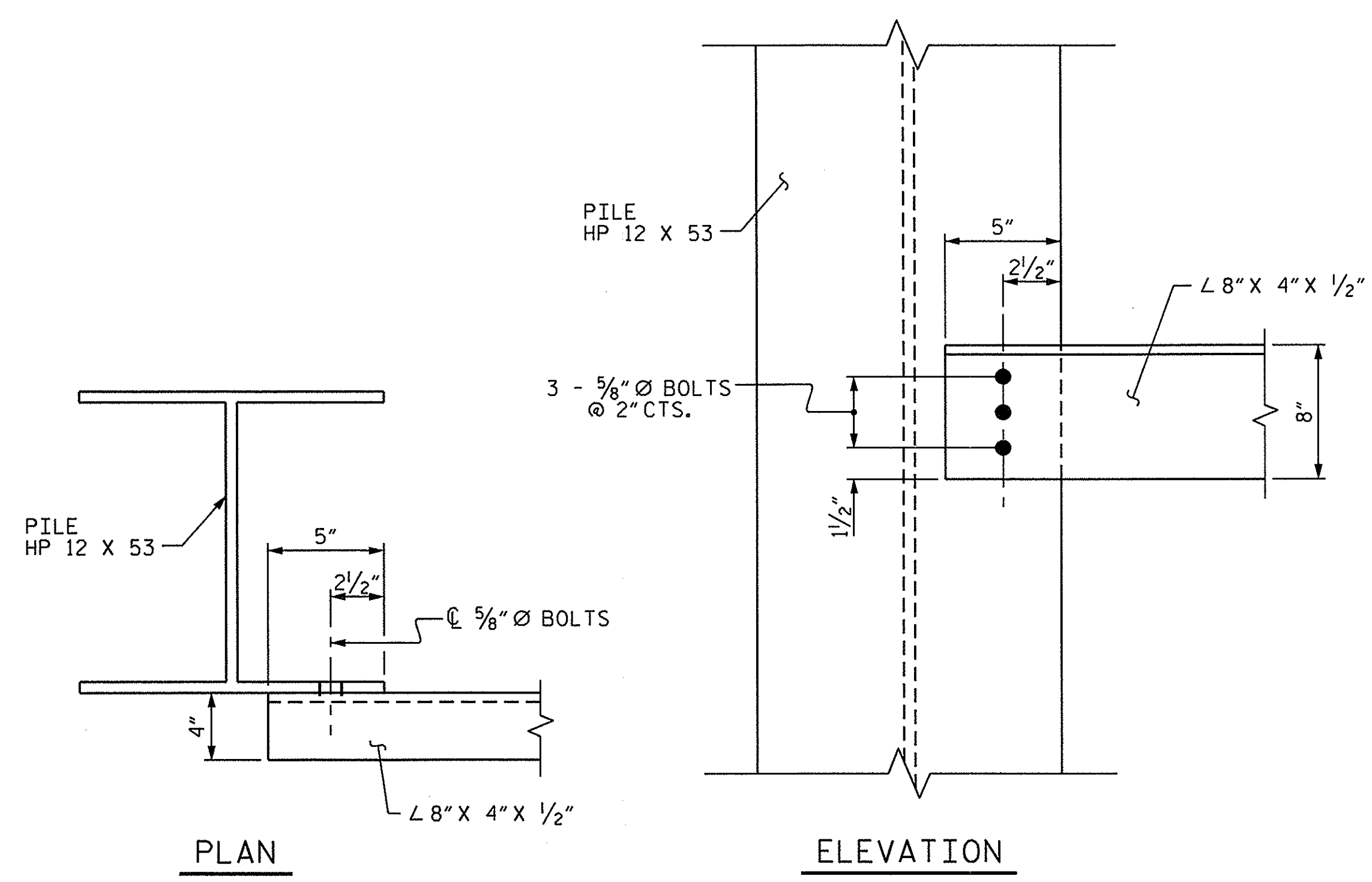
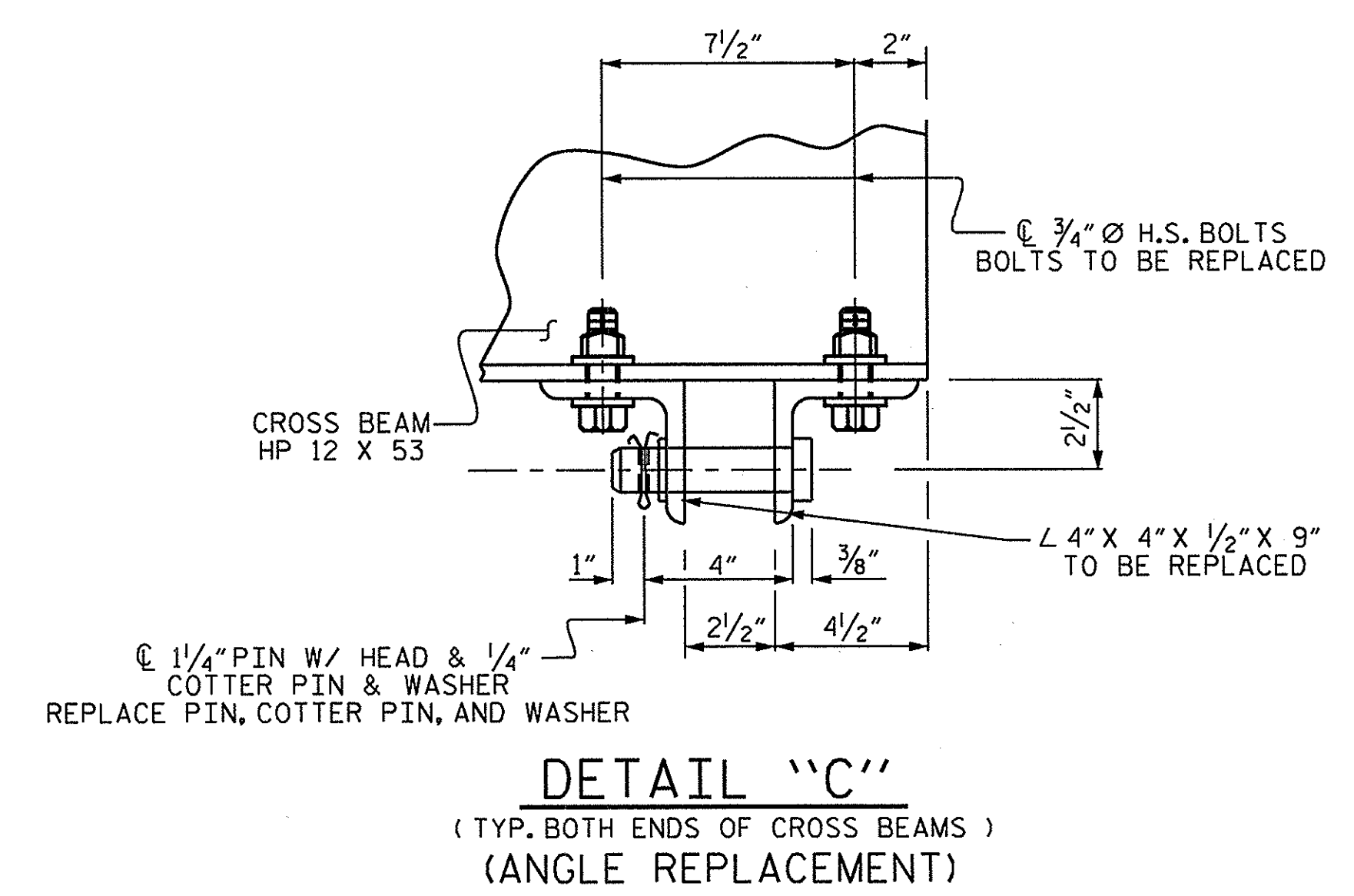
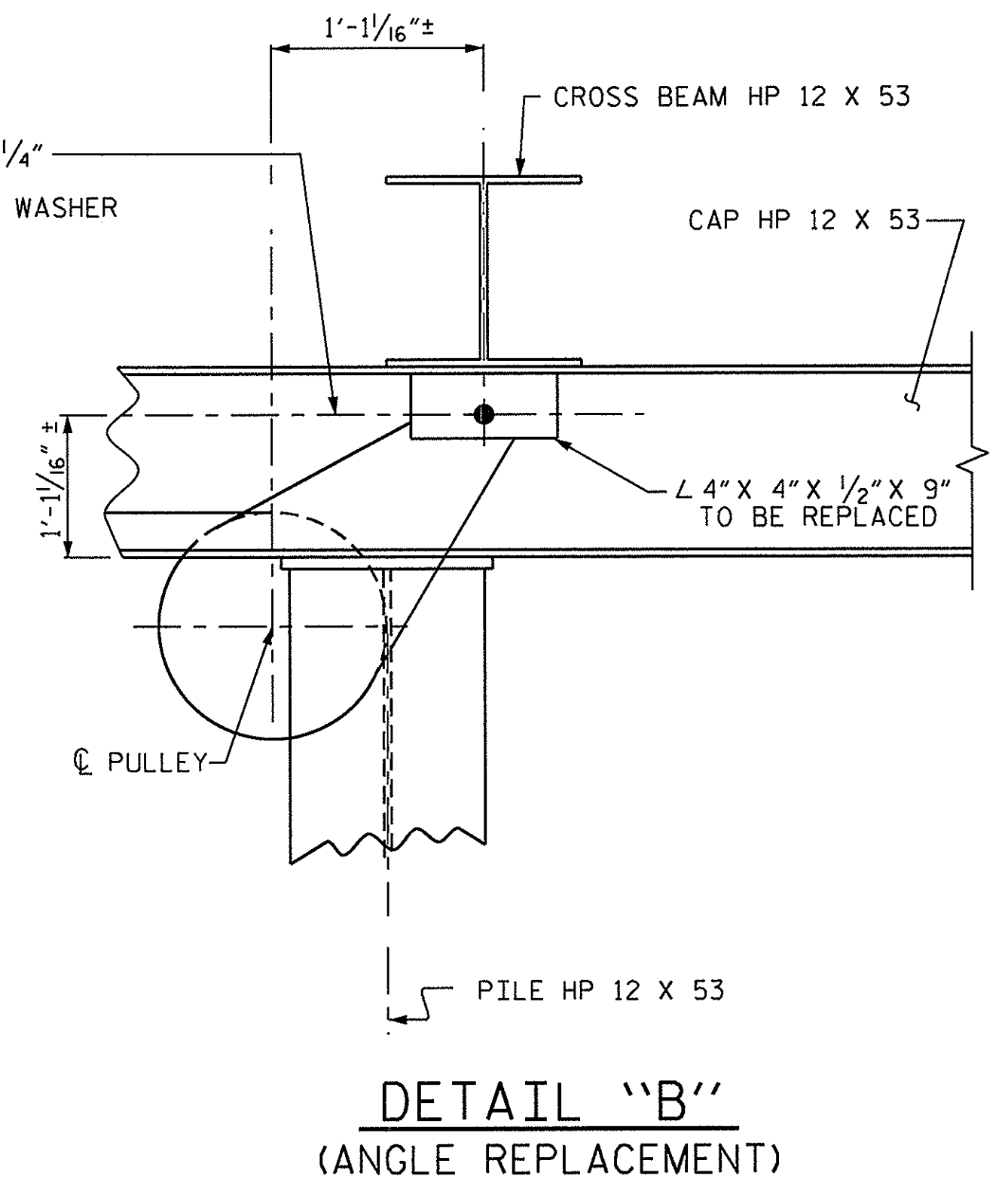
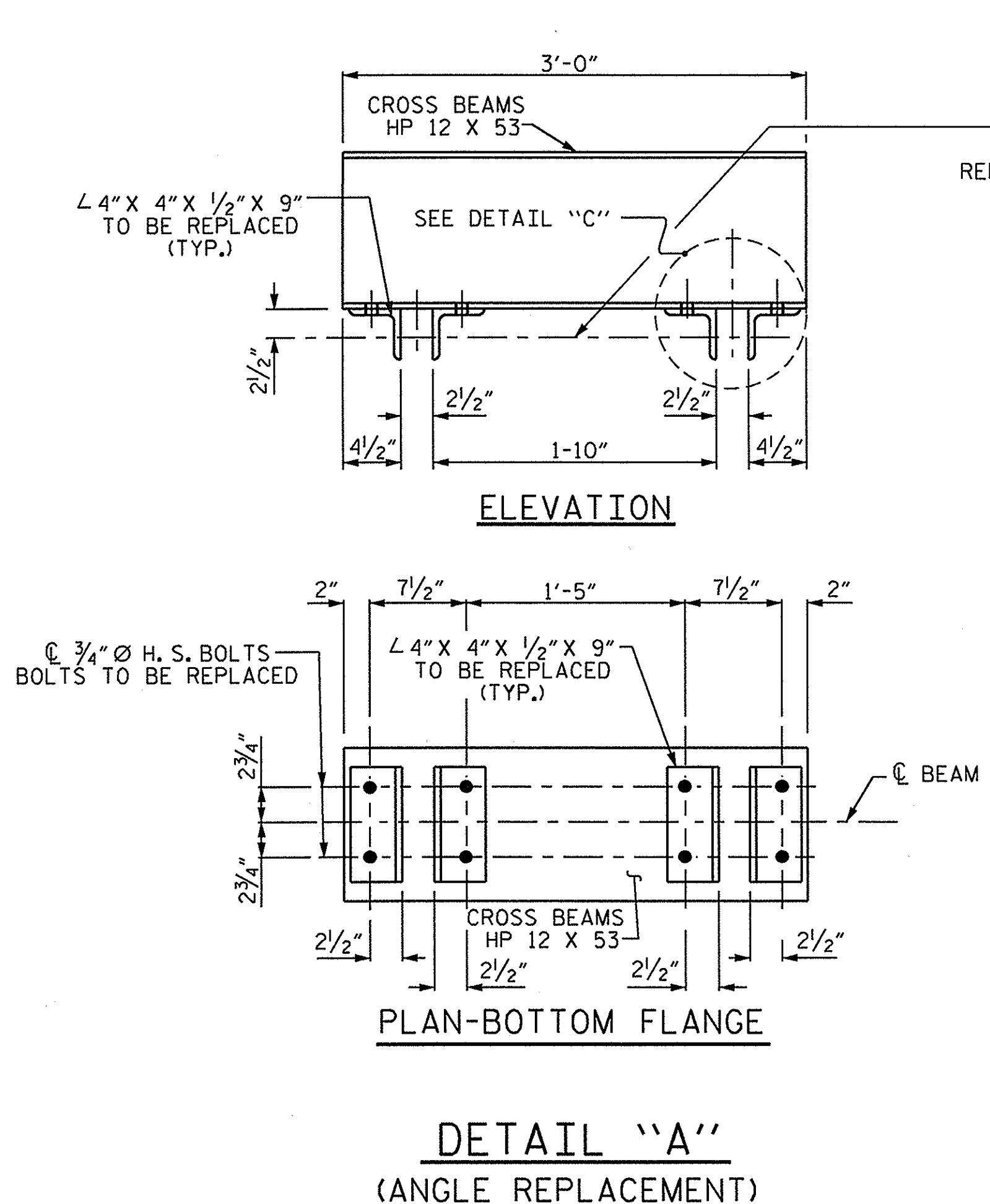
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LIFT BENT
SILVER LAKE DOCK
(RAMP 1 & 2)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			2			5-2
2			4			TOTAL SHEETS 9

DRAWN BY : B.N. GRADY DATE : 10/5/11
CHECKED BY : N.N. BULLOCK DATE : 10/11/11

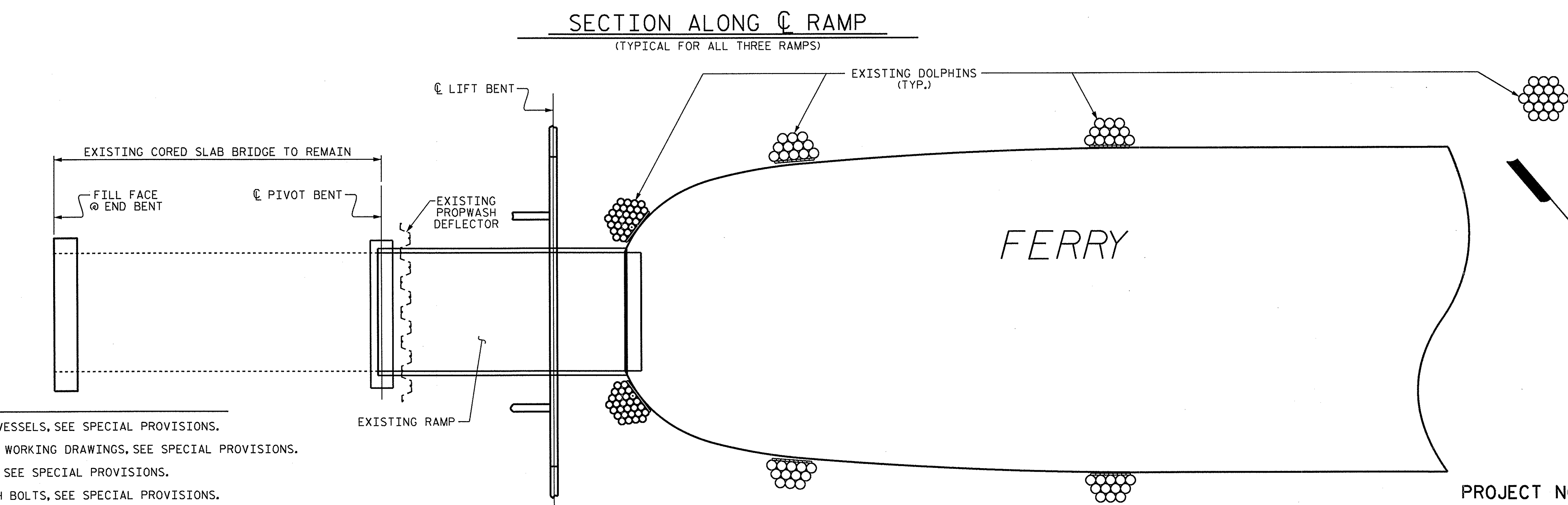
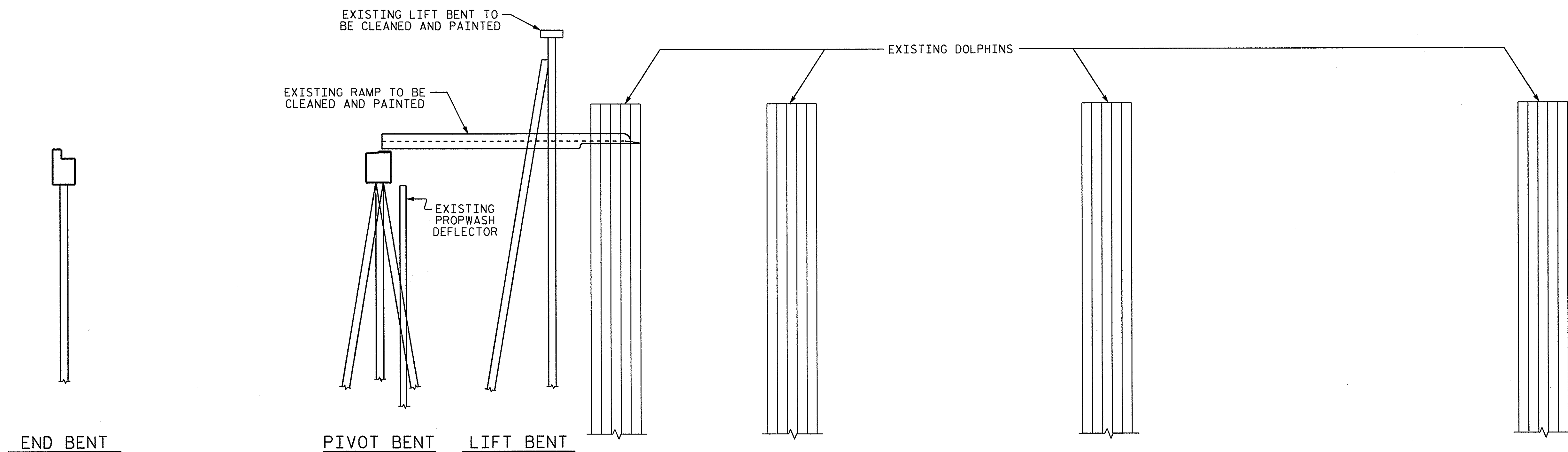
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PROJECT NO. F-5004
HYDE COUNTY
 STATION: _____
 SHEET 3 OF 3

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			53
2			4			TOTAL SHEETS 9

DRAWN BY : B.N. GRADY DATE : 10/5/11
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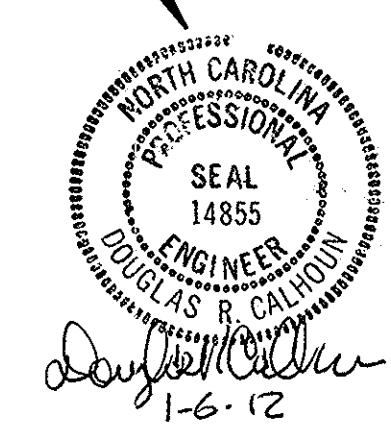


- NOTES:**
- FOR SECURING OF VESSELS, SEE SPECIAL PROVISIONS.
 - FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
 - FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
 - FOR HIGH STRENGTH BOLTS, SEE SPECIAL PROVISIONS.
 - FOR SCOPE OF WORK, SEE SPECIAL PROVISIONS.
 - FOR CLEANING AND PAINTING THE EXISTING LIFT BENTS, SEE SPECIAL PROVISIONS.
 - FOR CLEANING AND PAINTING THE EXISTING RAMPS, SEE SPECIAL PROVISIONS.
 - FOR REPAIR OF THE EXISTING LIFT BENT STRUCTURAL STEEL, SEE SPECIAL PROVISIONS.
 - FOR REMOVAL AND REPLACEMENT OF THE RAMP APRONS, SEE SPECIAL PROVISIONS.
 - FOR CROSS BEAM REPLACEMENT, SEE SPECIAL PROVISIONS.
 - FOR LIFT SYSTEM, SEE SPECIAL PROVISIONS.
 - FOR SKID RESISTANT COATING, SEE SPECIAL PROVISIONS.
 - FOR REPLACEMENT OF STRUCTURAL BOLTS, SEE SPECIAL PROVISIONS.
 - FOR FLANGE REPAIR, SEE SPECIAL PROVISIONS.

THE CONSTRUCTION SHALL BE STAGED SO THAT ONLY ONE OF THE RAMPS WILL BE UNDER CONSTRUCTION AT EACH SITE. FERRY SERVICE WILL BE MAINTAINED AT ALL TIMES.

DRAWN BY : B.N. GRADY DATE : 10/5/11
 CHECKED BY : N.N. BULLOCK DATE : 10/11/11

TOTAL BILL OF MATERIAL								
	REPLACE LIFT SYSTEM	SKID RESISTANT COATING	CLEANING & PAINTING OF THE EXISTING LIFT BENT	CLEANING & PAINTING THE EXISTING RAMP	CROSS BEAM REPLACEMENT	BOLT REPLACEMENT	REMOVE & REPLACE APRON	FLANGE REPAIR
	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	EACH	EACH	EACH	LUMP SUM
RAMP 1	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM		10		
RAMP 2	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	4	25	1	
RAMP 3	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	4	400	1	LUMP SUM
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	8	435	2	LUMP SUM



PROJECT NO. F-5005
HYDE COUNTY

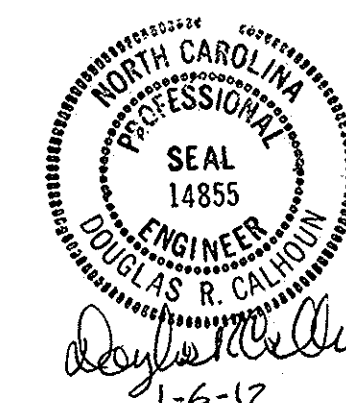
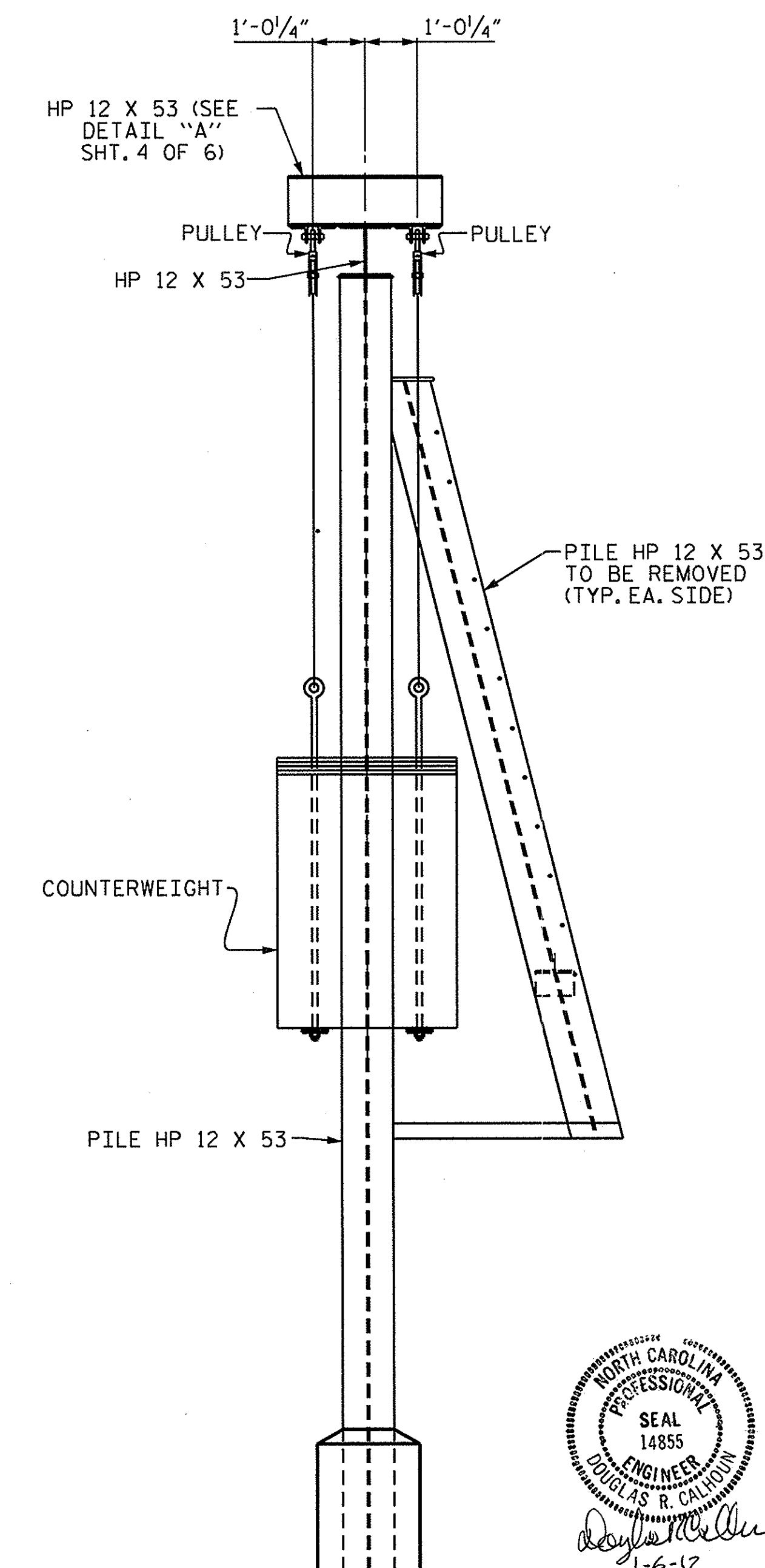
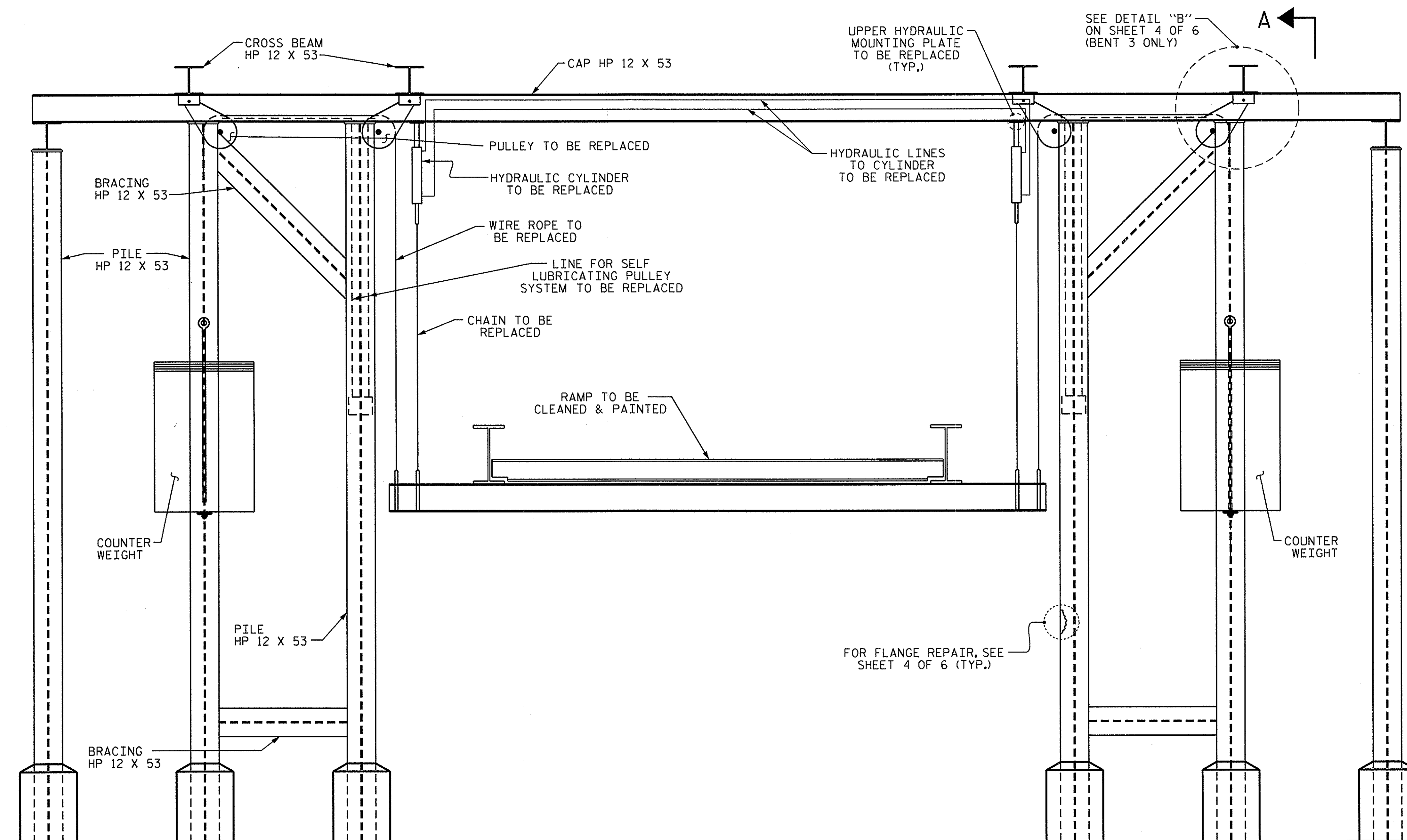
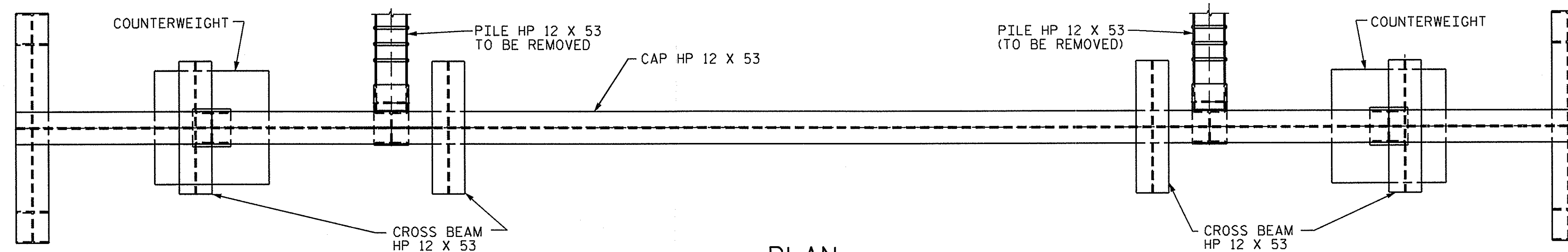
STATION: _____

SHEET 1 OF 6

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

 GENERAL DRAWING
 OCRACOKE SOUTH DOCK

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5-4
2			4			9



SECTION A-A

PROJECT NO. F-5005
HYDE COUNTY

STATION: _____

SHEET 2 OF 6

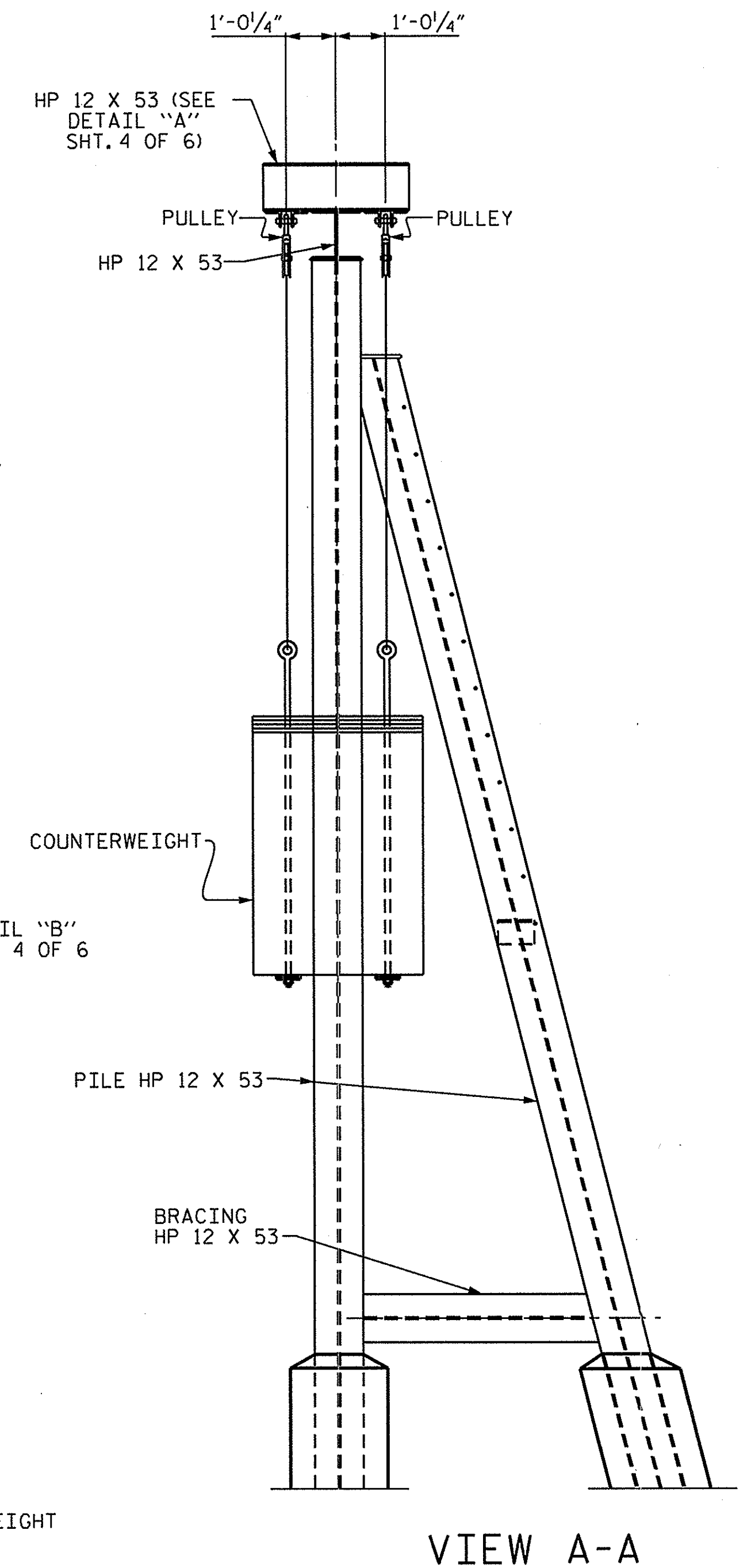
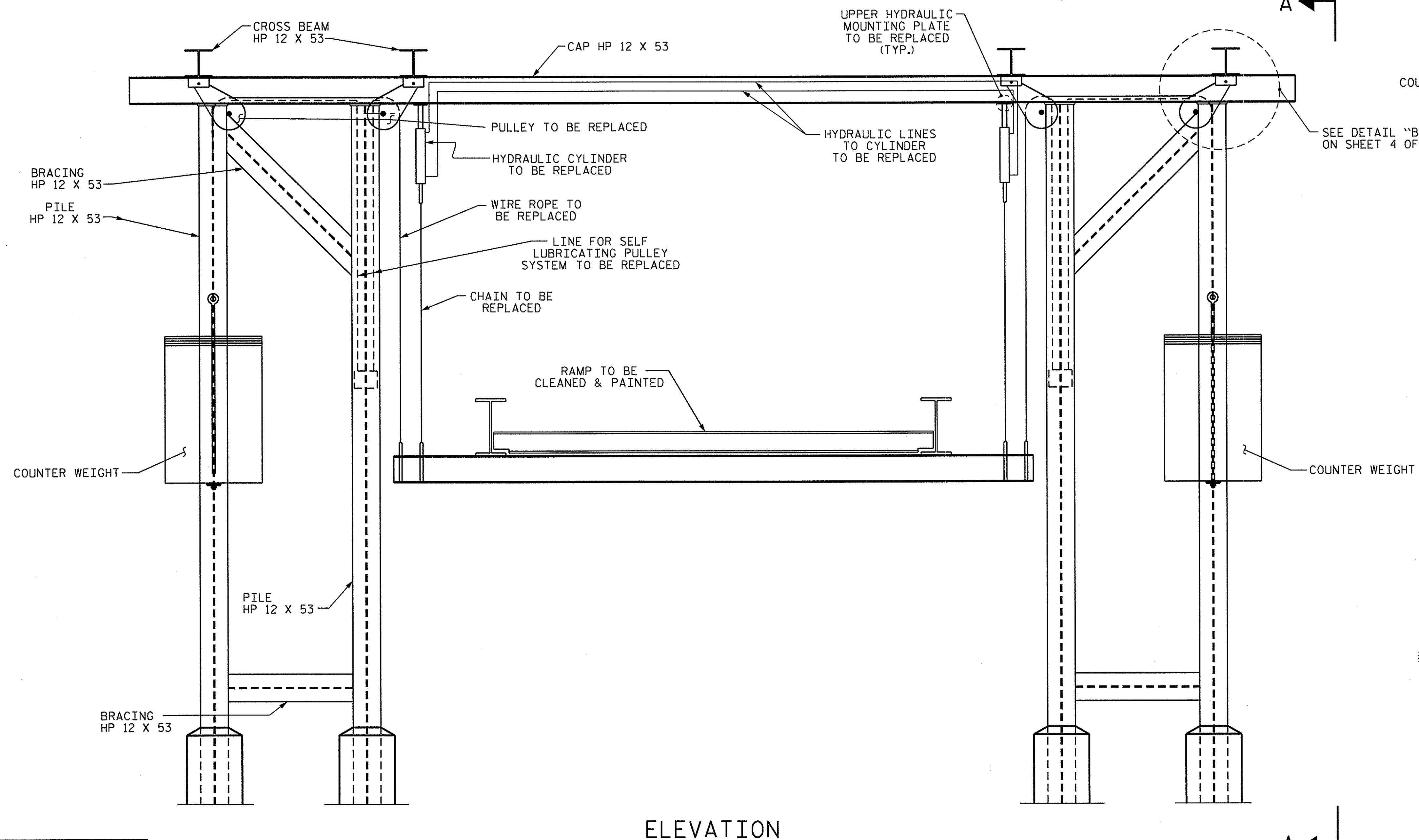
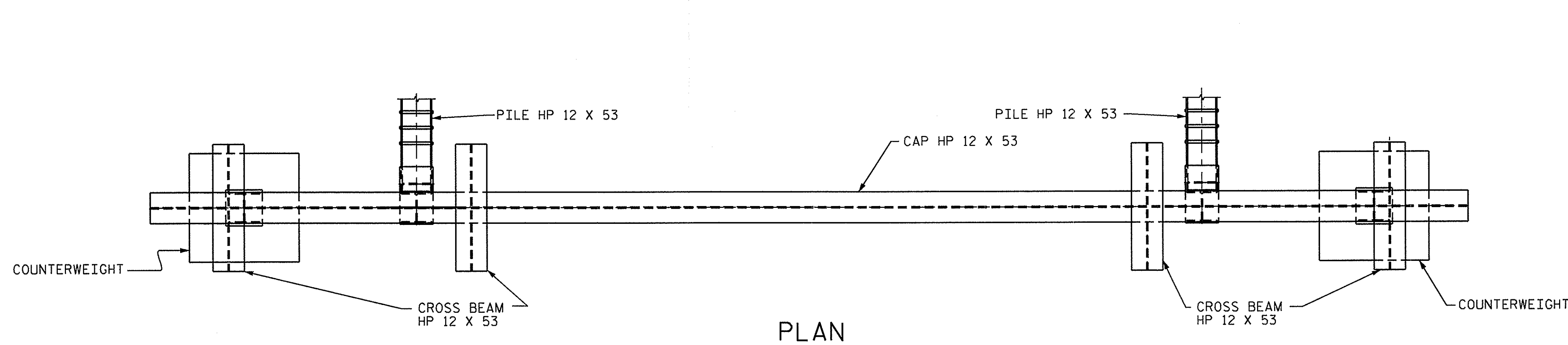
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

LIFT BENT
 OCRACOKE SOUTH DOCK
 (RAMP 1 & 3)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			TOTAL SHEETS 9

DRAWN BY : B.N. GRADY
 CHECKED BY :
 DATE : 10/5/11
 DATE :

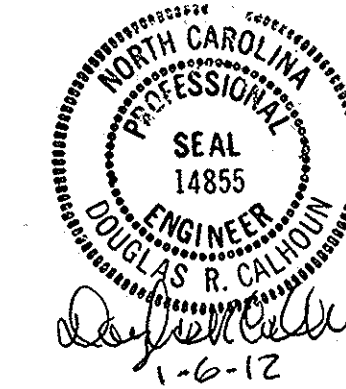
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PROJECT NO. F-5005
HYDE COUNTY

STATION: _____

SHEET 3 OF 6



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

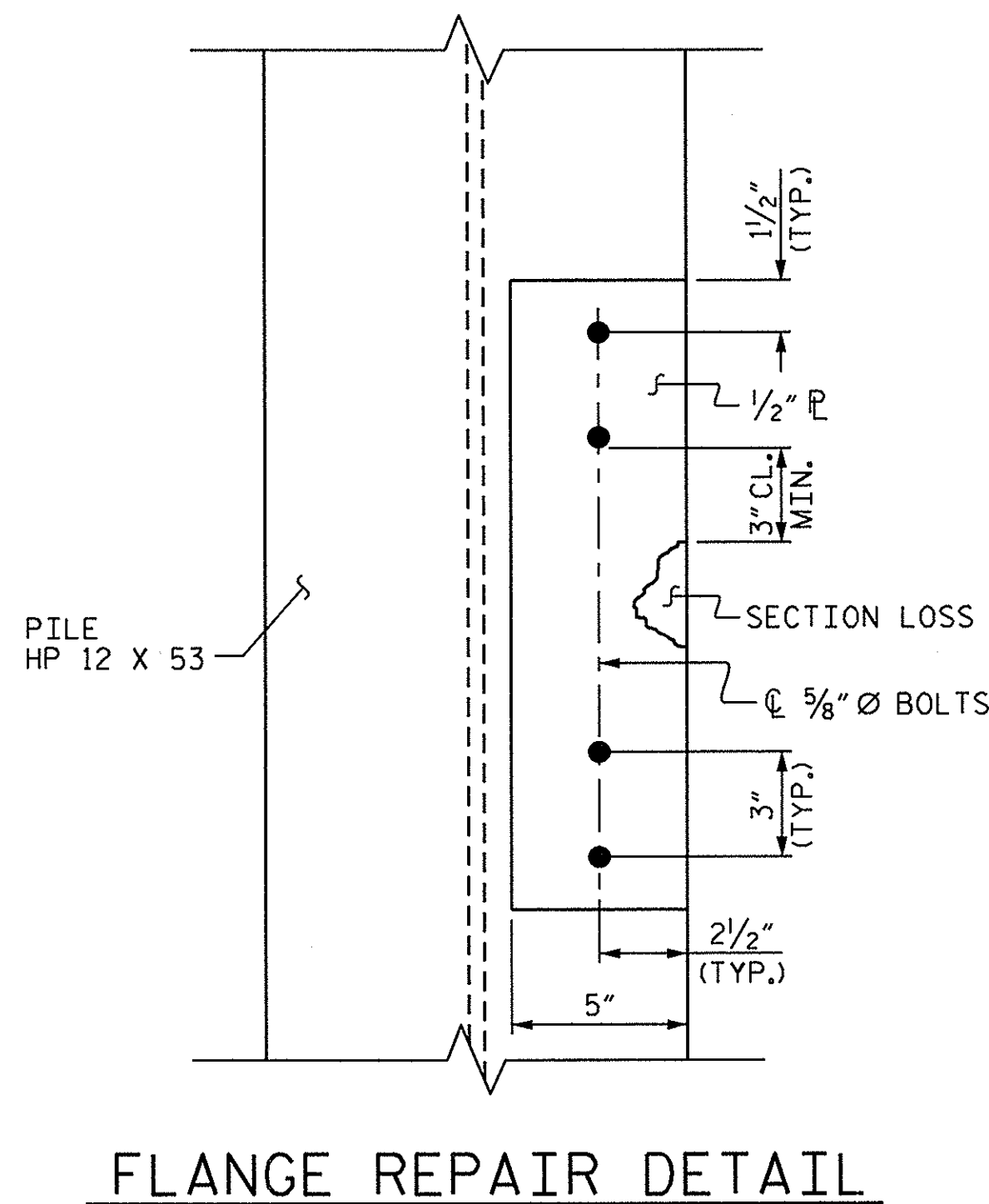
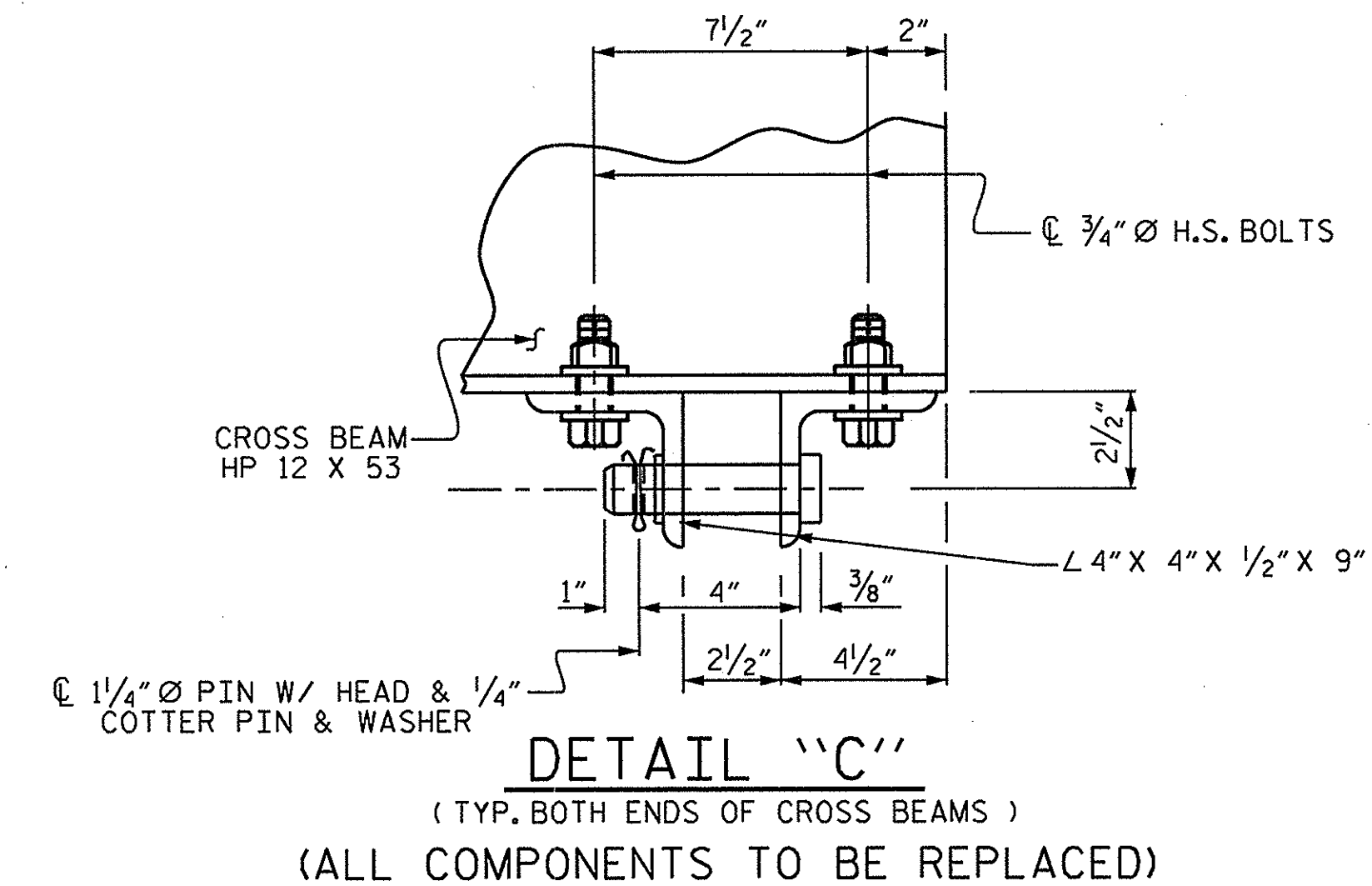
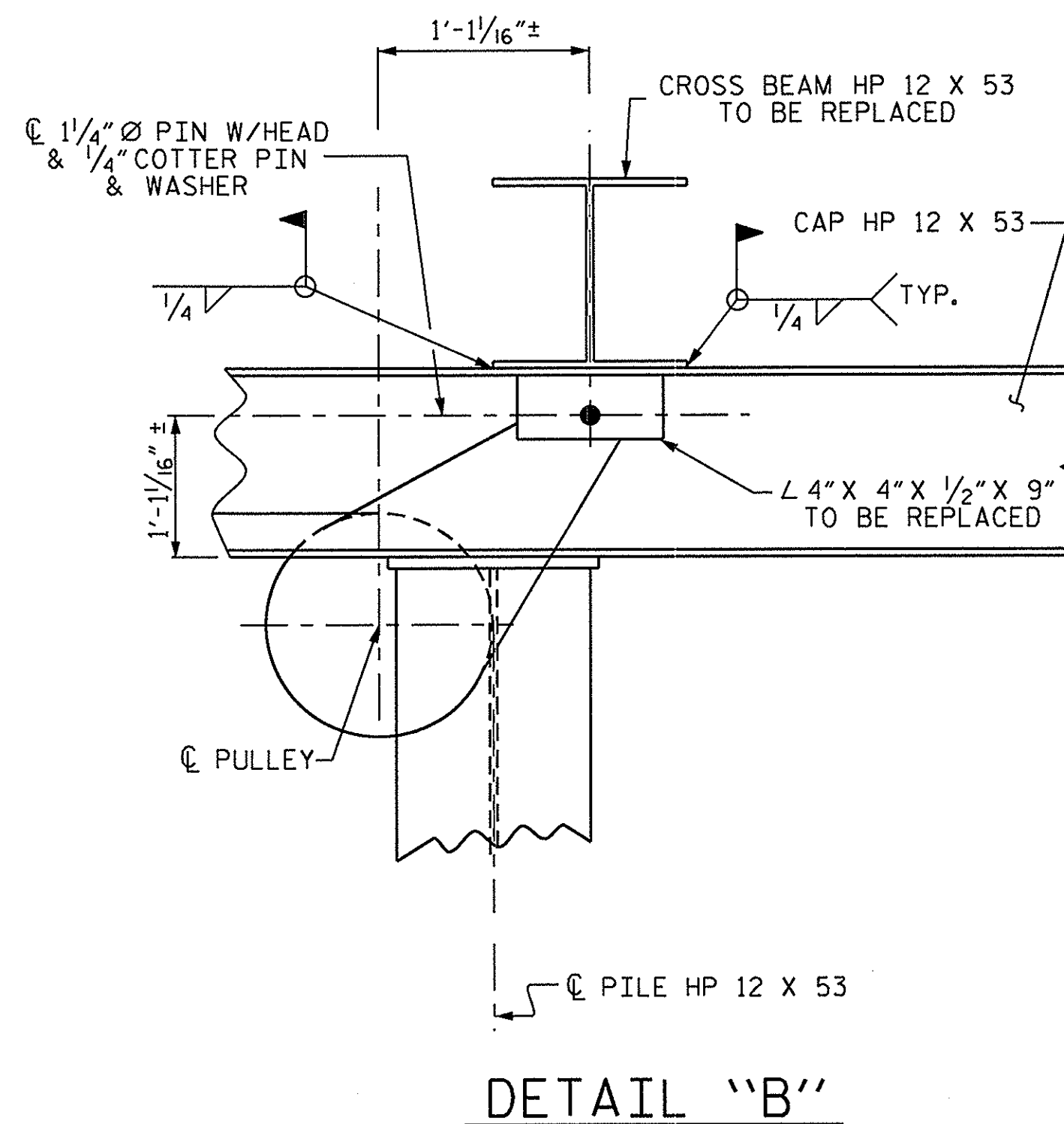
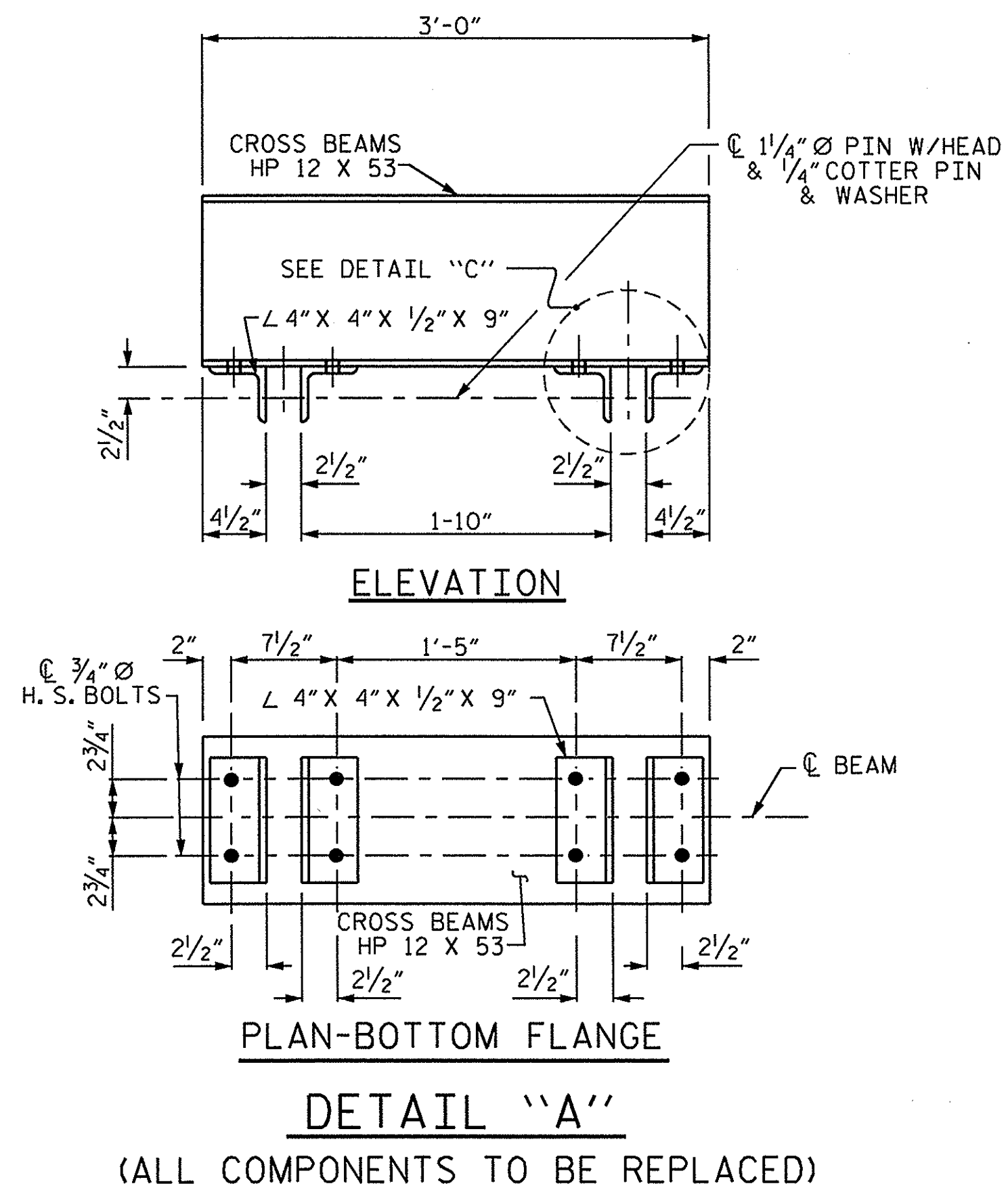
LIFT BENT
OCRACOKE SOUTH DOCK
(RAMP 2)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			TOTAL SHEETS 7

DRAWN BY : B.N. GRADY
CHECKED BY : N.N. BULLOCK

DATE : 10/5/11
DATE : 10/11/11

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PROJECT NO. F-5005
HYDE COUNTY
 STATION: _____
 SHEET 4 OF 6



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-7
2			4			TOTAL SHEETS 9

DRAWN BY : B.N. GRADY DATE : 10/5/11
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ALL PLATES, CHANNELS, AND RODS SHALL BE HOT DIPPED GALVANIZED TO AASHTO M111 AFTER FABRICATION.

WASHERS AND OTHER HARDWARE SHALL BE HOT DIPPED GALVANIZED TO AASHTO M232.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270
GRADE 50. DECK PLATE MAY BE AASHTO M270 GRADE 36.

WASHERS TO BE AASHTO M293 TYPE 1.

VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION
TO ENSURE A PROPER FIT.

EACH COUNTERWEIGHT MAY REQUIRE AN ADDITIONAL
356 LBS. TO ACCOUNT FOR THE EXTRA WEIGHT OF
STEEL IN THE RAMP ASSEMBLIES.

FOR PAINTING THE APRON, SEE SPECIAL PROVISION FOR
CLEANING AND PAINTING EXISTING RAMP.

FOR SKID RESISTANT COATING, SEE SPECIAL PROVISIONS.



DRAWN BY : B.N. GRADY DATE : 10/5/11
CHECKED BY : N.N. BULLOCK DATE : 10/11/11

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PROJECT NO. F-5005
HYDE COUNTY

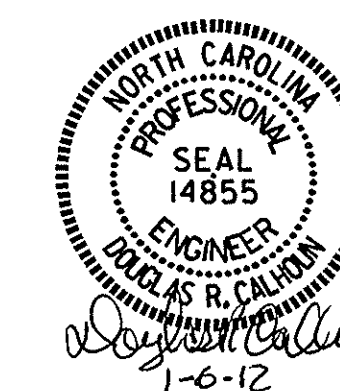
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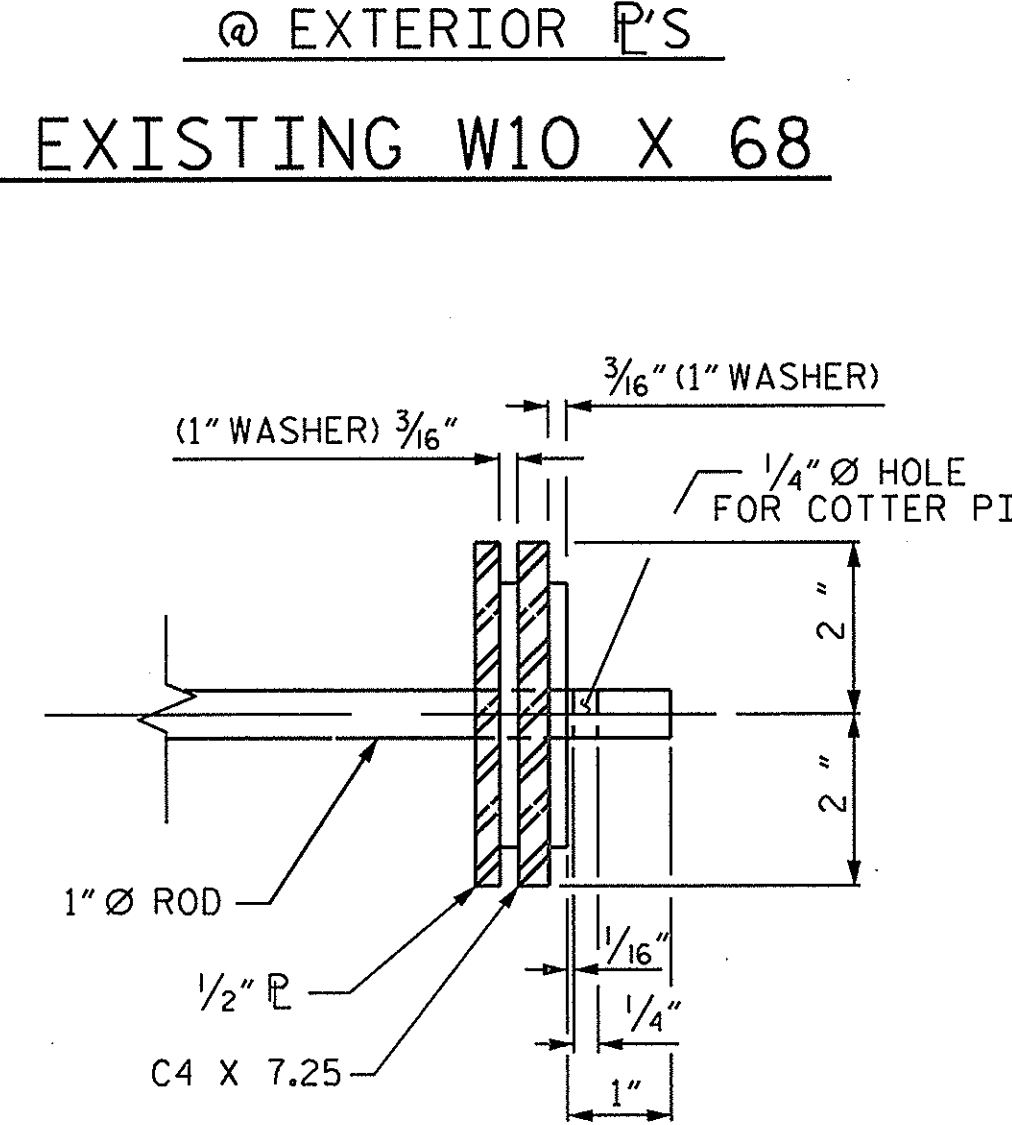
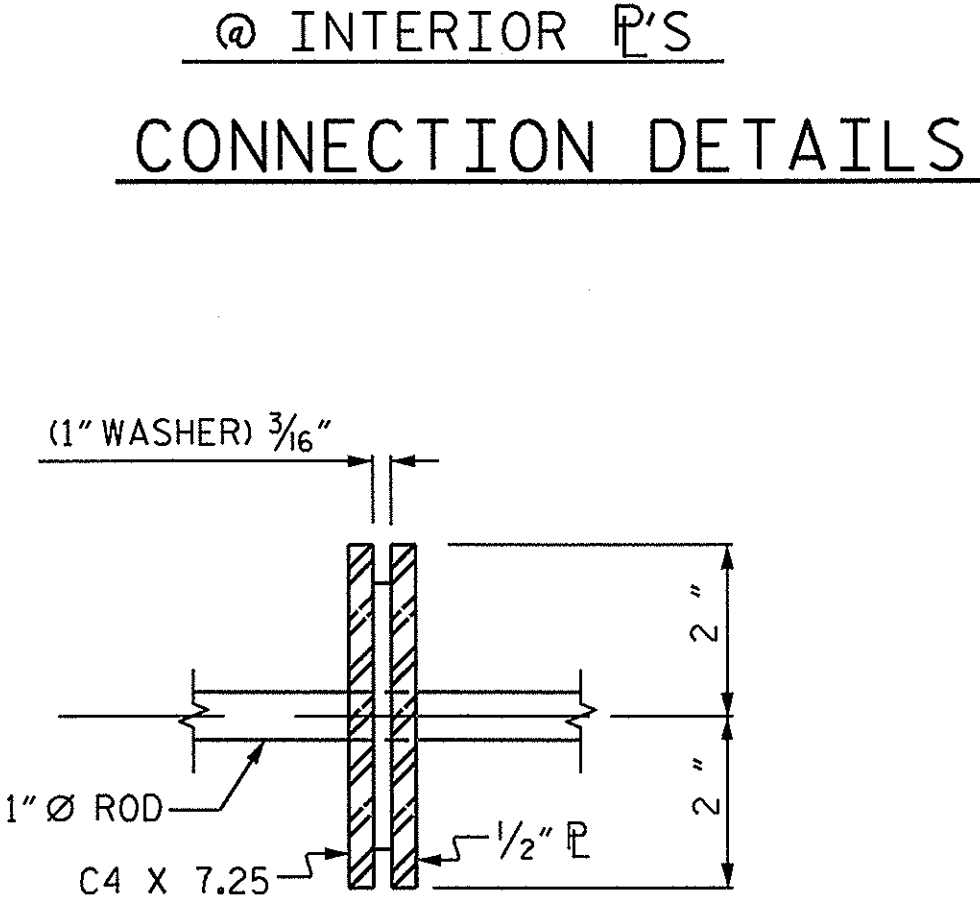
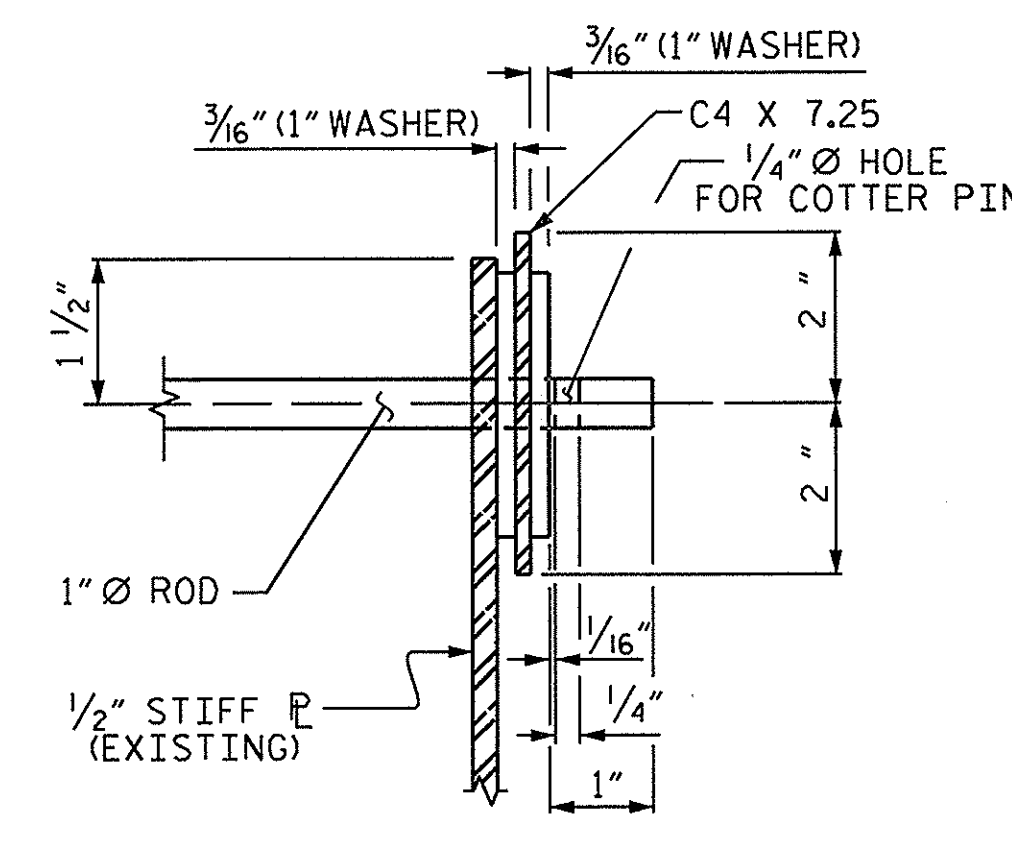
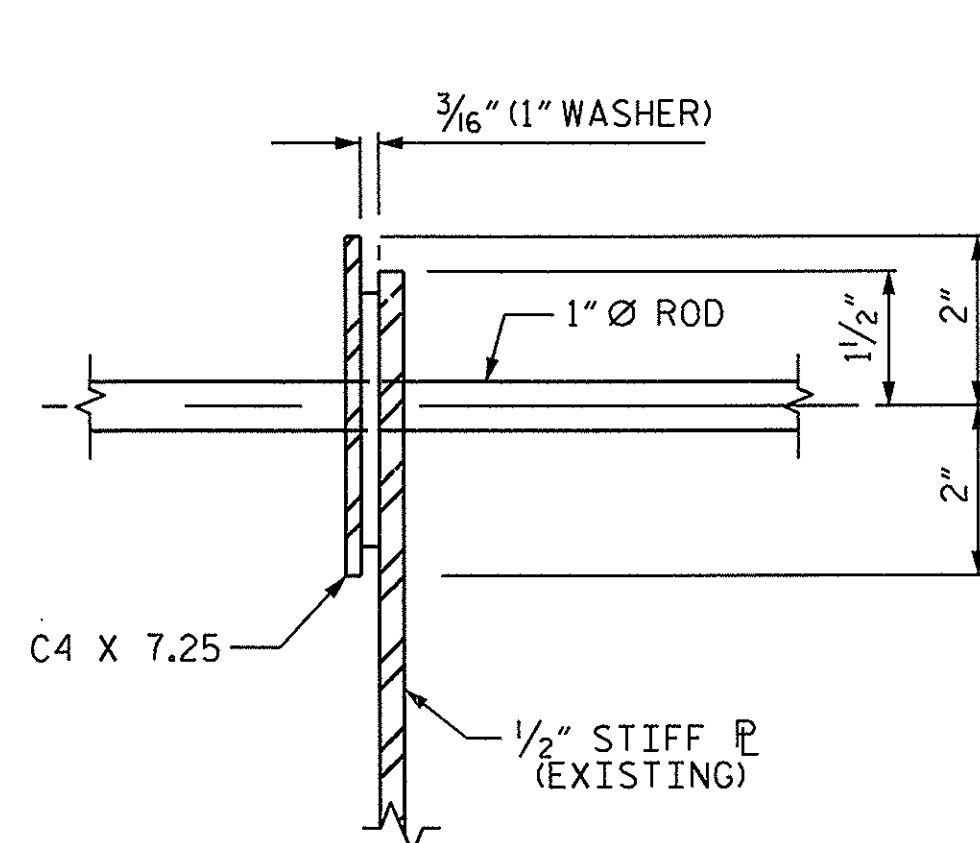
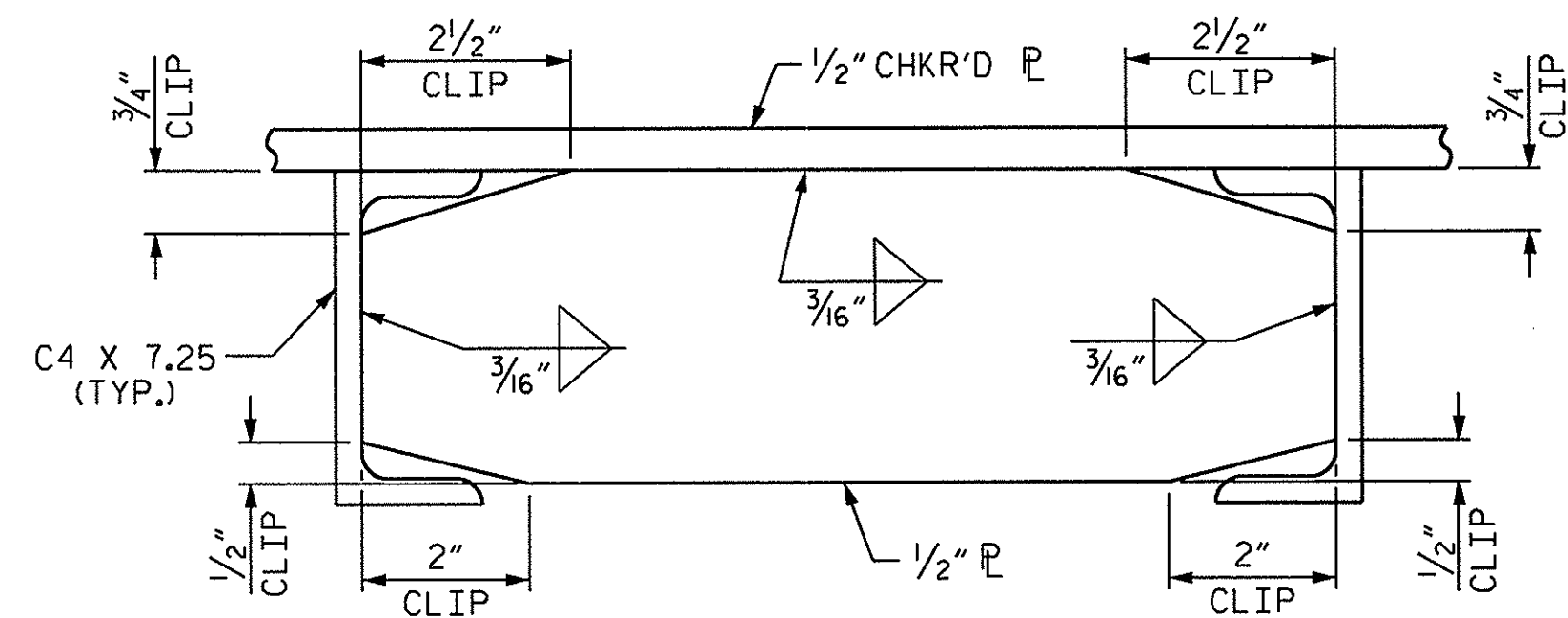
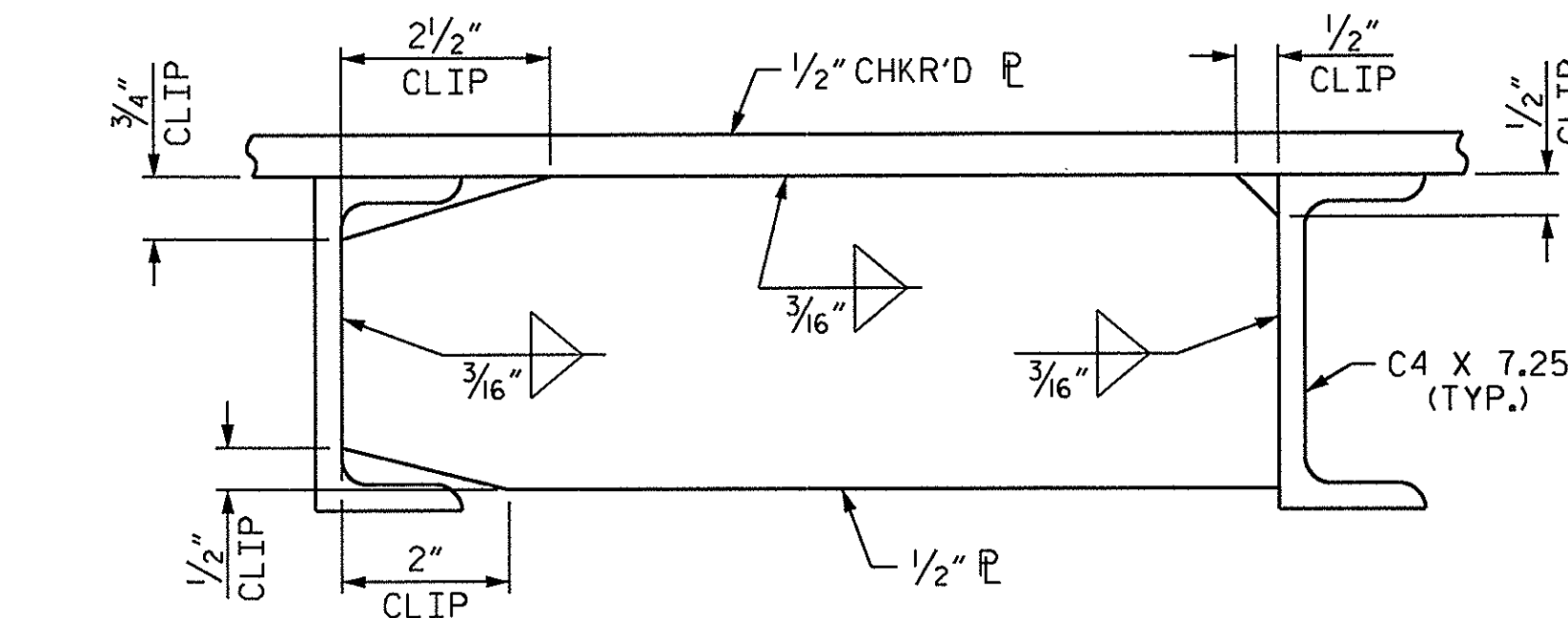
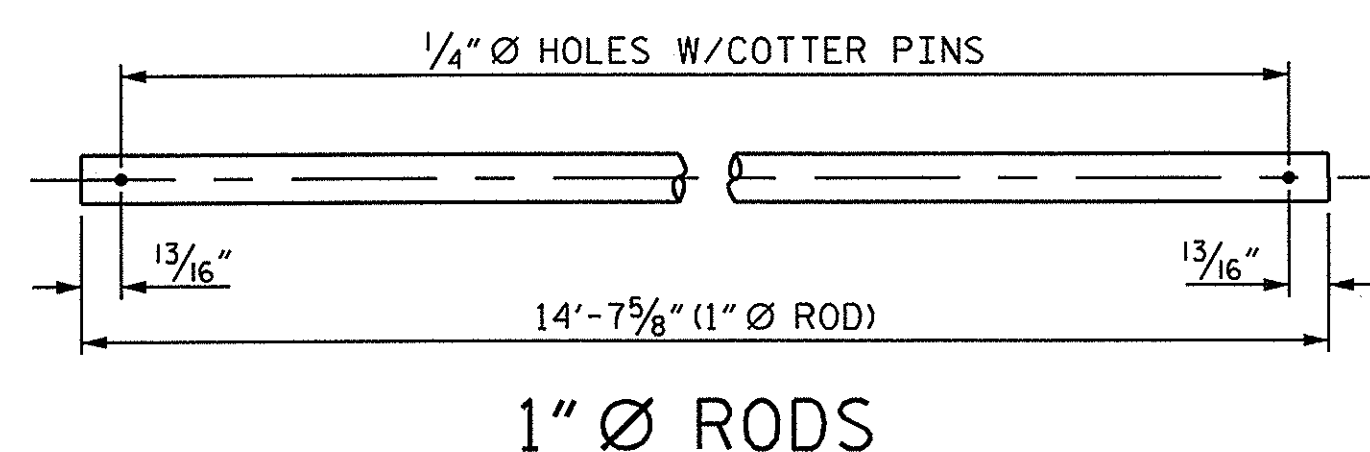
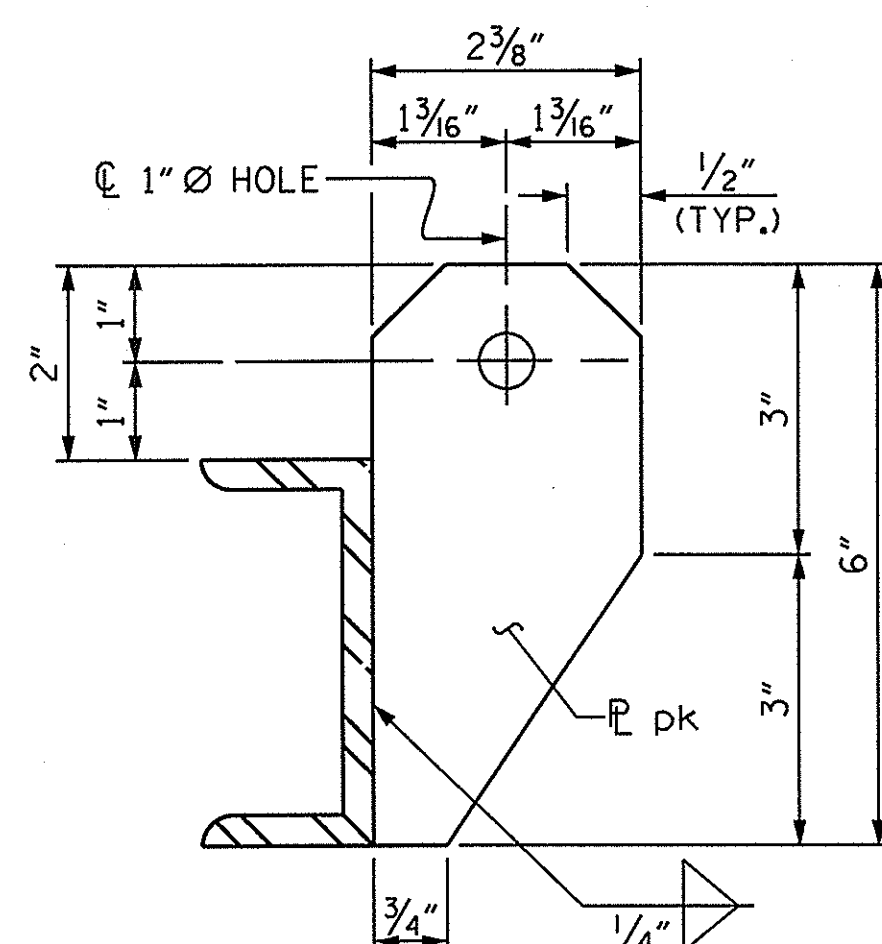
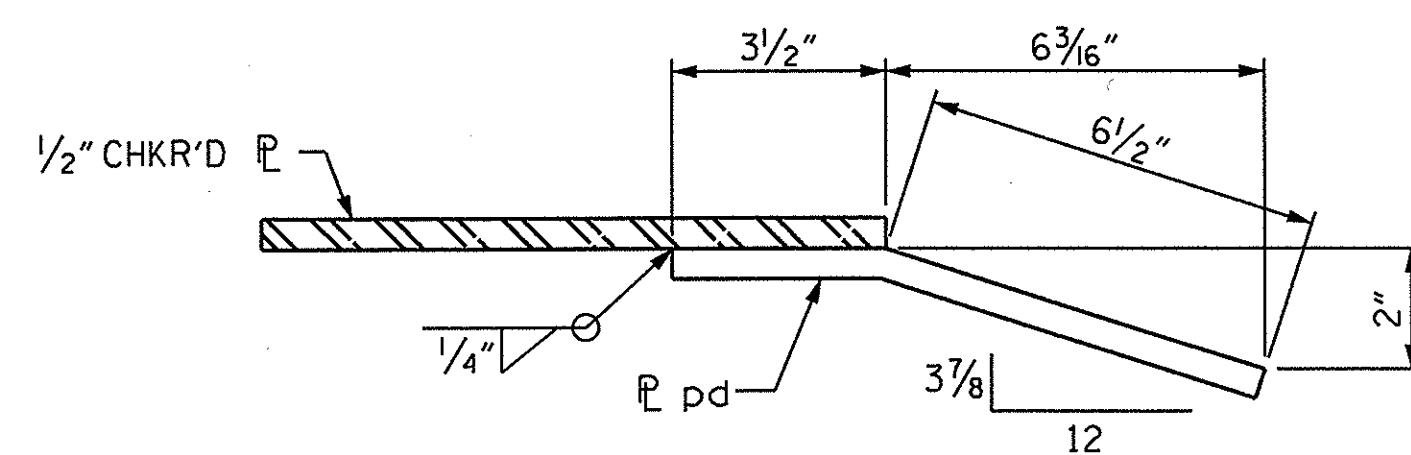
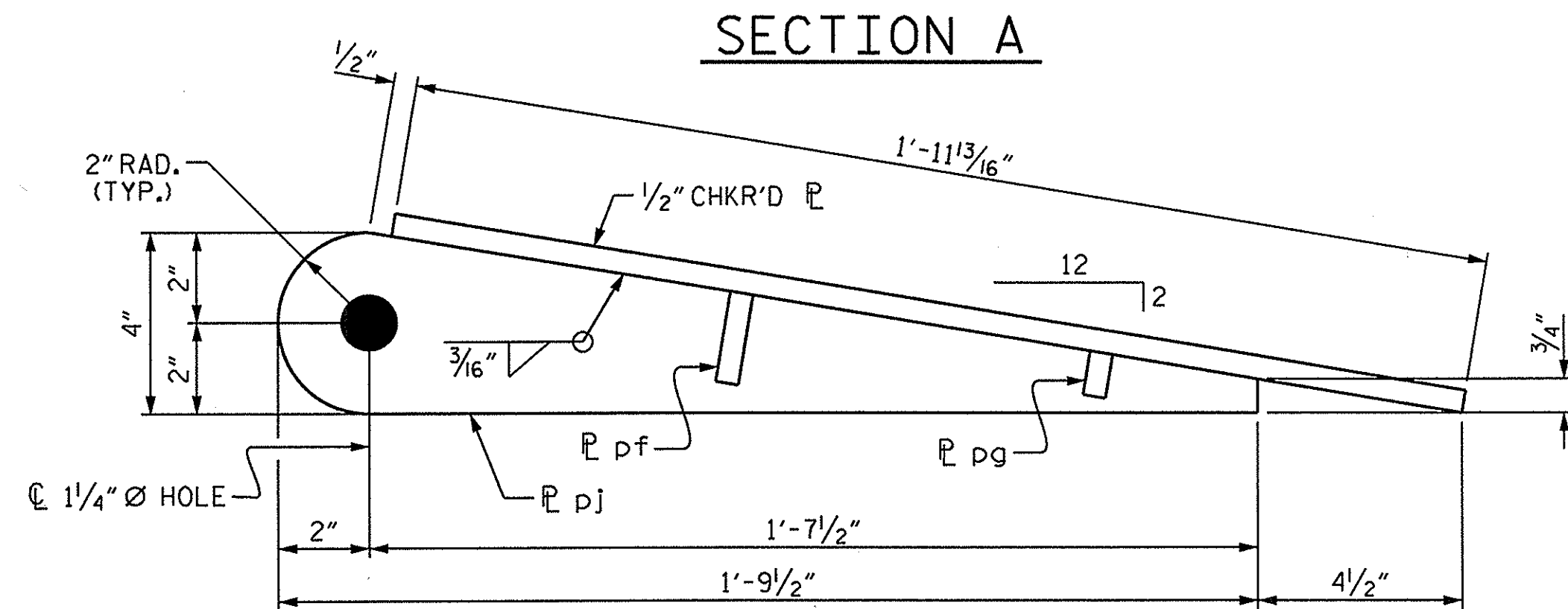
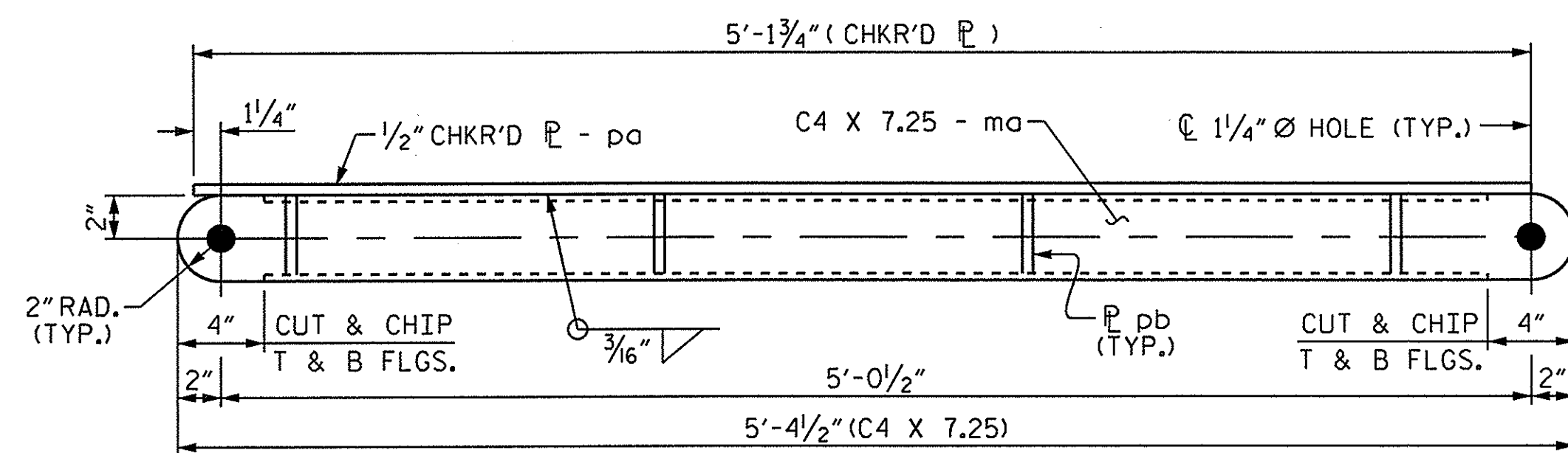
SHEET 5 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

APRON REPLACEMENT
OCRACOKE SOUTH DOCK
(RAMP 2 & 3)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			
2			4			

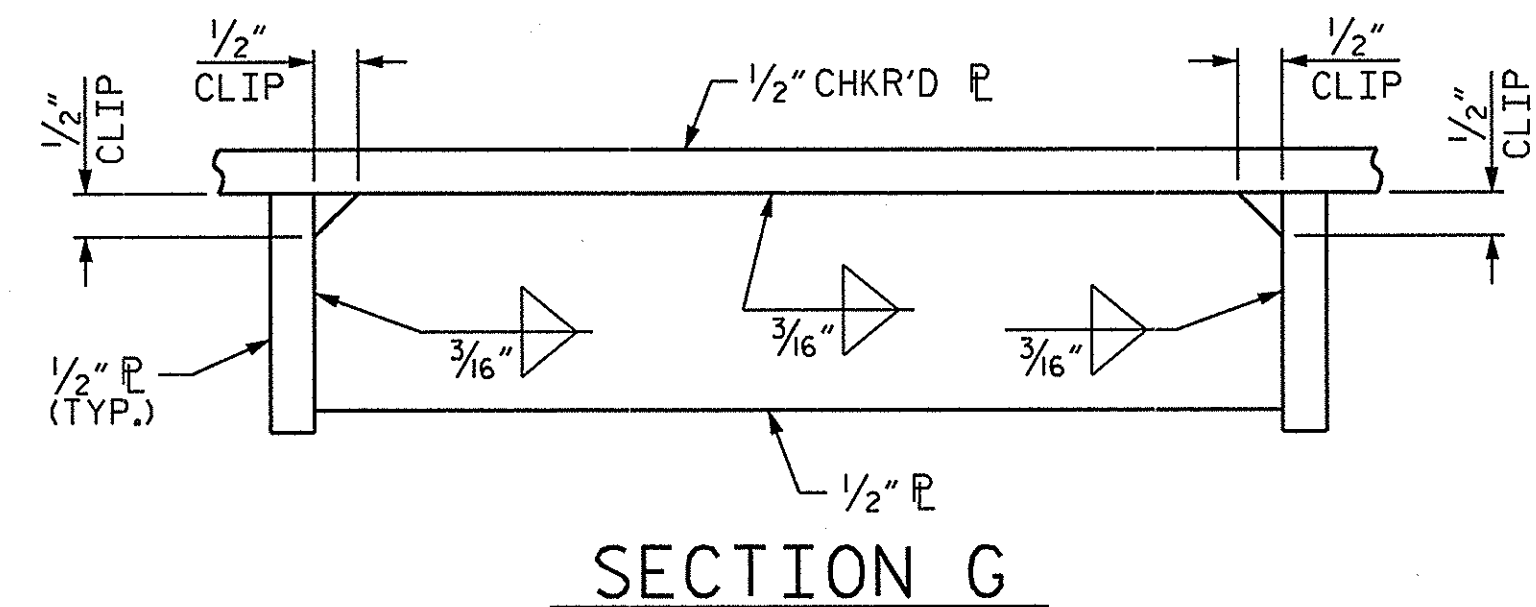




BILL OF MATERIAL			
PIECE	QTY.	SHAPE	LENGTH
pa	2	CPL 1/2" X 61 3/4"	14'-10"
pb	112	PL 1/2" X 3 3/4"	0'-11 3/16"
pc	8	PL 1/2" X 3 3/4"	0'-11 5/8"
pd	12	PL 1/2" X 6"	0'-10"
pe	2	CPL 1/2" X 23 3/16"	14'-10"
pf	28	PL 1/2" X 2"	0'-11"
pg	28	PL 1/2" X 1"	0'-11"
ph	2	PL 1/2" X 2"	0'-10"
pi	2	PL 1/2" X 1"	0'-10"
pj	32	PL 1/2" X 4"	1'-9 1/2"
pk	4	PL 1/2" X 2 3/8"	0'-6"
ma	32	C4 X 7.25	5'-4 1/2"
mb	72	1" STD. WASHERS	-
mc	8	1/4" COTTER PINS	-
ra	4	1" Ø ROD	14'-7 5/8"

STRUCTURAL STEEL WEIGHT APPROX. LBS. = 7137

NOTE: SEAL ALL WELDS PRIOR TO GALVANIZING.

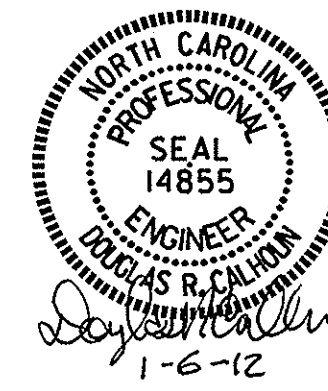


PROJECT NO. F-5005
HYDE COUNTY

STATION: _____

SHEET 6 OF 6

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
				TOTAL SHEETS	59



DRAWN BY : B.N. GRADY
CHECKED BY : 10/11/11

DATE : 10/5/11
DATE : 10/11/11

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tbeach