

# COLLIER COUNTY PUBLIC UTILITIES RAW WATER BOOSTER PUMP STATION IMPROVEMENTS

10600 CHEVROLET WAY, SUITE 102  
ESTERO, FL 33928  
PH: (239) 390-1467

www.tetratech.com



PROJECT LOCATION:

841 7TH ST SW  
NAPLES, FL 34117

CLIENT INFORMATION:

COLLIER COUNTY PUBLIC UTILITIES  
3339 TAMiami TRAIL EAST, SUITE 303  
NAPLES, FL 34112

Tt PROJECT No.:  
200-08486-24001

CLIENT PROJECT No.:  
70085.30.1

PROJECT DESCRIPTION / NOTES:

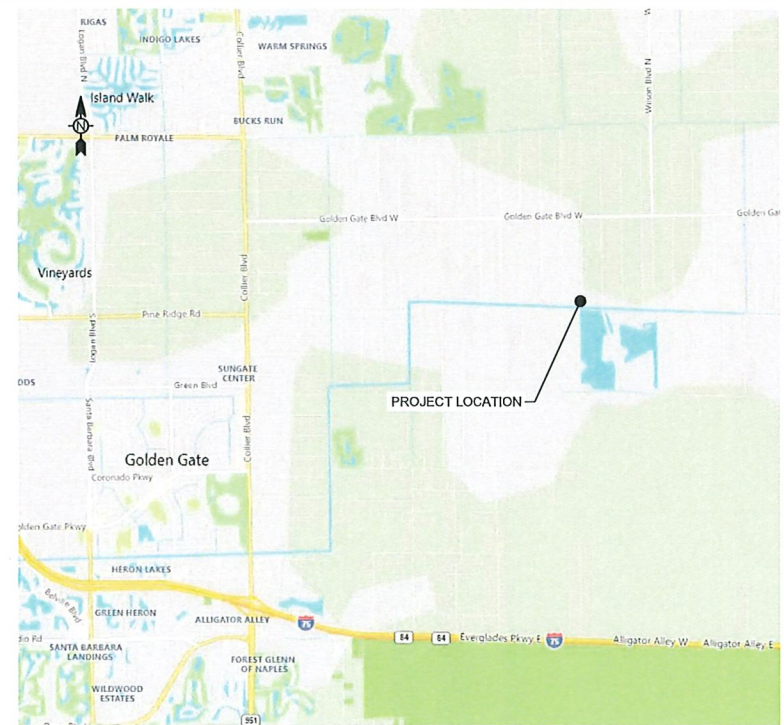
1. FLOW METER REPLACEMENT
2. OFFICE SPACE AND RESTROOM UPGRADES
3. PRE-ENGINEERED METAL BUILDING (PEMB) FOR PARKING CANOPY
4. POTABLE WELL AND REVERSE OSMOSIS (RO) SYSTEM
5. WASTEWATER SUBSURFACE DISPOSAL SYSTEM INSPECTION AND CLEANING.

ISSUED:

04/11/25 - 100% SUBMITTAL



VICINITY MAP:

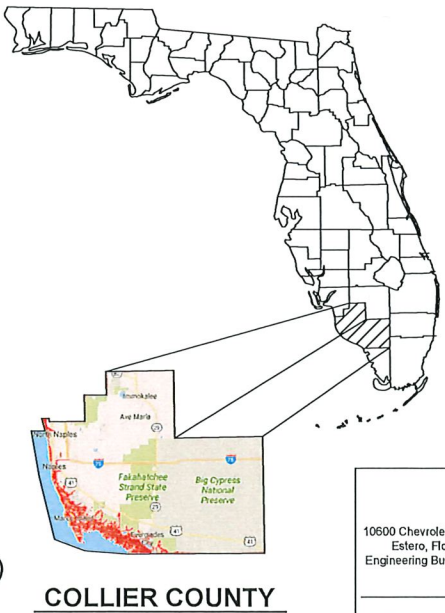


PREPARED FOR  
COLLIER COUNTY PUBLIC UTILITIES  
COLLIER COUNTY WATER-SEWER DISTRICT  
3339 TAMiami TRAIL E., SUITE 303  
NAPLES, FLORIDA 34112

BOARD OF COUNTY COMMISSIONERS

RICK LOCASTRO  
CHRIS HALL  
BURT L. SAUNDERS  
DAN KOWAL  
WILLIAM L. MCDANIEL, JR.

DISTRICT 1  
DISTRICT 2  
DISTRICT 3 (CHAIRMAN)  
DISTRICT 4 (VICE CHAIRMAN)  
DISTRICT 5



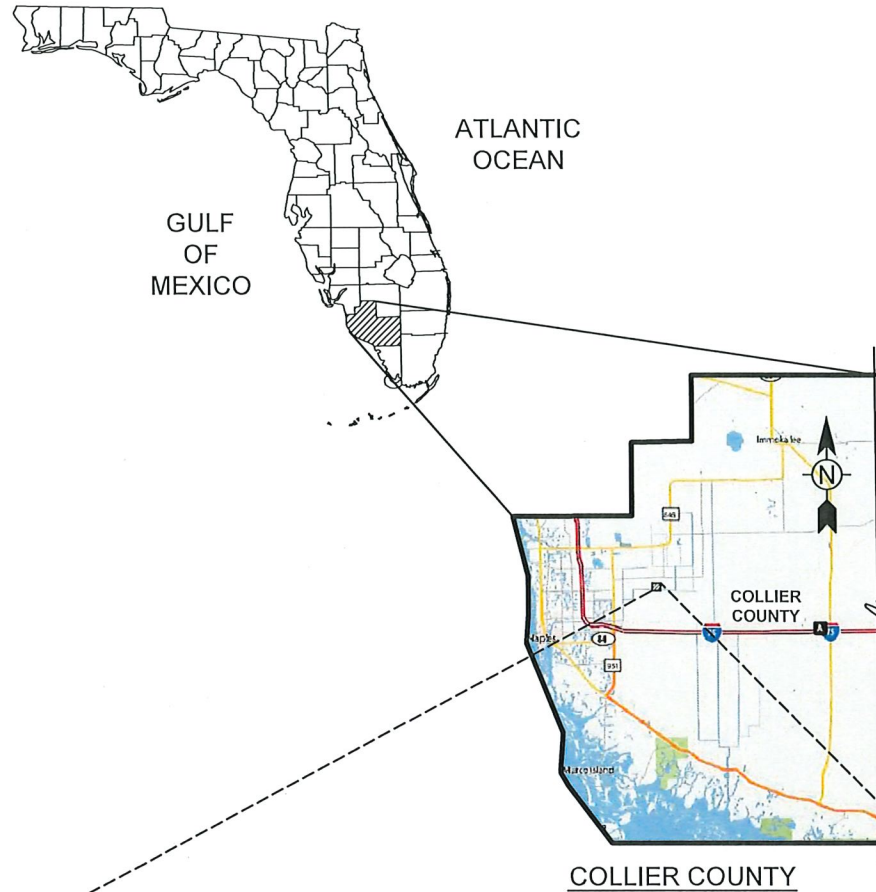
10600 Chevrolet Way, Suite 102  
Estero, Florida 33928  
Engineering Business No. 2429  
DATE \_\_\_\_\_





# RAW WATER BOOSTER PUMP STATION SITE

SCALE: N.T.S.



## GENERAL NOTES

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, DEPTH AND CHARACTER OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AS LISTED BELOW AND FIELD VERIFY LOCATIONS AND ELEVATIONS OF UTILITIES AT LEAST 48 HOURS IN ADVANCE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE CAUSED BY THEIR OPERATIONS.
- COLLIER COUNTY PUBLIC UTILITIES (WATER AND WASTEWATER DISTRICT): (239) 530-5335  
- SUNSHINE STATE ONE CALL: 811 WWW.CALLSUNSHINE.COM  
- IN ADDITION, PRIOR TO STARTING WORK, CONTRACTOR SHALL NOTIFY LOCAL PUBLIC SERVICE AGENCIES INCLUDING SHERIFF AND FIRE DEPARTMENTS.
- EXISTING UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS AND ARE BASED ON RECORD DRAWINGS AND HAVE NOT BEEN FIELD VERIFIED. THE EXISTING UTILITIES SHOWN AND LISTED ABOVE SHALL NOT BE CONSTRUED AS BEING ALL INCLUSIVE OF UTILITIES IN THE AREA. ANY INTERRUPTION OF SERVICE SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY.
  - ALL DISTURBED AREAS SHALL BE RE-SODDED BY THE CONTRACTOR.
  - THE CONTRACTOR SHALL NOT PLACE ANY FILL MATERIALS WITHIN A WETTED DITCH OR WETLAND AREA WHEN WORKING ADJACENT TO EITHER TYPE OF AREA.
  - WORK HOURS FOR THIS PROJECT SHALL BE AS FOLLOWS:  
M-F: 7 AM - 7 PM  
SATURDAY: 8 AM - 5 PM, REQUIRES 48 HOUR WRITTEN NOTICE AND WRITTEN APPROVAL FROM DISTRIBUTION MANAGER  
SUNDAY: NO WORK ALLOWED.
  - CONTRACTOR SHALL SUPPLY THEIR OWN RESTROOM FACILITIES FOR THE DURATION OF THE PROJECT.
  - PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIARIZED WITH THE OVERALL SITE CONDITION AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF ROCK AND EXPECTED ORGANIC SILT PEAT AREAS, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFFSITE, AND MATERIALS TO BE DISPOSED OF OFFSITE ALL OF WHICH WILL AFFECT THEIR PRICING. ANY DELAY, INCONVENIENCE OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL AND THE CONTRACTOR MAY HAVE TO BRING IN MATERIALS AT NO EXTRA COST FROM OFFSITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.
  - ALL PROPOSED IMPROVEMENTS SHALL BE PERFORMED PER COLLIER COUNTY STANDARDS, WHICH ARE AVAILABLE ON THE COUNTY'S WEBSITE: [WWW.COLLIERGOV.NET](http://WWW.COLLIERGOV.NET)
  - THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGES TO COUNTY'S MAINS AND FACILITIES, IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY COUNTY. COUNTY MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
  - LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES EXPOSED DURING CONSTRUCTION SHALL BE ACCURATELY RECORDED ON THE CONSTRUCTION DRAWINGS. THE OWNER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS WITH PROPOSED CONSTRUCTION.
  - THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO CONTROL TURBIDITY INCLUDING, BUT NOT LIMITED TO, THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF INFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY, EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVING THE BARRIERS, AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTERS 62-302 AND 62-4, FLORIDA ADMINISTRATIVE CODE.
  - THE CONTRACTOR SHALL MAINTAIN NORMAL TRANSPORT VEHICLE ACCESS TO FACILITIES AT ALL TIMES.
  - IN THE EVENT THAT THE POTABLE WATER SYSTEM IS CONTAMINATED (I.E. WATER DOES NOT MEET FEDERAL AND STATE REQUIREMENTS) DUE TO THE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL BE RESPONSIBLE, UNDER THE DIRECTION OF THE OWNER, OR THE STATE AND LOCAL REGULATORY AGENCY FOR CORRECTING ANY SUCH CONTAMINATION PROBLEM INCLUDING DISINFECTION, TESTING AND OTHER CORRECTIVE ACTION.

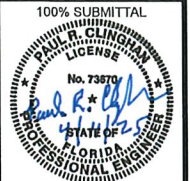
## DRAWING INDEX

SHEET NO.	SHEET TITLE
GENERAL	
G-000	COVER SHEET
G-001	LOCATION MAP, GENERAL NOTES, AND DRAWING INDEX
G-002	LEGENDS AND ABBREVIATIONS
CIVIL	
C-101	GENERAL SITE PLAN
C-102	EXISTING YARD PIPING PLAN
C-103	EXISTING FLOW METER PIPING AND DEMOLITION PLAN & SECTION
C-104	PROPOSED FLOW METER PIPING PLAN & SECTION
C-501	CIVIL DETAILS
C-502	CIVIL DETAILS
STRUCTURAL	
S-101	PARKING CANOPY STRUCTURAL NOTES & DESIGN CRITERIA
S-102	PARKING CANOPY STRUCTURAL NOTES & ABBREVIATIONS
S-103	PARKING CANOPY FOUNDATION AND ROOF PLANS
S-104	PARKING CANOPY PEMB FRAME ELEVATION
S-105	PARKING CANOPY FOUNDATION SECTIONS AND DETAILS
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S-107	PARKING CANOPY ELEVATIONS
ARCHITECTURAL	
A-001	EXISTING PUMP BUILDING
A-101	EXISTING PUMP BUILDING ARCHITECTURAL LIFE SAFETY PLAN
A-102	EXISTING PUMP BUILDING ARCHITECTURAL FLOOR PLANS AND ELEVATIONS
A-103	PARKING CANOPY ARCHITECTURAL LIFE SAFETY PLAN
A-104	PARKING CANOPY ARCHITECTURAL FLOOR PLAN
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P-101	EXISTING PUMP BUILDING PLUMBING DEMOLITION PLAN
P-201	EXISTING PUMP BUILDING PLUMBING PRESSURE & SANITARY PIPING PLAN
P-501	EXISTING PUMP BUILDING PLUMBING DETAILS
P-601	EXISTING PUMP BUILDING PLUMBING SCHEDULES & RISER DIAGRAMS
MECHANICAL	
M-001	MECHANICAL ABBREVIATIONS, LEGENDS, AND NOTES
M-002	MECHANICAL GENERAL NOTES
M-101	EXISTING PUMP BUILDING MECHANICAL DEMOLITION PLAN & SECTIONS
M-201	EXISTING PUMP BUILDING MECHANICAL ZONING PLAN
M-202	EXISTING PUMP BUILDING MECHANICAL MODIFICATION PLAN
M-203	PARKING CANOPY MECHANICAL PLAN
M-501	MECHANICAL DETAILS
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E-002	ELECTRICAL LEGEND
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E-202	PARKING CANOPY LIGHTING ELECTRICAL PLAN
E-203	PARKING CANOPY LIGHTNING PROTECTION AND GROUNDING PLAN
E-204	EXISTING PUMP BUILDING ELECTRICAL DEMOLITION PLAN
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E-502	TYPICAL ELECTRICAL DETAILS
E-503	TYPICAL ELECTRICAL DETAILS
E-504	TYPICAL ELECTRICAL DETAILS

**TETRA TECH**  
ENGINEERING BUSINESS NO. 2429

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ESTERO, FL 33928  
PH: (239) 390-1467

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**COLLIER COUNTY PUBLIC UTILITIES  
RAW WATER BOOSTER PUMP STATION  
IMPROVEMENTS  
LOCATION MAP,  
GENERAL NOTES, AND  
DRAWING INDEX**

PROJ:	200-08486-24001
DESN:	PC
DRWN:	GM
CHKD:	ML

G-001



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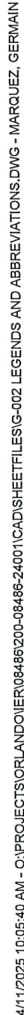
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Collier County

## RAW WATER BOOSTER PUMP STATION IMPROVEMENTS

### LEGENDS AND ABBREVIATIONS

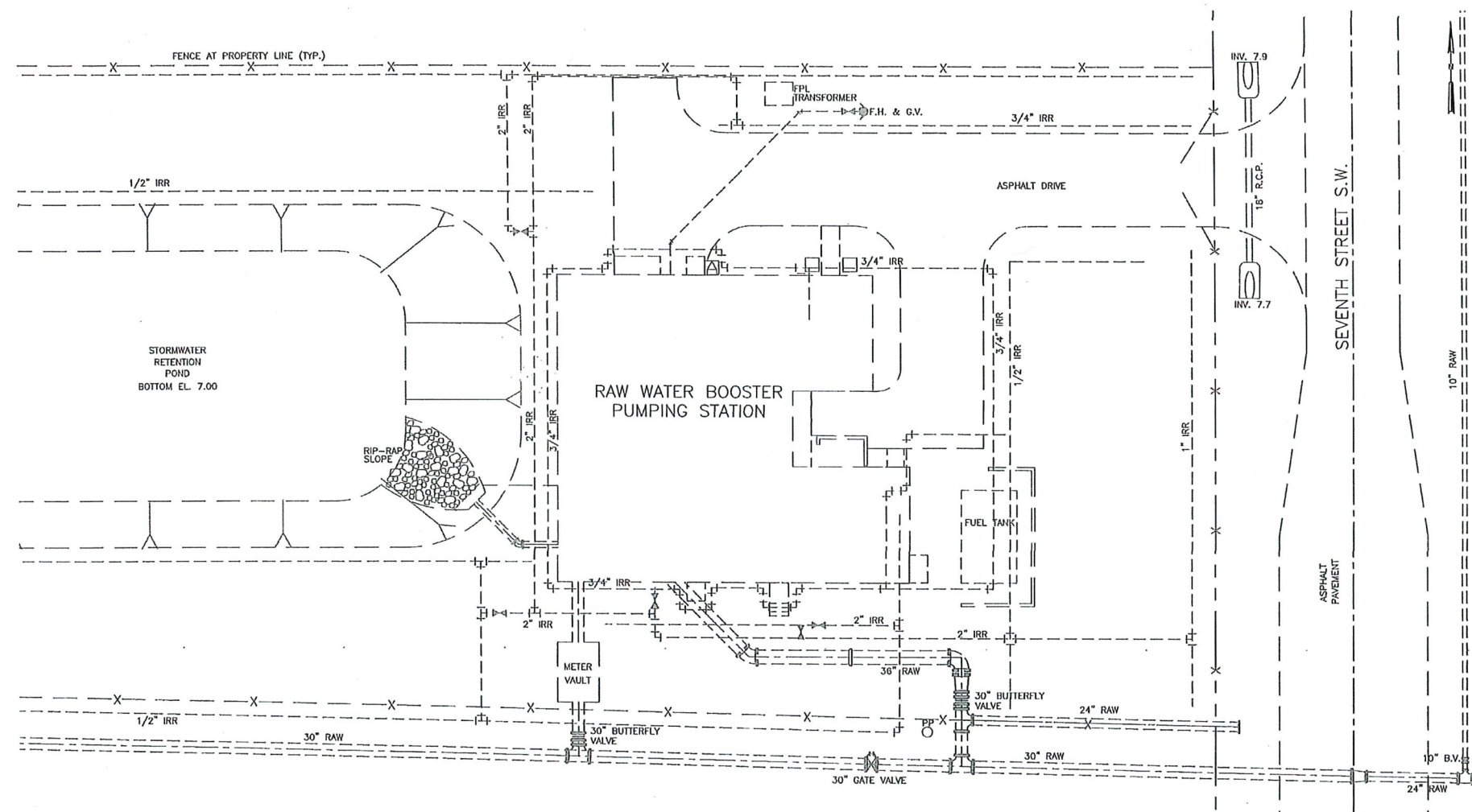
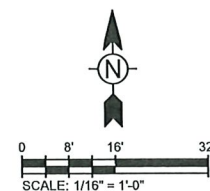
G-002

Copyright: Tetra Tech









### EXISTING YARD PIPING PLAN

SCALE: 1/16" = 1'-0"

## NOTES

1. THE EXISTING YARD PIPING PLAN IS TAKEN FROM THE HOLE MONTES - PUMP REPLACEMENTS - RAW WATER BOOSTER PUMP STATION SITE PLAN DATED JULY 30, 2014.
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-COLLIER COUNTY PUBLIC UTILITIES (WATER AND WASTEWATER DISTRICT): (239) 530-5335  
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**TETRA TECH**  
ENGINEERING BUSINESS NO. 2429



100% SUBMITTA

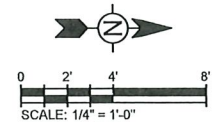
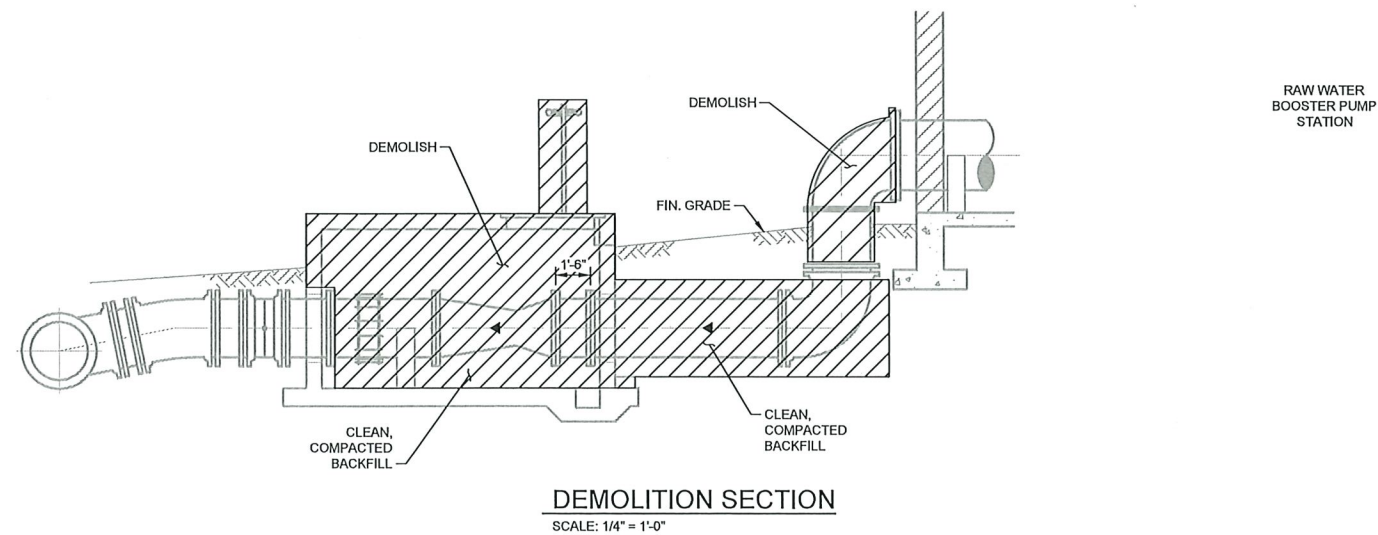
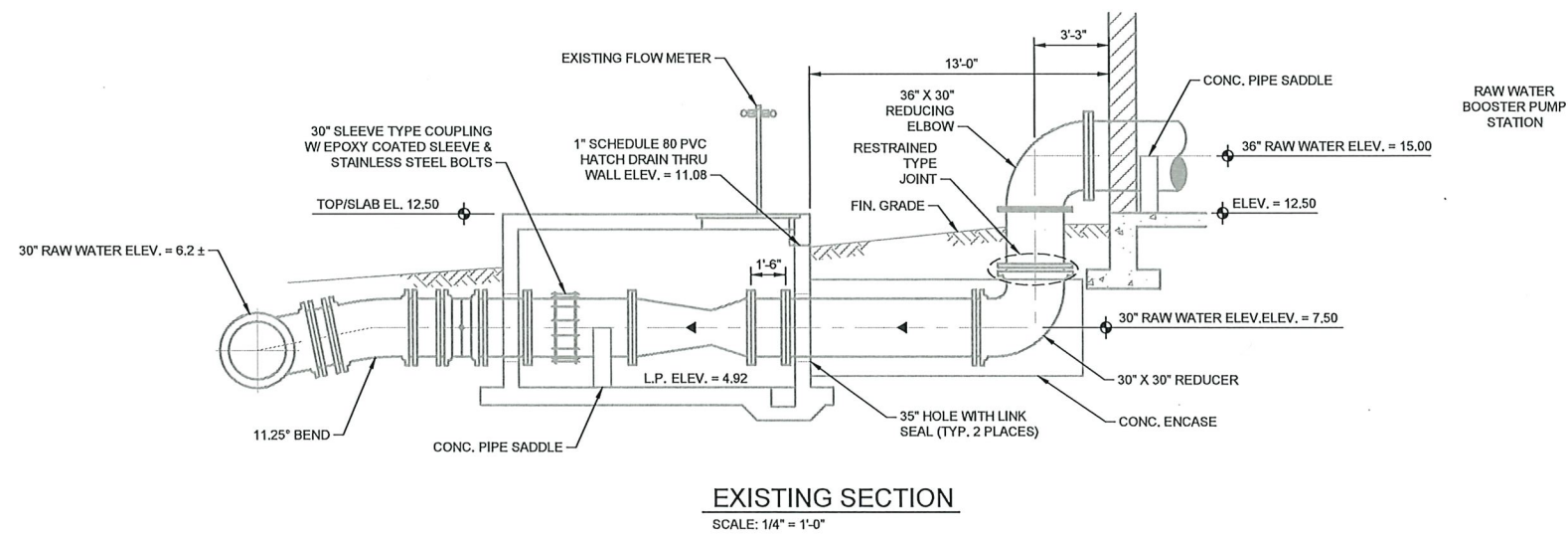
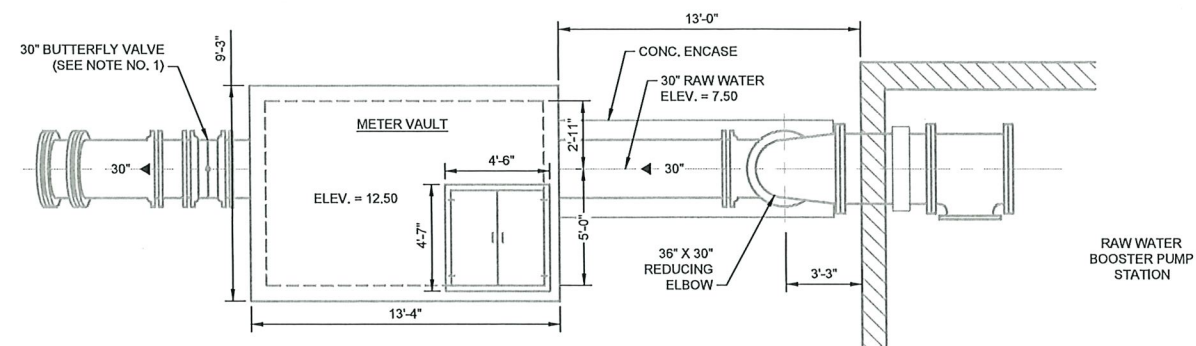
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**WATER BOOSTER PUMP STATION  
IMPROVEMENTS  
EXISTING YARD  
PIPING PLAN**

PROJ:	200-08486-24001
DESN:	PC
DRWN:	GM
CHKD:	ML

C-102





**TETRA TECH**  
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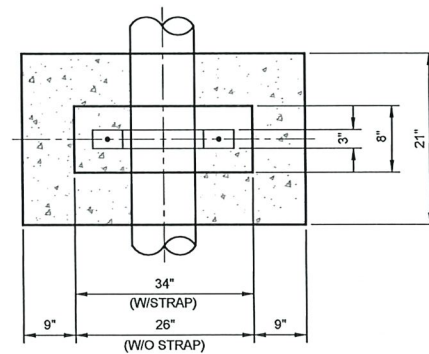
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# RAW WATER BOOSTER PUMP STATION IMPROVEMENTS EXISTING FLOW METER PIPING AND DEMOLITION PLAN & SECTION

OJ:	200-08486-24001
SN:	PC
WN:	GM
KD:	ML

C-103

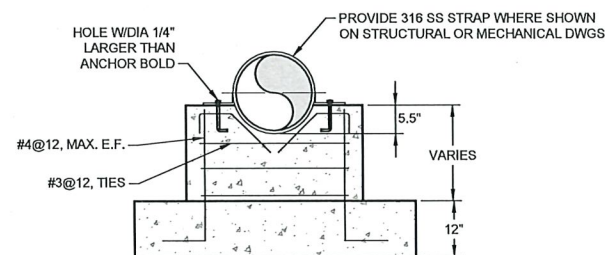




PLAN

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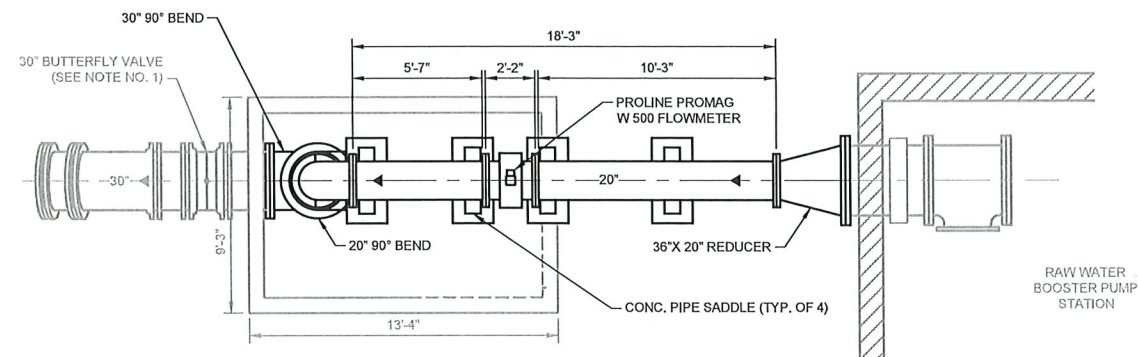
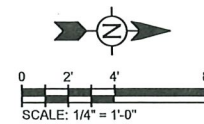
SCALE: 3/4" = 1'-0"



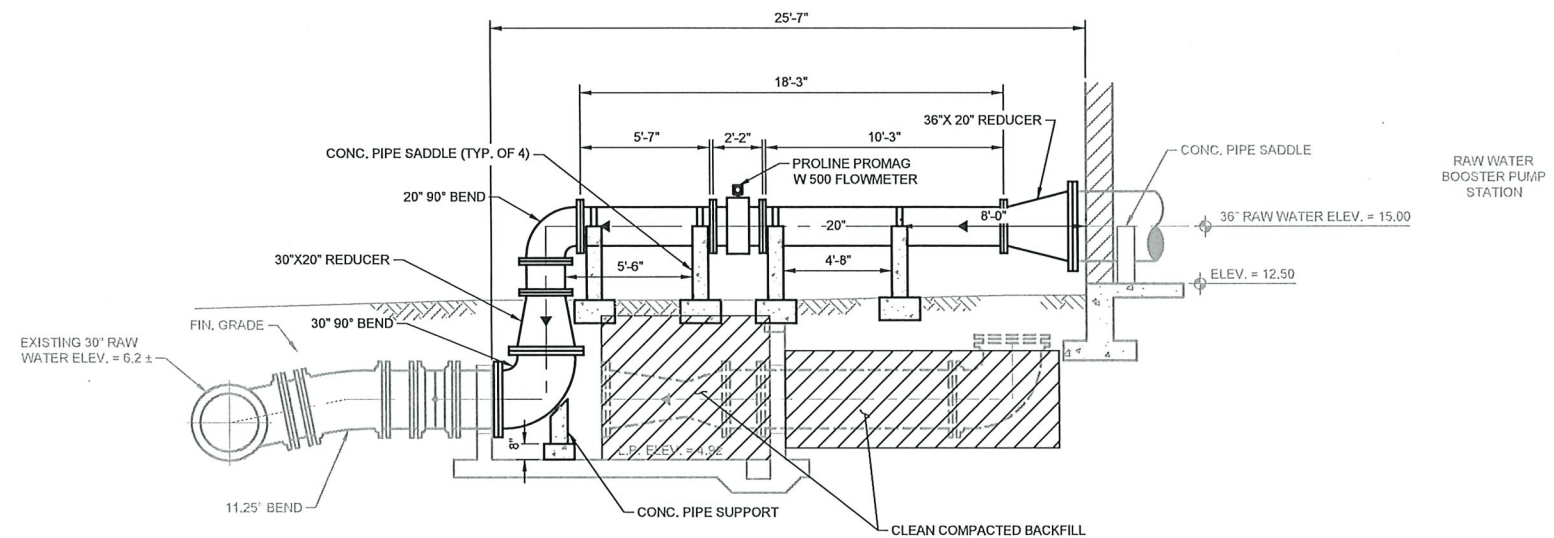
SECTION  
SCALE: 3/4" = 1'-0"

NOMINAL PIPE DIAMETER	MINIMUM CONCRETE PIER DIMENSIONS					STAINLESS STEEL STRAPS			STAINLESS STEEL ANCHOR BOLTS		
	"A1"	"A2"	"B"	"C"	"D"	QUAN.	"E"	THICK	QUAN.	SIZE	MIN. EMBED
4"	18"	9"	6"	1.5"	8"	1	2"	1/4"	2	1/2"	6"
6"	20"	12"	6"	2"	8"	1	2"	1/4"	2	1/2"	6"
8"	22"	14"	6"	2.5"	8"	1	2"	1/4"	2	1/2"	6"
10"	24"	16"	8"	3"	8"	1	2"	1/4"	2	3/4"	9"
12"	26"	18"	8"	3.5"	8"	1	2"	1/4"	2	3/4"	9"
14"	28"	20"	8"	4"	8"	1	2"	1/4"	2	3/4"	9"
16"	30"	22"	8"	4.5"	8"	1	2"	1/4"	2	3/4"	9"
18"	32"	24"	8"	5"	12"	1	3"	3/8"	2	3/4"	9"
20"	34"	26"	8"	5.5"	12"	1	3"	3/8"	2	3/4"	9"

**CONCRETE PIPE SUPPORT DETAIL**  
SCALE: N.T.S.



PROPOSED PLAN  
SCALE: 1/4" = 1'-0"



PROPOSED SECTION

---

SCALE: 1/4" = 1'-0"

NOTES:

1. THE RAW WATER BOOSTER PUMP STATION (RWBPS) TIMING FOR SHUTDOWN IS CRITICAL. THE CONTRACTOR SHALL COORDINATE WITH THE RWBPS OPERATORS AS FOLLOWS:
  - A. JANUARY THROUGH MAY THE ALLOWABLE TIME IS 8 HOURS FOR A SHUTDOWN OF THE STATION.
  - B. JUNE THROUGH SEPTEMBER THE ALLOWABLE TIME IS 24 HOURS FOR A SHUTDOWN OF THE STATION.
  - C. OCTOBER THROUGH DECEMBER THE ALLOWABLE TIME IS 12 HOURS FOR A SHUTDOWN OF THE STATION.



Diagram illustrating the stages of trench backfilling and trench limits:

- UNDISTURBED AREA**: The areas on either side of the trench.
- TRENCH LIMITS**: The boundaries of the excavation.
- TRENCH BACKFILL IN COMPACTED MAXIMUM 12" LIFTS TO A 98% REQUIRED DENSITY**: The backfill material above the pipe bedding.
- THIRD STAGE**: The top layer of backfill.
- SECOND STAGE**: The middle layer of backfill.
- FIRST STAGE**: The bottom layer of backfill, directly above the pipe bedding.
- PIPE BEDDING (SEE NOTE 2)**: The base layer supporting the pipe.
- PIPE**: The main structure being installed.
- 1'-0"**: The height of the first stage backfill above the pipe bedding.
- 1'-0" MINIMUM DIAMETER**: The minimum diameter of the pipe.
- 1'-0" MINIMUM**: The minimum width of the trench.
- 1'-0" MINIMUM**: The minimum width of the trench.

WHERE ANY TRENCH OCCURS IN AN UNSURFACED AREA, THE THIRD STAGE OF BACKFILLING SHALL EXTEND TO THE FINISHED GRADE.

- 1 DETAIL**  
SCALE: NTS



FOR ROADWAY AND BASE RESTORATION DETAILS, REFER TO THE COLLIER COUNTY RIGHT OF WAY HANDBOOK.

TRENCH BACKFILL IN COMPACTED MAXIMUM 12" LIFTS TO A 98% REQUIRED DENSITY

TRENCH BACKFILL TO LEVEL OF ONE FOOT ABOVE TOP OF PIPE IN 6" COMPACTION LIFTS

THIRD STAGE

SECOND STAGE

FIRST STAGE

PIPE BEDDING (SEE NOTE 2)

1'-0" OUTSIDE 1'-0" MINIMUM DIAMETER MINIMUM

6"

PIPE

The diagram illustrates the three-stage process for backfilling a trench around a 6-inch diameter pipe. Stage 1 (Pipe Bedding) is the bottom layer. Stage 2 (First Stage) is the first 1-foot layer of backfill above the bedding. Stage 3 (Second Stage) is the subsequent 1-foot layer of backfill. The total backfill height shown is 2 feet above the pipe. A note indicates that the backfill should be compacted in 12-inch lifts to 98% density. A final note specifies that the backfill should reach a level one foot above the top of the pipe in 6-inch compaction lifts. The pipe is labeled 'PIPE' and its diameter is '6"'. The backfill is shown in a hatched pattern, and the bedding is a stippled pattern. The overall width of the backfill is indicated as 1'-0" outside the pipe diameter, with a minimum diameter of 1'-0".

- 2 **DETAIL**  
SCALE: NTS



Diagram illustrating the minimum separation for a water main and a sanitary sewer, storm sewer, or force main.

- Water Main (top)
- Sanitary Sewer, Storm Sewer, or Force Main (bottom)
- Minimum Separation: 10" (for sanitary sewer, storm sewer, or force main)
- Minimum Separation: 5" (for irrigation main)
- Water Main Cover: 30" MINIMUM COVER
- Sanitary Sewer, Storm Sewer, or Force Main: 18" MINIMUM SEPARATION

**3 DETAIL**  
SCALE: NTS



18" x 18" x 6" CONCRETE COLLAR

2" SCH 80 PVC PIPE W/ THREADED CAP, FLUSH WITH CONCRETE PAD (WHEN TRACER WIRE IS PROVIDED)

2" MIN FROM EDGE OF SLAB

PLAN VIEW

SPECIFY LETTERING AS "RR", "SEWER", OR "WATER", DEPENDING ON USE

PROVIDE A 3" DIAMETER BRASS DISC ANCHORED IN CONCRETE COLLAR (WASTEWATER ONLY)

16" MAIN

51 TURNS TO

OPEN - C ON

DARLING CO

1994

SIZE OF MAIN OR BYPASS

NUMBER OF TURNS TO OPEN

DIRECTION TO TURN TO OPEN

VALVE MANUFACTURER

YEAR VALVE INSTALLED

NON PAVED AREAS

PAVED AREAS

PROVIDE A 3" DIAMETER BRASS DISC ANCHORED IN CONCRETE COLLAR

FINISHED GRADE

FINISHED PAVEMENT

18" x 18" x 6" CONCRETE COLLAR

2" SCH 80 PVC PIPE WITH THREADED CAP (FOR DIRECTIONAL DRILLS ONLY)

30" MINIMUM

TWO PIECE CAST IRON VALVE BOX WITH DR 18 PVC PIPE EXTENSION IF NEEDED (C-900 DR 14 PVC PIPE IN PAVED AREAS). VALVE BOX OR PIPE SHALL NOT BEAR ON VALVE OR PRESSURE MAIN

PRESSURE MAIN

(2) TRACER WIRES, TERMINATE INSIDE 2" SCH 80 PVC (WHEN PROVIDED). SEE SECTION 3306253.13

ALL VALVES USED IN WATER DISTRIBUTION SYSTEMS SHALL BE OF THE RESILIENT SEAT TYPE IN ACCORDANCE WITH ANWA C-515

- 4 DETAIL**  
SCALE: NTS



The technical drawing consists of two parts: a cross-section and a profile view.

**SECTION:** This view shows a cross-section of the dip water main. The main is a circular pipe with a diameter of 18 inches, indicated by a dimension line. The pipe is shown in a plan view, with a shaded area representing the water. The pipe is set in a trench, and the top of the trench is labeled "FINISHED GRADE". A vertical dimension of 35" MIN. is shown from the finished grade to the top of the pipe. An "IDENTIFICATION TAPE, SEE NOTE" is shown as a horizontal line above the pipe. The pipe is labeled "DIP WATER MAIN".

**PROFILE:** This view shows the profile of the dip water main. It is a horizontal pipe with a dashed centerline. The pipe is shown in a plan view, with a shaded area representing the water. The pipe is set in a trench, and the top of the trench is labeled "FINISHED GRADE". An "IDENTIFICATION TAPE" is shown as a horizontal line above the pipe.

**5 DETAIL**  
SCALE: NTS

4'-0"

6" SCHED 40 STEEL PIPE FILLED WITH CONCRETE

COLOR OF FINISH COAT SHALL BE OSHA SAFETY YELLOW

9" (TYP)

FINISHED GRADE

3'-0"

3,000 PSI CONCRETE

2'-0"

6"

- 6 DETAIL  
SCALE: NTS

[illegible]

PROJ:	200-08486-2400
DESN:	PO
DRWN:	GM
CHKD:	M

C-501

**TETRA TECH**  
ENGINEERING BUSINESS NO. 2429

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100% SUBMITTAL



Collier County



1. THE FOLLOWING ARE THE BEST MANAGEMENT PRACTICES (BMP'S) NOTES AND DETAILS ARE ONLY A SUGGESTED APPROACH DEVELOPED FOR USE BY THE CONTRACTOR TO ASSIST THEM IN IMPLEMENTING APPROPRIATE POLLUTION PREVENTION TECHNIQUES TO COMPLY WITH FLORIDA'S NPDES STORMWATER MANAGEMENT DURING CONSTRUCTION ACTIVITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND IMPLEMENT THE BEST MANAGEMENT PRACTICE THAT ARE APPROPRIATE FOR THE PROJECT'S SITE SPECIFIC CONDITIONS DURING THE LIFE OF THE CONSTRUCTION ACTIVITIES.
2. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
3. ADDITIONAL PROTECTION-ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORSEEN CONDITIONS OR ACCIDENTS.
4. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL COORDINATE WITH STOF PUBLIC WORKS SILT REMOVAL EFFORTS FROM SITE. PRIOR TO REMOVAL IT SHALL BE DETERMINED IF SILT IS NOT REUSABLE ON-SITE.
5. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
6. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
7. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
8. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC., ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
9. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
10. THE COST OF STORM WATER EROSION CONTROL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE ALLOWED.
11. UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR, AT NO COST TO OWNER, SHALL BE RESPONSIBLE FOR RESTORING ALL AREAS WHERE EROSION CONTROL DEVICES WERE PROVIDED. RESTORATION EFFORTS SHALL LEAVE SITE IN AS GOOD AS, IF NOT BETTER CONDITION THAN WHAT EXISTED PRIOR TO CONSTRUCTION.
12. IF AN INADVERTENT DISCOVERY OF ARCHEOLOGICAL MATERIALS OR HUMAN REMAINS IS MADE, ALL WORK MUST STOP AND THE DISCOVERY MUST BE REPORTED TO THE TRIBAL HISTORIC PRESERVATION OFFICE (THPO) AT 863-983-6549. IN THE CASE OF DISCOVERY OF HUMAN REMAINS, NOTIFY THE SEMINOLE POLICE DEPARTMENT IMMEDIATELY AT 954-966-6300, THEN CALL THE THPO.
13. DURING ANY ACTIVITY, IF SOIL OR GROUNDWATER CONTAMINATION IS ENCOUNTERED, OR A SPILL OF HAZARDOUS MATERIAL OR OIL/GASOLINE OCCURS, STOP WORK IN THE AREA AND CONTACT THE ENVIRONMENTAL RESOURCE MANAGEMENT DEPARTMENT (ERMD) AT 954-965-4380 OR 863-763-4128 IMMEDIATELY.
14. CONSTRUCTION PERSONNEL INVOLVED ARE REQUIRED TO WATCH THE BEST MANAGEMENT PRACTICES (BMP) VIDEO FOR WILDLIFE PROTECTION. WILDLIFE BROCHURES MUST BE ON HAND DURING CONSTRUCTION AND POSTED ON BULLETIN BOARDS. THE VIDEO AND BROCHURES ARE AVAILABLE FROM ERMD UPON REQUEST AT 863-902-3200 X 13411.
15. A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES OVER ONE ACRE IS REQUIRED UNDER THE EPA 2017 CONSTRUCTION GENERAL PERMIT ON INDIAN COUNTRY. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE DEVELOPED PRIOR TO SUBMITTING THE NOTICE OF INTENT (NOI). A COMPLETE AND ACCURATE NOI MUST BE SUBMITTED TO THE EPA AT LEAST 14 CALENDAR DAYS PRIOR TO COMMENCING EARTH-DISTURBING ACTIVITIES TO BE ELIGIBLE FOR COVERAGE UNDER THE NPDES PERMIT. THE EPA REQUIRES THE NOI TO BE SUBMITTED ONLINE. INFO IS AVAILABLE AT [HTTPS://WWW.EPA.GOV/NPDES/ELECTRONIC-NOTICE-INTENT-ENOI](https://www.epa.gov/npdes/electronic-notice-intent-enoi). COPY [ERMDREQUEST@SEMTRIBE.COM](mailto:ERMDREQUEST@SEMTRIBE.COM) ON YOUR SUBMITTAL. THE CONTRACTOR IS RESPONSIBLE FOR PREPARATION AND SUBMISSION OF THE REQUIRED NPDES PERMIT APPLICATION, SWPPP, AND

1. COMPLIANCE TO "TRENCH SAFETY ACT" IS REQUIRED FOR ALL EXCAVATIONS IN EXCESS OF 5 FEET DEEP. CONTRACTOR SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS STANDARDS OSHA 29 CFR 1910.146, "PERMIT-REQUIRED CONFINED SPACES" AND OSHA 29 CFR 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."
2. IF AN INADVERTENT DISCOVERY OF ARCHEOLOGICAL MATERIALS OR HUMAN REMAINS IS MADE, ALL WORK MUST STOP AND THE DISCOVERY MUST BE REPORTED TO THE TRIBAL HISTORIC PRESERVATION OFFICE (THPO) AT 863-983-6549. IN THE CASE OF DISCOVERY OF HUMAN REMAINS, NOTIFY THE SEMINOLE POLICE DEPARTMENT IMMEDIATELY AT 954-966-6300, THEN CALL THE THPO.
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RESPONSIBLE FOR PREPARATION AND SUBMISSION OF THE REQUIRED NPDES PERMIT  
APPLICATION, SWPPP, AND NOI.

**PLAN**

DIRECTION OF SURFACE FLOW

ANGLE BOTH ENDS OF FILTER FABRIC FENCE TO ASSURE SOIL IS TRAPPED

INTERLOCKED 2"x4" POSTS AND ATTACH

**SECTION**

FILTER FABRIC MATERIAL

USE STITCHED LOOPS OVER 2"x4" POSTS

PROVIDE BASE COURSE BACKFILL IN TRENCH

2'-6"

5'-0"

6"

**ELEVATION**

5'-0"

2'-6"

6"

6" MAXIMUM SPACING

FILTER FABRIC MATERIAL, 36" WIDE ROLLS

**NOTES:**

- BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISH
- 2"x4" TIMBER FIR OR STEEL FENCE POSTS.
- STITCHED LOOPS TO BE INSTALLED DOWNHILL SIDE OF SLOPE.
- COMPACT ALL AREAS OF FILTER FABRIC TRENCH.

**DETAIL**

SCALE: NTS

The image contains two technical drawings of curtains, labeled TYPE I and TYPE II. Both drawings show a cross-section of the curtain assembly, including the top rail, the curtain fabric, and the bottom edge. The drawings are labeled with various components and dimensions.

**TYPE II:** This drawing shows a curtain with a top rail and a bottom edge. The top rail is labeled "5/16\" VINYL SHEATHED EAW STEEL CABLE (9800 LBS. BREAKING STRENGTH) WITH GALVANIZED CONNECTORS (TOOL FREE DISCONNECT)". The top rail is also labeled "CLOSED CELL SOLID PLASTIC FOAM FLotation (6\" DIA. EQUIV.) (17 LBS. PER FT. BUOYANCY)". The top rail is connected to a "SLOTTED PVC CONNECTOR PIPE (METAL COLLAR REINFORCED)". The top rail is also labeled "18 OZ. NYLON RE-INFORCED PVC FABRIC (300 PSI TEST)". The top rail is also labeled "STRESS PLATE". The top rail is also labeled "5/16\" GALVANIZED CHAIN". The top rail is also labeled "D1". The top rail is also labeled "D2".

**TYPE I:** This drawing shows a curtain with a top rail and a bottom edge. The top rail is labeled "5/16\" VINYL SHEATHED EAW STEEL CABLE (9800 LBS. BREAKING STRENGTH) WITH GALVANIZED CONNECTORS (TOOL FREE DISCONNECT)". The top rail is also labeled "CLOSED CELL SOLID PLASTIC FOAM FLotation (6\" DIA. EQUIV.) (12 LBS. PER FT. BUOYANCY)". The top rail is connected to a "SLOTTED PVC CONNECTOR PIPE (METAL COLLAR REINFORCED)". The top rail is also labeled "18 OZ. NYLON RE-INFORCED PVC FABRIC (300 PSI TEST) WITH LACING GROMMETS". The top rail is also labeled "5/8\" POLYPRO ROPE (600 LB. BREAKING STRENGTH)". The top rail is also labeled "1/4\" GALVANIZED CHAIN". The top rail is also labeled "D1". The top rail is also labeled "D2".

**Dimensions:**

- D1 = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS).
- D2 = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5').

**Notes:**

- CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET.
- TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

- NOTES: 1. COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AN ANCHOR PLAN WITH CONSIDERATION GIVEN TO DESIRED SHAPE, WIND AND CURRENT CONDITIONS. THE BARRIER SHALL BE ANCHORED TO BOTH SIDES.
3. WHILE IN SERVICE THE TURBIDITY BARRIER SHALL BE INSPECTED ON A REGULAR BASIS.

2 DETAIL  
SCALE: NTS

The drawing consists of two views: a Plan view and a Section view.

**PLAN:** This view shows a rectangular area defined by two parallel lines. Inside, three rectangular straw bales are arranged in a staggered pattern. An arrow labeled "FLOW" points from the top left towards the bottom right. A label "STRAW BALES, TYP., SPACE AS SHOWN ON PLANS" points to one of the bales. A small black rectangle is shown at the bottom right corner of the plan area.

**SECTION:** This view shows a cross-section of the straw bales. The bales are shown in a staggered arrangement with a "6\" OVERLAP, TYP" indicated between them. A label "PT 'A', SEE NOTE 1" points to the left end of the first bale. A label "PT 'B'" points to the junction of two bales. A label "STAKE, TYP" points to a small black rectangle at the bottom right. The bales are filled with a hatched pattern.

- | NOTES:   | SECTION |
|--|---------|
| <ol style="list-style-type: none"> <li>1. POINT 'A' MUST BE 6" MINIMUM HIGHER THAN PT 'B'.</li> <li>2. STAKING OF BALES IS REQUIRED USING (2)'2"x2"x3' LONG WOOD STAKES OR APPROVED EQUAL PER BALE.</li> <li>3. DRIVE STAKES MINIMUM 12" INTO GROUND AND FLUSH WITH TOP OF BALES.</li> <li>4. EMBED BALES MINIMUM OF 4" INTO GROUND SURFACE.</li> <li>5. BIOFILTER BAGS TO BE USED, IF SPECIFIED.</li> <li>6. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.</li> </ol> |         |

3 DETAIL  
SCALE: NTS

- NOTES:**

  1. STAKING OF BALES IS REQUIRED USING (2) 2"x2"x3' LONG WOOD STAKES OR APPROVED EQUAL PER BALE.
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**4 DETAIL**  
SCALE: NTS

[illegible]

# COLLIER COUNTY PUBLIC UTILITIES

## RAW WATER BOOSTER PUMP STATION IMPROVEMENTS

### CIVIL DETAILS

PROJ: 200-08486-24001

DESN:	PC
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DRWN:	GM
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CHKD:	ML
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C-502