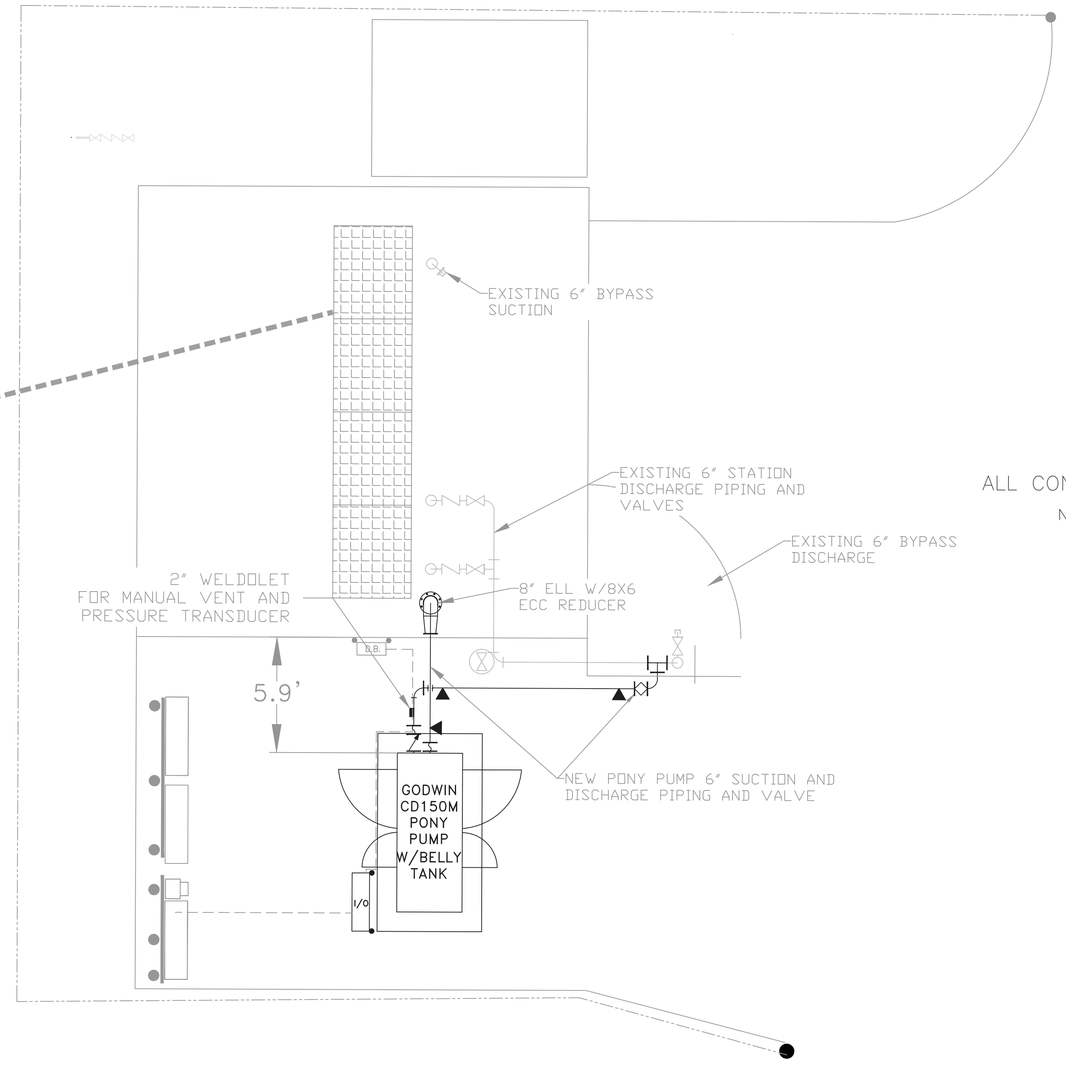
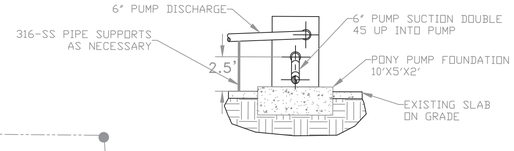
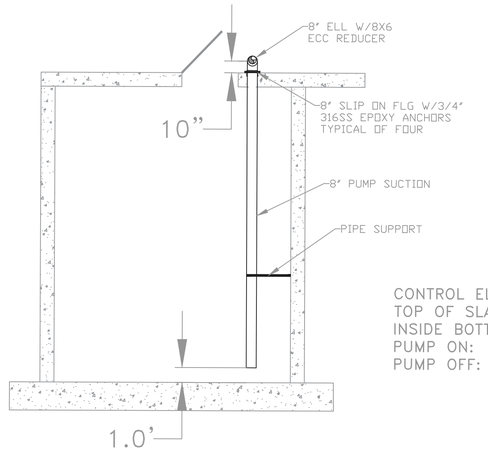




PONY PUMP
END VIEW

▲ PIPE SUPPORT LOCATION

— PIPE FLANGE LOCATION



WETWELL ELEVATION VIEW

CONTROL ELEVATIONS:

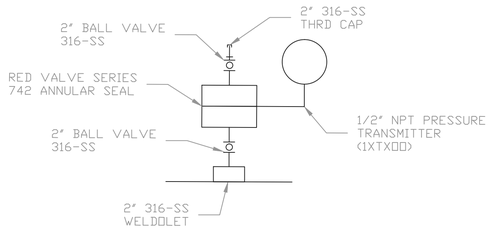
TOP OF SLAB:	13.00
INSIDE BOTTOM:	−2.50
PUMP ON:	9.00
PUMP OFF:	2.50

N

ALL CONTRACTOR PROVIDED MATERIAL SHALL CONFORM TO JEA STANDARDS

NOTES:

1. DRAWING IS ILLUSTRATIVE. DIMENSIONS MAY CHANGE DURING CONSTRUCTION.
2. ALL ABOVE GRADE AND WETWELL PIPING SHALL BE MINIMUM SS−316L SCH 10, ALL FITTINGS SHALL BE FLANGED 316−SS.
3. ROUTE DRAIN PIPING UNDER SUCTION LINE BACK TO WETWELL.
4. PLUG VALVE IS CLASS 150 ECCENTRIC PLUG INSTALL W/STEM HORIZONTAL AND PLUG FACE UP WHEN OPEN
5. SLOPE DISCHARGE PIPE AS NECESSARY TO CONNECT TO EXISTING FORCEMAIN.
6. PROVIDE SWING CHECK VALVE W/ LEVER AND WEIGHT
7. PROVIDE SINGLE ARCH RUBBER EXPANSION JOINT AT PUMP CONNECTIONS
8. PROVIDE PIPE SUPPORTS AS SHOWN OR REQUIRED
9. ROUTE CONDUIT ALONG EDGE OF FOUNDATION WHERE POSSIBLE
10. CUT CONCRETE AND INSTALL CONDUIT 18−IN BELOW GRADE FOR RUN TO EXISTING PANELS
11. CUT EXISTING CONCRETE AND POUR FOUNDATION SLAB WITH FISHED ELEVATION 4−IN ABOVE EXISTING SLAB AT NORTHERN END
12. FOUNDATION SHALL BE 4,000−PSI CONCRETE W/2 LAYERS OF #5 REBAR 12−IN O.C.E.W PROVIDE 3−IN CLR ALL AROUND
13. ALL ANCHORING HARDWARE SHALL BE 316SS
14. MOUNT I/O PANEL PER JEA STANDARD DETAIL
15. SET FLOAT LEVELS TO CONTROL ELEVATIONS
16. GROUND EQUIPMENT TO EXISTING SYSTEM OR ADD ROD(S) AS REQUIRED PER NEC AND COJ CODES



MANUAL VENT AND
PRESSURE TRANSMITTER
DETAIL

NO.	BY	DATE	REVISIONS
6.			
5.			
4.			
3.			
2.			
1.			

DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY:
CHECKED BY:
DATE: 03/2018

JEA Building Community sm

LS-001089
1705 HODGES BLVD
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS 1
SHEET NO. 1
DRAWING NO.

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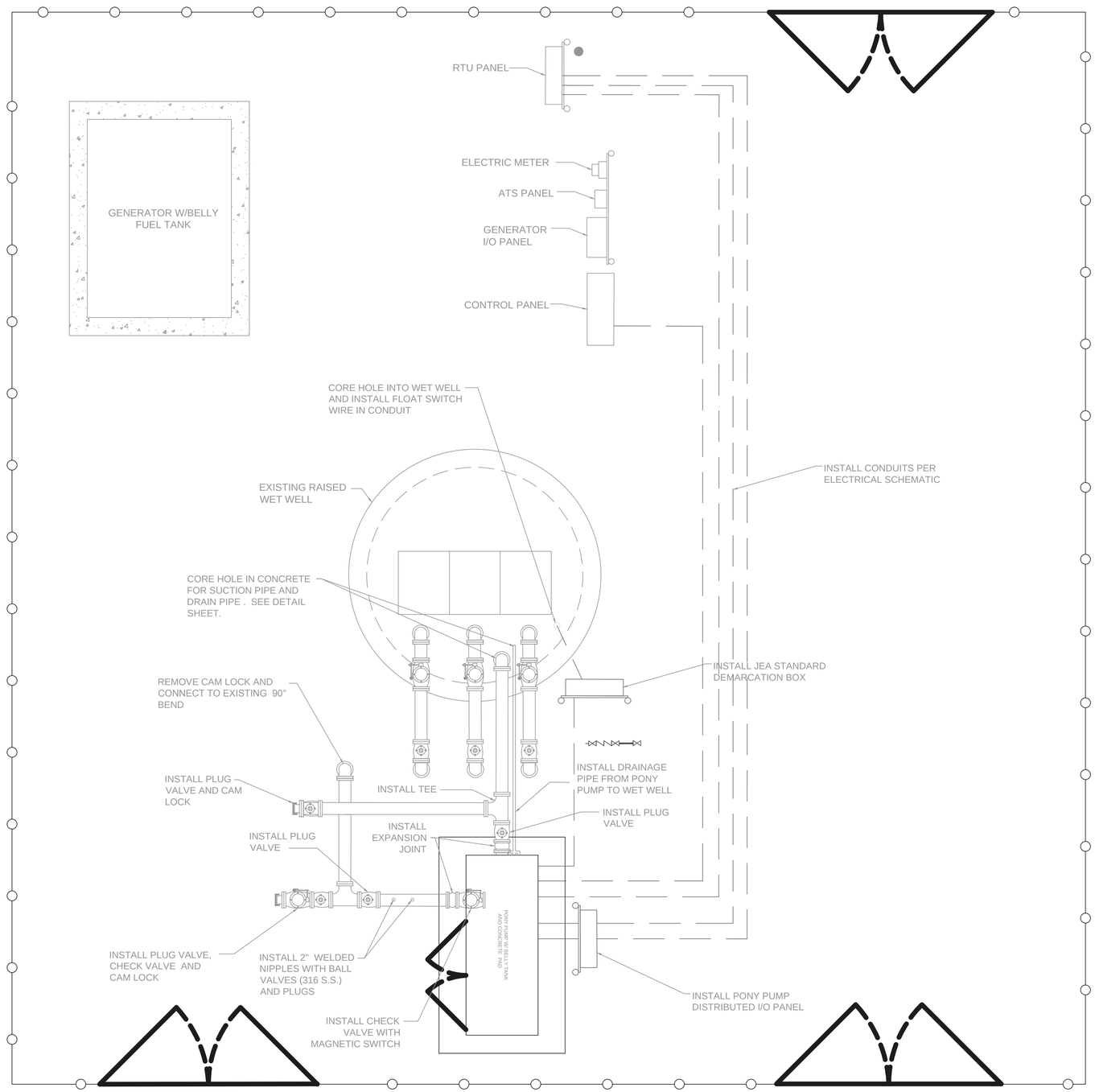

PROPOSED SITE LAYOUT

NOTES:

1. THE CLEARANCES SHOWN AROUND THE PONY PUMP ENCLOSURE ON THIS DOCUMENT ARE TO BE USED AS A MINIMUM. DISTANCES SHALL BE INCREASED TO PROVIDE ANY ADDITIONAL CLEARANCE AS SPECIFIED OR REQUIRED BY THE PONY PUMP AND/OR ENGINE MANUFACTURER TO ALLOW FULL ACCESS FOR NORMAL OPERATION, MAINTENANCE AND REPAIR.
2. THE PIPING CONFIGURATION IS ILLUSTRATIVE. FIELD ADJUSTMENTS TO ACCOMMODATE ACTUAL CONDITIONS ARE ALLOWED WITH APPROVAL FROM JEA.
3. ALL CONTRACTOR SUPPLIED MATERIALS SHALL CONFORM TO JEA STANDARDS.
4. PROVIDE RUBBER EXPANSION JOINTS AT BOTH PUMP CONNECTIONS.
5. PROVIDE MANUAL VENT AND PRESSURE TRANSMITTER (SEE DETAIL SHEET).
6. PROVIDE PIPE SUPPORTS AS NECESSARY TO ENSURE A SECURE INSTALLATION
7. INSTALL CLASS 150 ECC PLUG VALVES WITH SHAFTS IN THE HORIZONTAL AND PLUG FACE UP WHEN OPEN.
8. PROVIDE A 12-FT X7-FT X1.5-FT CONCRETE PUMP FOUNDATION. PROVIDE 4,000-PSI CONCRETE W/ 2 LAYERS OF #4 BAR 12-IN O.C.E.W W/3-IN CLEAR ALL AROUND. SET TOP ELEVATION MINIMUM OF 4-INCHES ABOVE EXISTING SLAB.
9. ANY REQUIRED CONCRETE REMOVAL FOR CONDUIT INSTALLATION SHALL BE COMPLETED WITH CLEAN CUTS, UTILIZING 90 DEGREE ANGLES WHERE POSSIBLE, AND SHALL BE REPAIRED TO MATCH THE EXISTING SLAB THICKNESS.
10. ABOVEGROUND AND WETWELL PIPING SHALL BE 316L-SS MINIMUM SCH 10. FITTINGS SHALL BE FLANGED 316-SS.
11. ALL ANCHORS AND FASTENERS SHALL BE 316-SS.

REVISIONS

NO.	BY	DATE
6.		
5.		
4.		
3.		
2.		
1.		

DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY: JWH
DATE: 03/2018
CHECKED BY:
DATE:

JEA Building Community sm

LS-000230
4437 Barnes Road South
Jacksonville, Fl 32207

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS
SHEET NO.
DRAWING NO.

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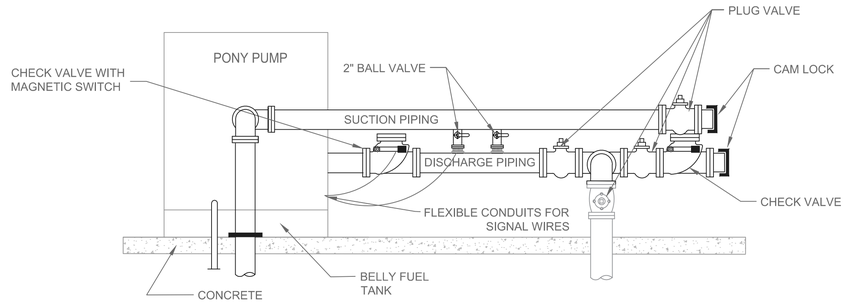
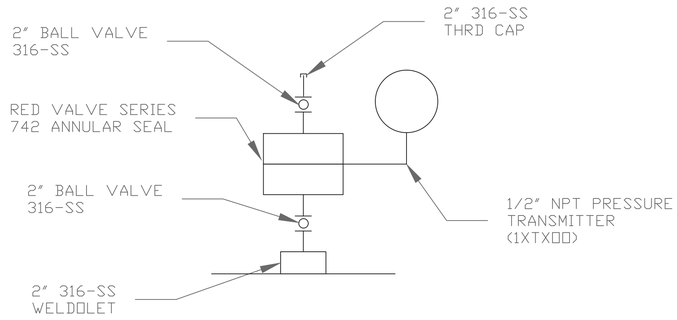
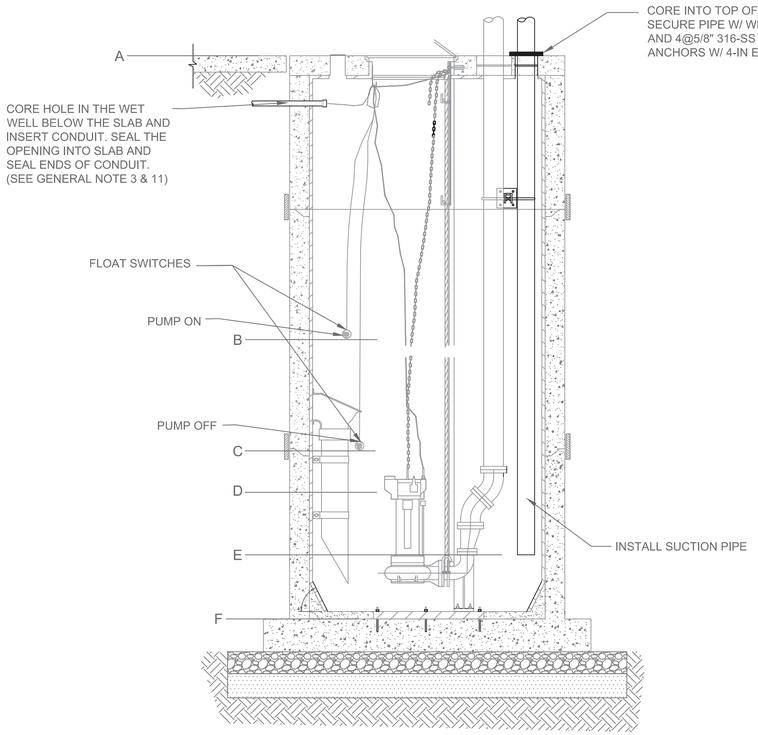


PONY PUMP CONNECTION

NOT TO SCALE



MANUAL VENT AND PRESSURE TRANSMITTER DETAIL



WETWELL SECTION

NOT TO SCALE

ELEVATIONS		
A	TOP	23.55
B	PONY PUMP ON	18.55
C	PONY PUMP OFF	11.55
D	ALL PUMPS OFF	-2.75
E	BOTTOM OF SUCTION	-4.75
F	WET WELL BOTTOM	-5.75

NOTE:
1. TWO FLOATS SHOULD BE PROVIDED (ON/OFF).
2. FLOAT ON SHALL BE A S40NO WITH GREEN TAPE ABOVE THE FLOAT TO INDICATE START.
3. FLOAT OFF SHALL BE A S40NO WITH RED ELECTRICAL TAPE ABOVE THE FLOAT TO INDICATE STOP.

DETAIL SHEET

REVISIONS: NO. | BY | DATE
6. 5. 4. 3. 2. 1.

DESIGN ENGINEER: JOHN W. HURORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY: JWH
CHECKED BY:
DATE: 03/2018

JEA Building Community

LS-000230
4437 Barnes Road South
Jacksonville, Fl 32207

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS
SHEET NO.
DRAWING NO.

NOTES:

1. THE CLEARANCES SHOWN AROUND THE PONY PUMP ENCLOSURE ON THIS DOCUMENT ARE TO BE USED AS A MINIMUM. DISTANCES SHALL BE INCREASED TO PROVIDE ANY ADDITIONAL CLEARANCE AS SPECIFIED OR REQUIRED BY THE PONY PUMP AND/OR ENGINE MANUFACTURER TO ALLOW FULL ACCESS FOR NORMAL OPERATION, MAINTENANCE AND REPAIR.

2. THE PIPING CONFIGURATION IS ILLUSTRATIVE. FIELD ADJUSTMENTS TO ACCOMMODATE ACTUAL CONDITIONS ARE ALLOWED WITH APPROVAL FROM JEA.

3. ALL CONTRACTOR SUPPLIED MATERIALS SHALL CONFORM TO JEA STANDARDS.

4. PROVIDE RUBBER EXPANSION JOINTS AT BOTH PUMP CONNECTIONS.

5. PROVIDE MANUAL VENT AND PRESSURE TRANSMITTER (SEE DETAIL SHEET).

6. PROVIDE PIPE SUPPORTS AS NECESSARY TO ENSURE A SECURE INSTALLATION

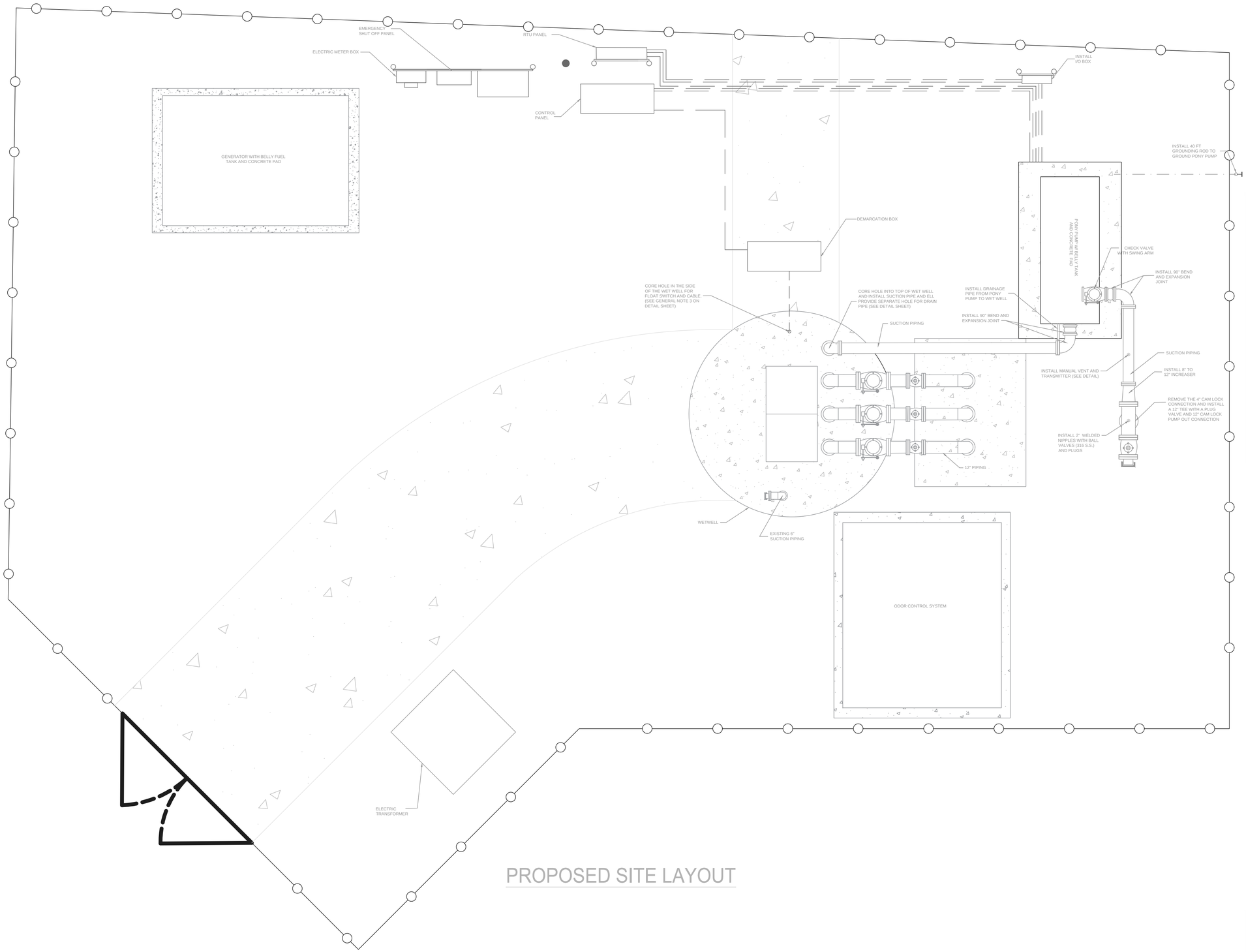
7. INSTALL CLASS 150 ECC PLUG VALVES WITH SHAFTS IN THE HORIZONTAL AND PLUG FACE UP WHEN OPEN.

8. PROVIDE A 12-FT X7-FT X1.5-FT CONCRETE PUMP FOUNDATION. PROVIDE 4,000-PSI CONCRETE W/ 2 LAYERS OF #4 BAR 12-IN O.C.E.W W/3-IN CLEAR ALL AROUND. SET TOP ELEVATION EQUAL TO THE WETWELL TOP.

9. ANY REQUIRED CONCRETE REMOVAL FOR CONDUIT INSTALLATION SHALL BE COMPLETED WITH CLEAN CUTS, UTILIZING 90 DEGREE ANGLES WHERE POSSIBLE, AND SHALL BE REPAIRED TO MATCH THE EXISTING SLAB THICKNESS.

10. ABOVEGROUND AND WETWELL PIPING SHALL BE 316L-SS MINIMUM SCH 10. FITTINGS SHALL BE FLANGED SS.

11. ALL ANCHORS AND FASTENERS SHALL BE 316-SS.



PROPOSED SITE LAYOUT

REVISIONS

NO.	BY	DATE
6		
5		
4		
3		
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1		

DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY: JWH
DATE: 03/2018
CHECKED BY:
DATE:

JEA Building Community

LS-002308
13383 TROPIC EGRET DRIVE
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS
SHEET NO.
DRAWING NO.

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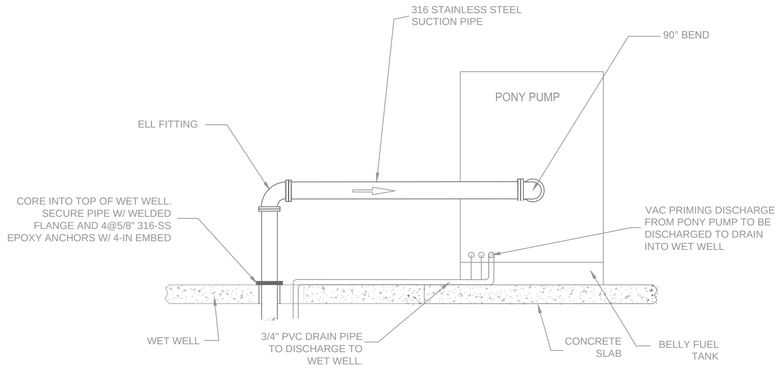
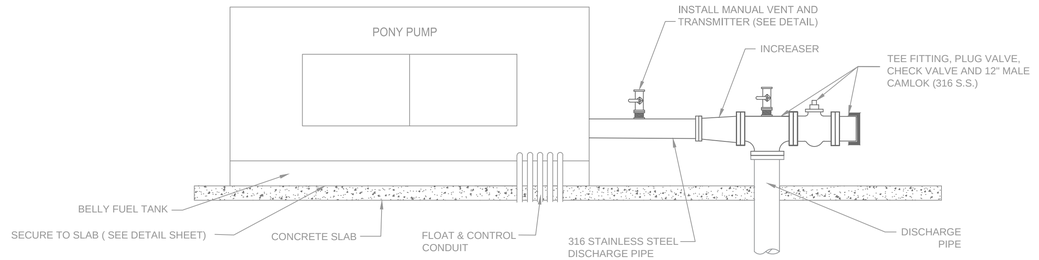
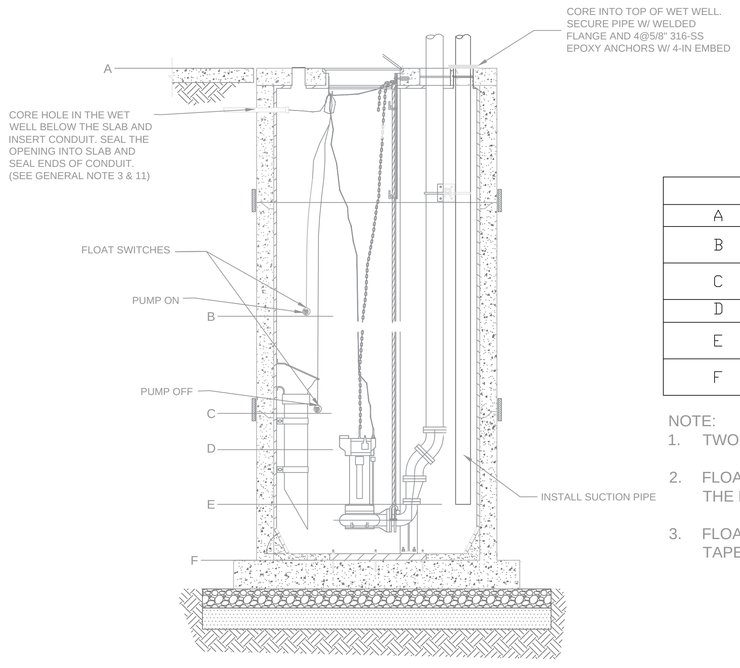


PONY PUMP SUCTION CONNECTION



PONY PUMP DISCHARGE CONNECTION



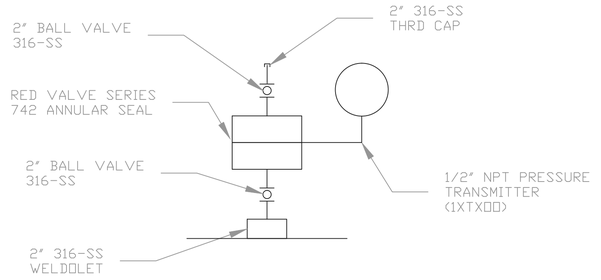
WETWELL SECTION

NOT TO SCALE

ELEVATIONS		
A	TOP	18.90
B	PONY PUMP ON	13.90
C	PONY PUMP OFF	6.90
D	ALL PUMPS OFF	-7.55
E	BOTTOM OF SUCTION	-9.00
F	WET WELL BOTTOM	-10.93

NOTE:

1. TWO FLOATS SHOULD BE PROVIDED (ON/OFF).
2. FLOAT ON SHALL BE A S40NO WITH GREEN TAPE ABOVE THE FLOAT TO INDICATE START.
3. FLOAT OFF SHALL BE A S40NO WITH RED ELECTRICAL TAPE ABOVE THE FLOAT TO INDICATE STOP.



MANUAL VENT AND PRESSURE TRANSMITTER DETAIL

DETAIL SHEET

REVISIONS

NO.	BY	DATE
6.		
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1.		

DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY: JWH
DATE: 03/2018
CHECKED BY:
DATE:

JEA Building Community sm

LS-002308
13383 TROPIC EGRET DRIVE
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS
SHEET NO.
DRAWING NO.

Wed Mar 14, 2018 – 14:45

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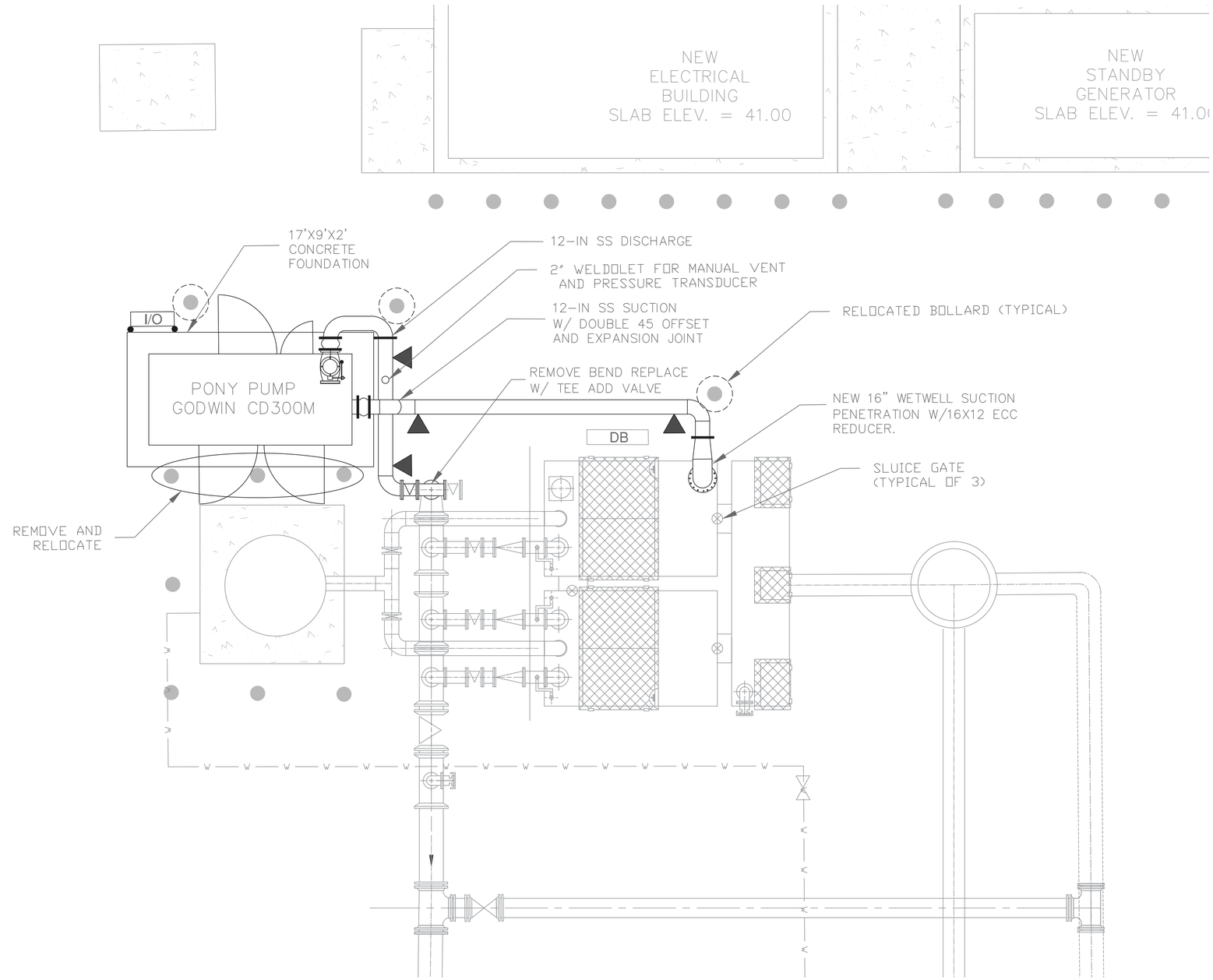
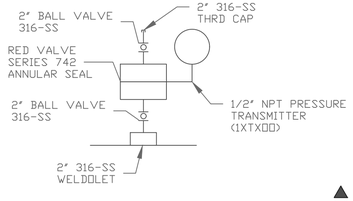


ALL CONTRACTOR PROVIDED MATERIAL SHALL CONFORM TO JEA STANDARDS

NOTES:

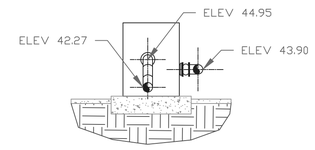
1. ALL ABOVE GRADE AND WETWELL PIPING SHALL BE MINIMUM SS-316L SCH 10, ALL FITTINGS SHALL BE FLANGED 316-SS.
2. ROUTE DRAIN PIPING UNDER SUCTION LINE BACK TO WETWELL.
3. CORDINATE WITH GRID MANAGER FOR FORCEMAIN TIE-IN CONNECTION
4. PLUG VALVE IS CLASS 150 ECCENTRIC PLUG INSTALL W/STEM HORIZONTAL AND PLUG FACE UP WHEN OPEN
5. PROVIDE SWING CHECCK VALVE W/LEVER AND WEIGHT
6. PROVIDE SINGLE ARCH RUBBER EXPANSION JOINT AT PUMP CONNECTIONS
7. PROVIDE PIPE SUPPORTS AS SHOWN OR REQUIRED
8. ROUTE CONDUIT ALONG EDGE OF FOUNDATION WHERE POSSIBLE
9. USE EXISTING SPARE CONDUITS FOR RUN TO MCC BUILDING AND WETWELL FLOAT INSTALLATION
10. CUT EXISTING CONCRETE AND POUR FOUNDATION SLAB WITH FISHED ELEVATION 4-IN ABOVE EXISTING SLAB
11. FOUNDATION SHALL BE 4,000-PSI CONCRETE W/2 LAYERS OF #5 REBAR 12-IN O.C.E.W PROVIDE 3-IN CLR ALL AROUND
12. ALL ANCHORING HARDWARE SHALL BE 316SS
13. MOUNT I/O PANEL PER JEA STANDARD DETAIL
14. SET FLOAT LEVELS TO CONTROL ELEVATIONS
15. GROUND EQUIPMENT TO EXISTING SYSTEM OR ADD ROD(S) PER NEC AND COJ CODES.



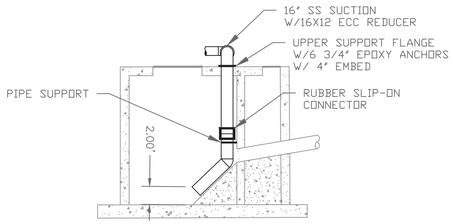
MANUAL VENT AND
PRESSURE TRANSMITTER
DETAIL

▲ PIPE SUPPORT LOCATION

— PIPE FLANGE LOCATION



PONY PUMP
END VIEW



ELEVATION VIEW

CONTROL ELEVATIONS:

TOP OF SLAB:	40.50
BOTTOM OF SLAB:	25.00
PUMP ON:	37.50
PUMP OFF:	31.50

REVISIONS

NO.	BY	DATE
6.		
5.		
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DESIGN ENGINEER
JOHN W. HURFORD
FLORIDA REGISTRATION NO.
56014

DESIGNER:
DRAWN BY: JWH
CHECKED BY: 05/2018
DATE:

JEA Building Community sm

LS-000924
8560 FURY DR.
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS 1
SHEET NO. 1
DRAWING NO.

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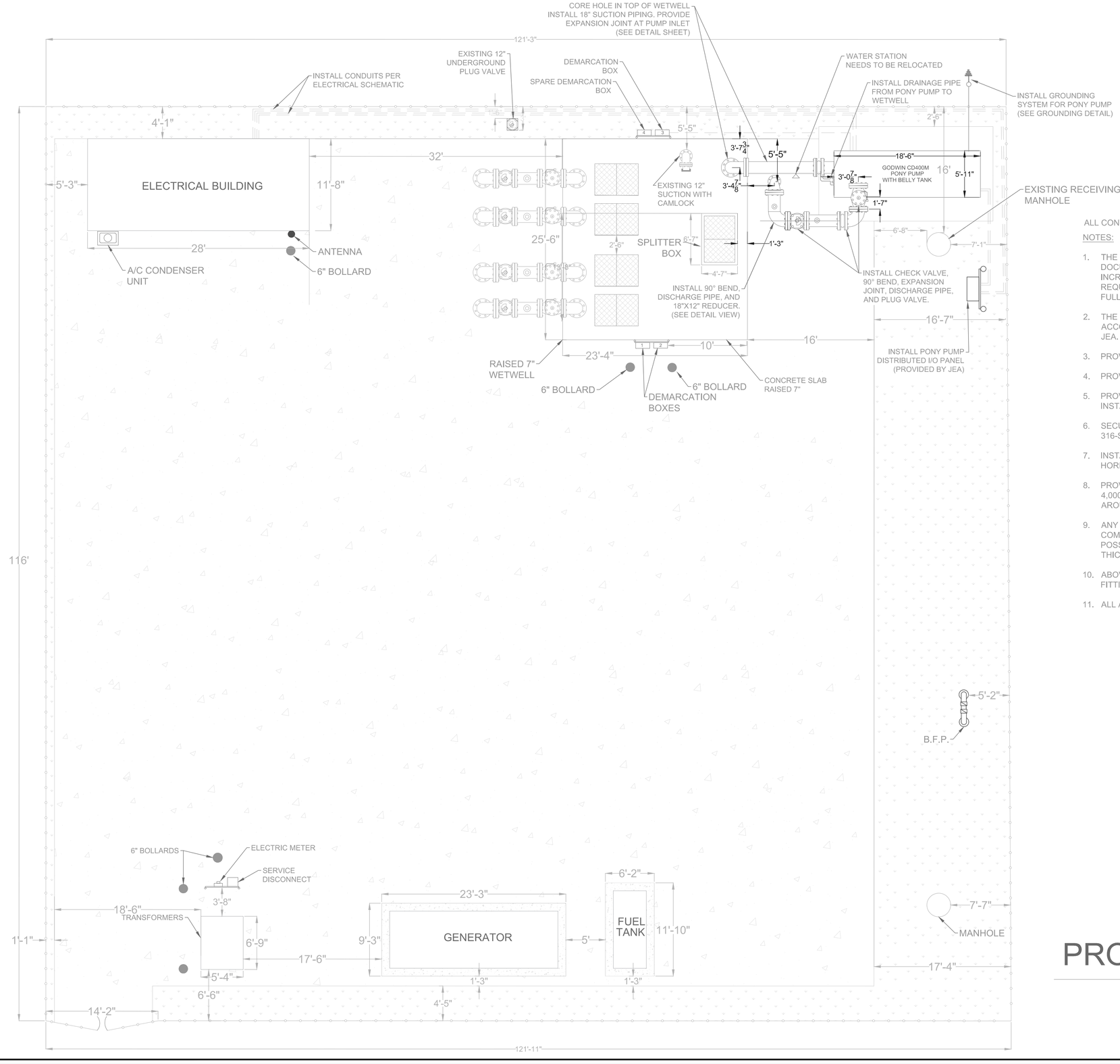

ALL CONTRACTOR PROVIDED MATERIAL SHALL CONFORM TO JEA STANDARDS

NOTES:

1. THE CLEARANCES SHOWN AROUND THE PONY PUMP ENCLOSURE ON THIS DOCUMENT ARE TO BE USED AS A MINIMUM. DISTANCES SHALL BE INCREASED TO PROVIDE ANY ADDITIONAL CLEARANCE AS SPECIFIED OR REQUIRED BY THE PONY PUMP AND/OR ENGINE MANUFACTURER TO ALLOW FULL ACCESS FOR NORMAL OPERATION, MAINTENANCE AND REPAIR.
2. THE PIPING CONFIGURATION IS ILLUSTRATIVE. FIELD ADJUSTMENTS TO ACCOMMODATE ACTUAL CONDITIONS ARE ALLOWED WITH APPROVAL FROM JEA.
3. PROVIDE RUBBER EXPANSION JOINTS AT BOTH PUMP CONNECTIONS.
4. PROVIDE MANUAL VENT AND PRESSURE TRANSMITTER (SEE DETAIL SHEET)
5. PROVIDE PIPE SUPPORTS AS NECESSARY TO ENSURE A SECURE INSTALLATION
6. SECURE WETWELL PIPE PENETRATION WITH WELDED FLANGE AND 4 @ 3/4" 316-SS EPOXY ANCHOR BOLT S W/ 4" EMBED
7. INSTALL THE DISCHARGE CLASS 150 ECC PLUG VALVE WITH SHAFT IN THE HORIZONTAL AND PLUG FACE UP WHEN OPEN.
8. PROVIDE A 12-FT X22-FT X2-FT CONCRETE PUMP FOUNDATION. PROVIDE 4,000-PSI CONCRETE W/ 2 LAYERS OF #4 BAR 12-IN O.C.E.W, W/3-IN CLEAR ALL AROUND. SET TOP ELEVATION THE SAME AS WETWELL SLAB.
9. ANY REQUIRED CONCRETE REMOVAL FOR CONDUIT INSTALLATION SHALL BE COMPLETED WITH CLEAN CUTS, UTILIZING 90 DEGREE ANGLES WHERE POSSIBLE, AND SHALL BE REPAIRED TO MATCH THE EXISTING SLAB THICKNESS.
10. ABOVEGROUND AND WETWELL PIPING SHALL BE MINIMUM 316L-SS SCH 10. FITTINGS SHALL FLANGED BE 316L-SS.
11. ALL ANCHORS AND FASTENERS SHALL BE 316-SS.

PROPOSED SITE PLAN

REVISIONS

NO	BY	DATE
1.		
2.		
3.		
4.		
5.		
6.		

DESIGN ENGINEER
JOHN W. HURFORD
FLORIDA REGISTRATION NO.
56014

DESIGNER:
DRAWN BY: JWH
DATE: 03/2018
CHECKED BY:
DATE:

JEA Building Community sm

LS-001114
2798 HUFFMAN BOULEVARD
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: N.T.S.

NO. SHEETS
SHEET NO.
DRAWING NO.

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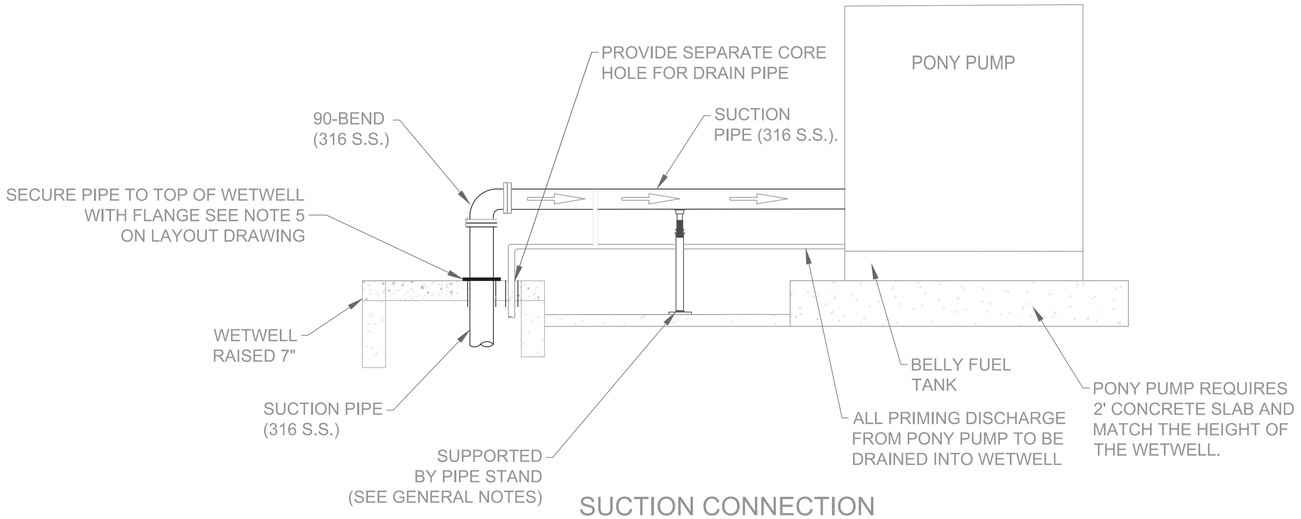
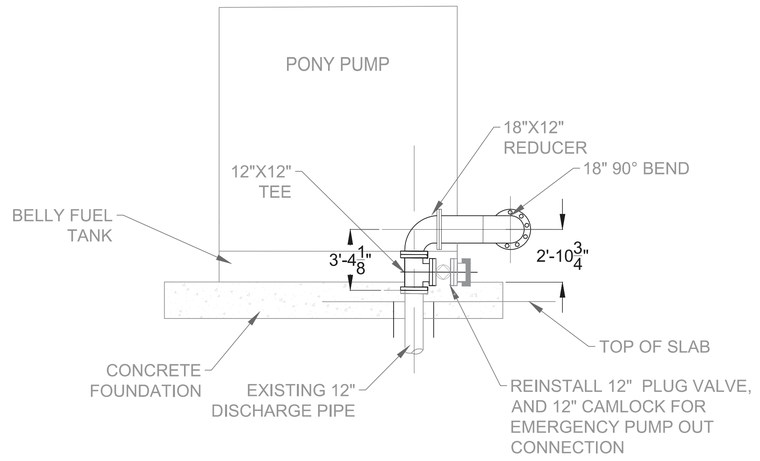


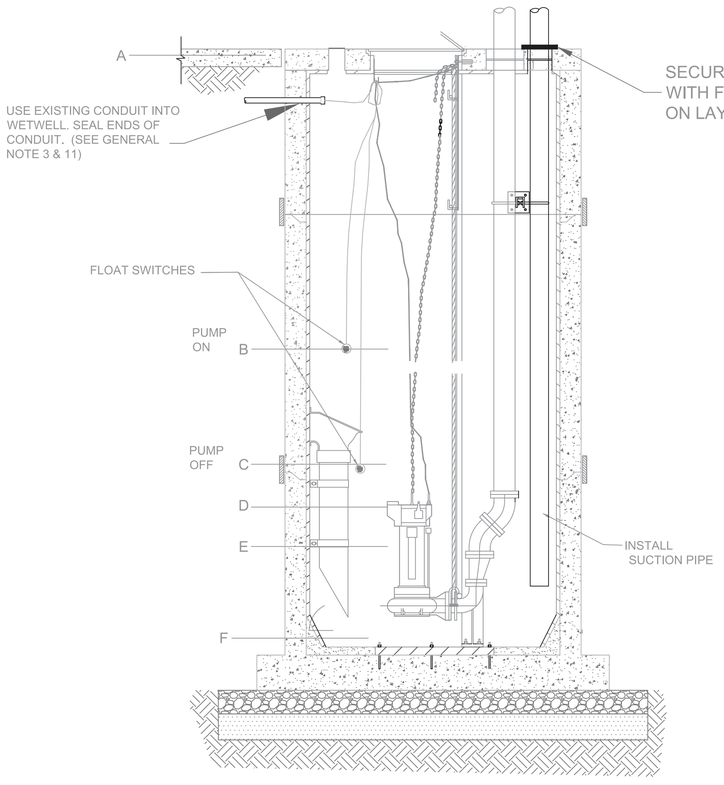
SUCTION CONNECTION



DISCHARGE CONNECTION

PONY PUMP CONNECTION

NOT TO SCALE

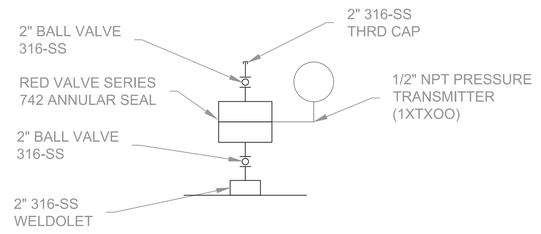


WETWELL SECTION

NOT TO SCALE

ELEVATIONS		
A	TOP	40.64
B	PONY PUMP ON	36.64
C	PONY PUMP OFF	30.64
D	ALL PUMPS OFF	16.80
E	BOTTOM OF SUCTION	14.50
F	WET WELL BOTTOM	13.00

NOTE:
1. TWO FLOATS SHOULD BE PROVIDED (ON/OFF).
2. FLOAT ON SHALL BE A S40NO WITH GREEN TAPE ABOVE THE FLOAT TO INDICATE START.
3. FLOAT OFF SHALL BE A S40NO WITH RED ELECTRICAL TAPE ABOVE THE FLOAT TO INDICATE STOP.



MANUAL VENT AND PRESSURE TRANSMITTER DETAIL

DETAIL SHEET

NO.	BY	DATE	REVISIONS
6.			
5.			
4.			
3.			
2.			
1.			

DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNED: JWH
DRAWN BY: JWH
DATE: 03/2018
CHECKED BY:
DATE:

JEA Building Community sm

LS-001114
2798 HUFFMAN BOULEVARD
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: N.T.S.
NO. SHEETS
SHEET NO.
DRAWING NO.

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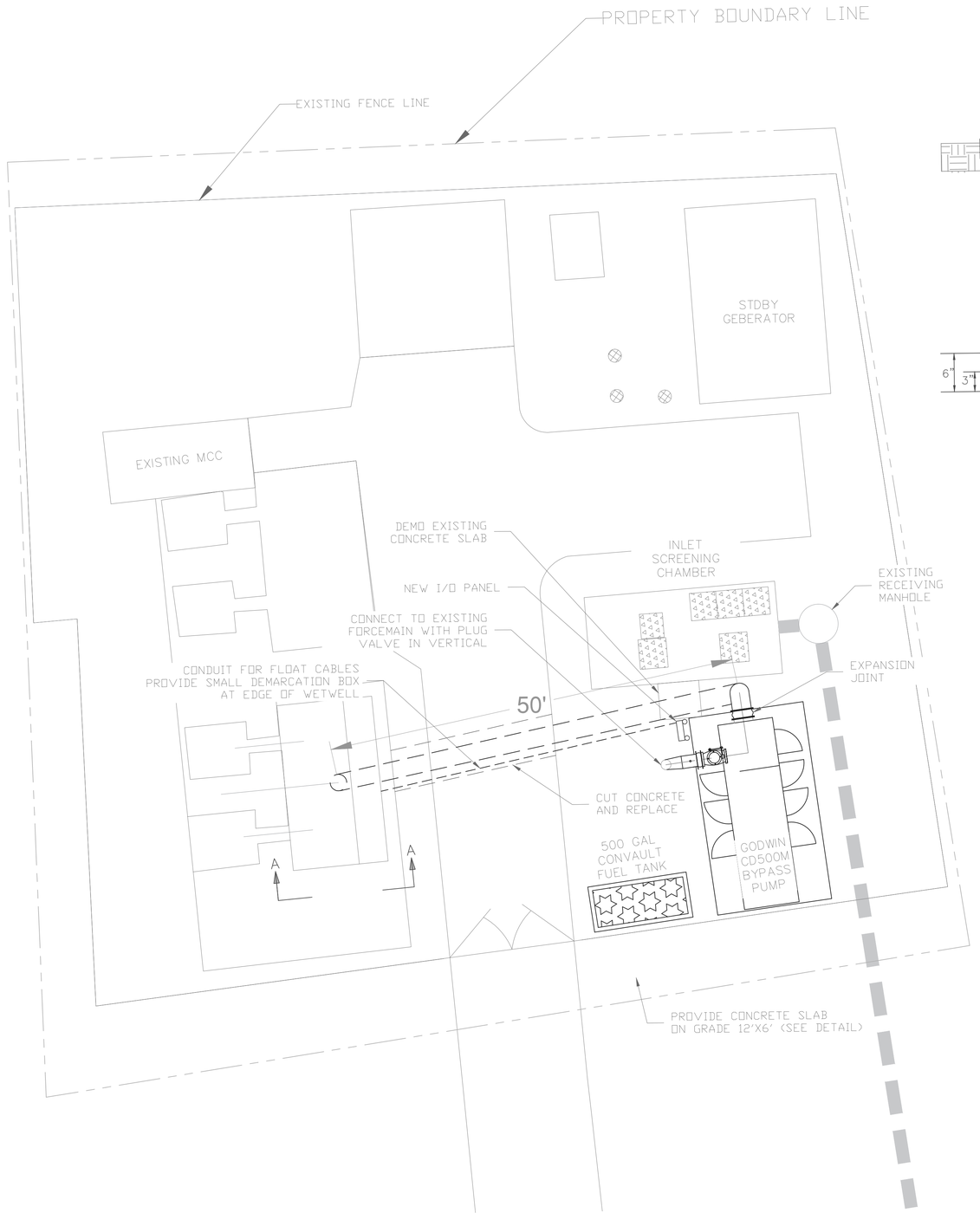
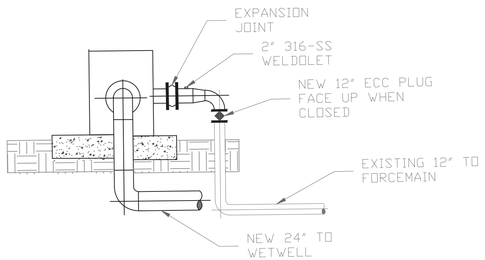
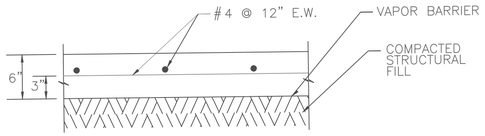


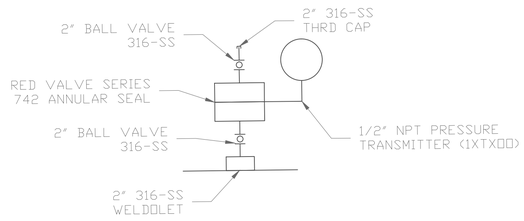


PONY PUMP
END VIEW

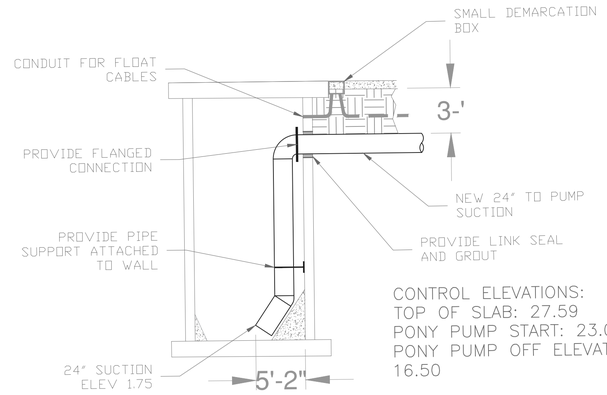


SLAB ON GRADE DETAIL

GODWIN CD500M IS A 9000-GPM BYPASS PUMP W/24-IN SUCTION AND 18-IN DISCHARGE. EXISTING FORCEMAIN CONNECTION IS 12-IN. FOUNDATION IS 13'X24'X2.5' W/2' IN GROUND.



MANUAL VENT AND
PRESSURE TRANSMITTER
DETAIL



SECTION
A-A

CONTROL ELEVATIONS:
TOP OF SLAB: 27.59
PONY PUMP START: 23.00
PONY PUMP OFF ELEVATION: 16.50

ALL CONTRACTOR PROVIDED MATERIAL SHALL CONFORM TO JEA STANDARDS

NOTES:

1. ALL ABOVE GRADE PIPING SHALL BE SS-316L MINIMUM SCH 10, ALL FITTINGS SHALL BE FLANGED.
2. ALL BELOW GRADE PIPING SDR 18 PVC PUSH ON JOINT.
3. WETWELL PIPING SHALL BE FLANGED SS-316L SCH 10
4. ROUTE DRAIN PIPING BACK TO SPLITER BOX
5. PLUG VALVE IS CLASS 150 ECCENTRIC PLUG, INSTALL IN VERTICAL WITH PLUG FACE UP WHEN CLOSED
6. PROVIDE SWING CHECK W/ LEVER AND WEIGHT AT PUMP DISCHARGE
7. PROVIDE SINGLE ARCH RUBBER EXPANSION JOINT AT PUMP CONNECTIONS
8. ROUTE CONDUIT ALONG EDGE OF FOUNDATION WHERE POSSIBLE
9. CUT CONCRETE AND INSTALL CONDUIT 18-IN BELOW GRADE FOR RUN TO MCC BUILDING AS NECESSARY MAY USE EXISTING CONDUITS IF AVAILABLE. SEE ELECTRICAL DETAIL SHEETS
10. POUR FOUNDATION SLAB WITH FISHED ELEVATION AT 27.50
11. FOUNDATION SHALL BE 4,000-PSI CONCRETE W/3 LAYERS OF #5 REBAR 12-IN O.C.E.W PROVIDE 2-IN CLR ALL AROUND
12. ALL ANCHORING HARDWARE SHALL BE 316SS
13. INSTALL FUEL TANK ON NEW SLAB IN ACCORDANCE WITH NFPA AND COJ CODES AND REGULATIONS. FUEL PIPING SHALL BE 316SS.
14. MOUNT NEW I/O PANEL PER JEA STANDARD DETAIL
15. INSTALL FLOATS AT CONTROL ELEVATIONS
16. GROUND EQUIPMENT TO EXISTING SYSTEM OR ADD ROD(S) PER NEC AND COJ CODE REQUIREMENTS.

NO.	BY	DATE	REVISIONS
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			2.
			1.

DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY: JWH
DATE: FEB 2018
CHECKED BY:
DATE: FEB 2018

JEA Building Community sm

LS-000060
12733 ABESS BLVD
PONY PUMP INSTALLATION

NO. SHEETS: 1
SHEET NO.: 1
DRAWING NO.: 1

PROJ. NO.:
DATE: JAN 2018
SCALE:

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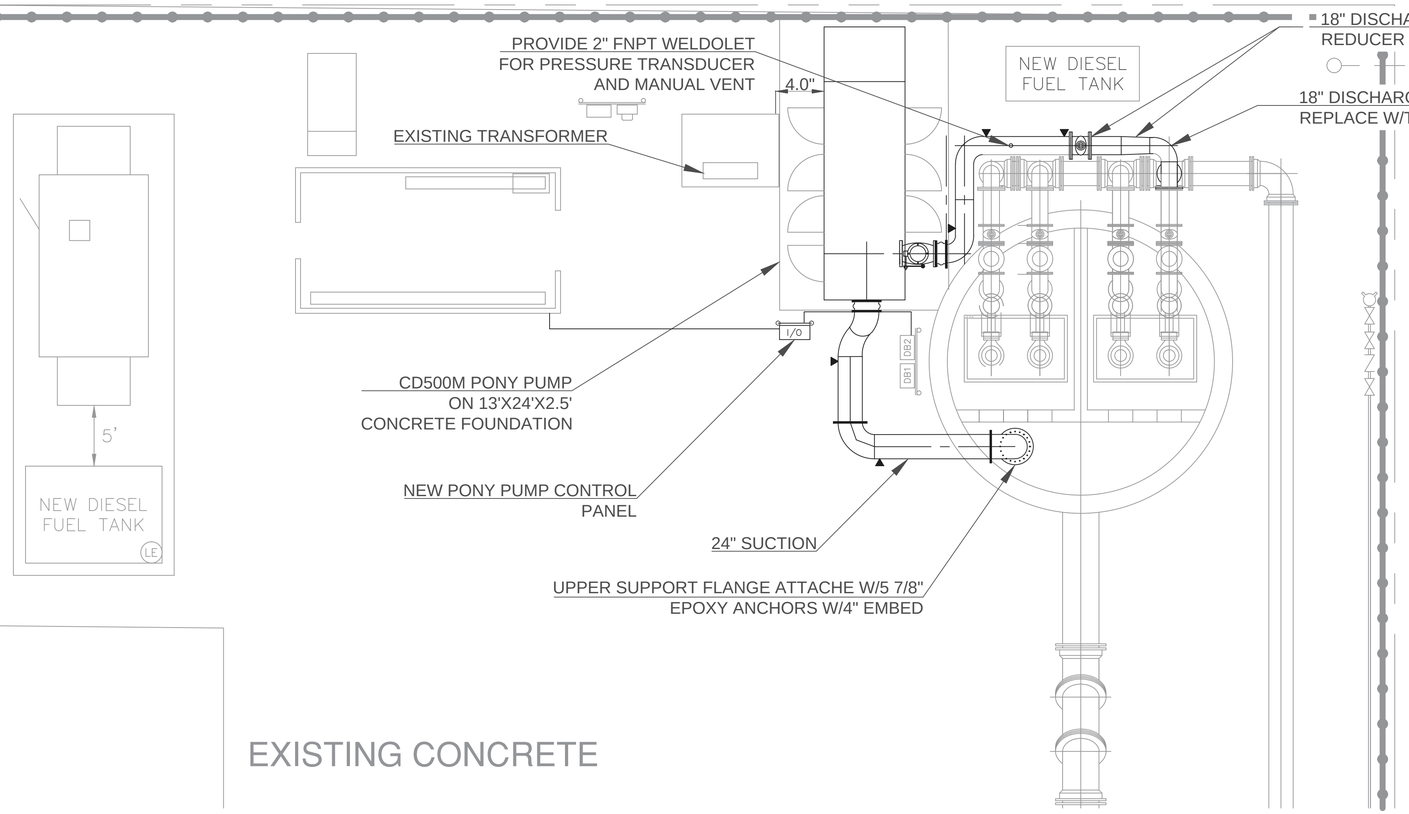
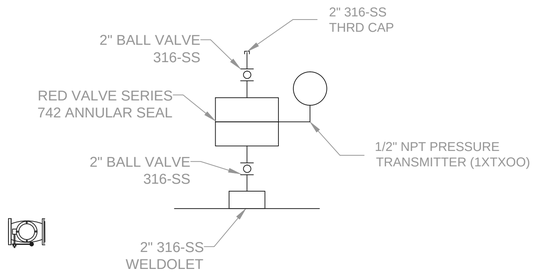


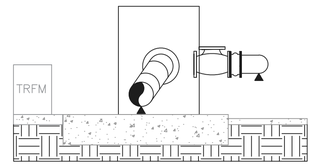
EXISTING CONCRETE



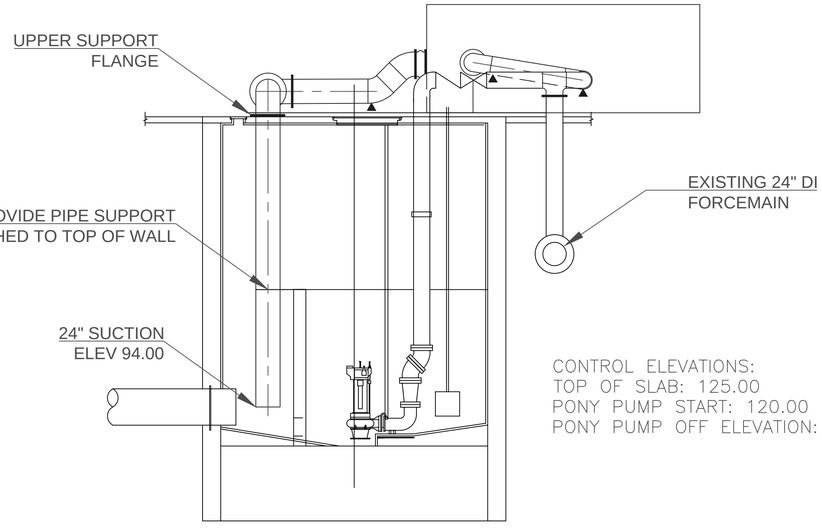
▲ PIPE SUPPORT LOCATION

— PIPE FLANGE LOCATION

MANUAL VENT AND
PRESSURE TRANSMITTER
DETAIL



PONY PUMP
END VIEW



CONTROL ELEVATIONS:
TOP OF SLAB: 125.00
PONY PUMP START: 120.00
PONY PUMP OFF ELEVATION: 114.00

PONY PUMP
ELVATION VIEW

ALL CONTRACTOR PROVIDED MATERIAL SHALL CONFORM TO JEA STANDARDS

NOTES:

1. ALL ABOVE GRADE AND WETWELL PIPING SHALL BE MINIMUM SS-316L SCH 10, ALL FITTINS SHALL BE FLANGED 316L-SS.
2. ROUTE DRAIN PIPING UNDER SUCTION LINE BACK TO WETWELL.
3. PLUG VALVE IS CLASS 150 ECCENTRIC PLUG INSTALL W/STEM HORIZONTAL AND PLUG FACE UP WHEN OPEN
4. PROVIDE SWING CHECK VALVE W/LEVER AND WEIGHT
5. PROVIDE SINGLE ARCH RUBBER EXPANSION JOINT AT PUMP CONNECTIONS
6. PROVIDE PIPE SUPPORTS AS SHOWN OR REQUIRED
7. PROVIDE A MINIMUM 3-FT CLEARANCE BETWEEN DB1 AND DB2 AND THE SUCTION PIPING
8. ROUTE CONDUIT ALONG EDGE OF FOUNDATION WHERE POSSIBLE
9. CUT CONCRETE AND INSTALL CONDUIT 18-IN BELOW GRADE FOR RUN TO MCC BUILDING.
10. CUT EXISTING CONCRETE AND POUR FOUNDATION SLAB WITH FISHED ELEVATION 4-IN ABOVE EXISTING SLAB
11. FOUNDATION SHALL BE 4,000-PSI CONCRETE W/3 LAYERS OF #5 REBAR 12-IN O.C.E.W PROVIDE 2-IN CLR ALL AROUND
12. ALL ANCHORING HARDWARE SHALL BE 316SS
13. INSTALL FUEL TANK ON EXISTING SLAB IN ACCORDANCE WITH NFPA AND COJ CODES AND REGULATIONS. FUEL PIPING SHALL BE 316SS.
14. MOUNT I/O PANEL PER JEA STANDARD DETAIL
15. INSTALL FLOATS AT CONTROL ELEVATIONS
16. GROUND EQUIPMENT TO EXISTING SYSTEM OR ADD NEW ROD(S) AS REQUIRED PER NEC AND COJ CODES

REVISIONS

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DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER:
DRAWN BY: JOHN HURFORD
DATE: 09/12/2018
CHECKED BY:
DATE:

JEA Building Community sm

LS-000013
2809 W 5th ST(HURON)
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: 1:20

NO. SHEETS 1
SHEET NO. 1
DRAWING NO.

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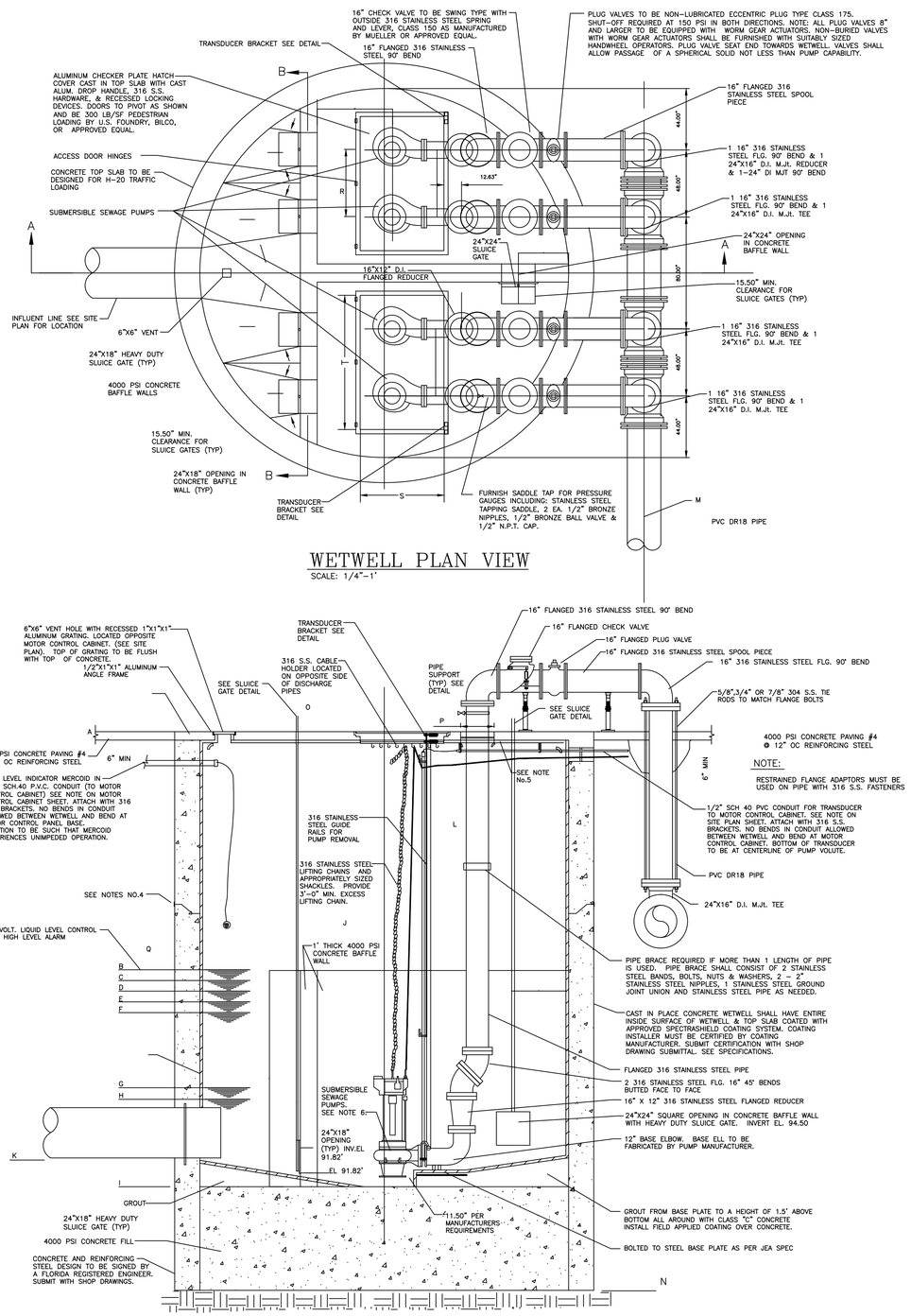


WETWELL PLAN VIEW

SCALE: 1/4"=1'

SECTION A-A WETWELL AND MANHOLE

HORIZONTAL SCALE: 1/4"=1'
VERTICAL: NOT TO SCALE

LIFT STATION INFORMATION

SCHEDULE OF ELEVATIONS:

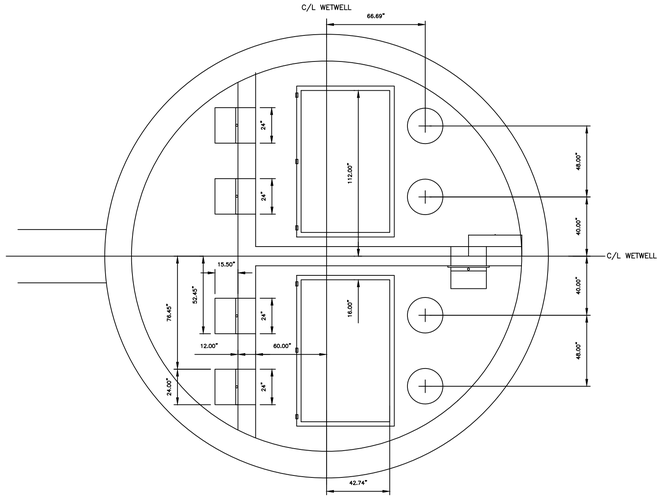
PUMP STATION STREET ADDRESS	TOP & SITE GRADE	HIGH LEVEL ALARM	3RD LAG PUMP ON	2nd LAG PUMP ON	1st LAG PUMP ON	LEAD PUMP ON	ALL PUMPS OFF	LOW LEVEL ALARM	TOP CONCRETE FILL	WET WELL DIAM.	INFLUENT INVERT	DISCHARGE PIPE DIA.	DISCHARGE F.M. DIA.	BOTTOM	TOP SLAB THICKNESS (INCHES)	PIPE HOLE DIAMETER (INCHES)	WALL THICKNESS	PUMP C/L SEPARATION	ACCESS HATCH WIDTH	ACCESS HATCH LENGTH
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
HURON STREET LIFT STATION	125.00	103.50	103.00	102.50	102.00	101.50	96.00	95.50	91.00'	22'	92.50'	16"	24"	82.00'	12"	24"	18"	48"	60"	96"

OPTION #1

PUMP MANUFACTURER F.E. MYERS
MODEL 12VLX600M6-43 IMPELLER 13.63
DISCHARGE 12" MOTOR RPM 1150
60 HP 460 VOLTS 3 PHASE VFD HZ
DESIGN POINT 5200 GPM AT 37 FT. TDH
RUNOUT POINT 7000 GPM AT 15 FT.TDH
MAX. SPHERE 5.25 INCH (ES)
PUMP ACCESS HATCH SIZE 96" X 60"
PUMP CENTERLINE SEPARATION 48"

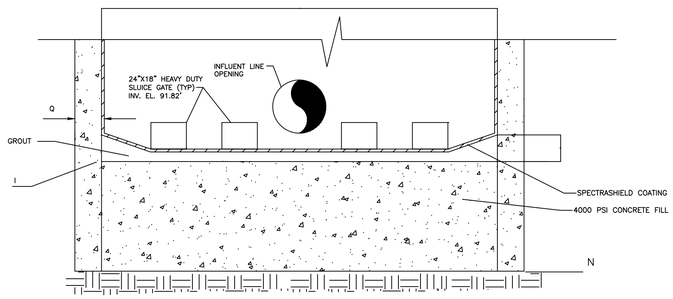
OPTION #2

PUMP MANUFACTURER HYDROMATIC
MODEL S12LX IMPELLER 13.63
DISCHARGE 12" MOTOR RPM 1150
60 HP 460 VOLTS 3 PHASE VFD HZ
DESIGN POINT 5122 GPM AT 36.6 FT. TDH
RUNOUT POINT 6800 GPM AT 15 FT.TDH
MAX. SPHERE 6" INCH (ES)
PUMP ACCESS HATCH SIZE 96" X 60"
PUMP CENTERLINE SEPARATION 48"



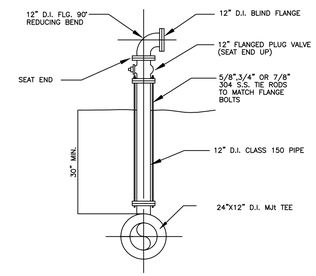
LOCATION OF HATCH AND DISCHARGE PIPE OPENING DETAIL

SCALE: 1/4"=1'



SECTION B-B

HORIZONTAL SCALE: 1/4"=1'
VERTICAL: NOT TO SCALE



PUMP OUT DETAIL

N.T.S.

GENERAL NOTES:

1. REFER TO SPECIFICATIONS, SECTION 433, "SUBMERSIBLE SEWAGE PUMPING STATIONS" IN JEA STANDARD SPECIFICATIONS.
2. ALL DUCTILE IRON FITTINGS AND PIPE SHALL BE HOLIDAY TESTED PRIOR TO INSTALLATION. TESTING SHALL BE ARRANGED BY CALLING JEA WATER AND SEWER AT TEL. NO. 665-6092. 48 HOUR(S) ADVANCE NOTICE SHALL BE GIVEN.
3. DUCTILE IRON PIPE, FITTINGS AND BOLTS SHALL RECEIVE A THOROUGH EXTERIOR COATING OF BITUMINOUS COATING AS SPECIFIED IN A.N.S.I. SPECIFICATIONS A21.51.
4. ALL EXTERIOR JOINTS OF PRECAST CONCRETE WETWELLS SHALL BE SEALED WITH A RUBBERIZED ASPHALT MEMBRANE TAPE. TAPE SHALL BE PERM-A-BARRIER BY W.R. GRACE, ELASTOPLY BY KARNAK OR EQUAL.
5. ALL ANNULAR OPENINGS IN CONCRETE SHALL BE SEALED WITH NON-SHRINK GROUT AND WATERSTOPS.
6. IF PUMPS TO BE INSTALLED ARE NOT SCREW IMPELLER PUMPS, MOUNTING BASE TO BE RAISED AS RECOMMENDED BY MANUFACTURER TO ACCOMMODATE FUTURE SCREW IMPELLER PUMPS.
7. ENGINEER WILL CONSIDER INSTALLATION OF WET WELL BY CAISSON METHOD.

NO.	BY	DATE	SYMBOL	REVISIONS
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SURVEY DATA:	BOOK NO.		PGS.		
		BY	DATE		BY	DATE
SURVEYED				ALIGNMENT CHECKED		
GRADES CHECKED				RIGHT-OF-WAY CHECKED		
BENCHMARKS				STRUCTURE NOTATION CHECKED		

DESIGNER:	TRT
DRAWN BY:	SLD
DATE:	7/26/01
CHECKED BY:	ABB
DATE:	7/26/01

DESIGN ENGINEER
TIMOTHY R. TAYLOR
FLORIDA REGISTRATION NO.
47667

JEA Building Community

PROJECT NO.	01-471
DATE:	7/26/01
SCALE:	NONE

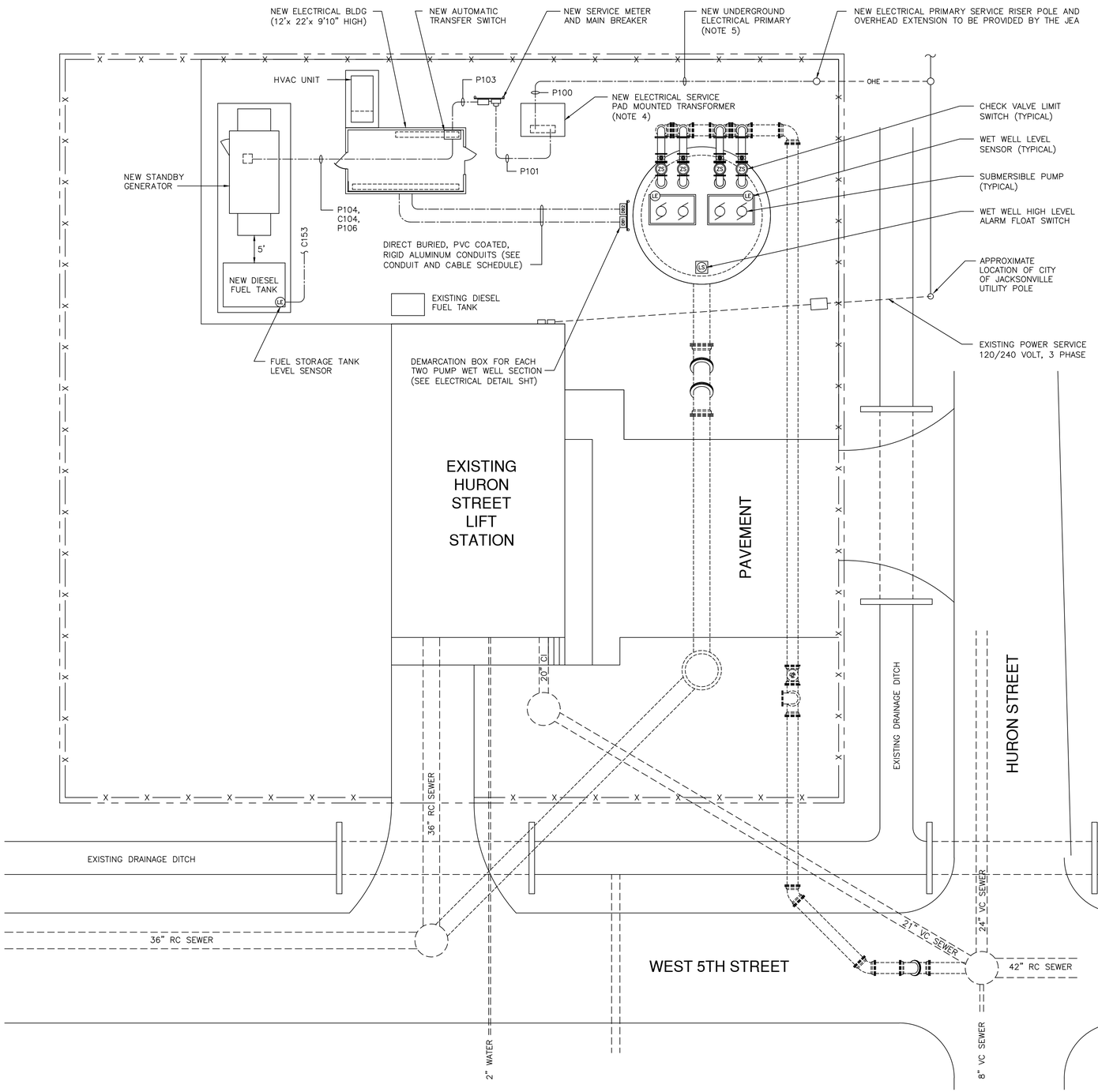
GroundWorks

LIFT STATION
HURON STREET LIFT STATION
ALTERNATIVE

GroundWorks

NO. SHEETS	33
SHEET NO.	7
DRAWING NO.	7

DRAWING NAME: HURONBASE



NOTES:

1. THE CONTRACTOR SHALL INSPECT THE SITE PRIOR TO BID TO EVALUATE EXISTING CONDITIONS. INSTALLATION OF THE NEW FACILITIES WILL REQUIRE FIELD COORDINATION WITH STATION OPERATIONS TO PERMIT MAINTENANCE OF OPERATION DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID THE EXISTING UNDERGROUND UTILITIES, INCLUDING PROCESS PIPING, WATER LINES, ELECTRICAL CONDUITS, TELEPHONE, ETC. HAND EXCAVATION MAY BE REQUIRED IN CONGESTED AREAS WHERE THE EXACT LOCATION OF ALL UTILITIES IS UNKNOWN AND SURFACE LOCATION IS NOT PRACTICAL. LOCATIONS SHOWN FOR THE EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. NOT ALL OF THE EXISTING UNDERGROUND UTILITIES ARE SHOWN. FIELD ADJUST LOCATIONS OF THE NEW FACILITIES TO ACCOMMODATE THE EXISTING SITE CONDITIONS.
3. PROVIDE NEW ELECTRICAL SERVICE IN ACCORDANCE WITH ALL JEA POWER UTILITY COMPANY REQUIREMENTS, INCLUDING NEW SERVICE METERING, METER ENCLOSURE, METER MOUNTING SYSTEM, ETC.
4. THE NEW ELECTRICAL SERVICE PAD MOUNTED TRANSFORMER AND PRE-CAST TRANSFORMER PAD SHALL BE PROVIDED BY THE JEA. THE CONTRACTOR SHALL INSTALL THE TRANSFORMER PAD, BOLLARDS, METERING, PRIMARY CONDUITS ETC. IN ACCORDANCE WITH JEA REQUIREMENTS.
5. PROVIDE 2-4" SCH 40 PVC CONDUITS WITH LONG RADIUS ELLS, AND MINIMUM 42" COVER, FROM THE NEW TRANSFORMER TO NEW SERVICE RISER POLE, AND TERMINATE PER JEA REQUIREMENTS.
6. PROVIDE ELECTRICAL SYSTEM GROUNDING GRID (MAX. 10 OHMS) AND UL MASTER LABEL LIGHTNING PROTECTION SYSTEM FOR THE NEW ELECTRICAL BUILDING, INCLUDING GROUND RODS AT EACH LIGHTNING PROTECTION SYSTEM DOWN CONDUCTOR, AND AT EACH CORNER OF THE GENERATOR/FUEL STORAGE TANK PAD. INTERCONNECT EACH SYSTEM GROUND ROD WITH A CONTINUOUS #4/0 COPPER COUNTERPOISE LOOP. BOND SERVICE ENTRANCE EQUIPMENT, POWER DISTRIBUTION EQUIPMENT, GENERATOR AND STORAGE TANK TO THE LOOP COUNTERPOISE.
7. ALL EXTERIOR MATERIAL AND INSTALLATION SHALL BE SUITABLE FOR AND IN ACCORDANCE WITH THE SPECIFICATIONS FOR "CORROSIVE ATMOSPHERES".

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SURVEYED				ALIGNMENT CHECKED		
GRADES CHECKED				RIGHT-OF-WAY CHECKED		
BENCHMARKS				STRUCTURE NOTATION CHECKED		

DESIGNER:	WDL
DRAWN BY:	ATM
DATE:	05/15/01
CHECKED BY:	TRT
DATE:	05/15/01

DESIGN ENGINEER
WD LASSETTER, PE
FLORIDA REGISTRATION NO.
37971

JEA Building Community

PROJECT NO.	01-471
DATE:	07/25/01
SCALE:	AS SHOWN

GroundWorks

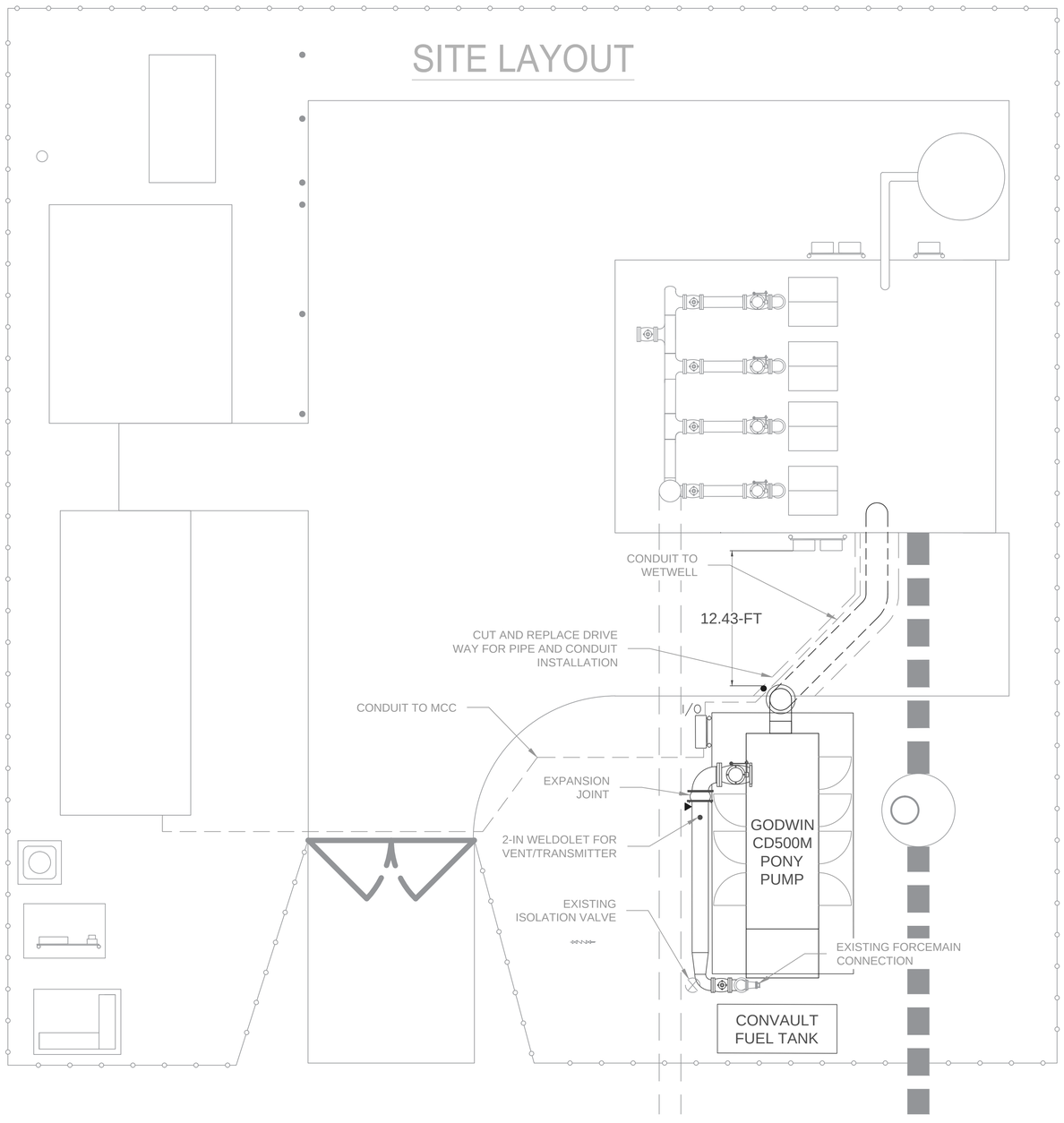
HURON STREET LIFT STATION ELECTRICAL SITE PLAN

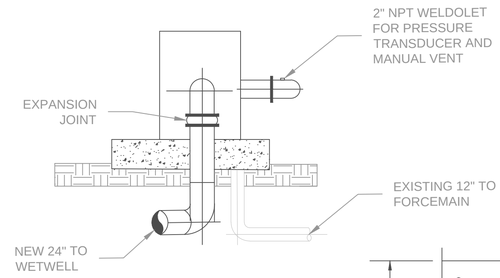
GroundWorks

NO. SHEETS	33
SHEET NO.	16
DRAWING NO.	16

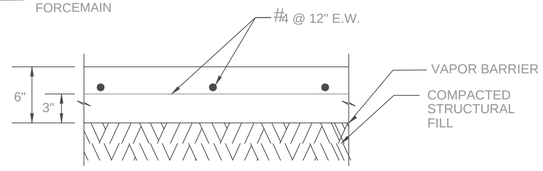
DRAWING NAME: 292E02S5.DWG

SITE LAYOUT

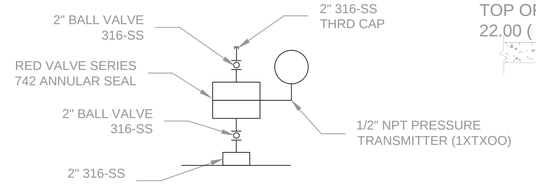




PONY PUMP
END VIEW



SLAB ON GRADE DETAIL

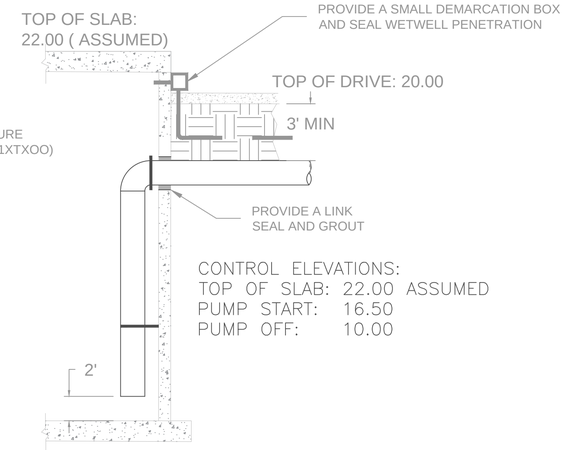


MANUAL VENT AND
PRESSURE TRANSMITTER
DETAIL

▲ PIPE SUPPORT LOCATION

— PIPE FLANGE LOCATION

GODWIN CD500M IS A 6000-GPM BYPASS PUMP W/24-IN SUCTION AND 18-IN DISCHARGE. EXISTING FORCEMAIN CONNECTION IS 12-IN. FOUNDATION IS 13'X24'X2.5' W/2' IN GROUND.



24" SUCTION WETWELL
PENETRATION DETAIL

CONTROL ELEVATIONS:
TOP OF SLAB: 22.00 ASSUMED
PUMP START: 16.50
PUMP OFF: 10.00

ALL CONTRACTOR PROVIDED MATERIAL SHALL CONFORM TO JEA STANDARDS

NOTES:

1. ALL ABOVE GRADE AND WETWELL PIPING SHALL BE MINIMUM SS-316L SCH 10,
2. ALL FITTINGS SHALL BE FLANGED 316L-SS.
3. BELOW GRADE PIPING SHALL BE SDR 18 PVC PUSH-ON JOINT
4. ROUTE DRAIN PIPING BACK TO WETWELL
5. PLUG VALVE IS CLASS 150 ECCENTRIC PLUG, INSTALL WITH PLUG FACE UP WHEN OPEN
6. PROVIDE SWING CHECK W/ LEVER AND WEIGHT.
7. PROVIDE SINGLE ARCH RUBBER EXPANSION JOINT AT PUMP CONNECTIONS
8. EXACT LOCATION OF WETWELL SUCTION PENETRATION TBD
9. ROUTE CONDUIT ALONG EDGE OF FOUNDATION WHERE POSSIBLE
10. CUT CONCRETE AND INSTALL CONDUIT 18-IN BELOW GRADE FOR RUN TO MCC BUILDING AND WETWELL AS NECESSARY
11. POUR FOUNDATION SLAB WITH FINISHED ELEVATION AT 22.00
12. FOUNDATION SHALL BE 4,000-PSI CONCRETE W/3 LAYERS OF #5 REBAR 12-IN O.C.E.W PROVIDE 2-IN CLR ALL AROUND. SET TOP ELEVATION TO MATCH EXISTING WETWELL TOP ELEVATION.
13. ALL ANCHORING HARDWARE SHALL BE 316SS
14. INSTALL FUEL TANK ON NEW SLAB IN ACCORDANCE WITH NFPA AND COJ CODES AND REGULATIONS. FUEL PIPING SHALL BE 316SS.
15. MOUNT NEW I/O PANEL PER JEA STANDARD DETAIL
16. INSTALL FLOATS AT CONTROL ELEVATIONS
17. GROUND EQUIPMENT TO EXISTING SYSTEM OR ADD ROD(S) PER NEC AND COJ CODE REQUIREMENTS.

REVISIONS

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DESIGN ENGINEER: JOHN W. HURFORD
FLORIDA REGISTRATION NO. 56014

DESIGNER: JWH
DRAWN BY:
DATE: 03/2018
CHECKED BY:
DATE:

JEA Building Community sm

LS-000752
7200 A C SKINNER PARKWAY
PONY PUMP INSTALLATION

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS
SHEET NO. 1
DRAWING NO.

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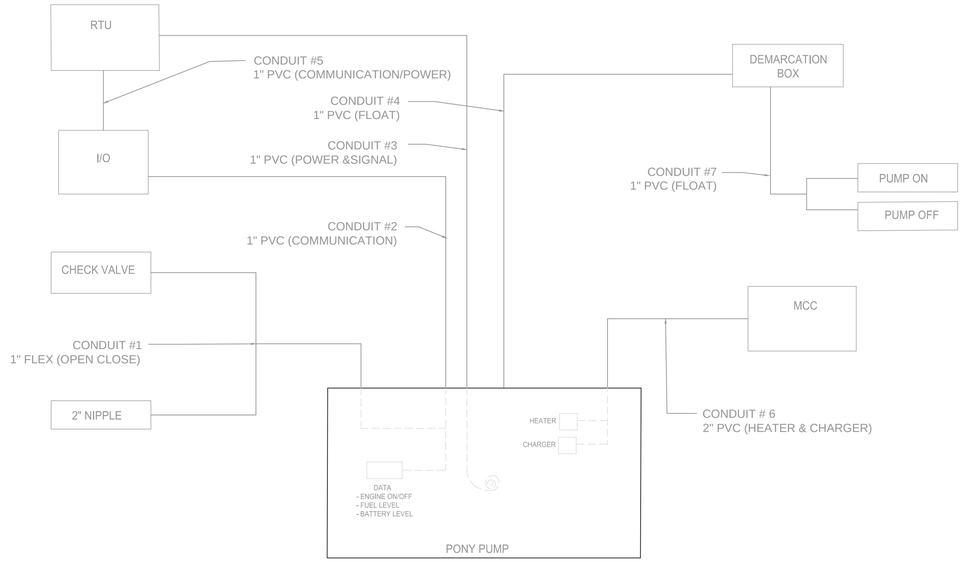


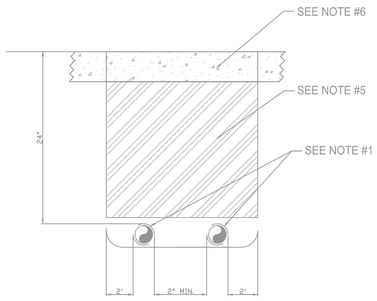
ELECTRICAL SCHEMATIC

CONDUIT SCHEDULE					
CONDUIT #	FROM	TO	SIZE	MATERIAL	NOTES
1	CHECK VALVE	PONY PUMP	1 IN.	PVC	CHECK STAT
2	DISTRIBUTED I/O	PONY PUMP	1 IN.	PVC	I/O
3	RTU	PONY PUMP	1 IN.	PVC	SEC PWR/I/O
4	DEMARCATION	PONY PUMP	1 IN.	PVC	FLOAT STAT
5	DISTRIBUTED I/O	RTU	1 IN.	PVC	COMM/PWR
6	MCC	PONY PUMP	2 IN.	PVC	POWER
7	WET WELL	DEMARCATION	1 IN.	PVC	FLOATS

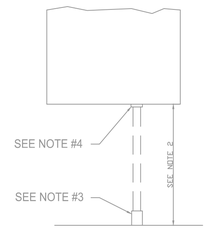
WIRE SCHEDULE			
CONDUIT #	CONDUCTOR SIZE/PART NUMBER	QTY	NOTES
1	18 AWG	2	DISCRETE
1	BELDEN 9463	1	ANALOG
2	18 AWG	24	DISCRETE
2	BELDEN 9463	2	ANALOG
3	12 AWG	2	12VDC SECONDARY POWER
3	18 AWG	6	DISCRETE
4	18 AWG	4	FLOAT
5	SIEMENS FC CAT5 6XV1840-2AH10	1	COMMUNICATION
5	12 AWG	2	24VDC POWER
6	12 AWG	2	CHARGER
6	TO BE SIZED PER CONTRACTOR	2	HEATER
7	PROVIDED BY PUMP MFG.	2	FLOATS

GENERAL NOTES:

1. ALL WORK SHALL COMPLY WITH JEA WATER AND WASTEWATER STANDARDS, SECTION 433, "SUBMERSIBLE SEWAGE PUMPING STATIONS".
2. ALL VALVES TO BE DUCTILE IRON. FITTINGS TO BE 316L-SS OR DUCTILE IRON LINED IN ACCORDANCE WITH JEA WATER AND WASTEWATER STANDARDS, SECTION 429, "WASTEWATER FORCE MAINS".
3. PENETRATIONS INTO WET WELL SHALL BE SEALED w/ EUCOLASTIC BY EUCLID CITEM CO. OR APPROVED EQUAL SEAL.
4. ALL PIPING SHALL BE FLANGED 316 STAINLESS STEEL, (MINIMUM SCH 10, ONE PIECE CONSTRUCTION). WHERE BUTT WELDING OF PIPING IS PRACTICAL, PIPING SHALL BE MINIMUM SCH 20 ALLOWED. ALL NUTS, BOLTS AND ACCESSORIES SHALL BE 316 STAINLESS STEEL.
5. FLOAT, SCADA AND CHARGING CONDUITS TO ENTER PONY PUMP ENCLOSURE AS SPECIFIED BY PUMP MANUFACTURER. COORDINATE WITH JEA GRID COORDINATOR FOR CONNECTION OF CONDUITS TO EXISTING CONTROL PANEL.
6. FLOAT CONDUIT TO CONTAIN FLOAT WIRES CONNECTING FLOATS IN WET WELL TO PONY PUMP.
7. SCADA CONDUIT TO CONTAIN DATA WIRE FROM PONY TO CONTROL PANEL INDICATING RUN/STOP DATA.
8. THE PONY PUMP BATTERY SHALL BE CAPABLE OF PROVIDING CONTINUOUS AND UNINTERRUPTED POWER SUPPLY TO JEA'S SCADA SYSTEM. FOR 12V ENGINE CONFIGURATIONS, THE BATTERY MUST PROVIDE 5 AMPS 12VDC CONTINUOUS TO DC INVERTER LOCATED WITHIN THE RTU PANEL. FOR 24V ENGINE CONFIGURATIONS, THE BATTERY MUST PROVIDE 3 AMPS 24VDC CONTINUOUS TO THE RTU PANEL. CHARGING CONDUIT TO CONTAIN CABLES CAPABLE OF PROVIDING THE REQUIRED VOLTAGE AND AMPERAGE BASED ON THE ENGINE VOLTAGE CONFIGURATION.
9. PONY PUMP SHALL BE EQUIPPED WITH A MAGNETIC CHECK VALE WITH LIMIT SWITCH TO INDICATE THAT THE CHECK VALVE IS CLOSED. THE LIMIT SWITCH SHALL BE MANUFACTURED BY GO SWITCH LIMIT SWITCH AND BE MODEL #1.
10. IF THE EXISTING CONCRETE SLAB IS OF SUFFICIENT THICKNESS TO MEETS THE PONY PUMP MANUFACTURE'S REQUIREMENTS, THEN THE PONY PUMP SHALL BE INSTALLED ON THE EXISTING SLAB. IF NOT, THEN THE EXISTING SLAB SHALL BE CUT TO THE REQUIRED DIMENSION OF THE NEW PAD AND A NEW CONCRETE PAD POURED IN PLACE. UNLESS SPECIFIED OTHERWISE, OR APPROVED BY JEA, THE FINISHED GRADE OF THE NEW PAD SHALL MATCH THE GRADE OF THE EXISTING SURROUNDING CONCRETE.
11. PONY PUMP SYSTEM SHALL BE SECURED TO THE RESPECTIVE CONCRETE FOUNDATIONS PER PUMP MANUFACTURERS REQUIREMENTS.
12. ALL DRAIN PORTS FROM THE PONY PUMP SHALL BE PIPED THROUGH A SINGLE PIPE INTO THE WET WELL.THE PIP SHALL BE SIZED BY THE PUMP MANUFACTURER AND SHALL BE NO LESS THAN 1" SCHEDULE 40 PVC.WHERE INSTALLED IN NO-CONCRETE AREAS, THE PIPE SHALL BE BURIED AND CORED INTO THE SIDE OF THE WET WELL. WHERE AN EXISTING CONCRETE SLAB PREVENTS BURYING THE DRAIN PIPE, THE PIPE SHALL BE LAID ON, AND SECURED TO, THE CONCRETE SLAB.THE ROUTE THE PIPE SHALL BE UNDER AND FOLLOWING THE SUCTION PIPING TO AVOID CREATING A TRIP HAZARD AND SHALL ENTER THE TOP SLAB OF THE WET WELL.WHEN A CORE IS REQUIRED FOR THE SUCTION PIPE, CORE A LARGE ENOUGH HOLE TO ACCOMMODATE THE DRAIN AS WELL.WHERE A SUCTION PIPE ALREADY EXISTS, CORE A NEW HOLE INTO THE TOP SLAB AS CLOSE AS POSSIBLE TO THE EXISTING SUCTION PIPE AND REPAIR THE HOLE AS IN INDICATED ON THE DESIGN DRAWINGS.
13. PONY PUMP SHALL BE EQUIPPED WITH A PRESSURE TRANSDUCER ON THE OUTLET. THE TRANSDUCER IS TO BE 2-WIRE LOOP POWERED 2-20mA ANALOG OUTPUT WITH A RANGE OF 0-100PSIG, ONE SERIES MANUFACTURED BY UNITED ELECTRIC CONTROLS AND MODEL NUMBER 1XTX00.
14. ALL CONDUITS COMING FROM THE WET WELL TO BE SEAL WITH JEA WATER AND WASTEWATER STANDARDS, SECTION 433, "SUBMERSIBLE SEWAGE PUMPING STATIONS".
15. WET WELL CORES OF EXISTING LININGS TO BE REPAIRED BY OTHER.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ANY BYPASS PUMPING AND DISPOSAL WHICH MAY BE REQUIRED DURING THE PROJECT.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FILLING THE PONY PUMP FUEL TANK PRIOR TO COMPLETION.
18. ALL PANELS THAT WILL BE INSTALLED OVER CONCRETE SHALL CORE BORE HOLES INTO THE CONCRETE UNLESS NEAR THE EDGE OF THE SLAB THEN CUTTING A SQUARE OUT AND REPLACING WITH NEW CONCRETE IS ACCEPTABLE.



MULTIPLE CONDUIT RUN



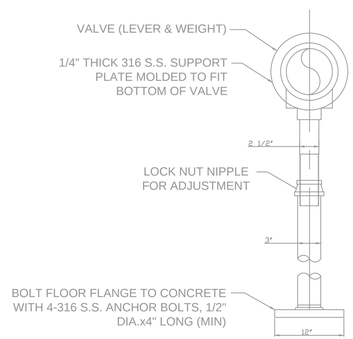
GENERAL ABOVE GROUND CONDUIT RUN SHOWING COUPLING AND CONNECTOR

CONDUIT NOTES:

1. UNDERGROUND CONDUIT SCHEDULE 80 PVC 1" MIN.
2. CONDUIT ABOVE GROUND TO CABINETS SCHEDULE 80 PVC NEMA TC-2 SUNLIGHT RESISTANT 1.5" MIN.
3. UNDERGROUND PVC COUPLED TO ABOVE GROUND PVC WITH A PVC COUPLING. MANUFACTURER: CARLON
4. ABOVE GROUND PVC CONNECTED TO RTU AND MCC USING A PVC CONNECTOR.
5. BACK FILL SOIL TO EXISTING GRADE (IF TRENCHING UNDER CONCRETE SLAB MUST BACK FILL WITH COMPACTED SUBGRADE UNDER CONCRETE SLAB, 95% MAX. DENSITY).
6. REPAIR CONCRETE SLAB TO MATCH EXISTING SLAB THICKNESS.

ABOVE AND UNDERGROUND ELECTRICAL RACEWAY DETAILS

NOT TO SCALE



NOTES:

1. ALL SUPPORT MATERIALS SHALL BE 316 S.S. AFTER FINAL HEIGHT ADJUSTMENT.
2. FOR FORCE MAINS LARGER THAN 10" SIZE, THE COMPONENTS OF THE VALVE SUPPORT SHALL BE ENLARGED AS APPROVED BY JEA.
3. THERE SHALL BE TWO PIPE STANDS FOR THE SUCTION PIPE AND TWO PIPE STANDS FOR THE DISCHARGE PIPE FOR A TOTAL OF FOUR PIPE STANDS. COORDINATE WITH THE GRID COORDINATOR ON THE EXACT LOCATION OF EACH PIPE STAND.
4. PROVIDE A 1'X1'X1' CONCRETE PAD TO SECURE THE PIPE SUPPORT TO UNLESS THERE IS AN EXISTING CONCRETE PAD THAT CAN BE UTILIZED.

VALVE/PIPE SUPPORT DETAIL

NOT TO SCALE

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DESIGN ENGINEER | FLORIDA REGISTRATION NO.

DESIGNER:
DRAWN BY:
DATE:
CHECKED BY: JOHN W. HURFORD
DATE: 3/1/62018

JEA Building Community sm

PONY PUMP INSTALLATION
ELECTRICAL SCHEMATIC & SCHEDULE
GENERAL NOTES AND DETAILS

PROJ. NO.
DATE:
SCALE: NTS

NO. SHEETS
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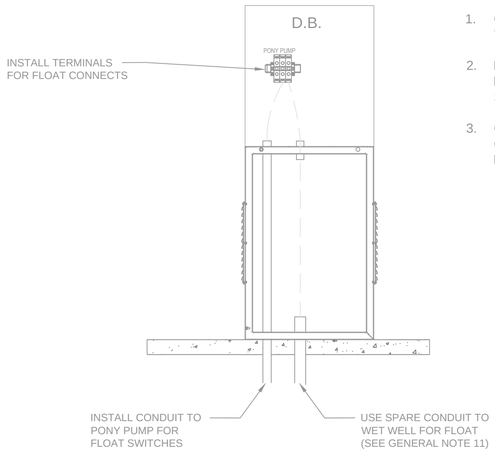


FLOAT WIRING

NOT TO SCALE

CONDUIT NOTES:

1. COORDINATE WITH THE GRID COORDINATOR ON WIRING POWER, NEUTRAL, GROUND AND CHARGE.
2. PONY PUMP DISTRIBUTED I/O PANEL WILL BE PROVIDED BY JEA WITH AN ELECTRICAL SCHEMATIC
3. CONVERTER WILL BE INSTALLED BY OTHERS. CONTRACTOR WILL INSTALL WIRES FOR IT AND HAVE THEM TERMINATED IN THE PANEL.

GROUNDING NOTES

1. PROVIDE A COMPLETE ELECTRICAL GROUNDING SYSTEM WITH A MEASURED GROUND RESISTANCE OF 10 OHMS OR LESS. IF THE STATION IS EQUIPPED WITH A GROUNDING SYSTEM OF 10 OHMS OR LESS THEN CONNECT PONY PUMP GROUNDING INTO THE EXISTING SYSTEM.

2. GROUNDING COMPONENTS AND MATERIALS SHALL BE NEW AND UNDAMAGED.

3. INSULATED GROUND CONDUCTOR SHALL BE SOFT DRAWN, TIN PLATED, STRANDED COPPER CONFORMING TO THE REQUIREMENTS OF UL 83. INSULATED GROUND CONDUCTOR SHALL BE TYPE TW OR THW, AND GREEN COLORED INSULATION. MINIMUM SIZE FOR INSULATED GROUND CONDUCTORS, REGARDLESS OF APPLICATION SHALL BE #12 AWG.

4. BURIED GROUND LOOP CONDUCTORS
   - 4.1. GROUND LOOP CONDUCTOR SHALL BE BARE #2/0 AWG, SOFT DRAWN, TIN PLATED STRANDED COPPER CONDUCTOR UNLESS OTHERWISE NOTED.
   - 4.2. BARE GROUND CONDUCTORS BELOW GRADE, SHALL HAVE A MINIMUM OF 18 INCHES AND A MAXIMUM OF 30 INCHES COVER FROM FINISHED GRADE. BARE GROUND CONDUCTORS UNDER FOUNDATIONS OR SLABS, SHALL HAVE A MINIMUM OF 6 INCHES OF EARTH COVER BETWEEN THE TOP OF CONDUCTOR CONDUCTOR AND THE FOUNDATION OR SLAB.
   - 4.3. BARE GROUND CONDUCTORS THAT PENETRATE THROUGH EXPOSED SLABS OR WET WELL WALL, SHALL DO SO THROUGH A 3/4" x 12" (MIN), SCHED 40 PVC SLEEVE. WITH GROUND WIRE CENTERED IN SLEEVE, FILL TOP OF SLEEVE ALL WIRES PROTRUDING TO THE SURFACE SHALL BE TIN PLATED.
   - 4.4. BARE GROUND CONDUCTOR SHALL BE DIRECTLY BURIED IN EARTH; TO WITHIN 24 TO 36 INCHES FROM BASE OF STRUCTURES OR EQUIPMENT IDENTIFIED FOR GROUNDING.

5. GROUND RODS
   - 5.1. SHALL BE COPPER CLAD MIN 13MIL, COLD DRAWN CARBON STEEL MANUFACTURED IN ACCORDANCE WITH UL 467, WITH THE COPPER CLADDING BONDED TO THE STEEL ROD BY ELECTROLYTIC, OR MOLTEN WELDING PROCESS. GROUND RODS SHALL HAVE A CONICAL TAPER ON PENETRATING END. EACH GROUND ROD SHALL BE 10-FOOT BY 3/4 INCH DIAMETER SECTIONS.
   - 5.2. THERE SHALL BE A MINIMUM OF 2 GROUND RODS THAT SHALL BE DRIVEN TO A MINIMUM OF 60FT EACH. IF GROUND RODS ARE UNABLE TO BE DRIVEN 60FT OR 10 OHMS IS NOT ACHIEVED THEN ADDITIONAL GROUND RODS MUST BE DRIVEN TILL THE 10 OHMS IS REACHED. IF AN ADDITIONAL GROUND ROD IS REQUIRED IT MUST BE DRIVEN IN A CORNER THAT DOESN'T HAVE A ROD.
   - 5.3. GROUND RODS SHALL BE CONNECTED BY COMPRESSION COUPLINGS, SCREW COUPLINGS WILL NOT BE ACCEPTED.

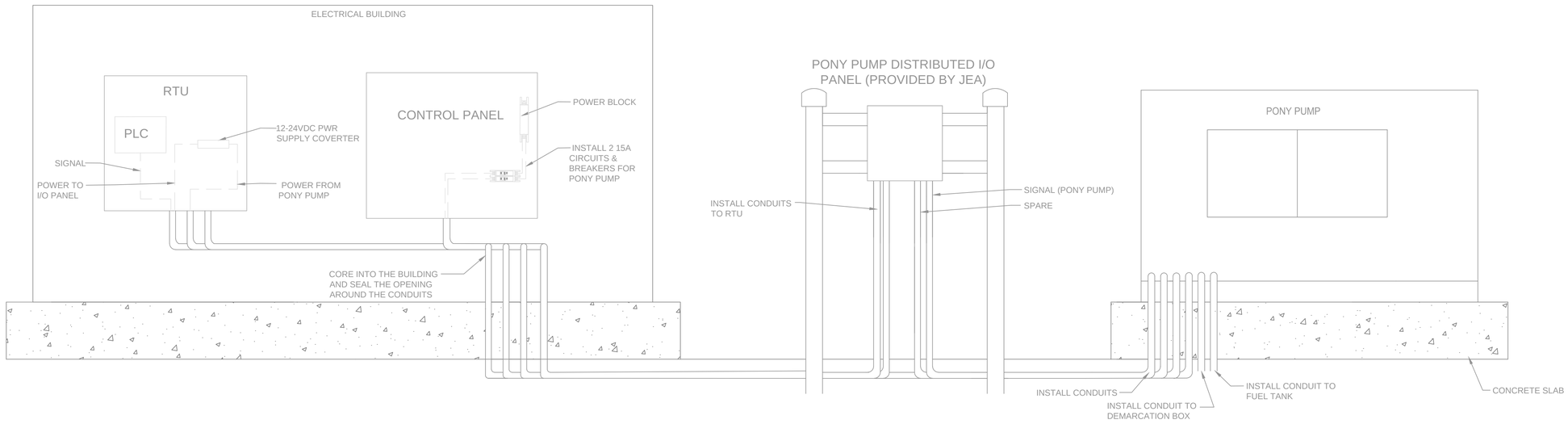
6. GROUNDING SYSTEM HARDWARE
   - 6.1. GROUNDING SYSTEM HARDWARE, INCLUDING CLAMPS, CONNECTORS, BOLTS, WASHERS, AND NUTS, SHALL BE TIN PLATED COPPER.
   - 6.2. SPLICES, JOINTS, AND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC OR IRREVERSIBLE COMPRESSION TYPE. THREADED OR BOLTED COUPLINGS ARE NOT ACCEPTABLE EXCEPT WHERE NOTED IN GROUNDING DETAILS.
   - 6.3. PREPARE CONDUCTORS AND CONNECTORS PER MANUFACTURERS REQUIREMENTS. REMAKE CONNECTIONS THAT FAIL MANUFACTURER'S RECOMMENDED TESTS.
   - 6.4. GROUNDING CONNECTIONS SHALL ENCOMPASS 100 PERCENT OF THE GROUND CONDUCTOR AND CONDUCTOR ENDS.
   - 6.5. GROUND LUGS SHALL BE SINGLE OR TWO-HOLE, HEAVY-DUTY, TIN PLATED COPPER BARS CONFORMING TO THE REQUIREMENTS OF IEEE 837 AND UL 467. TWO-HOLE GROUND LUGS SHALL HAVE NEMA CENTERLINE HOLE SPACING. GROUND LUGS USING AN EXOTHERMIC PROCESS SHALL BE SIMILAR TO TYPE LA AS MANUFACTURED BY ERICO.
   - 6.6. MAKE CABLE CONNECTIONS TO BUS BARS USING HIGH-COMPRESSION LUGS. GROUND LUGS USED WITH THE COMPRESSION PROCESS SHALL BE TYPE YGHA AS MANUFACTURED BY BURNDY ELECTRICAL

7. GROUNDING BY USE OF ANCHOR BOLTS, AGAINST GASKETS, ON PAINTED OR VARNISHED SURFACES, OR ON BOLTS HOLDING REMOVABLE ACCESS COVERS WILL NOT BE ACCEPTABLE.

8. GROUND RESISTANCE SHALL BE CERTIFIED BY AN INDEPENDENT GROUNDING SYSTEM TESTING ORGANIZATION. TESTING SHALL BE DONE AT EACH TEST WELL USING THE 3-POINT FALL OF POTENTIAL METHOD. THIS DOCUMENT MUST BE SUBMITTED AT THE TIME OF STARTUP FOR FINAL ACCEPTANCE.

9. NO CHEMICALS SHALL BE USED TO REDUCE THE RESISTANCE UNLESS APPROVED BY JEA.

10. A MINIMUM OF 10 OHMS OF SHALL BE GUARANTEED BY THE CONTRACTOR FOR 3 YEARS FROM THE SITES ACCEPTANCE. IF THE RESISTANCE FAILS IN THIS TIME THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDING ADDITIONAL GROUND RODS AT THE CONTRACTORS EXPENSE.



PONY PUMP WIRING

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ELECTRICAL SHEET

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DESIGNER:
DRAWN BY: LLOYD HENRY
DATE: 03/08/18
CHECKED BY: CHRIS REICHART
DATE:

DESIGN ENGINEER

FLORIDA REGISTRATION NO.

JEA Building Community sm

PONY PUMP INSTALLATION
ELECTRIC BUILDING
ELECTRICAL SHEET W/GROUNDING NOTES

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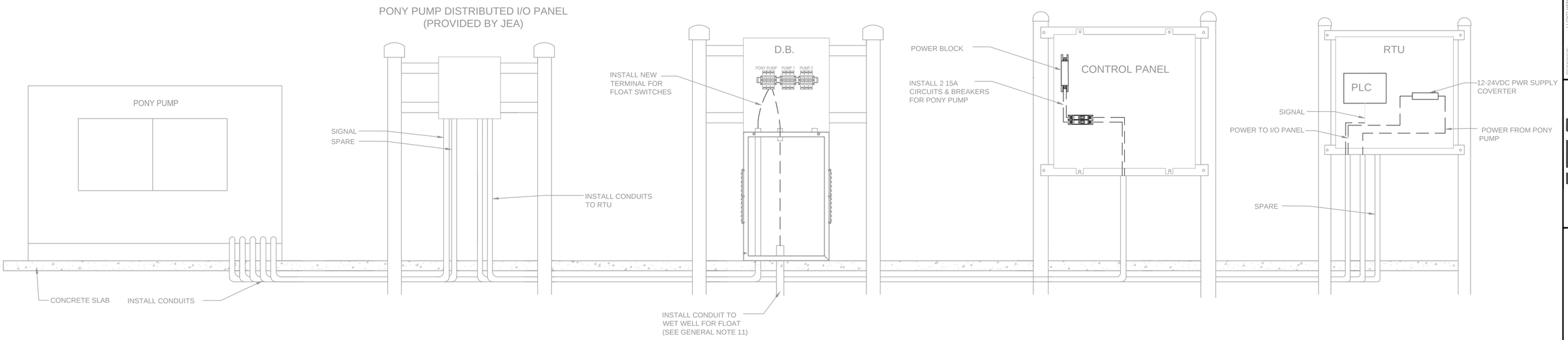

PONY PUMP WIRING

NOT TO SCALE

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ELECTRICAL SHEET

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DESIGN ENGINEER

FLORIDA REGISTRATION NO.

DESIGNER: LLOYD HENRY
DRAWN BY: LLOYD HENRY
CHECKED BY: CHRIS TIERCHAFFT
DATE:

JEA Building Community sm

PONY PUMP INSTALLATION
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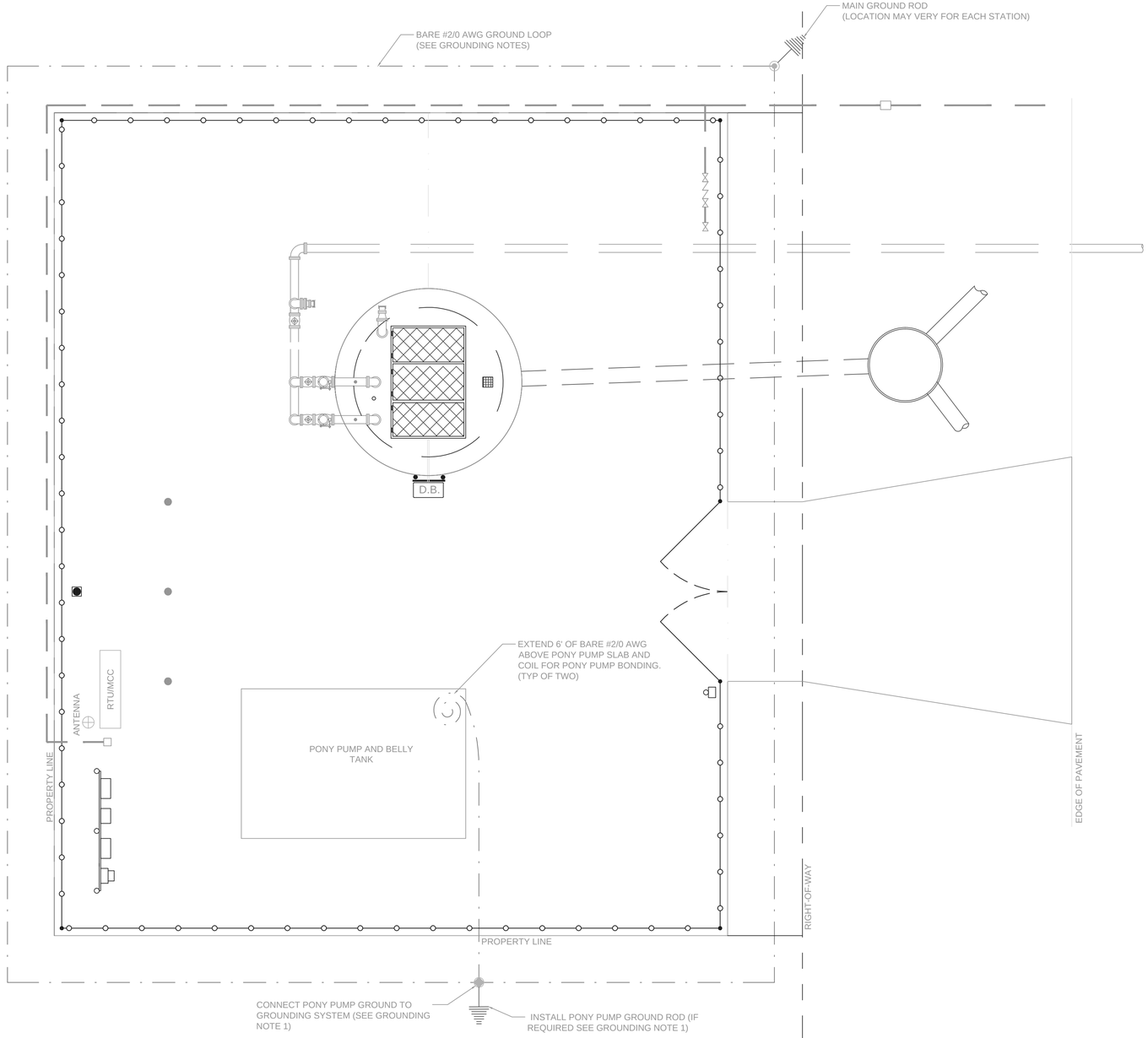

GROUNDING SYMBOL LEGEND

- GROUND CONDUCTOR (SIZE AS REQUIRED BY NOTES)
- EXOTHERMIC OR COMPRESSION CONNECTION
- GROUND ROD AND CONNECTION
- GROUND TEST WELL WITH GROUND ROD
- GROUND CONDUCTOR COILED ABOVE GRADE OR SLAB FOR FUTURE CONNECTION

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PONY PUMP GROUNDING SITE PLAN

NOT TO SCALE

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DESIGNER: LLOYD HENRY
DRAWN BY: LLOYD HENRY
CHECKED BY: CHRIS REICHART
DATE:

DESIGN ENGINEER

FLORIDA REGISTRATION NO.

JEA Building Community sm

PONY PUMP INSTALLATION
GROUNDING SITE PLAN
TYPICAL NOT SITE SPECIFIC

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