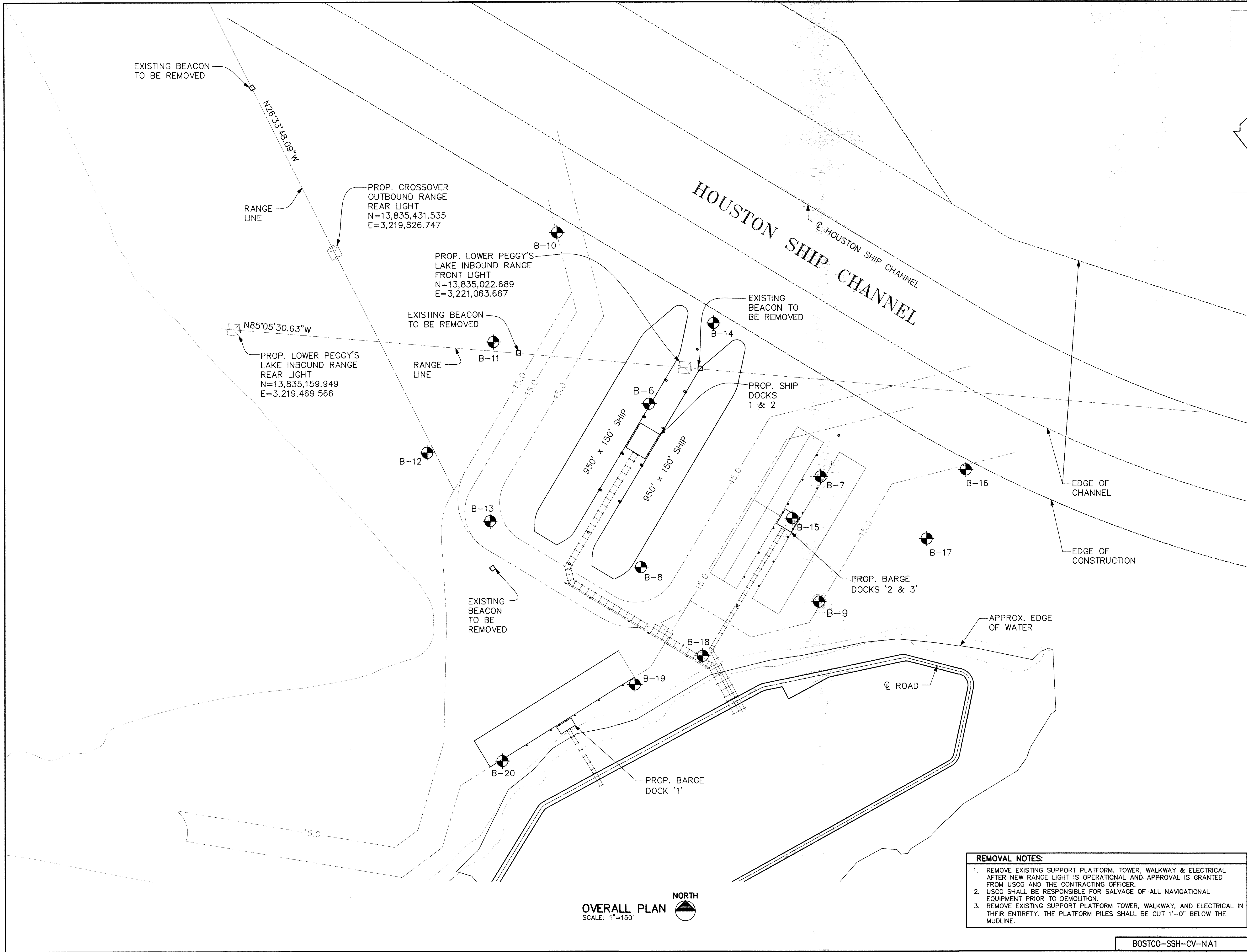


KEY PLAN



OVERALL PLAN
SCALE: 1"=150'



- REMOVAL NOTES:**
1. REMOVE EXISTING SUPPORT PLATFORM, TOWER, WALKWAY & ELECTRICAL AFTER NEW RANGE LIGHT IS OPERATIONAL AND APPROVAL IS GRANTED FROM USCG AND THE CONTRACTING OFFICER.
 2. USCG SHALL BE RESPONSIBLE FOR SALVAGE OF ALL NAVIGATIONAL EQUIPMENT PRIOR TO DEMOLITION.
 3. REMOVE EXISTING SUPPORT PLATFORM TOWER, WALKWAY, AND ELECTRICAL IN THEIR ENTIRETY. THE PLATFORM PILES SHALL BE CUT 1'-0" BELOW THE MUDLINE.

NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES

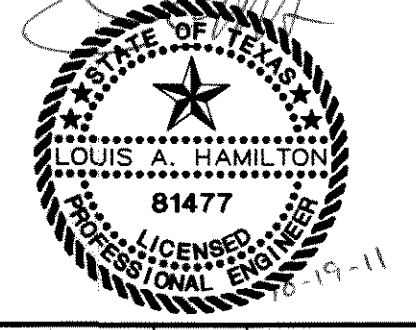
PHASE 1 NEW SHIP & BARGE FACILITY

**PROPOSED LAYOUT FOR NAVIGATIONAL AIDS
LAPORTE, TX -
OVERALL LAYOUT PLAN**

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. REGISTRATION # F-000175

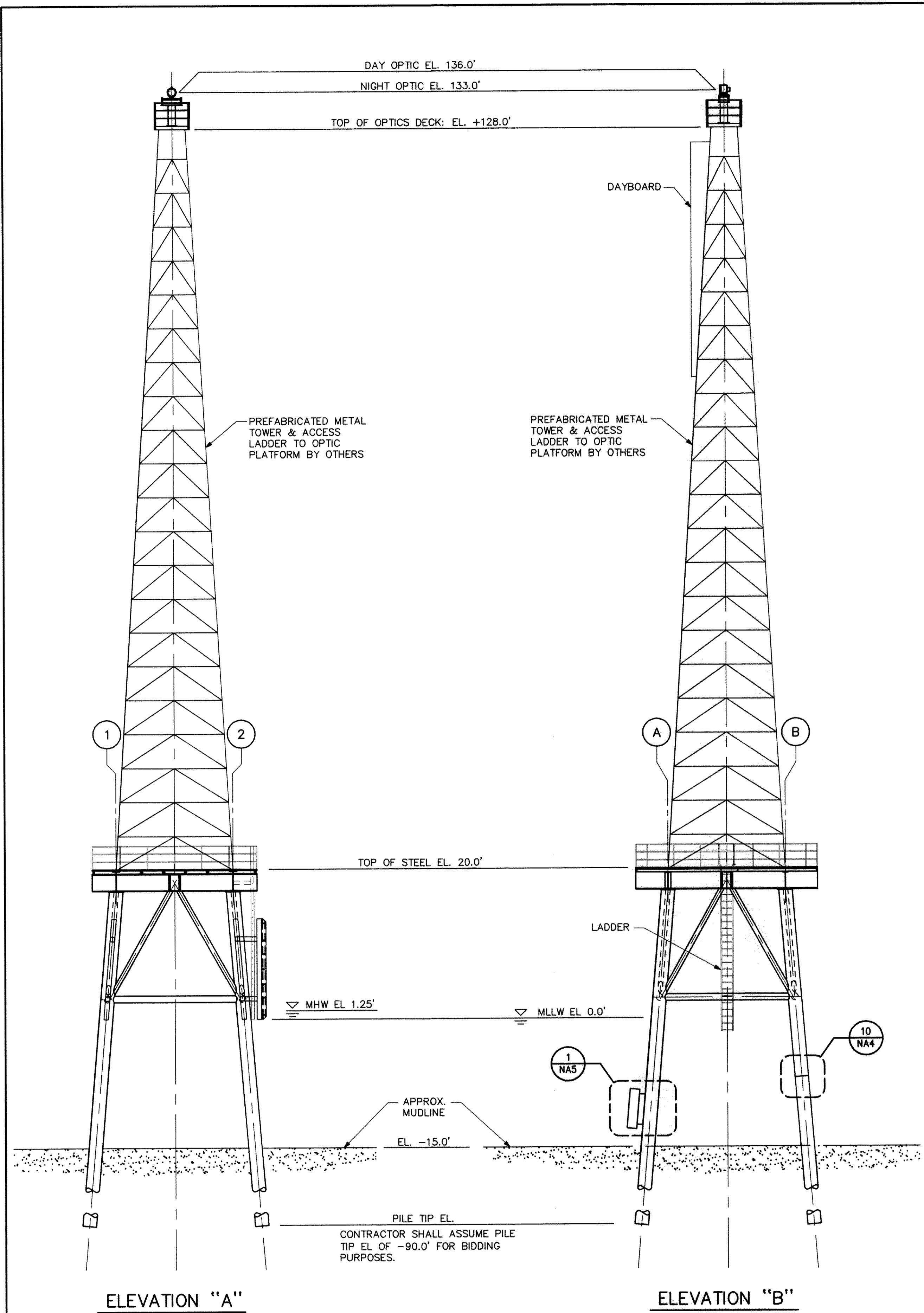
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA1



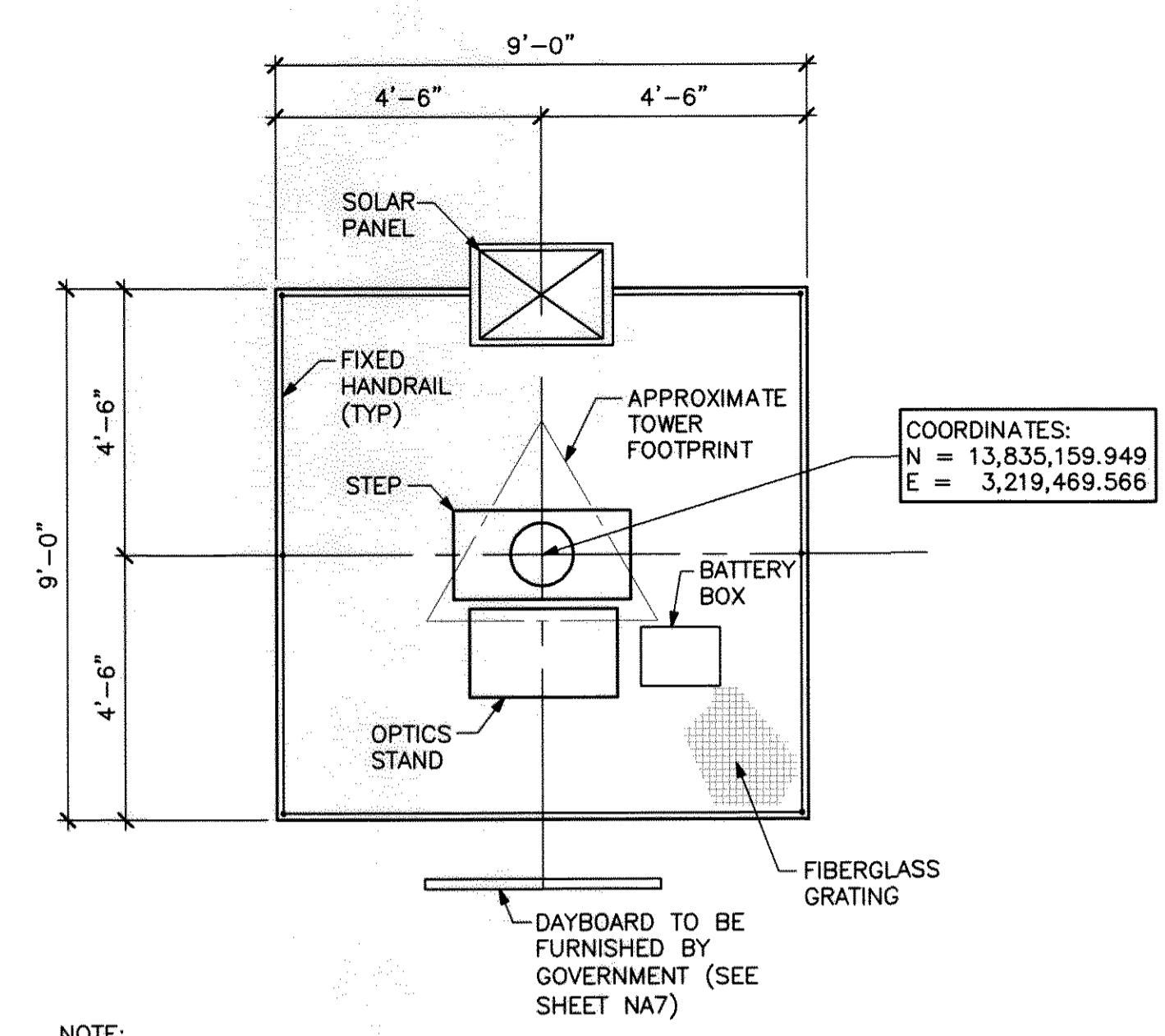
SHEET NO.
NA1

BOSTCO-SSH-CV-NA1



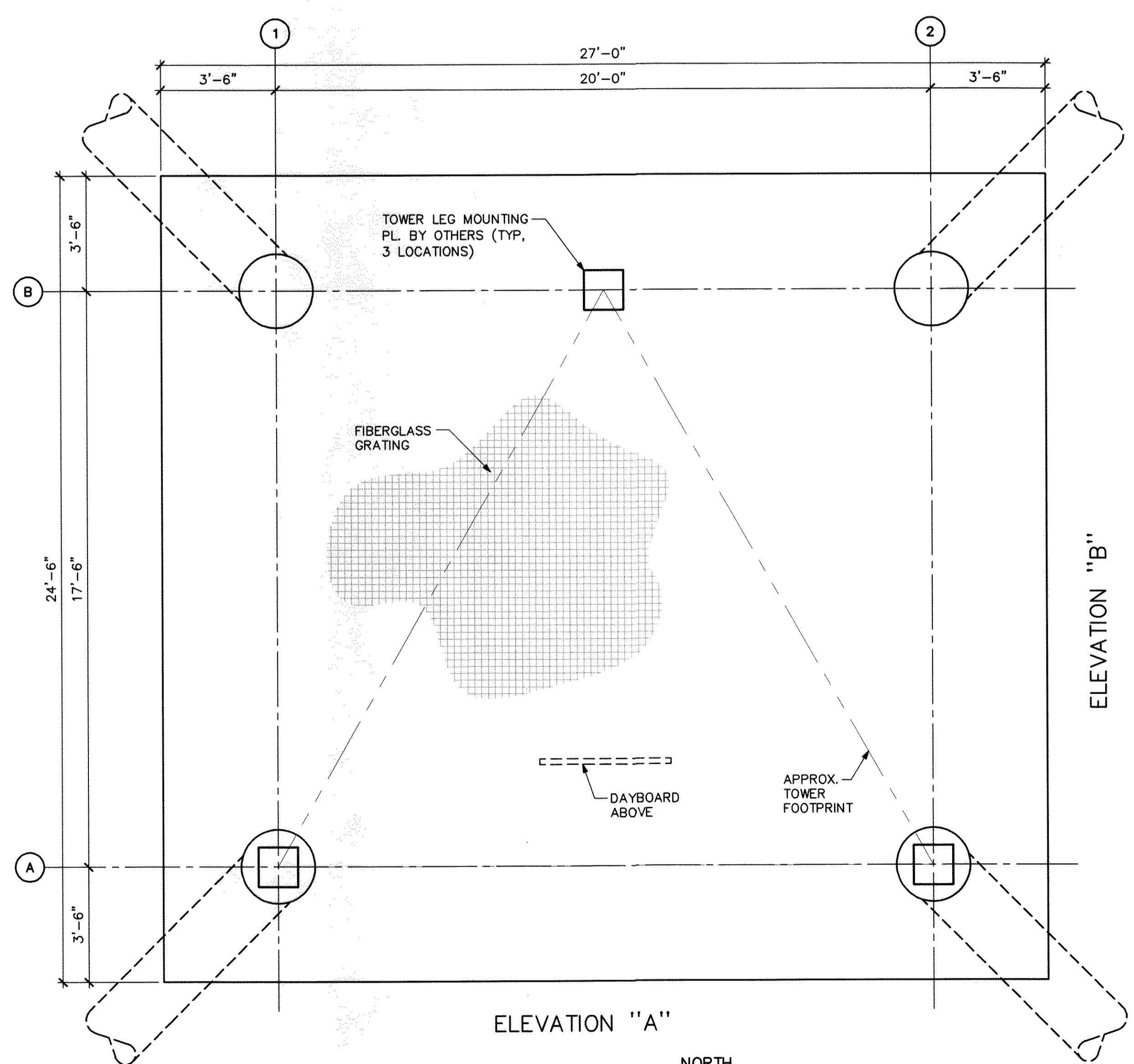
ELEVATION "A"

ELEVATION "B"



NOTE:
 1. LIGHT AND ASSOCIATED ELECTRONICS TO BE FURNISHED BY GOVERNMENT.
 2. TOWER PLATFORM TO BE DESIGNED BY TOWER MANUFACTURER. THE LAYOUT PROVIDES GENERAL DIMENSIONS AND THE LAYOUT OF EQUIPMENT.

OPTIC DECK PLAN
 SCALE: 3/8"=1'-0"



ELEVATION "A"

MAIN DECK PLAN
 SCALE: 3/8"=1'-0"

- DESIGN NOTES:
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
 - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF AWS D1.1 LATEST EDITION AND APPLICABLE RULINGS, SUPPLEMENTS AND ADDENDA.
 - ALL WELDING TO CONFORM TO CONTRACT SPECIFICATIONS.
 - ALL WELDS SHALL BE FULL PENETRATION CONTINUOUS BEVEL WELDS UNLESS NOTED. NON-STRUCTURAL COMPONENTS OF HANDRAILS ARE PERMITTED TO BE FULL STRENGTH FILLET WELDS.
 - PAINTING SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
 - STRUCTURAL SHAPES, PLATES, AND PIPE SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
 - STRUCTURAL SHAPES AND PLATES SHALL BE ASTM A 252, GRADE 50.
 - PIPE (HANDRAILS AND BRACING) SHALL BE ASTM A53, GRADE B.
 - PIPE PILES SHALL BE ASTM A 252, GRADE 3.
 - UNLESS NOTED, ALL BOLTS SHALL BE ASTM A 325.
 - NO MATERIAL OR MEMBER SIZE SUBSTITUTIONS MAY BE MADE WITHOUT ENGINEER'S APPROVAL.
 - ALL FIELD WELDS SHALL BE CLEANED UP BY USING WIRE BRUSH AND COATING TOUCHED UP IN ACCORDANCE WITH THE SPECIFICATIONS.
 - THE PLATFORM STRUCTURE IS DESIGNED FOR THE FOLLOWING TOWER LOADING:
 - TOWER TOTAL SHEAR = 44 KIPS
 - TOWER OVERTURNING MOMENT = 3829 FT.-KIPS
 - LEG TENSION = 201 KIPS
 - LEG COMPRESSION = 220 KIPS
 - CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND FABRICATION OF TOWER AND ALL NECESSARY APPURTENANCES ATTACHED TO THE TOWER INCLUDING DAYBOARD.
 - CONTRACTOR SHALL SUBMIT TOWER SHOP DRAWINGS FOR REVIEW & APPROVAL PRIOR TO ORDERING MATERIAL & FABRICATION.

NO.	DATE	REVISIONS	APP.

BOSTCO
 STORAGE & TERMINAL SERVICES
 PHASE 1 NEW SHIP & BARGE FACILITY
 LOWER PEGGY'S LAKE INBOUND
 RANGE REAR LIGHT
 LAPORTE, TX -
 STRUCTURAL PLAN

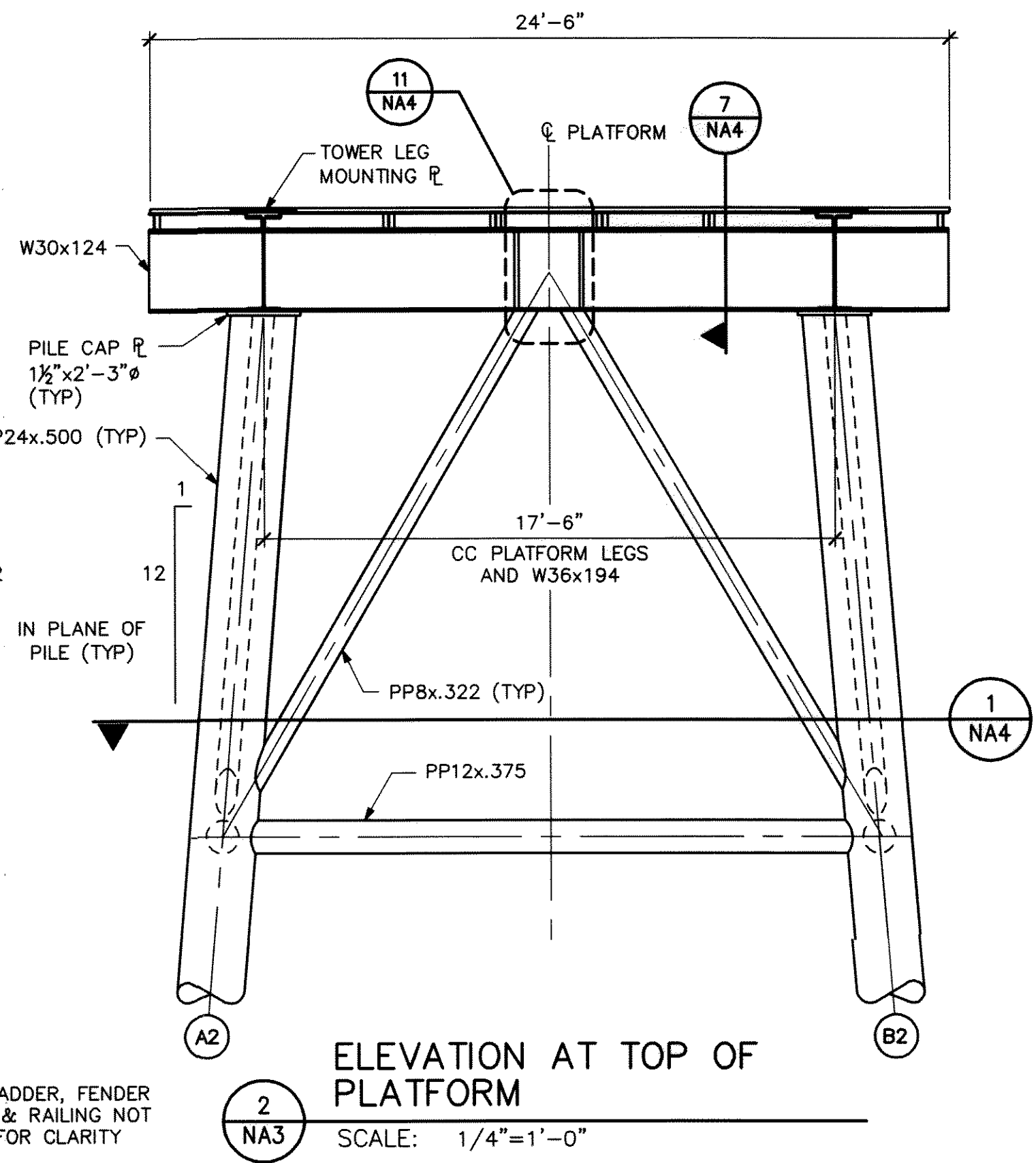
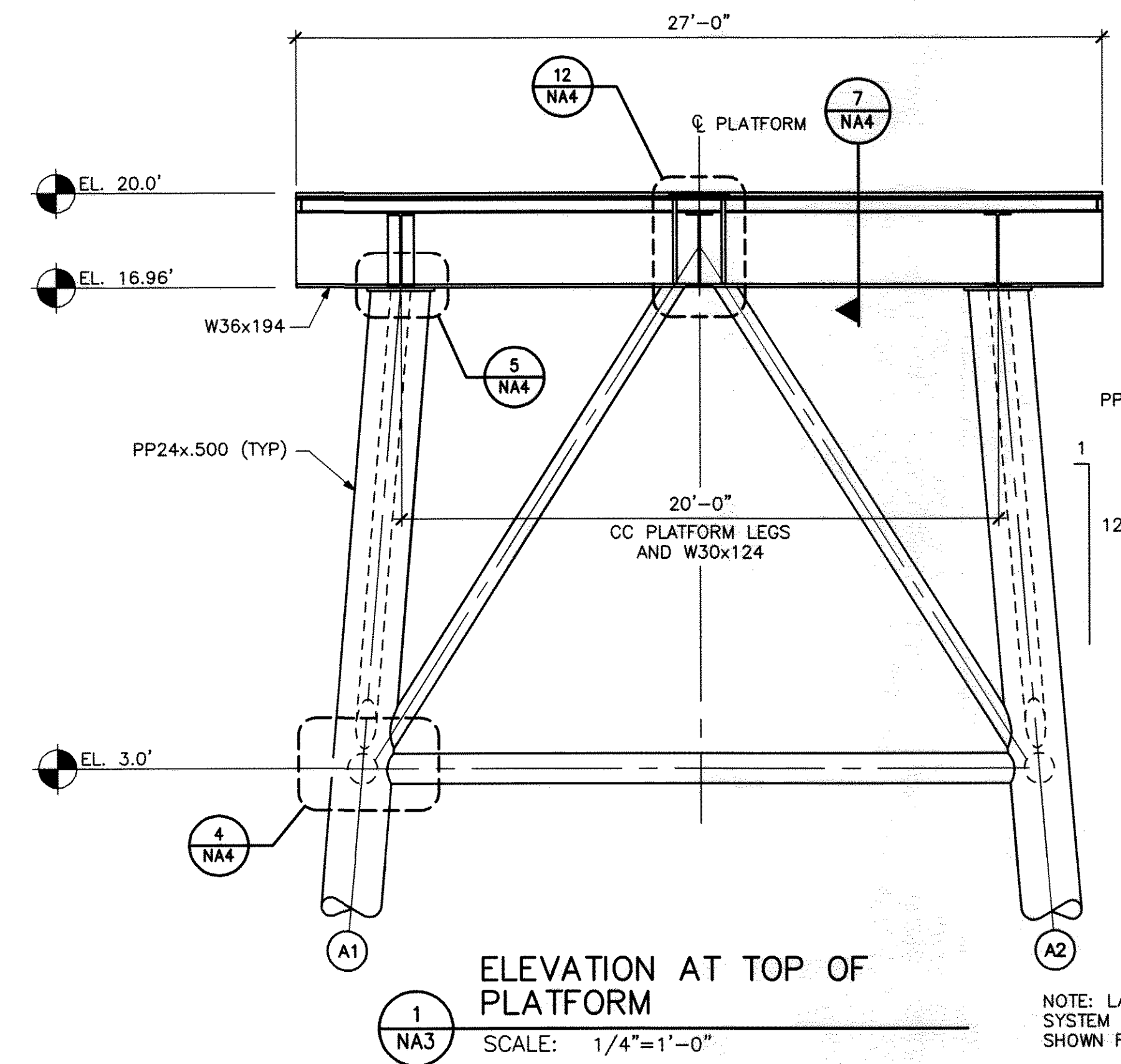
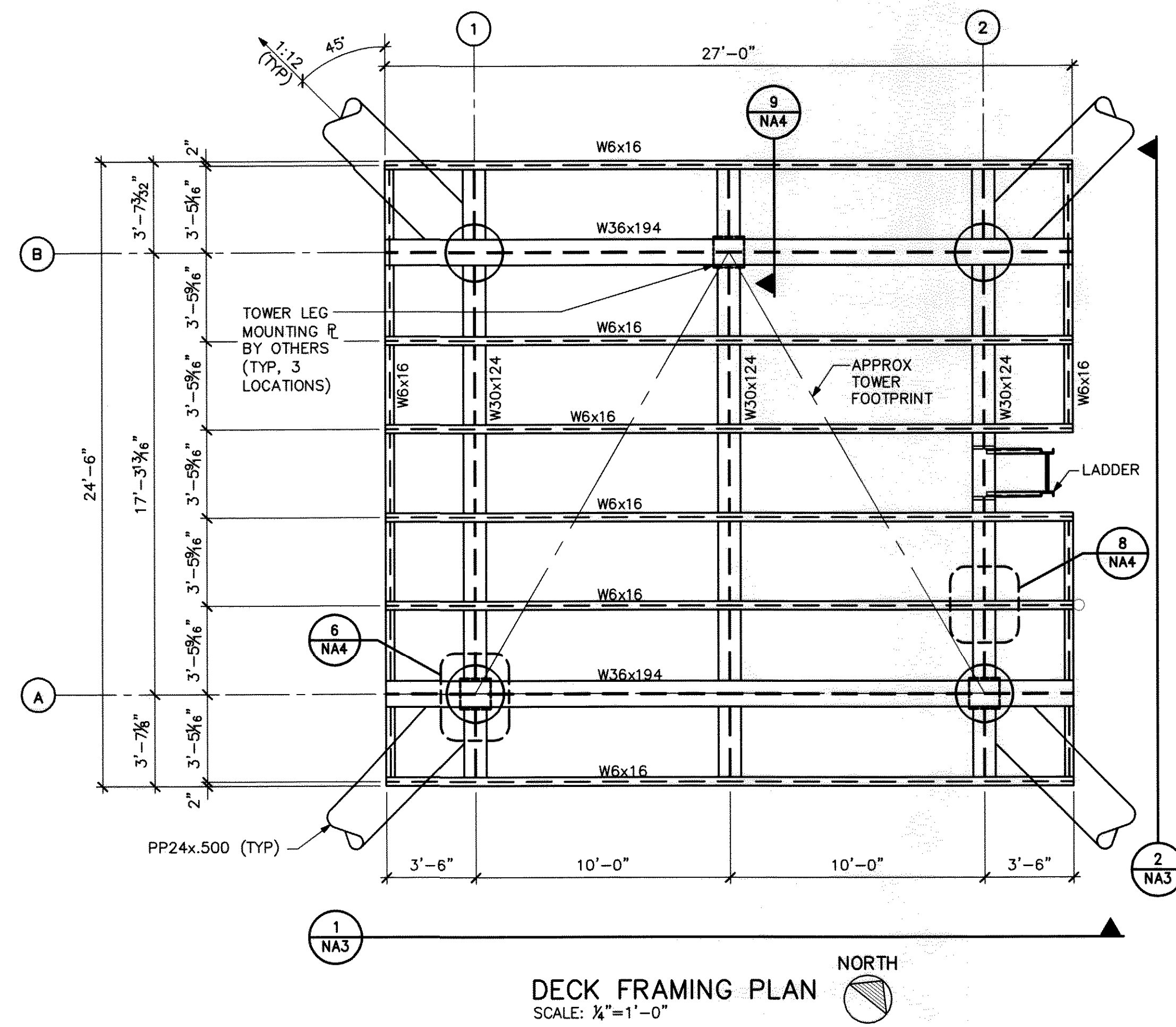
SSH STANLEY SPURLING & HAMILTON, INC.
 Consulting Engineering Services
 T.S.P.E. REGISTRATION #F-000175
 3301 Edloe Street, Suite 200 Houston, Texas 77027
 Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
 DATE: 10-18-11 DWN. BY: TP
 JOB NO. 0896-0002 DWG. NO. 896002-NA2

STATE OF TEXAS
 LOUIS A. HAMILTON
 81477
 LICENSED PROFESSIONAL ENGINEER
 19-11

SHEET NO. NA2

BOSTCO-SSH-CV-NA2



NOTE: LADDER, FENDER SYSTEM & RAILING NOT SHOWN FOR CLARITY

NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES

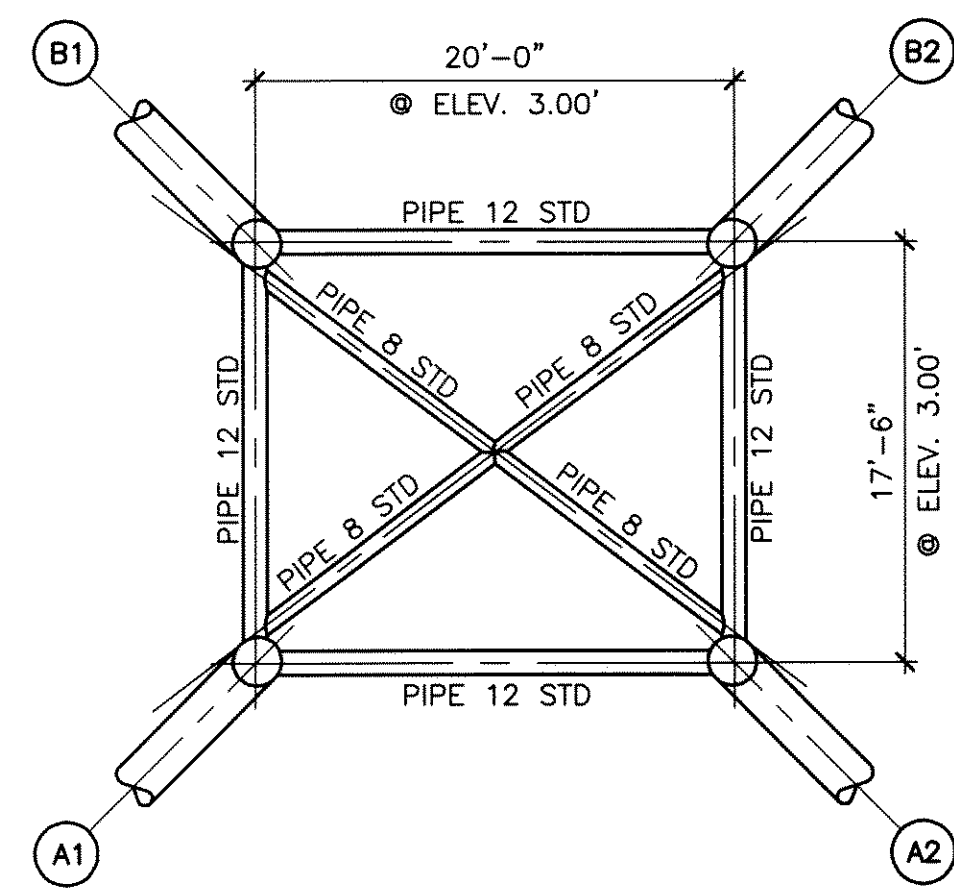
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND RANGE REAR LIGHT
LAPORTE, TX -
MAIN PLATFORM PLAN & ELEVATIONS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

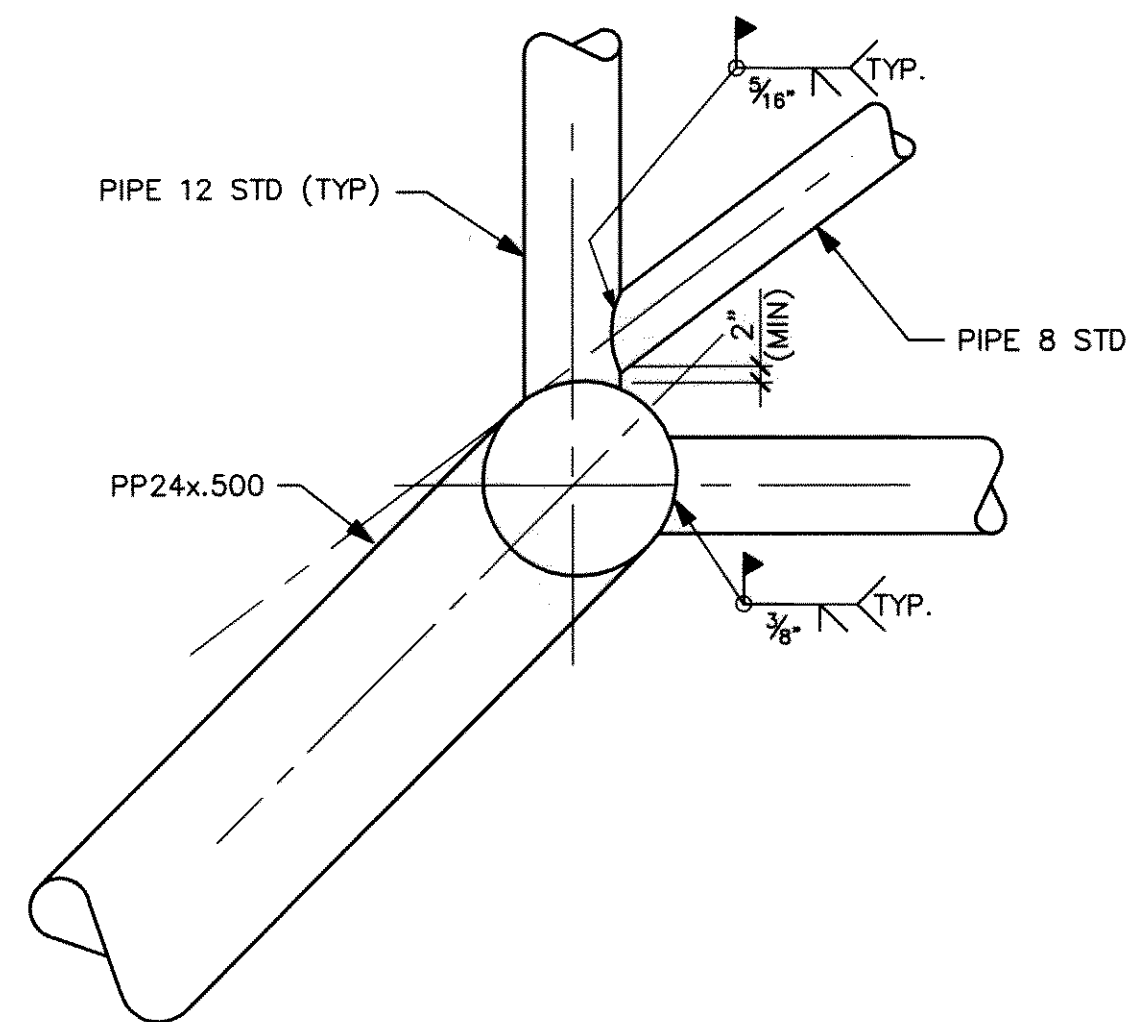
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA3

LOUIS A. HAMILTON
81477
LICENSED PROFESSIONAL ENGINEER
10-19-11

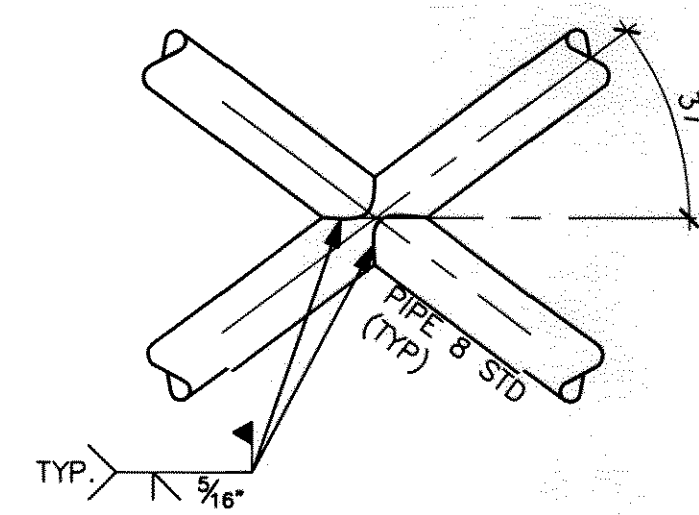
SHEET NO. NA3



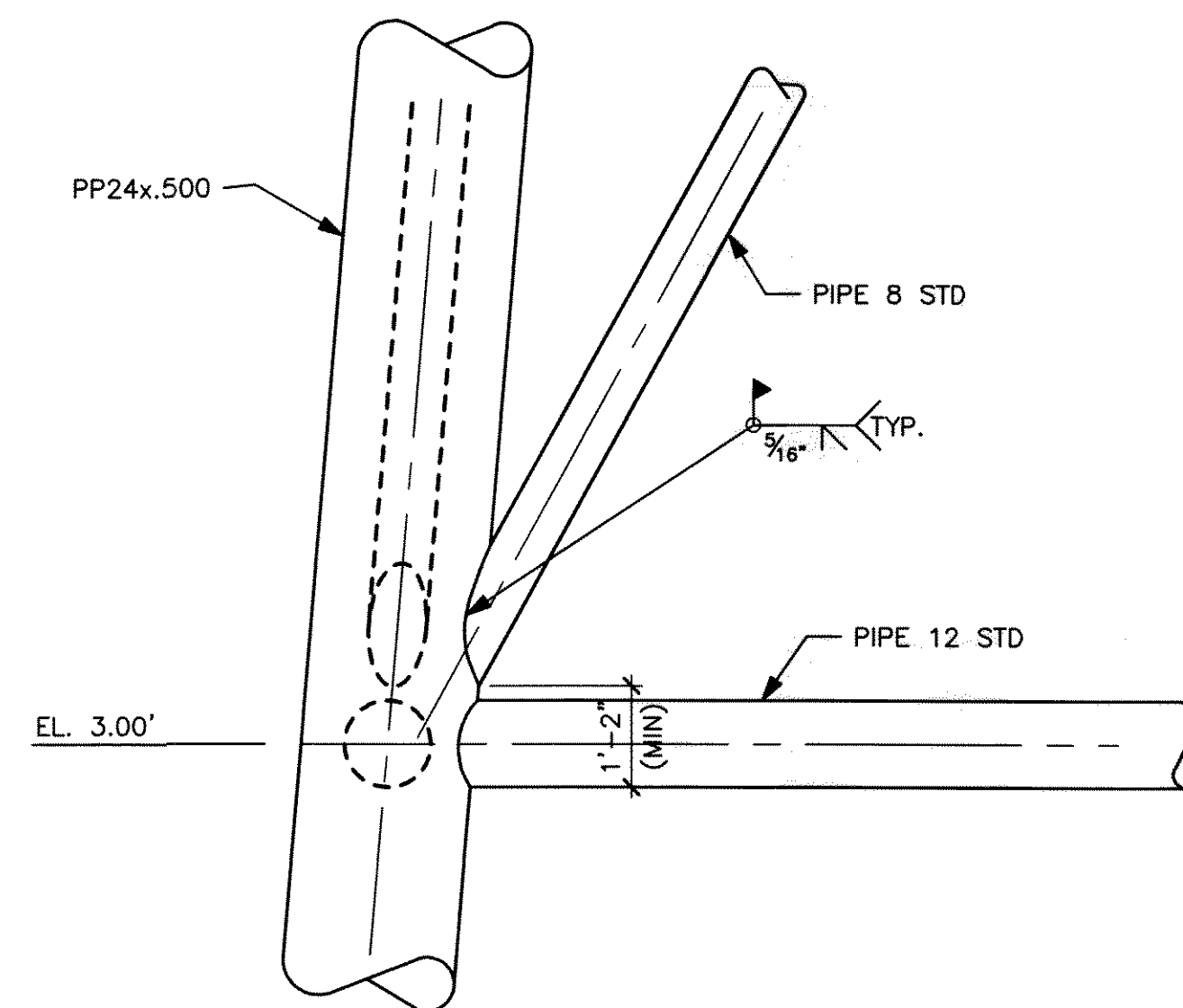
1
NA4 PLAN LOWER HORIZONTAL BRACING (EL 3.0')
SCALE: 1/8"=1'-0"



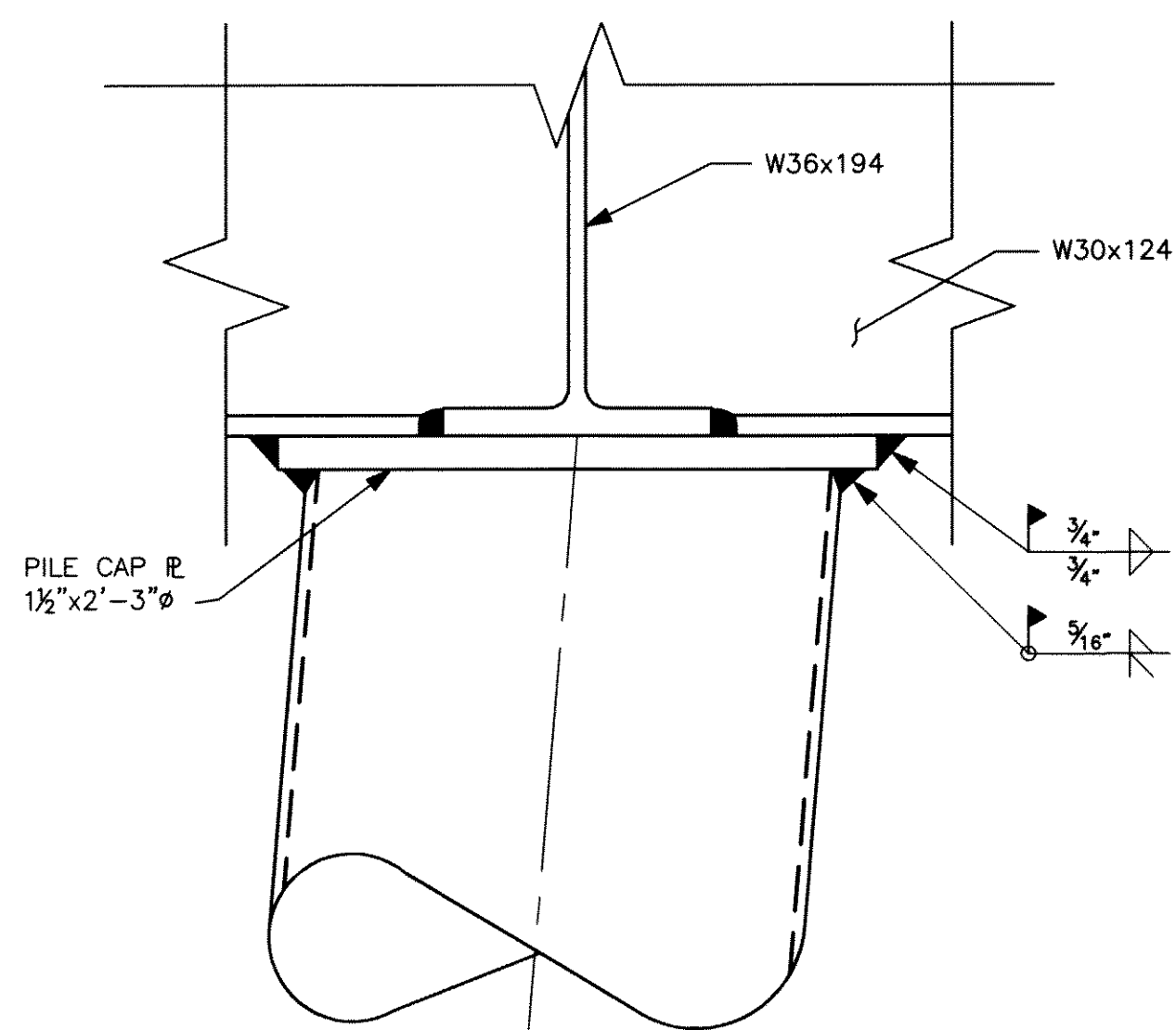
2
NA4 DETAIL BRACING CONNECTIONS (EL 3.0')
SCALE: 1/2"=1'-0"



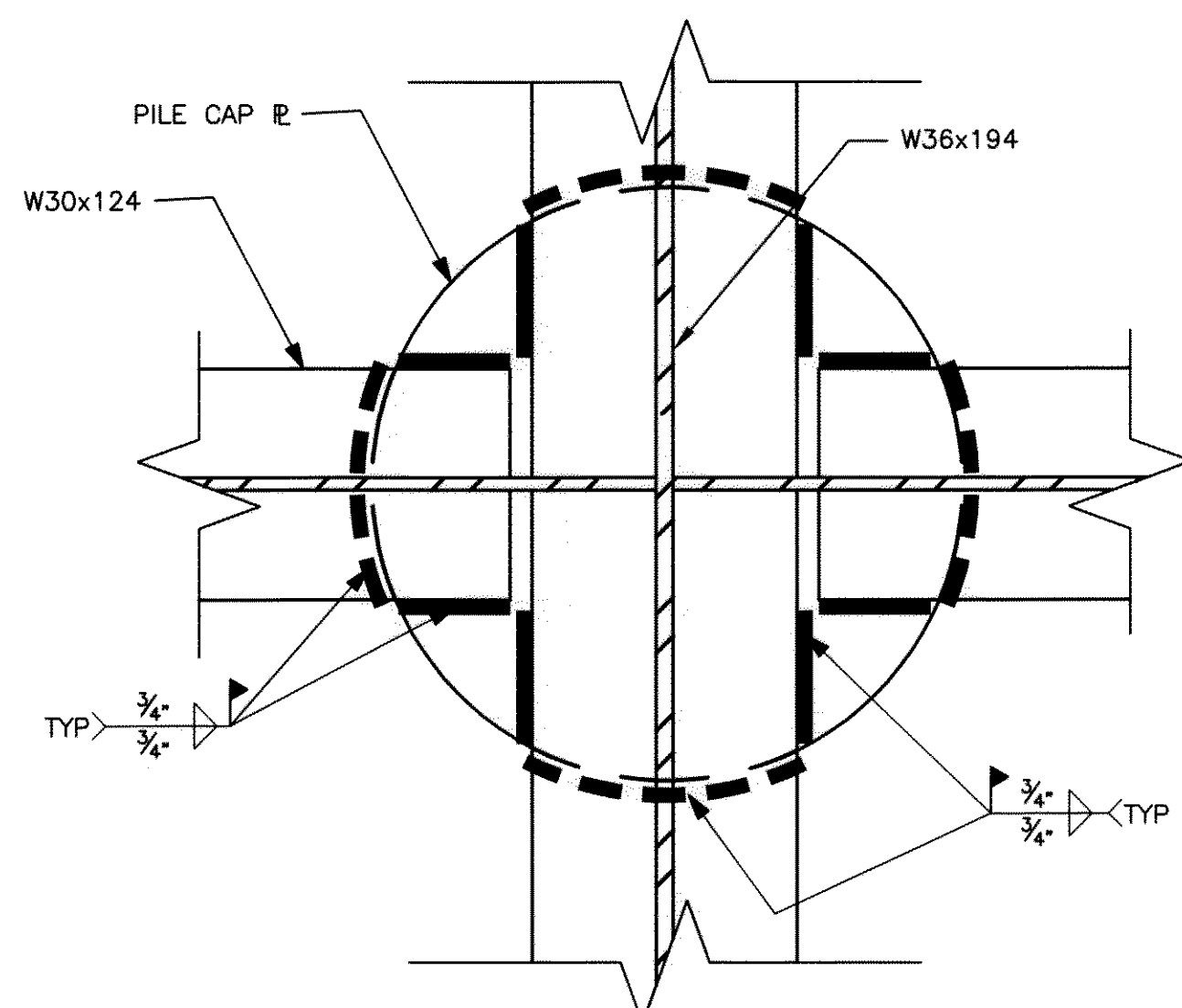
3
NA4 DETAIL BRACING CONNECTIONS (EL 3.0')
SCALE: 1/2"=1'-0"



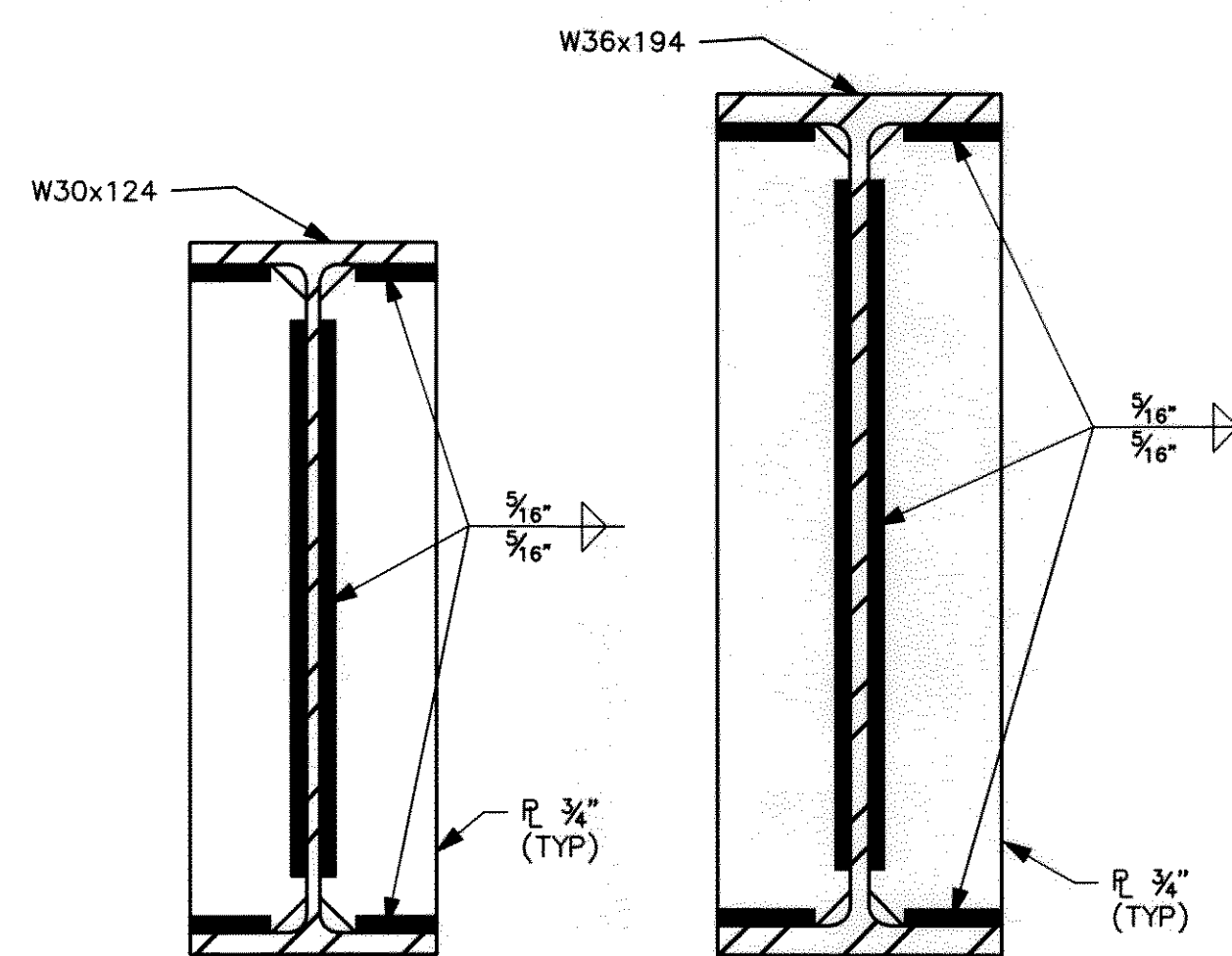
4
NA4 DETAIL PP8x.322 TO PP24x.500 VERTICAL CONNECTION
SCALE: 1/2"=1'-0"



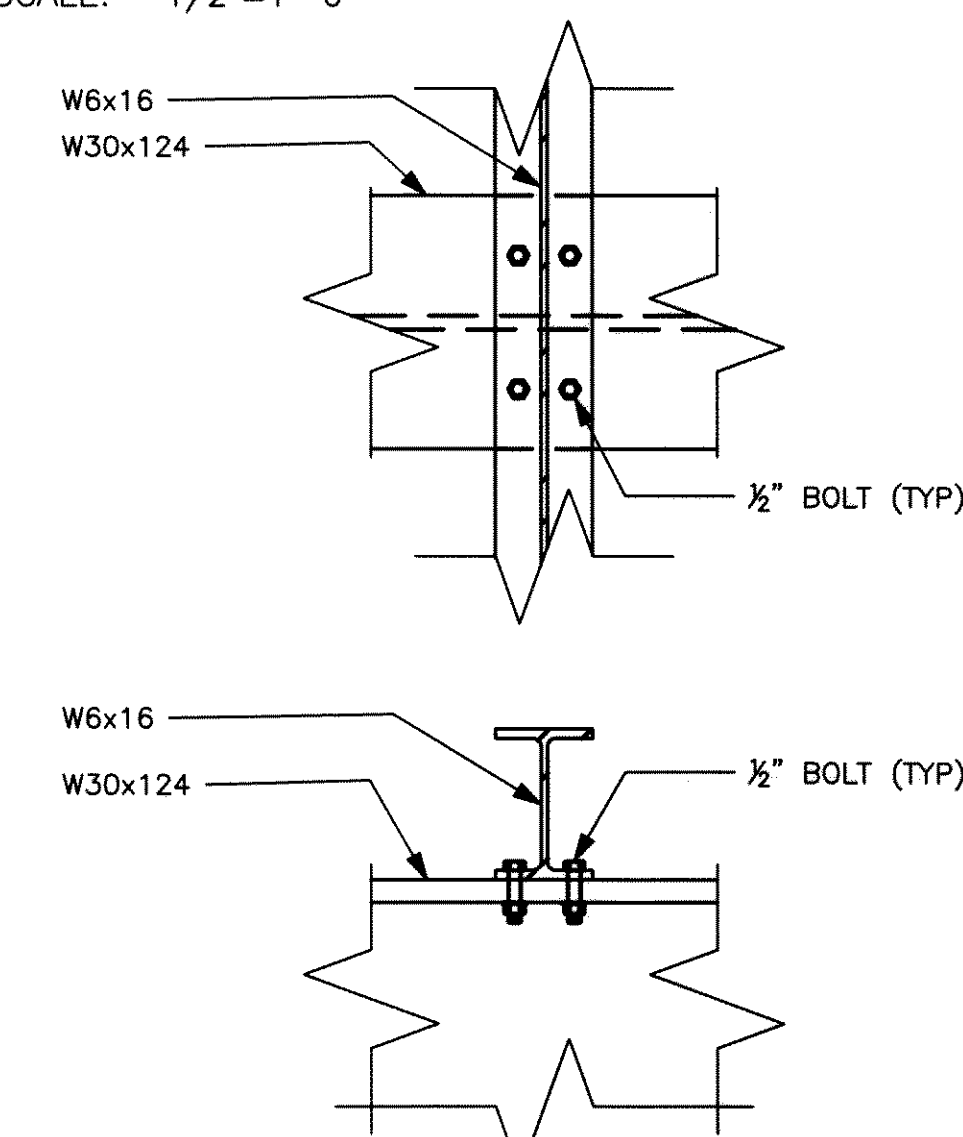
5
NA4 DETAIL PILE TO PILE CAP PLATE CONNECTION (TYP)
SCALE: 1 1/2"=1'-0"



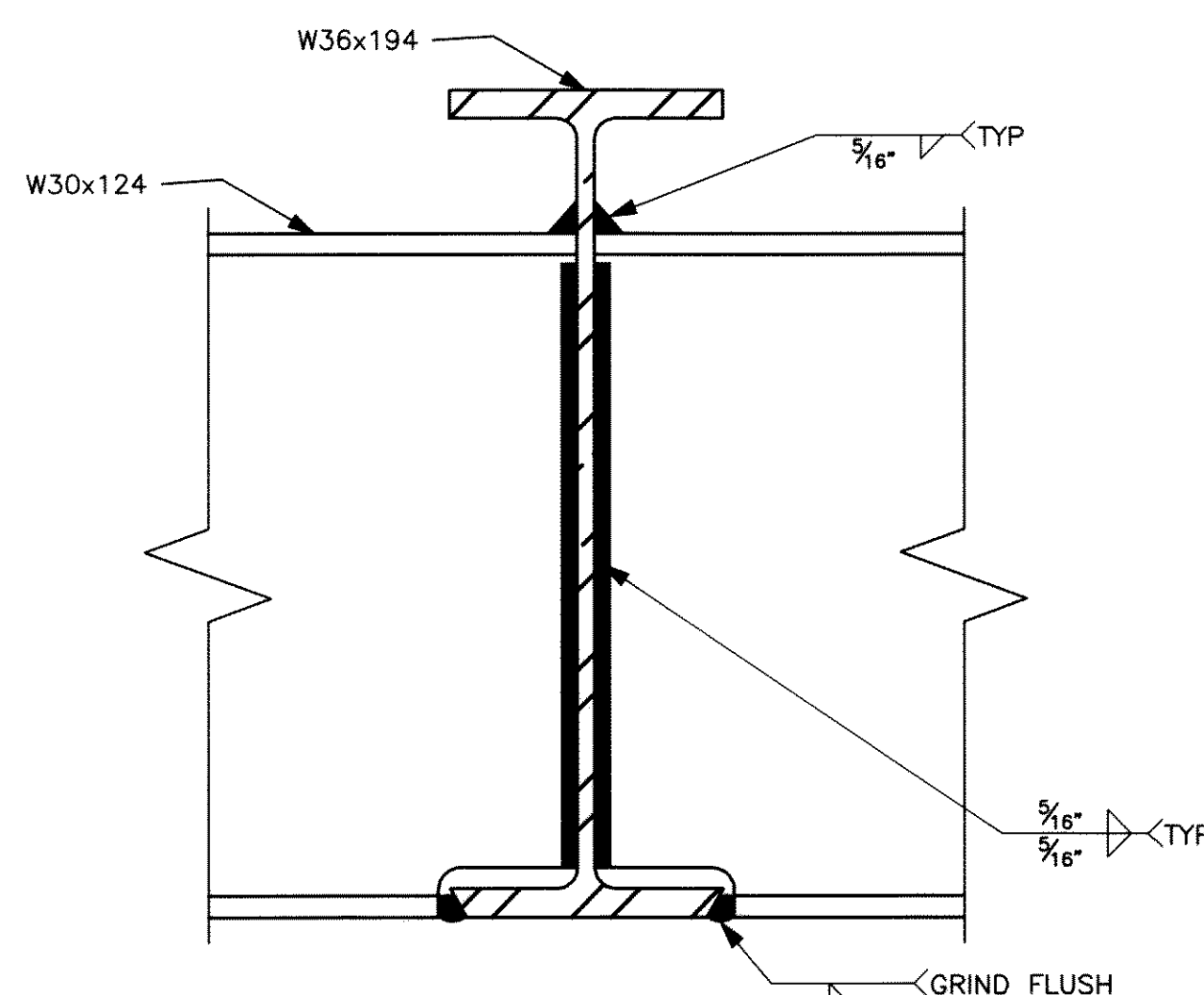
6
NA4 DETAIL PILE CAP PLATE TO W MEMBERS CONNECTION (TYP)
SCALE: 1 1/2"=1'-0"



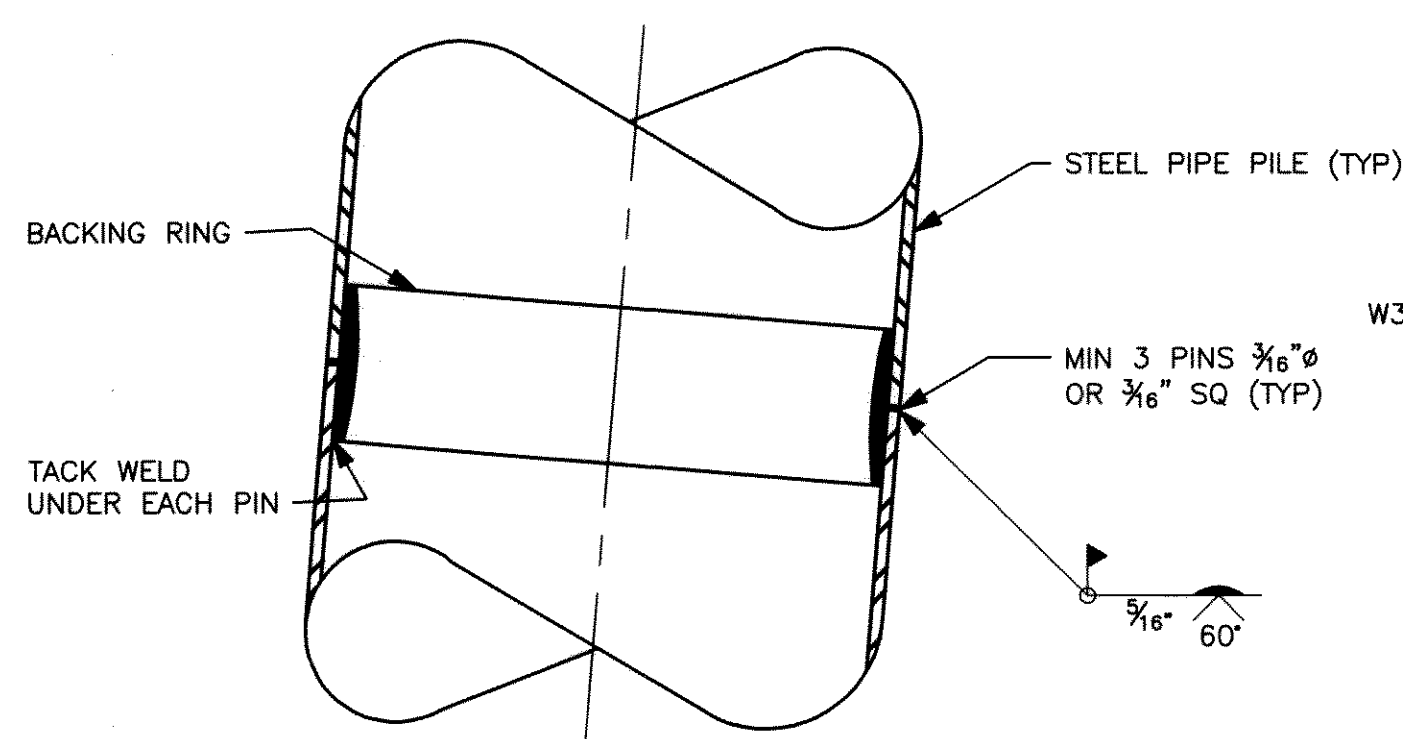
7
NA4 DETAIL W30 AND W36 STIFFENER
SCALE: 1 1/2"=1'-0"



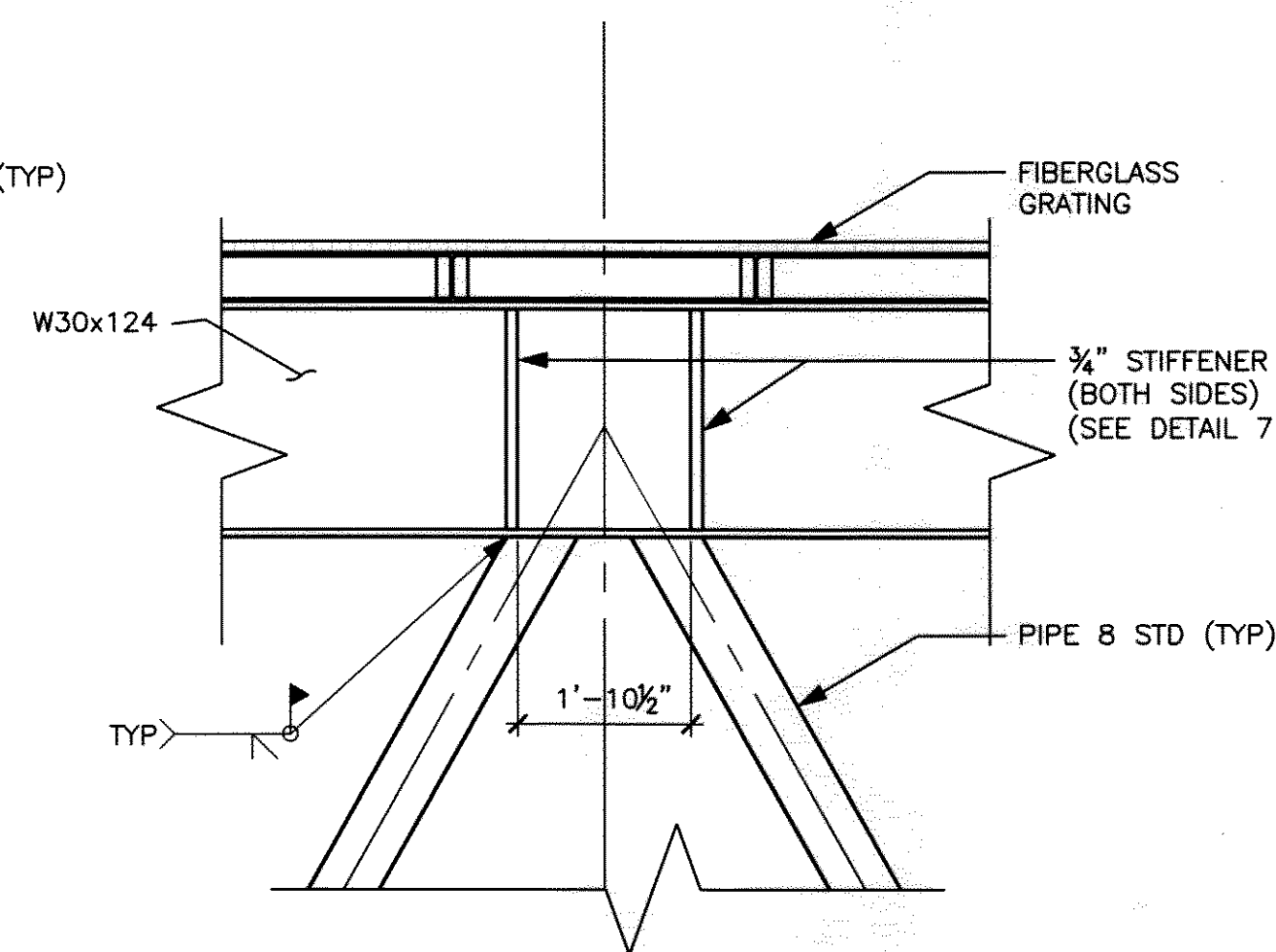
8
NA4 DETAIL (PLAN AND SECTION) W6 TO W30 CONNECTION
SCALE: 1 1/2"=1'-0"



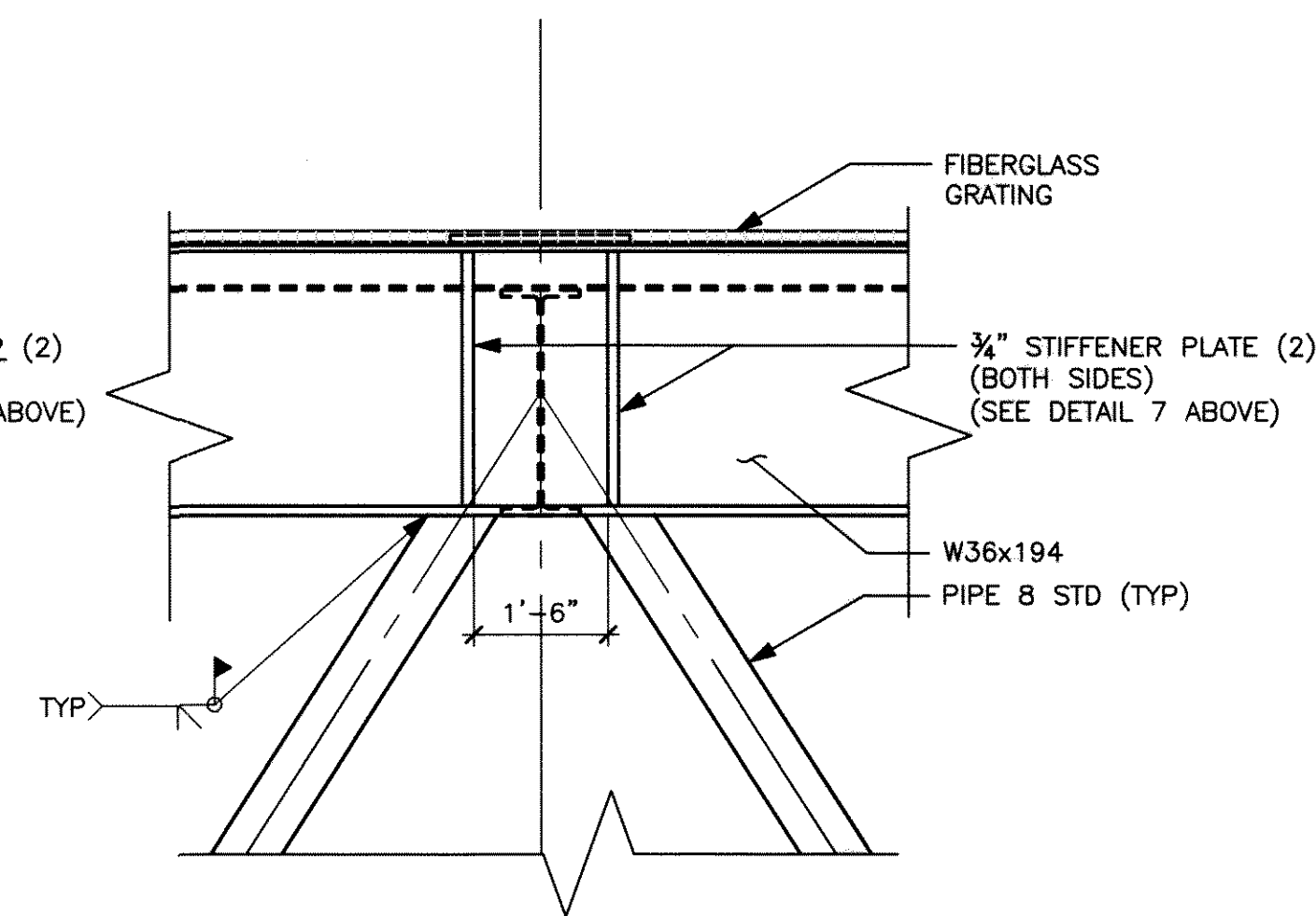
9
NA4 DETAIL W30 TO W36 CONNECTION
SCALE: 1 1/2"=1'-0"



10
NA4 DETAIL STEEL PIPE PILE SPLICE
SCALE: 1 1/2"=1'-0"



11
NA4 DETAIL W30x124 STIFFENER CONNECTION
SCALE: 1/2"=1'-0"



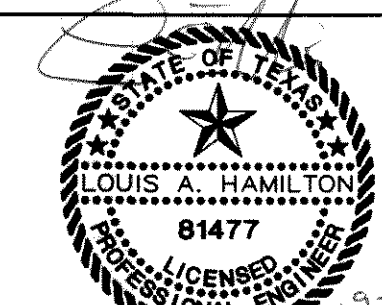
12
NA4 DETAIL W36x194 STIFFENER CONNECTION
SCALE: 1/2"=1'-0"

NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND
RANGE REAR LIGHT
LAPORTE, TX
STRUCTURAL PLATFORM DETAILS

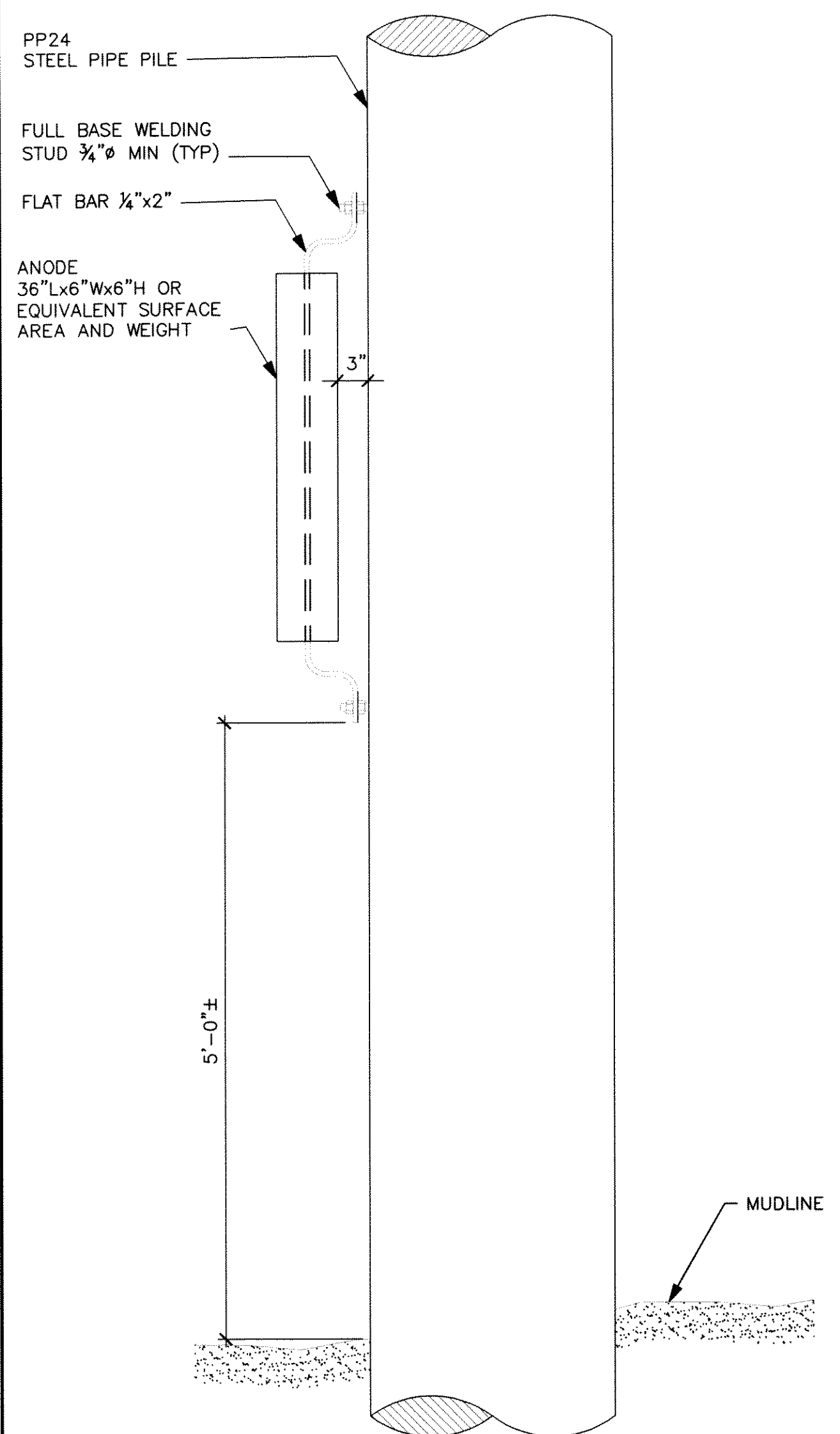
SH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA4

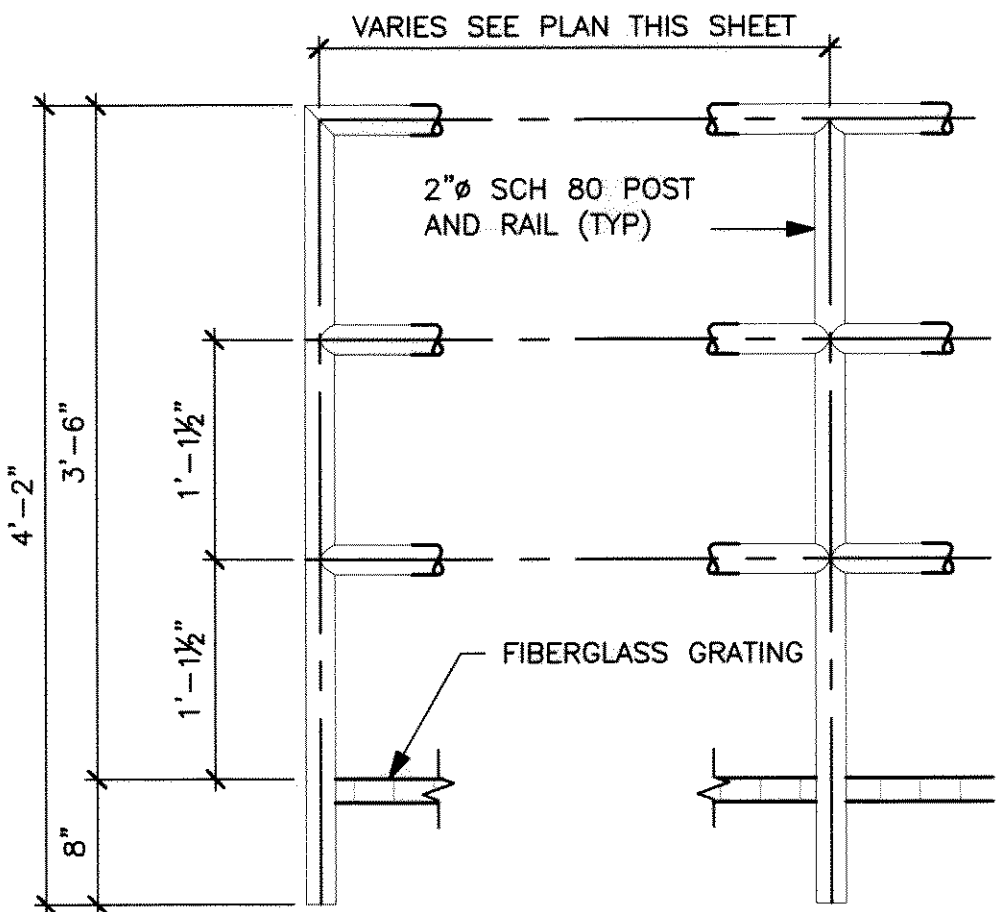


SHEET NO.
NA4

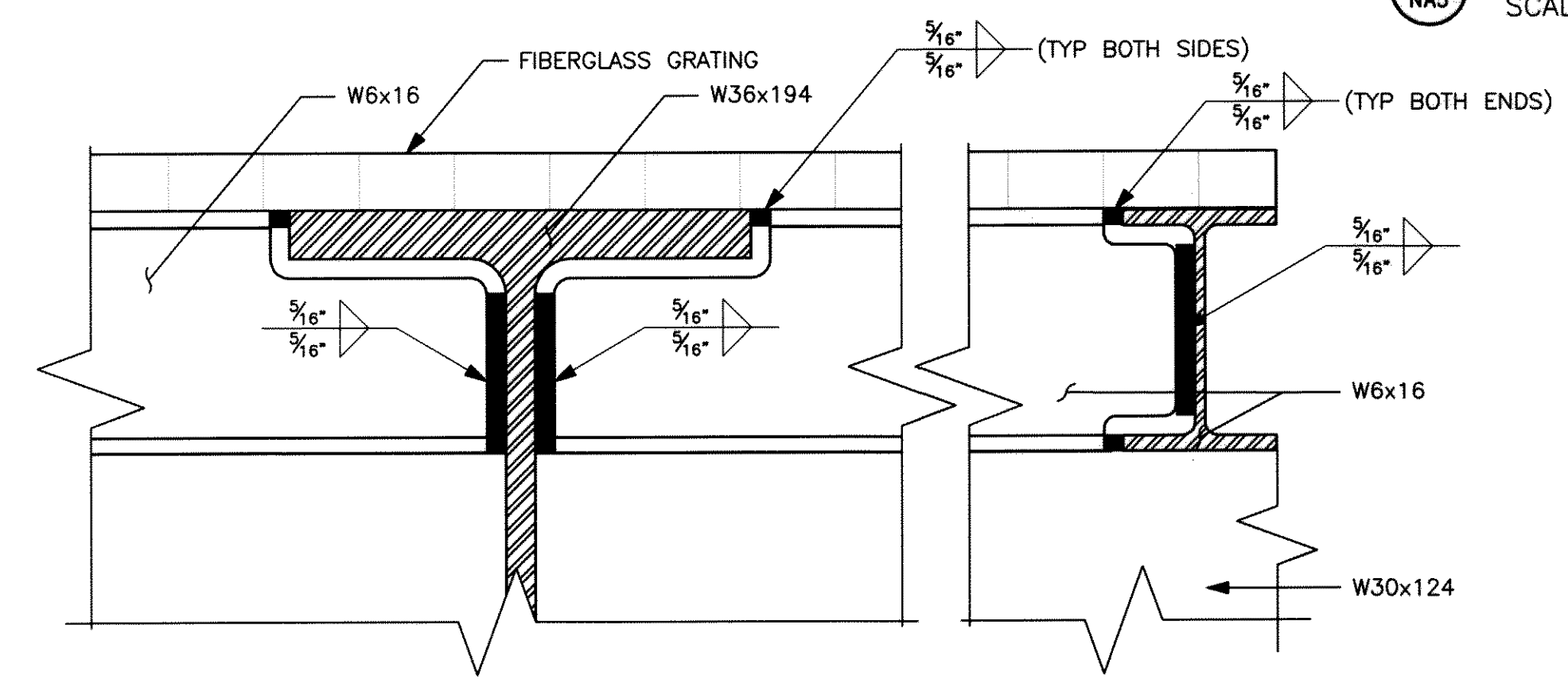
BOSTCO-SSH-CV-NA4



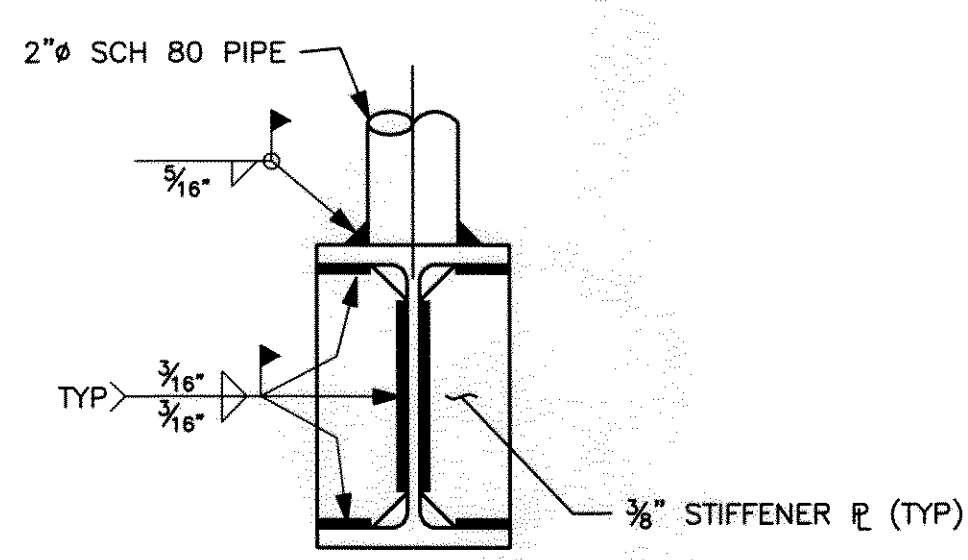
1 ANODE INSTALLATION
SCALE: 1"=1'-0"



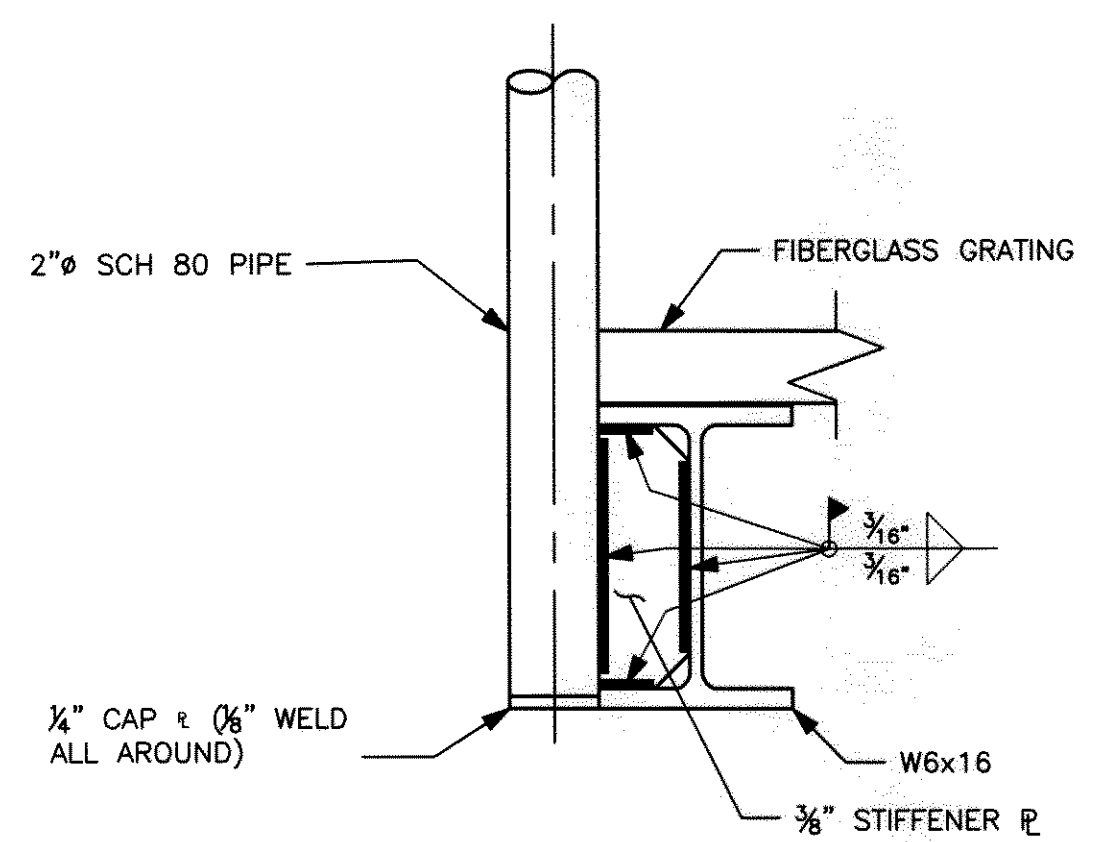
2 ELEVATION DECK RAILING
SCALE: 1 1/2"=1'-0"



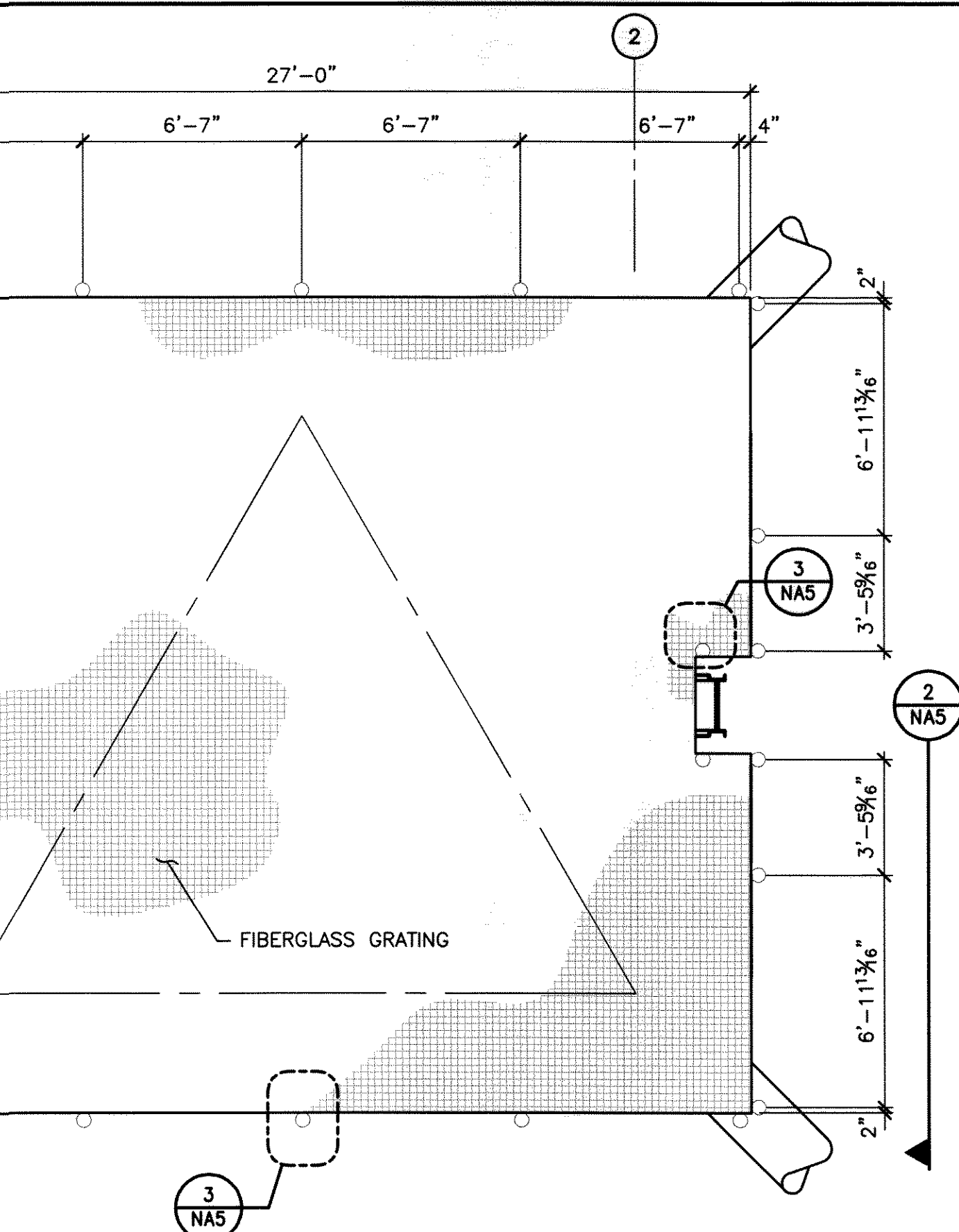
4 DETAIL W6x16 TO W36x194 & W6x16 CONNECTION
SCALE: 1 1/2"=1'-0"



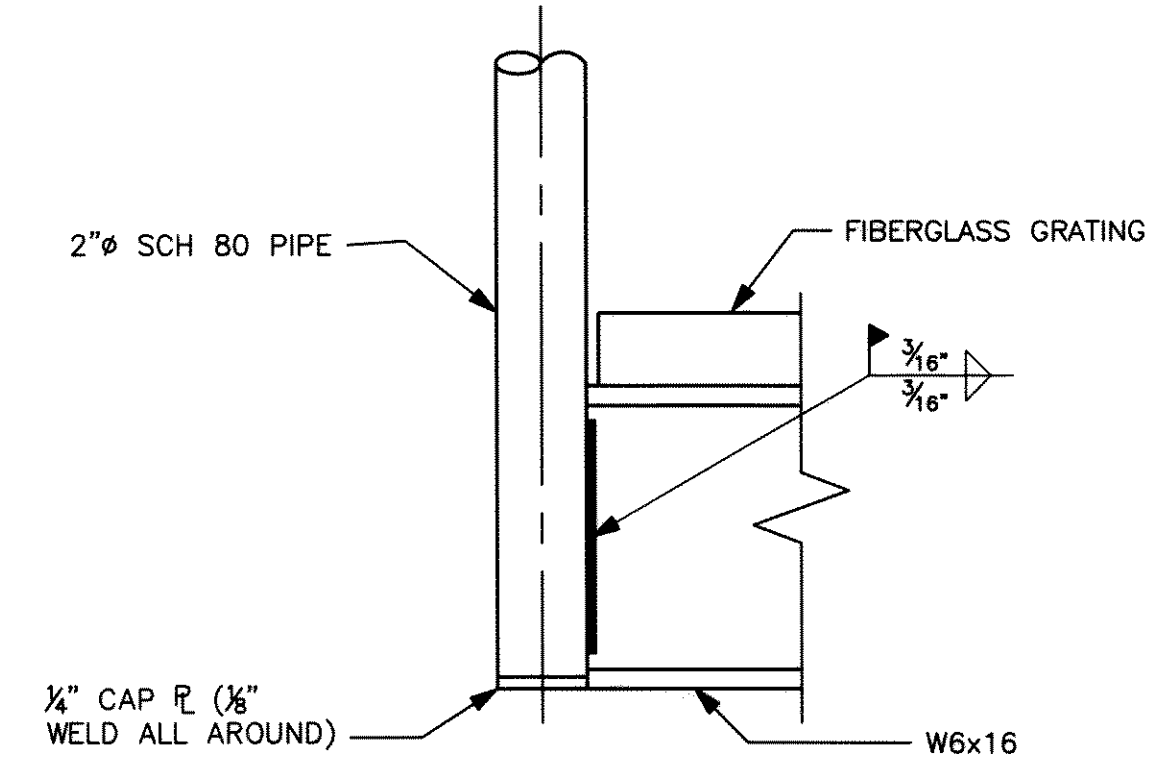
3 DETAIL RAILING TO TOP OF W6x16
SCALE: 3"=1'-0"



5 DETAIL RAILING TO SIDE OF W6x16
SCALE: 3"=1'-0"



PLAN DECK RAILING AND GRATING
SCALE: 1/4"=1'-0"



6 DETAIL RAILING TO END OF W6x16
SCALE: 3"=1'-0"

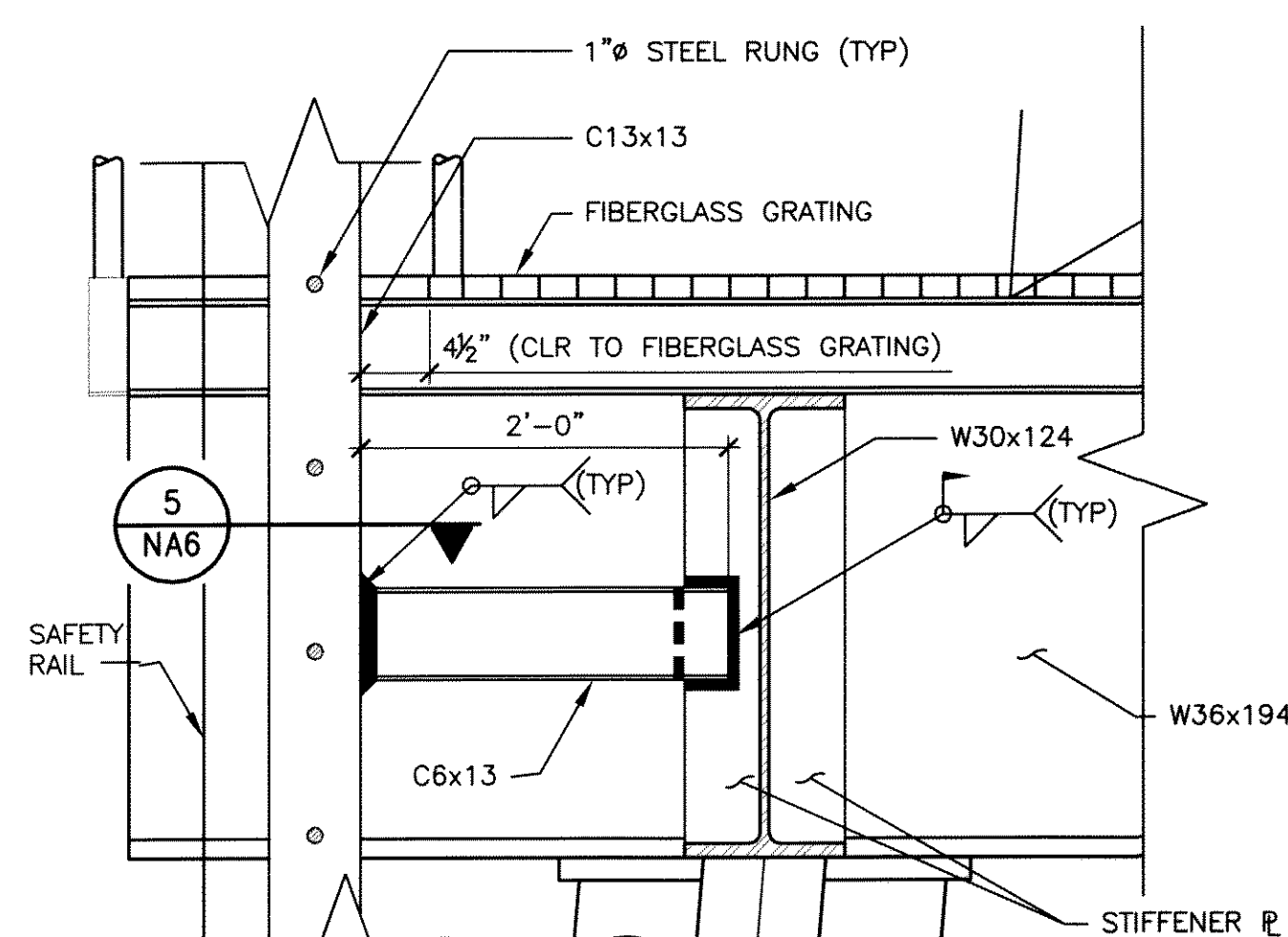
NO.	DATE	REVISIONS	APP.

BOSTCO
 STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND RANGE REAR LIGHT - LAPORTE, TX
STRUCTURAL DECK RAILING AND ANODE DETAILS

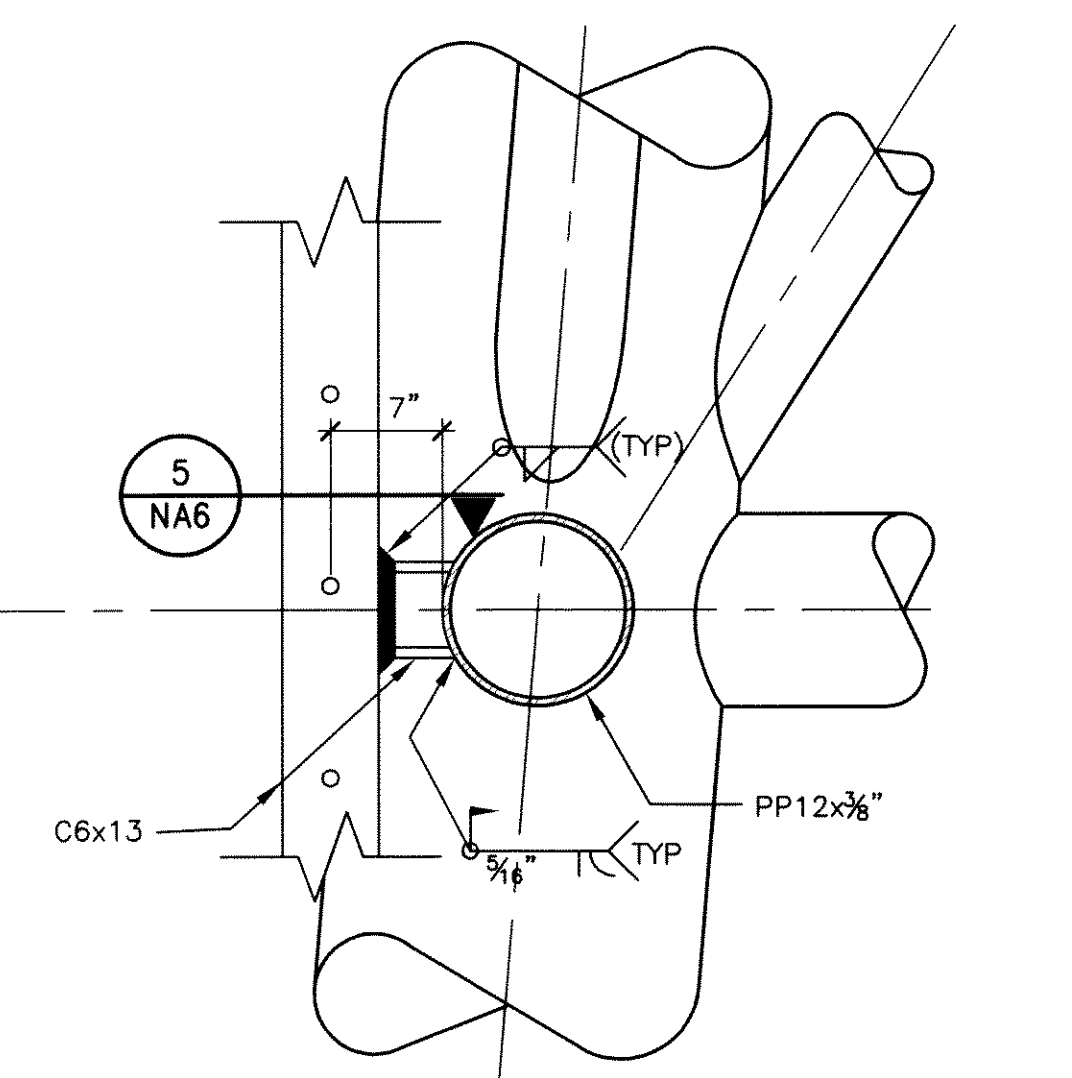
STANLEY SPURLING & HAMILTON, INC.
 Consulting Engineering Services
 T.E.P.E. REGISTRATION # F-000175
 3301 Edloe Street, Suite 200 Houston, Texas 77027
 Phone: 713-776-9433 Fax: 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
 DATE: 10-18-11 DWN. BY: JP
 JOB NO. 0896-0002 DWG. NO. 896002-NA5

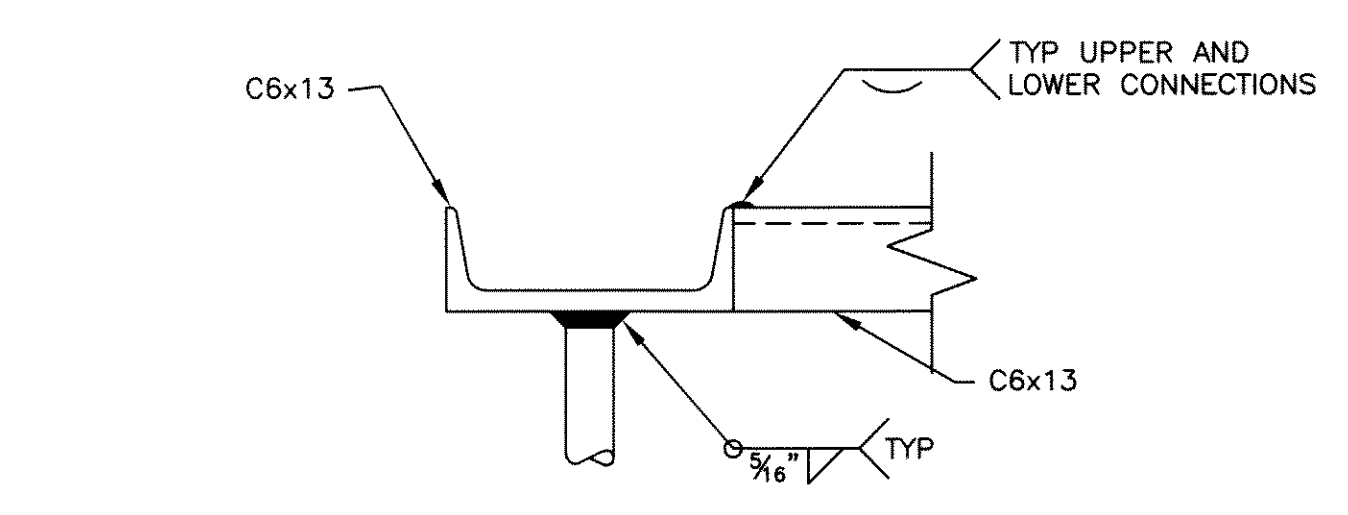
SHEET NO.
NA5



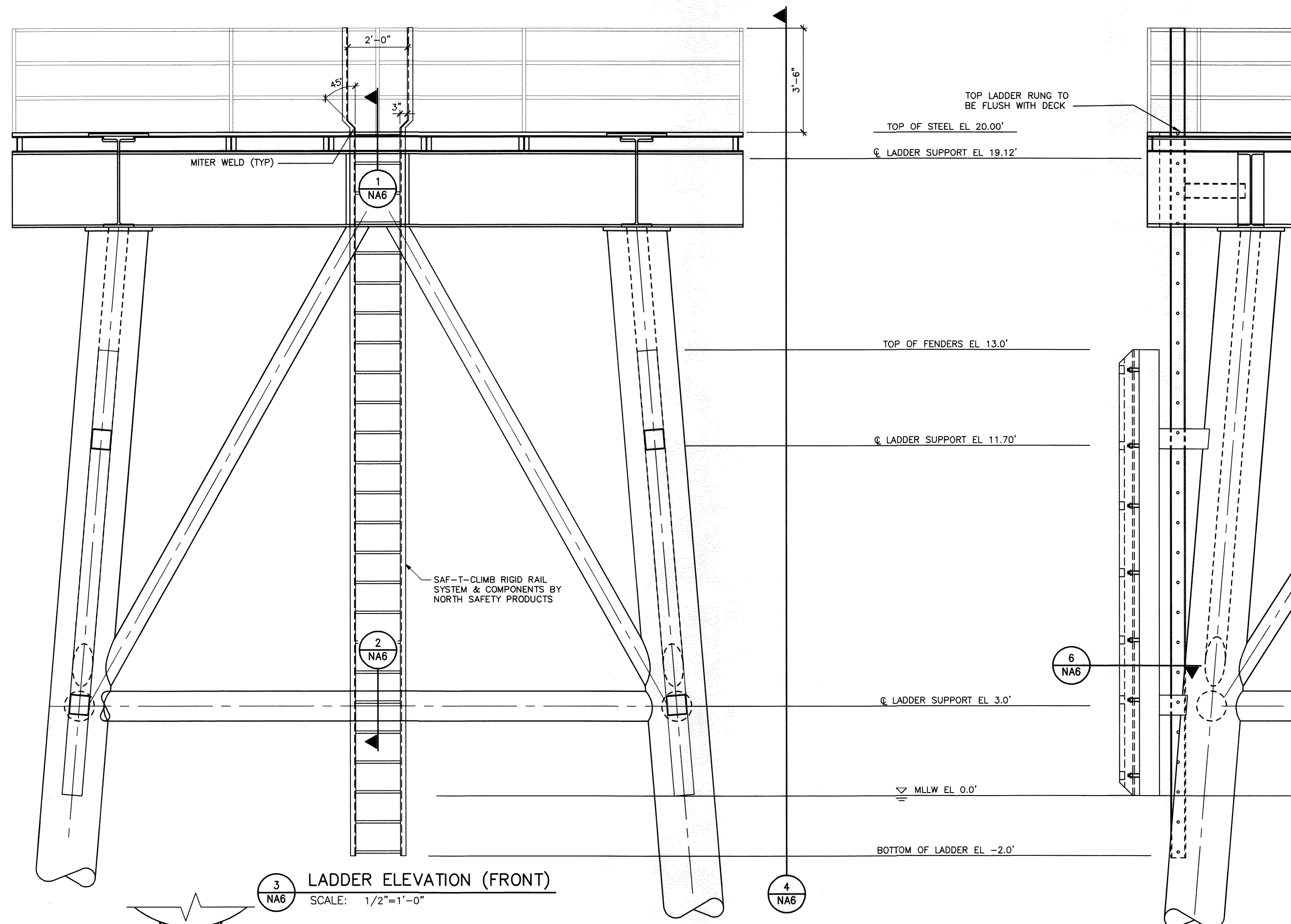
SECTION UPPER LADDER CONNECTION
SCALE: 1"=1'-0"



SECTION LOWER LADDER CONNECTION
SCALE: 1"=1'-0"

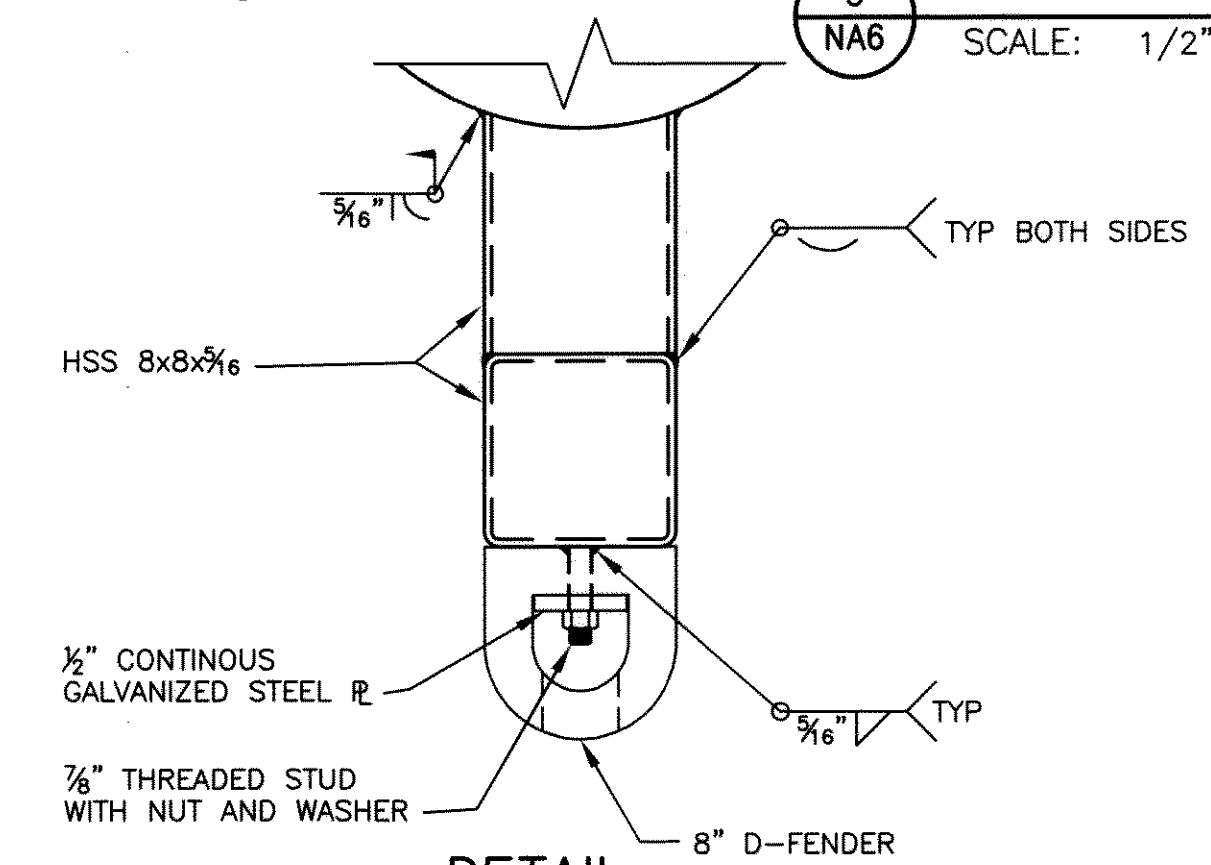


RUNG CONNECTION AND LOWER AND UPPER SUPPORT CONNECTION
SCALE: 3"=1'-0"



LADDER ELEVATION (FRONT)
SCALE: 1/2"=1'-0"

LADDER ELEVATION (SIDE)
SCALE: 1/2"=1'-0"



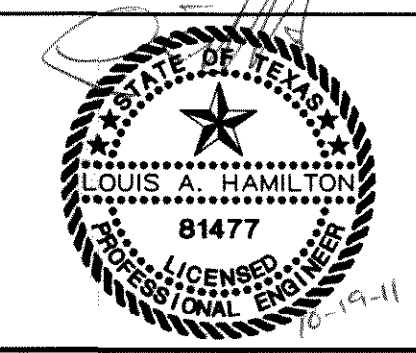
DETAIL FENDER
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISIONS	APP.

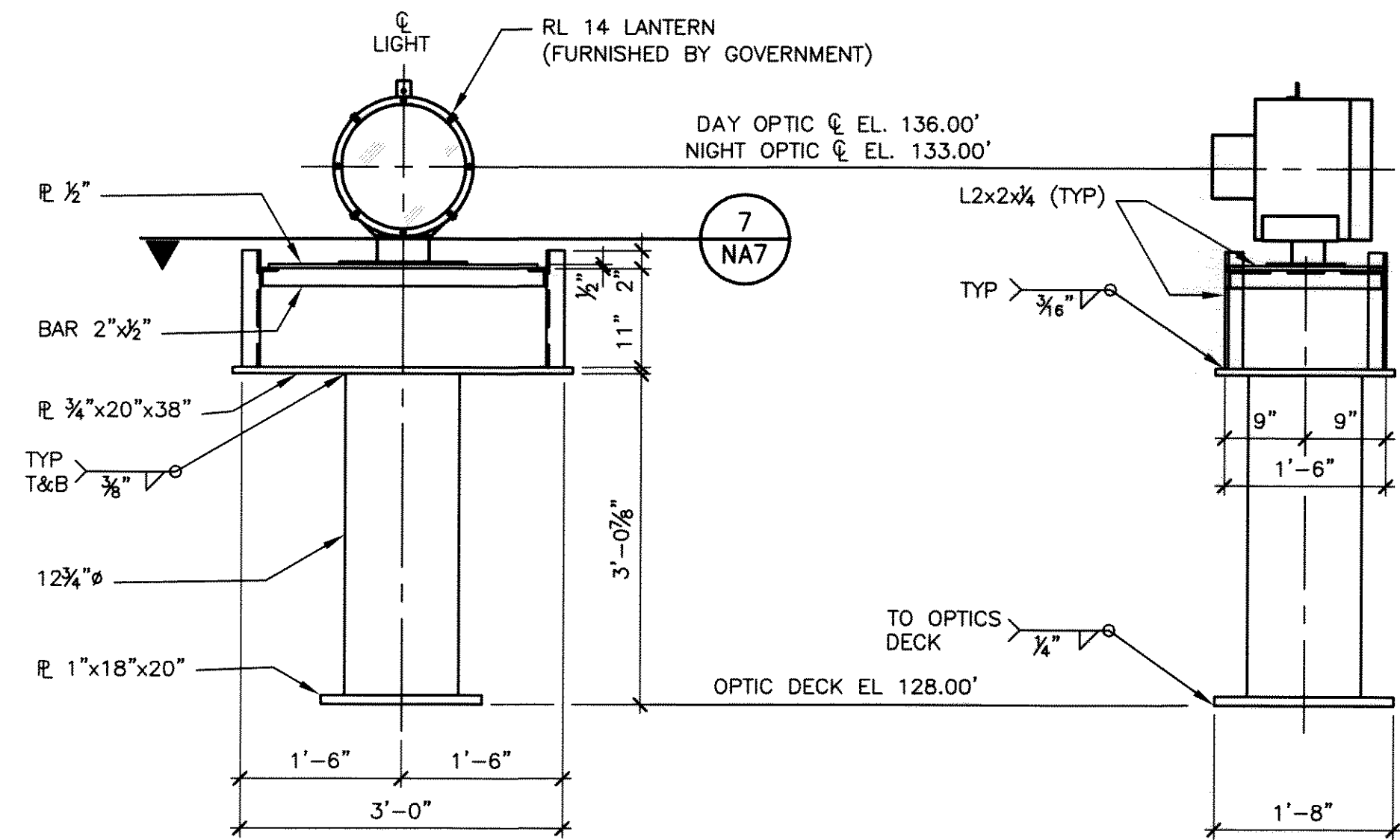
BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND
RANGE REAR LIGHT - LAPORTE, TX
STRUCTURAL LADDER AND
RUBSTRIP DETAILS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

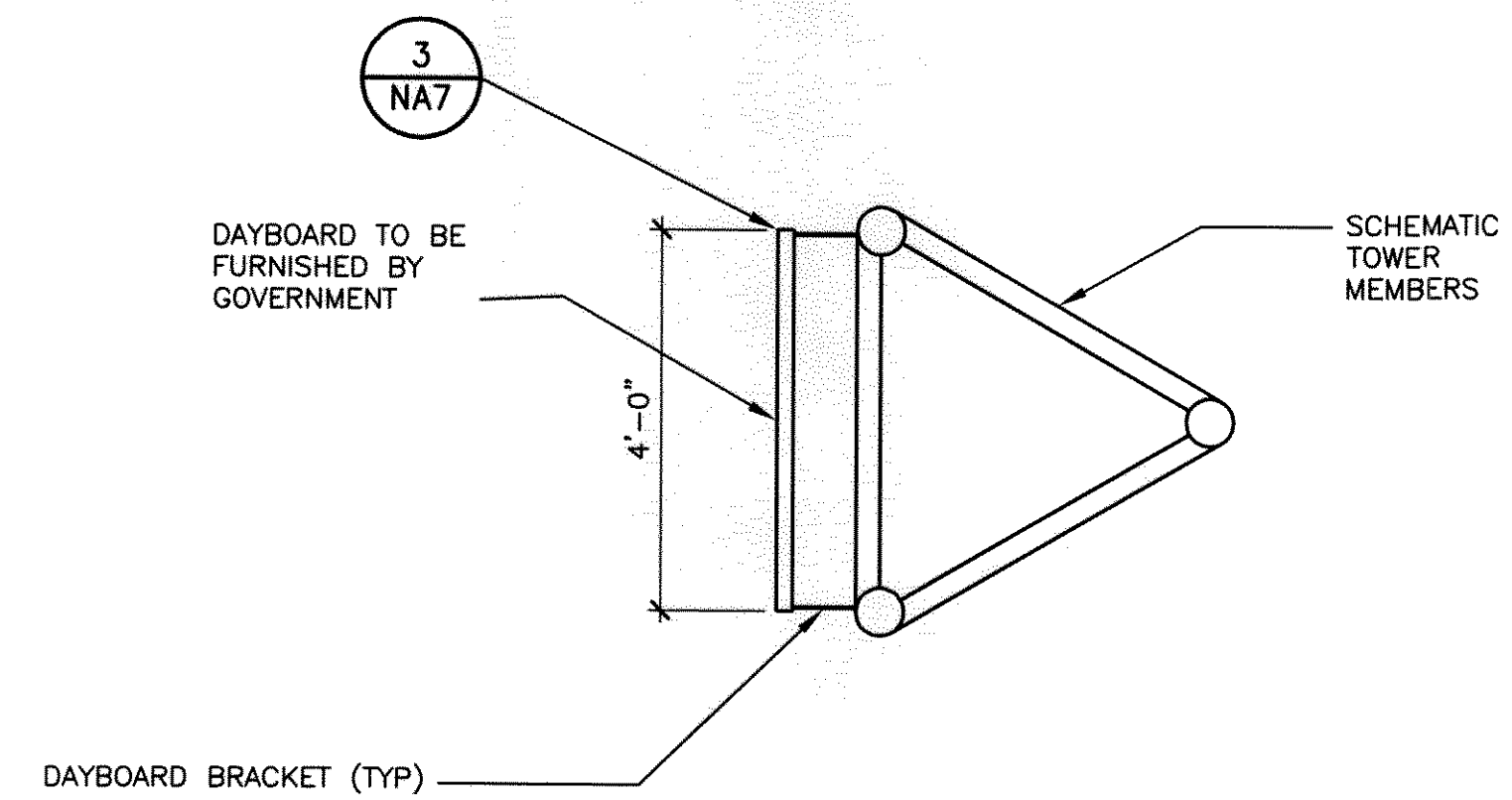
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA6



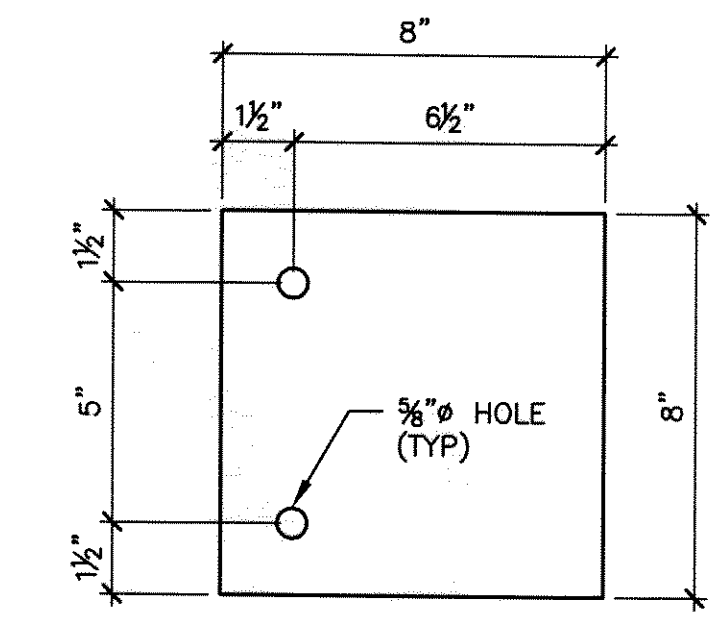
SHEET NO.
NA6



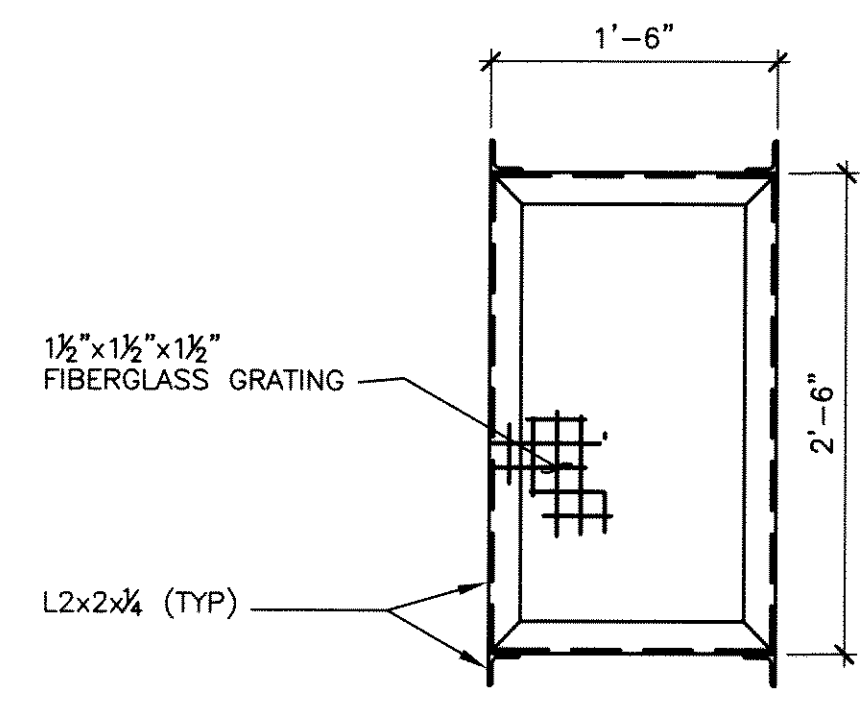
1 OPTIC STAND
SCALE: 3/4"=1'-0"



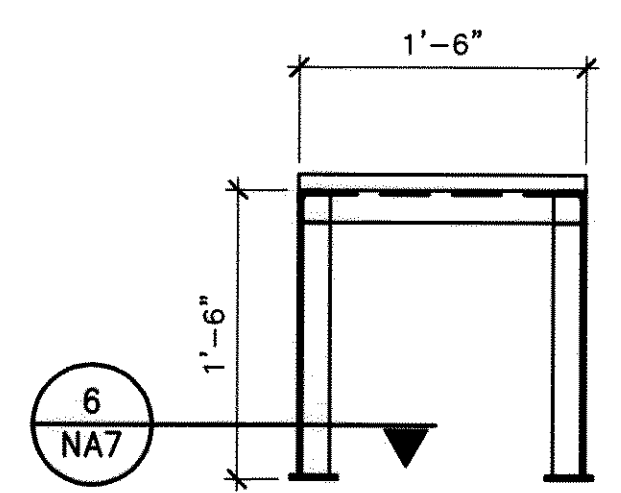
2 PLAN DAYBOARD BRACKET SCHEMATIC
SCALE: NOT TO SCALE



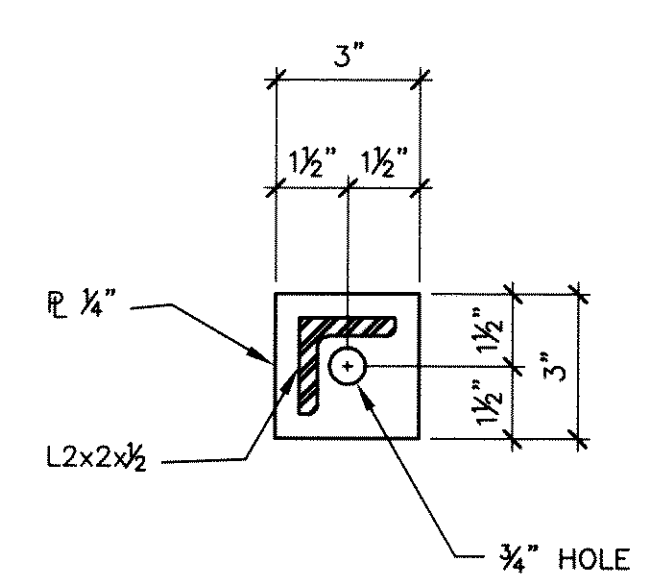
3 DETAIL DAYBOARD BRACKET
SCALE: 3" = 1'-0"



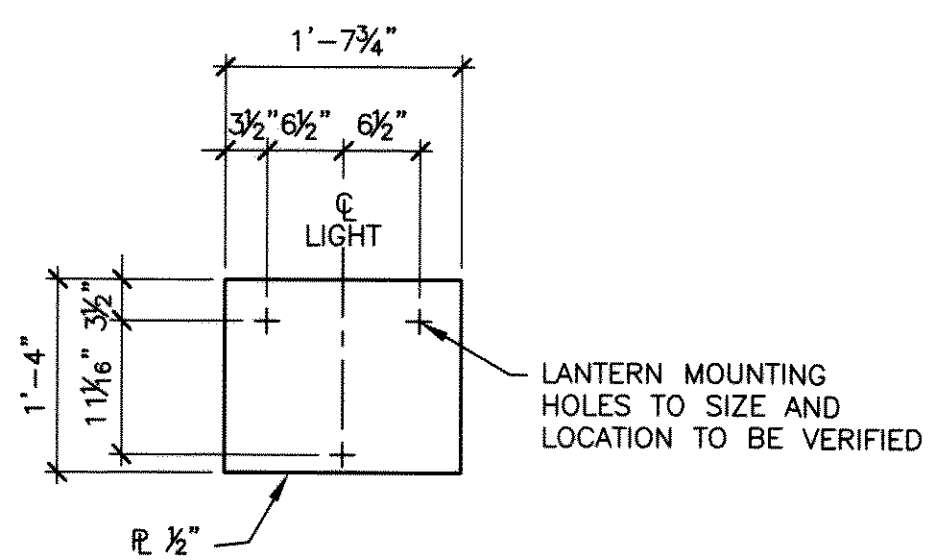
4 PLAN STEP BASE
SCALE: 1"=1'-0"



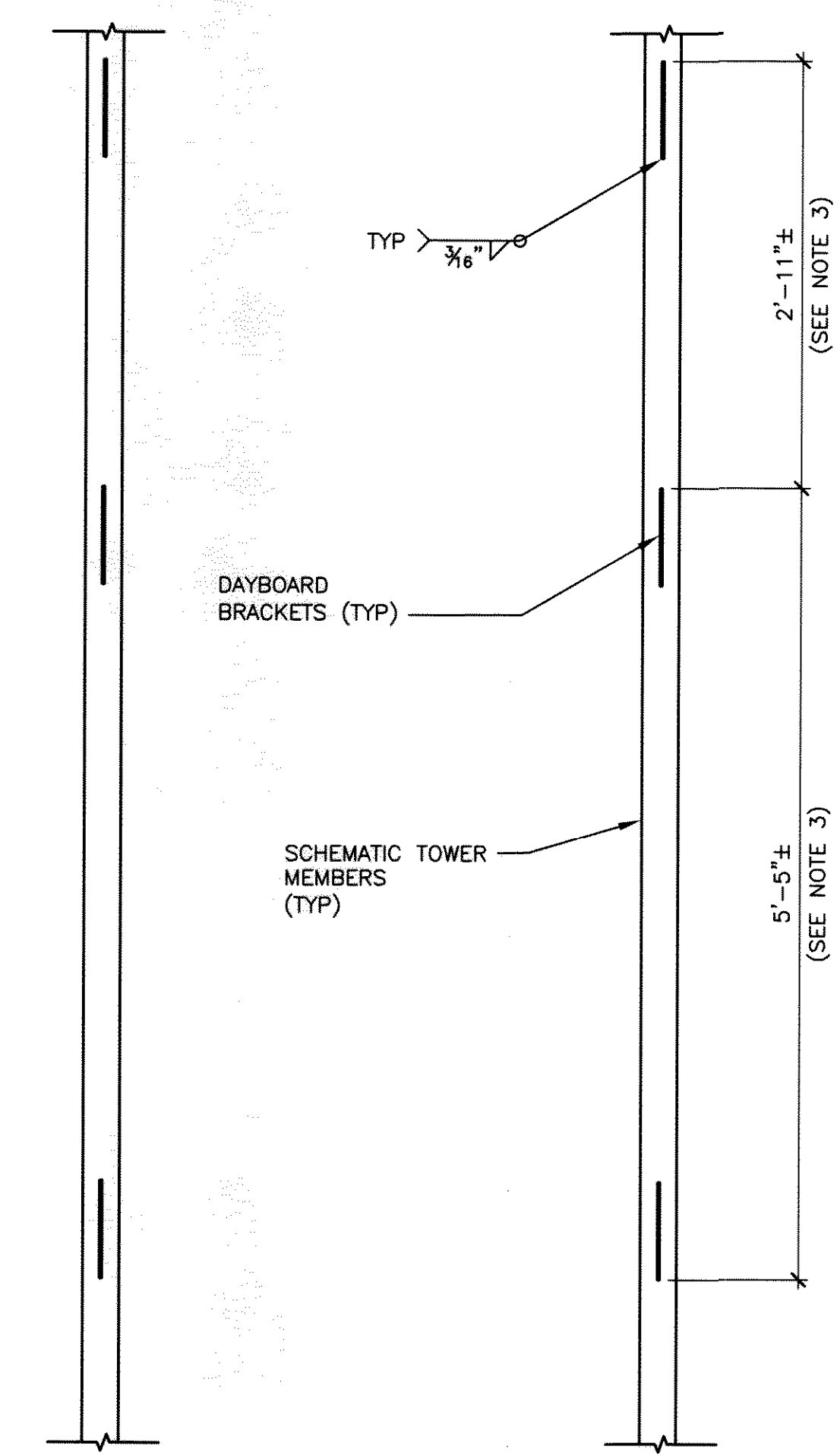
5 ELEVATION STEP BASE
SCALE: 1"=1'-0"



6 STEP BASE
SCALE: 3"=1'-0"



7 OPTIC BASE PLATE
SCALE: 3/4"=1'-0"



8 ELEVATION DAYBOARD BRACKET SCHEMATIC
SCALE: NOT TO SCALE

DAYBOARD NOTES:

1. DAYBOARD TO BE FURNISHED BY GOVERNMENT.
2. CONTRACTOR TO PROVIDE SIX DAYBOARD CONNECTION BRACKETS AND TWO 10 FOOT LONG GALVANIZED L2x2x1/4 REQUIRED FOR DAYBOARD SUPPORT RAILS (NOT SHOWN ON DRAWING).
3. THE CONTRACTOR SHALL COORDINATE WITH THE OFFICER IN CHARGE FOR THE EXACT LOCATIONS OF THE CONNECTION BRACKETS AND DAYBOARD. THE DRAWING LOCATIONS ARE SCHEMATIC AND MAY REQUIRE ADJUSTMENT TO THE TOWER AND DAYBOARD CONFIGURATION.

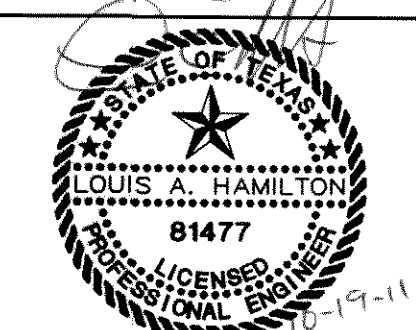
NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND
RANGE REAR LIGHT
LAPORTE, TX
STRUCTURAL GENERAL DETAILS

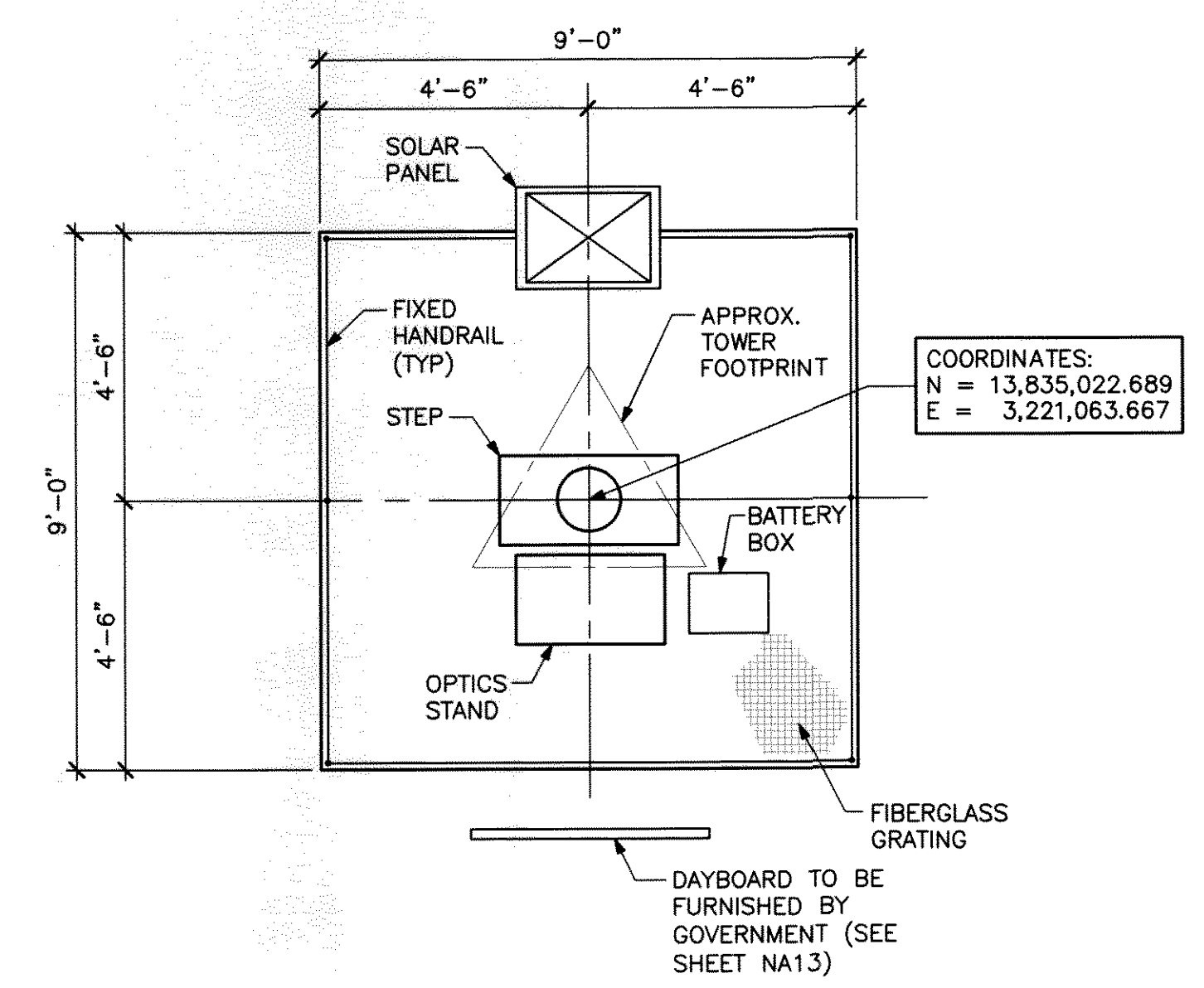
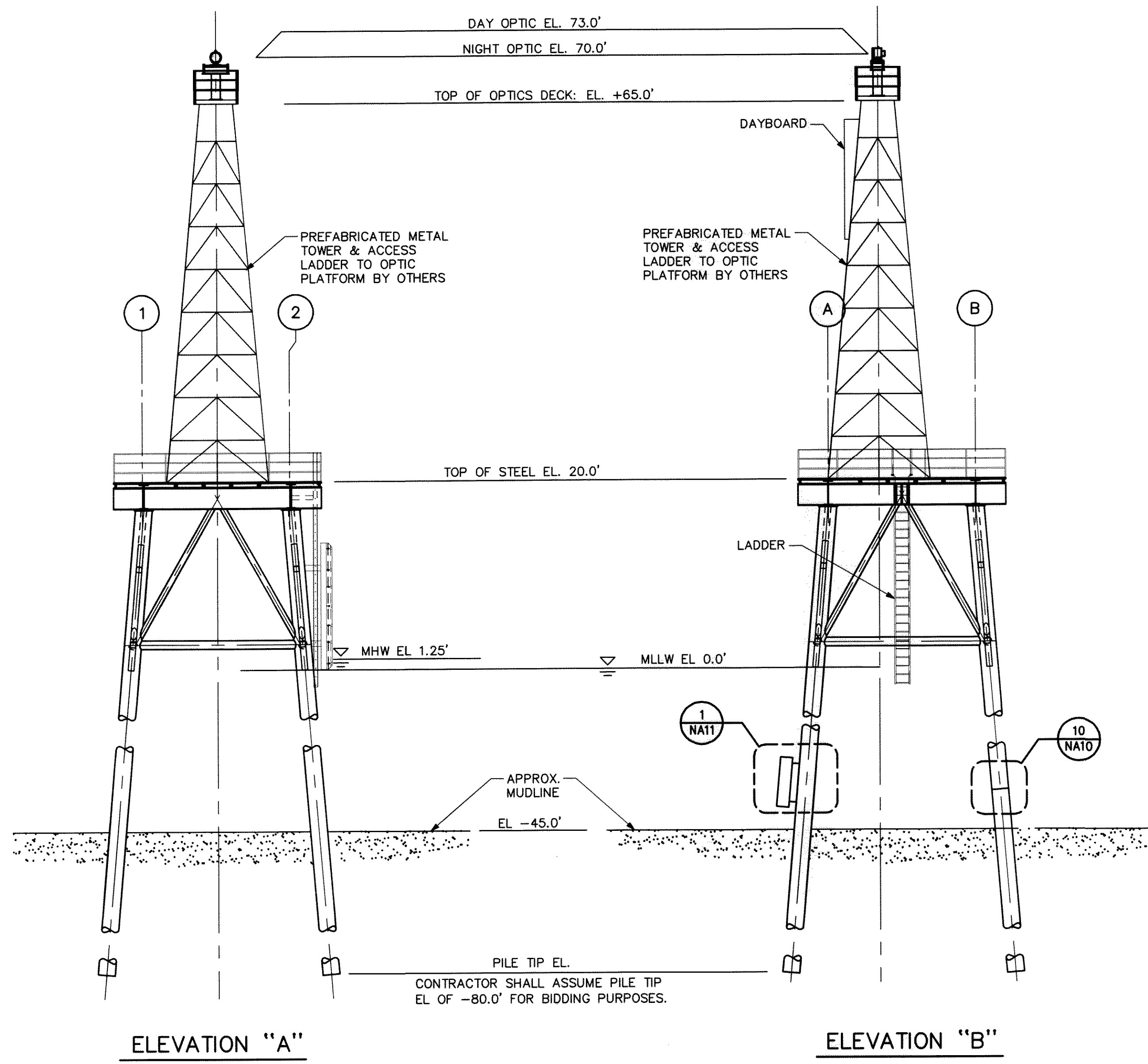
SH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F400175

3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA7

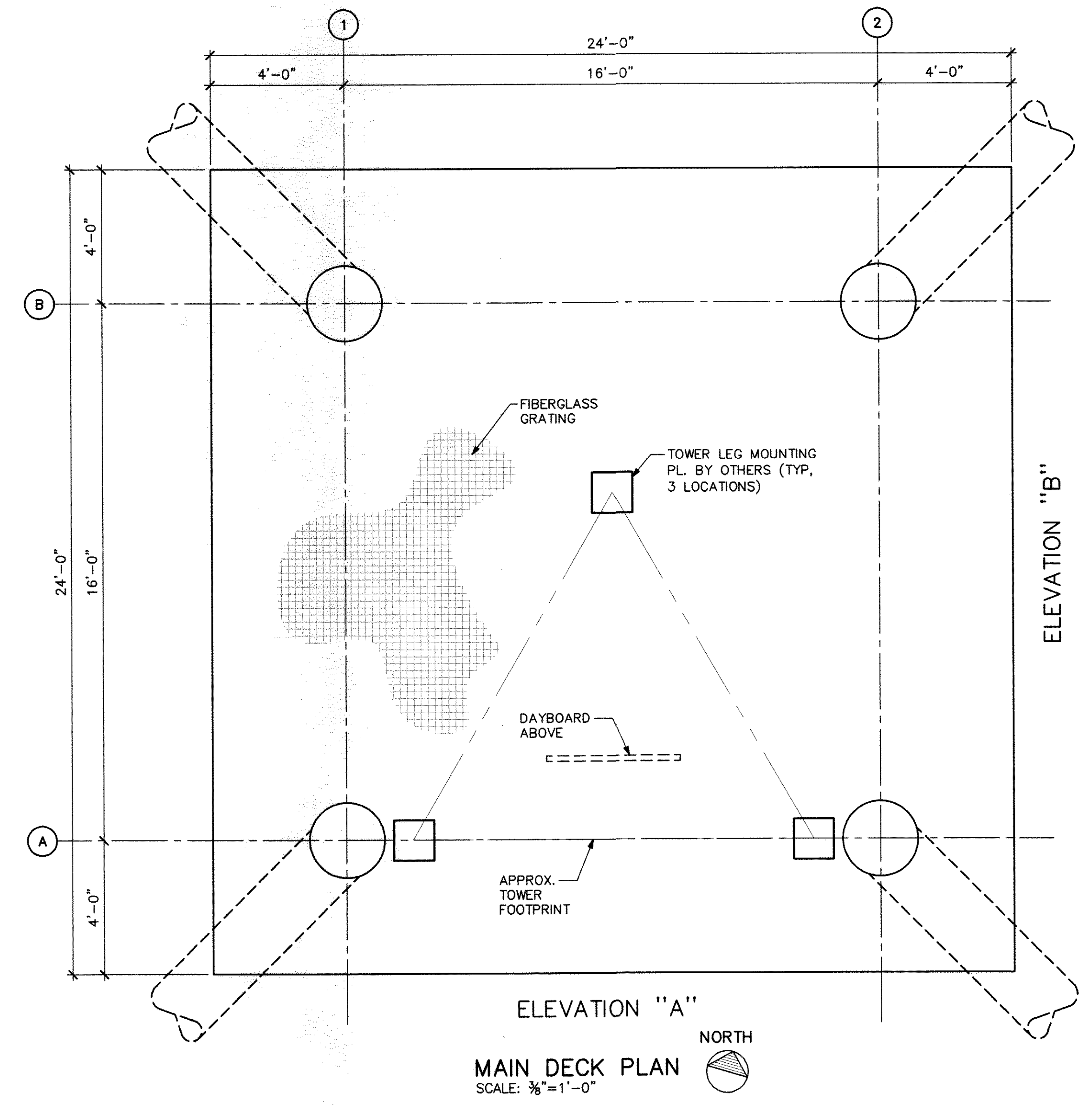


SHEET NO.
NA7



NOTE:
 1. LIGHT AND ASSOCIATED ELECTRONICS TO BE FURNISHED BY GOVERNMENT.
 2. TOWER PLATFORM TO BE DESIGNED BY TOWER MANUFACTURER. THE LAYOUT PROVIDES GENERAL DIMENSIONS AND THE LAYOUT OF EQUIPMENT.

OPTIC DECK PLAN
 SCALE: 3/8"=1'-0"



ELEVATION "A"
 MAIN DECK PLAN
 SCALE: 3/8"=1'-0"

- DESIGN NOTES:
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
 - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF AWS D1.1 LATEST EDITION AND APPLICABLE RULINGS, SUPPLEMENTS AND ADDENDA.
 - ALL WELDING TO CONFORM TO CONTRACT SPECIFICATIONS.
 - ALL WELDS SHALL BE FULL PENETRATION CONTINUOUS BEVEL WELDS UNLESS NOTED. NON-STRUCTURAL COMPONENTS OF HANDRAILS ARE PERMITTED TO BE FULL STRENGTH FILLET WELDS.
 - PAINTING SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
 - STRUCTURAL SHAPES, PLATES, AND PIPE SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
 - STRUCTURAL SHAPES AND PLATES SHALL BE ASTM A 252, GRADE 50.
 - PIPE (HANDRAILS AND BRACING) SHALL BE ASTM A53, GRADE B.
 - PIPE PILES SHALL BE ASTM A 252, GRADE 3.
 - UNLESS NOTED, ALL BOLTS SHALL BE ASTM A 325.
 - NO MATERIAL OR MEMBER SIZE SUBSTITUTIONS MAY BE MADE WITHOUT USCG APPROVAL.
 - ALL FIELD WELDS SHALL BE CLEANED UP BY USING WIRE BRUSH AND COATING TOUCHED UP IN ACCORDANCE WITH THE SPECIFICATIONS.
 - THE PLATFORM STRUCTURE IS DESIGNED FOR THE FOLLOWING TOWER LOADING:
 - TOWER TOTAL SHEAR = 33 KIPS
 - TOWER OVERTURNING MOMENT = 1600 FT.-KIPS
 - LEG TENSION = 150 KIPS
 - LEG COMPRESSION = 150 KIPS
 - CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND FABRICATION OF TOWER AND ALL NECESSARY APPURTENANCES ATTACHED TO THE TOWER INCLUDING DAYBOARD.

NO.	DATE	REVISIONS	APP.

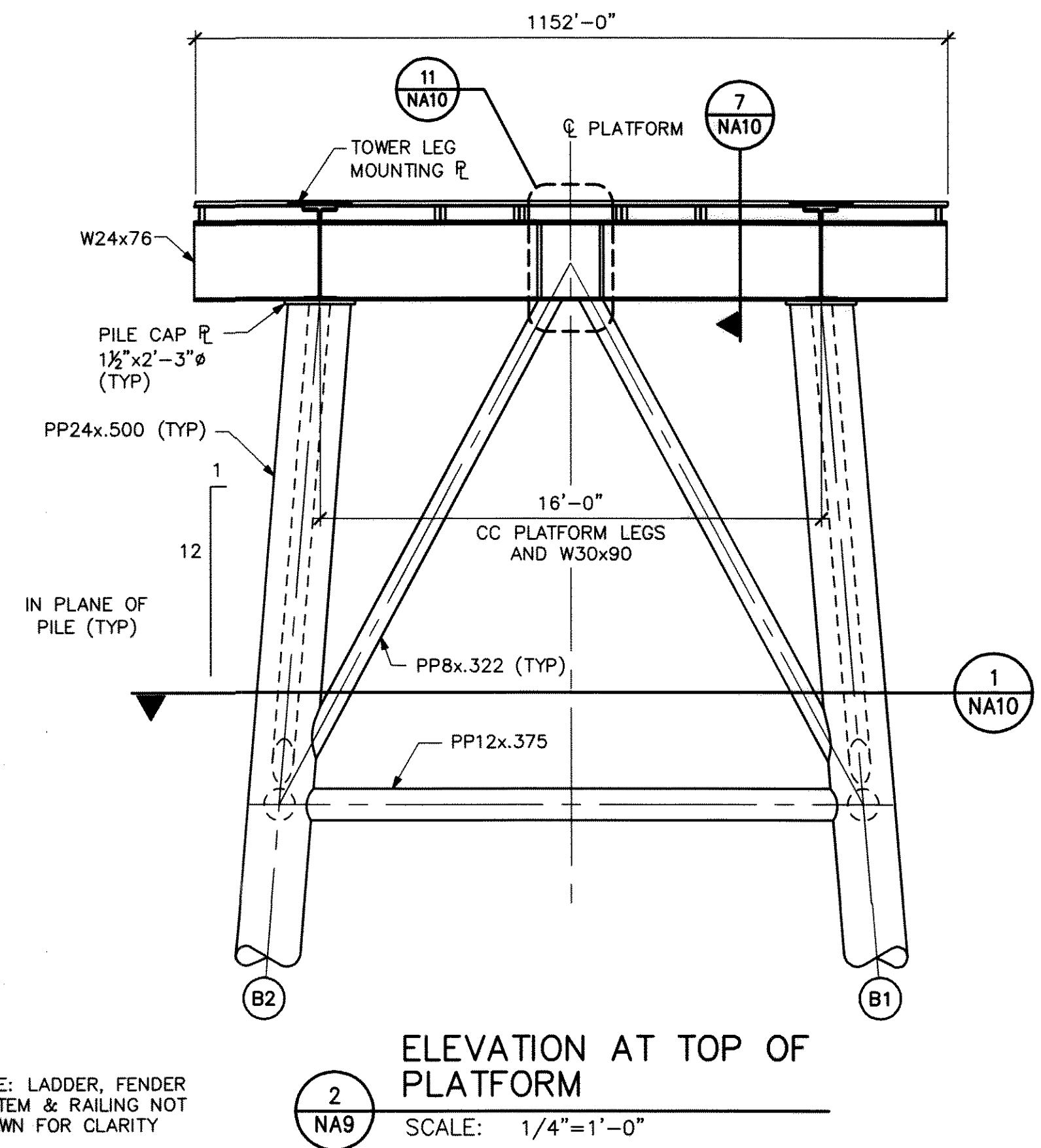
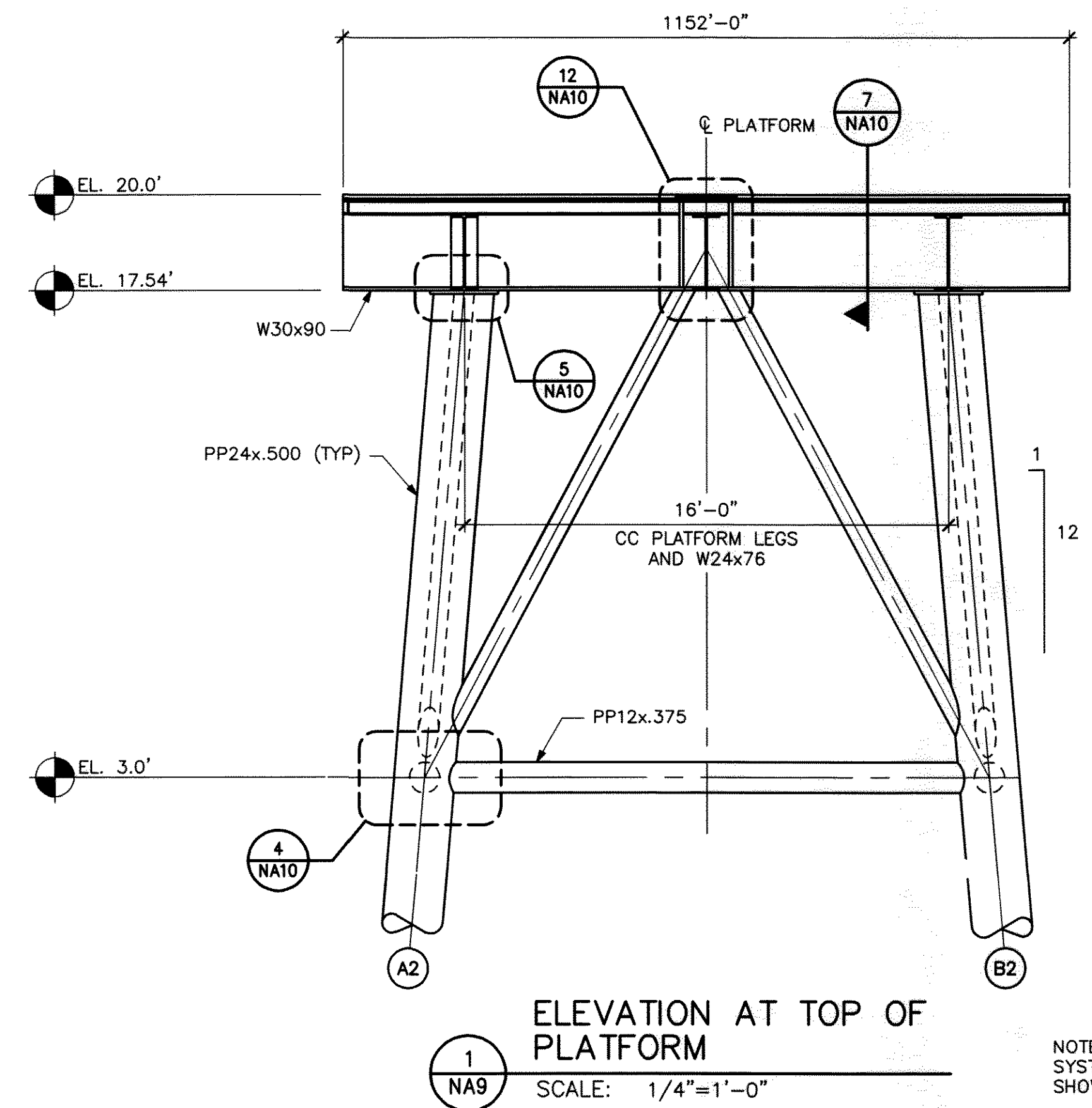
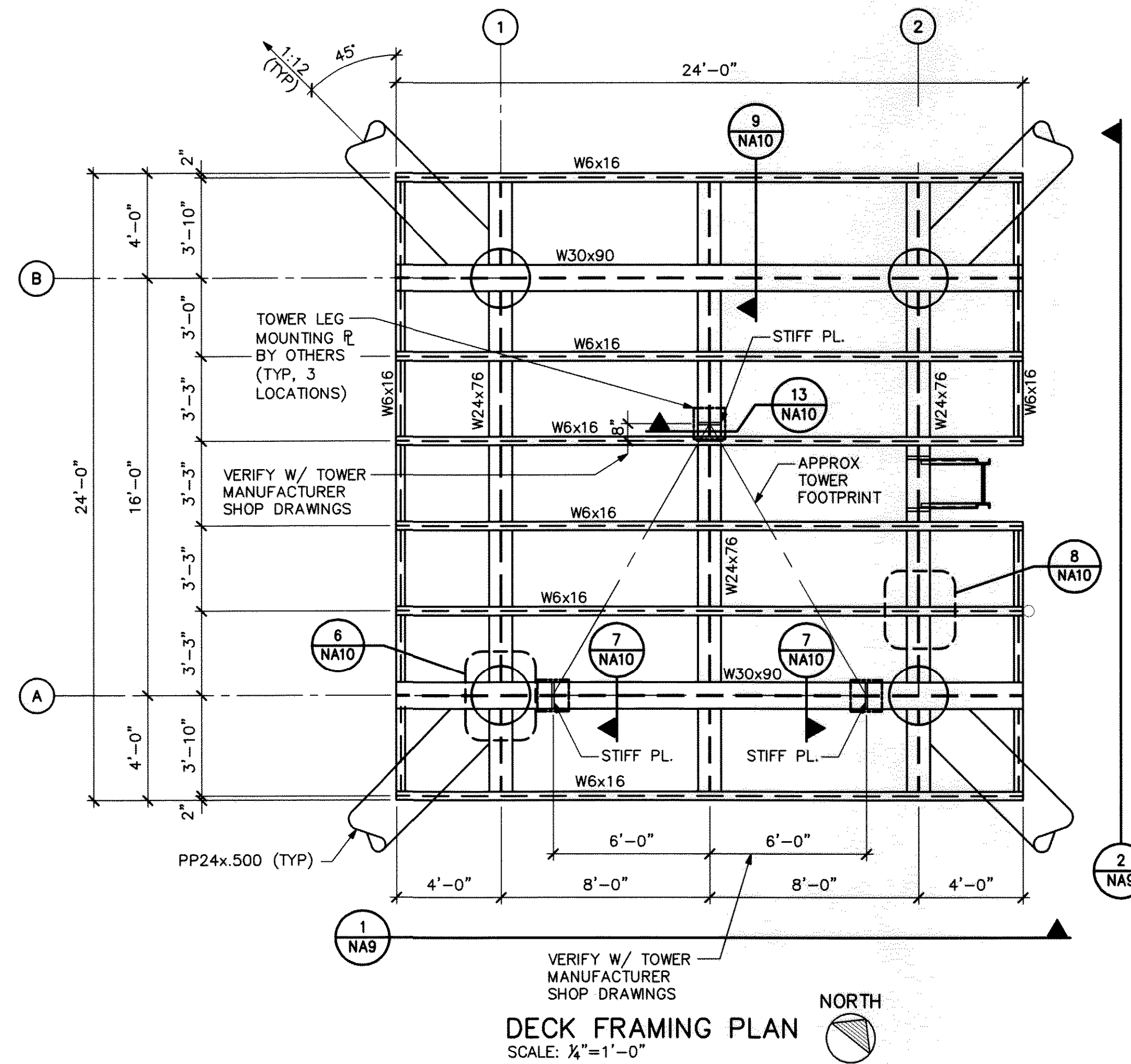
BOSTCO
 STORAGE & TERMINAL SERVICES
 PHASE 1 NEW SHIP & BARGE FACILITY
 LOWER PEGGY'S LAKE INBOUND
 RANGE FRONT LIGHT
 LAPORTE, TX -
 STRUCTURAL PLAN

SSH STANLEY SPURLING & HAMILTON, INC.
 Consulting Engineering Services
 T.A.P.E. REGISTRATION # F000175
 3301 Edloe Street, Suite 200 Houston, Texas 77027
 Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
 DATE: 10-18-11 DWN. BY: TP
 JOB NO. 0896-0002 DWG. NO. 896002-NAB

LOUIS A. HAMILTON
 81477
 LICENSED PROFESSIONAL ENGINEER
 STATE OF TEXAS

SHEET NO. **NAB**



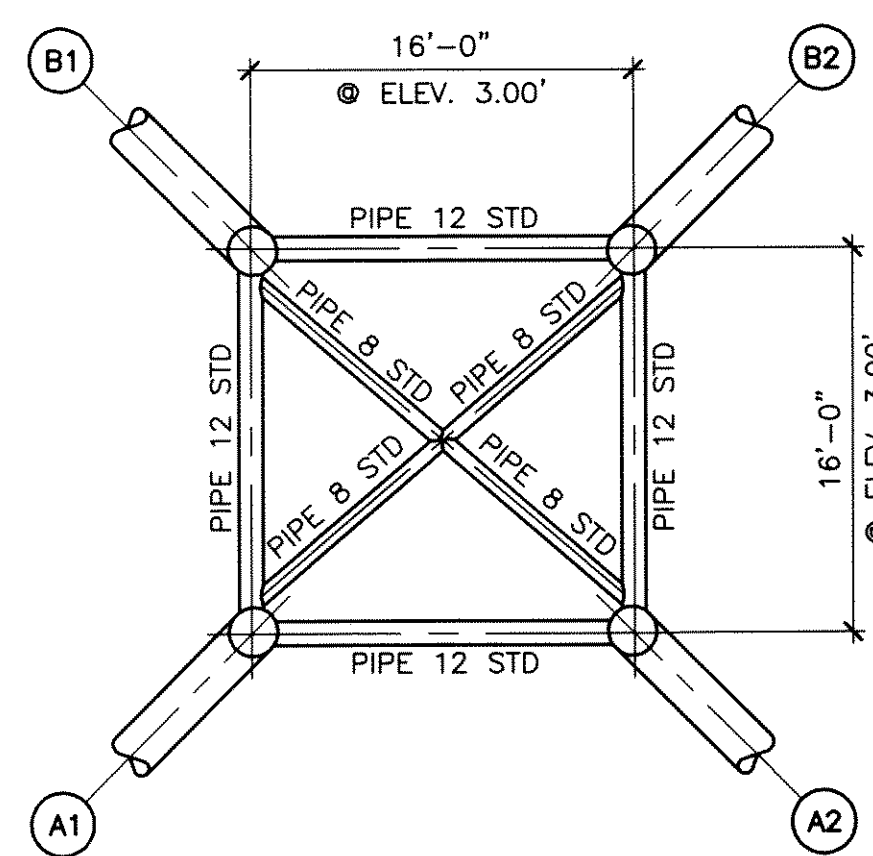
NO.	DATE	REVISIONS	APP.

BOSTCO
 STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND RANGE FRONT LIGHT
LAPORTE, TX - MAIN PLATFORM PLAN & ELEVATIONS

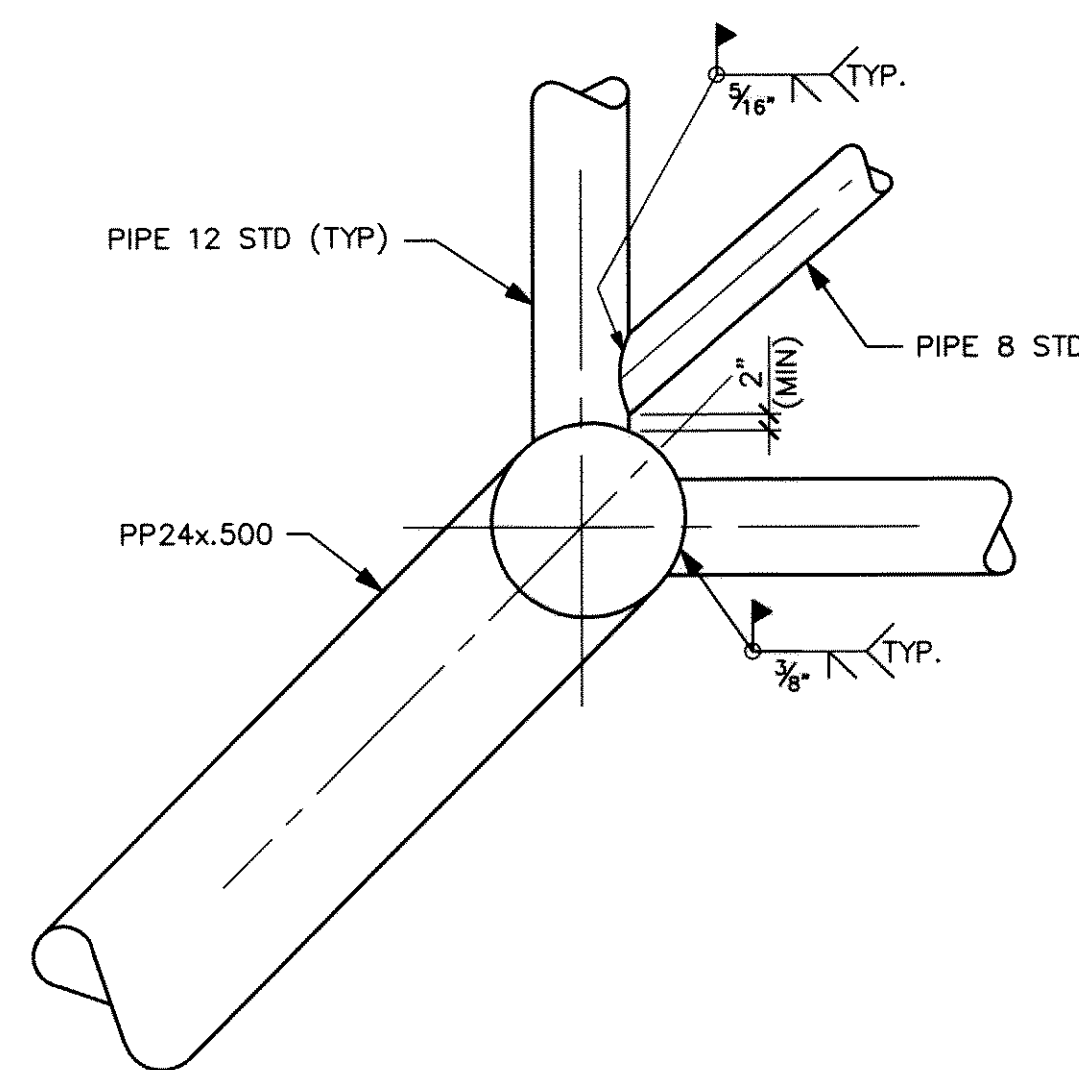
STANLEY SPURLING & HAMILTON, INC.
 Consulting Engineering Services
 T.E.P.E. REGISTRATION # F-000175
 3301 Edloe Street, Suite 200 Houston, Texas 77027
 Phone 713-776-9433 Fax 713-776-2430

SCALE: AS SHOWN DGN. BY: SB/BJ
 DATE: 10-18-11 DWN. BY: TP
 JOB NO. 0896-0002 DWG. NO. 896002-NA9

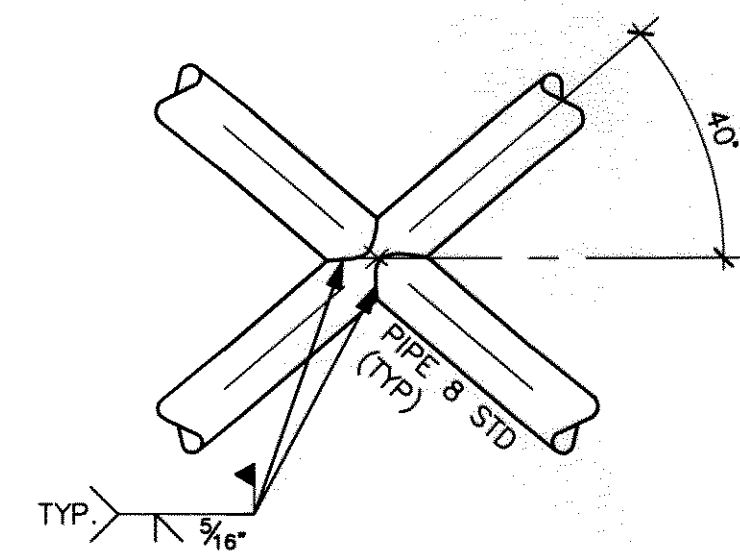
SHEET NO.
NA9



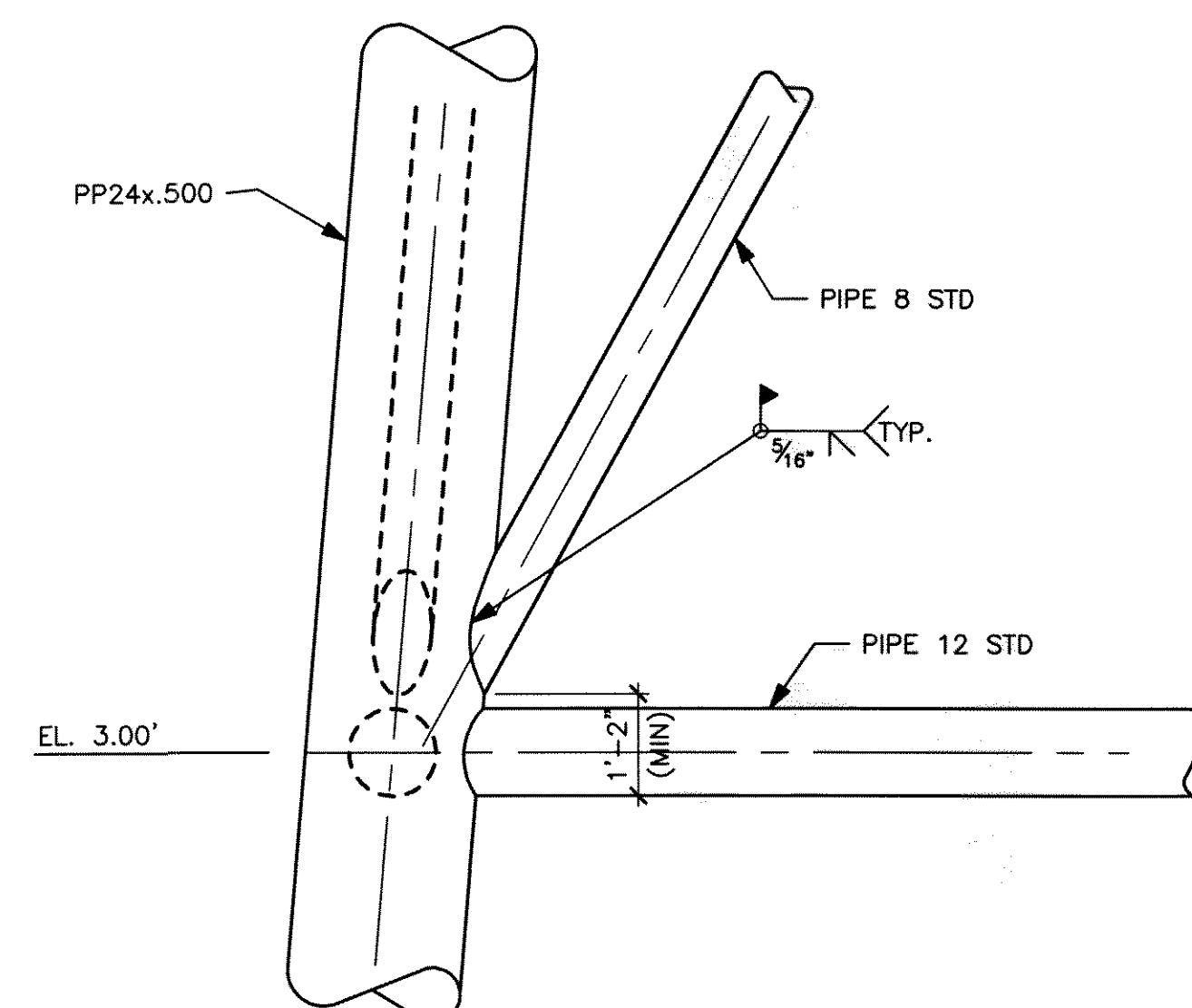
1 PLAN LOWER HORIZONTAL BRACING (EL 3.0')
NA10 SCALE: 1/8"=1'-0"



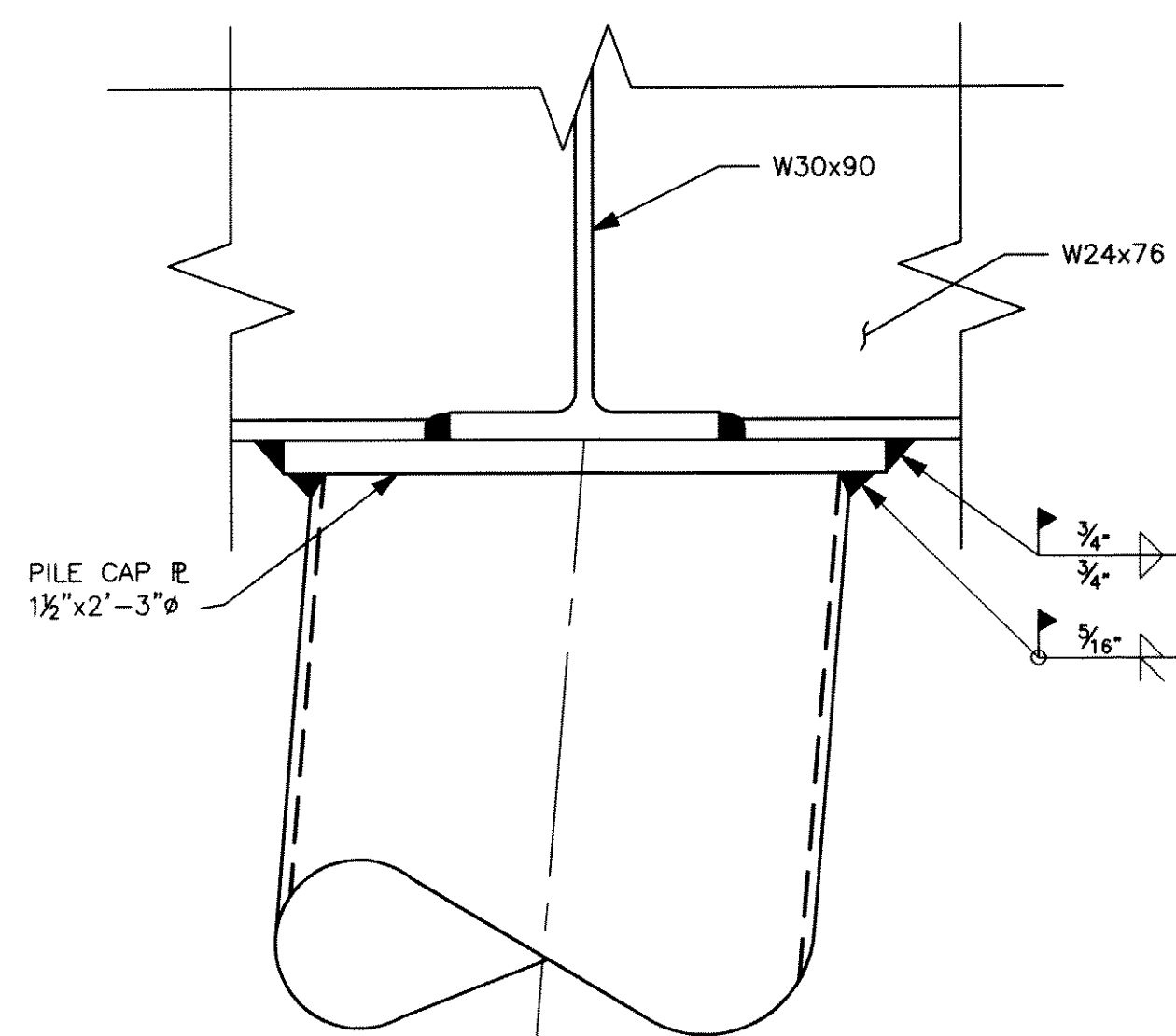
2 DETAIL BRACING CONNECTIONS (EL 3.0')
NA10 SCALE: 1/2"=1'-0"



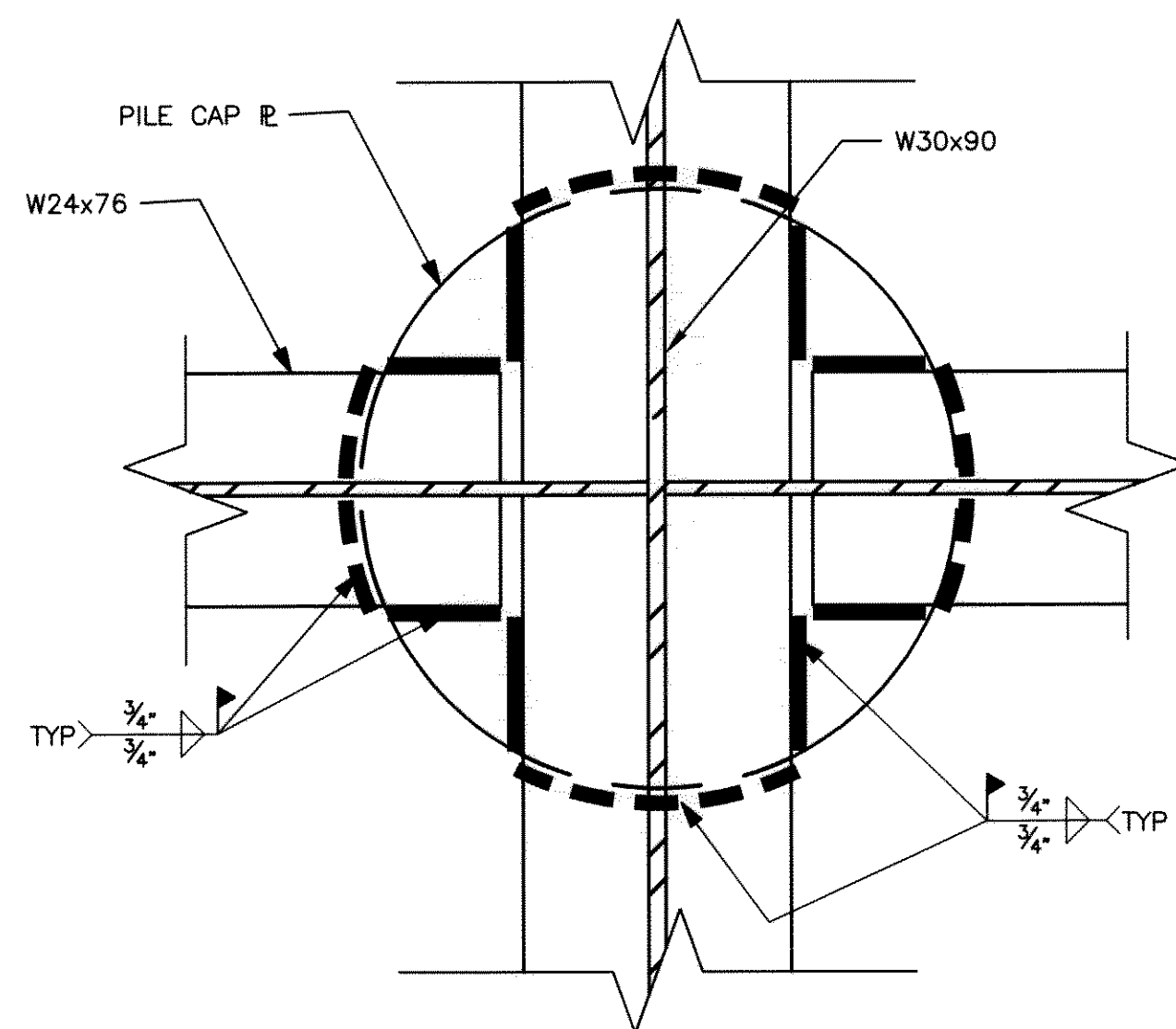
3 DETAIL BRACING CONNECTIONS (EL 3.0')
NA10 SCALE: 1/2"=1'-0"



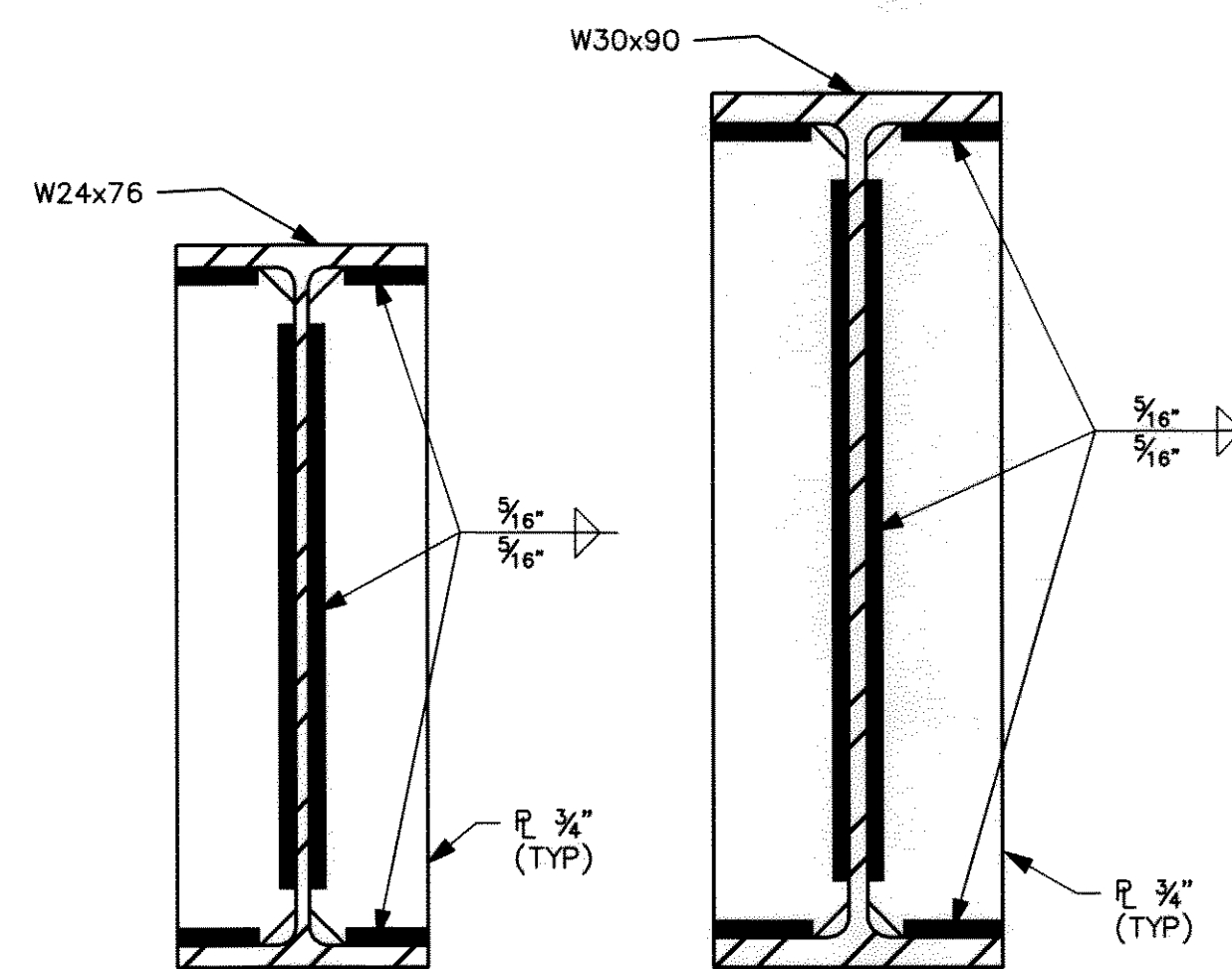
4 DETAIL PP8x.322 TO PP24x.500 VERTICAL CONNECTION
NA10 SCALE: 1/2"=1'-0"



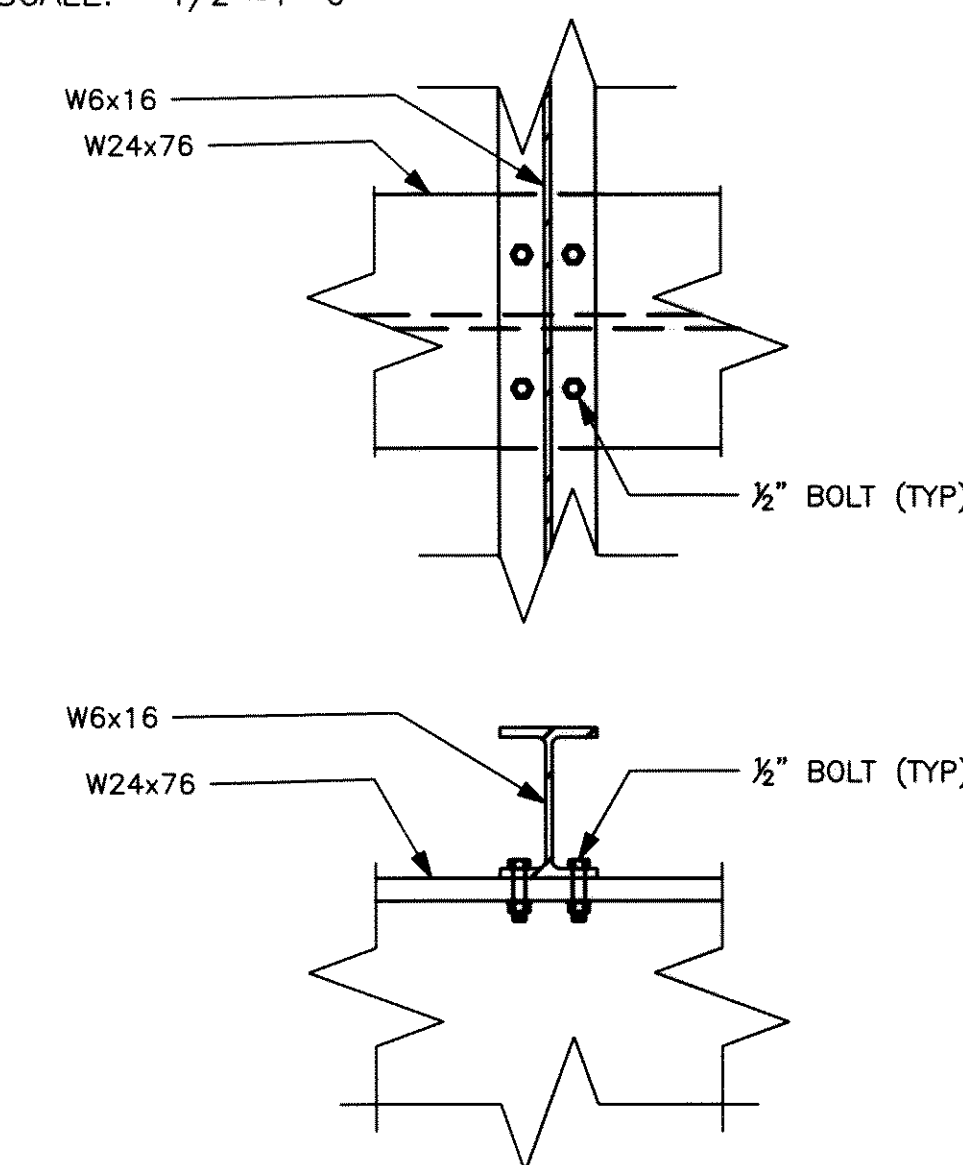
5 DETAIL PILE TO PILE CAP PLATE CONNECTION (TYP)
NA10 SCALE: 1 1/2"=1'-0"



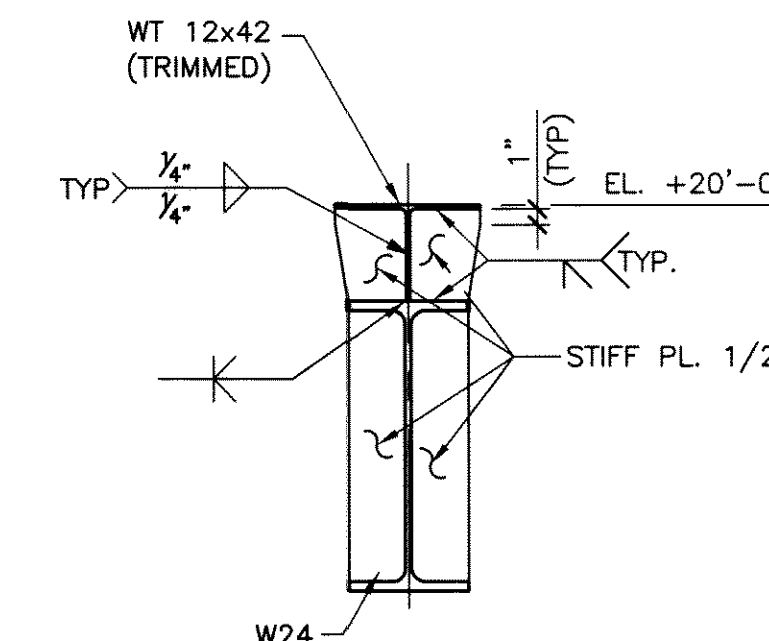
6 DETAIL PILE CAP PLATE TO W MEMBERS CONNECTION (TYP)
NA10 SCALE: 1 1/2"=1'-0"



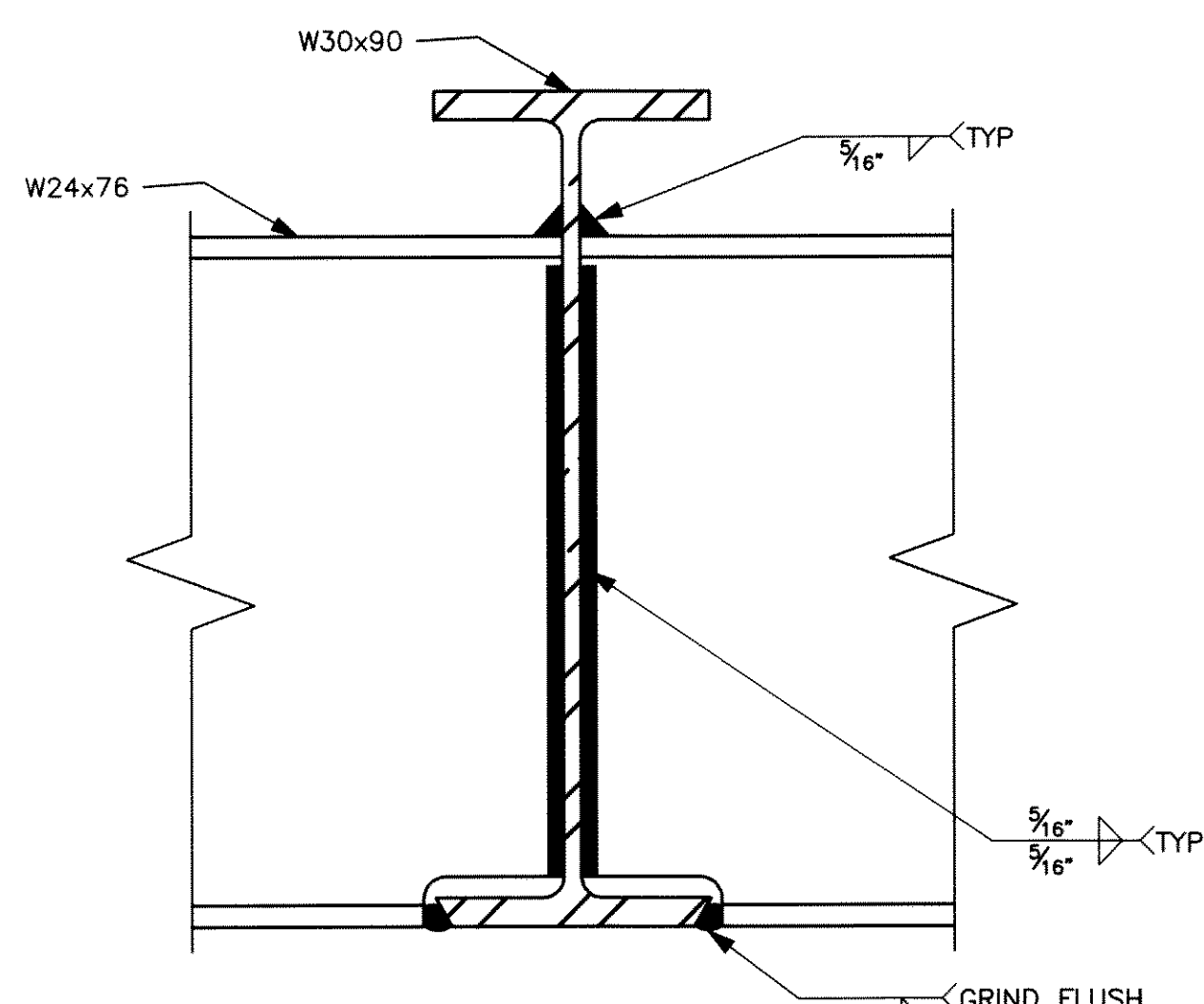
7 DETAIL W30 AND W24 STIFFENER
NA10 SCALE: 1 1/2"=1'-0"



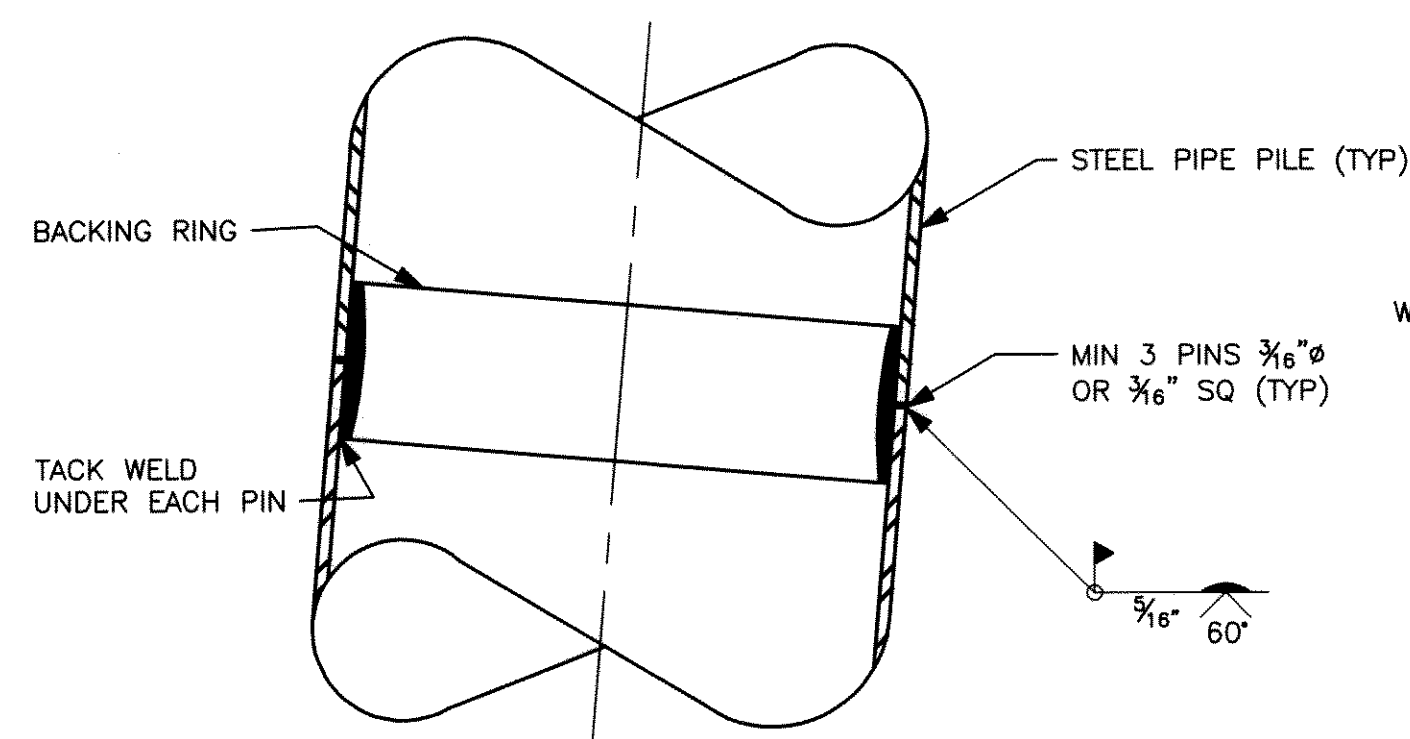
8 DETAIL (PLAN AND SECTION) W6 TO W24 CONNECTION
NA10 SCALE: 1 1/2"=1'-0"



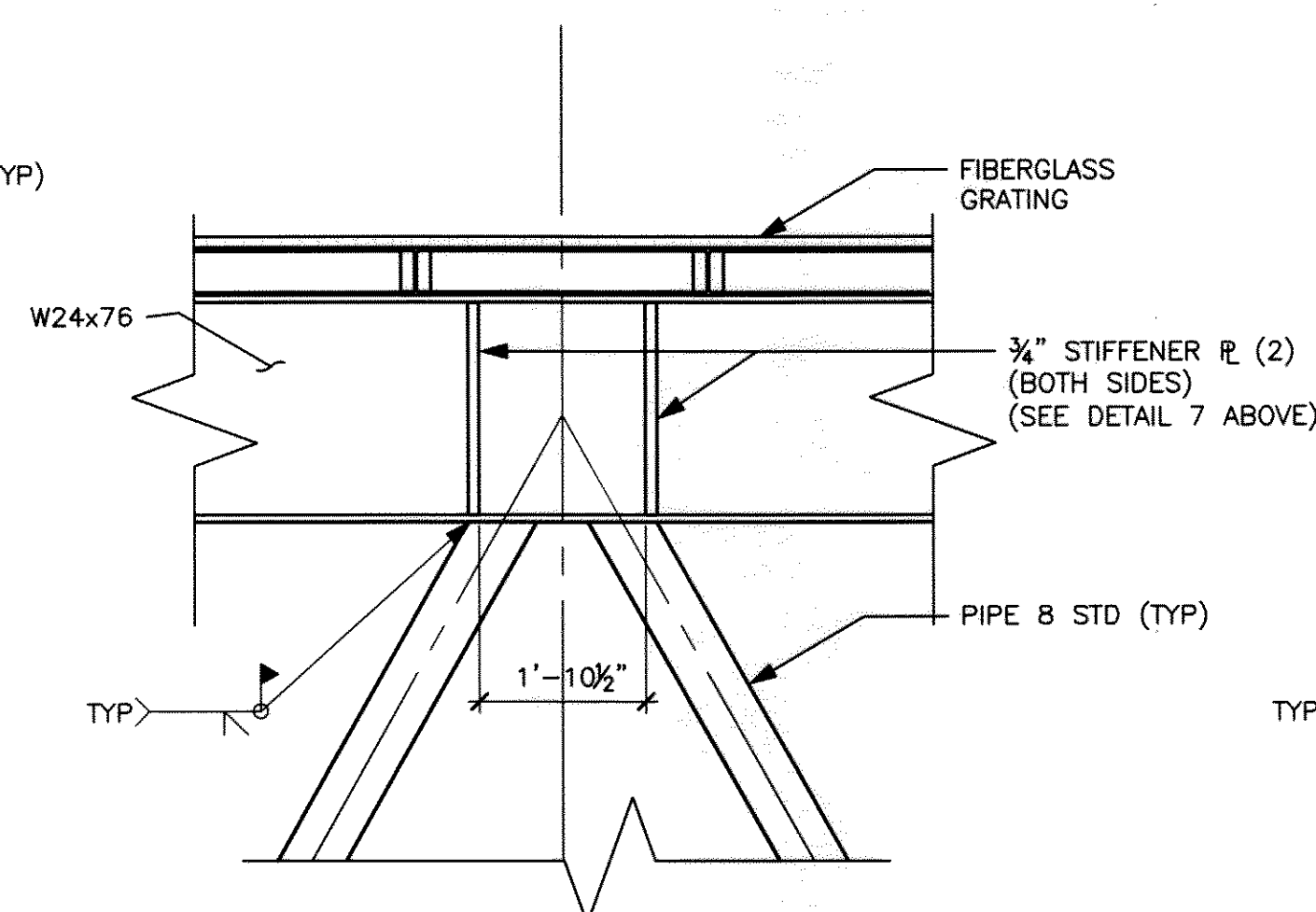
13 SECTION
NA10 SCALE: 1"=1'-0"



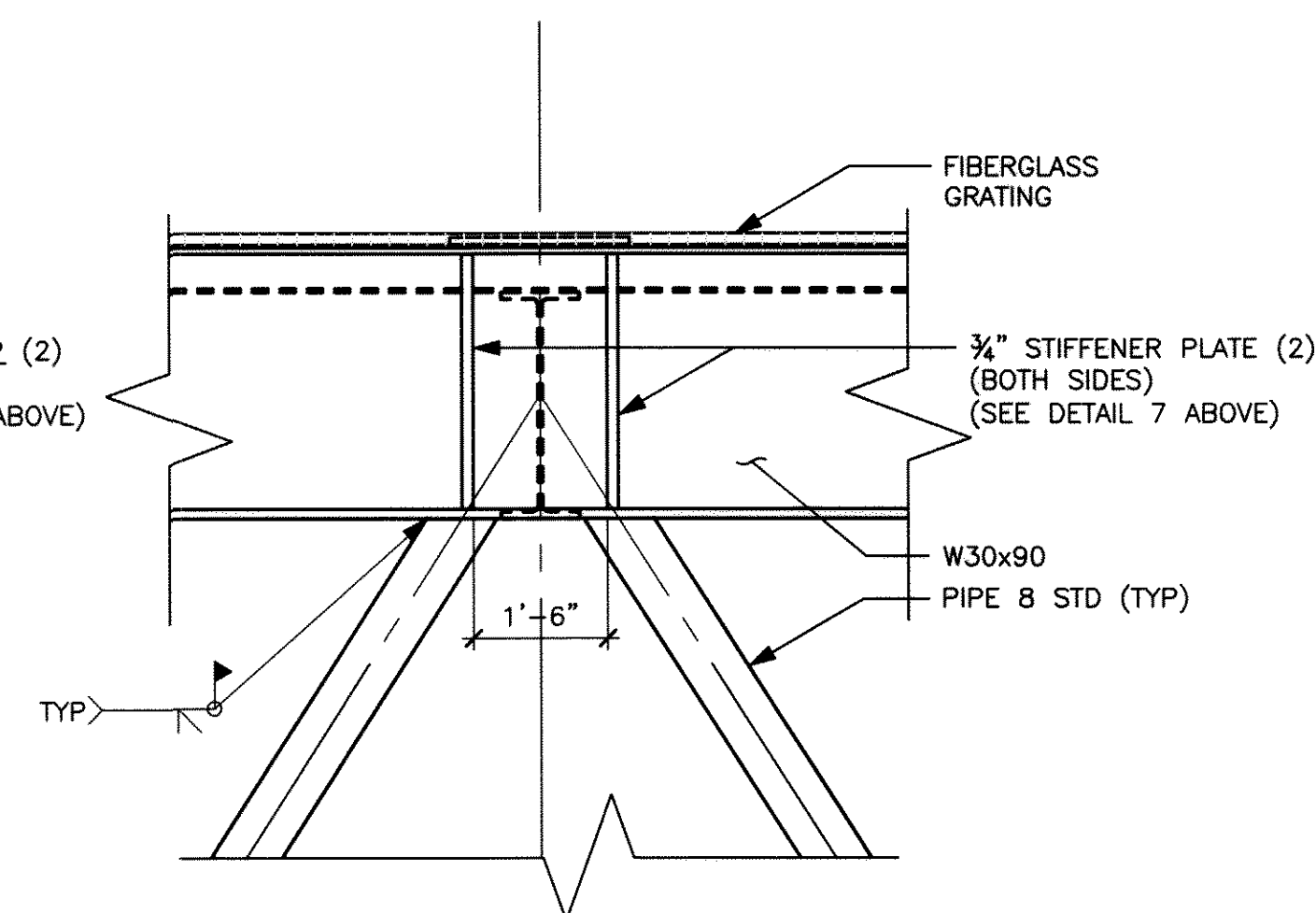
9 DETAIL W30 TO W24 CONNECTION
NA10 SCALE: 1 1/2"=1'-0"



10 DETAIL STEEL PIPE PILE SPLICE
NA10 SCALE: 1 1/2"=1'-0"



11 DETAIL W24x76 STIFFENER CONNECTION
NA10 SCALE: 1/2"=1'-0"



12 DETAIL W30x90 STIFFENER CONNECTION
NA10 SCALE: 1/2"=1'-0"

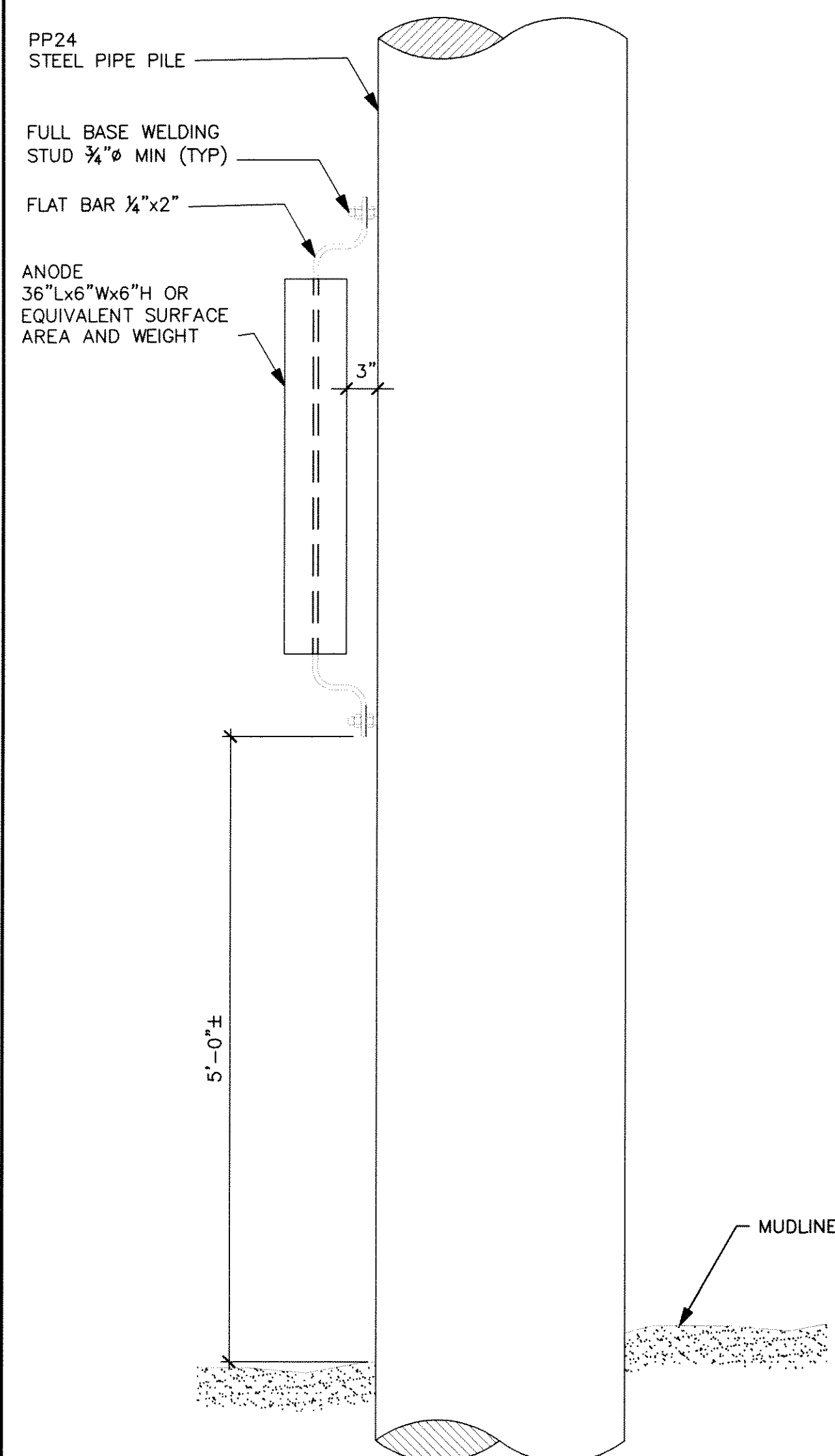
NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND
RANGE FRONT LIGHT
LAPORTE, TX
STRUCTURAL PLATFORM DETAILS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

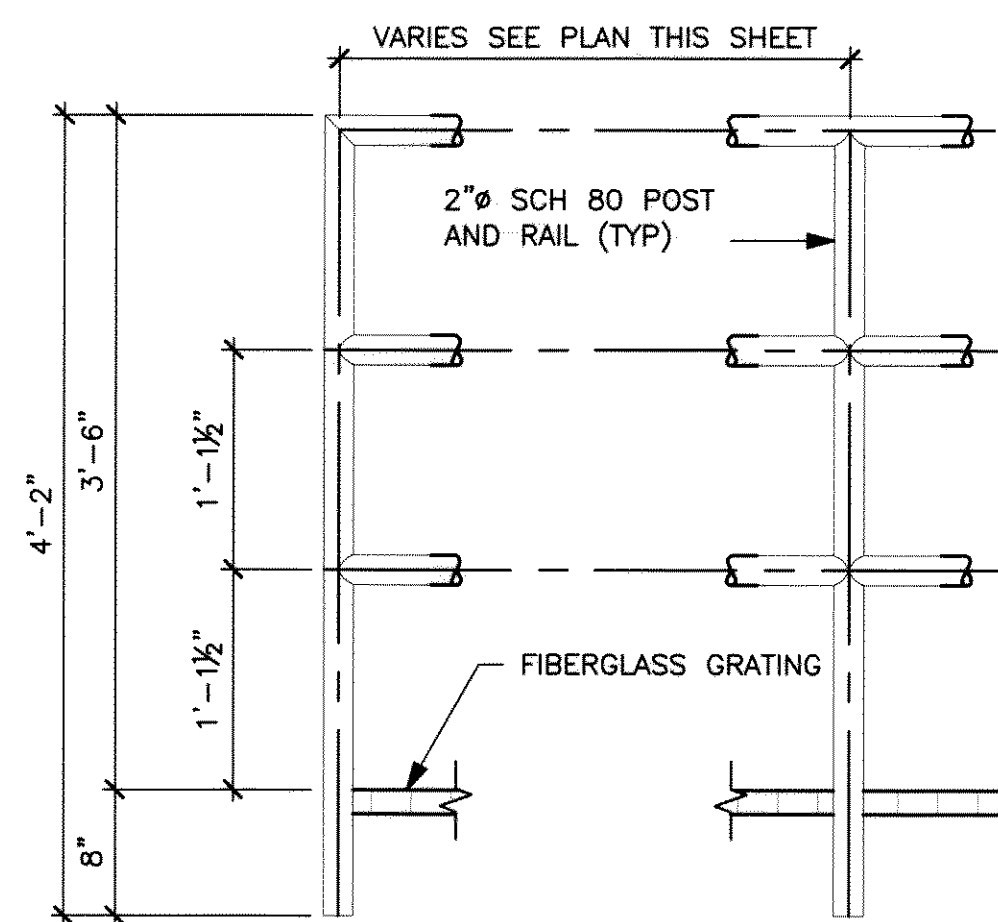
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA10

Professional Engineer
LOUIS A. HAMILTON
81477
LICENSED PROFESSIONAL ENGINEER
1941

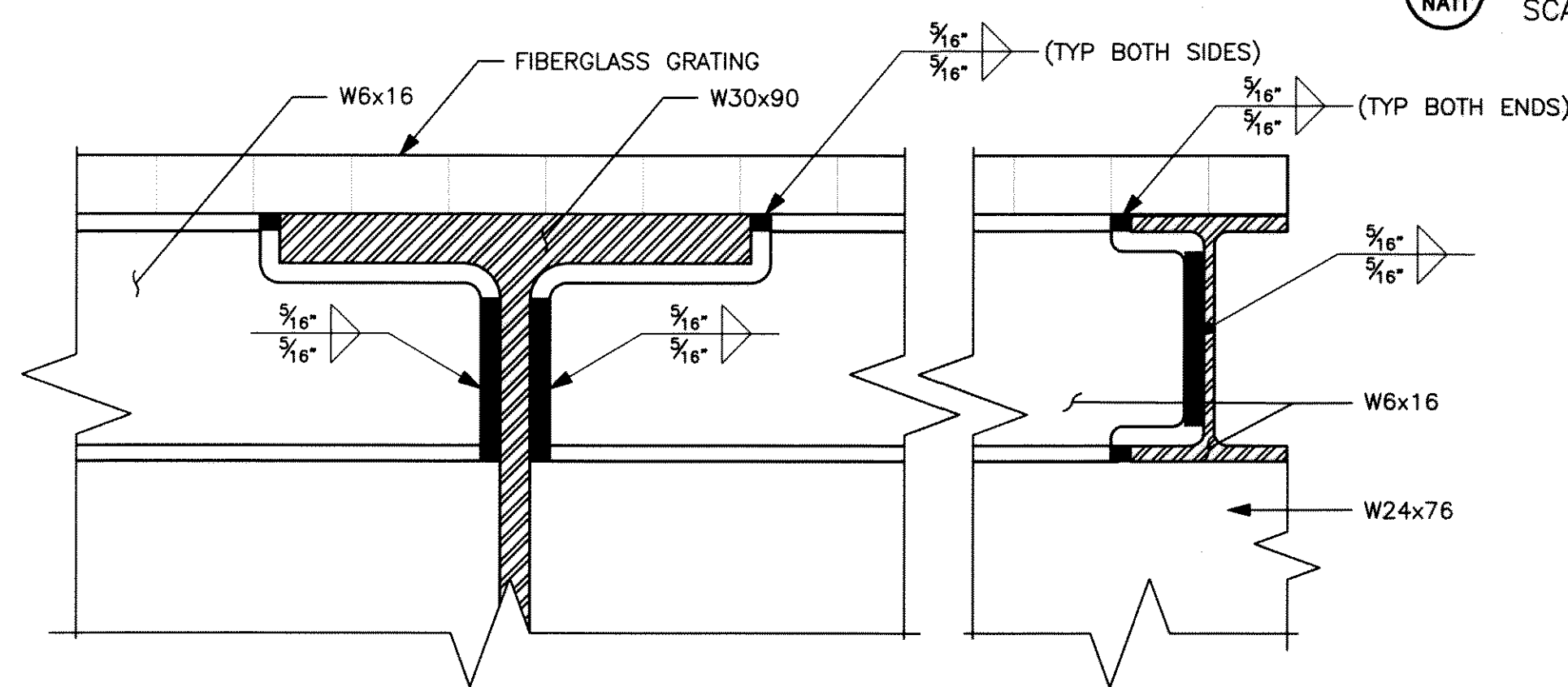


NOTE:
4 ANODES TO BE INSTALLED ON INSIDE OF EACH PILE FACE.

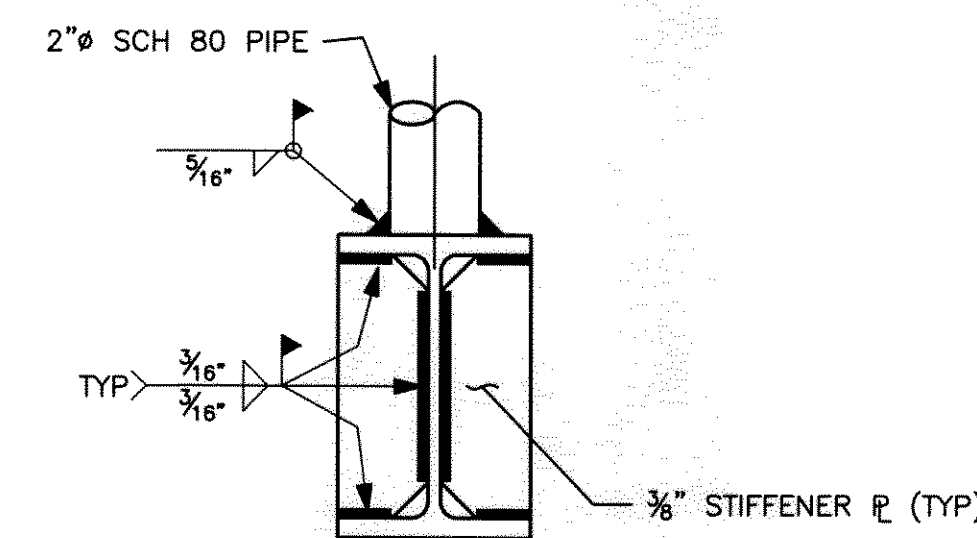
1 ANODE INSTALLATION
SCALE: 1"=1'-0"



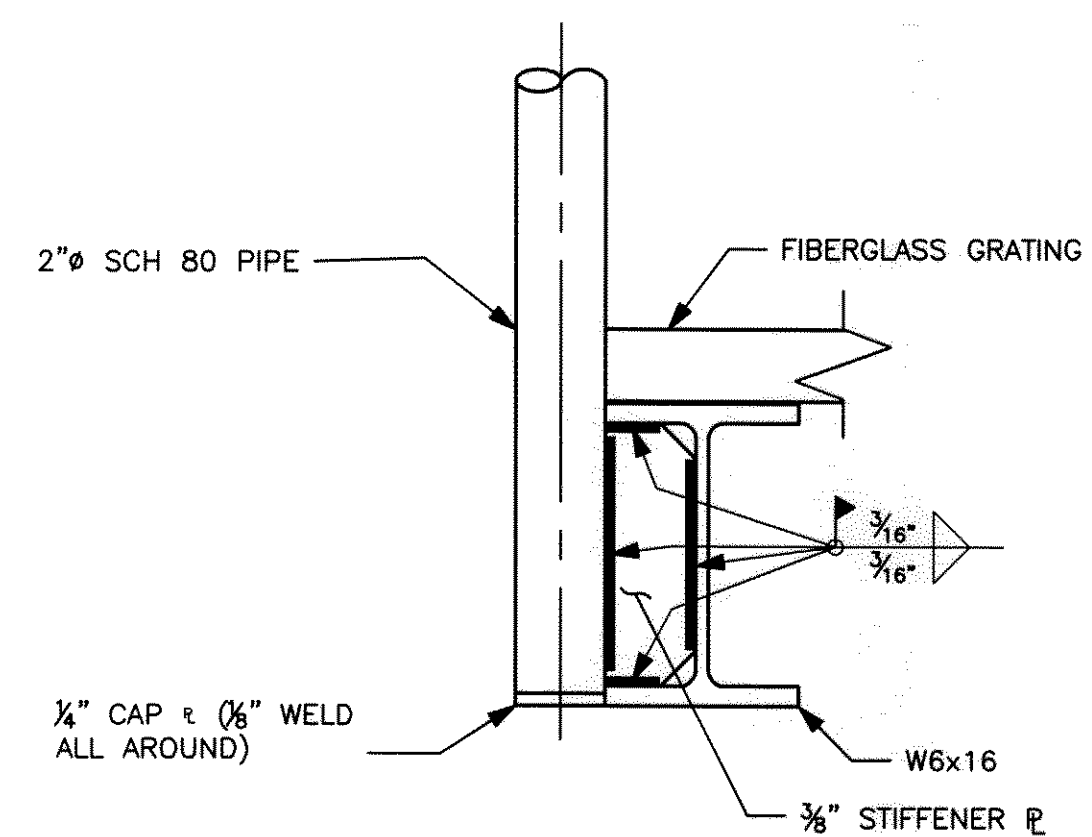
2 ELEVATION DECK RAILING
SCALE: 1 1/2"=1'-0"



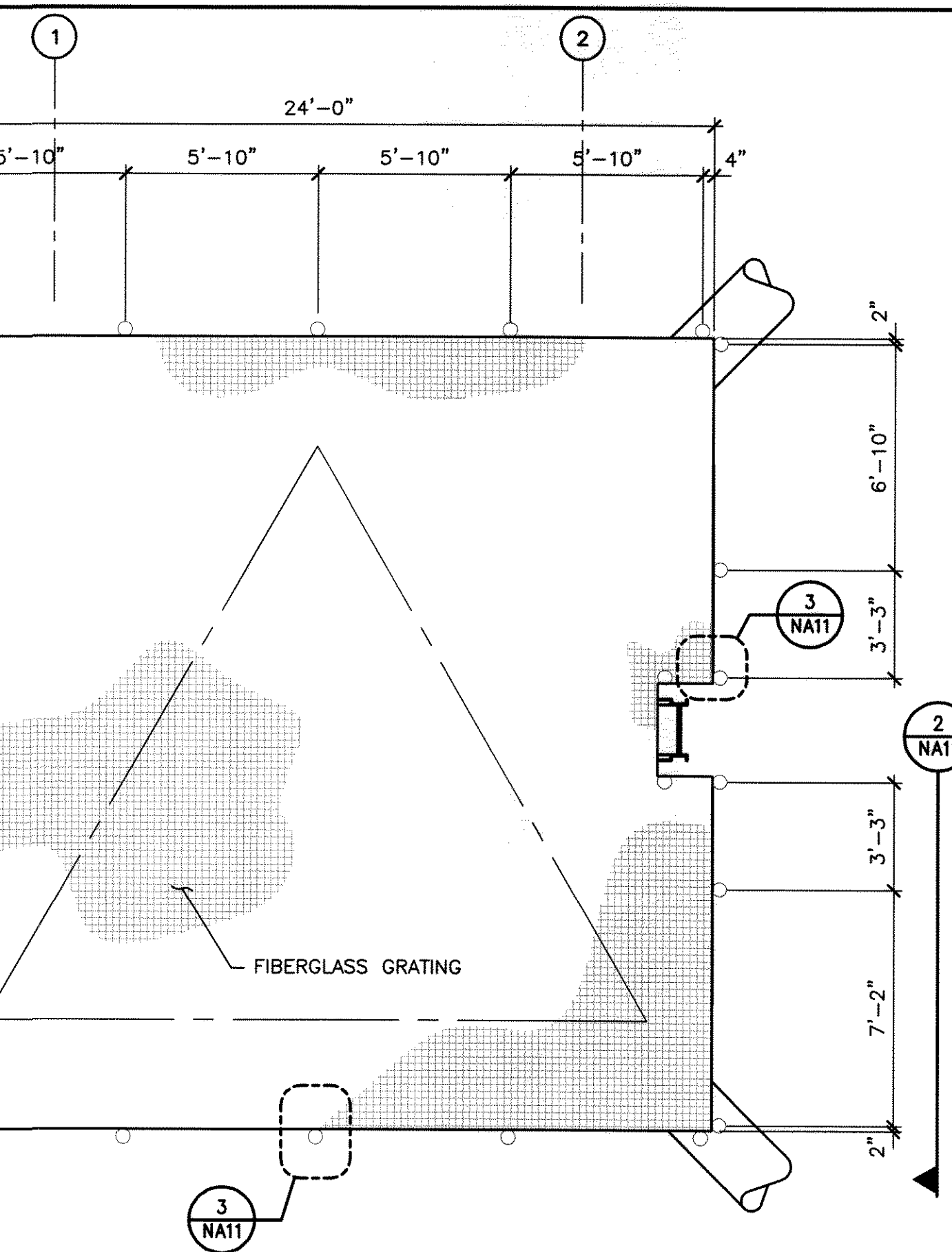
4 DETAIL W6x16 TO W30x90 & W6x16 CONNECTION
SCALE: 1 1/2"=1'-0"



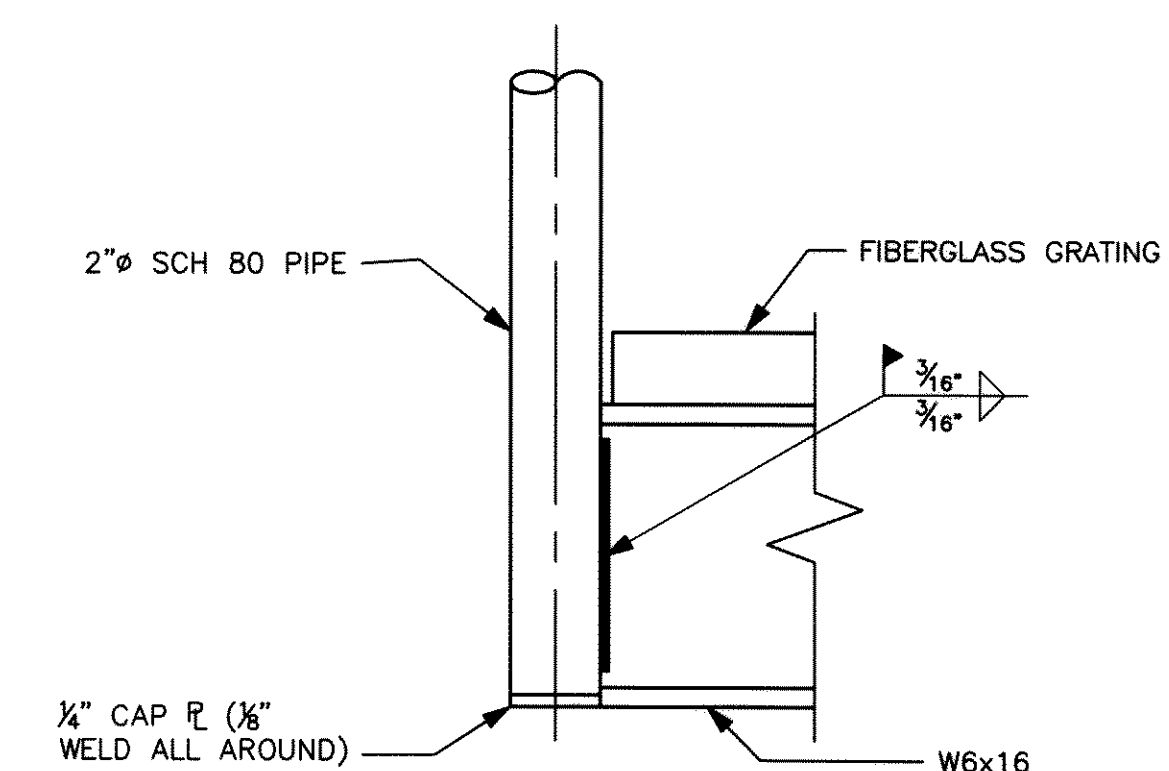
3 DETAIL RAILING TO TOP OF W6x16
SCALE: 3"=1'-0"



5 DETAIL RAILING TO SIDE OF W6x16
SCALE: 3"=1'-0"



PLAN DECK RAILING AND GRATING
SCALE: 1/4"=1'-0"



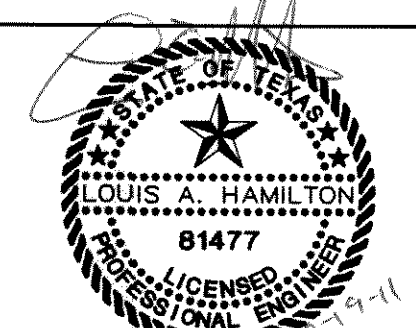
6 DETAIL RAILING TO END OF W6x16
SCALE: 3"=1'-0"

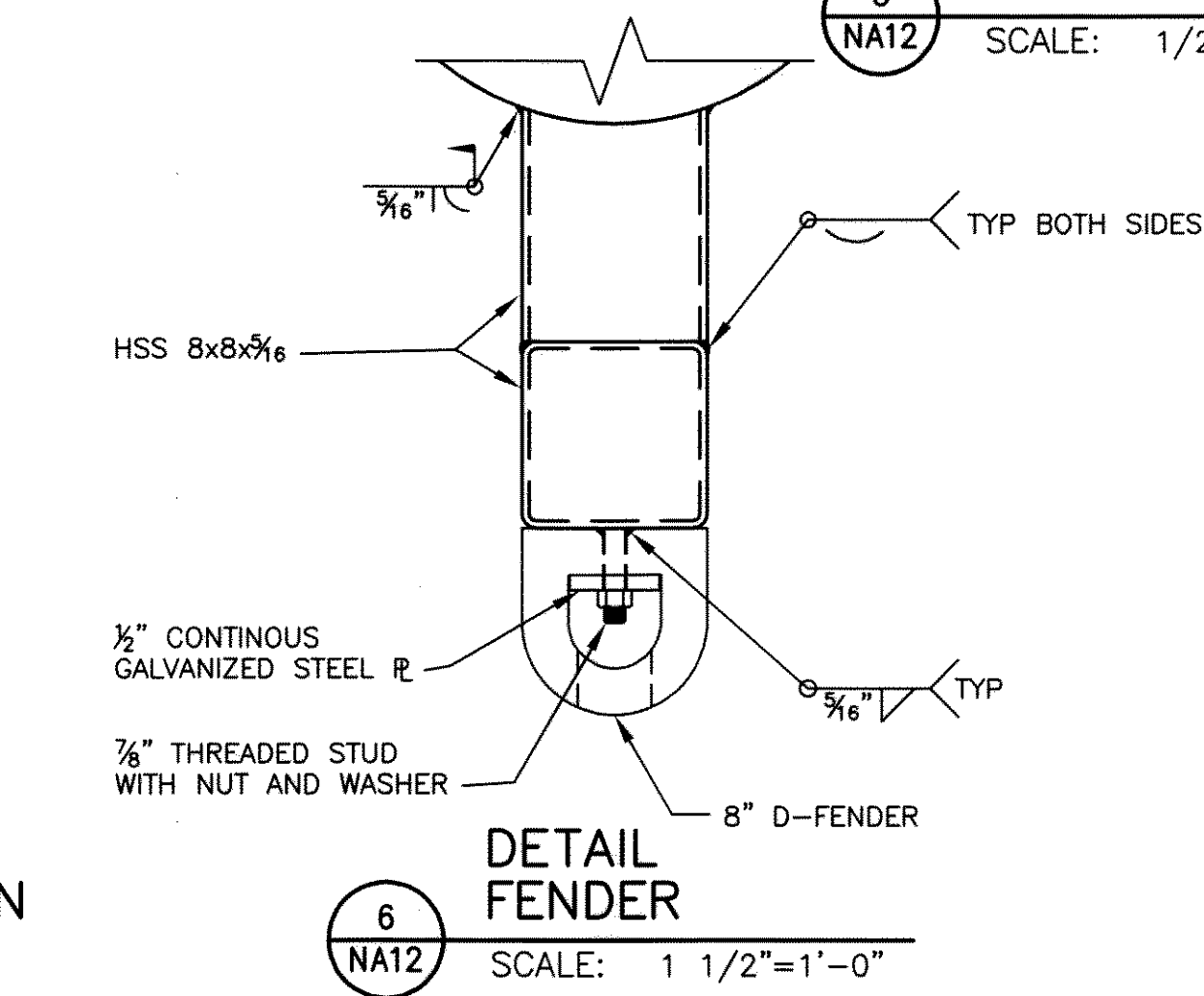
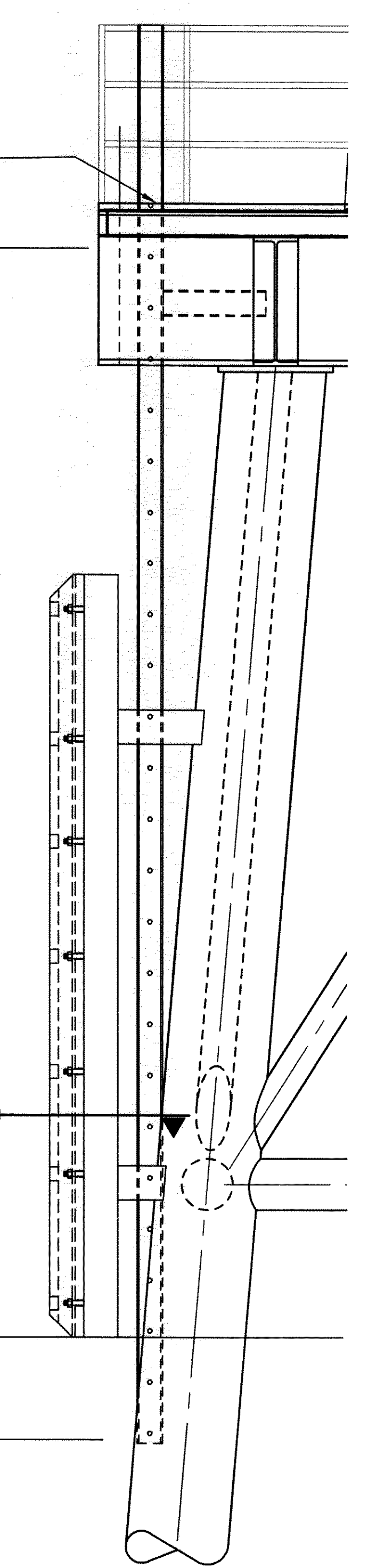
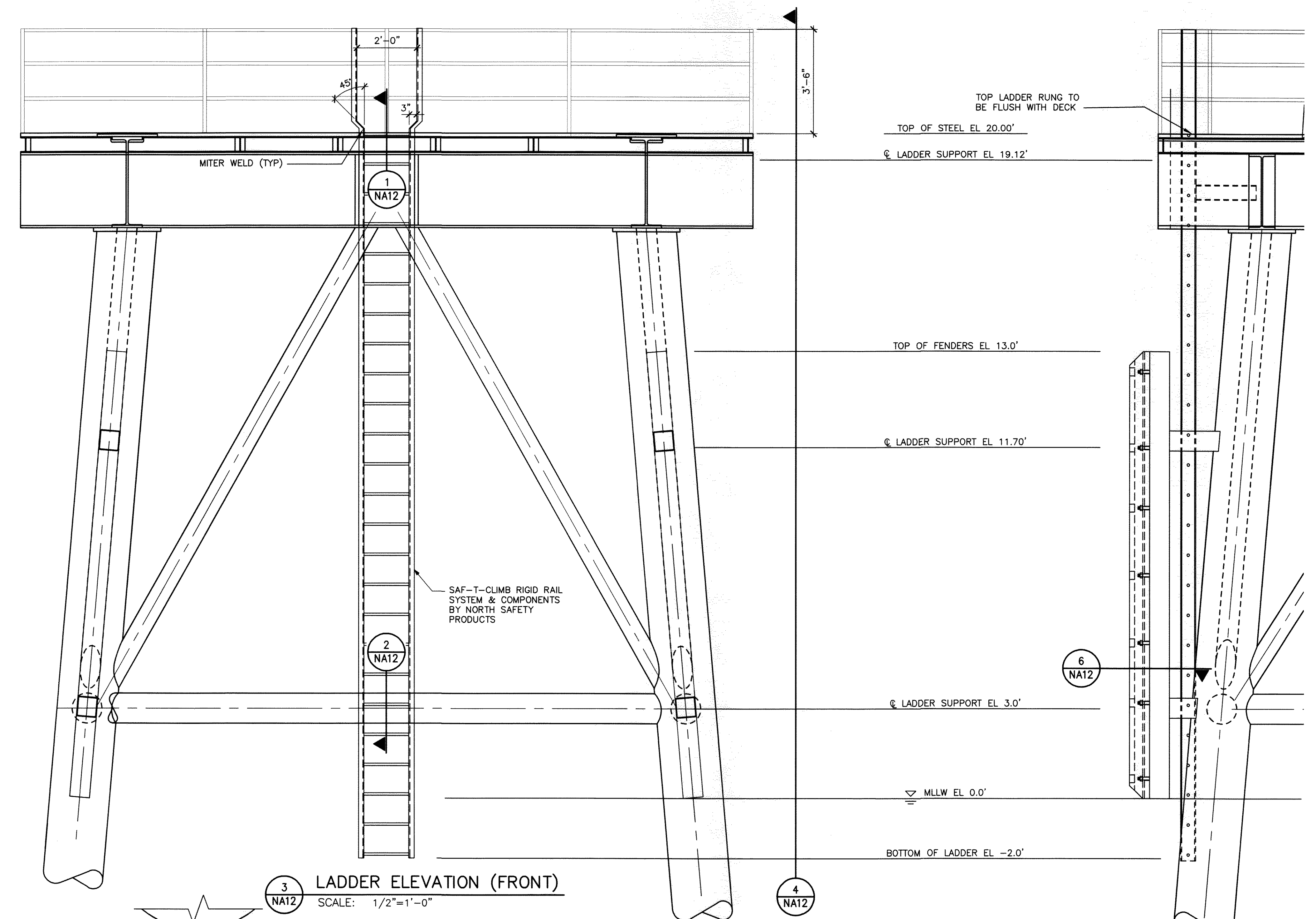
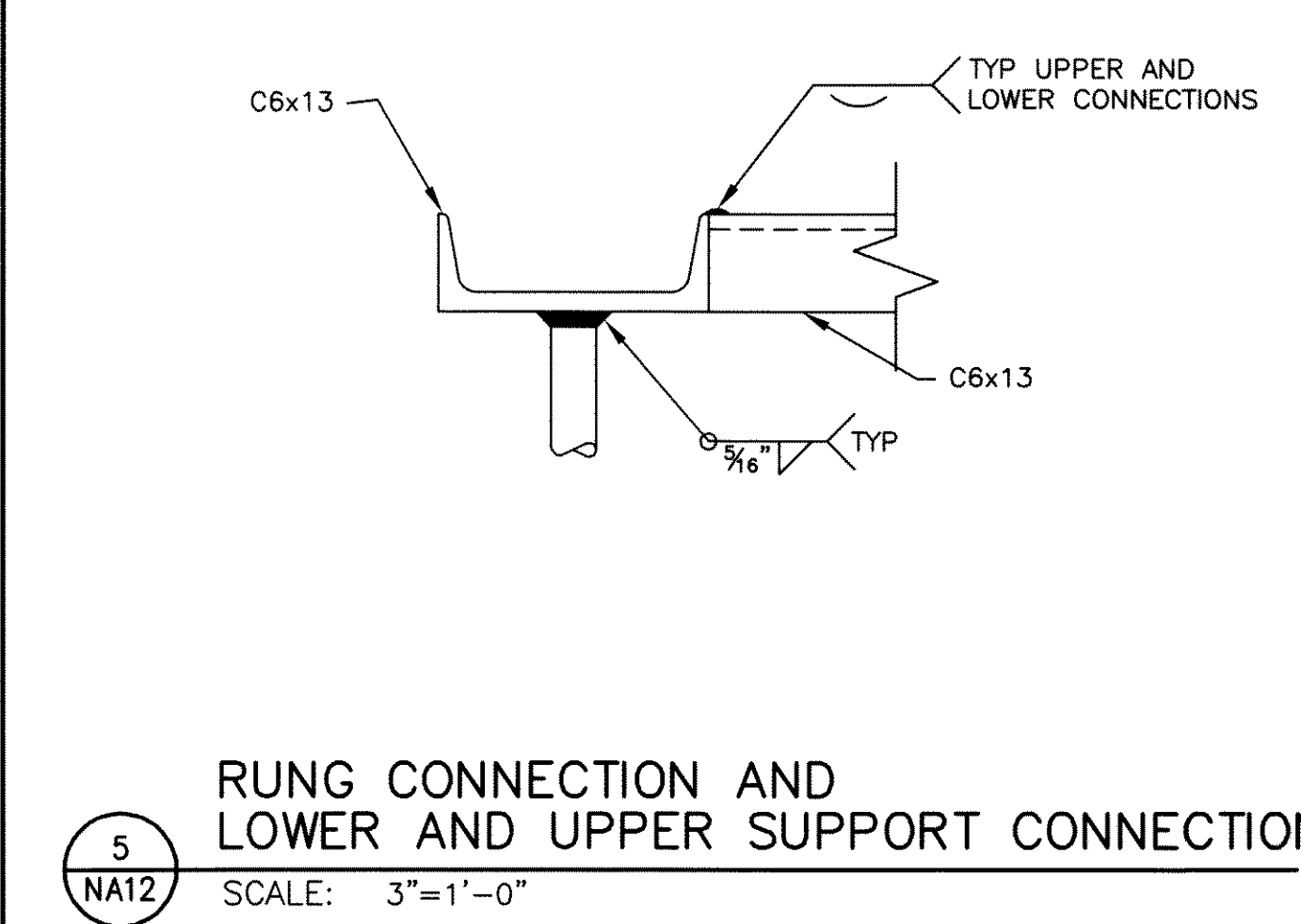
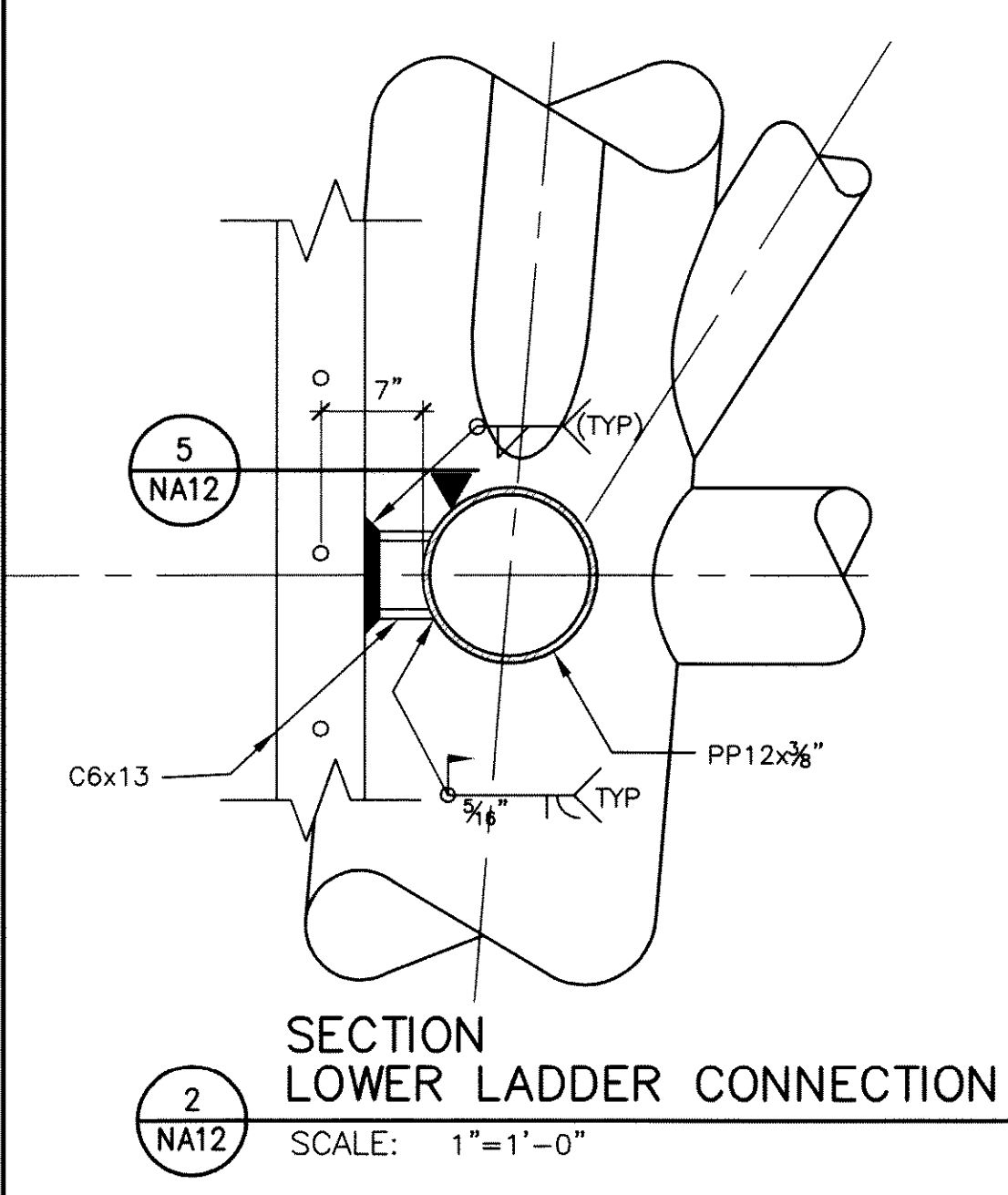
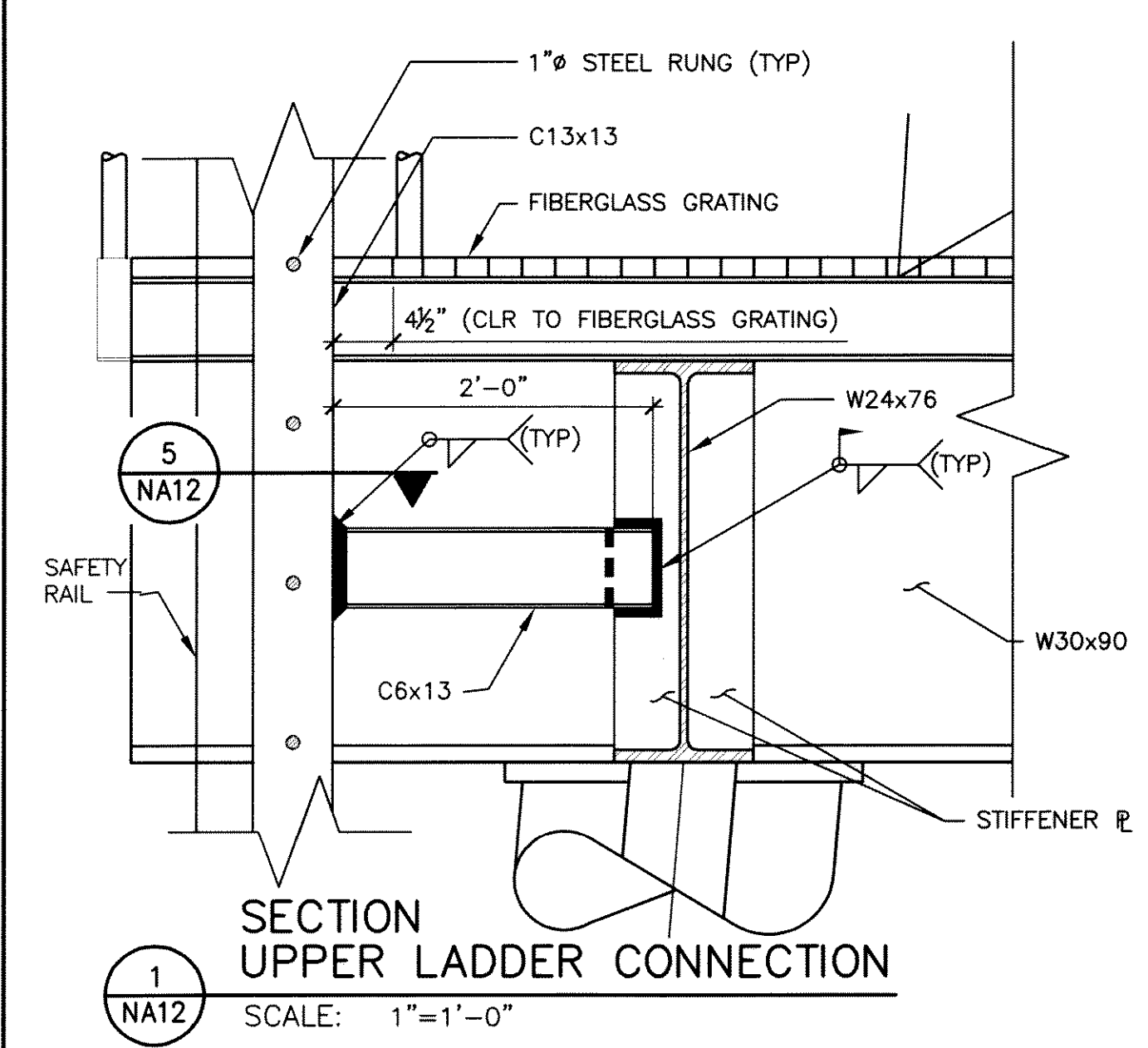
NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND RANGE FRONT LIGHT - LAPORTE, TX
STRUCTURAL DECK RAILING AND ANODE DETAILS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA11





NO.	DATE	REVISIONS	APP.

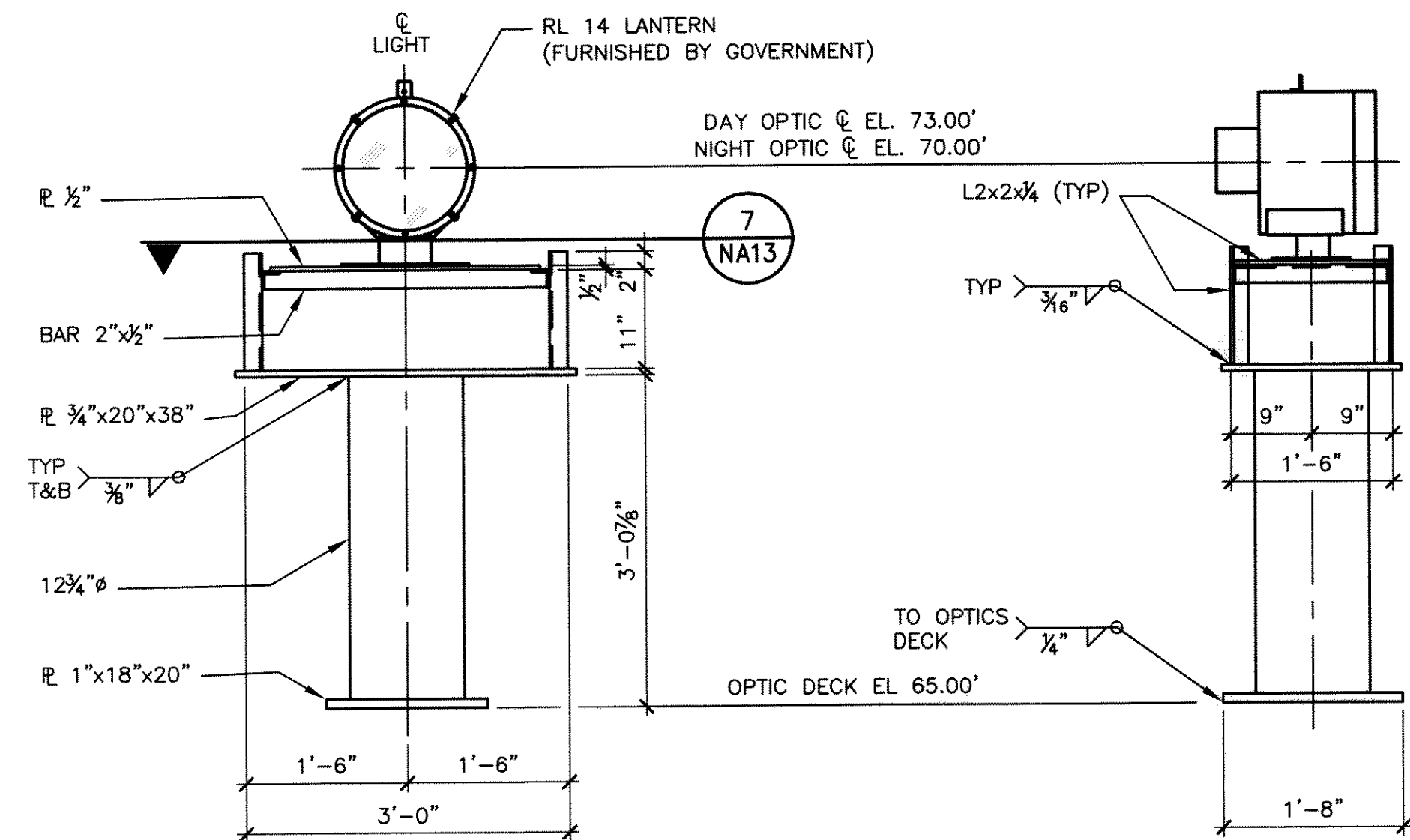
BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND
RANGE FRONT LIGHT - LAPORTE, TX
STRUCTURAL LADDER AND
RUBSTRIP DETAILS

SH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

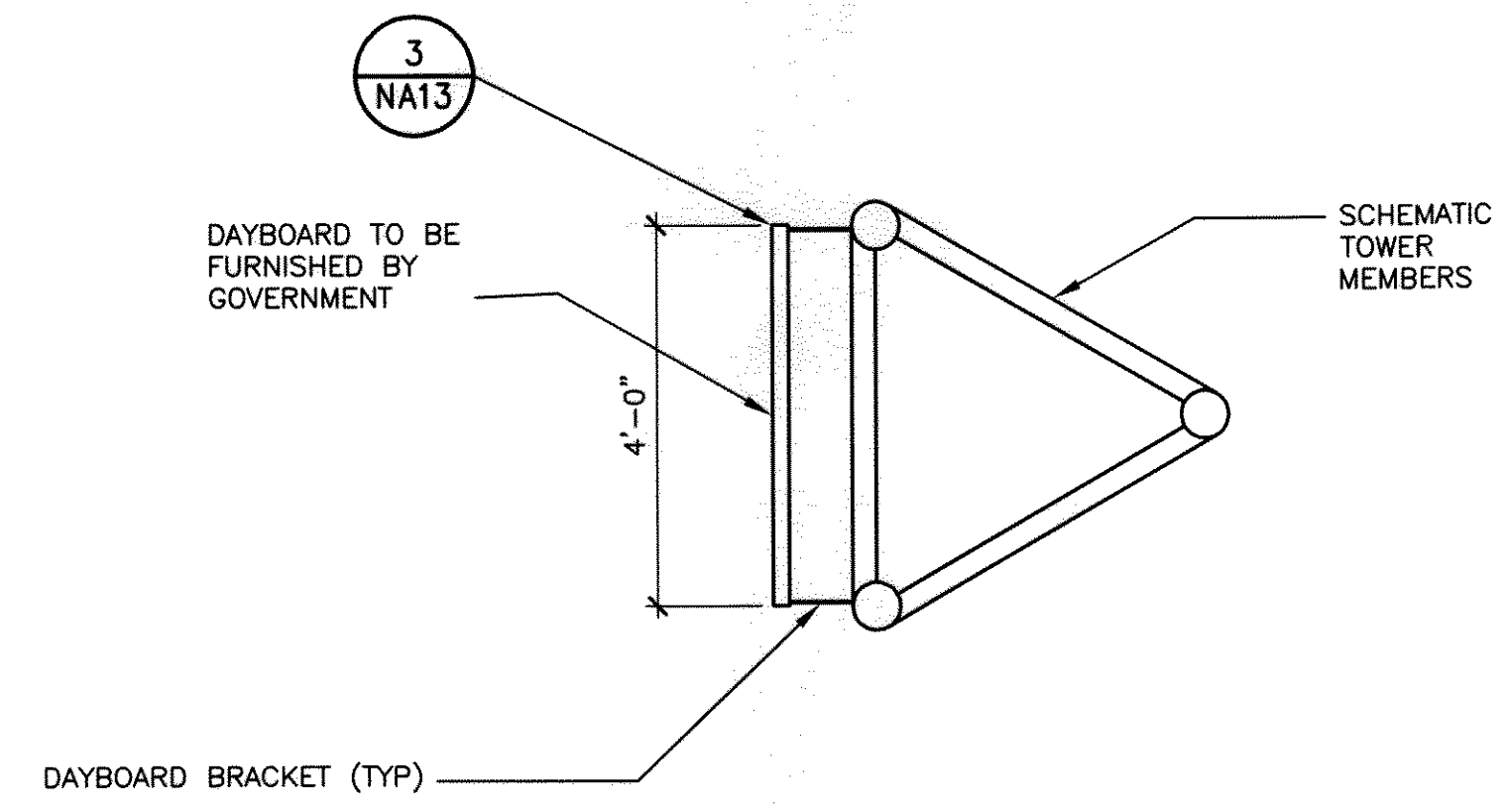
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA12

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
LOUIS HAMILTON
81477
EXPIRES 07-19-11

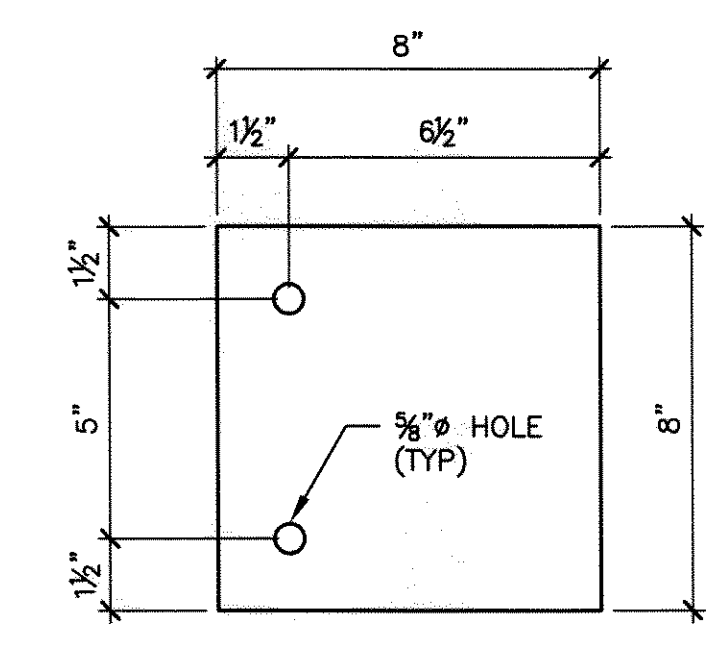
SHEET NO.
NA12



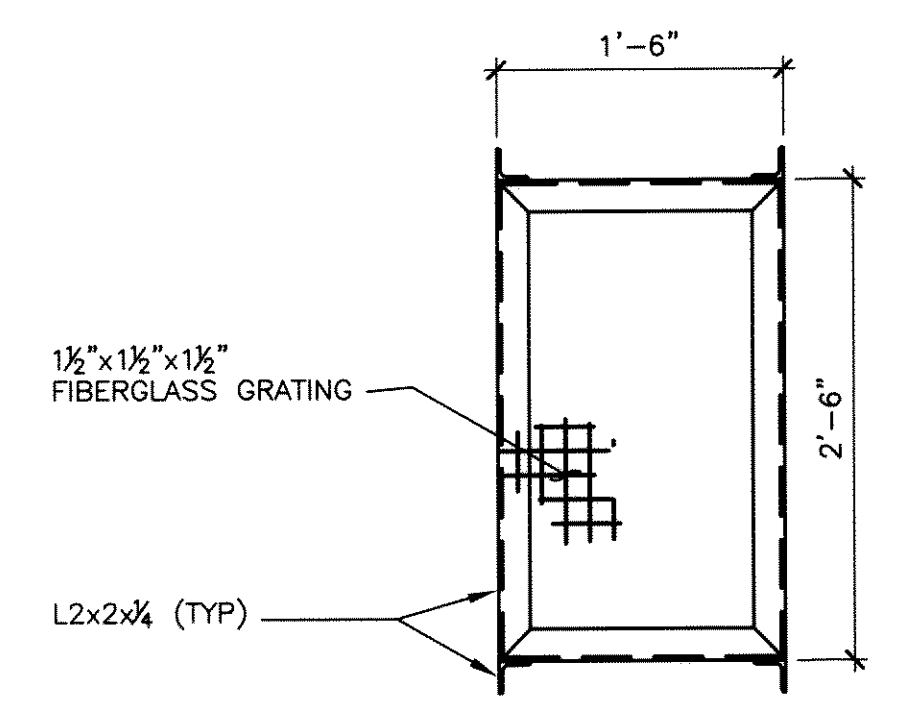
1 OPTIC STAND
NA13 SCALE: 3/4"=1'-0"



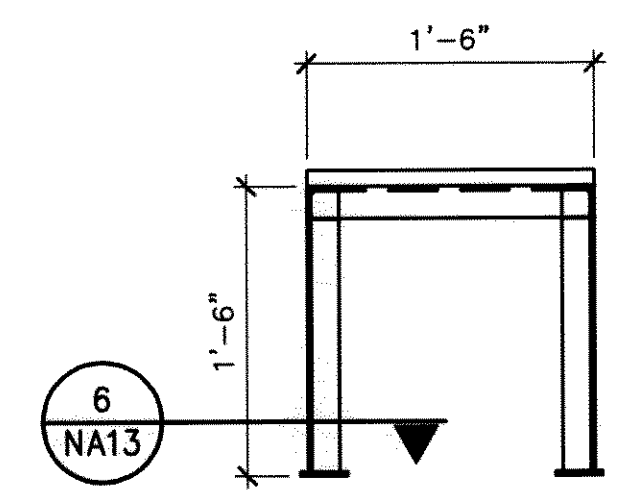
2 PLAN DAYBOARD BRACKET SCHEMATIC
NA13 SCALE: NOT TO SCALE



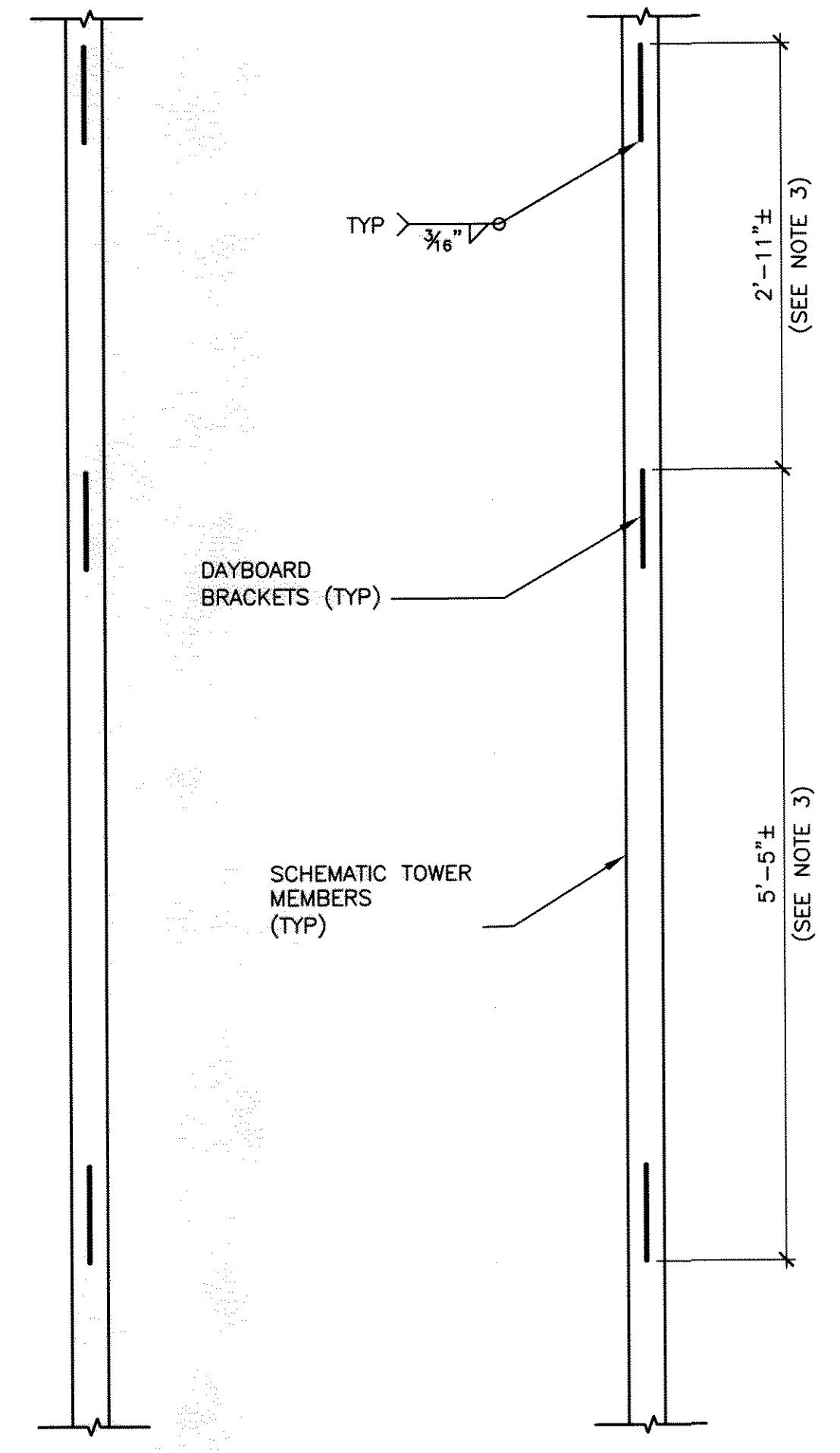
3 DETAIL DAYBOARD BRACKET
NA13 SCALE: 3" = 1'-0"



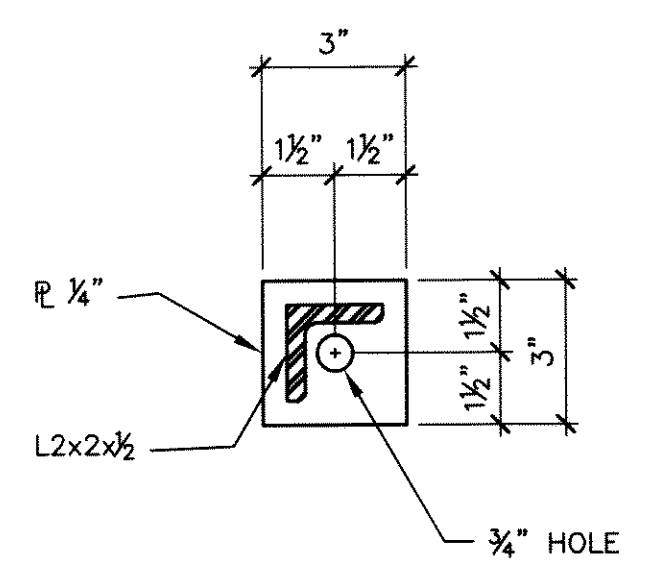
4 PLAN STEP BASE
NA13 SCALE: 1"=1'-0"



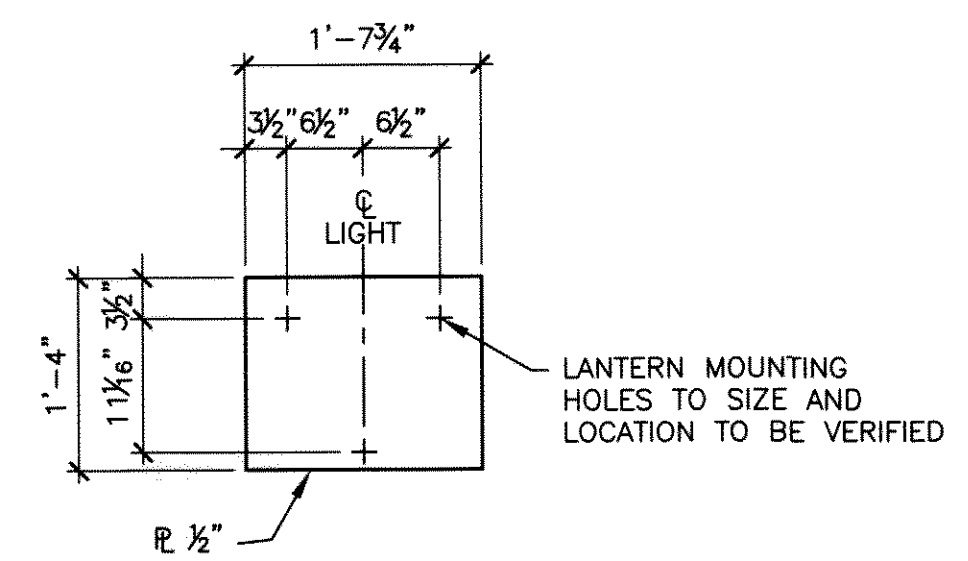
5 ELEVATION STEP BASE
NA13 SCALE: 1"=1'-0"



8 ELEVATION DAYBOARD BRACKET SCHEMATIC
NA13 SCALE: NOT TO SCALE



6 STEP BASE
NA13 SCALE: 3"=1'-0"



7 OPTIC BASE PLATE
NA13 SCALE: 3/4"=1'-0"

- DAYBOARD NOTES:
1. DAYBOARD TO BE FURNISHED BY GOVERNMENT.
 2. CONTRACTOR TO PROVIDE SIX DAYBOARD CONNECTION BRACKETS AND TWO 10 FOOT LONG GALVANIZED L2x2x1/4 REQUIRED FOR DAYBOARD SUPPORT RAILS (NOT SHOWN ON DRAWING).
 3. THE CONTRACTOR SHALL COORDINATE WITH THE OFFICER IN CHARGE FOR THE EXACT LOCATIONS OF THE CONNECTION BRACKETS AND DAYBOARD. THE DRAWING LOCATIONS ARE SCHEMATIC AND MAY REQUIRE ADJUSTMENT TO THE TOWER AND DAYBOARD CONFIGURATION.

NO.	DATE	REVISIONS	APP.

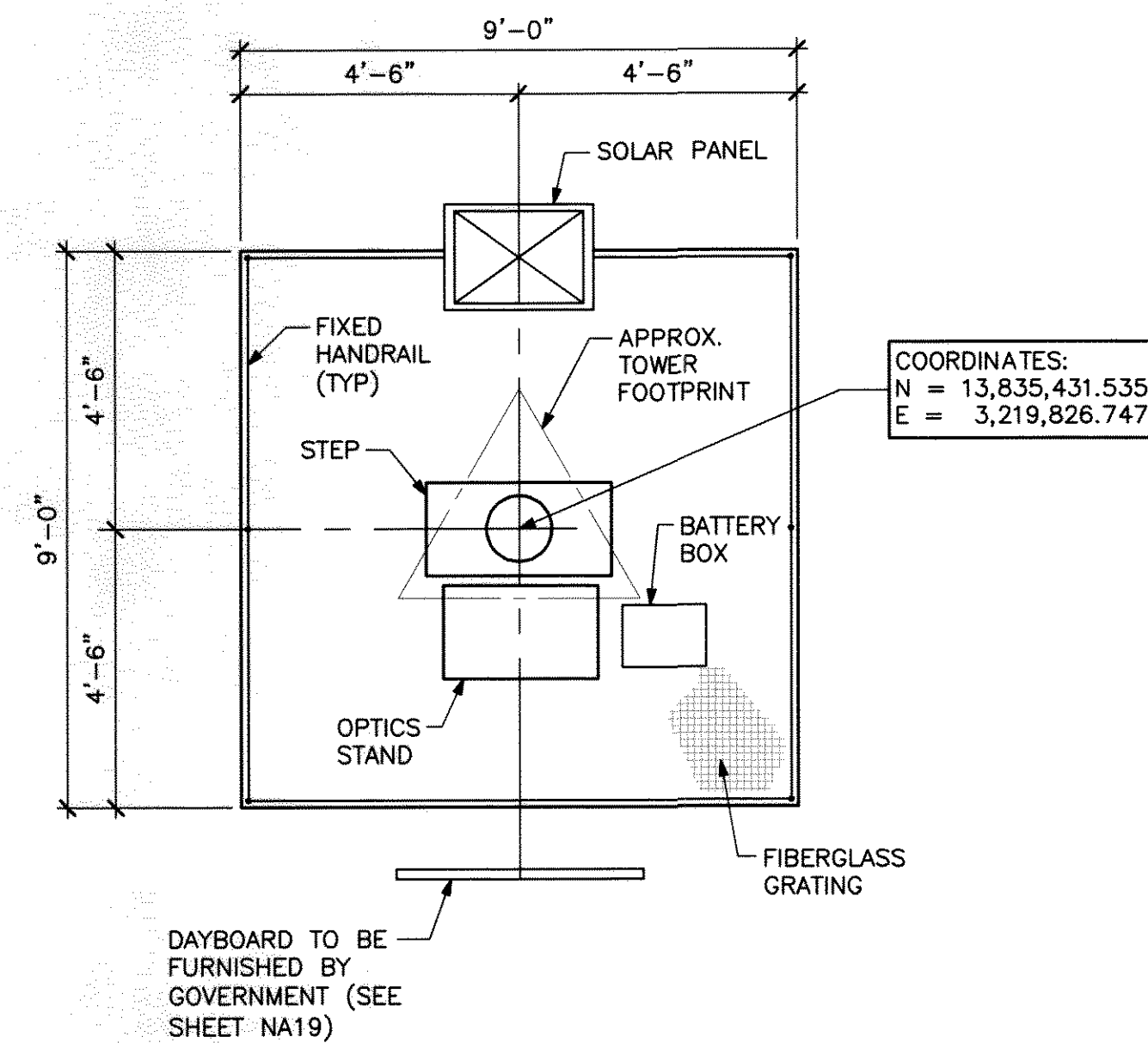
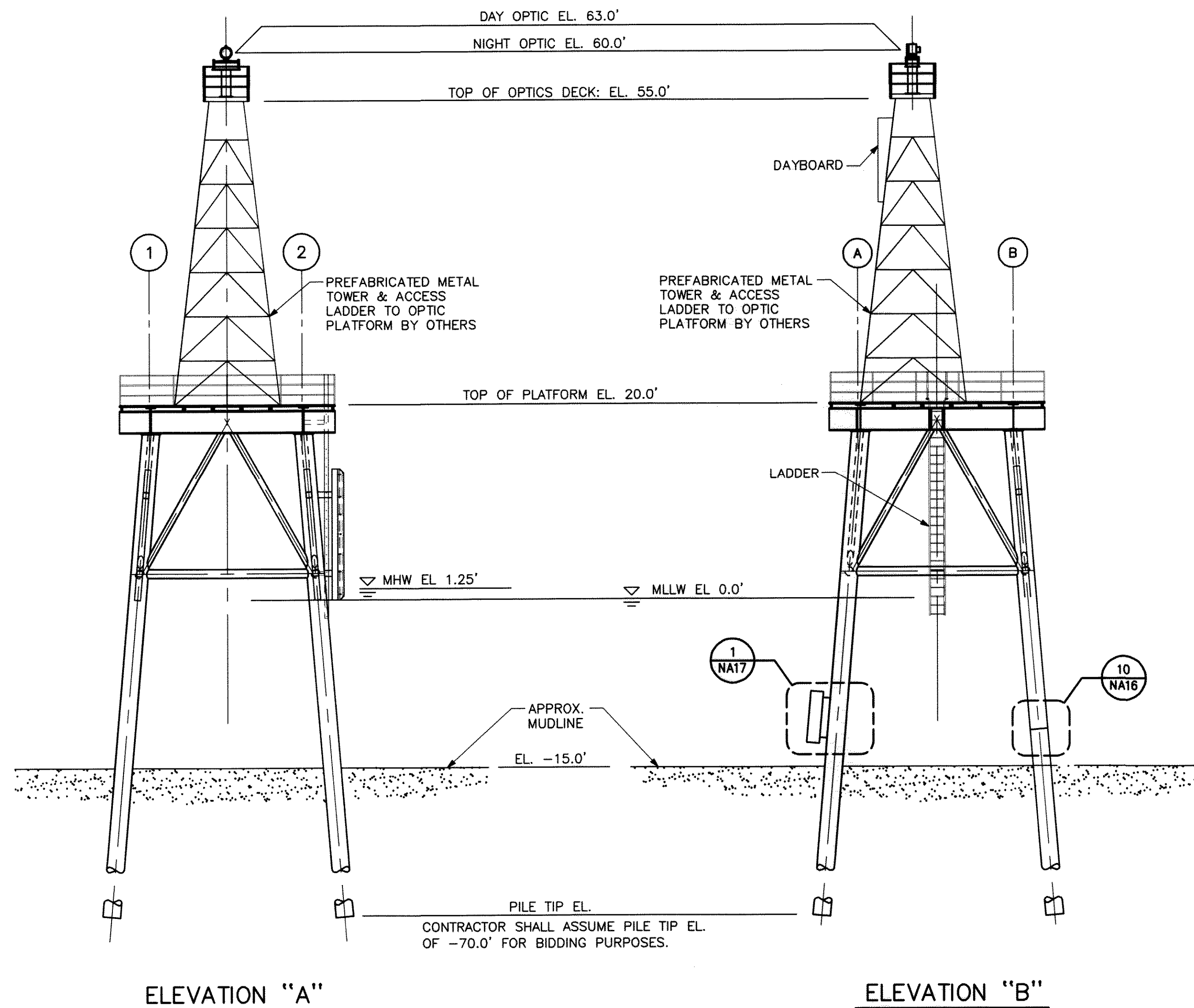
BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
LOWER PEGGY'S LAKE INBOUND
RANGE FRONT LIGHT
LAPORTE, TX
STRUCTURAL GENERAL DETAILS

SH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

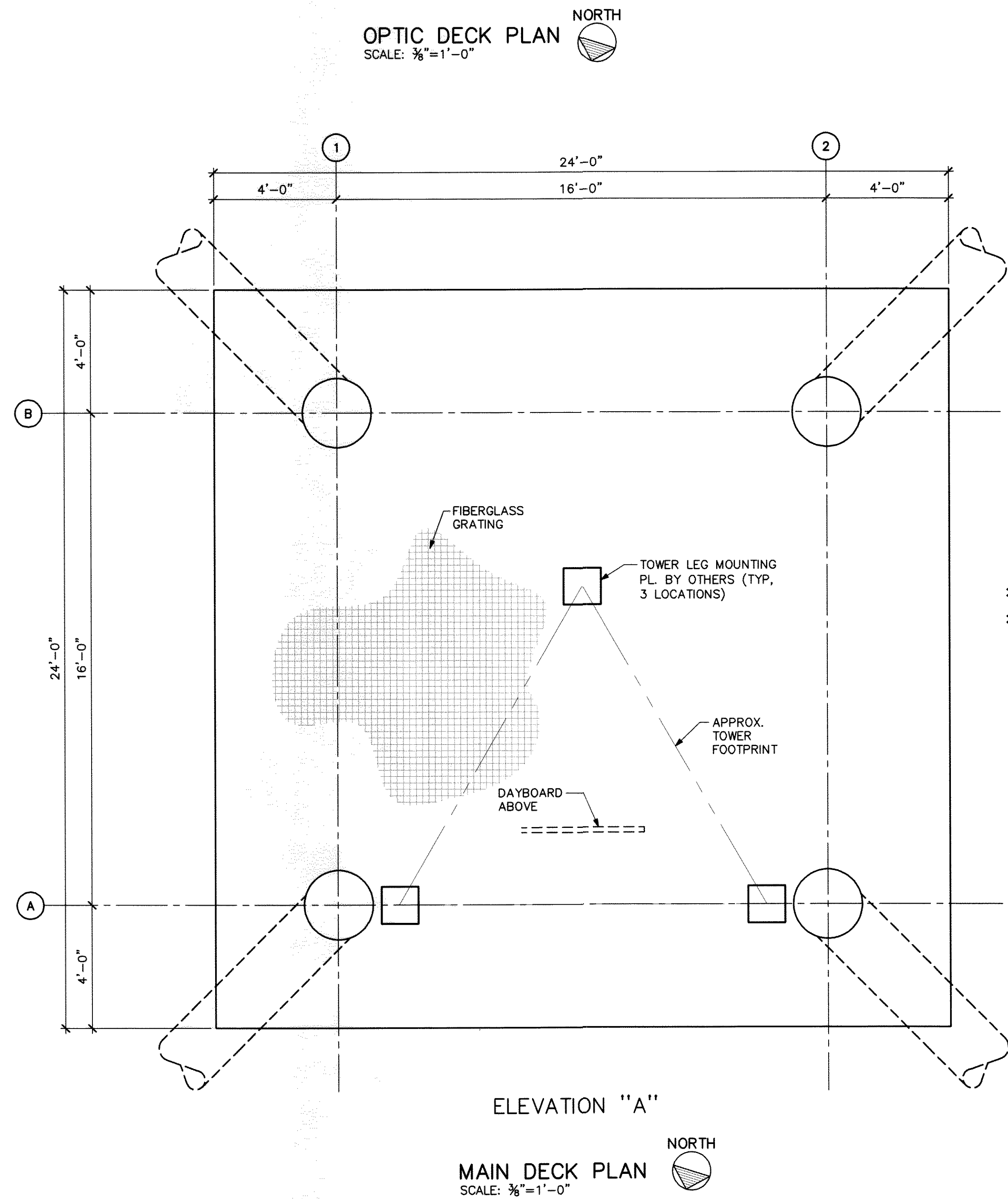
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA13

STATE OF TEXAS
LOUIS A. HAMILTON
81477
LICENSED PROFESSIONAL ENGINEER
10-11

SHEET NO. NA13



NOTE:
 1. LIGHT AND ASSOCIATED ELECTRONICS TO BE FURNISHED BY GOVERNMENT.
 2. TOWER PLATFORM TO BE DESIGNED BY TOWER MANUFACTURER. THE LAYOUT PROVIDES GENERAL DIMENSIONS AND THE LAYOUT OF EQUIPMENT.



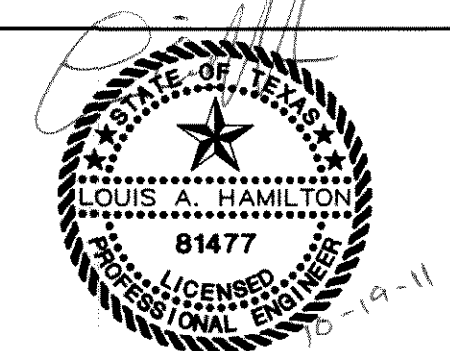
- DESIGN NOTES:**
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
 - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF AWS D1.1 LATEST EDITION AND APPLICABLE RULINGS, SUPPLEMENTS AND ADDENDA.
 - ALL WELDS SHALL CONFORM TO CONTRACT SPECIFICATIONS.
 - ALL WELDS SHALL BE FULL PENETRATION CONTINUOUS BEVEL WELDS UNLESS NOTED. NON-STRUCTURAL COMPONENTS OF HANDRAILS ARE PERMITTED TO BE FULL-STRENGTH FILLET WELDS.
 - PAINTING SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
 - STRUCTURAL SHAPES, PLATES, AND PIPE SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
 - STRUCTURAL SHAPES AND PLATES SHALL BE ASTM A 252, GRADE 50.
 - PIPE (HANDRAILS AND BRACING) SHALL BE ASTM A53, GRADE B.
 - PIPE PILES SHALL BE ASTM A 252, GRADE 3.
 - UNLESS NOTED, ALL BOLTS SHALL BE ASTM A 325.
 - NO MATERIAL OR MEMBER SIZE SUBSTITUTIONS MAY BE MADE WITHOUT USCG APPROVAL.
 - ALL FIELD WELDS SHALL BE CLEANED UP BY USING WIRE BRUSH AND COATING TOUCHED UP IN ACCORDANCE WITH THE SPECIFICATIONS.
 - THE PLATFORM STRUCTURE IS DESIGNED FOR THE FOLLOWING TOWER LOADING:
 - TOWER TOTAL SHEAR = 33 KIPS
 - TOWER OVERTURNING MOMENT = 1600 FT.-KIPS
 - LEG TENSION = 150 KIPS
 - LEG COMPRESSION = 150 KIPS
 - CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND FABRICATION OF TOWER AND ALL NECESSARY APPURTENANCES ATTACHED TO THE TOWER INCLUDING DAYBOARD.

NO.	DATE	REVISIONS	APP.

BOSTCO
 STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
CROSSOVER OUTBOUND
RANGE REAR LIGHT
LAPORTE, TX -
STRUCTURAL PLAN

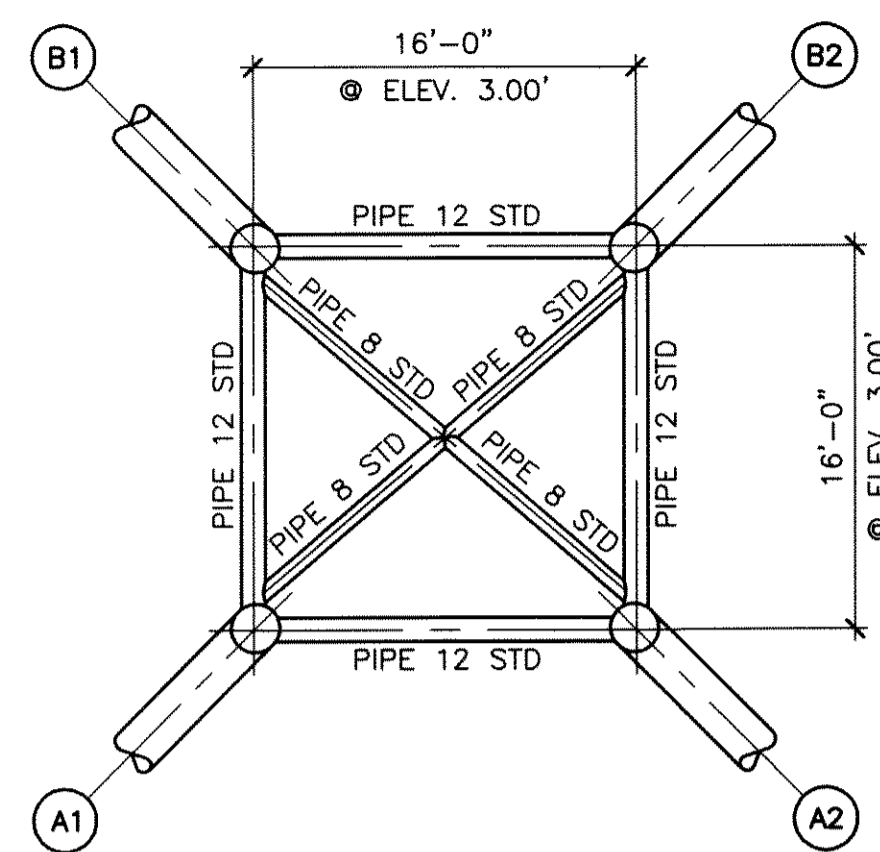
SSH STANLEY SPURLING & HAMILTON, INC.
 Consulting Engineering Services
 T.E.P.E. REGISTRATION # F-000175
 3301 Edloe Street, Suite 200 Houston, Texas 77027
 Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
 DATE: 10-18-11 DWN. BY: TP
 JOB NO. 9896-0002 DWG. NO. 896002-NA14

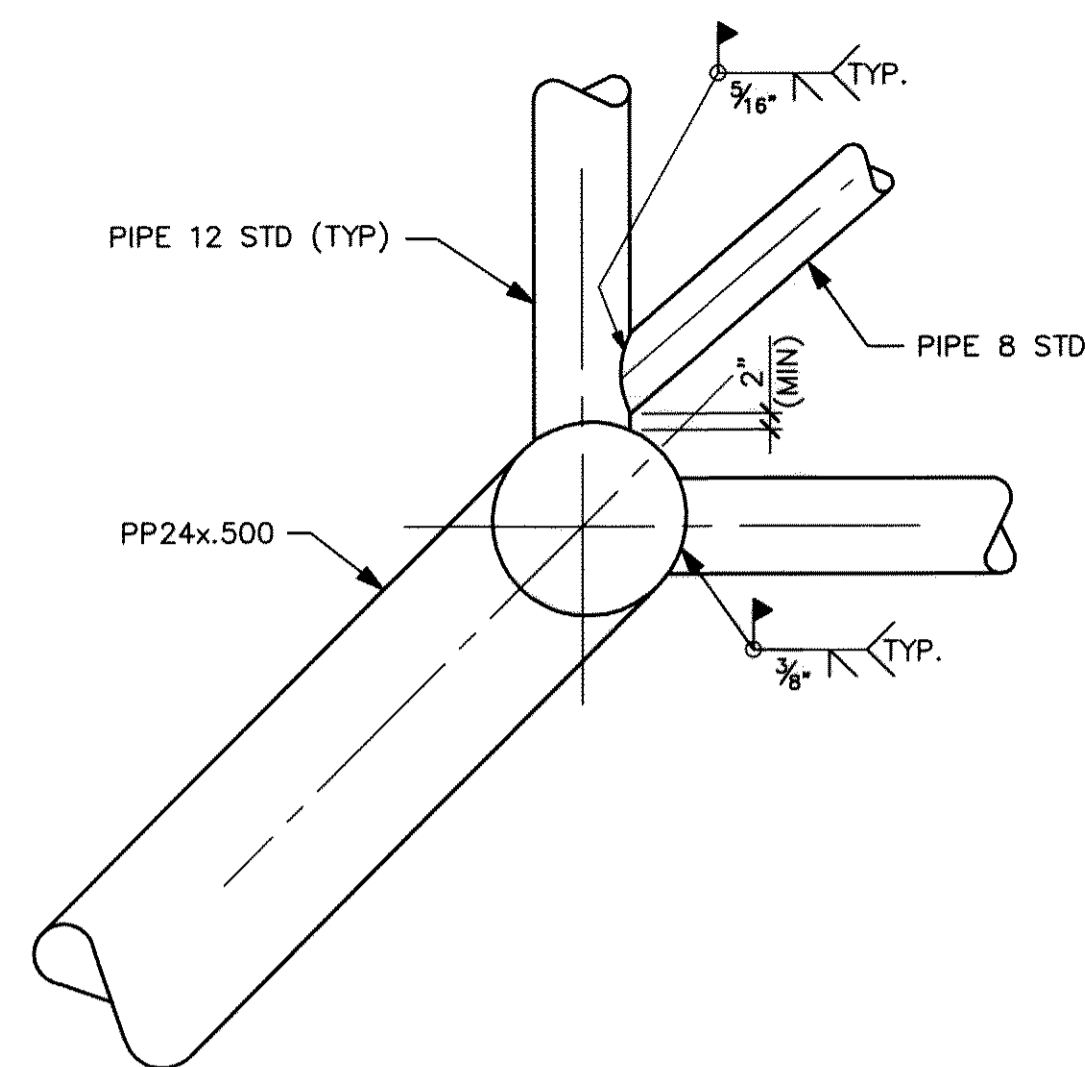


SHEET NO. NA14

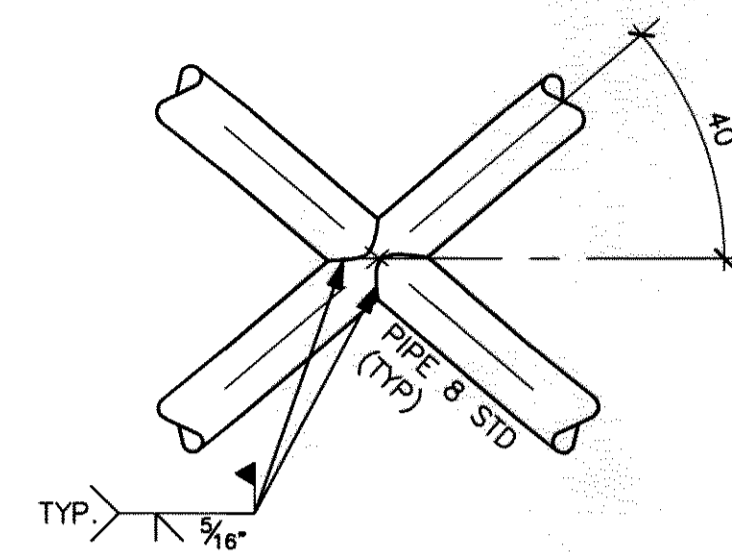
BOSTCO-SSH-CV-NA14



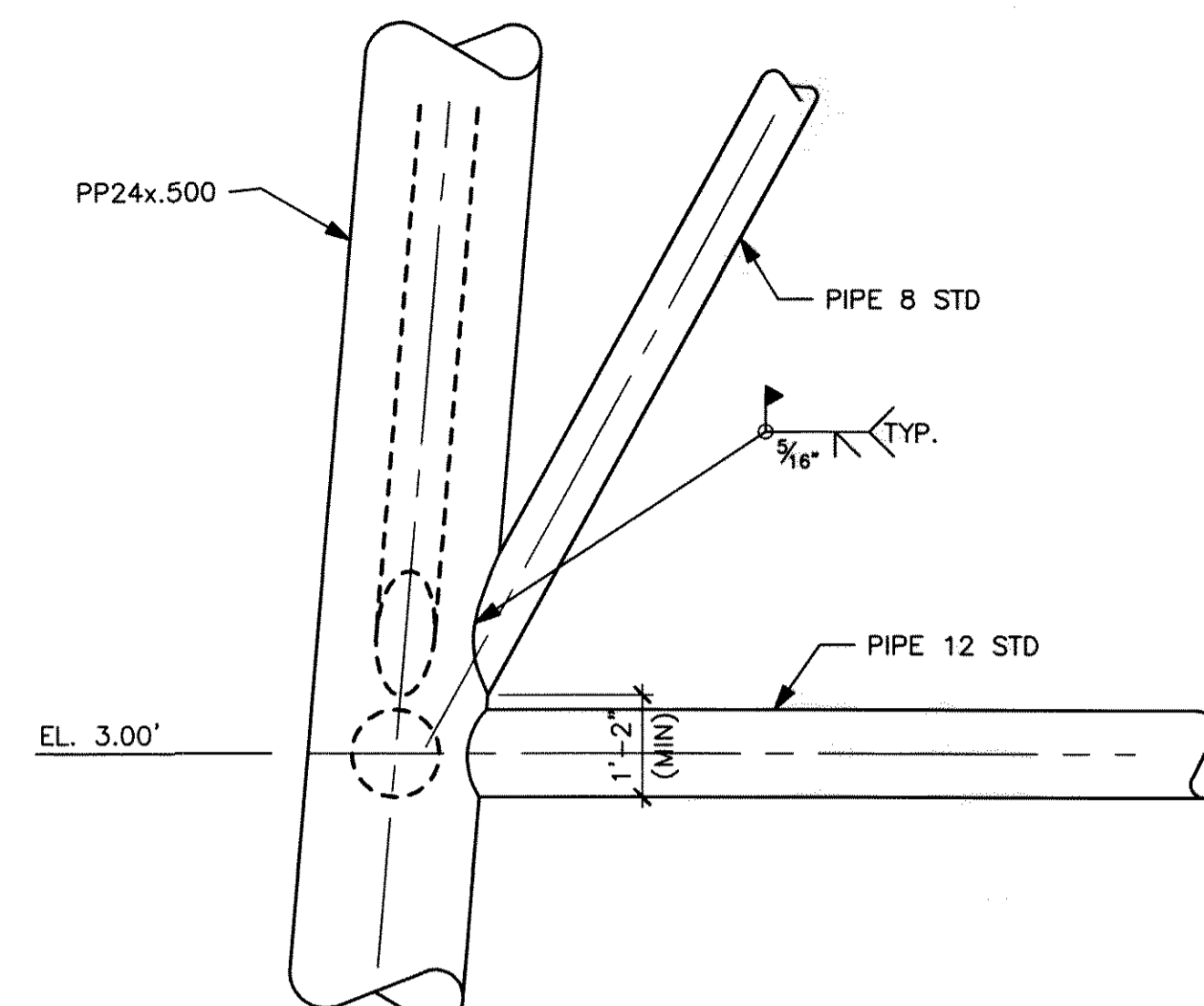
1
NA16 PLAN LOWER HORIZONTAL BRACING (EL 3.0')
SCALE: 1/8"=1'-0"



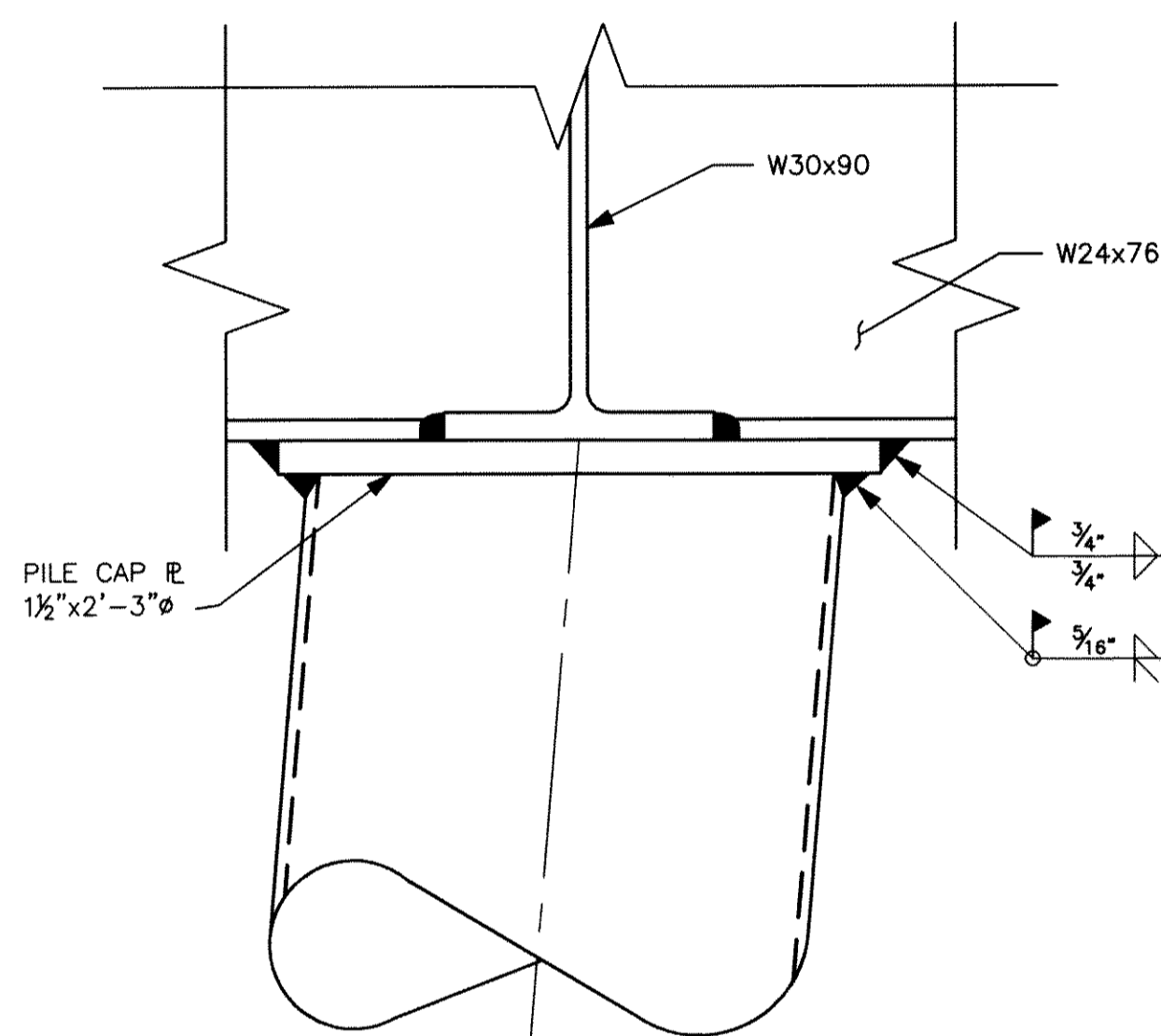
2
NA16 DETAIL BRACING CONNECTIONS (EL 3.0')
SCALE: 1/2"=1'-0"



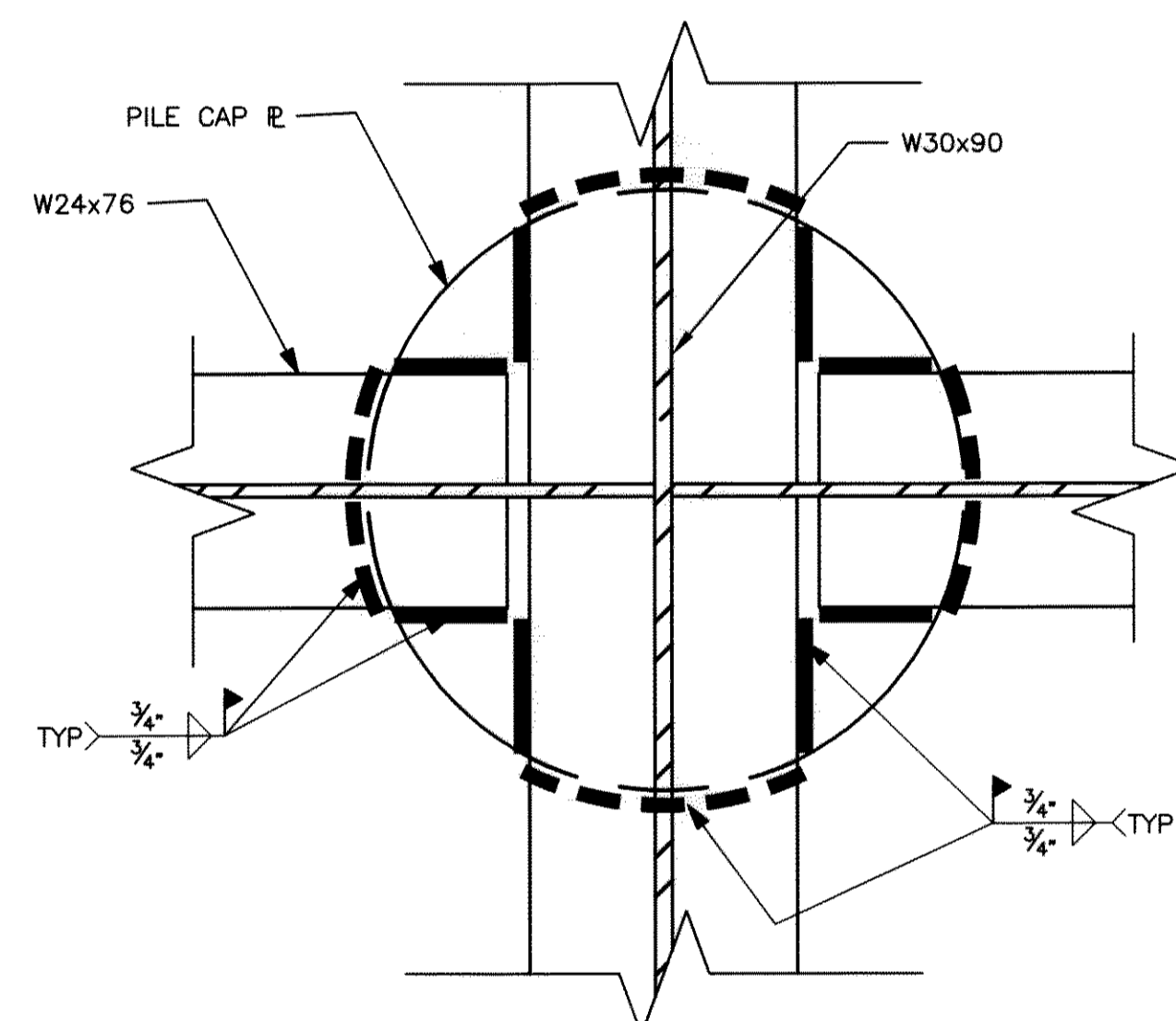
3
NA16 DETAIL BRACING CONNECTIONS (EL 3.0')
SCALE: 1/2"=1'-0"



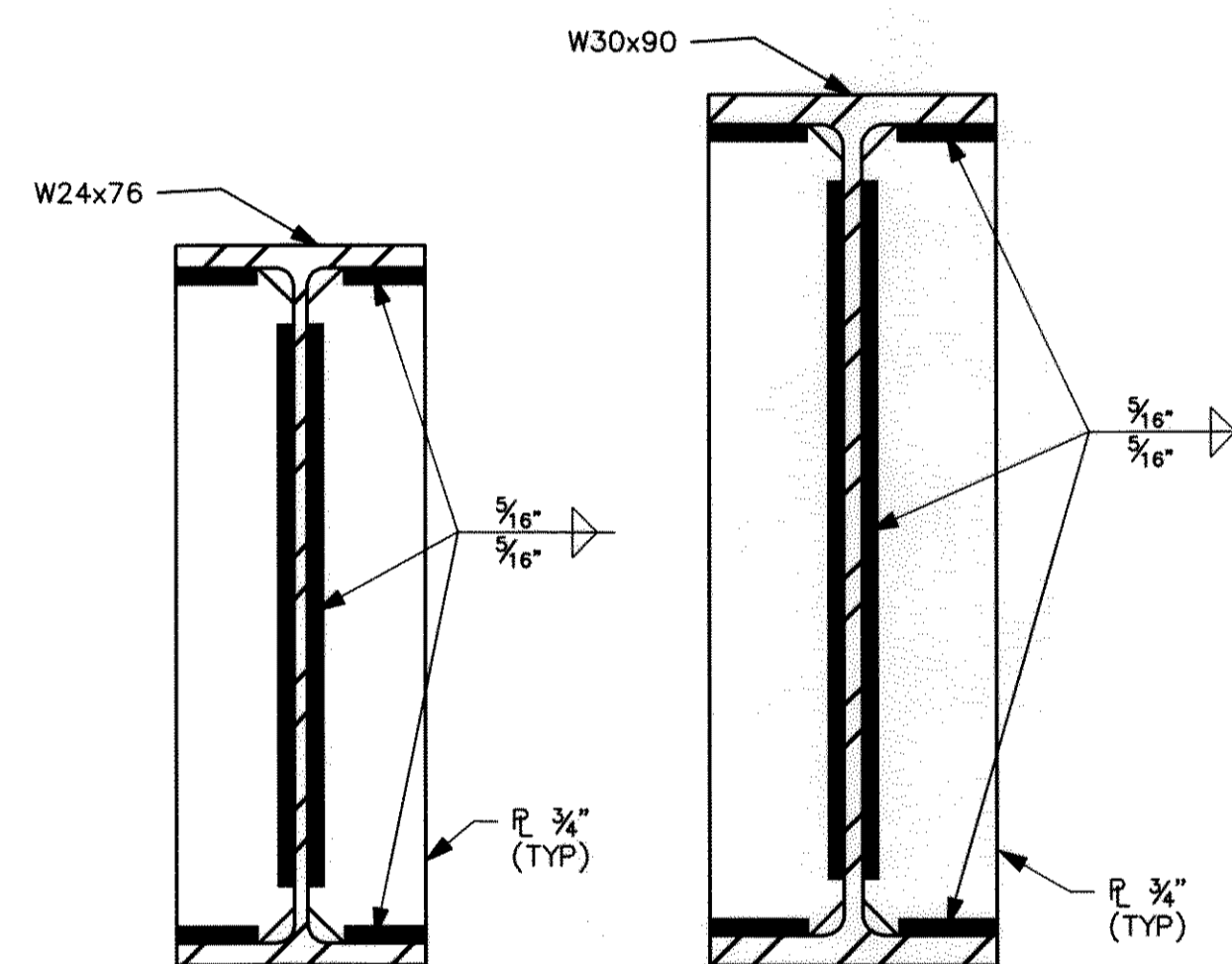
4
NA16 DETAIL PP8x.322 TO PP24x.500 VERTICAL CONNECTION
SCALE: 1/2"=1'-0"



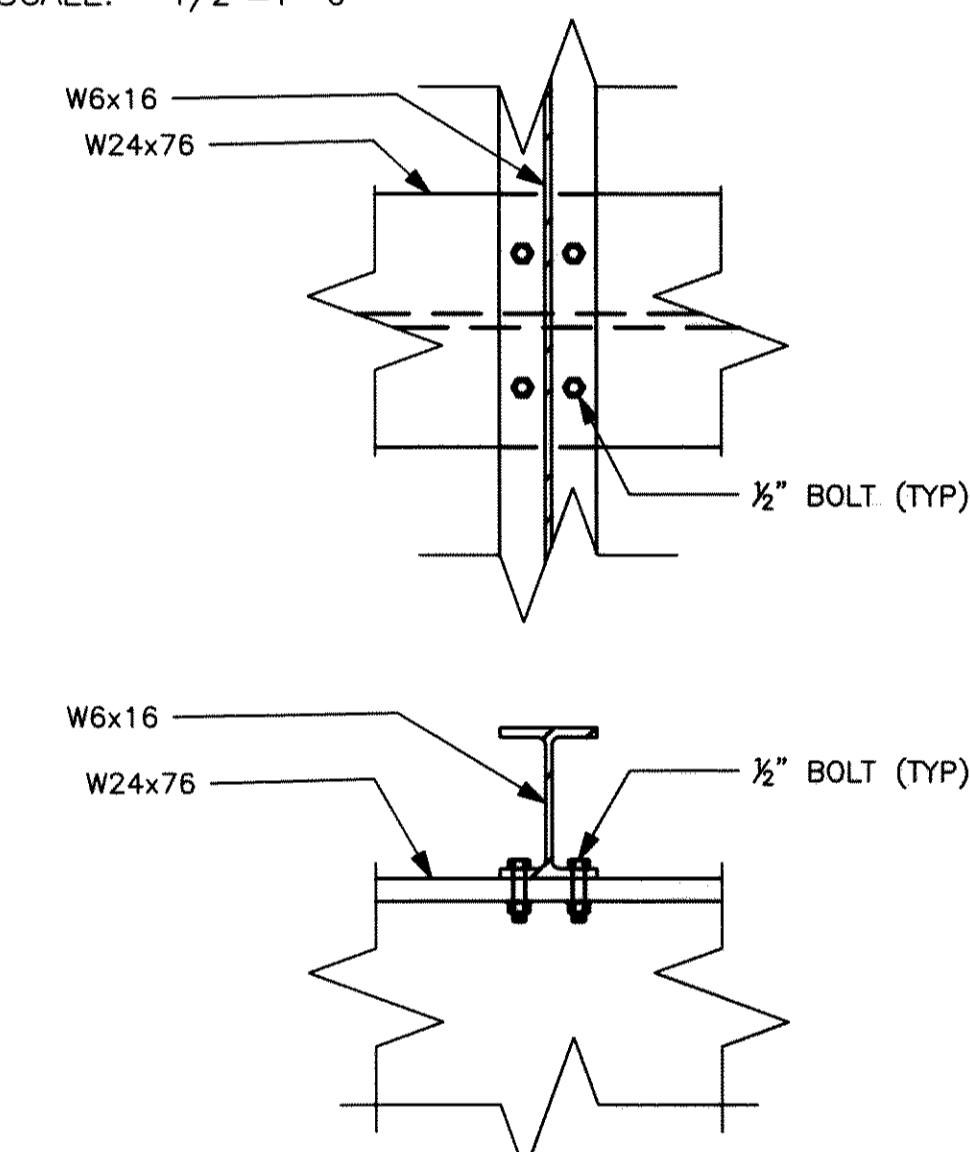
5
NA16 DETAIL PILE TO PILE CAP
PLATE CONNECTION (TYP)
SCALE: 1 1/2"=1'-0"



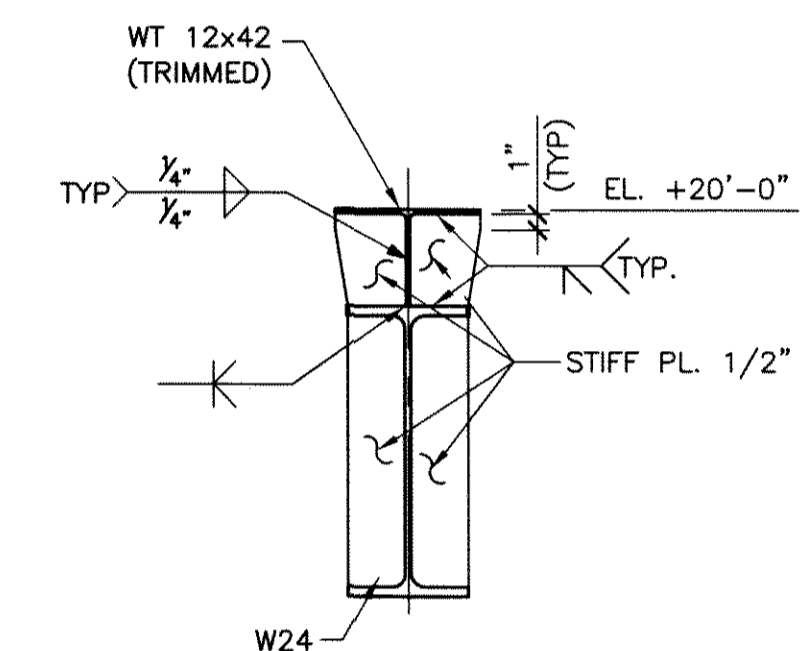
6
NA16 DETAIL PILE CAP PLATE TO
W MEMBERS CONNECTION (TYP)
SCALE: 1 1/2"=1'-0"



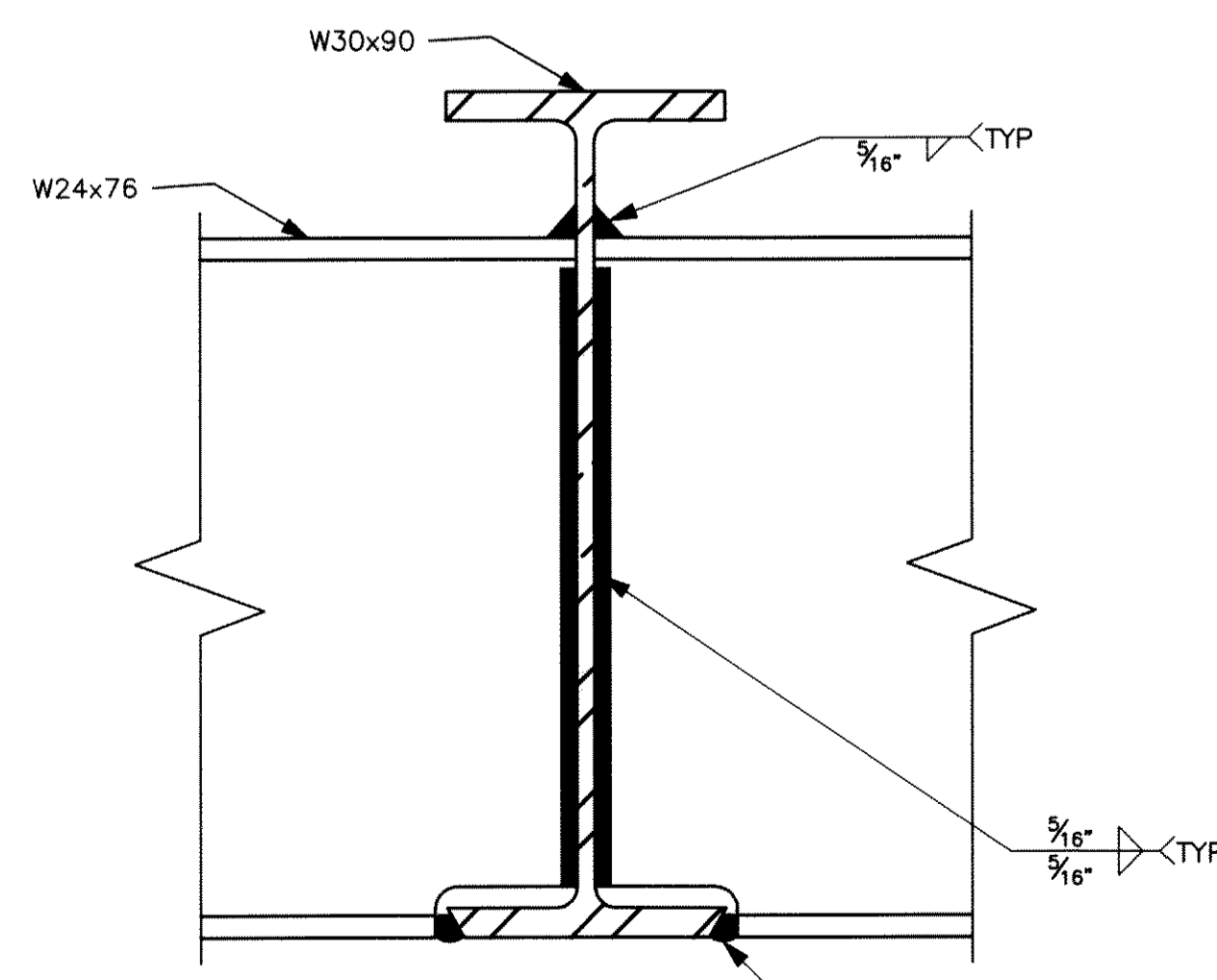
7
NA16 DETAIL W30 AND W24 STIFFENER
SCALE: 1 1/2"=1'-0"



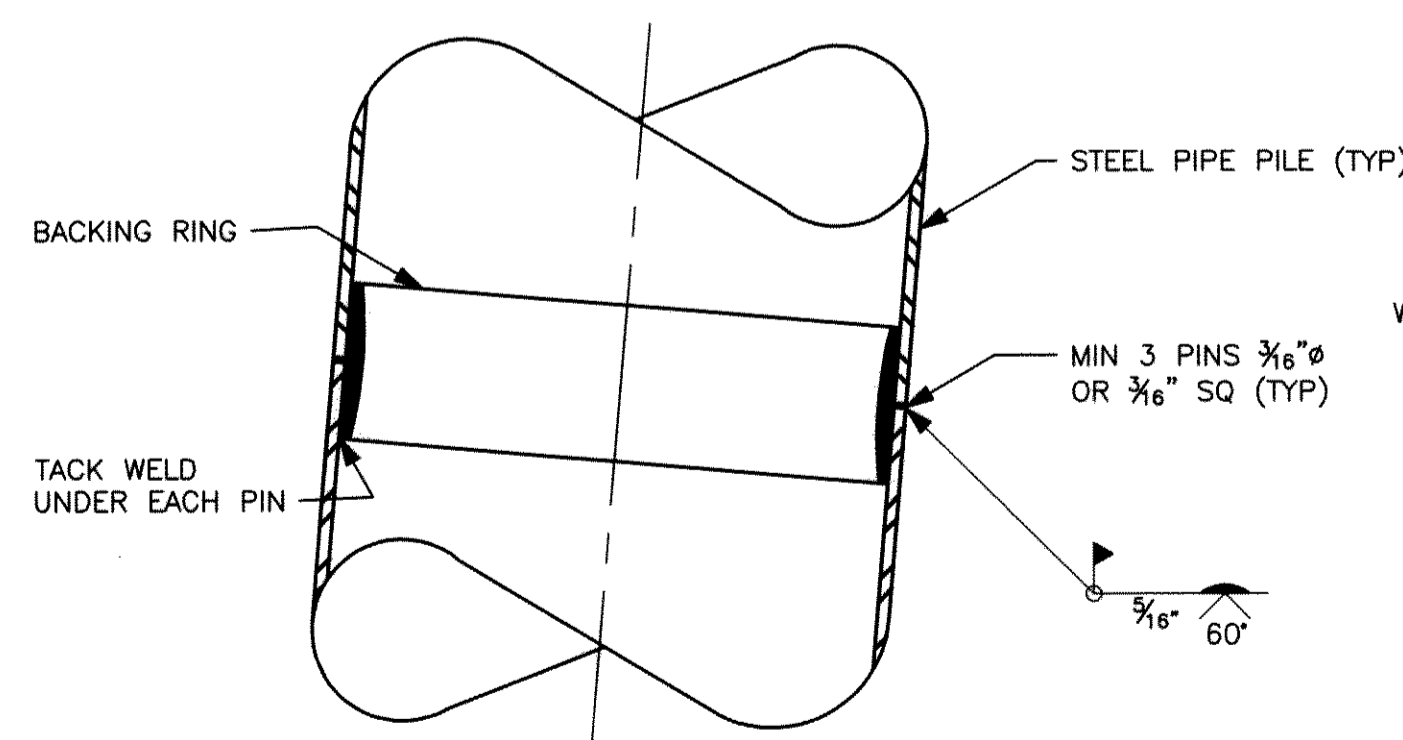
8
NA16 DETAIL (PLAN AND SECTION)
W6 TO W24 CONNECTION
SCALE: 1 1/2"=1'-0"



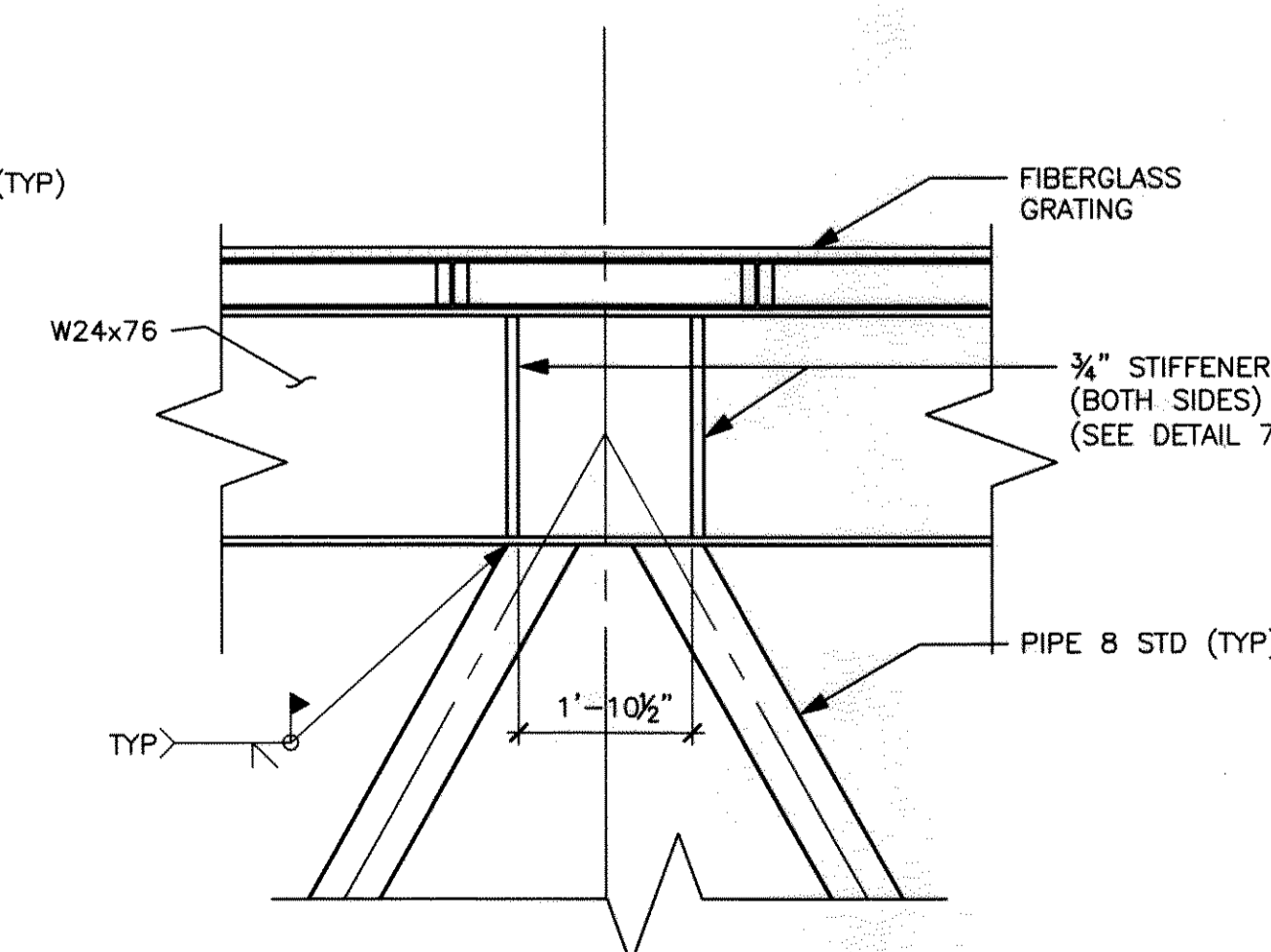
13
NA16 SECTION
SCALE: 1"=1'-0"



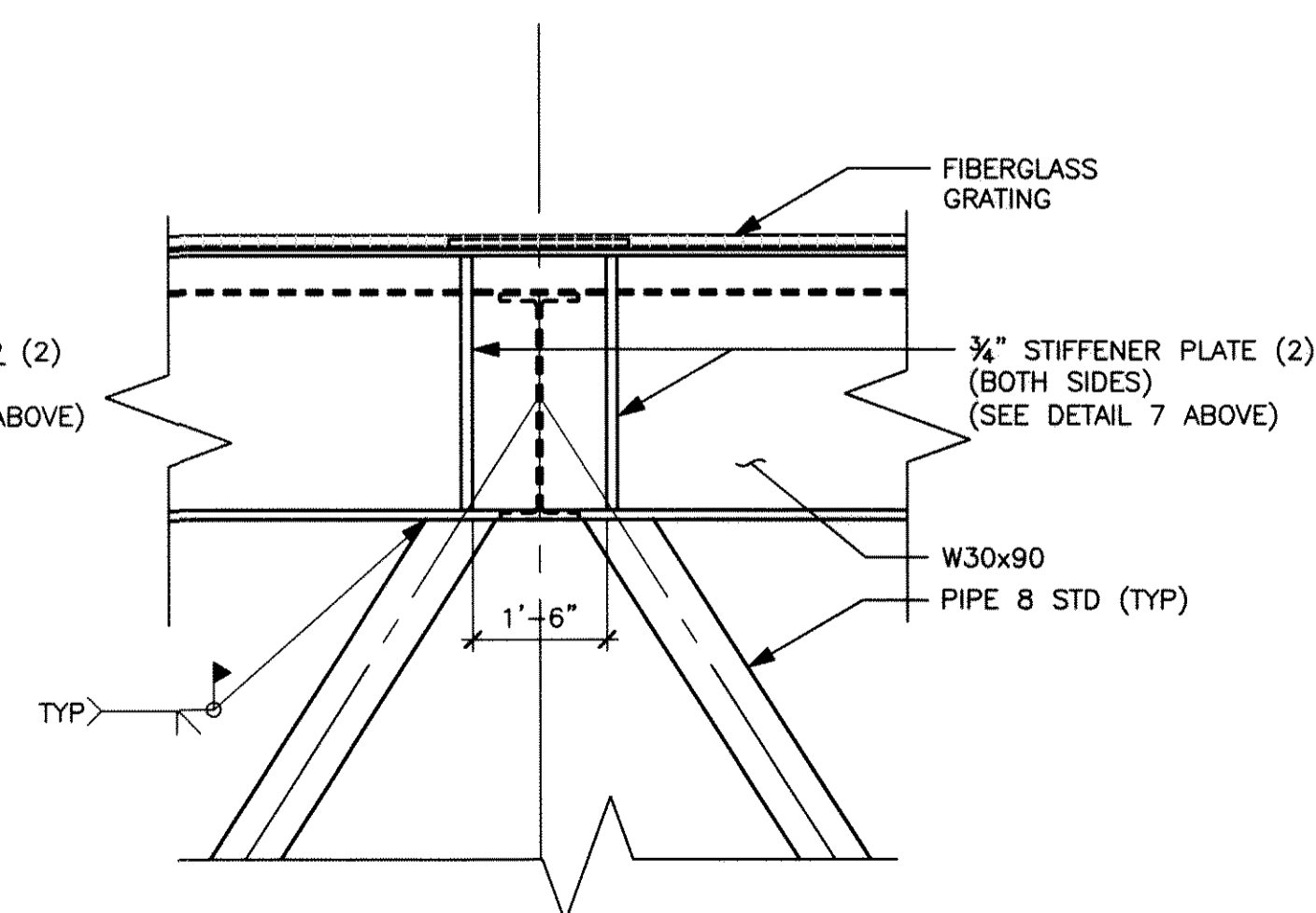
9
NA16 DETAIL W30 TO W24 CONNECTION
SCALE: 1 1/2"=1'-0"



10
NA16 DETAIL STEEL PIPE PILE SPLICE
SCALE: 1 1/2"=1'-0"



11
NA16 DETAIL W24x76 STIFFENER CONNECTION
SCALE: 1/2"=1'-0"



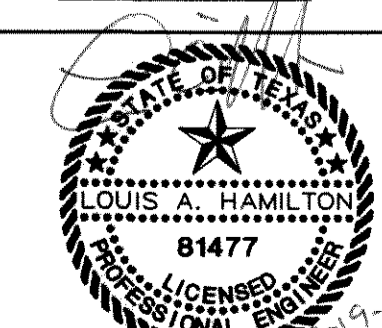
12
NA16 DETAIL W30x90 STIFFENER CONNECTION
SCALE: 1/2"=1'-0"

NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
CROSSOVER OUTBOUND
RANGE REAR LIGHT
LAPORTE, TX -
STRUCTURAL PLATFORM DETAILS

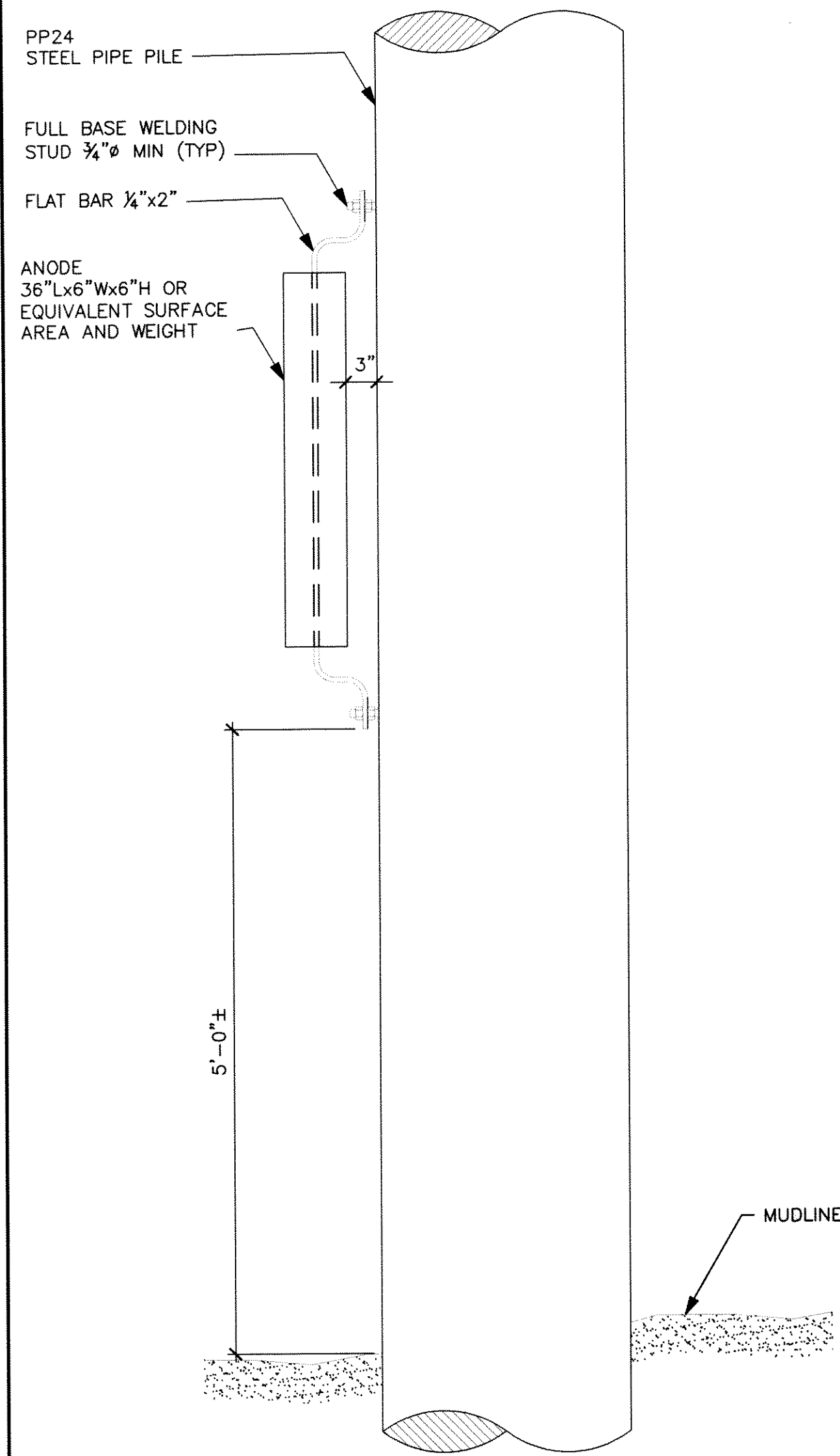
SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.E.P.E. REGISTRATION # F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA16

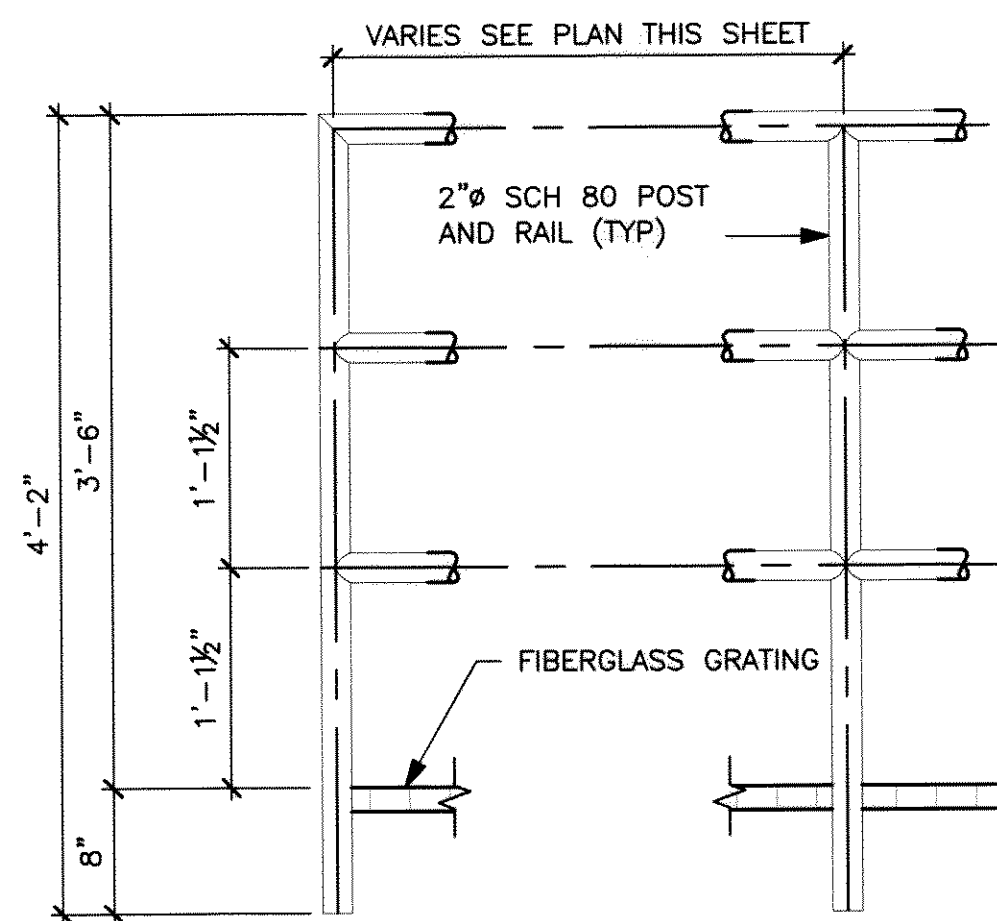


SHEET NO.
NA16

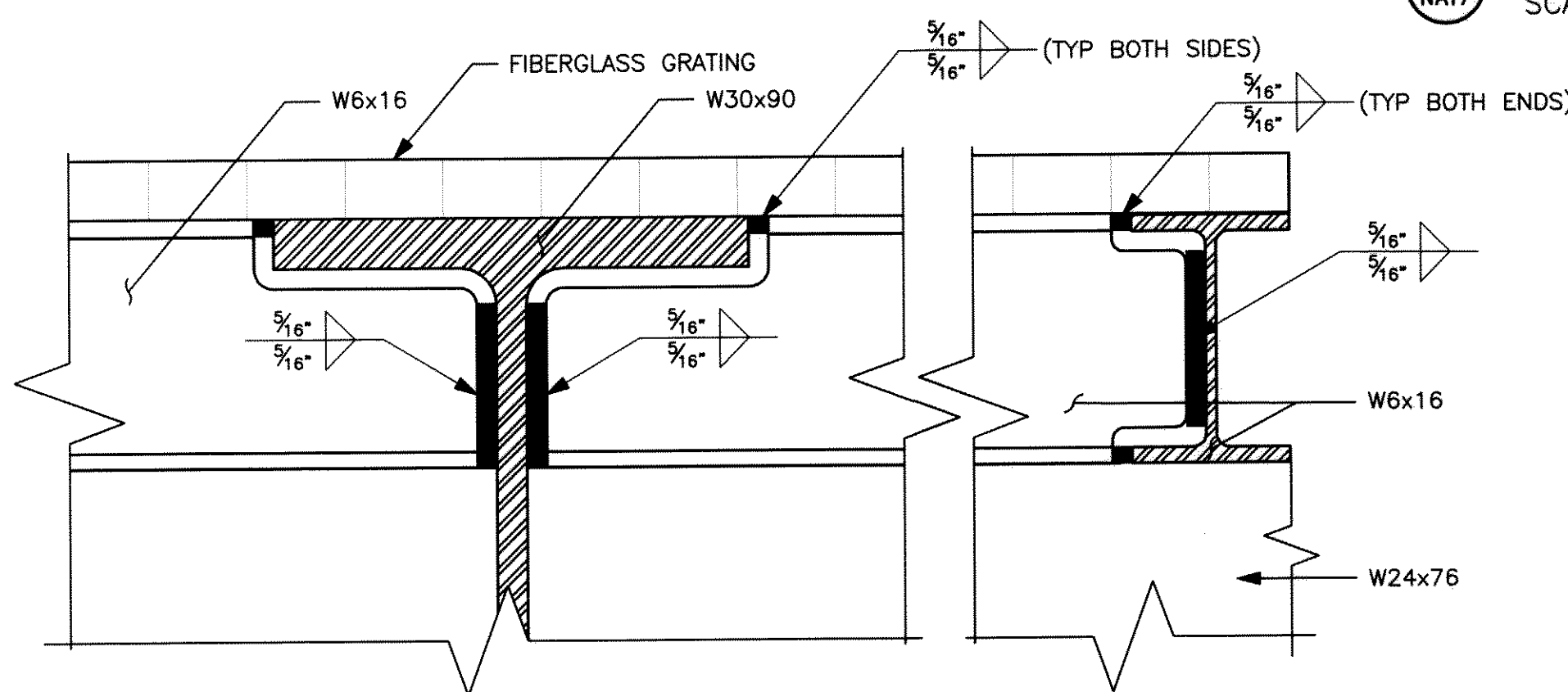
BOSTCO-SSH-CV-NA16



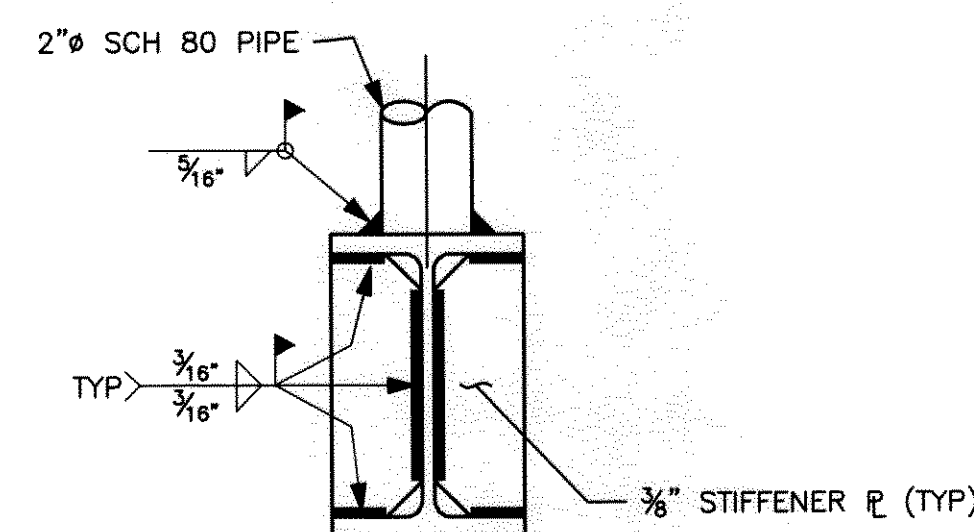
1 ANODE INSTALLATION
SCALE: 1"=1'-0"



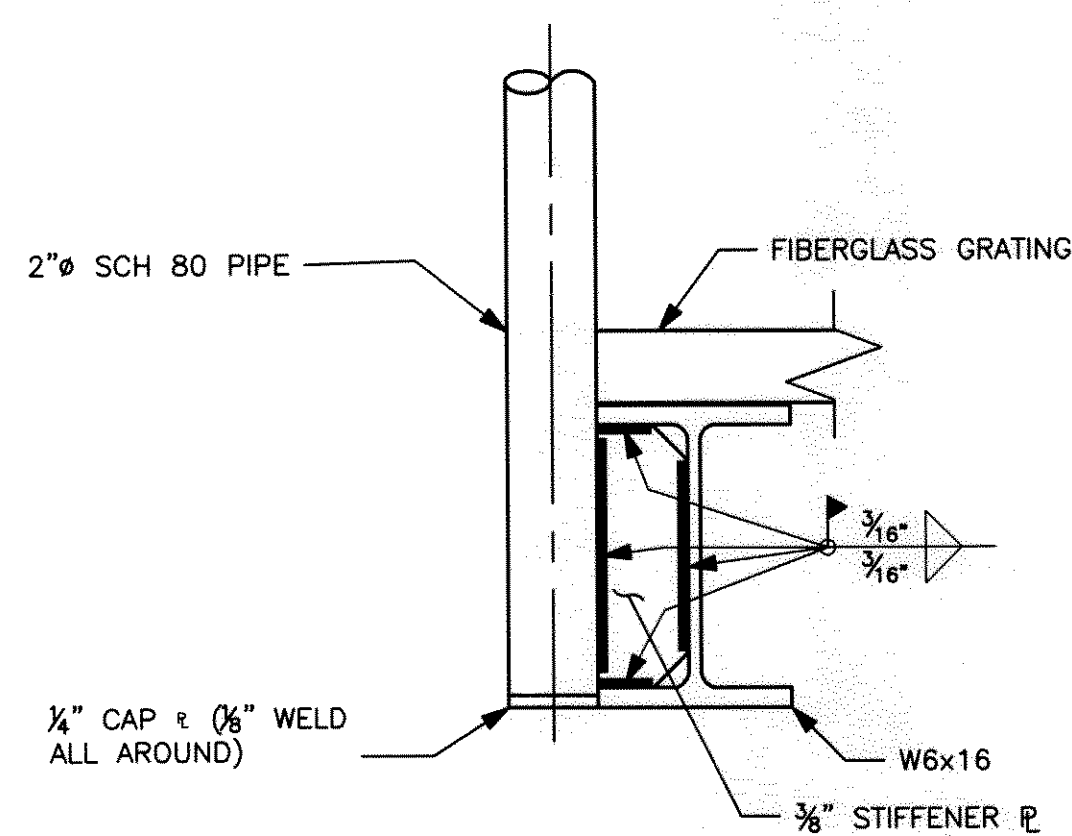
2 ELEVATION DECK RAILING
SCALE: 1 1/2"=1'-0"



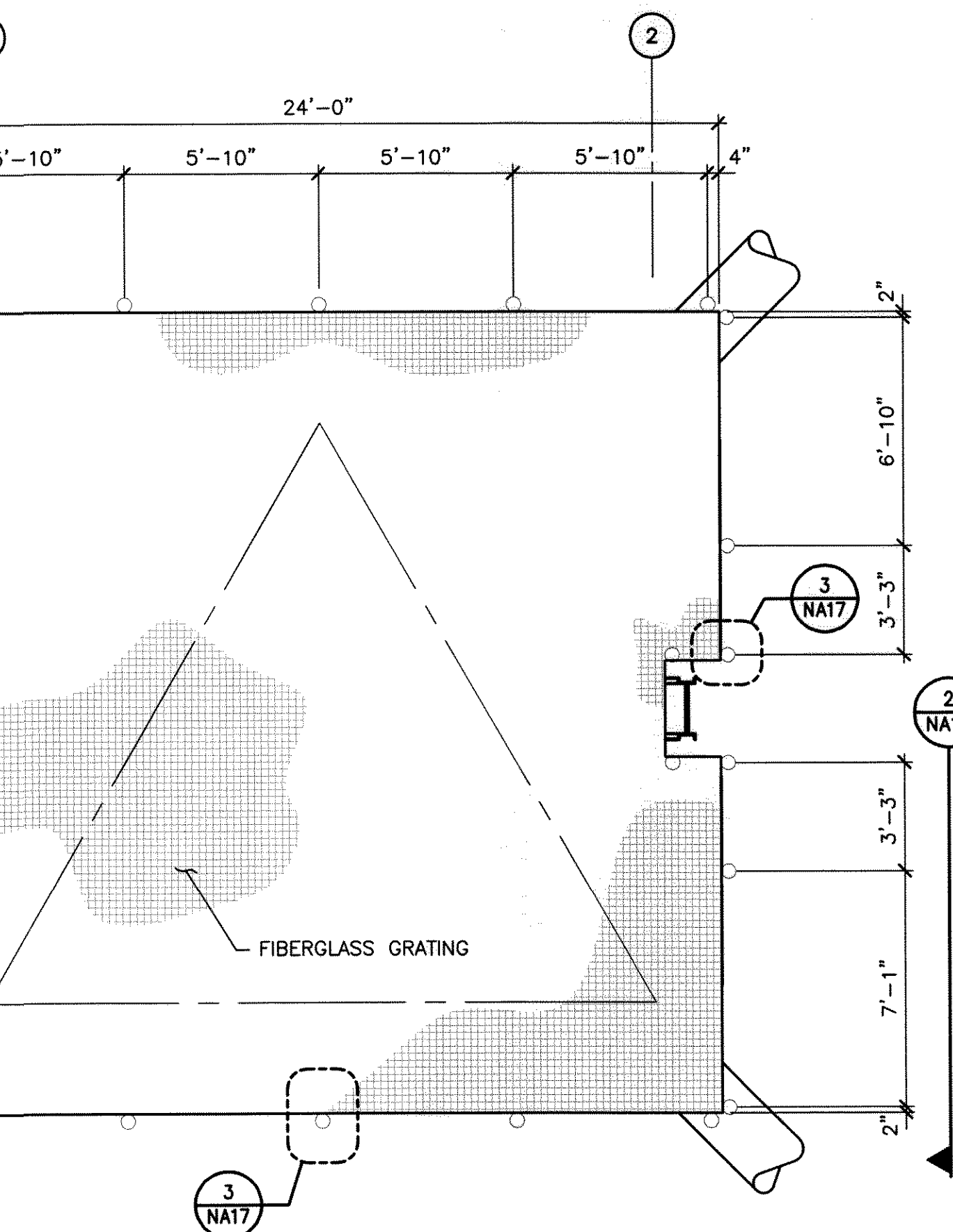
4 DETAIL W6x16 TO W30x90 & W6x16 CONNECTION
SCALE: 1 1/2"=1'-0"



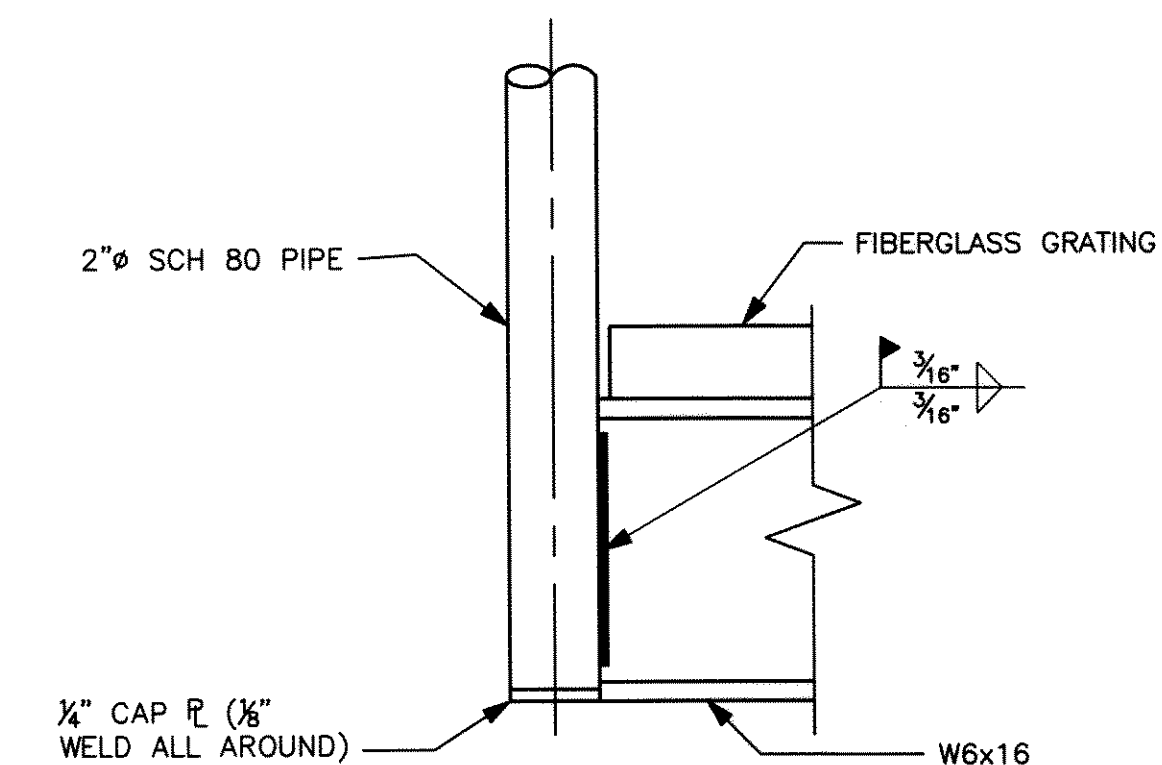
3 DETAIL RAILING TO TOP OF W6x16
SCALE: 3"=1'-0"



5 DETAIL RAILING TO SIDE OF W6x16
SCALE: 3"=1'-0"



PLAN DECK RAILING AND GRATING
SCALE: 1/4"=1'-0"



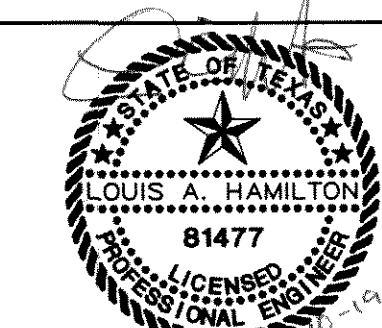
6 DETAIL RAILING TO END OF W6x16
SCALE: 3"=1'-0"

NO.	DATE	REVISIONS	APP.

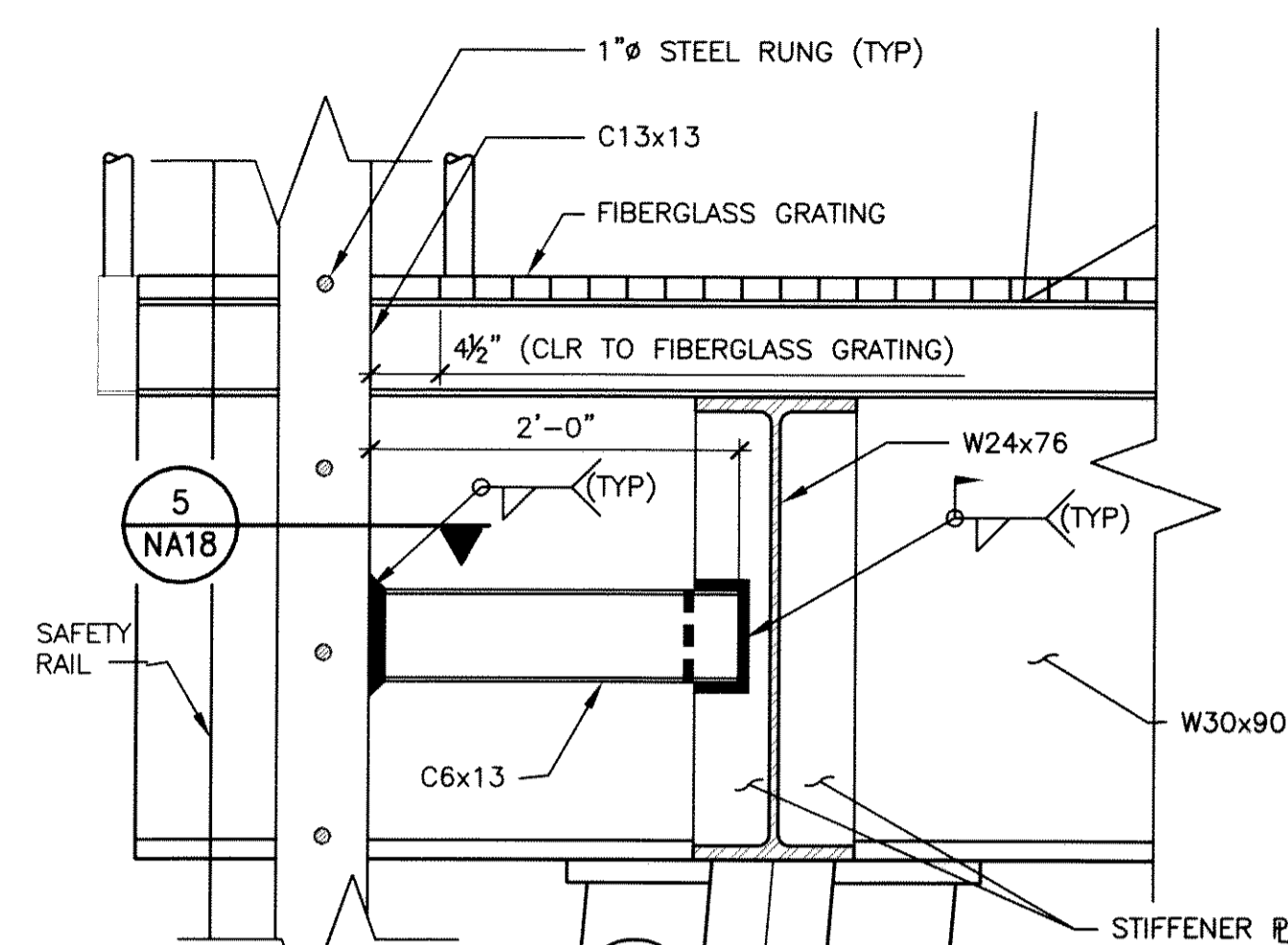
BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
CROSSOVER OUTBOUND
RANGE REAR LIGHT - LAPORTE, TX
STRUCTURAL DECK RAILING
AND ANODE DETAILS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.R.P.E. REGISTRATION # F-000175

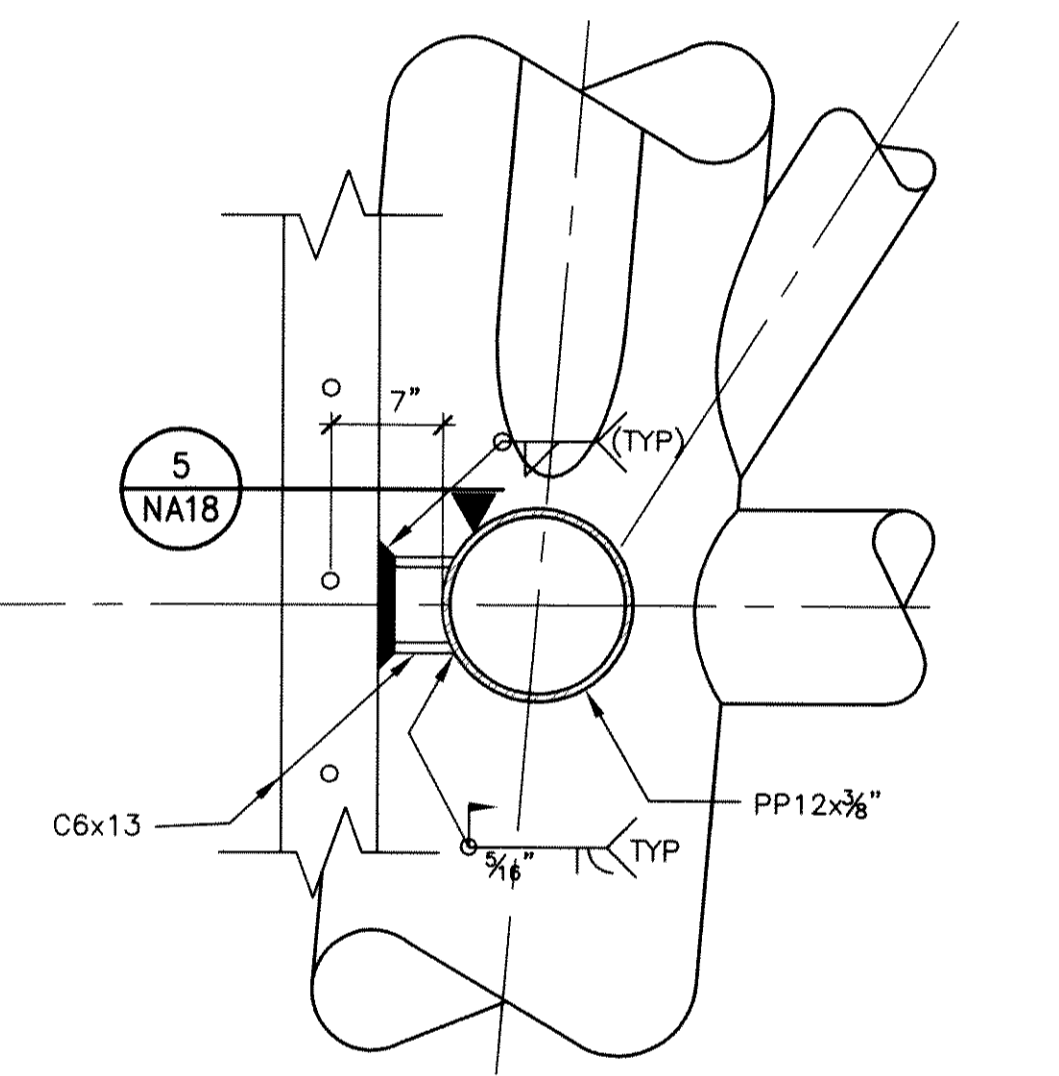
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone: 713-776-9433 Fax: 713-776-2439
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA17



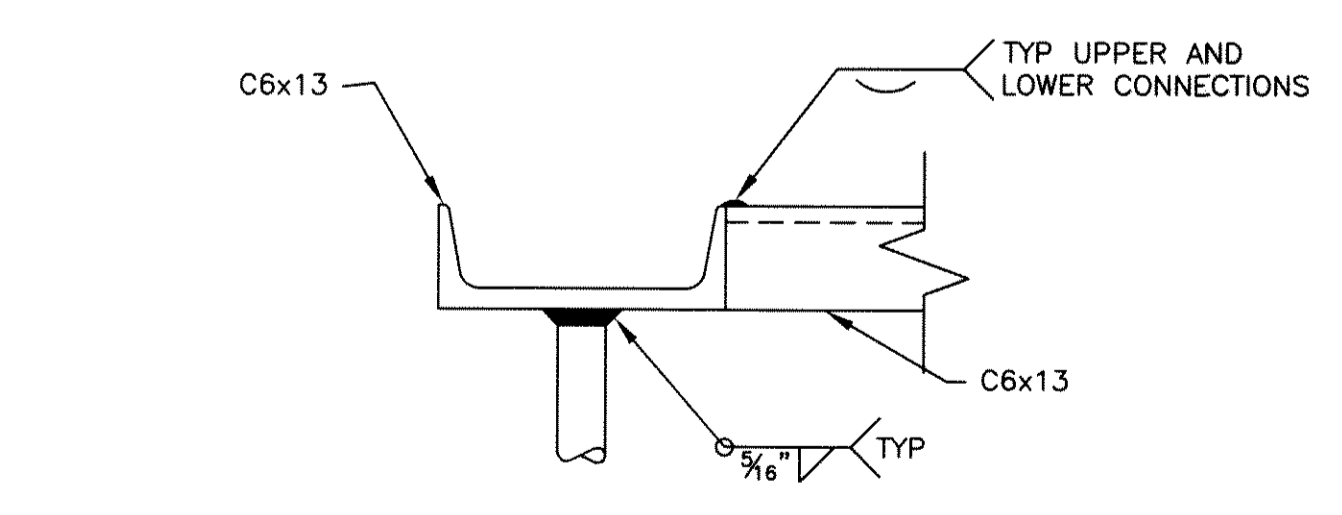
BOSTCO-SSH-CV-NA17



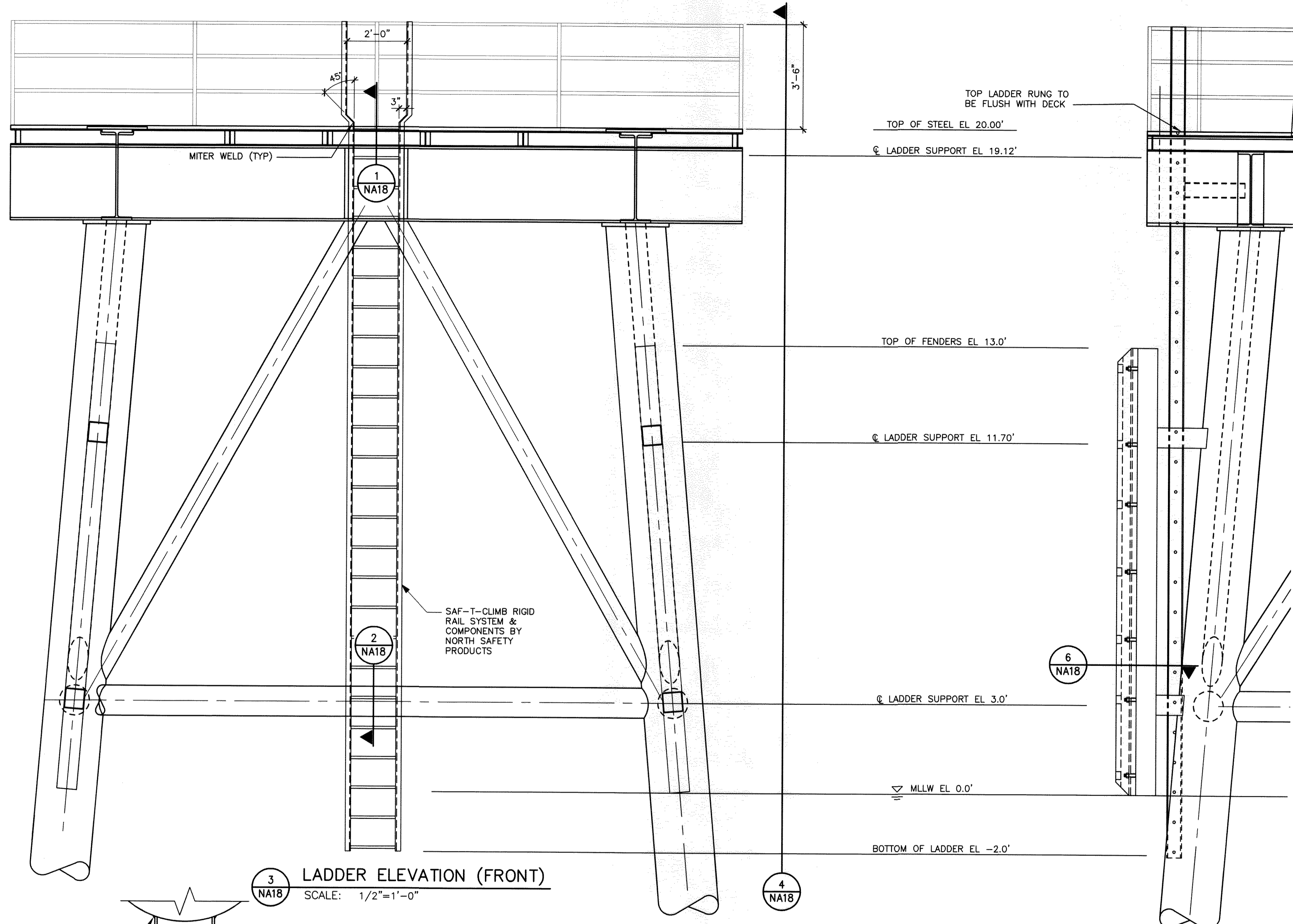
SECTION UPPER LADDER CONNECTION
SCALE: 1"=1'-0"



SECTION LOWER LADDER CONNECTION
SCALE: 1"=1'-0"

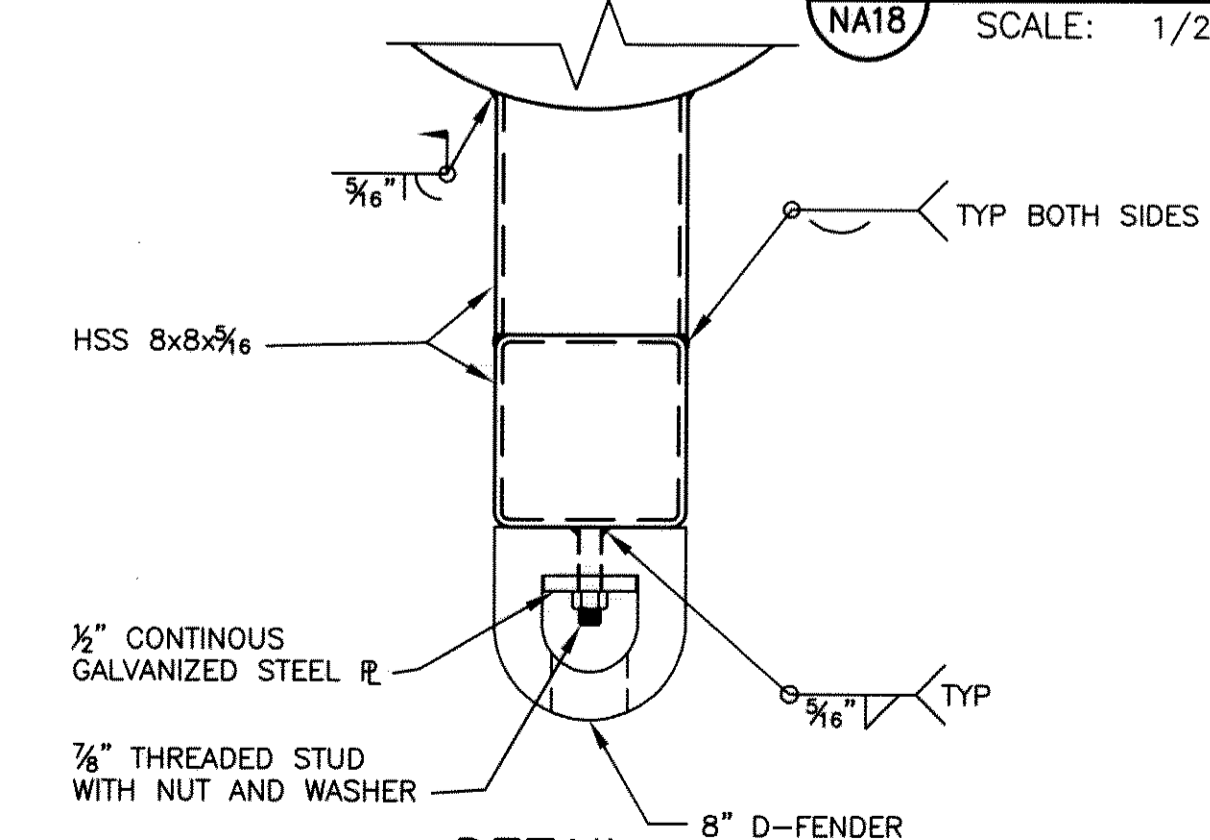


RUNG CONNECTION AND LOWER AND UPPER SUPPORT CONNECTION
SCALE: 3"=1'-0"



LADDER ELEVATION (FRONT)
SCALE: 1/2"=1'-0"

LADDER ELEVATION (SIDE)
SCALE: 1/2"=1'-0"



DETAIL FENDER
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISIONS	APP.

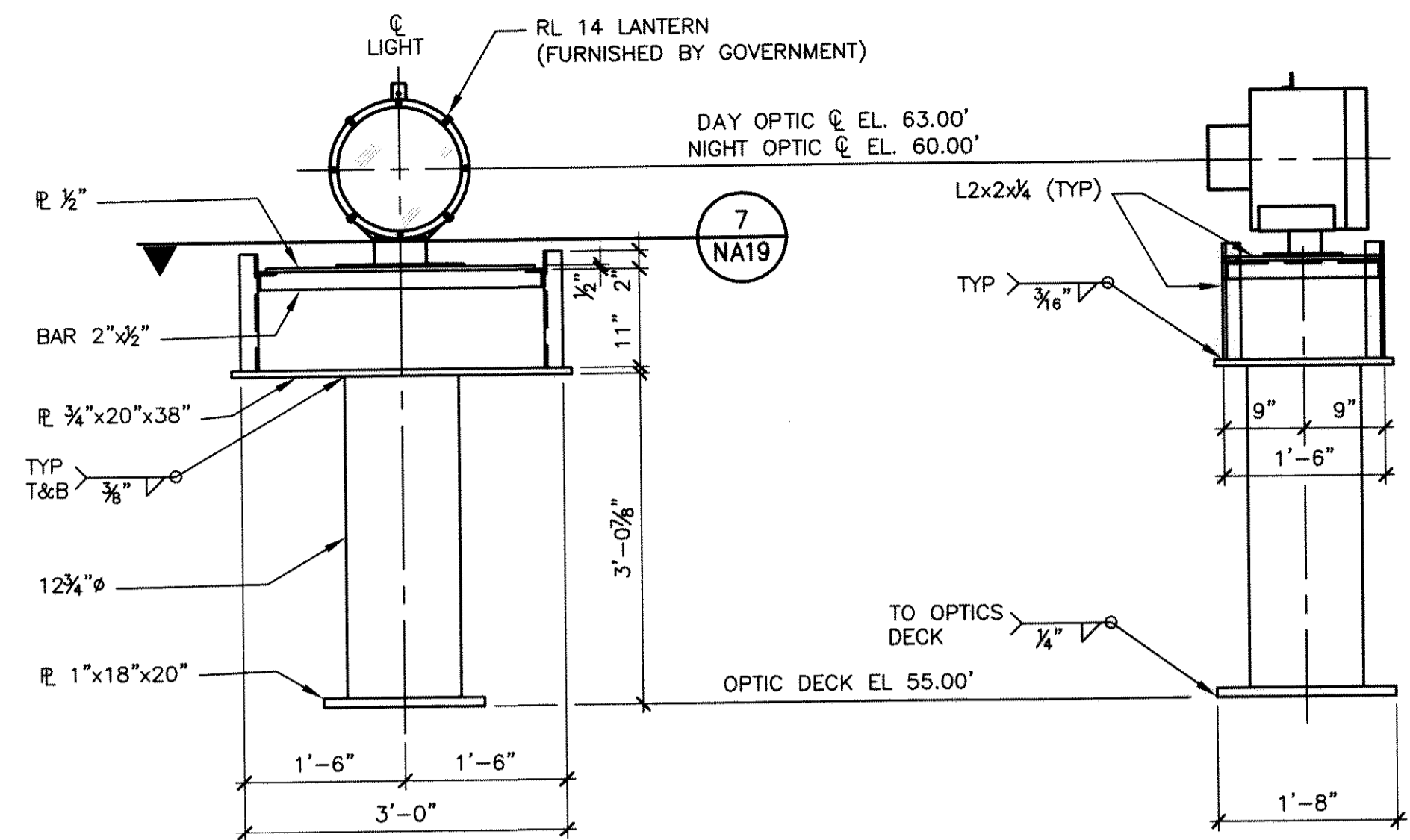
BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
CROSSOVER OUTBOUND
RANGE REAR LIGHT - LAPORTE, TX
STRUCTURAL LADDER AND
RUBSTRIP DETAILS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. REGISTRATION #F-000175
3301 Edloe Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

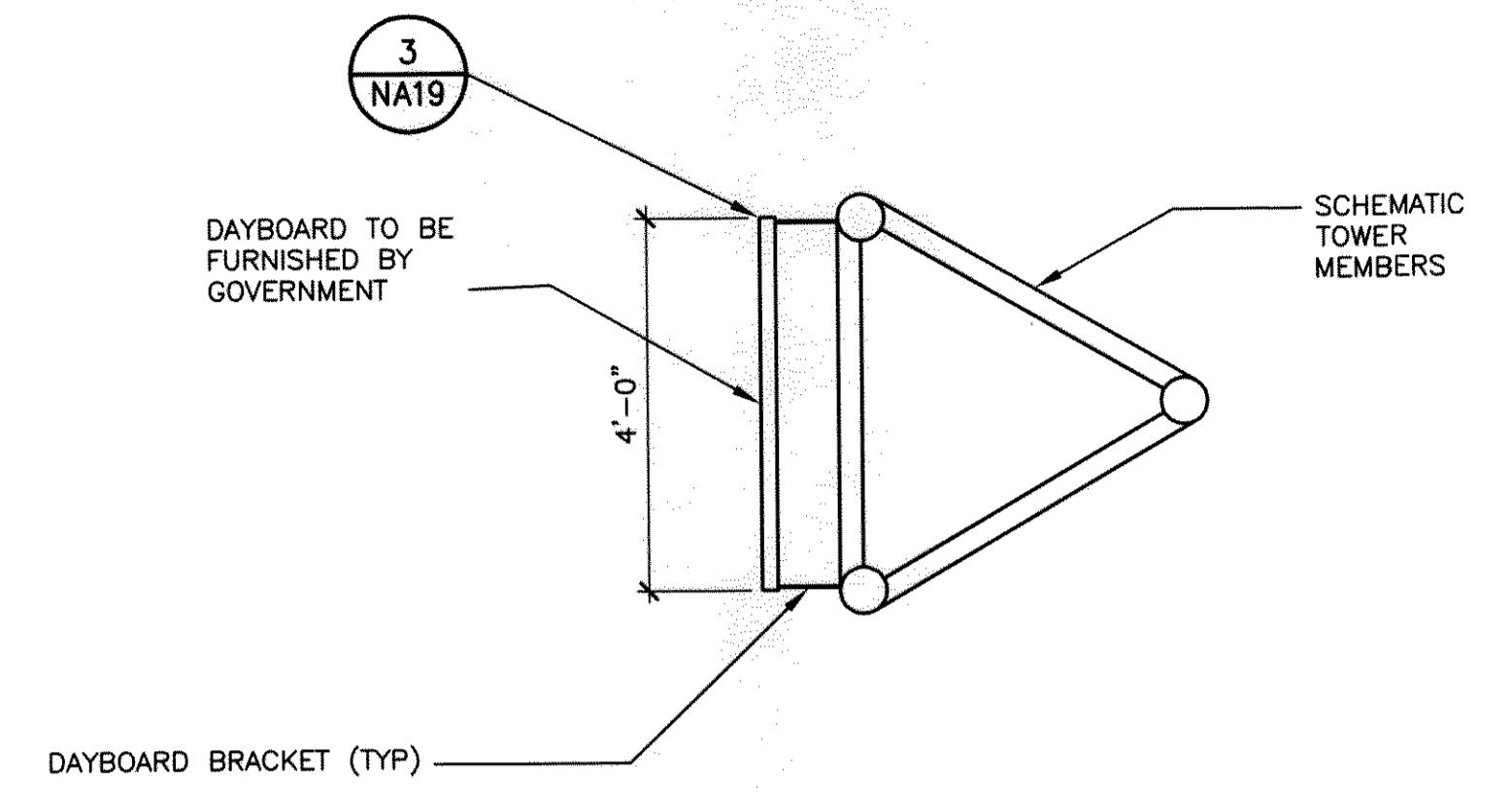
SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA18

STATE OF TEXAS
LOUIS A. HAMILTON
81477
LICENSED PROFESSIONAL ENGINEER

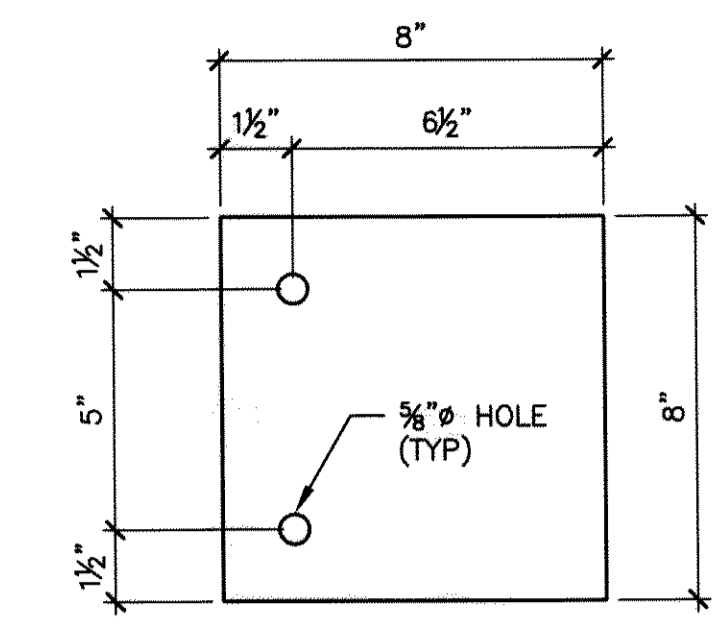
SHEET NO.
NA18



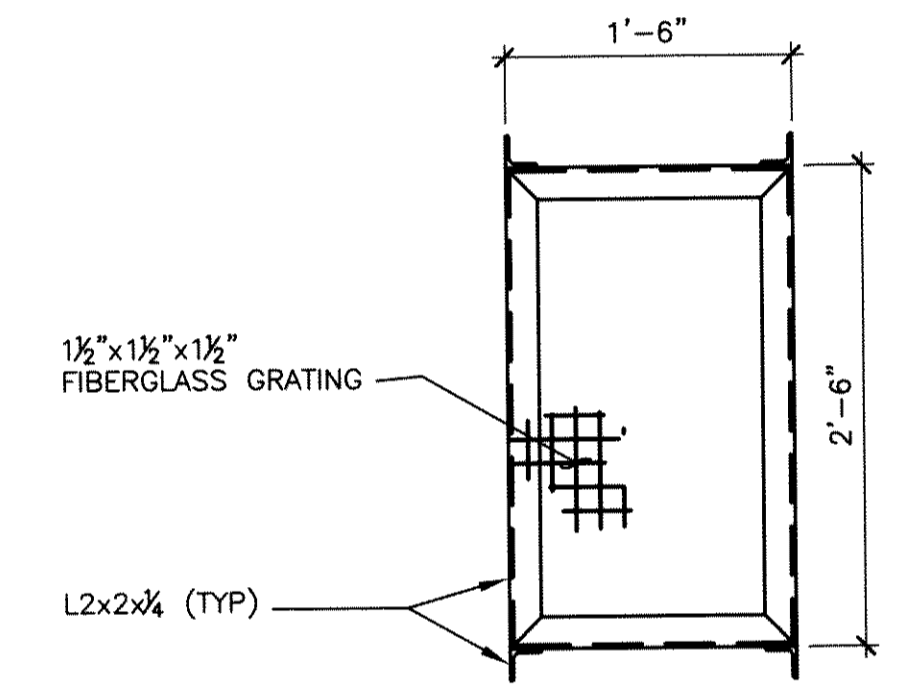
1 OPTIC STAND
SCALE: 3/4"=1'-0"



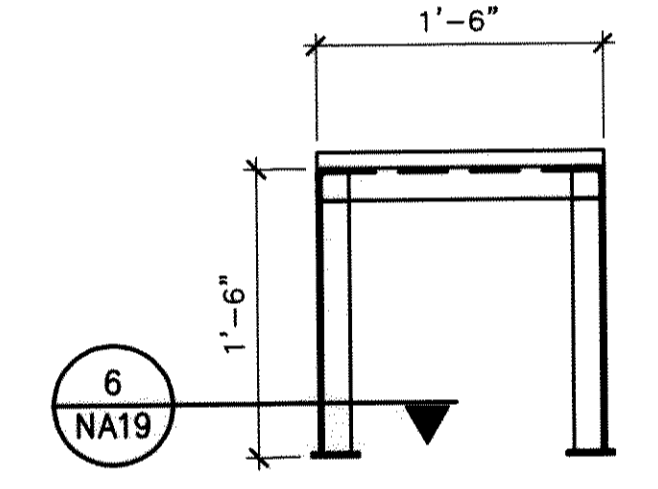
2 PLAN DAYBOARD BRACKET SCHEMATIC
SCALE: NOT TO SCALE



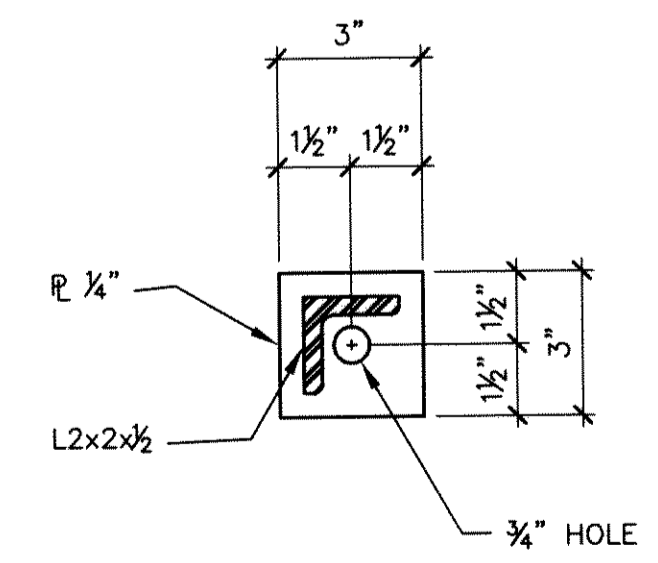
3 DETAIL DAYBOARD BRACKET
SCALE: 3" = 1'-0"



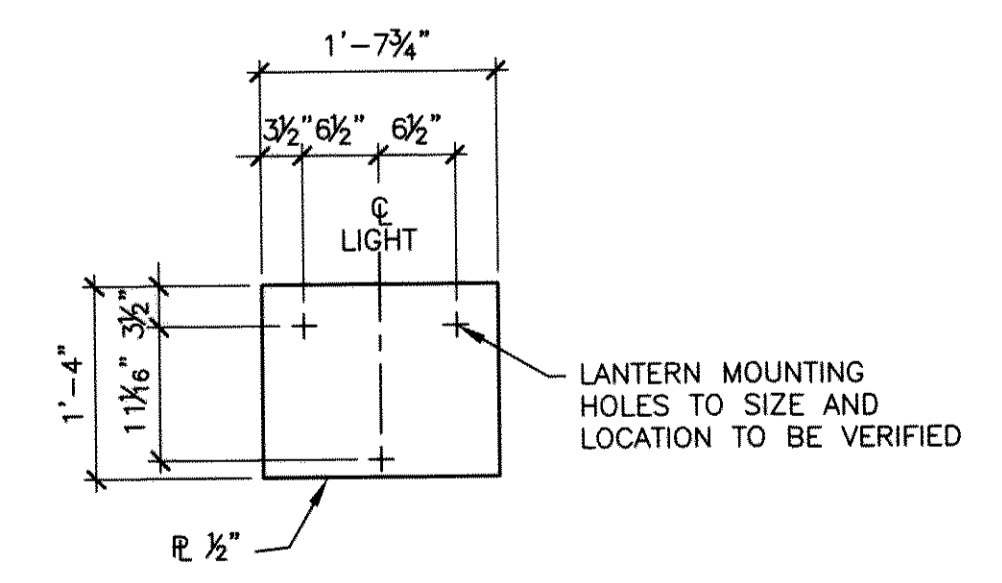
4 PLAN STEP BASE
SCALE: 1"=1'-0"



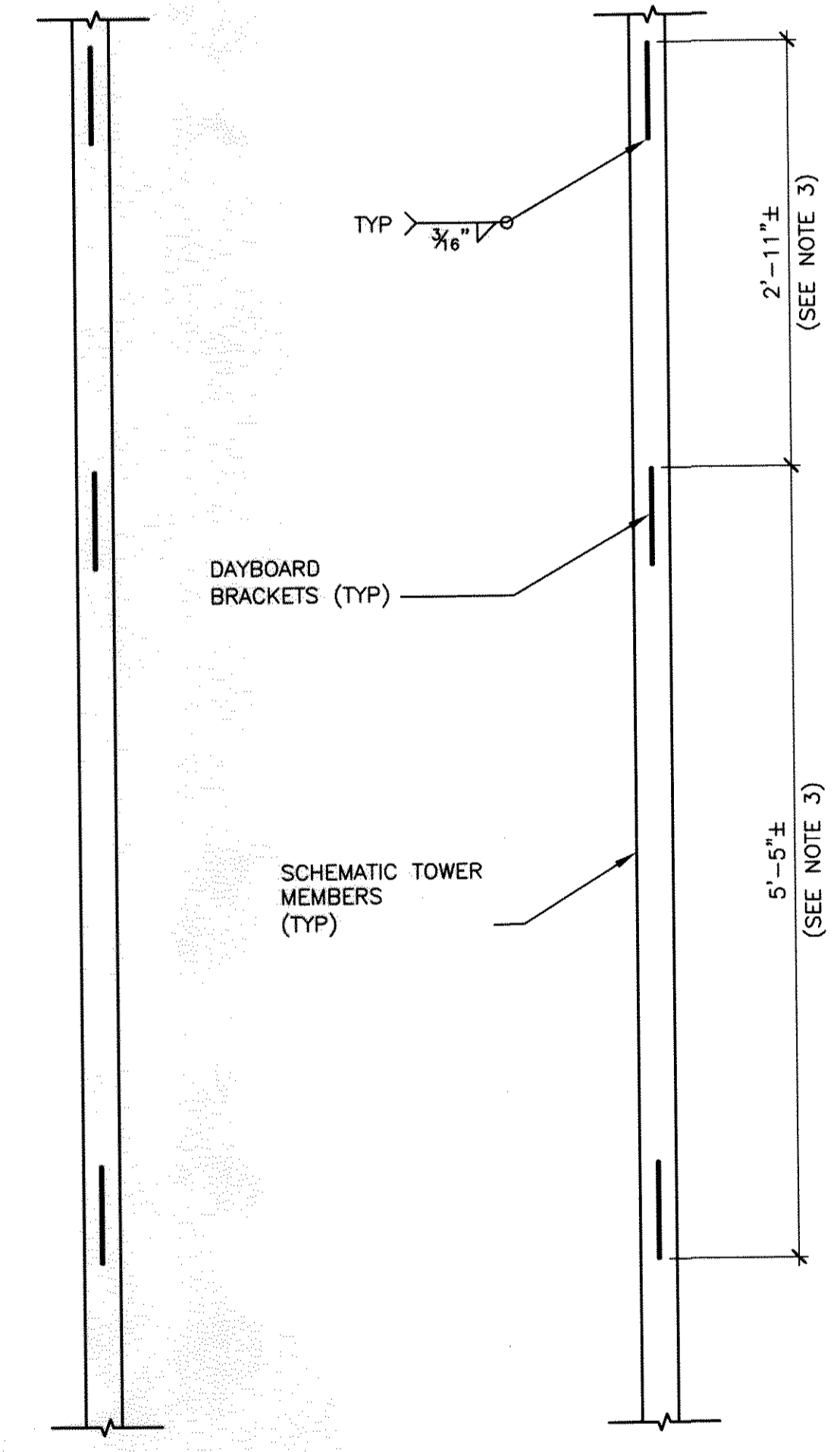
5 ELEVATION STEP BASE
SCALE: 1"=1'-0"



6 STEP BASE
SCALE: 3"=1'-0"



7 OPTIC BASE PLATE
SCALE: 3/4"=1'-0"



8 ELEVATION DAYBOARD BRACKET SCHEMATIC
SCALE: NOT TO SCALE

DAYBOARD NOTES:

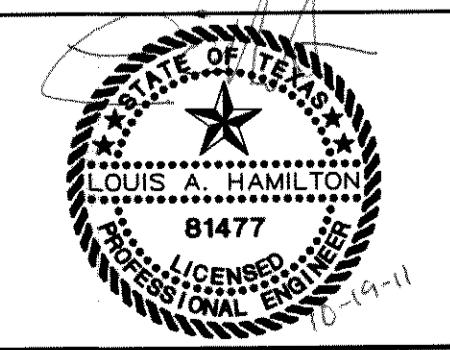
1. DAYBOARD TO BE FURNISHED BY GOVERNMENT.
2. CONTRACTOR TO PROVIDE SIX DAYBOARD CONNECTION BRACKETS AND TWO 10 FOOT LONG GALVANIZED L2x2x1/4 REQUIRED FOR DAYBOARD SUPPORT RAILS (NOT SHOWN ON DRAWING).
3. THE CONTRACTOR SHALL COORDINATE WITH THE OFFICER IN CHARGE FOR THE EXACT LOCATIONS OF THE CONNECTION BRACKETS AND DAYBOARD. THE DRAWING LOCATIONS ARE SCHEMATIC AND MAY REQUIRE ADJUSTMENT TO THE TOWER AND DAYBOARD CONFIGURATION.

NO.	DATE	REVISIONS	APP.

BOSTCO
STORAGE & TERMINAL SERVICES
PHASE 1 NEW SHIP & BARGE FACILITY
CROSSOVER OUTBOUND RANGE REAR LIGHT
LAPORTE, TX
STRUCTURAL GENERAL DETAILS

SSH STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.E. REGISTRATION # F-000175
3301 Falgout Street, Suite 200 Houston, Texas 77027
Phone 713-776-9433 Fax 713-776-2439

SCALE: AS SHOWN DGN. BY: SB/BJ
DATE: 10-18-11 DWN. BY: TP
JOB NO. 0896-0002 DWG. NO. 896002-NA19



SHEET NO.
NA19