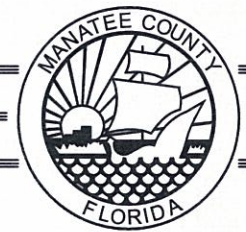


COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT S:\P\W\Engineering\Shore\Util\_Eng\_Design\PROJ\5401 SWR Pro\Sch Swr - LS Upgrades\MS TideVue 4 Rehab\DWG\TideVue 4 RTU 533 TideVue 4.dwg, 1:1, ANSI full bleed B (17.00 x 11.00 inches)



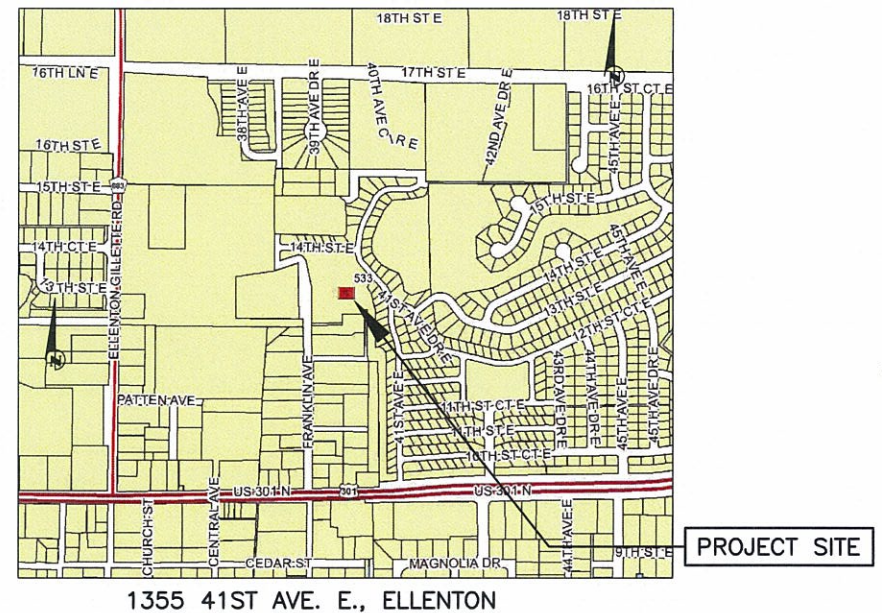
# MANATEE COUNTY, FLORIDA MASTER LIFT STATION R & R TIDEVUE 4, RTU 533 404-6060784

DECEMBER 2013

CONFINED  
 SPACE ENTRY  
 PERMIT  
 REQUIRED

MANATEE COUNTY GOVERNMENT  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING SERVICES  
  
 1022 26th Avenue East  
 Bradenton, FL 34208

**MASTER LIFT STATION R & R  
 TIDEVUE 4, RTU 533  
 COVER**

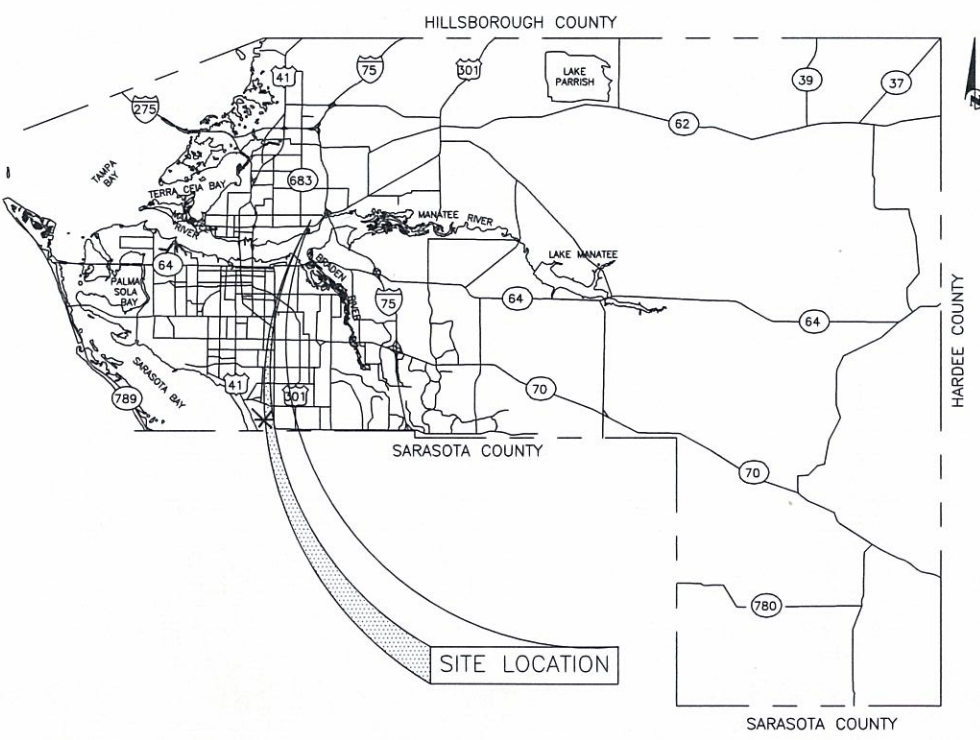


1355 41ST AVE. E., ELLENTON

VICINITY MAP  
 N.T.S.

**PROJECT DESCRIPTION**

- REMOVE AND REPLACE EXISTING FIBERGLASS DECKING AND ISOLATION GATES.
- REMOVE AND REPLACE EXISTING SAFETY RAIL WITH A 1.5" ROUND FIBERGLASS BASIC IN-LINE TWO-RAIL W/ FITTINGS THAT MEETS OR EXCEEDS OSHA REQUIREMENTS.
- REPAIR, REHAB EXISTING WET WELL CONCRETE STRUCTURE AND APPLY NEW SPRAY LINER.
- INSTALL EXPLOSION PROOF LED LIGHTS.
- INSTALL NEW ALUMINUM WET WELL ACCESS DOOR/FRAME.
- INSTALL NEW COMMUNATOR, WIRING, AND CONTROL.
- INSTALL NEW 16" HDPE FORCE MAIN, 2-16" GATE VALVE, & A BY-PASS RISER PIPE



SITE LOCATION

100% PLANS

| NO.   | INDEX OF SHEETS            |
|-------|----------------------------|
| 1.    | COVER                      |
| 2.    | PLAN VIEWS                 |
| 3.    | SECTION VIEWS              |
| 4.    | STAIRWAY PLAN              |
| 5.-6. | WET WELL FRAMING & DETAILS |

| MASTER LIFT STATION TIDEVUE 4 |                      |
|-------------------------------|----------------------|
| ITEM                          | VALUE                |
| RTU                           | 533                  |
| STREET ADDRESS                | 1355 41ST AVE. E.    |
| CITY                          | ELLENTON             |
| SEC./TWN./RGE                 | 17/34/18             |
| DESIGN FLOW                   | 1,629 GPM @ 150' TDH |
|                               |                      |
|                               |                      |

\* CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS

| NO. | REVISION DESCRIPTION           | BY  | DATE    |
|-----|--------------------------------|-----|---------|
| 1   | added comminator               | jas | 8/7/13  |
| 2   | rev. safety railing & grating  | jas | 8/12/13 |
| 3   | rev. project description notes | jas | 5/8/14  |

|               |             |
|---------------|-------------|
| PROJECT #     | 404-6060784 |
| SURVEY #      | -----       |
| SEC./TWN./RGE | 17/34/18    |
| SCALE         | NTS         |

PROFESSIONAL ENGINEER  
 STATE OF FLORIDA  
 No. 60909, P.E.  
 Florida P.E. #60923  
 Signature: [Signature]  
 Date: 8/12/13



**MASTER LIFT STATION R & R  
TIDEVUE 4, RTU 533**

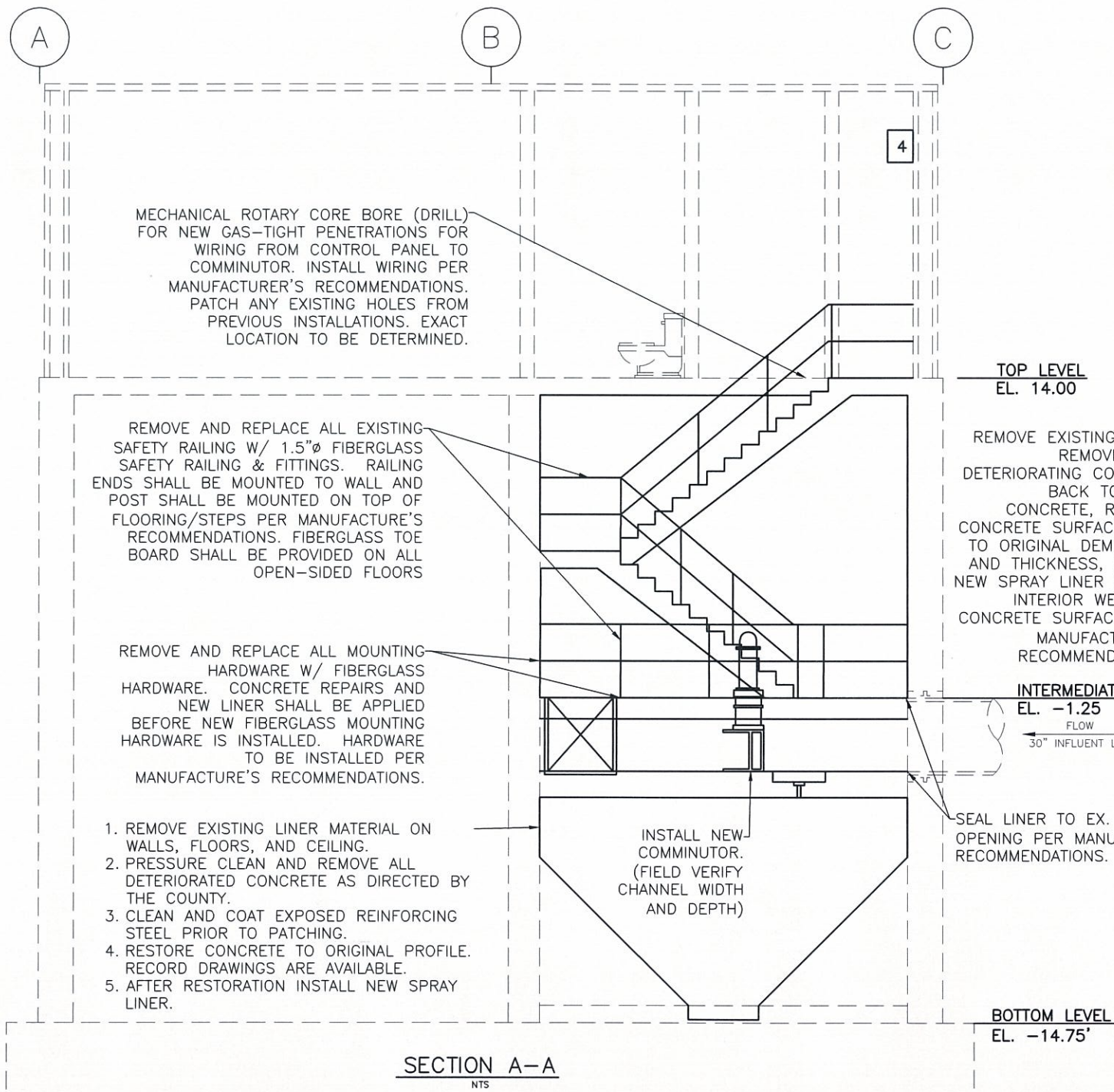
**SECTIONS**

**NOTES:**

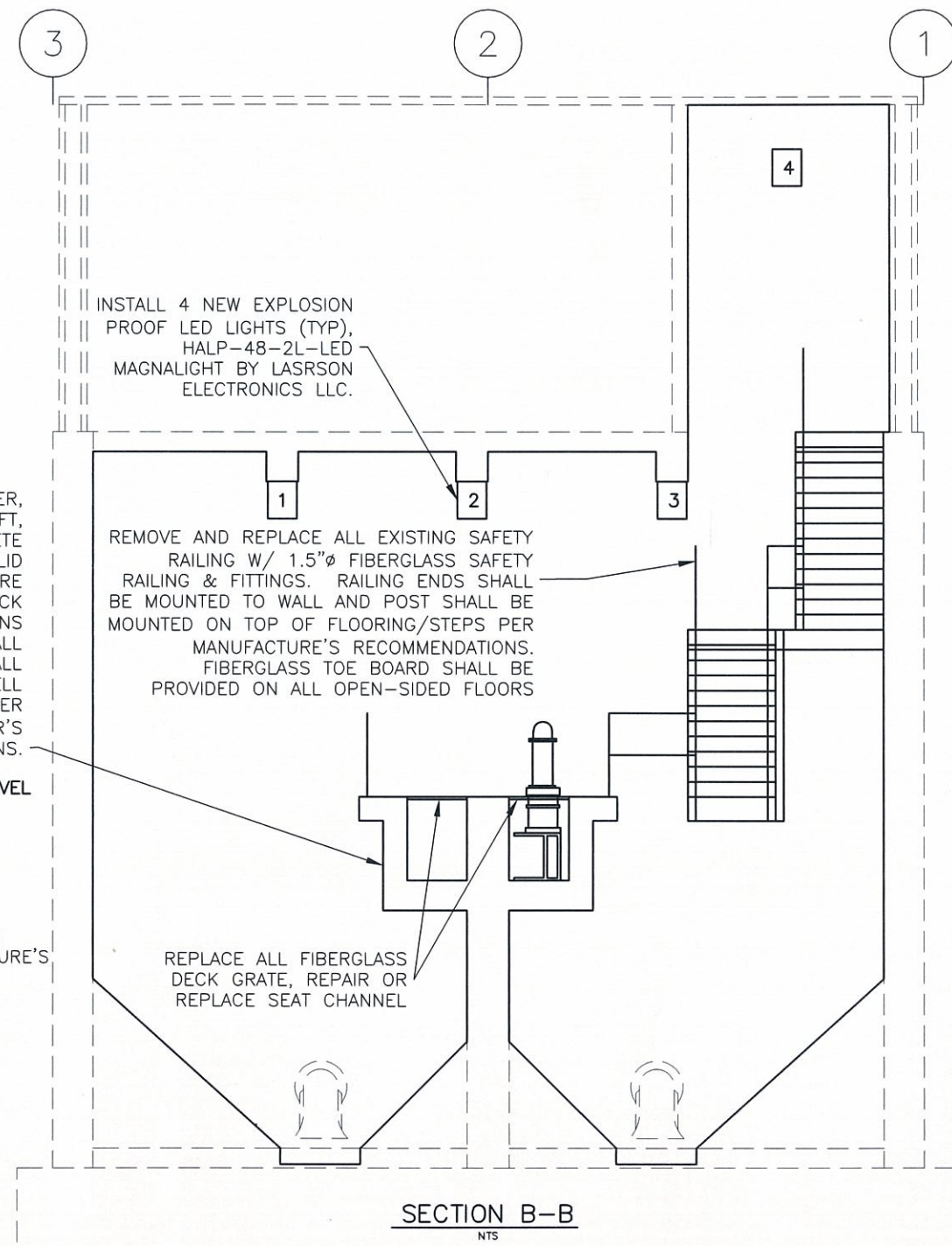
- ELECTRICAL LINE NEEDS TO BE ROUTED FROM THE NEW CONTROL BOX TO THE NEW COMMUNOTOR. USE OF THE EXISTING HATCH OPENING WILL NOT BE ACCEPTABLE. SEE NOTE BELOW.
- NEW COMMUNOTOR TO BE MODEL CDD1810-XDM2.0 CHANNEL MONSTER™ SYSTEM. INSTALLATION INCLUDES CMA1101 316 SS CHANNEL MOUNT FRAME ASSEMBLY WITH OVERFLOW BAR RACK, PC2200 MOTOR CONTROLLER IN NEW NEMA 4X FIBERGLASS PANEL BOX, IEC STARTER WITH OVERCURRENT PROTECTION & JAM SENSING.

**COMMUNOTOR SPECIFICATIONS:**

- GRINDER W/ 18" CUTTER STACK, 11-TOOTH CAM CUTTERS IN 8620 ALLOY STEEL, (2)-10" DIA. 316 SS ROTATING PERFORATED DRUMS W/ 1/4" PERFORATIONS, CARTRIDGE-STYLE TUNGSTEN CARBIDE MECHANICAL SEALS W/ BUNA-N ELASTOMERS RATED FOR 90 PSI, 2 COATS OF TNEC COALTAR EPOXY PAINT COATED DUCTILE IRON HOUSING & SIDERAILS, 29:1 SPEED REDUCER, (1)-5 HP & (2)-1 HP XPNV 230V/460V/3PH/60HZ BOTH IMMERSIBLE ELECTRIC MOTOR W/ 40' OF INTERNAL POWER CABLE & 316 SS LIFT BAIL.
- ONE (1) CMA1101-STYLE CHANNEL MOUNTED FRAME ASSEMBLY W/ OVERFLOW BAR RACK FABRICATED OF 316 STAINLESS STEEL.
- ONE (1) PC2200 MOTOR CONTROLLER IN NEW NEMA 4X FIBERGLASS ENCLOSURE ACCEPTING 230V/460V/3PH/60HZ INPUT POWER, INCLUDES IEC STARTER W/ OVERCURRENT PROTECTION, JAM-SENSING CURRENT TRANSFORMER, AND MICRO-PCL.



CONTRACTOR IS RESPONSIBLE FOR ALL LABOR, MEASUREMENTS, AND ALL MATERIALS REQUIRED TO COMPLETE THE JOB AS INTENDED.



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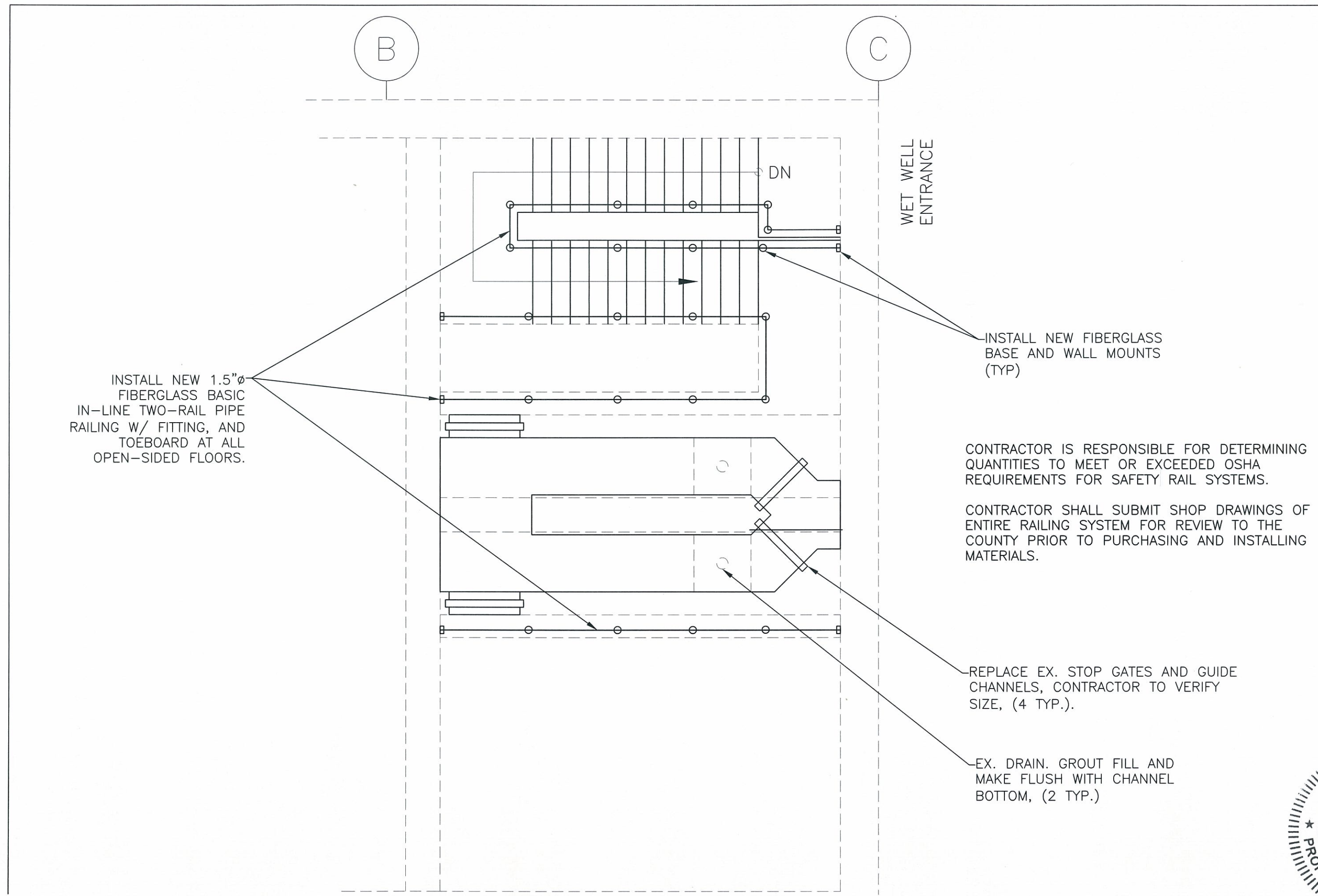
| NO. | REVISION DESCRIPTION          | BY  | DATE    |
|-----|-------------------------------|-----|---------|
| 1   | added comminutor              | jas | 8/7/13  |
| 2   | rev. safety railing & grating | jas | 8/12/13 |
| 3   | rev. comminutor spec.         | jas | 5/8/14  |

|               |             |
|---------------|-------------|
| PROJECT #     | 404-6060784 |
| SURVEY #      | -----       |
| SEC./TWN./RGE | 17/34/18    |
| SCALE         | NTS         |

|                       | BY                  | DATE                |
|-----------------------|---------------------|---------------------|
| SUBMITTED             |                     |                     |
| DESIGNED              | JS                  | 5/2013              |
| DRAWN                 | JS                  | 5/2013              |
| CHECKED               |                     |                     |
| NO. 1                 | JOHN A. SHOUN, P.E. | FLORIDA P.E. #60323 |
| STATE OF              | FLORIDA             |                     |
| PROFESSIONAL ENGINEER |                     |                     |

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | 5: PWD - Engineering - Shore Util. Eng. Design (PROJ) - SAN SW - LS Uprated MLIS TideVue 4. Rtdns\DWG\active-MLIS R&R 2013 TideVue 4.dwg, 3 SECTIONS, 5/8/2014 7:12 AM Shea Shoun, L1. ANSI full bleed B (17.00 x 11.00 inches)

**MASTER LIFT STATION R & R  
TIDEVUE 4, RTU 533  
STAIRWAY PLAN**



INSTALL NEW 1.5"Ø  
FIBERGLASS BASIC  
IN-LINE TWO-RAIL PIPE  
RAILING W/ FITTING, AND  
TOEBOARD AT ALL  
OPEN-SIDED FLOORS.

WET WELL  
ENTRANCE

INSTALL NEW FIBERGLASS  
BASE AND WALL MOUNTS  
(TYP)

CONTRACTOR IS RESPONSIBLE FOR DETERMINING  
QUANTITIES TO MEET OR EXCEEDED OSHA  
REQUIREMENTS FOR SAFETY RAIL SYSTEMS.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF  
ENTIRE RAILING SYSTEM FOR REVIEW TO THE  
COUNTY PRIOR TO PURCHASING AND INSTALLING  
MATERIALS.

REPLACE EX. STOP GATES AND GUIDE  
CHANNELS, CONTRACTOR TO VERIFY  
SIZE, (4 TYP.).

EX. DRAIN. GROUT FILL AND  
MAKE FLUSH WITH CHANNEL  
BOTTOM, (2 TYP.)

| NO. | REVISION DESCRIPTION          | BY  | DATE    |
|-----|-------------------------------|-----|---------|
| 2   | rev. safety railing & grating | jss | 8/12/13 |

|               |             |
|---------------|-------------|
| PROJECT #     | 404-6060784 |
| SURVEY #      | -----       |
| SEC./TWN./RGE | 17/34/18    |
| SCALE         | NTS         |

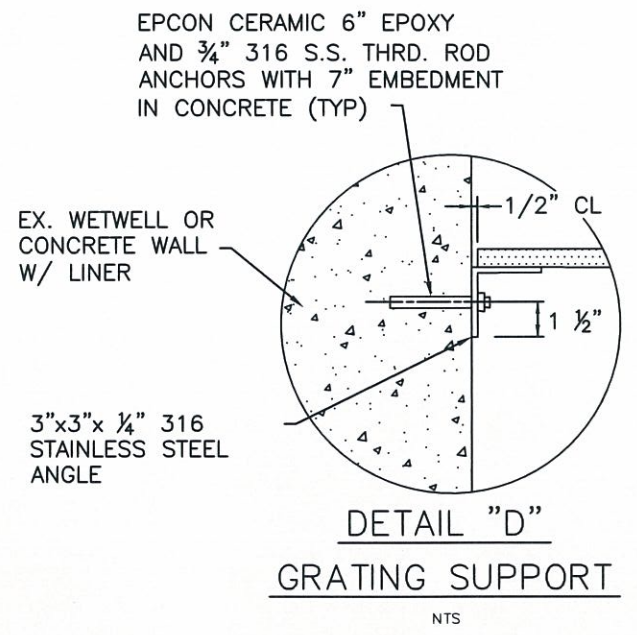
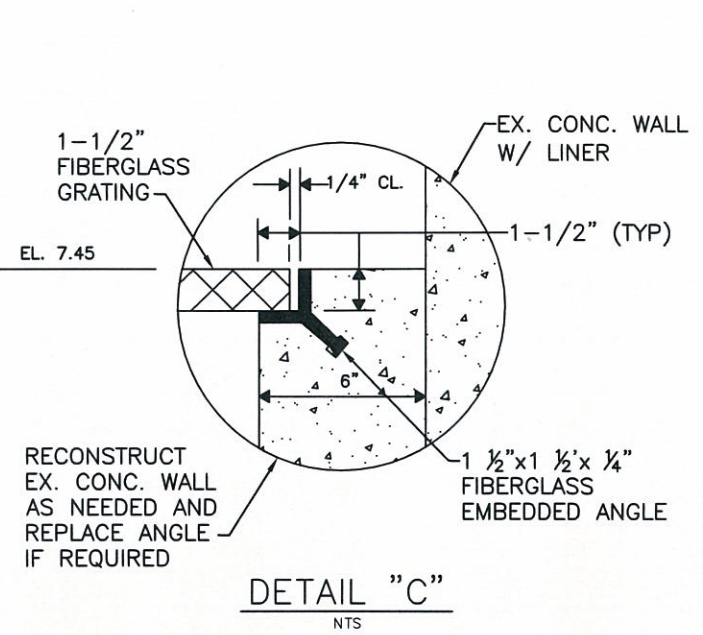
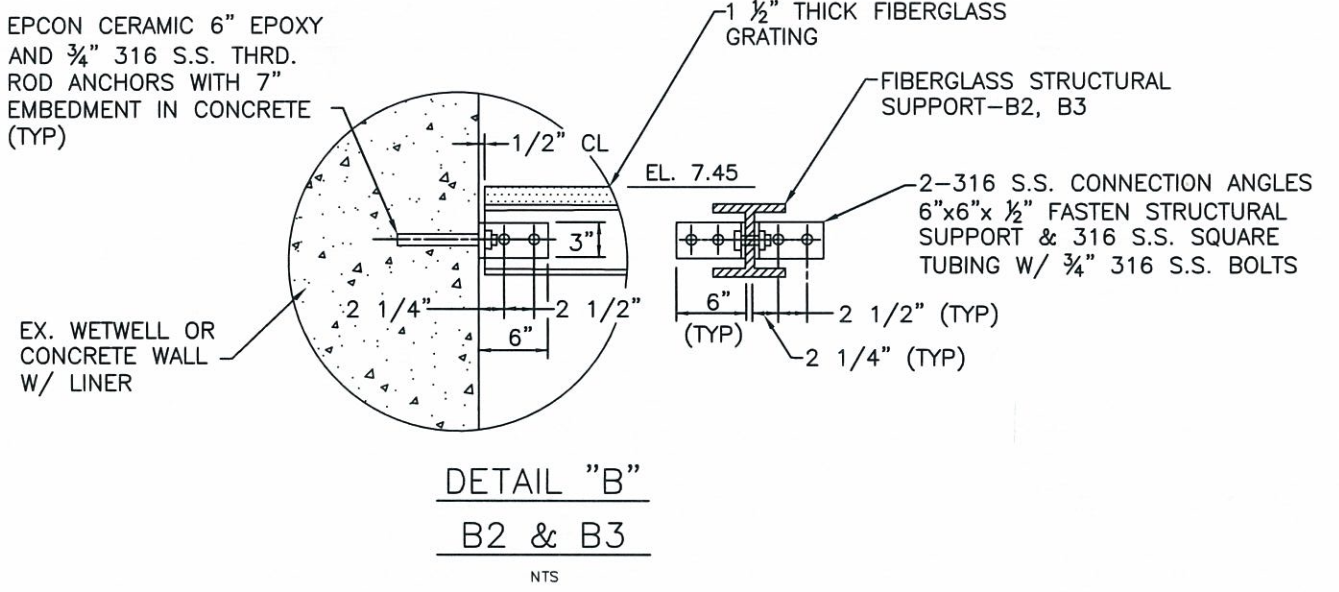
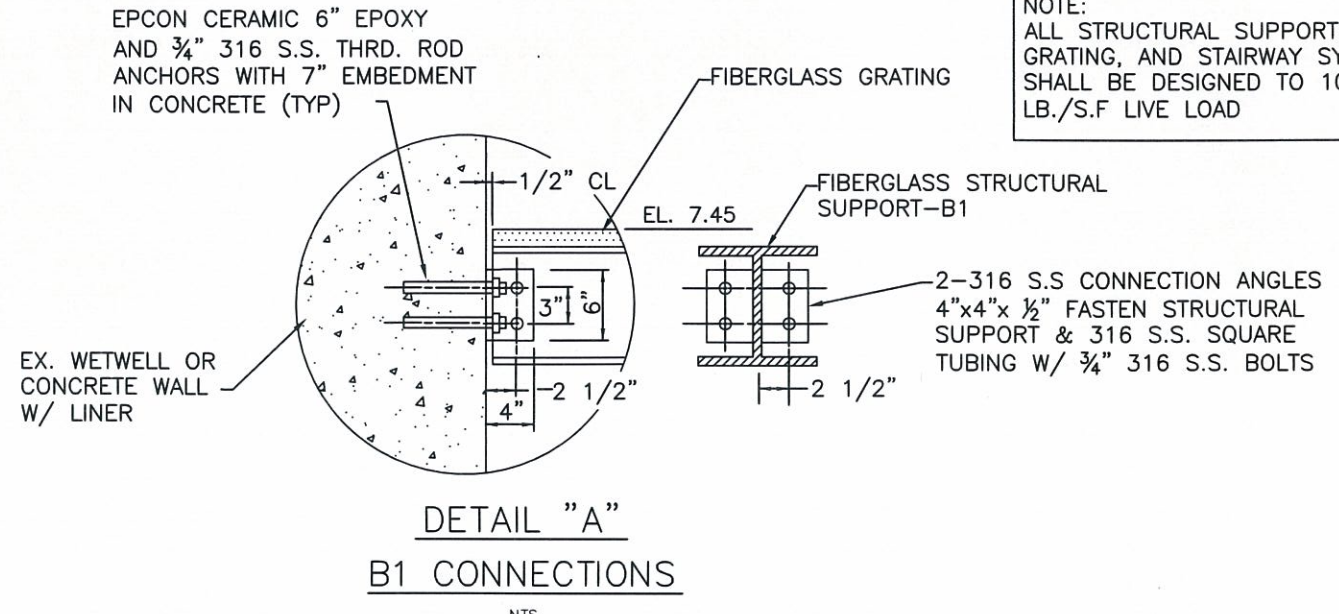
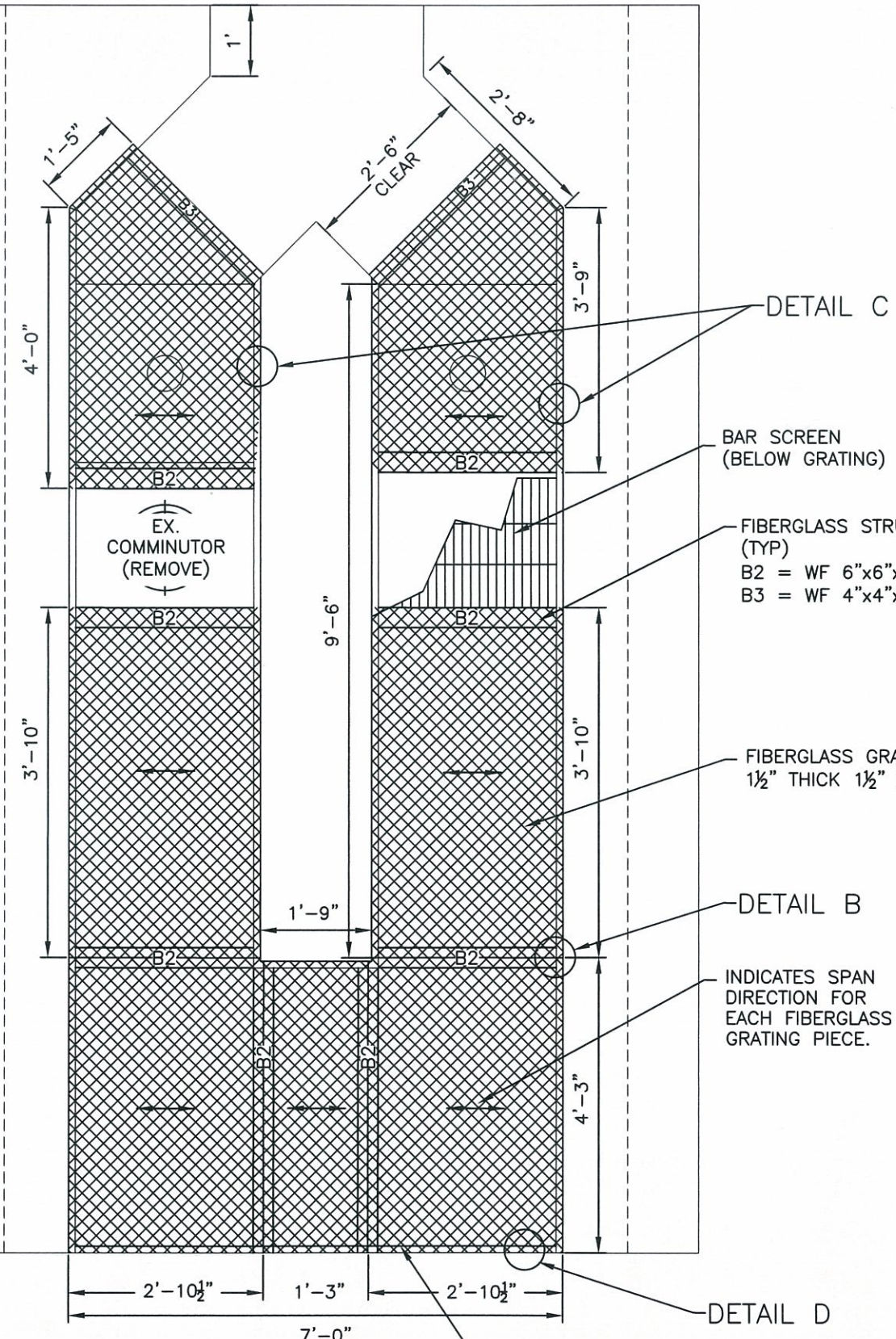
|          | BY  | DATE   |
|----------|-----|--------|
| DESIGNED | JSS | 5/2013 |
| DRAWN    | JSS | 5/2013 |
| CHECKED  |     |        |

Professional Engineer Seal for John C. Shoun, P.E., License No. 60923, State of Florida. The seal includes the text 'PROFESSIONAL ENGINEER' and 'STATE OF FLORIDA' around a central emblem.

**MASTER LIFT STATION R & R  
TIDEVUE 4, RTU 533  
DETAILS**

- NOTES:
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS.
  - FIBERGLASS GRATING SHALL BE ORIENTATED PER THE MANUFACTURER'S RECOMMENDATION.

NOTE:  
ALL STRUCTURAL SUPPORTS,  
GRATING, AND STAIRWAY SYSTEMS  
SHALL BE DESIGNED TO 100  
LB./S.F LIVE LOAD



| NO. | REVISION DESCRIPTION          | DATE    |
|-----|-------------------------------|---------|
| 1   | added communicator            | 8/7/13  |
| 2   | rev. safety railing & grating | 8/12/13 |

|               |             |
|---------------|-------------|
| PROJECT #     | 404-6060784 |
| SURVEY #      | -----       |
| SEC./TWN./RGE | 17/34/18    |
| SCALE         | NTS         |

| BY                      | DATE                             |
|-------------------------|----------------------------------|
| SURVEYED                | -----                            |
| DESIGNED                | 5/2013                           |
| DRAWN                   | 5/2013                           |
| CHECKED                 | -----                            |
| NO. JOHN S. SHOWN, P.E. | FLORIDA P.E. #60823              |
| STATE OF FLORIDA        | REGISTERED PROFESSIONAL ENGINEER |

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

SHEET 5 OF 6

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**MASTER LIFT STATION R & R  
TIDEVUE 4, RTU 533**

**DETAILS**

| NO. | REVISION DESCRIPTION            | BY  | DATE   |
|-----|---------------------------------|-----|--------|
| 1   | added by-pass riser pipe detail | jss | 5/8/14 |

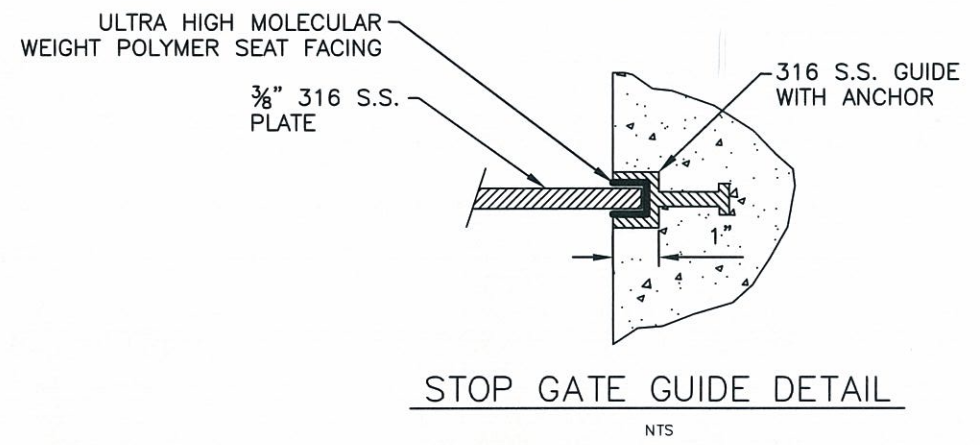
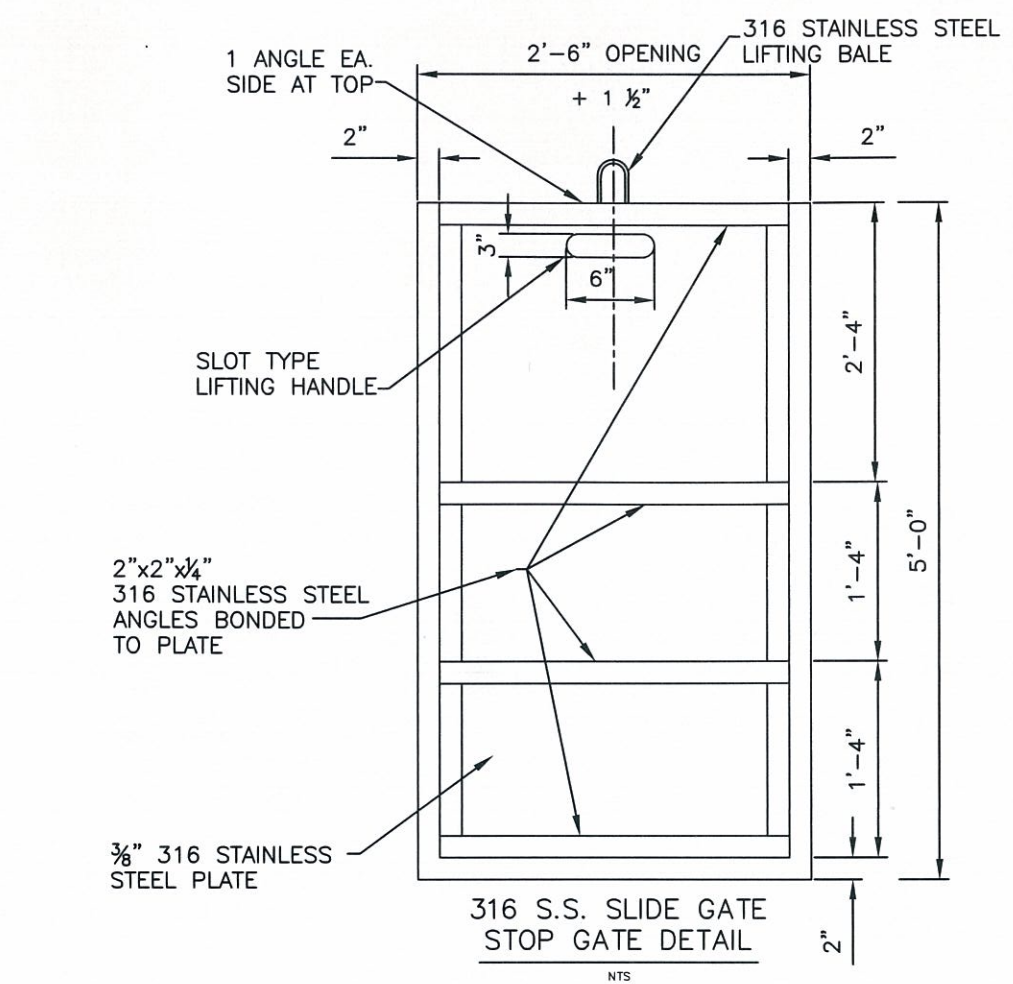
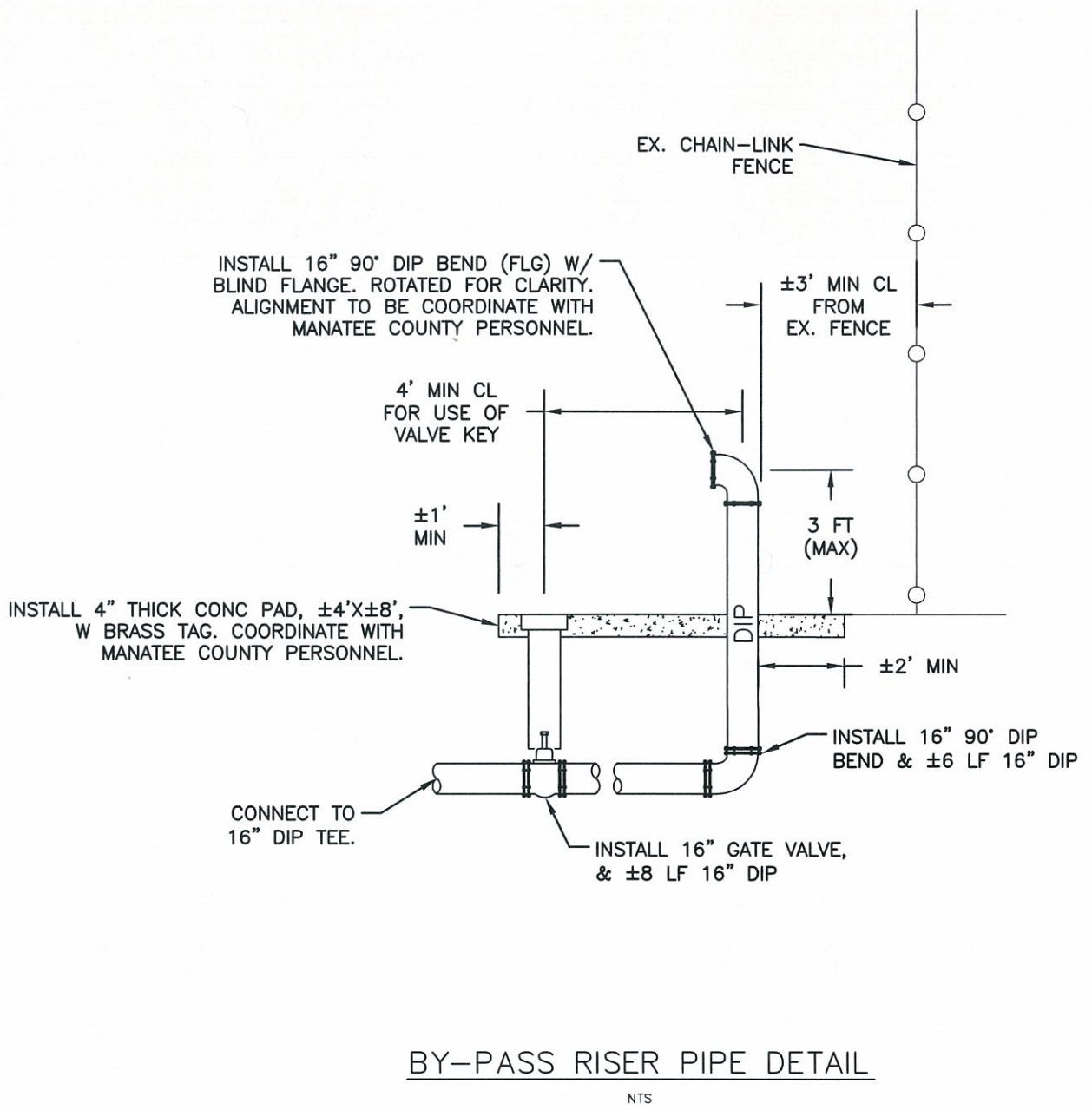
|               |             |
|---------------|-------------|
| PROJECT #     | 404-6060784 |
| SURVEY #      | -----       |
| SEC./TWN./RGE | 17/34/18    |
| SCALE         | NTS         |

|          | BY  | DATE   |
|----------|-----|--------|
| SURVEYED | JSS | 5/2013 |
| DESIGNED | JSS | 5/2013 |
| DRAWN    | JSS | 5/2013 |

CHECKED  
JOHN S. SHOURI, P.E.  
FLORIDA P.E. #60923

STATE OF FLORIDA  
PROFESSIONAL ENGINEER

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



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