1. Existing conditions shown on drawings are based on "Phase I wastewater treatment system" elbow up new graphics; equipment, structures, etc., are dated July 1988 prepared by Mccrone and visual field observations. Shown as bold linework and in this text format.

2. Topographic survey prepared in July of 2014 by DH Steffens Company.

3. Electrical duct bank, underground electrical utilities, shown on the drawings.

4. Contractor shall replace all pavement that is shown on the drawings.

5. Work shall be performed in a manner that minimizes impact to normal operation of existing treatment process and create hazardous conditions for plant operations. The contractor shall plan and schedule the work to meet the plant operating requirements. The contractor shall provide temporary facilities to maintain continuous operation of all existing process manholes.

6. The contractor must coordinate demolition removal with the owner's operating procedures.

7. Certified compaction tests are required for all trench/fill work in accordance with the latest construction standards and specifications for the purpose of obtaining an approval for substantial inspection of water and sewer construction for the purpose of obtaining an approval for substantial inspection.

8. All work shall be scheduled and performed such that the construction schedule shall not interfere with normal processes and/or required shutdown of plant operations. The contractor shall not make any change to the temporary plant operating schedule unless approved by the owner's representatives. This includes temporary shutdowns of plant operations. Any temporary shutdowns shall be scheduled and performed such that the construction schedule shall not interfere with normal processes and/or required shutdown of plant operations. Any temporary shutdowns shall be scheduled and performed such that the construction schedule shall not interfere with normal processes and/or required shutdown of plant operations. Any temporary shutdowns shall be scheduled and performed such that the construction schedule shall not interfere with normal processes and/or required shutdown of plant operations. Any temporary shutdowns shall be scheduled and performed such that the construction schedule shall not interfere with normal processes and/or required shutdown of plant operations.

9. The contractor is responsible for contacting "Miss Utility" at 1-800-257-7777, 48 hours prior to any proposed work.

10. The contractor is responsible for contacting the Charles County Department of Planning and Requirements to remove and dispose of the sludge in accordance with state and local requirements.

11. All new materials and equipment to be installed must be on site and ready for installation and requirements refer to the construction manual.

12. All wall, floor, ceiling, roof, and tank openings shall be plugged in a watertight manner.

13. The developer is responsible to hold a "Preconstruction" meeting to include the contractor, engineer, owner, and others as required prior to the start of construction.

14. The contractor is responsible for providing all necessary appurtenances to adequately support remaining piping, conduits, and structures.

15. The contractor is responsible for preparing all structural drawings and specifications and must be in a watertight condition. A. The developer is responsible to hold a "Preconstruction" meeting to include the contractor, engineer, owner, and others as required prior to the start of construction.

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25. The contractor is responsible for preparing all structural drawings and specifications and must be in a watertight condition. A. The developer is responsible to hold a "Preconstruction" meeting to include the contractor, engineer, owner, and others as required prior to the start of construction.
1. DISTURBED AREAS MUST BE COVERED WITH THE FOLLOWING MATERIALS: 4" DEPTH CRITICAL AREA BOUNDARY.
2. DISTURBED AREAS MUST BE COVERED WITH THE FOLLOWING MATERIALS: 4" DEPTH CRITICAL AREA BOUNDARY.
3. ALL TRENCHES OR HOLES CREATED FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED, AND STABILIZED AT THE END OF EACH WORKING DAY. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH OR HOLE. NO TRENCH/HOLE SHALL BE OPENED MORE THAN CAN BE STABILIZED THE SAME DAY. IF AN AREA MUST BE LEFT UNSTABILIZED OVERNIGHT, SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNHILL OF ALL DISTURBED AREAS AND STOCKPILES, AND APPROPRIATE SAFETY MEASURES SHALL BE INSTALLED AS REQUIRED. REFER TO SEQUENCE OF CONSTRUCTION AND DETAILS AND SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT ON DWG C007.
4. ALL SLOPES 3:1 AND GREATER SHALL BE STABILIZED WITH TOPSOIL, SEED, AND EROSION CONTROL MATERIALS AS INDICATED.
5. SILT FENCE PROTECTING STORMWATER SWALE MAY BE REMOVED TEMPORARILY FOR CONSTRUCTION OF PROPOSED PIPE BUT SHALL BE REINSTALLED THE SAME WORKING DAY. REFER TO SEQUENCE OF CONSTRUCTION.
6. WHERE SILT FENCE TRANSITIONS TO SILT FENCE ON PAVEMENT, EXTEND SILT FENCE FOR 5 FEET. STAPLE SILT FENCE GEOTEXTILE TO SILT FENCE ON PAVEMENT POST.
7. CONTRACTOR SHALL USE SCE AS SOLE MEANS OF SITE INGRESS AND EGRESS.
8. CONTRACTOR SHALL DEWATER AS REQUIRED TO COMPLETE SPECIFIED WORK PER STANDARD ESC DETAIL F-2 SUMP PIT AND DETAIL F-4 FILTER BAG. GROUNDWATER SHALL DISCHARGE ONTO PAVEMENT, A RIP RAP OUTLET, OR OTHER STABILIZED CHANNEL.

**Note:** All distances and areas are given in feet and square feet respectively.
1. DISTURBED AREA IS PARTIALLY LOCATED WITHIN THE RESOURCE CONSERVATION AREA (RCA) CRITICAL AREA BOUNDARY.

2. DISTURBED AREA IS LOCATED OUTSIDE OF THE 100-YEAR FLOODPLAIN.

3. ALL TRENCHES OR HOLES CREATED FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED, AND STABILIZED AT THE END OF EACH WORKING DAY. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH OR HOLE. NO TRENCH/HOLE SHALL BE OPEN MORE THAN CAN BE STABILIZED THE SAME DAY. IF AN AREA MUST BE LEFT UNSTABILIZED OVERNIGHT, SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNHILL OF ALL DISTURBED AREAS AND STOCKPILES, AND APPROPRIATE SAFETY MEASURES SHALL BE INSTALLED AS REQUIRED. REFER TO SEQUENCE OF CONSTRUCTION AND DETAILS AND SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT ON DWG C007.

4. ALL SLOPES 3:1 AND GREATER SHALL BE STABILIZED WITH TOPSOIL, SEED, AND EROSION CONTROL MATTING PER STANDARD ESC DETAIL B-4-6-D.

5. FLOW FROM THE 1" SUMP PUMP DISCHARGE WILL ENTER THE LAGOON AT A NON-EROSIVE VELOCITY.

6. CONTRACTOR SHALL DEWATER AS REQUIRED TO COMPLETE SPECIFIED WORK PER STANDARD ESC DETAIL F-2 SUMP PIT AND DETAIL F-4 FILTER BAG. GROUNDWATER SHALL DISCHARGE ONTOP AVEMENT, A RIP RAP OUTLET, OR OTHER STABILIZED CHANNEL.
1. USE 12 INCH OR LARGER DIAMETER CORRUGATED METAL, HDPE, OR PVC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER. BOTTOM OF Pipe MUST BE CAPPED WITH WATERTIGHT SEAL.

2. WRAP Pipe WITH 1 4 INCH GALVANIZED HARDWARE CLOTH AND WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.

3. EXCAVATE PIT TO THREE TIMES THE Pipe DIAMETER AND FOUR FEET IN DEPTH. PLACE 3 4 TO 1 2 INCH STONE, 6 INCHES IN DEPTH PRIOR TO Pipe PLACEMENT.

4. SET TOP OF Pipe MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.

5. BACKFILL PIT AROUND THE Pipe WITH 3 4 TO 1 2 INCH CLEAN STONE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.

7. A SUMP PIT REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, REMOVE PERFORATED Pipe AND REPLACE GEOTEXTILE AND STONE. KEEP POINT OF DISCHARGE FREE OF EROSION.

FLOW

FB

1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.

2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.

3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.

4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.

6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.
1. CONSTRUCT LAGOON INTERIOR BERM REPAIR AS FOLLOWS:
   a. 3" - 8" STONE
   b. GEOTEXTILE FILTER CLOTH
   c. COMPACTED SOIL
   d. BENTONITE CLAY MIXED WITH BACKFILL MATERIAL TO CREATE LAGOON LINER, MATCH EXISTING FINISHED GRADE.

   2. ADJUST THE ELEVATION OF PIPE IF IT INTERFERES WITH PRE-CAST JOINT. COORDINATE WITH ENGINEER IF ADISCREPANCY IS NOTICED.

   3. CORE DRILLED PIPE PENETRATION

   4. MIN 4" TOPSOIL MATCH EXISTING FINISHED GRADE AT 4:1 SLOPE

   5. COMPACTED BENTONITE CLAY PER SECTION 02260

   6. 8" PVC, FM

   7. INV EL 14.28

   8. SEE NOTE 1

   9. FROM INTERCONNECTION

   10. 10" DIP, OVF

   11. INV EL 14.78

   12. SEE NOTE 1

   13. LAGOON LINER
DISCHARGE PRESSURE GAUGE
W/ QUICK CONNECT
PENETRATION COORDINATED
SNUBBER WHERE SPECIFIED; 1/2" CONCRETE WALL
DIAPHRAGM SEAL TO BE QUICK CONNECT (SWAGELOK "QF"
INSTALLED BETWEEN GAUGE SERIES OR EQUAL)

3' BALL VALVE WITH SPRING RETURN
1/2" FEMALE NPT BODY
W/ PLUG
MODULAR MECHANICAL SEAL
1/2" FEMALE NPT STEM
ON INTERIOR SIDE ALSO FOR "CLOSED" POSITION
W/ PROTECTOR CAP

WATER-RETAINING STRUCTURAL DRAWINGS FOR PROTECTION AND CLOSURE OF EXPOSED CONCRETE, REBAR REQUIREMENTS. WHERE SPECIFIED "MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

NOT TO SCALE  INCHES (2 x D50).

BLEND RIPRAP INTO EXISTING GROUND.

2. POUR CONCRETE PAD AROUND VALVE BOXES AND PROVIDE LOCKING VALVE BOX LIDS AT SWAN POINT

5. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP WWTP. POINTS OF INFLOW FREE OF EROSION.

1. VERIFY ACTUAL DISTANCE (D) BETWEEN EXISTING PIPES IN THE FIELD.
2. FOR PVC PIPE PROVIDE PAIR OF MECHANICAL LUGS (MEGA LUGS SERIES 2000 JV OR EQUAL). WRAP LUG ASSEMBLY WITH 6 MIL POLYETHYLENE SHEET.
GENERAL NOTES:

1. INDICATOR (EQUIPMENT TAG) 
- INDICATOR 1: EQUIPMENT LOCATION (X)
- INDICATOR 2: EQUIPMENT LOCATION (Y)
- INDICATOR 3: EQUIPMENT LOCATION (Z)

2. LAYOUT (EQUIPMENT TAG) 
- LAYOUT 1: EQUIPMENT LOCATION (A)
- LAYOUT 2: EQUIPMENT LOCATION (B)
- LAYOUT 3: EQUIPMENT LOCATION (C)

3. SCHEMATIC (EQUIPMENT TAG) 
- SCHEMATIC 1: EQUIPMENT LOCATION (D)
- SCHEMATIC 2: EQUIPMENT LOCATION (E)
- SCHEMATIC 3: EQUIPMENT LOCATION (F)

4. DATA CENTER (EQUIPMENT TAG) 
- DATA CENTER 1: EQUIPMENT LOCATION (G)
- DATA CENTER 2: EQUIPMENT LOCATION (H)
- DATA CENTER 3: EQUIPMENT LOCATION (I)

5. POWER GROUNDING (EQUIPMENT TAG) 
- POWER GROUNDING 1: EQUIPMENT LOCATION (J)
- POWER GROUNDING 2: EQUIPMENT LOCATION (K)
- POWER GROUNDING 3: EQUIPMENT LOCATION (L)

6. CONTROL ROOM (EQUIPMENT TAG) 
- CONTROL ROOM 1: EQUIPMENT LOCATION (M)
- CONTROL ROOM 2: EQUIPMENT LOCATION (N)
- CONTROL ROOM 3: EQUIPMENT LOCATION (O)

7. ELECTRONIC COMMUNICATIONS (EQUIPMENT TAG) 
- ELECTRONIC COMMUNICATIONS 1: EQUIPMENT LOCATION (P)
- ELECTRONIC COMMUNICATIONS 2: EQUIPMENT LOCATION (Q)
- ELECTRONIC COMMUNICATIONS 3: EQUIPMENT LOCATION (R)

8. MEASUREMENT (EQUIPMENT TAG) 
- MEASUREMENT 1: EQUIPMENT LOCATION (S)
- MEASUREMENT 2: EQUIPMENT LOCATION (T)
- MEASUREMENT 3: EQUIPMENT LOCATION (U)

9. PROCESS CONTROL (EQUIPMENT TAG) 
- PROCESS CONTROL 1: EQUIPMENT LOCATION (V)
- PROCESS CONTROL 2: EQUIPMENT LOCATION (W)
- PROCESS CONTROL 3: EQUIPMENT LOCATION (X)

10. AUTOMATION (EQUIPMENT TAG) 
- AUTOMATION 1: EQUIPMENT LOCATION (Y)
- AUTOMATION 2: EQUIPMENT LOCATION (Z)
- AUTOMATION 3: EQUIPMENT LOCATION (AA)

11. BUILDING MANAGEMENT SYSTEM (EQUIPMENT TAG) 
- BUILDING MANAGEMENT SYSTEM 1: EQUIPMENT LOCATION (AB)
- BUILDING MANAGEMENT SYSTEM 2: EQUIPMENT LOCATION (AC)
- BUILDING MANAGEMENT SYSTEM 3: EQUIPMENT LOCATION (AD)

12. POWER SUPPLY (EQUIPMENT TAG) 
- POWER SUPPLY 1: EQUIPMENT LOCATION (AE)
- POWER SUPPLY 2: EQUIPMENT LOCATION (AF)
- POWER SUPPLY 3: EQUIPMENT LOCATION (AG)

13. ELECTRICAL DISTRIBUTION (EQUIPMENT TAG) 
- ELECTRICAL DISTRIBUTION 1: EQUIPMENT LOCATION (AH)
- ELECTRICAL DISTRIBUTION 2: EQUIPMENT LOCATION (AI)
- ELECTRICAL DISTRIBUTION 3: EQUIPMENT LOCATION (AJ)

14. ELECTRICAL HANDHOLE (EQUIPMENT TAG) 
- ELECTRICAL HANDHOLE 1: EQUIPMENT LOCATION (AK)
- ELECTRICAL HANDHOLE 2: EQUIPMENT LOCATION (AL)
- ELECTRICAL HANDHOLE 3: EQUIPMENT LOCATION (AM)

15. EXISTING LocATIONS (EQUIPMENT TAG) 
- EXISTING Locations 1: EQUIPMENT LOCATION (AN)
- EXISTING Locations 2: EQUIPMENT LOCATION (AO)
- EXISTING Locations 3: EQUIPMENT LOCATION (AP)

16. NEW Locations (EQUIPMENT TAG) 
- NEW Locations 1: EQUIPMENT LOCATION (AQ)
- NEW Locations 2: EQUIPMENT LOCATION (AR)
- NEW Locations 3: EQUIPMENT LOCATION (AS)

17. CONSTRUCTION (EQUIPMENT TAG) 
- CONSTRUCTION 1: EQUIPMENT LOCATION (AT)
- CONSTRUCTION 2: EQUIPMENT LOCATION (AU)
- CONSTRUCTION 3: EQUIPMENT LOCATION (AV)

18. INSTALLATION (EQUIPMENT TAG) 
- INSTALLATION 1: EQUIPMENT LOCATION (AW)
- INSTALLATION 2: EQUIPMENT LOCATION (AX)
- INSTALLATION 3: EQUIPMENT LOCATION (AY)

19. OPERATIONAL (EQUIPMENT TAG) 
- OPERATIONAL 1: EQUIPMENT LOCATION (AZ)
- OPERATIONAL 2: EQUIPMENT LOCATION (BA)
- OPERATIONAL 3: EQUIPMENT LOCATION (BB)

20. MAINTENANCE (EQUIPMENT TAG) 
- MAINTENANCE 1: EQUIPMENT LOCATION (BC)
- MAINTENANCE 2: EQUIPMENT LOCATION (BD)
- MAINTENANCE 3: EQUIPMENT LOCATION (BE)

21. SECURITY (EQUIPMENT TAG) 
- SECURITY 1: EQUIPMENT LOCATION (BF)
- SECURITY 2: EQUIPMENT LOCATION (BG)
- SECURITY 3: EQUIPMENT LOCATION (BH)

22. ENVIRONMENTAL (EQUIPMENT TAG) 
- ENVIRONMENTAL 1: EQUIPMENT LOCATION (BI)
- ENVIRONMENTAL 2: EQUIPMENT LOCATION (BJ)
- ENVIRONMENTAL 3: EQUIPMENT LOCATION (BK)

23. ENERGY (EQUIPMENT TAG) 
- ENERGY 1: EQUIPMENT LOCATION (BL)
- ENERGY 2: EQUIPMENT LOCATION (BM)
- ENERGY 3: EQUIPMENT LOCATION (BN)

24. TECHNOLOGY (EQUIPMENT TAG) 
- TECHNOLOGY 1: EQUIPMENT LOCATION (BO)
- TECHNOLOGY 2: EQUIPMENT LOCATION (BP)
- TECHNOLOGY 3: EQUIPMENT LOCATION (BQ)

25. PROJECT (EQUIPMENT TAG) 
- PROJECT 1: EQUIPMENT LOCATION (BR)
- PROJECT 2: EQUIPMENT LOCATION (BS)
- PROJECT 3: EQUIPMENT LOCATION (BT)
AUXILIARY COPPER-CLAD STEEL GROUNDING ELECTRODE
FIT BOND TO EMR WITH 4/0 GROUNDING CONDUCTOR.

TERMINATE DUCT BANK GROUND WIRE TO GROUND ROD E007 (TYP).

INSTALL METER 1
FIT TERMINAL TERMINAL
TERMINATE DUCT BANK GROUND WIRE TO GROUND ROD E007 (TYP).

TERMINATE DUCT BANK GROUND WIRE TO GROUND ROD E007 (TYP).

PROVIDE INSTRUMENT ENCLOSURE 2
FIT SUMP PUMP 1
FIT METER VAULT E007 (TYP).

HAZARDOUS LOCATION!
THE METER VAULT SHALL BE DESIGNATED A CLASS I, GROUP D, DIVISION 2 HAZARDOUS LOCATION. ALL ELECTRICAL WORK IN THE AREA SHALL CONFORM TO ARTICLE 501 OF THE NEC.

REFER TO NOTE G15 ON SHEET E001 FOR ADDITIONAL INFORMATION.

3/4" C w/C2
1.5" C w/SUMP PUMP MFR'S CABLES
1.5" C w/SUMP PUMP MFR'S CABLES

DB-PB1[CA1] w/LP6-25
DB-PB1[CA1] w/LP6-25

12" RACEWAY DRIP LOOP: PROVIDE CONDUIT DRAIN FITTINGS AT (MIN)
(POWER/CONTROL)

4 INTRINSICALLY SAFE CIRCUIT: INTRINSICALLY SAFE CIRCUITS SHALL BE KEPT SEPARATE FROM ALL OTHER CIRCUITS (MINIMUM OF 2”).

REFER TO SITE PLANS AND DUCT BANK SECTIONS FOR CIRCUIT CONTINUATION - DB-PB1[C1] w/RP1-37
DB-PB1[C1] w/RP1-37, 41
DB-MV1[C1] w/3#10,1#10G
DB-MV1[C1] w/3#10,1#10G
DB-PB1[D1] w/TSP-1
DB-PB1[D1] w/IC-FIT
DB-PB1[B1] w/C2
DB-PB1[A1] w/FE/FIT MFR'S CABLES
DB-MV1[A1] w/FE/FIT MFR'S CABLES
DB-MV1[A1] w/FE/FIT MFR'S CABLES
DB-MV1[A1] w/FE/FIT MFR'S CABLES

LP6-25
RP1-41

DB-MV1[D1] w/C4
DB-MV1[C1] w/3#10,1#10G
DB-MV1[B1] w/FE/FIT MFR'S CABLES

FP6-25
RP1-37, 41
DB-MV1[B1] w/FE/FIT MFR'S CABLES
DB-MV1[A1] w/FE/FIT MFR'S CABLES
DB-MV1[A1] w/FE/FIT MFR'S CABLES

DB-MV1[E1] w/C6
DB-MV1[D1] w/C3

Client
2.5 10' 57 . 5
Designer
Drafting
Check
Check
Approved

PROFESSIONAL CERTIFICATION - HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30016, EXPIRATION DATE: 04/08/2016

PROPERTY OF GHDI, INC. COPYRIGHTED MATERIAL NOT TO BE USED EXCEPT AS PERMITTED BY THE AGREEMENTS COVERING THIS DOCUMENT

This Drawing shall not be used for Construction unless Signed by the Owner's designated representative.

7/21/15 – 1:15 PM
86-16764-E-003
Charles County, Maryland
Swann Point and Cove Island Interconnection
Swann Point WWF Plans and Conduit Riser Diagram
CONTRACTOR SHALL AS-BUILT EXISTING INTERSITE PUMP STATION DUPLEX MSCP AND CREATE ELEMENTARY WIRING

1. CR-LSH
2. CR-1PR
3. 'RESET'

CONTROL PANEL ENCLOSURE
MOTOR STARTER CONTROL PANEL (MSCP)

120VAC, 1PH POWER
15A
MCB

OL T1
PR
UPS
T2
POWER
RELAY
PRUPS-2
PRUPS-3
PRUPS-4

PROVIDE SEPARATE RELAY FOR EACH FLOAT (TYP)

INTRINSICALLY SAFE RELAY (ISR1)

OUTPUTS INPUTS
1
2

LSH
LSL

EXISTING DUPLEX MSCP

FLOAT SWITCH

[SCP-CRLSHH-1]
CR
LSHH
TO RTU

[SCP-CRR1-1]
PCP-P1
FROM INTERSITE PS SCP
(PUMP 1 CONTROL-AUTO) [FUTURE]

[SCP-CRP1-1]
PCP-P2
FROM INTERSITE PS SCP
(PUMP 1 CONTROL-SECONDARY MODE)

[SCP-CRR1-2]
NTS
PCP-P2
FROM INTERSITE PS SCP
(PUMP 2 CONTROL-AUTO) [FUTURE]

[SCP-CRP2-1]
FROM INTERSITE PS SCP
(PUMP 2 CONTROL-SECONDARY AUTO)

SYSTEM COMPONENTS

1
2

CR-1PR

SYSTEM CONTROLS: REFER TO SPECIFICATIONS FOR ADDITIONAL CONTROL COMPONENTS AND ACCESSORIES REQUIRED FOR EACH STARTER/VFD UNIT OR CONTROL PANEL.

CONTRACTOR SHALL MOUNT PRIMARY LEVEL CP WITH DISPLAY APPROXIMATELY 60" AFF. IT IS ESTIMATED THAT A 12" W MAXIMUM SIZE ENCLOSURE CAN BE INSTALLED IN BETWEEN THE INTERSITE PUMP STATION MSCP AND THE SPRAY FIELD PUMP STATION MSCP. CONTRACTOR SHALL VERIFY AVAILABLE SPACE PRIOR TO FABRICATION OF SCP.

CONTRACTOR SHALL PROVIDE SURGE PROTECTION TERMINAL BLOCKS DEVICES AND INTRINSICALLY SAFE BARRIER FOR SUBMERSIBLE LT. SPD TERMINAL BLOCKS SHALL BE SUITABLE FOR USE WITH INTRINSICALLY SAFE CIRCUITS.

ALTERNATING RELAY HN

PROFESSIONAL CERTIFICATION: REFER TO APPROPRIATE PLAN FOR LOCATION. REFER TO APPROPRIATE PLAN FOR LOCATION. REFER TO APPROPRIATE PLAN FOR LOCATION.

PROCUREMENT/ENGINEERING/CONSTRUCTION/PLANNING

CONSULTING ENGINEER/ARCHITECT/PLANNING/CONSTRUCTION/PLANNING/CONSTRUCTION/PLANNING

BOWIE MD 20715 USA

T 301 240 2066 F 301 240 2067
bowmail@ghd.com www.ghd.com

This Drawing shall not be used for Construction unless Signed and Sealed For Construction

Job Project
Date Drawn Revision No

A A0 A1 A2 A3

August 2015 - 1:55 PM G:\86\16764\CADD\Drawings\Elec\86-16764-E-004.dwg Kristopher Larson

November 15, 2015

GHD Inc. [Project Director]

Charles County Maryland Swan Point and Cord Island Interconnection Elelments and Sections

APPROVAL

REMARKS OR CONDITIONS
### Power Panel Schedule

1. **Location:**
   - **Inlet:**
   - **Location:**
   - **Fed From:**
   - **Interconnection:**
   - **Conduit:**
   - **Main Bus Rating:**
   - **Interruption Rating:**
   - **Enclosure:**
   - **Main Breaker Trip:**

2. **Conduit Schedule:**
   - **Size:**
   - **Service Type UL Type Minimum Size:**
   - **Note:**

3. **Conductor Schedule:**
   - **Conductor Type:**
   - **Rating:**
   - **Description:**

4. **Other Notes:**
   - *Provide new panelboard circuit breaker shown for new branch circuit.*
   - *Provide additional conductors as required to connect switched legs for fixtures or unswitched legs for emergency lighting units and exit signs. Emergency lighting units and exit signs shall be connected upstream of switched devices. For any circuits with emergency lighting, provide circuit breaker with lockout feature (in the on position) at GP/PP to prevent accidentally turning off the breaker.*
   - *Provide ground-fault equipment protector rated breaker. (GFEP)*

### Additional Notes:

- Provide new panelboard circuit breaker shown for new branch circuit.
- Provide additional conductors as required to connect switched legs for fixtures or unswitched legs for emergency lighting units and exit signs. Emergency lighting units and exit signs shall be connected upstream of switched devices. For any circuits with emergency lighting, provide circuit breaker with lockout feature (in the on position) at GP/PP to prevent accidentally turning off the breaker.
- Provide ground-fault equipment protector rated breaker (GFEP).

---

**Client:**

**Contractor:**

**Designer:**

**Drafting:**

**Check:**

**Approval:**

**Date:**

**Contract No.:**

**Original Size:**

**Sht of:**

**Notes:**

---

**Charles County, Maryland Swan Point and Corbin Island Interconnection Electrical Schedules**

**Drawing No.:** 86-16764-E005
1. Pull boxes may be specified in lieu of LB fittings. Refer to contract drawings.

2. Drain hole, ground rod, and pull irons (not shown) are required for each handhole.

3. Duct bank depth shall be coordinated with manhole/handhole penetrations.

4. Instrumentation, network and intrinsically safe circuits shall be isolated from other circuits via conduits and junction boxes (typ).

5. Conduct entrance at manhole/handhole.

6. Conduit stub-up details refer to "Conduit stub-up detail" on this sheet.

7. Electrical conduit entry and wet well details.