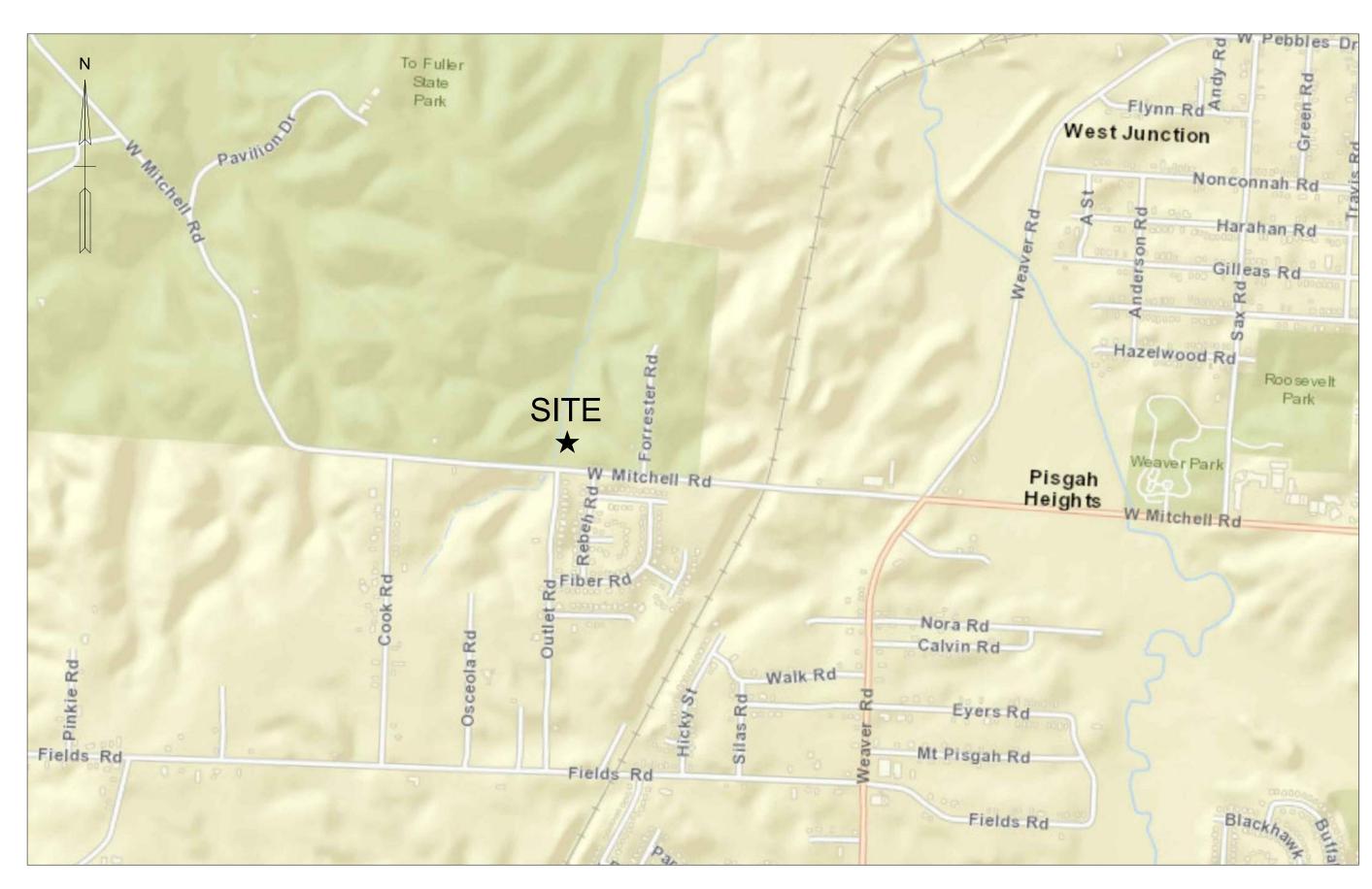
# 1250 WEST MITCHELL LIFT STATION SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10)

MEMPHIS, TENNESSEE



# LOCATION MAP

NOT TO SCALE







CONSTRUCTION DOCUMENTS



Sanders 36592\3659204\04\_CAD\GENL\02 - 1250 West Mitchell\PLOT\3659204\_1250 West Mitchell\_G0.01\_C3D

#### **ABBREVIATIONS**

AFF ABOVE FINISHED FLOOR ALUM. ALUMINUM APPROX. APPROXIMATE BCB **BOTTOM CATCH BASIN** BOC BACK OF CURB BACKFLOW PREVENTOR BFP BUTTERFLY VALVE BFV CATCH BASIN CCTV CLOSED CIRCUIT TELEVISION CURB INLET CIPP CURED-IN-PLACE PIPE CENTERLINE CORRUGATED METAL PIPE CMP CO CLEAN OUT CONC CONCRETE CONN CONNECT CONST. CONSTRUCTION CPLG. COUPLING COMBINED SEWER CU COPPER CHECK VALVE CV DB DEED BOOK DROP INLET DIP DUCTILE IRON PIPE **DWCB** DOUBLE WING CATCH BASIN D/W DRIVEWAY

EXIST. **EXISTING ELEC** ELECTRICAL SERVICE EOI END OF INFORMATION OR UNKNOWN TERMINATION POINT EOP EDGE OF PAVEMENT FIP FEMALE IRON PIPE FFE FINISHED FLOOR ELEVATION FIRE HYDRANT FORCE MAIN GALVANIZED STEEL PIPE GV GATE VALVE HDPE HIGH DENSITY POLYETHYLENE HORZ HORIZONTAL HWY HIGHWAY INSIDE DIAMETER

**ELEVATION** 

ELEV.

INVERT ELEVATION INV INVERT LINEAR FEET MINIMUM MIP MALE IRON PIPE MJ MECHANICAL JOINT MH MANHOLE MNPT MALENATIONAL PIPE THREAD N/F NOW OR FORMERLY NPW NON POTABLE WATER

NTS NOT TO SCALE OD OUTSIDE DIAMETER PG PAGE POWER POLE POINT REPAIR PLUG VALVE PVC POLYVINYL CHLORIDE PW POTABLE WATER WATER FAUCET PROP. PROPOSED RCP REINFORCED CONCRETE PIPE

RD ROAD RET RETAINER RESTRAINED JOINT R.O.W. RIGHT-OF-WAY SD STORM DRAIN SHT SHEET SP SIGNAL POLE SPD STANDARD PROCTOR DENSITY STATE ROUTE

SANITARY SEWER SS SANITARY SEWER MANHOLE SSTL STAINLESS STEEL STA STATION SWCB SINGLE WING CATCH BASIN TELECOM TELECOMMUNICATION CONDUIT TELEPHONE POLE TSB TRAFFIC SIGNAL BOX TS&V TAPPING SLEEVE AND VALVE TRAFCON TRAFFIC SIGNAL COMM WIRE TYPICAL

UNLESS NOTED OTHERWISE

VITRIFIED CLAY PIPE

VERTICAL

WM WATER METER WTR WATER W/ WITH FEET INCHES

UNO

VCP

**VERT** 

#### **INDEX OF DRAWINGS**

SHEET NO. **DESCRIPTION** G0.01 COVER SHEET NOTES G0.02 C1.01 SEWER LAYOUT PLAN C1.02 **EXISTING CONDITIONS** C2.01 LIFT STATION SECTIONS E1.01 ELECTRICAL PLAN

#### **LEGEND**

| <b>EXISTING</b>     | NEW             |                                 |
|---------------------|-----------------|---------------------------------|
| <del></del>         | <del></del>     | CAP OR PLUG                     |
| S                   | S               | SANITARY SEWER MANHOLE          |
|                     |                 | STORM SEWER MANHOLE             |
|                     | COO             | CLEANOUT                        |
| □YH                 | ■YH             | YARD HYDRANT                    |
| $\mathcal{T}$       | ~               | FIRE HYDRANT                    |
| $\bowtie$           | H               | REDUCER                         |
|                     |                 | SOLID SLEEVE OR HDPE MJ ADAPTER |
| w∨<br>⊠             | •               | WATER VALVE                     |
| □ <sub>WM</sub>     | □ <sub>wm</sub> | WATER METER                     |
|                     |                 | AIR VALVE MH OR LINE STOP VALVE |
| FM                  | FM              | FORCE MAIN                      |
| G                   | ——— G———        | GAS LINE                        |
| SD                  | sp              | STORM SEWER LINE                |
| SS                  | ss              | SANITARY SEWER LINE             |
| W                   | w               | WATER MAIN                      |
| - — — - 350 - — — - | 350 ———         | CONTOUR                         |
| X                   | x               | FENCE                           |
| $\varnothing$       | Ø               | POWER/TELEPHONE POLE            |
| ¢3                  | €3              | TREE                            |
|                     | l               | CENTERLINE                      |
|                     |                 | PROPERTY BOUNDARY LINE          |
|                     |                 | RIGHT-OF-WAY                    |
|                     |                 | EASEMENT                        |
| <u> </u>            | <u></u>         | USACE DREDGE LIMITS             |

#### **NOTES**

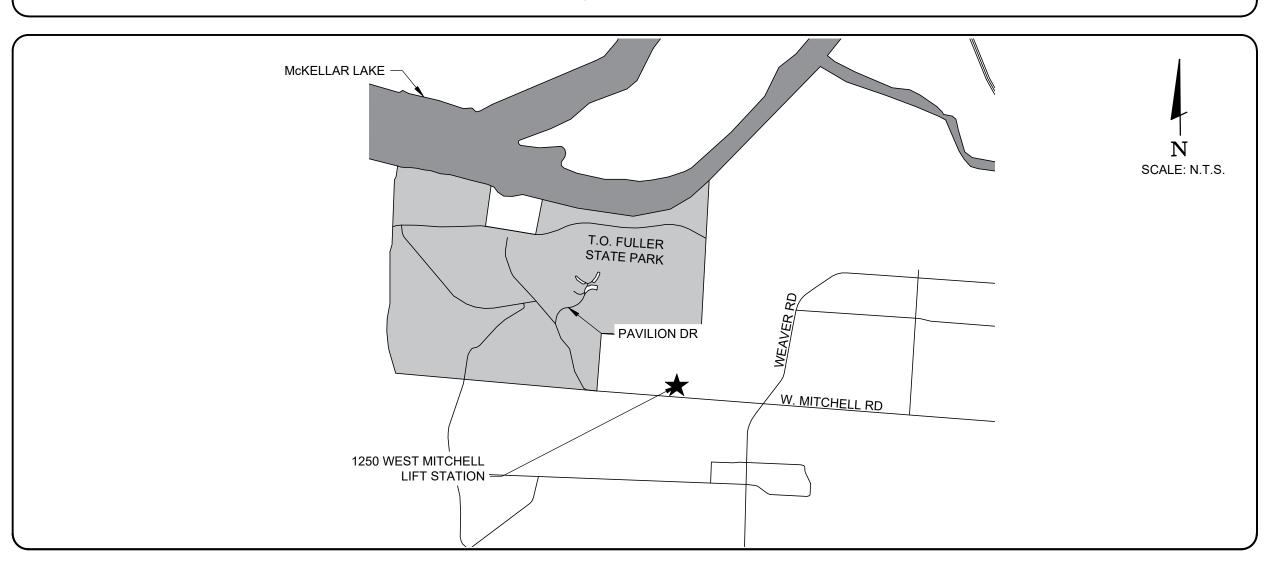
#### **GENERAL NOTES**

- 1. ALL DESIGN, CONSTRUCTION AND MATERIAL SHALL BE IN COMPLIANCE WITH THE SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) AND CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS AND STANDARDS.
- 2. THE CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
- 3. GRADING AND DRAINAGE: FINISH GRADE SHALL BE SLOPED FOR POSITIVE DRAINAGE.
- 4. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
- 5. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
- 6. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
- 7. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT. LADEN WATER FROM LEAVING THE SITE.
- 8. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING.

#### CITY OF MEMPHIS TYPICAL CONSTRUCTION NOTES

- 1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, PLEASE CALL 1-800-351-1111. FOR SEWER SERVICE LOCATIONS, CALL 901-636-8025.
- 2. CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR BYPASSING.
- 3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
- 4. CONTRACTOR SHALL NOTIFY THE SARP10 CONSTRUCTION MANAGER A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
- 5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
- 6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
- 7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS. SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS PER CITY OF MEMPHIS STANDARD SST-16.
- 8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 1.5' ABOVE PROPOSED GRADE. IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE FINAL GRADE.
- 9. ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' MINIMUM BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE (D.I.P.) SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
- 10. THE CITY OF MEMPHIS SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS.
- 11. NO TREES, SHRUBS, PERMANENT STRUCTURES, OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS.
- 12. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS, OR DRIVES (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR PICK HOLES TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM.
- 13. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.

#### **VICINITY MAP**

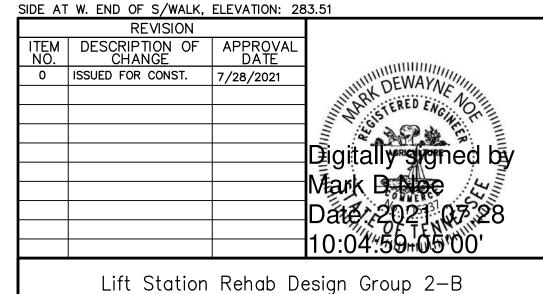


FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0415F, DATED SEPTEMBER 28, 2007.

BENCHMARK NOTE:

CITY OF MEMPHIS BENCHMARK NUMBER 1256 - FIELDS RD. & OUTLET RD..: CITY MONUMENT IS LOCATED ON THE N.W. CORNER, AT B/CURB ER ON FIELDS RD.



MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

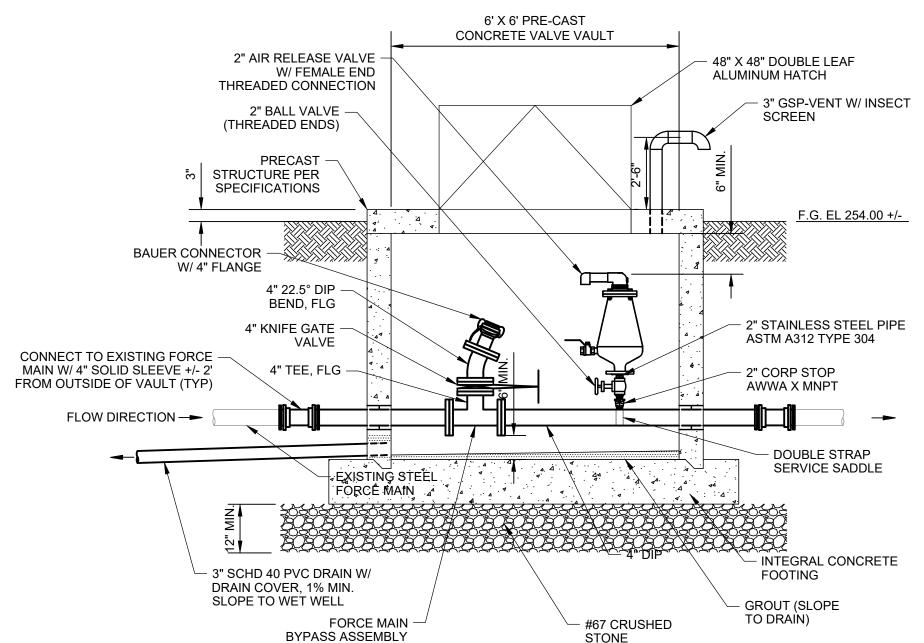
SEWER BASIN: NS 02-1

DIVISION OF ENGINEERING

NOTES LOCATION: 1250 WEST MITCHELL LIFT STATION

MEMPHIS, TENNESSEE PROJECT NO.: 36592-04 DESIGN BY: BARGE DATE: 7/2021 SCALE: NONE REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER



#### FM BYPASS/AIR RELEASE ASSEMBLY

STONE

SCALE: 1/2" = 1'-0"

## APPROVED FOR CONSTRUCTION

THE DOCUMENT BEARING THIS STAMP HAS BEEN RECEIVED AND REVIEWED BY THE CITY OF MEMPHIS DIVISION OF ENGINEERING UNDER AUTHORITY DELEGATED BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER POLLUTION CONTROL. IT IS HEREBY APPROVED FOR CONSTRUCTION BY THE CITY ENGINEER AS EVIDENCED BY HIS SIGNATURE IN THE TITLE BLOCK BELOW.

APPROVAL EXPIRES 1 YEAR FROM APPROVAL DATE BELOW. THIS APPROVAL SHALL NOT BE CONSTRUED AS CREATING A PRESUMPTION OF CORRECT OPERATION OR AS WARRANTING BY THE CITY ENGINEER THAT THE APPROVED FACILITIES WILL REACH THE DESIRED GOALS.

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157CO415F, DATED SEPTEMBER 28, 2007.

CITY OF MEMPHIS BENCHMARK NUMBER 1256 - FIELDS RD. & OUTLET RD..: CITY MONUMENT IS LOCATED ON THE N.W. CORNER, AT B/CURB ER ON FIELDS RD.

| SIDE AT     | W. END OF S/WALK,     | ELEVATION: 28    | 33.51               |
|-------------|-----------------------|------------------|---------------------|
|             | REVISION              |                  |                     |
| ITEM<br>NO. | DESCRIPTION OF CHANGE | APPROVAL<br>DATE | annilling.          |
| 0           | ISSUED FOR CONST.     | 7/28/2021        | DEWAYNE IN          |
|             |                       |                  | DEWAYNE NO.         |
|             |                       |                  | SOSTERED ENGINEERS  |
|             |                       |                  | Digitally signed by |
|             |                       |                  | Mark B. Noe         |
|             |                       |                  | Date: 2021,07,28    |
|             |                       |                  | 10:05:16-05'00'     |

Lift Station Rehab Design Group 2—B

DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER LAYOUT PLAN LOCATION: 1250 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

SEWER BASIN: NS 02-1

DESIGN BY: BARGE DATE: 7/2021 SCALE:NONE

PROJECT NO.: 36592-04 REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

DIVISION OF ENGINEERING

**EXISTING LIFT STATION** 

SCALE: N.T.S.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1—PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0415F, DATED SEPTEMBER 28, 2007.

BENCHMARK NOTE:

CITY OF MEMPHIS BENCHMARK NUMBER 1256 - FIELDS RD. & OUTLET RD..: CITY MONUMENT IS LOCATED ON THE N.W. CORNER, AT B/CURB ER ON FIELDS RD. SIDE AT W. END OF S/WALK, ELEVATION: 283.51

| SIDE AT     | W. END OF S/WALK,     | ELEVATION: 28    | 3.51                          |
|-------------|-----------------------|------------------|-------------------------------|
|             | REVISION              |                  |                               |
| ITEM<br>NO. | DESCRIPTION OF CHANGE | APPROVAL<br>DATE | DEWAYNE NOW THE RED ENGINEERS |
| 0           | ISSUED FOR CONST.     | 7/28/2021        | WILLY DEWAYNE MILL            |
|             |                       |                  | THE STERED ENGINEER           |
|             |                       |                  |                               |
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|             |                       |                  | · - · · · -                   |
|             |                       |                  | Mark Divise                   |
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|             |                       |                  | 10:04:47:0500                 |
|             |                       | l l              |                               |

Lift Station Rehab Design Group 2—B

MEMPHIS, TENNESSEE

DEVELOPER: SARP10

ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER BASIN: NS 02-1

DIVISION OF ENGINEERING

EXISTING CONDITIONS

LOCATION: 1250 WEST MITCHELL LIFT STATION

MEMPHIS, TENNESSEE

SURVEY: DAT DESIGN BY: BARGE DAT

DATE: PROJECT NO.: 36592-04
DATE: 7/2021 SCALE: NONE
REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

7/28/2021 8:54 AM

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157CO415F, DATED SEPTEMBER 28, 2007.

BENCHMARK NOTE: CITY OF MEMPHIS BENCHMARK NUMBER 1256 - FIELDS RD. & OUTLET RD..: CITY MONUMENT IS LOCATED ON THE N.W. CORNER, AT B/CURB ER ON FIELDS RD. SIDE AT W. END OF S/WALK, ELEVATION: 283.51

|             | REVISION              |                  |  |
|-------------|-----------------------|------------------|--|
| ITEM<br>NO. | DESCRIPTION OF CHANGE | APPROVAL<br>DATE |  |
| 0           | ISSUED FOR CONST.     | 7/28/2021        | DEWAYNAMI  |
|             |                       |                  | THE STERED ENGINO  |
|             |                       |                  | A STERED ENGINEER  |
|             |                       |                  | Finitally wind in Political  |
|             |                       |                  | In the second se |
|             |                       |                  | Mark Lange William   |
|             |                       |                  | Date: 2021.07.28   |
|             |                       |                  | 10.05/20 75/200  |
|             |                       |                  | 10.05.20#W\$*00  |

SEWER BASIN: NS 02-1

DIVISION OF ENGINEERING

LIFT STATION SECTIONS LOCATION: 1250 WEST MITCHELL LIFT STATION

MEMPHIS, TENNESSEE

SURVEY:

DESIGN BY: BARGE DATE: 7/2021 SCALE: REVIEWED:

PROJECT NO.: 36592-04

Know what's below Call before you dig. www.call811.com

Lift Station Rehab Design Group 2-B DEVELOPER: SARP10

ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DEPUTY CITY ENGINEER DATE

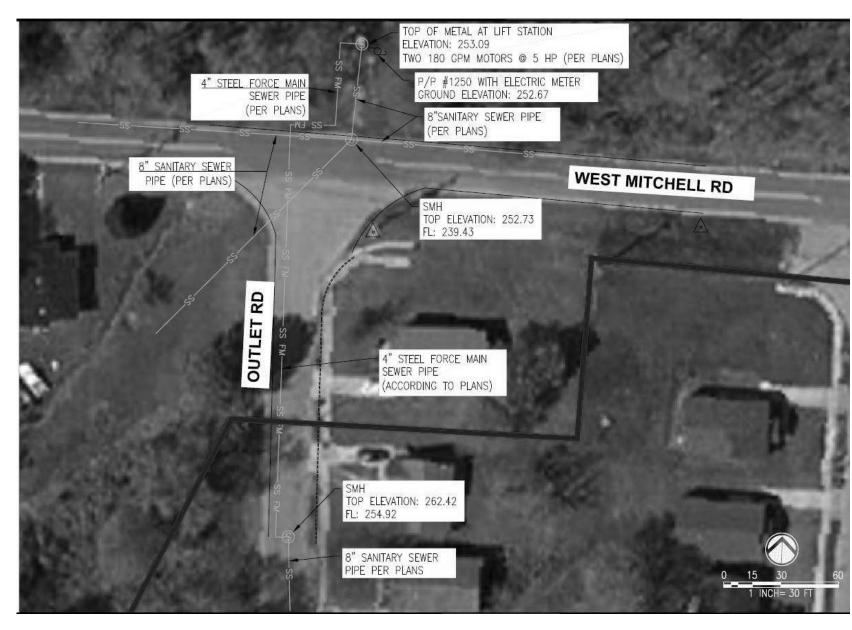
CITY ENGINEER



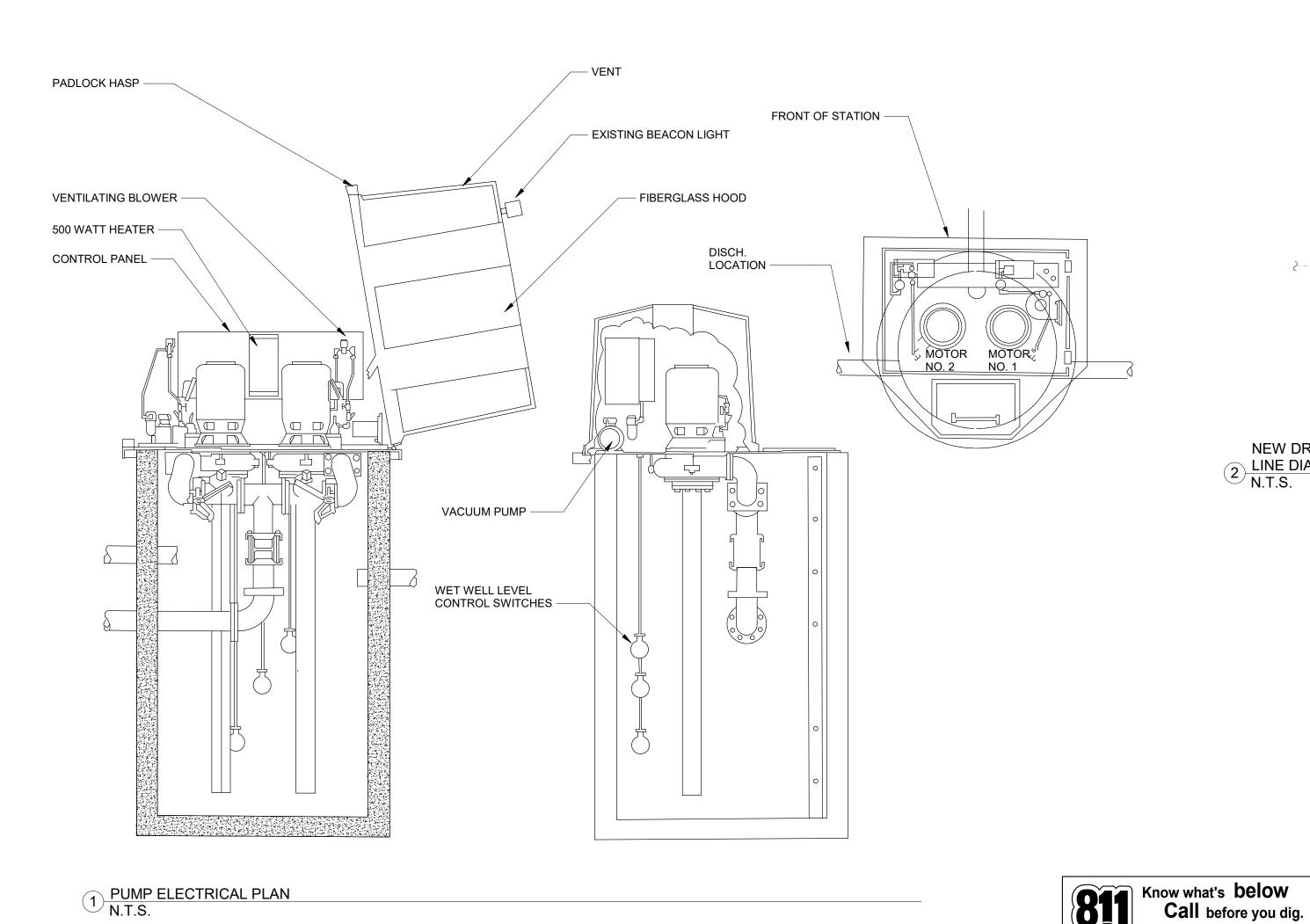
Electrical Meter AND DISCONNECT SWITCH



Lift station, warning light, SIGNAGE and electrical equipment.



LOCATION OF SITE



#### CODE ANALYSIS - INTERNATIONAL BUILDING CODE 2015

#### CODE COMMENTS

Memphis and Shelby County Construction Code Enforcement

APPLICABLE CODES 2015 International Building Code with Local Amendments

2015 International Existing Building Code with Local Amendments

2015 International Residential Code with Local Amendments

2014 National Electrical Code

JURISDICTION

2018 Joint Electrical Code

2015 International Mechanical Code with Local Amendments 2015 International Fuel Gas Code with Local Amendments

2015 International Plumbing Code with Local Amendments

2013 ASME 17.1 Safety Code for Elevators and Escalators (by reference)

#### 2015 International Energy Conservation Code with Local Amendments 2009 ICC A117.1 Accessibility and Useable Buildings and Facilities )by reference)

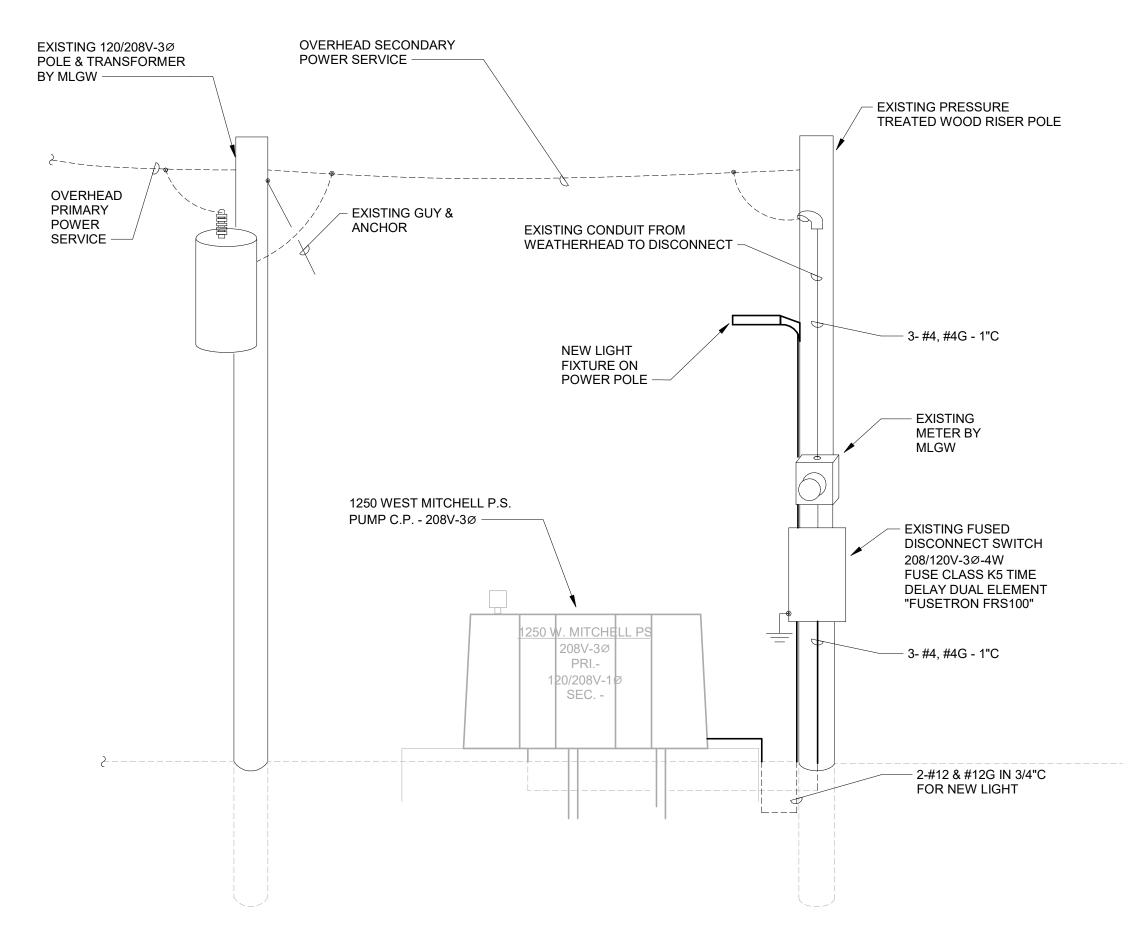
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE STANDARDS AND REGULATIONS ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- ALL ABOVE GROUND EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH CORROSION RESISTANT FITTINGS, CLAMPS AND SUPPORT.
- IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS, SPECIFICATIONS, CODES AND REGULATIONS, NOTIFY THE ENGINEER OF RECORD FOR HIS OPINION PRIOR TO INSTALLATION.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL AND TO THE ENGINEER FOR REVIEW.
  - SMACNA SEISMIC RESTRAINT MANUAL, THIRD EDITION 2008, OR LATEST REVISION MAY BE USED AS A GUIDE FOR
- GENERAL SEISMIC SUPPORT DETAIL AND SUPPORT SPACING RECOMMENDATIONS. COORDINATE LOCATION OF ALL LIGHTING FIXTURES, MECHANICAL EQUIPMENT AND ACCESS PANELS WITH
- WHILE EFFORT HAS BEEN MADE TO IDENTIFY EXISTING CIRCUITS THAT ARE TO BE REMOVED OR REPLACED, THE
- INFORMATION MAY NOT BE ACCURATE.
- ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE AND AMP DRAW FOR ANY NEW EQUIPMENT.
- EXISITNG CONTROL PANEL TO REMAIN.

EXISTING CONDITIONS PRIOR TO ROUGH-IN.

- 10. THE MAIN CONTROL PANEL IS FED WITH AN EXISTING 208V 3PH 40A FUSED DISCONNECT ABOVE GRADE.
- 11. INSTALL OVERHEAD LIGHT AT THIS LOCATION EQUAL TO LITHONIA DSX0 LED P2 40K T4M MVOLT RUMBA PIR. POWER FROM A CIRCUIT BREAKER IN THE CONTROL PANEL.
- 12. REPLACE FUSES ON DISCONNECT.

**GENERAL PROJECT NOTES:** 

13. RE-CONNECT AND TIGHTEN ALL ELECTRICAL CONNECTIONS.



NEW DRAWING 1250 WESTMITCHELL PUMP STATION SINGLE

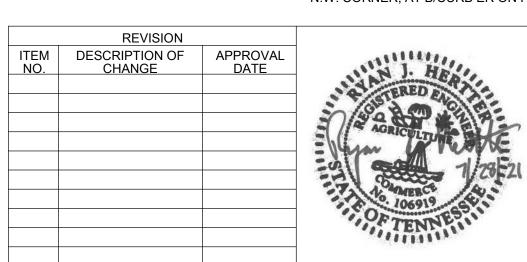
2 LINE DIAGRAM N.T.S.

www.call811.com

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1 - PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0270F, DATED SEPTEMBER 28, 2007.

BENCHMARK NOTE:

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Lift Station Rehab Design Group 2-B

MEMPHIS, TENNESSEE DEVELOPER: SARP 10 ENGINEER: BARGE DESIGN SOLUTIONS, INC. SEWER BASIN: NS 02-1

DIVISION OF ENGINEERING

ELECTRICAL PLAN LOCATION: 1250 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

DESIGN BY: BARGE

PROJECT NO.: 36592-04 DATE: 9/2020 SCALE: N.T.S. REVIEWED:

DEPUTY CITY ENGINEER CITY ENGINEER

# 1585 WEST MITCHELL LIFT STATION SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10)

## MEMPHIS, TENNESSEE



LOCATION MAP

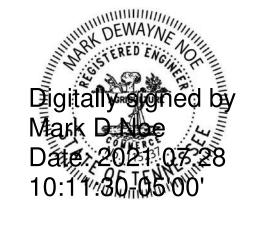
NOT TO SCALE







CONSTRUCTION DOCUMENTS



roline Sanders \36\36592\3659204\04\_CAD\GENL\03 - 1585 West Mitchell\PLOT\3659204\_1585 West Mit

#### **ABBREVIATIONS**

DIAMETER ABOVE FINISHED FLOOR AFF ALUM. ALUMINUM APPROX. APPROXIMATE BOTTOM CATCH BASIN BCB BACK OF CURB BFP BACKFLOW PREVENTOR BUTTERFLY VALVE BFV CB CATCH BASIN CLOSED CIRCUIT TELEVISION CCTV CURB INLET CIPP CURED-IN-PLACE PIPE CENTERLINE CORRUGATED METAL PIPE CMP CLEAN OUT CONCRETE CONC CONN CONNECT CONST. CONSTRUCTION CPLG. COUPLING CS **COMBINED SEWER** CU COPPER CHECK VALVE DEED BOOK DROP INLET DIP DUCTILE IRON PIPE DWCB DOUBLE WING CATCH BASIN D/W DRIVEWAY ELEV. **ELEVATION** EXIST. **EXISTING** ELEC ELECTRICAL SERVICE EOI END OF INFORMATION OR **UNKNOWN TERMINATION POINT** EOP EDGE OF PAVEMENT FEMALE IRON PIPE FFE FINISHED FLOOR ELEVATION FIRE HYDRANT FM FORCE MAIN GSP GALVANIZED STEEL PIPE GATE VALVE HIGH DENSITY POLYETHYLENE HDPE HORZ HORIZONTAL HWY HIGHWAY **INSIDE DIAMETER** 

INVERT ELEVATION

INVERT

LINEAR FEET

MALE IRON PIPE

NOT TO SCALE

**POWER POLE** 

POINT REPAIR

PLUG VALVE

PROPOSED

RETAINER

ROAD

SHEET

STATION

TYPICAL

VERTICAL WATER METER

WATER

WITH FEET INCHES

MECHANICAL JOINT

NOW OR FORMERLY

**OUTSIDE DIAMETER** 

NON POTABLE WATER

POLYVINYL CHLORIDE

REINFORCED CONCRETE PIPE

STANDARD PROCTOR DENSITY

SANITARY SEWER MANHOLE

SINGLE WING CATCH BASIN TELECOM TELECOMMUNICATION CONDUIT

TAPPING SLEEVE AND VALVE

UNLESS NOTED OTHERWISE

POTABLE WATER

WATER FAUCET

RESTRAINED JOINT

RIGHT-OF-WAY STORM DRAIN

SIGNAL POLE

STATE ROUTE

SANITARY SEWER

STAINLESS STEEL

TELEPHONE POLE

TRAFCON TRAFFIC SIGNAL COMM WIRE

TRAFFIC SIGNAL BOX

VITRIFIED CLAY PIPE

MALENATIONAL PIPE THREAD

MINIMUM

MANHOLE

PAGE

INV

MIN

MIP

NPW

NTS

OD

PG

PVC

PROP.

RCP

RD

RET

SD

SP

SPD

SR

SS SSMH

SSTL

STA

TSB

TS&V

TYP

UNO

VCP

WTR

W/

**VERT** 

SWCB

R.O.W.

**DESCRIPTION** 

G0.01 **COVER SHEET** G0.02

NOTES

SHEET NO.

C1.01 SEWER LAYOUT PLAN C1.02 EXISTING CONDITIONS

C2.01 LIFT STATION SECTIONS

C7.01 DETAILS

E1.01 ELECTRICAL PLAN

#### **LEGEND**

**INDEX OF DRAWINGS** 

| EXISTING            | NEW                 |                                 |
|---------------------|---------------------|---------------------------------|
| <del></del>         |                     | CAP OR PLUG                     |
| S                   | <b>S</b>            | SANITARY SEWER MANHOLE          |
|                     |                     | STORM SEWER MANHOLE             |
|                     | COO                 | CLEANOUT                        |
| □YH                 | ■YH                 | YARD HYDRANT                    |
| $\mathcal{O}$       | ~                   | FIRE HYDRANT                    |
|                     | M                   | REDUCER                         |
| 口                   | Ħ                   | SOLID SLEEVE OR HDPE MJ ADAPTER |
| wv<br>              | $oldsymbol{\Theta}$ | WATER VALVE                     |
| □ <sub>WM</sub>     | $\square_{WM}$      | WATER METER                     |
|                     |                     | AIR VALVE MH OR LINE STOP VALVE |
| FM                  | ——— FM ———          | FORCE MAIN                      |
| ——— G———            | G                   | GAS LINE                        |
|                     | ——— SD ———          | STORM SEWER LINE                |
| SS                  | ss                  | SANITARY SEWER LINE             |
|                     | ——— W———            | WATER MAIN                      |
| - — — – 350 – — — – | 350                 | CONTOUR                         |
| x                   | x                   | FENCE                           |
| $\varnothing$       | Ø                   | POWER/TELEPHONE POLE            |
| <b>#</b>            | ¢3                  | TREE                            |
|                     |                     | CENTERLINE                      |
|                     |                     | PROPERTY BOUNDARY LINE          |
|                     |                     | RIGHT-OF-WAY                    |
|                     |                     | EASEMENT                        |
| <u> </u>            |                     | USACE DREDGE LIMITS             |

- ALL DESIGN, CONSTRUCTION AND MATERIAL SHALL BE IN COMPLIANCE WITH THE SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) AND CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS AND STANDARDS.
- 2. THE CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.

**NOTES** 

- GRADING AND DRAINAGE: FINISH GRADE SHALL BE SLOPED FOR POSITIVE DRAINAGE.
- 4. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
- 5. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
- 6. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
- 7. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
- 8. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING.

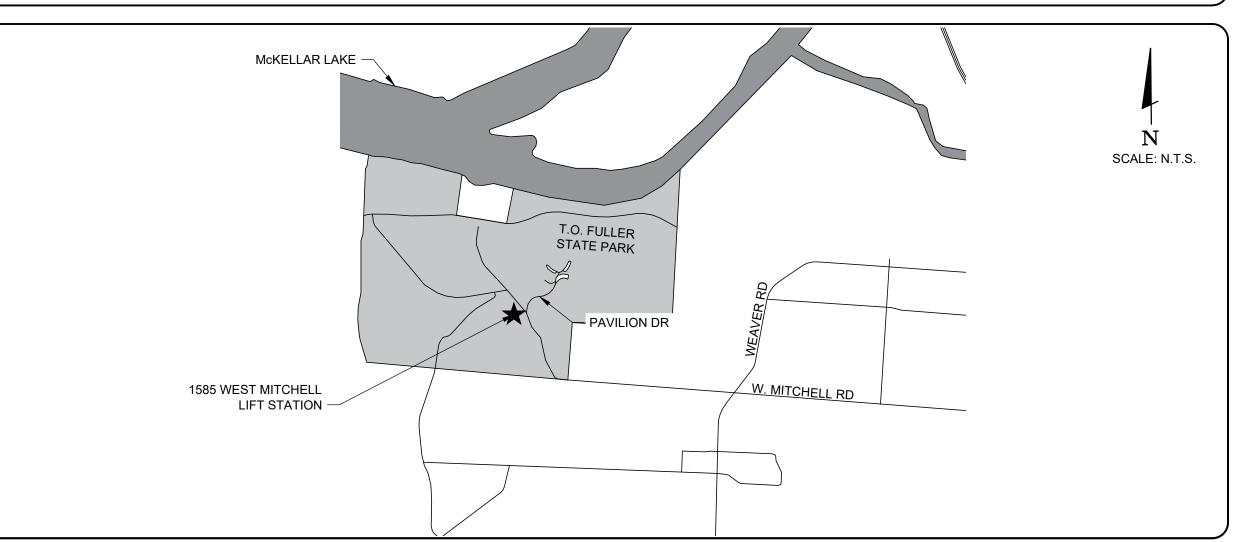
#### CITY OF MEMPHIS TYPICAL CONSTRUCTION NOTES

- 1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, PLEASE CALL 1-800-351-1111. FOR SEWER SERVICE LOCATIONS, CALL 901-636-8025.
- 2. CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR BYPASSING.
- 3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.

**GENERAL NOTES** 

- 4. CONTRACTOR SHALL NOTIFY THE SARP10 CONSTRUCTION MANAGER A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
- 5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
- 6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
- 7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS. SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS PER CITY OF MEMPHIS STANDARD SST-16.
- 8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 1.5' ABOVE PROPOSED GRADE. IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE FINAL GRADE.
- ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' MINIMUM BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE (D.I.P.) SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
- 10. THE CITY OF MEMPHIS SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS.
- 11. NO TREES, SHRUBS, PERMANENT STRUCTURES, OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS.
- 12. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS, OR DRIVES (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR PICK HOLES TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM.
- 13. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.

## **VICINITY MAP**



THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0415F, DATED SEPTEMBER 28, 2007.

CITY OF MEMPHIS BENCHMARK NUMBER 529 - MITCHELL RD. & PLANT RD.: CITY MONUMENT IS LOCATED IN T.O. FULLER STATE PARK AT THE S.W. COR. OF INTERSECTION, 66' S. OF CENTERLINE OF MITCHELL, 76' W. OF CENTERLINE OF PLANT RD., 51' SW OF P/POLE #101005, 154' SW OF A SMH AT INTERSECTION, ELEVATION: 275.98

|             | REVISION              |                  |                              |
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Lift Station Rehab Design Group 2—B

MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC. DIVISION OF ENGINEERING NOTES

LOCATION: 1585 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

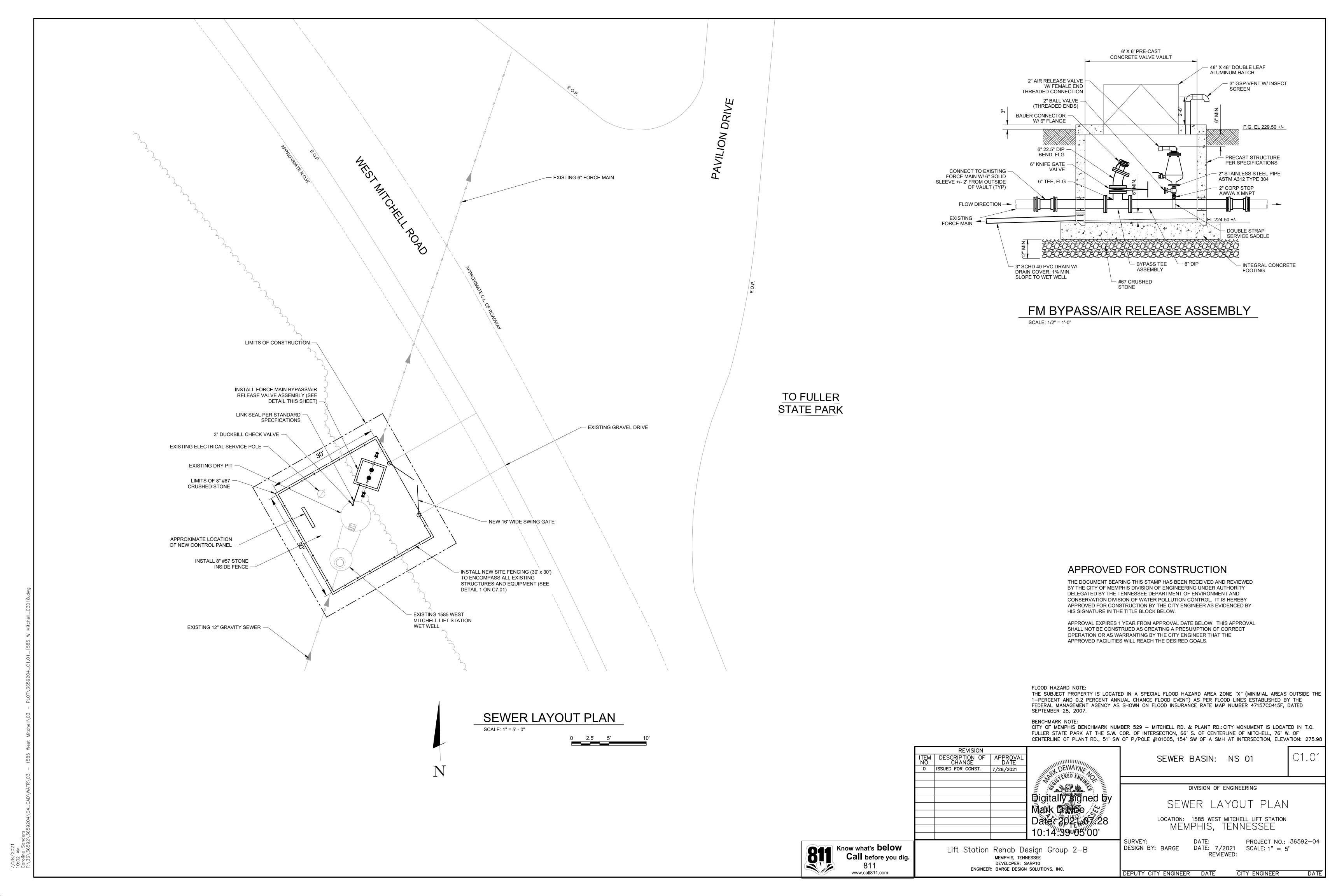
DESIGN BY: BARGE

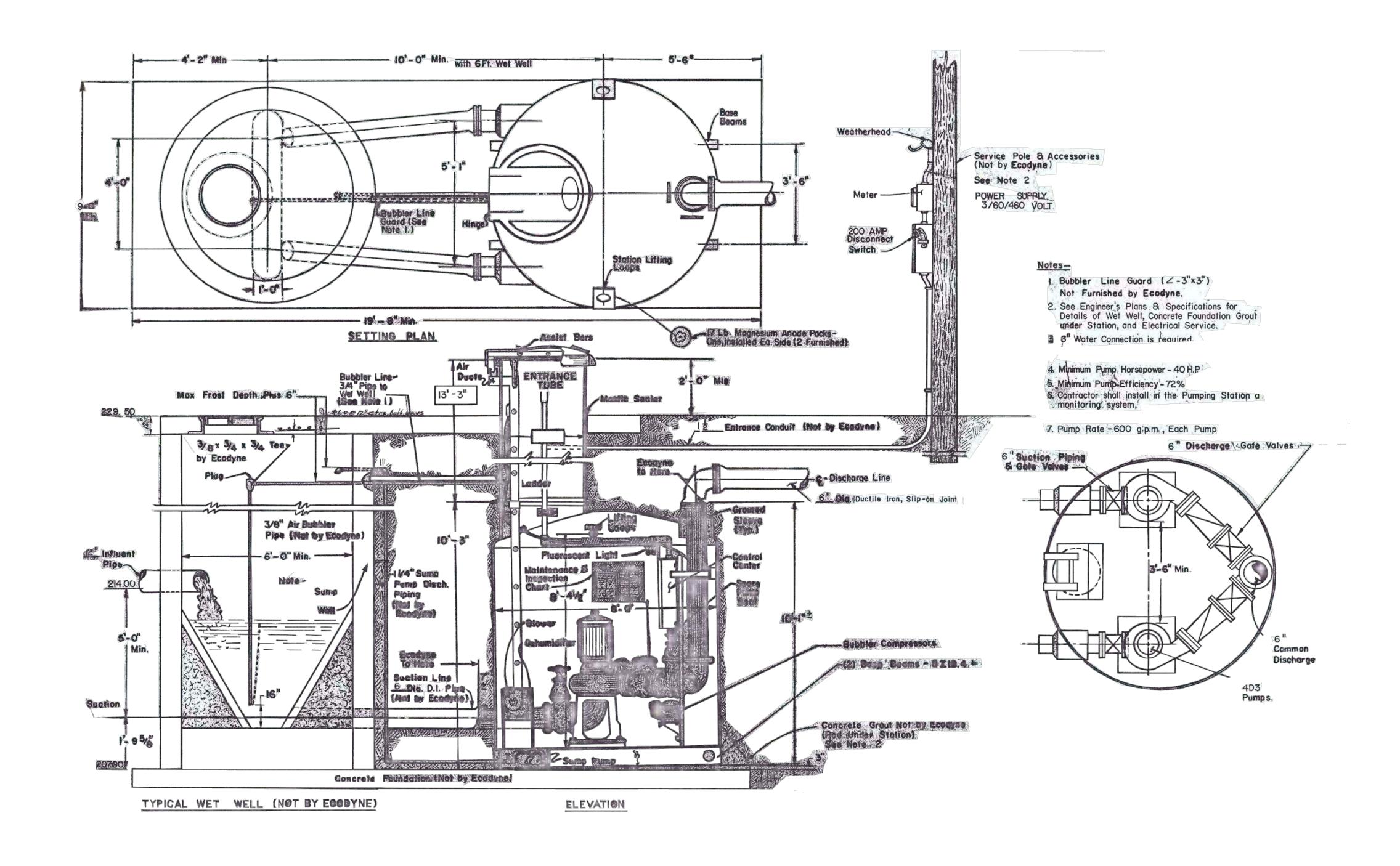
PROJECT NO.: 36592-04 DATE: 7/2021 SCALE: NONE REVIEWED:

G0.02

DEPUTY CITY ENGINEER DATE CITY ENGINEER

SEWER BASIN: NS 01





 RECORD DRAWINGS DRAWN BY THE CITY OF MEMPHIS DEPARTMENT OF ENGINEERING - BUREAU OF SEWER DESIGN, TITLED "BOXTOWN AREA SEWERS PHASE 5A" AND DATED 1978.

**EXISTING LIFT STATION** 

FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0415F, DATED SEPTEMBER 28, 2007.

BENCHMARK NOTE: CITY OF MEMPHIS BENCHMARK NUMBER 529 - MITCHELL RD. & PLANT RD.: CITY MONUMENT IS LOCATED IN T.O. FULLER STATE PARK AT THE S.W. COR. OF INTERSECTION, 66' S. OF CENTERLINE OF MITCHELL, 76' W. OF CENTERLINE OF PLANT RD., 51' SW OF P/POLE #101005, 154' SW OF A SMH AT INTERSECTION, ELEVATION: 275.98

|             |                       |                  | CENTEREINE OF FEART RD., 51 SW |
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|             | REVISION              |                  |                                |
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DIVISION OF ENGINEERING

SEWER BASIN: NS 01

EXISTING CONDITIONS

LOCATION: 1585 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

DATE: PROJECT NO.: 36592-04
DESIGN BY: BARGE DATE: 7/2021 SCALE: N.T.S.
REVIEWED:

CITY ENGINEER

Know what's below Call before you did. Call before you dig. www.call811.com

Lift Station Rehab Design Group 2—B MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DEPUTY CITY ENGINEER DATE

- EXISTING SMITH & LOVELESS MODEL 4DE3 VERTICAL EXISTING 5' DIAMETER WET EXISTING 6" SUCTION PIPING CENTRIFUGAL PUMP WELL WITH ACCESS MANHOLE -AND GATE VALVE -EXISTING 6" COMMON DISCHARGE HEADER - EXISTING 6" GATE VALVE - EXISTING 6" CHECK VALVE - EXISTING SMITH & LOVELESS MODEL 4DE3 VERTICAL CENTRIFUGAL PUMP

PLACE COATING ON INSIDE OF WET WELL (SEE NOTE 1) — EXISTING ELECTRICAL CONDUIT EXISTING %" BUBBLER PIPE -— EXISTING 6" COMMON DISCHARGE HEADER EXISTING 12" INFLUENT - EXISTING ELECTRICAL CONTROL PANEL TO BE ABANDONED - EXISTING SUMP PUMP  $^{-}$  1  $\frac{1}{4}$ " SUMP PUMP DISCHARGE PIPING

#### NOTES:

1. CONTRACTOR SHALL APPLY CITY OF MEMPHIS APPROVED COATING SYSTEM TO ALL INTERIOR SURFACES OF THE WET WELL PER STANDARD SPECIFICATIONS. 2. EXISTING PUMP DATA COLLECTED FROM THE "FINAL ASSESSMENT REPORT FOR 4486 WINDOW - SARP10 LIFT STATION ASSESSMENT PROJECT FOR THE CITY OF MEMPHIS" DATED APRIL 6, 2019.

## PUMP 1/2 DATA: - MANUFACTURER: SMITH & LOVELESS

- MOTOR HP: 40

- TYPE: VERTICAL CENTRIFUGAL - CAPACITY: APPROX. 450 GPM @ 119 FT OF HEAD (IMPELLER DIAMETER SHAVED FROM 12" TO 11"). RATED CAPACITY IS APPROX. 600 GPM @ 134 FT OF HEAD. - MODEL: 4D3

SCALE: 1/2" = 1'-0"

LIFT STATION SECTION

FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0415F, DATED SEPTEMBER 28, 2007.

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SEWER BASIN: NS 01

DIVISION OF ENGINEERING

LIFT STATION PLAN AND SECTION

LOCATION: 1585 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

DEPUTY CITY ENGINEER DATE

PROJECT NO.: 36592-04 DESIGN BY: BARGE DATE: 7/2021 SCALE:
REVIEWED:

CITY ENGINEER

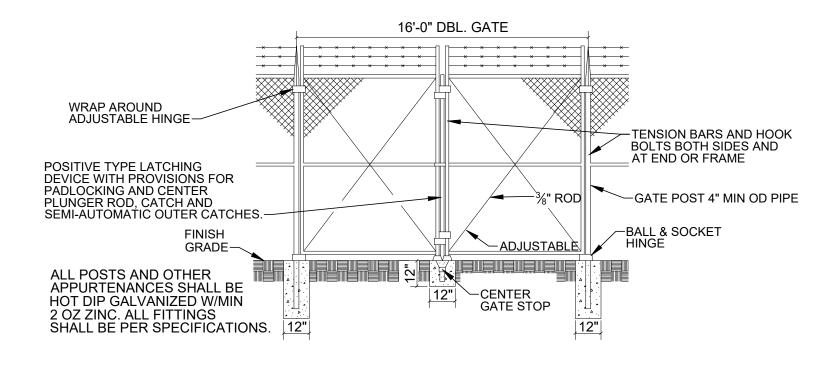
LIFT STATION PLAN

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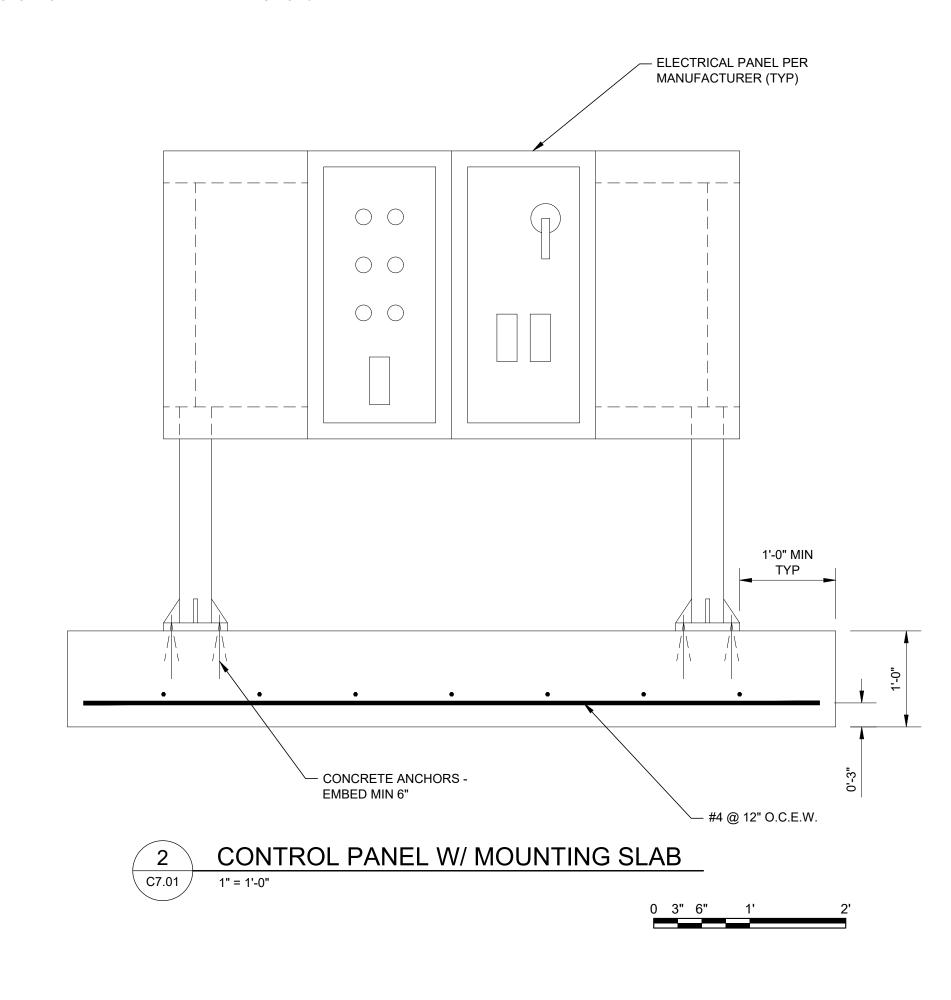
Lift Station Rehab Design Group 2—B DEVELOPER: SARP10

ENGINEER: BARGE DESIGN SOLUTIONS, INC.



SITE SECURITY FENCING SCALE: NONE

1. EXTEND SLAB 12" FROM THE ENDS, FACE, AND BACK OF THE CONTROL PANEL. SLAB DEPTH SHOULD BE 12". ADD A LAYER OF #4 REBAR 3" FROM THE BOTTOM AT 12" O.C. E.W. ANCHOR BOLTS SHALL BE EMBEDED A MINIMUM OF 6".



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|             |                       |                  | CENTERLINE OF PLANT RD., 51' SW |
|-------------|-----------------------|------------------|---------------------------------|
|             | REVISION              |                  |                                 |
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Lift Station Rehab Design Group 2—B MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER BASIN: NS 01

DIVISION OF ENGINEERING

DETAILS

LOCATION: 1585 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

DESIGN BY: BARGE

DAIE: PROJECT NO.: 36592-04 DATE: 7/2021 SCALE: NONE REVIEWED:

CITY ENGINEER DEPUTY CITY ENGINEER DATE



PUMP STATION METER AND DISCONNECT



FUSES IN DISCONNECT SWITCH



RUSTED HOLE IN METER BASE

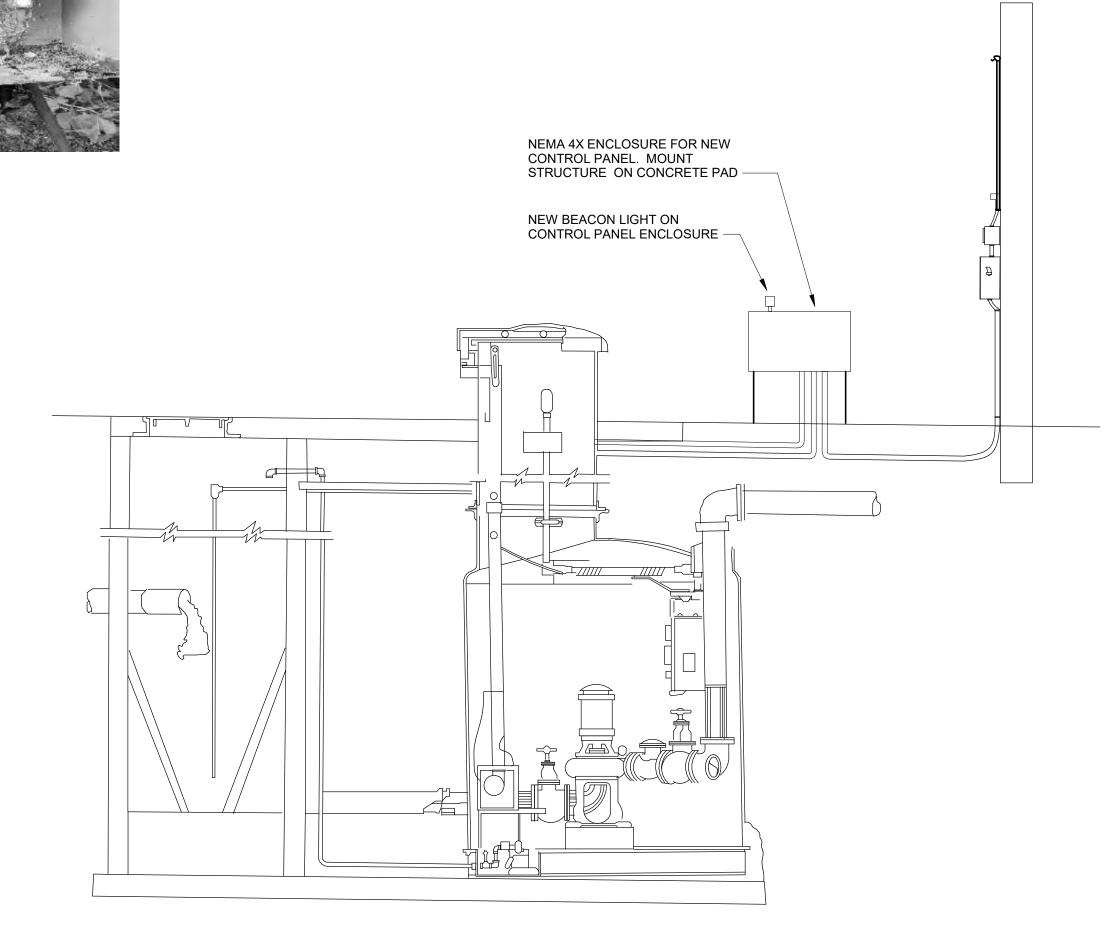


CONDUIT HAS COME LOOSE FROM DISCONNECT





**GROUNDING CLAMP CONNECTION** 



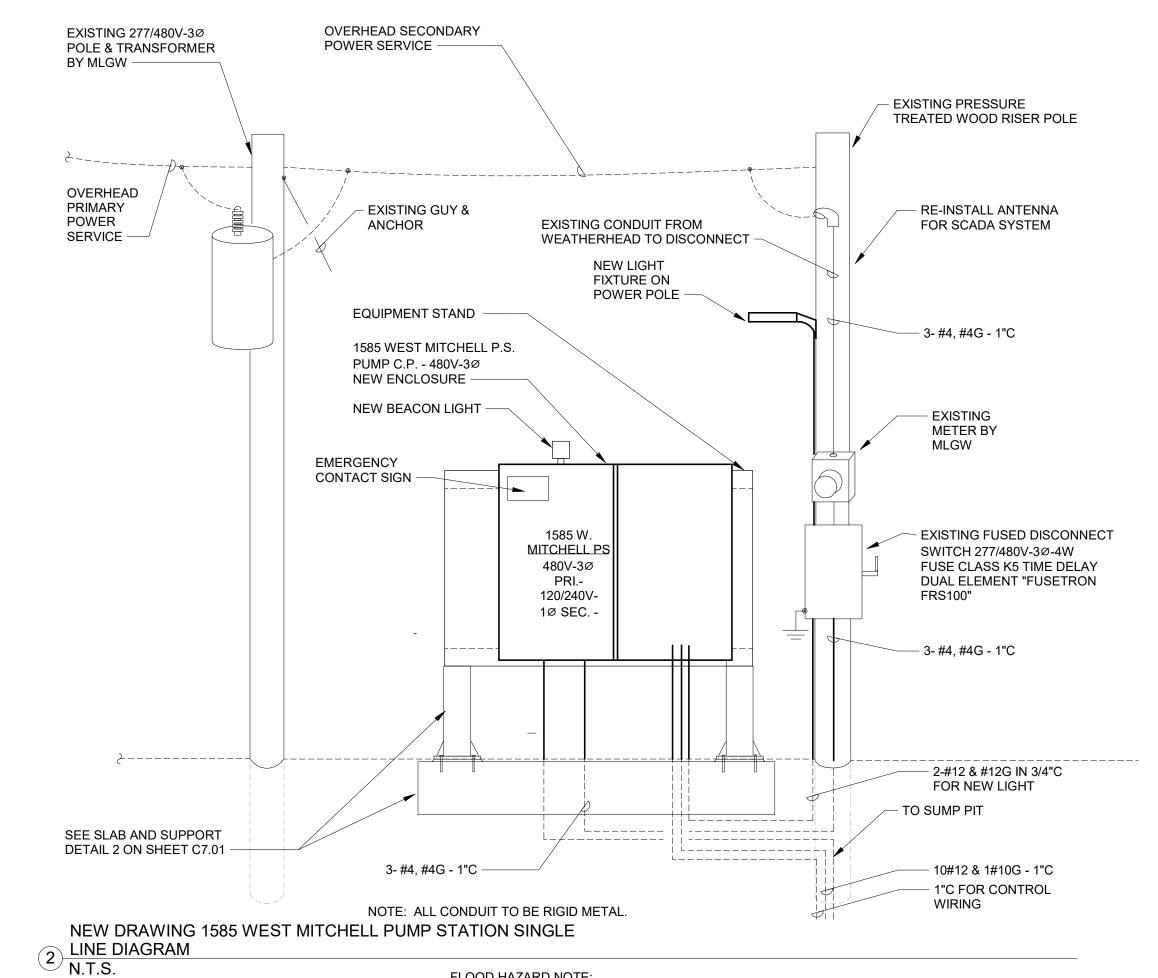
 $\underbrace{1}_{\text{N.T.S.}} \underbrace{\text{PUMP ELECTRICAL PLAN}}_{\text{N.T.S.}}$ 

#### CODE ANALYSIS - INTERNATIONAL BUILDING CODE 2015

#### CODE COMMENTS JURISDICTION Memphis and Shelby County Construction Code Enforcement APPLICABLE CODES 2015 International Building Code with Local Amendments 2015 International Existing Building Code with Local Amendments 2015 International Residential Code with Local Amendments 2014 National Electrical Code 2018 Joint Electrical Code 2015 International Mechanical Code with Local Amendments 2015 International Fuel Gas Code with Local Amendments 2015 International Plumbing Code with Local Amendments 2015 International Energy Conservation Code with Local Amendments 2009 ICC A117.1 Accessibility and Useable Buildings and Facilities )by reference) 2013 ASME 17.1 Safety Code for Elevators and Escalators (by reference)

#### **GENERAL PROJECT NOTES:**

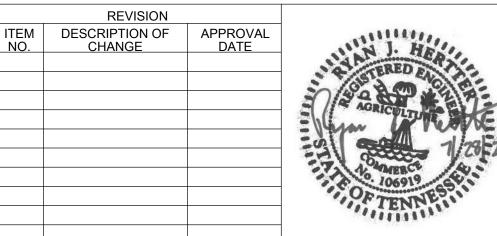
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE STANDARDS AND REGULATIONS ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- ALL ABOVE GROUND EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH CORROSION RESISTANT FITTINGS, CLAMPS AND SUPPORT.
- IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS, SPECIFICATIONS, CODES AND REGULATIONS, NOTIFY THE ENGINEER OF RECORD FOR HIS OPINION PRIOR TO INSTALLATION.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL AND TO THE ENGINEER FOR REVIEW.
- SMACNA SEISMIC RESTRAINT MANUAL, THIRD EDITION 2008, OR LATEST REVISION MAY BE USED AS A GUIDE FOR GENERAL SEISMIC SUPPORT DETAIL AND SUPPORT SPACING RECOMMENDATIONS.
- WHILE EFFORT HAS BEEN MADE TO IDENTIFY EXISTING CIRCUITS THAT ARE TO BE REMOVED OR REPLACED, THE INFORMATION MAY NOT BE ACCURATE.
- ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE AND AMP DRAW FOR ANY NEW EQUIPMENT.
- ALL ELECTRICAL GEAR SHALL BE MOVED FROM THE PIT TO ABOVE GROUND. VERIFY NEW CONTROL PANEL WORKS WITH ANY REMAINING EQUIPMENT OR CONTROLS IN THE PIT.
- THE MAIN CONTROL PANEL IS FED WITH AN EXISTING 480V 3PH 60A FUSED DISCONNECT ABOVE GRADE. ALL AUXILIARY EQUIPMENT IS CURRENTLY FED FROM THE CONTROL PANEL IN THE PIT. EXTEND POWER TO LIGHT, SUMP PUMP, BLOWER/DEHUMIDIFIER, & AIR COMPRESSOR USING ISO CABLE FROM THE NEW ENCLOSURE ABOVE GRADE TO THE EQUIPMENT.
- USE KELLUMS TYPE WIRE MESH HANGERS TO SUPPORT ALL CORDS COMING FROM THE PUMP STATION CEILING. PROVIDE CLIPS ON THE WALL TO KEEP CORDS CLEAR OF SERVICE AREA.
- REPLACE FUSES IN DISCONNECT.
- REPLACE GROUND CLAMP AND TIGHTEN GROUND WIRES.
- REPLACE RACEWAY (CONDUIT AND FITTINGS) FOR BOTH POWER AND CONTROLS.
- REPAIR WEATHERHEAD ON POLE. SECURE CONDUIT TO POLE.
- REPLACE EXISTING ELECTRIC PANEL COMPONENTS THAT ARE MISSING SUCH AS KNOCK OUTS AND SECURE ANY
- REPLACE METER BASE PANEL.
- INSTALL RED FLASHING BEACON LIGHT ON TOP OF CONTROL PANEL ENCLOSURE CONNECTED TO ALARM CONTACTS ON THE NEW CONTROL PANEL FOR HIGH LEVEL FLOAT. INSTALL EMERGENCY CONTACT SIGN ON THE ENCLOSURE STATING, "IF LIGHT IS BLINKING, PLEASE CALL 901-521-0186".



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BENCHMARK NOTE: CITY OF MEMPHIS BENCHMARK NUMBER 529 - MITCHELL RD. & PLANT RD.: CITY MONUMENT IS LOCATED IN T.O.

FULLER STATE PARK AT THE S.W. COR. OF INTERSECTION, 66' S. OF CENTERLINE OF MITCHELL, 76' W. OF CENTERLINE OF PLANT RD., 51' SW OF P/POLE #101005, 154' SW OF A SMH AT INTERSECTION, ELEVATION: 275.98 DESCRIPTION OF APPROVAL SEWER BASIN: NS 01



DIVISION OF ENGINEERING

**ELECTRICAL PLAN** LOCATION: 1585 WEST MITCHELL LIFT STATION MEMPHIS, TENNESSEE

DESIGN BY: BARGE

PROJECT NO.: 36592-04 DATE: 9/2020 SCALE: N.T.S. REVIEWED:

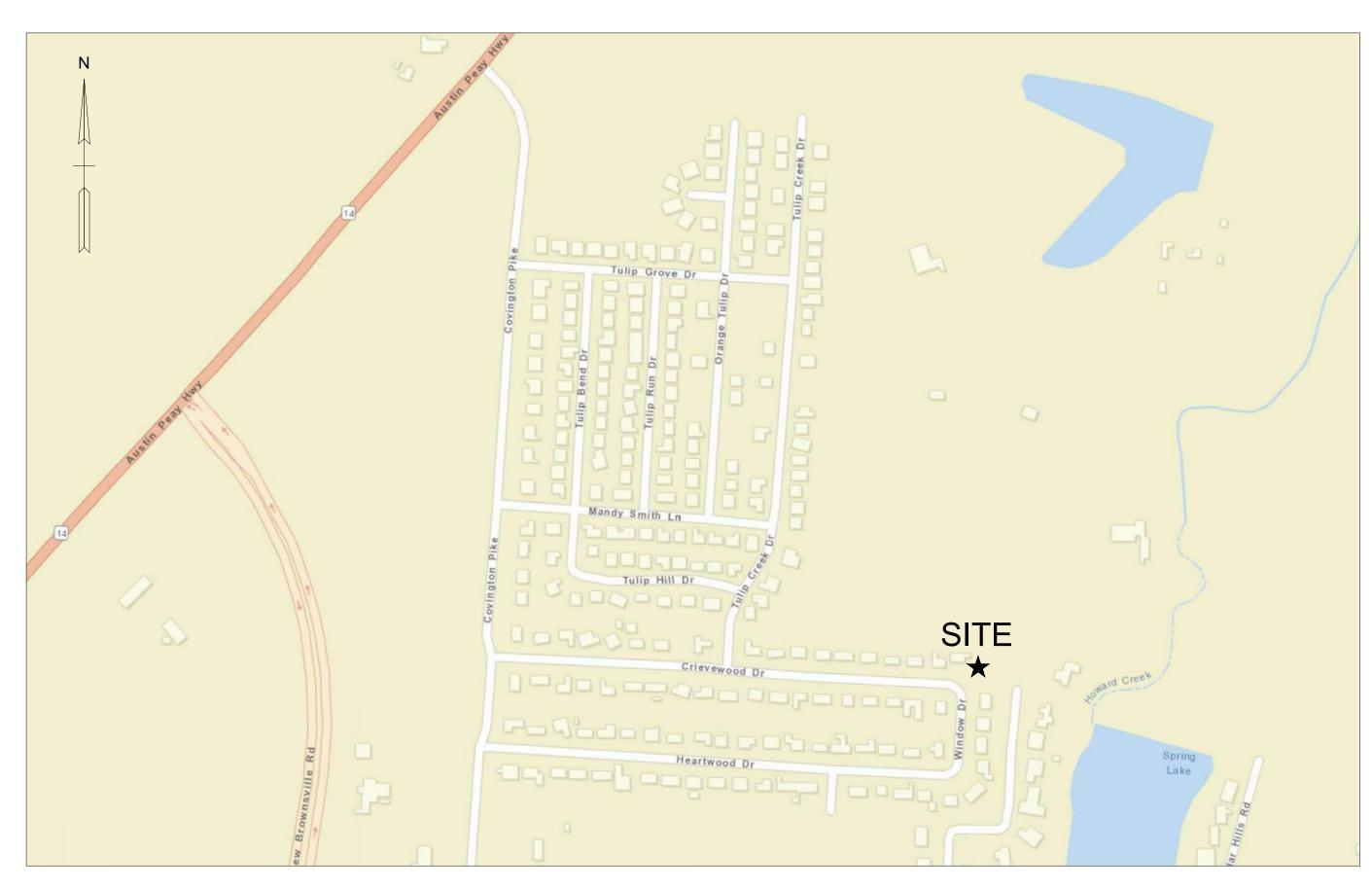
Know what's **below** Lift Station Rehab Design Group 2-B Call before you dig. MEMPHIS, TENNESSEE DEVELOPER: SARP 10 www.call811.com

ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DATE DEPUTY CITY ENGINEER CITY ENGINEER

# 4486 WINDOW LIFT STATION SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10)

MEMPHIS, TENNESSEE



# LOCATION MAP

NOT TO SCALE







CONSTRUCTION DOCUMENTS



s Am oline Sanders 36\36592\36592\4659204\04\_CAD\GENL\04 - 4486 Window\PLOT\3659204\_4486 West

#### **ABBREVIATIONS**

DIAMETER AFF ABOVE FINISHED FLOOR ALUMINUM ALUM. APPROX. APPROXIMATE BOTTOM CATCH BASIN BCB BACK OF CURB BFP BACKFLOW PREVENTOR **BUTTERFLY VALVE** BFV CB CATCH BASIN CLOSED CIRCUIT TELEVISION CCTV CURB INLET CIPP CURED-IN-PLACE PIPE CENTERLINE CORRUGATED METAL PIPE CMP CLEAN OUT CONCRETE CONC CONN CONNECT CONST. CONSTRUCTION CPLG. COUPLING CS **COMBINED SEWER** CU COPPER CHECK VALVE DEED BOOK DROP INLET DIP DUCTILE IRON PIPE DWCB DOUBLE WING CATCH BASIN D/W DRIVEWAY ELEV. **ELEVATION** EXIST. **EXISTING** ELEC ELECTRICAL SERVICE END OF INFORMATION OR EOI **UNKNOWN TERMINATION POINT EDGE OF PAVEMENT** EOP **FEMALE IRON PIPE** FFE FINISHED FLOOR ELEVATION

FIRE HYDRANT

GALVANIZED STEEL PIPE

HIGH DENSITY POLYETHYLENE

MALENATIONAL PIPE THREAD

FORCE MAIN

GATE VALVE

HORIZONTAL

**INSIDE DIAMETER** INVERT ELEVATION

MALE IRON PIPE

NOT TO SCALE

POINT REPAIR

PLUG VALVE

PROPOSED

RETAINER

ROAD

SHEET SIGNAL POLE

STATION

TYPICAL

VERTICAL WATER METER

WATER

INCHES

WITH FEET

PAGE **POWER POLE** 

MECHANICAL JOINT

NOW OR FORMERLY

**OUTSIDE DIAMETER** 

NON POTABLE WATER

POLYVINYL CHLORIDE

REINFORCED CONCRETE PIPE

STANDARD PROCTOR DENSITY

SANITARY SEWER MANHOLE

SINGLE WING CATCH BASIN TELECOM TELECOMMUNICATION CONDUIT

TAPPING SLEEVE AND VALVE

UNLESS NOTED OTHERWISE

POTABLE WATER

WATER FAUCET

RESTRAINED JOINT

RIGHT-OF-WAY STORM DRAIN

STATE ROUTE

SANITARY SEWER

STAINLESS STEEL

TELEPHONE POLE

TRAFCON TRAFFIC SIGNAL COMM WIRE

TRAFFIC SIGNAL BOX

VITRIFIED CLAY PIPE

HIGHWAY

INVERT LINEAR FEET

MINIMUM

MANHOLE

FM

GSP

HDPE

HORZ

HWY

INV

MIN

NTS

OD

PG

PVC

PROP.

RCP

RD

RET

R.O.W.

SPD

SSMH

SSTL

SWCB

STA

TSB

TS&V

TYP

UNO

VCP

**VERT** 

WTR

W/

SR SS

MIP

## NEW **EXISTING** CAP OR PLUG SANITARY SEWER MANHOLE STORM SEWER MANHOLE CLEANOUT YARD HYDRANT □YH FIRE HYDRANT REDUCER SOLID SLEEVE OR HDPE MJ ADAPTER WATER VALVE WATER METER $\square_{\mathsf{WM}}$ AIR VALVE MH OR LINE STOP VALVE FORCE MAIN GAS LINE —— SD —— STORM SEWER LINE ------ SS -----WATER MAIN \_\_\_\_\_\_ 350 \_\_\_\_\_ CONTOUR - — — - 350 - — — -— X — FENCE POWER/TELEPHONE POLE TREE CENTERLINE ---- RIGHT-OF-WAY

---- EASEMENT

—···—···—···—···—···— USACE DREDGE LIMITS

#### **INDEX OF DRAWINGS**

SHEET NO. **DESCRIPTION** G0.01 **COVER SHEET** G0.02 NOTES C1.01 SEWER LAYOUT PLAN C1.02 **EXISTING CONDITIONS** C2.01 LIFT STATION SECTIONS C7.01 DETAILS E1.01 ELECTRICAL PLAN

#### **LEGEND**

#### **NOTES**

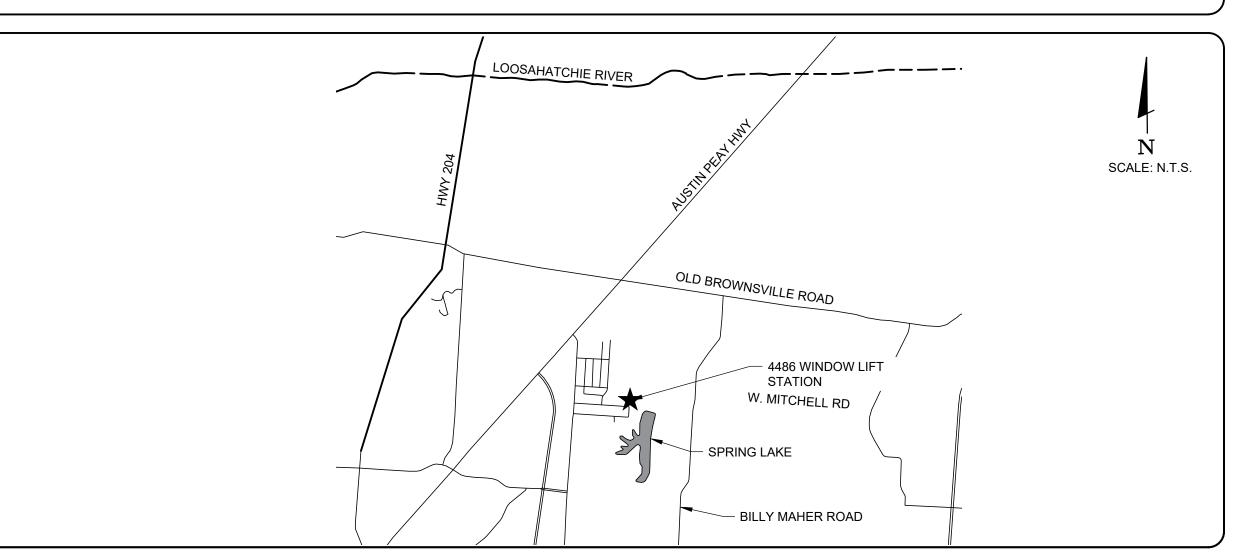
#### **GENERAL NOTES**

- ALL DESIGN, CONSTRUCTION AND MATERIAL SHALL BE IN COMPLIANCE WITH THE SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) AND CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS AND STANDARDS.
- 2. THE CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
- GRADING AND DRAINAGE: FINISH GRADE SHALL BE SLOPED FOR POSITIVE DRAINAGE.
- 4. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
- 5. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
- 6. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
- 7. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
- 8. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING.

#### CITY OF MEMPHIS TYPICAL CONSTRUCTION NOTES

- 1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, PLEASE CALL 1-800-351-1111. FOR SEWER SERVICE LOCATIONS, CALL 901-636-8025.
- CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR BYPASSING.
- 3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
- 4. CONTRACTOR SHALL NOTIFY THE SARP10 CONSTRUCTION MANAGER A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
- 5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
- 6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
- 7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS. SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS PER CITY OF MEMPHIS STANDARD SST-16.
- 8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 1.5' ABOVE PROPOSED GRADE. IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE
- ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' MINIMUM BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE (D.I.P.) SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
- 10. THE CITY OF MEMPHIS SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS.
- 11. NO TREES, SHRUBS, PERMANENT STRUCTURES, OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS.
- 12. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS, OR DRIVES (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR PICK HOLES TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM.
- 13. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.

## **VICINITY MAP**



FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0301G, DATED FEBRUARY 6, 2013.

BENCHMARK NOTE: CITY OF MEMPHIS BENCHMARK NUMBER 1892 - CRIEVEWOOD DR. & WINDOW DR.: CITY CAP IS LOCATED ON THE SW CORNER, SET 12-15-06, GLUED TO TOP OF CURB AT THE MID POINT OF RADIUS, CITYNET GPS 848,

| PEVISION  |  |
|---|--|
| REVISION  ITEM DESCRIPTION OF CHANGE  0 ISSUED FOR CONST. 7/28/2021 |  |

Lift Station Rehab Design Group 2—B

MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC. DIVISION OF ENGINEERING

SEWER BASIN: LS 06

NOTES

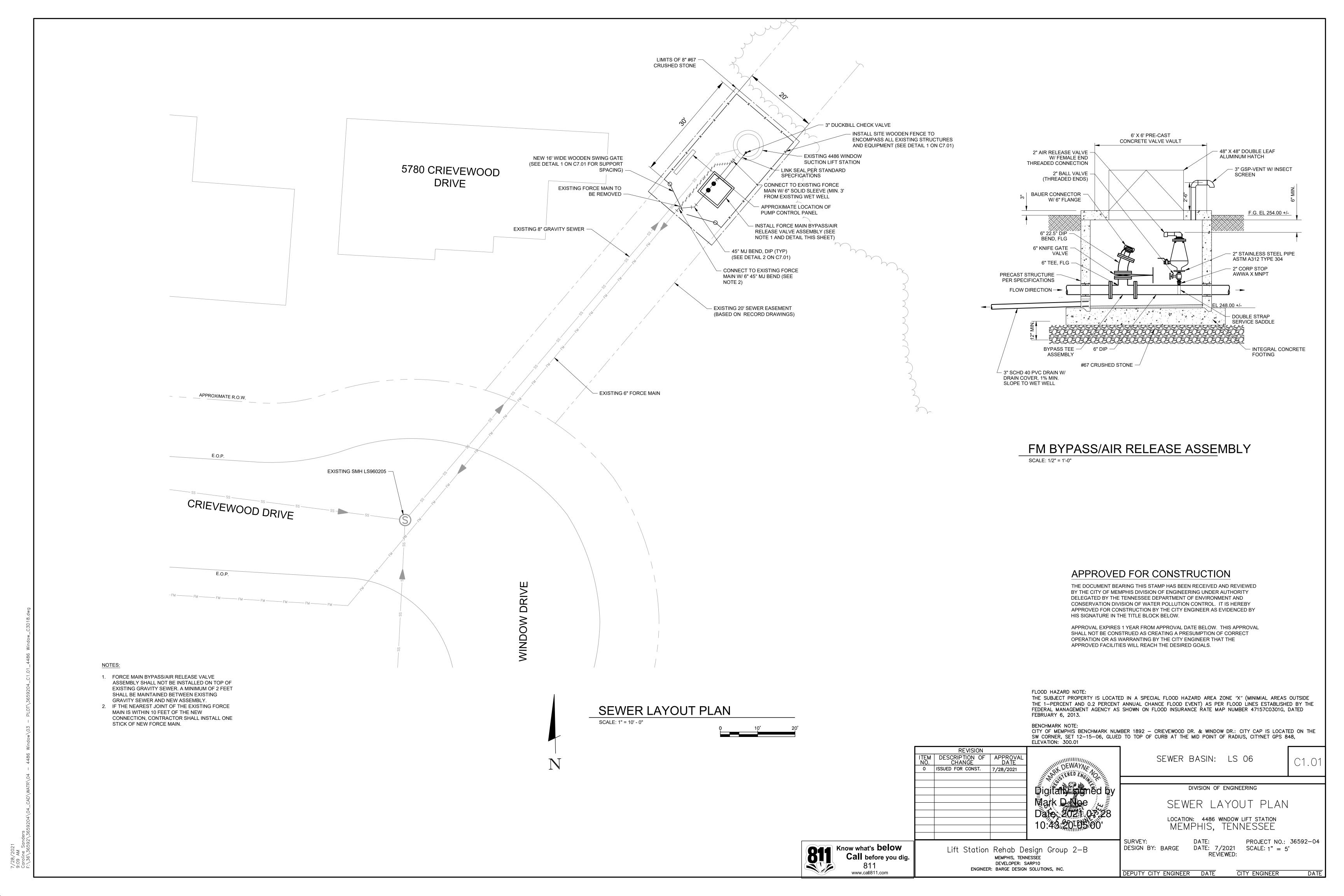
G0.02

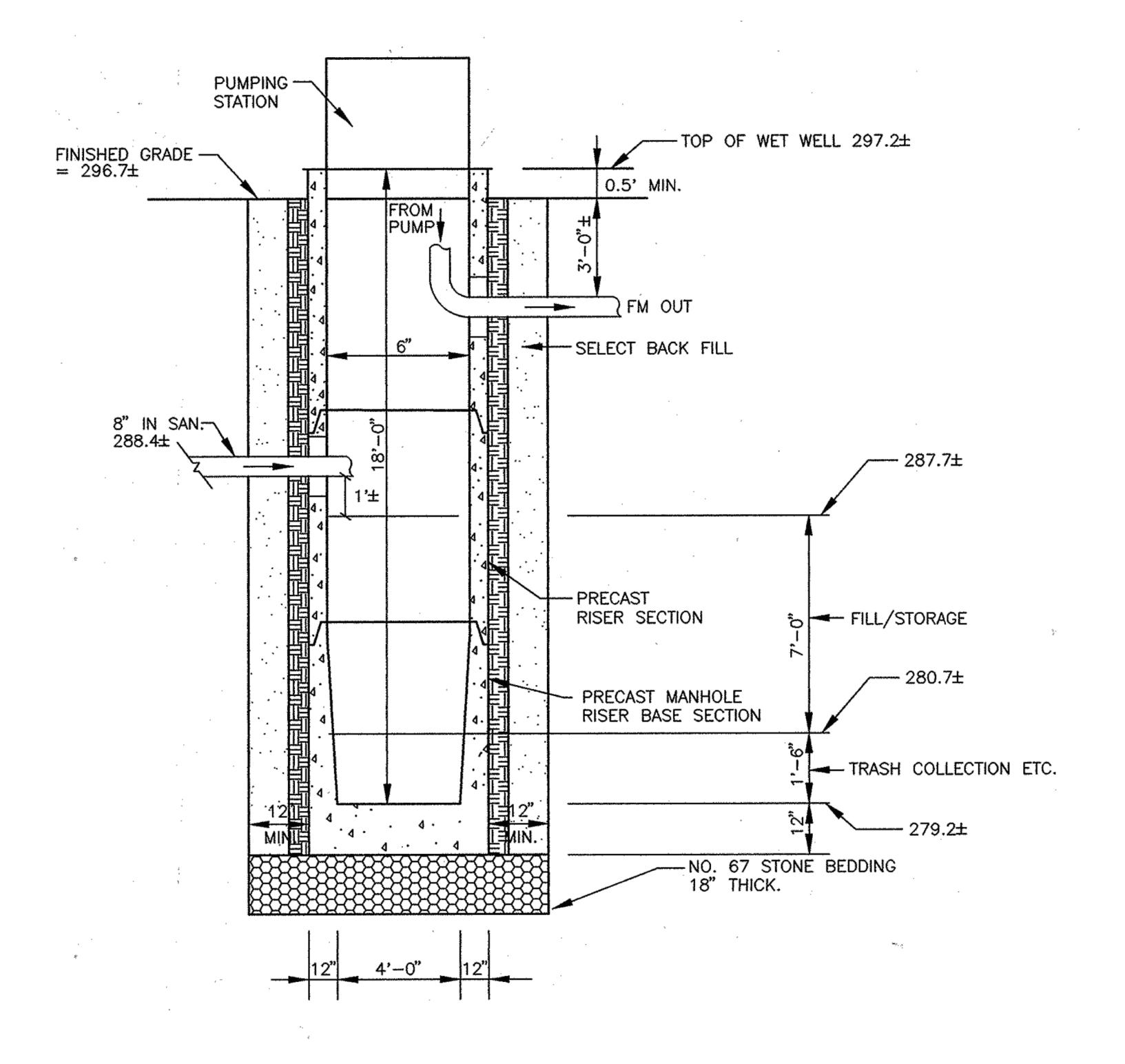
LOCATION: 4486 WINDOW LIFT STATION MEMPHIS, TENNESSEE

DESIGN BY: BARGE

PROJECT NO.: 36592-04 DATE: 7/2021 SCALE: NONE **REVIEWED:** 

DEPUTY CITY ENGINEER DATE CITY ENGINEER





1. RECORD DRAWINGS DRAWN BY CITY OF MEMPHIS DIVISION OF ENGINEERING - DEPARTMENT OF SEWER DESIGN 1994 TITLED "WINDOW DRIVE PUMP RELOCATION".

**EXISTING LIFT STATION** 

FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0301G, DATED FEBRUARY 6, 2013.

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ITEM DESCRIPTION OF APPROVAL NO. CHANGE DATE 0 ISSUED FOR CONST. 7/28/2021

SEWER BASIN: LS 06

DIVISION OF ENGINEERING

EXISTING CONDITIONS

LOCATION: 4486 WINDOW LIFT STATION MEMPHIS, TENNESSEE

DESIGN BY: BARGE DATE: PROJECT NO.: 36592-04 SCALE: N.T.S. REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

Know what's below Call before you dig. www.call811.com

Lift Station Rehab Design Group 2—B MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

EXISTING PUMPING STATION —

## LIFT STATION SECTION

SCALE: N.T.S

- 1. EXISTING PIPE LOCATION AND CONDITION SHOULD BE CONFIRMED PRIOR TO REPLACEMENT. 2. CONTRACTOR TO SUPPLY AND INSTALL ADDITIONAL PIPING AND FITTINGS AS NECESSARY TO
- MATCH EXISTING PIPING CONNECTIONS. 3. CONTRACTOR SHALL APPLY CITY OF MEMPHIS APPROVED COATING SYSTEM TO ALL INTERIOR
- SURFACES OF THE WET WELL PER STANDARD SPECIFICATIONS. 4. EXISTING PUMP DATA COLLECTED FROM THE "FINAL ASSESSMENT REPORT FOR 1585 WEST MITCHELL - SARP10 LIFT STATION ASSESSMENT PROJECT FOR THE CITY OF MEMPHIS" DATED
- JANUARY 17, 2019.
- MANUFACTURER: SMITH & LOVELESS
- TYPE: VERTICAL CENTRIFUGAL - RATED CAPACITY: APPROX. 230GPM @ 107 FT OF HEAD
- MODEL: 4B3B
- MOTOR HP: 10

#### APPROVED FOR CONSTRUCTION

THE DOCUMENT BEARING THIS STAMP HAS BEEN RECEIVED AND REVIEWED BY THE CITY OF MEMPHIS DIVISION OF ENGINEERING UNDER AUTHORITY DELEGATED BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER POLLUTION CONTROL. IT IS HEREBY APPROVED FOR CONSTRUCTION BY THE CITY ENGINEER AS EVIDENCED BY HIS SIGNATURE IN THE TITLE BLOCK BELOW.

APPROVAL EXPIRES 1 YEAR FROM APPROVAL DATE BELOW. THIS APPROVAL SHALL NOT BE CONSTRUED AS CREATING A PRESUMPTION OF CORRECT OPERATION OR AS WARRANTING BY THE CITY ENGINEER THAT THE APPROVED FACILITIES WILL REACH THE DESIRED GOALS.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0301G, DATED FEBRUARY 6, 2013.

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| WINDER CORE OF WELL  | 7/28/2021        | ISSUED FOR CONST.     | 0          |
| The Steward of the Well  |                  |                       |            |
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| Mark Pride   |                  |                       |            |
| Date 2021 07.2   |                  |                       |            |
| 10.42.9115500  |                  |                       |            |
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|  |                  |                       |            |

SEWER BASIN: LS 06

DIVISION OF ENGINEERING

LIFT STATION SECTION

LOCATION: 4486 WINDOW LIFT STATION MEMPHIS, TENNESSEE

SURVEY:

PROJECT NO.: 36592-04

Know what's below Call before you dig. 811

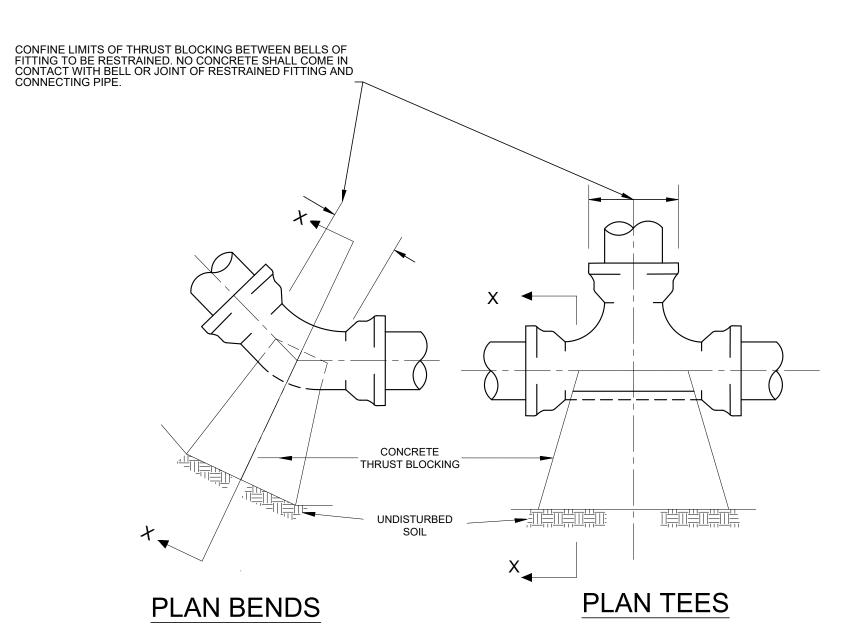
www.call811.com

Lift Station Rehab Design Group 2—B DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DESIGN BY: BARGE DATE: 7/2021 SCALE: REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

SITE SECURITY FENCING **C7.01** ✓ SCALE: NONE



18" MINIMUM 10" & SMALLER— -TRENCH BOTTOM UNDISTURBED SOIL -SECTION X-X BENDS & TEES

CONCRETE THRUST BLOCKING SCHEDULE IN SQUARE FEET

| PIPE |          | BENDS  |      |      |      |  |
|------|----------|--------|------|------|------|--|
| SIZE | 11 1/4 ° | 22 ½ ° | 45 ° | 90°  | TEE  |  |
| 4    | 1.0      | 1.0    | 1.5  | 2.5  | 2.0  |  |
| 6    | 1.5      | 2.0    | 3.0  | 5.5  | 4.0  |  |
| 8    | 1.5      | 2.5    | 5.0  | 10.0 | 7.0  |  |
| 10   | 2.0      | 4.0    | 7.5  | 14.5 | 10.0 |  |
| 12   | 3.0      | 6.0    | 11.5 | 21.5 | 14.5 |  |
| 14   | 4.0      | 7.5    | 15.0 | 28.0 | 19.5 |  |
| 16   | 5.0      | 10.0   | 20.0 | 35.0 | 25.5 |  |
| 18   | 6.5      | 12.5   | 24.5 | 35.0 | 32.0 |  |
| 20   | 8.5      | 16.5   | 32.6 | 35.0 | 35.0 |  |
| 24   | 10.0     | 20.0   | 35.0 | 35.0 | 35.0 |  |
| 30   | 18.0     | 34.5   | 35.0 | 35.0 | 35.0 |  |
| 36   | 25.0     | 35.0   | 35.0 | 35.0 | 35.0 |  |
| 42   | 32.5     | 35.0   | 35.0 | 35.0 | 35.0 |  |

BLOCKING SCHEDULE BASED ON 200 PSI WATER PRESSURE, 2,000 PSF SOIL BEARING PRESSURE & 1.25 SAFETY FACTOR.

TYPICAL THRUST BLOCK C7.01 SCALE: NONE

> FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MINIMIAL AREAS OUTSIDE THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0301G, DATED FEBRUARY 6, 2013.

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|             |                       |                  | ELEVATION: 300.01   |
|-------------|-----------------------|------------------|---------------------|
|             | REVISION              |                  |                     |
| ITEM<br>NO. | DESCRIPTION OF CHANGE | APPROVAL<br>DATE | WILL DEWAYNAMIN     |
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|             |                       |                  | E A COS A CONTRACT  |
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|             |                       |                  |                     |
|             |                       |                  |                     |

Lift Station Rehab Design Group 2—B MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DIVISION OF ENGINEERING

SEWER BASIN: LS 06

DETAILS

LOCATION: 4486 WINDOW LIFT STATION MEMPHIS, TENNESSEE

SURVEY: DESIGN BY: BARGE

DATE: PROJECT NO.: 36592-04 DATE: 7/2021 SCALE: NONE REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

7/28/202 9:18 AM Caroline \$ F:\36\36



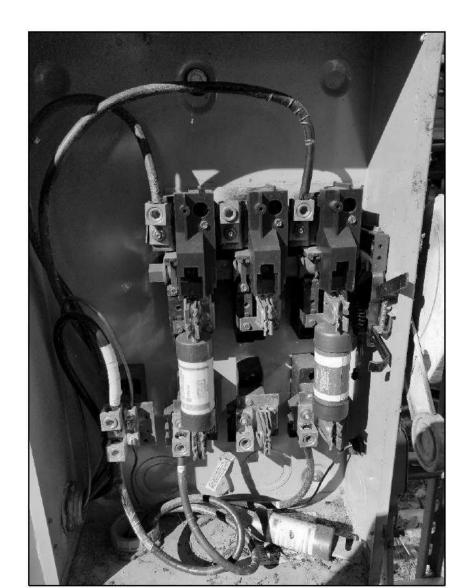
POWER WIRING CONDUIT BROKEN AND IN NEED OF REPAIR



PUMP STATION WITH COVER



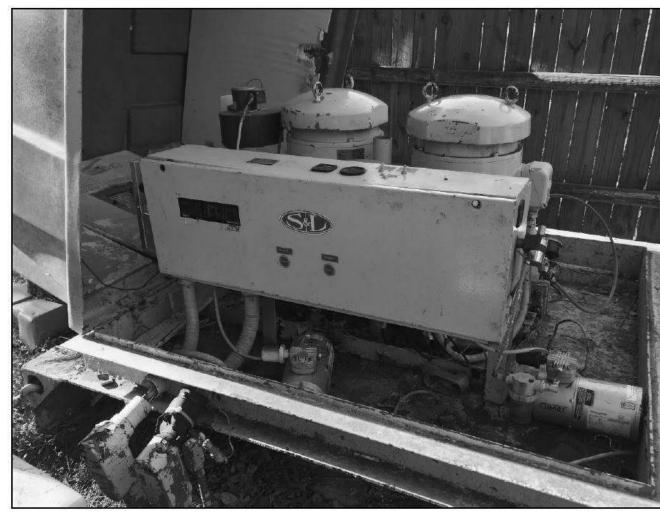
CONTROL WIRING RACEWAY BROKEN AND NEEDS REPAIR



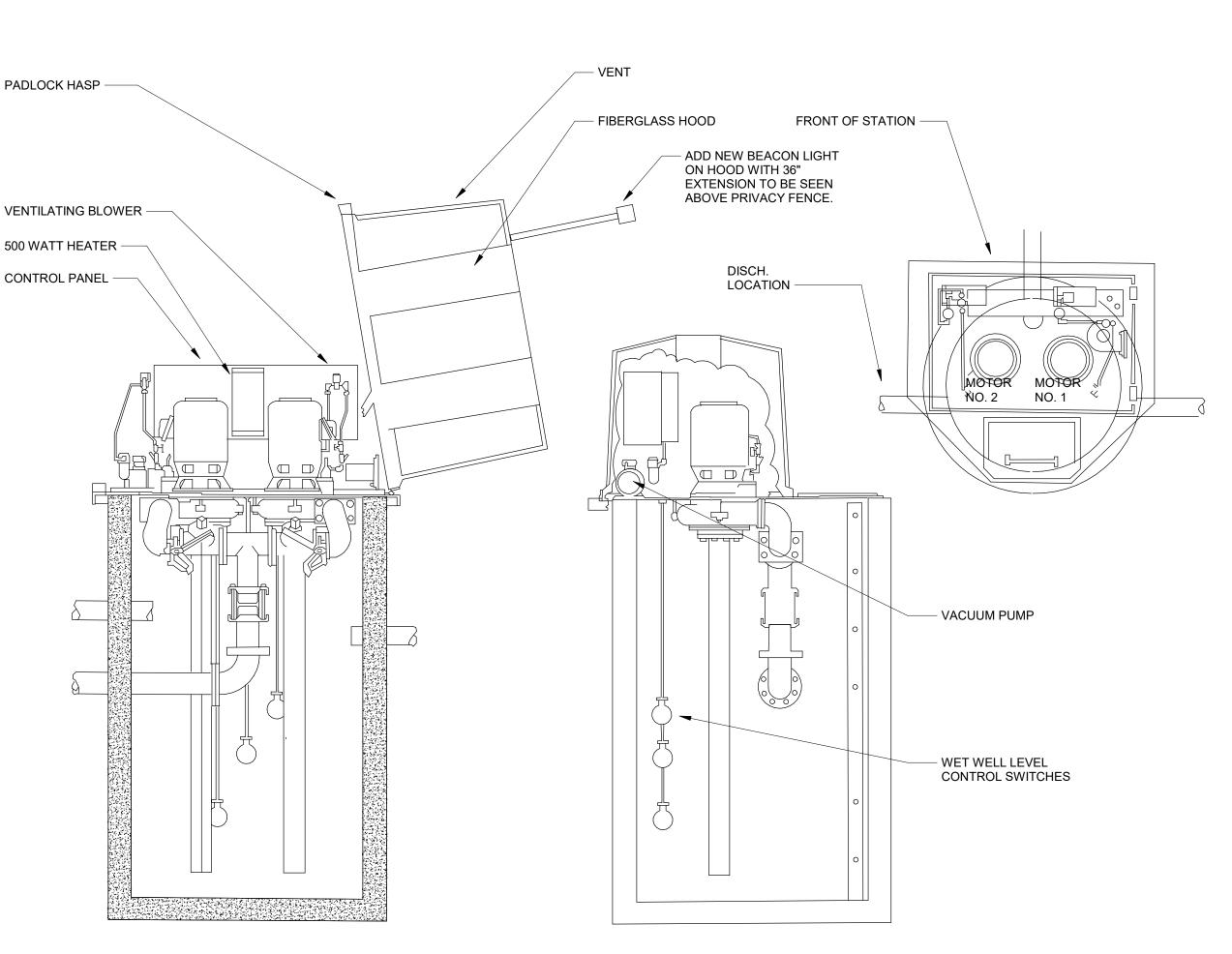
FUSED DISCONNECT



PUMP STATION METER AND DISCONNECT



PUMP STATION CONTROL PANEL



#### CODE ANALYSIS - INTERNATIONAL BUILDING CODE 2015

#### CODE COMMENTS JURISDICTION Memphis and Shelby County Construction Code Enforcement APPLICABLE CODES 2015 International Building Code with Local Amendments 2015 International Existing Building Code with Local Amendments 2015 International Residential Code with Local Amendments 2014 National Electrical Code

2018 Joint Electrical Code 2015 International Mechanical Code with Local Amendments 2015 International Fuel Gas Code with Local Amendments

2015 International Plumbing Code with Local Amendments

2015 International Energy Conservation Code with Local Amendments 2009 ICC A117.1 Accessibility and Useable Buildings and Facilities )by reference)

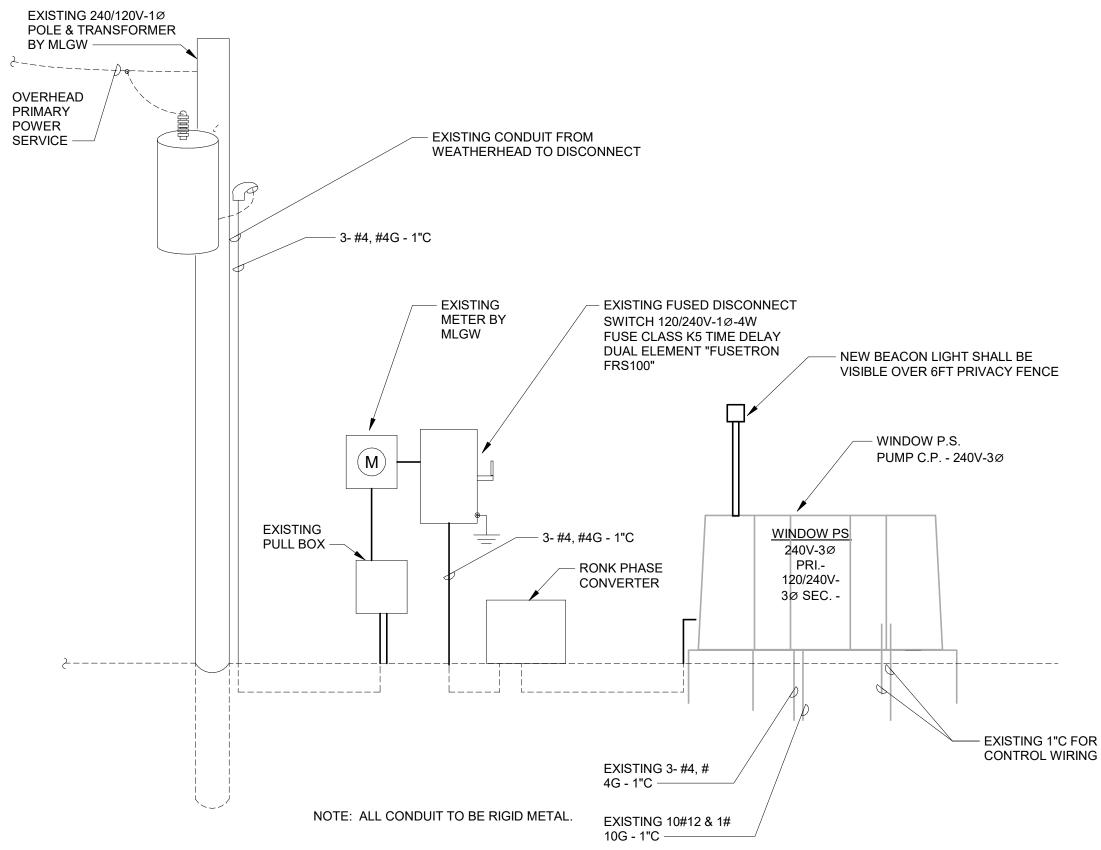
## 2013 ASME 17.1 Safety Code for Elevators and Escalators (by reference)

#### **GENERAL PROJECT NOTES:**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE STANDARDS AND REGULATIONS ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- ALL ABOVE GROUND EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH CORROSION RESISTANT FITTINGS, CLAMPS AND SUPPORT.
- IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS, SPECIFICATIONS, CODES AND REGULATIONS, NOTIFY
- THE ENGINEER OF RECORD FOR HIS OPINION PRIOR TO INSTALLATION. SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL AND TO THE ENGINEER FOR REVIEW.
  - SMACNA SEISMIC RESTRAINT MANUAL, THIRD EDITION 2008, OR LATEST REVISION MAY BE USED AS A GUIDE FOR
- GENERAL SEISMIC SUPPORT DETAIL AND SUPPORT SPACING RECOMMENDATIONS. COORDINATE LOCATION OF ALL LIGHTING FIXTURES, MECHANICAL EQUIPMENT AND ACCESS PANELS WITH
- EXISTING CONDITIONS PRIOR TO ROUGH-IN. WHILE GREAT EFFORT HAS BEEN MADE TO IDENTIFY EXISTING CIRCUITS THAT ARE TO BE REMOVED OR
- REPLACED, THE INFORMATION MAY NOT BE ACCURATE.

ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE AND AMP DRAW FOR ANY NEW EQUIPMENT.

- THE MAIN CONTROL PANEL IS FED WITH AN EXISTING 240V 3PH SERVICE PROVIDED BY A RONK PHASE CONVERTER. PRIMARY SERVICE IS 240/120V 1Ø 200A FUSED DISCONNECT ABOVE GRADE. ALL AUXILIARY EQUIPMENT IS CURRENTLY FED FROM THE CONTROL PANEL; LIGHTS, BLOWER DEHUMIDIFIER, SUMP PUMP, AIR COMPRESSOR & CONTROLS, AND TRANSFORMER.
- 10. REPLACE FUSES IN DISCONNECT.
- 11. REPLACE GROUND CLAMP AND TIGHTEN GROUND WIRES.
- 12. REPLACE RACEWAY (CONDUIT AND FITTINGS) FOR BOTH POWER AND CONTROLS.
- 13. INSTALL RED FLASHING BEACON LIGHT ON TOP OF CONTROL PANEL ENCLOSURE CONNECTED TO ALARM CONTACTS ON THE CONTROL PANEL FOR HIGH LEVEL FLOAT. BEACON SHALL BE SEEN ABOVE PRIVACY FENCE. INSTALL EMERGENCY CONTACT SIGN ON THE NEW PRIVACY ENCLOSURE STATING, "IF LIGHT IS BLINKING, PLEASE CALL 901-521-0186".



NEW DRAWING WEST WINDOW PUMP STATION SINGLE LINE 2 DIAGRAM N.T.S.

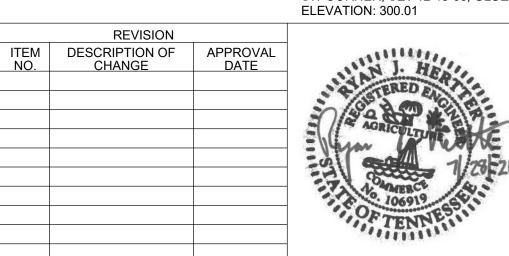
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SEWER BASIN: LS 06

DIVISION OF ENGINEERING

**ELECTRICAL PLAN** 

LOCATION: 4486 WINDOW LIFT STATION MEMPHIS, TENNESSEE

DESIGN BY: BARGE

DEPUTY CITY ENGINEER

PROJECT NO.: 36592-04 SCALE: N.T.S.

DEVELOPER: SARP 10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

Lift Station Rehab Design Group 2-B MEMPHIS, TENNESSEE

DATE: 9/2020 REVIEWED:

CITY ENGINEER

# 5230 RALEIGH MILLINGTON LIFT STATION SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10)

MEMPHIS, TENNESSEE



# LOCATION MAP NOT TO SCALE







CONSTRUCTION DOCUMENTS



G0.01

#### **ABBREVIATIONS**

DIAMETER AFF ABOVE FINISHED FLOOR ALUM. ALUMINUM APPROX. **APPROXIMATE BOTTOM CATCH BASIN** BOC BACK OF CURB BFP **BACKFLOW PREVENTOR** BFV **BUTTERFLY VALVE** CATCH BASIN CCTV CLOSED CIRCUIT TELEVISION CURB INLET CIPP **CURED-IN-PLACE PIPE** CENTERLINE CMP CORRUGATED METAL PIPE CO CLEAN OUT CONC CONCRETE CONN CONNECT CONST CONSTRUCTION CPLG. COUPLING **COMBINED SEWER** CU COPPER CHECK VALVE DEED BOOK DROP INLET DUCTILE IRON PIPE **DWCB** DOUBLE WING CATCH BASIN DRIVEWAY ELEV.

**ELEVATION EXISTING** EXIST. ELEC ELECTRICAL SERVICE END OF INFORMATION OR EOI **UNKNOWN TERMINATION POINT** EDGE OF PAVEMENT FEMALE IRON PIPE FFE FINISHED FLOOR ELEVATION FIRE HYDRANT FORCE MAIN GSP

GALVANIZED STEEL PIPE GATE VALVE HDPE HIGH DENSITY POLYETHYLENE HORZ HORIZONTAL HIGHWAY INSIDE DIAMETER INVERT ELEVATION INVERT LINEAR FEET MINIMUM MALE IRON PIPE MECHANICAL JOINT MANHOLE **MNPT** MALENATIONAL PIPE THREAD

NOW OR FORMERLY NPW NON POTABLE WATER NOT TO SCALE **OUTSIDE DIAMETER** PAGE POWER POLE POINT REPAIR PLUG VALVE POLYVINYL CHLORIDE POTABLE WATER WATER FAUCET PROP. PROPOSED

REINFORCED CONCRETE PIPE

R.O.W. RIGHT-OF-WAY SD STORM DRAIN SHT SHEET SIGNAL POLE SPD STANDARD PROCTOR DENSITY STATE ROUTE SANITARY SEWER SSMH SANITARY SEWER MANHOLE STAINLESS STEEL SSTL STA STATION SINGLE WING CATCH BASIN TELECOM TELECOMMUNICATION CONDUIT

TELEPHONE POLE

TRAFFIC SIGNAL BOX

TAPPING SLEEVE AND VALVE

RETAINER

RESTRAINED JOINT

RD RET

TSB

TS&V

TRAFCON TRAFFIC SIGNAL COMM WIRE TYP TYPICAL UNLESS NOTED OTHERWISE UNO VCP VITRIFIED CLAY PIPE **VERT** VERTICAL WATER METER WM WTR WATER WITH W/ FEET

INCHES

#### **INDEX OF DRAWINGS**

| SHEET NO.      | DESCRIPTION                           |
|----------------|---------------------------------------|
| G0.01<br>G0.02 | COVER SHEET<br>NOTES                  |
| C1.01<br>C1.02 | SEWER LAYOUT PLAN EXISTING CONDITIONS |
| C2.01          | LIFT STATION IMPROVEMENTS             |
| C7.01          | DETAILS                               |
| E1.01          | ELECTRICAL PLAN                       |
|                |                                       |

#### **LEGEND**

|                |                 | CAP OR PLUG                             |
|----------------|-----------------|---|
| S              | S               | SANITARY SEWER MANHOLE                  |
|                | 0               | STORM SEWER MANHOLE                     |
|                | coo             | CLEANOUT                                |
| □YH            | ■YH             | YARD HYDRANT                            |
| $\bigcirc$     | ~               | FIRE HYDRANT                            |
| $\bowtie$      | <b>I</b>        | REDUCER                                 |
|                |                 | SOLID SLEEVE OR HDPE MJ ADAPTER         |
| wv<br>         | •               | WATER VALVE                             |
| $\square_{WM}$ | □ <sub>wm</sub> | WATER METER                             |
|                |                 | AIR VALVE MH OR LINE STOP VALVE         |
| — FM ———       | FM              | FORCE MAIN                              |
| — G———         | G               | - GAS LINE                              |
| — SD ———       | SD              | - STORM SEWER LINE                      |
| — SS ———       | ss              | <ul> <li>SANITARY SEWER LINE</li> </ul> |
| W              |                 | – WATER MAIN                            |
| - 350          | 350             | - CONTOUR                               |
| x              | x               | - FENCE                                 |
| $\varnothing$  | Ø               | POWER/TELEPHONE POLE                    |
| <b>#</b>       | €3              | TREE                                    |
|                |                 | - CENTERLINE                            |
|                |                 | PROPERTY BOUNDARY LINE                  |
|                |                 | - RIGHT-OF-WAY                          |
|                |                 | - EASEMENT                              |
|                |                 | - USACE DREDGE LIMITS                   |

#### **NOTES**

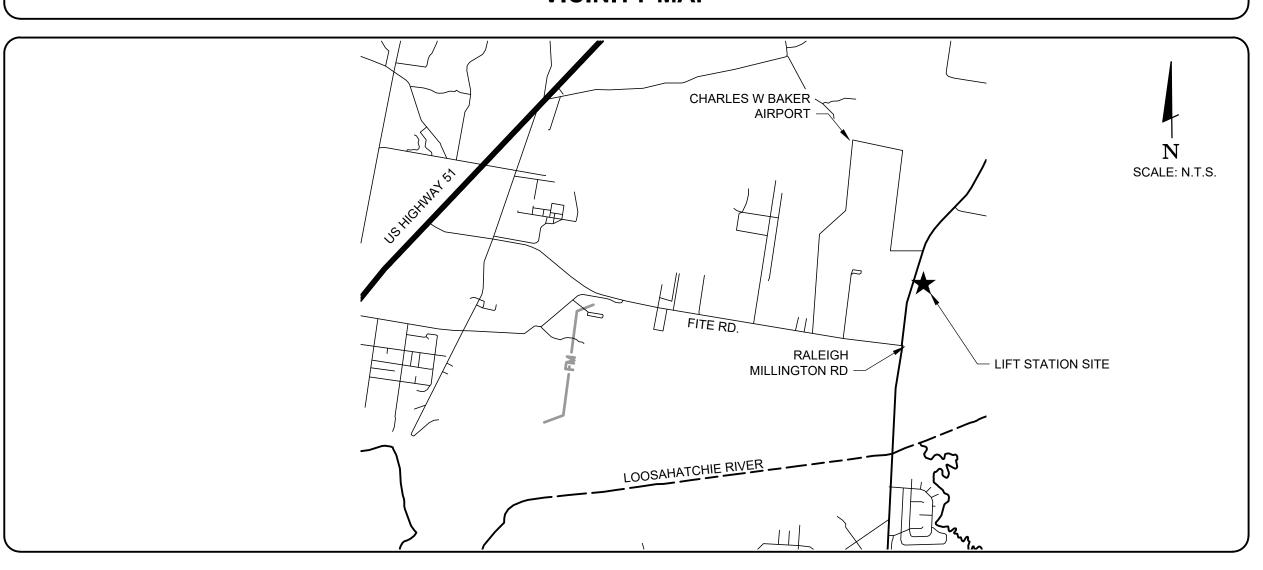
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- 5. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
- 6. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
- 7. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT. LADEN WATER FROM LEAVING THE SITE.
- 8. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING.

#### CITY OF MEMPHIS TYPICAL CONSTRUCTION NOTES

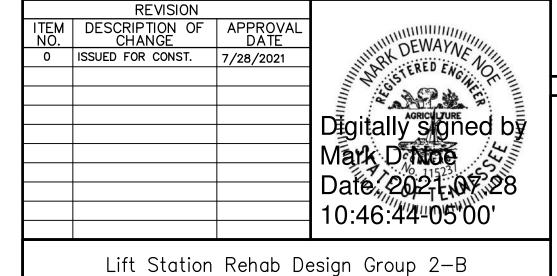
- 1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, TEXAS GAS COMPANY, AND/OR FOR SEWER SERVICE LOCATIONS, CALL 811.
- 2. CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR
- 3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
- 4. CONTRACTOR SHALL NOTIFY THE SARP10 CONSTRUCTION MANAGER A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
- 5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
- 6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
- 7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS. SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS PER CITY OF MEMPHIS STANDARD SST-16.
- 8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 1.5' ABOVE PROPOSED GRADE. IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE FINAL GRADE.
- ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' MINIMUM BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE (D.I.P.) SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
- 10. THE CITY OF MEMPHIS SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS.
- 11. NO TREES, SHRUBS, PERMANENT STRUCTURES, OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS.
- 12. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS, OR DRIVES (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR PICK HOLES TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM.
- 13. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.

## **VICINITY MAP**



THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INNUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157CO170F, DATED SEPTEMBER 28, 2007. THE NEAREST BFE IS 236.0 FEET.

CITY OF MEMPHIS BENCHMARK NUMBER 1599 - BLUFFWOOD DR. & ROYAL ELM CV.: CITY CAP IS LOCATED THE N.E. COR., GLUED TO TOP OF CURB AT ER ON BLUFFWOOD DR. SIDE. GPS 704, ELEVATION: 252.7



MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER BASIN: LN 03

DIVISION OF ENGINEERING

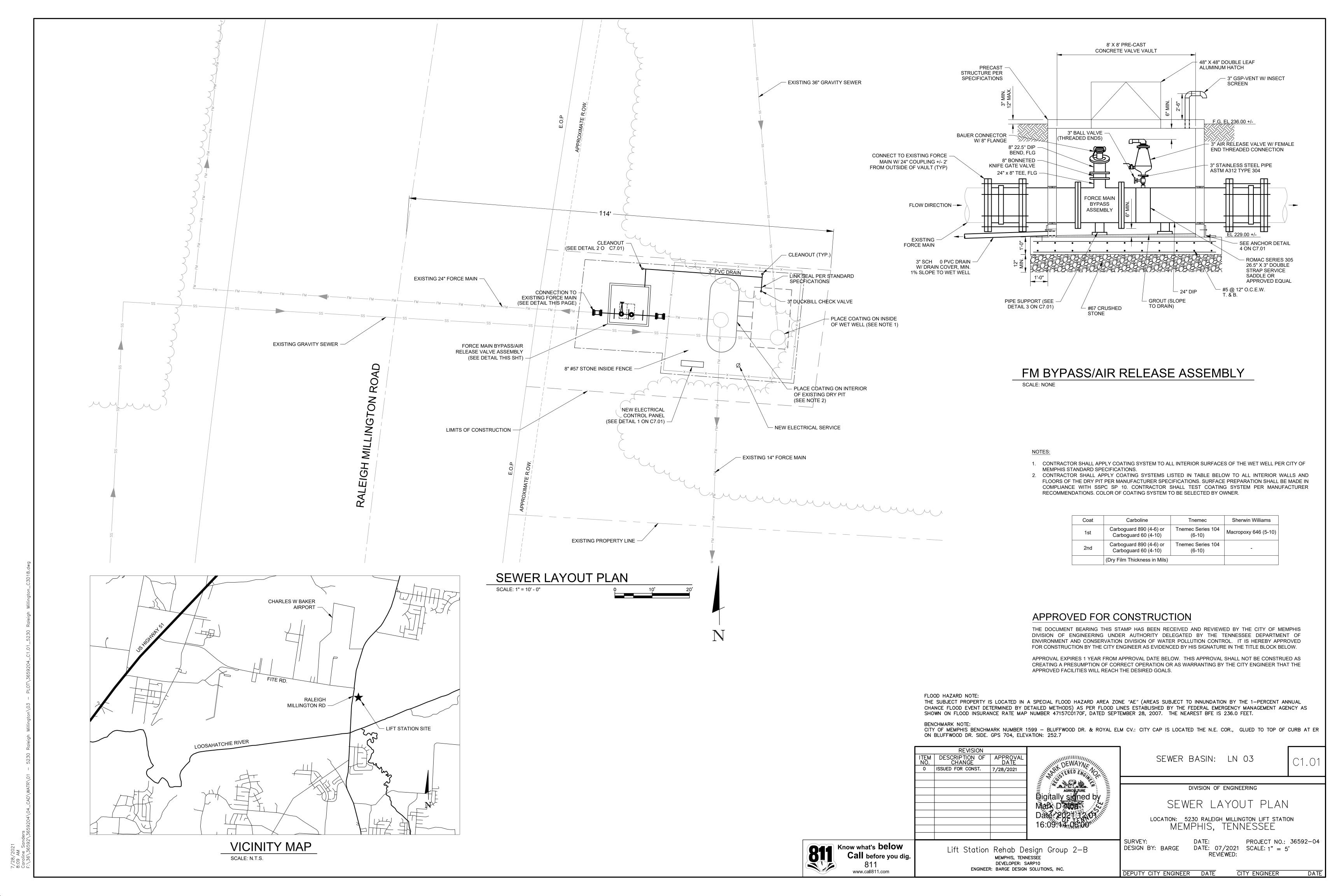
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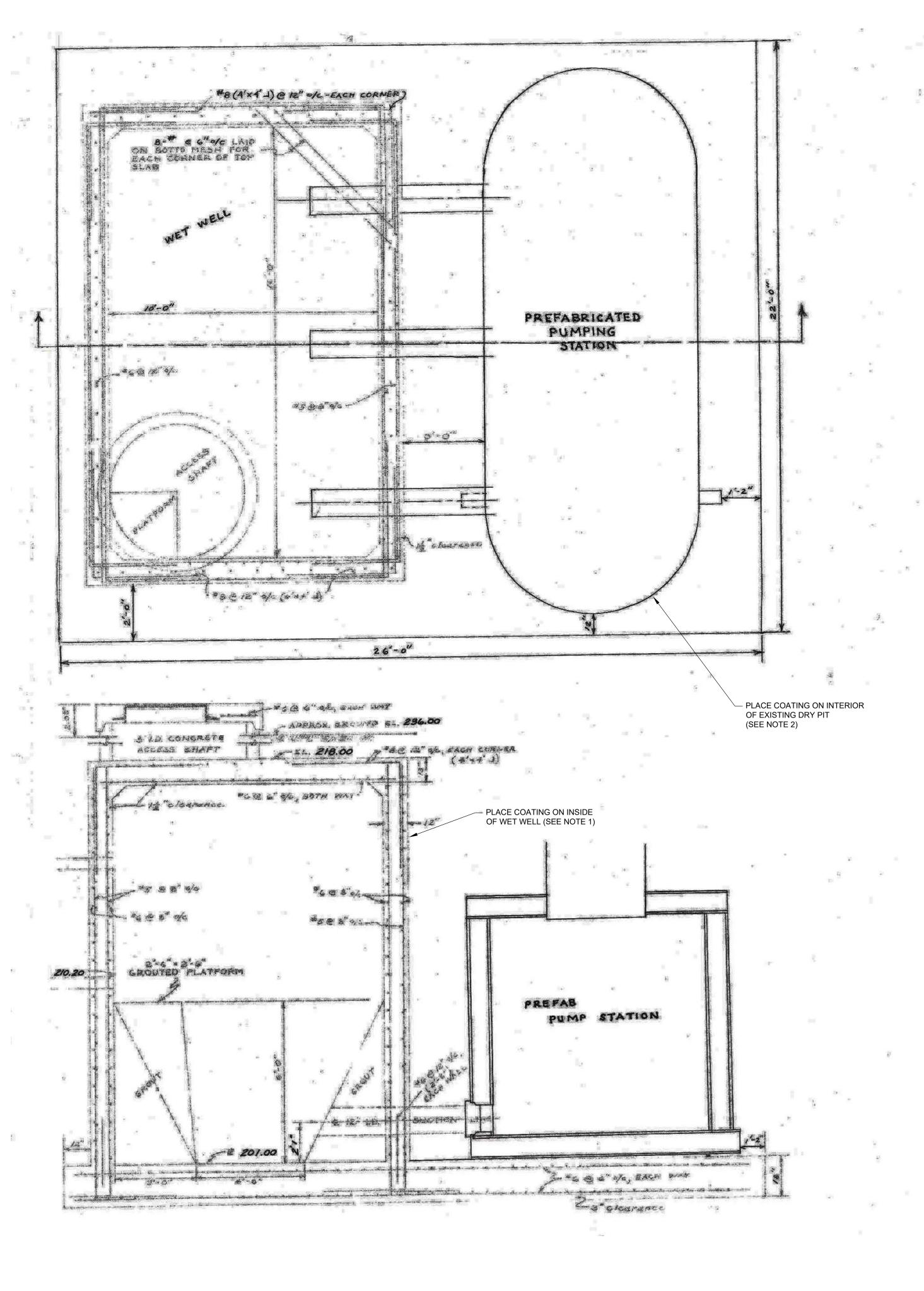
LOCATION: 5230 RALEIGH MILLINGTON LIFT STATION MEMPHIS, TENNESSEE

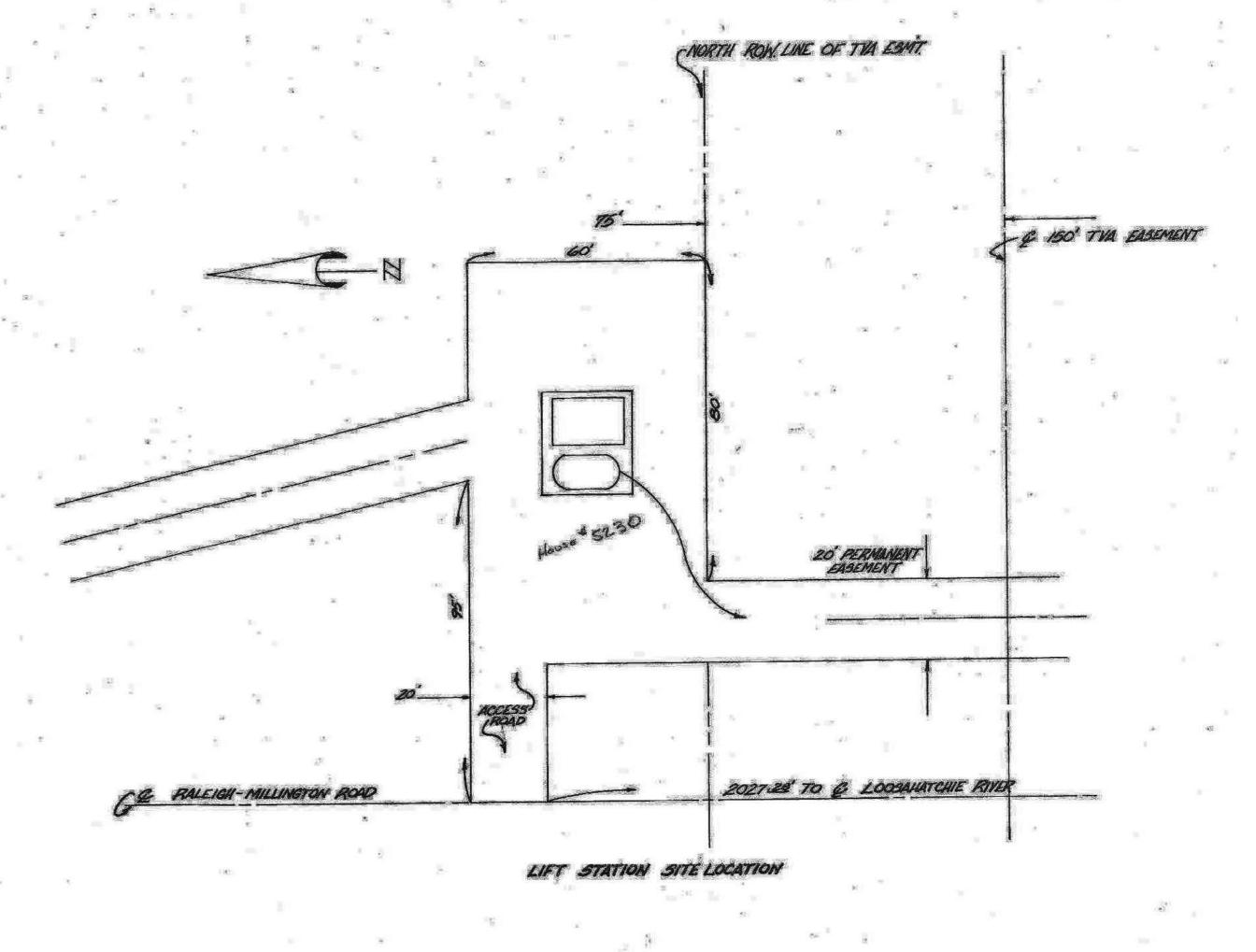
SURVEY:

PROJECT NO.: 36592-04 DESIGN BY: BARGE DATE: 07/2021 SCALE: NONE REVIÉWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER







- 2. CONTRACTOR SHALL APPLY COATING SYSTEMS LISTED IN TABLE BELOW TO ALL INTERIOR WALLS AND FLOORS OF THE DRY PIT PER MANUFACTURER SPECIFICATIONS. SURFACE PREPARATION SHALL BE MADE IN COMPLIANCE WITH SSPC SP 10. CONTRACTOR SHALL TEST COATING SYSTEM PER MANUFACTURER RECOMMENDATIONS. COLOR OF COATING SYSTEM TO BE SELECTED BY OWNER.
- 3. RECORD DRAWINGS DRAWN BY THE CITY OF MEMPHIS DEPARTMENT OF ENGINEERING BUREAU OF SEWER DESIGN, TITLED "LUCY SEWER DISTRICT OUTFALL TO RALEIGH - NORTH SUBDIVISION".
- MANUFACTURER: SMITH & LOVELESS - TYPE: SUBMERSIBLE CENTRIFUGAL
- CAPACITY: APPROX. 2250 GPM @ 51 FT OF HEAD
- PUMP MODEL: 8D4B
- MANUFACTURER: SMITH & LOVELESS
   TYPE: SUBMERSIBLE CENTRIFUGAL - CAPACITY: APPROX. 3000 GPM
- PUMP MODEL: 8D5 - MOTOR HP: 75

| Coat | Carboline                                       | Tnemec                      | Sherwin Williams     |
|------|---|-----------------------------|----------------------|
| 1st  | Carboguard 890 (4-6) or<br>Carboguard 60 (4-10) | Tnemec Series 104<br>(6-10) | Macropoxy 646 (5-10) |
| 2nd  | Carboguard 890 (4-6) or<br>Carboguard 60 (4-10) | Tnemec Series 104<br>(6-10) | -                    |
|      | (Dry Film Thickness in Mils)                    |                             |                      |

CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0170F, DATED SEPTEMBER 28, 2007. THE NEAREST BFE IS 236.0 FEET.

BENCHMARK NOTE: CITY OF MEMPHIS BENCHMARK NUMBER 1599 — BLUFFWOOD DR. & ROYAL ELM CV.: CITY CAP IS LOCATED THE N.E. COR., GLUED TO TOP OF CURB AT ER ON BLUFFWOOD DR. SIDE. GPS 704, ELEVATION: 252.7

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| Know what's below Call before you dig. |             | Lift Station          | MEMPHIS, TENN    |  |
| 811                                    |             |                       | DEVELOPER: S     | MILETO   |

SEWER BASIN: LN 03

DIVISION OF ENGINEERING

EXISTING CONDITIONS

LOCATION: 5230 RALEIGH MILLINGTON LIFT STATION MEMPHIS, TENNESSEE

DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC. DESIGN BY: BARGE DATE: PROJECT NO.: 36592-04 SCALE: N.T.S. REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

**EXISTING LIFT STATION** 

Know what's below Call before you dia.

Call before you dig.

www.call811.com

 REMOVE ALL THREE EXISTING PUMPS. INSTALL TWO NEW PUMPS PER SPECIFICATIONS. ONE PUMP SLOT TO REMAIN OPEN FOR A FUTURE PUMP (SEE NOTE 4).

- 1. EXISTING PUMP AND PIPE LOCATION AND CONDITION SHOULD BE CONFIRMED PRIOR
- 2. CONTRACTOR TO SUPPLY AND INSTALL ADDITIONAL PIPING AND FITTINGS AS NECESSARY TO MATCH EXISTING PIPING CONNECTIONS.
- 3. ALL EXISTING SUCTION AND DISCHARGE PIPING WITHIN THE DRY PIT IS TO BE REPLACED PER SPECIFICATIONS UP TO THE WALL CONNECTIONS.
- 4. FOR FUTURE PUMP SLOT, INSTALL NEW DISCHARGE DIP, 10" GATE VALVE, AND 10" BLIND FLANGE. ON THE SUCTION SIDE, INSTALL NEW DIP, GATE VALVE, AND BLIND
- 5. EXISTING PUMP DATA COLLECTED FROM THE "FINAL ASSESSMENT REPORT FOR 4486 WINDOW SARP10 LIFT STATION ASSESSMENT PROJECT FOR THE CITY OF MEMPHIS" DATED APRIL 6, 2019.

- PUMP 1/2 DATA:

   MANUFACTURER: FLYGT

   TYPE: SUBMERSIBLE CENTRIFUGAL

   CAPACITY: APPROX. 2870 GPM @ 56.8 FT OF HEAD

   MODEL: NT 3203 MT 3 PHASE
- MOTOR HP: 60

LIFT STATION IMPROVEMENTS

FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INNUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0170F, DATED SEPTEMBER 28, 2007. THE NEAREST BFE IS 236.0 FEET.

BENCHMARK NOTE:
CITY OF MEMPHIS BENCHMARK NUMBER 1599 — BLUFFWOOD DR. & ROYAL ELM CV.: CITY CAP IS LOCATED THE N.E. COR., GLUED TO TOP OF CURB AT ER
ON BLUFFWOOD DR. SIDE. GPS 704, ELEVATION: 252.7

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SEWER BASIN: LN 03

DIVISION OF ENGINEERING

LIFT STATION IMPROVEMENTS

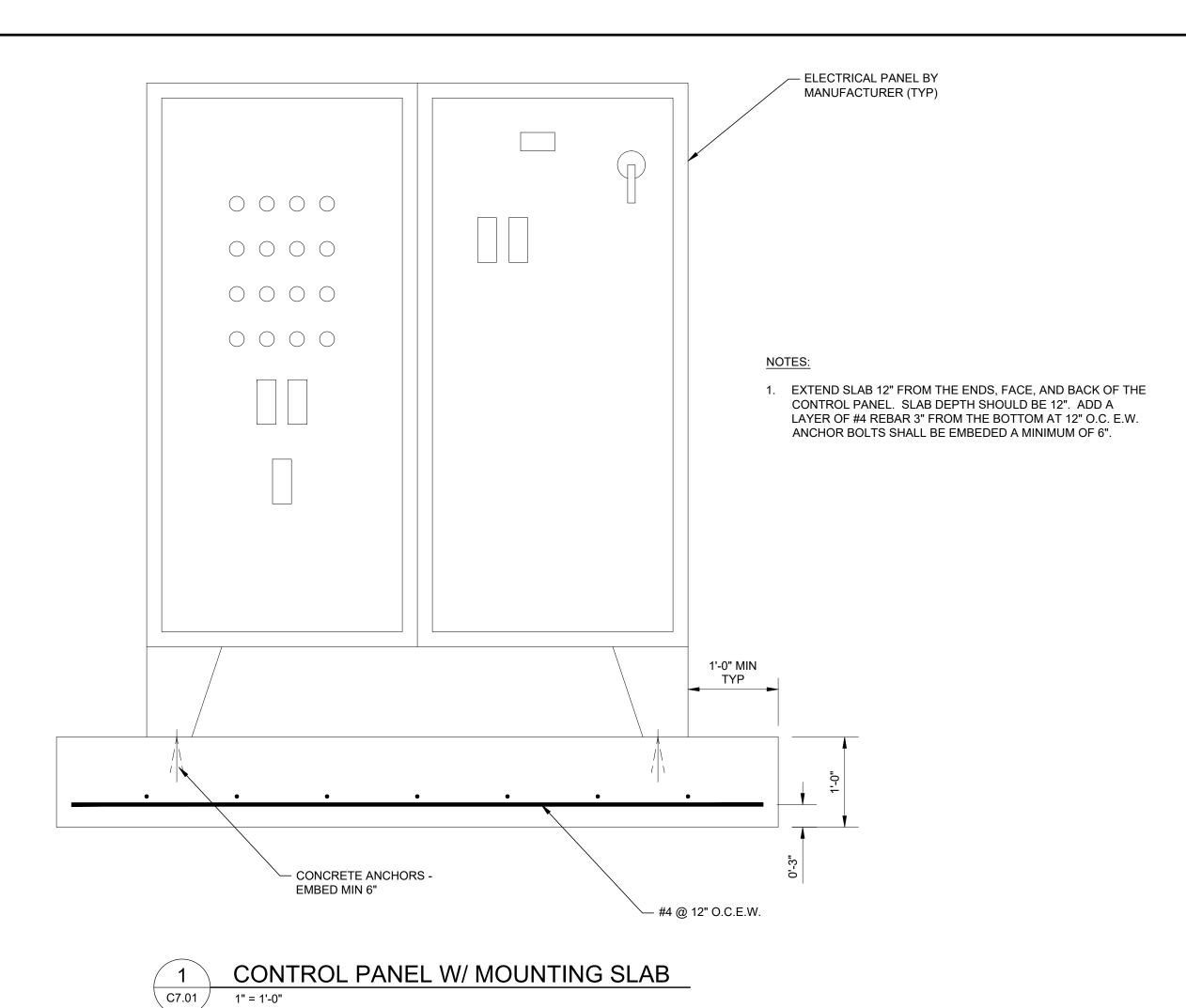
LOCATION: 5230 RALEIGH MILLINGTON LIFT STATION MEMPHIS, TENNESSEE

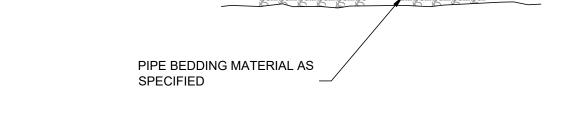
DESIGN BY: BARGE DATE: 07/2021 SCALE: N.T.S.

REVIEWED:

Lift Station Rehab Design Group 2—B DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

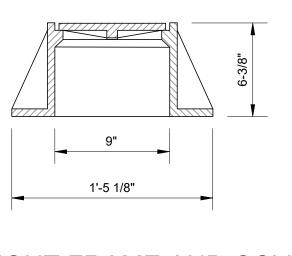
DEPUTY CITY ENGINEER DATE CITY ENGINEER



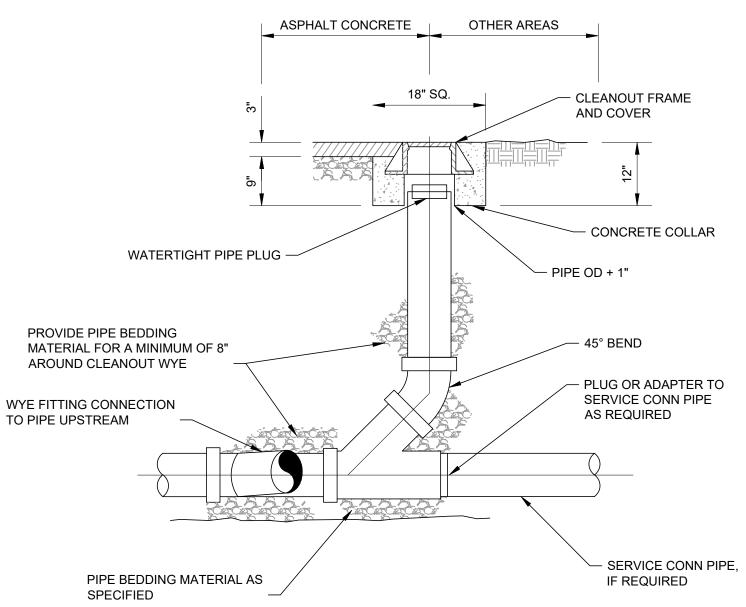


C7.01 N.T.S.

**EXTERIOR CLEANOUT** 



## CLEANOUT FRAME AND COVER





**DIMENSION TABLE** 

SIZE

2-1/2"

10"

12"

16"

20"

24"

MINIMUM

NOMINAL

PIPE SIZE

2-1/2"

2-1/2"

3"

— L 9' x 4' x ½' x 6" LG. (S.STL) (8 REQ'D @ 45' O.C.) — ¾" Ø HILTI HVA (HAS SSTL) ADHESIVE ANCHOR W/4" **EMBEDMENT** 3/4" Ø SSTL ANCHOR BOLT HEX NUT & WASHER 8" MIN. EMBEDMENT

ANCHOR DETAIL

FLOOD HAZARD NOTE: THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INNUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0170F, DATED SEPTEMBER 28, 2007. THE NEAREST BFE IS 236.0 FEET.

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| DESCRIPTION OF           |                   |   |
|--------------------------|-------------------|---|
| DESCRIPTION OF<br>CHANGE | APPROVAL<br>DATE  | DEWAYNAMIN  |
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2-1/2" TO 24" PIPE -

PRE-ENGINEERED

PIPE SUPPORT

SIZE AS REQUIRED BY

WALL PIPE MINIMUM

CALCULATIONS, STANDARD

STANDARD PIPE FLANGE —

MINIMUM 1-1/2" NON-SHRINK GROUT

CONCRETE ANCHORS, SIZE

AND NUMBER AS REQUIRED

NOTES:

1. SUBMIT FINAL DESIGN AND CALCULATIONS FOR SUPPORT

AND ANCHORAGE AS SPECIFIED.

BY CALCULATIONS

Lift Station Rehab Design Group 2—B MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DESIGN BY: BARGE

LOCATION: 5230 RALEIGH MILLINGTON LIFT STATION MEMPHIS, TENNESSEE

DIVISION OF ENGINEERING

DETAILS

SEWER BASIN: LN 03

DATE: PROJECT NO.: 36592-04 DATE: 07/2021 SCALE: NONE REVIEWED:

DEPUTY CITY ENGINEER DATE CITY ENGINEER

7/28/202 8:21 AM Caroline 3 F:\36\36



PUMP STATION METER AND DISCONNECT

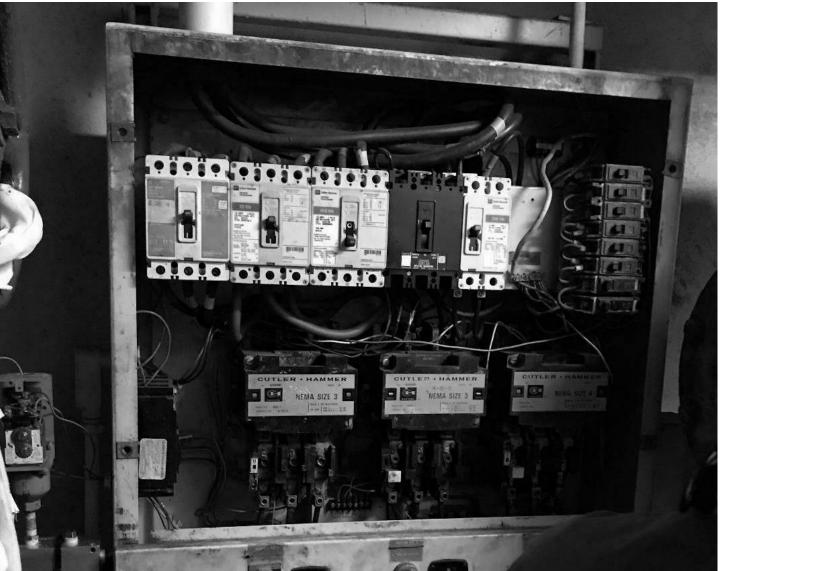


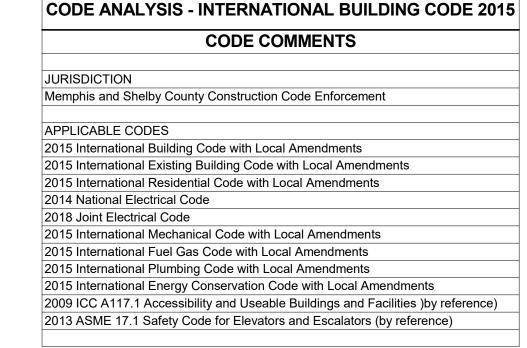
PUMP STATION CONTROL PANEL



**BUBBLER SYSTEM** -NORTH ROW. LINE OF TVA ESMT. & 150' TVA EASEMENT 2027-28' TO & LOOSAHATCHIE RIVER

LIFT STATION SITE LOCATION



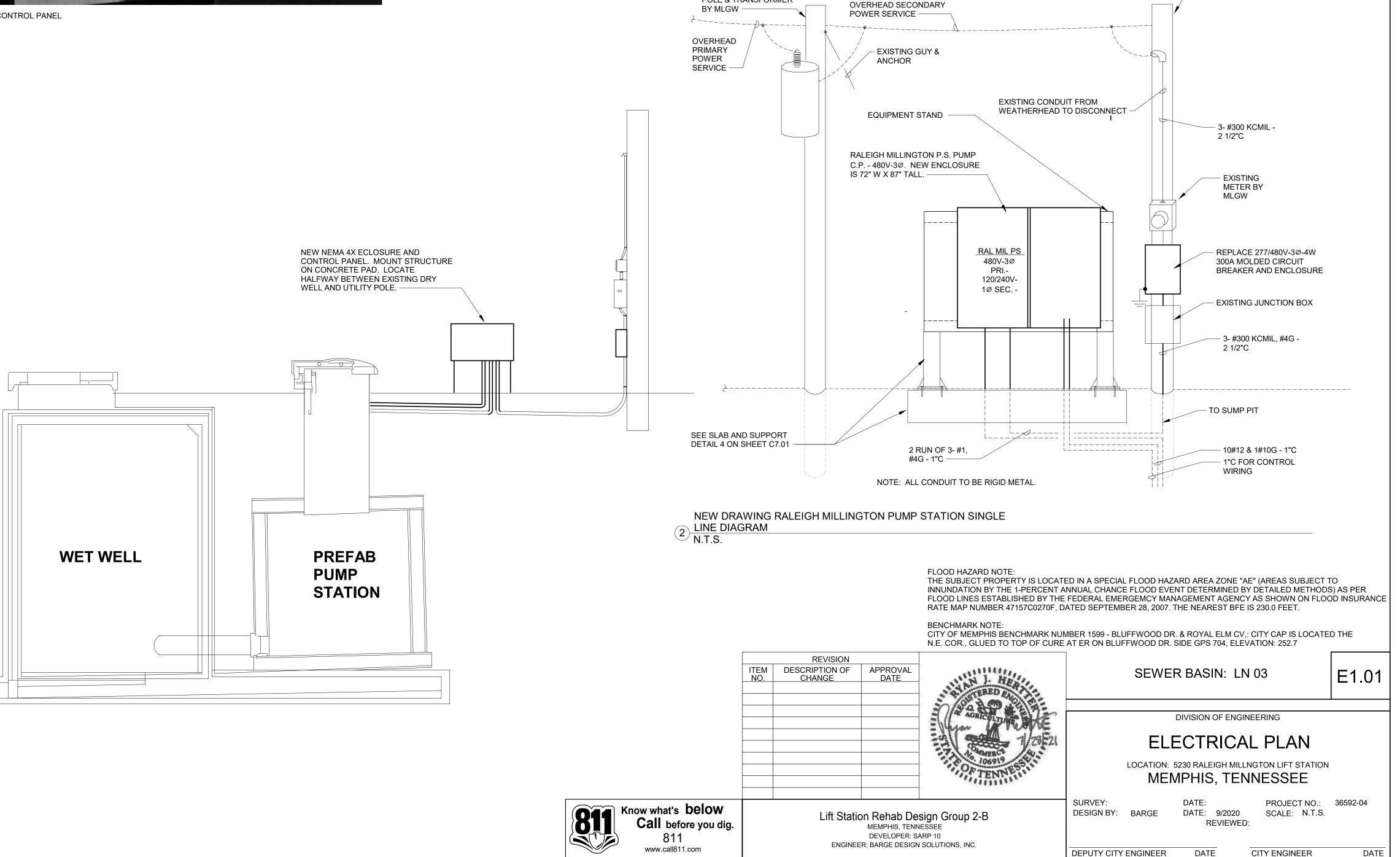


#### **GENERAL PROJECT NOTES:**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE STANDARDS AND REGULATIONS ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- ALL ABOVE GROUND EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH CORROSION RESISTANT FITTINGS, CLAMPS AND SUPPORT.
- IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS, SPECIFICATIONS, CODES AND REGULATIONS, NOTIFY THE ENGINEER OF RECORD FOR HIS OPINION PRIOR TO INSTALLATION.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL AND TO THE ENGINEER FOR REVIEW.
- SMACNA SEISMIC RESTRAINT MANUAL, THIRD EDITION 2008, OR LATEST REVISION MAY BE USED AS A GUIDE FOR GENERAL SEISMIC SUPPORT DETAIL AND SUPPORT SPACING RECOMMENDATIONS.
- COORDINATE LOCATION OF ALL LIGHTING FIXTURES, MECHANICAL EQUIPMENT AND ACCESS PANELS WITH EXISTING CONDITIONS PRIOR TO ROUGH-IN.
- WHILE EFFORT HAS BEEN MADE TO IDENTIFY EXISTING CIRCUITS THAT ARE TO BE REMOVED OR REPLACED, THE INFORMATION MAY NOT BE ACCURATE.
- ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE AND AMP DRAW FOR ALL NEW EQUIPMENT.
- ALL ELECTRICAL GEAR SHALL BE MOVED FROM THE PIT TO ABOVE GROUND. VERIFY NEW CONTROL PANEL WORKS WITH ANY REMAINING EQUIPMENT OR CONTROLS IN THE PIT.
- REPLACE THE (2) 40HP PUMP AND (1) 75HP PUMP WITH (2) 60HP PUMPS. RUN NEW WIRE AND CONDUIT FROM THE NEW CONTROL PANEL ABOVE GRADE TO THE TWO NEW PUMPS.
- THE MAIN CONTROL PANEL IS FED WITH AN EXISTING 480V 3PH 300A MOLDED CASE CIRCUIT BREAKER ABOVE GRADE. ALL AUXILIARY EQUIPMENT IS CURRENTLY FED FROM THE CONTROL PANEL IN THE PIT. EXTEND POWER TO LIGHT, SUMP PUMP, BLOWER/DEHUMIDIFIER, & AIR COMPRESSOR USING ISO CABLE FROM THE NEW ENCLOSURE ABOVE GRADE TO THE EQUIPMENT. REPLACE 300A CIRCUIT BREAKER AND ENCLOSURE.
- USE KELLUM TYPE WIRE MESH HANGERS TO SUPPORT ALL CORDS COMING FROM THE PUMP STATION CEILING. PROVIDE CLIPS ON THE WALL TO KEEP CORDS CLEAR OF SERVICE AREA.

- EXISTING PRESSURE

TREATED WOOD RISER POLE



EXISTING 277/480V-3Ø

POLE & TRANSFORMER