

**CITY OF BATON ROUGE
PARISH OF EAST BATON ROUGE
DEPARTMENT OF ENVIRONMENTAL SERVICES**

June 16, 2016

ADDENDUM NO. 2

TO: ALL BIDDERS

SUBJECT: **HOOPER ROAD PUMP STATION PROJECT
CITY-PARISH PROJECT NO. 10-PS-GS-0048**

ORIGINAL BID DATE: Tuesday, June 7, 2016 at 2:00 p.m.

CURRENT BID DATE: Tuesday, June 28, 2016 at 2:00 p.m.

The following revisions shall be incorporated in and take precedence over any conflicting part of the original contract document:

PART 1 – UNIFORM CONSTRUCTION BID FORMS:

1. For paper sealed bidders, with reference to page UCBF 1 of 4 of Part 1, Uniform Construction Bid Forms, the Bidder shall indicate the receipt of this addendum in the space provided. For online Bid Express bidders, an acknowledgement of this addendum will be prompted by the electronic bidding program prior to formally submitting the bid. Failure to indicate the receipt of this addendum shall be cause for the bid to be rejected.
2. Replace Unit Price Form with the attached Revised Unit Price Form (dated 06/16/2016). The original Unit Price Form was 7 sheets and the Revised Unit Price Form is 8 sheets. This Revised Unit Price Form **MUST** be used by all Bidders for this project. The UCBF on BidExpress.com has been updated to reflect the changes on the attached UCBF. Failure to submit on the revised Unit Price Form shall be cause for the bid to be rejected.
3. Acting in accordance with Louisiana Revised Statutes 38:2212, (C)(1), the bid opening date is postponed by seven (7) calendar days. **Bids will be opened at 2:00 PM Tuesday, June 28, 2016 in Room 806 of City Hall**, in lieu of 2:00 PM Tuesday, June 21, 2016.

PART 2 – CONTRACT DOCUMENTS AND SPECIAL PROVISIONS:

1. Replace Unit Price Form with the attached Revised Unit Price Form (dated 06/16/2016). The original Unit Price Form was 7 sheets and the Revised Unit Price Form is 8 sheets. This Revised Unit Price Form **MUST** be used by all Bidders for this project. The UCBF on BidExpress.com has been updated to reflect the changes on the attached UCBF. Failure to submit on the revised Unit Price Form shall be cause for the bid to be rejected

Addendum No. 2

Dated: June 16, 2016

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2. Acting in accordance with Louisiana Revised Statutes 38:2212, (C)(1), the bid opening date is postponed by seven (7) calendar days. **Bids will be opened at 2:00 PM Tuesday, June 28, 2016 in Room 806 of City Hall**, in lieu of 2:00 PM Tuesday, June 21, 2016.

PUMP STATIONS SITE VISITS

For those interested in visiting any of the pump station sites for observation, DPW staff will be on hand at Pump Station 207 (15440 Red Maple Dr.) – **Tuesday, June 21 for 9:00 AM**. Visits to subsequent pump station sites on this day will be at the request of the attending Contractors.

Please note that no questions will be answered during site visits. Please submit questions in writing and in accordance with the Notice to Contractors by COB Tuesday, June 21, 2016.

CONSTRUCTION PLANS:

1. REPLACE Sheet CG01 with attached CG01R
2. REPLACE Sheet SG05 with attached SG05R
3. REPLACE Sheet A-E03 with attached A-E03R
4. REPLACE Sheet F-C01 with attached F-C01R
5. REPLACE Sheet F-C02 with attached F-C02R
6. REPLACE Sheet F-S02 with attached F-S02R.
7. REPLACE Sheet M-C03 with attached M-C03R
8. REPLACE Sheet M-E03 with attached M-E03R
9. REPLACE Sheet P-C01 with attached P-C01R
10. REPLACE Sheet P-C02 with attached P-C02R
11. REPLACE Sheet P-E08 with attached P-E08R
12. REPLACE Sheet P-I02 with attached P-I02R
13. REPLACE Sheet P-M01 with attached P-M01R
14. REPLACE Sheet P-M02 with attached P-M02R
15. REPLACE Sheet P-M03 with attached P-M03R
16. REPLACE Sheet Q-C01 with attached Q-C01R
17. REPLACE Sheet Q-C02 with attached Q-C02R
18. REPLACE Sheet Q-E08 with attached Q-E08R
19. REPLACE Sheet Q-I02 with attached Q-I02R
20. REPLACE Sheet Q-I03 with attached Q-I03R
21. REPLACE Sheet Q-I04 with attached Q-I04R
22. REPLACE Sheet Q-M01 with attached Q-M01R

23. REPLACE Sheet Q-M02 with attached Q-M02R
24. REPLACE Sheet R-C01 with attached R-C01R
25. REPLACE Sheet R-C03 with attached R-C03R
26. REPLACE Sheet R-E08 with attached R-E08R
27. REPLACE Sheet R-I02 with attached R-I02R
28. REPLACE Sheet R-I03 with attached R-I03R
29. REPLACE Sheet R-I04 with attached R-I04R
30. REPLACE Sheet R-I05 with attached R-I05R
31. REPLACE Sheet R-I06 with attached R-I06R
32. REPLACE Sheet R-M01 with attached R-M01R
33. REPLACE Sheet R-M02 with attached R-M02R
34. REPLACE Sheet R-M03 with attached R-M03R

SPECIAL PROVISIONS

SECTION 44 31 31 – ODOR CONTROL BIOTOWER EQUIPMENT

DELETE paragraph 2.04-E.1 and replace it with the following:

1. Capacity: As recommended by the manufacturer

COMMENTS & QUESTIONS:

1. Please provide the force main material for the existing pipes at PS 509, 510AA and PS 511. If the tie ins are on PCCP it is unlikely the contractor will be able to make the connection fast enough so the system doesn't backup.

In general, existing pipe materials for force mains 24” and under are Ductile Iron or PVC. Pipe material for force mains greater than 24” could be PCCP.

2. Please provide the system curves for these stations.

System Curves have been provided as Exhibit 1 in this addendum.

3. First, in the Odor Control Biotower Equipment Spec (Division 44), within the recirculation system section (2.04) the spec calls for a recirculation pump with a capacity of 95 gpm minimum. For these systems, the recirculation pump's flow rate required is significantly less. A 95 gpm minimum pump would be much higher than necessary for a system of this size. It is requested that the biotrickling filter vendor be allowed to size the pump as necessary for the process.

The contractor shall follow the manufacturer's recommendation for the minimum size of the recirculation pump. The contract documents have been revised in this addendum.

4. Sheet Q-C02 & 3; the pump discharge is 14", the ppg coming off the end of the pump appears to enlarge, the vertical riser does not show a pipe size; however, the ppg above the station appears to be 12". Where does the discharge change to 12" and what is the size of the riser ppg?

See revised sheets in this addendum.

5. Sheets P-M02 & Q-M02, the ppg above these stations are essentially the same with the exception of the immediate discharge from the pumps and the piping size once the force main leaves the station. Fitting "A" is 16" x 12" reducing cross, it connects to fitting "B", a 16" x 12" eccentric reducer. Fitting "A" would have to be 16" x 16" x 16" x 12" to be able to use the eccentric reducer or fitting "B". Can we change fitting "B" to a 12' x 1' 0" F x F DI spool thereby eliminating the use of an "odd ball" cross?

No.

6. Sheet P-C01 shows the pump station discharge force main extending approximately 193' to the point illustrated by Tie-in Detail No. 1. Which bid item does this 24" force main piping on the bid form belong with? Also, which bid item do the fittings for the 24" force main need to be included with?

See revised bid items and added notes on the site plan sheets in this addendum.

7. The standard details call for 316SS fasteners within the wet well. Once we are out of the wet well, either above ground or in a valve box, can we use 304SS on the DI piping bolt ups?

No. All fasteners are to be 316 stainless steel.

8. At PS511 the existing casing pipe shall be reused for the new 36" carrier pipe. The existing carrier pipe is 30".

- a. What is the size of the existing casing pipe?

The existing casing is 48" in diameter.

- b. Will the existing casing pipe be of sufficient size for the increased pipe size?

Yes.

- c. Is the existing 30" carrier pipe grouted into the casing pipe? If yes, how should we demolish this pipe?

To the best of our records, the carrier pipe is not grouted in. Contractor to verify condition of casing prior to beginning work at this site. See Record Drawings for existing casing included as Exhibit 2.

9. Almost all of the pump stations installed during the last few years have utilized a caisson method for installation. If the contractor provides all engineering, will the contractor be allowed to install the 6 pump stations using the caisson method?

This method will be considered as long as the contract documents are followed.

10. What is the cost of the six generators furnished by the owner? We do not need the exact number but just a ball park figure to give to our insurance company.

The estimated value of the generators to be furnished by the owner are the following: PS 086: \$30,000, PS 207: \$30,000, PS285 \$30,000, PS509: \$70,000, PS510AA: \$70,000, PS511: \$150,000

11. The Notice to Contractors documents States the Contractor shall be responsible to conform to the terms of the Consent Decree and then gives a web address to the Consent Decree documents. However, this web address is nonresponsive and we continue to get an error message when we try to access. Can the program please print and provide the pertinent documents in the next addendum? On the SSO Website there are over 19 hyperlinks to over 900 pages of documents relating to the Consent Decree. Which of these documents pertain to this project? In the event of conflict between these documents and the plans and specs which shall govern? What about conflicts within the Consent Decree documents? It is suggested that Program provide more specifics as to how and why this project is tied to these Consent Decree Documents.

The Consent Decree documents on the web address have been confirmed to be active. The Consent Decree requires that the C-P notify all parties involved that the C-P is under a consent decree, that the project is directly related to the said Consent Decree, and to make the Consent Decree documents available to those parties involved.

12. Is a project sign required at each station location?

No. Two (2) project signs are required per the contract documents.

13. Drawing F-C01 and F-C03 shows existing hog wire fence (down) in the access servitude. Is this fence to be replaced along the newly cleared servitude line?

Not unless needed for construction

14. Drawing F-C03 shows existing wooden lattice fence in the access servitude. Is this fence to be replaced along the newly cleared servitude line?

Not unless needed for construction

15. Drawing F-C02 notes "existing shed to be relocated beyond servitude line (coordinate with owner)." Is the contractor responsible for relocating the shed?

See revised plan sheet in this addendum.

16. Are the valve pit and wet well walls of pump station 207 detailed on F-S02 to be precast?

Yes

17. Drawing F-S02 shows the column footing as 1' thick. Drawing S-G04 shows the column footing as 1'-6" thick. Please clarify.

The footing is 1'-6" thick. See revised plan sheet in this addendum.

18. Drawing F-C01 notes "Req'd Limits of Fee Title Property Acquisition." Is the contractor responsible to acquire property in relation to this note?

No. The Owner has acquired the property as shown on the Servitude Maps. See revised plan sheet in this addendum

19. Drawing F-C01 notes "Req'd muck existing ditch then armor ditch with flexible revetment as per C.P.S; 704-01." C.P.S 704-01 provides details for a sacked concrete revetment and a stone or riprap revetment. Please clarify as to which revetment is required.

Per Section 704, contractor has the option to use stone, cellular concrete block, or sacked concrete.

20. Are the 8" thick pump station driveways to be un-reinforced?

The driveway should have WWF placed at mid-point 6x6 –W4.7x W4.7.

21. Are the 6" pump station apron slabs to be un-reinforced?

The slab should have WWF placed at mid-point 6x6 –W4.7x W4.7.

22. Bid items 804000B and 804040B account for 490 LF of 6" force main at PS207. Drawing F-C02 notes 561 LF of 6" force main. Please clarify.

Bid item 804040B includes extra linear feet to cover any unexpected changes in route during construction, if needed. The actual 6" force main quantities as shown on the plans are 100 lf on site (included in lump sum pump station bid item) and 461 lf off site (covered under bid item 804040B).

23. Drawing SG05, equipment pad at grade detail, shows a slab thickness of 1'-0" in the middle. The above grade dimension at the footings is 6". Please clarify the equipment pad thickness.

The equipment pad is 1'-0" thick and the top of the pad should be 6" above the existing or finish grade.

24. Drawing CG01, General Yard Piping and Utilities Notes, note 8 and pump station force main tie-in details state "All sewer force mains are to be restrained." Bid item 804000B is for unrestrained sewer force main. Please clarify.

All force mains are to be restrained. See revised bid items in this addendum.

25. Drawing P-C01, Q-C01 and R-C01 state at force main tie-in locations "Req'd connect new force main to existing force main (by others)." Bid items 804920A thru 804920Q, 804921B thru 804921Q and 804922B are all for force main tie-ins. Please clarify as to who will be performing the sewer force main tie-ins.

The tie-ins are included in this contract. See revised plan sheets in this addendum.

26. I fail to see where there are bid items for the force mains, 30 & 36", and the 36" SS from the junction box to the ps ww does not have a corresponding bid item. All @ PS510AA.

See revised plan sheets in this addendum. All piping inside the fence location is paid as part of the pump station lump sum bid item.

27. We need a bid item for the 15" SS from the new MH to the new JB on PS 510AA, Sheet Q-C01.

See revised bid items in this addendum.

28. *On sheet P-C01 it shows a note stating that the concrete drive is 15' wide. However, it does not show/mention the thickness of the concrete. Based on the other pump station drawings I'm assuming that the drive will be 8" thick. Can you please confirm this.*

The drive shown on P-C01 is 8" thick.

29. *For each of the concrete drives it refers to sheets 502-01 (1-3) of the city parish standard details. These sheets do not mention the thickness of the base for the concrete drives nor is this mentioned anywhere in the plans. What thickness is the driveway base to be and what base spec applies here?*

See general note on revised plan sheet CG01R in this addendum.

30. PS207 – The servitude on Drawing F-C02 presently has existing obstructions; transformers shown and not shown, fence shown and not shown, power poles, sheds, trees, landscaping, etc. Most of the existing obstructions are not shown on the drawings. Some of the obstructions seem to have been installed recently. Please advise.

The contractor is responsible for clearing within the servitude, in coordination with the Owner during construction.

31. PS207 – While visiting the site, we were approached by Mr. Harry Hudson. He informed us that there was an agreement with the SSO Program to not have the site entrance within the subdivision. The drawings presently show the access to enter from Beaver Creek Drive. Is this correct is there an addendum forthcoming, changing the entrance to a logging road southeast of the new pump station location?

No. The entrance will remain as shown on the contract documents.

32. PS510AA – There are newly installed structures onsite that are not shown on the drawings. A new workshop is within 4 feet of the new manhole location. Please advise.

If these newly installed structures are within the C-P servitude, the contractor should coordinate with the owner to have them removed.

33. PS510AA – Has clearing of trees been performed since the drawings were created?

Not to our knowledge.

34. For the sake of providing the Owner with the best estimate can DES identify what equipment out of each station to be demolished will be salvaged. Also please provide information as to the destination this equipment will be delivered.

Contractor to coordinate with the Owner regarding salvaged equipment. Equipment will be delivered by the contractor to 1050 W Mc Kinley St.

35. Please clarify what type of granular material is required to backfill the pump stations.

Refer to the contract documents.

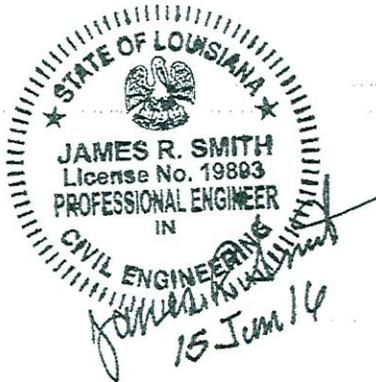
36. PS 511 is located on South Black Water Road. South Black Water Road is posted to only allow 7.5TN GVW. Therefore is it the intent that the contractor establish a temporary drive to access the site from Hooper Road. If so please advise on the required culvert size require to be installed to establish this temp drive.

If needed, a temporary drive would need to be permitted by the contractor and LaDOTD would establish the required culvert size.

37. No cross sections have been provided for the individual pump station sites, including the driveways. Please provide cross sections of each site so that quantities of site fill may be accurately determined.

Cross sections to be developed by the contractors from the survey data and elevations that have been provided in the contract documents.

RECOMMENDED:



James Smith, P.E.



Heather Layrisson, P.E.



Justin L. Sharper, P.E.

APPROVED:

A handwritten signature in blue ink that reads "Adam M. Smith".

Adam M. Smith, P.E.

UNIT PRICE FORM

To: CITY OF BATON ROUGE
 PARISH OF EAST BATON ROUGE
 DEPARTMENT OF PUBLIC WORKS

BID FOR: HOOPER ROAD PUMP STATION PROJECT

Project Number: 10-PS-MS-0048

<i>Description:</i> Sewer Pipe (6'-8')(12")(PS 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
802001E	280	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Sewer Pipe(8'-10')(12") (PS 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
802002E	130	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Sanitary Sewer Pipe (15") (10.1'-12.0') (PS 510AA)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
802003G	80	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Adjusted Sanitary Sewer Service Lateral Connections(PS 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8024000	6	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> 48" Sanitary Sewer Manhole (6'-8') (PS 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8031481	2	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> 48" Sanitary Sewer Manhole (8'-10') (PS 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8031482	1	EACH	\$ _____ . _____	\$ _____ . _____

UNIT PRICE FORM

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BID FOR: HOOPER ROAD PUMP STATION PROJECT

Project Number: 10-PS-MS-0048

<i>Description:</i> Restrained Joint Force Main (6") (PS 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804040B	490	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Restrained Joint Force Main (8") (PS 510AA)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804040C	20	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Restrained Joint Force Main (24")(PS 509, 510AA, 511)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804040L	210	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Restrained Joint Force Main (30") (PS 510AA)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804040O	220	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Restrained Joint Force Main (36")(PS 510AA, 511)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804040Q	800	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Fittings (Associated with Unit Price FM Only)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8045000	52000	LB	\$ _____ . _____	\$ _____ . _____

UNIT PRICE FORM

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 DEPARTMENT OF PUBLIC WORKS

BID FOR: HOOPER ROAD PUMP STATION PROJECT

Project Number: 10-PS-MS-0048

<i>Description:</i> Force Main Tap (24")(PS511)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804910L	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS207) (4")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920A	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS086) (6")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920B	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS510AA) (8")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920C	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS509) (20")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920J	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS509) (24")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920L	2	EACH	\$ _____ . _____	\$ _____ . _____

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Project Number: 10-PS-MS-0048

<i>Description:</i> Force Main Tie-In (PS510AA) (30")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920O	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS510AA) (36")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804920Q	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS285) (6")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804921B	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS511) (24")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804921L	1	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS511) (36")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804921Q	2	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Force Main Tie-In (PS509) (6")				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
804922B	1	EACH	\$ _____ . _____	\$ _____ . _____

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BID FOR: HOOPER ROAD PUMP STATION PROJECT

Project Number: 10-PS-MS-0048

<i>Description:</i> Duplex Submersible Wastewater Pump Station (PS No. 086)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8050201	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Duplex Submersible Wastewater Pump Station (PS No. 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8050202	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Duplex Submersible Wastewater Pump Station (PS No. 285)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8050203	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Demolition & Site Restoration of Pump Station (PS No. 086)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8200001	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Demolition & Site Restoration of Pump Station (PS No. 207)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8200002	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Demolition & Site Restoration of Pump Station (PS No. 231)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
8200003	1	LUMP	\$ _____ . _____	\$ _____ . _____

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BID FOR: HOOPER ROAD PUMP STATION PROJECT

Project Number: 10-PS-MS-0048

<i>Description:</i> Demolition & Site Restoration of Pump Station (PS No. 285)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity X Unit Price)
8200004	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Demolition & Site Restoration of Pump Station (PS No. 509)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity X Unit Price)
8200005	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Demolition & Site Restoration of Pump Station (PS No. 511)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity X Unit Price)
8200006	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Miscellaneous Work and Cleanup				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity X Unit Price)
8211100	6	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Rebuilt Fence				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity X Unit Price)
9021300	90	LF	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Storm Water Pollution Prevention Plan				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity X Unit Price)
9031600	1	LUMP	\$ _____ . _____	\$ _____ . _____

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Project Number: 10-PS-MS-0048

<i>Description:</i> Mobilization				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9090100	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Submersible Wastewater Program Pump Station (PS No. 509)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9999991	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Submersible Wastewater Program Pump Station (PS No. 510AA)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9999992	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Submersible Wastewater Program Pump Station (PS No. 511)				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9999993	1	LUMP	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Vibration Monitoring				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9999994	6	EACH	\$ _____ . _____	\$ _____ . _____
<i>Description:</i> Utility Relocation Allocation				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9999995	1	LUMP	\$ 10000.00	\$ 10000.00

UNIT PRICE FORM

To: CITY OF BATON ROUGE
 PARISH OF EAST BATON ROUGE
 DEPARTMENT OF PUBLIC WORKS

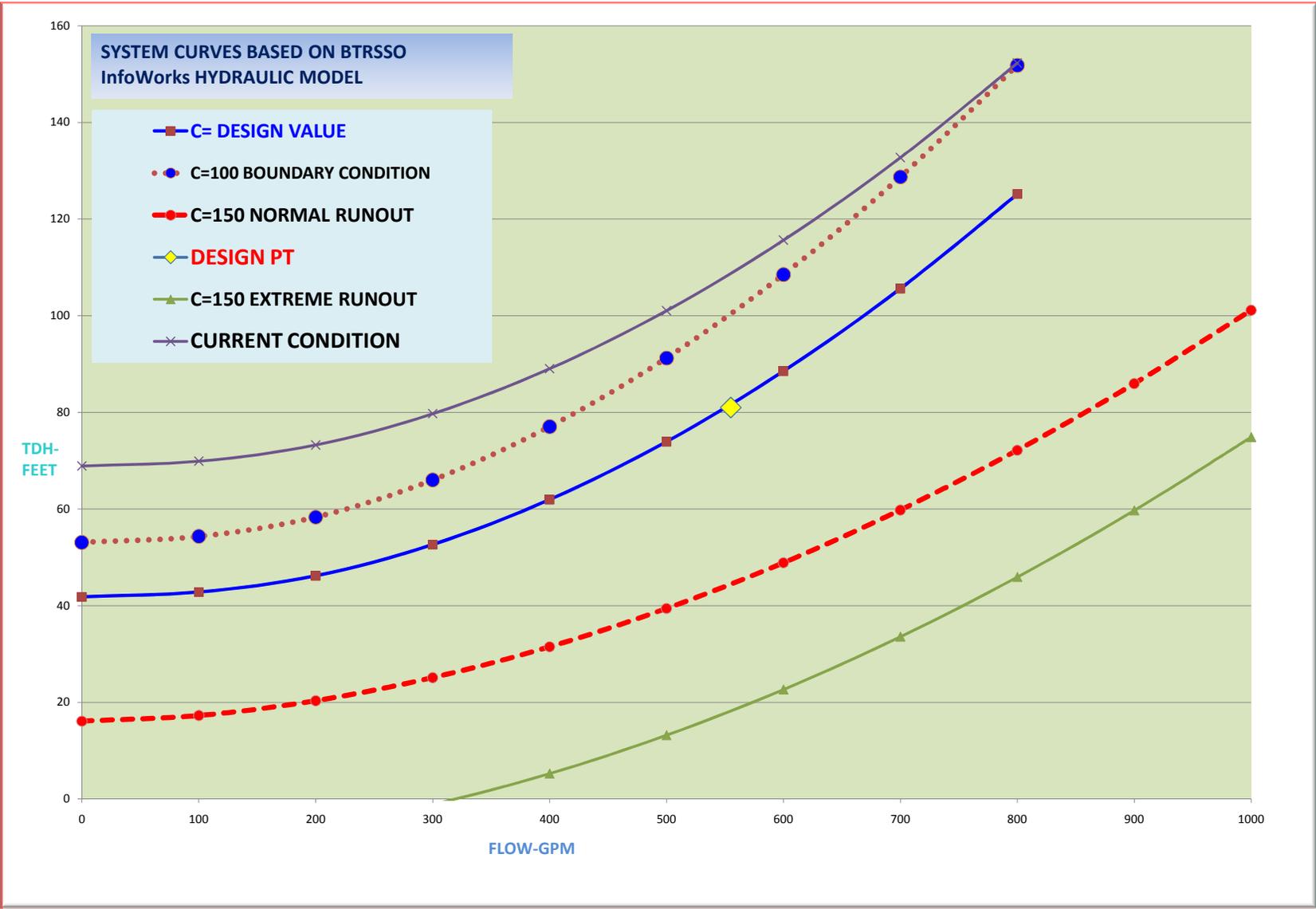
BID FOR: HOOPER ROAD PUMP STATION PROJECT

Project Number: 10-PS-MS-0048

<i>Description:</i> Insert 36" Carrier Pipe in Existing 48" Casing				
REF. NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity X Unit Price)</i>
9999996	175	LF	\$ _____ . _____	\$ _____ . _____

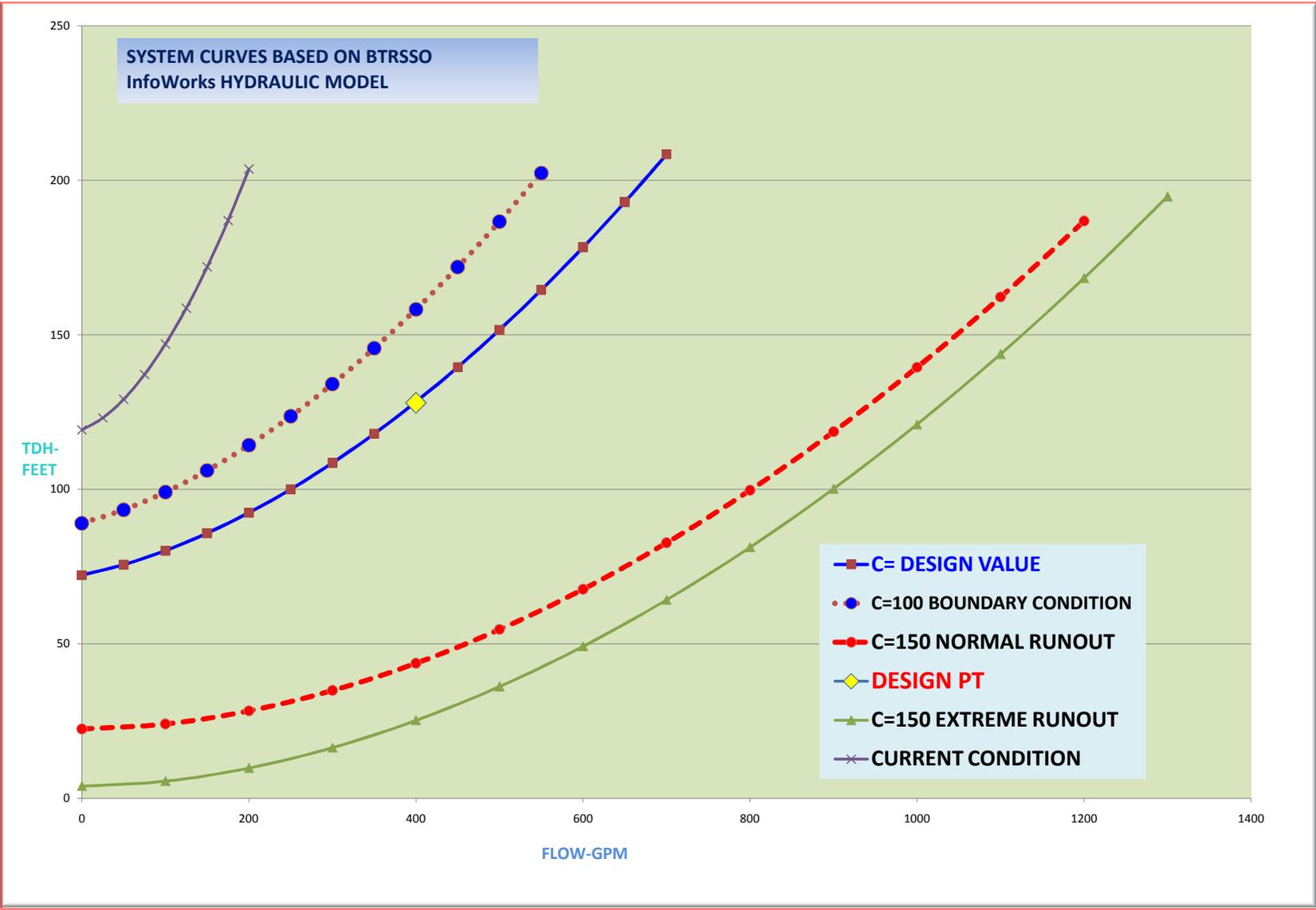
EXHIBIT 1: PUMP STATION SYSTEM CURVES

System Curve Plot



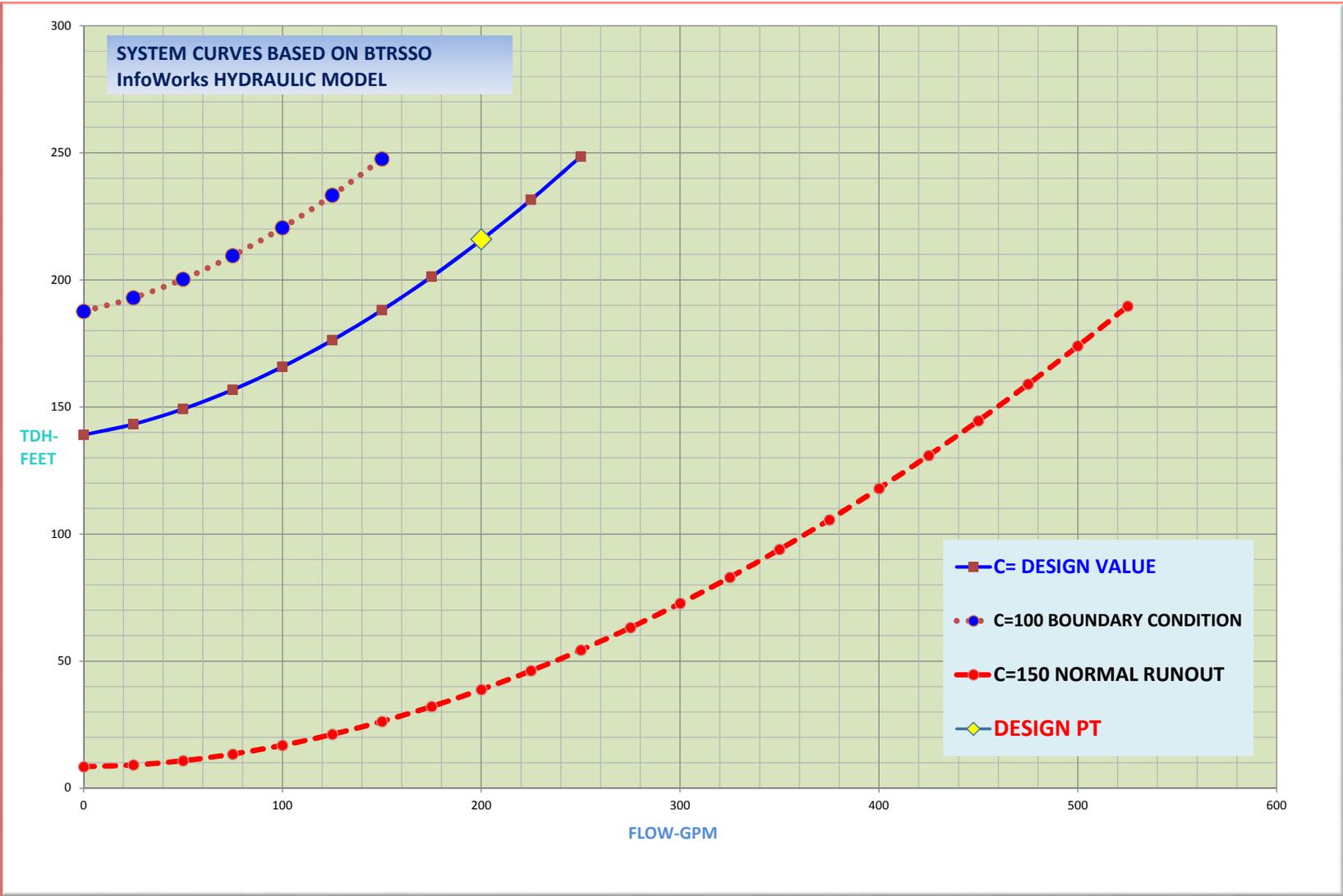
PUMP STATION NO. : 86
STATION LOSSES: INCLUDED
DESIGN CONDITIONS: 555 GPM @ 81 FT TDH

System Curve Plot



PUMP STATION NO. : 207
STATION LOSSES: INCLUDED
DESIGN CONDITIONS: 400 GPM @ 128 FT TDH

System Curve Plot



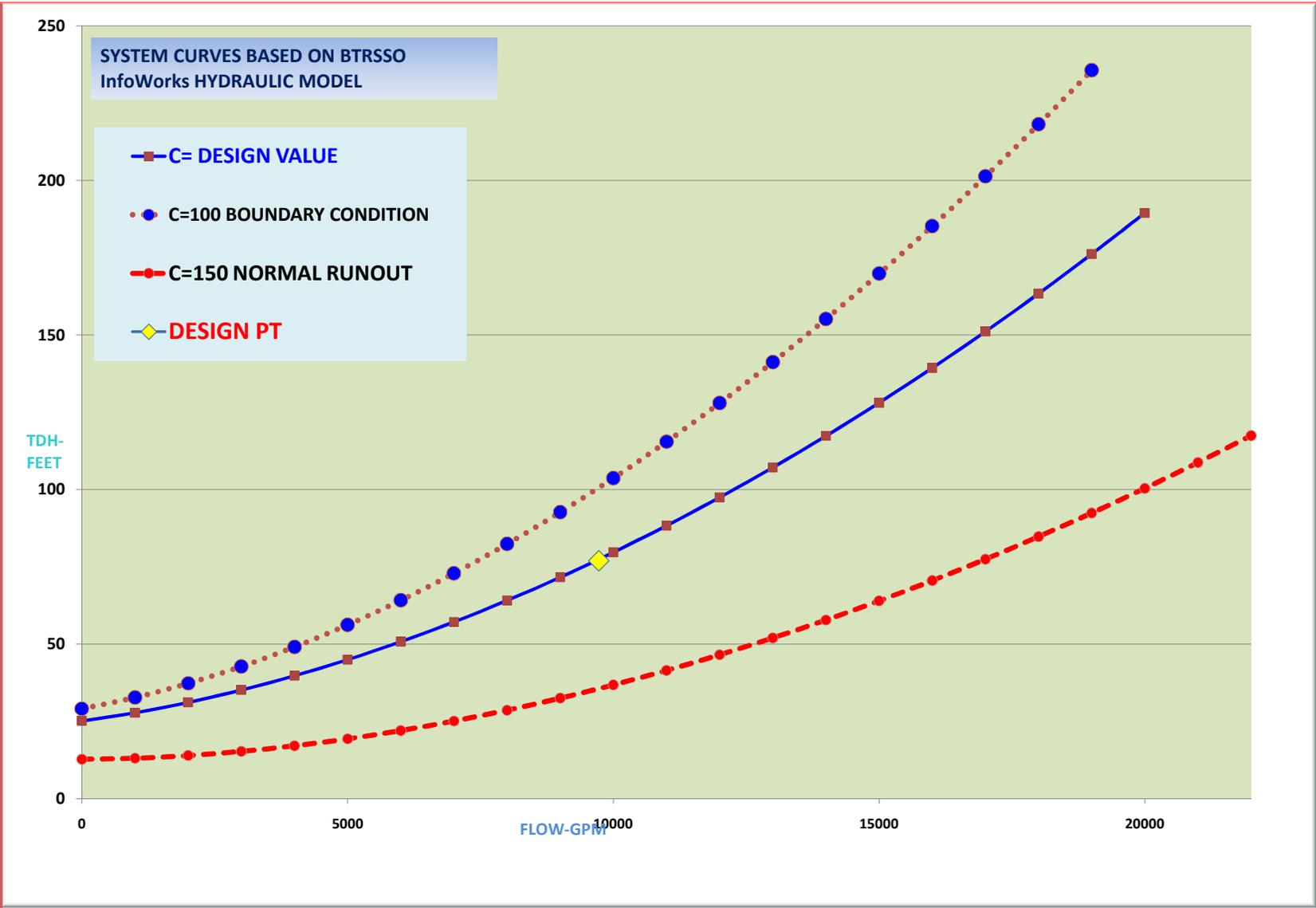
PUMP STATION NO. : 285
STATION LOSSES: INCLUDED
DESIGN CONDITIONS: 200 GPM @ 216 FT TDH

System Curve Plot



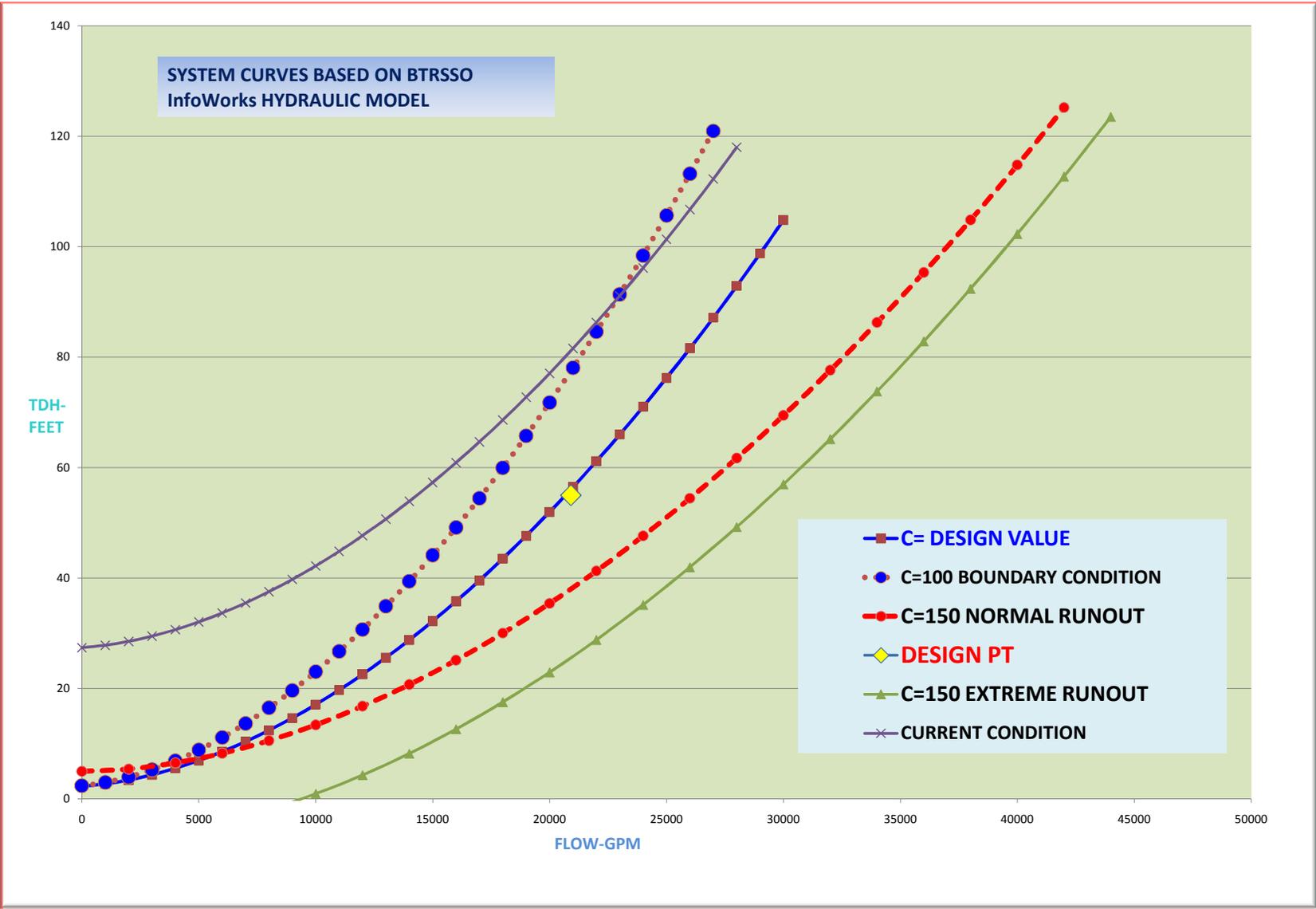
PUMP STATION NO. : 509
STATION LOSSES: NOT INCLUDED
DESIGN CONDITIONS: 8092 GPM @ 70 FT TDH

System Curve Plot



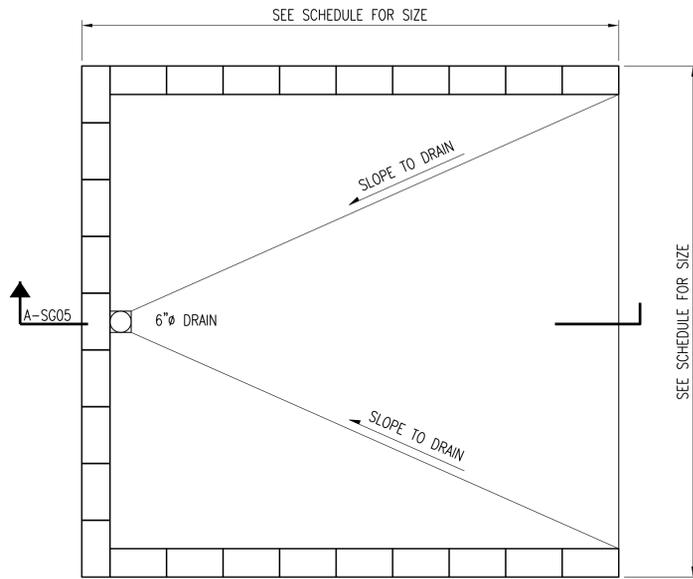
PUMP STATION NO. : 510AA
 STATION LOSSES: NOT INCLUDED
 DESIGN CONDITIONS: 9724 GPM @ 77 FT TDH

System Curve Plot

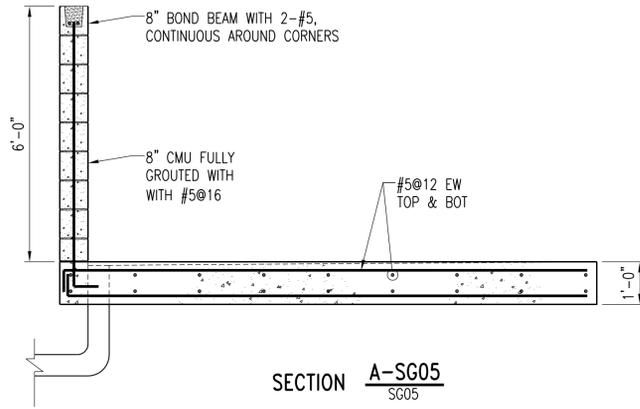


PUMP STATION NO. : 511
STATION LOSSES: NOT INCLUDED
DESIGN CONDITIONS: 20911 GPM @ 55 FT TDH

EXHIBIT 2: PUMP STATION 511
JACK AND BORE RECORD DRAWINGS



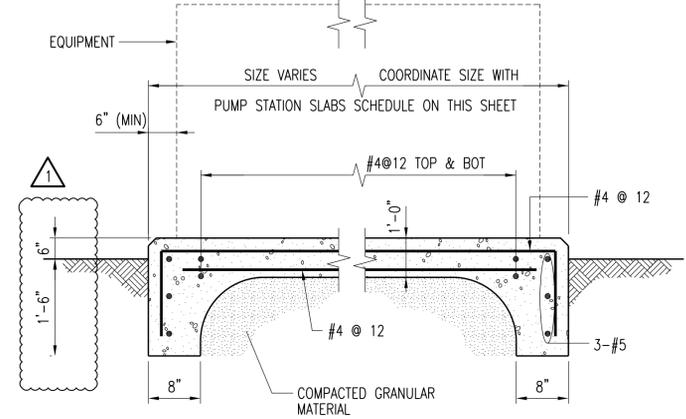
PLAN



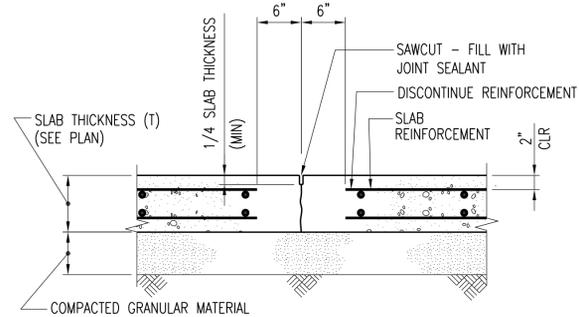
SECTION A-SG05
SG05

PUMP WASH DOWN FACILITY DETAIL
NO SCALE

PROGRAM PUMP STATION SLABS SCHEDULE			
PUMP STATION	PUMP WASH DOWN FACILITY SLAB	BIOTOWER SLAB	TRANSFORMER SLAB
509	10'-0" X 10'-0"	20'-10" X 12'-6" (+)	10'-0" X 10'-0" (+)
510AA	10'-0" X 10'-0"	-	10'-0" X 10'-0" (+)
511	12'-8" X 12'-0"	20'-10" X 12'-6" (+)	10'-0" X 10'-0" (+)



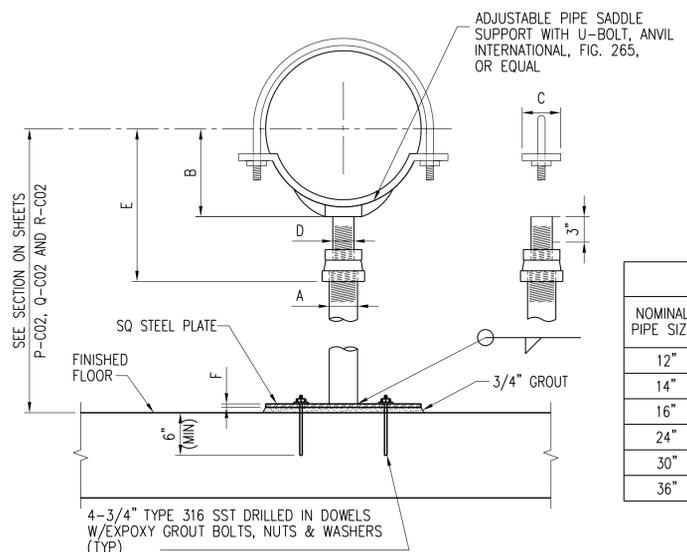
EQUIPMENT PAD AT GRADE DETAIL
NO SCALE



SLAB CONTROL JOINT
NO SCALE

GENERATOR FOUNDATION SCHEDULE					
PUMP STATION	FOUNDATION TYPE	PLAN DIMENSIONS		SLAB THICKNESS, T	SLAB REINFORCEMENT
		L	W		
86	100	10'-9"	5'-10"	12"	#4 @ 12" O.C.E.W.
285	100	10'-9"	5'-10"	12"	#4 @ 12" O.C.E.W.
509	600	28'-0"	10'-0"	16"	#5 @ 12" O.C.E.W.
510AA	600	28'-0"	10'-0"	16"	#5 @ 12" O.C.E.W.
511	800	28'-10"	10'-0"	16"	#5 @ 12" O.C.E.W.

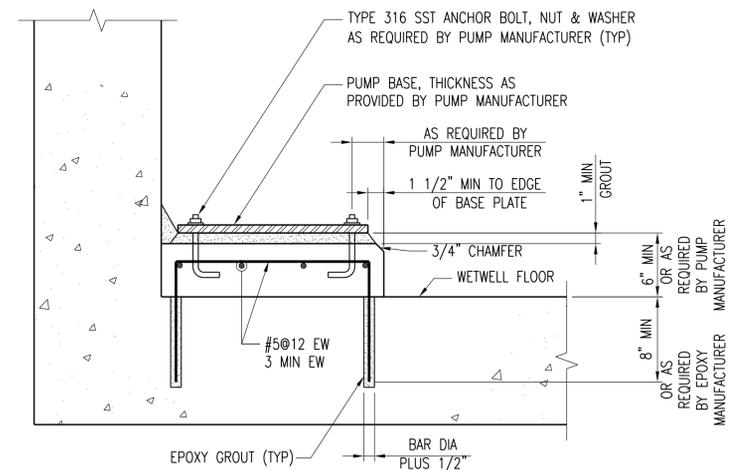
NOTE: FOUNDATION TYPE NUMBER INDICATES THE KW RATING OF THE GENERATOR TO BE PLACED ON THE FOUNDATION.



ADJUSTABLE PIPE SADDLE SUPPORT TABLE						
NOMINAL PIPE SIZE	NOMINAL A	B	WIDTH C	NOMINAL D	E	
					MIN	MAX
12"	4"	9 15/16"	3 5/8"	3"	14 5/8"	19 1/8"
14"	4"	10 1/2"	6"	3"	15 13/16"	20 5/16"
16"	4"	11 1/2"	6"	3"	16 13/16"	21 5/16"
24"	6"	17 1/2"	6"	4"	23 5/16"	27 13/16"
30"	6"	20 5/8"	6"	4"	26 7/16"	30 15/16"
36"	6"	23 5/8"	6"	4"	29 7/16"	33 15/16"

- NOTES:
 1. WHERE PIPE SUPPORT REQUIRES A "U" BOLT PROVIDE GRINNELL, FIG 259 OR EQUAL.
 2. DISTANCE OF SST DOWELS TO NEAREST CONCRETE EDGE OF JOINT = 6" MIN.
 3. PLATE SIZE AND BOLT PLACEMENT PER MANUFACTURER'S RECOMMENDATION.

ADJUSTABLE PIPE SUPPORT DETAIL
NO SCALE



SUBMERSIBLE PUMP BASE DETAIL
NO SCALE

- NOTES:
 1. SEE CIVIL DRAWINGS FOR LOCATION OF SLABS ON SITE.
 2. ANCHOR EQUIPMENT TO CONCRETE SLAB ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
 3. CMU MASONRY SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 04 20 00 FROM THE PUMP STATION BUILDING SECTION.
 4. PUMP WASH DOWN FACILITY SHALL BE PAINTED WITH PAINT SYSTEM 108 PER CITY OF BATON ROUGE STANDARD SPECIFICATION SECTION 822.
 5. IF SLAB DIMENSIONS CHANGE BASED ON CONTRACTOR-SUPPLIED EQUIPMENT, ADJUSTMENT WILL BE DONE AT NO ADDITIONAL COST.



SHEET NUMBER	SG05R
EAST BATON ROUGE	BATON ROUGE
PARISH	CITY
PROJECT	10-PS-MS-0048
DESIGNED JMC	CHECKED LB
DATE	04-01-2016
DRAWN	CHECKED
DATE	02
SHEET	OF 175
NO.	1
DATE	06-15-16
REVISION DESCRIPTION	CLARIFIED EQUIPMENT PAD DETAIL DIMENSION
BY	JRS

HOOPER ROAD PUMP STATION PROJECT
 STRUCTURAL GENERAL SHEETS
 MISCELLANEOUS SLAB ON GRADE DETAILS

Jun 15, 2016 - 9:00am
 B:\21337_HooperRoadPumpStation\11-CADD\Civil\General Drawings\21337-SG05R (NEW).dwg [Layout1]

TABLE 805-09

PUMP STATION NO. 86 (TYPE I - DUPLEX)			
DESIG.	ITEM DESCRIPTION	ITEM VALUE	UNITS
A	1-SHORT CIRCUIT RATING	22	KAIC
	2-UTILITY SERVICE VOLTAGE	480 OPEN DELTA ⁽¹⁾	VOLTS
	3-UTILITY TRANSFORMERS	2 - 25 (TBD)	KVA
	4-SERVING UTILITY NAME	ENTERGY	
B	UTILITY & MAIN DISCONNECT/ CIRCUIT BREAKER SIZE	200	AMPS
C	AUTOMATIC TRANSFER SWITCH RATING	200	AMPS
D	TRANS. T1 PRIMARY CIRCUIT BREAKER	20	AMPS
E	TRANS. T1 SIZE	7.5	KVA
F	LIGHTING PANEL MAIN BREAKER	40	AMPS
G	PUMP MOTOR SIZE (MAXIMUM)	32	HP
H	PUMP MOTOR STARTER SIZE	3 - ATL	NEMA TYPE
I	VFD RATING	N/A	KVA
J	PUMP MOTOR BREAKER SIZE (MCP)	100	AMPS
K	1-GENERATOR RATING	100	KW
	2-GENERATOR VOLTAGE & WINDING	480V, 3PH	VOLTS
	3-GENERATOR BREAKER RATING	175	AMPS
L	1-GENERATOR DIMENSIONS	117L x 42W x 94H	INCHES
	2-GENERATOR WET WEIGHT	4,785	LBS
M	UTILITY SHORT CIRCUIT DUTY	3.2 (EST)	KAIC

(1) VOLTAGE LINE-TO-GROUNDED NEUTRAL VARIES;
CONNECT LOADS LINE-TO-LINE. SEE NOTE 10-SURGE
PROTECTIVE DEVICE.

CONDUIT SCHEDULE - PS86

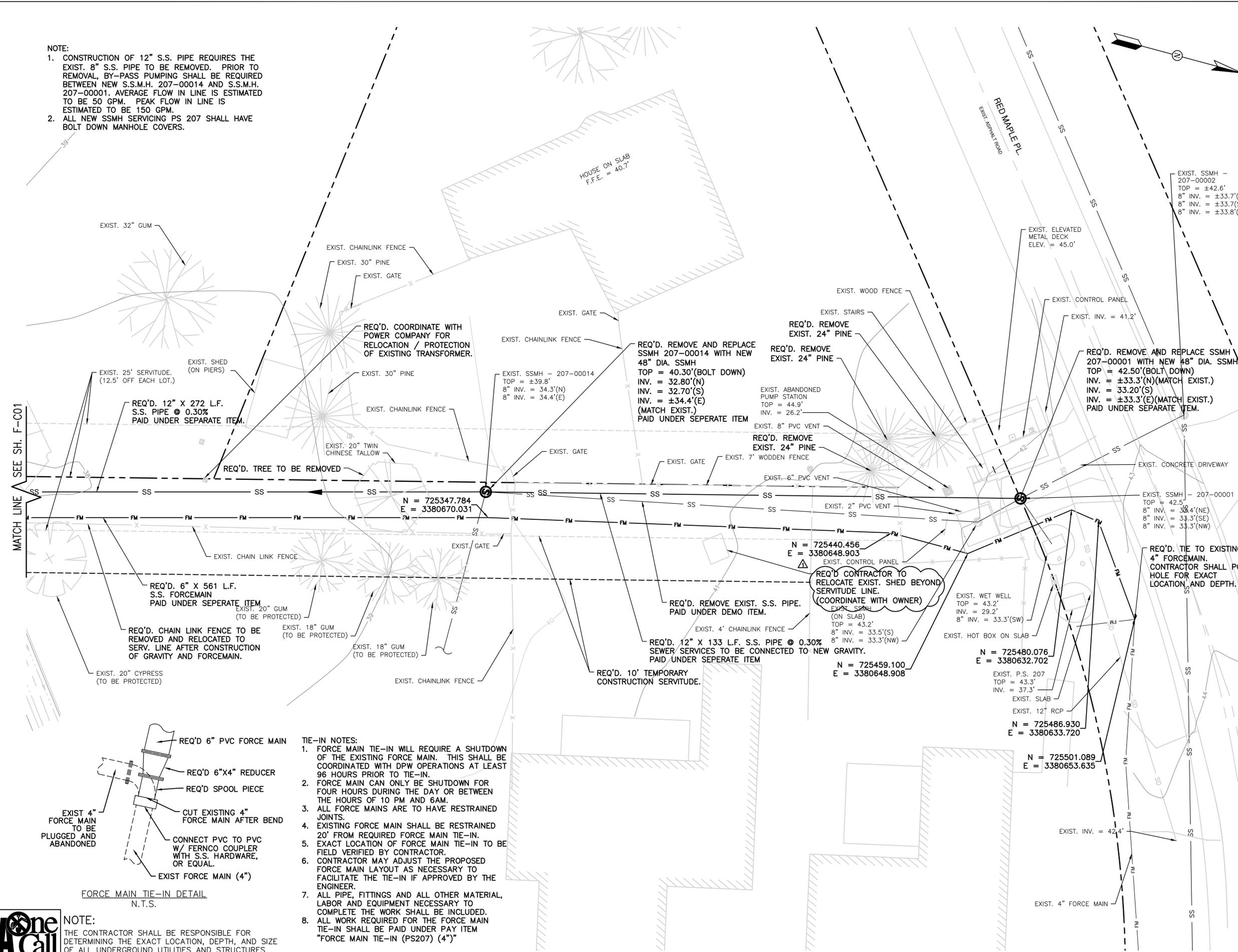
NO. (1)	FROM	TO	SIZE & TYPE (1)	CONDUCTORS	NOTES
SVC	UTILITY RISER	CP 86	4" PVC	BY UTILITY	NEW SERVICE CONDUIT - SEE NOTE 7 ON SHEET E01
SPARE	CP86	CAPPED STUB-OUT	4" PVC	FUTURE	FOR FUTURE USE - SEE NOTE 6 ON SHEET E01
G1	GEN G-86-1	CP 86	2-1/2"	4#3/0, #2G	SEE ITEM K IN TABLE 805-09 THIS SHEET, AND NOTE 9.
G2	GEN G-86-1	CP 86	1-1/2"		- AUX. POWER WIRING - SEE 3-LINE DGM. ON STD. PLAN 805-09
				1) 2#12, #12G	CKT H7-9 JACKET WATER HEATER
				2) 2#12, #12G	CKT H12 BATTERY CHARGER
G3	GEN G-86-1	CP 86	1-1/2"		- CONTROL & INDICATION WIRING THRU ATS - SEE STD. PLAN 805-11
				1) 2#14	GENERATOR 'RUN' COMMAND
				2) 2#14	GENERATOR 'ON' STATUS
				3) 2#14	GENERATOR COMMON 'FAIL' ALARM
				4) 2#14	GENERATOR LOW FUEL ALARM
				5) 2#14	GENERATOR FUEL TANK LEAK ALARM
				6) 2#14	SPARES
P86-1	CP 86	TP 86 w/SO (3)	1-1/4"	1) 3#6, #8G	FOR PUMP 86-1
				2) 2#12, #12G	CKT H2 ANALYZER & TRANSDUCER POWER - SEE C1 & C3
P86-2	CP 86	TP 86 w/SO (3)	1-1/4"	3#6, #8G	FOR PUMP 86-2
C1	CP 86	TP 86 w/SO (3)	1"	1) 2/C#16 TSP	COMBUSTIBLE GAS DETECTOR - ANALOG
				2) 4#14	COMBUSTIBLE GAS DETECTOR - DISCRETES
C2	CP 86	TP 86 w/SO (3)	1"	1 PARAFLEX	TUBING - CAPTIVE AIR SYSTEM, PER STD. DETAILS
C3	CP 86	TP 86 w/SO (3)	1"	4#14	'OPTI-FLOAT' LEVEL TRANSDUCER - DISCRETES
C4	CP 86	TP 86 w/SO (3)	1"	2(5#14)	LEAK & TEMPERATURE ALARMS - SET PER PUMP MOTOR
V1	CP 86	PI-100 XMTR	1"	2/C#16 TSP	HEADER PRESSURE TRANSMITTER - ON PIPING
V2	CP 86	LS CV-P1, CV-P2	1"	2(2#14, #14G)	CHECK VALVE LIMIT SWITCH, EACH PUMP - ON PIPING
W1	TP 86 BOTTOM	WET WELL	1-1/2"	2(FFO)	FACTORY FIBER OPTIC CABLES TO FLOATS (2 EACH)
W2	TP 86 BOTTOM	WET WELL	1-1/2"	5/C#16	COMBUSTIBLE GAS SENSOR
W3	TP 86 BOTTOM	WET WELL	1-1/2"	1 PARAFLEX	TUBING - CAPTIVE AIR SYSTEM, PER STD. DETAILS
W4	TP 86 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 1 MOTOR FACTORY POWER CABLE - VERIFY CONDUIT SIZE
W5	TP 86 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 2 MOTOR FACTORY POWER CABLE - VERIFY CONDUIT SIZE
W6 (4)	TP 86 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 3 MOTOR FACTORY POWER CABLE - VERIFY CONDUIT SIZE
W7	TP 86 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 1 MOTOR FACTORY ALARM CABLE
W8	TP 86 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 2 MOTOR FACTORY ALARM CABLE
W9 (4)	TP 86 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 3 MOTOR FACTORY ALARM CABLE
				(1) GRS/PVC UNLESS OTHERWISE INDICATED.	(3) w/SO = WITH SEAL-OFF FITTING
				(2) MSC = MANUFACTURER SUPPLIED CABLE	(4) FOR TRIPLEX STATIONS ONLY

NOTES

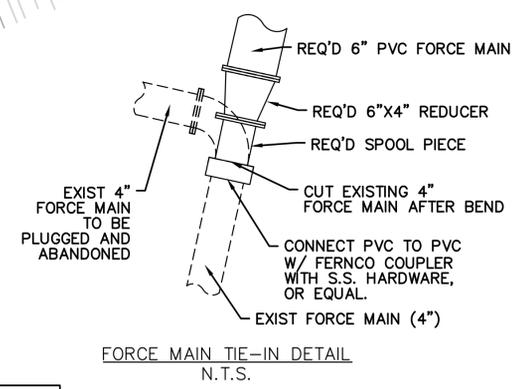
- ELECTRICAL EQUIPMENT SIZING TABLE 805-09 DEFINES RATINGS OF ELECTRICAL EQUIPMENT IN STANDARD DRAWING 805-09 SHEET 1 OF 2 THREE LINE POWER DIAGRAM (TYPE I STATION). RATINGS SHOWN ON SHEET 1 ARE PLACE HOLDERS ONLY AND MAY BE SUPERSEDED IN TABLE 805-09.
- UTILITY SHORT CIRCUIT RATING AT SERVICE ENTRANCE POINT OF CONNECTION GIVEN IN TABLE 805-09 USES INFORMATION PROVIDED BY ELECTRICAL UTILITY. IF KAIC IS NOT AVAILABLE, THE ESTIMATED VALUE IS BASED ON SERVICE TRANSFORMER KVA RATING AND STANDARD IMPEDANCE.
- FOR RATING OF BREAKER SERVING THE GENERATOR JACKET WATER HEATER AND THE GENERATOR BATTERY CHARGER, SEE DRAWING 805-09 SHEET 1 OF 2.
- FOR FIXED SPEED PUMP CONTROLS SEE STANDARD DRAWINGS 805-07, AND 805-08.
- PROVIDE CONDUIT SEAL-OFF FITTING FOR CONDUITS BETWEEN CONTROL PANEL AND TERMINATION PANEL. SEE STANDARD DRAWING 805-07 SHEET 2/2.
- WORK IN THIS DRAWING SHALL BE PERFORMED IN ADDITION TO DPW STANDARD PLANS NOTED ON DRAWING GG01.
- REFER TO STANDARD DRAWINGS FOR RISER DIAGRAM WORK IN ADDITION TO WORK SHOWN ON THIS SHEET.
- FOR GENERATOR DELIVERY REQUIREMENTS, SEE GENERAL NOTES ON SHEET CG01.
- CHARACTERISTICS OF PERMANENT GENERATORS (TYPICAL):
240V, 60KW: BREAKER-200A; FEEDER-4#4/0, #2G, 2-1/2"C; BLOCK HEATER-1.0KW, 120V
240V, 100KW: BREAKER-350A; FEEDER-4#500 KCMIL, #1G/0G, 4"C; BLOCK HEATER-1.0KW, 120V
480V, 100KW: BREAKER-175A; FEEDER-4#3/0, #2G, 2-1/2"C; BLOCK HEATER-1.0KW, 120V
480V, 200KW: BREAKER-400A; FEEDER-2(4#250 KCMIL, #2G, 3"C); BLOCK HEATER-1.5KW, 120V
- SURGE PROTECTIVE DEVICE (I.E., LA-LIGHTNING ARRESTER) SHALL BE RATED FOR USE ON 480 VOLT OPEN DELTA (HIGH LEG) GROUNDED SYSTEMS.
W.W. 5/5/2016

SHEET NUMBER	A-E03R
DESIGNED	ACR
CHECKED	WCW
DATE	04-01-2016
BY	WCW
NO.	1
DATE	05/31/16
REVISION DESCRIPTION	ADDED SUBSCRIPT (1) TO TABLE 805-09 AND NOTE 10
PARISH	EAST BATON ROUGE
CITY	BATON ROUGE
PROJECT	10-PS-MS-0048
HOOPER ROAD PUMP STATION PROJECT PUMP STATION 86 TYPE I DUPLEX 805-09 THREE-LINE DIAGRAM, SHEET 2 OF 2	
MAY 31, 2016 - 11:17am B:\23327_HooperRoadPumpStation\11-CADD\Civil\PS-86\23327-A-E03-REV1.dwg [Layout1]	

NOTE:
 1. CONSTRUCTION OF 12" S.S. PIPE REQUIRES THE EXIST. 8" S.S. PIPE TO BE REMOVED. PRIOR TO REMOVAL, BY-PASS PUMPING SHALL BE REQUIRED BETWEEN NEW S.S.M.H. 207-00014 AND S.S.M.H. 207-00001. AVERAGE FLOW IN LINE IS ESTIMATED TO BE 50 GPM. PEAK FLOW IN LINE IS ESTIMATED TO BE 150 GPM.
 2. ALL NEW SSMH SERVICING PS 207 SHALL HAVE BOLT DOWN MANHOLE COVERS.



SEE SH. F-C01
 MATCH LINE



TIE-IN NOTES:
 1. FORCE MAIN TIE-IN WILL REQUIRE A SHUTDOWN OF THE EXISTING FORCE MAIN. THIS SHALL BE COORDINATED WITH DPW OPERATIONS AT LEAST 96 HOURS PRIOR TO TIE-IN.
 2. FORCE MAIN CAN ONLY BE SHUTDOWN FOR FOUR HOURS DURING THE DAY OR BETWEEN THE HOURS OF 10 PM AND 6 AM.
 3. ALL FORCE MAINS ARE TO HAVE RESTRAINED JOINTS.
 4. EXISTING FORCE MAIN SHALL BE RESTRAINED 20' FROM REQUIRED FORCE MAIN TIE-IN. EXACT LOCATION OF FORCE MAIN TIE-IN TO BE FIELD VERIFIED BY CONTRACTOR.
 5. CONTRACTOR MAY ADJUST THE PROPOSED FORCE MAIN LAYOUT AS NECESSARY TO FACILITATE THE TIE-IN IF APPROVED BY THE ENGINEER.
 6. ALL PIPE, FITTINGS AND ALL OTHER MATERIAL, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED.
 7. ALL WORK REQUIRED FOR THE FORCE MAIN TIE-IN SHALL BE PAID UNDER PAY ITEM "FORCE MAIN TIE-IN (PS207) (4)"

NOTE:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, AND SIZE OF ALL UNDERGROUND UTILITIES AND STRUCTURES AND SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.



PUMP STATION 285		
ITEM	DESCRIPTION	DIMENSIONS
A	WET WELL BASE DIAMETER	138" (11'-6")
B	WET WELL OUTSIDE DIAMETER	114" (9'-6")
C	WET WELL INSIDE DIAMETER	96" (8'-0")
D	CHECK VALVE	6"
E	GATE VALVE	6"
F	AIR RELEASE VALVE/VACUUM VALVE ASSEMBLY	2"
G	EMERGENCY CONNECTION DIAMETER	4"
H	FORCE MAIN DIAMETER	6"
I	WET WELL BASE REINFORCING	#4's @ 6" O/C EW
J	WET WELL BEDDING MATERIAL THICKNESS	12"
K	WET WELL BASE THICKNESS	10"
L	DUCTILE IRON PIPE DIAMETER	6"
M	VENT PIPE DIAMETER	6"
N	WET WELL TOP REINFORCING	#4's @ 6" O/C EW
O	WET WELL TOP THICKNESS	10"
P	PIPE SPOOL LENGTH EXITING WET WELL	24" MIN.

DESIGN SYSTEM CURVE (MAXIMUM STATIC HEAD)		
GPM	TDH	
0	139.03'	
25	143.25'	
50	149.23'	
75	156.77'	
100	165.8'	
125	176.24'	
150	188.07'	
175	201.24'	
200	215.72'	
225	231.5'	
250	248.55'	

RUN OUT CONDITIONS (MAXIMUM STATIC HEAD, C=150)		
GPM	TDH	
0	8.5'	
25	9.14'	
50	10.83'	
75	13.43'	
100	16.9'	
125	21.19'	
150	26.29'	
175	32.17'	
200	38.81'	
225	46.2'	
250	54.32'	
275	63.17'	
300	72.73'	
325	82.99'	
350	93.96'	
375	105.61'	
400	117.94'	
425	130.94'	
450	144.62'	
475	158.96'	
500	173.96'	
525	189.61'	

PUMP SELECTED IS REQUIRED TO INTERSECT THIS RUN-OUT CURVE AND THE MOTOR OFFERED IS TO BE NON-OVERLOADING FOR THE FULL RANGE OF THE PUMP SELECTED.

THE ABOVE RUNOUT CONDITIONS ARE TO BE PLOTTED ON THE PUMP CURVE OFFERING WHEN SUBMITTING FOR SHOP DRAWING APPROVAL.

PUMP STATION 285 - PUMP SCHEDULE					
CAPACITY (GPM)	HEAD (FT)	MIN. EFF. (±5%)	RPM	PUMP DISCHARGE (IN)	MAX. HORSEPOWER (HP)
202	219	42	3600	4	35

PUMP STATION 285 PUMP CONTROL SETTINGS AND DIMENSIONS		
CONTROL POINT	ELEV.	HEIGHT*
100 YR FLOOD ELEVATION	47.00	20.23
NATURAL GROUND @ SITE	44.00	17.23
E9 - TOP OF WET WELL	48.00	21.23
E8 - LOWEST INFLUENT INVERT	34.30	7.53
E7 - HIGH LEVEL ALARM (FLOAT SWITCH)	34.10	6.83
E6 - HIGH LEVEL ALARM PUMP TWO ON	33.10	6.33
E5 - LEAD PUMP ON	32.60	5.83
E4 - PUMP OFF	30.58	3.67
E3 - LOW LEVEL ALARM	29.58	2.67
E2 - LOW-LOW LEVEL ALARM (FLOAT)	29.08	2.17
E1 - WET WELL INVERT ELEVATION	26.91	0.00

* HEIGHT FROM INVERT OF WET WELL

PUMP STATION 285 - REQUIRED SINGLE PUMP CURVE AT 100% SPEED (±5%)				
FLOW (GPM)	SHUT OFF	200	400	700
HEAD (FT)	270	219	178	110

STATE OF LOUISIANA
 JAMES R. SMITH
 License No. 19893
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
 April 1, 2016

SHEET NUMBER	M-C03R	
PARISH	EAST BATON ROUGE	
CITY	BATON ROUGE	
PROJECT	10-PS-MS-0048	
DESIGNED BY	JRS	
CHECKED BY	JRS	
DATE	04-01-2016	
SHEET NO.	044 OF 175	
REVISION	NO. DATE DESCRIPTION	
1	05/31/16	REVISED PUMP DATA AND SYSTEM CURVE REMOVED REFERENCE TO VALVE PIT

HOOPER ROAD PUMP STATION PROJECT
 PUMP STATION 285
 PROPOSED PUMP STATION DETAILS

TABLE 805-09

PUMP STATION NO. 285 (TYPE I - DUPLEX)			
DESIG.	ITEM DESCRIPTION	ITEM VALUE	UNITS
A	1-SHORT CIRCUIT RATING	22	KAIC
	2-UTILITY SERVICE VOLTAGE	240 - OPEN DELTA	VOLTS
	3-UTILITY TRANSFORMERS	2 - 37.5 PAD	KVA
	4-SERVING UTILITY NAME	DEMCO	
B	UTILITY & MAIN DISCONNECT/ CIRCUIT BREAKER SIZE	350	AMPS
C	AUTOMATIC TRANSFER SWITCH RATING	400	AMPS
D	TRANS. T1 PRIMARY CIRCUIT BREAKER	N/A	AMPS
E	TRANS. T1 SIZE	N/A	KVA
F	LIGHTING PANEL MAIN BREAKER	60	AMPS
G	PUMP MOTOR SIZE (MAXIMUM)	40	HP
H	PUMP MOTOR STARTER SIZE	4 - ATL	NEMA TYPE
I	VFD RATING	N/A	KVA
J	PUMP MOTOR BREAKER SIZE (MCP)	200	AMPS
K	1-GENERATOR RATING	100	KW
	2-GENERATOR VOLTAGE & WINDING	240V, 3-PH	VOLTS
	3-GENERATOR BREAKER RATING	350	AMPS
L	1-GENERATOR DIMENSIONS	117L X 42W X 94H	INCHES
	2-GENERATOR WET WEIGHT	4,725	LBS
M	UTILITY SHORT CIRCUIT DUTY	1.0 (EST)	KAIC

NOTES

- ELECTRICAL EQUIPMENT SIZING TABLE 805-09 DEFINES RATINGS OF ELECTRICAL EQUIPMENT IN STANDARD DRAWING 805-09 SHEET 1 OF 2 THREE LINE POWER DIAGRAM (TYPE I STATION). RATINGS SHOWN ON SHEET 1 ARE PLACE HOLDERS ONLY AND MAY BE SUPERSEDED IN TABLE 805-09.
- UTILITY SHORT CIRCUIT RATING AT SERVICE ENTRANCE POINT OF CONNECTION GIVEN IN TABLE 805-09 USES INFORMATION PROVIDED BY ELECTRICAL UTILITY. IF KAIC IS NOT AVAILABLE, THE ESTIMATED VALUE IS BASED ON SERVICE TRANSFORMER KVA RATING AND STANDARD IMPEDANCE.
- FOR RATING OF BREAKER SERVING THE GENERATOR JACKET WATER HEATER AND THE GENERATOR BATTERY CHARGER, SEE DRAWING 805-09 SHEET 1 OF 2.
- FOR FIXED SPEED PUMP CONTROLS SEE STANDARD DRAWINGS 805-07, AND 805-08.
- PROVIDE CONDUIT SEAL-OFF FITTING FOR CONDUITS BETWEEN CONTROL PANEL AND TERMINATION PANEL. SEE STANDARD DRAWING 805-07 SHEET 2/2.
- WORK IN THIS DRAWING SHALL BE PERFORMED IN ADDITION TO DPW STANDARD PLANS NOTED ON DRAWING CG01.
- REFER TO STANDARD DRAWINGS FOR RISER DIAGRAM WORK IN ADDITION TO WORK SHOWN ON THIS SHEET.
- FOR GENERATOR DELIVERY REQUIREMENTS, SEE GENERAL NOTES ON SHEET CG01.
- CHARACTERISTICS OF PERMANENT GENERATORS (TYPICAL):
 240V, 60KW: BREAKER-200A; FEEDER-4#4/0, #2G, 2-1/2"C; BLOCK HEATER-1.0KW, 120V
 240V, 100KW: BREAKER-350A; FEEDER-4#500 KCMIL, #1G/0G, 4"C; BLOCK HEATER-1.0KW, 120V
 480V, 100KW: BREAKER-175A; FEEDER-4#3/0, #2G, 2-1/2"C; BLOCK HEATER-1.0KW, 120V
 480V, 200KW: BREAKER-400A; FEEDER-2(4#250 KCMIL, #2G, 3"C); BLOCK HEATER-1.5KW, 120V

CONDUIT SCHEDULE - PS285

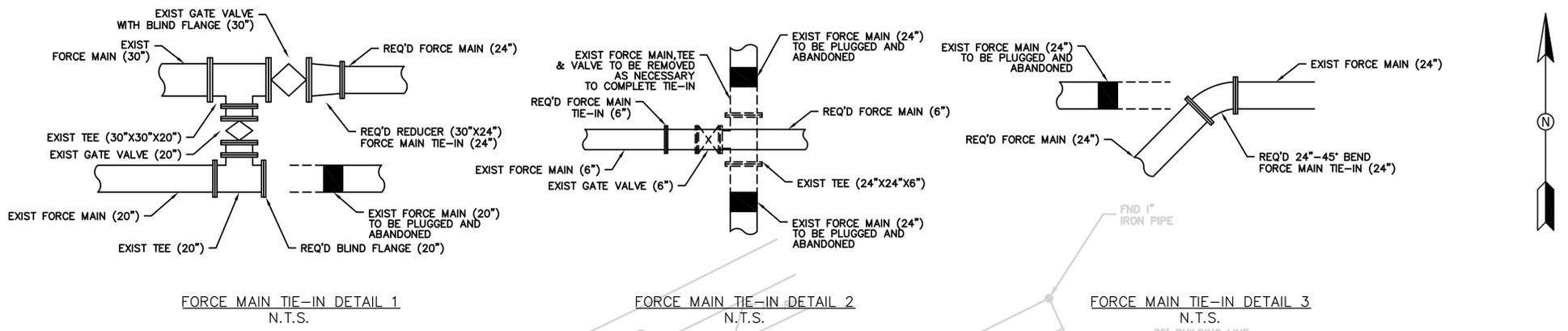
NO. (1)	FROM	TO	SIZE & TYPE (1)	CONDUCTORS	NOTES
SVC	UTILITY RISER	CP 285	4" PVC	BY UTILITY	NEW SERVICE CONDUIT - SEE NOTE 7 ON SHEET E01
SPARE	CP285	CAPPED STUB-OUT	4" PVC	FUTURE	FOR FUTURE USE - SEE NOTE 6 ON SHEET E01
G1	GEN G-285-1	CP 285	2-1/2"	4#3/0, #2G	SEE ITEM K IN TABLE 805-09 THIS SHEET, AND NOTE 9.
G2	GEN G-285-1	CP 285	1-1/2"		- AUX. POWER WIRING - SEE 3-LINE DGM. ON STD. PLAN 805-09
				1) 2#12, #12G	CKT H7-9 JACKET WATER HEATER
				2) 2#12, #12G	CKT H12 BATTERY CHARGER
G3	GEN G-285-1	CP 285	1-1/2"		- CONTROL & INDICATION WIRING THRU ATS - SEE STD. PLAN 805-11
				1) 2#14	GENERATOR 'RUN' COMMAND
				2) 2#14	GENERATOR 'ON' STATUS
				3) 2#14	GENERATOR COMMON 'FAIL' ALARM
				4) 2#14	GENERATOR LOW FUEL ALARM
				5) 2#14	GENERATOR FUEL TANK LEAK ALARM
				6) 2#14	SPARES
P285-1	CP 285	TP 285 w/SO (3)	1-1/4"	1) 3#6, #8G	FOR PUMP 285-1
				2) 2#12, #12G	CKT H2 ANALYZER & TRANSDUCER POWER - SEE C1 & C3
P285-2	CP 285	TP 285 w/SO (3)	1-1/4"	3#6, #8G	FOR PUMP 285-2
C1	CP 285	TP 285 w/SO (3)	1"	1) 2/C#16 TSP	COMBUSTIBLE GAS DETECTOR - ANALOG
				2) 4#14	COMBUSTIBLE GAS DETECTOR - DISCRETES
C2	CP 285	TP 285 w/SO (3)	1"	1 PARAFLEX	TUBING - CAPTIVE AIR SYSTEM, PER STD. DETAILS
C3	CP 285	TP 285 w/SO (3)	1"	4#14	'OPTI-FLOAT' LEVEL TRANSDUCER - DISCRETES
C4	CP 285	TP 285 w/SO (3)	1"	2(5#14)	LEAK & TEMPERATURE ALARMS - SET PER PUMP MOTOR
V1	CP 285	PI-100 XMTR	1"	2/C#16 TSP	HEADER PRESSURE TRANSMITTER - ON PIPING
V2	CP 285	LS CV-P1, CV-P2	1"	2(2#14, #14G)	CHECK VALVE LIMIT SWITCH, EACH PUMP - ON PIPING
W1	TP 285 BOTTOM	WET WELL	1-1/2"	2(FFO)	FACTORY FIBER OPTIC CABLES TO FLOATS (2 EACH)
W2	TP 285 BOTTOM	WET WELL	1-1/2"	5/C#16	COMBUSTIBLE GAS SENSOR
W3	TP 285 BOTTOM	WET WELL	1-1/2"	1 PARAFLEX	TUBING - CAPTIVE AIR SYSTEM, PER STD. DETAILS
W4	TP 285 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 1 MOTOR FACTORY POWER CABLE - VERIFY CONDUIT SIZE
W5	TP 285 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 2 MOTOR FACTORY POWER CABLE - VERIFY CONDUIT SIZE
W6 (4)	TP 285 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 3 MOTOR FACTORY POWER CABLE - VERIFY CONDUIT SIZE
W7	TP 285 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 1 MOTOR FACTORY ALARM CABLE
W8	TP 285 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 2 MOTOR FACTORY ALARM CABLE
W9 (4)	TP 285 BOTTOM	WET WELL	2-1/2"	1 MSC	PUMP 3 MOTOR FACTORY ALARM CABLE
	(1) GRS/PVC UNLESS OTHERWISE INDICATED.		(3) w/SO = WITH SEAL-OFF FITTING		
	(2) MSC = MANUFACTURER SUPPLIED CABLE		(4) FOR TRIPLEX STATIONS ONLY		

SHEET NUMBER	M-E03R								
EAST BATON ROUGE	BATON ROUGE	PROJECT	10-PS-MS-0048	PARISH	CITY	DATE	04-01-2016	BY	DF 175
DESIGNED	ACR	CHECKED	WCV	DETAILED	CHECKED	DATE	04-01-2016	BY	WCV
REVISED CURRENT VALUES IN TABLE 805-09									
REVISION DESCRIPTION									
NO. 1 05/31/16									
HOOPER ROAD PUMP STATION PROJECT									
PUMP STATION 285									
TYPE I DUPLEX									
805-09 THREE-LINE POWER DIAGRAM, SHEET 2 OF 2									
May 31, 2016 - 10:57am									


 VERNON L. McALLISTER
 License No. 28919
 PROFESSIONAL ENGINEER
 STATE OF LOUISIANA
 APRIL 1, 2016



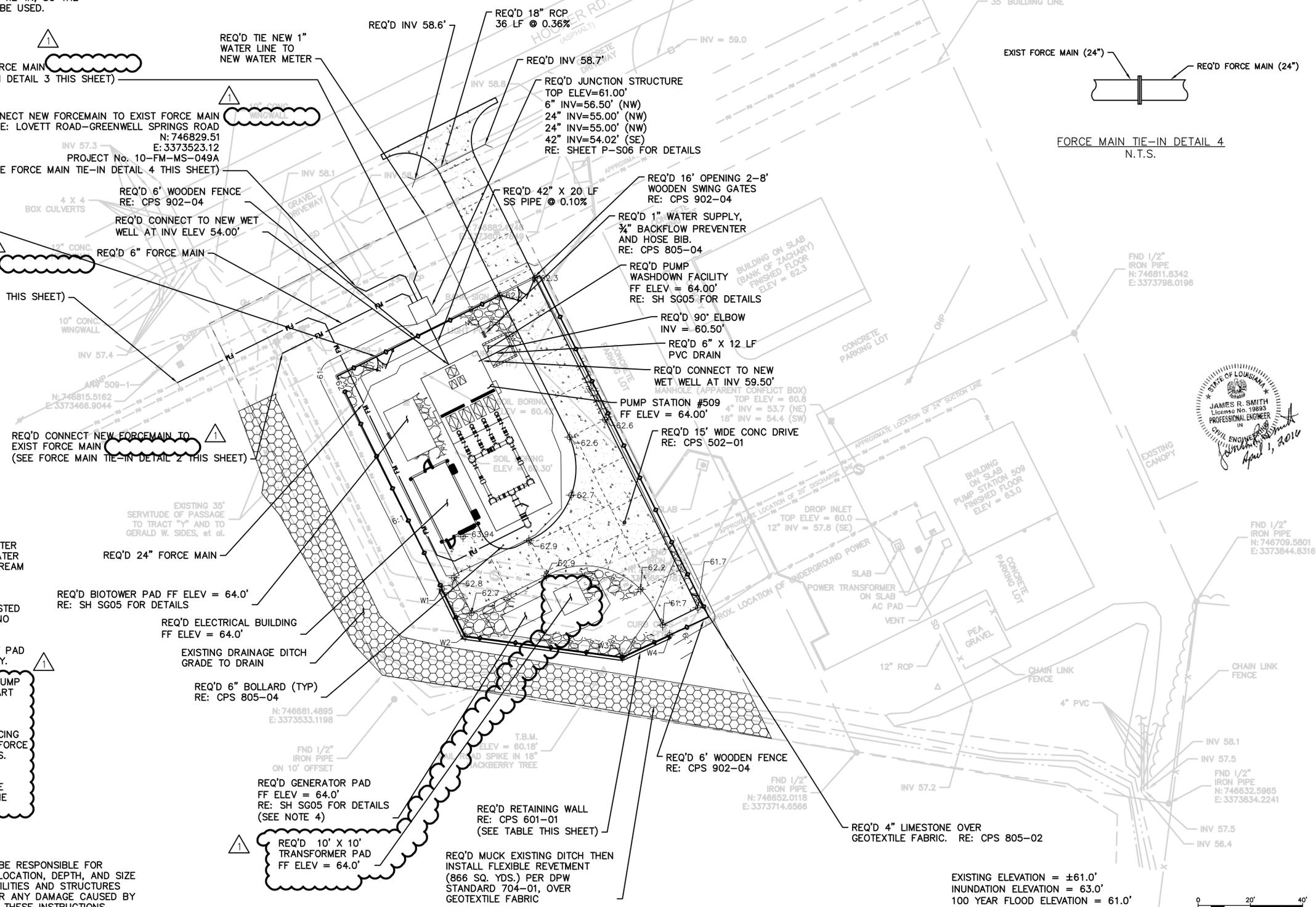
- TIE-IN NOTES:
- FORCE MAIN TIE-IN WILL REQUIRE A SHUTDOWN OF THE EXISTING FORCE MAIN. THIS SHALL BE COORDINATED WITH DPW OPERATIONS AT LEAST 96 HOURS PRIOR TO TIE-IN.
 - FORCE MAIN CAN ONLY BE SHUTDOWN FOR FOUR HOURS DURING THE DAY OR BETWEEN THE HOURS OF 10 PM AND 6AM.
 - ALL REQUIRED FORCE MAINS ARE TO BE RESTRAINED.
 - EXISTING FORCE MAIN SHALL BE RESTRAINED 20' FROM REQUIRED FORCE MAIN TIE-IN.
 - EXACT LOCATION OF FORCE MAIN TIE-IN TO BE FIELD VERIFIED BY CONTRACTOR.
 - CONTRACTOR MAY ADJUST THE PROPOSED FORCE MAIN LAYOUT AS NECESSARY TO FACILITATE THE TIE-IN IF APPROVED BY THE ENGINEER.
 - ALL PIPE, FITTINGS AND ALL OTHER MATERIAL, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED.
 - CONTRACTOR TO VERIFY EXISTING FORCE MAIN MATERIAL PRIOR TO MAKING TIE-IN, SO THE PROPER CONNECTIONS CAN BE USED.



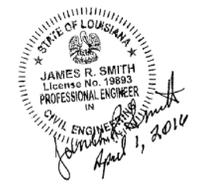
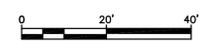
POINT	TOP OF WALL	EXIST. GROUND
W1	62.0	±60.1
W2	62.0	±60.2
W3	62.0	±59.8
W4	61.8	±59.7

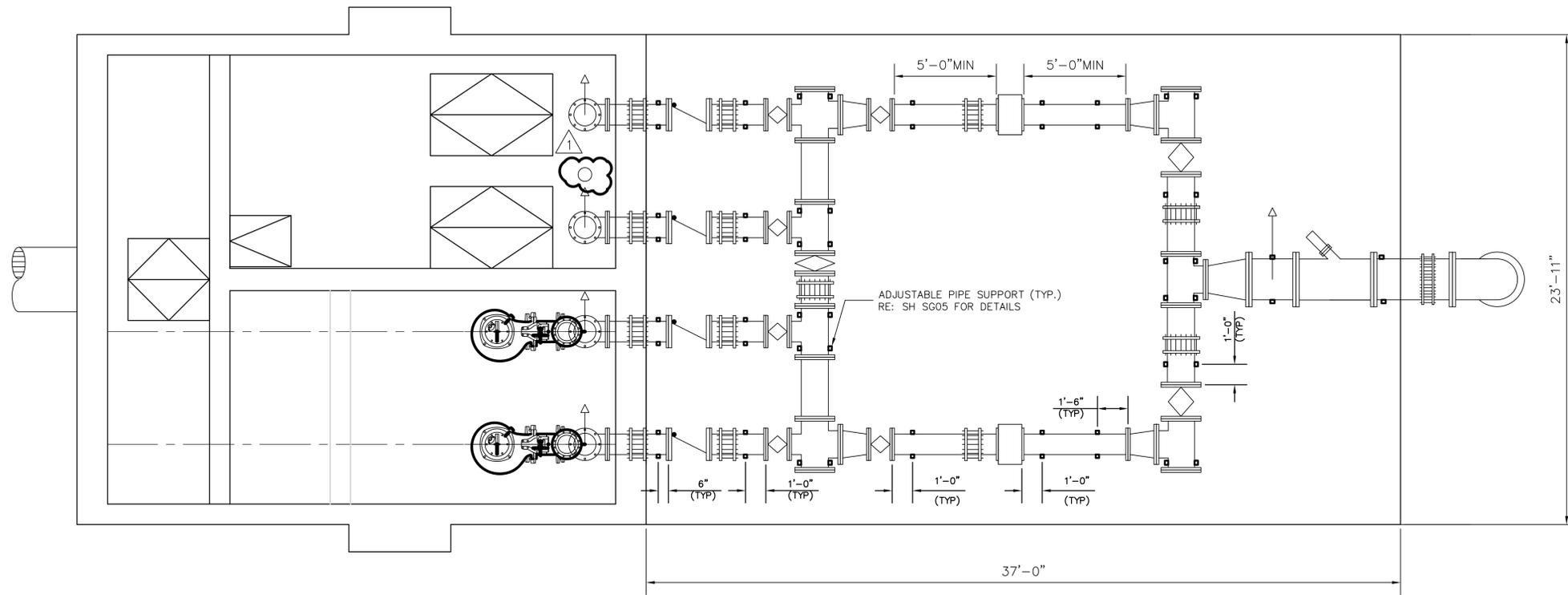
- NOTES:
- EXISTING PUMP STATION, FORCEMAINS & GRAVITY SEWERS LINES SHALL REMAIN OPERATIONAL DURING CONSTRUCTION AND TESTING OF NEW STATION.
 - CONTRACTOR TO VERIFY LOCATION OF WATER LINE. CONTRACTOR TO CONNECT NEW WATER LINE TO EXISTING WATER LINE JUST UPSTREAM OF THE BACK FLOW PREVENTER, UNLESS SHOWN OTHERWISE.
 - MANHOLE TOP ELEVATIONS MAY BE ADJUSTED IN THE FIELD BY PROJECT ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR TO FIELD VERIFY EQUIPMENT PAD DOES NOT CONFLICT WITH EXISTING UTILITY.
 - ALL FORCE MAINS LOCATED WITHIN THE PUMP STATION FENCING ARE TO BE PAID AS PART OF THE LUMP SUM PRICE FOR THE PUMP STATION.
 - FORCE MAINS LOCATED OUTSIDE THE FENCING WILL BE PAID FOR PER LINEAR FOOT OF FORCE MAIN INSTALLED ALONG WITH ALL FITTINGS.
 - JUNCTION BOX STRUCTURE AND GRAVITY SEWER FROM BOX TO WET WELL SHALL BE INCLUDED IN THE LUMP SUM PRICE OF THE PUMP STATION.

NOTE:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, AND SIZE OF ALL UNDERGROUND UTILITIES AND STRUCTURES AND SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.

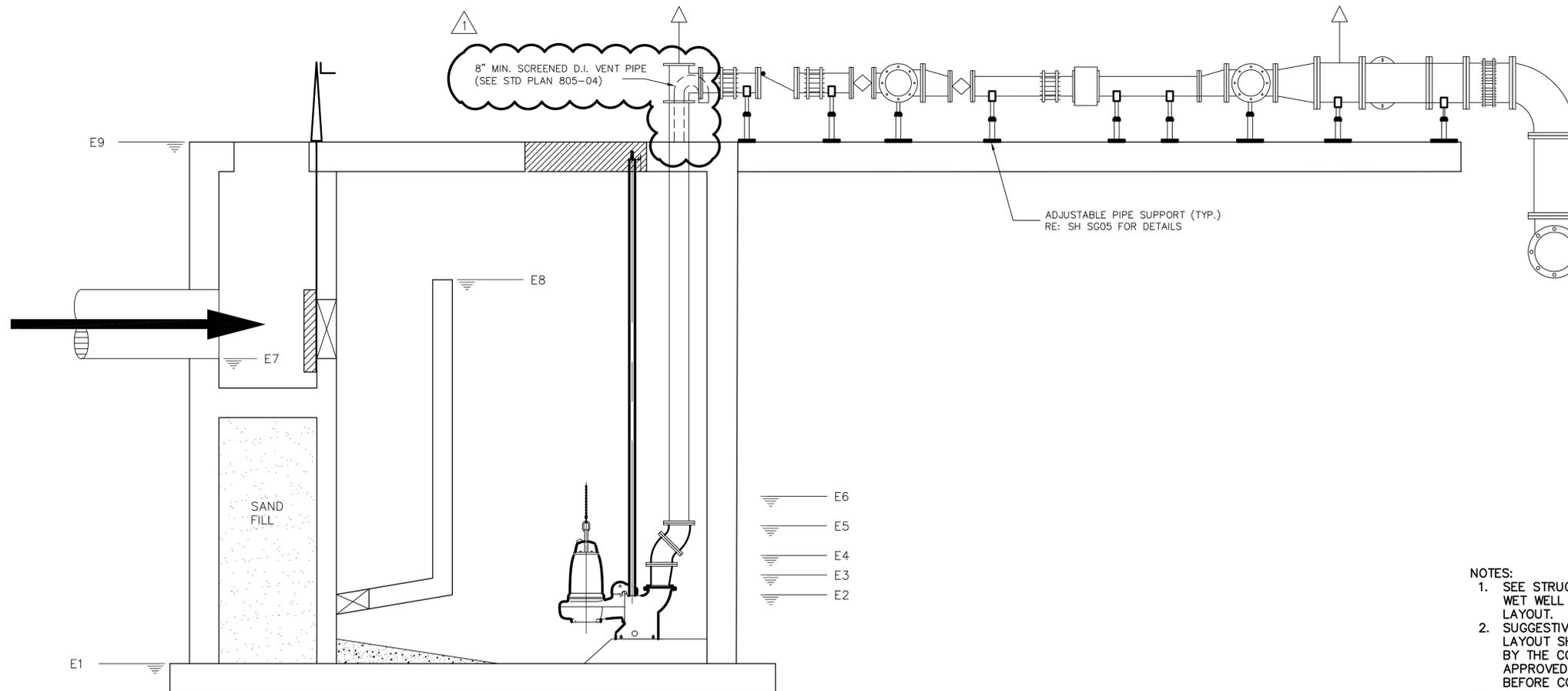


EXISTING ELEVATION = ±61.0'
 INUNDATION ELEVATION = 63.0'
 100 YEAR FLOOD ELEVATION = 61.0'
 TOP PROP. WET WELL = 64.00"





PUMP STATION PLAN
 (N.T.S.)

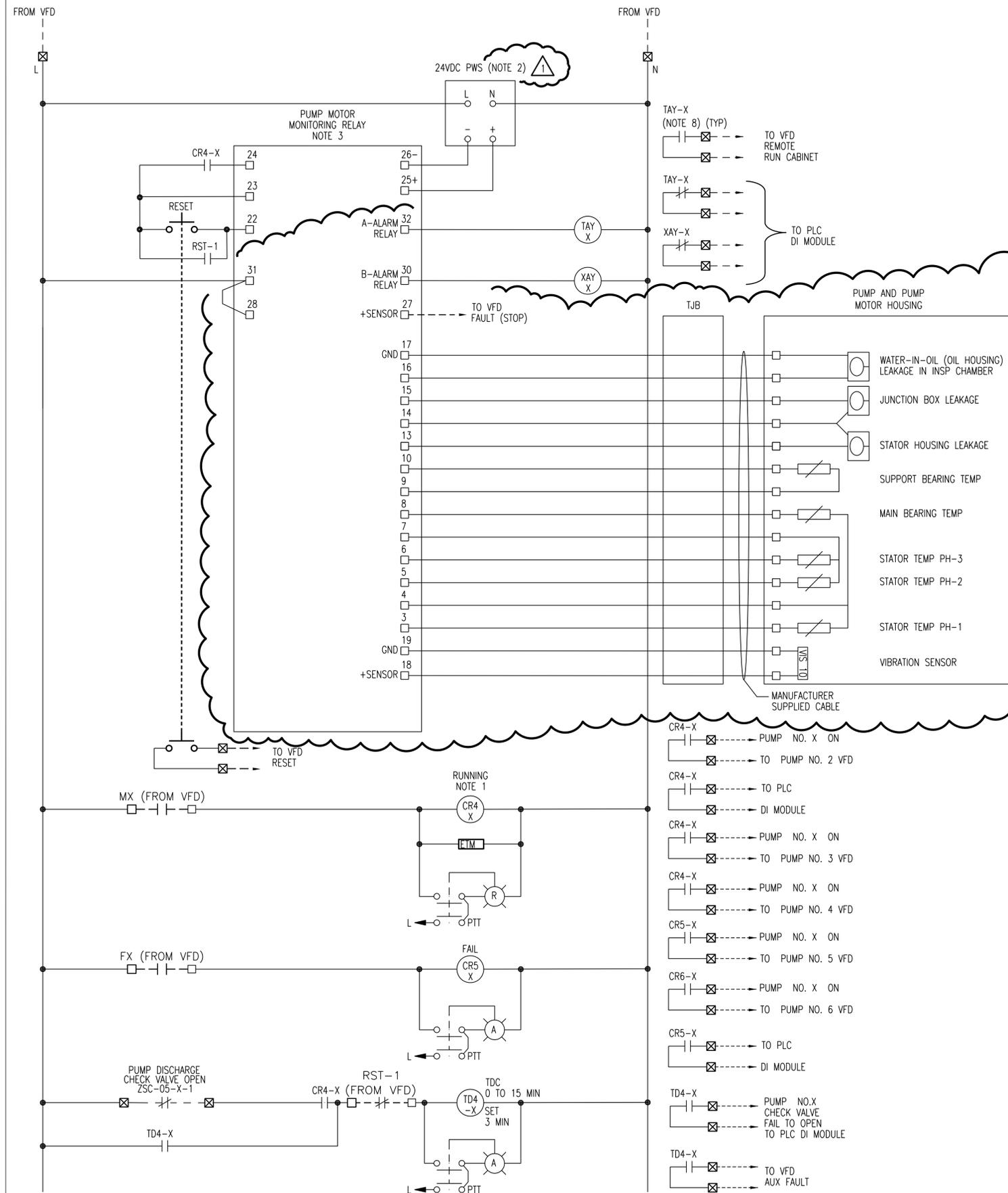


PUMP STATION SECTION
 (N.T.S.)

- NOTES:
1. SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.
 2. SUGGESTIVE PIPE SUPPORT LAYOUT SHALL BE CONFIRMED BY THE CONTRACTOR WITH APPROVED MANUFACTURER BEFORE CONSTRUCTION.
 3. CONTRACTOR SHALL COORDINATE HEIGHT OF PIPE SUPPORT BASED ON MATERIALS SELECTED FOR ABOVE GROUND PIPING.

STATE OF LOUISIANA
 JAMES R. SMITH
 License No. 18893
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
James R. Smith
 April 1, 2016

SHEET NUMBER		P-C02R	
EAST BATON ROUGE		BATON ROUGE	
PARISH		CITY	
DESIGNED BJR		PROJECT 10-PS-MS-0048	
CHECKED JRS		DATE 04-01-2016	
DETAILED		SHEET 051 OF 175	
CHECKED		REVISION DESCRIPTION	
DATE		NO.	
BY		DATE	
JRS		05/31/16	
SHOWED SCREENED D.I. VENT PIPE		1	
REVISION DESCRIPTION		DATE	
			
HOOPER ROAD PUMP STATION PROJECT PUMP STATION 509 PLAN, SECTION AND DETAILS			
			
			



GENERAL NOTES:

1. PUMP EMERGENCY CALL CONTACT COMES FROM RELAY CR6 FOR PUMP 1, AND TD1-X FOR PUMP #X, X = 2 THRU 6. SEE PUMP EMERGENCY CALL CIRCUIT ON P-109. WHEN THE E CALL CONTACT IS CLOSED, THE DRIVE STARTS AT AN ADJUSTABLE PRESET SPEED ONLY WHEN THE DRIVE IS IN REMOTE, IGNORING PLC LOGIC RUN CONTACT.
2. PROVIDE MINI 24VDC PHOENIX CONTACT POWER SUPPLY RATED AT 1.3 AMPS.
3. A PUMP MOTOR MONITORING RELAY SHALL BE FURNISHED WITH THE PUMP. COORDINATE REQUIREMENTS WITH THE PUMP MANUFACTURER AND SPECIFICATION SECTION 22 13 29-16. MOUNT PUMP MONITORING RELAY SCREEN ON FRONT DOOR OF VFD JBOX.
4. NOT USED
5. NOT USED
6. NOT USED
7. NOT USED
8. TYPICAL FOR PUMP NO. X. X=1 THRU 6. PUMP MOTOR CONTROLS TYPICAL TO PUMP NO.X=1.

TYPICAL PUMP VFD CONTROL DIAGRAM

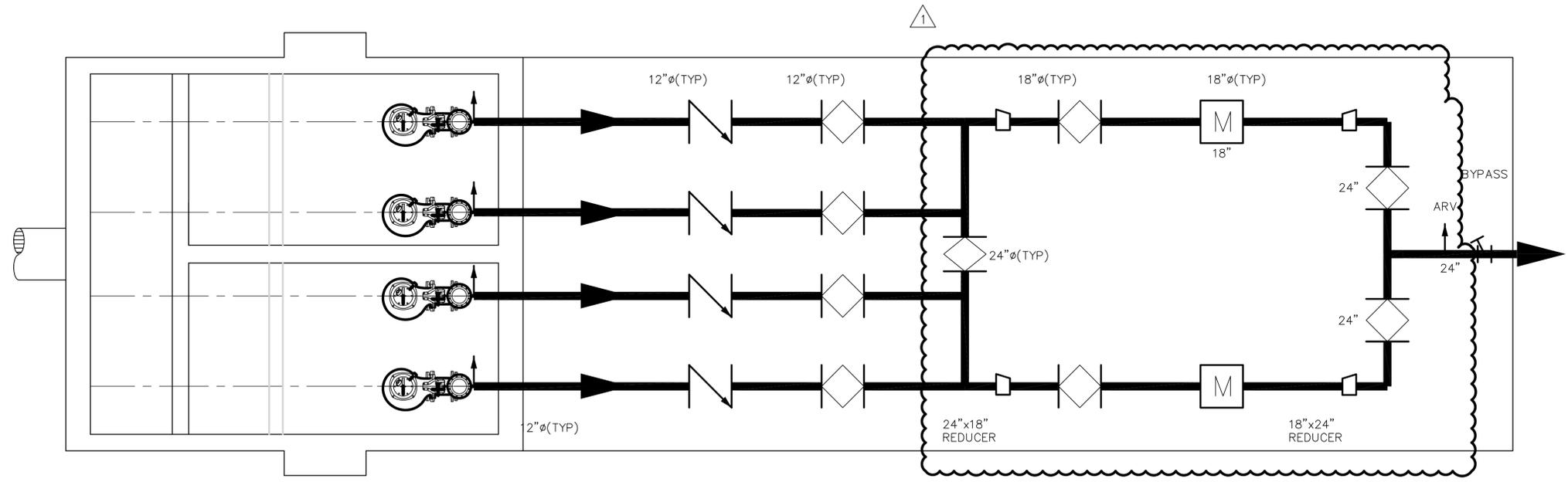
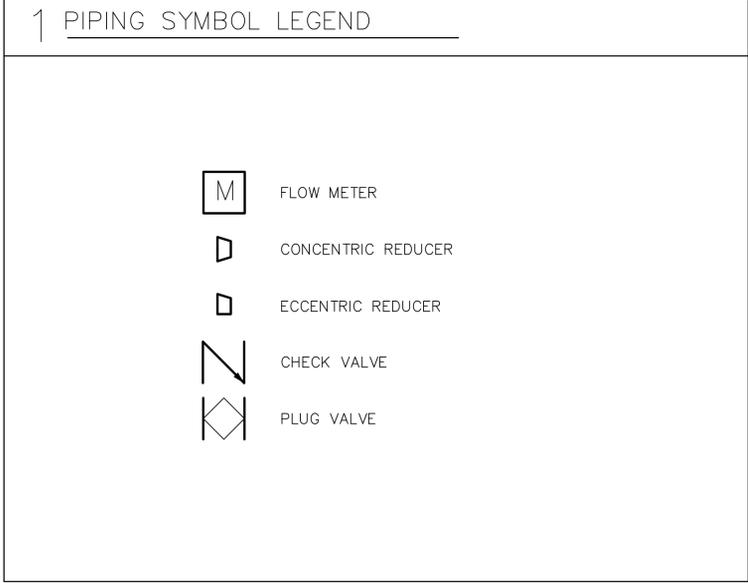
X = 1, 2, 3, 4

STATE OF LOUISIANA
 VERNON L. McALLISTER
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 PROFESSIONAL ENGINEER
 APRIL 1, 2016

SHEET NUMBER	P-E08R
EAST BATON ROUGE	BATON ROUGE
PARISH	CITY
PROJECT	10-PS-MS-0048
DESIGNED	SAW
CHECKED	TJM
DATE	04-01-2016
NO.	091 OF 175
REVISION DESCRIPTION	REVISED PUMP MOTOR HOUSING AND RELAY
DATE	05/31/16
NO.	1
BY	SAW

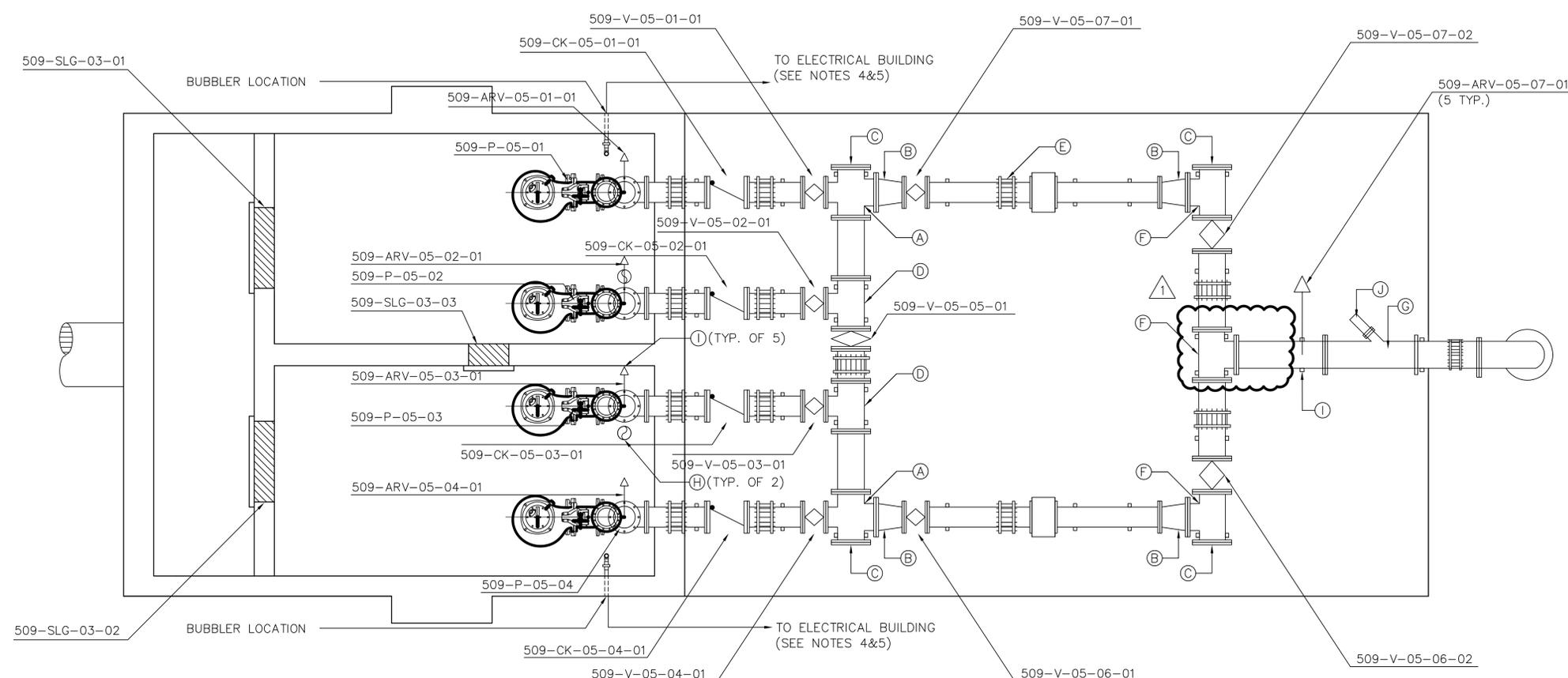
HOOPER ROAD PUMP STATION PROJECT
 PUMP STATION PS-509
 TYPE IIIA PROGRAM STATION
 TYPICAL VFD JBOX WIRING DIAGRAM

May 31, 2016 - 10:44am
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STATE OF LOUISIANA
 JAMES R. SMITH
 License No. 19893
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
James R. Smith
 April 1, 2016

SHEET NUMBER		P-M01R	
DESIGNED BY	CHKD BY	PARRISH	EAST BATON ROUGE
DATE	DATE	CITY	BATON ROUGE
NO.	DATE	PROJECT	10-PS-MS-0048
1	06-06-16	DESIGNED BY	JRS
		CHKD BY	
		DATE	04-01-2016
		NO.	065
		OF	175
		REVISION DESCRIPTION	
		NO.	
		DATE	
		BY	
			
HOOPER ROAD PUMP STATION PROJECT PUMP STATION 509 PROCESS FLOW DIAGRAM			
			



PUMP STATION PLAN
(N.T.S.)

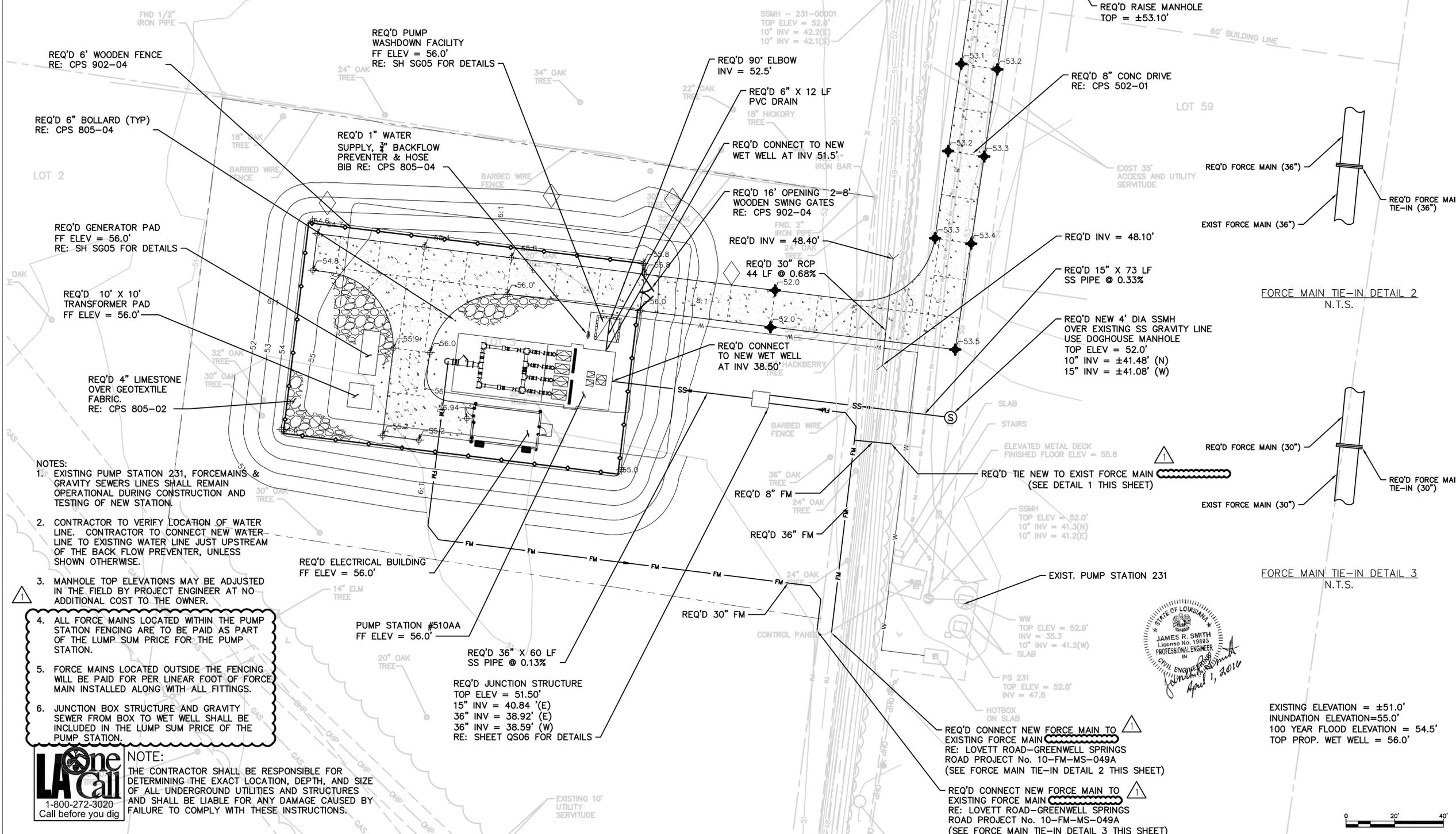
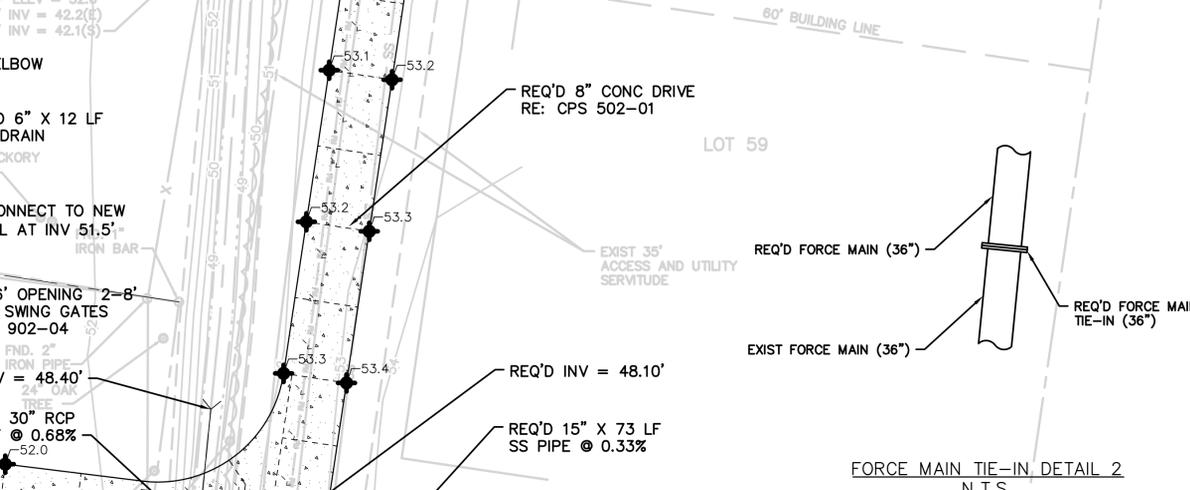
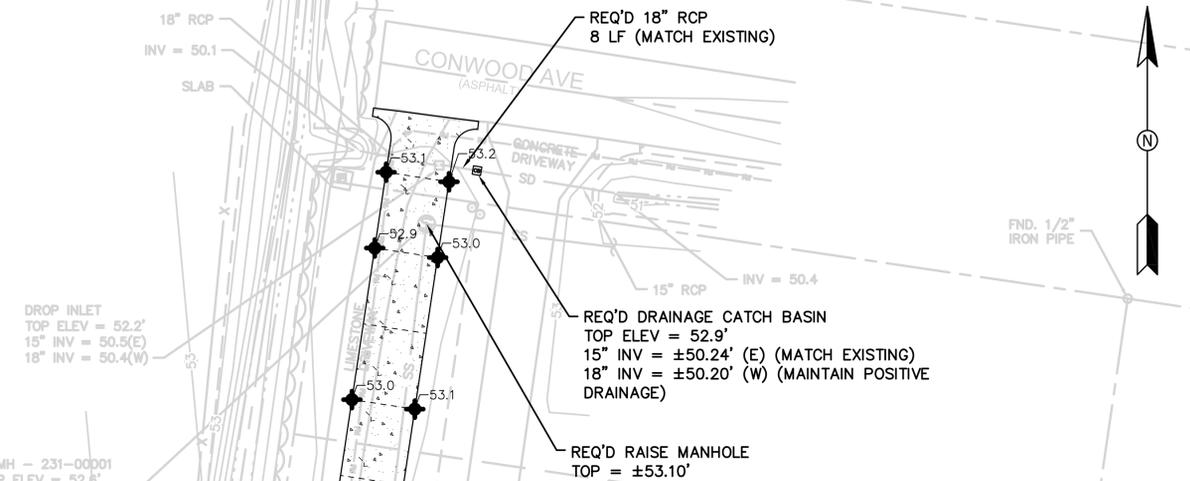
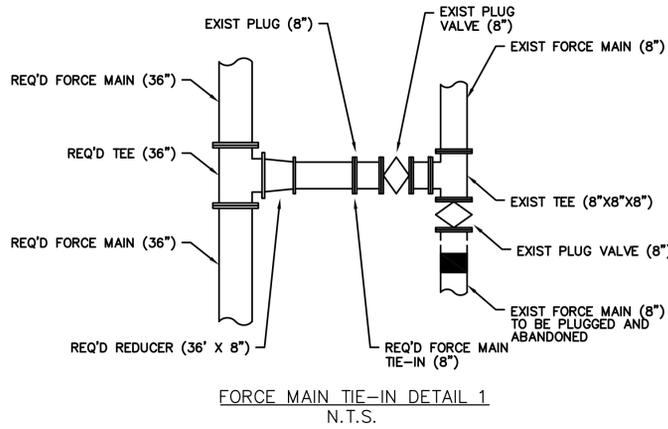
- NOTES:
1. SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.
 2. BUBBLER & VENT PIPE SHALL BE INSTALLED PER STANDARD PLAN 805-04.
 3. LOCATION OF BUBBLER MAY BE ADJUSTED TO ALLOW FOR THE INSTALLATION AND REMOVAL OF PUMPS.
 4. CONTRACTOR TO ROUTE BUBBLER PIPING TO AVOID CONFLICTS WITH ELECTRICAL DUCTS.
 5. CONTRACTOR SHALL SUBMIT A LAYING AND ROUTING PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.

(A)	REDUCING CROSS 24"X12"	(F)	TEE 24"X24"
(B)	ECCENTRIC REDUCER 24"X18"	(G)	WYE 24"X6"
(C)	BLIND FLANGE 24"	(H)	VENT PIPE 8"
(D)	REDUCING TEE 24"X12"	(I)	AIR RELEASE VALVE 2"
(E)	FLEXIBLE COUPLING (TYP.)	(J)	6" S.S. EMERGENCY CONNECTION CAMLOCK W/ PLUG, GATE VALVE, AND FITTINGS TO CONNECT TO WYE.

STATE OF LOUISIANA
 JAMES R. SMITH
 License No. 13883
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
 April 1, 2016

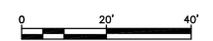
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DESIGNED BY		BKR	
CHECKED BY		JRS	
DATE		04-01-2016	
SHEET		066	
PROJECT		10-PS-MS-0048	
CITY		BATON ROUGE	
PARISH		EAST BATON ROUGE	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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REVISION DESCRIPTION		REVISED PIPING SIZES	
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REVISION DESCRIPTION		REVISED PIPING SIZES	
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REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
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DATE		06-06-16	
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BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
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BY		JRS	
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DATE		06-06-16	
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BY		JRS	
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DATE		06-06-16	
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NO.		1	
DATE		06-06-16	
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DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
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NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	
NO.		1	
DATE		06-06-16	
REVISION DESCRIPTION		REVISED PIPING SIZES	
BY		JRS	

- TIE-IN NOTES:**
1. FORCE MAIN TIE-IN WILL REQUIRE A SHUTDOWN OF THE EXISTING FORCE MAIN. THIS SHALL BE COORDINATED WITH DPW OPERATIONS AT LEAST 96 HOURS PRIOR TO TIE-IN.
 2. FORCE MAIN CAN ONLY BE SHUTDOWN FOR FOUR HOURS DURING THE DAY OR BETWEEN THE HOURS OF 10 PM AND 6AM.
 3. ALL REQUIRED FORCE MAINS ARE TO BE RESTRAINED.
 4. EXISTING FORCE MAIN SHALL BE RESTRAINED 20' FROM REQUIRED FORCE MAIN TIE-IN.
 5. EXACT LOCATION OF FORCE MAIN TIE-IN TO BE FIELD VERIFIED BY CONTRACTOR.
 6. CONTRACTOR MAY ADJUST THE PROPOSED FORCE MAIN LAYOUT AS NECESSARY TO FACILITATE THE TIE-IN IF APPROVED BY THE ENGINEER.
 7. ALL PIPE, FITTINGS AND ALL OTHER MATERIAL, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED.

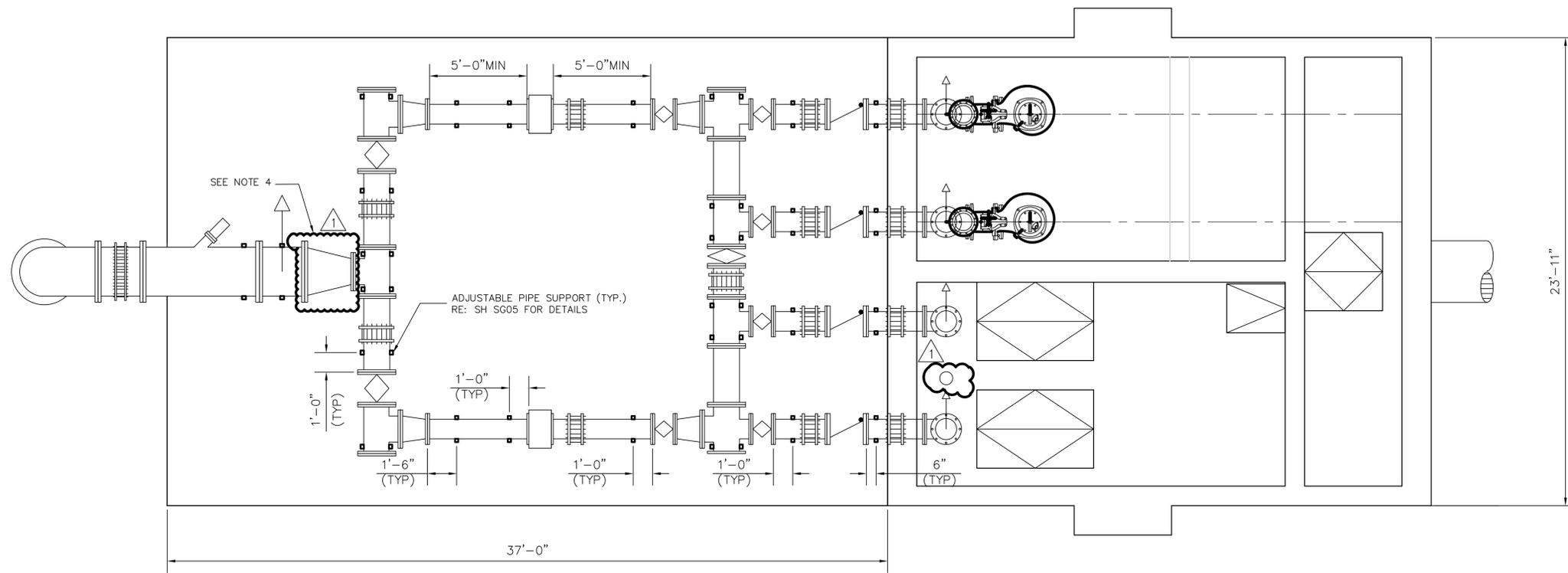


- NOTES:**
1. EXISTING PUMP STATION 231, FORCE MAINS & GRAVITY SEWERS LINES SHALL REMAIN OPERATIONAL DURING CONSTRUCTION AND TESTING OF NEW STATION.
 2. CONTRACTOR TO VERIFY LOCATION OF WATER LINE. CONTRACTOR TO CONNECT NEW WATER LINE TO EXISTING WATER LINE JUST UPSTREAM OF THE BACK FLOW PREVENTER, UNLESS SHOWN OTHERWISE.
 3. MANHOLE TOP ELEVATIONS MAY BE ADJUSTED IN THE FIELD BY PROJECT ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
 4. ALL FORCE MAINS LOCATED WITHIN THE PUMP STATION FENCING ARE TO BE PAID AS PART OF THE LUMP SUM PRICE FOR THE PUMP STATION.
 5. FORCE MAINS LOCATED OUTSIDE THE FENCING WILL BE PAID FOR PER LINEAR FOOT OF FORCE MAIN INSTALLED ALONG WITH ALL FITTINGS.
 6. JUNCTION BOX STRUCTURE AND GRAVITY SEWER FROM BOX TO WET WELL SHALL BE INCLUDED IN THE LUMP SUM PRICE OF THE PUMP STATION.

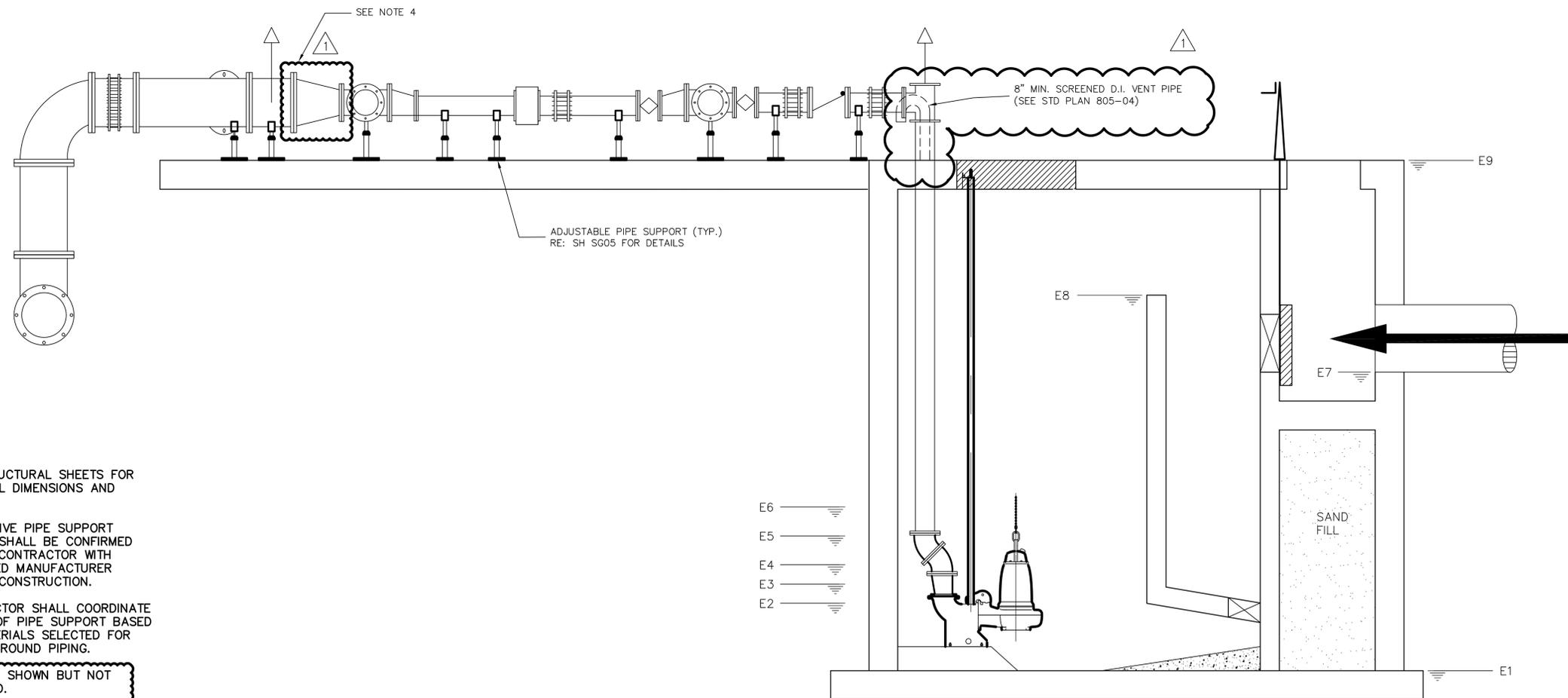
NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, AND SIZE OF ALL UNDERGROUND UTILITIES AND STRUCTURES AND SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.



SHEET NUMBER	Q-C01R
EAST BATON ROUGE	BATON ROUGE
PARISH	CITY
PROJECT	10-FM-MS-0048
DESIGNED BY	CHKD BY
CHECKED BY	DATE
DATE	04-01-2016
DATE	092
DATE	06-08-16
DATE	1
NO.	
HOOPER ROAD PUMP STATION PROJECT PUMP STATION 510AA PROPOSED SITE PLAN	
EXISTING ELEVATION = ±51.0' INUNDATION ELEVATION = 55.0' 100 YEAR FLOOD ELEVATION = 54.5' TOP PROP. WET WELL = 56.0'	



PUMP STATION PLAN
SCALE 1"=40'



PUMP STATION SECTION
SCALE 1"=40'

NOTES:

1. SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.
2. SUGGESTIVE PIPE SUPPORT LAYOUT SHALL BE CONFIRMED BY THE CONTRACTOR WITH APPROVED MANUFACTURER BEFORE CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE HEIGHT OF PIPE SUPPORT BASED ON MATERIALS SELECTED FOR ABOVE GROUND PIPING.

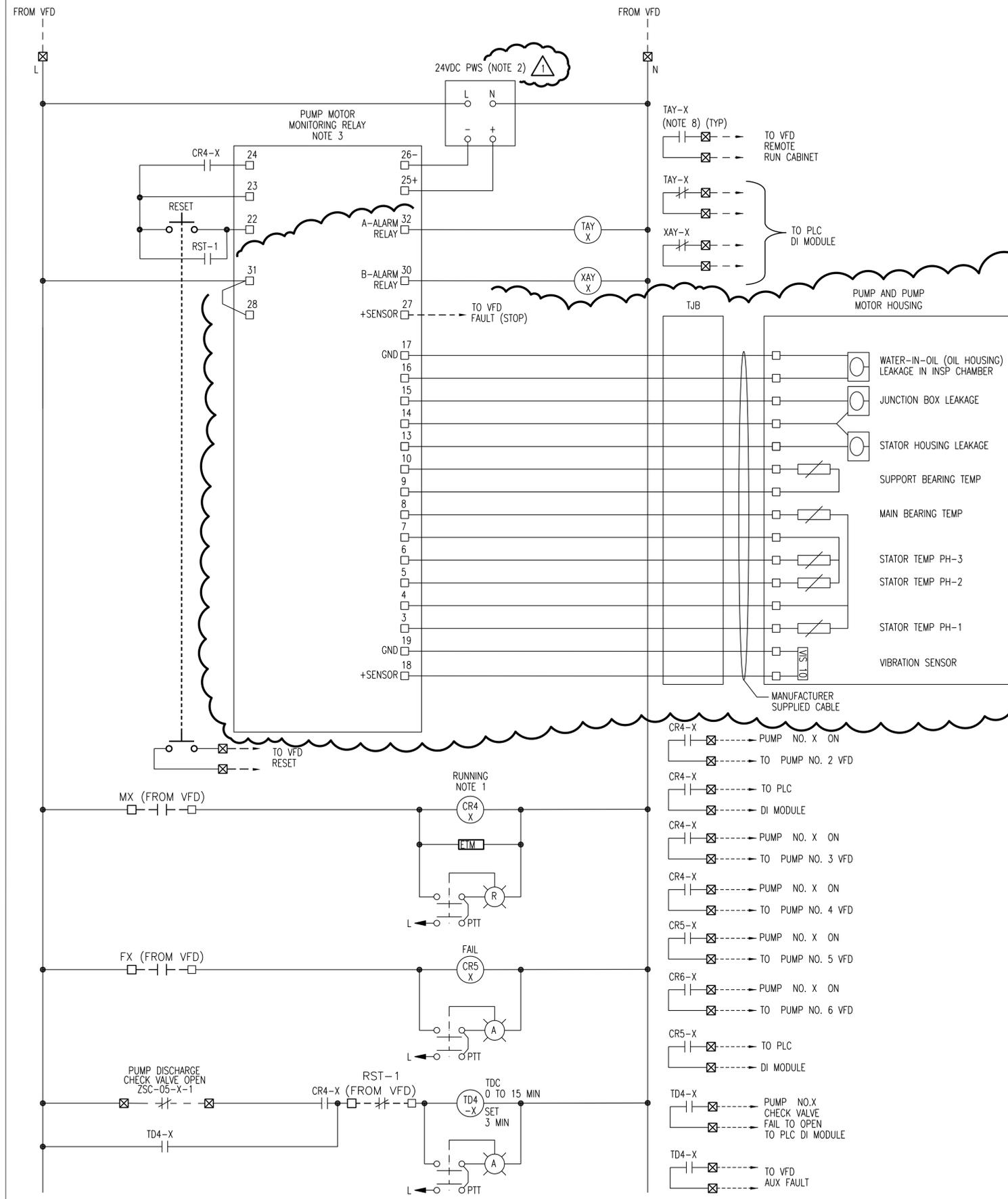
4. REDUCER SHOWN BUT NOT REQUIRED.

SHEET NUMBER	Q-C02R
PARISH	EAST BATON ROUGE
CITY	BATON ROUGE
PROJECT	10-PS-MS-0048
DESIGNED BY	JRS
CHECKED BY	JRS
DATE	04-01-2016
NO. OF SHEETS	175
NO.	4
DATE	05/31/16
REVISION DESCRIPTION	SHOWED SCREENED D.I. VENT PIPE AND ADDED NOTE 4



HOOPER ROAD PUMP STATION PROJECT
PUMP STATION 510AA
PLAN, SECTION AND DETAILS





GENERAL NOTES:

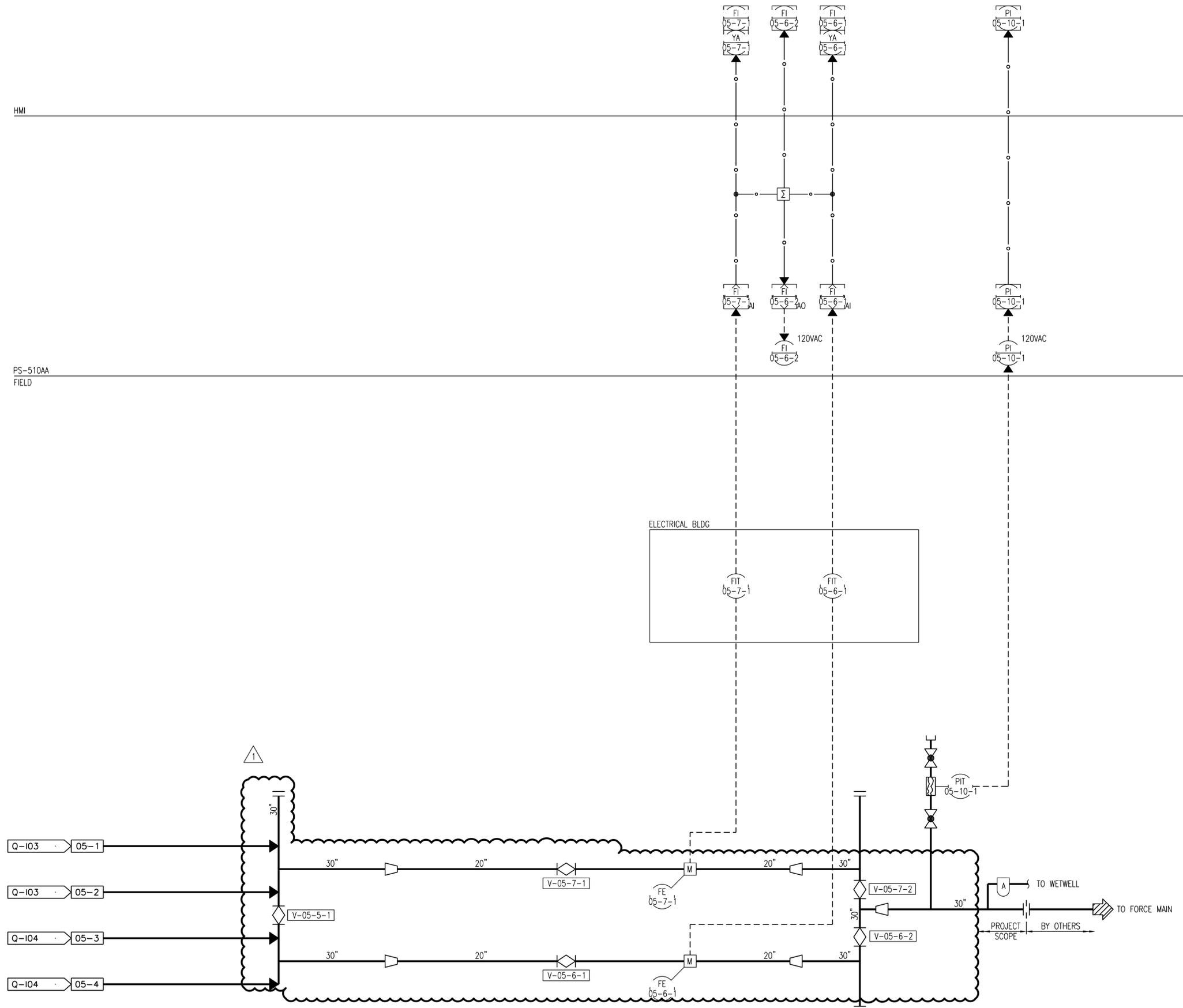
1. PUMP EMERGENCY CALL CONTACT COMES FROM RELAY CR6 FOR PUMP 1, AND TD1-X FOR PUMP #X, X = 2 THRU 6. SEE PUMP EMERGENCY CALL CIRCUIT ON P-109. WHEN THE E CALL CONTACT IS CLOSED, THE DRIVE STARTS AT AN ADJUSTABLE PRESET SPEED ONLY WHEN THE DRIVE IS IN REMOTE, IGNORING PLC LOGIC RUN CONTACT.
2. PROVIDE MINI 24VDC PHOENIX CONTACT POWER SUPPLY RATED AT 1.3 AMPS.
3. A PUMP MOTOR MONITORING RELAY SHALL BE FURNISHED WITH THE PUMP. COORDINATE REQUIREMENTS WITH THE PUMP MANUFACTURER AND SPECIFICATION SECTION 22 13 29-16. MOUNT PUMP MONITORING RELAY SCREEN ON FRONT DOOR OF VFD JBOX.
4. NOT USED
5. NOT USED
6. NOT USED
7. NOT USED
8. TYPICAL FOR PUMP NO. X. X=1 THRU 6. PUMP MOTOR CONTROLS TYPICAL TO PUMP NO.X=1.

TYPICAL PUMP VFD CONTROL DIAGRAM

X = 1, 2, 3, 4

STATE OF LOUISIANA
 VERNON L. McALLISTER
 License No. 28919
 PROFESSIONAL ENGINEER
 APRIL 1, 2016

SHEET NUMBER	Q-E08R
EAST BATON ROUGE	BATON ROUGE
PARISH	CITY
PROJECT	10-PS-MS-0048
DESIGNED	SAW
CHECKED	TJM
DATE	04-01-2016
REVISION	1.00
NO.	OF 175
REVISED PUMP MOTOR HOUSING AND RELAY	SAW
DESCRIPTION	BY
NO.	DATE
1	05/31/16
HOOPER ROAD PUMP STATION PROJECT	
PUMP STATION PS-510AA	
TYPE IIIA PROGRAM STATION	
TYPICAL VFD JBOX WIRING DIAGRAM	
May 31, 2016 - 10:41am	



GENERAL NOTES:

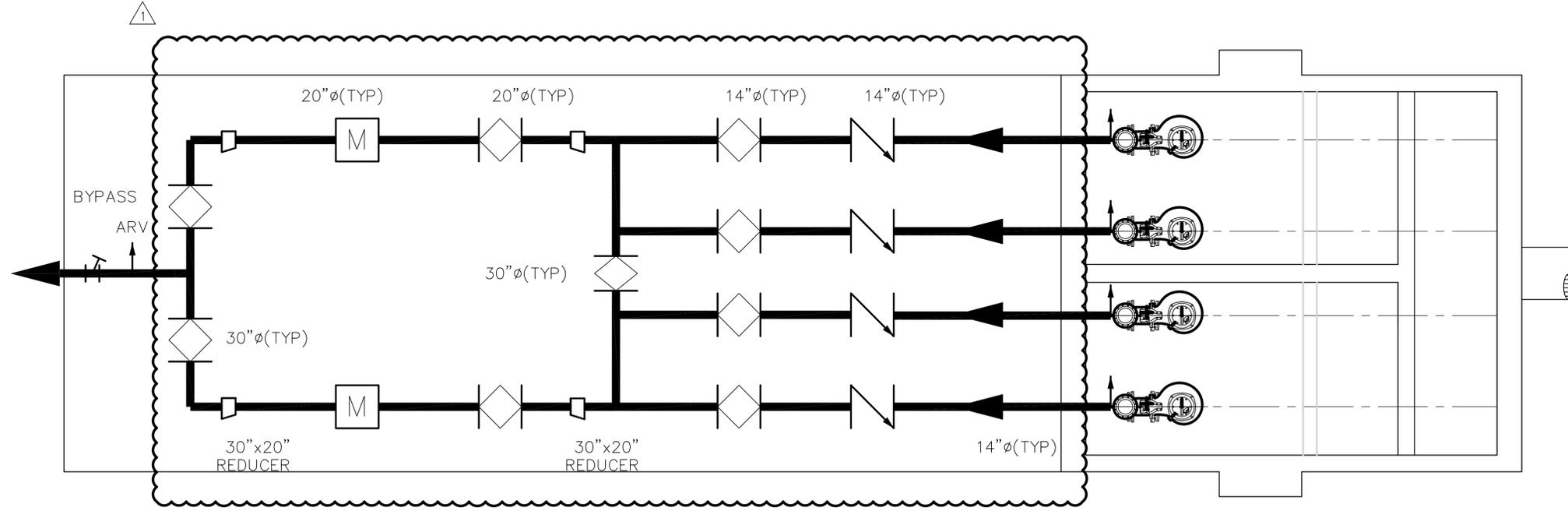
1. FOR GENERAL LEGEND AND NOTES SEE DRAWINGS IG01 AND IG02.
2. ALL WORK ON THIS DRAWING BY CONTRACTOR, UNLESS NOTED OTHERWISE.
3. ALL INSTRUMENTS, I/O, AND EQUIPMENT HAVE PREFIX 510AA INCLUDED IN THE TAG NUMBER, UNLESS NOTED OTHERWISE.

KEYNOTES:

SHEET NUMBER	Q-102R
EAST BATON ROUGE	BATON ROUGE
PARISH	CITY
DESIGNED	SAW
CHECKED	TJM
DATE	04-01-2016
SHEET	109
OF	175
NO.	1
DATE	06-06-2016
REVISION	NO.
DESCRIPTION	BY
REVISION	JRS
DESCRIPTION	BY

SCOTT A. WARREN
License No. 37559
PROFESSIONAL ENGINEER
IN
LOUISIANA
4/1/16

HOOPER ROAD PUMP STATION PROJECT
PUMP STATION PS-510AA
P&ID OVERVIEW - SHEET 2 OF 2



1 PIPING SYMBOL LEGEND

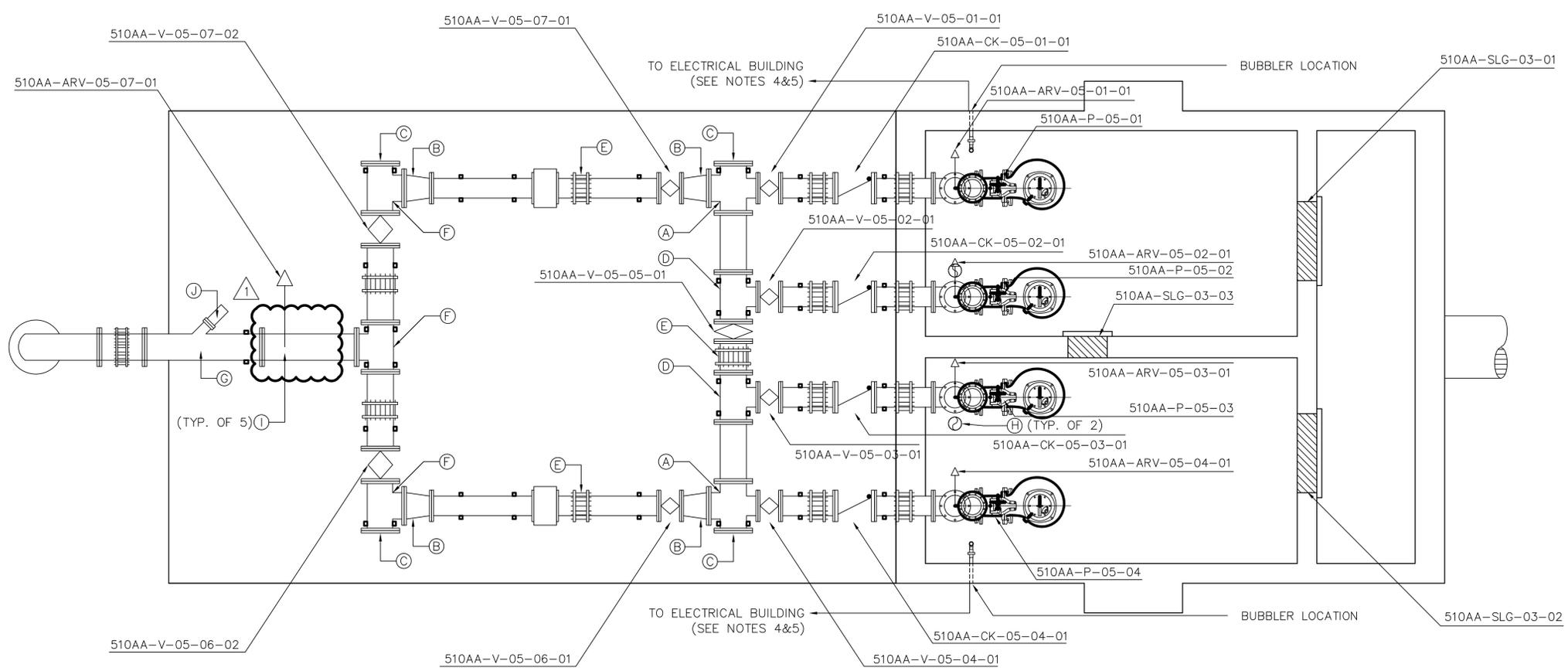
- FLOW METER
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- CHECK VALVE
- PLUG VALVE

JAMES R. SMITH
 License No. 18093
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
 State of Louisiana
 April 1, 2016

SHEET NUMBER	Q-M01R	DESIGNED BY	EAST BATON ROUGE	DATE	04-01-2016
CHECKED	JRS	CITY	BATON ROUGE	PROJECT	10-PS-MS-0048
DETAILED	JRS	PARISH	EAST BATON ROUGE	DATE	04-01-2016
NO.	1	REVISION DESCRIPTION	REVISED PIPING SIZES	SHEET	106
NO.	1	REVISION DESCRIPTION	REVISED PIPING SIZES	SHEET	106
NO.	1	REVISION DESCRIPTION	REVISED PIPING SIZES	SHEET	106

HOOPER ROAD PUMP STATION PROJECT
PUMP STATION 510AA

PROCESS FLOW DIAGRAM



PUMP STATION PLAN
(N.T.S.)

- NOTES:
- SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.
 - BUBBLER & VENT PIPE SHALL BE INSTALLED PER STANDARD PLAN 805-04.
 - LOCATION OF BUBBLER MAY BE ADJUSTED TO ALLOW FOR THE INSTALLATION AND REMOVAL OF PUMPS.
 - CONTRACTOR TO ROUTE BUBBLER PIPING TO AVOID CONFLICTS WITH ELECTRICAL DUCTS.
 - CONTRACTOR SHALL SUBMIT A LAYING AND ROUTING PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.

(A)	REDUCING CROSS 30"x14"	(F)	TEE 30"x30"
(B)	ECCENTRIC REDUCER 30"x20"	(G)	WYE 30"x6"
(C)	BLIND FLANGE 30"	(H)	VENT PIPE 8" (TYP.)
(D)	REDUCING TEE 30"x14"	(I)	AIR RELEASE VALVE 2" (TYP.)
(E)	FLEXIBLE COUPLING (TYP.)	(J)	6" S.S. EMERGENCY CONNECTION CAMLOCK W/ PLUG, GATE VALVE, AND FITTING TO CONNECT TO WYE



HOOPER ROAD PUMP STATION PROJECT
PUMP STATION 510AA
TOP PLAN

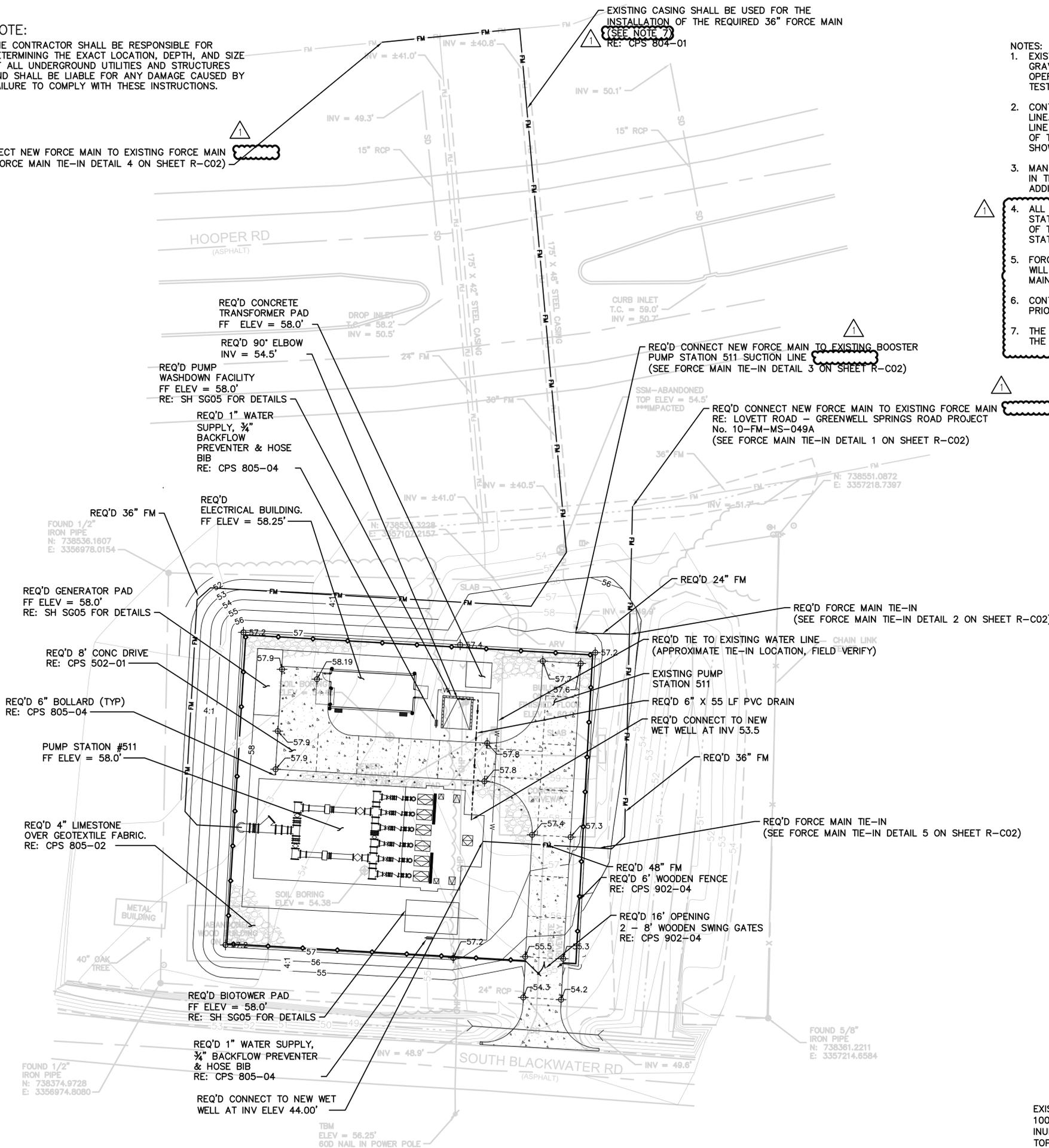




NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, AND SIZE OF ALL UNDERGROUND UTILITIES AND STRUCTURES AND SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.

REQ'D CONNECT NEW FORCE MAIN TO EXISTING FORCE MAIN (SEE FORCE MAIN TIE-IN DETAIL 4 ON SHEET R-C02)



- NOTES:**
- EXISTING PUMP STATION, FORCEMAINS & GRAVITY SEWERS LINES SHALL REMAIN OPERATIONAL DURING CONSTRUCTION AND TESTING OF NEW STATION.
 - CONTRACTOR TO VERIFY LOCATION OF WATER LINE. CONTRACTOR TO CONNECT NEW WATER LINE TO EXISTING WATER LINE JUST UPSTREAM OF THE BACK FLOW PREVENTER, UNLESS SHOWN OTHERWISE.
 - MANHOLE TOP ELEVATIONS MAY BE ADJUSTED IN THE FIELD BY PROJECT ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
 - ALL FORCE MAINS LOCATED WITHIN THE PUMP STATION FENCING ARE TO BE PAID AS PART OF THE LUMP SUM PRICE FOR THE PUMP STATION.
 - FORCE MAINS LOCATED OUTSIDE THE FENCING WILL BE PAID FOR PER LINEAR FOOT OF FORCE MAIN INSTALLED ALONG WITH ALL FITTINGS.
 - CONTRACTOR TO VERIFY CONDITION OF CASING PRIOR TO BEGINNING ANY WORK AT THIS SITE.
 - THE AS-BUILT SHEETS DO NOT SHOW THAT THE FORCE MAIN IS GROUTED IN THE CASING.



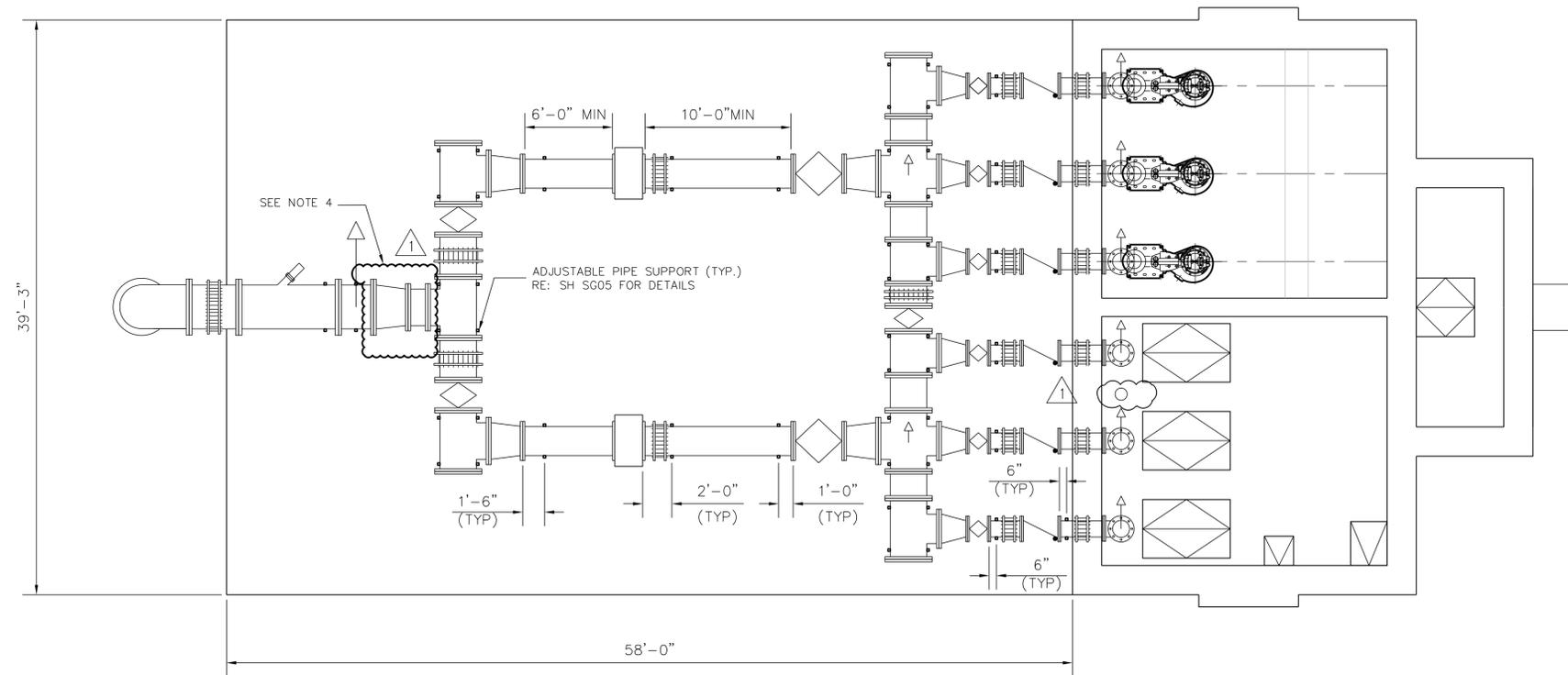
EXISTING ELEVATION = ±54.0'
100 YEAR FLOOD ELEVATION = 54.0'
INUNDATION LEVEL = 57.0'
TOP WET WELL ELEVATION = 58.0'



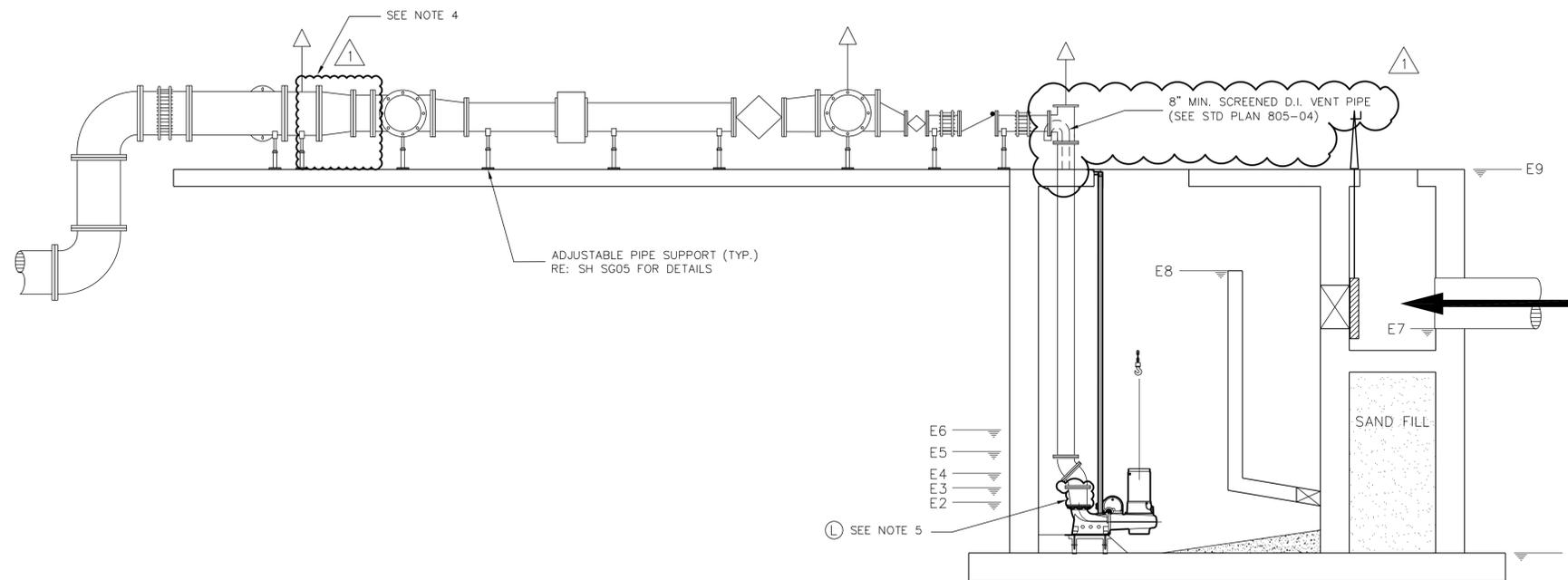
SHEET NUMBER		R-C01R	
EAST BATON ROUGE		BATON ROUGE	
DESIGNED	CHKD	DATE	BY
BKR	JRS	04-01-2016	JRS
Detailed	Checked	131	
PROJECT		10-PS-MS-0048	
ADDED NOTES 4-7: REMOVED "BY OTHERS"		REVISION DESCRIPTION	
NO.		DATE	
1		05/31/16	

HOOPER ROAD PUMP STATION PROJECT
PUMP STATION 511
PROPOSED SITE PLAN

Jun 14, 2016 - 4:31pm
[78] PROPOSED SITE PLAN
[78] SHEETS\23327-R-C01R.dwg



PUMP STATION PLAN
(N.T.S.)



PUMP STATION SECTION
(N.T.S.)

- NOTES:
- SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.
 - SUGGESTIVE PIPE SUPPORT LAYOUT SHALL BE CONFIRMED BY THE CONTRACTOR WITH APPROVED MANUFACTURER BEFORE CONSTRUCTION.
 - CONTRACTOR SHALL COORDINATE HEIGHT OF PIPE SUPPORT BASED ON MATERIALS SELECTED FOR ABOVE GROUND PIPING.

- REDUCER SHOWN BUT NOT REQUIRED.
- REDUCER 14"X12"

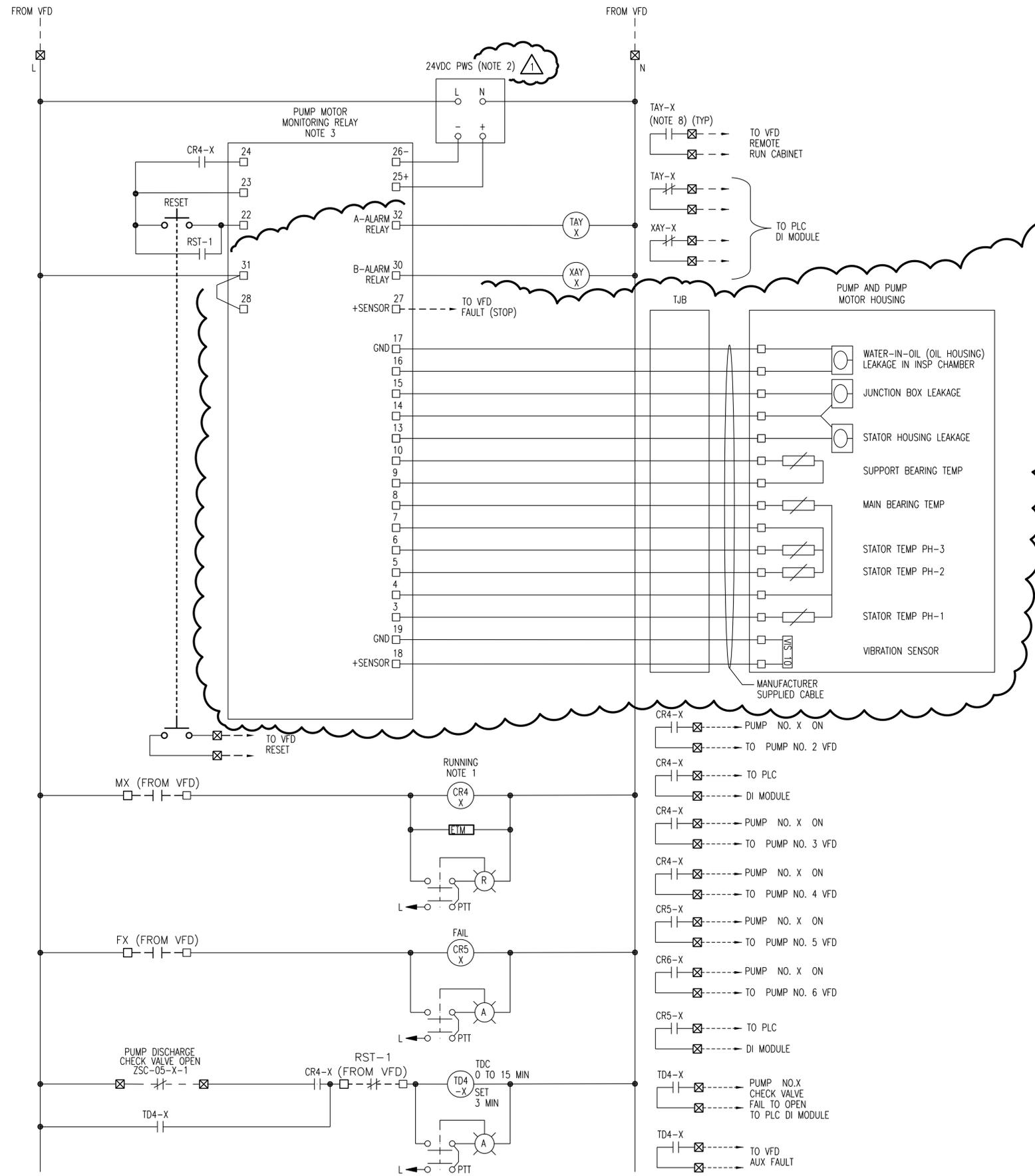
STATE OF LOUISIANA
 JAMES R. SMITH
 License No. 19883
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
 April 1, 2016

SHEET NUMBER	R-C03R
DESIGNED BY	JRS
CHECKED BY	JRS
DATE	04-01-2016
SHEET	133
OF	175
PARISH	EAST BATON ROUGE
CITY	BATON ROUGE
PROJECT	10-PS-MS-0048
NO.	1
DATE	05/31/16
REVISION DESCRIPTION	SHOWED SCREENED D.I. VENT PIPE AND ADDED NOTES 4 & 5
BY	JRS



HOOPER ROAD PUMP STATION PROJECT
 PUMP STATION 511
 PLAN, SECTION AND DETAILS





GENERAL NOTES:

1. PUMP EMERGENCY CALL CONTACT COMES FROM RELAY CR6 FOR PUMP 1, AND TD1-X FOR PUMP #X, X = 2 THRU 6. SEE PUMP EMERGENCY CALL CIRCUIT ON P-109. WHEN THE E CALL CONTACT IS CLOSED, THE DRIVE STARTS AT AN ADJUSTABLE PRESET SPEED ONLY WHEN THE DRIVE IS IN REMOTE, IGNORING PLC LOGIC RUN CONTACT.
2. PROVIDE MINI 24VDC PHOENIX CONTACT POWER SUPPLY RATED AT 1.3 AMPS.
3. A PUMP MOTOR MONITORING RELAY SHALL BE FURNISHED WITH THE PUMP. COORDINATE REQUIREMENTS WITH THE PUMP MANUFACTURER AND SPECIFICATION SECTION 22.13.29-16. MOUNT PUMP MONITORING RELAY SCREEN ON FRONT DOOR OF VFD JBOX.
4. NOT USED
5. NOT USED
6. NOT USED
7. NOT USED
8. TYPICAL FOR PUMP NO. X. X=1 THRU 6. PUMP MOTOR CONTROLS TYPICAL TO PUMP NO.X=1.

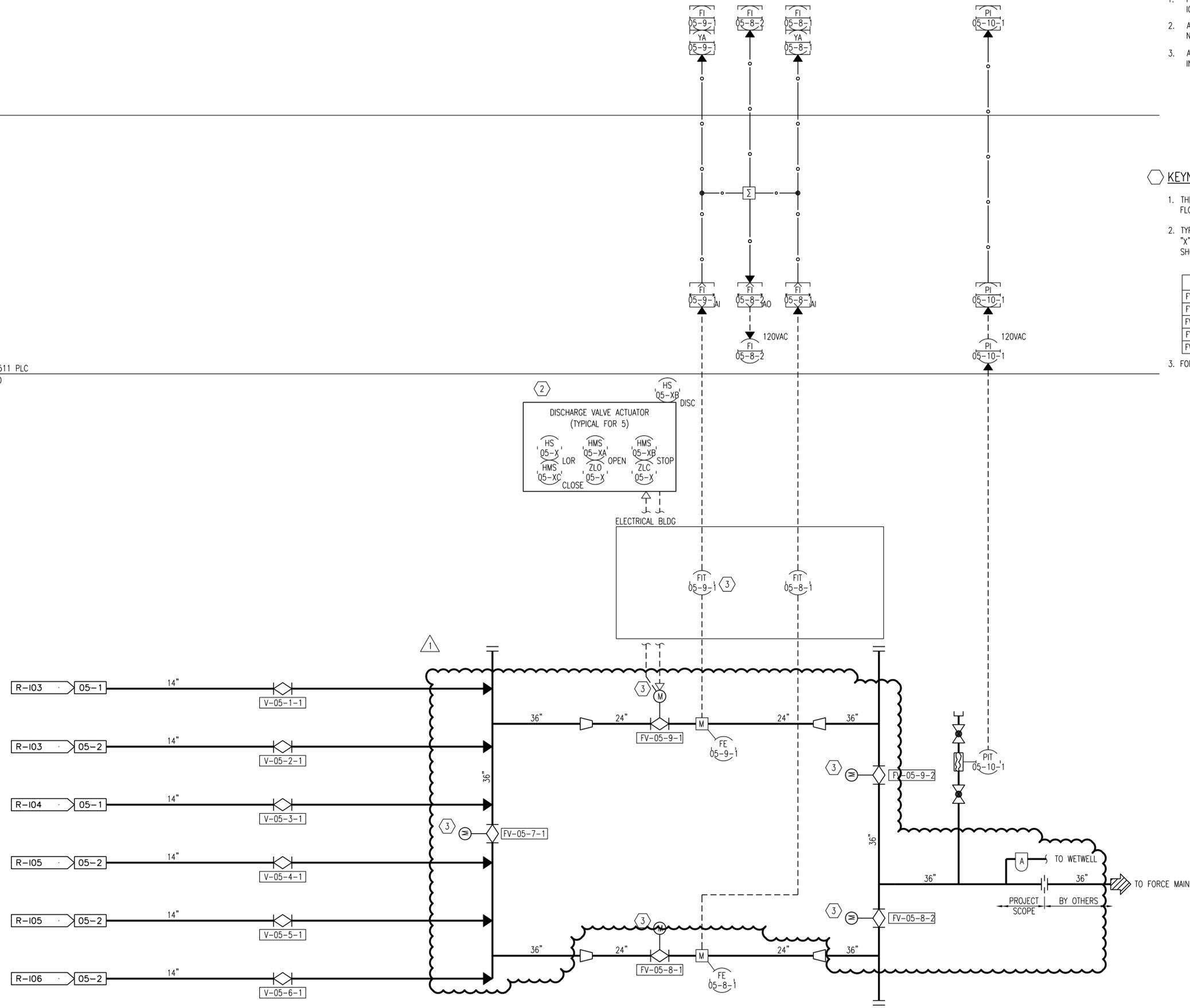
TYPICAL PUMP VFD CONTROL DIAGRAM
X = 1, 2, 3, 4, 5, 6

VERNON L. McALLISTER
License No. 28919
PROFESSIONAL ENGINEER
APRIL 1, 2016

SHEET NUMBER		R-E08R	
EAST BATON ROUGE		BATON ROUGE	
PARISH	CITY	PROJECT	
DESIGNED	CHECKED	DATE	BY
SAW	TJM	04-01-2016	175
REVISION	DESCRIPTION	DATE	NO.
1	REVISED PUMP MOTOR HOUSING AND RELAY	05/31/16	1
 PUBLIC WORKS			
HOOPER ROAD PUMP STATION PROJECT PUMP STATION PS-511		TYPE IIIA PROGRAM STATION	
May 31, 2016 - 10:47am B:\23327_HooperRoadPumpStation\Active\11-CADD\Civil\PS-511\SHEETS\23327-R-E08.dwg [Layout1]			

HMI

PS-511 PLC
FIELD



GENERAL NOTES:

- FOR GENERAL LEGEND AND NOTES SEE DRAWINGS IG01 AND IG02.
- ALL WORK ON THIS DRAWING BY CONTRACTOR, UNLESS NOTED OTHERWISE.
- ALL INSTRUMENTS, I/O, AND EQUIPMENT HAVE PREFIX 511 INCLUDED IN THE TAG NUMBER, UNLESS NOTED OTHERWISE.

KEYNOTES:

- THE PURPOSE OF THIS INTERCONNECTION IS TO PROVIDE FLOW RECIRCULATION DURING PUMP STARTUP AND TESTING.
- TYPICAL DISCHARGE VALVE TAGGING SCHEME SHOWN, WHERE "X" = LOOP AND UNIT NUMBER OF ASSOCIATED VALVE, SHOWN IN TABLE BELOW.
- FOR DETAILS, SEE NOTE 2.

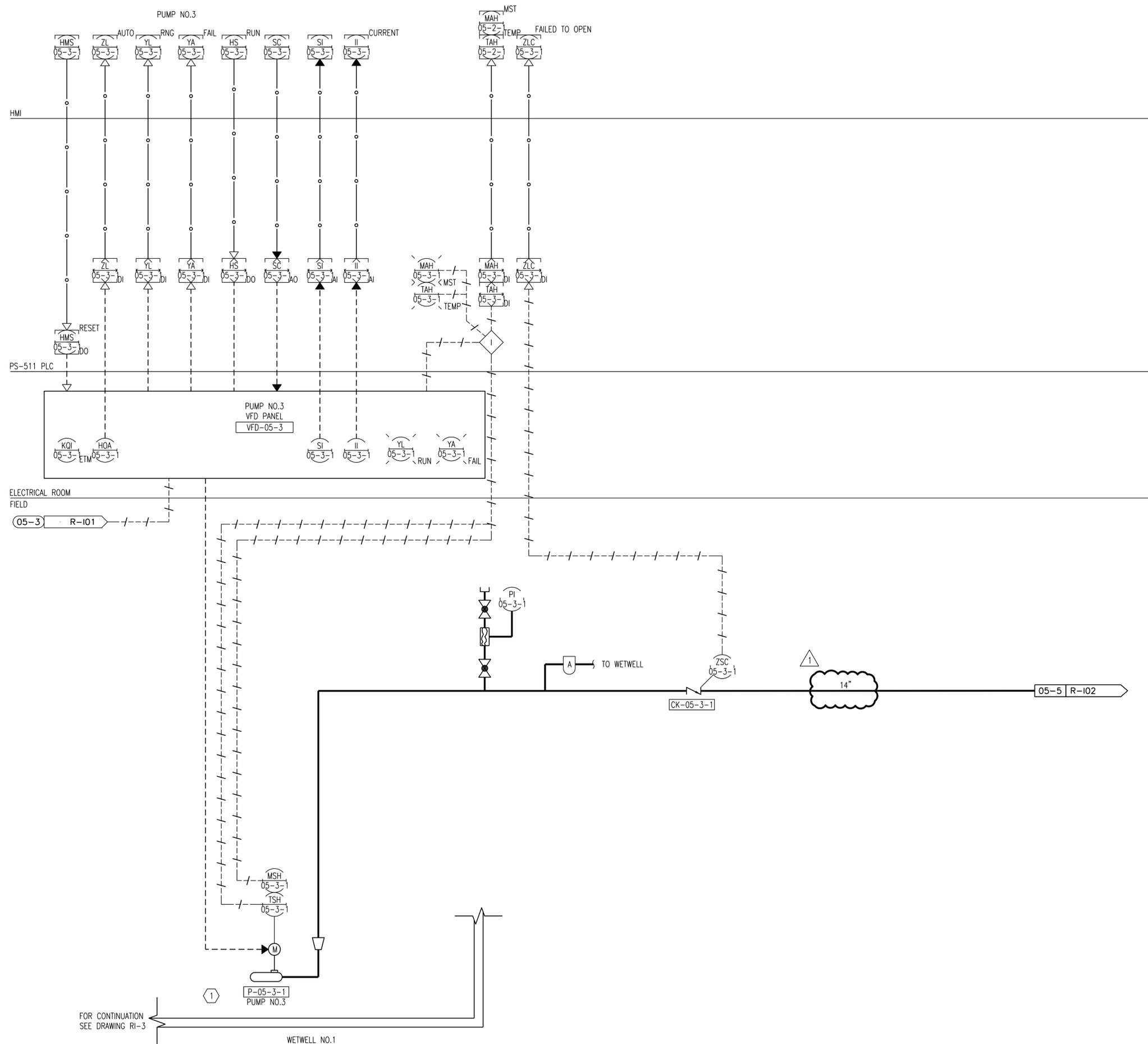
VALVE	LOOP-UNIT
FV-05-7-1	7-1
FV-05-8-1	8-1
FV-05-8-2	8-2
FV-05-9-1	9-1
FV-05-9-2	9-2

STATE OF LOUISIANA
 SCOTT A. WARREN
 License No. 37969
 PROFESSIONAL ENGINEER
 IN
 MECHANICAL ENGINEERING
 4/1/16

SHEET NUMBER	R-102R
EAST BATON ROUGE	BATON ROUGE
PARISH	CITY
PROJECT	10-PS-MS-0048
DESIGNED	SAW
CHECKED	TJM
DATE	04-01-2016
SHEET	150
OF	175
NO.	1
DATE	06-06-2016
REVISION	NO.
DESCRIPTION	BY
NO.	JRS
DESCRIPTION	BY

HOOPER ROAD PUMP STATION PROJECT
 PUMP STATION PS-511
 P&ID OVERVIEW - SHEET 2 OF 2

Jun 06, 2016 - 9:25am
 B:\23327_HooperRoadPumpStation\Active\11-CADD\Civil\PS-511\SHEETS\23327-R-102R.dwg [Layout1]



GENERAL NOTES:

- FOR GENERAL LEGEND AND NOTES SEE DRAWINGS IG01 AND IG02.
- ALL WORK ON THIS DRAWING BY CONTRACTOR, UNLESS NOTED OTHERWISE.
- ALL INSTRUMENTS, I/O, AND EQUIPMENT HAVE PREFIX 511 INCLUDED IN THE TAG NUMBER, UNLESS NOTED OTHERWISE.

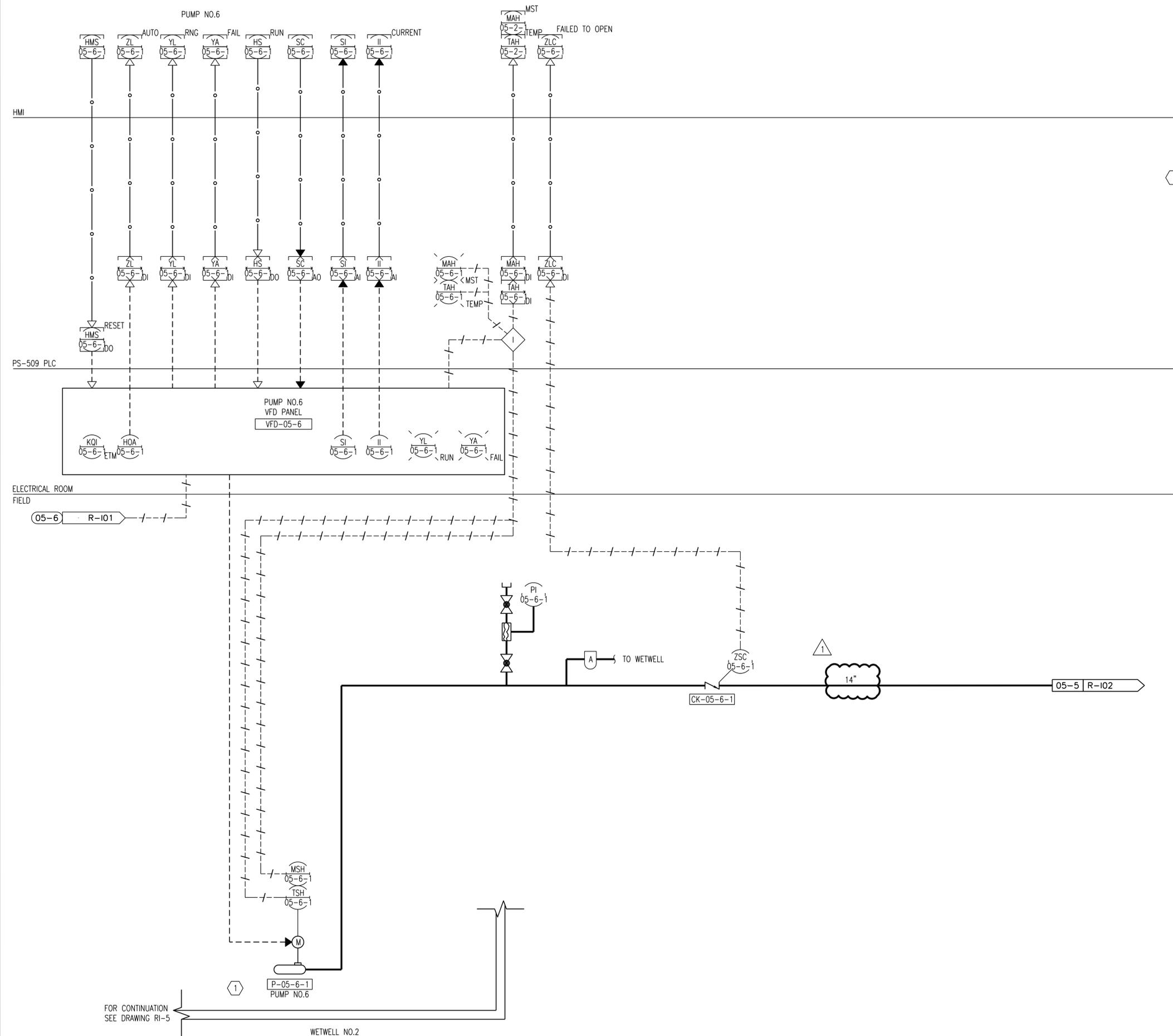
KEYNOTES:

- REFER TO DRAWING R-101 FOR WETWELL NO.1 INSTRUMENT DETAILS.

FOR CONTINUATION
SEE DRAWING RI-3



SHEET NUMBER		R-104R	
EAST BATON ROUGE		BATON ROUGE	
PARISH		CITY	
PROJECT		10-PS-MS-0048	
DESIGNED	SAW	DATE	BY
CHECKED	TJM	04-01-2016	JRS
DATE	CHECKED	152	NO.
ADDED PIPE SIZE CALL-OUT		REVISION DESCRIPTION	
1 06-06-2016			
HOOPER ROAD PUMP STATION PROJECT PUMP STATION PS-511 P&ID WETWELL 1 PUMPS CONTROL AND MONITORING - SHEET 2 OF 2			
Jun 06, 2016 - 9:31am B:\23327_HooperRoadPumpStation\Active\11-CADD\CWV\PS-511\SHEETS\23327-R-104R.dwg [Layout1]			



- GENERAL NOTES:**
- FOR GENERAL LEGEND AND NOTES SEE DRAWINGS IG01 AND IG02.
 - ALL WORK ON THIS DRAWING BY CONTRACTOR, UNLESS NOTED OTHERWISE.
 - ALL INSTRUMENTS, I/O, AND EQUIPMENT HAVE PREFIX 511 INCLUDED IN THE TAG NUMBER, UNLESS NOTED OTHERWISE.

- KEYNOTES:**
- REFER TO DRAWING R-101 FOR WETWELL NO.2 INSTRUMENT DETAILS.

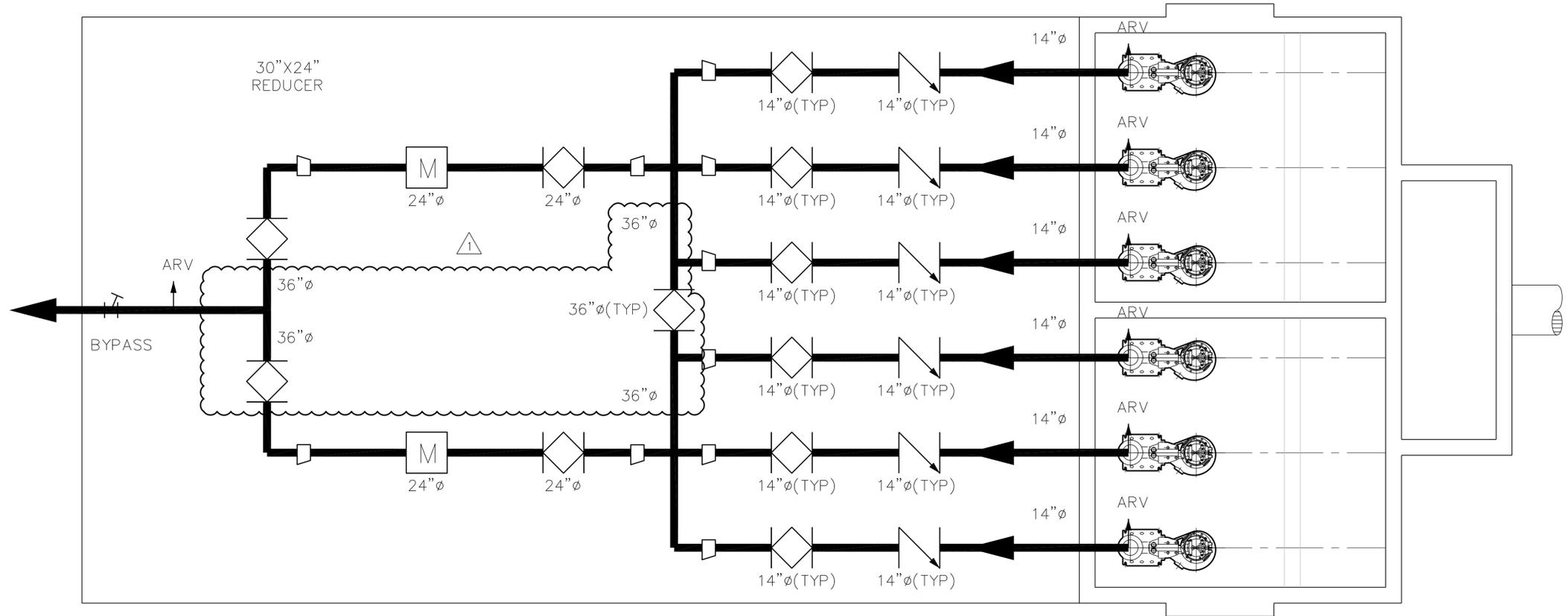
FOR CONTINUATION
SEE DRAWING RI-5



SHEET NUMBER		R-106R	
EAST BATON ROUGE		BATON ROUGE	
PARISH	CITY	PROJECT	10-PS-MS-0048
DESIGNED	SAW	CHECKED	TJM
DATE	04-01-2016	DATE	04-01-2016
SHEET	154	OF	175
ADDED PIPE SIZE CALL-OUT		REVISION DESCRIPTION	
NO.	1	DATE	06-06-2016
JRS	BY		

HOOPER ROAD PUMP STATION PROJECT
PUMP STATION PS-511
P&ID WETWELL 2 PUMPS
CONTROL AND MONITORING - SHEET 2 OF 2

Jun 06, 2016 - 9:38am
B:\23327_HooperRoadPumpStation\Active\11-CADD\Civil\PS-511\SHEETS\23327-R-106R.dwg [Layout1]

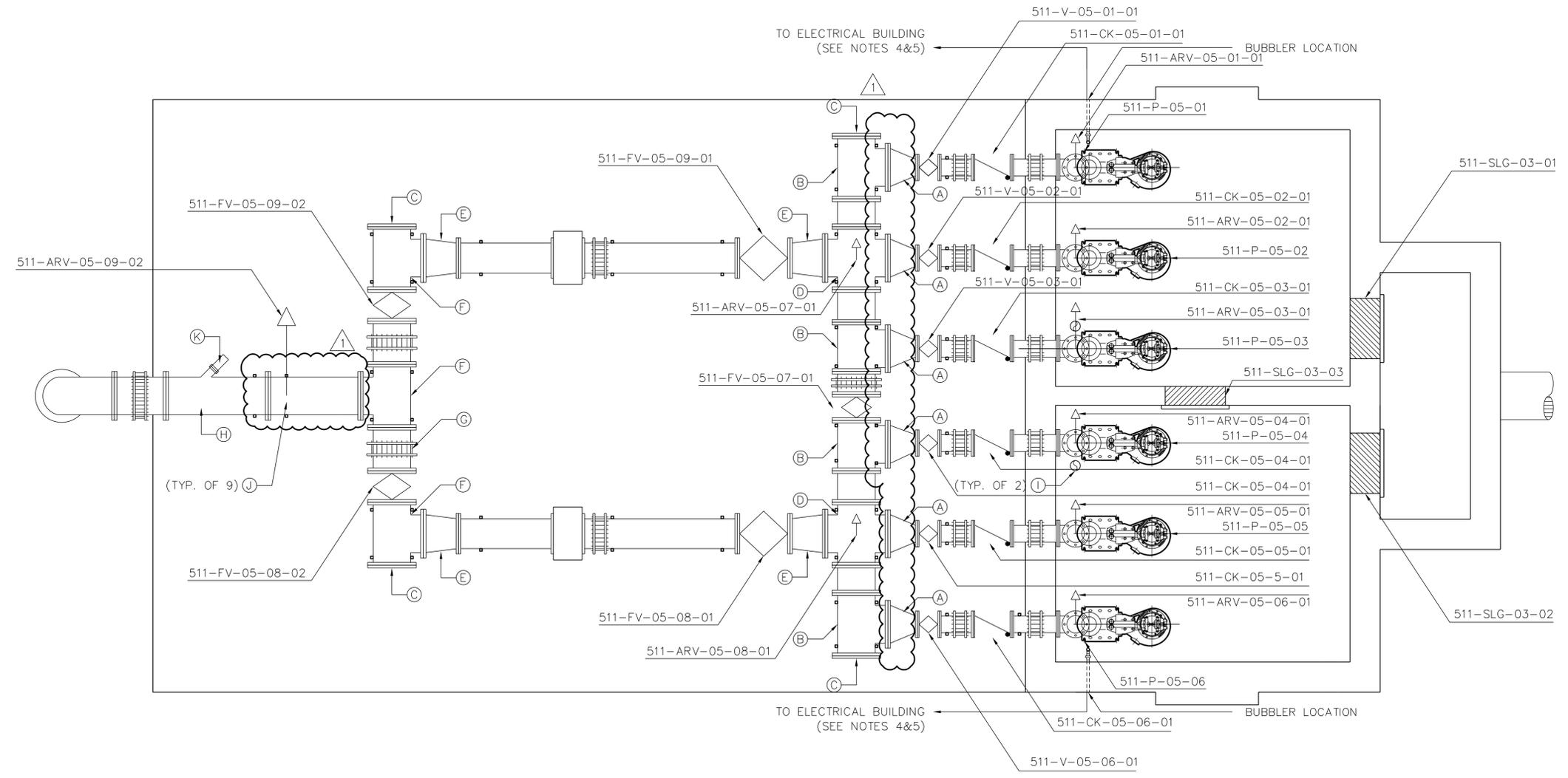


1 PIPING SYMBOL LEGEND

-  FLOW METER
-  CONCENTRIC REDUCER
-  ECCENTRIC REDUCER
-  CHECK VALVE
-  PLUG VALVE

STATE OF LOUISIANA
 JAMES R. SMITH
 LICENSE NO. 18893
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
James R. Smith
 April 1, 2016

SHEET NUMBER	R-M01R	DESIGNED BY	EAST BATON ROUGE	DATE	04-01-2016
CHECKED	JRS	CITY	BATON ROUGE	PROJECT	10-PS-MS-0048
DETAILED	JRS	DATE	04-01-2016	SHEET	146 OF 175
NO.	1	DATE	06-06-2016	REVISION DESCRIPTION	REVISED PIPING SIZES
					
HOOPER ROAD PUMP STATION PROJECT PUMP STATION 511 PROCESS FLOW DIAGRAM					
					



PUMP STATION PLAN
(N.T.S.)

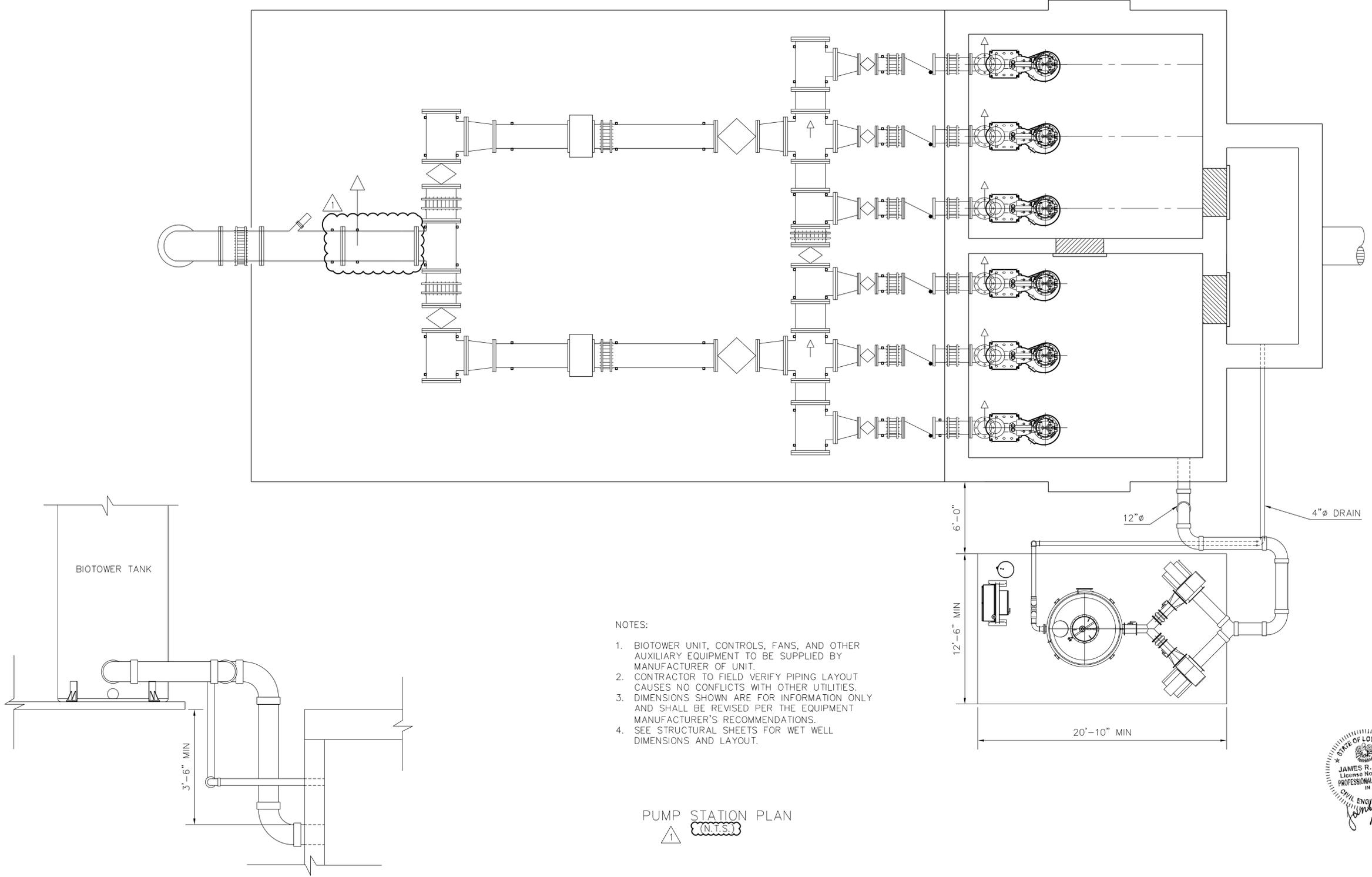
- NOTES:
1. SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.
 2. BUBBLER & VENT PIPE SHALL BE INSTALLED PER STANDARD PLAN 805-04.
 3. LOCATION OF BUBBLER MAY BE ADJUSTED TO ALLOW FOR THE INSTALLATION AND REMOVAL OF PUMPS.
 4. CONTRACTOR TO ROUTE BUBBLER PIPING TO AVOID CONFLICTS WITH ELECTRICAL DUCTS.
 5. CONTRACTOR SHALL SUBMIT A LAYING AND ROUTING PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.

(A)	ECCENTRIC REDUCER 36"x14"	(H)	WYE 36"x6"
(B)	TEE 36"	(I)	VENT PIPE 8"
(C)	BLIND FLANGE 36"	(J)	AIR RELEASE VALVE 2"
(D)	CROSS 36"x36"	(K)	6" S.S. EMERGENCY CONNECTION CAMLOCK W/ PLUG, GATE VALVE, AND FITTING TO CONNECT TO WYE.
(E)	ECCENTRIC REDUCER 36"x24"	(L)	REDUCER 14"x12" (SEE SHT. R-C03 FOR LOCATION)
(F)	TEE 36"		
(G)	FLEXIBLE COUPLING (TYP.)		



HOOPER ROAD PUMP STATION PROJECT
PUMP STATION 511
TOP PLAN





- NOTES:
1. BIOTOWER UNIT, CONTROLS, FANS, AND OTHER AUXILIARY EQUIPMENT TO BE SUPPLIED BY MANUFACTURER OF UNIT.
 2. CONTRACTOR TO FIELD VERIFY PIPING LAYOUT CAUSES NO CONFLICTS WITH OTHER UTILITIES.
 3. DIMENSIONS SHOWN ARE FOR INFORMATION ONLY AND SHALL BE REVISED PER THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
 4. SEE STRUCTURAL SHEETS FOR WET WELL DIMENSIONS AND LAYOUT.

PUMP STATION PLAN
(N.T.S.)

STATE OF LOUISIANA
 JAMES R. SMITH
 License No. 13685
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
James R. Smith
 April 1, 2014

ENTRY DETAIL
(N.T.S.)

SHEET NUMBER		R-M03R	
DESIGNED BY	JRS	PARISH	EAST BATON ROUGE
CHECKED BY	JRS	CITY	BATON ROUGE
DATE	06-06-16	PROJECT	10-PS-MS-0048
NO.	1	SHEET	148 OF 175
REMOVED REDUCER	JRS		
REVISION DESCRIPTION			
			
HOOPER ROAD PUMP STATION PROJECT PUMP STATION 511 BIOTOWER DETAILS			
			
			