

## DESIGN & CONSTRUCTION GROUP THE GOVERNOR NELSON A. ROCKEFELLER EMPIRE STATE PLAZA ALBANY, NY 12242

#### ADDENDUM NO. 1 TO PROJECT NO. 47675

## CONSTRUCTION WORK FUEL TANK MODIFICATION & ENVIRONMENTAL REMEDIATION - CENTRAL REGION SERVICE CONTRACT GNARESP CORNING TOWER ALBANY, NY 12242

May 21, 2025

**NOTE:** This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

#### **DRAWINGS**

- 1. Revised Drawings:
  - a. The drawing set that accompanies this Addendum, noted "ADDENDUM 01 C 5/21/25", will replace the original contract drawing set in its entirety.

#### **END OF ADDENDUM**

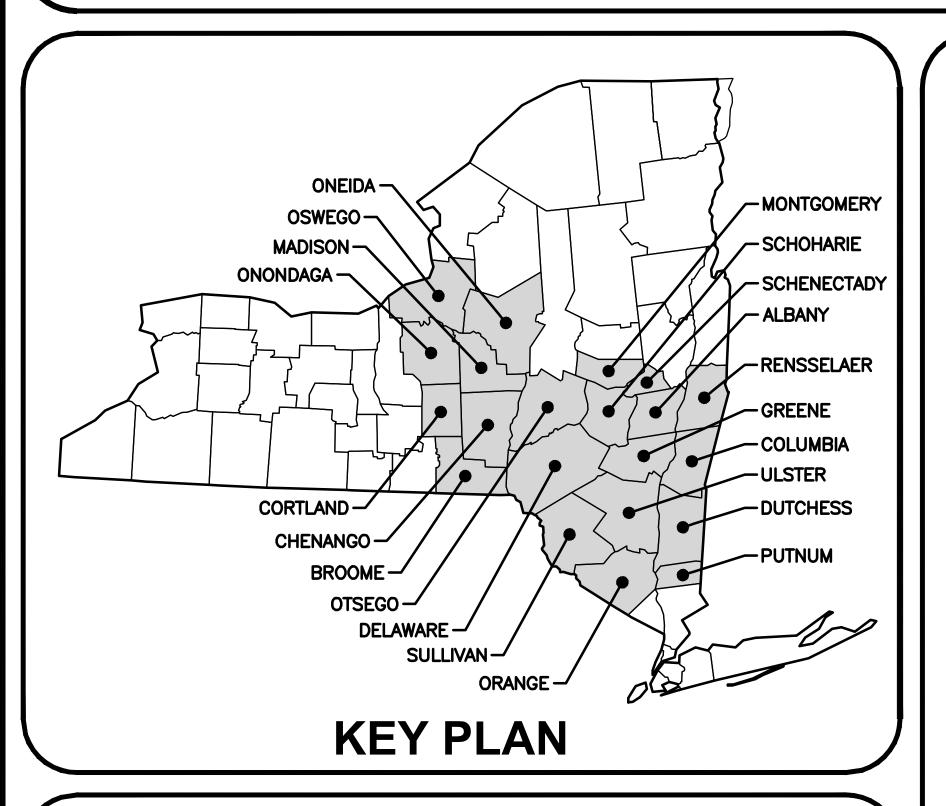
Brady M. Sherlock, P.E. Director, Division of Design Design & Construction

# FUEL TANK MODIFICATION AND ENVIRONMENTAL REMEDIATION

# CENTRAL REGION VARIOUS FACILITIES

O.G.S. PROJECT NO. 47675-C

FINAL SUBMISSION 1/31/2025





**DESIGN & CONSTRUCTION** 

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G-01

ODE ITEM	CODE SECTION	REQUIRED/ALLOWED	ACTUAL	COMMENTS
HAPTER 3 – USE AND OCCUPANCY CLASSIFICATION	SECTION 307			
CCUPANCY H				
HAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS				
LLOWABLE BUILDING HEIGHT (FEET) LLOWABLE NUMBER OF STORIES LLOWABLE AREA	TABLE 504.3 TABLE 504.4 TABLE 506.2	65' 2 9,500 SF		
HAPTER 10 – MEANS OF EGRESS				
MEANS OF EGRESS ILLUMINATION CCEPTABLE MEANS OF EGRESS OMMON PATH OF EGRESS TRAVEL	SECTION 1008 SECTION 1009 SECTION 1029.8	REQUIRED WITH EMERGENCY POWER REQUIRED 75' MAXIMUM TRAVEL DISTANCE		
HAPTER 11 – ACCESSIBILITY				
CCESSIBLE ROUTE CCESSIBLE ENTRANCES	SECTION 1104 SECTION 1105	REQUIRED REQUIRED		
HAPTER 12 – VENTILATION	SECTION 1202	MECHANICAL OR NATURAL		
IGHT: NATURAL/ARTIFICIAL	SECTION 1204.2/1204.3	ARTIFICIAL AND NATURAL		
HAPTER 27 – ELECTRICAL				
MEANS OF EGRESS ILLUMINATION	SECTION 2702.2.13	REQUIRED		

#### 2020 UNIFORM CODE

101.2 Scope. The provisions of the Uniform Code shall apply to all new and existing buildings, structures, systems and equipment as indicated in Sections 101.2.1 through 101.2.8.

302.2 Additional codes. Alterations, repairs, additions and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy or relocation, respectively, in this code and the International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Residential Code and NFPA 70. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

101.2.2 The Building Code. The provisions of the 2020 Building Code of New York State shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

#### REQUIRED CODES

1. Under the Uniform Code, all building projects must meet or exceed the following codes and applicable reference standards contained therein.

- a. 2020 Uniform Code, consisting of:
  - 2020 Building Code of New York State
  - 2020 Residential Code of New York State
  - 2020 Existing Building Code of New York State
  - 2020 Fire Code of New York State
  - 2020 Plumbing Code of New York State
  - 2020 Mechanical Code of New York State
  - 2020 Fuel Gas Code of New York State
  - 2020 Property Maintenance Code of New York State
- 2017 National Electric Code NEPA 70, as referenced in the codes above.
- b. 2020 Energy Code, consisting of:
  - 2020 Energy Conservation Construction Code of New York State
  - 2019 ASHRAE 90.1
- c. 6NYCRR Part 613 Petroleum Bulk Storage
- d. NFPA 30 Flammable and Combustible Liquids Code
- e. NFPA 30A Code for Motor Fuel Dispensing Facilities and Repair Garages
- f. NFPA 110 Standard for Emergency and Standby Power Systems

#### THE PUBLICATIONS LISTED ABOVE ARE BASED ON THE FOLLOWING DOCUMENTS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL AND ASHRAE INTERNATIONAL:

"2018 International Residential Code (first printing w/ errata)

2018 International Building Code (first printing w/ errata)

2018 International Plumbing Code (first printing w/ errata)

2018 International Mechanical Code (first printing w/ errata)

2018 International Fuel Gas Code (first printing w/errata)

2018 International Fire Code (first printing w/errata)

2018 International Property Maintenance Code (first printing w/ errata) 2018 International Existing Building Code (first printing w/errata)

2018 International Energy Conservation Code (first printing w/ errata)

2016 Edition of the Energy Standard for Buildings Except Low-Rise Residential Buildings (""ASH RAE 90.1-2016"")

#### CONSTRUCTION SAFEGUARDS

- . SCOPE: THE SAFETY OF THE CONSTRUCTION AREA, AND ADJACENT PUBLIC AND PRIVATE PROPERTIES SAFETY, SHALL BE PROTECTED DURING CONSTRUCTION AND DEMOLITION IN ACCORDANCE WITH THE 2020 EXISTING BUILDING CODE OF NEW YORK STATE (EBCNYS) CHAPTER 15 AND THE 2020 FIRE CODE OF NEW YORK STATE (FCNYS) CHAPTER 33. COMPLIANCE WITH NFPA 241 IS REQUIRED FOR ITEMS NOT SPECIFICALLY ADDRESSED. THIS SPECIFICATION PROSCRIBES MINIMUM SAFEGUARDS FOR CONSTRUCTION TO PROVIDE REASONABLE SAFETY TO LIFE AND PROPERTY FROM FIRE DURING SUCH OPERATIONS.
- 2. CONSTRUCTION INCLUDES ANY NEW CONSTRUCTION, REMOVALS, REMODELING, ALTERATIONS, REPAIRS OR ADDITIONS TO ANY BUILDING OR STRUCTURE.
- 3. MAINTENANCE OF SAFE CONDITIONS: REQUIRED SAFETY ELEMENTS SUCH AS EXITS, EXISTING STRUCTURAL MEMBERS, FIRE PROTECTION DEVICES AND SANITARY SAFEGUARDS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT WHERE THE BUILDING IS NOT OCCUPIED OR WHERE SUCH REQUIRED ELEMENTS ARE BEING ALTERED OR REPAIRED AND ADEQUATE SUBSTITUTE PROVISIONS ARE MADE.
- 4. MEAN OF EGRESS: AN APPROVED PERMANENT OR TEMPORARY MEANS OF EGRESS SHALL BE MAINTAINED. AN EGRESS COMPONENT SHALL NOT BE DESTROYED UNLESS AND UNTIL A SUBSTITUTE MEANS OF EGRESS HAS BEEN
- 5. FIRE SAFETY DURING CONSTRUCTION AND REMOVALS: FIRE SAFETY SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF EBCNYS CHAPTER 15 AND FCNYS CHAPTER 33.
  - A. FIRE EXTINGUISHERS: PROVIDE PORTABLE FIRE EXTINGUISHERS FOR PROTECTION DURING CONSTRUCTION AND REMOVALS AT EACH STAIRWAY, ON EACH FLOOR LEVEL, WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED, AND IN EVERY STORAGE AND CONSTRUCTION SHED. EXTINGUISHERS SHALL COMPLY WITH FCNYS 906, SIZED FOR ORDINARY HAZARD UNLESS GREATER HAZARD IS SPECIFIED. ADDITIONAL PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED WHERE SPECIAL HAZARDS EXIST. SUCH AS THE STORAGE AND USE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.
  - B. ANY BURNING, CUTTING OR WELDING SHALL REQUIRE A HOT WORK PERMIT AND APPROVAL.
- 6. MATERIAL HANDLING: EQUIPMENT AND MATERIALS SHALL BE STORED AND PLACED, AND WASTE SHALL BE REMOVED, SO AS NOT TO ENDANGER THE PERSONS OR PROPERTY OR TO IMPEDE A MEANS OF EGRESS. PLACE MATERIAL AND WASTE SO AS NOT TO OBSTRUCT ACCESS TO FIRE HYDRANTS, STANDPIPES, FIRE EXTINGUISHERS, FIRE OR POLICE ALARMS BOXES, CATCH BASINS, MANHOLES, RELEVANT UTILITY STRUCTURES, TRAFFIC OR OBSERVATION OF TRAFFIC SIGNALS. COMBUSTION DEBRIS SHALL NOT BE ACCUMULATED ON SITE, AND SHALL BE REMOVED AT THE END OF EACH WORK SHIFT. RUBBISH CONTAINERS WITH A CAPACITY EXCEEDING 5.33 CUBIC FEET (40 GALLONS OR 0.15 CUBIC METERS) SHALL HAVE TIGHT FITTING OR SELF CLOSING LIDS, AND SHALL BE CONSTRUCTED OF NONCOMBUSTIBLE MATERIAL OR MATERIAL THAT MEETS FCNYS SECTION 3304.2.3 (2).

#### BUILDING INFORMATION (SPECIFIED ON A SITE BY SITE BASIS):

OCCUPANCY CLASSIFICATION:

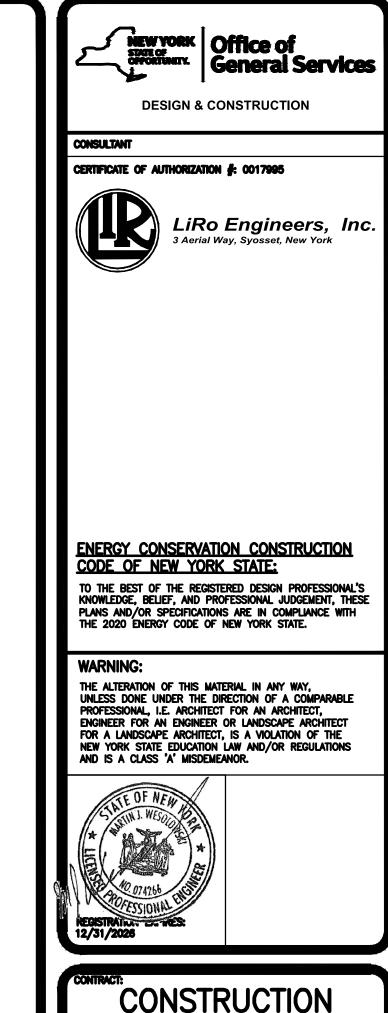
CONSTRUCTION CLASSIFICATION:

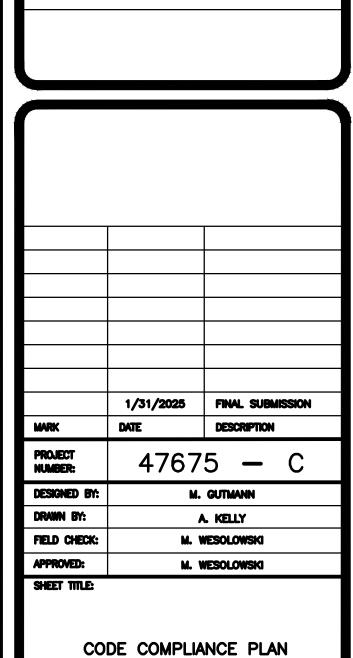
#### CLASSIFICATION OF WORK (SPECIFIED ON A SITE BY SITE BASIS):

ALTERATION LEVEL

#### FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) COMPLIANCE

THE DESIGNER OF RECORD SHALL REVIEW FEMA FLOOD HAZARD DATA AND FLOOD INSURANCE RATE MAPS (FIRMS) AND PERFORM A FLOOD RISK ANALYSIS IN, ON A SITE BY SITE BASIS, ACCORDANCE WITH FEMA GUIDELINES AND STANDARDS TO DETERMINE IF THE PROPOSED INSTALLATION IS IN A FLOOD HAZARD AREA. LOCATIONS DETERMINED TO BE IN A AREA OF FLOOD RISK SHALL INCORPORATE FLOOD RESISTANT DESIGN AND CONSTRUCTION REQUIREMENTS IN ACCORDANCE WITH THE NYS BUILDING CODE, NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FEMA, NFPA, AND ASCE REQUIREMENTS.





G-02

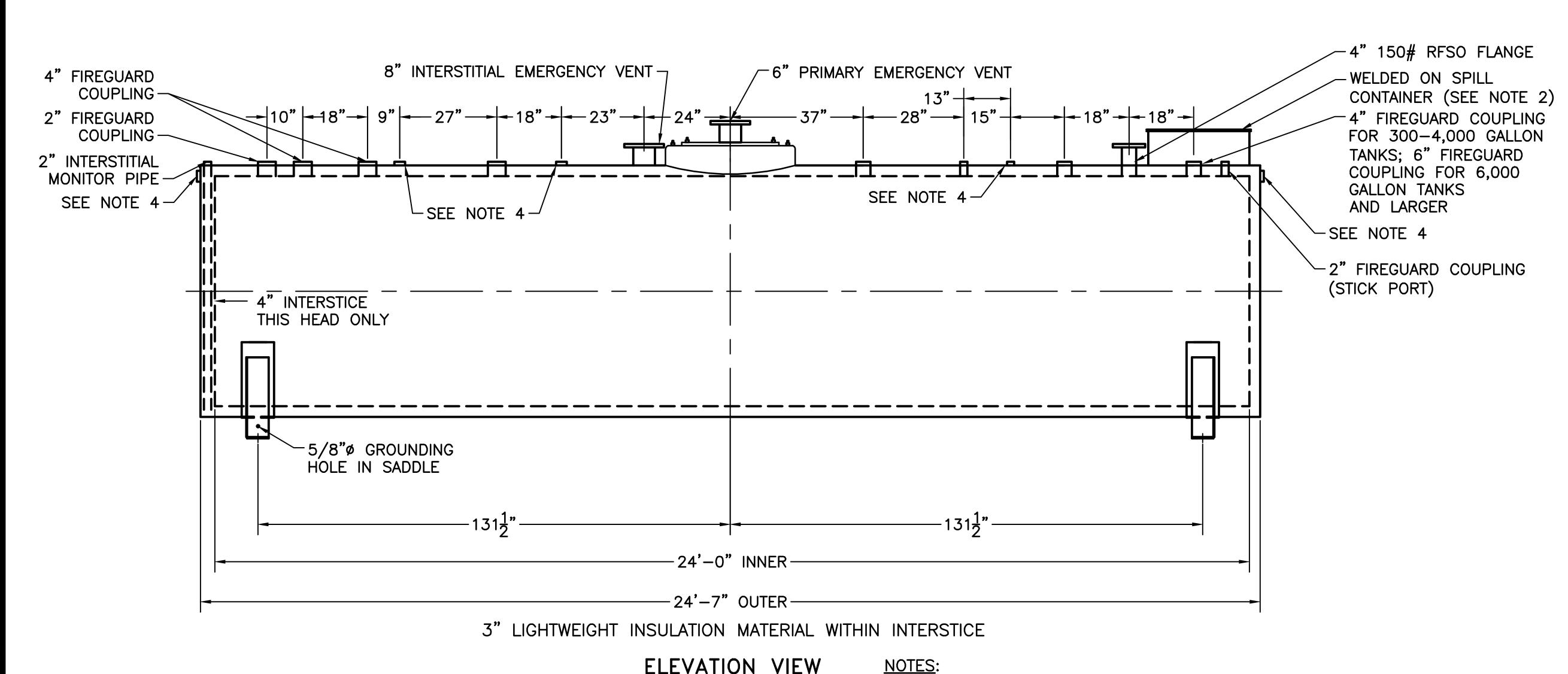
SHEET 2 OF 51

FUEL TANK MODIFICATION AND

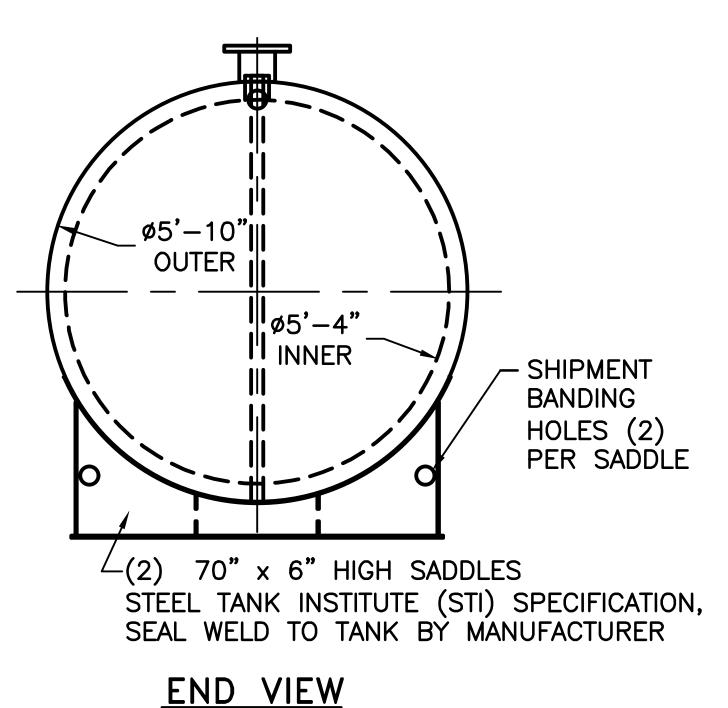
ENVIRONMENTAL REMEDIATION

CENTRAL REGION

VARIOUS FACILITIES

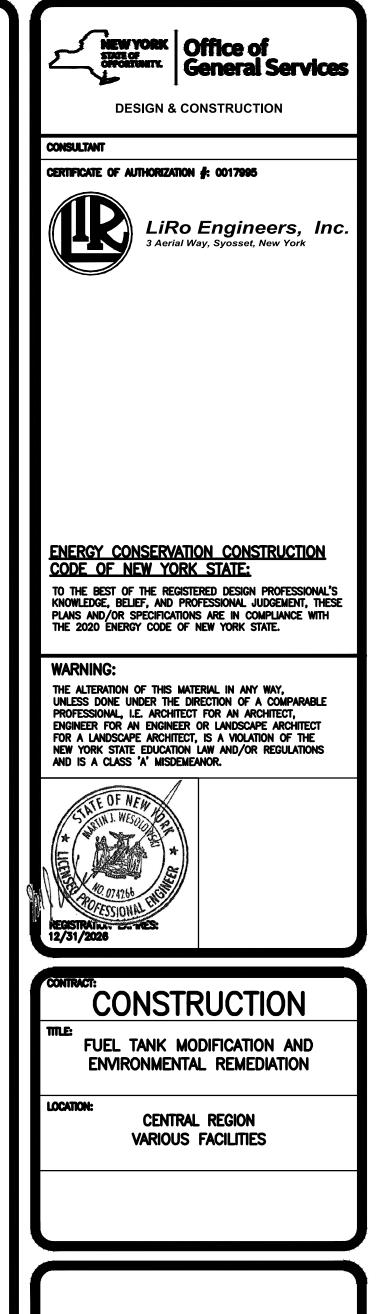


**ELEVATION VIEW** 



SCALE: NONE

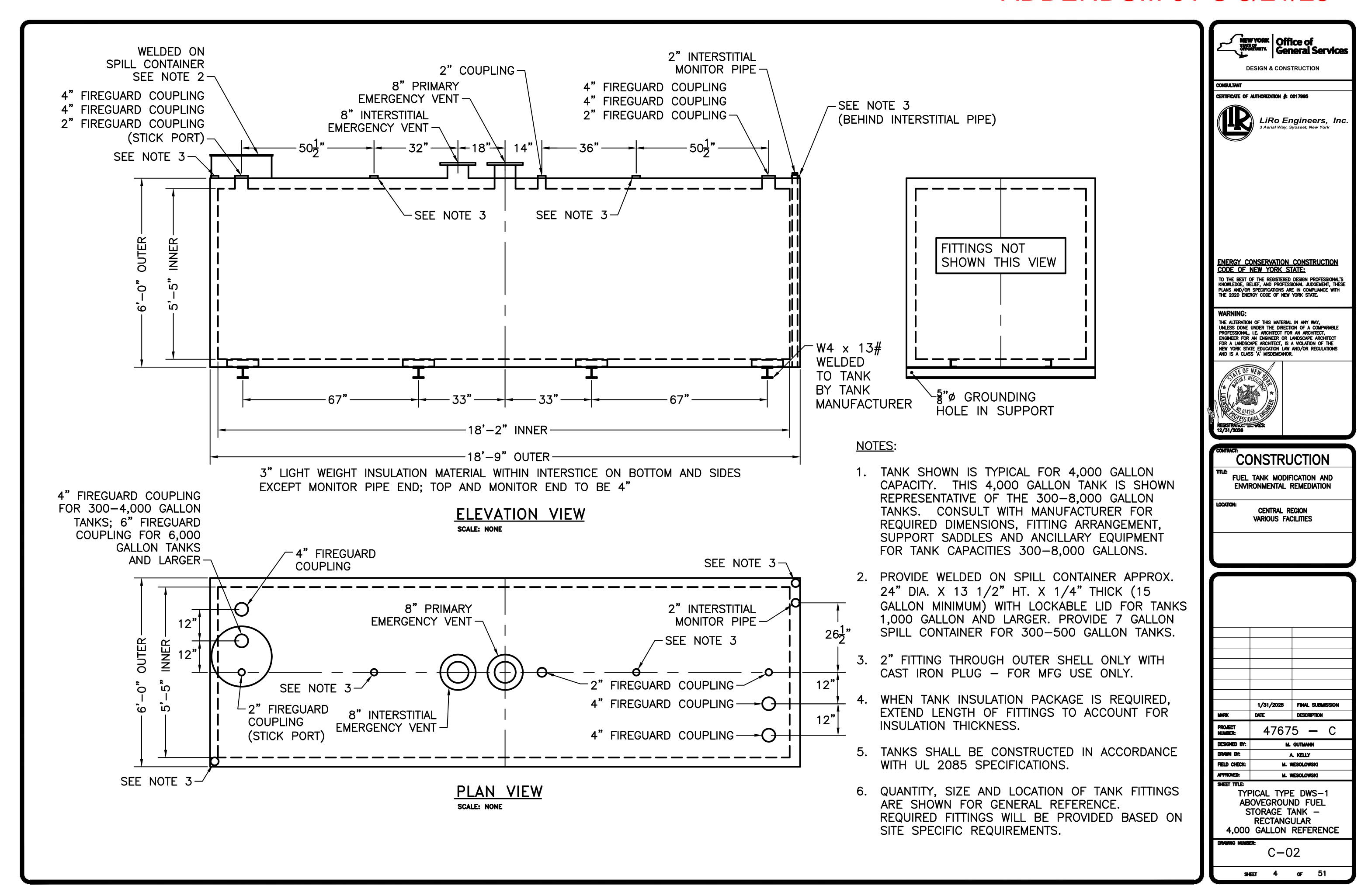
- 1. TANK SHOWN IS TYPICAL FOR 64" INNER DIAMETER 4,000 GALLON CAPACITY. THIS 4,000 GALLON TANK IS SHOWN REPRESENTATIVE OF THE 300-8,000 GALLON TANKS. TANK INNER DIAMETERS MAY VARY BETWEEN 48 INCHES AND 96 INCHES BASED ON SITE SPECIFIC REQUIREMENTS. CONSULT WITH MANUFACTURER FOR REQUIRED DIMENSIONS, FITTING ARRANGEMENT, SUPPORT SADDLES AND ANCILLARY EQUIPMENT FOR TANK CAPACITIES 300-8,000 GALLONS.
- 2. PROVIDE WELDED ON SPILL CONTAINER APPROX. 24" DIA. X 13 1/2" HT. X 1/4" THICK (15 GALLON MINIMUM) WITH LOCKABLE LID FOR TANKS 1,000 GALLON AND LARGER. PROVIDE 10 GAL SPILL CONTAINER FOR 300-500 GALLON TANKS.
- 3. SADDLE LOCATION AS PER TANK MANUFACTURER SPECIFICATIONS.
- 4. 2" FITTING THROUGH OUTER SHELL ONLY WITH CAST IRON PLUG FOR MFG USE ONLY.
- 5. WHEN TANK INSULATION PACKAGE IS REQUIRED, EXTEND LENGTH OF FITTINGS TO ACCOUNT FOR INSULATION THICKNESS.
- 6. TANKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH UL 2085 SPECIFICATIONS.
- 7. QUANTITY, SIZE AND LOCATION OF TANK FITTINGS ARE SHOWN FOR GENERAL REFERENCE. REQUIRED FITTINGS WILL BE PROVIDED BASED ON SITE SPECIFIC REQUIREMENTS.

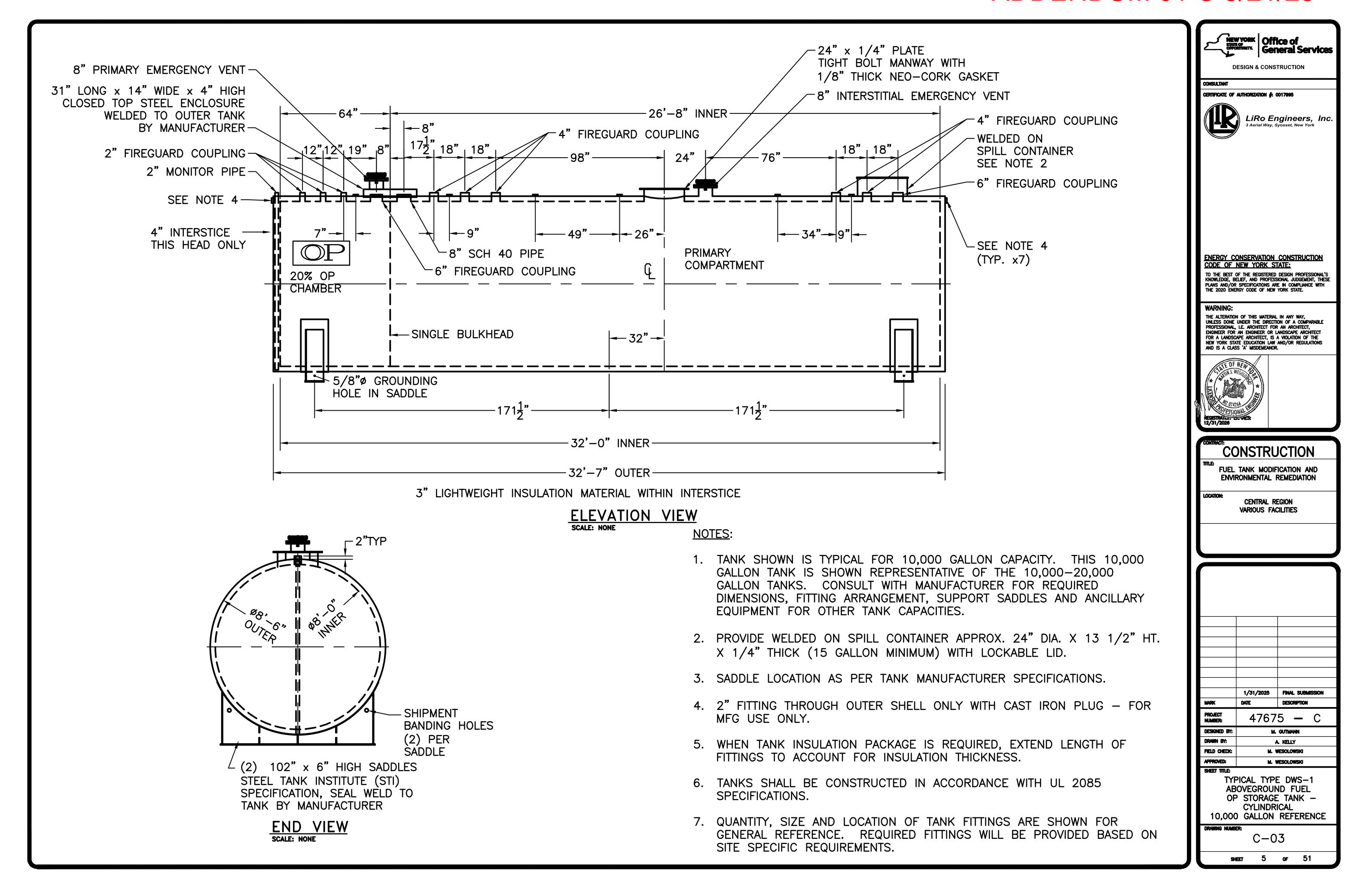


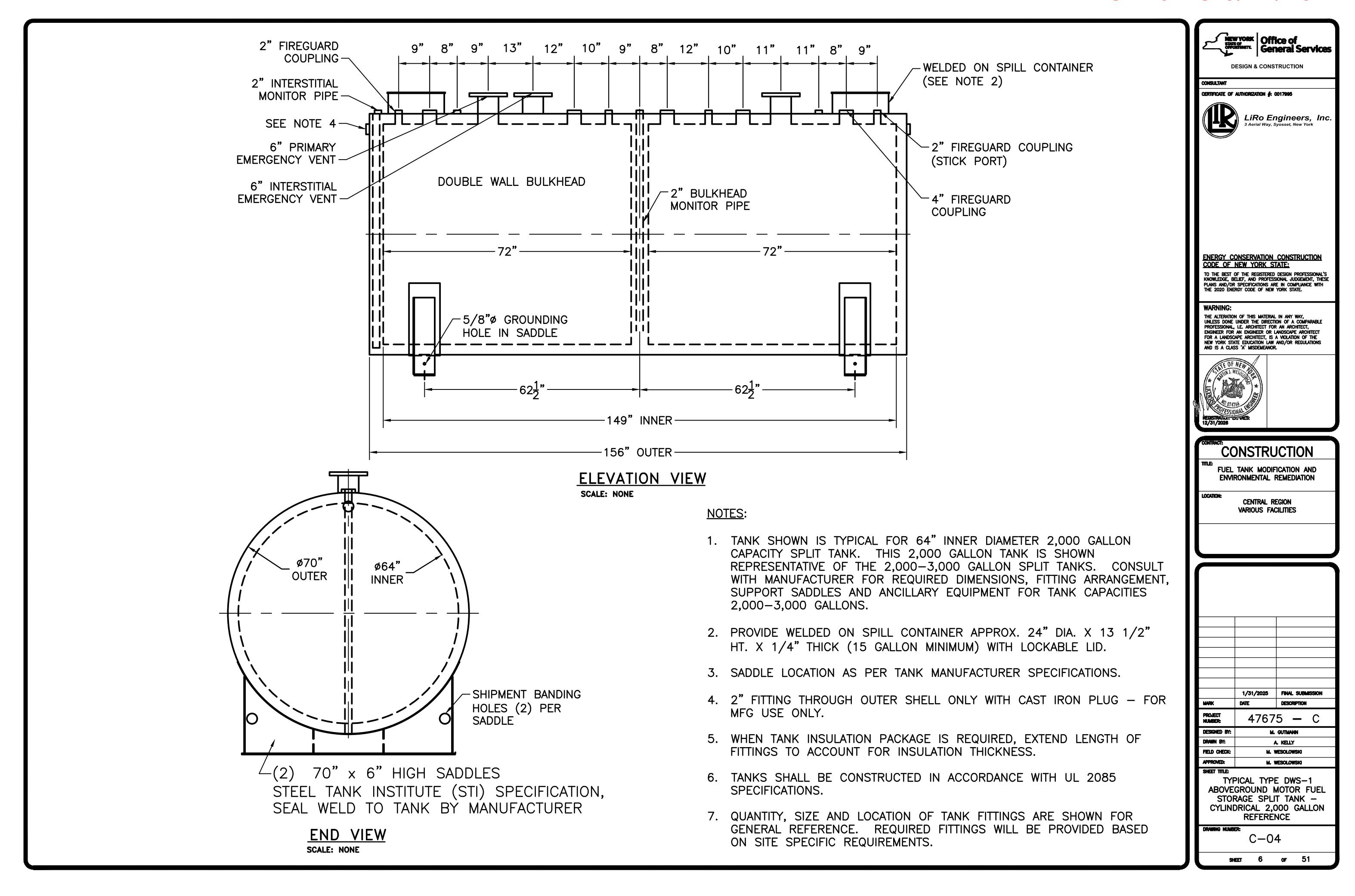
	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	4767	5 <b>–</b> C
		5 — C GUTMANN
NUMBER:	M.	
NUMBER: DESIGNED BY:	M.	GUTMANN
DESIGNED BY: DESIG	M. A	GUTMANN L KELLY
NUMBER: DESIGNED BY: DRAWN BY:	M. A	GUTMANN A. KELLY WESOLOWSKI

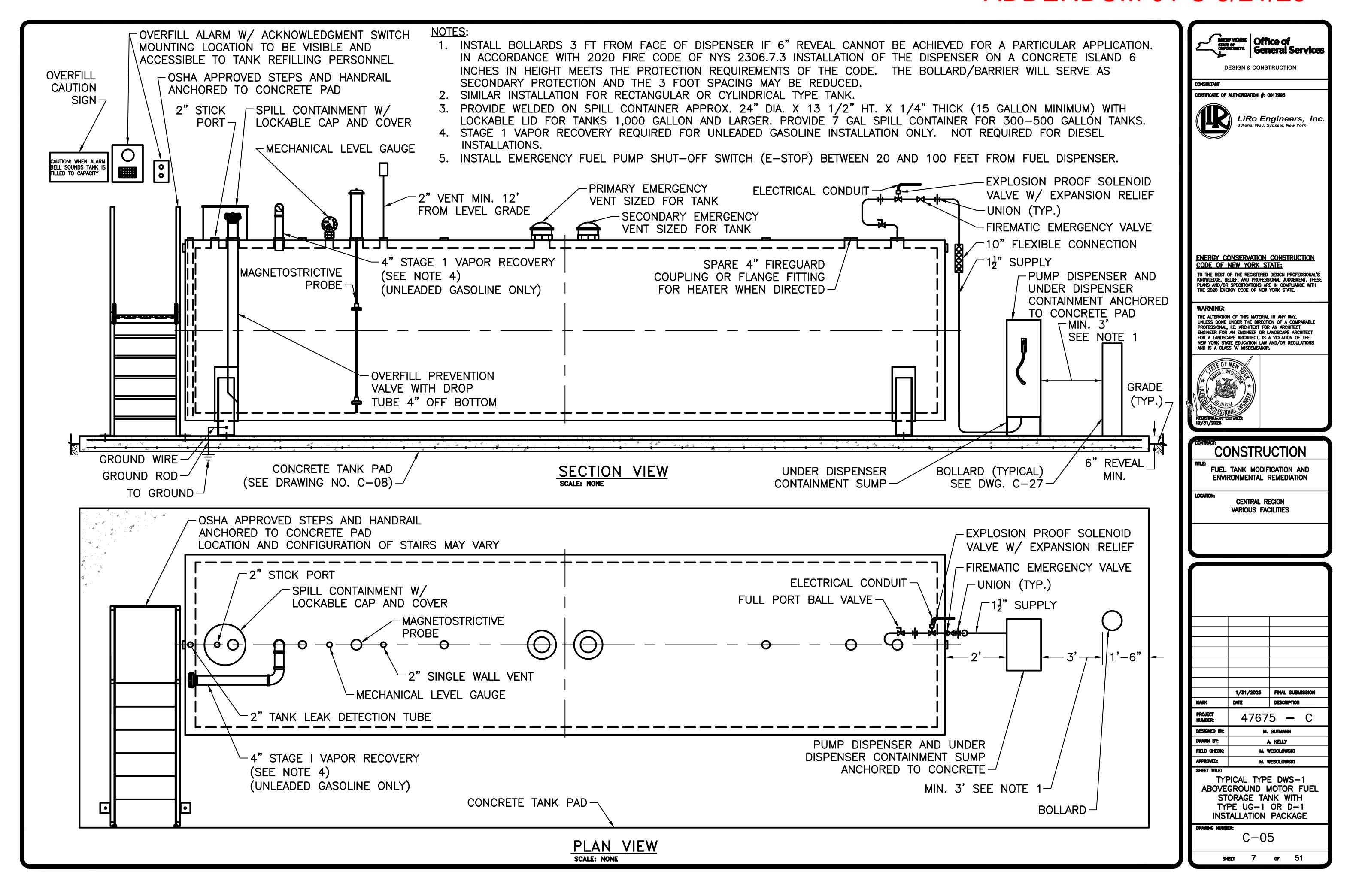
C - 01

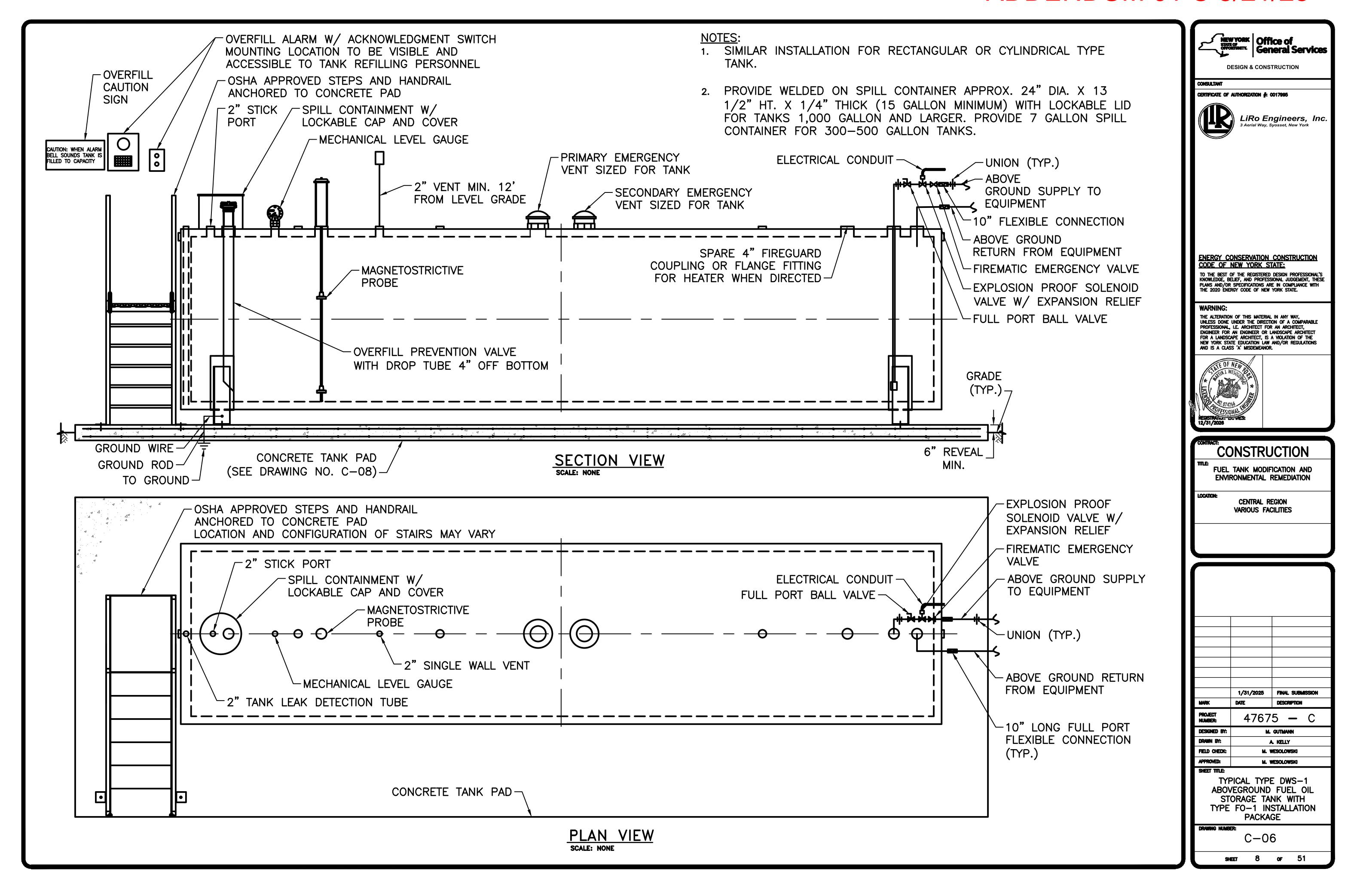
SHEET 3 OF 51

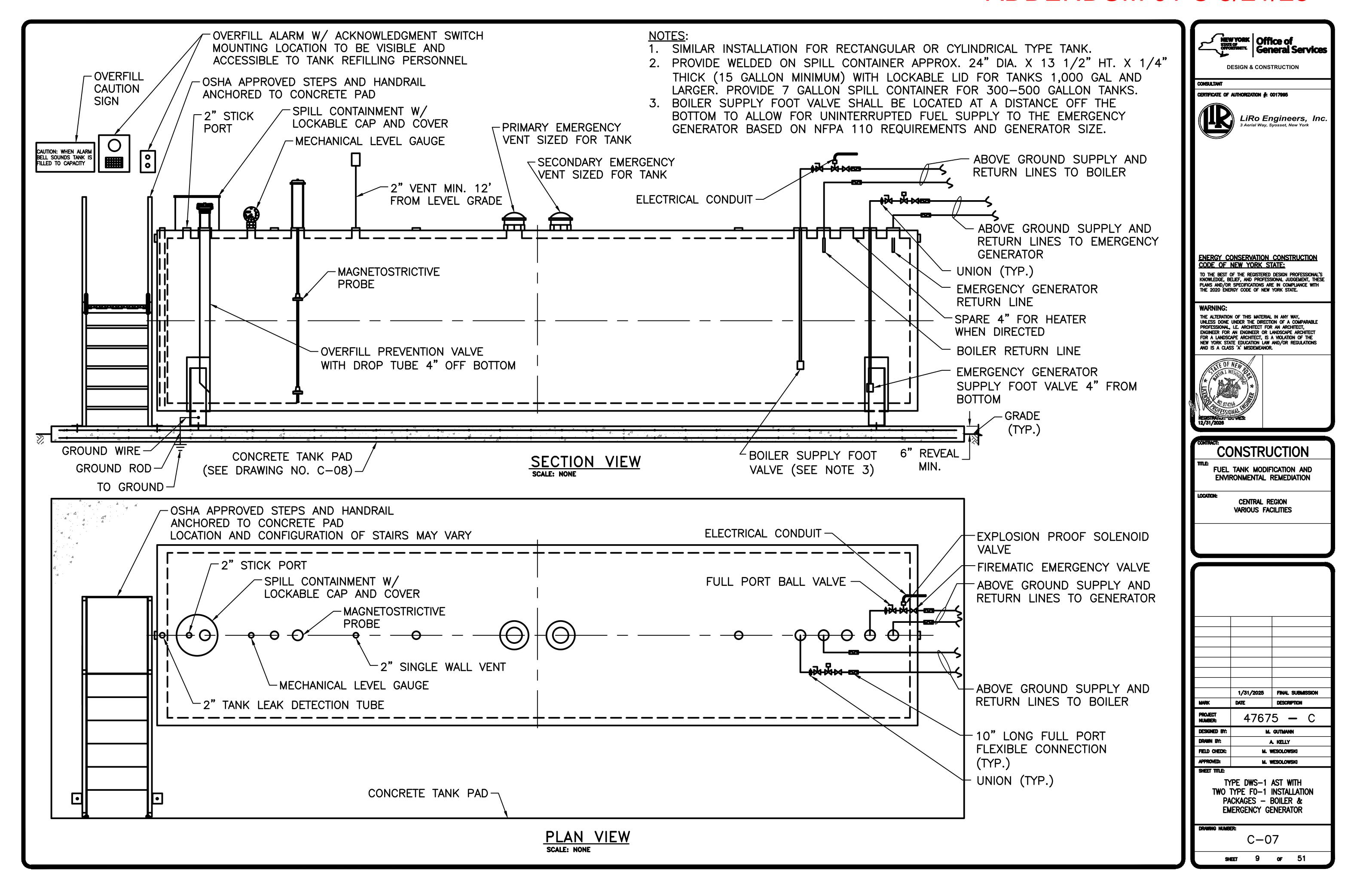


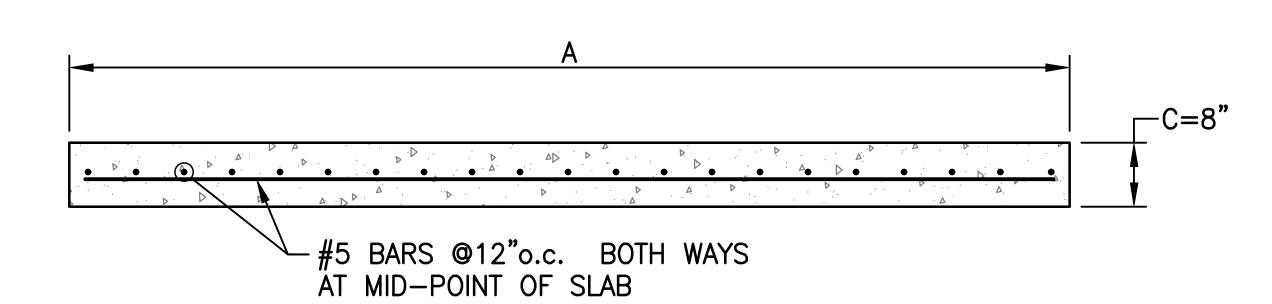






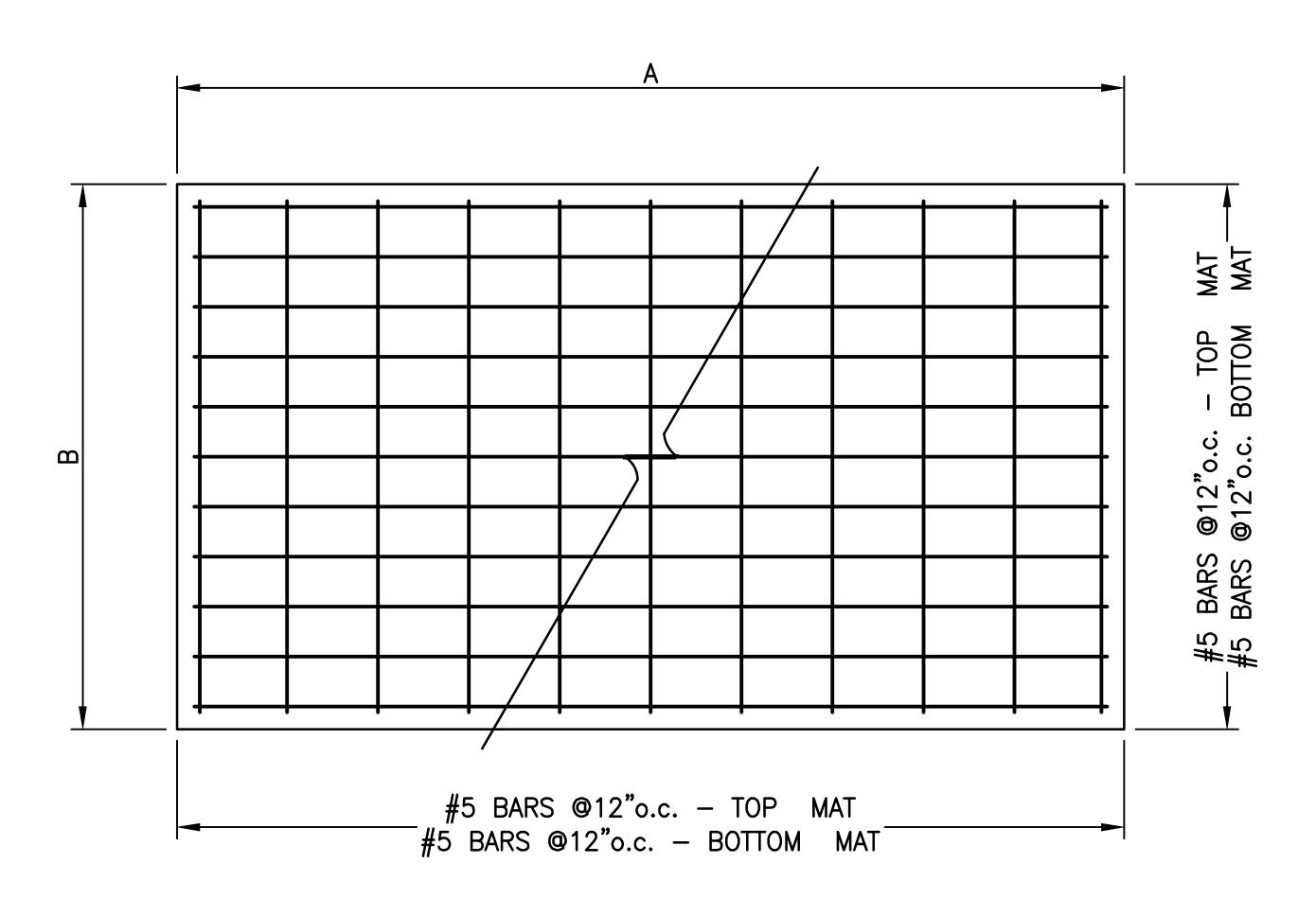






#### 8" CONCRETE PAD ELEVATION

SCALE: NONE



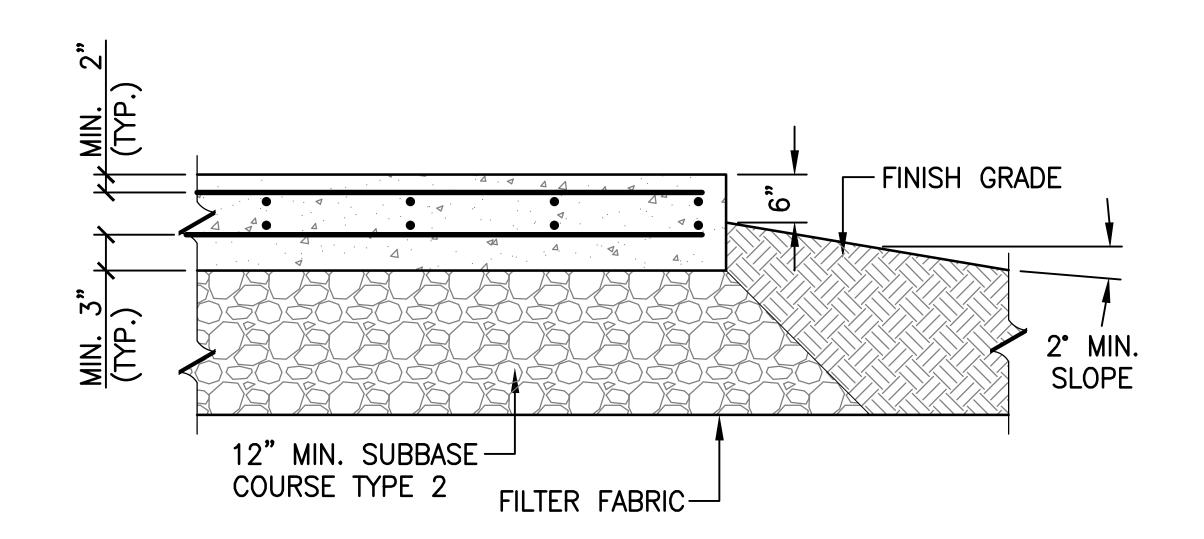
CONCRETE PAD PLAN

SCALE: NONE

# #5 BARS @12"o.c. — #5 BARS @12"o.c. — C=12" #5 BARS @12"o.c. — 3" — #5 BARS @12"o.c.

#### 12" CONCRETE PAD ELEVATION

SCALE: NONE



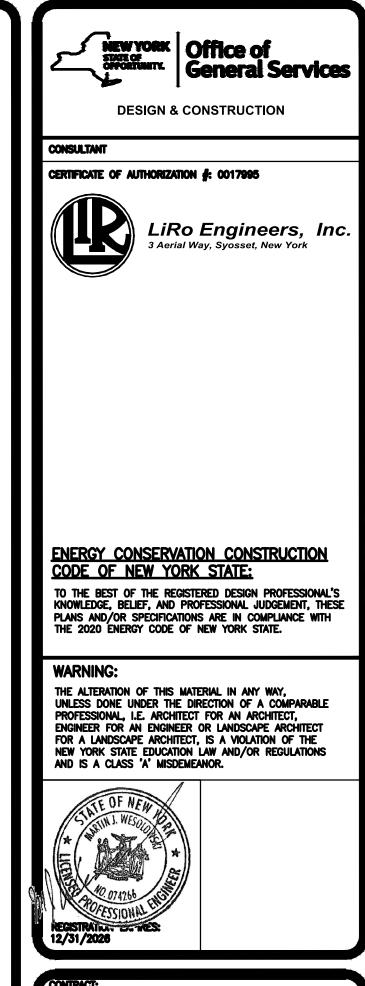
#### TANK PAD FOUNDATION / FILL DETAIL

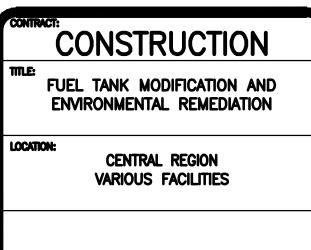
SCALE: NONE

C = 8" FOR TANKS 250 GALLON THROUGH 2,000 GALLON, 12" FOR TANKS >2,000 GALLON THROUGH 15,000 GALLON, 18" FOR TANKS >15,000 GALLON (SEE NOTE 5)

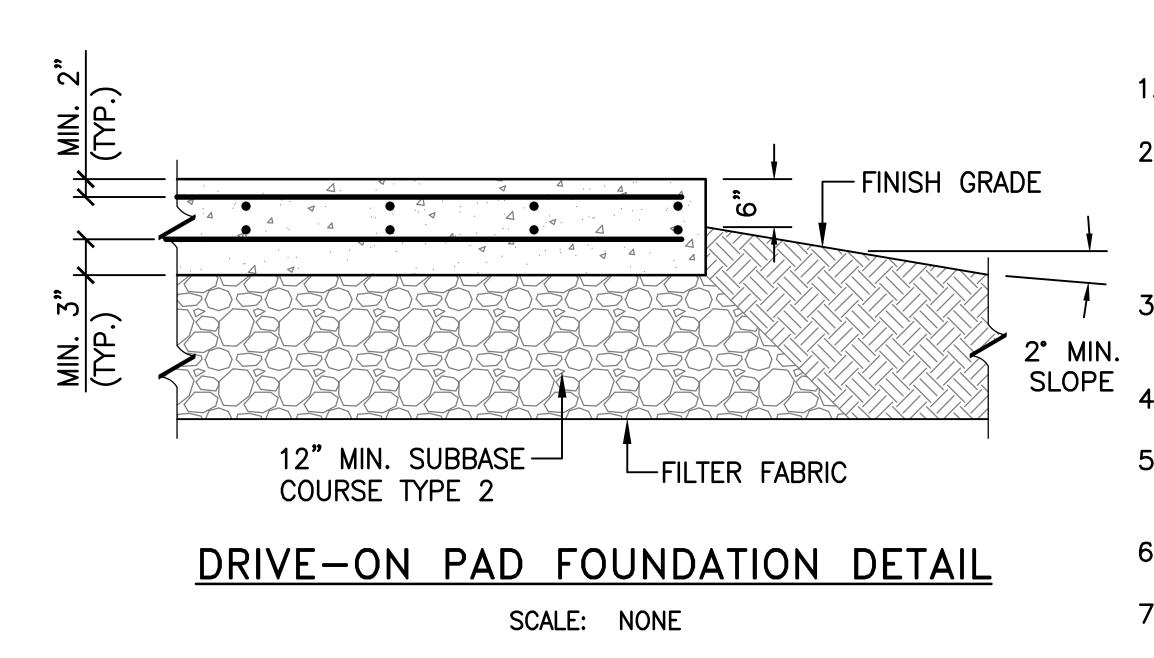
#### NOTES:

- 1. CONCRETE PAD DIMENSIONS SHALL BE DETERMINED BY SITE—SPECIFIC CONDITIONS AND FUEL SYSTEM REQUIREMENTS.
- 2. PROVIDE A ½" CHAMFER AT ALL EXPOSED CORNERS AND EDGES OF CONCRETE SLABS.
- 3. PROVIDE REBAR WITH CORROSION-RESISTANT EPOXY COATING.
- 4. SLOPE TANK PAD 1 DEGREE TO PREVENT POOLING OF WATER. PROVIDE SHIM BENEATH TANK ON ONE SIDE TO ENSURE IT IS LEVEL.
- 5. DESIGN OF TANK SLABS FOR >15,000 GALLON TANKS SHALL BE ON A SITE BY SITE BASIS.
- 6. FOR STANDARD SLABS, THE LAP LENGTH FOR REBAR SPLICING SHALL BE 40X THE REBAR DIAMETER.



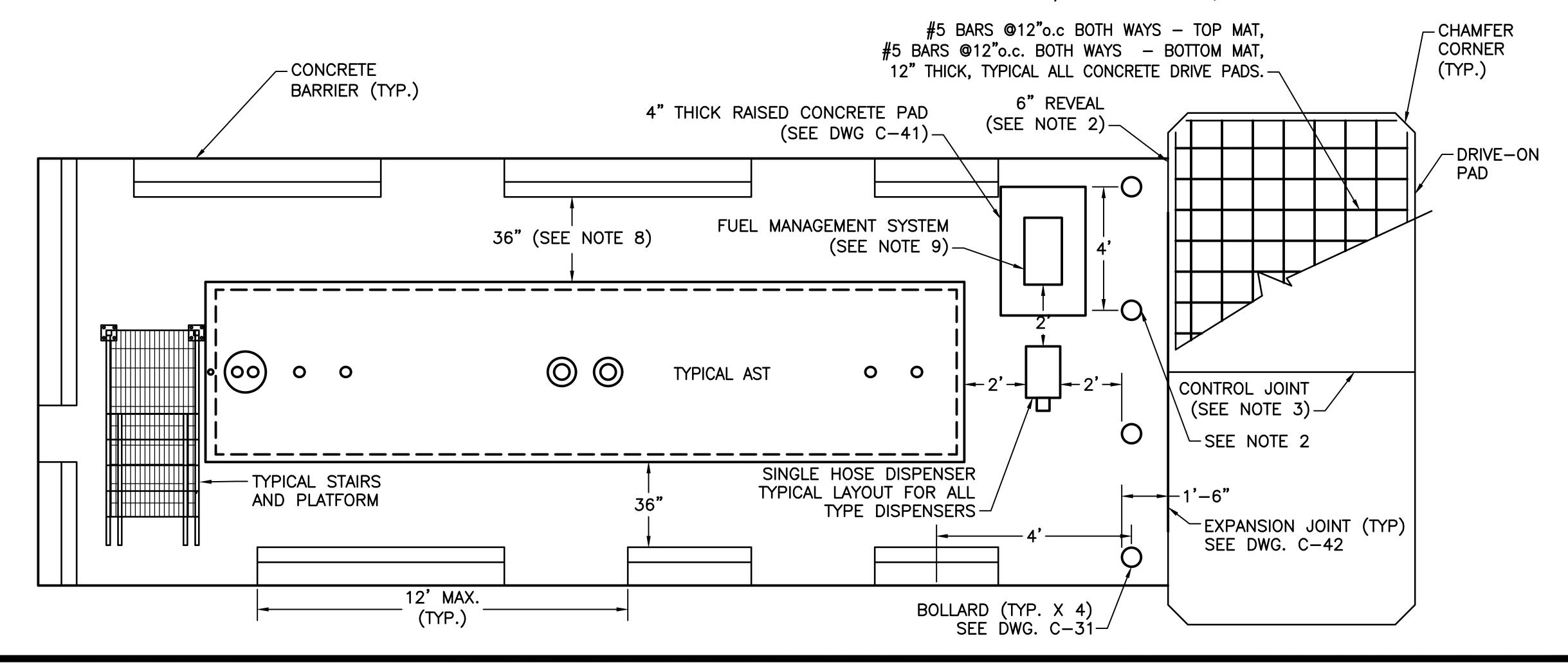


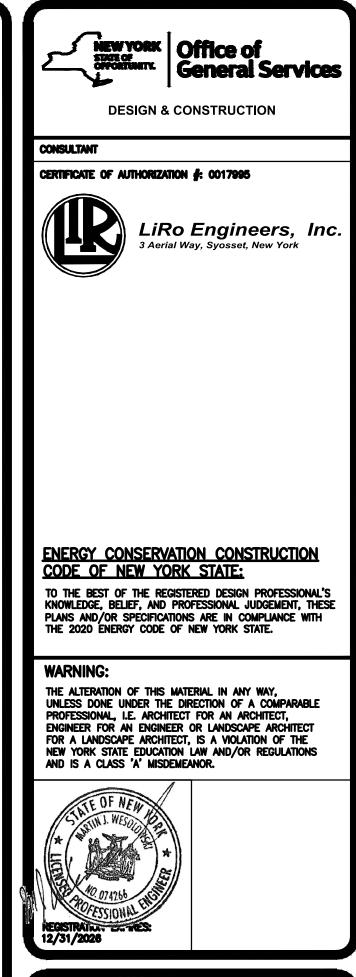
	1/31/2025	FINAL SUBMISSION	
MARK	DATE	DESCRIPTION	
PROJECT NUMBER:	4767	5 <b>–</b> C	
DESIGNED BY:	M.	GUTMANN	
DRAWN BY:		A. KELLY	
FIELD CHECK:	M. 1	NESOLOWSKI	
APPROVED:	M. 1	WESOLOWSKI	
SHEET TITLE:			
•	ABOVEGROUN STORAGE		
	CONCRETE		
	DETAILS		
DRAWING NUMB	C-0	8	
en en	EET 10	or 51	

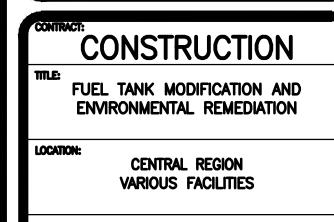


#### **NOTES:**

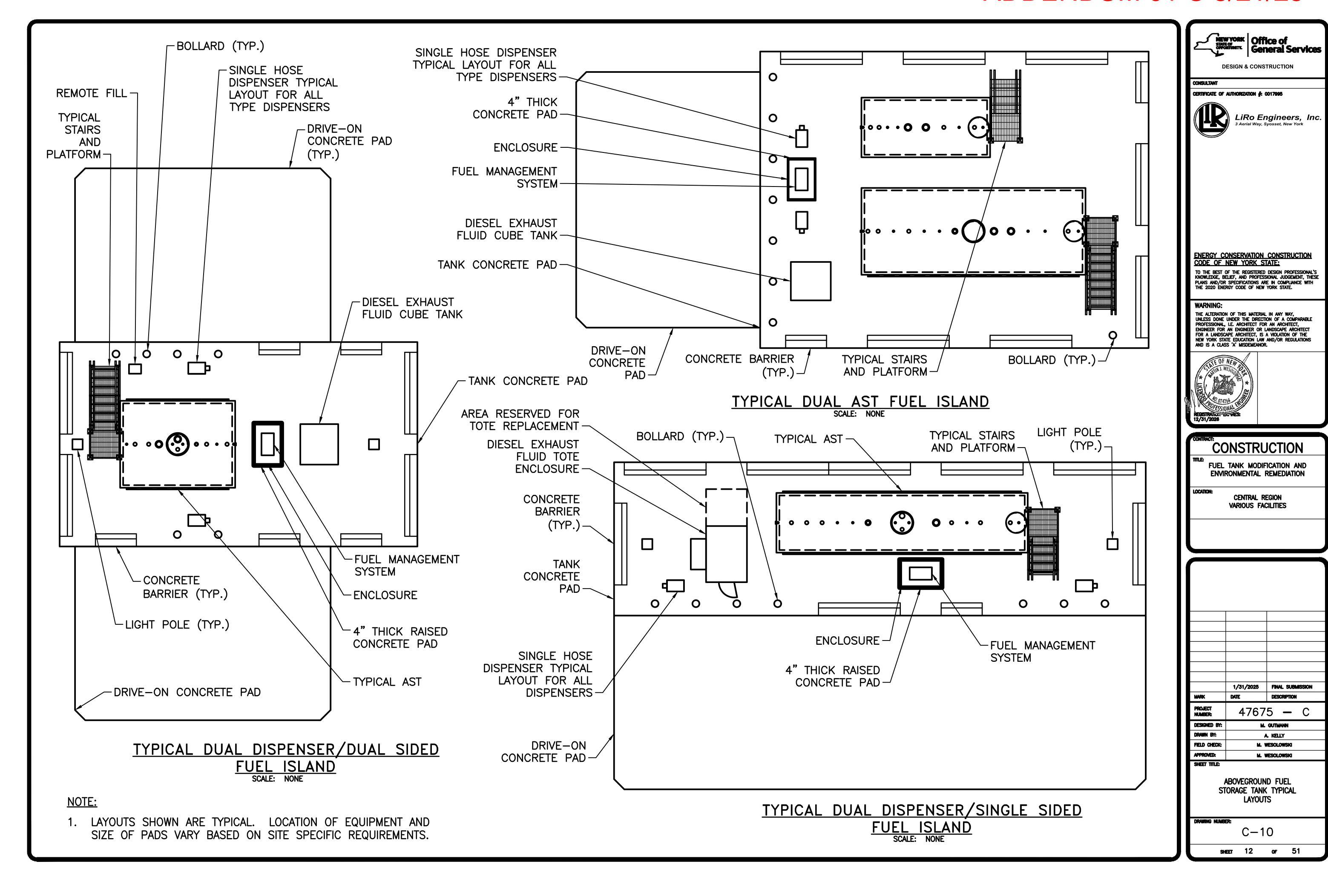
- 1. SEE DRAWING C-23, C-24, AND C-25 FOR FIRE SUPPRESSION IF REQUIRED.
- 2. INSTALL BOLLARDS 3 FT FROM FACE OF DISPENSER IF 6" CURB CANNOT BE ACHIEVED FOR A PARTICULAR APPLICATION. IN ACCORDANCE WITH 2020 FIRE CODE OF NYS 2306.7.3 INSTALLATION OF THE DISPENSER ON A CONCRETE ISLAND 6 INCHES IN HEIGHT MEETS THE PROTECTION REQUIREMENTS OF THE CODE. THE BOLLARD/BARRIER WILL SERVE AS SECONDARY PROTECTION AND THE 3 FOOT SPACING MAY BE REDUCED.
- CONTROL JOINT PLACEMENT AT MAXIMUM OF 20FT ON CENTER OR MIDPOINT OF ALL CONCRETE PADS.
- 4. PROVIDE A ½" CHAMFER AT ALL EXPOSED CORNERS AND EDGES OF CONCRETE SLABS.
- 5. INSTALL EMERGENCY FUEL PUMP SHUT-OFF SWITCH (E-STOP) BETWEEN 20 AND 100 FEET FROM FUEL DISPENSER.
- 6. BOLLARD PROTECTION IN FRONT OF DISPENSERS AND FUEL MANAGEMENT SYSTEM IS REQUIRED.
- 7. PROVIDE A 20-POUND ABC-RATED (MINIMUM 40-B:C) FIRE EXTINGUISHER NOT MORE THAN 75 FEET FROM STORAGE TANK.
- 8. PROVIDE MINIMUM 3 FOOT DISTANCE BETWEEN THE TANK AND BOLLARD/BARRIER FOR NON IMPACT RESISTANT TANKS. IN ACCORDANCE WITH 2020 FIRE CODE OF NYS 2306.4 PHYSICAL PROTECTION, BOLLARDS/BARRIERS ARE NOT REQUIRED FOR UL-2085 IMPACT RESISTANT TANKS. THE BOLLARDS/BARRIERS WILL SERVE AS SECONDARY PROTECTION AND THE 3 FOOT DISTANCE MAY BE REDUCED.
- 9. FOR ASSET WORKS FUEL MANAGEMENT SYSTEMS, STUB UP ALL REQUIRED CONDUIT IN AN 11" X 11" AREA.

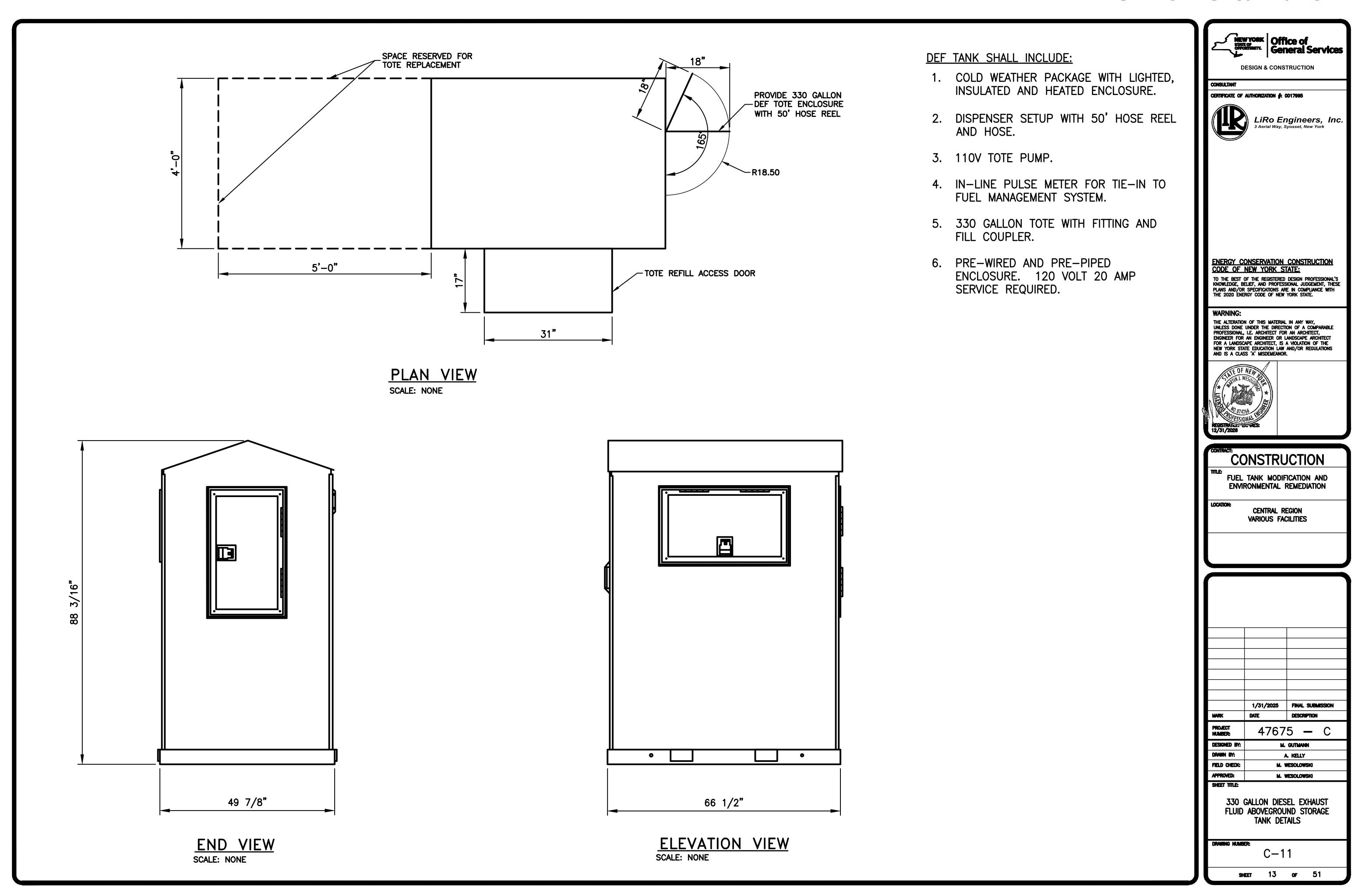






	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	4767	5 <b>–</b> C
DESIGNED BY:	M.	GUTMANN
DRAWN BY:	•	r Ketta
FIELD CHECK:		VESOLOWSKI
APPROVED:	M. V	VESOLOWSKI
ABOVEGROUND FUEL STORAGE TANK DISPENSER & ISLAND CONCRETE PAD DETAIL		
DRAWING NUMBER:		
DRAWING NUMB		9

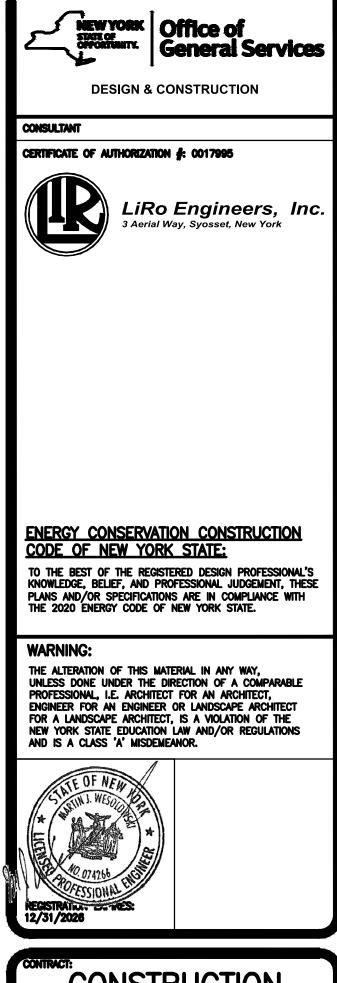


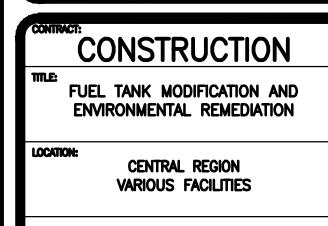


TANK SIZE	DEPTH
396-GALLON	44-1/2"
660-GALLON	70-1/2"

#### DEF TANK SHALL INCLUDE:

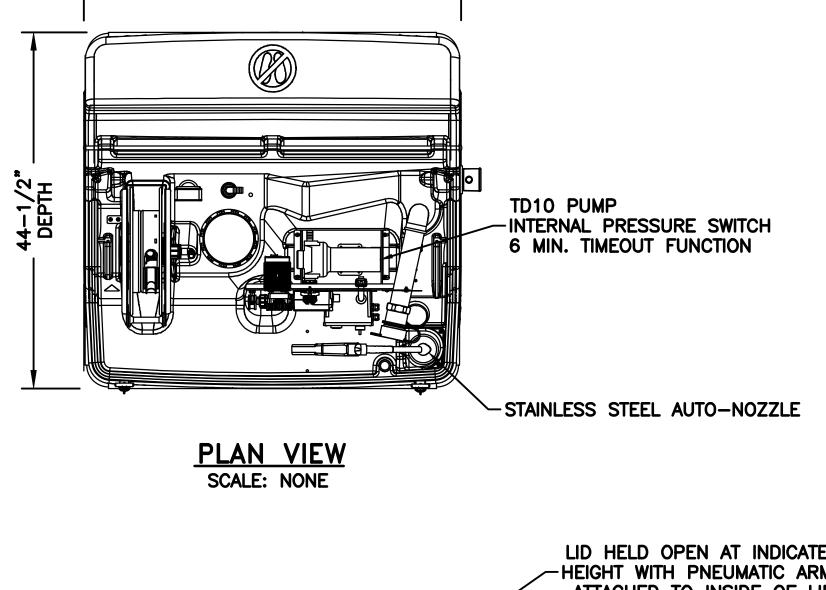
- 1. COLD WEATHER PACKAGE WITH 500W INTERNAL PROBE HEATER.
- 2. DISPENSER SETUP WITH 35' HOSE REEL AND HOSE.
- 3. 6 GPM 120V PUMP.
- 4. IN-LINE PULSE METER FOR TIE-IN TO FUEL MANAGEMENT SYSTEM.
- 5. 396 OR 660 GALLON TOTE WITH FITTING AND FILL COUPLER.
- 6. PRE-WIRED AND PRE-PIPED ENCLOSURE. 120 VOLT 20 AMP SERVICE REQUIRED.





	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
	UNIE	DESCRIPTION
PROJECT NUMBER:	4767	
PROJECT	4767	
PROJECT NUMBER:	4767	5 <b>–</b> C
PROJECT NUMBER: DESIGNED BY:	4767 M.	5 — C
PROJECT NUMBER: DESIGNED BY: DRAWN BY:	4767 M.	5 — C GUTMANN L KELLY
PROJECT NUMBER: DESIGNED BY: DRAWN BY: FIELD CHECK:	4767 M.	5 — C GUTMANN L KELLY WESOLOWSKI

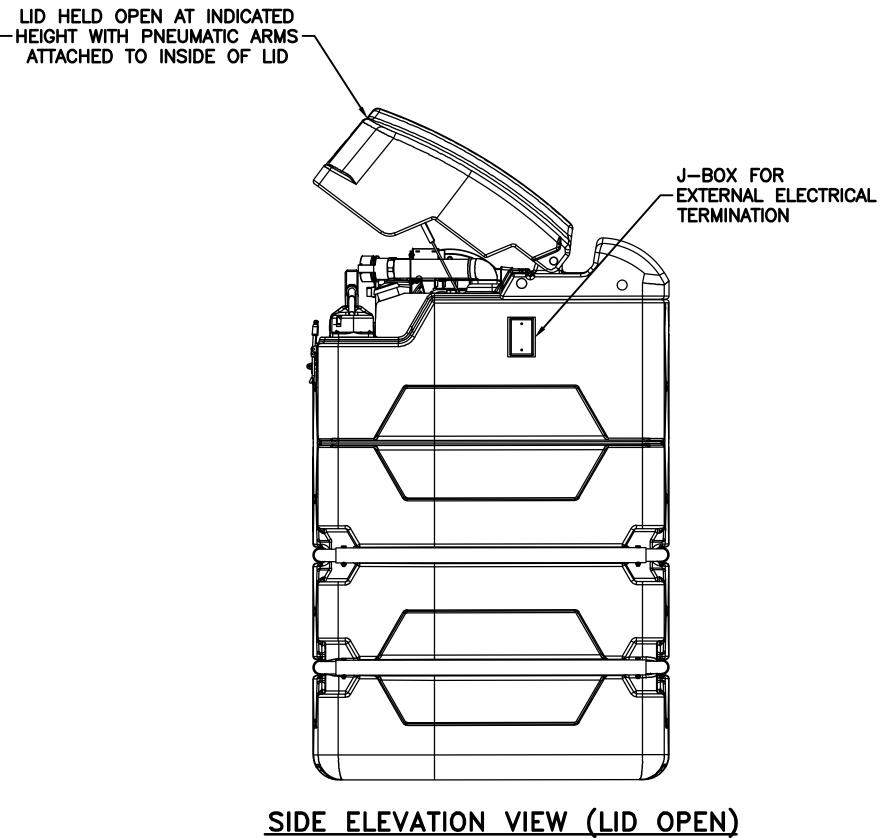
SHEET 14 OF 51



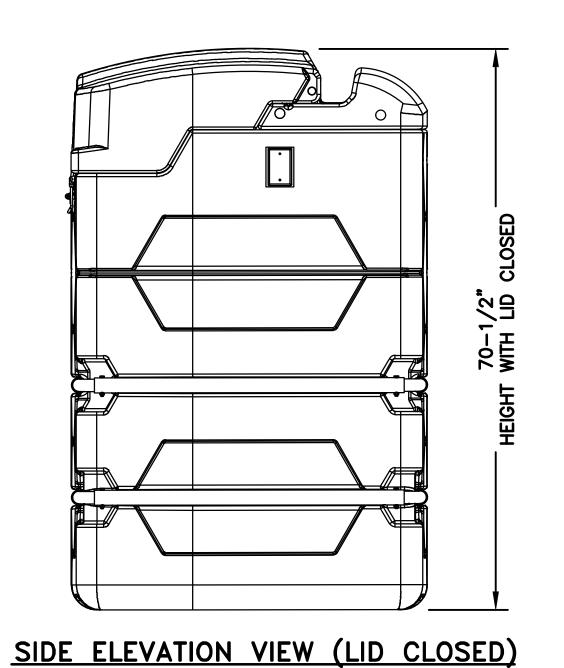
- **47**–1/2**"** —

FRONT ELEVATION VIEW (LID OPEN)

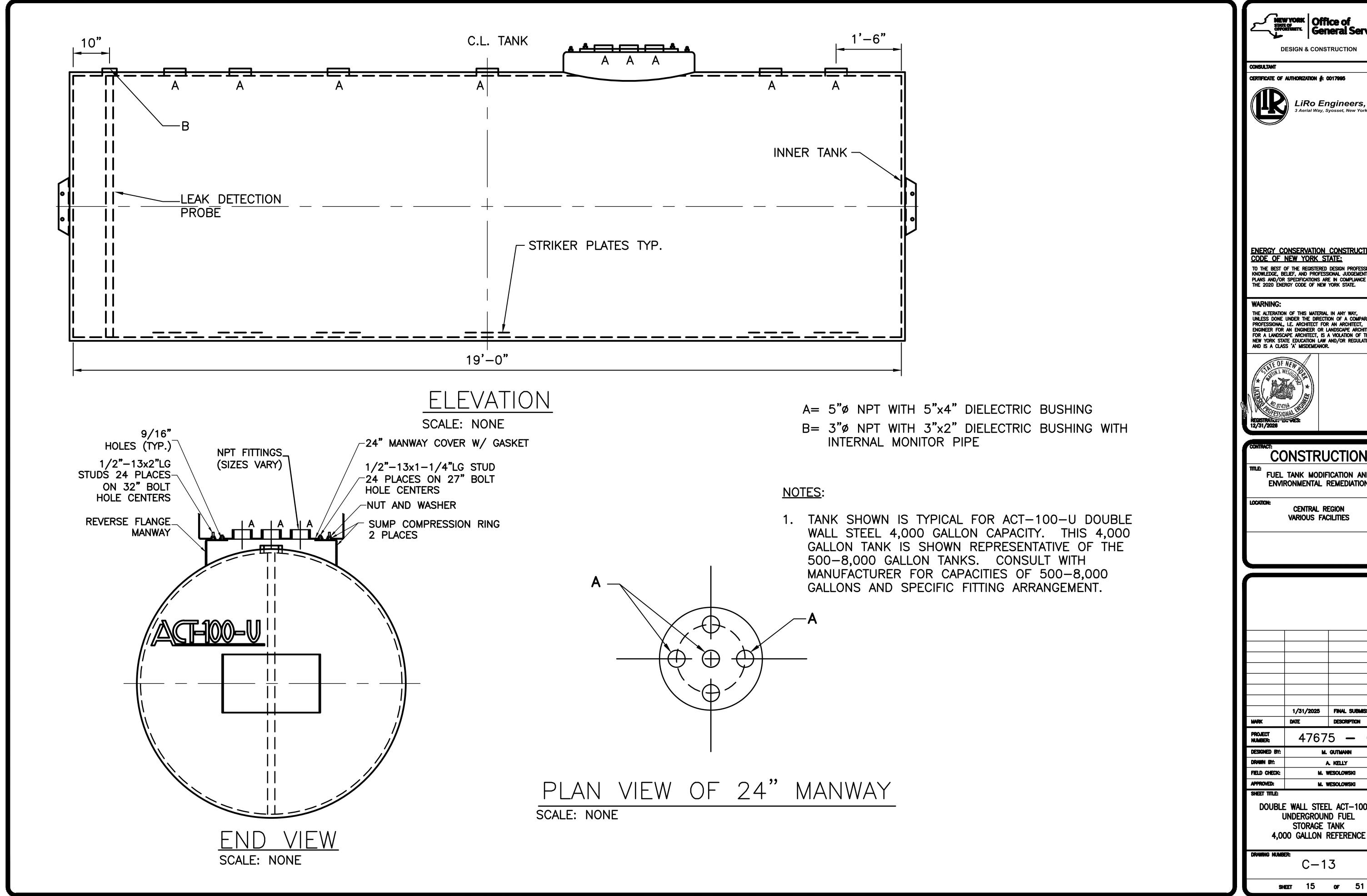
SCALE: NONE

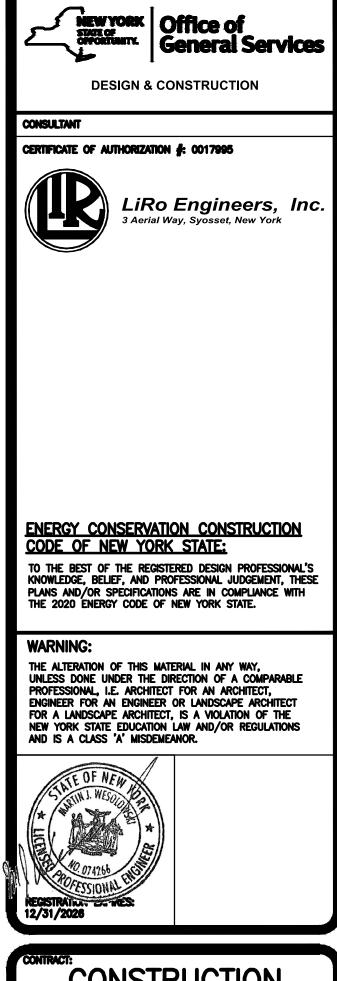


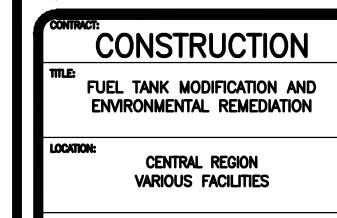
SCALE: NONE



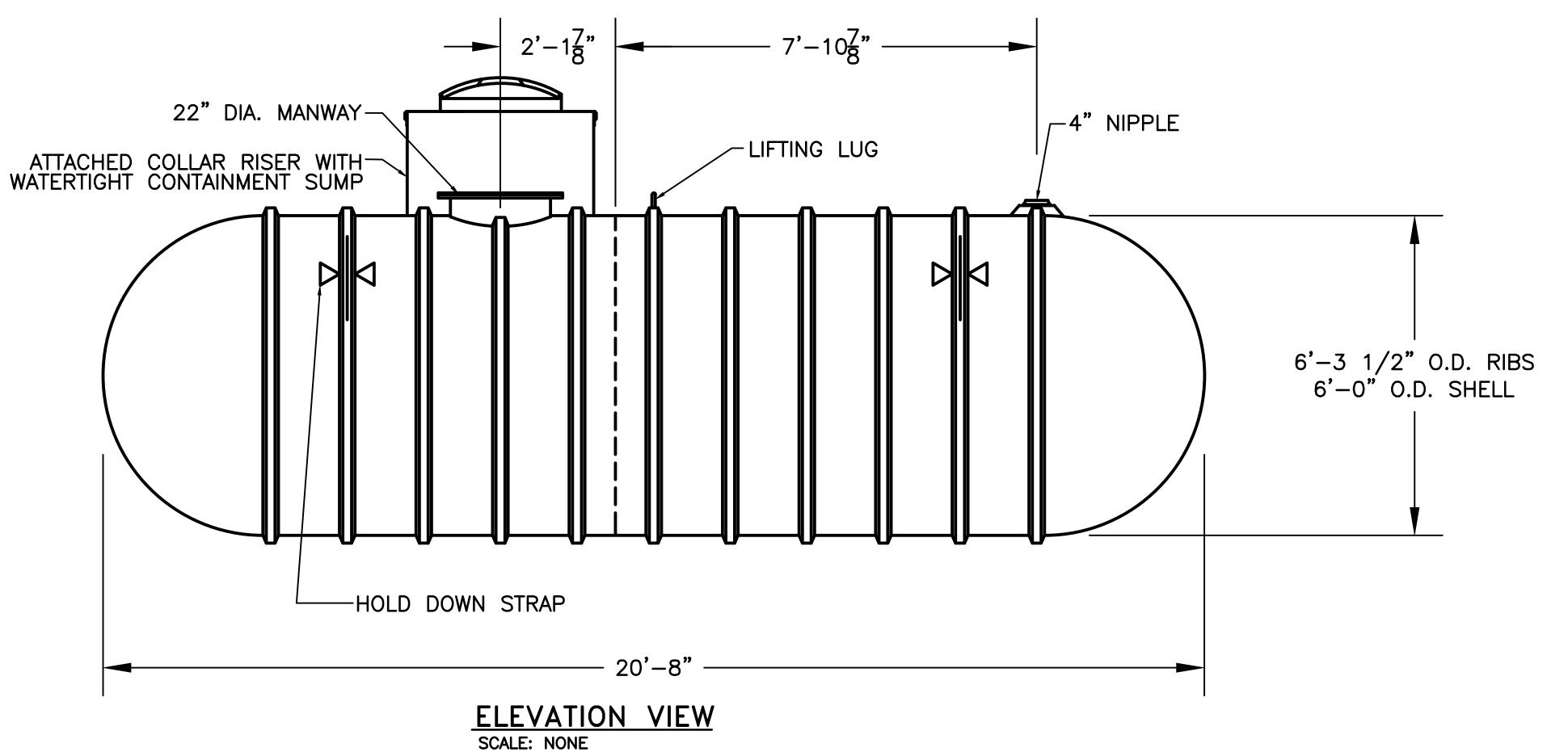
SCALE: NONE



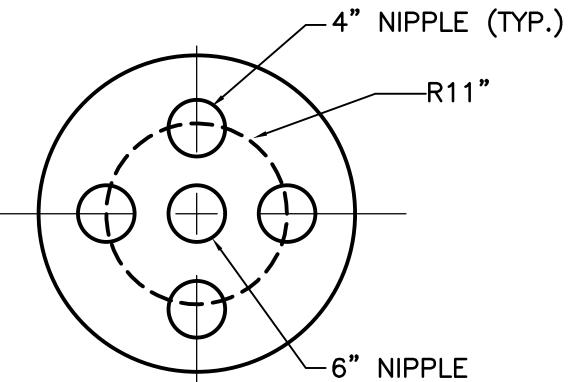




	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	4767	5 <b>–</b> C
		5 — C
NUMBER:	M.	
NUMBER: DESIGNED BY:	M.	GUTMANN
NUMBER:  DESIGNED BY:  DRAWN BY:	M.	GUTMANN A. KELLY
NUMBER:  DESIGNED BY:  DRAWN BY:  FIELD CHECK:	M.	GUTMANN A. KELLY WESOLOWSKI
DESIGNED BY: DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE: DOUBLE	M. V M. V E WALL STEE JNDERGROUN	GUTMANN A. KELLY MESOLOWSKI MESOLOWSKI L ACT-100-U ID FUEL
NUMBER:  DESIGNED BY:  DRAWN BY:  FIELD CHECK:  APPROVED:  SHEET TITLE:  DOUBLE	M. V	GUTMANN A. KELLY WESOLOWSKI WESOLOWSKI L ACT-100-U ID FUEL TANK



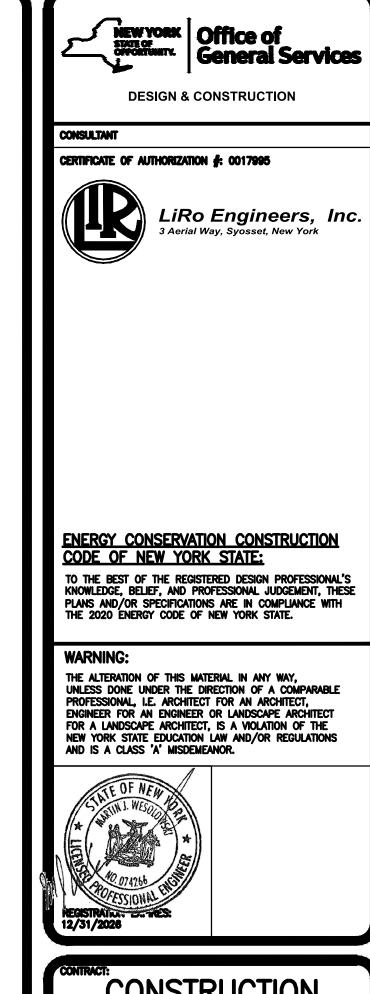
#### E: NONE

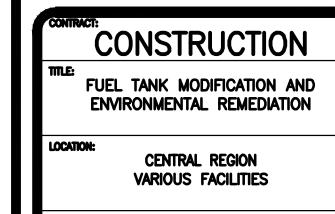


22" MANWAY PLAN VIEW
SCALE: NONE

#### NOTE:

1. TANK SHOWN IS TYPICAL FOR DOUBLEWALL FIBERGLASS 4,000 GALLON CAPACITY. THIS 4,000 GALLON TANK IS SHOWN REPRESENTATIVE OF THE 500-8,000 GALLON TANKS. CONSULT WITH MANUFACTURER FOR CAPACITIES OF 500-8,000 GALLONS AND SPECIFIC FITTING ARRANGEMENT.





	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	4767	5 <b>–</b> C
05000150 504		
DESIGNED BY:	M.	GUTMANN
DRAWN BY:		GUTMANN L KELLY
DRAWN BY: FIELD CHECK: APPROVED:	M. V	L KELLY
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:	M. V	NESOLOWSKI
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE: DOL	M. V	NESOLOWSKI WESOLOWSKI TIBERGLASS ID FUEL
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE: DOL 4,00	JBLE WALL F JNDERGROUN STORAGE OO GALLON F	NESOLOWSKI WESOLOWSKI TIBERGLASS ID FUEL TANK
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE: DOL	JBLE WALL F JNDERGROUN STORAGE OO GALLON F	VESOLOWSKI VESOLOWSKI  TIBERGLASS ID FUEL TANK REFERENCE

#### PROVIDED EQUIPMENT

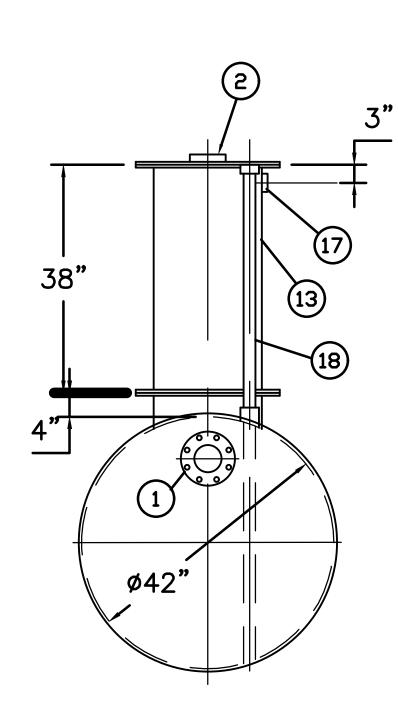
- 1. 150# R.F.S.O. FLANGE W/ 2" FNPT FOR VENT
- 2. 4"ø"FNPT FOR GAUGE WITH PLUG 3. VELOCITY HEAD DIFFUSION BAFFLE
- 4. WEAR PLATE
- 5. SEDIMENT CHAMBER
- 6. UNDERFLOW BAFFLE (REMOVABLE)
- 7. SLUDGE BAFFLE 8. STRIKER PLATES
- 9. PARALLEL CORRUGATED PLATE COALESCER. CORELLA PVC PLATES (3" PLATE SPACING)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

#### ANCILLARY PROVIDED EQUIPMENT

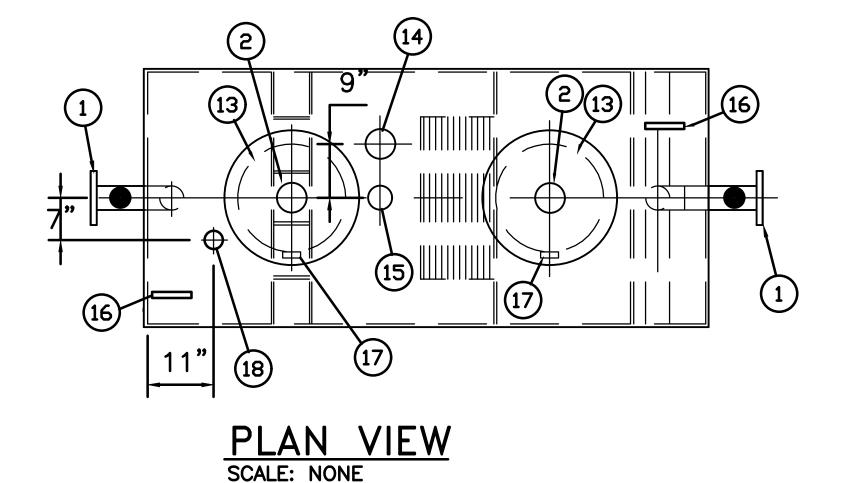
- (4) 18" NEO-CORK MANWAY GASKETS
- (4) SETS OF NUTS/BOLTS/WASHERS FOR 18" MANWAY

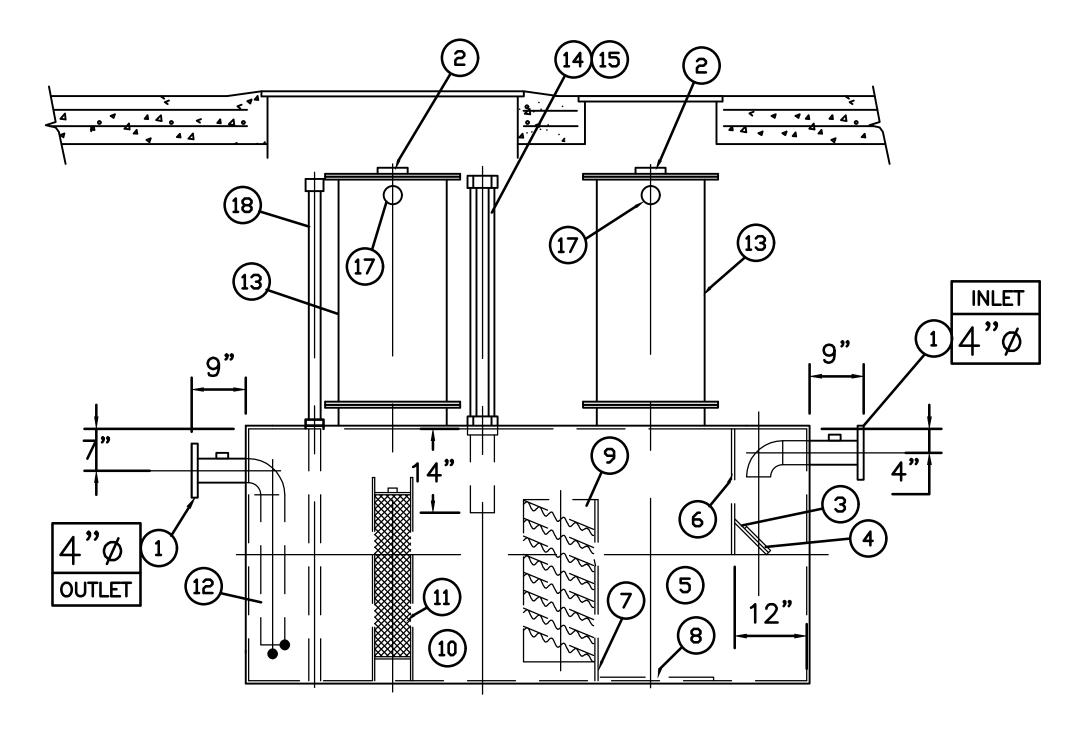
#### **NOTES**

- 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



END VIEW SCALE: NONE

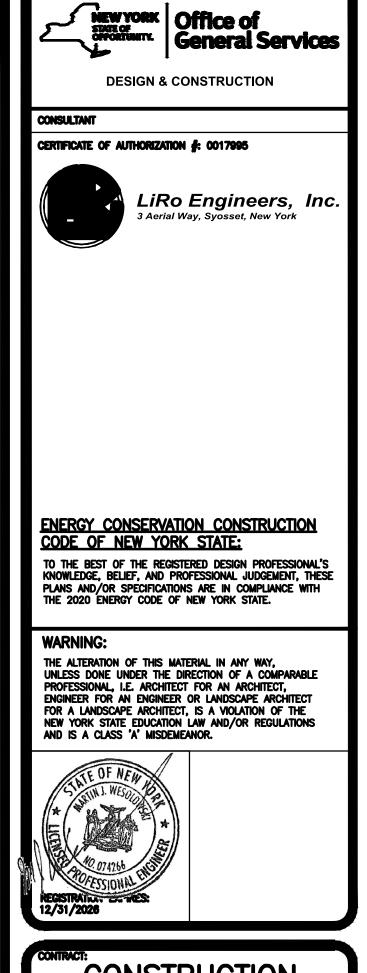


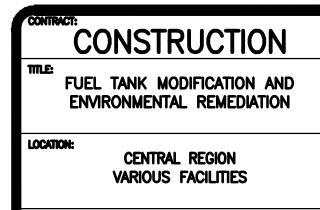


ELEVATION VIEW SCALE: NONE

#### NOTE:

1. SEPARATOR SHOWN IS TYPICAL FOR JACKETED DOUBLE-WALL STEEL 550-GALLON CAPACITY. CONSULT WITH MANUFACTURER FOR CAPACITIES OTHER THAN 550 GALLONS AND SPECIFIC FITTING AND MANWAY ARRANGEMENTS.





	4 /74 /0005	FINAL SUBMISSION
MARK	1/31/2025 DATE	DESCRIPTION
PROJECT NUMBER:	4767	75 — C
		5 — C
NUMBER:  DESIGNED BY:  DRAWN BY:	M.	GUTMANN A. KELLY
DESIGNED BY: DRAWN BY: FIELD CHECK:	M. 1	GUTMANN A. KELLY WESOLOWSKI
NUMBER: DESIGNED BY: DRAWN BY: FIELD CHECK: APPROVED:	M. 1	GUTMANN A. KELLY
NUMBER: DESIGNED BY: DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:  TYP	M. 1	GUTMANN A. KELLY WESOLOWSKI WESOLOWSKI -WALL STEEL MPARTMENT

SHEET 17 OF 51

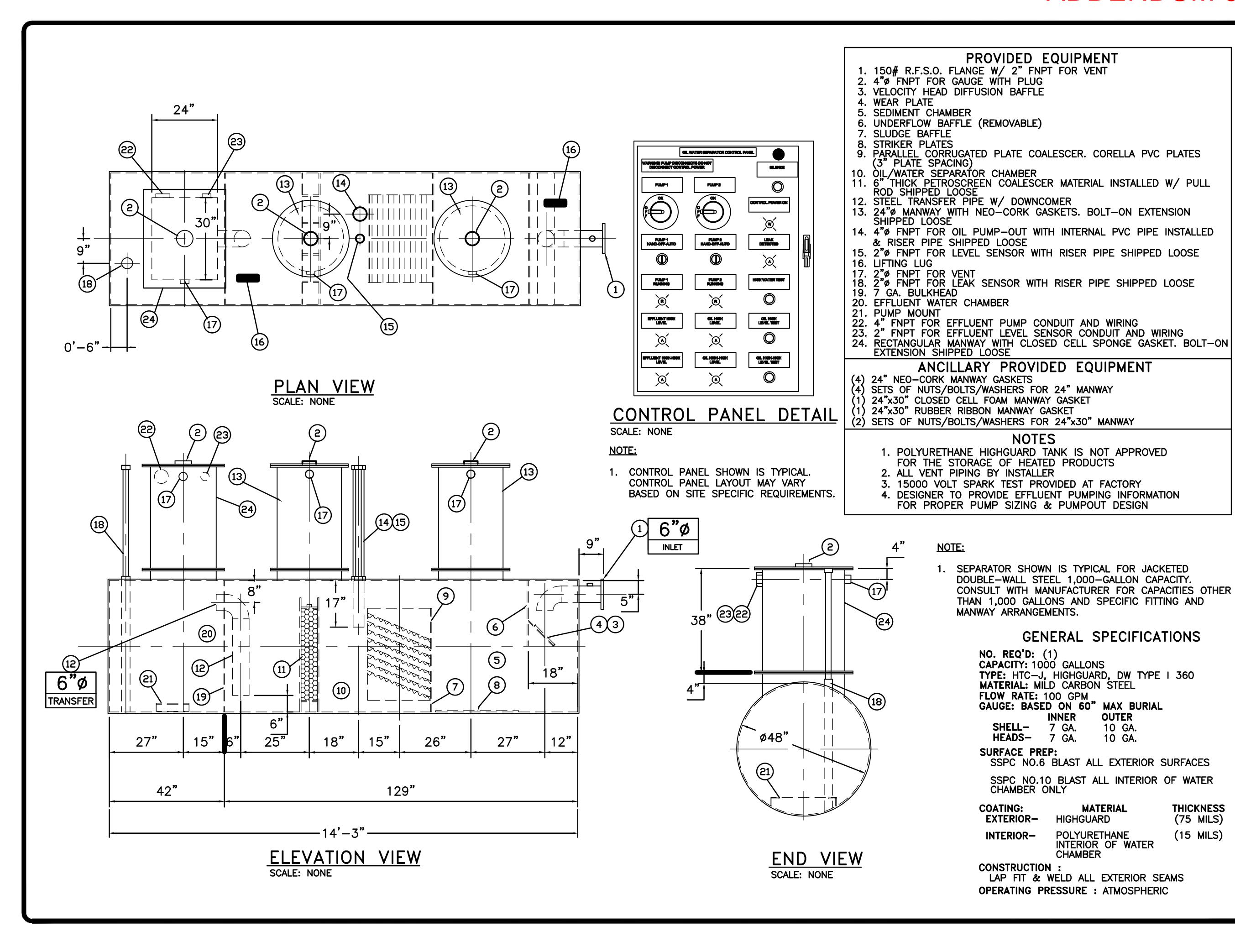
#### GENERAL SPECIFICATIONS

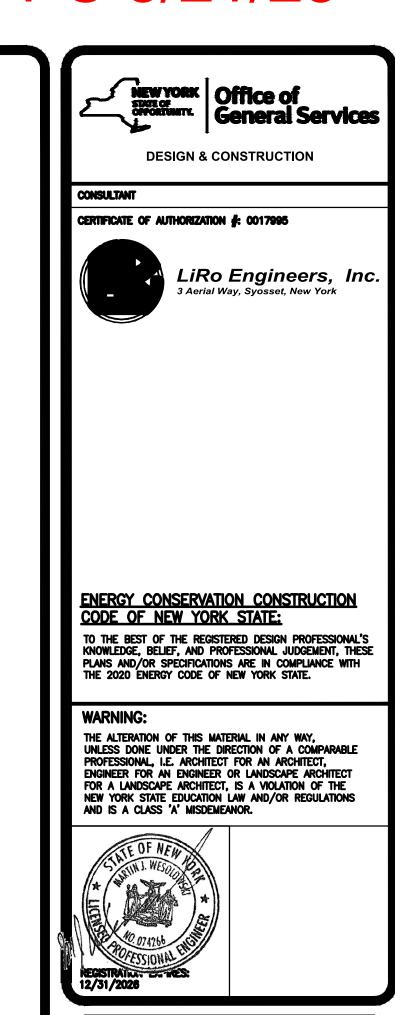
NO. REQ'D: (1)
CAPACITY: 550 GALLONS
TYPE: HTC, HIGHGUARD, DW TYPE I 360
MATERIAL: MILD CARBON STEEL FLOW RATE: 55 GPM
GAUGE: BASED ON 60" MAX BURIAL SHELL-7 GA. HEADS-7 GA.

SURFACE PREP:

MATERIAL **COATING: THICKNESS** EXTERIOR-HIGHGUARD (75 MILS) INTERIOR-NONE **CONSTRUCTION:** LAP FIT & WELD ALL EXTERIOR SEAMS **OPERATING PRESSURE: ATMOSPHERIC** 

SSPC NO.6 BLAST ALL EXTERIOR SURFACES





## CONSTRUCTION FUEL TANK MODIFICATION AND ENVIRONMENTAL REMEDIATION

CENTRAL REGION VARIOUS FACILITIES

	1/31/2025	FINAL SUBMISSION
MARK	1/31/2025 DATE	FINAL SUBMISSION DESCRIPTION
MARK PROJECT NUMBER:		DESCRIPTION
PROJECT	4767	DESCRIPTION
PROJECT NUMBER:	4767	DESCRIPTION  5 — C
PROJECT NUMBER: DESIGNED BY:	4767 M.	DESCRIPTION  5 — C GUTMANN
PROJECT NUMBER: DESIGNED BY: DRAWN BY:	4767 M.	DESCRIPTION  5 — C GUTMANN  KELLY
PROJECT NUMBER: DESIGNED BY: DRAWN BY: FIELD CHECK:	4767 M.	DESCRIPTION  5 — C GUTMANN  KELLY VESOLOWSKI

OIL/WATER SEPARATOR

C-16

SHEET 18 OF 51

OUTER

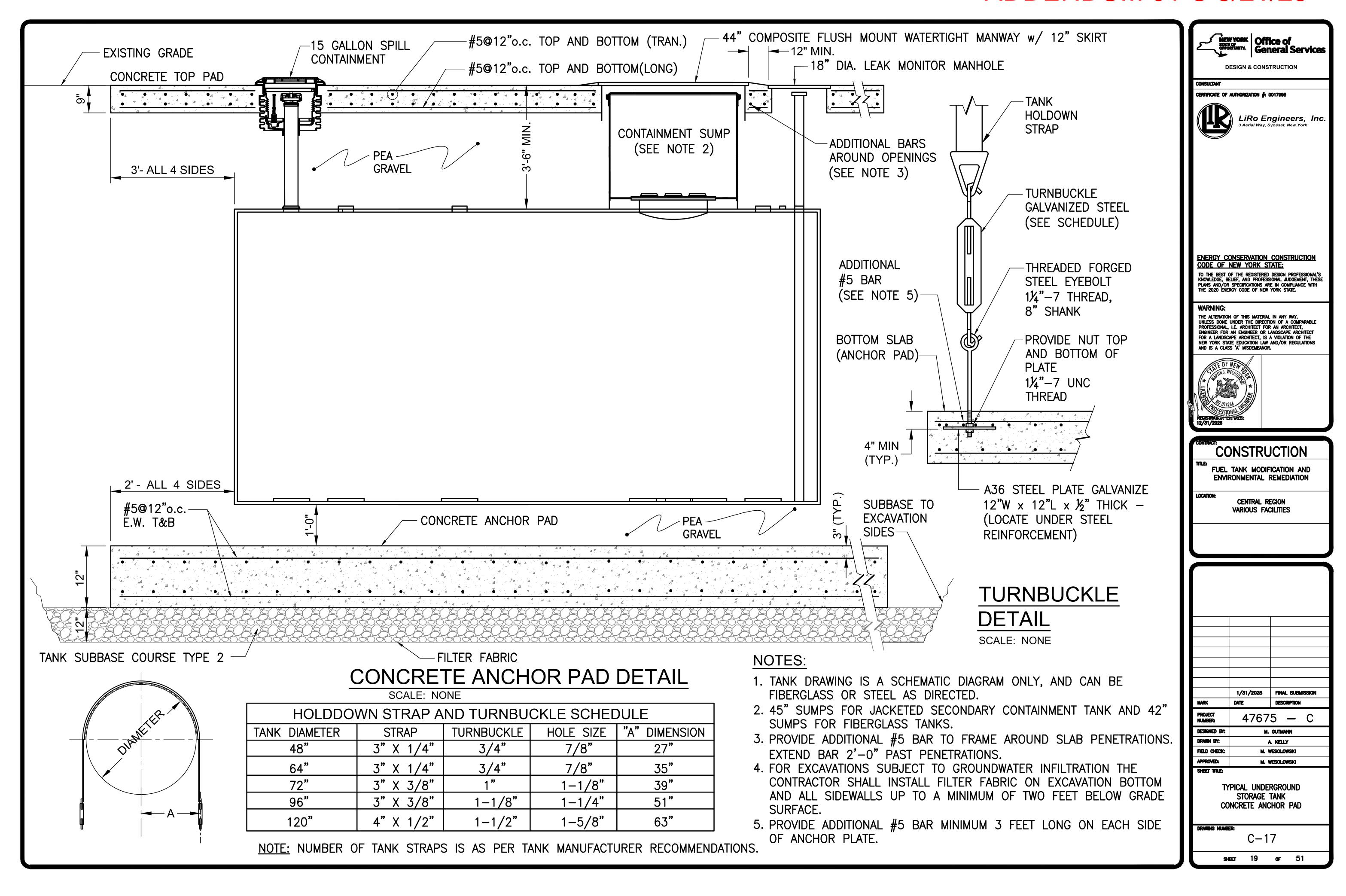
10 GA.

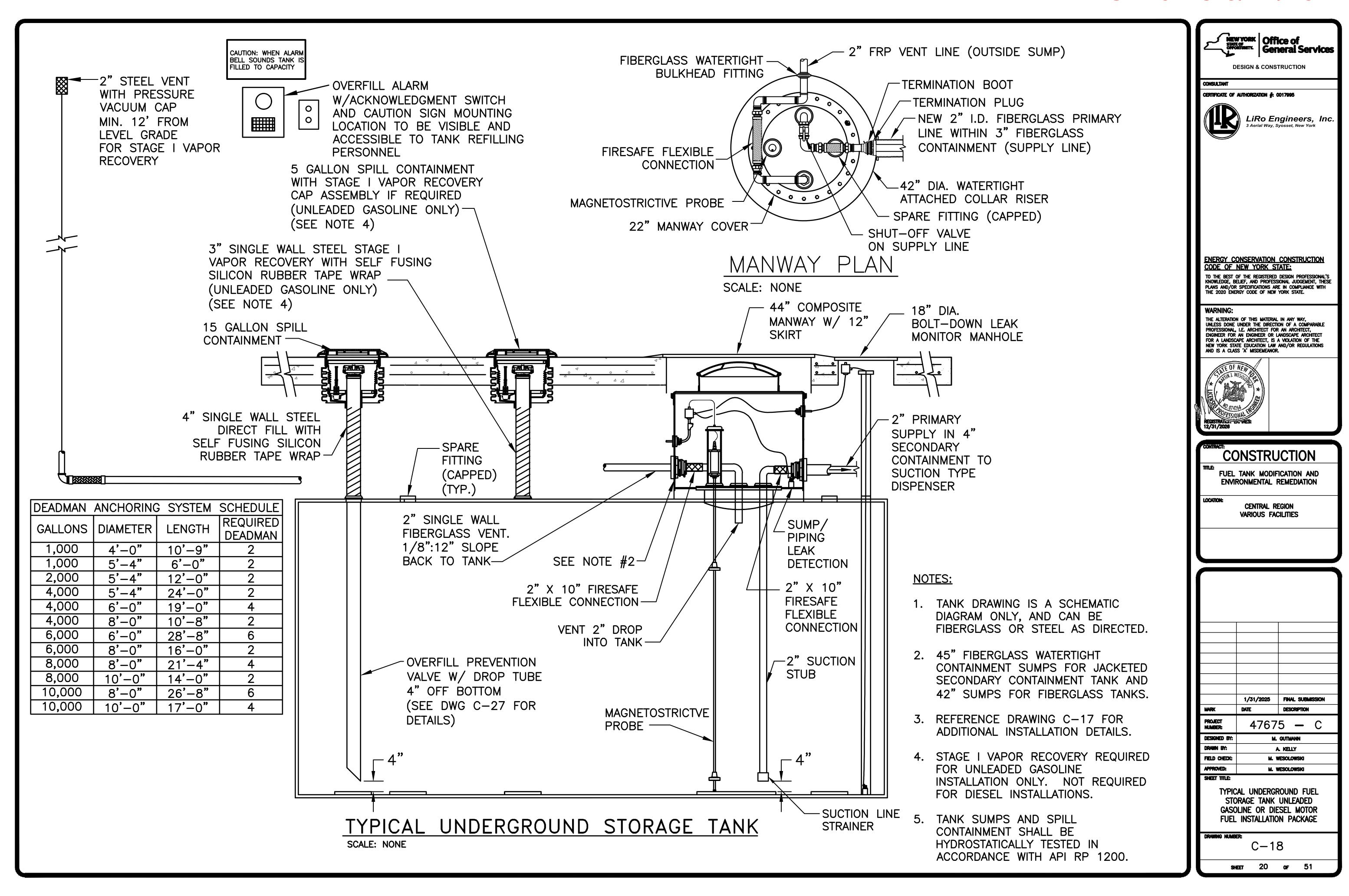
10 GA.

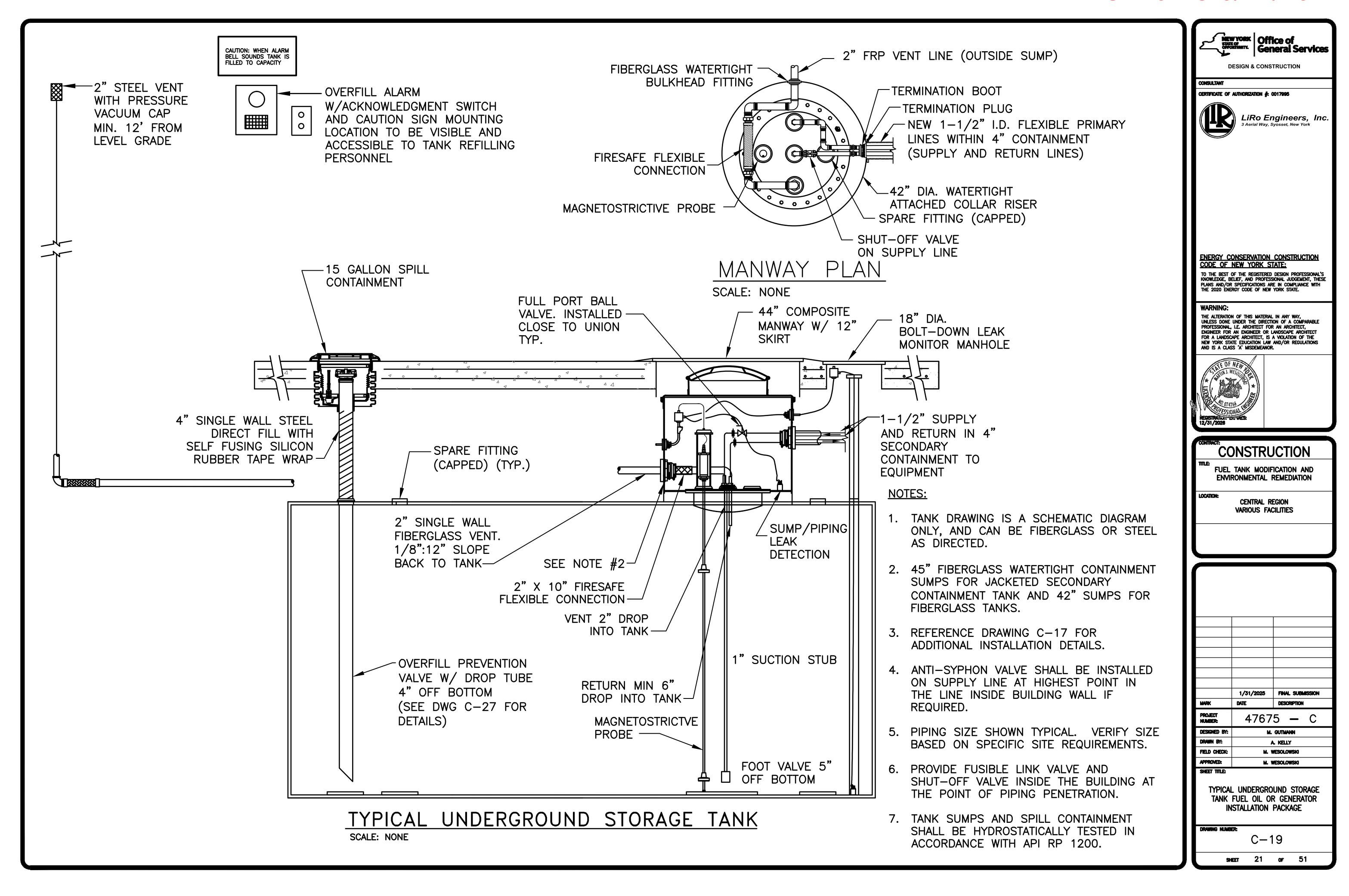
**THICKNESS** 

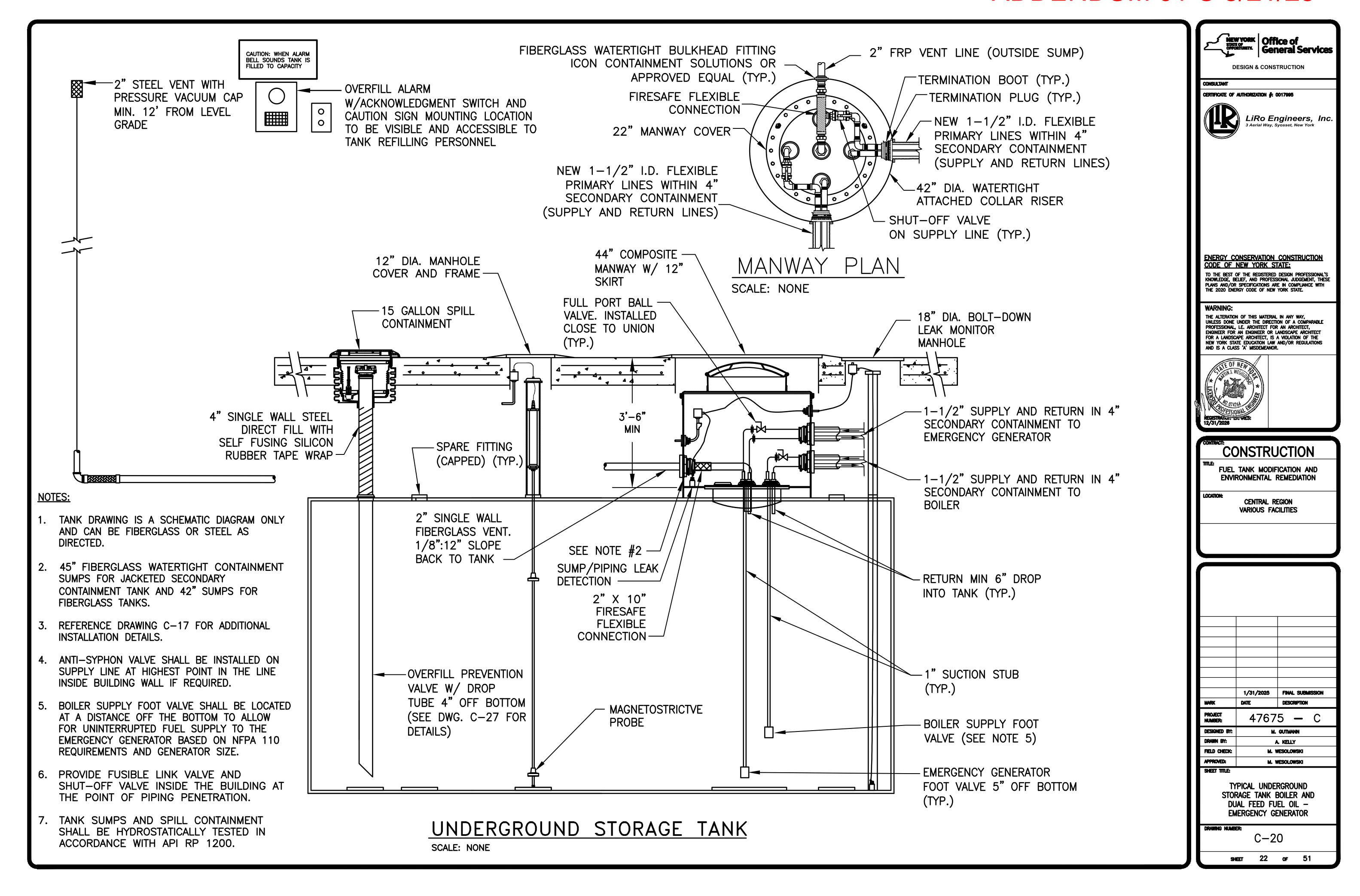
(75 MILS)

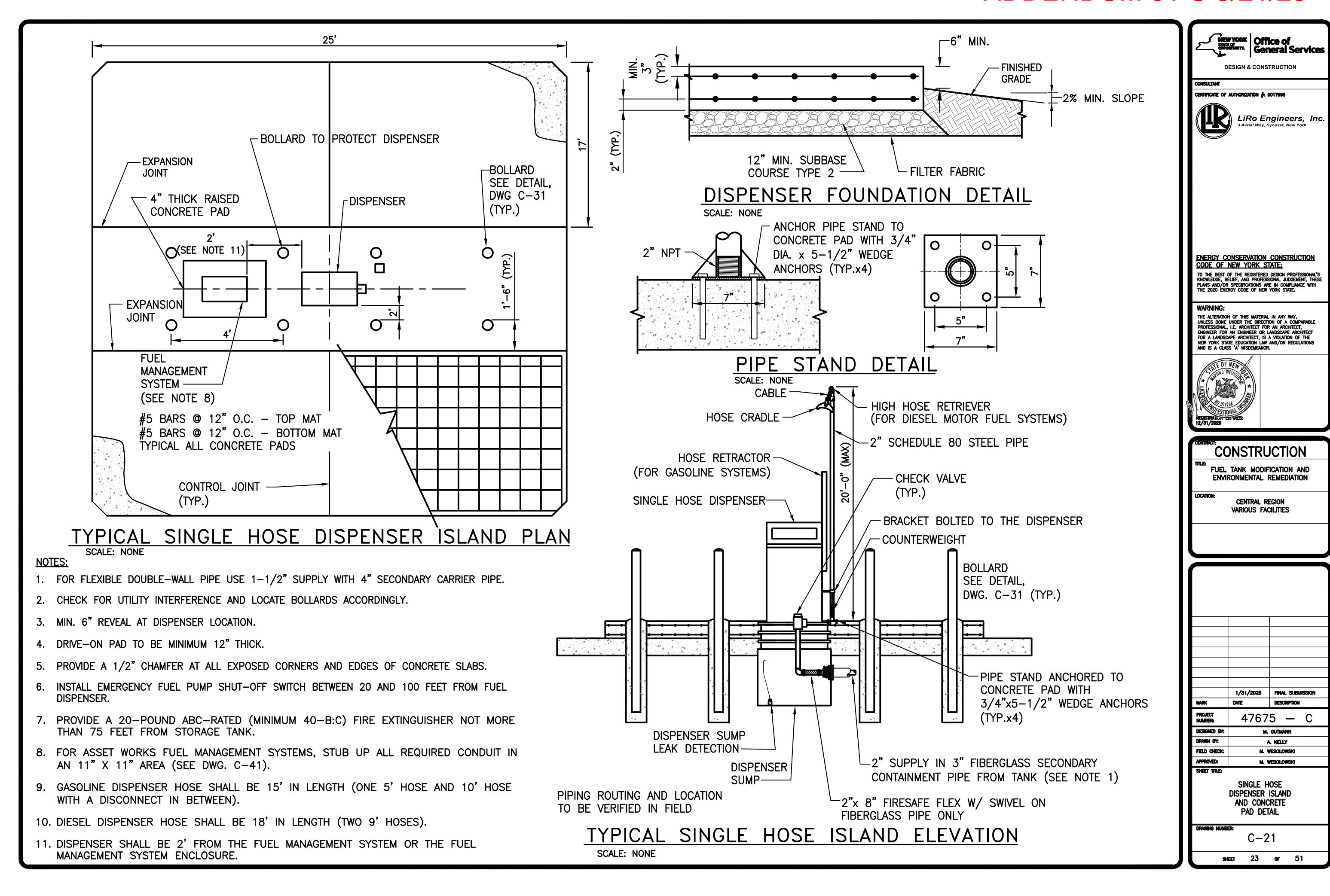
(15 MILS)











Office of General Services

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

**DESIGN & CONSTRUCTION** 

ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

CONSTRUCTION

FUEL TANK MODIFICATION AND ENVIRONMENTAL REMEDIATION

CENTRAL REGION VARIOUS FACILITIES

1/31/2025 FINAL SUBMISSION

47675 **—** C

M. GUTMANN

A. KELLY

M. WESOLOWSKI

M. WESOLOWSKI

DUAL HOSE

DISPENSER ISLAND AND CONCRETE

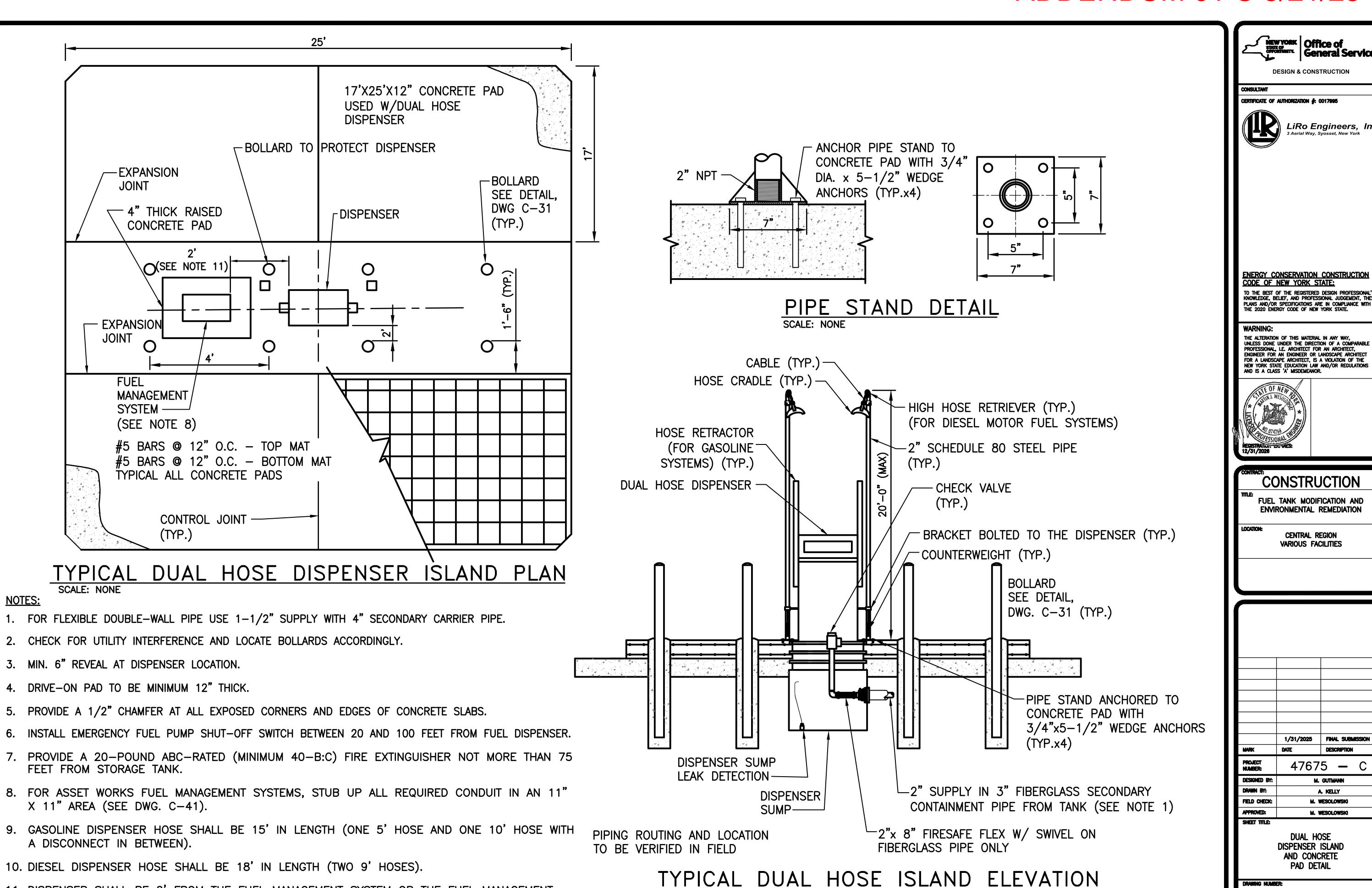
PAD DETAIL

C - 22

SHEET 24 OF 51

DESCRIPTION

CERTIFICATE OF AUTHORIZATION #: 0017995



SCALE: NONE

11. DISPENSER SHALL BE 2' FROM THE FUEL MANAGEMENT SYSTEM OR THE FUEL MANAGEMENT

SYSTEM ENCLOSURE.

DESCRIPTION

47675 - C

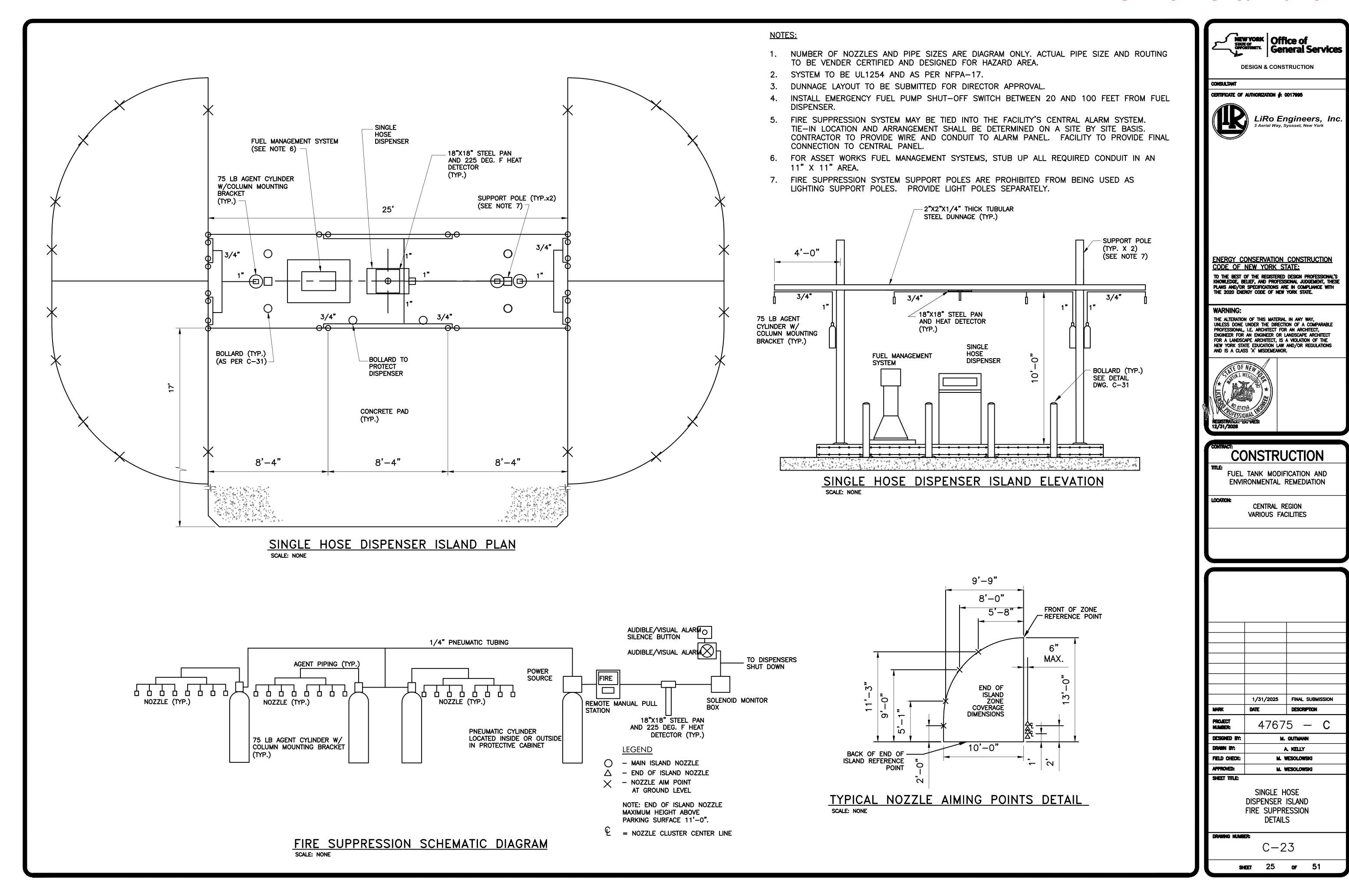
M. GUTMANN

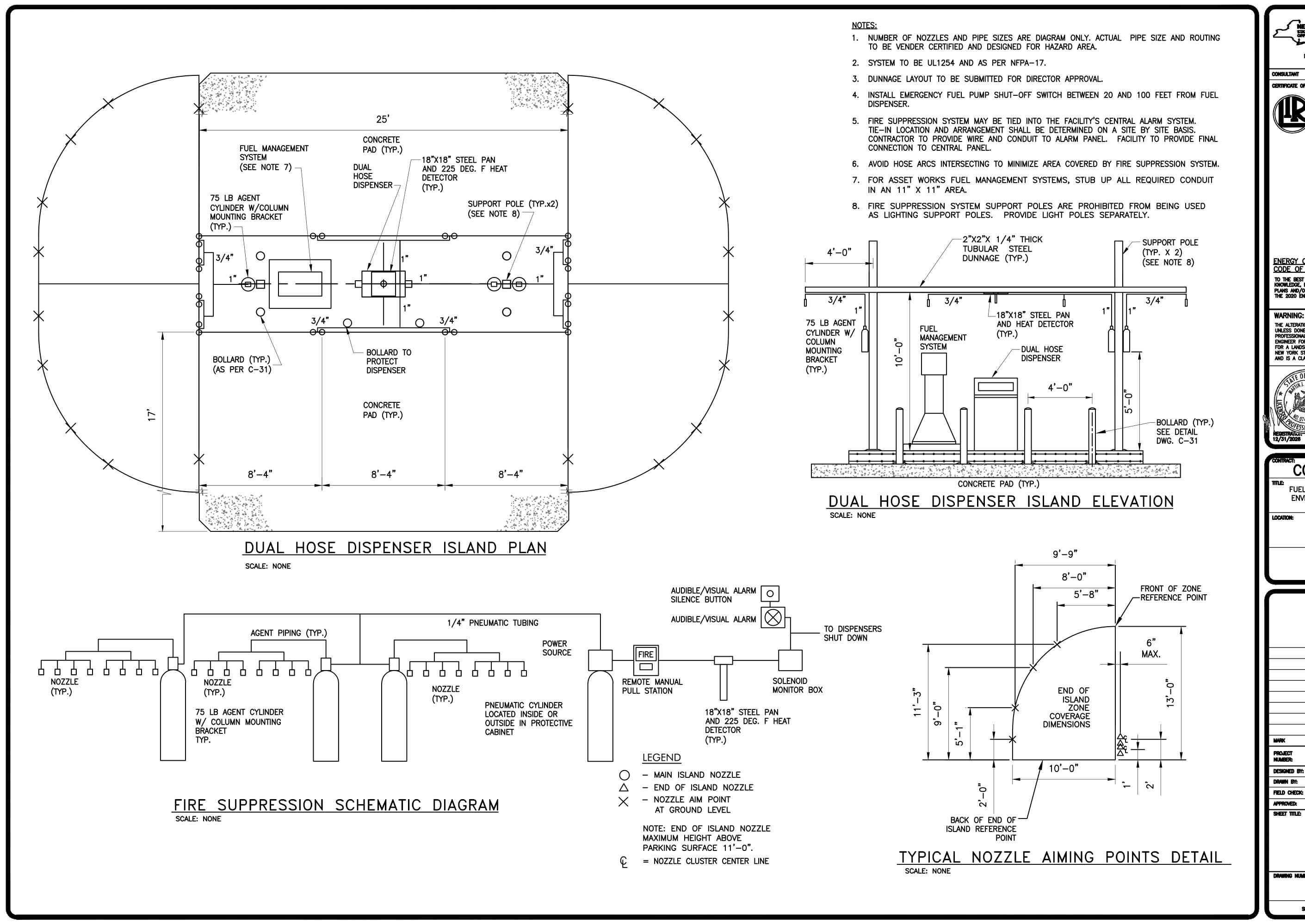
A. KELLY

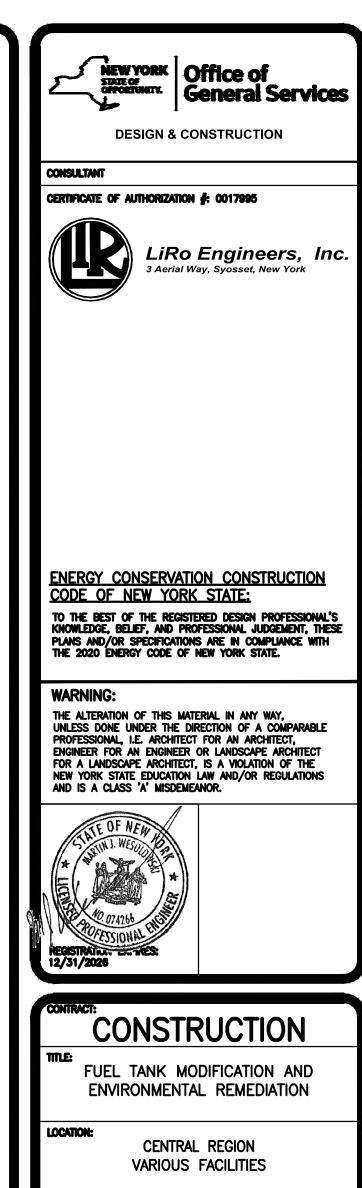
M. WESOLOWSKI

M. WESOLOWSKI

DETAILS







1/31/2025 FINAL SUBMISSION

47675 - C

M. GUTMANN

A. KELLY

M. WESOLOWSKI

M. WESOLOWSKI

DUAL HOSE

DISPENSER ISLAND

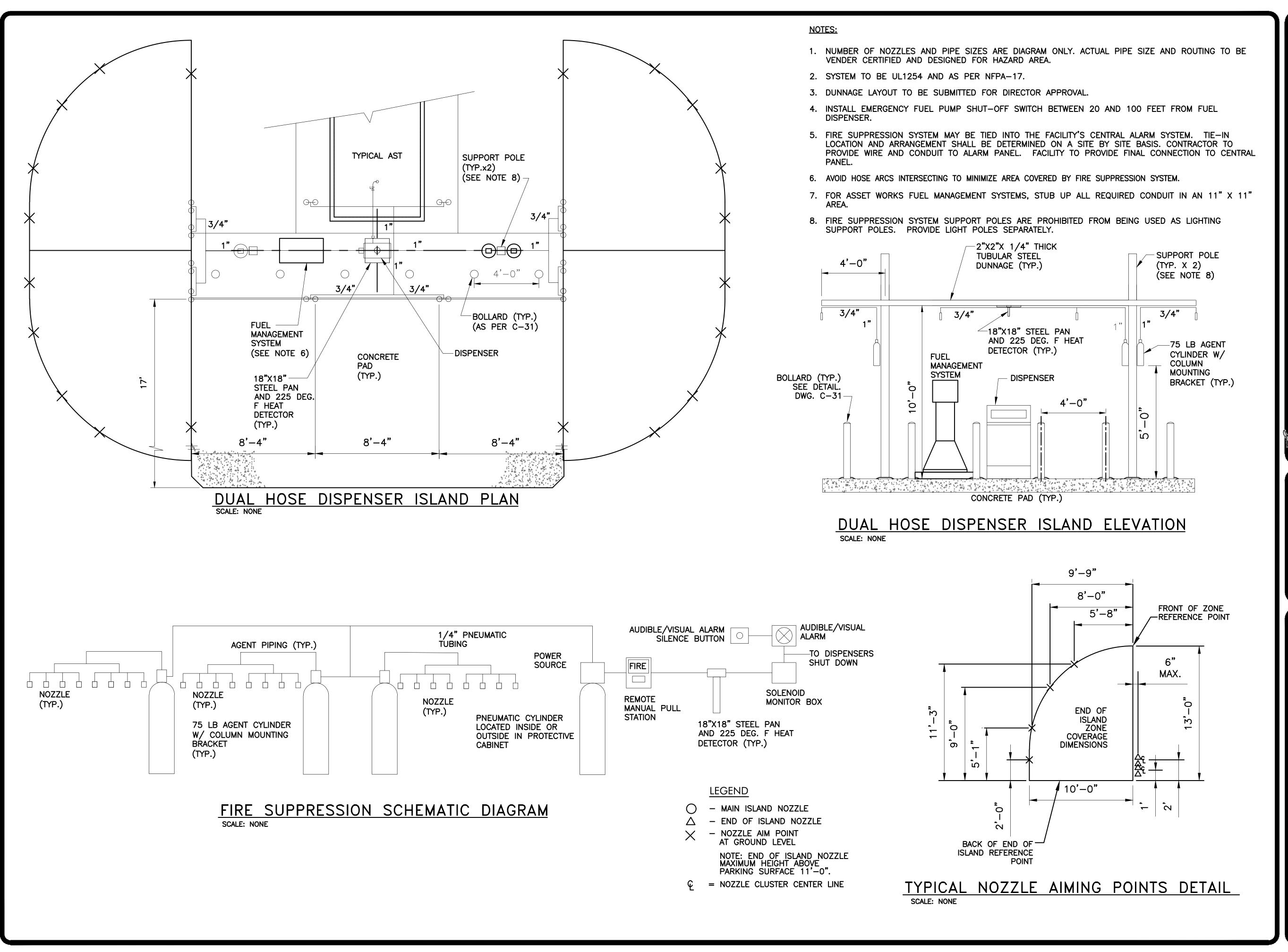
FIRE SUPPRESSION

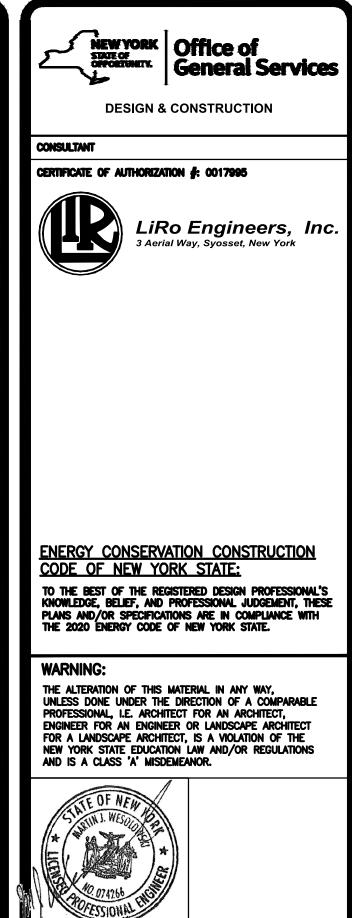
**DETAILS** 

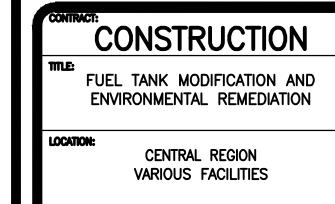
C - 24

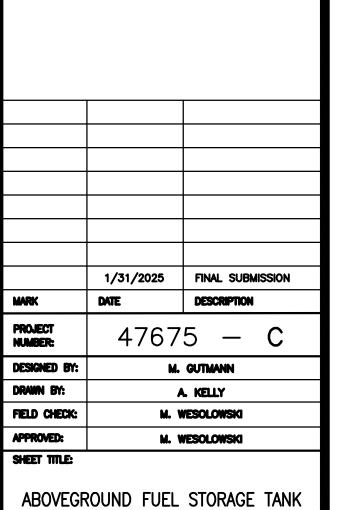
**SHEET** 26 **OF** 51

DESCRIPTION









SINGLE AND DUAL HOSE DISPENSER AND ISLAND DETAILS

C - 25

SHEET 27 OF 51

**DESIGN & CONSTRUCTION** 

CENTRAL REGION VARIOUS FACILITIES

1/31/2025 FINAL SUBMISSION

47675 — C

M. GUTMANN A. KELLY M. WESOLOWSKI

M. WESOLOWSKI

PIPING PENETRATION &

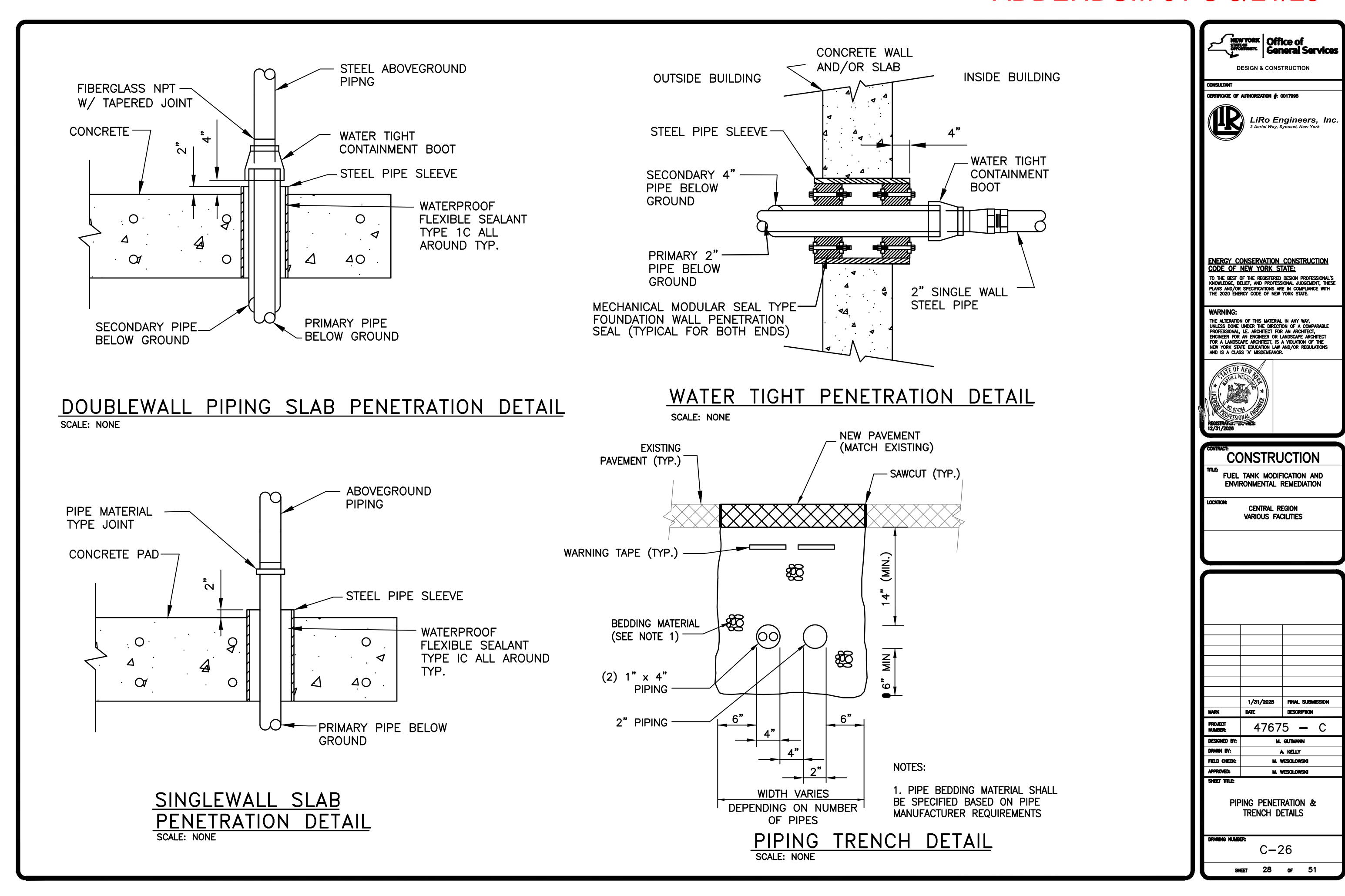
TRENCH DETAILS

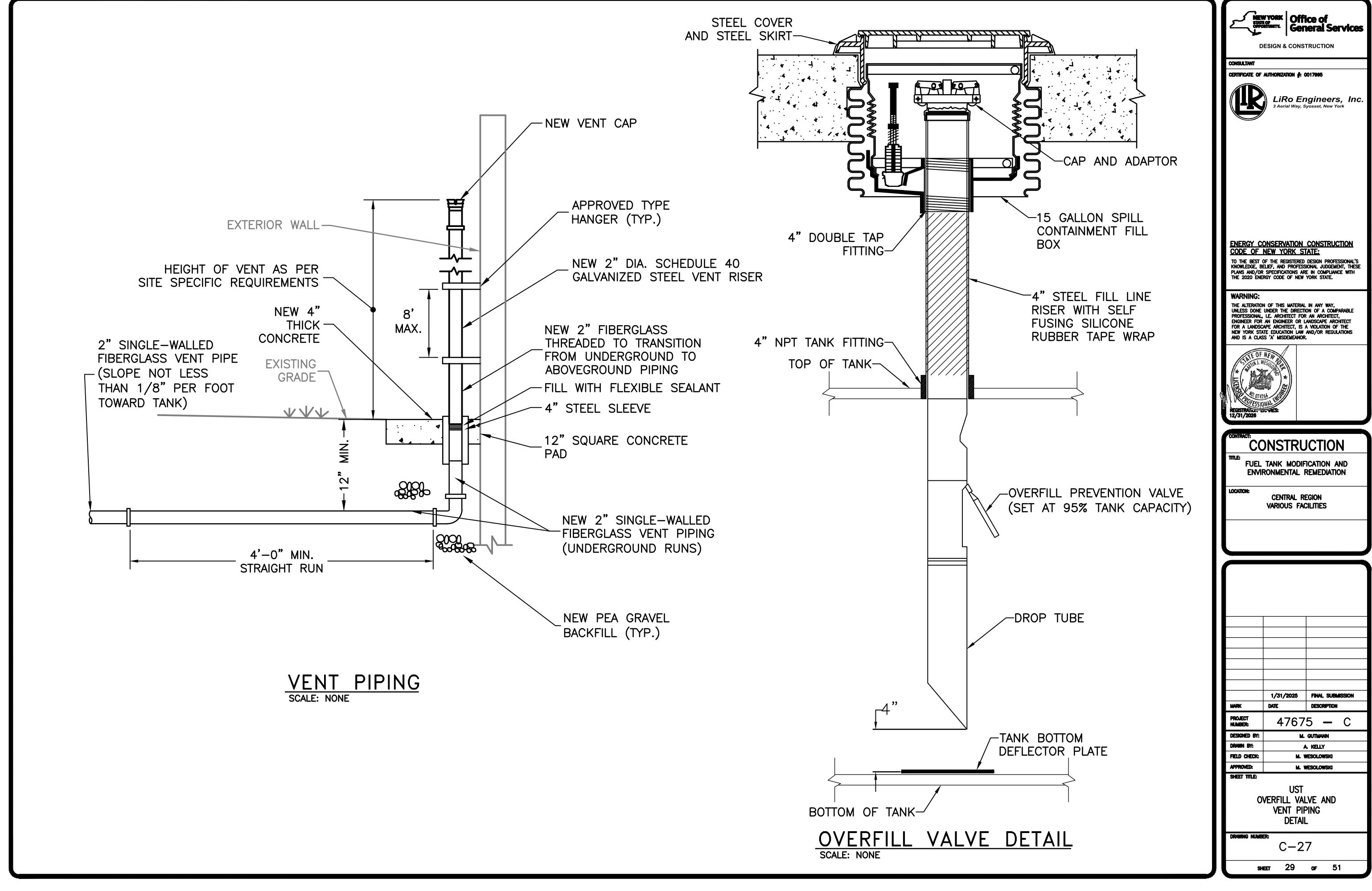
C-26

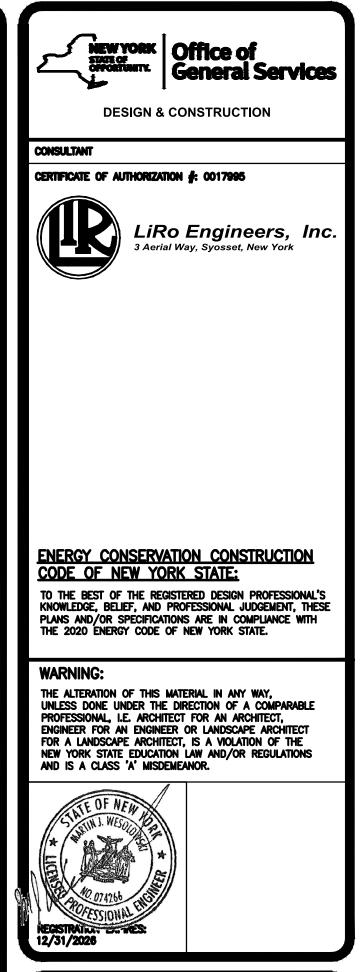
SHEET 28 OF 51

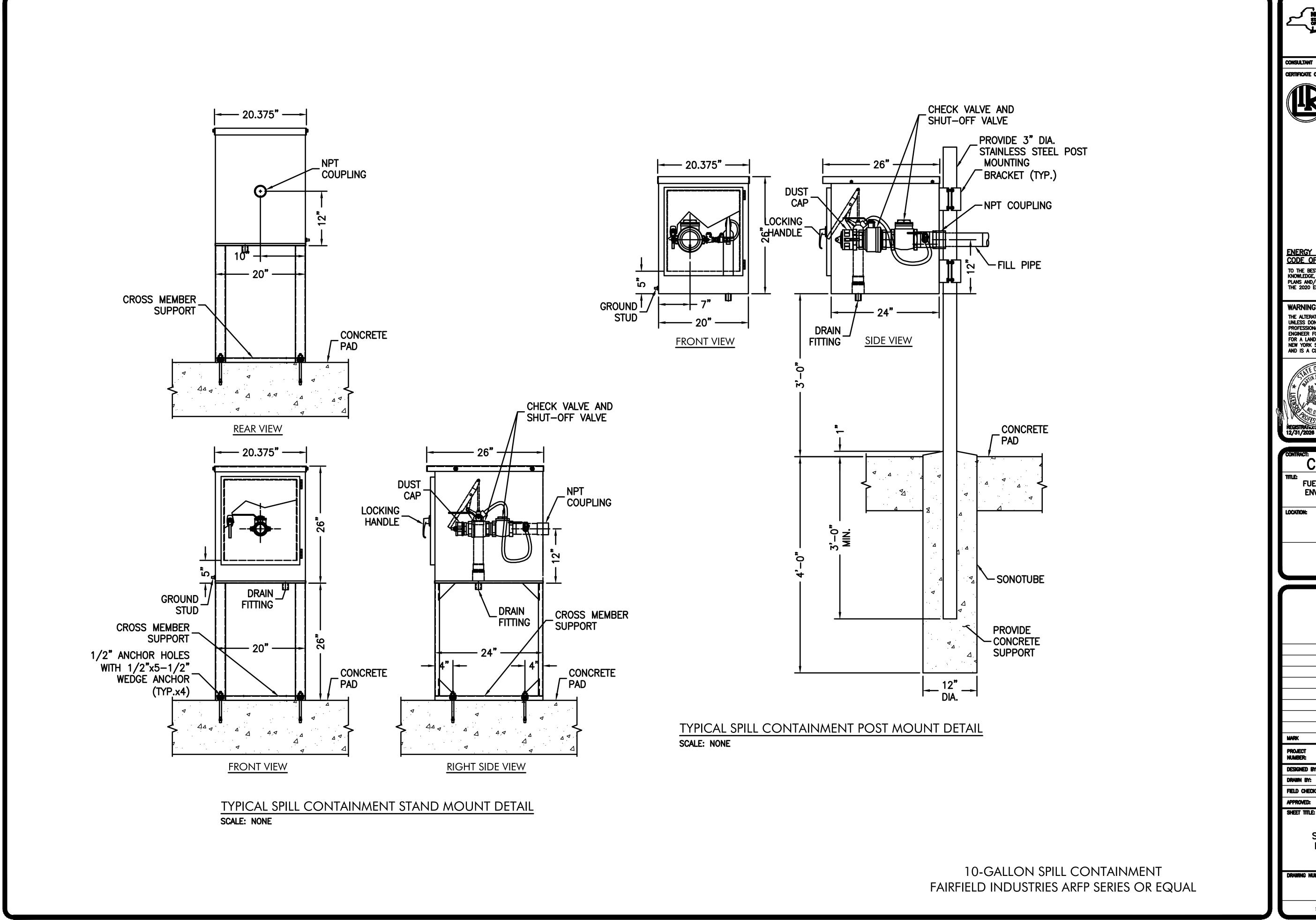
DESCRIPTION

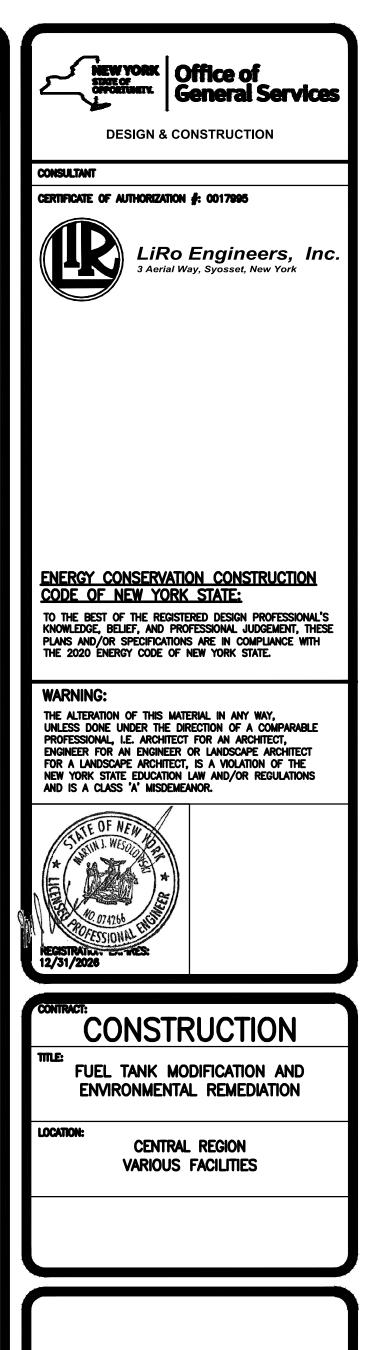
LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York



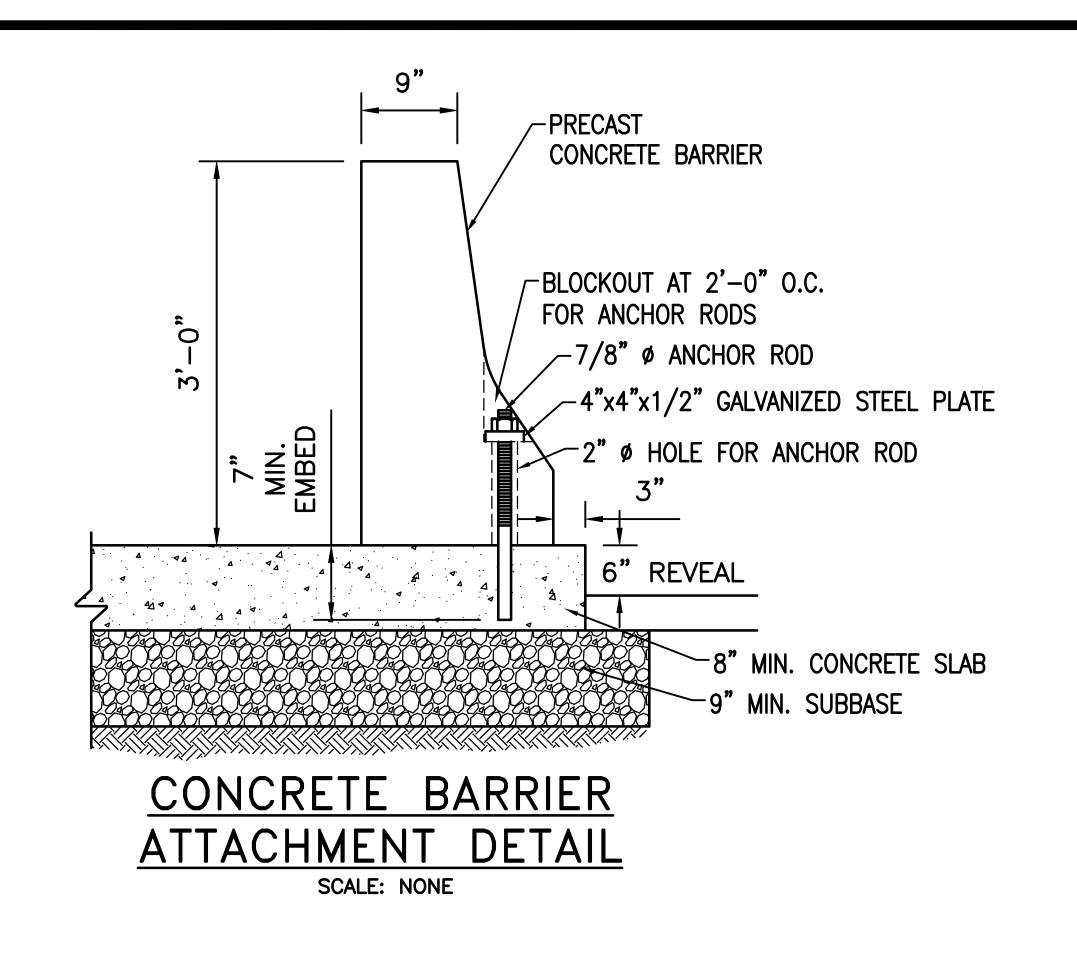






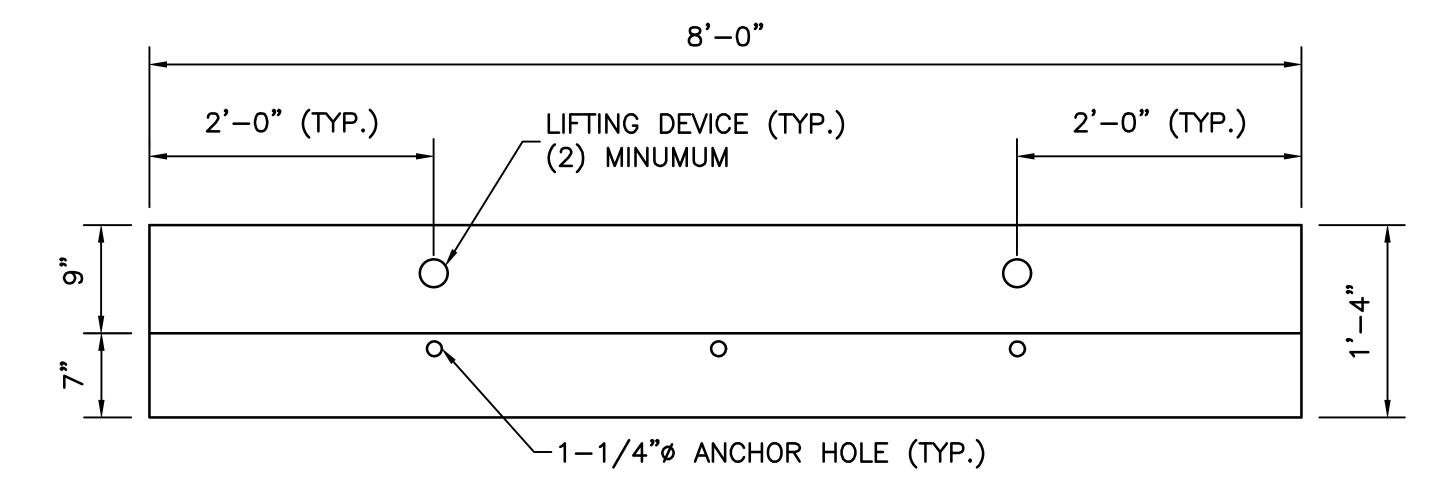


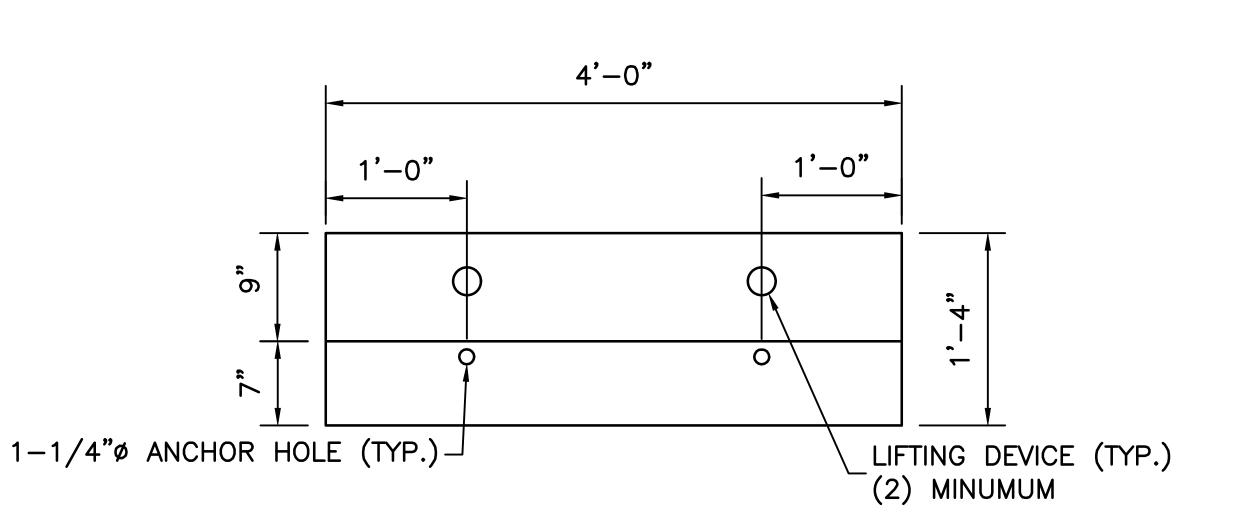
		`
	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT	4767	<u> </u>
NUMBER:	4767	5 <b>–</b> C
		GUTMANN
NUMBER:	M.	
NUMBER: DESIGNED BY:	M.	GUTMANN
NUMBER:  DESIGNED BY:  DRAWN BY:	M. A	GUTMANN L KELLY
NUMBER: DESIGNED BY: DRAWN BY: FIELD CHECK:	M. A	GUTMANN A. KELLY WESOLOWSKI
NUMBER:  DESIGNED BY:  DRAWN BY:  FIELD CHECK:  APPROVED:  SHEET TITLE:  SF	M. V M. V PILL CONTA	GUTMANN  L. KELLY  WESOLOWSKI  WESOLOWSKI  AINMENT
NUMBER:  DESIGNED BY:  DRAWN BY:  FIELD CHECK:  APPROVED:  SHEET TITLE:	M. V M. V PILL CONTA	GUTMANN  L KELLY WESOLOWSKI WESOLOWSKI  AINMENT DETAILS



#### NOTES:

- 1. CONCRETE FOR THE SLAB-ON-GRADE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- 2. CONCRETE FOR THE PRECAST CONCRETE BARRIER SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI.
- 3. ANCHOR RODS SHALL BE 7/8" DIAMETER AND HAVE AN ULTIMATE TENSILE STRENGTH OF 60 KSI.
- 4. THE 4"x4"x1/2" STEEL PLATE SHALL HAVE A MINIMUM YIELD STRENGTH OF 36 KSI.
- 5. ANCHOR RODS SHALL BE DRILLED AND GROUTED INTO CONCRETE SLAB USING HILTI HVU CAPSULE ADHESIVE ANCHORING SYSTEM OR APPROVED EQUAL. ULTIMATE BOND/CONCRETE CAPACITY IN TENSION SHALL BE 36 KIPS.
- 6. AFTER ANCHOR RODS ARE INSTALLED IN CONCRETE SLAB, SET PRECAST BARRIER AND GROUT ANCHOR ROD HOLES IN BARRIER WITH NON—SHRINK GROUT FROM NYSDOT APPROVED MATERIALS LIST.
- 7. AFTER ANCHOR ROD HOLES ARE GROUTED, INSTALL 4"x4"x1/2" STEEL PLATE AND HEX NUT. TIGHTEN HEX NUT AND GROUT BLOCK-OUTS IN BARRIER WITH NON-SHRINK GROUT.
- 8. PROVIDE MINIMUM 3 FOOT DISTANCE BETWEEN THE TANK AND BOLLARD/BARRIER FOR NON IMPACT RESISTANT TANKS. IN ACCORDANCE WITH 2020 FIRE CODE OF NYS 2306.4 PHYSICAL PROTECTION, BOLLARDS/BARRIERS ARE NOT REQUIRED FOR UL-2085 IMPACT RESISTANT TANKS. THE BOLLARDS/BARRIERS WILL SERVE AS SECONDARY PROTECTION AND THE 3 FOOT DISTANCE MAY BE REDUCED.
- 9. PROVIDE BARRIERS THAT ARE A MINIMUM 36" IN HEIGHT RELATIVE TO SURROUNDING GRADE. BARRIERS MAY BE REDUCED IN HEIGHT IF PLACED ON RAISED PAD.

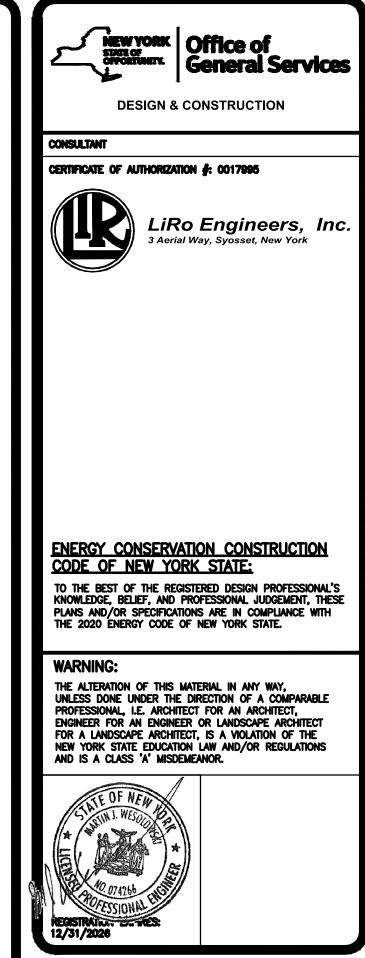


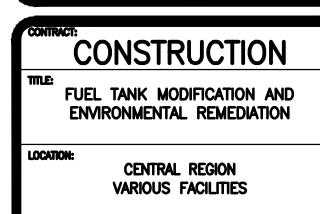


#### NOTES:

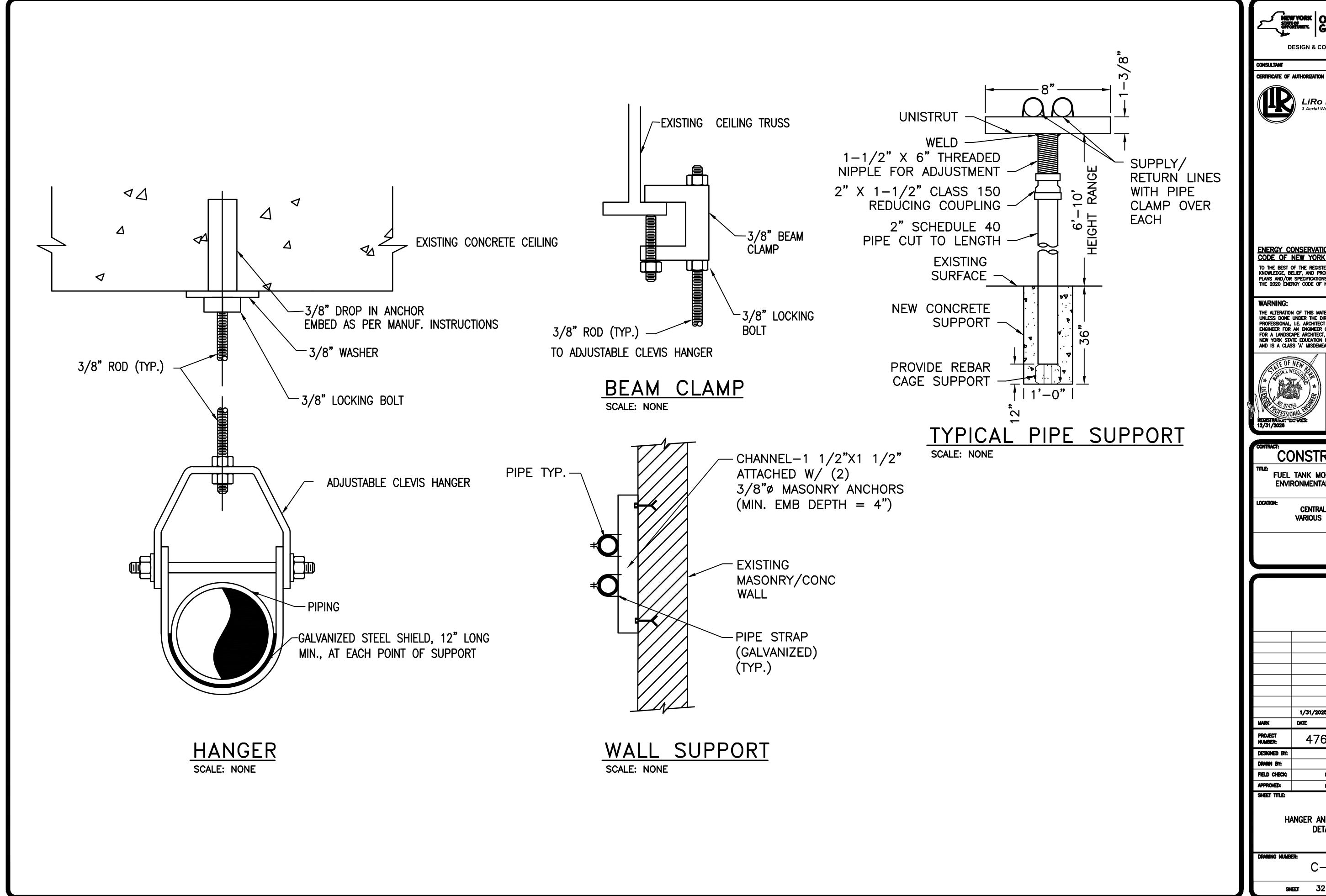
- 1. FOR 4'-0" BARRIER A MINIMUM OF TWO (2) ANCHOR HOLES ARE REQUIRED.
- 2. FOR 8'-0" BARRIER A MINIMUM OF THREE (3) ANCHOR HOLES ARE REQUIRED.

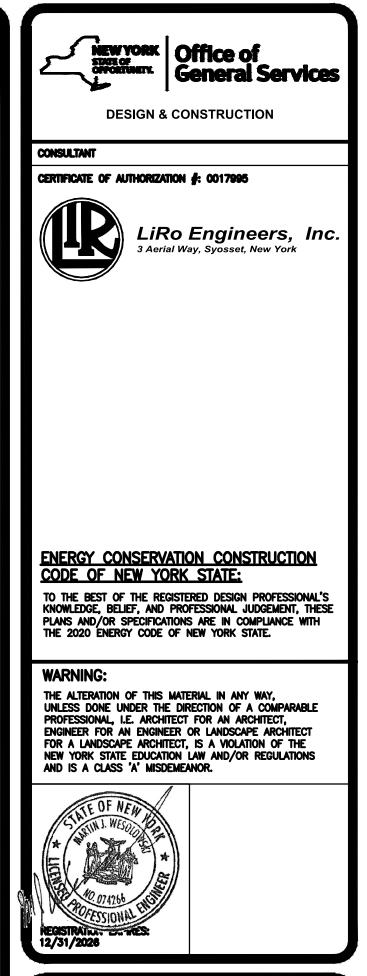
## PLAN VIEW SCALE: NONE

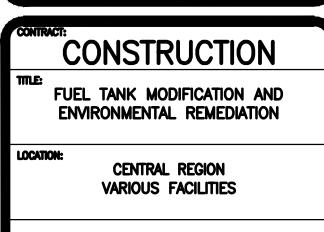




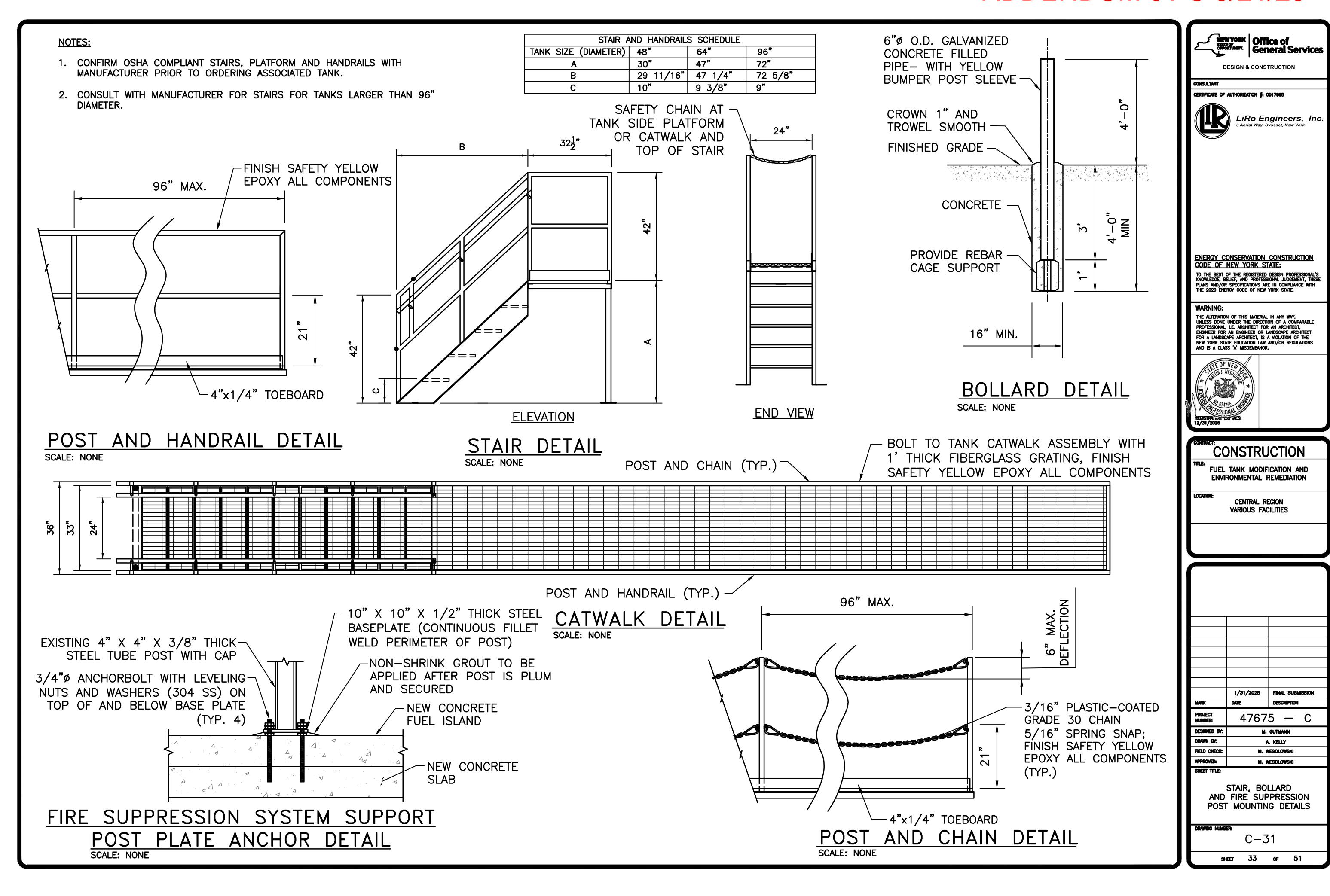
	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	4767	5 <b>–</b> C
DESIGNED BY:	M.	GUTMANN
DRAWN BY:		r Ketta
FIELD CHECK:	M. V	VESOLOWSKI
FIELD CHECK: APPROVED:	M. V	
FIELD CHECK: APPROVED: SHEET TITLE:	M. V	vesolowski Vesolowski BARRIER
FIELD CHECK: APPROVED: SHEET TITLE:	M. V  CONCRETE B  ANCHORING	VESOLOWSKI VESOLOWSKI  BARRIER DETAILS

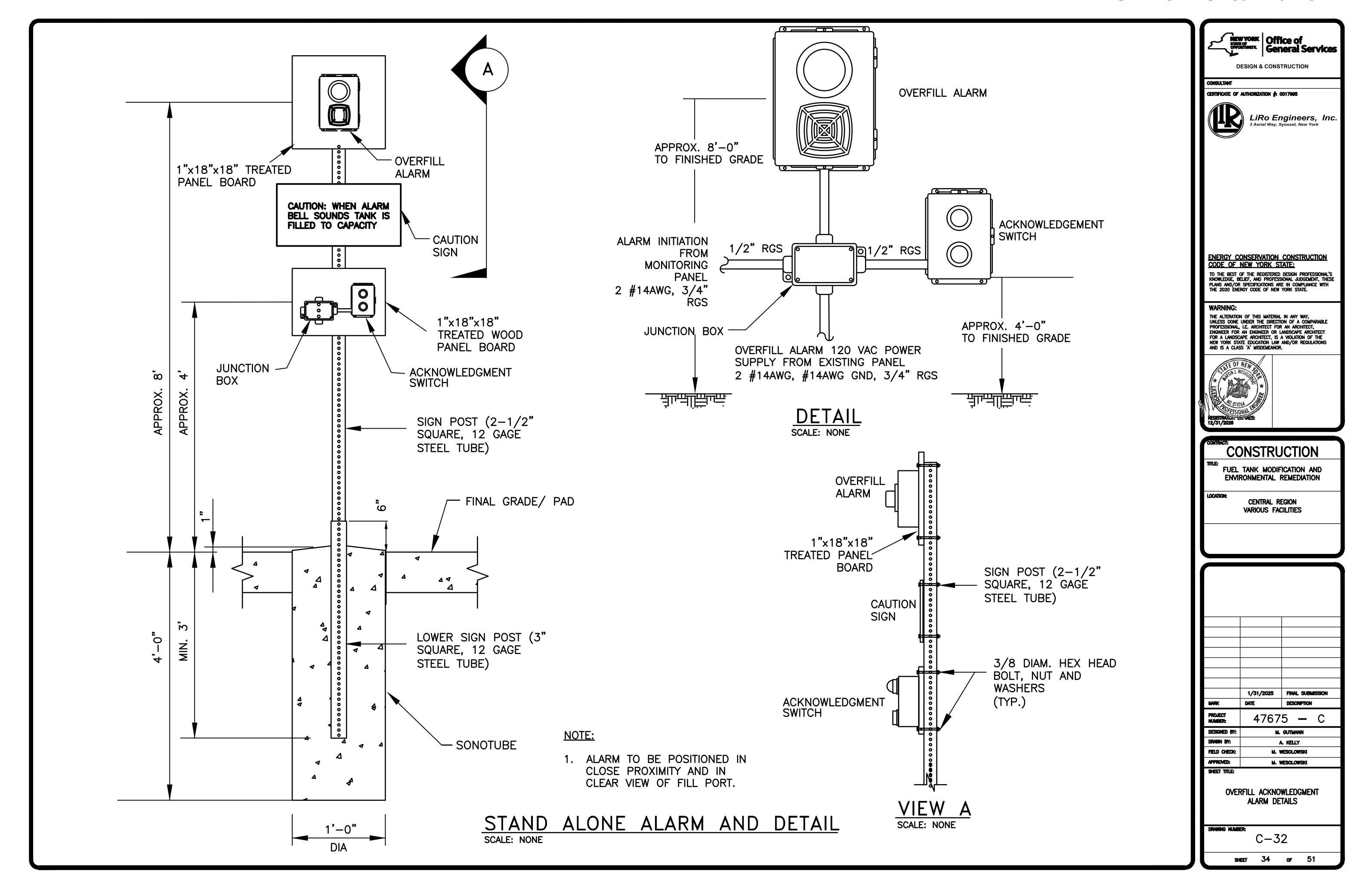






	1/31/2025	FINAL SUBMISSION
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	47675 — C	
DESIGNED BY:	M. GUTMANN	
DRAWN BY:	A. KELLY	
FIELD CHECK:  APPROVED:	M. WESOLOWSKI	
SHEET TITLE:	M. V	IEGULUWSKI
HANGER AND SUPPORT DETAILS		
H/		
DRAWING NUMBER	DETAIL	S





**DESIGN & CONSTRUCTION** 

CENTRAL REGION

VARIOUS FACILITIES

1/31/2025 FINAL SUBMISSION

47675 — C

M. GUTMANN

A. KELLY

M. WESOLOWSKI

M. WESOLOWSKI

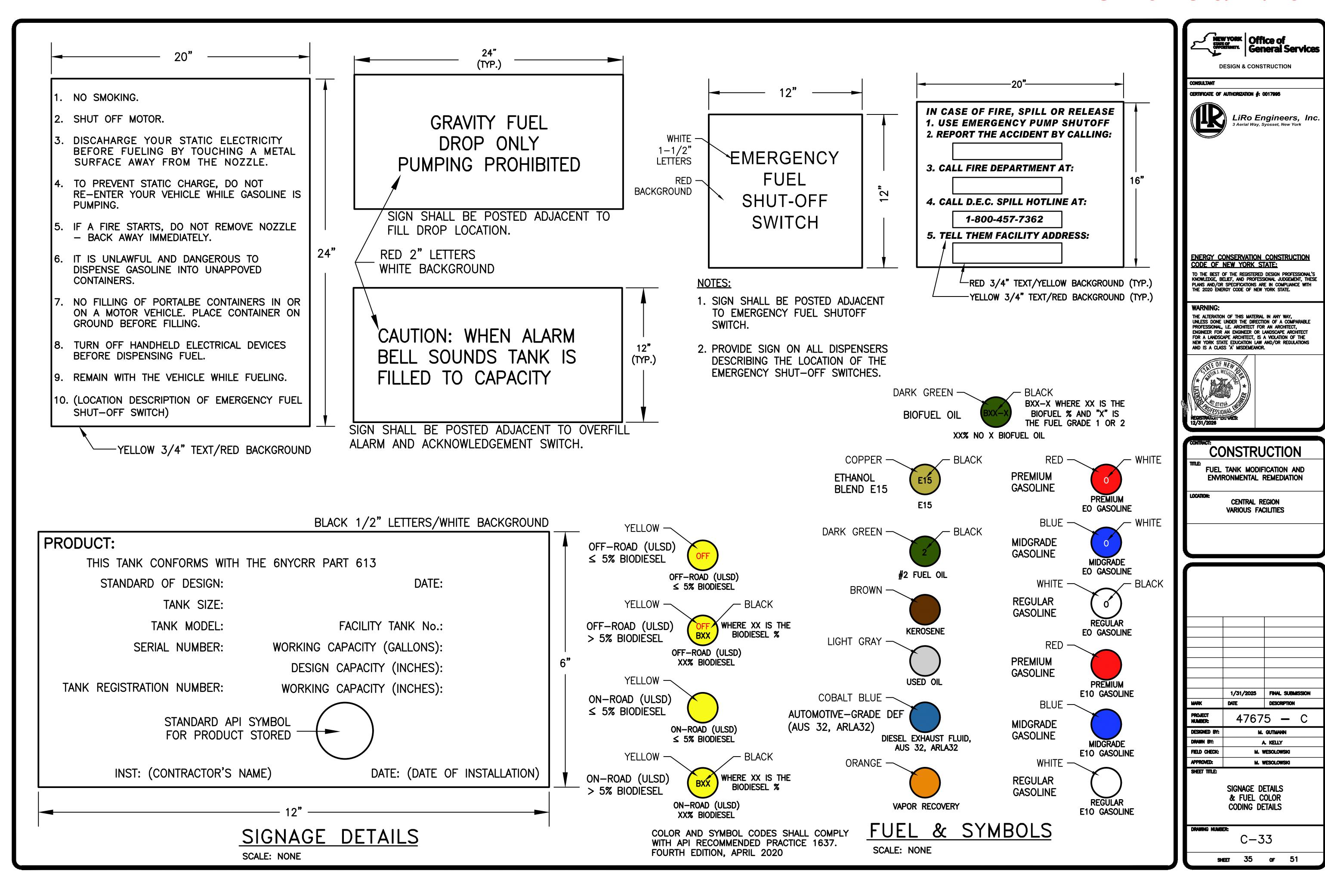
SIGNAGE DETAILS & FUEL COLOR CODING DETAILS

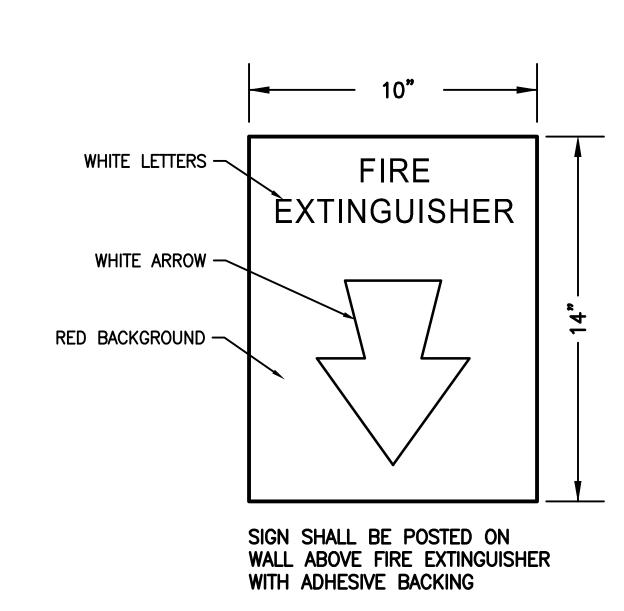
C - 33

SHEET 35 OF 51

DESCRIPTION

LiRo Engineers, Inc.



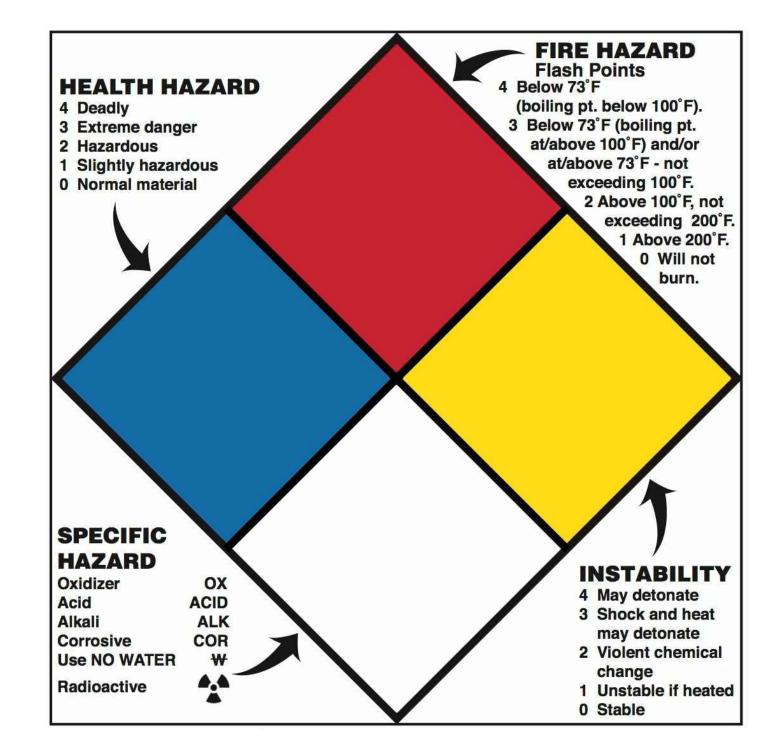


SCALE: NONE

WALL MOUNT FIRE EXTINGUISHER SIGNAGE DETAIL

WHITE ARROW — RED BACKGROUND — SIGN SHALL BE POSTED ON POST ABOVE FIRE EXTINGUISHER WITH ADHESIVE BACKING

POST MOUNT FIRE EXTINGUISHER SIGNAGE DETAIL SCALE: NONE



NFPA 704 STANDARD SYSTEM FOR THE IDENTIFICATION OF THE HAZARDS OF MATERIALS FOR EMERGENCY RESPONSE

SCALE: NONE

# FUEL TANK MODIFICATION AND ENVIRONMENTAL REMEDIATION CENTRAL REGION VARIOUS FACILITIES 1/31/2025 FINAL SUBMISSION PROJECT NUMBER: 47675 **–** C M. GUTMANN DRAWN BY: A. KELLY M. WESOLOWSKI

DESCRIPTION

M. WESOLOWSKI

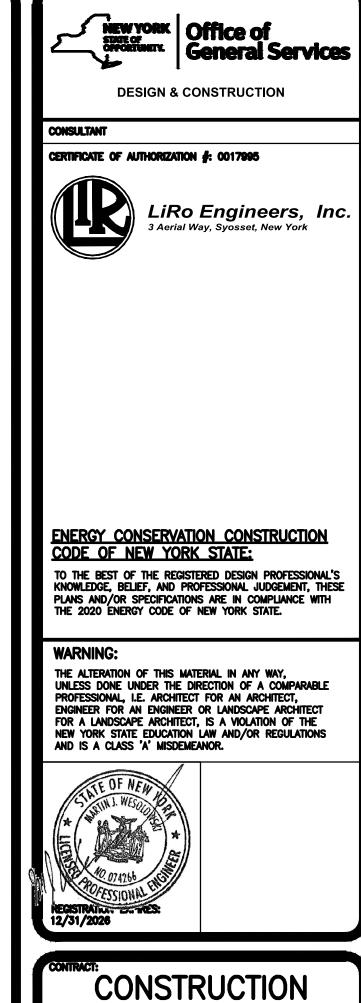
SIGNAGE DETAILS & NFPA 704 PLACARD

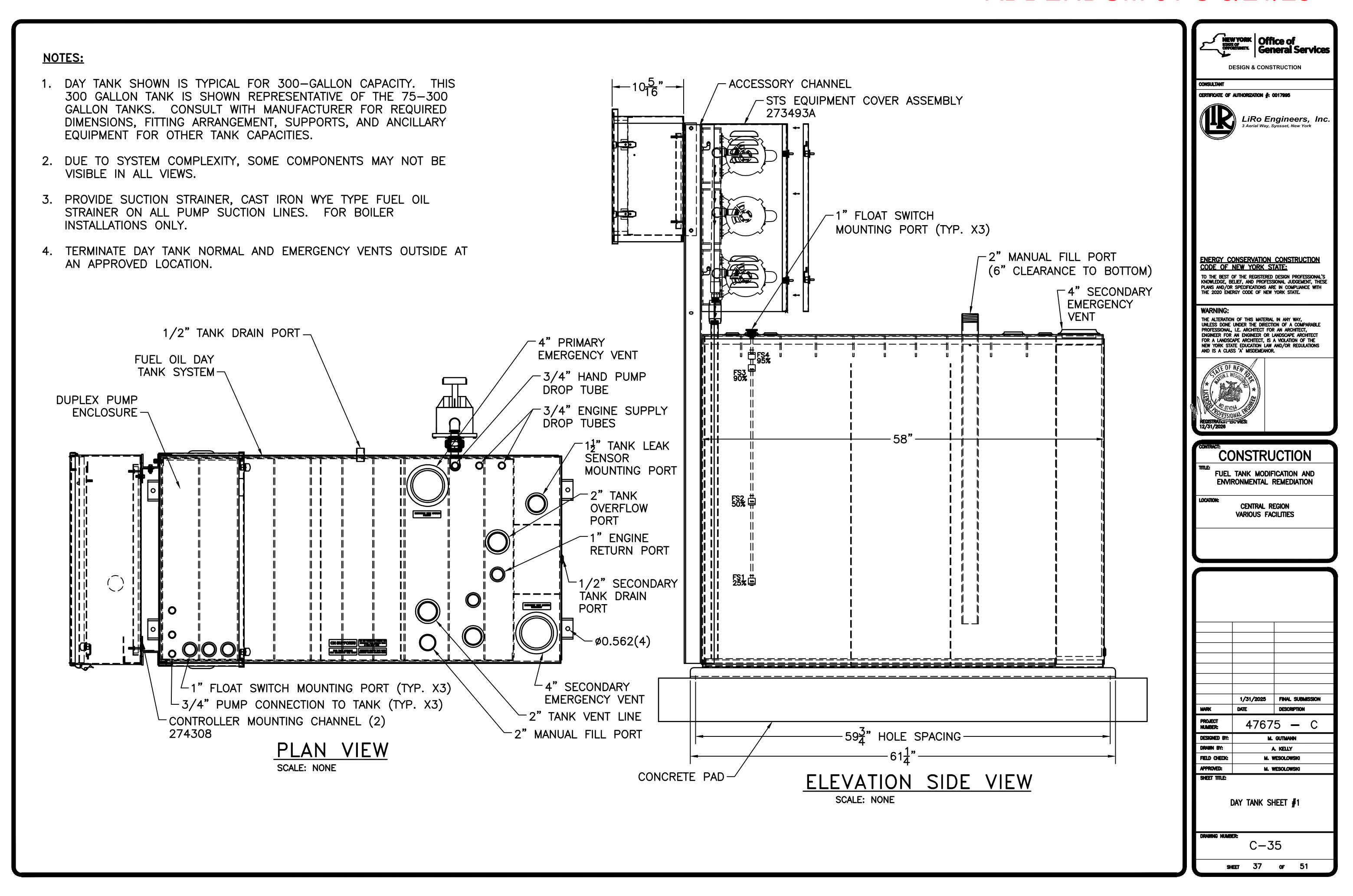
C - 34

SHEET 36 OF 51

#### **NOTES:**

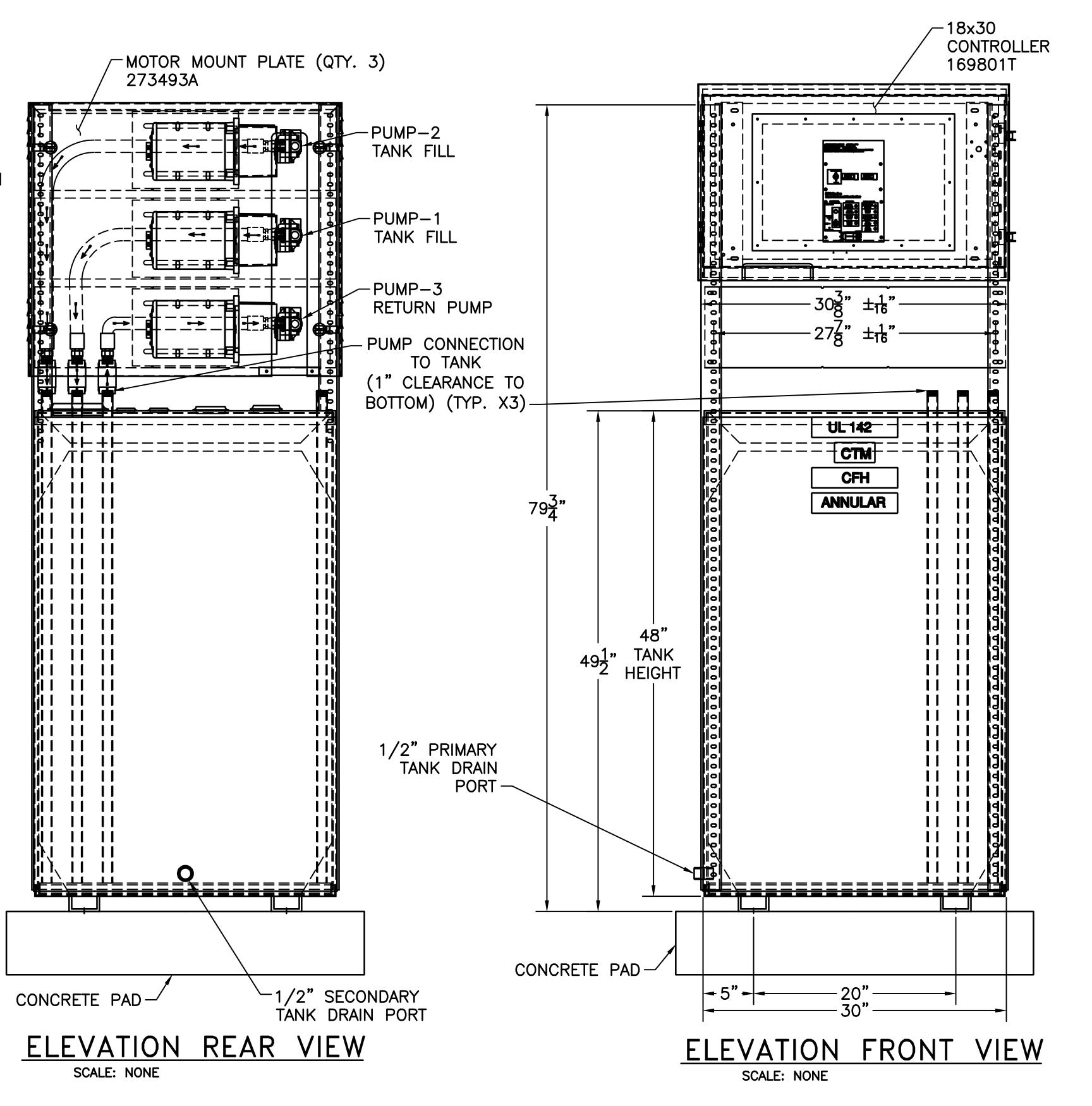
- 1. INSTALL LABEL ON ALL TANKS. LABEL SHALL BE SPECIFIC TO THE MATERIAL STORED IN ACCORDANCE WITH NFPA 704.
- 2. LABEL SHALL BE VINYL WITH SELF-ADHESIVE BACKING

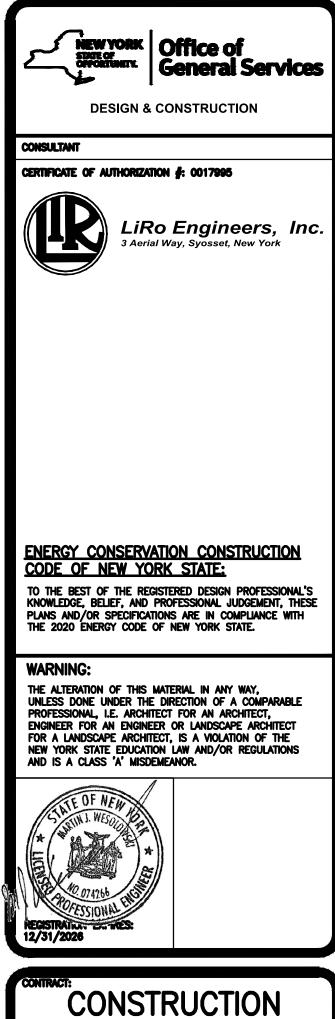


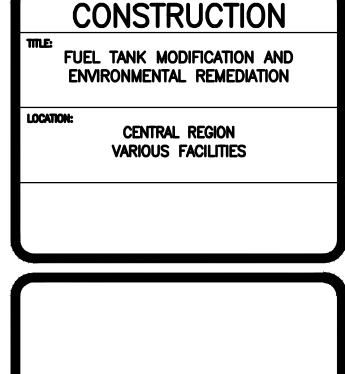


#### **NOTES:**

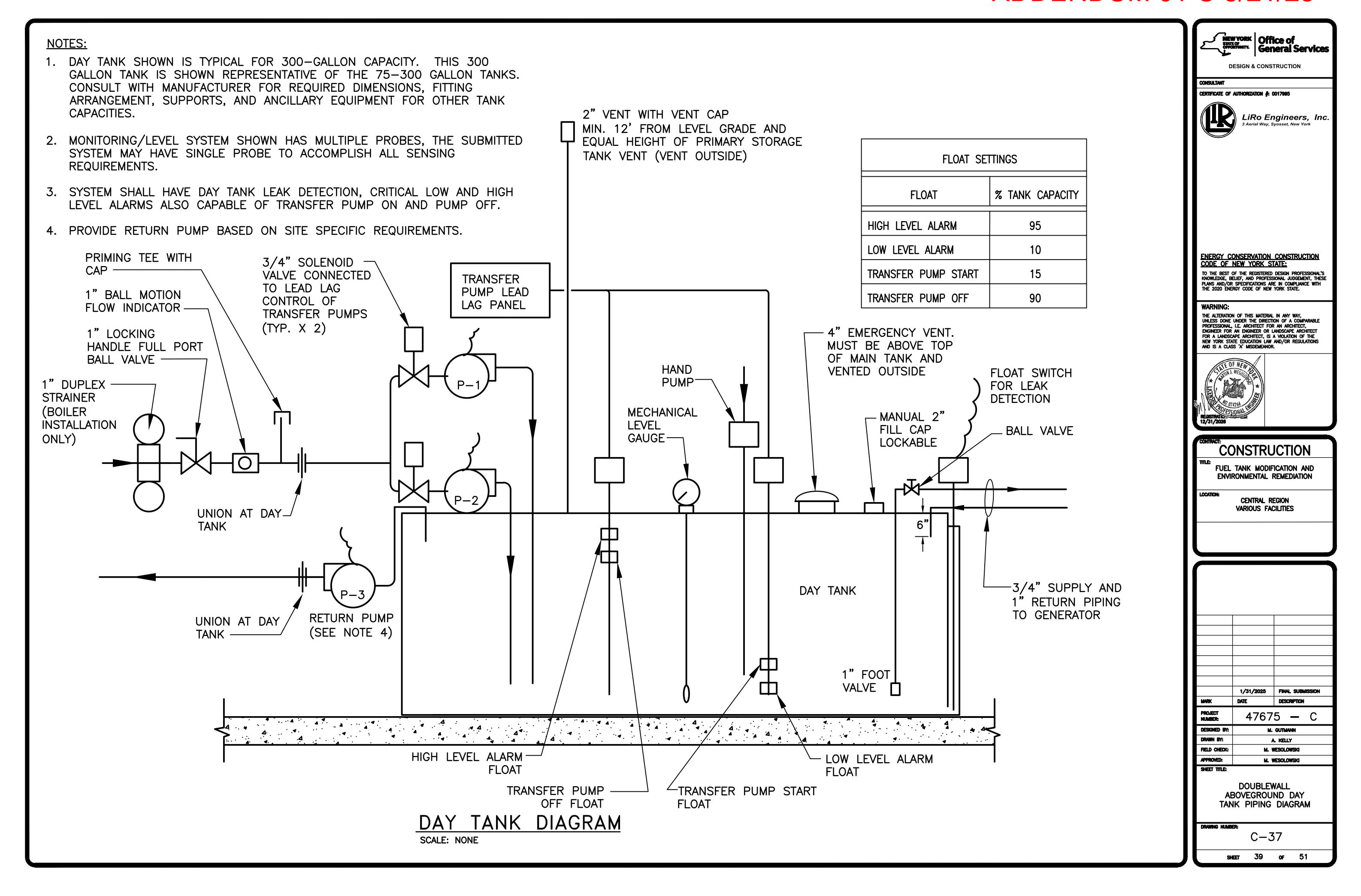
- 1. DAY TANK SHOWN IS TYPICAL FOR 300-GALLON CAPACITY. THIS 300 GALLON TANK IS SHOWN REPRESENTATIVE OF THE 75-300 GALLON TANKS. CONSULT WITH MANUFACTURER FOR REQUIRED DIMENSIONS, FITTING ARRANGEMENT, SUPPORTS, AND ANCILLARY EQUIPMENT FOR OTHER TANK CAPACITIES.
- 2. PROVIDE SUCTION STRAINER, CAST IRON WYE TYPE FUEL OIL STRAINER ON ALL PUMP SUCTION LINES. FOR BOILER INSTALLATION ONLY.
- 3. TERMINATE TANK NORMAL AND EMERGENCY VENTS OUTSIDE AT AN APPROVED LOCATION.

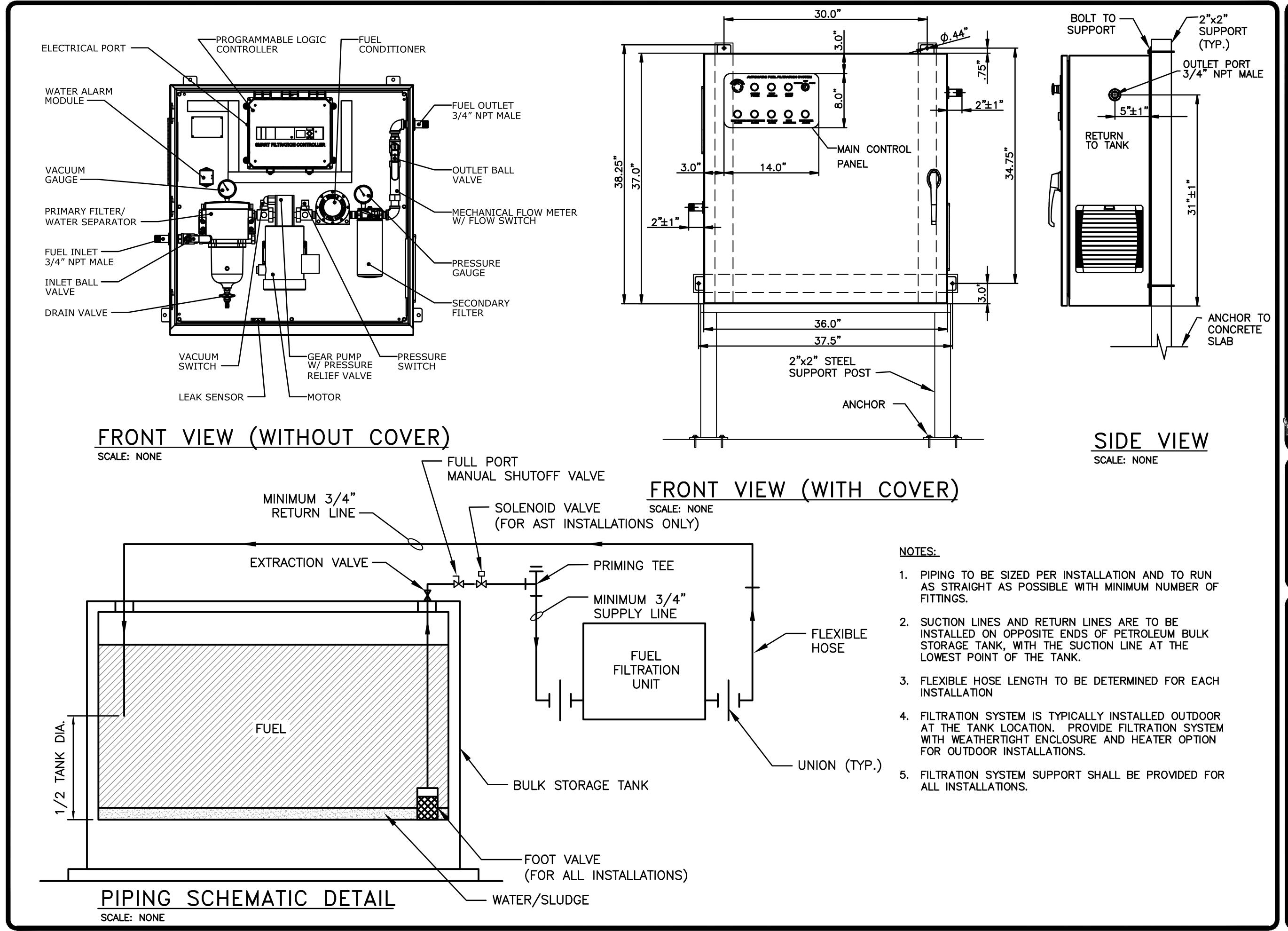


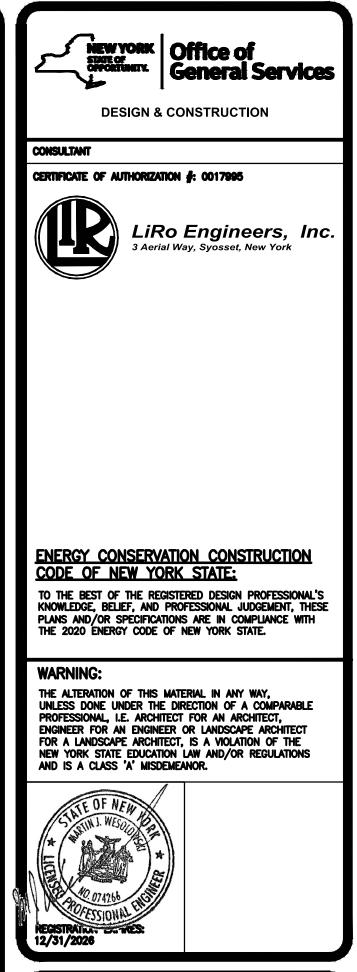


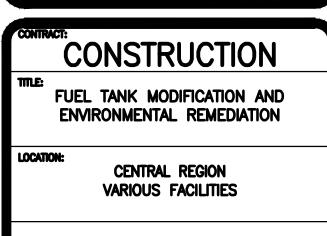


	1/31/2025	FINAL SUBMISSION		
MARK	DATE	DESCRIPTION		
PROJECT NUMBER:	47675 — C			
DESIGNED BY:	M. GUTMANN			
DRAWN BY:	A. KELLY			
FIELD CHECK:	M. WESOLOWSKI			
APPROVED:	M. WESOLOWSKI			
SHEET TITLE:  DAY TANK SHEET #2				
DRAWING NUMBER:  C-36				
SHEET 38 OF 51				

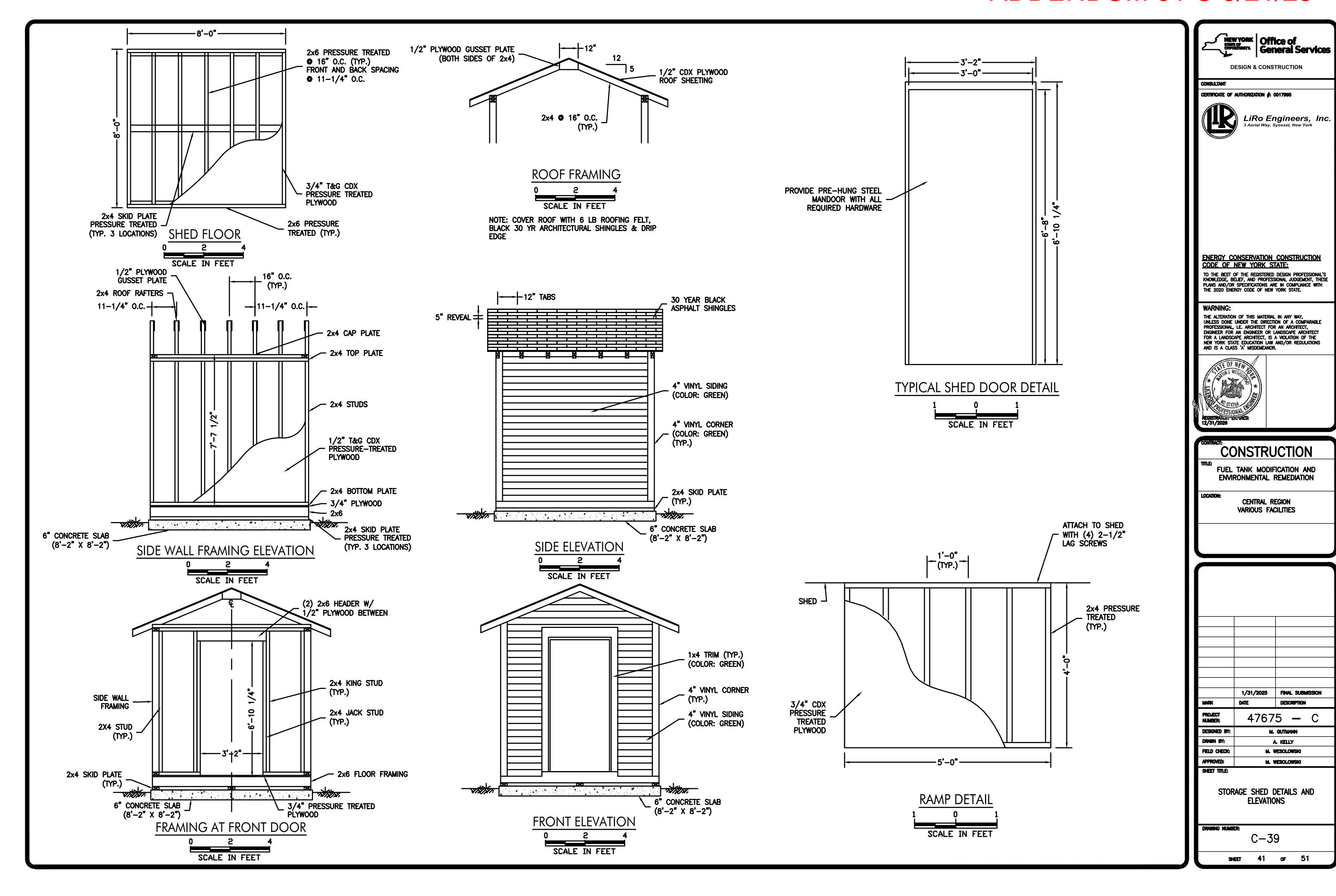


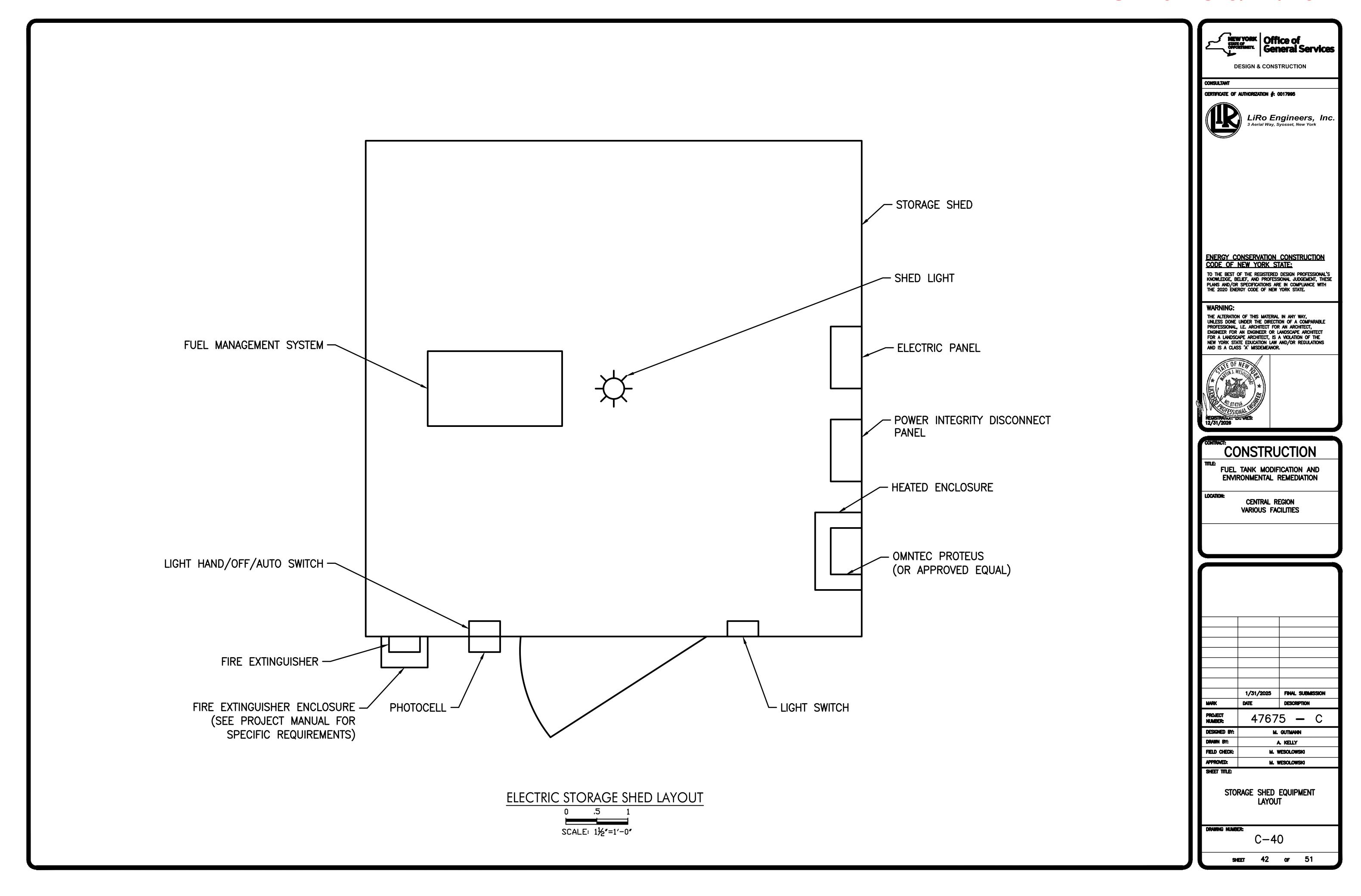






MARK DATE DESCRIF PROJECT 47675 — DESIGNED BY: M. GUTMANN DRAWN BY: A. KELLY FIELD CHECK: M. WESOLOWS	LUBMISSION			
MARK DATE DESCRIF PROJECT 47675 — DESIGNED BY: M. GUTMANN DRAWN BY: A. KELLY FIELD CHECK: M. WESOLOWS APPROVED: M. WESOLOWS	IUBMISSION			
MARK DATE DESCRIF PROJECT 47675 — DESIGNED BY: M. GUTMANN DRAWN BY: A. KELLY FIELD CHECK: M. WESOLOWS APPROVED: M. WESOLOWS	LUBMISSION			
MARK DATE DESCRIF PROJECT 47675 — DESIGNED BY: M. GUTMANN DRAWN BY: A. KELLY FIELD CHECK: M. WESOLOWS APPROVED: M. WESOLOWS	UBMISSION			
MARK DATE DESCRIF PROJECT 47675 — DESIGNED BY: M. GUTMANN DRAWN BY: A. KELLY FIELD CHECK: M. WESOLOWS APPROVED: M. WESOLOWS				
NUMBER: 4/0/5 — DESIGNED BY: M. GUTMANN DRAWN BY: A. KELLY FIELD CHECK: M. WESOLOWS APPROVED: M. WESOLOWS	TON .			
DRAWN BY:  FIELD CHECK:  M. WESOLOWS  APPROVED:  M. WESOLOWS				
FIELD CHECK: M. WESOLOWS APPROVED: M. WESOLOWS	M. GUTMANN			
APPROVED: M. WESOLOWS				
	M. WESOLOWSKI			
OILLI IIILLI	M. WESOLOWSKI			
FUEL FILTRATION SYSTEM DETAIL				
DRAIMING NUMBER:  C-38				
SHEET 40 OF 51				



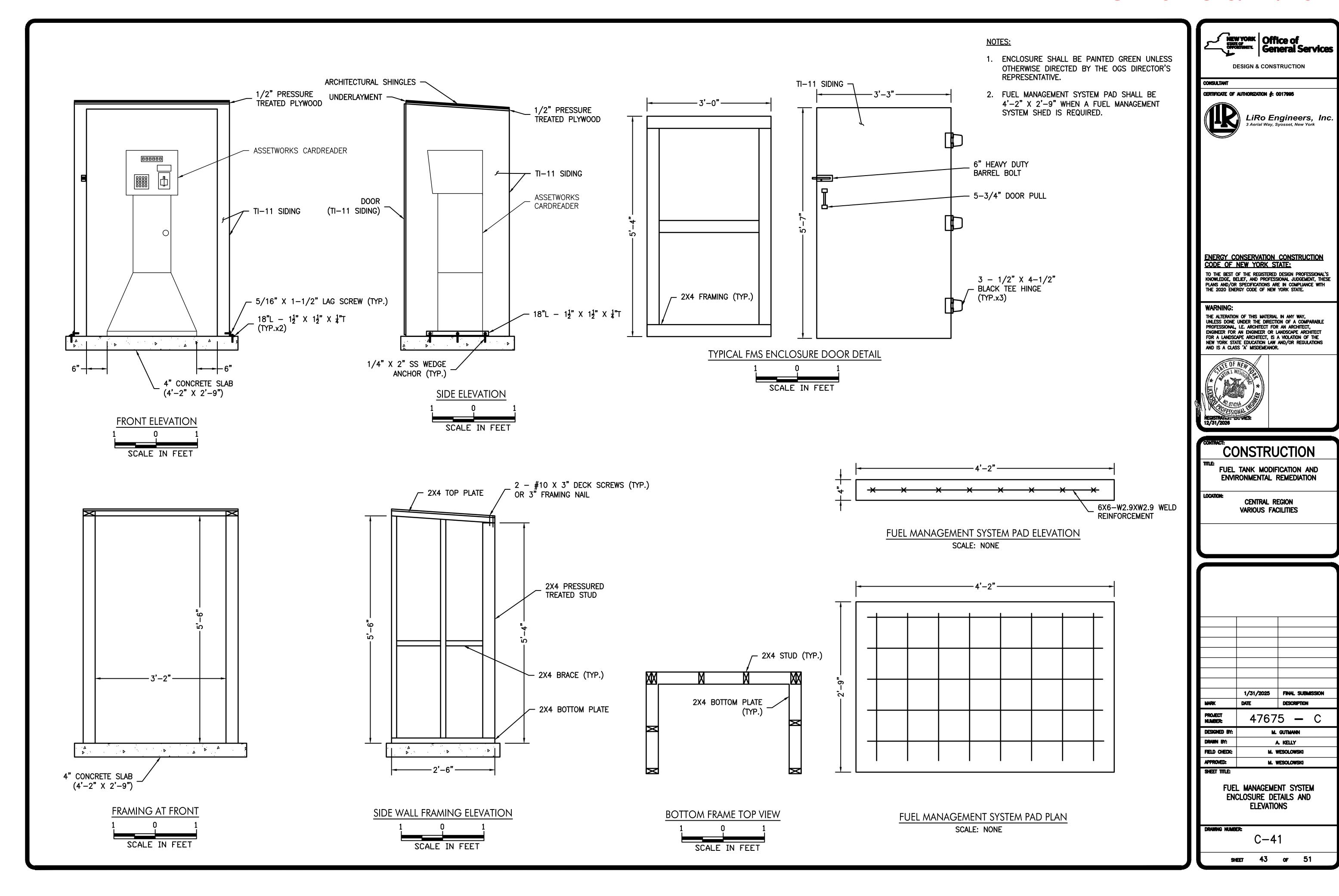


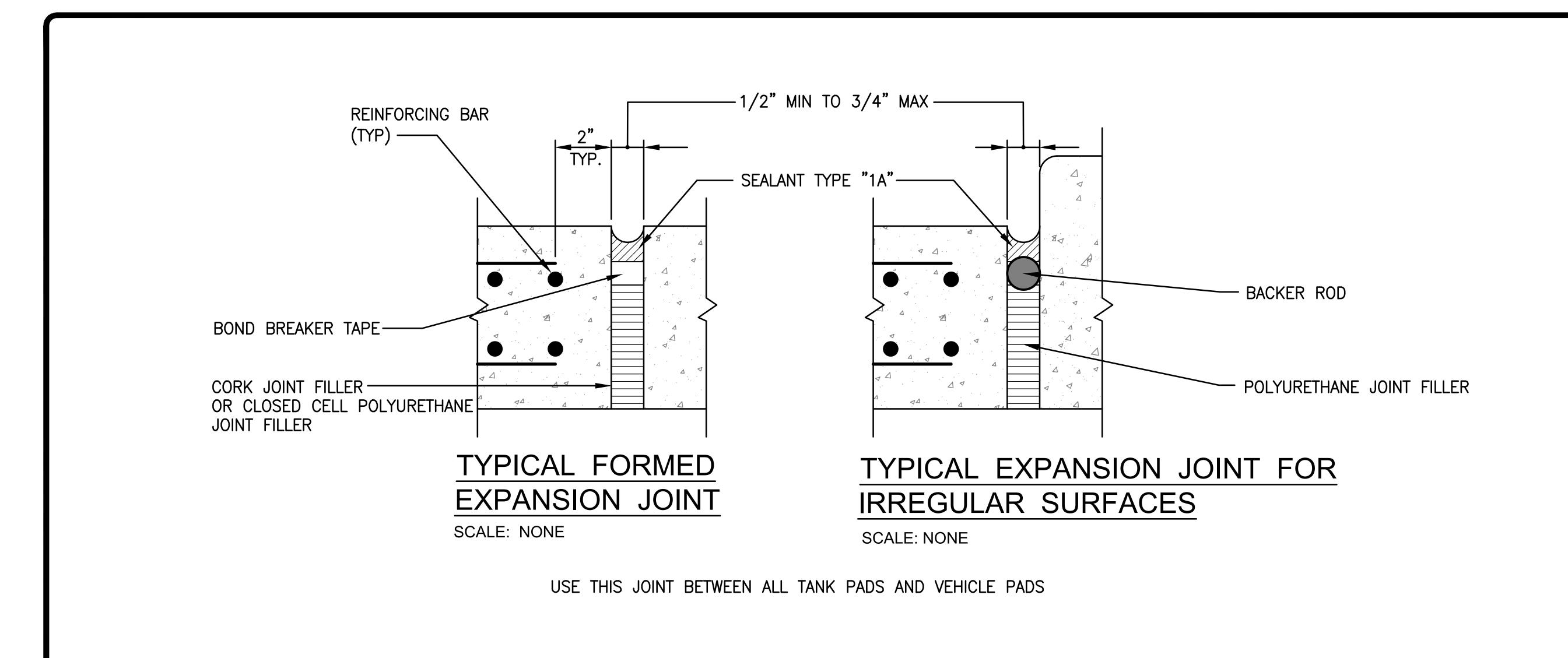
DESCRIPTION

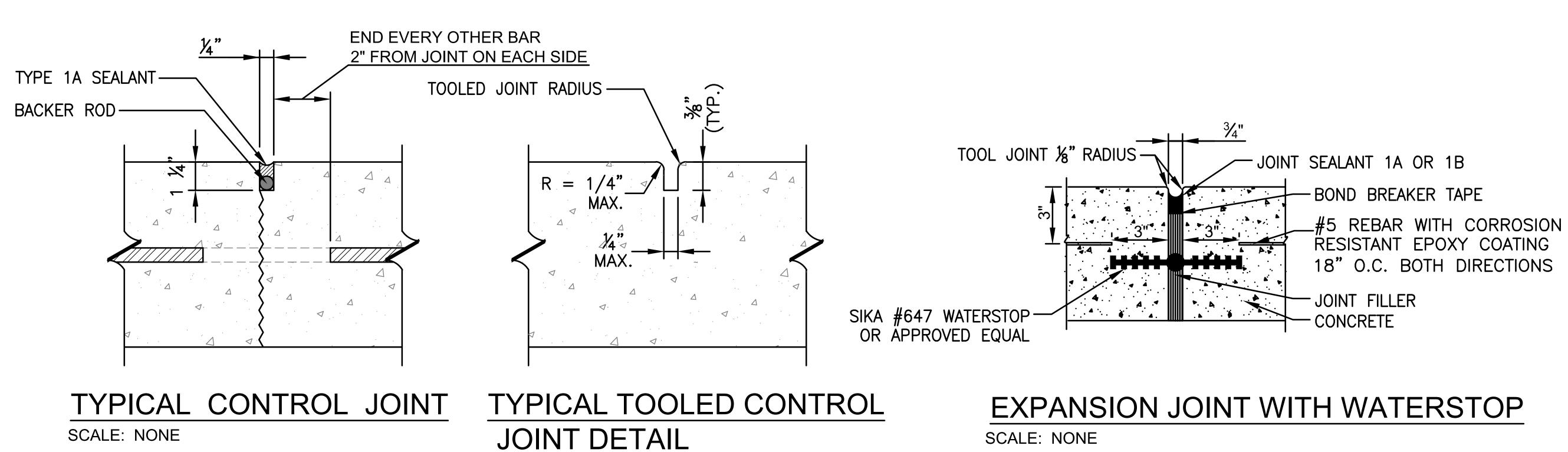
M. GUTMANN

A. KELLY

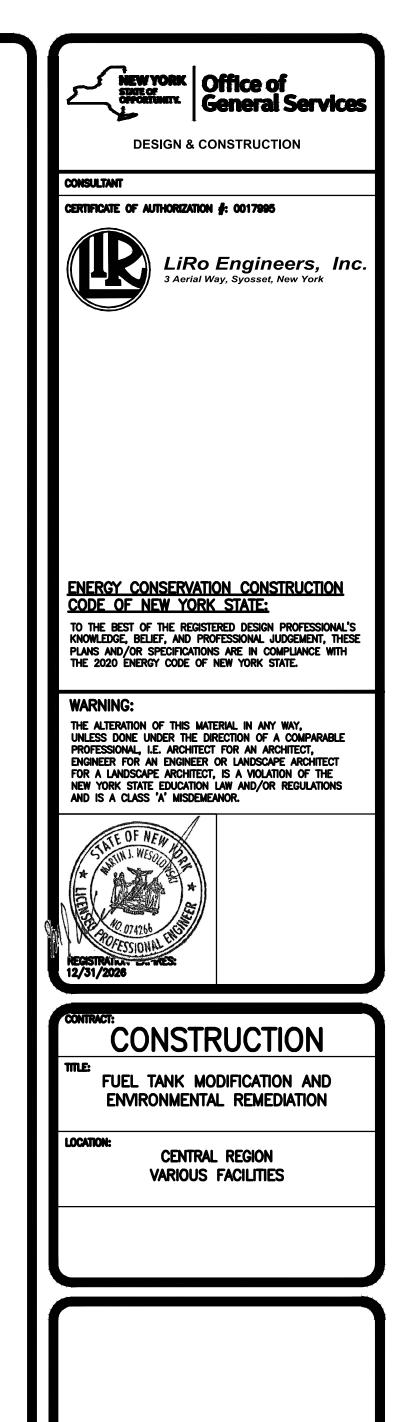
M. WESOLOWSKI M. WESOLOWSKI







SCALE: NONE



1/31/2025 FINAL SUBMISSION

47675 **–** C

M. GUTMANN

A. KELLY

M. WESOLOWSKI

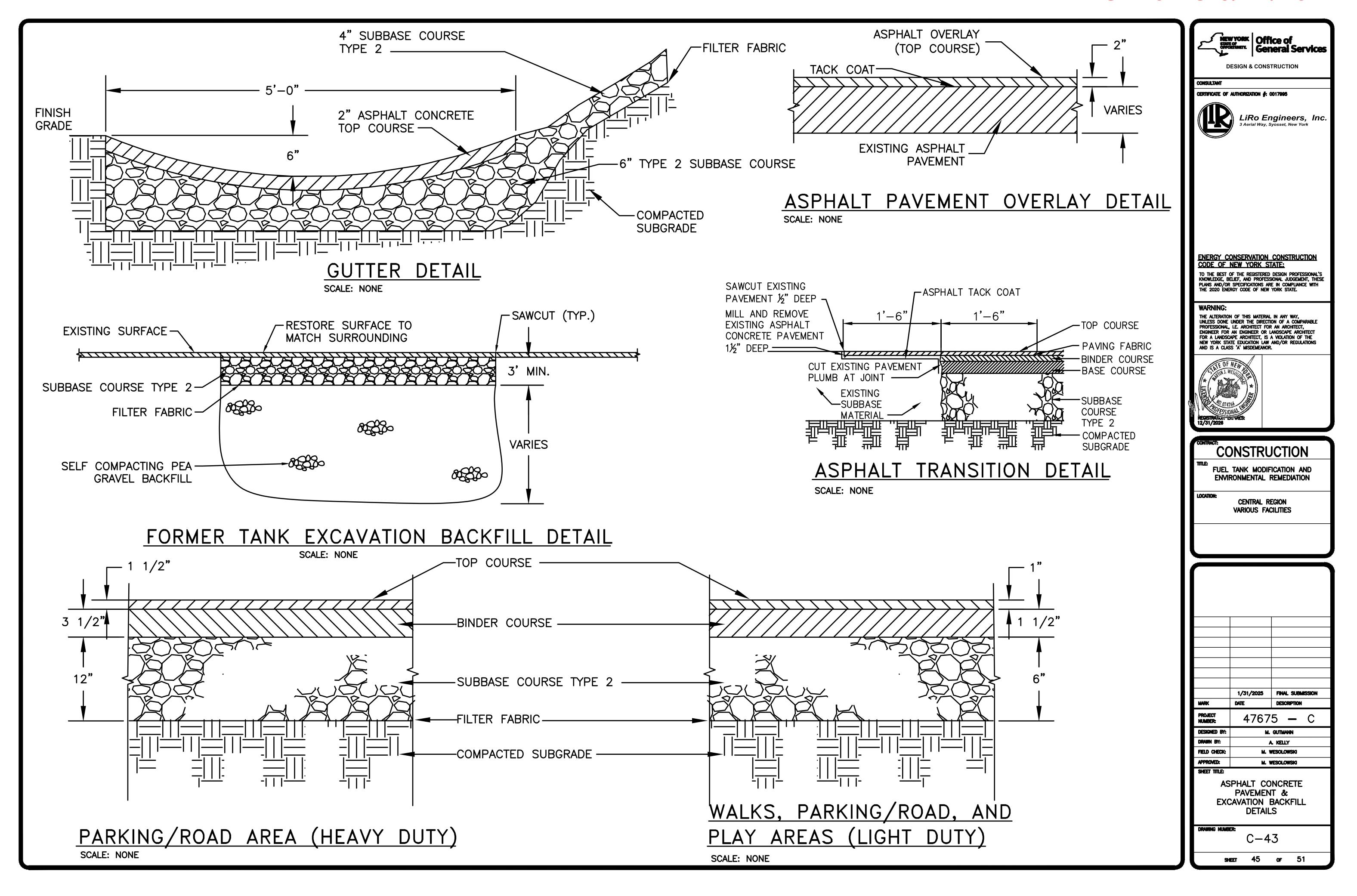
M. WESOLOWSKI

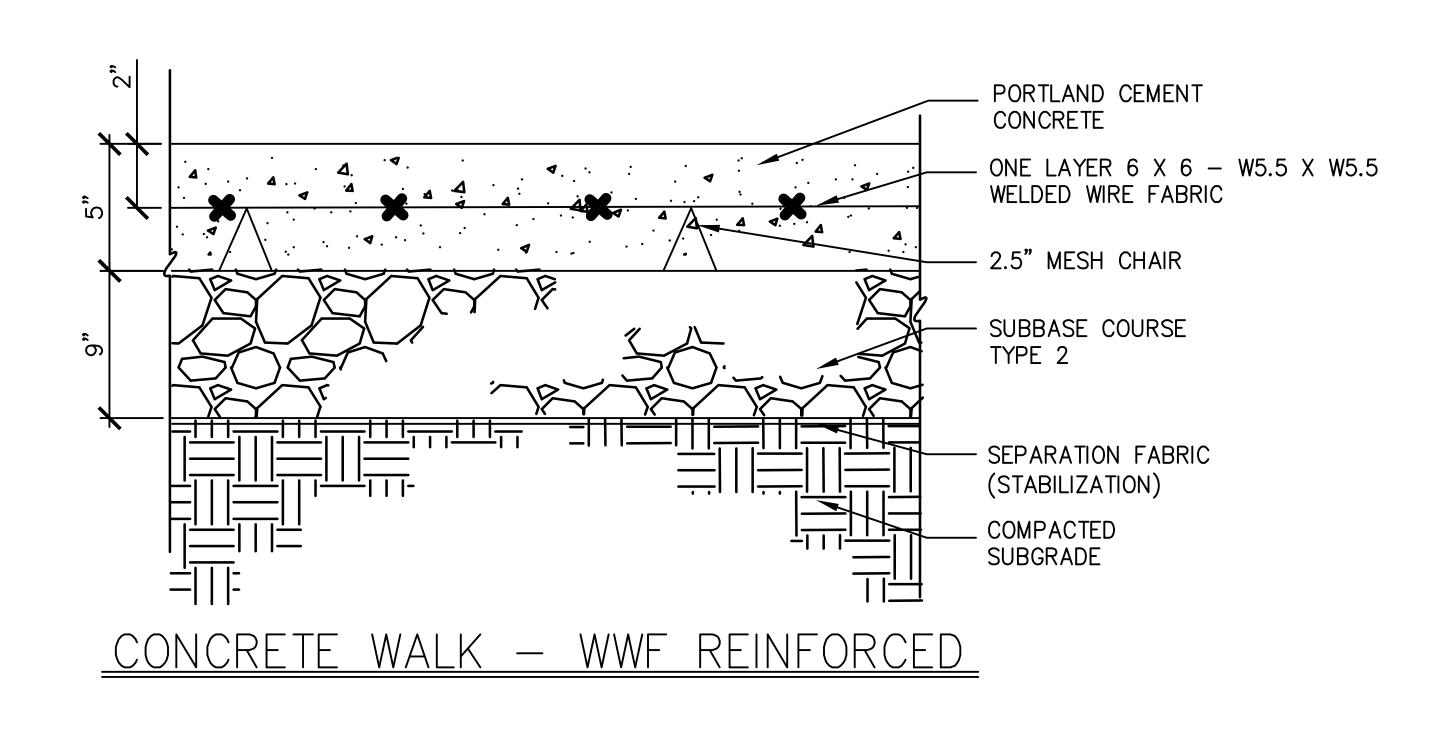
CONCRETE JOINT DETAILS

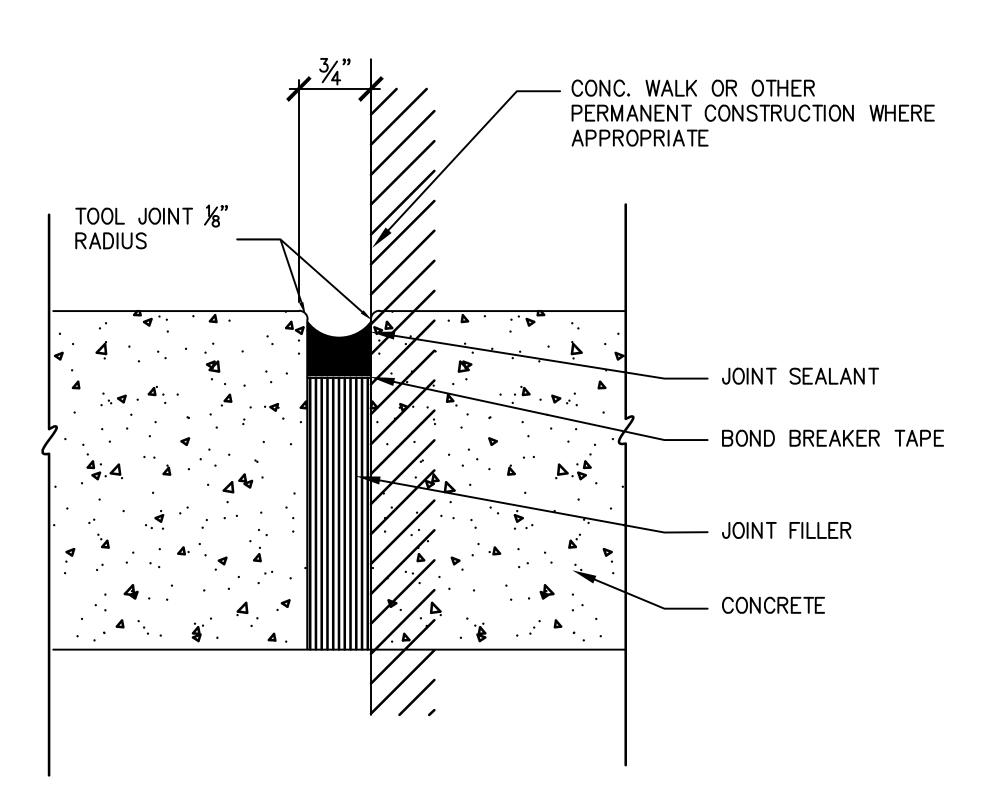
C - 42

SHEET 44 OF 51

PROJECT NUMBER:



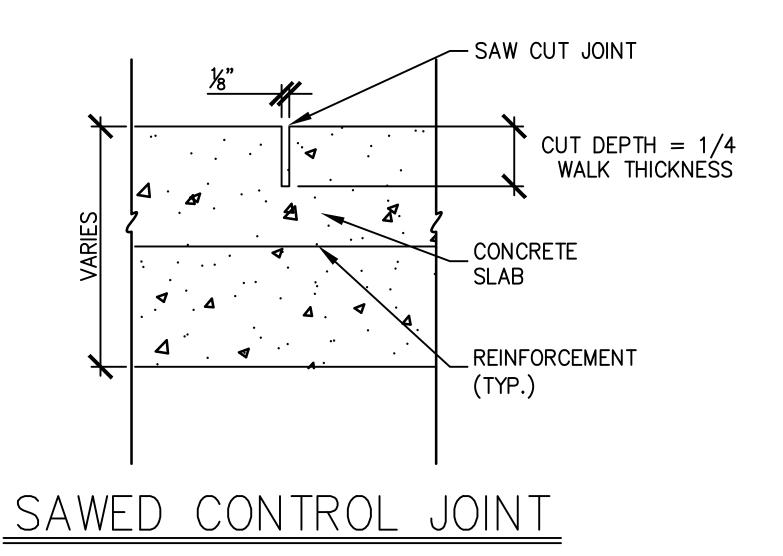


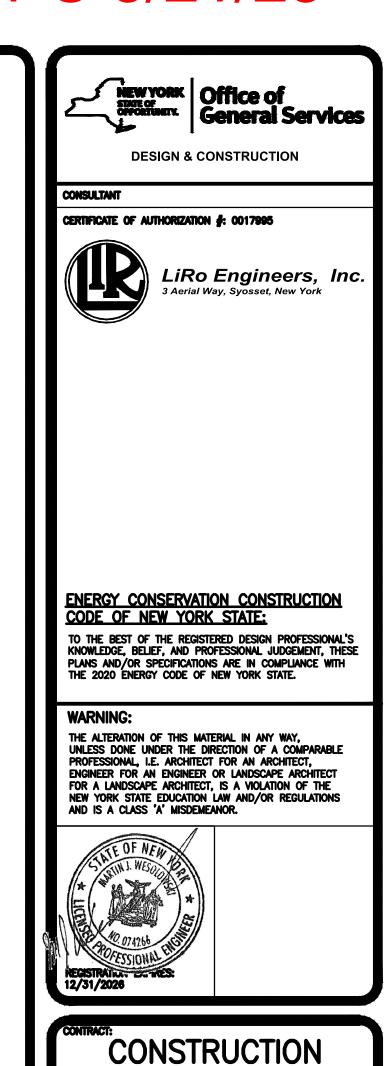


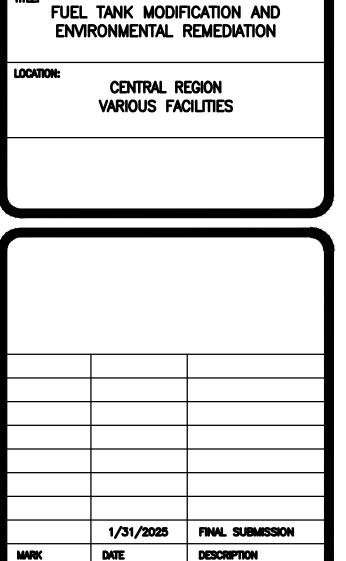
EXPANSION JOINT

#### NOTES:

- 1. PROVIDE EXPANSION JOINT WHERE THE SIDEWALK ABUTS THE CONCRETE SLAB FOR THE FUEL TANK AND AT THE CHANGE IN DIRECTION AND EVERY 50'.
- 2. VERTICAL EXPANSION JOINTS:
  - W.R. MEADOWS, INC. ASPHALT FIBRE EXPANSION JOINT, OR APPROVED EQUAL.
  - W.R. MEADOWS SNAP-CAP EXPANSION JOINT CAP (KEEPS THE FIBRE BOARD CLEAN DURING CONCRETE PLACEMENT), OR APPROVED EQUAL.
  - 3M BOND BREAKER TAPE OR APPROVED EQUAL.
  - A SINGLE COMPONENT, SELF-LEVELING, NON-SAG POLYURETHANE SEALANT SIKAFLEX-1C SL OR APPROVED EQUAL.
- 3. EDGES AND EXPANSION JOINTS SHOULD TROWELED WITH A RADIUS EDGE.
- 4. SAW CONTROL JOINTS (CJ) AFTER THE CONCRETE HAS SET. COMPLETE SAWCUTS WITHIN 18 HOURS AFTER SLAB IS PLACED. SPACE CONTROL JOINTS EQUALLY BETWEEN EXPANSION JOINTS AT APPROXIMATELY 5'-0" ON CENTER OR MATCH EXISTING WALKS IN AREA, EXCEPT WHERE A DIFFERENT SPACING IS SHOWN ON THE DRAWINGS.
- 5. APPLY CURING IMMEDIATLY AFTER FINAL FINISH. KURE-N-SEAL OR APPROVED EQUAL.
- 6. CONCRETE SIDEWALK SHALL HAVE A BROOM FINISH.







47675 **–** C

M. GUTMANN

A. KELLY

M. WESOLOWSKI

M. WESOLOWSKI

SIDEWALK AND EXPANSION JOINT DETAIL

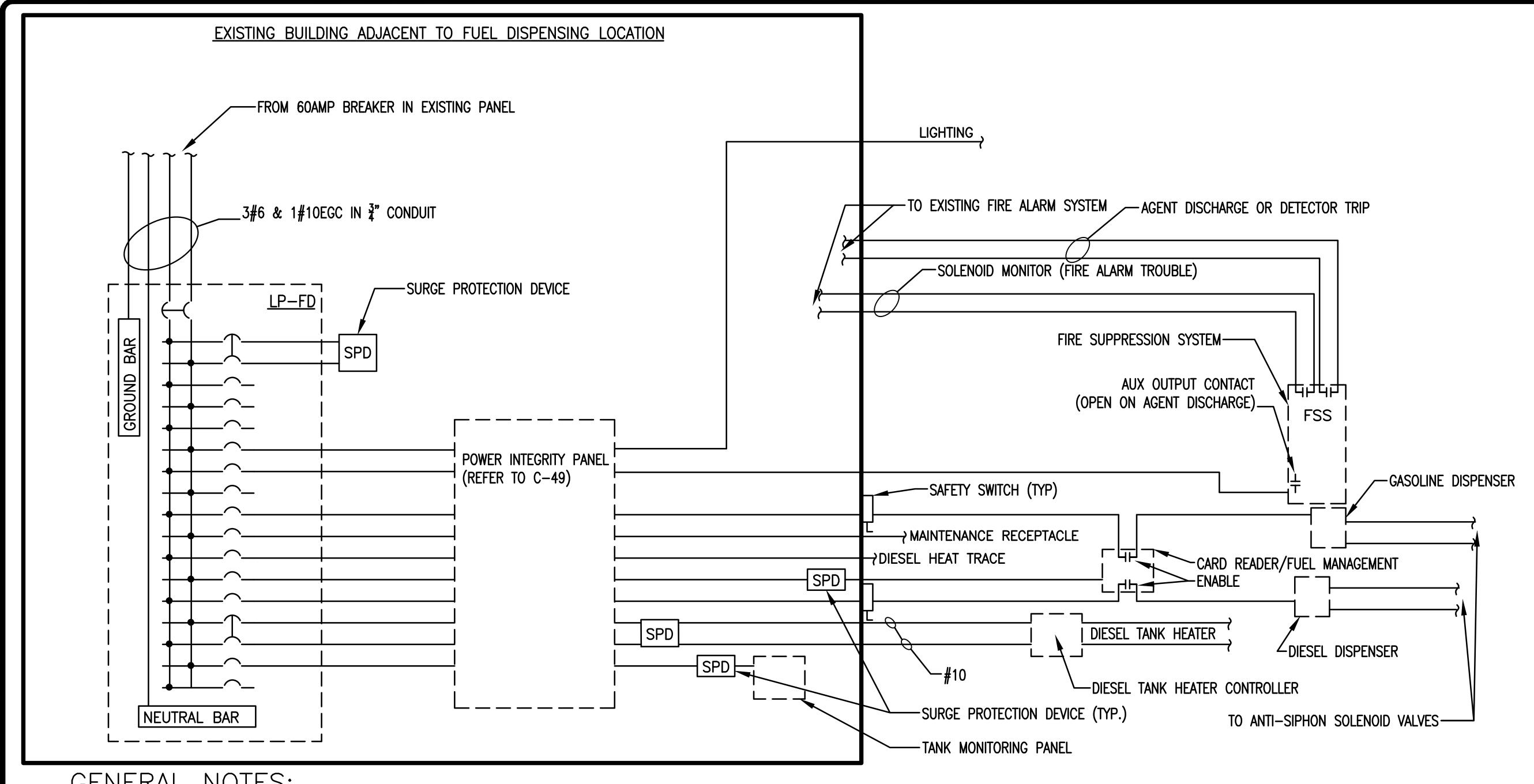
C - 44

PROJECT NUMBER:

DRAWN BY:

FIELD CHECK:

APPROVED:



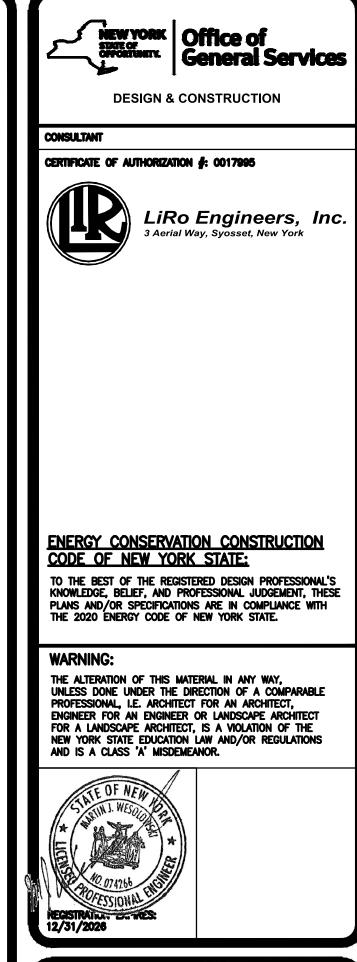
#### GENERAL NOTES:

(THIS DRAWING ONLY)

- A. CONDUIT LAYOUT IS SHOWN DIAGRAMMATICALLY. CONDUITS SHALL BE CONSOLIDATED TO REDUCE THE NUMBER OF CONDUITS REQUIRED ON A SITE BY SITE BASIS. CONTRACTOR SHALL SUBMIT CONDUIT CONSOLIDATION PLAN AS A FIELD SUBMITTAL ON ELECTRIC SUBMITTAL PLATFORM.
- B. PROVIDE A 2 POLE 60 AMPERE TRIP ELEMENT BREAKER IN AN EXISTING PANEL AS DIRECTED. OR IF SUFFICIENT SPACE EXISTS IN AN EXISTING BREAKER, PROVIDE BRANCH BREAKERS IN THAT PANEL AS DIRECTED.
- C. GROUNDING CONDUCTORS ARE TO BE PROVIDED IN ALL CONDUITS REGARDLESS OF WHAT IS DEPICTED ON THIS DIAGRAM.
- D. PROVIDE ALL WIRING IN CONDUIT. CONDUITS PENETRATING SLABS OR AREAS EXPOSED TO SALT SHALL BE PVC-COATED RIGID METAL CONDUIT. PVC-COATED CONDUIT SHALL EXTEND FROM BENEATH SLAB TO 2 FEET ABOVE SLAB.

- THE MAINTENANCE RECEPTACLE CONDUCTORS SHALL NOT BE ROUTED THROUGH THE CONTACTOR.
- MOUNT THE PHOTOCELL ON THE EXTERIOR OF THE BUILDING AT APPROXIMATELY 10 FEET ABOVE GRADE AS DIRECTED.
- MOUNT SAFETY SWITCHES OUTDOORS, IN SIGHT OF THE DISPENSING LOCATION, OUTSIDE OF THE HAZARDOUS AREA, AS DIRECTED. BREAK NEUTRAL CONDUCTORS IN SAFETY SWITCHES AS WELL.
- H. COMPONENTS SHOWN ON THE DIAGRAM ARE TYPICAL, NOT ALL INSTALLATIONS WILL REQUIRE ALL OF THE COMPONENTS SHOWN.

- I. PROVIDE THE NUMBER OF CONTACTORS AS REQUIRED TO OPEN ALL LINE AND NEUTRAL CONDUCTORS SHOWN ON THE DIAGRAM.
- J. THE EMERGENCY POWER SWITCH SHALL BE LOCATED A MINIMUM OF 20 FEET FROM ALL DISPENSERS AND A MAXIMUM OF 100 FEET FROM ALL DISPENSERS AS DIRECTED.
- K. SEALING FITTINGS ARE NOT SHOWN. PROVIDE SEALING FITTINGS AT LOCATIONS INDICATED BY AND DEPICTED IN ARTICLES: 500, 501, 511, 514 AND 515 OF THE 2014 NEC.
- L. ABOVE GROUND TANKS: UNLESS SPECIFIED BY THE TANK MANUFACTURER, PROVIDE A GROUND ROD FOR EACH TANK WITH A MINIMUM OF A #2 GROUNDING CONDUCTOR BETWEEN THE TANK AND THE ROD.
- M. ALL COMPLETED RACEWAY SYSTEMS SHALL BE INSPECTED AND APPROVED PRIOR TO CONDUCTORS BEING INSTALLED.
- N. MINIMUM CONDUCTOR SIZE #12 UNLESS OTHERWISE
- O. LOCATE THE MAINTENANCE RECEPTACLE AS DIRECTED OUTSIDE OF THE HAZARDOUS AREA.
- P. SURGE PROTECTION DEVICE SHALL BE PROVIDED FOR INDIVIDUAL EQUIPMENT. THE USE OF A BRANCH PANEL BOARD SUPPRESSOR IN PLACE OF INDIVIDUAL EQUIPMENT SURGE PROTECTION DEVICES SHALL BE DETERMINED ON A SITE BY SITE BASIS.



#### CONSTRUCTION FUEL TANK MODIFICATION AND ENVIRONMENTAL REMEDIATION CENTRAL REGION VARIOUS FACILITIES

	1/31/2025	FINAL SUBMISSION		
MARK	DATE	DESCRIPTION		
PROJECT NUMBER:	47675 — C			
DESIGNED BY:	M. GUTMANN			
DRAWN BY:	A. KELLY			
FIELD CHECK:	M. WESOLOWSKI			
APPROVED:	M. WESOLOWSKI			
SHEET TITLE: POWER ONE LINE DIAGRAM				
DRAWING NUMBER:  C-45				
U-45				

SHEET 47 OF 51

#### GENERAL NOTES:

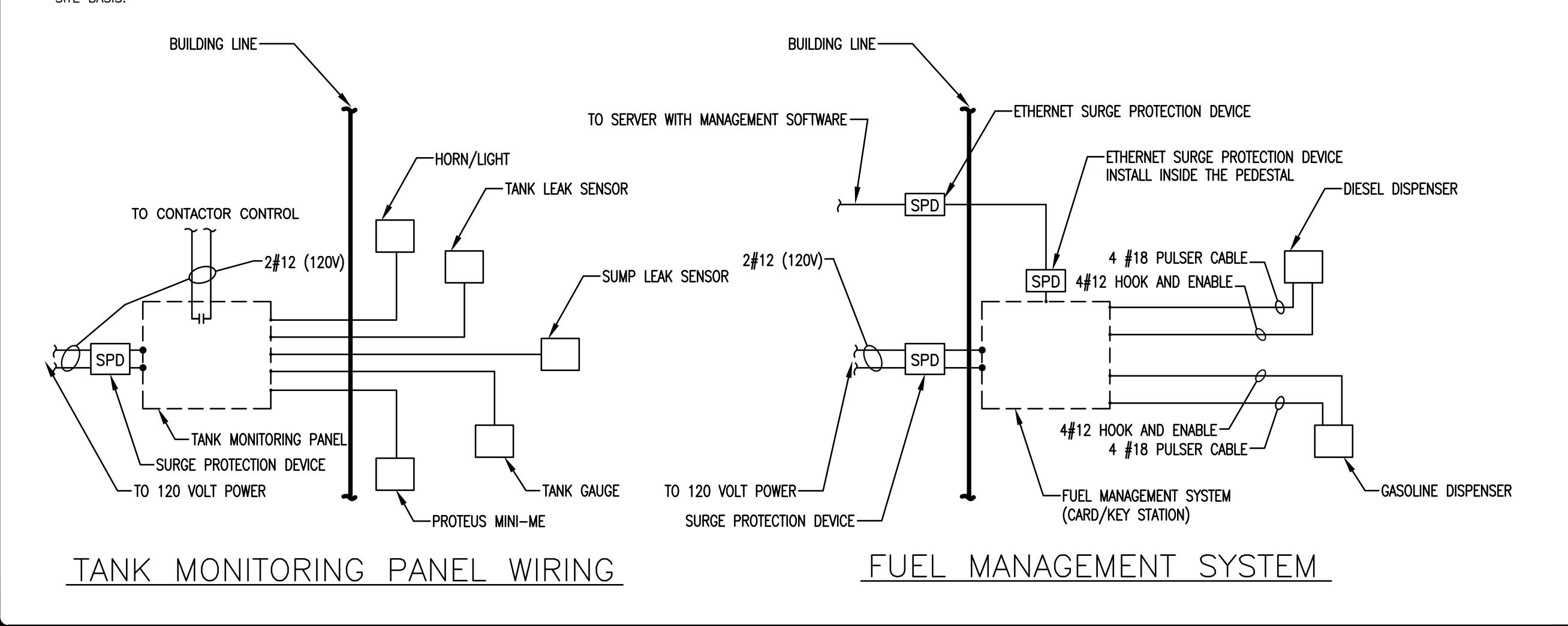
(THIS DRAWING ONLY)

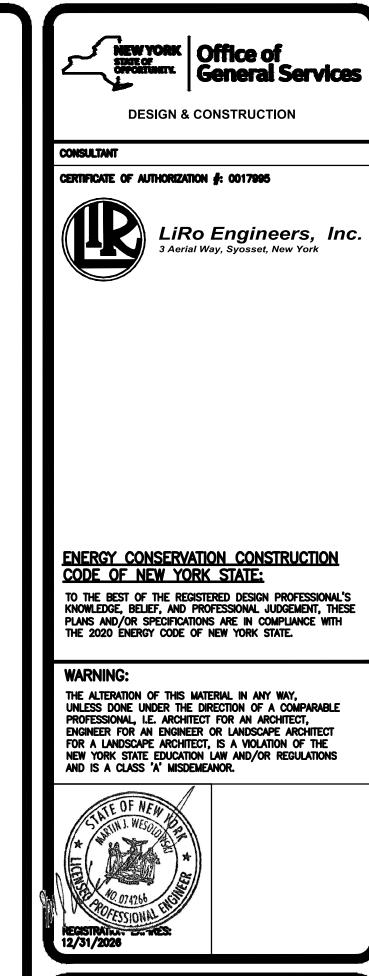
- A. WIRING FOR EQUIPMENT CONNECTED TANK MONITORING PANEL IS UNDER 120 VOLTS UNLESS OTHERWISE NOTED. WIRING OTHER THAN 120 VOLTS MAY BE COMBINED IN COMMON CONDUITS.
- B. WIRING FOR DEVICES CONNECTED TO THE TANK MONITORING PANEL IS A MINIMUM OF #22 UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.
- C. SEALING FITTINGS ARE NOT SHOWN. PROVIDE SEALING FITTINGS AT LOCATIONS INDICATED BY AND DEPICTED IN ARTICLES: 500, 501, 511, 514, AND 515 OF THE 2014 NEC.
- D. PROVIDE ALL WIRING IN CONDUIT. CONDUITS PENETRATING SLABS OR AREAS EXPOSED TO SALT SHALL BE PVC—COATED RIGID METAL CONDUIT. PVC—COATED CONDUIT SHALL EXTEND FROM BENEATH SLAB TO 2 FEET ABOVE SLAB.
- E. PULSER AND POWER CABLES SHALL NOT BE COMBINED IN COMMON RACEWAYS.
- F. CIRCUITS FROM TANK MONITORING PANEL OUTSIDE TO THE TANK LOCATION ARE INTRINSICALLY SAFE AND NEED TO BE RUN IN CONDUITS SEPARATE FROM ANY NON-INTRINSICALLY SAFE CIRCUITS.
- G. SURGE PROTECTION DEVICE SHALL BE PROVIDED FOR INDIVIDUAL EQUIPMENT. THE USE OF A BRANCH PANEL BOARD SUPPRESSOR IN PLACE OF INDIVIDUAL EQUIPMENT SURGE PROTECTION DEVICES SHALL BE DETERMINED ON A SITE BY SITE BASIS.

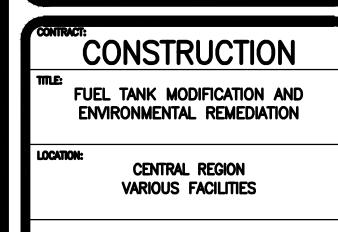
		PANELBOAR	RD S	SCH	IEDUL	E			
DESIGNATION: <u>LP-FD</u>	X	FULLY RATED EQUIPMENT RATING							IT RATING AMPERES
CABINET NEMA TYPE:		UL LISTED INTEGRATED EQUIPM SHORT CIRCUIT RATING IS ACC				LUG ONL		V.ED	<u></u> </td
1 ⅓ 3R □ 4 □ 4X □ 12 □		FOR THIS PANELBOARD				CIRCUIT		<del>i</del>	
MOUNTING, SUBFACE		UL LABEL 'SUITABLE FOR USE			FRAME	POLES	ATE		COMPONENTS (SEE BELOW)
MOUNTING: <u>SURFACE</u>		AS SERVICE EQUIPMENT'			100	26	60	)	_
MAIN: 100			BRANG	CH/F	EEDER (	CIRCUIT	BRE	AKERS	
VOLTAGE: 120/208 OR 240		DESCRIPTION	ATE	NO.	Α	В	NO.	ATE	DESCRIPTION
PHASE: SINGLE	GASOLINE	DISPENSER	20	1		+^-	2	20	DIESEL DISPENSER
	DIECEL TA	NIZ LIEATED (NOTE O)	70	3	$\vdash \uparrow \vdash$	<del>-</del> -	4	20	DIESEL HEAT TRACE (NOTE 2)
NO. WIRES: <u>3</u>	DIESEL IA	NK HEATER (NOTE 2)	30	5	┝┷┿	+~-	6	15	CARD READER/FUEL MANAGEMENT
OTHER REQ:	LIGHTING		15	7	$\vdash \smallfrown \dotplus$	<del>-</del>	8	20	FIRE SUPPRESSION SYSTEM (NOTE 1)
	MAINTENAI	NCE RECEPTACLE	20	9	<b>├</b> ^ <b></b>	+~-	10	20	CONTACTOR COIL VOLTAGE (NOTE 1)
FULL CAPACITY	CONTACTO	R CONTROL POWER	15	11	<b>├</b> ^┼	<del>-</del> -	12	15	LEAK DETECTION PANEL
NEUTRAL BUS				13	<b>├</b> ^ <b></b>	<b></b>	14	20	PROTEUS MINI-ME
EQUIPMENT				15	<b>├</b> ^┼	<del></del> -	16		
GROUNDING BUS				17	├^┿	+~-	18		

PANELBOARD SCHEDULE NOTES:

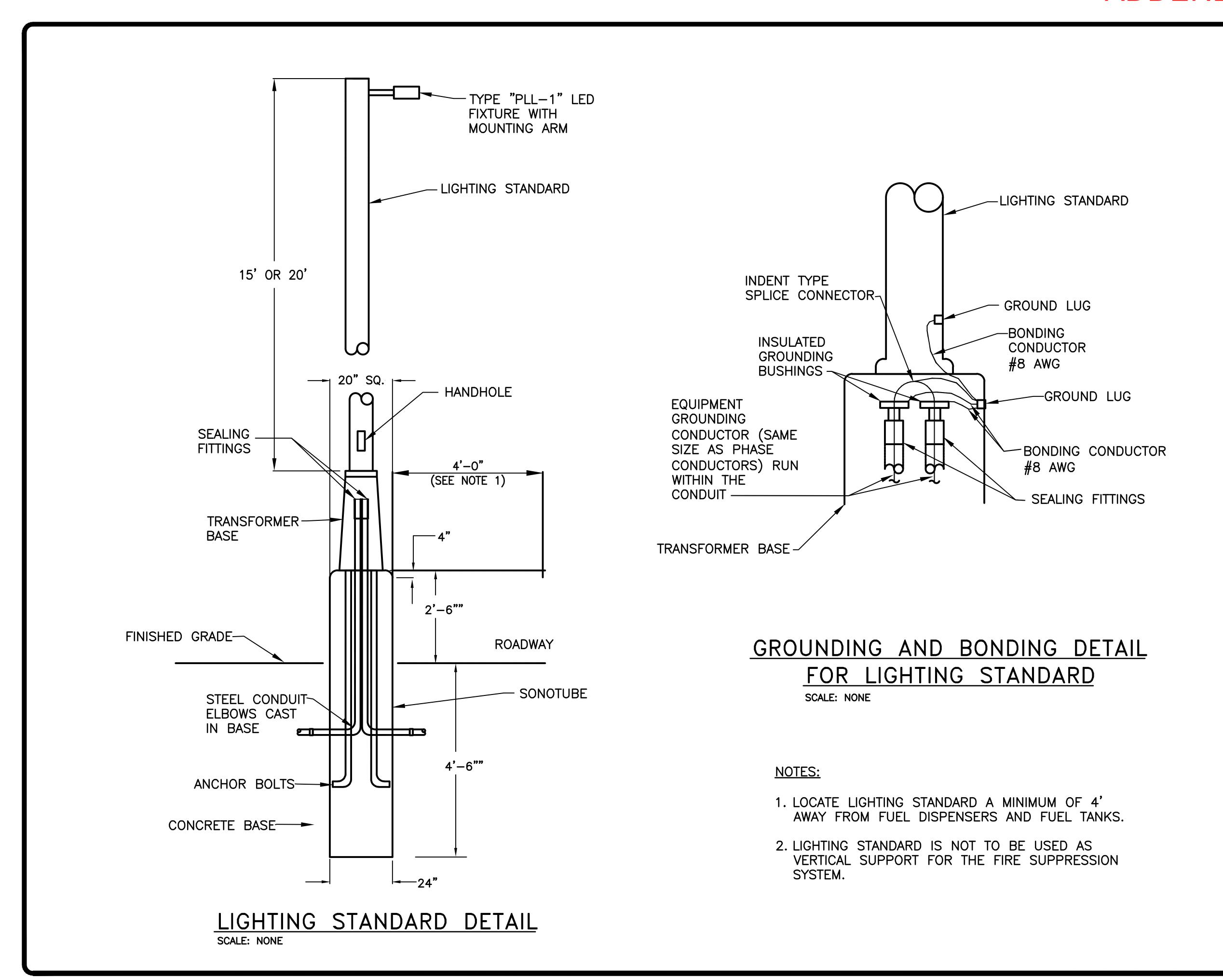
- : 1. PROVISIONS FOR LOCKING BREAKER ON.
- 2. GROUND FAULT PROTECTION FOR EQUIPMENT TYPE.

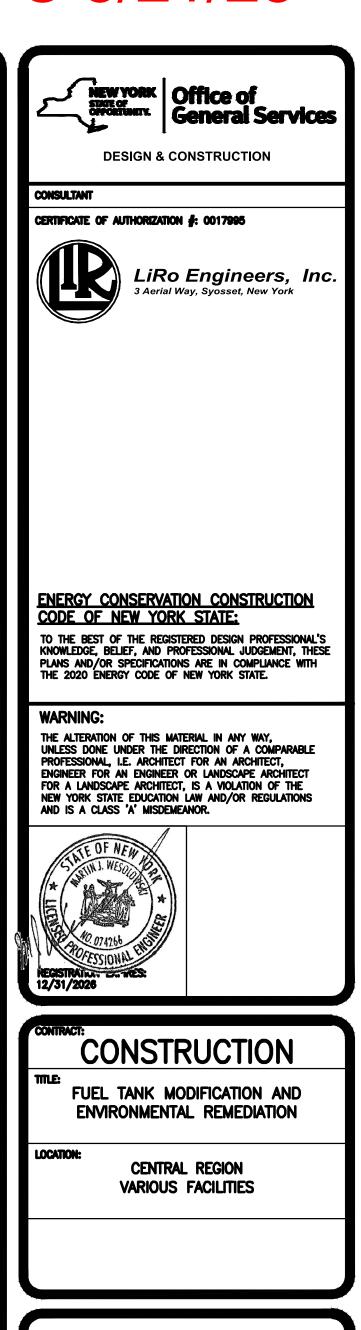






	1/31/2025	FINAL SUBMISSION	
MARK	DATE	DESCRIPTION	
PROJECT NUMBER:	47675 <b>—</b> C		
	M. GUTMANN		
DESIGNED BY:	M.	GUTMANN	
DESIGNED BY: DRAWN BY:		GUTMANN L. KELLY	
DRAWN BY: FIELD CHECK: APPROVED:	A. V	L KELLY	
DRAWN BY: FIELD CHECK:	A. V	V KEITA V KEITA	
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:	M. V	vesolowski	
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:	A. V	KELLY WESOLOWSKI  EDULE &	
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:	M. V M. V	KELLY WESOLOWSKI  DULE & GE ONE	
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:	M. V M. V NEL SCHE	KELLY WESOLOWSKI DULE &C GE ONE	
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE:	M. V M. V NEL SCHE DW VOLTAC LINES	KELLY WESOLOWSKI  DULE & GE ONE	
DRAWN BY: FIELD CHECK: APPROVED: SHEET TITLE: PA	M. V M. V NEL SCHE DW VOLTAC LINES	KELLY WESOLOWSKI  WESOLOWSKI  DULE &C GE ONE	





1/31/2025 FINAL SUBMISSION

47675 — C

M. GUTMANN

A. KELLY

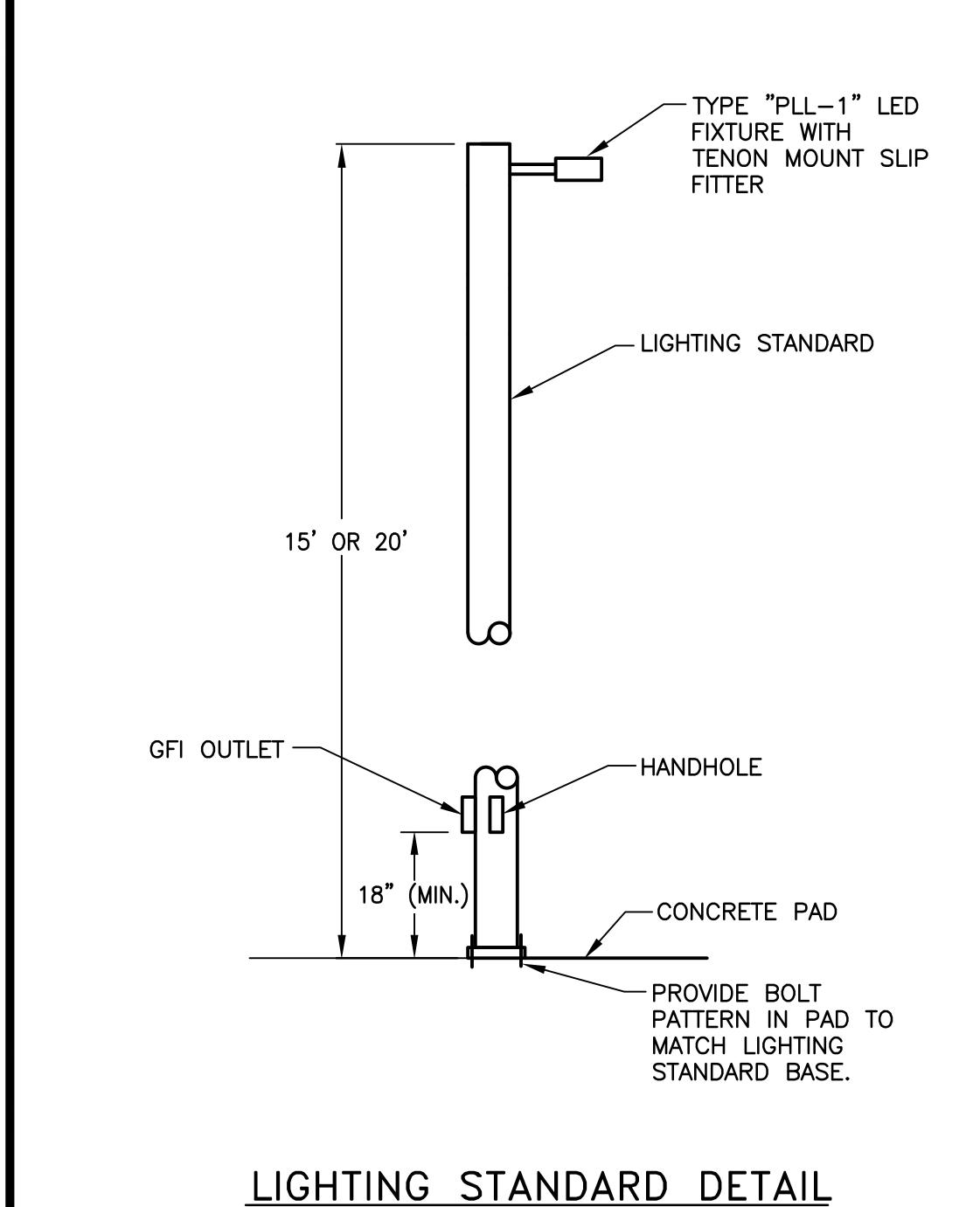
M. WESOLOWSKI

LIGHTING STANDARD -HAZARDOUS AREA

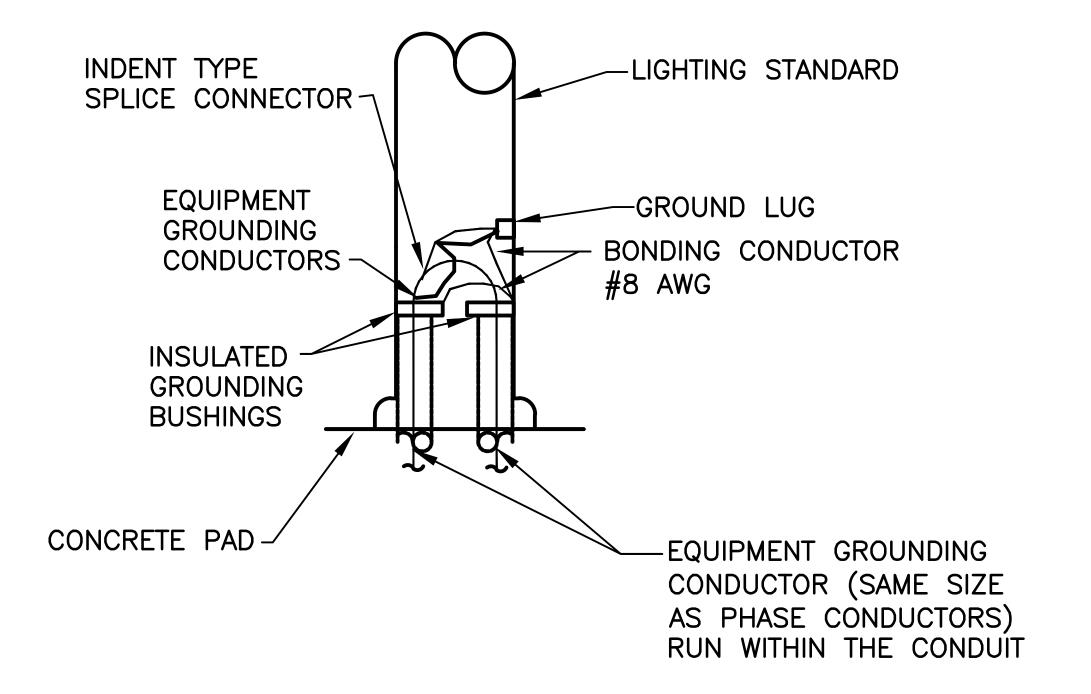
C - 47

SHEET 49 OF 51

PROJECT NUMBER:

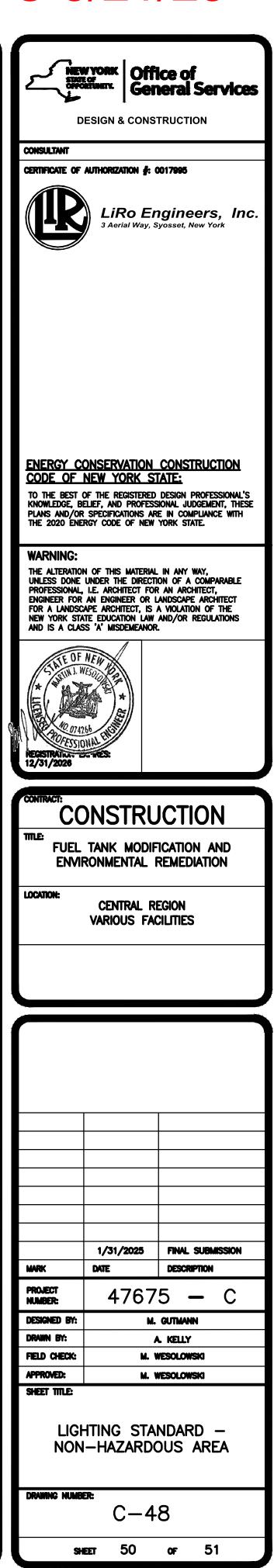


SCALE: NONE



GROUNDING AND BONDING DETAIL FOR LIGHTING STANDARD

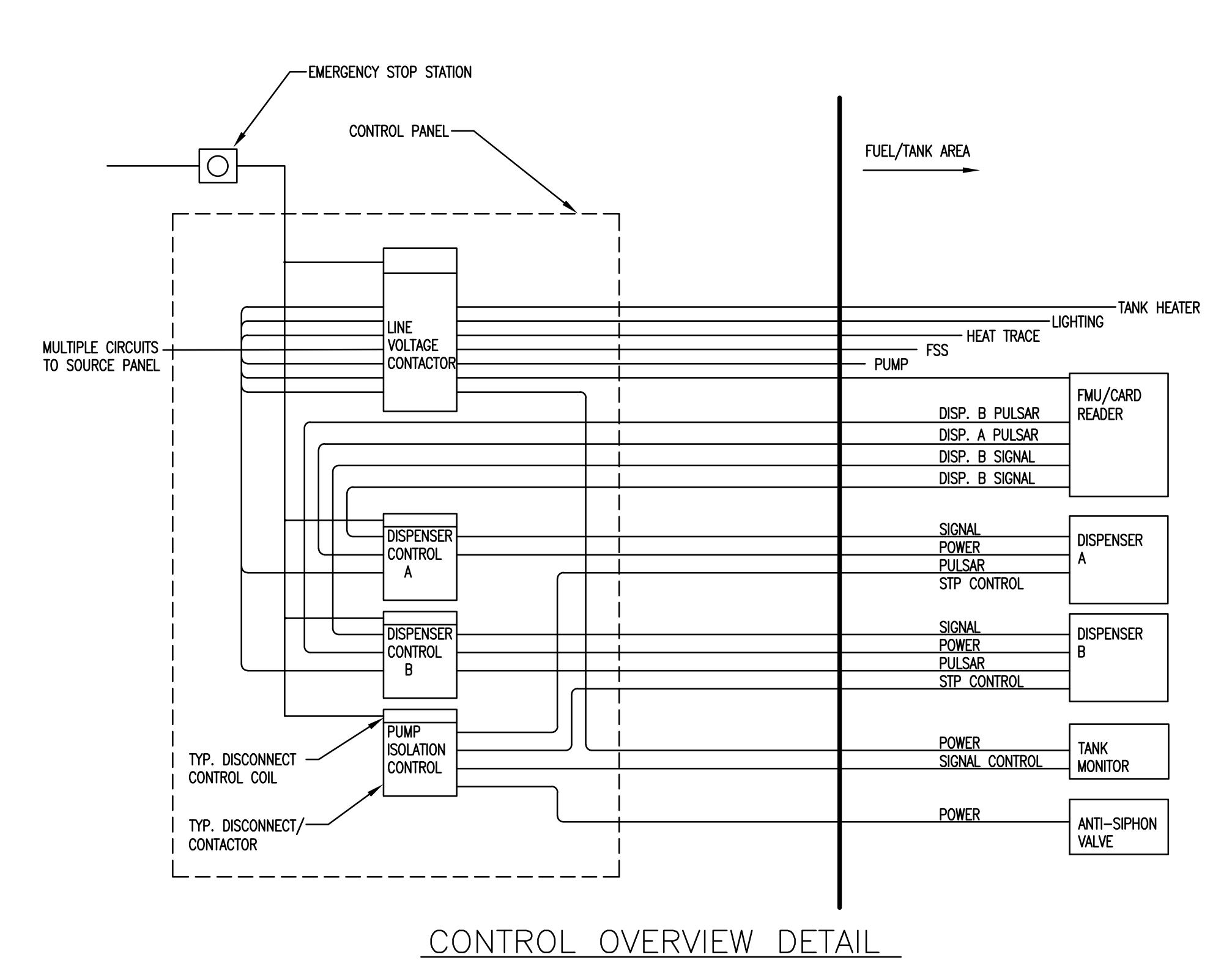
SCALE: NONE

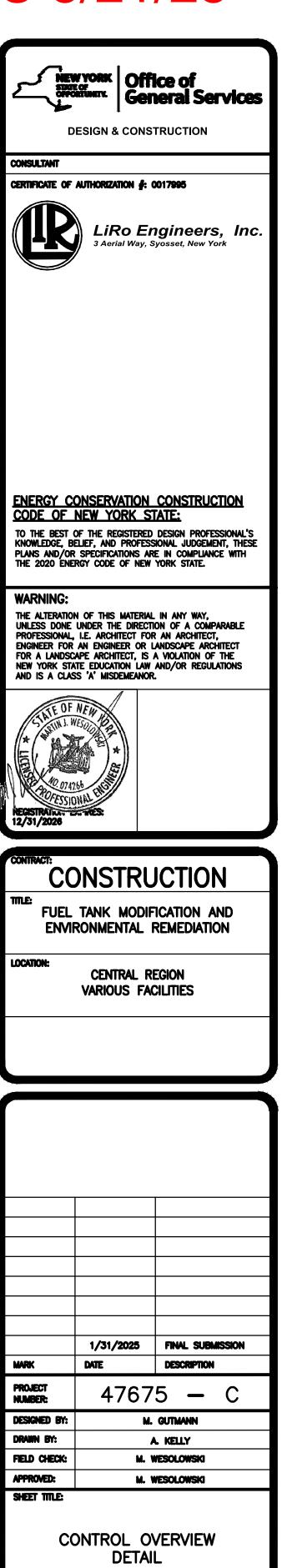


#### GENERAL NOTES:

(THIS DRAWING ONLY)

- A. COMPONENTS SHOWN ON THE DETAIL ARE TYPICAL. NOT ALL INSTALLATIONS WILL REQUIRE ALL COMPONENTS SHOWN.
- B. DETAIL IS DIAGRAMMATIC ONLY, REFER TO MANUFACTURERS INSTALLATION REQUIREMENTS FOR EXACT REQUIREMENTS.
- C. SEALING FITTINGS ARE NOT SHOWN. PROVIDE SEALING FITTINGS AT LOCATIONS INDICATED BY AND DEPICTED IN ARTICLES: 500, 501, 511, 514, AND 515 OF THE 2017 NEC.
- D. PROVIDE ALL WIRING IN CONDUIT. CONDUITS
  PENETRATING SLABS OR AREAS EXPOSED TO SALT
  SHALL BE PVC—COATED RIGID METAL CONDUIT.
  PVC—COATED CONDUIT SHALL EXTEND FROM
  BENEATH SLAB TO 2 FEET ABOVE SLAB.
- E. PULSAR AND POWER CABLES SHALL NOT BE COMBINED IN COMMON RACEWAYS.
- F. CIRCUITS FROM TANK MONITORING PANEL OUTSIDE TO THE TANK LOCATION ARE INTRINSICALLY SAFE AND NEED TO BE RUN IN CONDUITS SEPARATE FROM ANY NON-INTRINSICALLY SAFE CIRCUITS.





C - 49

SHEET 51 OF 51