AGENDA ITEM  C3

DATE:  August 1, 2012
TO:  Gerald J. Seeber, General Manager
FROM:  Charles H. Carden, Director of Operations and Facilities
SUBJECT:  Eldridge-Wilde H₂S Removal Facility and Pinellas County Points of Connection Updates Project – Request for Minor Modification of ERP No. 44-018255.00 - Approve Submittal to SWFWMD

SUMMARY:  A minor modification to Environmental Resource Permit No. 44-018255.00 is required to include the Eldridge-Wilde H₂S Removal Facility and Pinellas County Points of Connection Updates Project.

RECOMMENDATION:  Approve submittal of the attached Environmental Resource Permit minor modification request to the Southwest Florida Water Management District for the Eldridge-Wilde H₂S Removal Facility and Pinellas County Points of Connection Updates Project.

COST/FUNDING SOURCE:  None

DISCUSSION:  Pinellas County (County) obtained Environmental Resource Permit (ERP) No. 44-018255.00 from the Southwest Florida Water Management District (SWFWMD) for the construction of the S.K. Keller Water Treatment Plant. Tampa Bay Water’s Eldridge-Wilde Hydrogen Sulfide (H₂S) Removal Facility is within the County’s permitted area. In 2011, the County requested to modify its Points of Connection (POCs) with Tampa Bay Water through a Joint Project Agreement. It is necessary to obtain a minor modification to this ERP to address the activities described below:

- Eldridge-Wilde Wellfield Point of Connection – Design and construction of a new 20-pound per square inch POC upstream of the existing Pinellas County 7.5-million gallon (MG) ground storage tank, including 42-inch piping.
- 42-inch By-pass Line – Design and construction of a new 42-inch by-pass pipeline connecting to the County’s existing 7.5 MG ground storage tank with a capacity of 45 million gallons per day (MGD).
- Chemical Storage Safety Improvements – Increase the chemical storage containment area and demolish the County’s fluoride storage area.

A pre-application meeting was held on February 1, 2012, with SWFWMD. A minor permit modification application has been prepared seeking approval of pertinent activities. Stormwater modeling is not necessary since there is no increase in impervious areas.
The ERP minor modification application is contained on the agenda CD included with this Board Agenda Packet.

The ERP is a Primary Environmental Permit as defined by the Amended and Restated Interlocal Agreement and is subject to arbitration by the Host Member Government (in this case, Pinellas County). Given Board approval, the application will be submitted on or about September 20, 2012 if the Host Member Government elects not to arbitrate, or earlier if they vote to waive arbitration rights. If the Host Member Government elects arbitration, the application will be held for an additional 60 days as required by the Amended and Restated Interlocal Agreement, and will be submitted on or about October 20, 2012.

Staff recommends approval to submit the ERP minor modification application to SWFWMD.

BACKGROUND: In separate actions on April 16 and June 20, 2011, the Board approved a Memorandum of Understanding and Joint Project Agreement, respectively, with Pinellas County for modifications to the existing Pinellas County Points of Connection. These modifications allow Tampa Bay Water to meet Exhibit C pressure requirements and other Master Water Supply contract-related requirements. The Joint Project Agreement provides authority for Tampa Bay Water to design and construct the facilities which Tampa Bay Water will own but which are the responsibility of the County to fund.

Attachment: ERP Minor Modification Application (contained on the agenda CD included with this Board Agenda Packet)
20 September 2012

Mr. Richard Alt, PE
Southwest Florida Water Management District
7601 US Highway 301
Tampa, FL 33637

RE: Request for Modification by Short Form for ERP#44-018255.00
Tampa Bay Water – Eldridge Wilde H₂S Treatment Facility Improvements
Tarpon Springs, Florida

Attention: Mr. Alt,

As discussed during an ERP Pre-application meeting held on February 1, 2012, Tampa Bay Water has an upcoming project that involves piping and storage area improvements at the existing Eldridge–Wilde H₂S Treatment Facility. The project site is in northern Pinellas County (Section/Township/Range = 11/27S/16E), just north of the Pinellas County S. K. Keller Water Treatment Plant (Address: 3655 Keller Circle, Tarpon Springs, FL 34688).

The construction activities will be completed within a property owned by Pinellas County, where Tampa Bay Water has an existing non-exclusive permanent easement (attached herein). A site plan illustrating the proposed improvements has been attached with this letter, along with a Stormwater Pollution Prevention Plan, and a figure showing that the project site is within the boundaries of existing ERP #44-018255.00.

The improvements from this project will result in a net decrease of the site’s impervious area, as shown on the site plan drawing and summarized below:

**New Impervious Areas Added:**
- Concrete Pad for Emergency Bypass Piping Section 493.5 sq.-ft
- Concrete Pad for Eldridge-Wilde Wellfield POC piping 535.5 sq.-ft
- New Canopy over Existing Chemical Storage Area 87 sq.-ft
- Concrete Pad for CO₂ Feed System 25 sq.-ft
- Existing Manhole #2 Concrete Pad 16 sq.-ft

**New Impervious Area Added** 1,157 sq.-ft

**Existing Impervious Areas Removed and Replaced with Sod:**
- Demolition of Existing Fluoride Storage Area (913 sq.-ft)
- Demolition of Existing Sodium Hypochlorite Injection Pit (56 sq.-ft)
- Demolition of Existing Caustic Injection Pit (120 sq.-ft)
- Demolition of Existing Caustic Storage Area (640 sq.-ft)

**Existing Impervious Area Removed** (1,729 sq.-ft)
Net Decrease in Impervious Area  

Based on Rule 40D-4.331(2)(b), Florida Administrative Code (F.A.C.) and as discussed during the ERP Pre-application meeting, it is our understanding that this project may be permitted as a Short Form modification to the existing ERP# 44-018255.00.

Please, address any correspondence regarding the Short Form Modification to the owner’s contact: Ms. Maribel Medina, P.E., Tampa Bay Water Project Manager - 2575 Enterprise Road, Clearwater, FL 33763-1102.

As required to support the permit modification, enclosed please find the following:

- Documentation for the Tampa Bay Water “Perpetual Non-Exclusive Utility Easement and Access Easement Deed” with Pinellas County, executed August 26, 2011.
- Three signed and sealed copies of the Site Plan drawing identifying the location and dimensions of proposed improvements that involve adding or removing impervious areas.
- Three signed and sealed copies of the Stormwater Pollution Prevention Plan drawings and specification.
- A map showing the project location in relation to existing ERPs in the area.
- Environmental Resource Permit Modification Short Form, Form No. LEG-R.013.02 (one original and two copies).

If you require any additional information to support the requested ERP Short Form Modification for this project, please let us know.

Very truly yours,

BLACK & VEATCH

Robert Burchett, P.E.
Project Manager

Enclosure[s]

cc: Maribel Medina, P.E., Tampa Bay Water
    Steven King, Black & Veatch
SUBMIT AN ORIGINAL AND TWO COPIES OF THIS FORM AND OTHER RELATED INFORMATION TO ONE OF THE DISTRICT OFFICES LISTED BELOW. NO FEE REQUIRED. PLEASE PRINT OR TYPE ALL TEXT. To qualify for a modification using this modification short form, the permittee must submit sufficient information with this application so that a request for additional information is not required to verify compliance with the permit rules and threshold qualifications for modification, and a separate Statement of Completion and As-built is not required to verify compliance with the permit.

Date

Bartow Regulation
170 Century Blvd.
Bartow, FL 33830-7700

Brooksville Regulation
2379 Broad St.
Brooksville, FL 34604-6899

Tampa Regulation
7601 US Hwy 301
Tampa, FL 33637-8759

Sarasota Regulation
6750 Fruitville Rd.
Sarasota, FL 34240-9711

Subject: Request for Modification of ERP No. 44-018255 (rev #)

Project Name: Tampa Bay Water - Eldridge-Wilde H2S Treatment Facility Improvements

County/City: Pinellas County / Tarpon Springs

Total Acreage/Project Acreage: 397 / 0.5

Sec(s)/Twp(s)/Rge(s): 11 / 27S / 16E

To Whom It May Concern:

This is a request to modify the above-referenced District approved ERP construction permit pursuant to Section 403-4.331(2)(b) 1 - 6, Florida Administrative Code (F.A.C.). The requested modification does not: (1) expand or substantially alter the permit authorization (substantially alter means a change to the project that affects either the system design, construction or operation, which is reasonably expected to lead to substantially different water resource or environmental impacts and requires detailed permitting review and evaluation), (2) increase the authorized off site discharge, (3) impact the environmental features of the project, (4) decrease the required retention/detention, (5) decrease the required flood control elevations for roads or buildings, or (6) decrease pollution removal efficiency. Attached is documentation (plans, drawings, calculations, etc.) which addresses these requirements and supports the request for a modification. The undersigned Engineer certifies that the engineering features of this surface water management system have been:

x designed by me or under my responsible charge,

and in my professional opinion, this system conforms with sound engineering principles and all applicable rules and specifications.

Signature of Owner/Permittee (Applicant) or Authorized Agent *

Tampa Bay Water

2575 Enterprise Rd., Clearwater, FL 33763

Owner/Permittee (Applicant) Company Name/Title (if applicable)

Owner/Permittee (Applicant) Address, City, State Zip

Owner/Permittee (Applicant) Phone No.

Maribel Medina (727) 791-2378

Contact Name (for owner) and Phone No.

Pinellas County Utilities

Operation & Maintenance (O&M) Entity

Kevin Becotte (727) 464-5377

O&M Contact Name and Phone No.

Robert Burchett 64762

Engineer’s Name FL Reg. No.

Affix Seal

Engineer Signature Date

Black & Veatch Corporation

Engineer Company Name

4890 W. Kennedy Blvd., Suite 950, Engineer Company Address, City, State Zip Tampa, FL 33609

(813) 281-0032

Engineer Company Phone No.

* Attach a signed letter of authorization from the owner, except for corporate officers.

Form LEG-R.013.02 (08/11)
PERPETUAL NON-EXCLUSIVE UTILITY AND ACCESS EASEMENT DEED
(with production wells)

THIS GRANT OF EASEMENT, made this 26th day of August, 2011, by and between Pinellas County, a political subdivision of the State of Florida, hereinafter called the Grantor, and Tampa Bay Water, A Regional Water Supply Authority, hereinafter called the Grantee;

WITNESSETH: That the Grantor in consideration of the sum of ($10.00) Dollars and other valuable consideration to them in hand paid by the Grantee, receipt whereof is hereby acknowledged, grants to the Grantee its successors and assigns a perpetual, non-exclusive easement for utility and access purposes across certain lands situated in Pinellas County, Florida, as described in the attached Schedule “A”, together with the temporary right to go upon, over and through the Grantor's adjacent property during the performance of the necessary work of construction for utility purposes.

TO HAVE AND TO HOLD the same, together with the hereditaments and appurtenances, unto the Grantee, and its successors and assigns forever, for utility, drainage and access purposes. Grantee specifically acknowledges that such utility purposes includes but is not specifically limited to installing, operating, repairing, replacing, upgrading, removing or otherwise taking out of service and maintaining production wells, monitoring sites, water quality sampling sites, transmission pipelines, treatment facilities, electrical utilities and appurtenances for operating pumping facilities and all other purposes required for operation of the wellfield and water production on or through the property indicated herein. Grantee further acknowledges that its access rights to cross the property
outlined herein shall be limited to use of existing paved, dirt or mowed roads and firebreaks whenever possible.

WITNESS the hand and seal of said Grantor the day and year first above written.

PINELLAS COUNTY, FLORIDA

By: Susan Latvala
Chairman

Date: 7-26-11

Clerk

STATE OF FLORIDA
COUNTY OF Pinellas

The foregoing instrument was acknowledged before me this 26 day of July, 2011, by Susan Latvala and Chairman as Chairman and Clerk, respectively, of Pinellas County, on behalf of Pinellas County. They are personally known to me or have produced ______________ as identification.

(Seal)

Notary Public
Printed/Typed Name: Cynthia N. Hausmann
Commission Number: BD 985554

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SCHEDULE A

All Property within the following description:

A portion of Sections 1, 11, 12, and 13, Township 27 South, Range 16 East, Pinellas County Florida being more particularly described as follows:

Commence at the south ¼ corner of Section 11, Township 27 South, Range 16 East; thence N.00°49'33"W., along the west line of the southeast ¼ of said Section 11, a distance of 1964.83 feet to a point of intersection with the northerly maintained right of way line of Old Keystone Road and a point on a non-tangent curve to the right, having a radius of 2927.00 feet, a central angle of 01°12'28"., a tangent length of 30.85 feet, a chord bearing of S.77°21'59"E. and a chord length of 61.70 feet; thence along said northerly maintained right of way line and the arc of said curve, 61.70 feet to the POINT OF BEGINNING; thence N.00°49'33"W., departing said northerly line, a distance of 517.64 feet; thence N.88°57'37"E., a distance of 602.09 feet; thence N.00°49'33"W., a distance of 410.83 feet to a point of intersection with the southerly right of way line of the CSX Railroad; thence S.76°25'40"E., along said southerly right of way line, a distance of 1551.73 feet to the point of curvature of a curve to the left, having a radius of 1482.68 feet, a central angle of 24°26'17"., a tangent length of 321.08 feet, a chord bearing of S.88°38'49"E. and a chord length of 627.62 feet; thence along said southerly right of way line and the arc of said curve, an arc length of 632.40 feet to the point of tangency of said curve; thence N.79°08'02"E., continuing along said southerly right of way line, a distance of 5226.44 feet to a point of intersection with the east line of the northeast ¼ of Section 12, Township 27 South, Range 16 East; thence S.01°34'22"E., along said east line, a distance of 985.58 feet to the east ¼ corner of said Section 12; thence S.01°33'28"E., along the east line of the southeast ¼ of said Section 12, a distance of 2312.93 feet to a point of intersection with the north right of way line of Keystone Road (per FDOT Section 15560-2601) and a point on a non-tangent curve to the left, having: a radius of 1323.24 feet, a central angle of 04°31'00", a tangent length of 52.18 feet, a chord bearing of N.78°06'44"W. and a chord length of 104.29 feet; thence along said north right of way line and the arc of said curve, an arc length of 104.31 feet to the point of tangency of said curve; thence N.80°22'14"W., continuing along said north right of way line a distance of 579.52 feet to a point of intersection with the west line of Tract 16 in the southeast ¼ of said Section 12 as shown on the plat of KEYSTONE PARK COLONY recorded in Plat Book 5, Page 55 of the Public Records of Hillsborough County, Florida (of which Pinellas County was formerly a part); thence N.01°44'04"W., along the west line of said Tract 16, a distance of 177.28 feet to the northwest corner of said Tract 16, also being the southeast corner of Tract 10; thence N.89°07'25"W., along the south line of said Tract 10 and its westerly extension thereof, a distance of 671.09 feet to a point on the east line of the west ½ of the southeast ¼ of said Section 12; thence S.01°54'35"E., along said east line, a distance of 69.07 feet to a point of intersection with said north right of way line of Keystone Road (per FDOT Section 15560-2601) and a point on a non-tangent curve to the left; thence along said northerly right of way line of Keystone Road the following six (6) courses; (1) along said curve to the left, having: a radius of 1974.86 feet, a central angle of 17°24'10", a tangent length of 302.24 feet, a chord bearing of S.84°52'51"W., a chord length of 597.53 feet and an arc length of 599.83 feet to the point of tangency of said curve; (2) S.76°10'46"W., a distance of 66.25 feet; (3) S.13°49'14"E., a distance of 15.00 feet; (4) S.76°10'46"W., a distance of 1791.03 feet to the point of curvature of
a curve to the right; (5) along said curve to the right, having: a radius of 2814.79 feet, a central angle of 18°10'00"., a tangent length of 450.02 feet, a chord bearing of S.85°15'46".W., a chord length of 888.75 feet and an arc length of 892.48 feet to the point of tangency of said curve; (6) N.85°39'14".W., a distance of 428.45 feet to the northerly maintained right of way line of Old Keystone Road (per FDOT Section 15560-2601); thence along said northerly right of way line of Old Keystone Road the following seven (7) courses; (1) N.56°20'38".W., a distance of 44.94 feet; (2) N.04°20'46".E., a distance of 20.27 feet to the point of curvature of a curve to the left; (3) along said curve to the left, having: a radius of 133.00 feet, a central angle of 69°00'00"., a tangent length of 91.41 feet, a chord bearing of N.30°09'14".W., a chord length of 150.66 feet and an arc length of 160.17 feet to the point of tangency of said curve; (4) N.64°39'14".W., a distance of 25.30 feet to the point of curvature of a curve to the right; (5) along said curve to the right, having a radius of 2450.00 feet, a central angle of 17°29'21"., a tangent length of 376.85 feet, a chord bearing of N.55°54'33".W., a chord length of 744.95 feet, and an arc length of 747.85 feet to the point of tangency of said curve; (6) N.47°09'53".W., a distance of 1118.86 feet to the point of curvature of a curve to the left; (7) along said curve to the left, having: a radius of 2927.00 feet, a central angle of 29°35'53"., a tangent length of 773.29 feet, a chord bearing of N.61°57'49".W., a chord length of 1495.28 feet and an arc length of 1512.04 feet to the POINT OF BEGINNING.

Containing 362.517 acres, more or less.

AND

BEGINNING at the northwest corner of Section 1, Township 27 South, Range 16 East; thence S.89°39'53".E., along the north line of the northwest ¼ of said Section 1, a distance of 402.05 feet to the southwest corner of Section 36, Township 26 South, Range 16 East; thence S.89°28'59".E., continuing along said north line, a distance of 899.06 feet to the northeast corner of the west ½ of the northwest ¼ of said Section 1; thence S.00°38'48".E., along the east line of the west ½ of the northwest ¼ of said Section 1, a distance of 2673.27 feet to the southeast corner of the west ½ of the northwest ¼ of said Section 1; thence N.89°25'22".W., along the south line of the northwest ¼ of said Section 1; a distance of 1275.67 feet to the southwest corner of the northwest ¼ of said Section 1; thence N.01°11'37".W., along the west line of the northwest ¼ of said Section 1; a distance of 2671.29 feet to the POINT OF BEGINNING.

Containing 79.026 acres more or less.

AND

BEGINNING at the northeast corner of Section 1, Township 27 South, Range 16 East; thence S.01°36'11".E., along the east line of the northeast ¼ of said Section 1, a distance of 2681.46 feet to the east ¼ corner of said Section 1; thence S.01°34'51".E., along the east line of the southeast ¼ of said Section 1, a distance of 2633.19 feet to the southeast corner of said Section 1, also being the northeast corner of Section 12; thence S.01°34'22".E., along the East line of the northeast ¼ of said Section 12, a distance of 1616.57 feet to a point of intersection with the northerly right of way line of the CSX Railroad; thence S.79°08’02"W., along said northerly right of way line, a distance of 2749.06 feet to a point of intersection with the west line of the northeast ¼ of
Section 12, a distance of 2149.96 feet to the north ¼ corner of said Section 12, also being the south ¼ corner of Section 1; thence N.00°03'26"W., along the west line of the southwest ¼ of the southeast ¼ of said Section 1, a distance of 1323.91 feet to the northwest corner of the southwest ¼ of the southeast ¼ of said Section 1; thence S.89°32'12"E., along the north line of the southwest ¼ of the southeast ¼ of said Section 1, a distance of 1353.17 feet to the southwest corner of the northeast ¼ of the southeast ¼ of said Section 1; thence N.00°47'31"W., along the west line of the northeast ¼ of the southeast ¼ of said Section 1, a distance of 1320.14 feet to the southwest corner of the southeast ¼ of the northeast ¼ of said Section 1; thence N.00°51'11"W., along the west line of the southeast ¼ of the northeast ¼ of said Section 1, a distance of 1330.53 feet to the southeast corner of the northwest ¼ of the northeast ¼ of said Section 1; thence N.89°03'48"W., along the south line of the northwest ¼ of the northeast ¼ of said Section 1, a distance of 1318.92 feet to the southwest corner of the northwest ¼ of the northeast ¼ of said Section 1; thence N.00°06'04"W., along the west line of the northwest ¼ of the northeast ¼ of said Section 1, a distance of 1337.11 feet to the north ¼ corner of said Section 1; thence S.89°28'59"E., along the north line of the northeast ¼ of said Section 1, a distance of 447.38 feet to the south ¼ corner of Section 36, Township 26 South, Range 16 East; thence continue S.89°28'59"E., along said north line of the northeast ¼ of Section 1, a distance of 2154.83 feet to the POINT OF BEGINNING.

Containing 430.761 acres, more or less.

The above descriptions contain a total acreage of 872.304 acres, more or less.

AND

Logan Tract

The North 1/2 of the Northwest 1/4 and all that portion of the South 1/2 of the Northwest 1/4 of Section 12, Township 27 South, Range 16 East, lying north of the railroad, Pinellas County, Florida

LESS AND EXCEPT

Four portions of the Northwest 1/4 of Section 12, Township 27 South, Range 16 East, Pinellas County, Florida, being more particularly described as follows:

Parcel 4N

Commence at the West 1/4 corner of said Section 12; thence N. 03°47'19"W., along the West line of the Northwest 1/4 of Section 12, a distance of 1140.23 feet; thence N. 86°12'41"E., departing said West line, a distance of 120.07 feet to the POINT OF BEGINNING; thence N. 01°30'24"E., a distance of 208.71 feet; thence S. 88°29'36"E., a distance of 208.71 feet; thence S. 01°30'24"W., a distance of 208.71 feet; thence N. 88°29'36"W., a distance of 208.71 feet to the POINT OF BEGINNING,
AND

Parcel 5A

Commence at the West 1/4 corner of said Section 12; thence S. 88°38'30"E., along the South line of the Northwest 1/4 of Section 12, a distance of 82.52 feet to a point of intersection with the Northerly right-of-way line of the CSX Railroad; thence N. 79°08'02"E., along said Northerly right-of-way line, a distance of 1133.04 feet; thence N. 02°40'10"W., departing said Northerly line a distance of 790.64 feet to the POINT OF BEGINNING; thence S. 88°15'15"W., a distance of 111.15 feet; thence N. 01°44'45"W., a distance of 208.71 feet; thence N. 88°15'15"E., a distance of 208.71 feet; thence S. 01°44'45"E., a distance of 208.71 feet; thence S. 88°15'15"W., a distance of 97.56 feet to the POINT OF BEGINNING.

AND

Parcel 5N

Commence at the Northeast corner of the Northwest 1/4 of said Section 12; thence N. 89°17'10"W., along the North line of the Northwest 1/4 of Section 12, a distance of 1176.06 feet; thence S. 00°42'50"W., departing said North line, a distance of 253.93 feet to the POINT OF BEGINNING; thence S. 19°37'04"E., a distance of 208.71 feet; thence S. 70°22'56"W., a distance of 208.71 feet; thence N. 19°37'04"W., a distance of 208.71 feet; thence N. 70°22'56"E., a distance of 208.71 feet to the POINT OF BEGINNING.

AND

Parcel 6N

Commence at the Northeast corner of the Northwest 1/4 of said Section 12; thence S. 02°15'28"E., along the East line of the Northwest 1/4 of Section 12, a distance of 780.21 feet; thence N. 86°48'08"W., departing said East line, a distance of 219.14 feet to the POINT OF BEGINNING; thence S. 43°50'38"W., a distance of 206.56 feet; thence N. 46°09'22"W., a distance of 208.71 feet; thence N. 43°50'38"E., a distance of 208.71 feet; thence S. 46°09'22"E., a distance of 208.71 feet; thence S. 43°50'38"W., a distance of 2.15 feet to the POINT OF BEGINNING.

ALSO LESS AND EXCEPT the following described parcels:
SECTION 01570

STORM WATER POLLUTION PREVENTION

PART 1 -- GENERAL

1-1. THE REQUIREMENT. Erosion, sediment, and storm water pollution control shall be in accordance with Section 02268 – Erosion Control Barrier, and this section.

The CONTRACTOR shall be required to verify with Pinellas County Development Review Services (PCDRS) if a Habitat Management Permit is required. If so the CONTRACTOR must submit the forms and have the permit prior to any earth work commencing on site.

The CONTRACTOR shall submit a Notice of Intent (NOI) to the Florida Department of Environmental Protection (FDEP) to comply with the terms of the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit). The General Permit regulates storm water discharges associated with construction activities.

The CONTRACTOR shall be responsible for complying with General Permit requirements over the entire area affected by the WORK for the duration of construction.

A Storm Water Pollution Prevention Plan (SWPPP) and an Erosion and Sediment Control Plan (ESCP) are required for this WORK. The purpose of a SWPPP and ESCP, as outlined in this Section, is to improve water quality by reducing pollutants in storm water discharges and soil erosion from the construction site. The SWPPP is intended to meet the requirements of the General Permit. The CONTRACTOR shall prepare and submit the SWPPP and ESCP for the project and submit each to the ENGINEER for review. The SWPPP and ESCP shall be developed, implemented, monitored, maintained and updated by the CONTRACTOR.

The CONTRACTOR shall be responsible for providing the SWPPP and NOI to the ENGINEER two weeks after the NOTICE TO PROCEED. The CONTRACTOR is responsible for ensuring the SWPPP and NOI are signed by persons meeting the requirements established by the state in which the WORK is performed.

The CONTRACTOR shall be responsible for the costs and liabilities imposed by law as a result of the CONTRACTOR’s failure to implement and maintain the SWPPP and ESCP.
The SWPPP shall be broken into the following sections:

a. General Project Information
b. Site Description
c. Erosion and Sediment Controls
d. Structural Practices
e. Storm Water Management
f. Waste Disposal
g. Record Keeping
h. Other Controls
i. Maintenance/Inspection Procedures
j. Spill Prevention
k. Inventory of Materials
l. Pollution prevention Plan Certification
m. Contractor Certification
n. Non-Storm Water Discharges

1-2. CONTRACTOR SUBMITTALS. The CONTRACTOR shall submit a Storm Water Pollution Prevention Plan. This SWPPP shall detail how the CONTRACTOR proposes to comply with General Permit requirements. The CONTRACTOR’s SWPPP will be subject to review by the ENGINEER and OWNER and shall satisfy permit requirements. To ensure permit compliance, no land disturbing activity shall begin before the SWPPP is approved and certified by the ENGINEER and the Habitat Management Permit is obtained. The following items shall be specifically addressed:

a. Define type, location, and scheduled placement of stabilization practices that will be implemented to prevent soil erosion.
b. Describe storm water management techniques and schedule of implementation.
c. Define practices to be employed to prevent off-site movement of sediment.
d. Characterize construction, sanitary and any hazardous waste disposal practices.
e. Define record keeping practices.

1-3. REFERENCE REGULATORY AND OTHER GUIDANCE DOCUMENTS. The SWPPP shall be developed in accordance with the published guidelines set forth by the Florida Department of Environmental Protection and/or the EPA guidebook, “Storm Water Management for Construction Activities, Developing

Other potential guidance documents include:


PART 2 -- STORM WATER POLLUTION PREVENTION PLAN (SWPPP) & EROSION AND SEDIMENT CONTROL PLAN (ESCP)

2-1. GENERAL PROJECT INFORMATION

2-1.01. Contractor’s Responsibility. It is the CONTRACTOR’s responsibility to prepare the SWPPP and ESCP for review and approval by the OWNER and ENGINEER.

It is also the CONTRACTOR’s responsibility to submit a Notice of Intent form to the FDEP, implement and maintain the SWPPP and ESCP, and submit a Notice-of-Termination to FDEP at the completion of the WORK. The CONTRACTOR shall update the SWPPP as the project progresses in response to differing site conditions, new spill prevention procedures, and other unforeseen events.

2-2. SITE DESCRIPTION

2-2.01. Site Location. The WORK is located in Pinellas County, State of Florida, at the location shown on the Project Vicinity and Project Location maps in the Contract Documents.

2-2.02. Description of Construction Activities. The WORK of this Contract is described in Section 01015 – Project Requirements.

2-2.03. Site Maps. The Contract DRAWINGS shall show the existing site elevations, property description, and locations of proposed excavation, pavement, gravel, and grass sodding areas and drainage structures. The civil drawings show the surface water management, site grading, and minimum erosion and sediment control requirements.

2-2.04. Topography and Surface Features. The Site is generally grass covered with asphalt roads, concrete sidewalks and pads, pump buildings, and other treatment processes and the elevations range from approximately 26 at the west side of the site to approximate elevation of 25 at the east side of the site. Drainage off the site is generally achieved through a series of stormwater drop inlets that flow to two on-site stormwater ponds.
2-2.05. Site Geology. The “Soil Survey of Pinellas County, Florida” published by the USDA SCS indicates that the primary mapping within the site area is Felda fine sand (Map Unit 15). Based on soil boring information, the surficial soils are clean to slightly silty fine sand. This is underlain by silty to clayey fine sand, and clay. The soils are generally classified as SM/SC material with parts classified as SP based on the Unified Soil Classification System (USCS).

2-2.06. Pollutant Source During Construction. During the project construction, the likely sources of storm water pollution include, but are not limited to, soil from excavation/backfill operations, soil from construction-related vehicles leaving the construction site, oil and fuel from construction equipment, detergents, metals, pesticides, fertilizers, sanitary wastes, concrete, masonry, paint, grease, adhesives, caulking, and soil stabilization products.

2-3. EROSION AND SEDIMENT CONTROLS

2-3.01. Stabilization Practices. Temporary stabilization shall be initiated by the CONTRACTOR immediately upon commencement of any construction activities that would cause soil erosion. To prevent soil erosion, the CONTRACTOR shall employ both erosion and sediment Best Management Practices (BMPs) as listed below:

   a. Surface Roughening. The CONTRACTOR shall use heavy equipment to place tread or track grooves perpendicular to slope on all disturbed slopes.

   b. Synthetic Bales or Wattles: Bales or Wattles shall be placed in swales, channels, and other locations to create a check dam, slow water velocities, and settle out small solid particles.

   c. Erosion Control Blankets

   d. Synthetic Bale Placement on Fill Slopes

   e. Temporary Seeding

Further slope stabilization shall be required where construction activity will not occur for fourteen (14) calendar days or more. Stabilization measures to be used include:

   a. Temporary Seeding

   b. Permanent Seeding

   c. Mulching

   d. Application of Soil Stabilizer

   e. Sod Stabilization

   f. Geotextiles
g. Erosion Control Blankets
h. Synthetic Bale Placement on Fill Slopes

The CONTRACTOR shall be required to provide erosion control products, OR EQUAL, as specified in Specification Section 02268 – Erosion Control Barrier.

2-4 STRUCTURAL PRACTICES. Structural practices may include, but are not limited to: silt fences, turbidity barriers, drainage swales, temporary sediment ponds, subsurface drains, level spreaders, plastic covering on soil and rock disposal pile, logs placed perpendicular on fill slopes, and erosion control blankets.

Structural practices shall be employed at all down slope boundaries of the construction area and for those side slope boundaries above excavation with exposed groundwater.

The CONTRACTOR may construct temporary drainage swales and/or berms to direct storm water runoff away from construction and collect it in a sediment pond (or ponds).

Multiple structural measures shall be employed in areas upslope of sediment ponds to reduce the amount of sediment that will accumulate in sediment ponds. Pond shall be cleaned of accumulated material after construction and before substantial completion.

2-5 STORM WATER MANAGEMENT. The CONTRACTOR shall be responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and will not be responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site. Storm water BMPs may include but are not limited to: storm water detention structures (including ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff onsite, and sequential systems (which combine several practices).

2-5.01. Temporary Sediment Ponds. The CONTRACTOR shall construct temporary sediment ponds and any other necessary BMPs prior to any construction activities. All temporary drainage swales and/or berms collecting water from disturbed areas shall be directed to the sediment ponds.

2-5.02. Velocity / Energy Dissipation devices. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that
the natural physical and biological characteristics and functions are maintained and protected.

2-5.03. Silt Fence. Silt fence shall be installed per Contract DRAWINGS and shall be installed on all slopes where storm water runoff could potentially mix with exposed groundwater. Geotextile used to construct the silt fence shall be as specified in Section 02268 – Erosion Control Barrier.

2-6 WASTE DISPOSAL

2-6.01. Construction Waste. Waste disposal from the construction site for construction wastes, sanitary wastes and hazardous wastes shall be conducted per the requirements Section 01500 – Temporary Facilities, and the requirements specified herein.

All construction wastes shall be disposed of in a proper manner via the use of an on-site dumpster supplied by the CONTRACTOR. The CONTRACTOR shall provide removal services by a licensed solid waste management firm.

The dumpster shall be emptied a minimum of once per week and more often if necessary. The dumpster shall be covered during rain events. Burial of construction wastes onsite is prohibited. The CONTRACTOR shall ensure that the CONTRACTOR’s on-site work crews and SUBCONTRACTORS are trained and knowledgeable in the proper manner of disposal for construction wastes. Disposal of solid waste from the construction site shall meet all applicable Federal, State, and local codes.

2-6.02. Sanitary Wastes. The CONTRACTOR shall provide fixed or portable chemical toilets for use by on-site work crews and SUBCONTRACTORS. The CONTRACTOR shall hire a properly-licensed sanitary waste management firm for the disposal of the sanitary waste from the construction site, including the CONTRACTOR’s trailers and the ENGINEER’s trailers. Disposal of sanitary waste from the construction site shall meet all applicable Federal, State, and local codes.

2-6.03. Hazardous Wastes. All hazardous materials used for the construction shall be stored, handled and applied per the manufacturer’s printed instructions and per all applicable Federal, State, and local codes. The CONTRACTOR shall ensure that its on-site work crews and SUBCONTRACTORS are trained and knowledgeable in the proper manner of storage and disposal for hazardous wastes.

The disposal of hazardous wastes from the construction site shall be the responsibility of the CONTRACTOR and shall be performed by a licensed
hazardous waste management firm. Disposal of hazardous wastes from the construction site shall meet all applicable Federal, State, and local codes.

2-7 RECORD KEEPING. The CONTRACTOR shall maintain the following records on-site at all times throughout construction:

2-7.01. Records of Construction Activities. Dates shall be recorded when major grading activities occur, construction activities temporarily cease on a portion of the site, construction activities permanently cease on a portion of the site, and when stabilization measures are initiated and completed on the site. The CONTRACTOR shall take photographs to maintain documentation of all major activities.

2-7.02. Maintenance and Inspection Reports. The CONTRACTOR shall maintain records of construction activities temporarily cease on a portion of the site, and the maintenance performed to repair or correct any implemented stormwater or erosion control BMP(s). The CONTRACTOR shall have on staff someone who is knowledgeable in the proper construction of the controls, the requirements of the SWPPP, spill control practices and notification requirements, and who is capable of maintaining clear and accurate inspection reports.

The inspection reports shall be maintained with the latest version of the SWPPP in the CONTRACTOR’S office / construction trailer. Also, when an on-site inspection occurs by a regulatory agency, the CONTRACTOR shall record the following: Name of inspector, qualifications of inspector, measures / areas inspected, observed conditions, changes necessary to the SWPPP.

2-7.03. Releases in Excess of Reportable Quantities of Oil or Hazardous Materials (if they occur). In the event of a release of a reportable quantity of oil or hazardous material, the CONTRACTOR shall immediately notify the Florida State Warning Point (1-800-320-0519) and the National Response Center (1-800-424-8802). In addition, the CONTRACTOR shall notify the permitting authority in writing within fourteen (14) days of the release. Lastly, the CONTRACTOR shall modify the pollution prevention plan to include: the dates of release, circumstances leading to the release, steps taken to prevent reoccurrence of the release, and parties notified of the release(s).

2-7.04. Modifications to the SWPPP. When notified by the EPA or FDEP, the CONTRACTOR shall record any modifications made to the SWPPP throughout construction to comply with minimum EPA or FDEP permit requirements. In addition, the CONTRACTOR shall also record any change in design, construction operation, or maintenance that has an effect on the potential for discharge of pollutants.

2-7.05. Waste Disposal Records. Records of the type and quantity of waste materials disposed from the site, the disposal firm, and other information required
by Federal, State, and local regulations shall be maintained in the CONTRACTOR’s office / construction trailer during the entire construction period and shall be made available for inspection at the request of the OWNER, ENGINEER, or regulatory agency representative. A copy of the records shall be transferred to the OWNER at the end of the PROJECT.

2-7.06. Weekly Monitoring and Compliance Report. The CONTRACTOR shall fill out the weekly compliance reports for the General Permit.

2-8. OTHER CONTROLS

2-8.01. Stabilized Construction Access. All site access points shall be stabilized to prevent the removal of sediment from the construction site onto the adjacent paved roads. The stabilized construction roadway shall be constructed of Type G crushed rock base having a minimum depth of six inches. The construction access and road shall be wide enough to handle the anticipated truck traffic to and from the construction site. An apron shall be provided at the interface between the construction roads and existing plant site road to prevent turning vehicles from going off the road as they turn onto the plant road. Existing paved access roads shall be swept daily around the construction road entrance, if required, to remove mud, dirt, stone, and other sediment which accumulate due to vehicles entering and leaving the construction site.

If necessary, a wheel washer (i.e., pressure washer) will be required to remove dirt from truck tires prior to leaving the stabilized gravel road. The ENGINEER shall determine the necessity of a wheel washer as the project progresses.

2-8.02. Dust Abatement and Rubbish Control. The CONTRACTOR shall comply with all of the requirements listed in Specification Section 01500 – Temporary Facilities.

2-9 INVENTORY OF MATERIALS

The following materials are expected to be present onsite during construction:

a. Concrete
b. Caulking and sealants
c. Detergents and solvent cleaners
d. Petroleum-based products such as diesel
e. Electrical supplies
f. Metallic and plastic piping
g. Paints
h. Wood (for construction)
i. Metal (for construction)
j. Metal fencing materials
k. Masonry and grout
l. Fertilizers
m. Miscellaneous plastic and paper wrappings
n. Erosion Control Blanket
o. Adhesives
p. Treated Wood
q. Lime Treatment

2-10 NON-STORM WATER DISCHARGES

Non-storm water discharges will result from this construction activity, and each flow shall be handled differently. These activities, as described below, shall not be performed until the proper storm water pollution controls described above have been installed and are functioning properly.

2-10.01. **Flushing of Pipelines.** Gravity and pressure raw water pipelines shall be flushed and hydraulically tested after installation. The CONTRACTOR shall direct flushing water to the storm drain system. The CONTRACTOR shall maintain siltation protection during flushing of the pipelines. If the flushing water is contaminated or, if the water is suspected of having been contaminated by a regulated compound, testing may be ordered by the ENGINEER to determine contamination. Contamination is defined as either having a pH less than 4.0 or greater than 10.0, presence of a free chlorine residual, or evidence of hydrocarbon contamination.

If testing is ordered, the OWNER shall pay for the testing. If the testing indicates the water is contaminated and this occurred due to construction activities under the control of the CONTRACTOR, the CONTRACTOR shall reimburse the OWNER for all costs associated with the testing and any associated cleanup activities. The OWNER will be the sole judge on whether the flushing water is contaminated. Depending on the type of contamination, the flow shall be disposed as approved by the ENGINEER.

2-10.02. **Dewatering of Uncontaminated Groundwater.** The CONTRACTOR shall:

a. Maintain siltation protection during disposal of water from dewatering activities, including groundwater from dewatering activities.

b. Manage and dispose of groundwater separately from storm water runoff.
2-10.03. Miscellaneous Washdown Water for Buildings and Pavement. Washdown of structures and pavement shall only occur in areas having no sign of contamination of hazardous substances, such as vehicle oil or fuel. Washdown water shall be directed to the storm drain system via proper grading of the site, particularly in the area of the washdown. Any contamination shall be removed in accordance with appropriate regulations.

2-10.04. Equipment Testing. Water from equipment testing shall be discharged to an on-site retention pond if the water is uncontaminated (as defined above). The method of disposal shall be as approved by the ENGINEER prior to commencement of equipment testing or plant testing.

PART 3 -- EXECUTION

3-1 GENERAL. A copy of the SWPPP, ESCP, Habitat Management Permit, and the General Permit shall be kept on site at all times.

3-2 MAINTENANCE / INSPECTION PROCEDURES. Any and all erosion control structures and stabilization practices will be inspected by the CONTRACTOR on a weekly basis, at a minimum, and after any storm event of 0.5 inches or greater.

The SWPPP shall be modified by the CONTRACTOR as necessary to include additional or modified BMPs designed to correct problems and ensure compliance with regulations. Written revisions to the SWPPP shall be made by the CONTRACTOR within seven (7) calendar days following any identified deficiencies. Copies of the revised SWPPP shall be provided to all parties and to the OWNER.

All areas that undergo temporary and final stabilization with seeding, sodding or erosion control blanket shall be inspected. Any areas that exhibit lack of growth and bare spots shall be reseeded by the CONTRACTOR to ensure healthy growth.

All erosion control structures and stabilization practices shall be maintained in good working condition throughout the duration of the construction project.

Repair of damage to any erosion control structure or erosion control blanket shall be completed by the CONTRACTOR within twenty-four (24) hours of discovery of the damage.

In locations where silt fences or wattles are used around catch basins, trapped sediment shall be removed by the CONTRACTOR when one-third of the height of the silt fence or wattle is covered by sediment.
Water quality sampling shall be conducted by the CONTRACTOR in the event of accidental discharge that affects the nearby storm water ponds, conveyance structures or wetlands. The sampling protocol for visible and non-visible pollutants shall be developed and approved by the OWNER.

3-3 SPILL PREVENTION


3.3.01.01. General Good Housekeeping. The following are good housekeeping techniques which shall be utilized when construction materials are onsite:

   a. Only materials used for this construction project shall be stored onsite. These materials shall be stored in quantities reasonable for use on this project.
   b. Materials shall be stored in a neat and orderly fashion in their original containers. The materials shall be protected from the elements as specified by the manufacturer.
   c. The handling and storage of all materials shall follow the manufacturer’s written instructions, the project specifications, or applicable governmental codes; whichever is most stringent.
   d. Construction materials storage containers shall be disposed in a proper manner and, if possible, only after all the contents have been used.
   e. The CONTRACTOR shall maintain on file, at the CONTRACTOR’s construction trailer, all manufacturer’s printed recommendations for the storage, handling, use, and disposal of construction materials.
   f. The CONTRACTOR shall inspect the materials storage area on a daily basis and ensure that proper housekeeping practices are utilized for materials storage.
   g. The CONTRACTOR shall maintain an inventory of construction materials stored onsite. The inventory shall be kept in the CONTRACTOR’s construction trailer and be available for inspection by the ENGINEER.
   h. During adverse weather, and against the possibility thereof, the CONTRACTOR shall take all necessary precautions to insure the protection of the construction materials storage areas.

3-3.01.02. Hazardous Materials. The following additional housekeeping practices shall be followed for hazardous construction materials:

   a. Hazardous materials shall be stored separately from non-hazardous materials onsite.
b. Products shall remain in their original containers with the original legible product label attached to the container.

c. All products shall be used before disposal of the container.

d. The handling and storage of all hazardous materials shall follow the manufacturer’s written instructions, the project specifications, or applicable governmental codes, whichever is most stringent.

e. Hazardous materials, including diesel fuel, must be stored in contained areas which are able to contain 150 percent of the volume of the largest container’s contents. If the area is not exposed to storm water, the volume of the containment area shall be 110 percent of the volume of the largest container’s contents. Each hazardous material shall be stored in its own containment area. Under no circumstances shall hazardous materials be used or stored within 100 feet of any water supply well, unless specifically permitted by the ENGINEER and governing Federal, State, or local agency.

At a minimum, the containment area shall be constructed with dikes and lined with a material resistant to the properties of the hazardous material being contained. Before removal of any storm water from the containment area, a representative sample of the water shall be tested for contamination by the hazardous material stored in that containment area. For example, if the hazardous material is an acid, the pH of the rainwater shall be measured prior to disposal. Disposal of non-contaminated storm water shall be directed to the nearest storm drain system component. If the storm water is found to be contaminated, as defined above, the CONTRACTOR shall follow the spill control measures for this hazardous material.

f. The CONTRACTOR shall maintain all manufacturer’s storage, handling, use, and disposal recommendations and Material Safety Data Sheets of all hazardous materials at the CONTRACTOR’s construction trailer.

g. The CONTRACTOR shall inspect the hazardous materials storage area on a daily basis and ensure proper storage of the hazardous materials.

h. The CONTRACTOR shall maintain an inventory of hazardous materials stored onsite. The inventory shall be kept in the CONTRACTOR’s construction trailer and be available for inspection by the ENGINEER.

i. When transferring or unloading hazardous materials, the CONTRACTOR shall ensure that the area is protected from storm water and that the materials transfer operation shall not cause contamination (as defined above) to storm water. The hazardous
materials handling operation shall occur in a contained area of the construction site.

j. During adverse weather and against the possibility of damage thereof, the CONTRACTOR shall take all necessary precautions to insure the protection of the hazardous materials storage areas.

3-3.02. Product Specific Practices. Special storm water management specific practices shall be utilized for specific products. These products are discussed in the following paragraphs.

a. Petroleum-Based Products. All on-site vehicles shall be properly maintained and checked for any leaks of fluids or petroleum-based products. If a leak is found, the vehicle shall be repaired immediately or removed from the site. Diesel fuel shall be considered a hazardous material and stored in a containment area as indicated above.

b. Acid and Base Chemicals. All acid and base chemicals are considered hazardous materials and shall be stored in containment areas as described above. Disposal of acid or base chemicals shall, under no circumstances occur via the storm drain system, but instead through proper hazardous materials disposal procedures.

c. Paints, Thinners, and Solvents. Paints, thinners, and solvents shall be stored in their original containers. Unused paints, thinners, and solvents shall not be dumped onsite or disposed through the sanitary or storm sewer system. Disposal of unused paints, thinners, and solvents shall be through proper hazardous materials disposal procedures.

d. Fertilizers and Pesticides. Fertilizers and pesticides shall be applied at the minimum rate recommended by the manufacturer. Pesticides shall be applied by a certified pesticide applicator. Fertilizers shall be protected from exposure to storm water. Contents of partially used bags of fertilizer shall be transferred to sealable containers to prevent spillage and exposure to storm water and rain. Fertilizer shall be worked into the soil upon application in all areas to be seeded and landscaped.

e. Concrete Trucks. The washdown of concrete trucks or the disposal of unused or unacceptable concrete from a concrete truck will be permitted onsite only if the CONTRACTOR has set aside a specific area for this purpose, with dikes to prevent contact between the washdown water or excess concrete and storm water. Once the solids in the area have hardened, the CONTRACTOR shall dispose of the solids off-site in an approved manner.

f. Asphalt Cement Paving. The CONTRACTOR shall avoid paving operations during a rain event.
3-3.03. **Spill Control Practices.** In addition to good housekeeping practices, hazardous materials practices, and the product specific practices as described above, the following practices shall be followed for spill prevention, control, cleanup, and notification:

a. Any and all spills shall be contained and cleaned immediately.

b. The CONTRACTOR shall notify the ENGINEER, OWNER, and all applicable governmental agencies if a spill occurs.

c. Manufacturer’s printed instructions for the cleanup of a spill shall be kept onsite by the CONTRACTOR at all times. The CONTRACTOR’s work crews and SUBCONTRACTORS shall be required to be familiar with the requirements and procedures for spill cleanup. Equipment necessary for spill cleanup, such as gloves, metal containers, mops, etc., shall be maintained onsite by the CONTRACTOR. The cleanup instructions and the location of the cleanup equipment shall be maintained at the CONTRACTOR’s construction trailer during construction activities.

d. Workers involved in the cleanup of a spill shall be properly protected by protective suits, ventilation masks, goggles, and other necessary equipment, prior to contact with the spilled material.

e. The CONTRACTOR shall name an employee who will be on-site full-time throughout the duration of the project as the spill cleanup coordinator. The spill cleanup coordinator will be responsible for notifying the proper personnel and agencies of a spill and obtaining the proper equipment and personnel to cleanup the spill. The name and phone number where the spill cleanup coordinator can be reached at all times shall be posted on the construction site. The spill cleanup coordinator shall be properly trained in spill cleanup procedures.

f. The CONTRACTOR shall maintain material data safety sheets for all hazardous materials in the CONTRACTOR’s trailer. The spill cleanup coordinator shall have access to the material data safety sheets at all times during construction.

g. After a spill is contained and cleanup, a spill occurrence report shall be completed by the CONTRACTOR. The SWPPP shall be modified to prevent a reoccurrence of a type of spill.

h. Spills that affect storm water will require water quality sampling.

End of Section
Legend
- WMD Boundaries
- Boundary
- ERP

Disclaimer
The data are being provided on an 'as is' basis. The District specifically disclaims any warranty, either expressed or implied, including, but not limited to, the implied warranties or merchantability and fitness for a particular use. The entire risk as to quality and performance is with the user. In no event will the District or its staff be liable for any direct, indirect, incidental, special, consequential, or other damages, including loss of profit, arising out of the use of these data even if the District has been advised of the possibility of such damages. All data are intended for resource management use and have not been collected or certified by a Florida-registered Surveyor and Mapper.
1. A CRUSHED STONE PAD WITH A GEOTEXTILE FILTER BASE LAYOUT AT THE CONTRACTOR'S OPTIONS AREA. PADS SHALL BE PROVIDED FOR MONITORING BAGS FROM WALLS TREATMENT PLANT FILTERS. DRIVEN STONE PADS TO BE LEVELED AND RESURFACED AFTER CONSTRUCTION IS COMPLETE.

2. ANY BAILS SHALL NOT BE USED.

3. REFER TO SHEET C-14 FOR COMPLETE BIM/WP DETAILS.

4. BIPASS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS (1/370)

NOTES:

PINELLAS COUNTY GROUND STORAGE TANK

ELDRIDGE WETLANDS HAD TREATMENT FACILITY EMERGENCY BYPASS PIPING

TRANSFER PS

PACKED TOWER AERATORS

OXYGEN STORAGE AREA, IMPROVEMENTS

COOLING SYSTEM IMPROVEMENTS

PROPOSED SITE FOR PORTALS GENERATOR

ELDRIDGE-RIO HANDED D/W EFFLUENT IMPROVEMENTS