

**DRAWING INDEX**

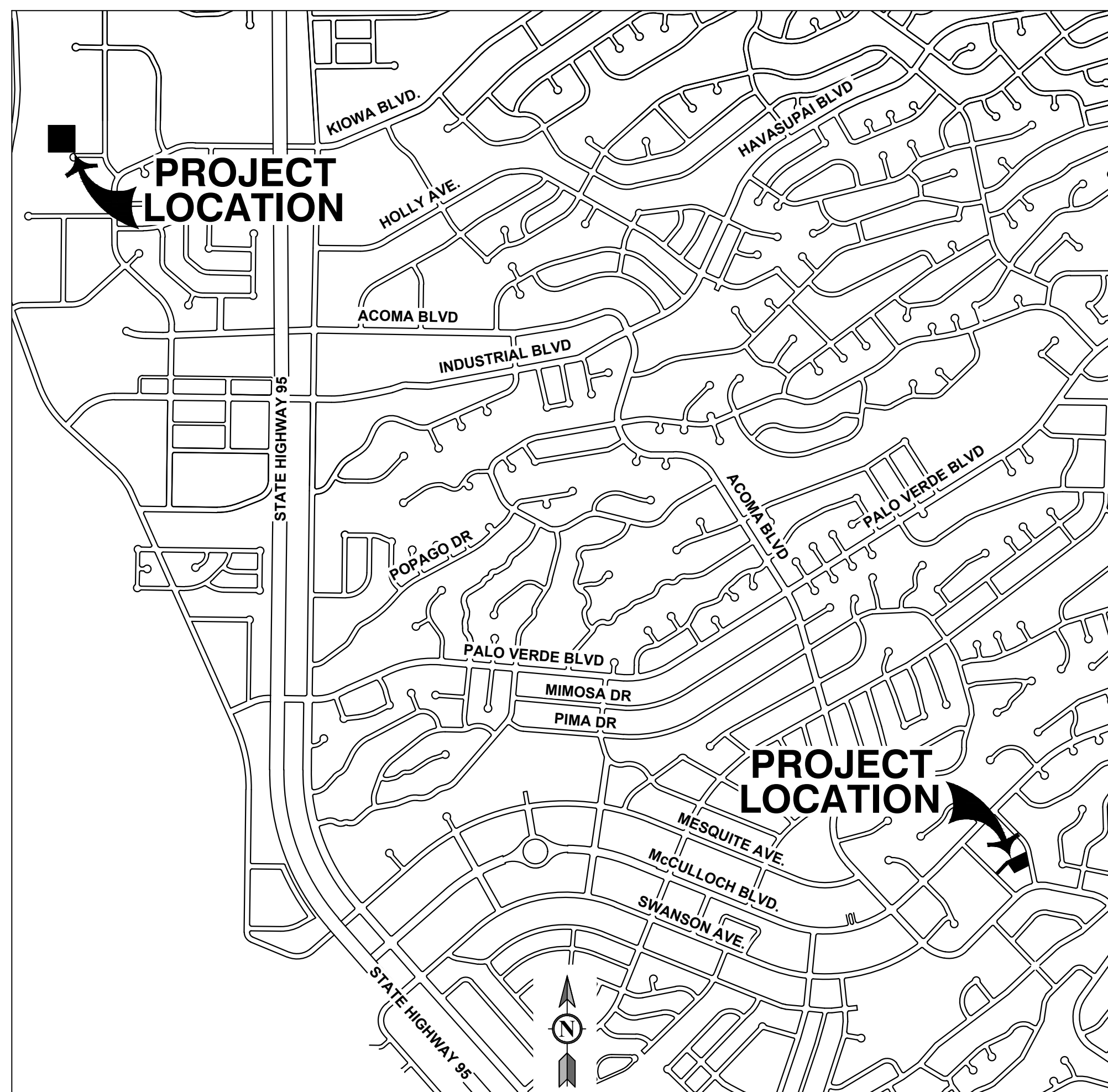
NO.	TITLE
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C-4	PUBLIC SAFETY FUEL STATION SITE PLAN
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# CITY FUELING FACILITIES IMPROVEMENTS

## PROJECT NUMBER: 101010

### PUBLIC SAFETY FACILITY

### PUBLIC WORKS MAINTENANCE FACILITY



**LOCATION MAP**  
SCALE: N.T.S.

**PROJECT CONTROL:**

PROJECT SETTINGS:

DATUM: NAD83  
 PROJECTION: ARIZONA STATE PLANE (WEST)  
 LINEAR UNIT: US FEET  
 COORDINATE: GRID  
 GEOID: GEOID 2003, UNIT 05

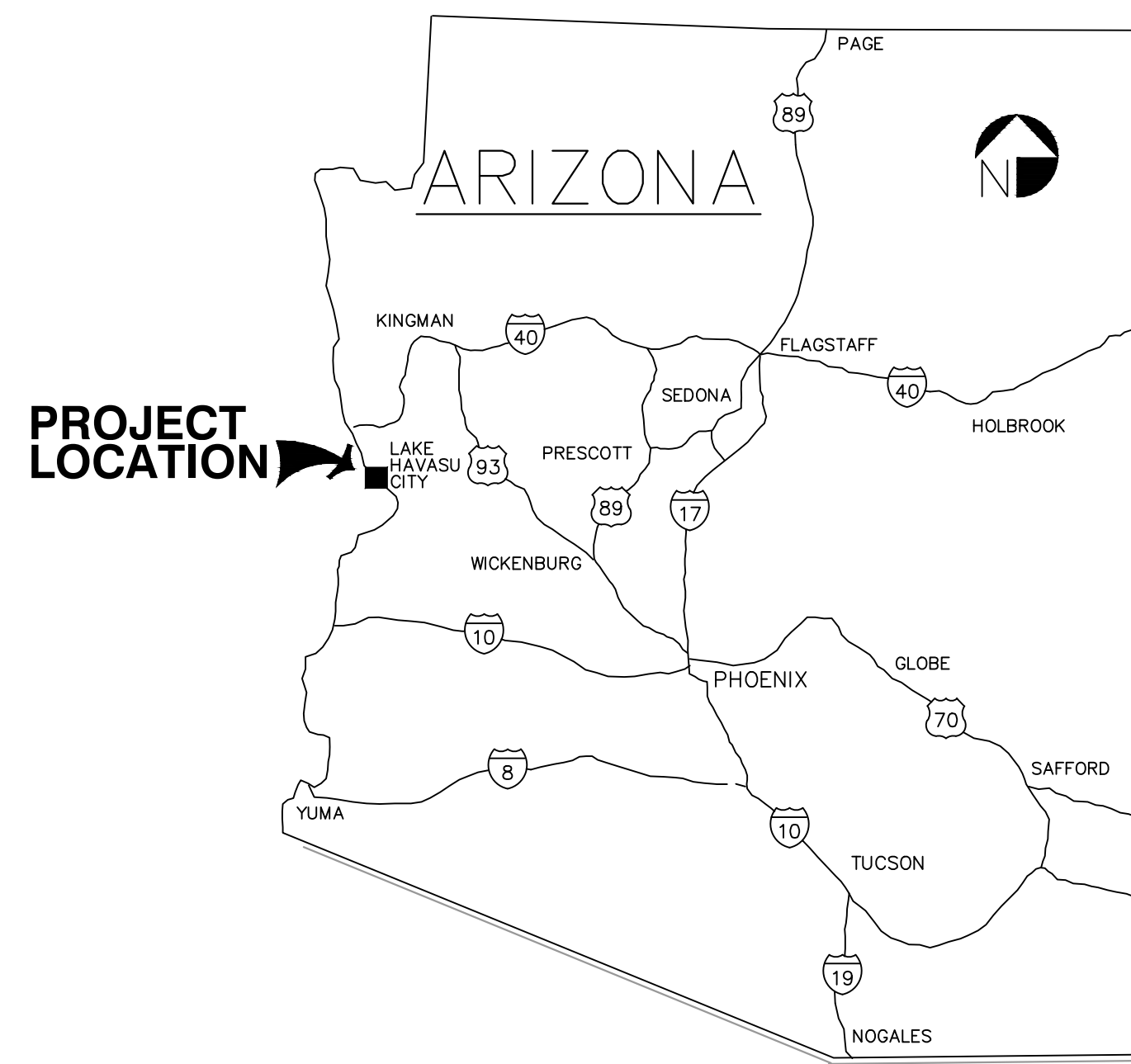
PROJECT CONTROL AND BENCHMARK DATA:

CITY BASE STATION:  
 N=1265542.33 --- E=528326.69 --- ELEV=773.83

US HARN POINT - HAVASU:  
 NGS ORDER A: STAINLESS STEEL ROD IN HANDHOLE MARKED HAVASU 92  
 N=1298017.10 --- E=515892.32 --- ELEV=696.75

LAKE HAVASU CITY SURVEY MONUMENT - SARA:  
 2005 AERIAL CONTROL CAP  
 N=1254812.07 --- E=550796.23 --- ELEV=1060.40

LAKE HAVASU CITY SURVEY MONUMENT - CP1:  
 G.P.S. CONTROL MONUMENT 1997 IN HANDHOLE  
 N=1267052.09 --- E=544522.51 --- ELEV=1209.68



**VICINITY MAP**  
SCALE: N.T.S.

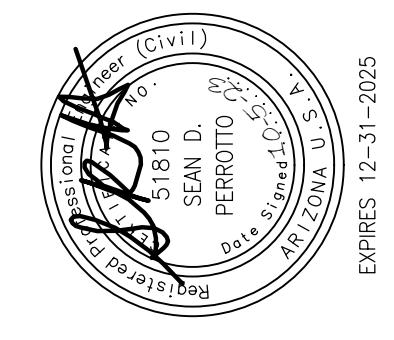
**CITY COUNCIL**

MAYOR: CAL SHEEHY  
 VICE MAYOR: DAVID LANE  
 CITY COUNCIL: NANCY CAMPBELL, JIM DOLAN, MICHELE LIN, CAMERON MOSES, JENI COKE

CITY MANAGER: JESS KNUDSON  
 CITY ENGINEER: GREG FROSLIE, PE  
 PROJECT MANAGER: JASON HART

**UTILITY CONTACTS:**

CITY OF LAKE HAVASU CITY (WASTEWATER) (928) 855-3999  
 CITY OF LAKE HAVASU CITY (WATER) (928) 855-2618  
 SUDDENLINK (CABLE) (928) 855-7815  
 UNISOURCE ENERGY SERVICES (GAS) (928) 505-7025  
 UNISOURCE ENERGY SERVICES (ELECTRIC) (928) 505-7031



NO.	DATE	DSGN	DR	REVISION	BY
				CHK	S. PERROTTO
				APVD	R. EDWARDS
				APVD	S. PERROTTO

**TRICO ENGINEERING, LLC**  
 231 SWANSON AVENUE, STE. 204  
 LAKE HAVASU CITY, AZ 86403  
 WWW.TRICOENGINEERINGLLC.COM

CITY FUELING FACILITIES IMPROVEMENTS  
 PROJECT NO: 101010  
 PUBLIC SAFETY FACILITY  
 PUBLIC WORKS MAINTENANCE FACILITY

LAKE HAVASU CITY, ARIZONA  
 2025 AERIAL CONTROL CAP  
 LAKE HAVASU CITY, AZ 86403  
 (928) 855-7116

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**JACOBS**

BID SET  
 COVER SHEET  
 CIVIL

VERIFY SCALE  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 0 1"

DATE	OCTOBER 2023
PROJ	
DWG	C-1
SHEET	1 of 26



GENERAL NOTES

- 1. ALL WATER UTILITY CONSTRUCTION TO CONFORM TO AAC R18-5-502 AND AAC R18-4-119 WATER SYSTEM STANDARDS, ADEQ BULLETIN 10, LAKE HAVASU CITY STANDARDS AND SPECIFICATIONS, MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) STANDARD SPECIFICATIONS AND DETAILS UNLESS SPECIFICALLY MODIFIED ON THE PLANS.
2. THE OWNER SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
3. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL BY THE OWNER OR ENGINEER AND/OR ALL WORK MATERIAL NOT IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS IS SUBJECT TO REMOVAL AT THE CONTRACTOR'S EXPENSE.
...
32. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE STEPS TO MAINTAIN CONTINUOUS UTILITY SERVICE TO RESIDENTS AND

GENERAL NOTES (CONT):

- BUSINESSES WITHIN THE PROJECT AREA. MANY EXISTING WATER AND GAS LINES ARE MORE THAN 30 YEARS OLD, PROPOSED METHOD OF CROSSING AND/OR SUPPORT OF UTILITIES SHALL BE APPROVED BY UTILITY OWNER IN ADVANCE OF WORK.
33. ALL GRAVEL DRIVES AND GRAVEL ROADS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH A MINIMUM OF SIX INCHES (6") OF GRANULAR BACKFILL AS SPECIFIED IN SECTION 02300 AND SHALL BE CONSIDERED SUBSIDIARY TO OTHER PAY ITEMS.
...
67. THE APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND

EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE AND WORKABLE UNIT.

- 68. LAKE HAVASU CITY MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN IN ITS JUDGEMENT PROGRESS IS UNSATISFACTORY, WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS ARE UNSUITABLE OR THERE IS A DANGER TO THE PUBLIC HEALTH OR SAFETY.
69. THE CONTRACTOR SHALL OBTAIN ANY ADDITIONAL TEMPORARY EASEMENTS OR USE AGREEMENTS THAT ARE DEEMED UNNECESSARY FOR CONSTRUCTION AT NO ADDITIONAL COST TO THE CITY. COPIES OF ALL CONTRACTORS OBTAINED EASEMENTS AND USE AGREEMENTS SHALL BE PROVIDED TO THE CITY'S REPRESENTATIVE PRIOR TO THE UTILIZATION OF THE SITE.
...
74. THE CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS ON PRIVATE PROPERTY. ALL ITEMS DAMAGED OR REMOVED SHALL BE RESTORED IN ACCORDANCE WITH THE SPECIFICATION TO A CONDITION EQUAL TO OR BETTER THAN THEIR CONDITION PRIOR TO THE START OF THE PROJECT.

LEGEND:

Table with 2 columns: LINE / SYMBOL and DESCRIPTION. Includes symbols for telephone, sewer, water main, gas main, overhead utility, force main, contours, property lines, and various pipe types.

FLOOD INFORMATION:

SAID DESCRIBED AREA ARE LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION "ZONE X" AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 04015C6176G, WITH A DATE OF IDENTIFICATION OF NOVEMBER 18, 2009, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.

ABBREVIATIONS:

Table with 3 columns: Abbreviation, Description, and Abbreviation. Lists terms like ABANDONED, AGGREGATE, APPROVED, ARCHITECTURAL, etc., and their corresponding symbols or units.

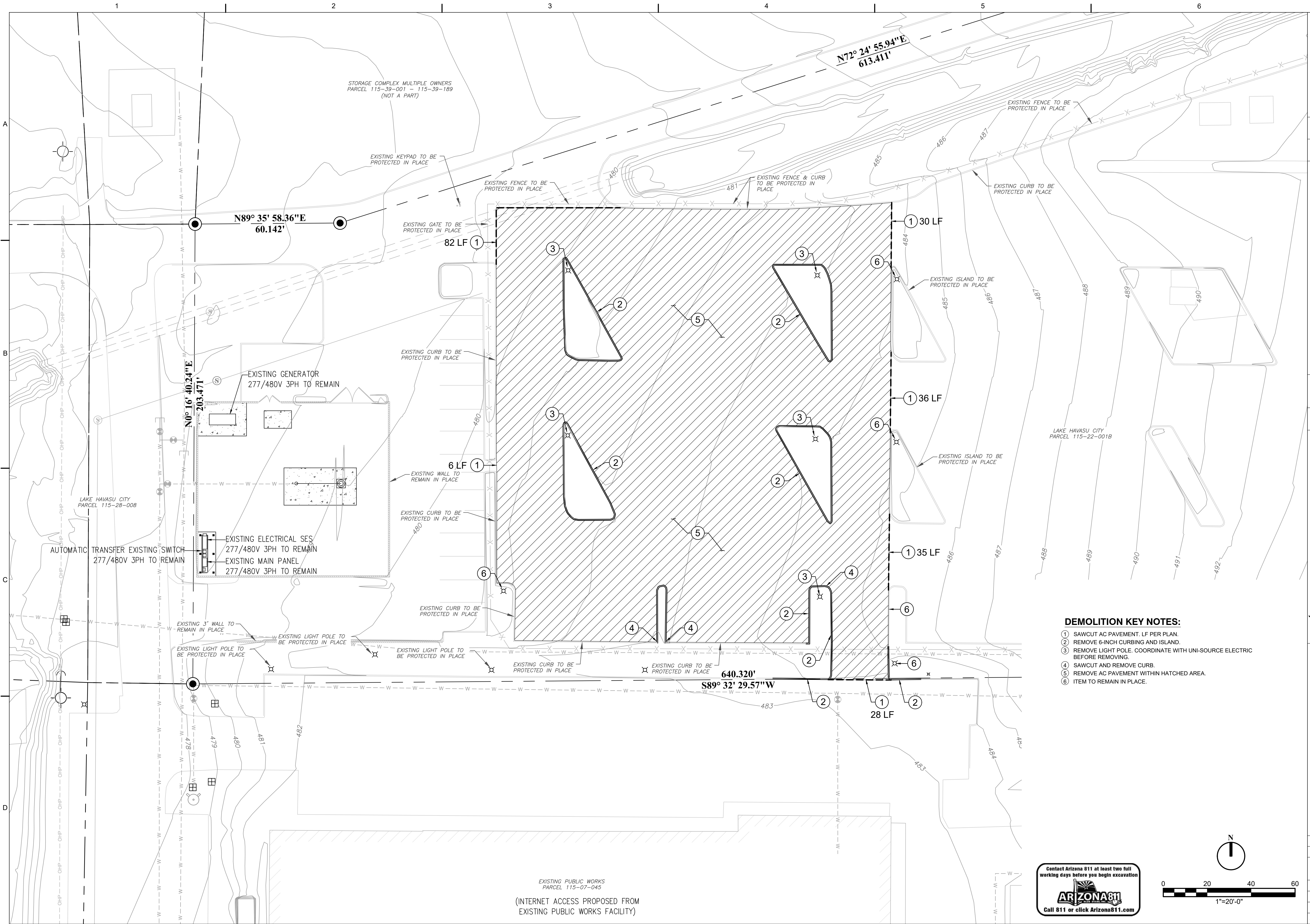


Revision table with columns: NO., DATE, DSGN, REVISION, CHK, APVD. Includes entries for S. Perrotto and R. Edwards.

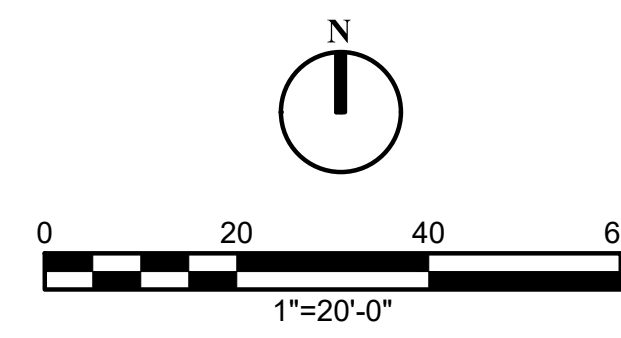
TRICO ENGINEERING, LLC logo and project information: CITY FUELING FACILITIES IMPROVEMENTS, PROJECT NO. 101010, PUBLIC SAFETY FACILITY, PUBLIC WORKS MAINTENANCE FACILITY.

JACOBS logo, BID SET, GENERAL NOTES, CIVIL, VERIFY SCALE, DATE: OCTOBER 2023, PROJ, DWG: C-2, SHEET 2 of 26.





- DEMOLITION KEY NOTES:**
- 1 SAWCUT AC PAVEMENT. LF PER PLAN.
  - 2 REMOVE 6-INCH CURBING AND ISLAND.
  - 3 REMOVE LIGHT POLE. COORDINATE WITH UNI-SOURCE ELECTRIC BEFORE REMOVING.
  - 4 SAWCUT AND REMOVE CURB.
  - 5 REMOVE AC PAVEMENT WITHIN HATCHED AREA.
  - 6 ITEM TO REMAIN IN PLACE.



NO.	DATE	DR	CHK	REVISION	BY

**TRICO ENGINEERING, LLC**  
 231 SWANSON AVENUE, STE. 204  
 LAKE HAVASU CITY, AZ 86403  
 WWW.TRICOENGINEERINGLLC.COM

**JACOBS**  
 1100 N. LAKE HAVASU CITY BLVD., SUITE 100  
 LAKE HAVASU CITY, AZ 86403  
 (928) 852-2116

CITY FUELING FACILITIES IMPROVEMENTS  
 PROJECT NO: 101010  
 PUBLIC SAFETY FACILITY  
 PUBLIC WORKS MAINTENANCE FACILITY

DESIGN: S. PERROTTI  
 CHECKED: E. PERROTTI  
 DRAWN: R. EDWARDS  
 BY: APVD  
 DATE: 10/03/2023  
 SHEET: 3 OF 26

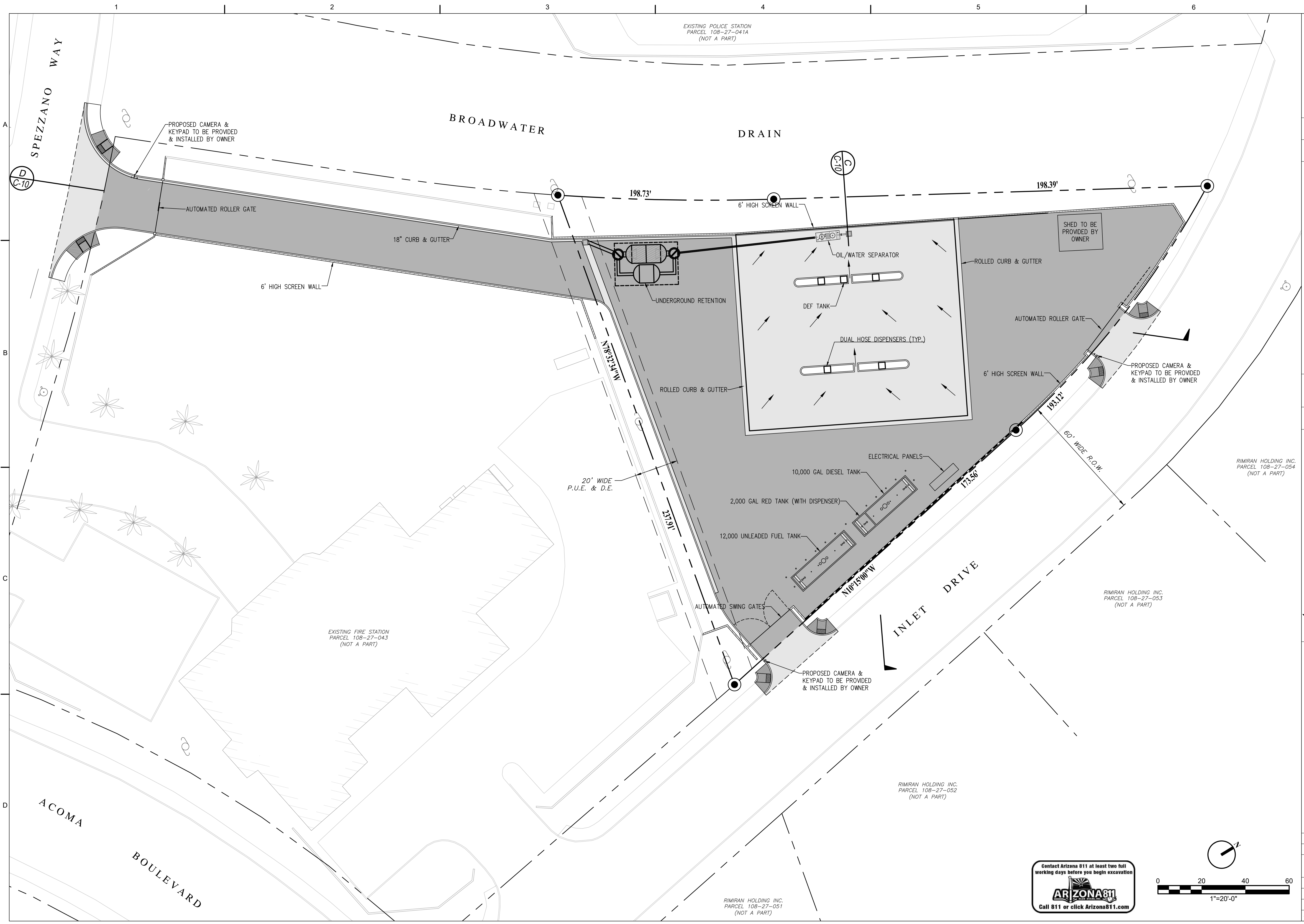
**JACOBS**

BID SET  
 PUBLIC WORKS SITE  
 DEMOLITION PLAN  
 CIVIL

VERIFY SCALE  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 1" = 20'-0"

DATE: OCTOBER 2023  
 PROJ:  
 DWG: C-3  
 SHEET: 3 of 26

EXPRES 12-31-2025  
 JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.  
 FILENAME: 23-028\_03\_Demolition Plan Public Works.dwg PLOT DATE: 10/3/23 PLOT TIME: 2:14 PM



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 LAKE HAVASU CITY, AZ 86403  
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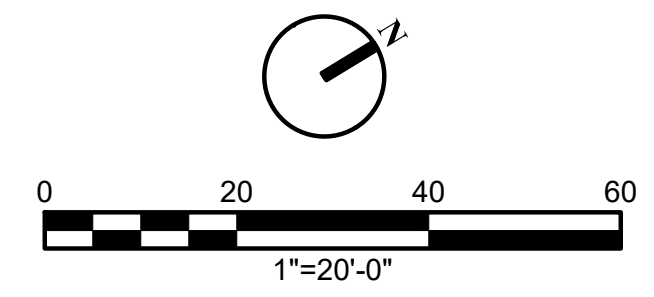
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 PROJECT NO: 101010  
**PUBLIC SAFETY FACILITY**  
**PUBLIC WORKS MAINTENANCE FACILITY**

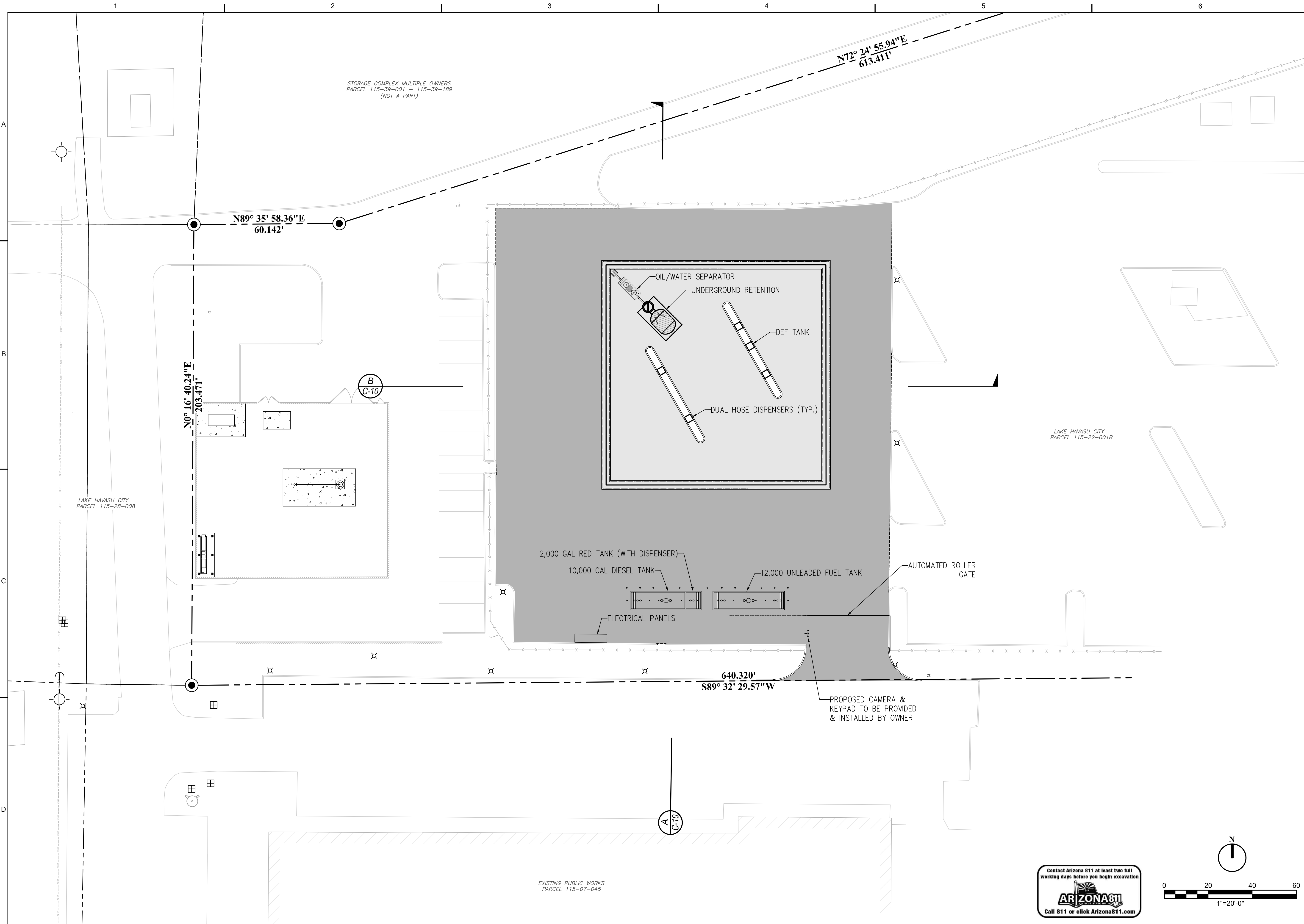
LAKE HAVASU CITY, AZ  
 LAKE HAVASU CITY, AZ 86403  
 (928) 852-2119

**Jacobs**  
 BID SET  
**PUBLIC SAFETY FUEL STATION**  
**SITE PLAN**  
 CIVIL

VERIFY SCALE  
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 1"=20'-0"

DATE: OCTOBER 2023  
 PROJ: [Blank]  
 DWG: C-4  
 SHEET: 4 of 26





NO.	DATE	DR	CHK	REVISION	BY	APVD

**TRICO**  
ENGINEERING, LLC  
231 SWANSON AVENUE, STE. 204  
LAKE HAVASU CITY, AZ 86403  
PH: 908.230.2666  
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CITY FUELING FACILITIES IMPROVEMENTS  
PROJECT NO: 101010  
PUBLIC SAFETY FACILITY  
PUBLIC WORKS MAINTENANCE FACILITY

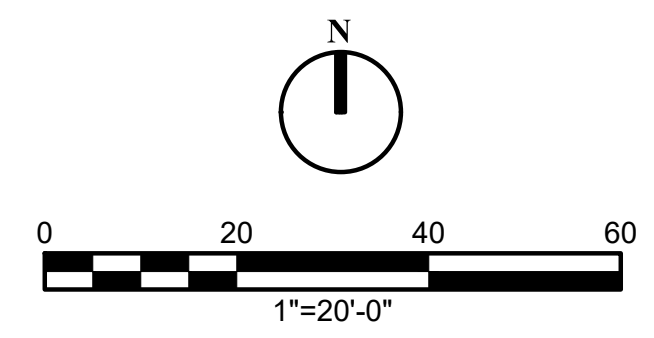
LAKE HAVASU CITY, AZ  
LAKE HAVASU CITY, AZ 86403  
(908) 952-2119

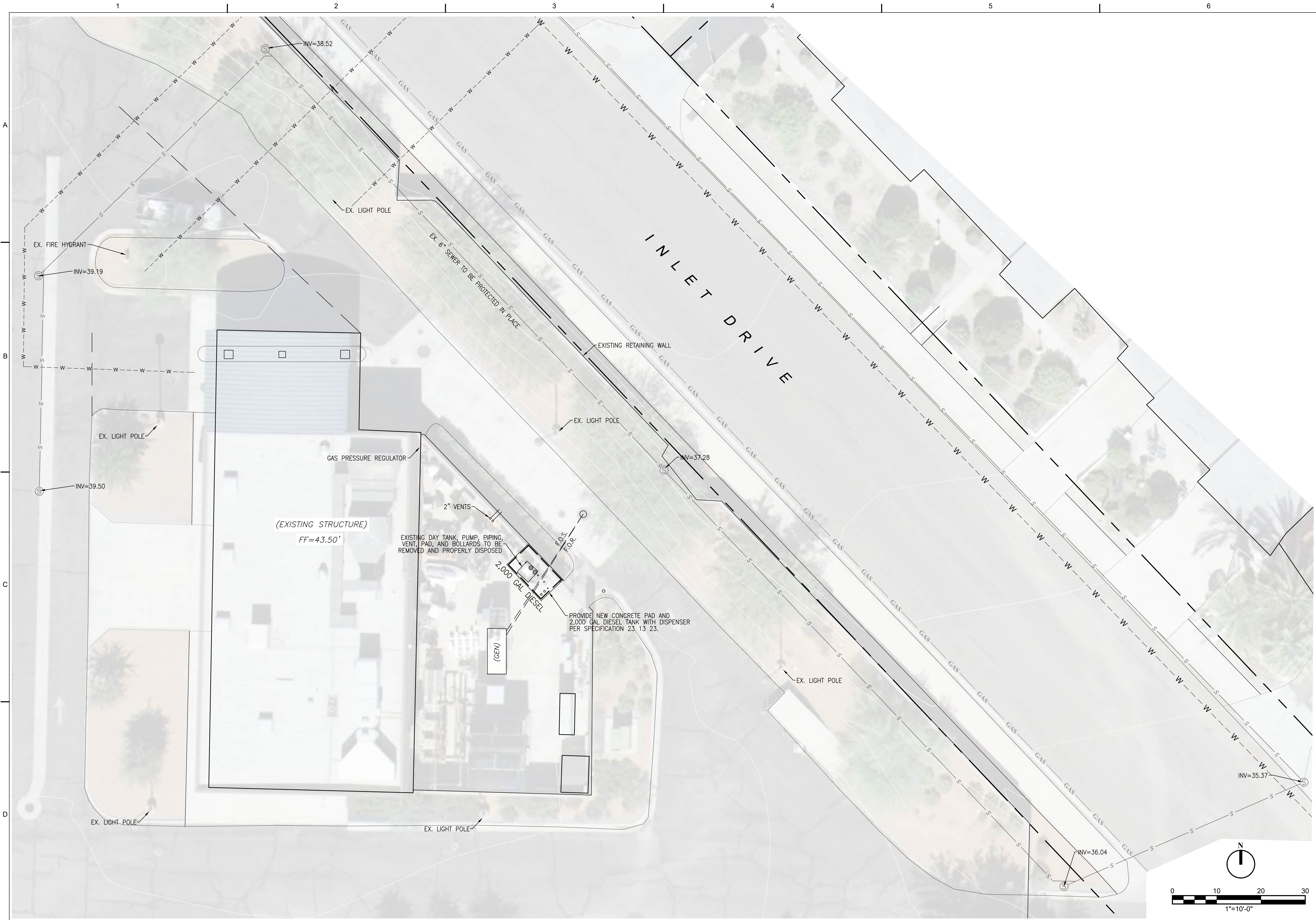
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PUBLIC WORKS FUEL STATION  
SITE PLAN  
CIVIL

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BAR IS ONE INCH ON ORIGINAL DRAWING.  
0 20 40 60  
1"=20'-0"

DATE	OCTOBER 2023
PROJ	
DWG	C-5
SHEET	5 of 26

Contact Arizona 811 at least two full working days before you begin excavation





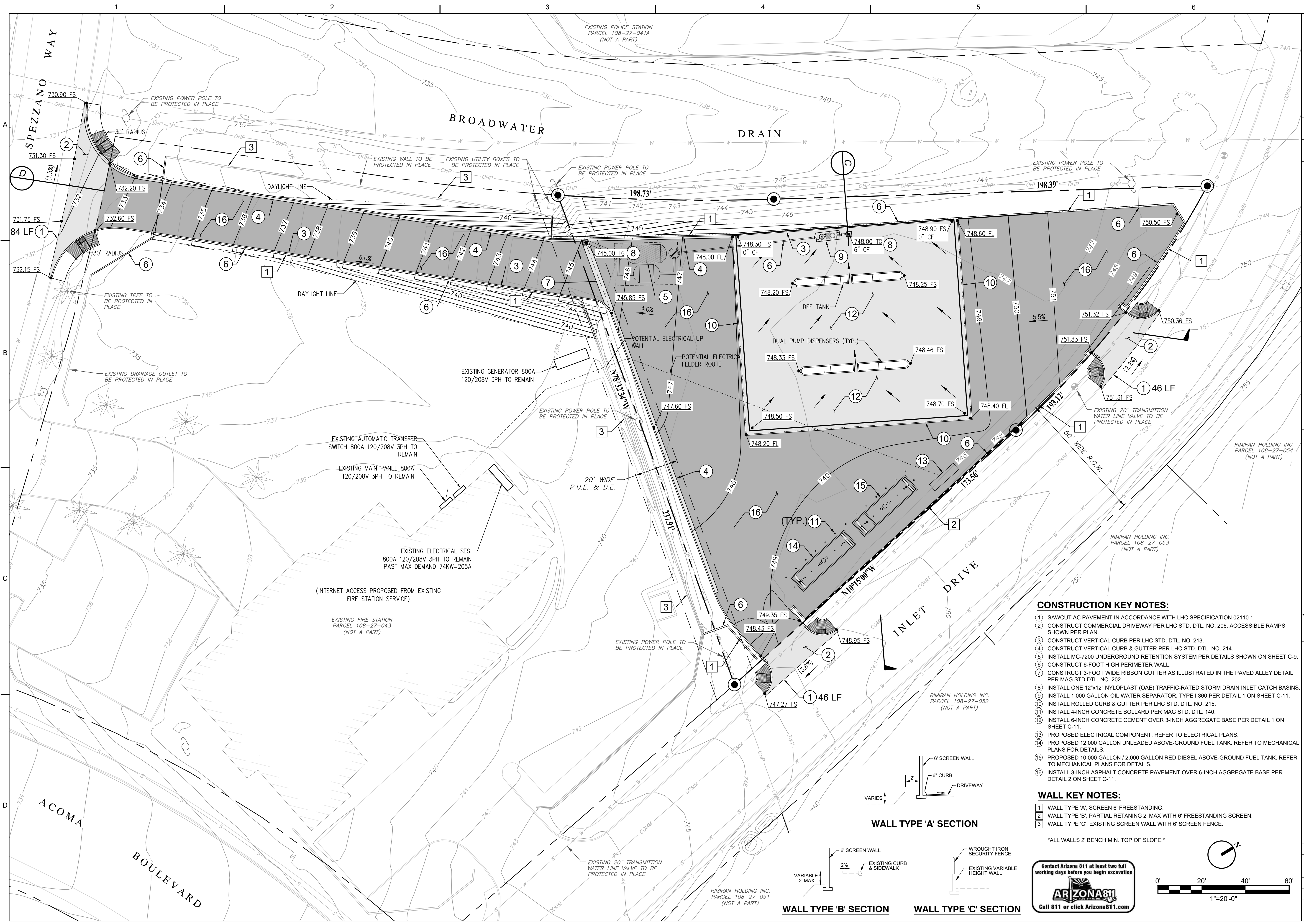
NO.	DATE	DR	CHK	REVISION	BY	APVD
		S. PERROTTI	E. PERROTTI			
			R. EDWARDS			

**TRICO ENGINEERING, LLC**  
 231 SWANSON AVENUE, STE. 204  
 LAKE HAVASU CITY, AZ 86403  
 PHONE: 908.230.4668  
 WWW.TRICOENGINEERINGLLC.COM

**CITY FUELING FACILITIES IMPROVEMENTS**  
 PROJECT NO: 101010  
**PUBLIC SAFETY FACILITY**  
**PUBLIC WORKS MAINTENANCE FACILITY**  
 LAKE HAVASU CITY, AZ  
 231 SWANSON AVENUE, STE. 204  
 LAKE HAVASU CITY, AZ 86403  
 (908) 852-7116

**Jacobs**  
 BID SET  
**POLICE DEPARTMENT**  
**GENERATOR SITE PLAN**  
 CIVIL

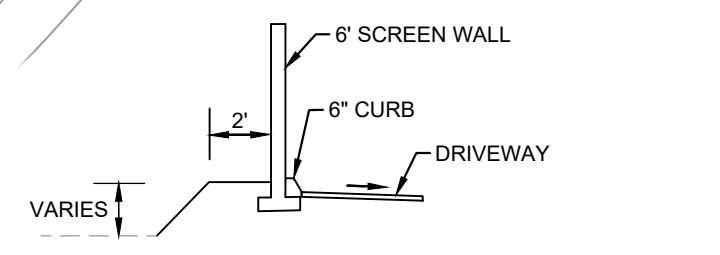
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 DATE: OCTOBER 2023  
 PROJ:  
 DWG: C-6  
 SHEET: 6 of 26



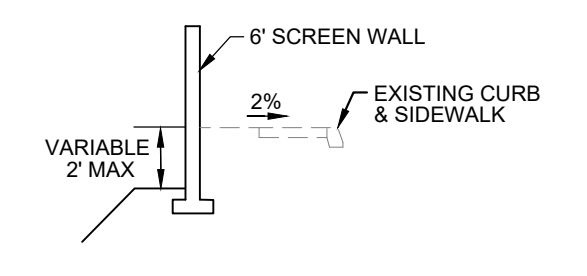
- CONSTRUCTION KEY NOTES:**
- SAWCUT AC PAVEMENT IN ACCORDANCE WITH LHC SPECIFICATION 02110.1.
  - CONSTRUCT COMMERCIAL DRIVEWAY PER LHC STD. DTL. NO. 206. ACCESSIBLE RAMPS SHOWN PER PLAN.
  - CONSTRUCT VERTICAL CURB PER LHC STD. DTL. NO. 213.
  - CONSTRUCT VERTICAL CURB & GUTTER PER LHC STD. DTL. NO. 214.
  - INSTALL MC-7200 UNDERGROUND RETENTION SYSTEM PER DETAILS SHOWN ON SHEET C-9.
  - CONSTRUCT 6-FOOT HIGH PERIMETER WALL.
  - CONSTRUCT 3-FOOT WIDE RIBBON GUTTER AS ILLUSTRATED IN THE PAVED ALLEY DETAIL PER MAG STD DTL. NO. 202.
  - INSTALL ONE 12"x12" NYLOPLAST (OAE) TRAFFIC-RATED STORM DRAIN INLET CATCH BASINS.
  - INSTALL 1,000 GALLON OIL WATER SEPARATOR, TYPE I 360 PER DETAIL 1 ON SHEET C-11.
  - INSTALL ROLLED CURB & GUTTER PER LHC STD. DTL. NO. 215.
  - INSTALL 4-INCH CONCRETE BOLLARD PER MAG STD. DTL. 140.
  - INSTALL 6-INCH CONCRETE CEMENT OVER 3-INCH AGGREGATE BASE PER DETAIL 1 ON SHEET C-11.
  - PROPOSED ELECTRICAL COMPONENT, REFER TO ELECTRICAL PLANS.
  - PROPOSED 12,000 GALLON UNLEADED ABOVE-GROUND FUEL TANK. REFER TO MECHANICAL PLANS FOR DETAILS.
  - PROPOSED 10,000 GALLON / 2,000 GALLON RED DIESEL ABOVE-GROUND FUEL TANK. REFER TO MECHANICAL PLANS FOR DETAILS.
  - INSTALL 3-INCH ASPHALT CONCRETE PAVEMENT OVER 6-INCH AGGREGATE BASE PER DETAIL 2 ON SHEET C-11.

- WALL KEY NOTES:**
- WALL TYPE 'A', SCREEN 6' FREESTANDING.
  - WALL TYPE 'B', PARTIAL RETAINING 2' MAX WITH 6' FREESTANDING SCREEN.
  - WALL TYPE 'C', EXISTING SCREEN WALL WITH 6' SCREEN FENCE.

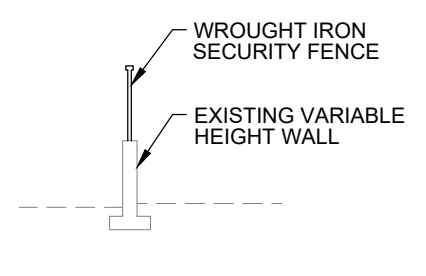
\*ALL WALLS 2' BENCH MIN. TOP OF SLOPE.\*



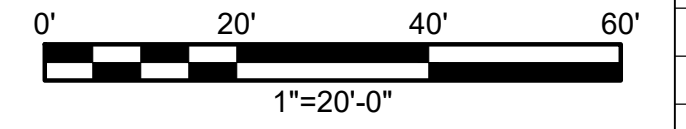
WALL TYPE 'A' SECTION



WALL TYPE 'B' SECTION



WALL TYPE 'C' SECTION



EXPRES 12-31-2025

NO.	DATE	DR	REVISION	BY	APVD

**TRICO ENGINEERING, LLC**

231 SWANSON AVENUE, STE. 204  
LAKE HAVASU CITY, AZ 86403  
WWW.TRICOENGINEERINGLLC.COM

**JACOBS**

BID SET  
PUBLIC SAFETY FUEL STATION  
GRADING PLAN  
CIVIL

PROJECT NO: 101010  
PUBLIC SAFETY FUEL STATION  
PUBLIC WORKS MAINTENANCE FACILITY

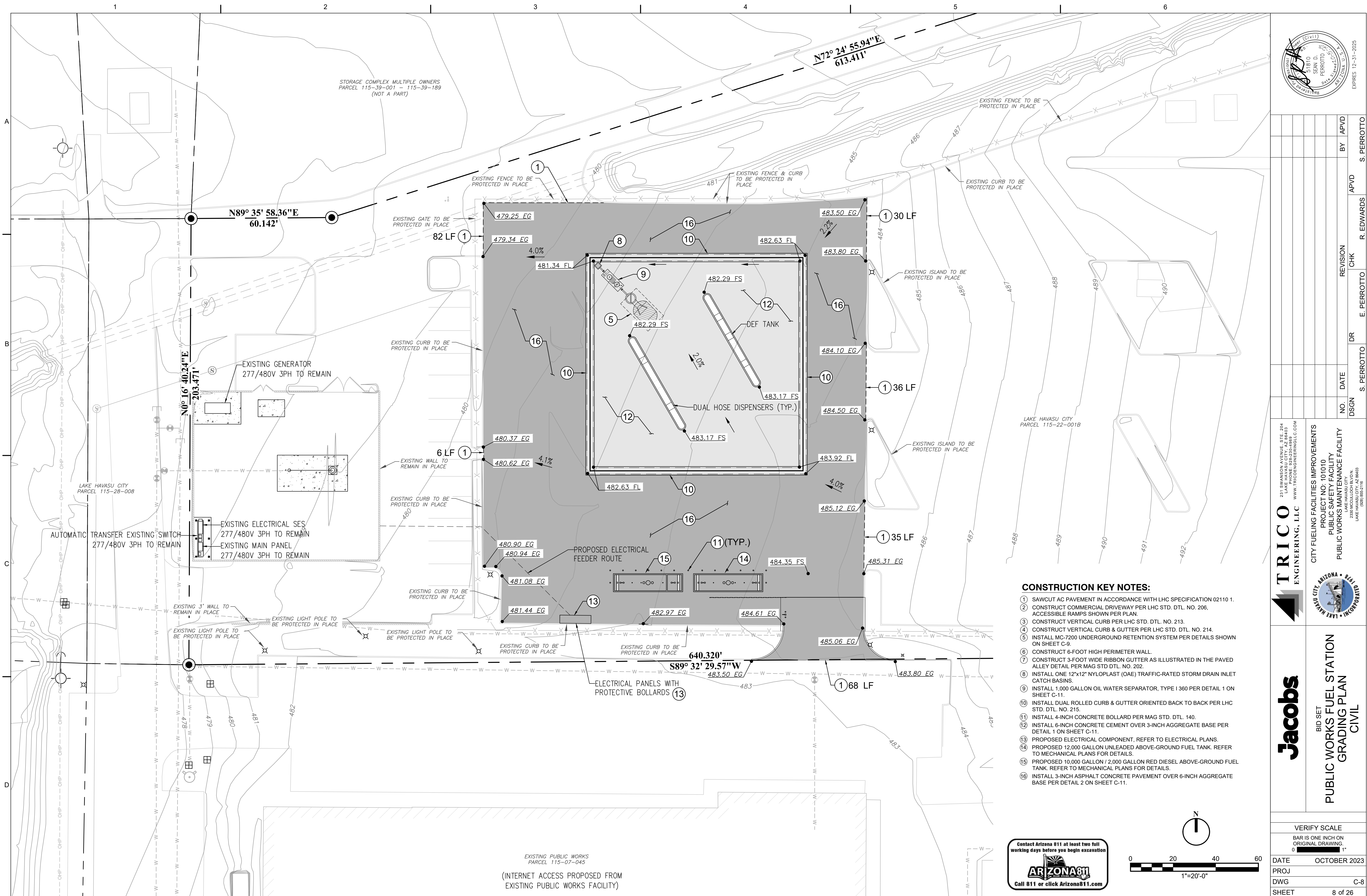
S. PERROTTO  
R. EDWARDS  
S. PERROTTO

VERIFY SCALE  
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0" = 1"

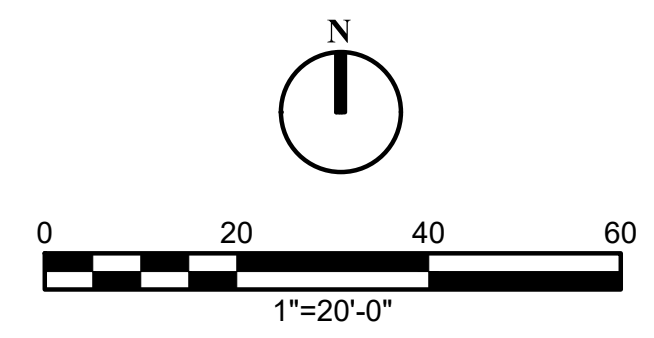
DATE: OCTOBER 2023  
PROJ: C-7  
DWG: C-7  
SHEET: 7 of 26

FILENAME: 23-028\_07\_Grading Plan.dwg

PLOT DATE: 10/3/23  
PLOT TIME: 10:56 AM



- CONSTRUCTION KEY NOTES:**
- SAWCUT AC PAVEMENT IN ACCORDANCE WITH LHC SPECIFICATION 02110 1.
  - CONSTRUCT COMMERCIAL DRIVEWAY PER LHC STD. DTL. NO. 206, ACCESSIBLE RAMPS SHOWN PER PLAN.
  - CONSTRUCT VERTICAL CURB PER LHC STD. DTL. NO. 213.
  - CONSTRUCT VERTICAL CURB & GUTTER PER LHC STD. DTL. NO. 214.
  - INSTALL MC-7200 UNDERGROUND RETENTION SYSTEM PER DETAILS SHOWN ON SHEET C-9.
  - CONSTRUCT 6-FOOT HIGH PERIMETER WALL.
  - CONSTRUCT 3-FOOT WIDE RIBBON GUTTER AS ILLUSTRATED IN THE PAVED ALLEY DETAIL PER MAG STD DTL. NO. 202.
  - INSTALL ONE 12"x12" NYLOPLAST (OAE) TRAFFIC-RATED STORM DRAIN INLET CATCH BASINS.
  - INSTALL 1,000 GALLON OIL WATER SEPARATOR, TYPE I 360 PER DETAIL 1 ON SHEET C-11.
  - INSTALL DUAL ROLLED CURB & GUTTER ORIENTED BACK TO BACK PER LHC STD. DTL. NO. 215.
  - INSTALL 4-INCH CONCRETE BOLLARD PER MAG STD. DTL. 140.
  - INSTALL 6-INCH CONCRETE CEMENT OVER 3-INCH AGGREGATE BASE PER DETAIL 1 ON SHEET C-11.
  - PROPOSED ELECTRICAL COMPONENT, REFER TO ELECTRICAL PLANS.
  - PROPOSED 12,000 GALLON UNLEADED ABOVE-GROUND FUEL TANK, REFER TO MECHANICAL PLANS FOR DETAILS.
  - PROPOSED 10,000 GALLON / 2,000 GALLON RED DIESEL ABOVE-GROUND FUEL TANK, REFER TO MECHANICAL PLANS FOR DETAILS.
  - INSTALL 3-INCH ASPHALT CONCRETE PAVEMENT OVER 6-INCH AGGREGATE BASE PER DETAIL 2 ON SHEET C-11.



NO.	DATE	DR	CHK	REVISION	BY

**TRICO ENGINEERING, LLC**  
 231 SWANSON AVENUE, STE. 204  
 LAKE HAVASU CITY, AZ 86403  
 WWW.TRICENGINEERINGLLC.COM

**JACOBS**  
 BID SET  
 PUBLIC WORKS FUEL STATION  
 GRADING PLAN  
 CIVIL

**CONTRACTOR:** TRICO ENGINEERING, LLC  
**PROJECT NO.:** 101010  
**PROJECT:** PUBLIC SAFETY FACILITY  
**WORK AREA:** PUBLIC WORKS MAINTENANCE FACILITY  
 LAKE HAVASU CITY, AZ  
 LAKE HAVASU CITY, AZ 86403  
 (928) 852-2116

DATE	DESCRIPTION

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	OCTOBER 2023
PROJ	
DWG	C-8
SHEET	8 of 26

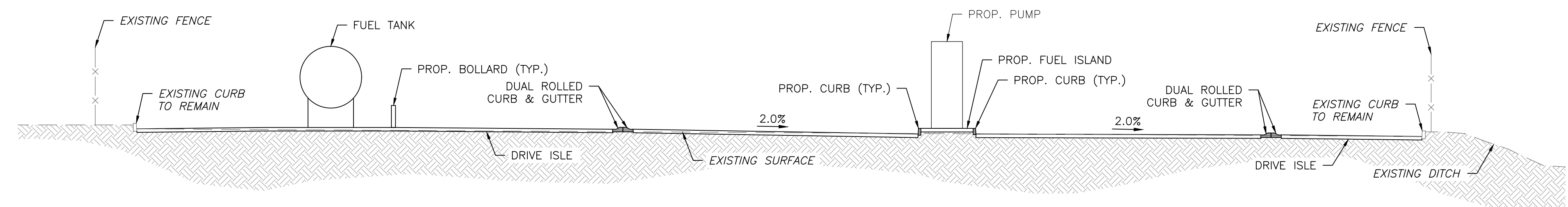
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 PARCEL 115-07-045  
 (INTERNET ACCESS PROPOSED FROM  
 EXISTING PUBLIC WORKS FACILITY)





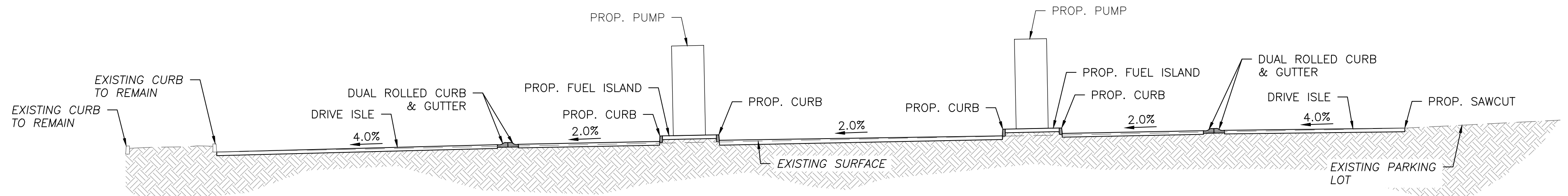
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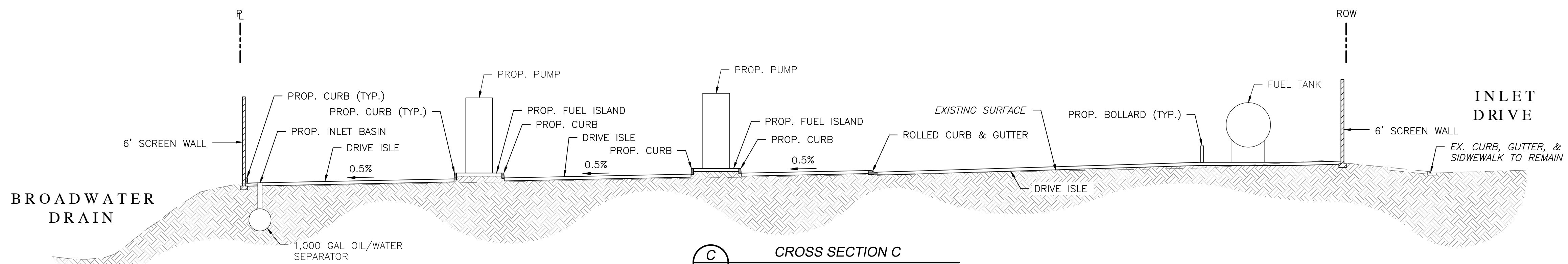
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B



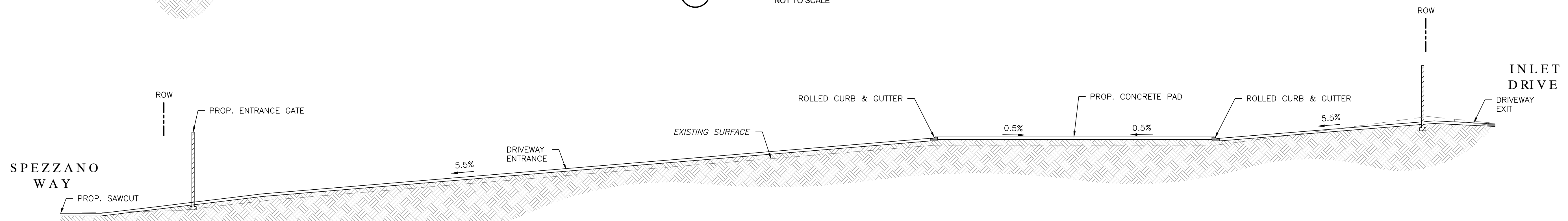
**B** CROSS SECTION B  
NOT TO SCALE

C



**C** CROSS SECTION C  
NOT TO SCALE

D



**D** CROSS SECTION D  
NOT TO SCALE



NO.	DATE	DR	REVISION	CHK	BY
					S. PERROTTO

**TRICO ENGINEERING, LLC**  
231 SWANSON AVENUE, STE. 204  
LAKE HAVASU CITY, AZ 86403  
PHONE: 908.230.4666  
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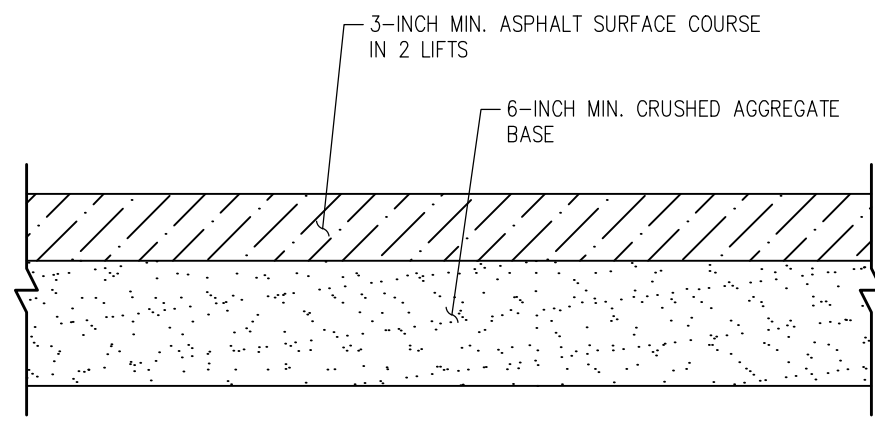
**JACOBS**  
CITY FUELING FACILITIES IMPROVEMENTS  
PROJECT NO: 101010  
PUBLIC SAFETY FACILITY  
PUBLIC WORKS MAINTENANCE FACILITY  
LAKE HAVASU CITY, AZ  
231 SWANSON AVENUE, STE. 204  
LAKE HAVASU CITY, AZ 86403  
(908) 952-2116

**JACOBS**  
BID SET  
CROSS SECTIONS  
CIVIL

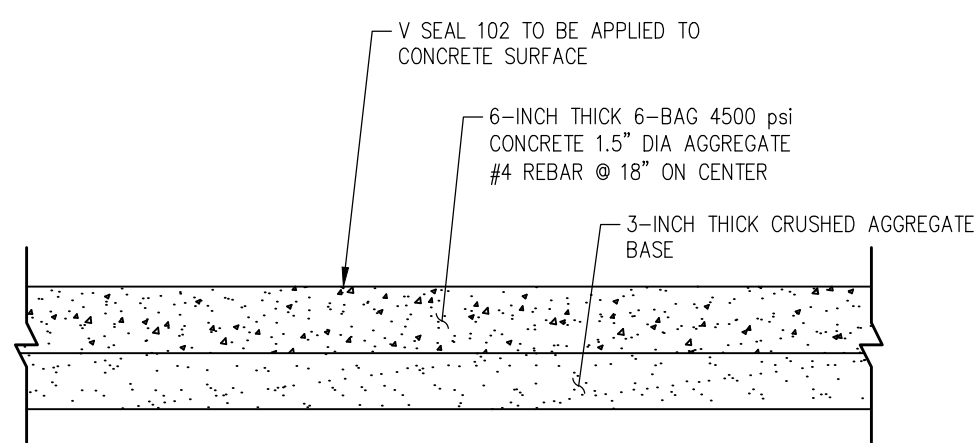
Contact Arizona 811 at least two full working days before you begin excavation

Call 811 or click Arizona811.com

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DATE	OCTOBER 2023
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SHEET	10 of 26

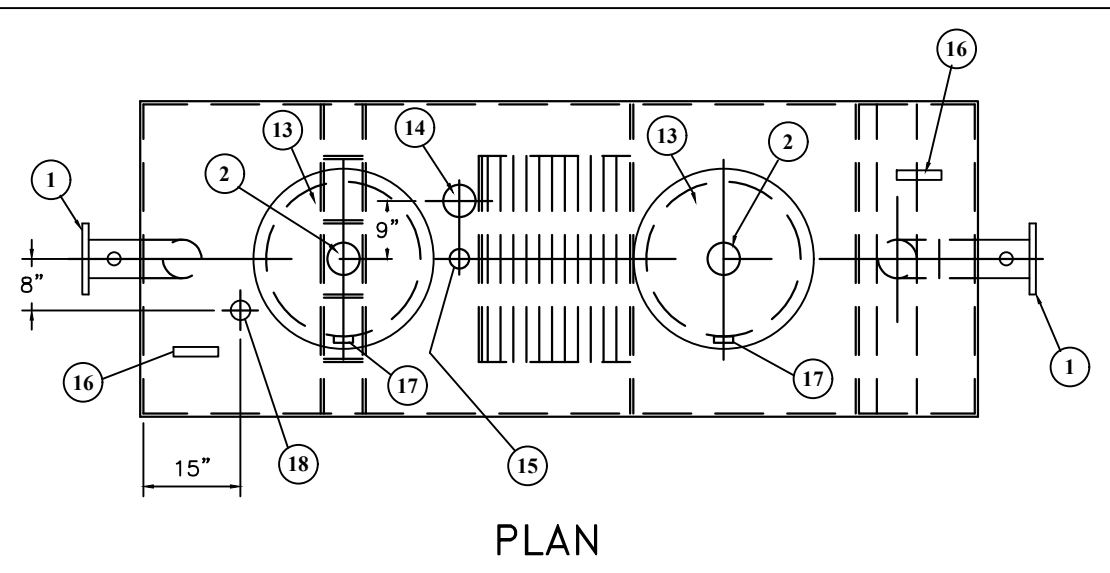


1 A.C. PAVEMENT DRIVEWAY SECTION  
NOT TO SCALE

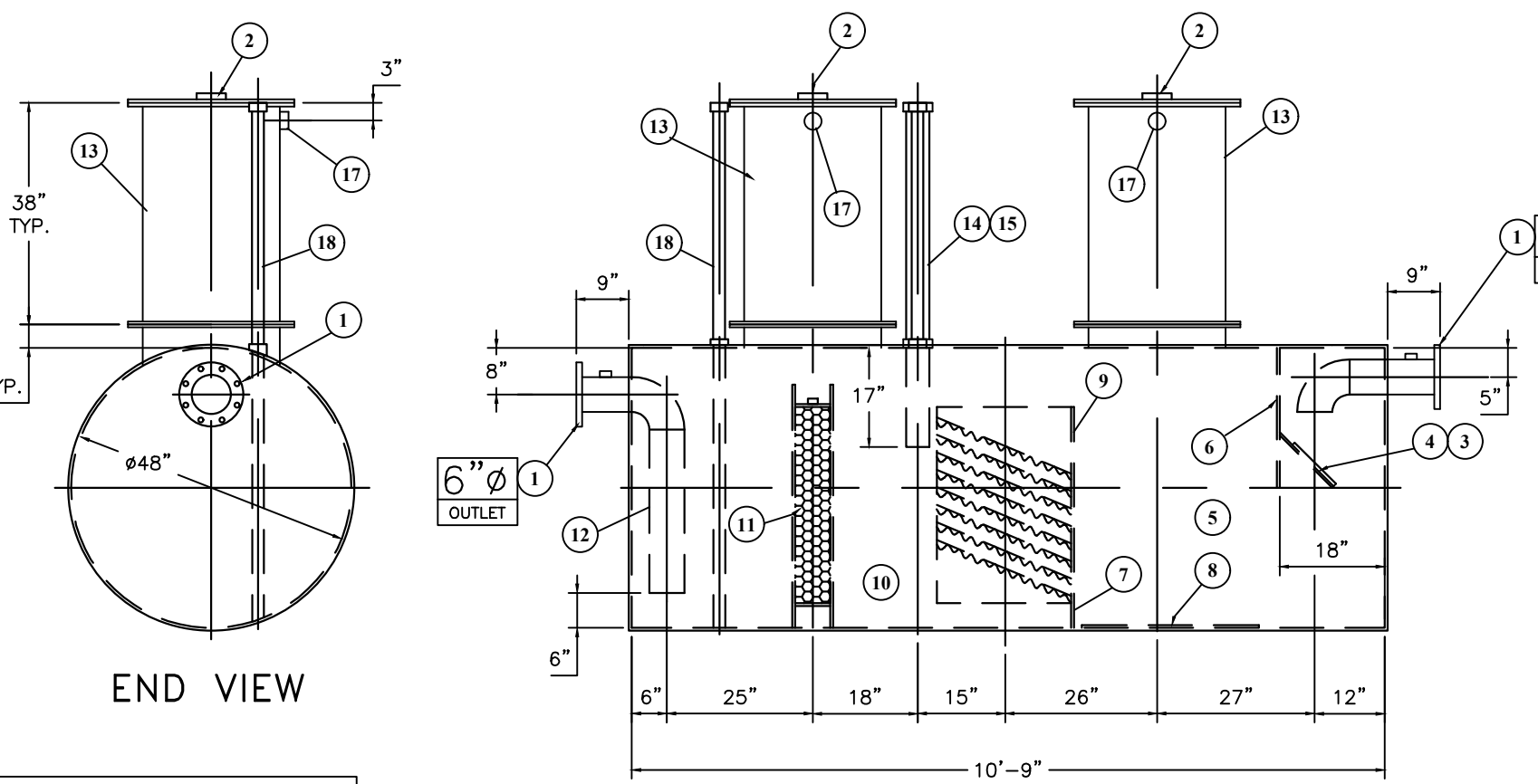


2 CONCRETE DRIVEWAY SECTION  
NOT TO SCALE

**GENERAL SPECIFICATIONS**  
 NO. RES'D (1)  
 CAPACITY: 1000 GALLONS  
 TYPE: HTC, HIGHGUARD, DW TYPE I 360  
 MATERIAL: MILD CARBON STEEL  
 FLOW RATE: 100 GPM  
 GAUGES: BASED ON 60" MAX BURIAL  
 SHELL - INNER OUTER  
 HEADS - 7 GA. 10 GA.  
 SURFACE PREP: 10 GA.  
 SSFC NO. 6 BLAST ALL EXTERIOR SURFACES  
 SSFC NO. 10 BLAST ALL INTERIOR SURFACES  
 COATING:  
 EXTERIOR - HIGHGUARD (75 MILS)  
 INTERIOR - CHEMLINE 4200 PW (15 MILS)  
 CONSTRUCTION:  
 LAP FIT & WELD ALL EXTERIOR SEAMS  
 OPERATING PRESSURE: ATMOSPHERIC



PLAN



ELEVATION

- PROVIDED EQUIPMENT**
1. 150# R.F.S.O. FLANGE W/ 2" FNPT FOR VENT
  2. 4" FNPT FOR GAUGE WITH PLUG
  3. VELOCITY HEAD DIFFUSION BAFFLE
  4. WEAR PLATE
  5. SEDIMENT CHAMBER
  6. UNDERFLOW BAFFLE (REMOVABLE)
  7. SLUDGE BAFFLE
  8. STRIKER PLATES
  9. PARALLEL CORRUGATED PLATE COALESCER, CORELLA PVC PLATES (3" PLATE SPACING)
  10. OIL/WATER SEPARATOR CHAMBER
  11. 8" THICK PETROGREEN COALESCER MATERIAL INSTALLED W/ PULL ROD, SHIPPED LOOSE
  12. STEEL OUTLET DOWNCOMER
  13. 24" MANWAY WITH BOLT-ON EXTENSION SHIPPED LOOSE
  14. 4" FNPT FOR OIL PUMP-OUT WITH INTERNAL PVC PIPE INSTALLED & RISER PIPE SHIPPED LOOSE
  15. 2" FNPT FOR LEVEL SENSOR WITH RISER PIPE SHIPPED LOOSE
  16. LIFTING LUG
  17. 2" FNPT FOR VENT
  18. 2" FNPT FOR LEAK SENSOR WITH RISER PIPE SHIPPED LOOSE
- ANCILLARY PROVIDED EQUIPMENT**
- (4) 24" FIBRELEX MANWAY GASKETS
  - (4) SETS OF NUTS/BOLTS/WASHERS FOR 24" MANWAY

- NOTES**
1. POLYURETHANE HIGHGUARD TANK IS NOT APPROVED FOR THE STORAGE OF HEATED PRODUCTS
  2. ALL VENT PIPING BY INSTALLER
  3. 15000 VOLT SPARK TEST PROVIDED AT FACTORY

**REVISIONS**

**Highland Tank**

U.S. Patent #4,722,800 Canadian Patent # 1,296,263

1000 GALLON OIL WATER SEPARATOR  
 HTC, HIGHGUARD, DW TYPE I 360

CUSTOMER:  
 PROJECT:  
 QUOTE NO: 0100HGDWHTCHDS

SCALE: DATE: DWG. BY: DWG. NO:

NOTE:  
 ALL RIGHTS RESERVED. THIS DRAWING OR ANY PART THEREOF MUST NOT BE REPRODUCED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF HIGHLAND TANK.  
 HIGHLAND TANK SHALL BE RESPONSIBLE ONLY FOR ITEMS INDICATED ON THIS FABRICATION DRAWING UNLESS OTHERWISE NOTED. CUSTOMER IS RESPONSIBLE FOR VERIFYING CORRECTNESS OF SIZE / LOCATION OF FITTINGS, ACCESSORIES & COATINGS SHOWN ON THIS DRAWING.

1,000 GALLON OIL WATER SEPARATOR DETAIL  
NTS

Issued: 02/01/2019

**STREET WIDTH DATA**

STREET	'B'	'C'
BOULEVARD	15 FEET	27 FEET
AVENUE	13 FEET	22 FEET
DRIVE	9 FEET	21 FEET
CUL-DE-SAC	7 FEET	18 FEET

**DRIVEWAY WIDTH SPECIFICATIONS 'A' \***

USE	MINIMUM WIDTHS
ONE-WAY	MULTI-FAMILY: 12 FEET
	COMMERCIAL-INDUSTRIAL: 15 FEET
TWO-WAY	MULTI-FAMILY: 18 FEET
	COMMERCIAL-INDUSTRIAL: 24 FEET

\* MAXIMUM DRIVEWAY WIDTH IS 40 FEET  
 \* TOTAL OF DRIVEWAY WIDTHS MAY NOT EXCEED 60% OF FRONTAGE 'D'  
 \* 10' (MIN), 20' (MAX) DRIVEWAY RADIUS

\* UNLESS RECOMMENDED IN A TRAFFIC REPORT APPROVED BY LAKE HAVASU CITY.

**NOTES:**

1. ALL SIDEWALKS TO BE 4" THICK CONCRETE.
2. ALL DRIVEWAYS TO BE 6" THICK CONCRETE.
3. NO REBAR OR WIRE MESH IN RIGHT-OF-WAY.
4. NO COLORED CONCRETE IN RIGHT-OF-WAY UNLESS APPROVED BY LAKE HAVASU CITY.
5. CONCRETE FOR STRUCTURES IN RIGHT-OF-WAY SHALL BE A 6 SACK PER CUBIC YARD MIX WITH A 4" MAXIMUM SLUMP AND BE ABLE TO PASS A 3000 PSI COMPRESSIVE STRENGTH TEST AT 28 DAYS.
6. SIDEWALK CROSS-SLOPE (BACK OF SIDEWALK TO CURB) TO BE 1% MIN / 2% MAX.

LAKE HAVASU CITY

Standard Details  
 Roadway Improvements

Street & Driveway Intersection  
 (Zone R-3 or Greater)

Scale: N.T.S.  
 Detail No. 206

Issued: 02/01/2019

**NOTES:**

1. ALL VERTICAL SURFACES TO BE FORMED.
2. CLASS 'B' CONCRETE 2500 PSI.
3. ALL EXPOSED SURFACES TO BE TROWEL FINISHED EXCEPT AS SHOWN.
4. CONTRACTION JOINT SPACING 10' MAX.
5. H=6" OR AS SPECIFIED ON PLANS.
6. EXPANSION JOINTS PLACED AT INTERVALS NOT TO EXCEED 100 FEET.

Scale: N.T.S.  
 Detail No. 213

Issued: 02/01/2019

**NOTES:**

1. CLASS 'B' CONCRETE 2500 PSI.
2. ALL EXPOSED SURFACES TO BE TROWEL FINISHED EXCEPT AS SHOWN.
3. CONTRACTION JOINT SPACING 10' MAX.
4. H=6" OR AS SPECIFIED ON PLANS.
5. EXPANSION JOINTS PLACED AT INTERVALS NOT TO EXCEED 100 FEET.

Scale: N.T.S.  
 Detail No. 214

Issued: 02/01/2019

**NOTES:**

1. MODIFIED MAG 220 (TYPE D).
2. PRIOR APPROVAL FROM ENGINEERING DIVISION REQUIRED.
3. CLASS 'B' CONCRETE 2500 PSI.
4. PLACE 3/4" EXPANSION JOINTS WITH TWO-FOOT DOWELS AT RADIUS POINTS. THESE DOWELS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
5. INSTALL 1 1/2"-DEEP CONTRACTION JOINTS AT APPROXIMATELY 15' INTERVALS.

Scale: N.T.S.  
 Detail No. 215

TRICO ENGINEERING, LLC

231 SWANSON AVENUE, STE. 204  
 LAKE HAVASU CITY, AZ 86403  
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CITY FUELING FACILITIES IMPROVEMENTS  
 PROJECT NO: 101010  
 PUBLIC SAFETY FACILITY  
 PUBLIC WORKS MAINTENANCE FACILITY

LAKE HAVASU CITY, AZ  
 LAKE HAVASU CITY, AZ 86403  
 (928) 952-7116

JACOBS

BID SET  
 GENERAL DETAILS  
 CIVIL

VERIFY SCALE  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 0" = 1"

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 DWG: C-11  
 SHEET: 11 of 26

Scale: N.T.S.  
 Detail No. 206

Scale: N.T.S.  
 Detail No. 213

Scale: N.T.S.  
 Detail No. 214

Scale: N.T.S.  
 Detail No. 215

REVISION  
 BY: APVD  
 DATE: DSGN

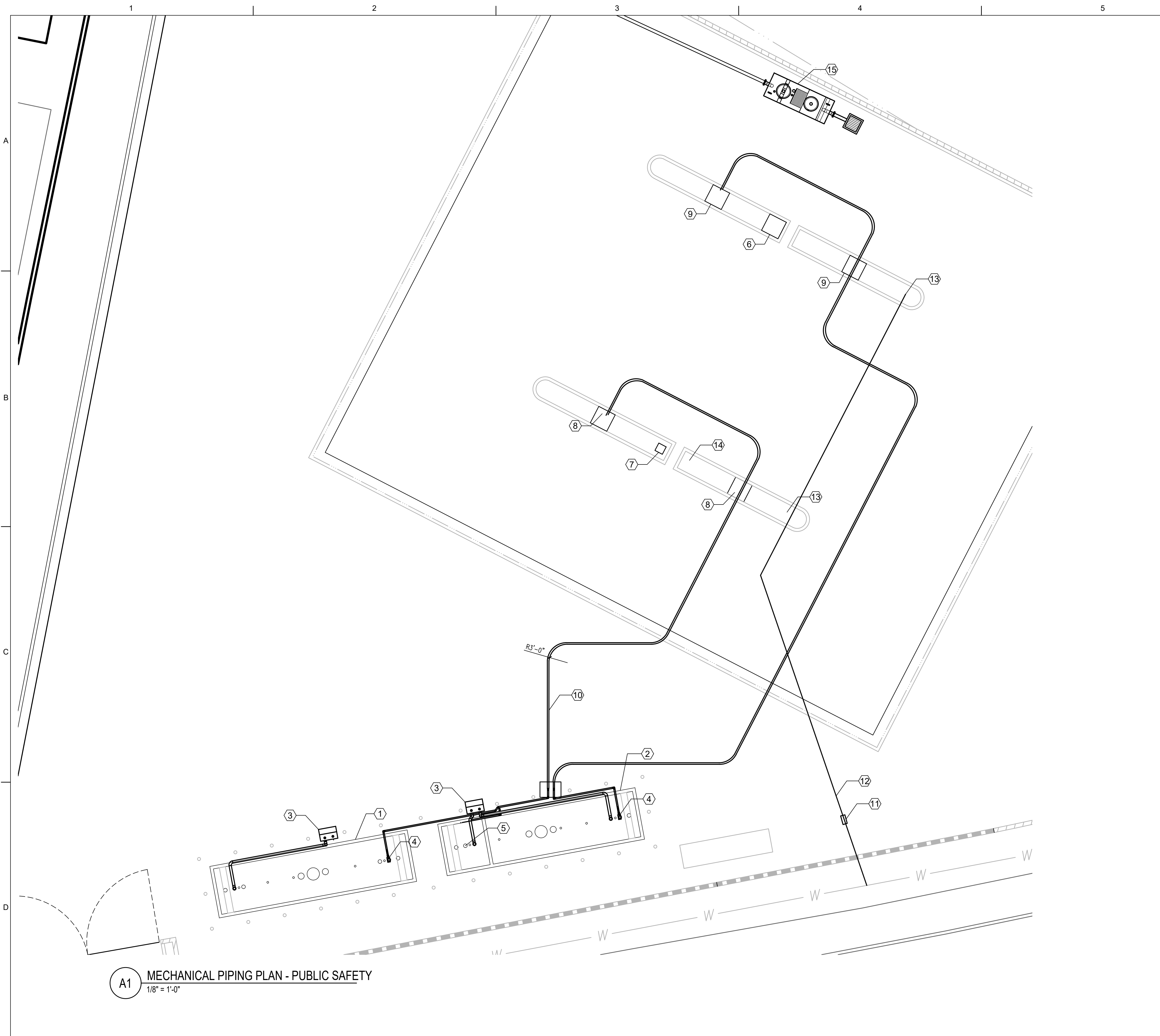
NO. DATE

DR: S. PERROTTO  
 CHK: R. EDWARDS  
 REVISION: S. PERROTTO

APVD: S. PERROTTO

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**A1** MECHANICAL PIPING PLAN - PUBLIC SAFETY  
1/8" = 1'-0"

**PLAN NOTES:**

- A. VERIFY ALL EXISTING CONDITIONS. INFORM OWNER'S PROJECT MANAGER AND ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS.
- B. THE PIPING AND EQUIPMENT LAYOUT HAS BEEN UTILIZED FOR SCHEMATIC REPRESENTATION. ACTUAL CONDITION MAY VARY.
- C. OTHER EXISTING EQUIPMENT AND PIPING IS NOT SHOWN.

**KEYED NOTES:**

- ① 12,000 GALLON DOUBLE WALL GASOLINE STORAGE TANK
- ② 12,000 GALLON DOUBLE WALL DIESEL STORAGE TANK. (10,000 ROAD DIESEL/2,000 RED DIESEL)
- ③ REMOTE FILL CABINET WITH SPILL CONTAINMENT
- ④ SUBMERSIBLE PUMP, 3/4 HP.
- ⑤ TANK MOUNTED RED DIESEL DISPENSER, 1/3 HP.
- ⑥ 400 GALLON DEF TANK WITH DISPENSER
- ⑦ FUEL KIOSK
- ⑧ GASOLINE DISPENSER, TWO HOSE
- ⑨ DIESEL DISPENSER, TWO HOSE
- ⑩ 2" DOUBLE WALL, UNDERGROUND FUEL PIPING
- ⑪ DOUBLE CHECK VALVE BACKFLOW PREVENTER, WATTS SERIES 007, OR EQUAL.
- ⑫ 1" POTABLE WATER LINE
- ⑬ YARD HYDRANT, 3/4", SIMMONS MODEL 802SB, OR EQUAL.
- ⑭ CLASS BC FIRE EXTINGUISHER
- ⑮ OIL-WATER SEPARATOR. SEE DETAIL DWG. C-11



NO.	DATE	DR	CHK	REVISION	BY	APVD

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PUBLIC WORKS MAINTENANCE FACILITY  
CITY HALL FACILITY  
LAKE HAVASU CITY, AZ  
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**Jacobs**

MECHANICAL PIPING PLAN  
PUBLIC SAFETY  
MECHANICAL

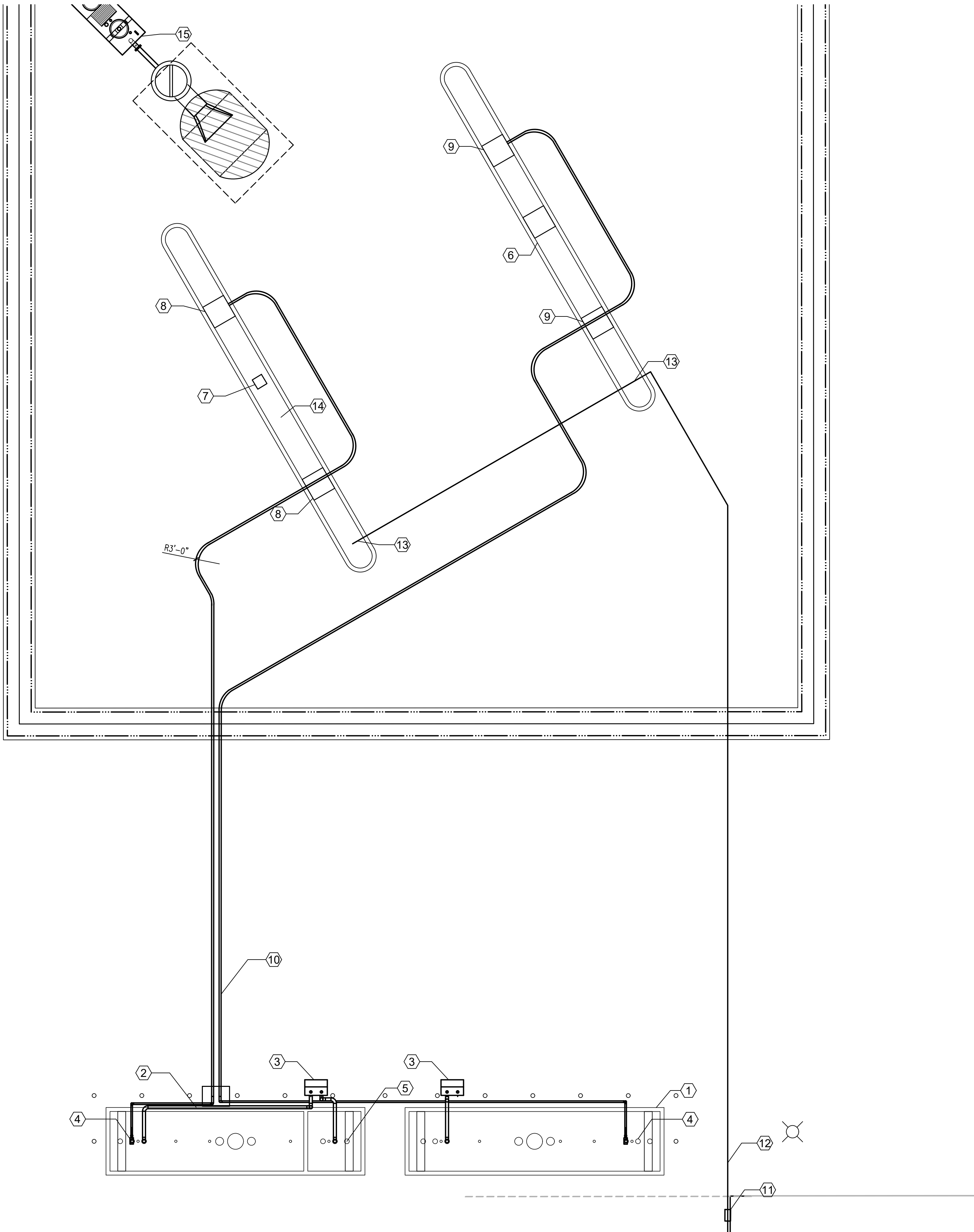
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DWG	M-2
SHEET	13 of 26

A

B

C

D



**A1** MECHANICAL PIPING PLAN - PUBLIC WORKS  
1/8" = 1'-0"

**PLAN NOTES:**

- A. VERIFY ALL EXISTING CONDITIONS. INFORM OWNER'S PROJECT MANAGER AND ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS.
- B. THE PIPING AND EQUIPMENT LAYOUT HAS BEEN UTILIZED FOR SCHEMATIC REPRESENTATION. ACTUAL CONDITION MAY VARY.
- C. OTHER EXISTING EQUIPMENT AND PIPING IS NOT SHOWN.

**KEYED NOTES:**

- ① 12,000 GALLON DOUBLE WALL GASOLINE STORAGE TANK
- ② 12,000 GALLON DOUBLE WALL DIESEL STORAGE TANK. (10,000 ROAD DIESEL/2,000 RED DIESEL)
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- ⑦ FUEL KIOSK
- ⑧ GASOLINE DISPENSER, TWO HOSE
- ⑨ DIESEL DISPENSER, TWO HOSE
- ⑩ 2" DOUBLE WALL, UNDERGROUND FUEL PIPING
- ⑪ DOUBLE CHECK VALVE BACKFLOW PREVENTER, WATTS SERIES 007, OR EQUAL.
- ⑫ 1" POTABLE WATER LINE
- ⑬ YARD HYDRANT, 3/4", SIMMONS MODEL 802SB, OR EQUAL.
- ⑭ CLASS BC FIRE EXTINGUISHER
- ⑮ OIL-WATER SEPARATOR. SEE DETAIL DWG. C-11



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**CITY FUELING FACILITIES IMPROVEMENTS**  
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CITY HALL FACILITY

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MECHANICAL PIPING PLAN  
PUBLIC WORKS  
MECHANICAL

VERIFY SCALE
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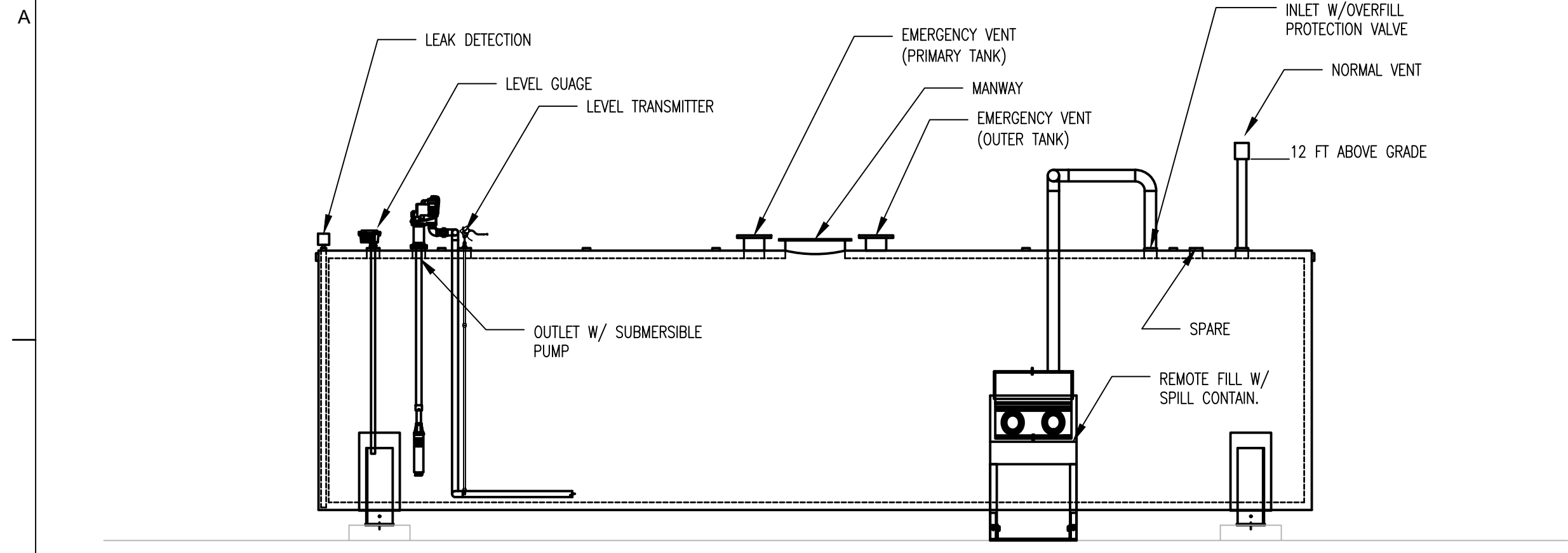
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**A1** FUEL STORAGE TANK ELEVATION  
NOT TO SCALE

### EMERGENCY INSTRUCTIONS

IN CASE OF FIRE OR SPILL:

- (1) USE EMERGENCY STOP BUTTON.
- (2) REPORT ACCIDENT BY CALLING 911.

**A2** EMERGENCY SIGNAGE  
NOT TO SCALE

### WARNING

NO SMOKING  
STOP MOTOR

IT IS UNLAWFUL AND DANGEROUS TO DISPENSE GASOLINE INTO UNAPPROVED CONTAINERS.

NO FILLING OF PORTABLE CONTAINERS IN OR ON A MOTOR VEHICLE.

PLACE CONTAINER ON GROUND BEFORE FILLING.

DISCHARGE YOUR STATIC ELECTRICITY BEFORE FUELING BY TOUCHING A METAL SURFACE AWAY FROM THE NOZZLE.

DO NOT RE-ENTER YOUR VEHICLE WHILE GASOLINE IS PUMPING.

IF A FIRE STARTS DO NOT REMOVE NOZZLE- BACK AWAY IMMEDIATELY.

DO NOT ALLOW INDIVIDUALS UNDER LICENSED AGE TO USE THE PUMP.

**A3** WARNING SIGN  
NOT TO SCALE



NO.	DATE	DR	CHK	BY	APVD
		S. GOODELL		R. EDWARDS	G.S. HINTE

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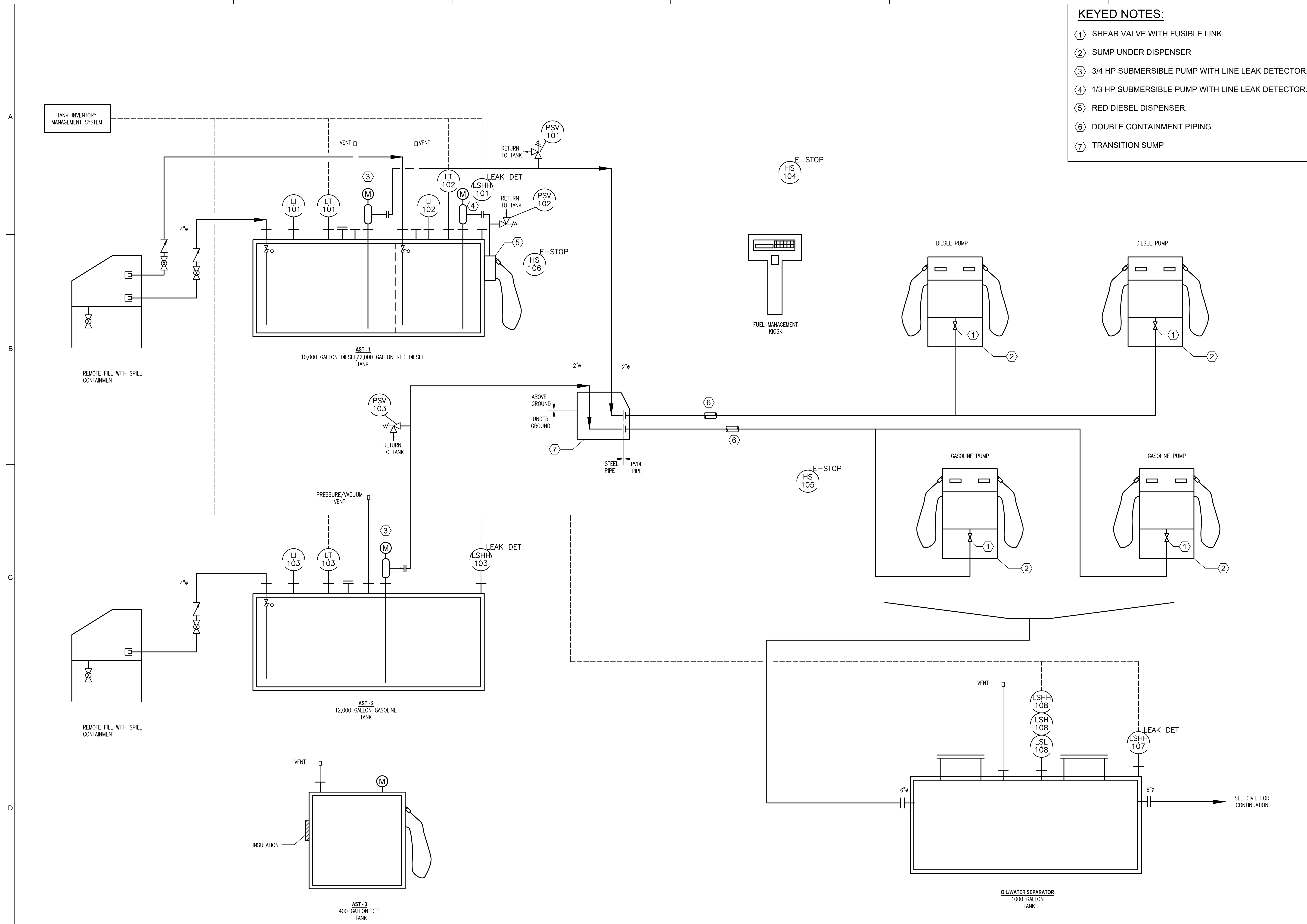
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MECHANICAL PIPING PLAN  
PUBLIC WORKS  
MECHANICAL

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- KEYED NOTES:**
- ① SHEAR VALVE WITH FUSIBLE LINK.
  - ② SUMP UNDER DISPENSER
  - ③ 3/4 HP SUBMERSIBLE PUMP WITH LINE LEAK DETECTOR.
  - ④ 1/3 HP SUBMERSIBLE PUMP WITH LINE LEAK DETECTOR.
  - ⑤ RED DIESEL DISPENSER.
  - ⑥ DOUBLE CONTAINMENT PIPING
  - ⑦ TRANSITION SUMP



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 LAKE HAVASU CITY, AZ  
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 (928) 952-2118

**Jacobs**  
 FUEL SYSTEM  
 PIPING & INSTRUMENT DIAGRAM  
 MECHANICAL

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SHEET	16 of 26



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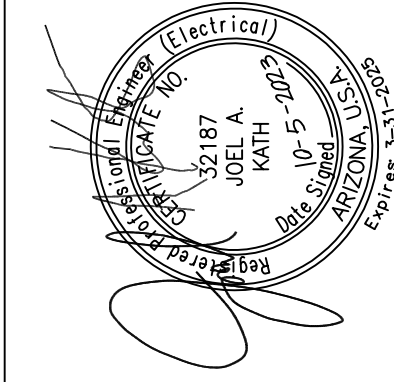
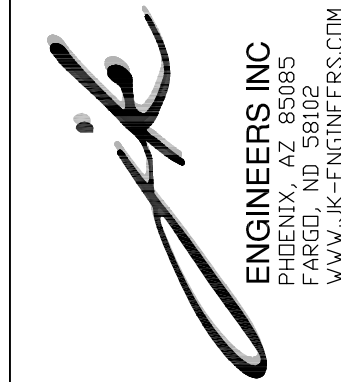
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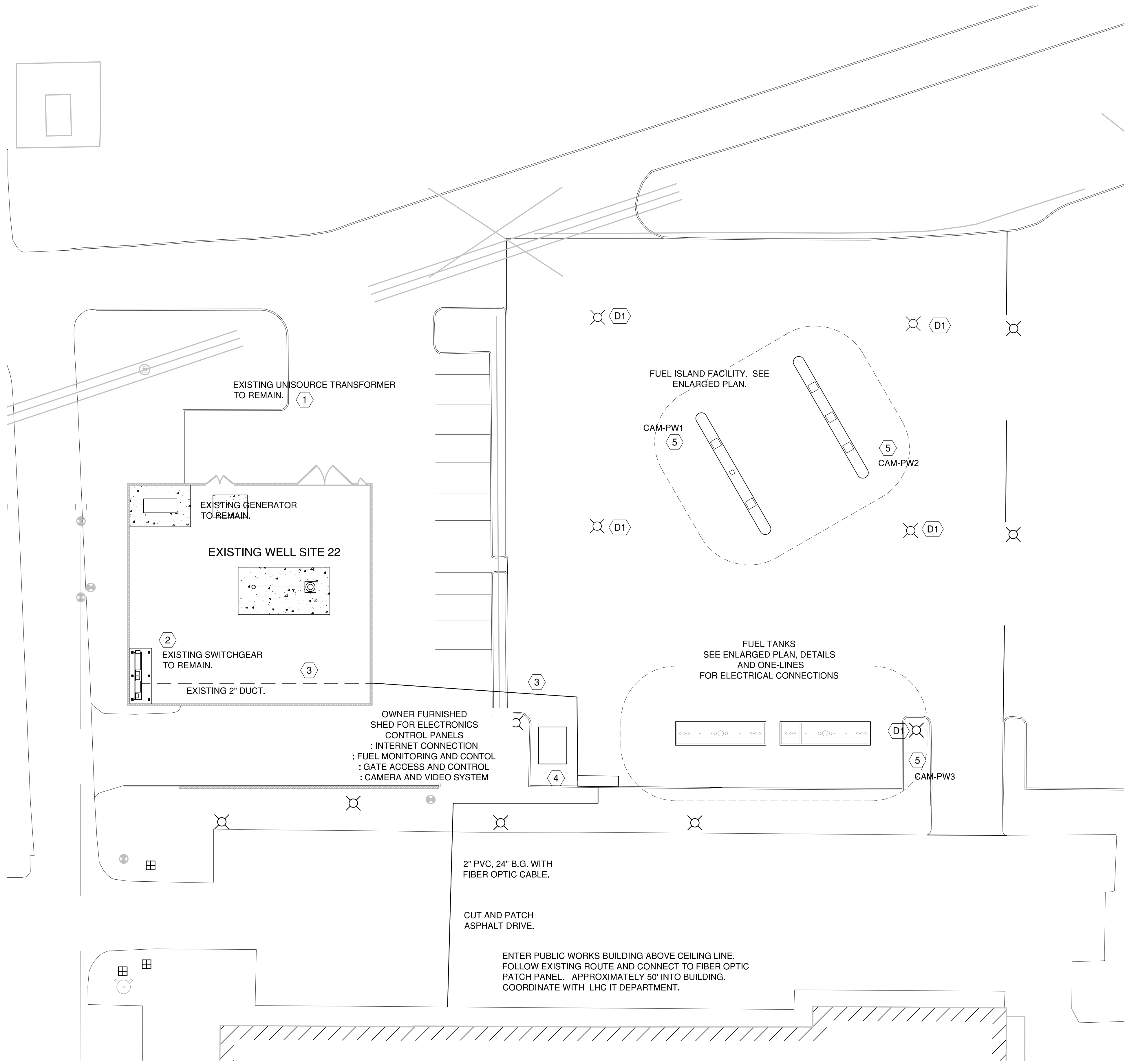
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GENERAL NOTES

REFER TO ONE-LINE DIAGRAMS FOR FEEDER AND CONDUCTOR SIZES AND QUANTITIES. PLAN VIEWS DO NOT INDICATE ALL CONDUITS. REFER TO ONE-LINE DIAGRAMS, EQUIPMENT SPECIFICATIONS, AND EQUIPMENT SHOP DRAWINGS FOR BRANCH CIRCUITRY, CONTROL, INSTRUMENTATION, POWER, AND COMMUNICATION CONDUIT AND CONDUCTORS. COORDINATE FIELD PLACEMENT OF INSTRUMENTATION CONDUIT AND CONDUCTORS WITH SYSTEMS VENDOR FABRICATION DRAWINGS. SEE TYPICAL DETAILS FOR CONDUIT ROUTING, PANEL SUPPORTS AND CONCRETE PADS FOR ELECTRICAL EQUIPMENT.

ELECTRICAL PLAN NOTES

- 1 EXISTING UNISOURCE 277/480V TRANSFORMER AND SERVICE TO REMAIN. 2 EXISTING SES, METER AND SERVICE TO REMAIN. SEE ONE-LINE DIAGRAM FOR MODIFICATIONS. CONNECT TO EXISTING DISTRIBUTION PANEL FOR POWER SOURCE FOR NEW FUEL FACILITY. 3 EXISTING 2" PVC CONDUIT FROM EXISTING DISTRIBUTION PANEL AND STUBBED BEYOND PERIMETER WALL OF WELL FACILITY. APPROXIMATELY 6" DEEP, (BELOW EXISTING WALL AND FOOTING.) CONTRACTOR RESPONSIBLE TO TRACE AND LOCATE CONDUIT. APPROXIMATELY 10' FROM SOUTHERLY WALL. INTERCEPT EXISTING DUCT AND UTILIZE FOR SERVICE SOURCE FOR NEW FUEL FACILITY. 4 NEW ELECTRICAL SERVICE PANELS FOR PUBLIC WORKS FUELING FACILITY, AND ELECTRICAL EQUIPMENT ENCLOSURE FOR FUEL FACILITY. SEE ONE-LINE DIAGRAMS AND ELEVATION DETAILS. 5 CAMERA LOCATION TO BE MOUNTED ON LIGHT POLE. CONTRACTOR TO PROVIDE EMPTY CONDUIT SYSTEM. SEE CAMERA SYSTEM ONE-LINE DIAGRAM 6 PROVIDE INGROUND PULLBOX LOCATED ADJACENT TO OPERATOR. PROVIDE POWER AND COMMUNICATION DUCTS AND HOMERUN TO POWER PANEL PS1 AND TO ACCESS CONTROL PANEL ACP. SEE ONE-LINE DIAGRAM FOR CONDUIT AND CONDUCTORS AND DETAILS. 7 INSTALL FIBER OPTIC CABLE TO PUBLIC WORKS FACILITY. CONNECT AT EXISTING SYSTEM COMMUNICATION CLOSET. SEE FIBER OPTIC ONE-LINE DIAGRAM

ELECTRICAL DEMOLITION NOTES

- D1 EXISTING LIGHT POLE TO BE REMOVED BY UNISOURCE. RESTORATION OF EXISTING LIGHTING CIRCUITS TO BE BY UNISOURCE. CITY TO CONTRACT WITH UNISOURCE SEPARATE FROM THIS CONTRACT.

Revision table with columns: NO., DATE, REVISION, CHK, DR, BY, APVD

TRICO ENGINEERING, LLC logo and project information: CITY FUELING FACILITIES IMPROVEMENTS, PROJECT NO: 101010, PUBLIC SAFETY FACILITY, PUBLIC WORKS MAINTENANCE FACILITY.

JACOBS logo and title: PUBLIC WORK PLAN ELECTRICAL

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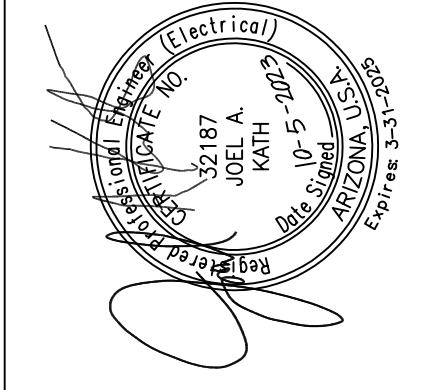
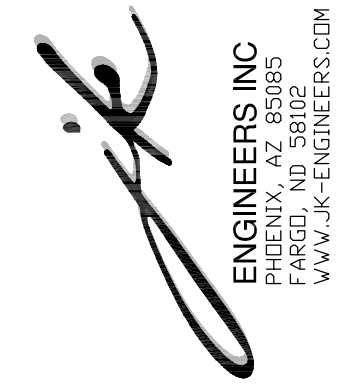
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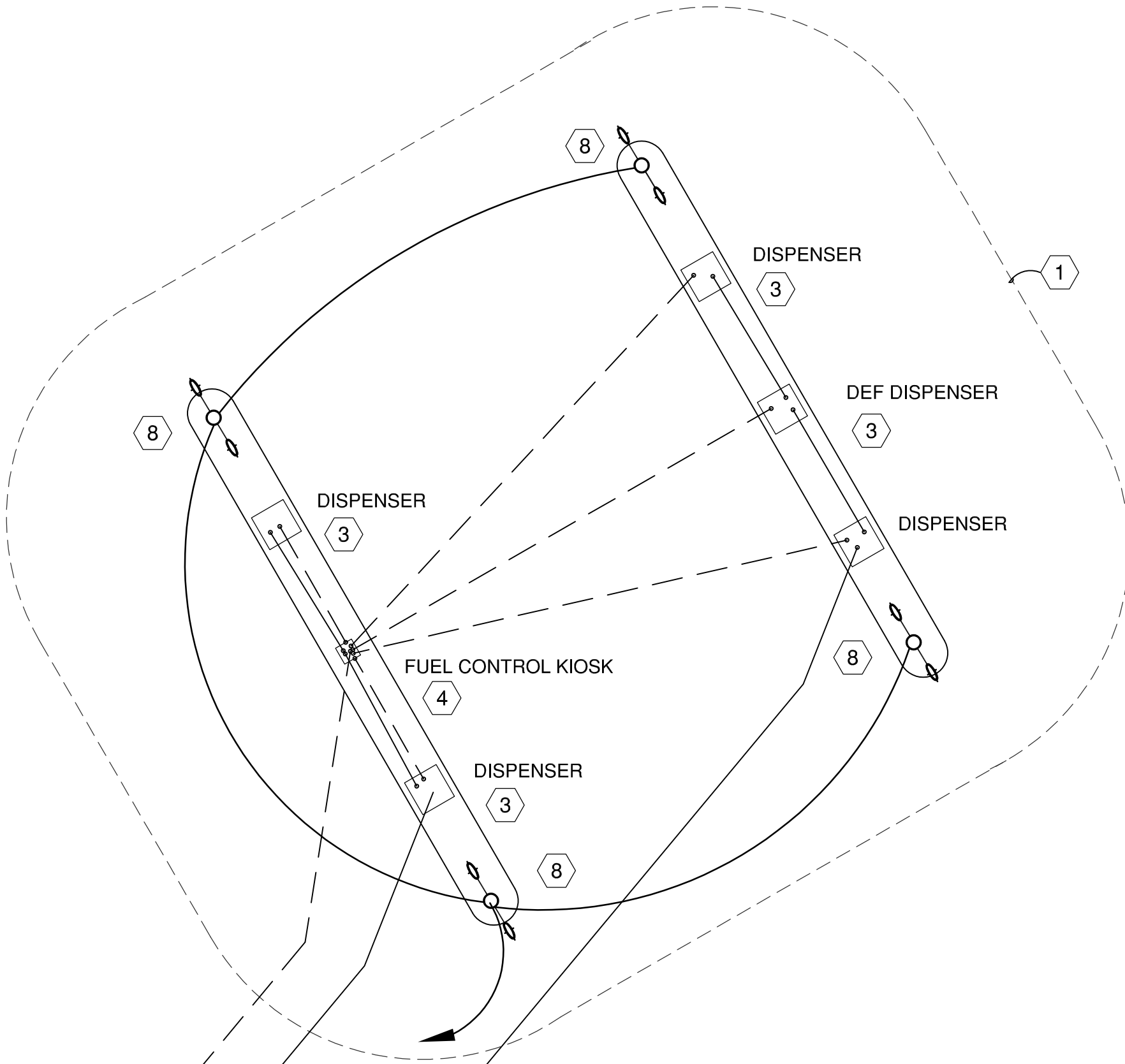
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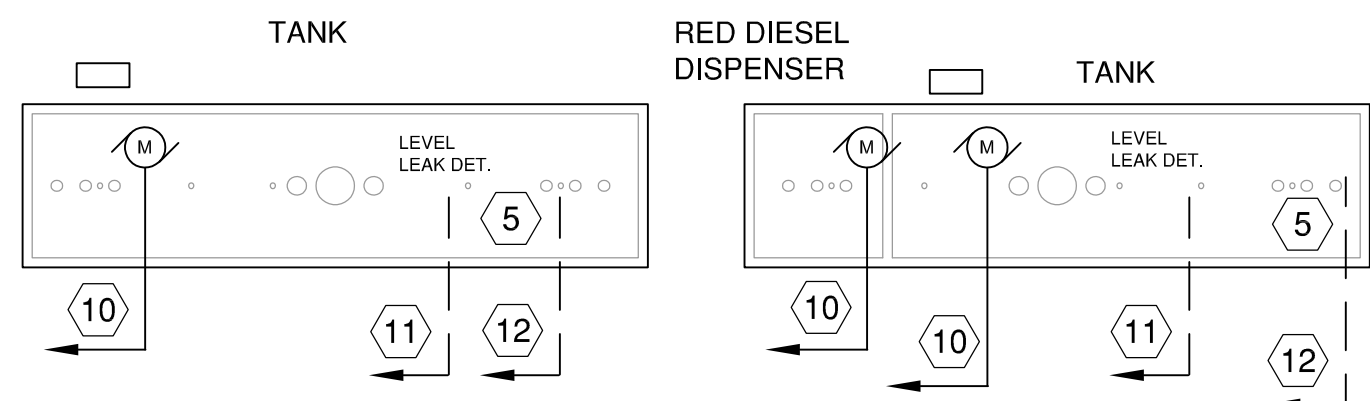


CONTROL CONDUIT AND CONDUCTORS 2

POWER CONDUIT AND CONDUCTORS 2

OWNER FURNISHED SHED FOR ELECTRONICS CONTROL PANELS  
: INTERNET CONNECTION  
: FUEL MONITORING AND CONTROL  
: GATE ACCESS AND CONTROL  
: CAMERA AND VIDEO SYSTEM

ELECTRICAL PANELS AND CONTROL  
SEE ONE LINE DIAGRAM.



AUTOMATIC GATE #PW-1 AND LIGHT POLE. SEE DETAILS.

CARD READERS AND SUPPORT SEE DETAILS

GENERAL NOTES

REFER TO ONE-LINE DIAGRAMS FOR FEEDER AND CONDUCTOR SIZES AND QUANTITIES.

SEE TYPICAL DETAILS FOR CONDUIT ROUTING, PANEL SUPPORTS AND CONCRETE PADS FOR ELECTRICAL EQUIPMENT.

PLAN VIEWS DO NOT INDICATE ALL CONDUITS. REFER TO ONE-LINE DIAGRAMS, EQUIPMENT SPECIFICATIONS, AND EQUIPMENT SHOP DRAWINGS FOR BRANCH CIRCUITRY, CONTROL, INSTRUMENTATION, POWER, AND COMMUNICATION CONDUIT AND CONDUCTORS. COORDINATE FIELD PLACEMENT OF INSTRUMENTATION CONDUIT AND CONDUCTORS WITH SYSTEMS VENDOR FABRICATION DRAWINGS.

ALL INSTALLATION SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE. FUEL ISLAND AND FUEL TANK INSTALLATION IS AS REQUIRED BY ARTICLE 514. PROVIDE EXPLOSION PROOF SEALS AS REQUIRED. NEATLY ORGANIZE SEALS WHEN IN MULTIPLE LOCATIONS.

ALL CONDUIT CONNECTIONS TO FUEL DISPENSING AND FUEL TANKS SHALL BE RIGID STEEL CONDUIT. BELOW GRADE INSTALLATION SHALL UTILIZE PVC COATED RIGID STEEL CONDUIT AS A CORROSION PROTECTION FOR DIRECT CONTACT WITH SOIL.

ANY BELOW GRADE CONDUIT THAT CROSSES WITHIN THE BOUNDRY AS DEFINED IN NEC ARTICLE 514 SHALL UTILIZE PVC COATED RIGID STEEL CONDUIT FROM SOURCE TO DEVICE.

CONDUIT ROUTING, CONDUCTORS AND CONDUIT IS BASED ON TYPICAL MANUFACTURER/VENDOR OF FUEL DISPENSING AND LEAK DETECTION SYSTEMS. COORDINATE AND ALTER ROUTES AND METHODS TO MEET REQUIREMENTS OF THE INSTALLING MANUFACTURER.

SUBMIT CONDUIT AND CONDUCTOR LAYOUT PLAN TO ENGINEER AND FUEL SYSTEMS VENDOR PRIOR TO START OF CONSTRUCTION.

INSPECTION OF TRENCHED AND INSTALLED CONDUIT SHALL BE APPROVED BY ENGINEER AND FUEL SYSTEM VENDOR PRIOR TO BACKFILL OF ANY CONDUIT TRENCH.

ELECTRICAL NOTES: OWNER PROVIDED SHED

AT COMPLETION OF THE CONSTRUCTION, THE OWNER WILL INSTALL A SHED TO ENCLOSE THE ELECTRONIC CONTROLLERS FOR THE STATION.

INTERNET MODEM AND WAN  
FUEL CONTROL AND MANAGEMENT SYSTEM  
CAMERA SYSTEM  
INTERFACE WITH LEAK DETECTION SYSTEM  
GATE ACCESS CONTROL.

CONTRACTOR TO COORDINATE CONDUIT STUBS FOR THESE SYSTEMS WITH ENGINEER AND OWNER PRIOR TO INSTALLATION OF CONDUIT.

SEE SHEMATIC OF OWNER FURNISHED SHED FOR APPROXIMATE LOCATIONS

ELECTRICAL PLAN NOTES

- 1 20' PERIMETER LINE DESIGNATION FROM THE FUEL EQUIPMENT AS NOTED IN NEC 514.
- 2 REFER TO FUEL SYSTEM ELECTRICAL ONE-LINE DIAGRAMS FOR BRANCH CIRCUIT CONDUCTOR SIZES AND QUANTITIES.
- 3 STUB CONDUIT INTO SUMP OF DISPENSERS. PROVIDE SEALS AS PER ARTICLE 514.
- 4 STUB CONDUIT INTO FUEL KIOSK. PROVIDE SEALS AS PER ARTICLE 514.
- 5 PROVIDE CONNECTION TO TANK LEAK DETECTION AND FUEL LEVEL MONITORING SYSTEM. PROVIDE CONNECTION TO INTERNAL TANK PUMP MOTOR. TYPICAL EACH TANK. SEE ONE-LINE DIAGRAM AND DETAILS.
- 6 PROVIDE CONNECTION TO EMERGENCY STOP PUSH BUTTON. LOCATED ON SEPARATE PEDESTAL ADJACENT TO POWER PANEL.
- 7 PROVIDE CONTACTOR PANEL FOR EMERGENCY FUEL SHUTOFF.
- 8 PROVIDE TWIN HEAD LIGHT AND POLE ON 30" TALL CONCRETE BASE ON FUEL ISLAND. MOTION SENSOR ACTIVATED.
- 9 #12, 3/4" TO SITE PANEL FOR LIGHTING CIRCUIT.
- 10 PROVIDE CONNECTION TO TANK SUMP MOTOR PER MANUFACTURER REQUIREMENTS. PROVIDE #12, 3/4" TO SITE PANEL VIA EMERGENCY SHUTDOWN CONTACTOR. MOTOR AND CIRCUIT TO BE 208V 2P.
- 11 PROVIDE CONNECTION TO TANK LEAK DETECTION AND FUEL LEVEL MONITORING SYSTEMS PER MANUFACTURER REQUIREMENTS. PROVIDE 3/4" TO FUEL CONTROL SYSTEM PANEL.
- 12 PROVIDE POWER AND CONTROL CONDUIT AND CONDUCTOR PER MANUFACTURER REQUIREMENTS. PROVIDE 3/4" POWER TO SITE PANEL VIA EMERGENCY SHUTDOWN CONTACTOR. PROVIDE 3/4" CONTROL CONDUIT TO FUEL CONTROL PANEL.

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			JAK	JAK

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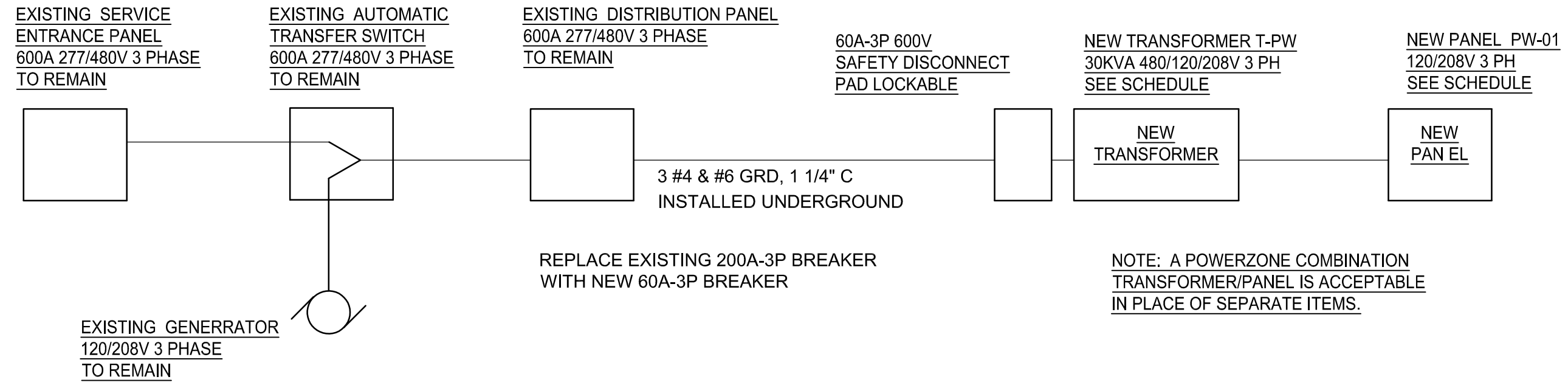
**CITY FUELING FACILITIES IMPROVEMENTS**  
PROJECT NO: 101010  
**PUBLIC SAFETY FACILITY**  
**PUBLIC WORKS MAINTENANCE FACILITY**

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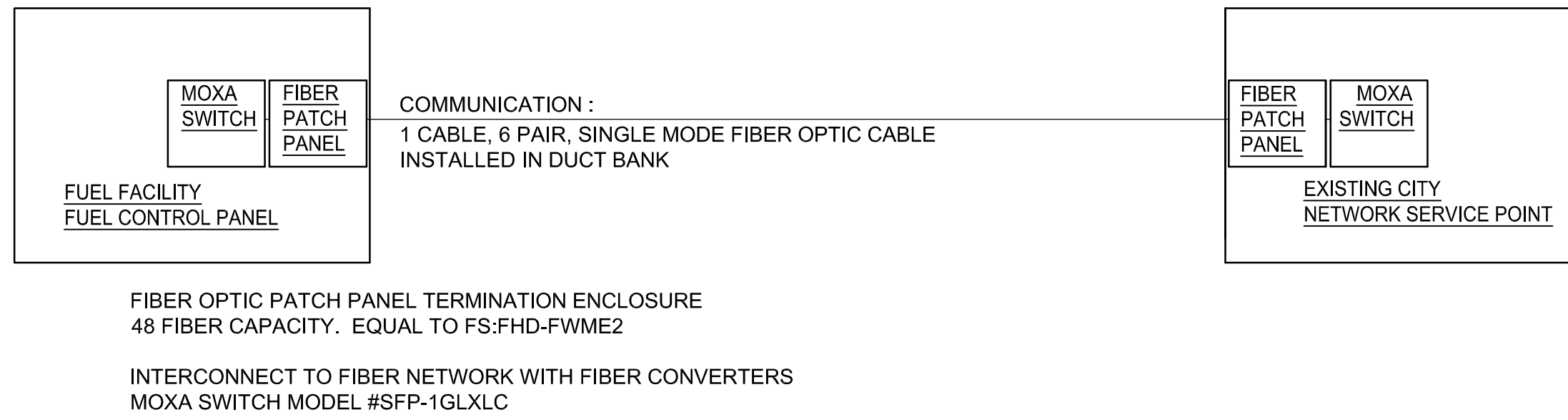
**PUBLIC WORK ENLARGED PLAN ELECTRICAL**

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	OCTOBER
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DWG	E-2
SHEET	18 of 26



**1 PUBLIC WORKS POWER ONE-LINE DIAGRAM**  
E-3 NO SCALE

POWER SUPPLY: 120/208 VAC, 1PH, 3W BUS RATING: 100A, 10K A.I.C. MAIN BREAKER 100A-3P				LOCATION: EXTERIOR WP NEMA 4 MOUNTING: SURFACE NAME: PW-P1			
DESCRIPTION	CCT BKR AMP	CCT No	PHASE A B C	CCT No	CCT BKR AMP	DESCRIPTION	
AST-1 GAS PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	1		2	20/1	CONVENIENCE OUTLETS - MODEMS	
		3		4	20/1	FUEL CONTROL SYSTEM	
AST-2 DIESEL PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	5		6	20/1	LIGHTS	
		7		8	20/2	GATE #1 POWER	
AST-2 RED DIESEL PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	9		10			
		11		12	20/2	GATE #2 POWER	
DEF PUMP	20/2 GFI	13		14			
		15		16	20/2	SPARE	
DEF PUMP	20/2 GFI	17		18			
		19		20	20/1	EQUIPMENT ENCLOSURE AC	
SPARE	20/2 GFI	21		22	20/1	AREA LIGHTS	
		23		24	20/1	LEAK DETECTION SYSTEM	
SPARE	20/1	25		26	20/1	SPARE	
SPARE	20/1	27		28	20/1	SPARE	
SPARE	20/1	29		30	20/1	SPARE	
SPARE	20/1	31		32	20/1	SPARE	



**3 FIBER OPTIC CONNECTION ONE-LINE DIAGRAM**  
E-3 NO SCALE

ENGINEERS INC  
FLORIAN J. GRIFFIN  
P. E. NO. 28182  
KATH A. JOEL  
P. E. NO. 32187  
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NO.	DATE	REVISION	BY
		CHK	APVD
		DR	JAK

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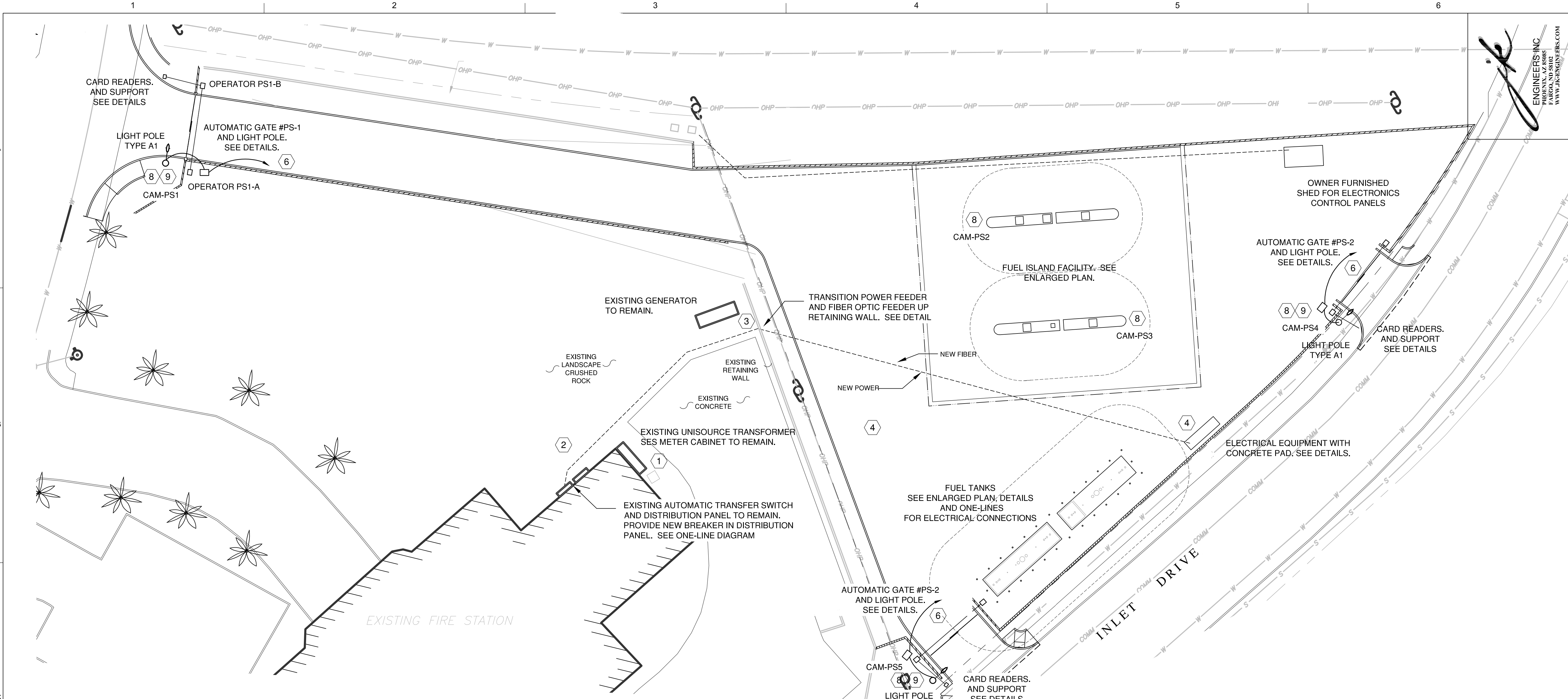
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PUBLIC WORKS  
ONE-LINES, DETAILS

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DWG	E-3
SHEET	19 of 26

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Professional Engineer Seal: State of ND, License No. 32187, Name: JOEL A. KATH, Exp. Date: 10-5-2024, Issue Date: 10-5-2020

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			JAK	JAK

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**PUBLIC SAFETY PLAN**  
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SHEET 20 of 26	DATE

**GENERAL NOTES**

REFER TO ONE-LINE DIAGRAMS FOR FEEDER AND CONDUCTOR SIZES AND QUANTITIES.

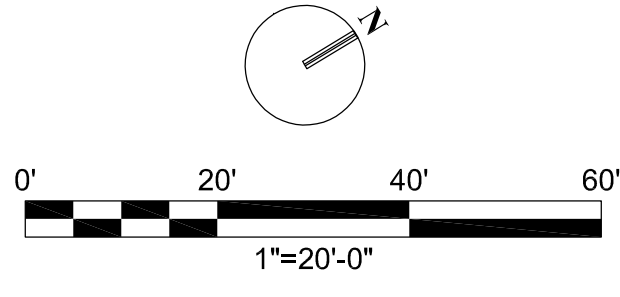
PLAN VIEWS DO NOT INDICATE ALL CONDUITS. REFER TO ONE-LINE DIAGRAMS, EQUIPMENT SPECIFICATIONS, AND EQUIPMENT SHOP DRAWINGS FOR BRANCH CIRCUITRY, CONTROL, INSTRUMENTATION, POWER, AND COMMUNICATION CONDUIT AND CONDUCTORS. COORDINATE FIELD PLACEMENT OF INSTRUMENTATION CONDUIT AND CONDUCTORS WITH PUMP CONTROL PANEL FABRICATION DRAWINGS.

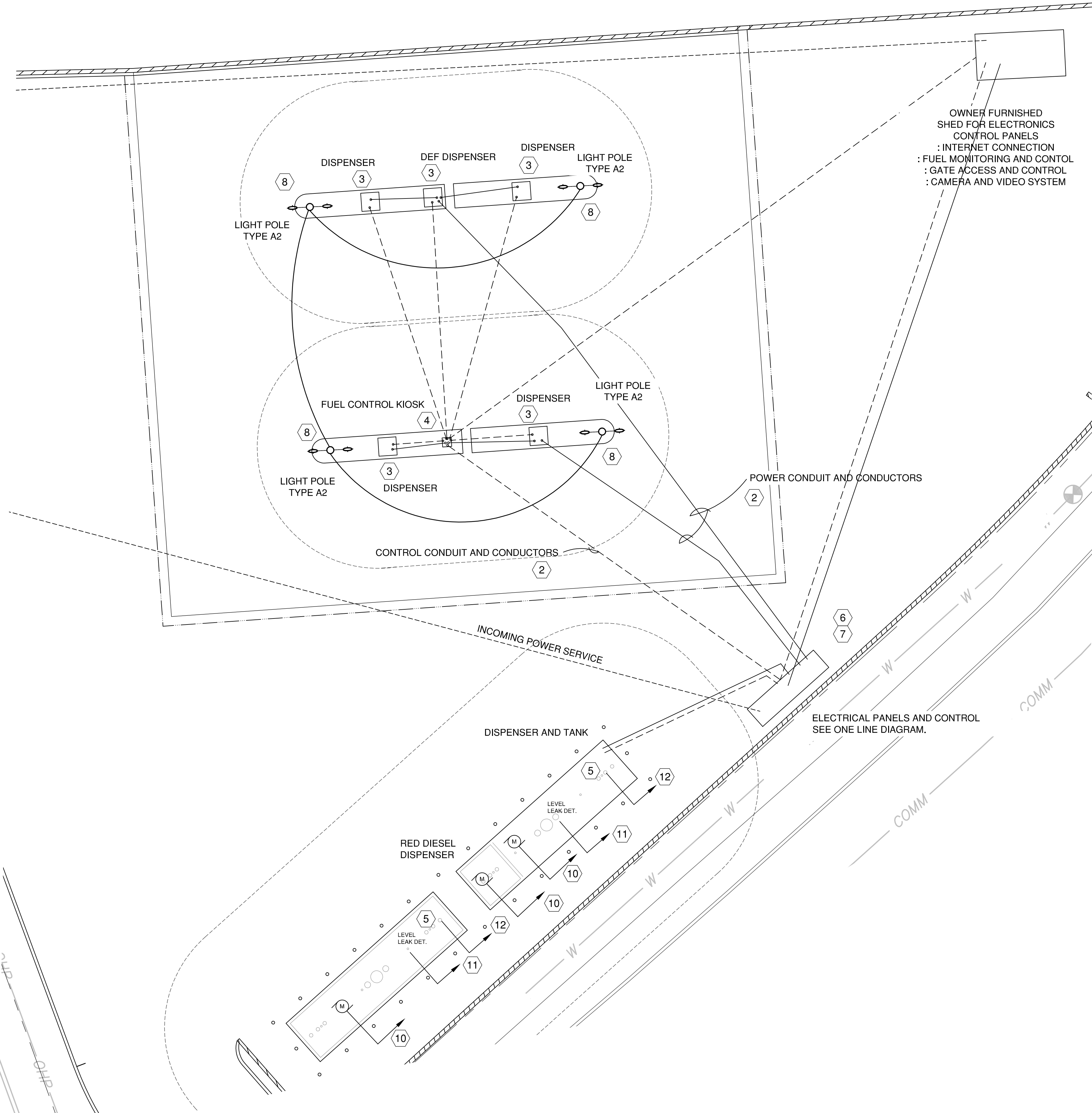
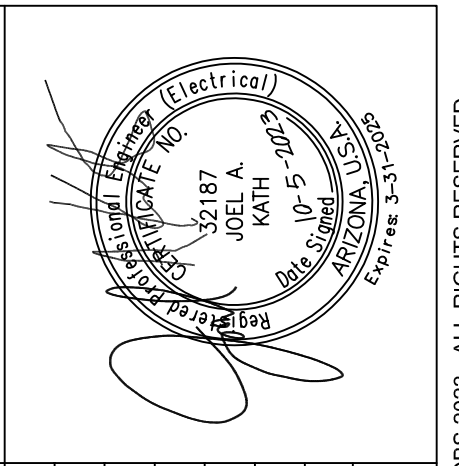
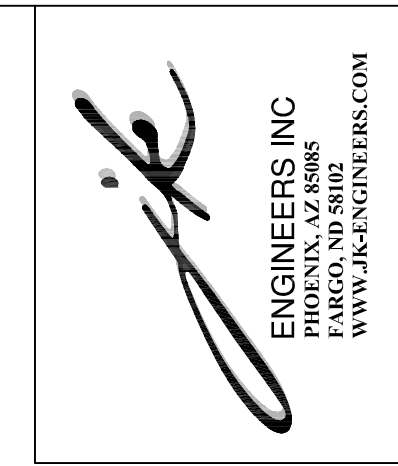
SEE TYPICAL DETAILS FOR CONDUIT ROUTING, PANEL SUPPORTS AND CONCRETE PADS FOR ELECTRICAL EQUIPMENT.

**ELECTRICAL PLAN NOTES**

- 1 EXISTING UNISOURCE 120/208V TRANSFORMER AND SES METER CABINET TO REMAIN.
- 2 EXISTING AUTOMATIC TRANSFER SWITCH AND DISTRIBUTION PANEL TO REMAIN. SEE ONE-LINE DIAGRAM FOR MODIFICATIONS. CONNECT TO EXISTING DISTRIBUTION PANEL FOR POWER SOURCE FOR NEW FUEL FACILITY.
- 3 NEW ELECTRICAL SERVICE FEEDER AND FIBER OPTIC FEEDER FOR FUEL FACILITY. SEE ONE-LINE DIAGRAM. TRENCH FEEDER IN LANDSCAPE ROCK AT APPROXIMATE ROUTE AS SHOWN. MINIMUM DEPTH 24". PROVIDE INGROUND PULLBOXES NEAR RETAINING WALL. MAINTAIN MINIMUM 12" LATERAL SEPARATION. TRANSITION TO RIGID STEEL CONDUIT AND SURFACE ROUTE CONDUIT VERTICAL UP WALL TO CONTINUE. SEE DETAIL. PROVIDE STRUT SUPPORT SEPARATE FROM RETAINING BLOCKS. PROVIDE EXPANSION FLEXIBLE FITTINGS TO ALLOW A MINIMUM 6" DISPLACEMENT. SEE DETAIL.
- 4 NEW ELECTRICAL SERVICE PANELS FOR PUBLIC SAFETY FUELING FACILITY. AND ELECTRICAL EQUIPMENT ENCLOSURE FOR FUEL FACILITY. SEE ONE-LINE DIAGRAMS AND ELEVATION DETAILS.
- 5 NEW ELECTRICAL OPERATED GATE WITH ACCESS CONTROL CONNECTION. SEE DETAILS AND DIAGRAMS.

- 6 PROVIDE INGROUND PULLBOXES LOCATED ADJACENT TO OPERATOR. PROVIDE POWER AND COMMUNICATION DUCTS AND HOMERUN TO POWER PANEL PS1 AND TO ACCESS CONTROL PANEL ACP. SEE ONE-LINE DIAGRAM FOR CONDUIT AND CONDUCTORS AND DETAILS.
- 7 INSTALL 1" CONDUIT FOR INTERNET SERVICE TO LOCATION AS INDICATED. COORDINATE WITH PROVIDER. STUB UP INTO OWNER PROVIDED SHED.
- 8 CAMERA LOCATION TO BE MOUNTED ON LIGHT POLE. CONTRACTOR TO PROVIDE EMPTY CONDUIT SYSTEM. SEE CAMERA SYSTEM ONE-LINE DIAGRAM.
- 9 PROVIDE 3#12, 3/4"C AND HOMERUN TO PANEL FOR LIGHT POLE POWER CIRCUIT. THIS MAY BE COMBINED WITH CONDUIT FOR THE GATE OPERATOR.





GENERAL NOTES

REFER TO ONE-LINE DIAGRAMS FOR FEEDER AND CONDUCTOR SIZES AND QUANTITIES.

SEE TYPICAL DETAILS FOR CONDUIT ROUTING, PANEL SUPPORTS AND CONCRETE PADS FOR ELECTRICAL EQUIPMENT.

PLAN VIEWS DO NOT INDICATE ALL CONDUITS. REFER TO ONE-LINE DIAGRAMS, EQUIPMENT SPECIFICATIONS, AND EQUIPMENT SHOP DRAWINGS FOR BRANCH CIRCUITRY, CONTROL, INSTRUMENTATION, POWER, AND COMMUNICATION CONDUIT AND CONDUCTORS. COORDINATE FIELD PLACEMENT OF INSTRUMENTATION CONDUIT AND CONDUCTORS WITH SYSTEMS VENDOR FABRICATION DRAWINGS.

ALL INSTALLATION SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE. FUEL ISLAND AND FUEL TANK INSTALLATION IS AS REQUIRED BY ARTICLE 514. PROVIDE EXPLOSION PROOF SEALS AS REQUIRED. NEATLY ORGANIZE SEALS WHEN IN MULTIPLE LOCATIONS.

ALL CONDUIT CONNECTIONS TO FUEL DISPENSING AND FUEL TANKS SHALL BE RIGID STEEL CONDUIT. BELOW GRADE INSTALLATION UTILIZE PVC COATED RIGID STEEL CONDUIT AS A CORROSION PROTECTION FOR DIRECT CONTACT WITH SOIL.

CONDUIT ROUTING, CONDUCTORS AND CONDUIT IS BASED ON TYPICAL MANUFACTURER/VENDOR OF FUEL DISPENSING AND LEAK DETECTION SYSTEMS. COORDINATE AND ALTER ROUTES AND METHODS TO MEET REQUIREMENTS OF THE INSTALLING MANUFACTURER.

SUBMIT CONDUIT AND CONDUCTOR LAYOUT PLAN TO ENGINEER AND FUEL SYSTEMS VENDOR PRIOR TO START OF CONSTRUCTION.

INSPECTION OF TRENCHED AND INSTALLED CONDUIT SHALL BE APPROVED BY ENGINEER AND FUEL SYSTEM VENDOR PRIOR TO BACKFILL OF ANY CONDUIT TRENCH.

ELECTRICAL NOTES: OWNER PROVIDED SHED

AT COMPLETION OF THE CONSTRUCTION, THE OWNER WILL INSTALL A SHED TO ENCLOSE THE ELECTRONIC CONTROLLERS FOR THE STATION.

- INTERNET MODEM AND WAN
- FUEL CONTROL AND MANAGEMENT SYSTEM
- CAMERA SYSTEM
- INTERFACE WITH LEAK DETECTION SYSTEM
- GATE ACCESS CONTROL.

CONTRACTOR TO COORDINATE CONDUIT STUBS FOR THESE SYSTEMS WITH ENGINEER AND OWNER PRIOR TO INSTALLATION OF CONDUIT.

SEE SCHEMATIC OF OWNER FURNISHED SHED FOR APPROXIMATE LOCATIONS

ELECTRICAL PLAN NOTES

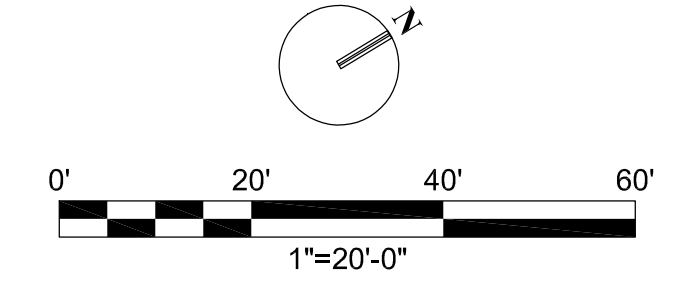
- 20' PERIMETER LINE DESIGNATION FROM THE FUEL EQUIPMENT AS NOTED IN NEC 514.
- REFER TO FUEL SYSTEM ELECTRICAL ONE-LINE DIAGRAMS FOR BRANCH CIRCUIT CONDUCTOR SIZES AND QUANTITIES.
- STUB CONDUIT INTO SUMP OF DISPENSERS. PROVIDE SEALS AS PER ARTICLE 514.
- STUB CONDUIT INTO FUEL KIOSK. PROVIDE SEALS AS PER ARTICLE 514.
- PROVIDE CONNECTION TO TANK LEAK DETECTION AND MONITORING SYSTEM. TYPICAL EACH TANK. SEE ONE-LINE DIAGRAM AND DETAILS.
- PROVIDE CONNECTION TO EMERGENCY STOP PUSH BUTTON. LOCATED ON SEPARATE PEDESTAL ADJACENT TO POWER PANEL.
- PROVIDE CONTACTOR PANEL FOR EMERGENCY FUEL SHUTOFF.
- PROVIDE TWIN HEAD LIGHT AND POLE ON 30" TALL CONCRETE BASE ON FUEL ISLAND. MOTION SENSOR ACTIVATED
- 3#12, 3/4"C TO SITE PANEL FOR LIGHTING CIRCUIT.
- PROVIDE CONNECTION TO TANK SUMP MOTOR PER MANUFACTURER REQUIREMENTS. PROVIDE 3#12, 3/4"C TO SITE PANEL VIA EMERGENCY SHUTDOWN CONTACTOR. MOTOR AND CIRCUIT TO BE 208V 2P.
- PROVIDE CONNECTION TO TANK LEAK DETECTION AND FUEL LEVEL MONITORING SYSTEMS PER MANUFACTURER REQUIREMENTS. PROVIDE 3/4"C TO FUEL CONTROL SYSTEM PANEL.
- PROVIDE POWER AND CONTROL CONDUIT AND CONDUCTOR PER MANUFACTURERS REQUIREMENTS. PROVIDE 3/4"C POWER TO SITE PANEL VIA EMERGENCY SHUTDOWN CONTACTOR. PROVIDE 3/4"C CONTROL CONDUIT TO FUEL CONTROL PANEL.

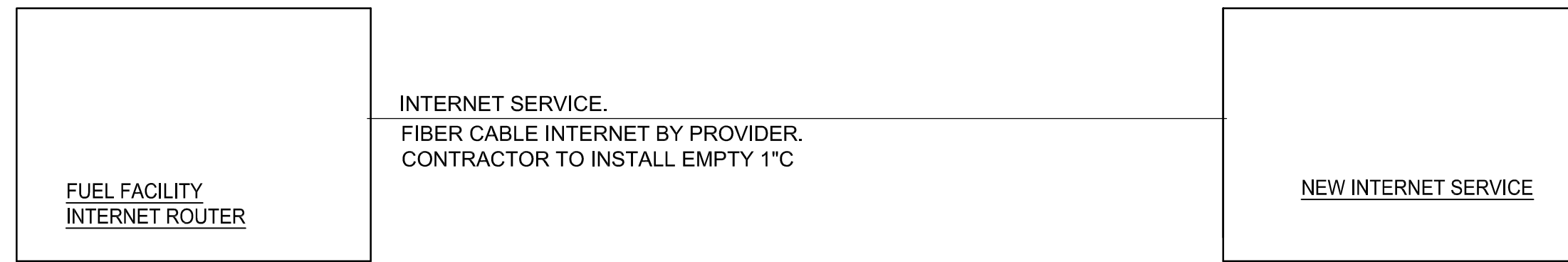
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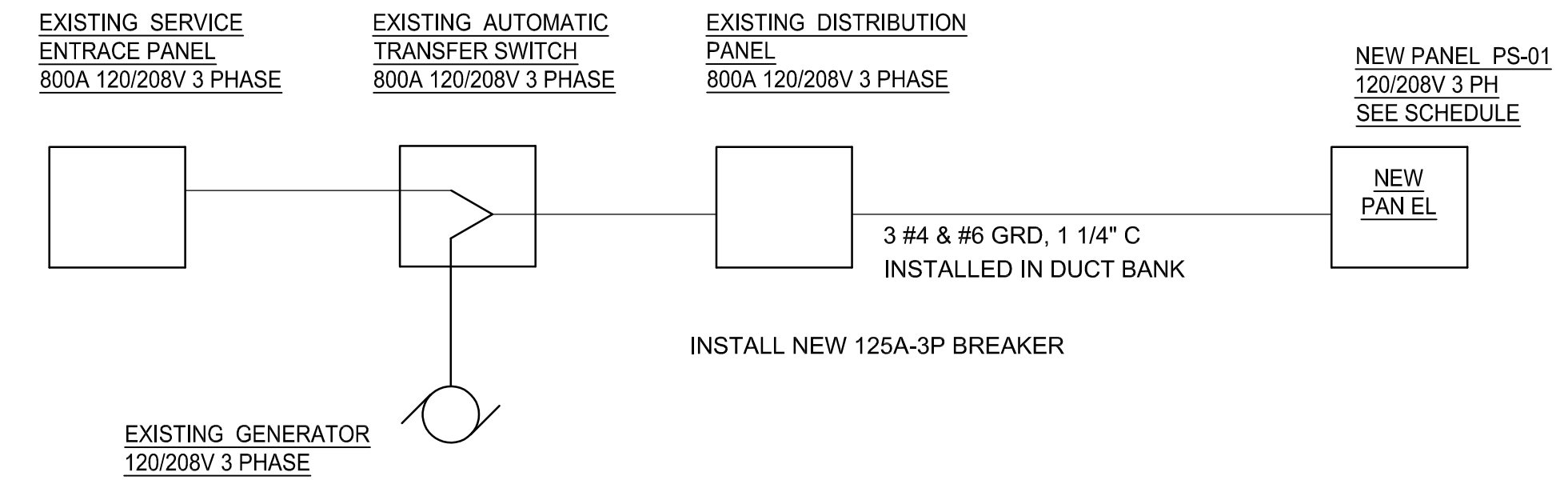
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 PROGRESS SET  
**PUBLIC SAFETY ENLARGED PLAN ELECTRICAL**

VERIFY SCALE	DATE	OCTOBER 2023
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0 20' 40' 60'	DWG	E-5
1"=20'-0"	SHEET	21 of 26

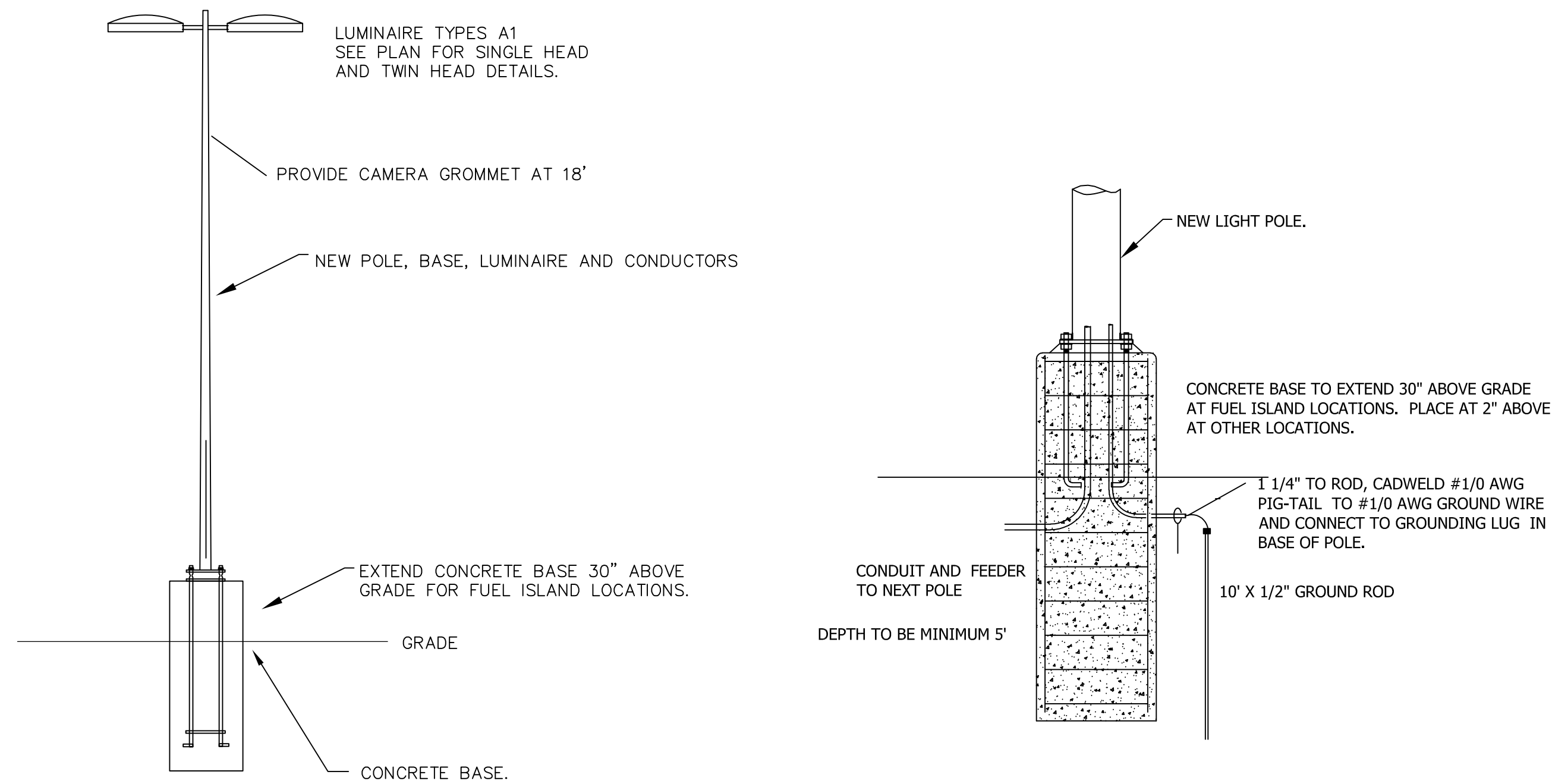




3 PUBLIC SAFETY INTERNET ONE-LINE DIAGRAM  
E-3 NO SCALE



POWER SUPPLY: 120/208 VAC, 1PH, 3W BUS RATING: 100A, 10K A.I.C. MAIN BREAKER 100A-3P						LOCATION: EXTERIOR WP NEMA 4 MOUNTING: SURFACE NAME: PS-P1					
DESCRIPTION	CCT BKR AMP	CCT No	PHASE A B C	CCT No	CCT BKR AMP	DESCRIPTION					
AST-1 GAS PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	1		2	20/1	CONVENIENCE OUTLETS - MODEMS					
AST-2 DIESEL PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	3		4	20/1	FUEL CONTROL SYSTEM					
AST-2 DIESEL PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	5		6	20/1	LIGHTS					
AST-2 RED DIESEL PUMP CONTROLLED VIA E-STOP CONTACTOR PS-ESC	20/2 GFI	7		8	20/2	GATE #1 POWER					
DEF PUMP	20/2 GFI	9		10							
DEF PUMP	20/2 GFI	11		12	20/2	GATE #2 POWER					
DEF PUMP	20/2 GFI	13		14							
DEF PUMP	20/2 GFI	15		16	20/2	GATE #3 POWER					
DEF PUMP	20/2 GFI	17		18							
SPARE	20/2 GFI	19		20	20/1	EQUIPMENT ENCLOSURE AC					
SPARE	20/2 GFI	21		22	20/1	AREA LIGHTS					
SPARE	20/2 GFI	23		24	20/1	LEAK DETECTION SYSTEM					
SPARE	20/1	25		26	20/1	SPARE					
SPARE	20/1	27		28	20/1	SPARE					
SPARE	20/1	29		30	20/1	SPARE					
SPARE	20/1	31		32	20/1	SPARE					



1 LIGHT POLE AND BASE DETAILS  
E-6 NO SCALE

LIGHT POLE SCHEDULE					
TYPE	MANUFACTURER	DESCRIPTION	FINISH COLOR	POLE HEIGHT	REMARKS
P1	LITHONIA	ROUND SMOOTH TAPERED STEEL POLE WITH SINGLE LUMINAIRE ARM, ANCHOR BASE.. WITH VIBRATION DAMPENER.	NATURAL ALUMINUM	20	MOUNT ON CONCRETE BASE 2" ABOVE GRADE
P2	LITHONIA	ROUND SMOOTH TAPERED STEEL POLE WITH DOUBLE LUMINAIRE, ANCHOR BASE. WITH VIBRATION DAMPENER.	NATURAL ALUMINUM	20	MOUNT ON 36" RAISED CONCRETE BASE.

LUMINAIRE SCHEDULE										
TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	FINISH COLOR	MOUNTING HEIGHT	VOLTAGE	LUMINAIRE WATTAGE	COLOR TEMPERATURE	DISTRIBUTION	REMARKS
A1	LITHONIA	RSX1 P2 30K R4 MVOLT WITH NLTAIR2PIRHN nLIGHT AIR GEN 2 NETWORKED BI-LEVEL MOTION/AMBIENT SENSOR	AREA LUMINAIRE	DARK BRONZE	20 - 23	MVOLT	72 WATTS	3000K	TYPE IV	

1 PUBLIC SAFETY POWER ONE-LINE DIAGRAM  
E-6 NO SCALE

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PUBLIC SAFETY  
ONE-LINES, DETAILS

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SHEET: 22 of 26

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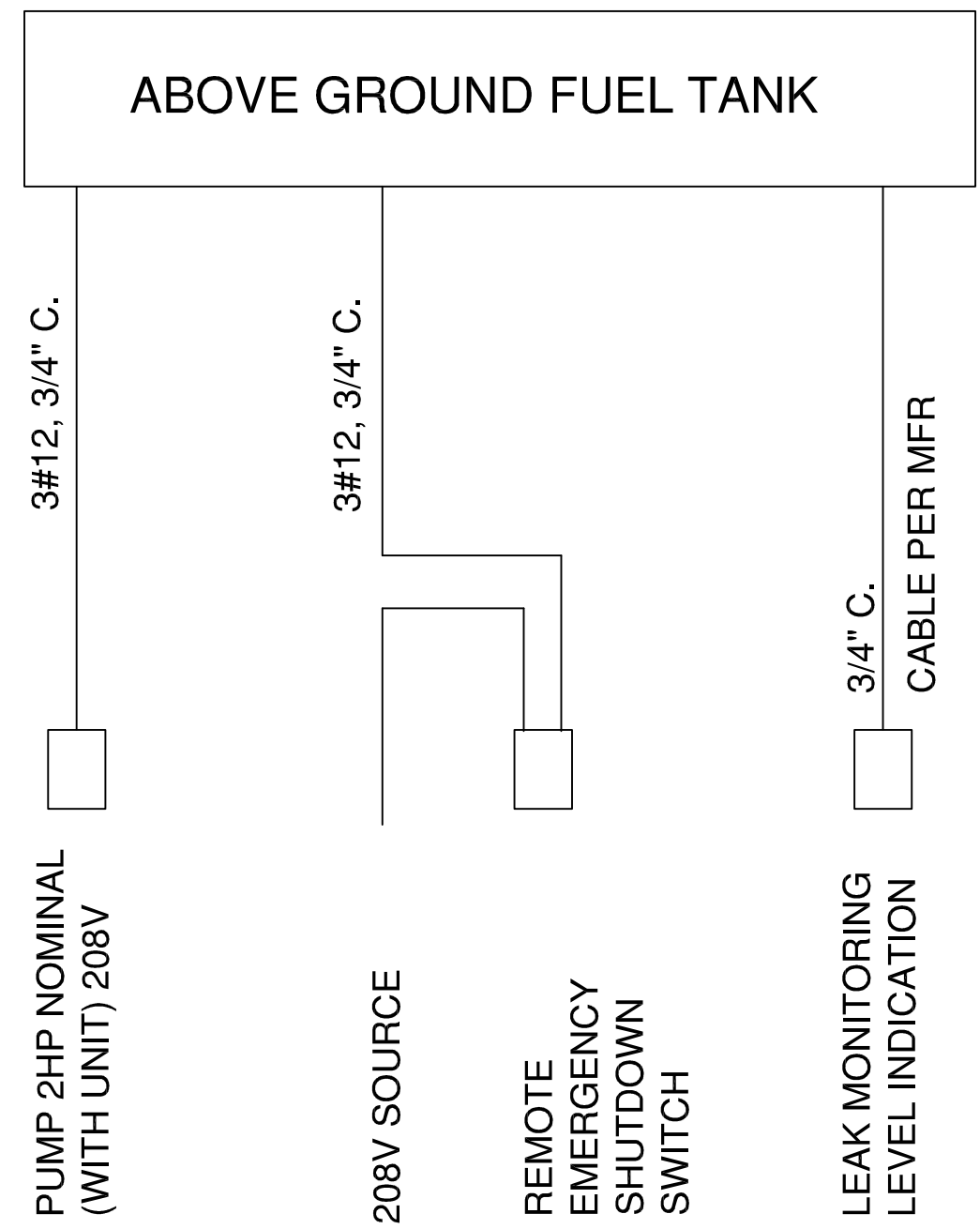
**CONSTRUCTION NOTES:**

GENERAL:

PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) FOR FUEL TANK STORAGE AND DISPENSING EQUIPMENT AND FACILITIES. PROVIDE WIRING METHODS AND SEALING REQUIREMENTS PER NEC. REPLACE/RESTORE ALL SEALS IN ANY EXISTING CONDUIT THAT MAY BE RETAINED AND REUSED FOR REPLACEMENT EQUIPMENT.

ELECTRICAL CONSTRUCTION NOTES:

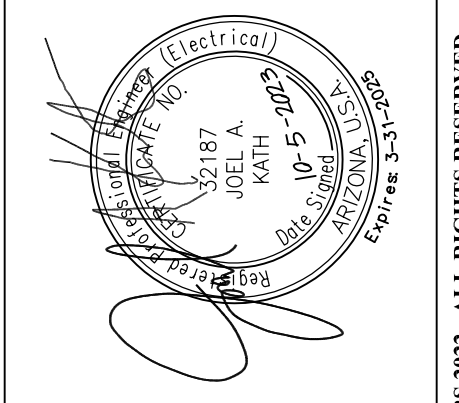
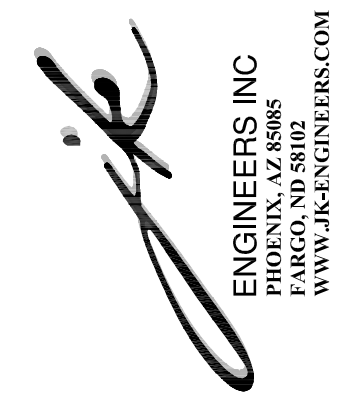
- ① EXISTING POWER SOURCE PANELBOARD 120/208V 3 PHASE. LOCATED IN INTERIOR ELECTRICAL CLOSET. ROUTE NEW POWER CIRCUITS FROM THIS LOCATION TO EXTERIOR OF BUILDING. SURFACE MOUNT CONDUIT IN EXPOSED OPEN CEILING AREA BETWEEN CLOSET AND EXTERIOR COURTYARD. SURFACE MOUNT CONDUIT TO EXTERIOR OF BUILDING AS NECESSARY WITHIN COURTYARD AREA.
- ② POWER CIRCUIT FOR DIESEL TANK. 3#12, 3/4" EMT POWER. 1-3/4" EMT CONTROL-MONITORING. SURFACE MOUNTED AT 8" A.G. ALONG COURTYARD WALL OF BUILDING AND COURTYARD PERIMETER WALL. TRANSITION TO RSC WITH SEAL-OFFS BEFORE TANK. CONNECT TO DIESEL FUEL PUMP AND HOSE DISPENSER. PROVIDE 20A-2P BREAKER IN EXISTING PANEL.
- ③ PROVIDE EXPLOSION PROOF DISCONNECT SWITCH AND CONNECTION TO DIESEL PUMP. COORDINATE CONNECTION POINT OF TANK WITH TANK MANUFACTURER.
- ④ PROVIDE NEW EMERGENCY SHUT DOWN SWITCH FOR DIESEL FUEL PUMP MOTOR. SURFACE MOUNT TO EXTERIOR WALL.
- ⑤ NEW ABOVE GROUND DIESEL TANK. PROVIDE NEW ELECTRICAL CONNECTION TO PUMP, EMERGENCY DISPENSER SHUT DOWN SWITCH, LEVEL GAUGE AND LEAK DETECTION MONITORING SYSTEMS. SEE DETAILS AND DIAGRAMS.



x ABOVE GROUND TANK DIAGRAM  
y SCALE: NONE

TYPICAL EACH TANK.

PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) FOR FUEL TANK STORAGE AND DISPENSING EQUIPMENT AND FACILITIES. PROVIDE WIRING METHODS AND SEALING REQUIREMENTS PER NEC. PROVIDE INSTALLATION AND CABLE TYPES PER MANUFACTURER RECOMMENDATIONS.



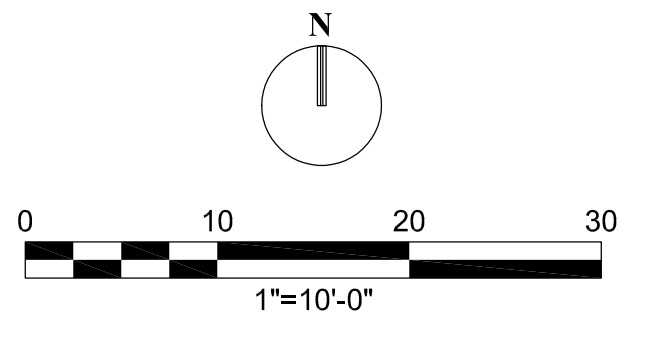
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**TRICO ENGINEERING, LLC**  
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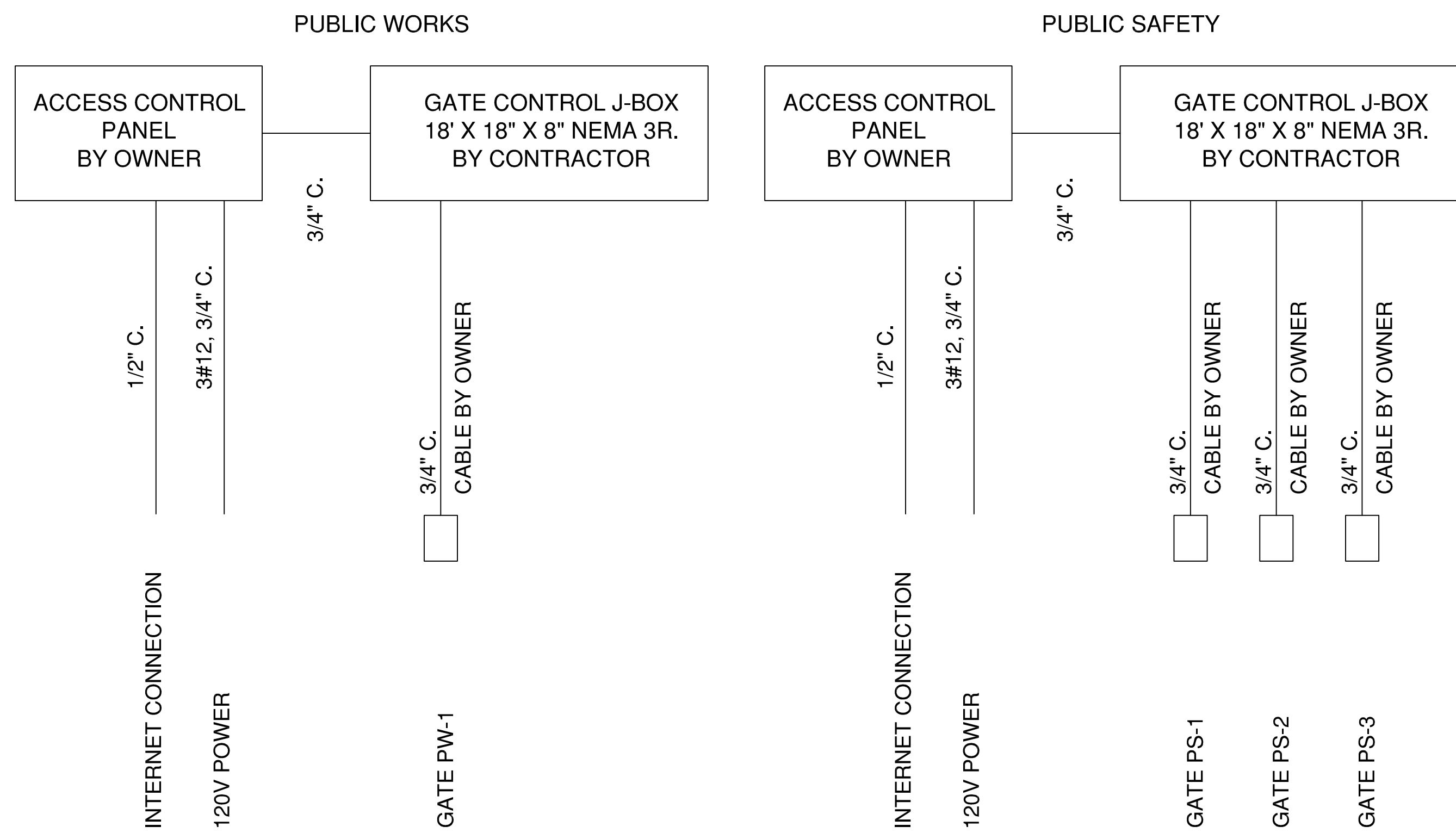
**Jacobs**

POLICE DEPARTMENT  
 ELECTRICAL PLAN AND DETAILS



VERIFY SCALE  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
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DWG	E-7
SHEET	23 of 26



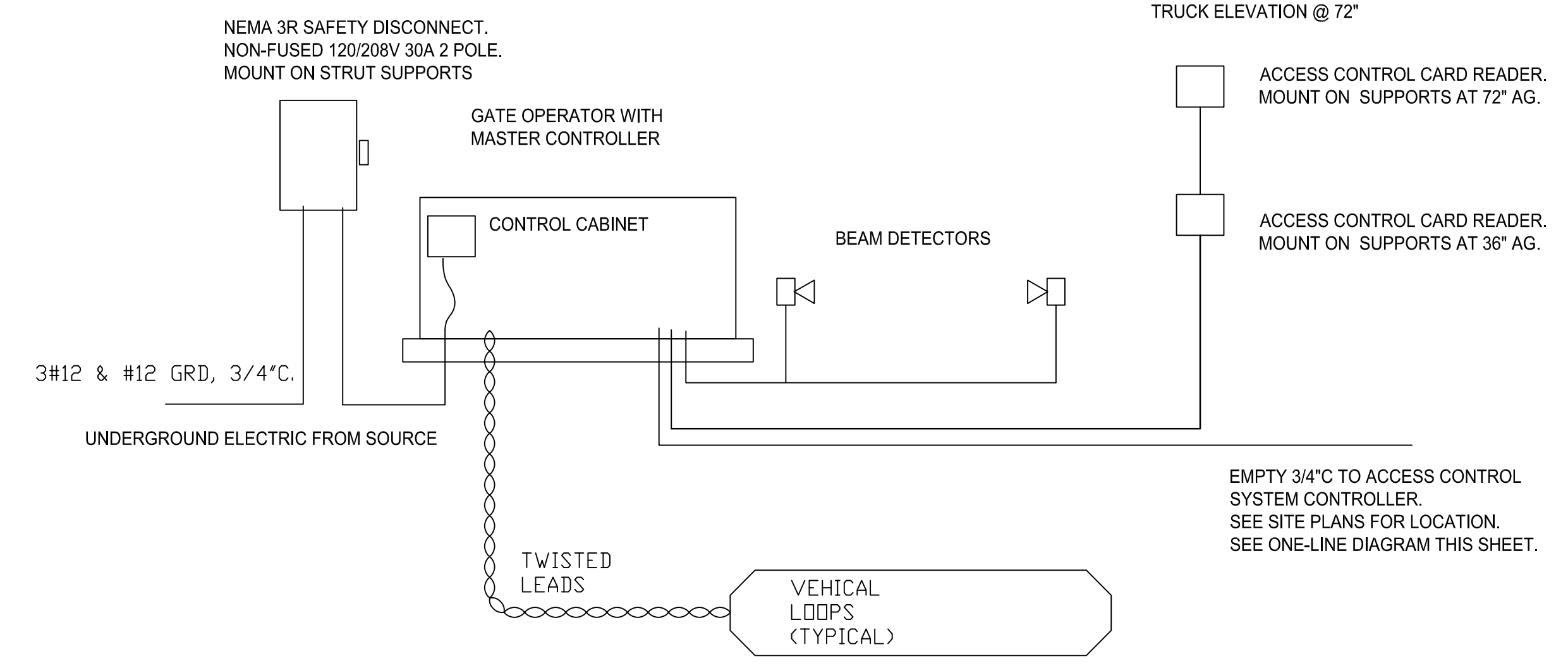
**3 E-8 ACCESS CONTROL ONE-LINE DIAGRAM**  
NO SCALE

**NOTES:**

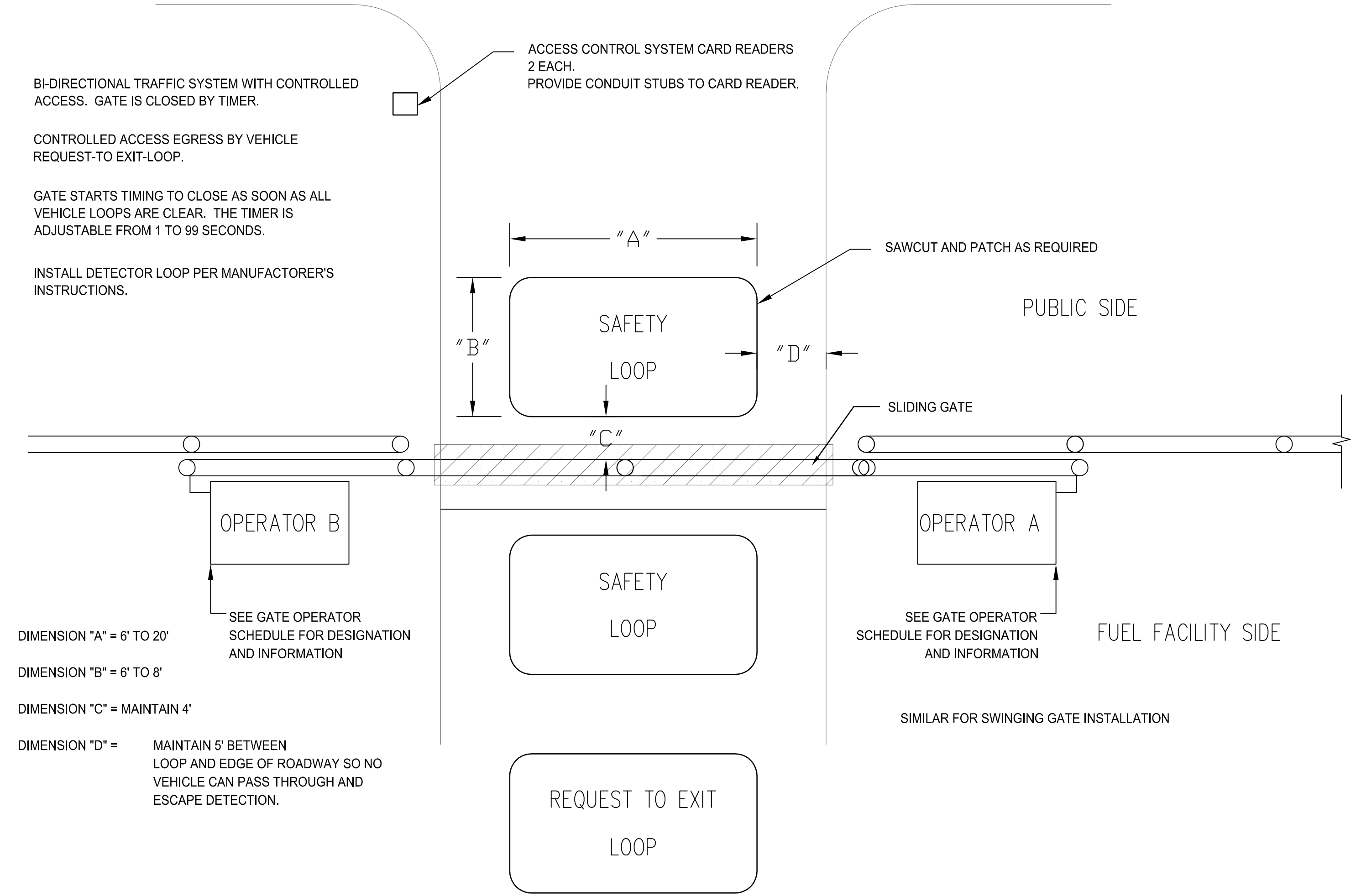
CONTRACTOR TO PROVIDE ONLY EMPTY CONDUIT WITH PULL STRING FOR ACCESS CONTROL SYSTEM.

ORDINATE CONDUIT LOCATIONS WITH OWNER. SUBMIT SKETCH OF FINAL CONDUIT LAYOUT TO ENGINEER AFTER COORDINATION AND PRIOR TO INSTALLATION OF CONDUIT.

ALL UNDERGROUND CONDUIT THAT CROSSES NEC 514 CLASSIFIED BOUNDARIES SHALL BE OVC COATED RIGID STEEL WITH APPROPRIATE SEALS. INSTALL SEAL MATERIAL AFTER CABLE INSTALLATION (BY OTHERS.)



**1 E-8 TYPICAL GATE ONE-LINE DIAGRAM**  
NO SCALE



**2 E-8 DETECTOR LOOP TYPICAL LAYOUT**  
NO SCALE

**ENGINEERS INC**  
ELECTRICAL ENGINEERS  
32187 JOEL A KATH  
10-5-2022  
LAKESIDE, ARIZONA 85624  
www.jk-engineers.com

NO.	DATE	REVISION	BY	CHK	DR	DESIGN

**TRICO ENGINEERING, LLC**  
211 SWANSON AVENUE, STE. 304  
LAKE HAVASU CITY, AZ 86403  
PHONE: (928)266-8888  
WWW.TRICOENGINEERING.COM

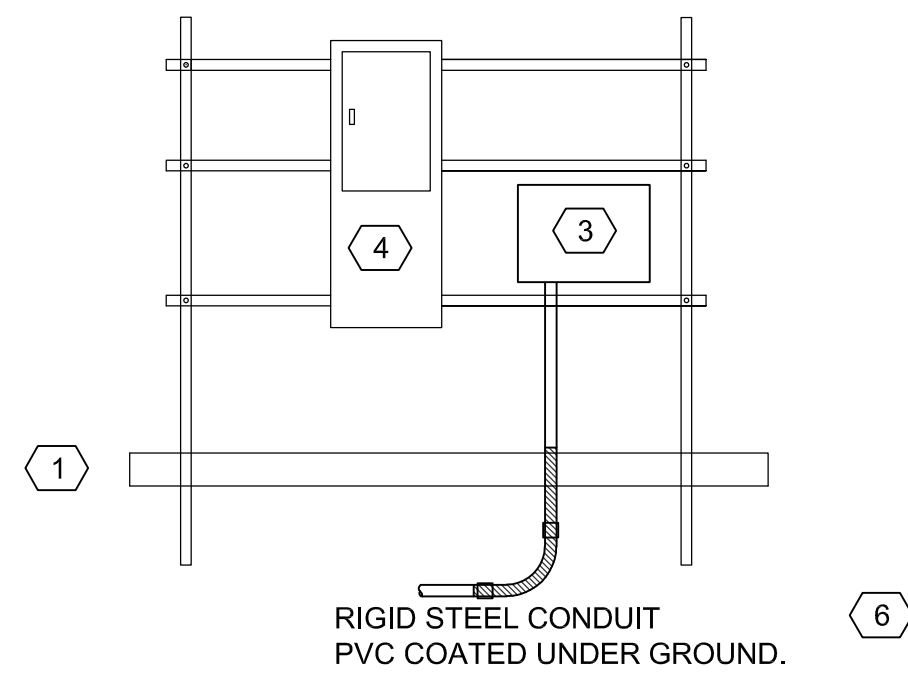
**CITY FUELING FACILITIES IMPROVEMENTS**  
PROJECT NO: 101010  
PUBLIC SAFETY FACILITY  
PUBLIC WORKS MAINTENANCE FACILITY  
LAKE HAVASU CITY  
3330 MCQUEEN BLVD N  
LAKE HAVASU CITY, AZ 86403  
(928) 852-1161

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**DETAILS AND DIAGRAMS ELECTRICAL**

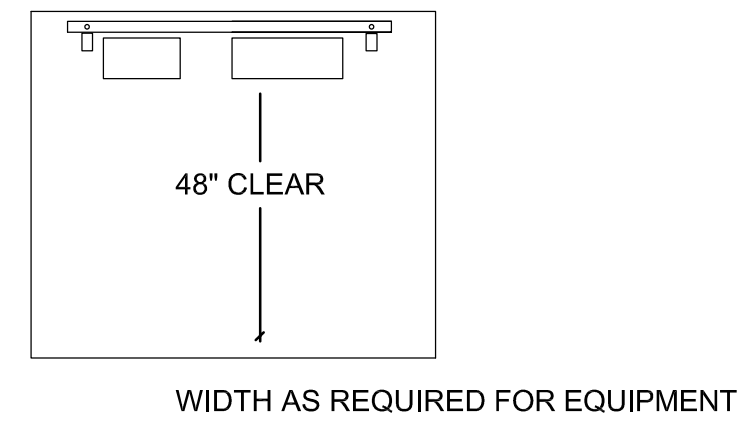
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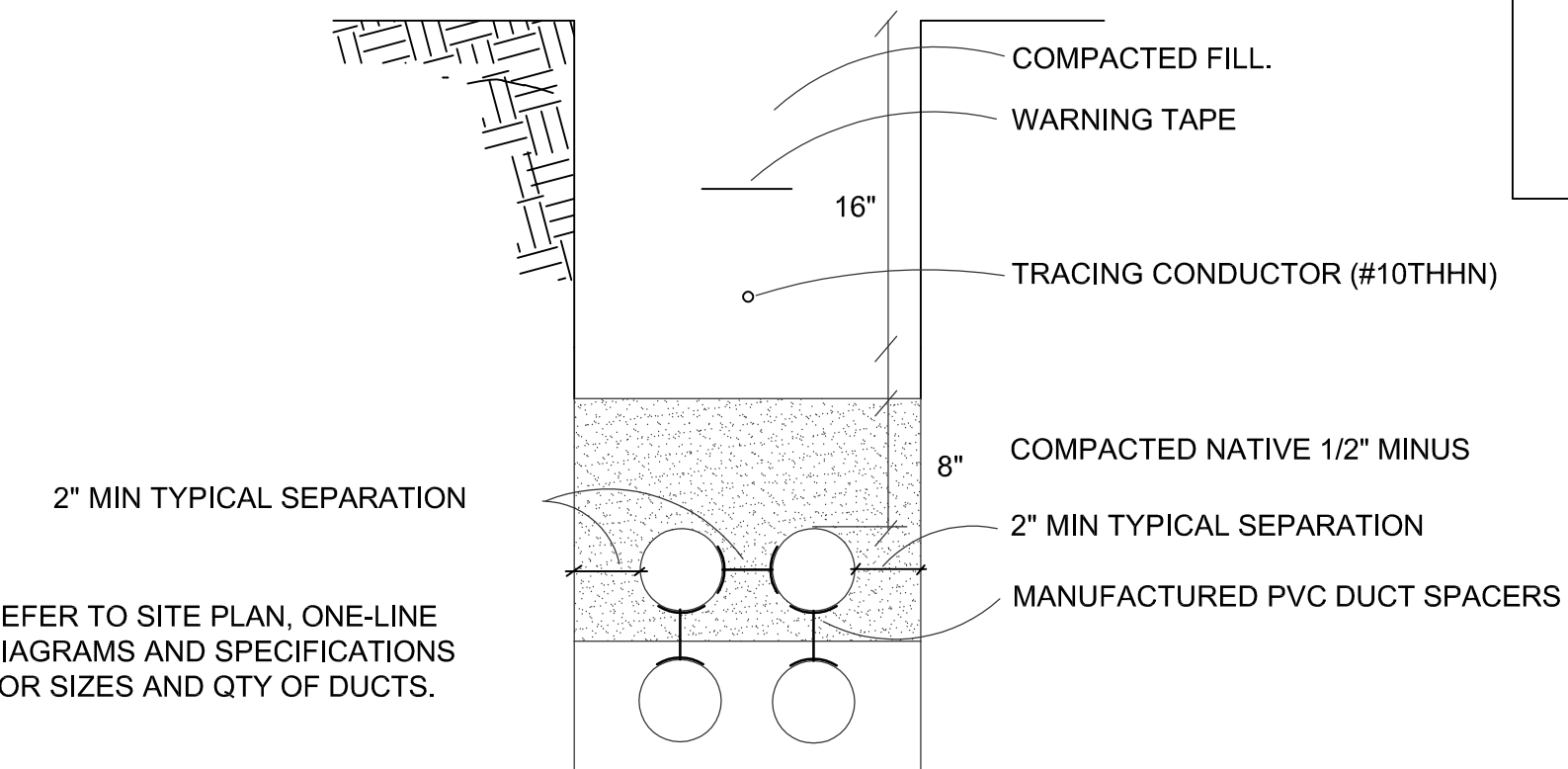


- EQUIPMENT ELEVATION DETAIL NOTES**
- 1 4" CONCRETE HOUSEKEEPING PAD FOR EQUIPMENT. EXTEND 24" BEYOND WIDTH OF LINEUP.
  - 2 STRUT RACK SUPPORT FOR PANELS
  - 3 FUEL EMERGENCY SHUT DOWN CONTACTOR.
  - 4 ELECTRICAL POWER PANEL. SEE ONE-LINE DIAGRAMS FOR EACH STATION.
  - 5 CONDUIT TO ENTER ONLY BOTTOM OF PANELS.
  - 6 SEAL OFF AS REQUIRED NEC 514.

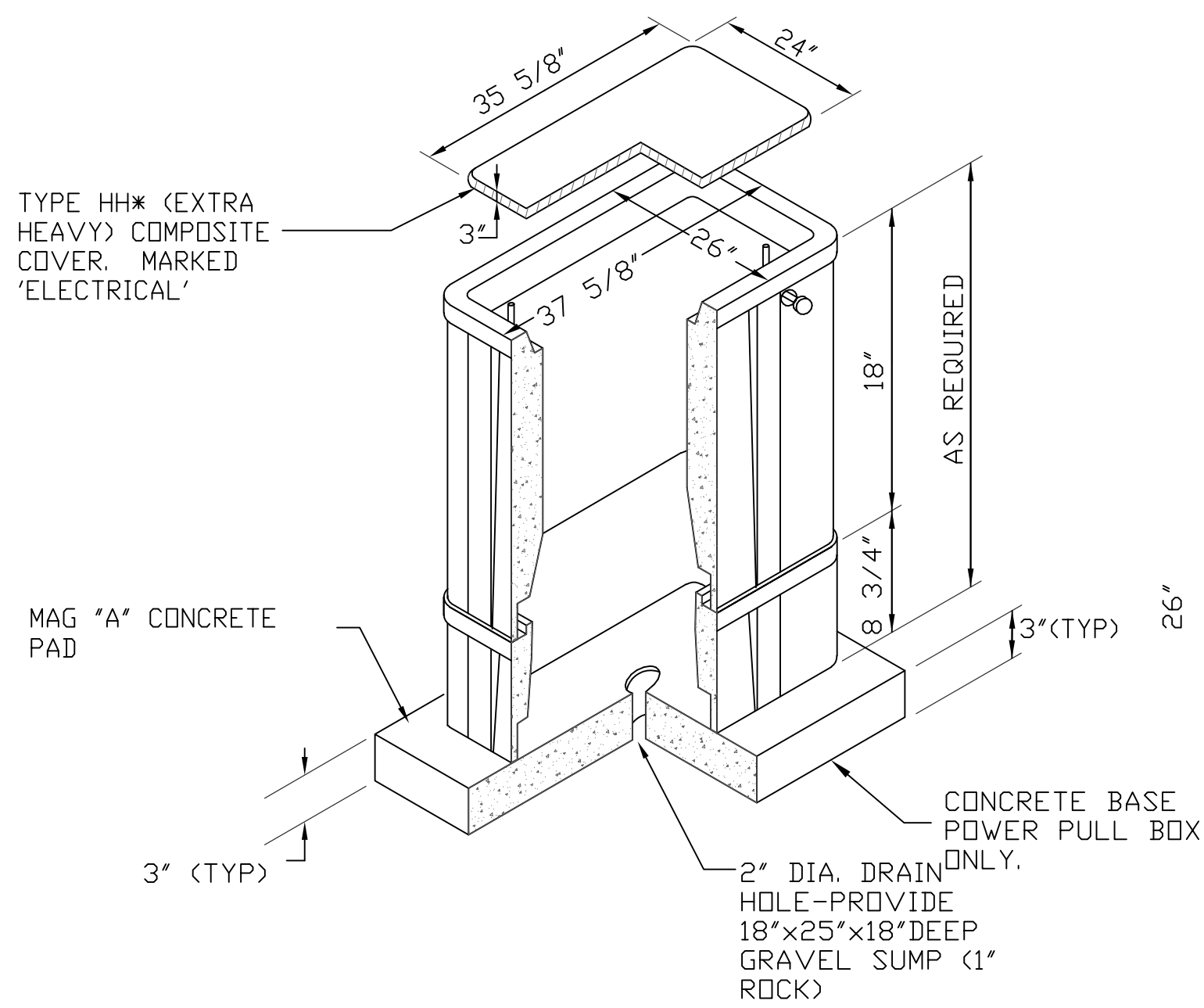
1 **ELECTRICAL EQUIPMENT PANEL ELEVATIONS**  
E-9 NO SCALE



2 **ELECTRICAL EQUIPMENT CONCRETE PAD**  
E-9 NO SCALE



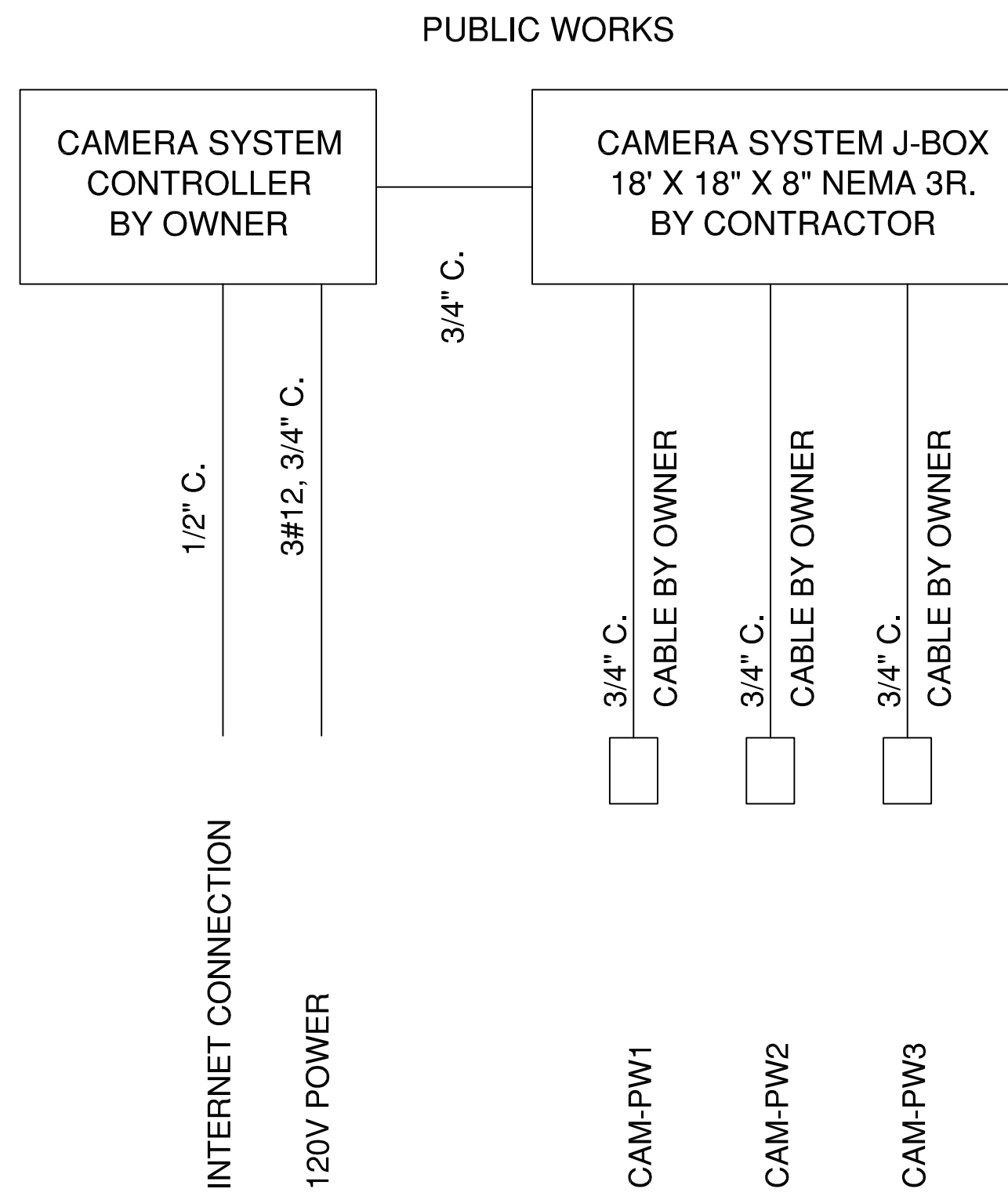
3 **TRENCH DETAIL**  
E-9 NO SCALE



4 **IN-GROUND PULLBOX DETAIL**  
E-9 NO SCALE

PULL BOXES TO BE POLYMER CONCRETE TYPE WITH EXTRA HEAVY DUTY COVERS. HH RATED.

**POWER PULL BOX NOTES:** 11' X 17' NOMINAL PROVIDE CONCRETE SOLID BASE. ALL CONDUIT ENTRIES SHALL TERMINATE IN THE SIDES OF THE BOX WITH END BELLS INSTALLED FLUSH WITH INSIDE WALL OF BOX OR HANDHOLE. SAW CUT KNOCKOUTS.



2 **CAMERA CONDUIT SYSTEM**  
E-10 SCALE: NONE

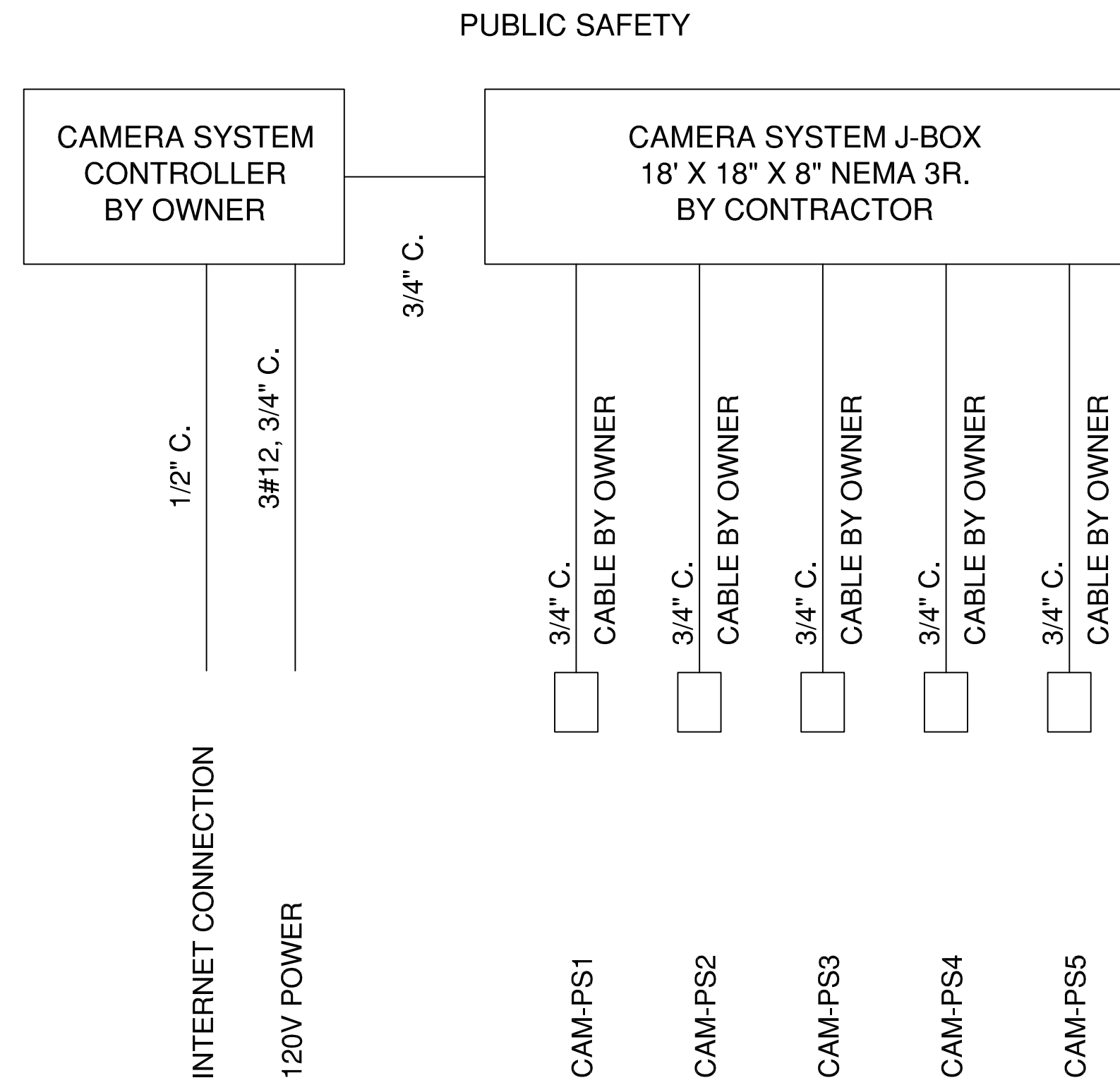
**NOTES:**

CONTRACTOR TO PROVIDE ONLY EMPTY CONDUIT WITH PULL STRING. CAMERA SYSTEM INCLUDING CAMERA'S CABLING, MOUNTING, CONFIGURATION AND STARTUP IS FURNISHED BY OTHERS.

COORDINATE CONDUIT LOCATIONS WITH OWNER. SUBMIT SKETCH OF FINAL CONDUIT LAYOUT TO ENGINEER AFTER COORDINATION AND PRIOR TO INSTALLATION OF CONDUIT.

STUB UP CONDUIT AT CAMERA CONTROL SYSTEM J-BOX ADJACENT TO CAMERA CONTROLLER. NEATLY ARRANGE CONDUIT AND ALIGN SEAL-OFFS AS REQUIRED.

ALL UNDERGROUND CONDUIT THAT CROSSES NEC 514 CLASSIFIED BOUNDARIES SHALL BE OVC COATED RIGID STEEL WITH APPROPRIATE SEALS. INSTALL SEAL MATERIAL AFTER CABLE INSTALLATION (BY OTHERS.)



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LAKE HAVASU CITY  
2300 MCADULLOCH BLVD. N.  
LAKE HAVASU CITY, AZ 86403

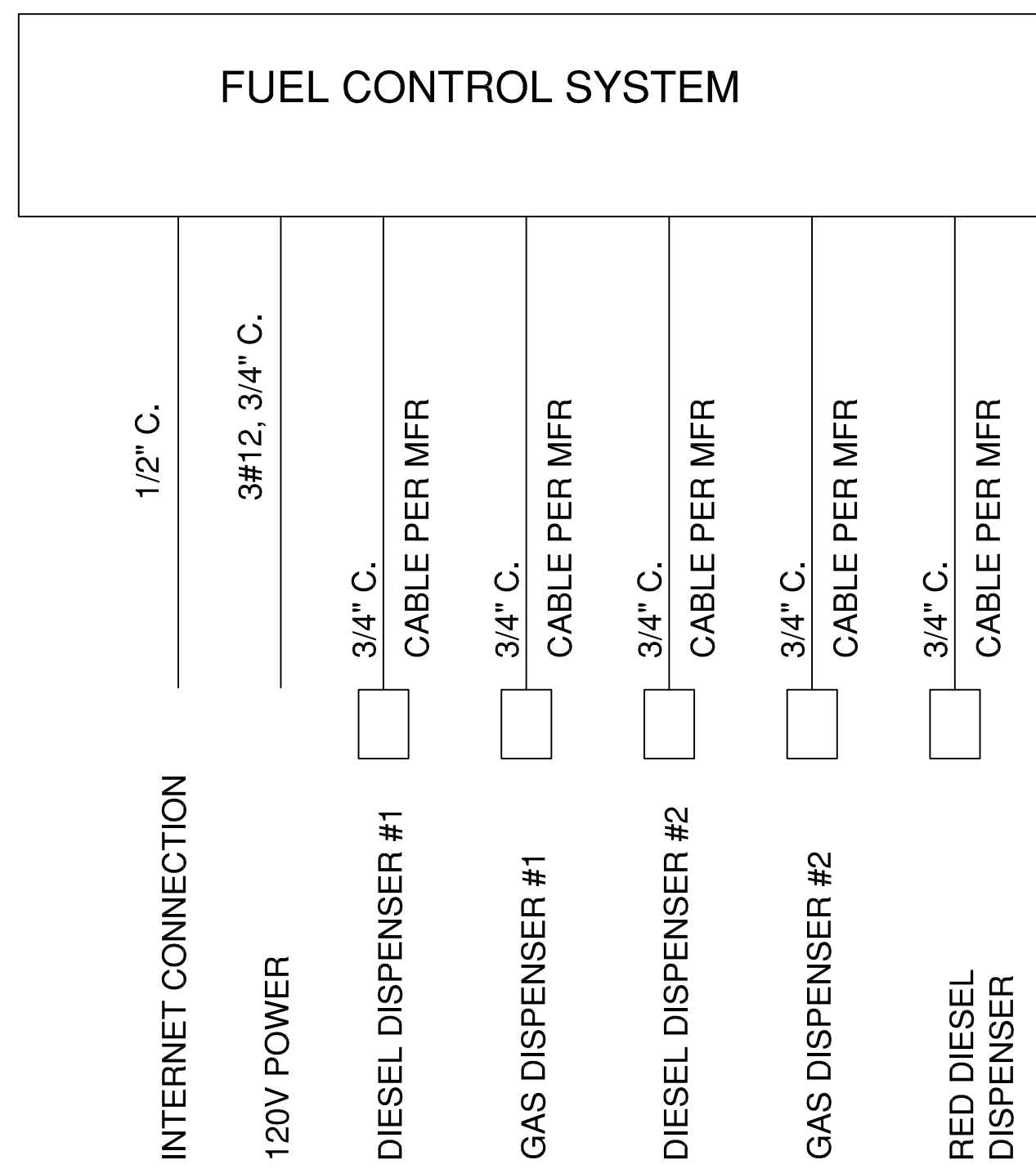
**Jacobs**

**DETAILS AND DIAGRAMS ELECTRICAL**

VERIFY SCALE	BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE	OCTOBER 2023
PROJ	
DWG	E-9
SHEET	25 of 26

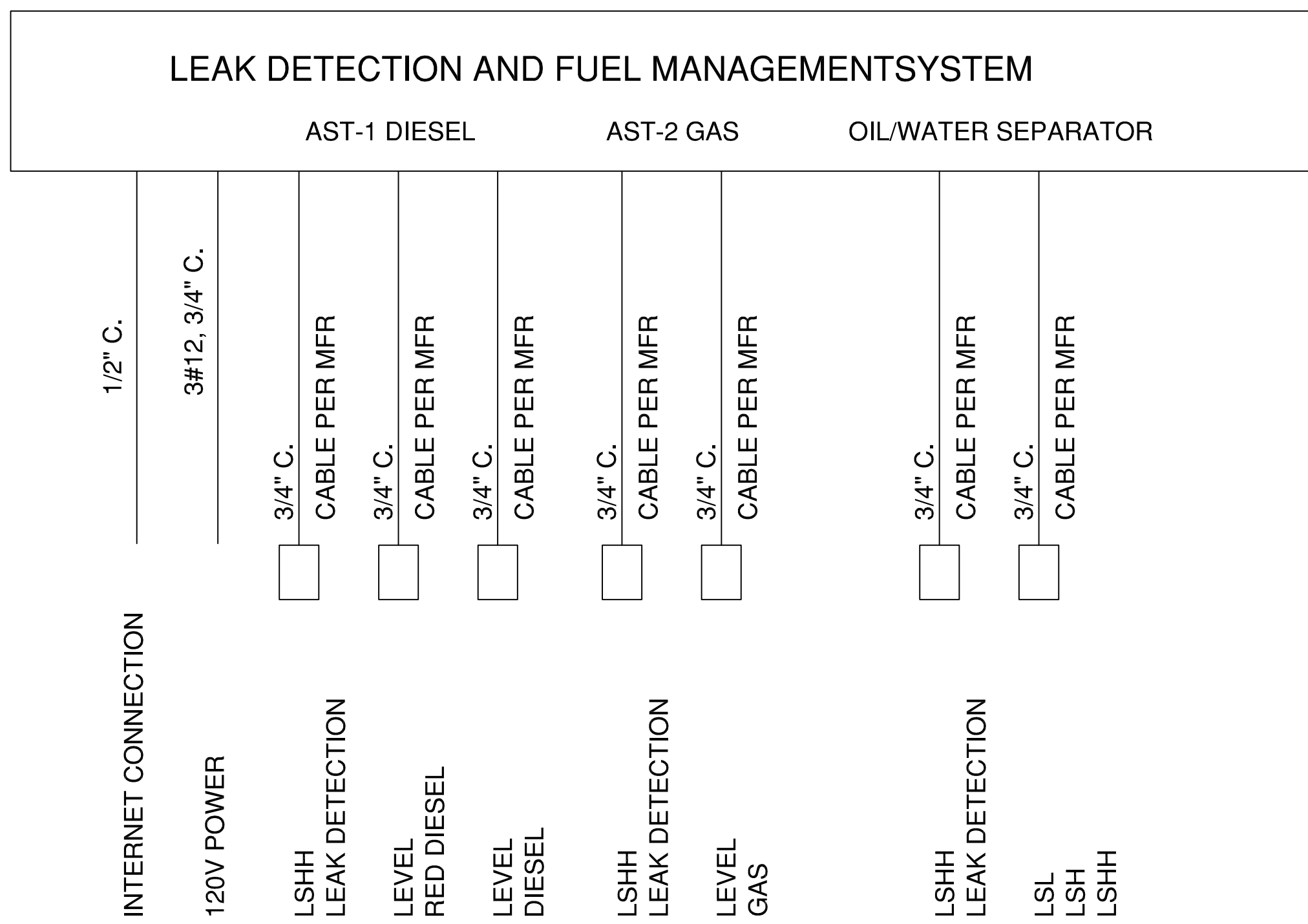
**ENGINEERS INC**  
EUGENE, OR 97401  
FARGO, ND 58102  
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Professional Engineer Seal for JOEL A. KATH, No. 32187, State of Oregon, Exp. 05-31-2026.



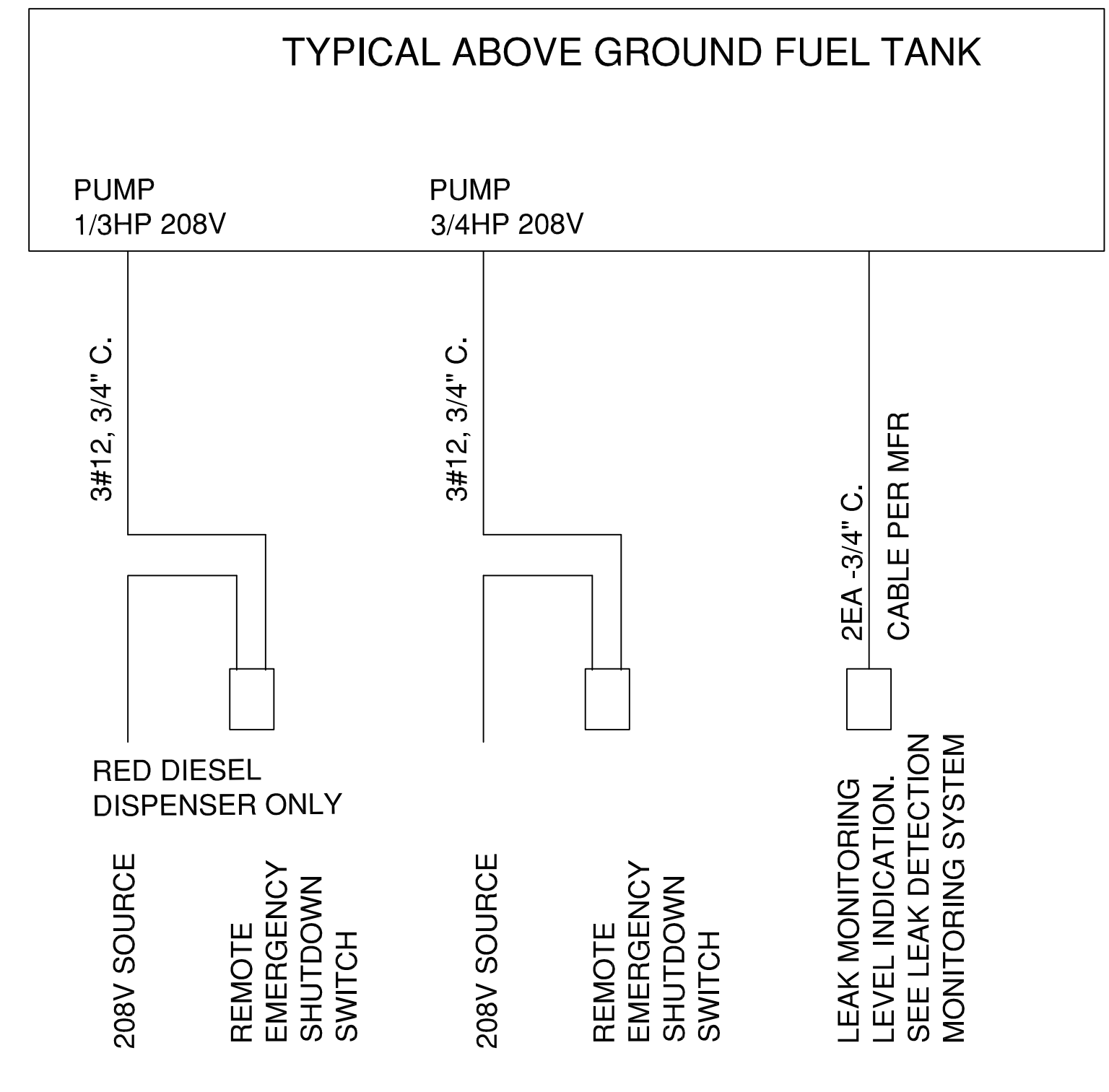
2 FUEL CONTROL SYSTEM ONE-LINE DIAGRAM  
 F-10 SCALE: NONE

COORDINATE CABLE AND CONDUIT CONFIGURATION WITH MANUFACTURER. CONTRACTOR TO PROVIDE CONDUIT AND CABLE ONLY. CONTROL SYSTEM INCLUDING CONFIGURATION AND STARTUP IS FURNISHED BY CITY.



2 LEAK DETECTION SYSTEM ONE-LINE DIAGRAM  
 F-10 SCALE: NONE

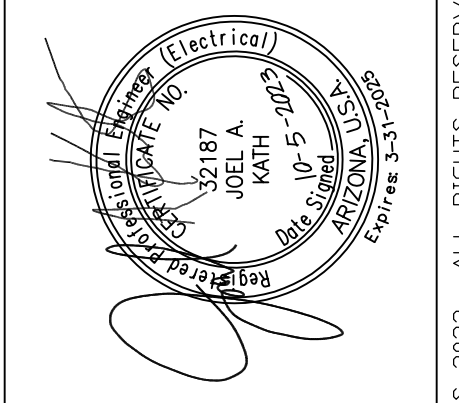
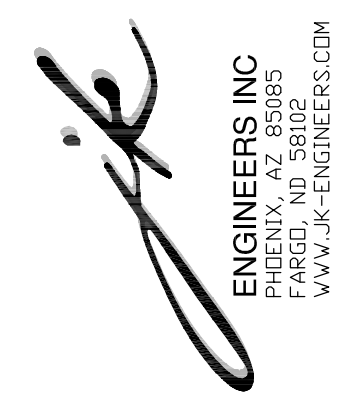
COORDINATE CABLE AND CONDUIT CONFIGURATION WITH MANUFACTURER.



2 ABOVE GROUND TANK DIAGRAM  
 F-10 SCALE: NONE

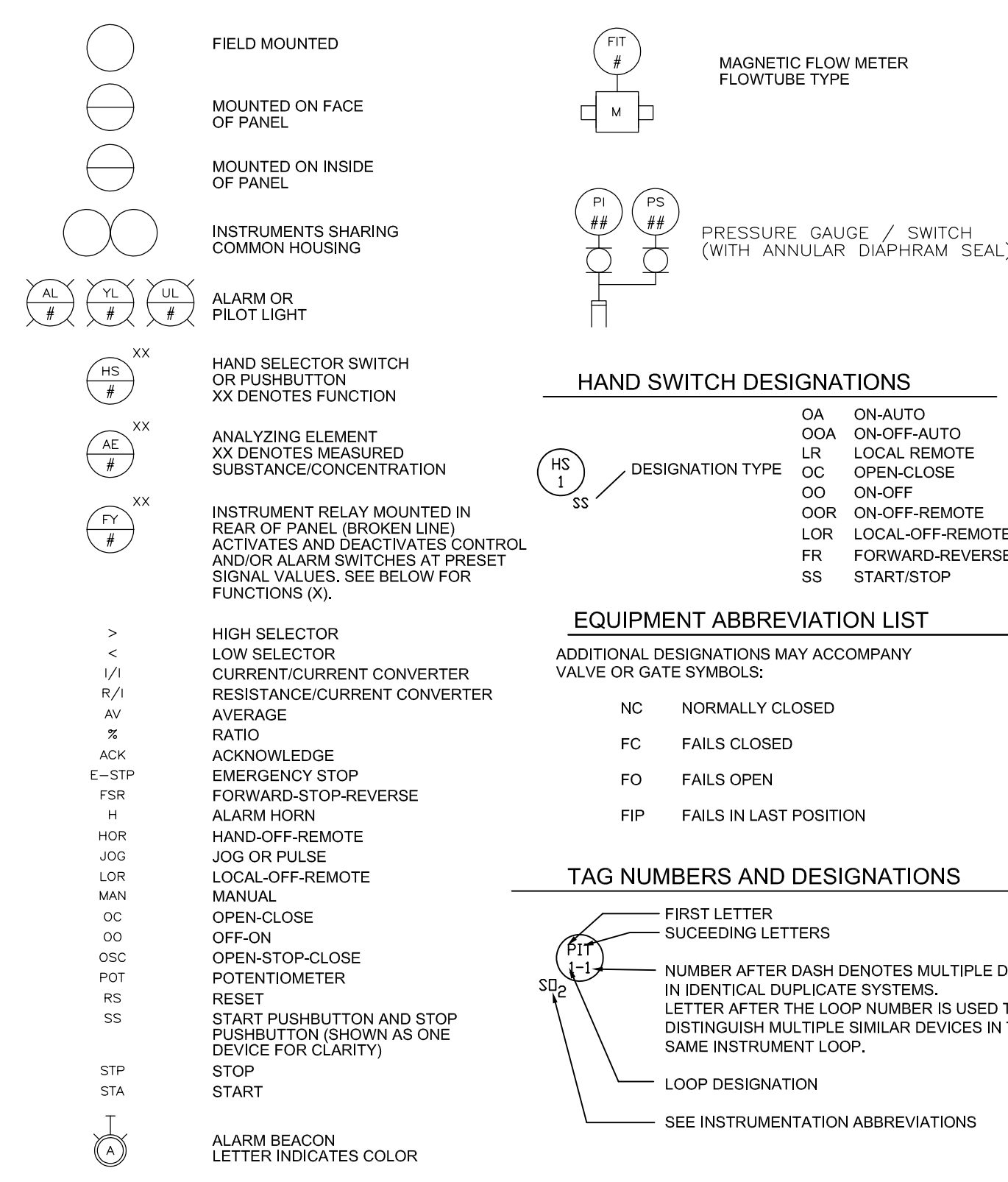
TYPICAL EACH TANK.

PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) FOR FUEL TANK STORAGE AND DISPENSING EQUIPMENT AND FACILITIES. PROVIDE WIRING METHODS AND SEALING REQUIREMENTS PER NEC. PROVIDE INSTALLATION AND CABLE TYPES PER MANUFACTURER RECOMMENDATIONS.

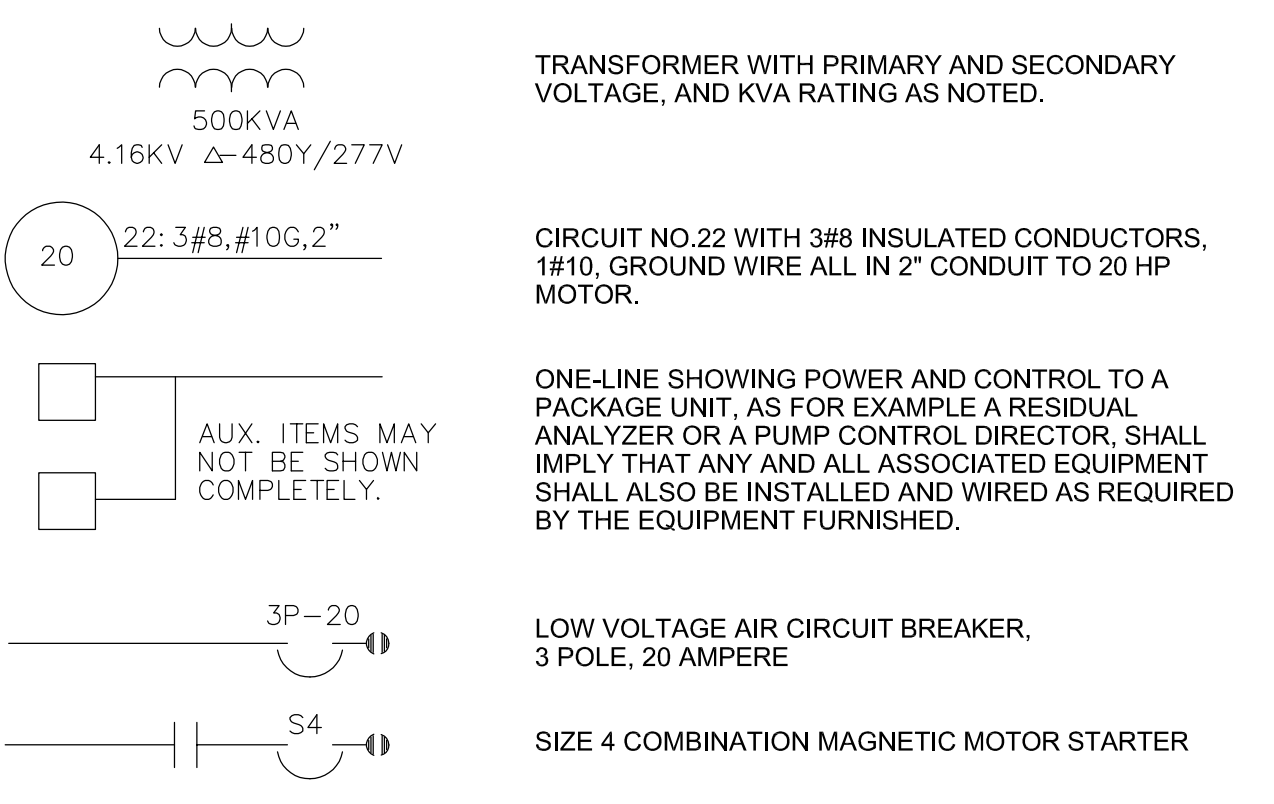


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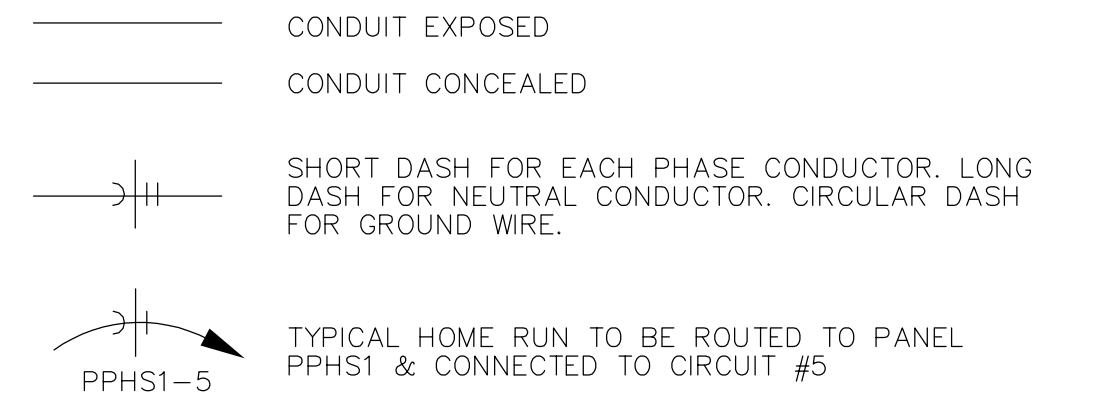
STANDARD SYMBOLS AND DESIGNATIONS



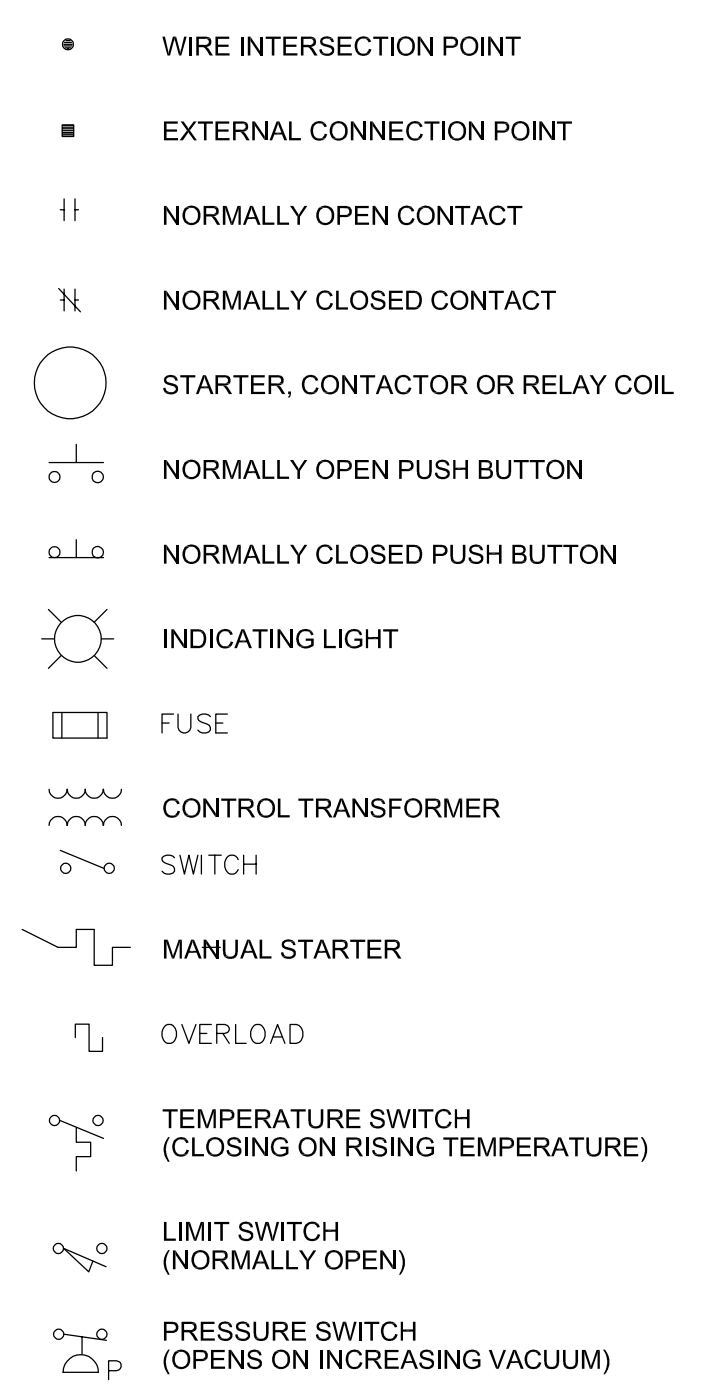
STANDARD ONE LINE DIAGRAM LEGEND



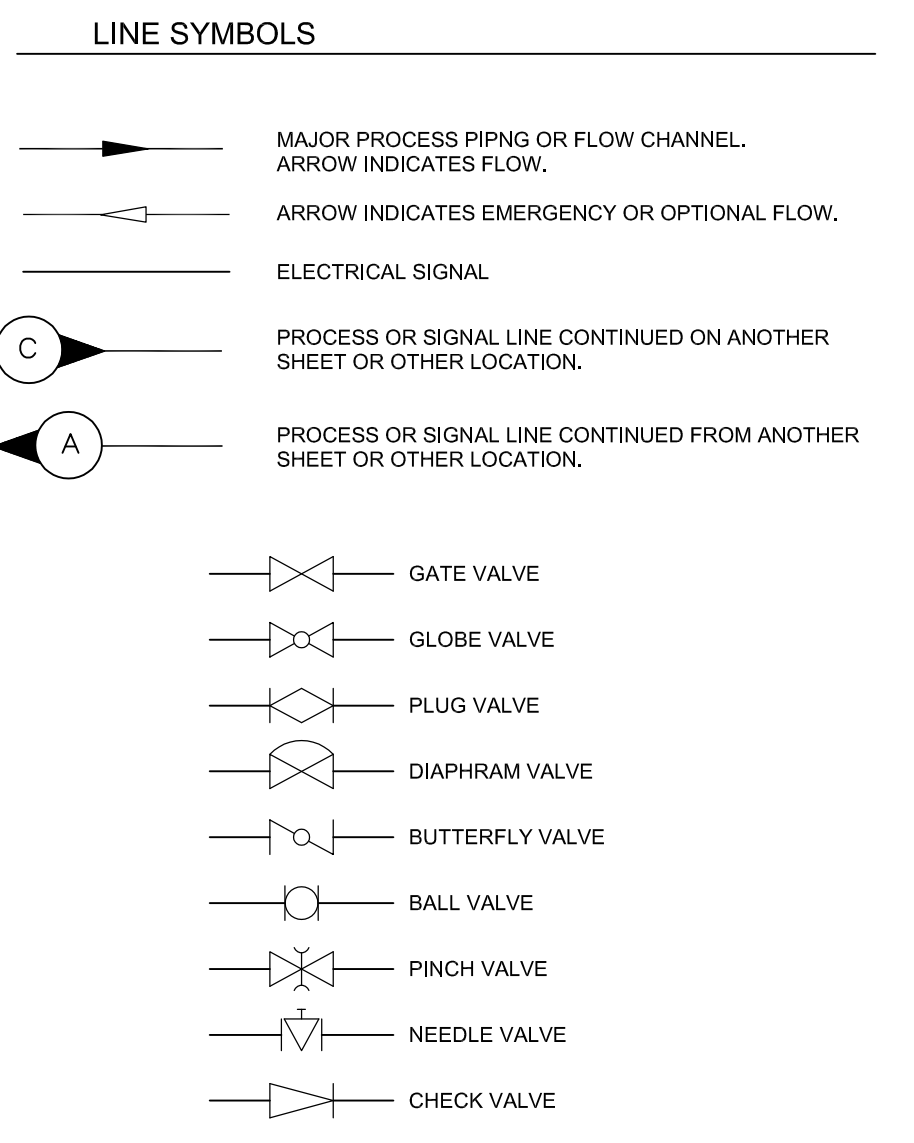
CONDUIT & WIRING INSTALLATION LEGEND



STANDARD SCHEMATIC DRAWINGS



STANDARD CONTROL SYSTEM LEGEND



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DETAILS AND DIAGRAMS  
 ELECTRICAL

VERIFY SCALE  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 0 1'

DATE: OCTOBER 2023  
 PROJ:  
 DWG: E-10  
 SHEET: 26 of 26