

SITE DATA

ZONING DISTRICT: M

FLOOD ZONE: AE8  
F.I.R.M. - U.S. NAVAL RESERVATION 12 FED; PANEL #1508; SUFFIX "K"; DATED: 02-18-2005

LEGAL DESCRIPTION: KW PT SEC19-30-31 TWP67S RNG25E FLEMING KEY SPOIL AREA G53-309/11  
(II DEED NO 19221)

DESIGN DATA

THE WORK DEPICTED HEREIN WAS DESIGNED TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 6TH EDITION (2017)  
ASCE 7-10, ASCE 24-14

THE WORK DEPICTED HEREIN WILL NOT YIELD ADDITIONAL IMPERVIOUS COVERAGE

THE FOLLOWING LOADINGS WERE USED:  
FUTURE PROPOSED FLOOD ELEVATION: AE8 NAVD = 9.35' NGVD29 (NOT IN THE LIMWA)  
DESIGN FLOOD ELEVATION (D.F.E.) 9.35' + 1.0' = 10.35' NGVD29, FLOOD DESIGN CLASS III  
WIND LOAD: 200 MPH (ASCE 7-10) 3 SECOND GUST, EXPOSURE D, RISK CATEGORY III

INDEX OF DRAWINGS

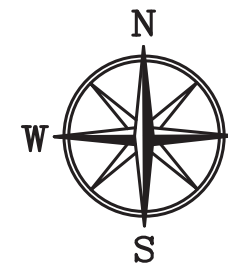
T-1 - SITE PLAN  
S-1 - DEMOLITION PLAN / TANK ANCHORAGE  
P-1 - PLUMBING SCHEMATIC / MONITORING SYSTEM SCHEMATIC

GENERAL NOTES

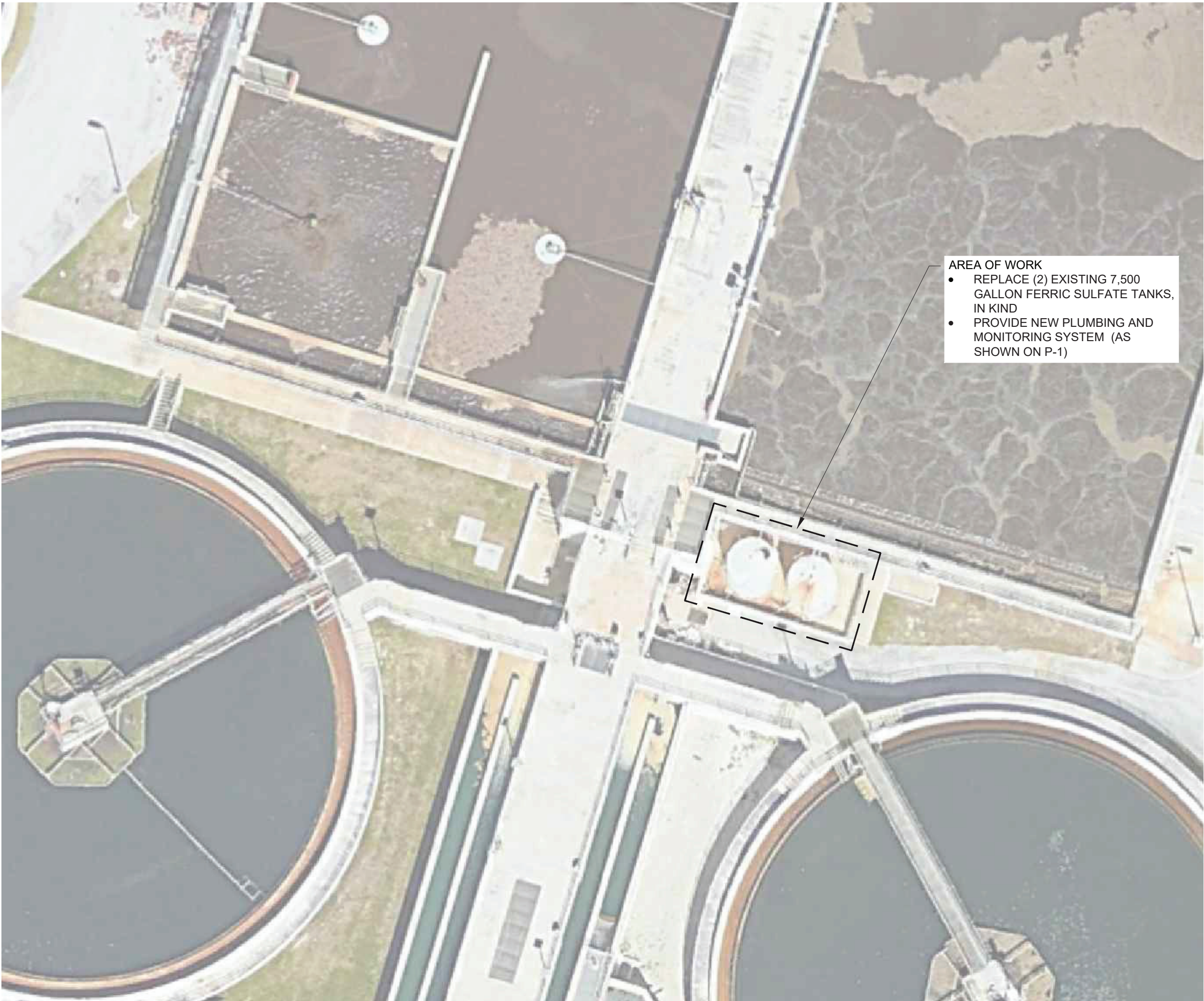
1. THESE PLANS ARE FOR THE WORK AT THE LOCATION SO DESIGNATED HEREIN.
2. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT AND SUPERVISION NECESSARY TO COMPLETE THE WORK AND MAKE STRUCTURE READY FOR USE.
3. THERE SHALL BE NO DEVIATION FROM THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
4. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BEFORE BID. CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK SITE AND REPORT ANY DISCREPANCIES, DIFFERENCES OR CONDITIONS THAT ARE UNSATISFACTORY OR UNSAFE.
5. NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCIES, DIFFERENCES, UNSATISFACTORY OR UNSAFE CONDITIONS. ANY MODIFICATIONS OR CHANGES MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER AND ENGINEER OF RECORD SHALL NOT BE ALLOWED. ANY REWORK, RESTORATION OR OTHER IMPACT AS A RESULT OF NOT OBTAINING SUCH PRIOR APPROVAL WILL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR COMPENSATION FROM THE OWNER.
6. THE CONTRACTOR SHALL PROVIDE FOR THE SAFETY, PREVENTION OF INJURY OR OTHER LOSS AT THE JOB TO ALL PERSONS EMPLOYED IN THE WORK, PERSONS VISITING THE WORK AND THE GENERAL PUBLIC. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PREVENTION OF DAMAGE, DUE TO THE WORK, TO MATERIALS OR EQUIPMENT AND OTHER PROPERTY AT THE SITE OR ADJACENT THERETO.
7. NO RESEARCH AS TO THE PRESENCE OF UNDERGROUND UTILITIES HAS BEEN INCLUDED ON OR PERFORMED FOR THIS PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING SUNSHINE UTILITY LOCATE SERVICE PRIOR TO ANY CONSTRUCTION WITHIN ANY PUBLIC RIGHT-OF-WAY OR OTHER AREAS WHERE UNDERGROUND UTILITIES MAY BE PRESENT (I.E. IN AND AROUND UTILITY EASEMENTS, ETC.)
8. THE GENERAL CONTRACTOR SHALL PROVIDE AN ON-SITE DUMPSTER IN A LOCATION COORDINATED WITH THE OWNER FOR THE DISPOSAL OF REMOVED MATERIAL AND CONSTRUCTION DEBRIS. THE DUMPSTER SHALL BE EMPTIED AT APPROPRIATE INTERVALS TO PREVENT OVERFLOW AND UNSIGHTLY CONDITIONS.
9. THE CONTRACTOR SHALL PERFORM ALL WORK IN STRICT CONFORMANCE WITH THE PLANS, THE FLORIDA BUILDING CODE, 6TH EDITION (2017), LOCAL CODES AND ORDINANCES, MANUFACTURER RECOMMENDATIONS AND ACCEPTABLE TRADE PRACTICES. ANY CONFLICT BETWEEN THESE REQUIREMENTS AND THE MOST STRINGENT REQUIREMENTS SHALL GOVERN THE WORK.
10. SHOP DRAWINGS OF ALL PREFABRICATED STRUCTURAL FLOOR AND ROOF SYSTEMS AND MECHANICAL SYSTEMS SHALL BEAR THE SEAL OF A FLORIDA PROFESSIONAL ENGINEER AS REQUIRED BY THE FLORIDA BUILDING CODE, 6TH EDITION (2017) AND SHALL BE SUBMITTED TO THE ENGINEER OF RECORD BY THE CONTRACTOR FOR APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
11. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. ANY INFORMATION THAT THE CONTRACTOR CANNOT OBTAIN FROM DIMENSIONS, DETAIL OR SCHEDULE SHALL BE OBTAINED FROM THE ENGINEER OF RECORD.
12. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES TO PREVENT ANY CONFLICTS.
13. THE CONTRACTOR SHALL FURNISH ALL SUBCONTRACTORS WITH A COMPLETE SET OF PLANS. ALL CHANGES SHALL BE NOTED ON THE DRAWINGS AND (2) COMPLETE AS-BUILT SETS SHALL BE DELIVERED TO THE OWNER AFTER COMPLETION OF WORK.

SULFATE TANK REPLACEMENT

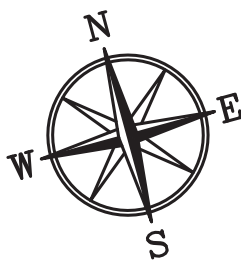
RICHARD A. HEYMAN ENVIRONMENTAL  
POLLUTION CONTROL FACILITY  
KEY WEST, FLORIDA



LOCATION MAP



AREA OF WORK  
• REPLACE (2) EXISTING 7,500 GALLON FERRIC SULFATE TANKS, IN KIND  
• PROVIDE NEW PLUMBING AND MONITORING SYSTEM (AS SHOWN ON P-1)



SITE PLAN

SCALE: N.T.S.

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

**PEREZ ENGINEERING & DEVELOPMENT, INC.**

Key West Office  
1010 East Kennedy Dr., Suite 202  
Key West, Florida 33040  
Tel: (305) 293-9440

CERTIFICATE OF AUTHORIZATION No. 8579

**Reynolds Engineering Services, Inc.**

JAMES G. REYNOLDS, P.E.  
Florida P.E. NO. 46885  
November 2, 2020  
305-394-5987

CERTIFICATE OF AUTHORIZATION No. 26397  
24478 OVERSEAS HWY, SUMMERLAND KEY, FL

|            |           |           |
|------------|-----------|-----------|
| REVISIONS: | ORIGINAL: | JULY 2020 |
| 1          |           |           |
| 2          |           |           |
| 3          |           |           |
| 4          |           |           |
| 5          |           |           |
| 6          |           |           |

|                            |
|----------------------------|
| SULFATE TANK REPLACEMENT   |
| WASTEWATER TREATMENT PLANT |
| TRUMBO POINT ANX           |
| KEY WEST, FL 33040         |

|                      |
|----------------------|
| CITY OF KEY WEST     |
| UTILITIES DEPARTMENT |
| 1300 WHITE ST        |
| KEY WEST, FL 33040   |

|          |        |
|----------|--------|
| JOB NO.  | 201016 |
| DRAWN    | JDH    |
| DESIGNED | JDH    |
| CHECKED  | JCR    |
| SHEET    | T-1    |



## TANK DESIGN REQUIREMENTS

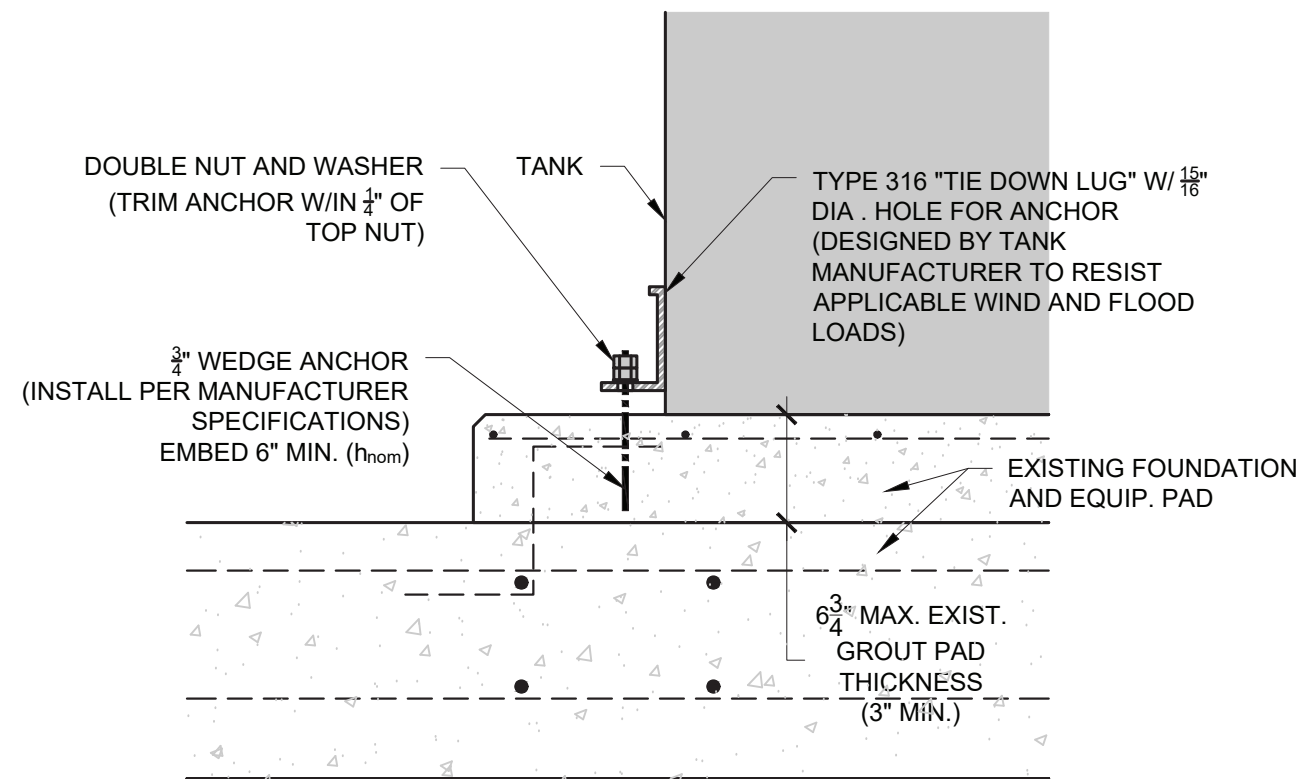
TANK TO BE MANUFACTURED AND DESIGNED BY PLAS-TANK INDUSTRIES, INC. MEETING THE FOLLOWING CRITERIA:

- DESIGN FLOOD LOAD (PER ASCE 24-14) AND WIND LOAD (PER ASCE 7-10) ACTING CONCURRENTLY PER APPLICABLE ASCE 7-10 LOAD FACTORS AND ASCE 24-14 SECTION 9.7 (FACTOR OF SAFETY = 1.5)
- D.F.E. AS SHOWN IN TYP. SECTION
- DESIGN WIND LOAD AS STATED IN DESIGN DATA ON SHEET T-1
- EACH TANK SHALL BE IDENTICAL, (2) TANKS TOTAL, MEETING THE PREVIOUS PLAS-TANK JOB NO: 10517
- WITH THE EXCEPTION OF THE REQUIRED (12) TIE DOWN LUGS, AS SHOWN ON THESE PLANS
- TANK DESIGN SHALL BE SIGNED AND SEALED BY A STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER
- THE DESIGN AND SHOP DRAWINGS AS WELL AS THE FABRICATION OF TANKS, WILL BE SUBJECT TO THE INSPECTIONS AND APPROVAL OF THE ENGINEER OF RECORD.
- THE HANDLING AND INSTALLATION OF THE TANKS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- PER F.B.C. - BUILDING, CH. 1, SEC. 107.3.4.1, DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

## DEMOLITION NOTES

1. PRIOR TO SUBMITTING A BID, VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS ON THE JOB SITE, AND ALSO AFTER AWARD, BUT PRIOR TO THE START OF CONSTRUCTION.
2. ALL DEMOLISHED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFICALLY NOTED OTHERWISE, AND SHALL BE PROPERLY REMOVED FROM THE SITE. COMPLY WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE PROJECT.
3. ALL COST OF DEMOLITION INCLUDING PERMIT FEES, DISPOSAL FEES, ETC. ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF AND TO CONFORM WITH ALL APPLICABLE DEMOLITION AND DISPOSAL CODES, SAFETY REQUIREMENT, AND ENVIRONMENTAL PROTECTION REGULATIONS OF ANY GOVERNMENTAL BODY HAVING JURISDICTION OVER THE WORK.
5. PROVIDE SAFETY BARRICADES AS REQUIRED TO PROTECT THE SAFETY OF THE GENERAL PUBLIC AND WORKERS ASSOCIATED WITH THE PROJECT.
6. PROVIDE BRACING AND SHORING AS REQUIRED TO TEMPORARILY SUPPORT STRUCTURAL MEMBERS DURING CONSTRUCTION, BRACINGS & SHORING OF STRUCTURAL MEMBERS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER.
7. DEMOLISHED MATERIAL CLASSIFIED AS CLEAN FILL MAY BE DISTRIBUTED ONSITE WHEN SPECIFICALLY APPROVED BY THE ENGINEER.

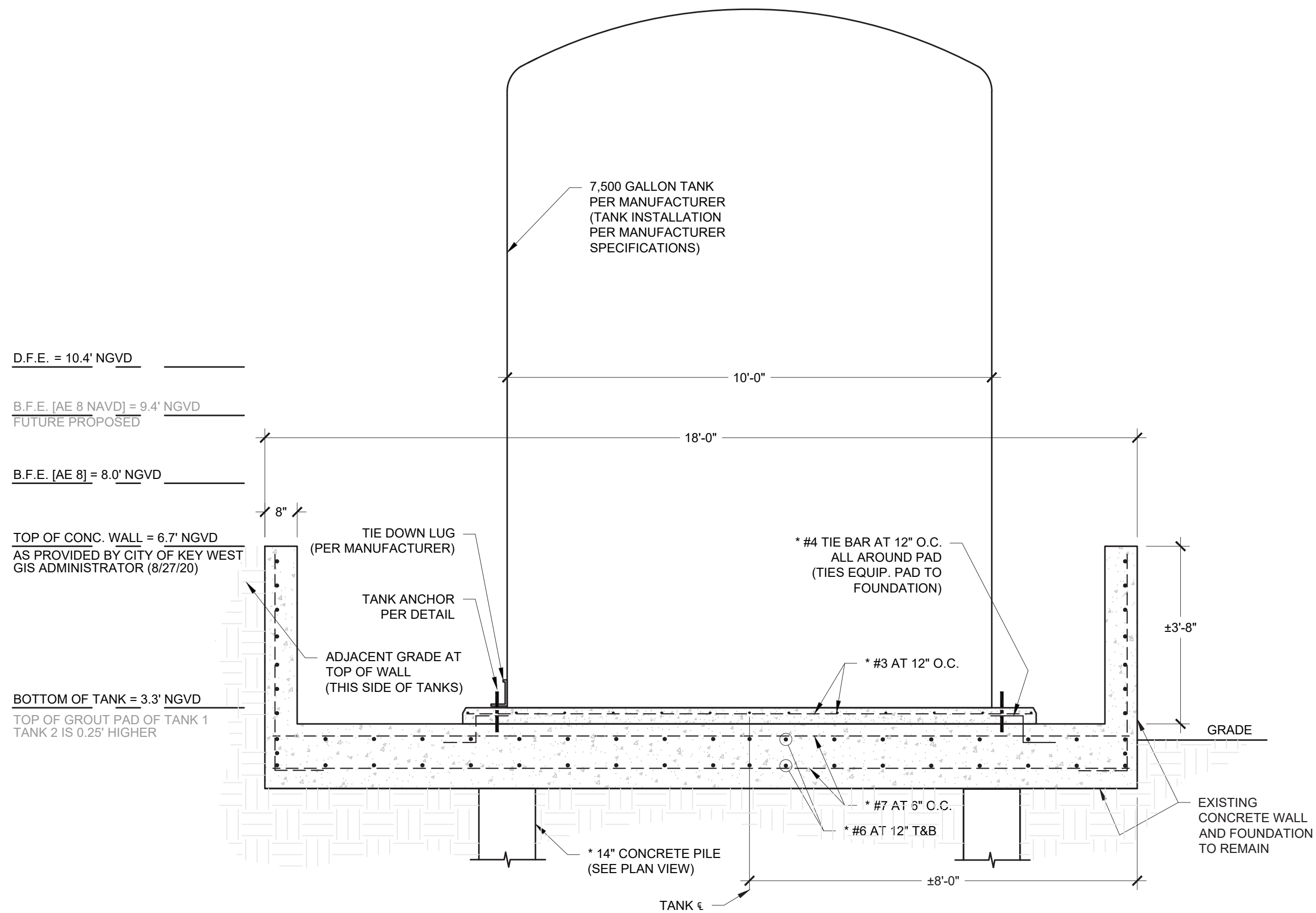
- ALL ANCHOR AND FASTENER HARDWARE TO TYPE 316 STAINLESS STEEL
- WEDGE ANCHOR SHALL BE  $\frac{3}{4}$ " X 10" HILTI QUICK BOLT TZ SS 316
- WEDGE ANCHOR SHALL HAVE A MIN. EMBED. OF 6" ( $f_{ucom}$ )
- INSTALL WEDGE ANCHOR PER MANUFACTURER SPECIFICATIONS



## TYP. DETAIL - TANK ANCHOR

TYP. OF 12 PER TANK

SCALE: 1"=1'-0"



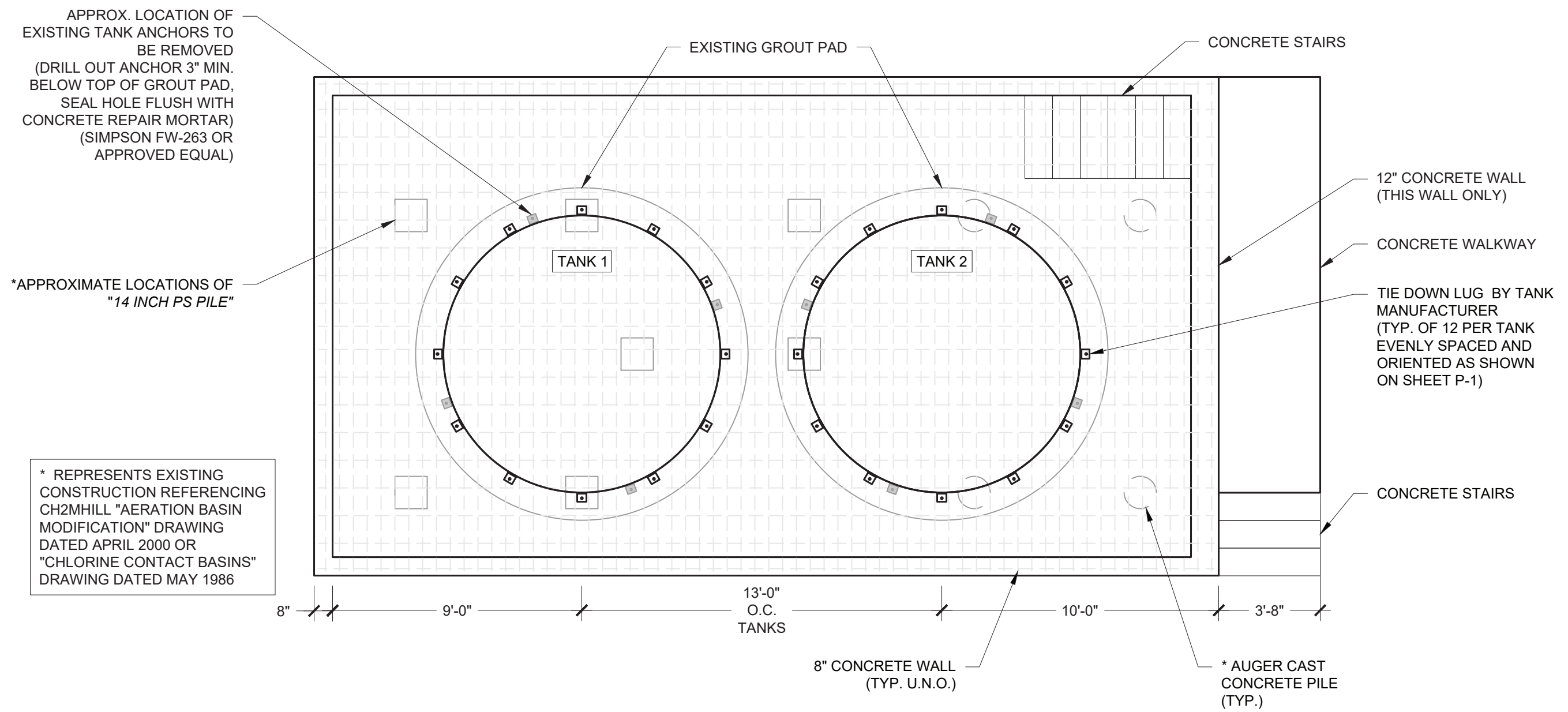
## TYP. SECTION - PROPOSED TANKS

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



## DEMOLITION PLAN

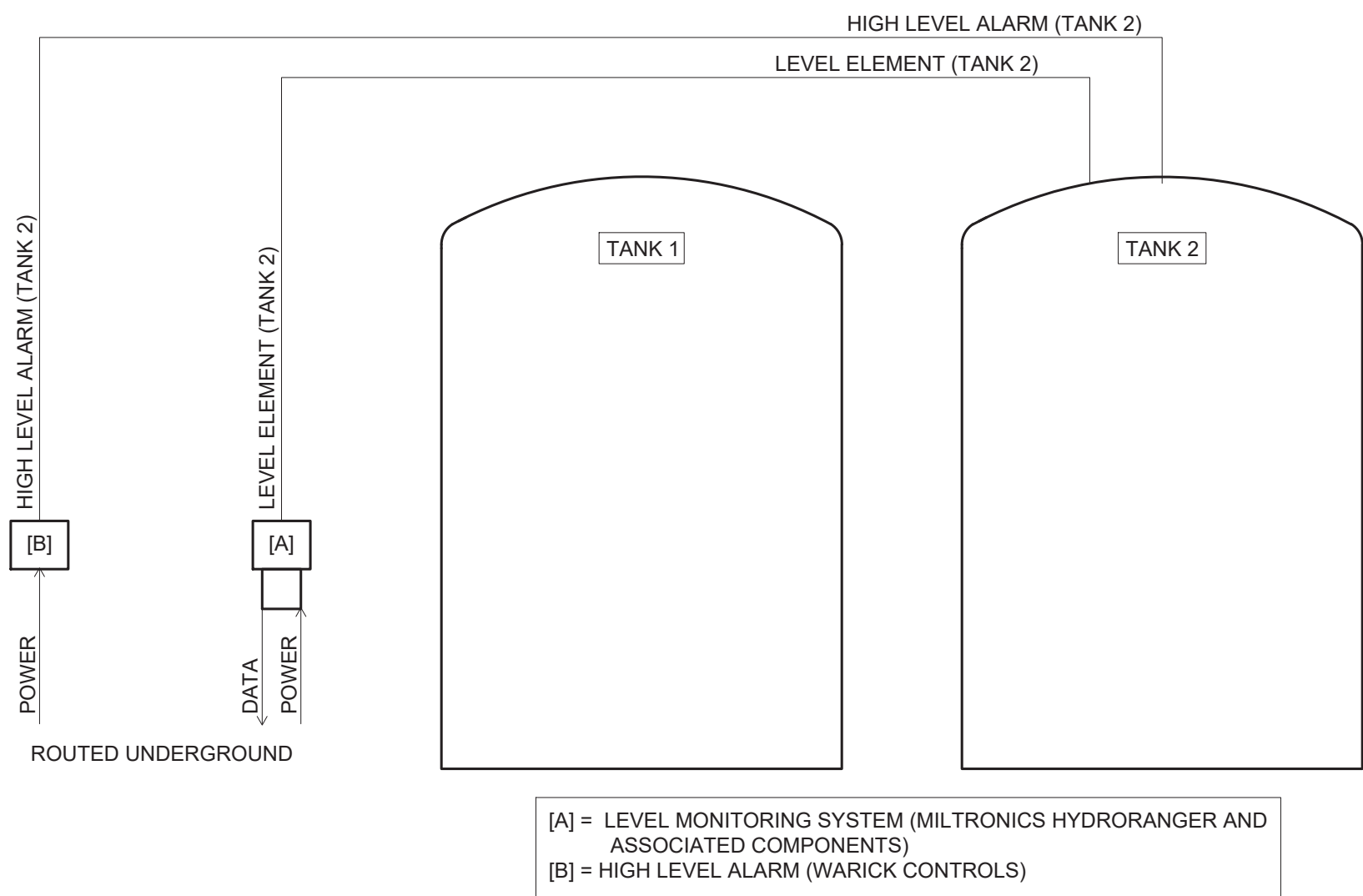
SCALE: 1/4"=1'-0"



## PLAN - PROPOSED TANKS

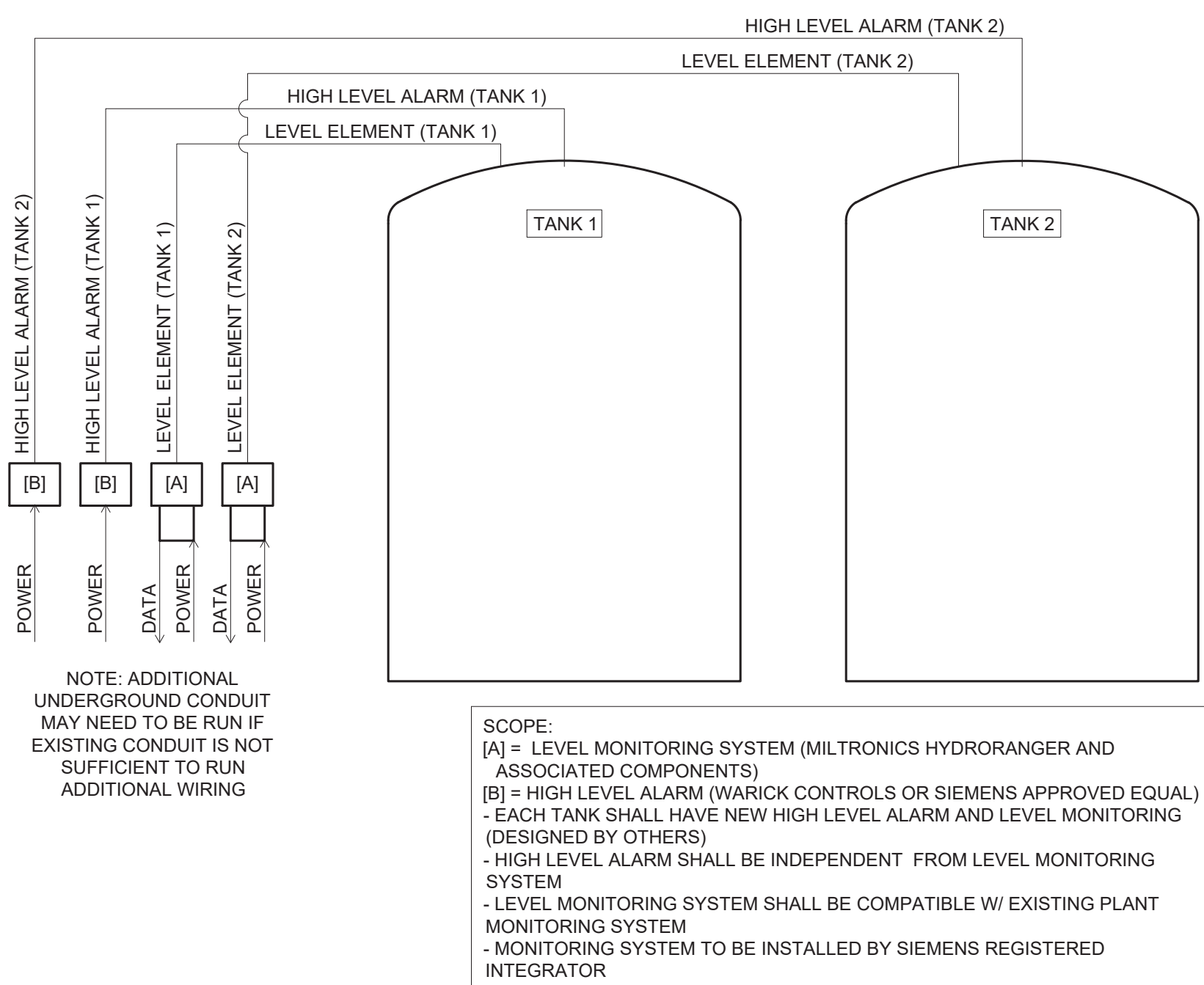
SCALE: 1/4"=1'-0"





## ELECTRICAL SCHEMATIC - MONITORING SYSTEM

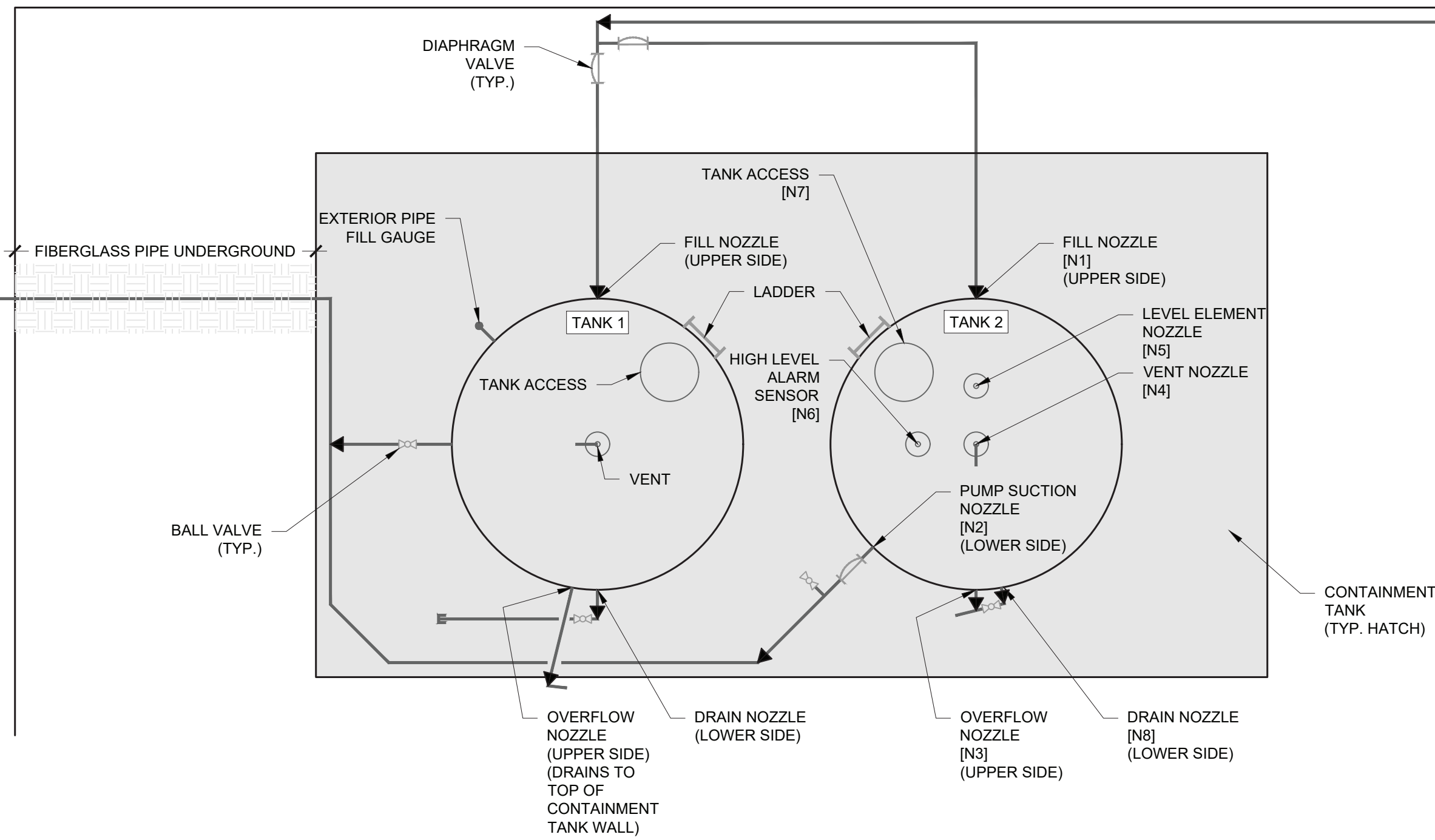
EXISTING SCALE: N.T.S.



## ELECTRICAL SCHEMATIC - MONITORING SYSTEM

PROPOSED SCALE: N.T.S.

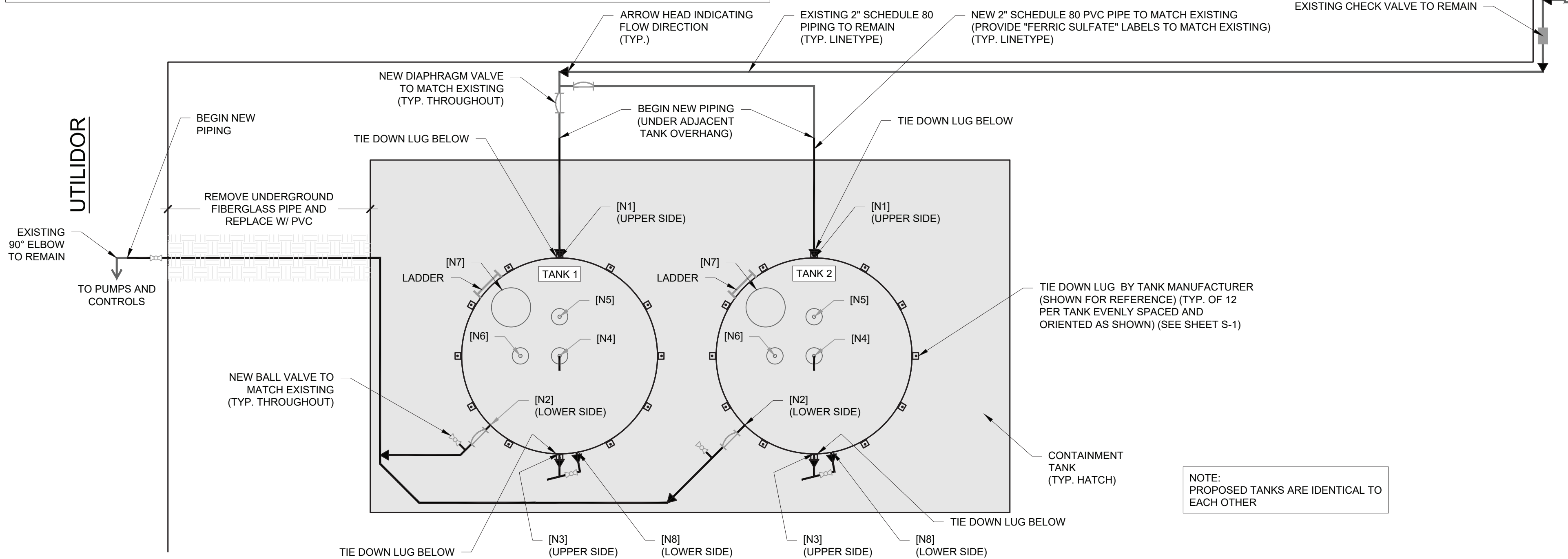
UTILIDOR



## PLUMBING SCHEMATIC - FERRIC SULFATE TANKS

EXISTING - PLAN VIEW SCALE: N.T.S.

- ALL PIPING AND CONDUIT SHALL BE SUPPORTED W/ SERIES 300 STAINLESS STEEL UNISTRUT (OR APPROVED EQUAL PIPE BRACKET). SUPPORT TYPE SHALL BE COORDINATED WITH AND APPROVED BY FACILITY MAINTENANCE MANAGER [DANNY CARABALLO (PH:305-292-5100)]
- SUPPORTS SHALL BE SPACED AT ±6' O.C. MAX. AND ANCHORED TO CONCRETE WITH A MIN. OF (2) ½" STAINLESS STEEL (SERIES 300) CONCRETE EXPANSION ANCHORS
- ALL LOCATIONS OF SUPPORT ANCHORS SHALL BE APPROVED BY FACILITY MAINTENANCE MANAGER [DANNY CARABALLO] PRIOR TO DRILLING INTO EXISTING CONCRETE



## PLUMBING SCHEMATIC - FERRIC SULFATE TANKS

PROPOSED - PLAN VIEW SCALE: N.T.S.

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November 2, 2020  
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1  
2  
3  
4  
5  
6

**SULFATE TANK REPLACEMENT**  
WASTEWATER TREATMENT PLANT  
**TRUMBO POINT ANX**  
**KEY WEST, FL 33040**

**CITY OF KEY WEST**  
UTILITIES DEPARTMENT  
1300 WHITE ST  
KEY WEST, FL 33040

JOB NO. 201016  
DRAWN JDH  
DESIGNED JDH  
CHECKED JCR  
SHEET P-1

Key West Office  
1010 East Kennedy Drive, Suite 202  
Key West, Florida 33040  
Tel: (305) 293-9440