

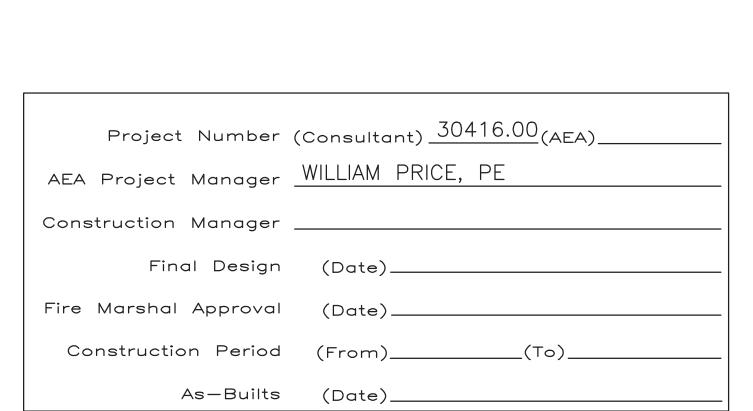


813 West Northern Lights Blvd. Anchorage, Alaska 99503

VENETIE, ALASKA

BULK FUEL UPGRADES

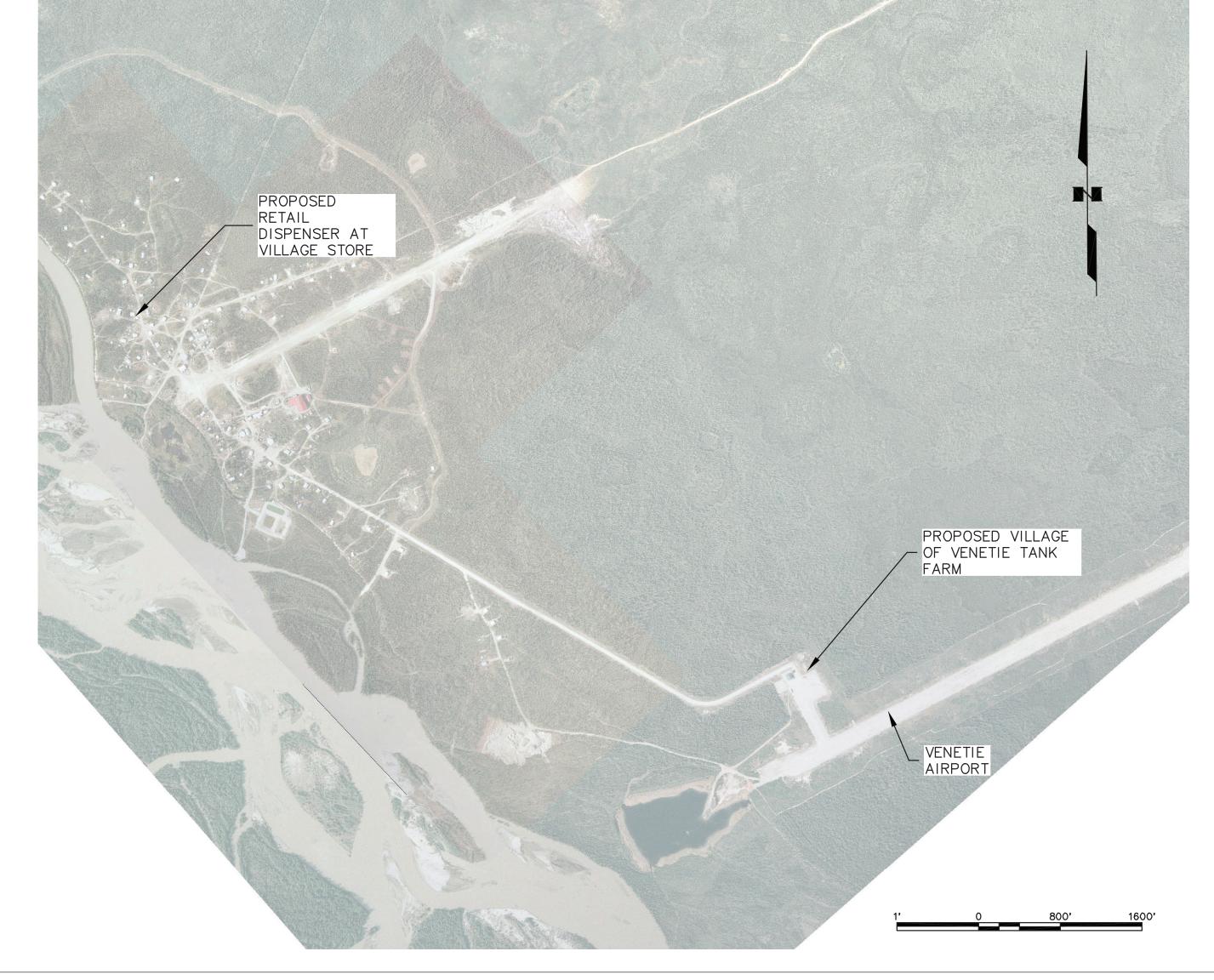
ISSUED FOR CONSTRUCTION NOVEMBER 2021





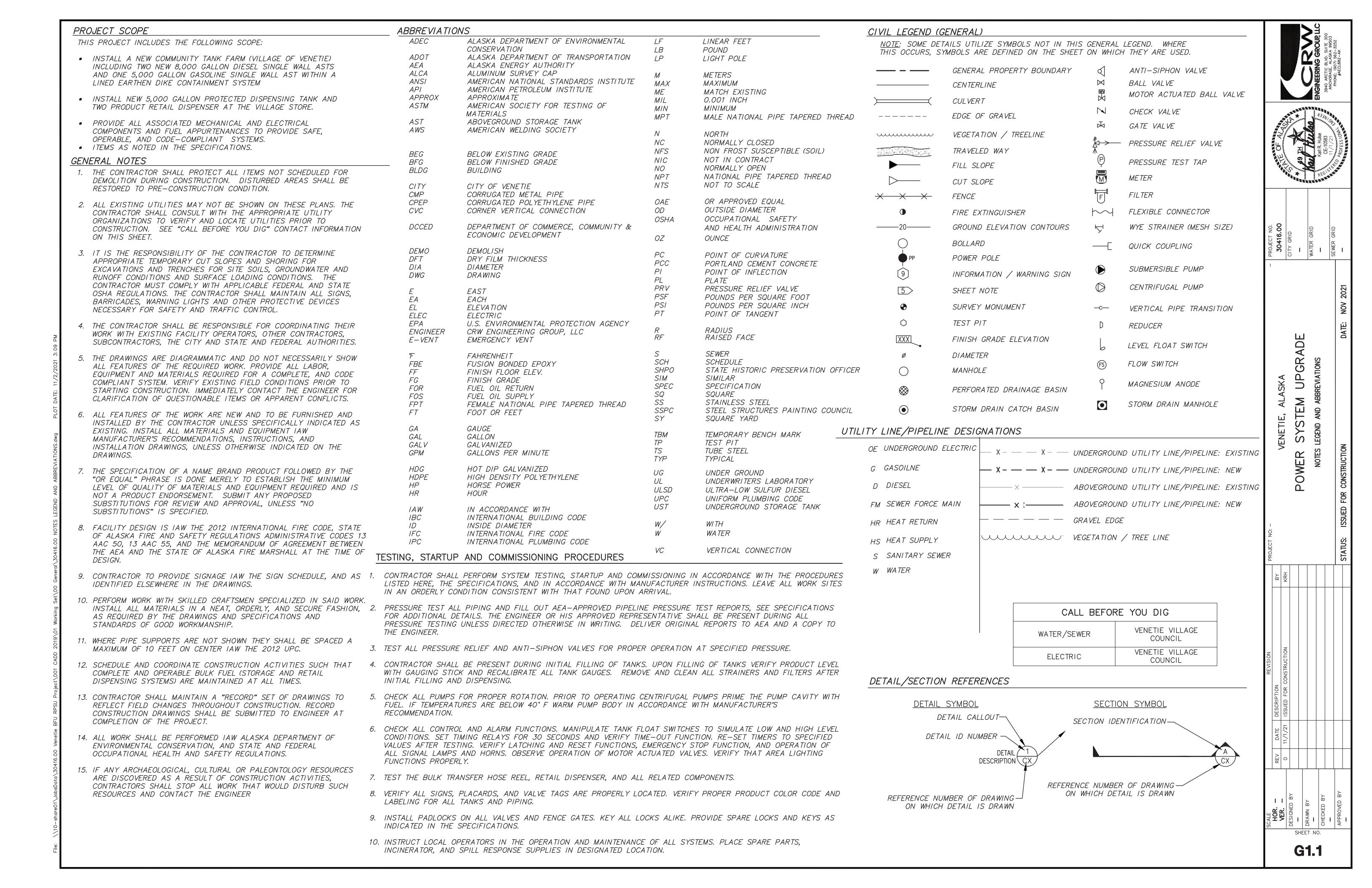
#AKCL882-AK

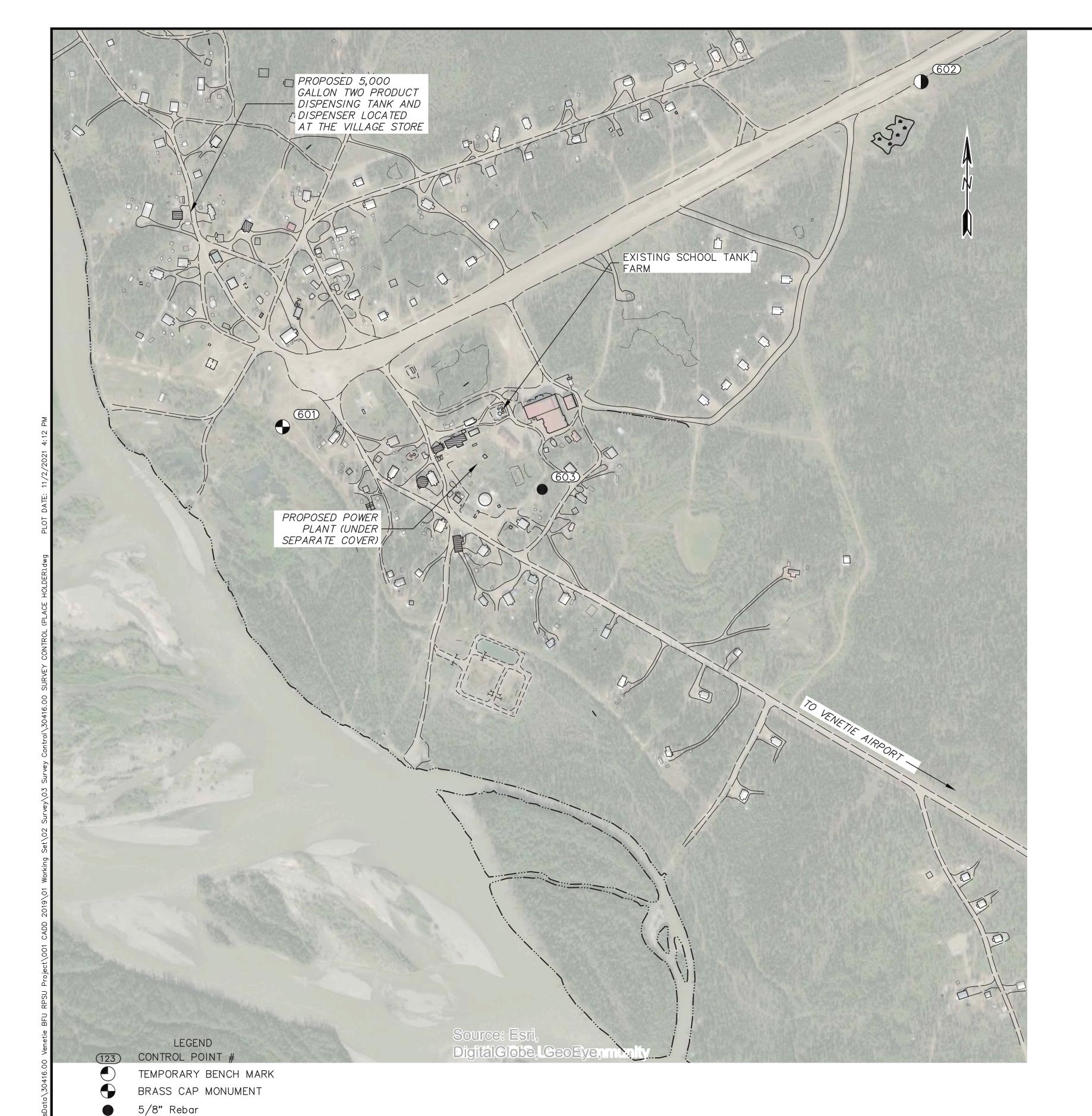




	SHEET INDEX
SHEET	SHEET TITLE
G1.0 G1.1 G1.2	COVER & SHEET INDEX NOTES LEGEND AND ABBREVIATIONS SURVEY CONTROL
G1.3	PROJECT DECOMISSIONING AND DEMOLITION PLA
G1.4 G1.5	COMPONENT SCHEDULES SETBACK AND SIGNAGE PLAN
G1.6	COMMUNITY TANK FARM OPERATING SCHEMATIC
C1.0 C1.1 C1.2 C1.3 C1.4 C2.0 C2.1 C3.0	VICINITY MAP COMMUNITY TANK FARM SITE PLAN TANK FARM GRADING PLAN TANK FARM PIPING PLAN RETAIL DISPENSING FACILITY SITE PLAN COMMUNITY TANK FARM SECTIONS RETAIL DISPENSING SITE SECTIONS 8,000 GALLON SINGLE WALL TANK DETAILS
C3.1	5,000 GALLON SINGLE WALL TANK DETAILS
C3.2 C3.3 C3.4 C3.5 C3.6 C3.7 C3.8 C3.9 C3.10	5,000 GALLON TWO PRODUCT DISPENSING TANK DETAILS FUEL PIPING DETAILS TRUCK CONTAINMENT DETAILS TRUCK CONTAINMENT DETAILS DIKE & STAIR DETAILS PUMP CABINET DETAILS HOSE REEL ENLOSURE DETAILS HOSE REEL DETAILS FENCE DETAILS
ELECTRIC	CAL
E1.0 E2.0	NOTES LEGEND AND ABBREVIATIONS ELECTRICAL SPECIFICATIONS CONTROL SPECIFICATIONS

	· · -	
E1.0	NOTES LEGEND AND ABBREVIATIONS	
E2.0	ELECTRICAL SPECIFICATIONS	
E3.0	CONTROL SPECIFICATIONS	
E4.0	POWER ONE-LINE	
E5.0	GROUNDING PLAN	
E6.0	POWER PLAN - COMMUNITY TF	
E6.1	POWER PLAN - DISPENSER	
E7.0	AREA CLASSIFICATION	
E7.1	DISPENSER AREA CLASSIFICATION	
E8.0	VENETIE COMMUNITY CONTROL PANEL LAYOUT	
E8.1	VENETIE COMMUNITY CONTROL PANEL SCHEMATICS	1
E8.2	VENETIE COMMUNITY CONTROL PANEL SCHEMATICS	2
E8.3	VENETIE COMMUNITY CONTROL PANEL SCHEMATICS	3
E9.0	RETAIL CONTROL PANEL	
E9.1	RETAIL CONTROL PANEL SCHEMATICS 1	
E9.2	RETAIL CONTROL PANEL SCHEMATICS 2	





AL Cap

HORIZONTAL & VERTICAL CONTROL STATEMENT

CRW ESTABLISHED THE BASIS OF COORDINATES BY STATIC GPS AND PROCESSED ON NGS - ONLINE POSITION USER SERVICE (OPUS), FOR POINT #601, A 3 1/4" BRASS CAP ON A 2 1/2" STAINLESS STEEL PIPE, FLUSH WITH GROUND. PROCESSED OPUS VALUES OF LATITUDE 67° 00' 55.17644" N LONGITUDE 146° 25' 20.20364" W (NAD 83 (2011), NAVD88 GEOID 12B ELEVATION IS 594.69'.

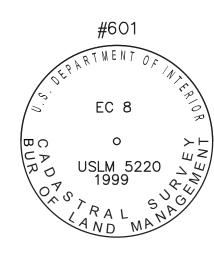
NGS BASE STATIONS USED FOR OPUS PROCESSING

PID	DESIGNATION	LATITUDE	LONGITUDE
DL7644	AB45 SAGRIVRDOT AK2007 CORS ARP	68° 45′ 37.784″ N	148° 52' 16.024"
DR5991	TLK2 TFS_WELLHEAD GPS CORS ARP	68° 37′ 40.935″ N	149° 35' 43.401"
DR4396	GCGO GILMORE CREEK GEO CORS ARP	64° 58' 41.015" N	147° 29' 57.841"

CRW POINT #601 IS THE BASIS OF COORDINATES WITH STATE PLANE ZONE 3 COORDINATES OF NORTHING 4757420.01, EASTING 1580029.00, ELEVATION 594.69'.

COORDINATE SYSTEM: NAME: AK83-ZONE 3 LINEAR UNIT: US SURVEY FEET GEODETIC DATUM: NAD83(2011) ELLIPSOID: GRS80

PROJECTION: TRANSVERSE MERCATOR

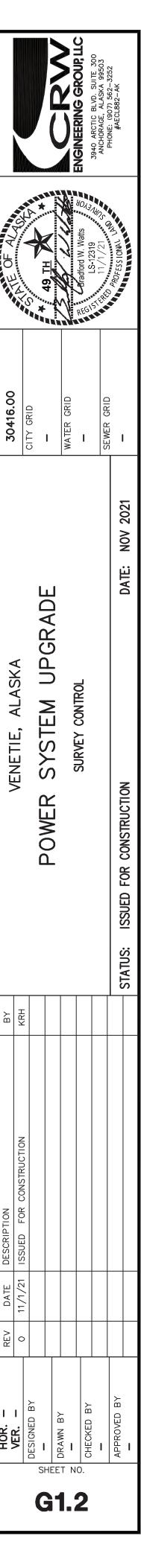


BASIS OF VERTICAL DATUM: THE BASIS OF ELEVATION IS GEOID 12B (NAVD88) OPUS SOLUTION FOR POINT #601 DETERMINED TO BE 594.69 ELEVATION. CRW USED LEICA GS14 DUAL FREQUENCY GPS RECIEVERS TO DETERMINE ELEVATIONS ON CONTROL POINTS.

<u>NOTES</u>

- 1. ALL COORDINATES AND DIMENSIONS SHOWN ARE IN U.S. SURVEY FEET.
- 2. A FIELD SURVEY WAS CONDUCTED IN JUNE 2021.
- 3. THE DEVELOPMENT OF THIS SURVEY CONTROL SHEET IS FOR THE NEW PROPOSED VENETIE ENERGY SYSTEM UPGRADE.
- 4. THE SITE CONTROL SHOWN WAS ESTABLISHED DURING A JUNE SURVEY WITH METHODOLOGY DESCRIBED IN THE HORIZONTAL AND VERTICAL STATEMENT.
- 5. CONTROL POINTS ARE SUBJECT TO SEASONAL DISTURBANCE, VERIFY HORIZONTAL COORDINATES AND VERTICAL ELEVATIONS BEFORE USE IN CONSTRUCTION TO BASIS OF COORDINATES.
- 6. WHETHER LISTED OF NOT, ALL MONUMENTS OR PROPERTY MARKERS, CORNERS, OR ACCESSORIES, WHICH WILL BE DISTURBEDOR BURIED, SHALL BE REFERENCED OR RE-ESTABLISHED IN THEIR ORIGINAL POSITION (A.S. 19.10.260) AND RECORDED (A.S. 34.65.0401).
- 7. THE BACKGROUND INFORMATION SHOWN IS FOR ORIENTATION PURPOSES ONLY AND DOES NOT REPRESENT RIGHT-OF-WAY/BOUNDARY. SEE RECORDED PLATS, DEEDS & EASEMENTS FOR DETAILED PROPERTY INFORMATION.
- 8. AERIAL IMAGE AND MAPPING SHOWN WHERE COLLECTED IN 2010, CONDITIONS AND IMPROVEMENTS MAY HAVE CHANGED.

	Horizontal Control							
Point No	Northing	Easting	Description	LATITUDE	LONGITUDE	ELEVATION		
601	4757420.01	1580029.00	3 1/4" BRASS CAP	N067° 00' 55.1764"	W146° 25' 20.2036"	594.69		
602	4758932.25	1582826.61	2 1/2" ALCAP	N067° 01' 10.2391"	W146° 24' 10.0252"	603.13		
603	4757145.58	1581166.55	5/8" REBAR	N067° 00' 52.5513"	W146° 24' 51.5218"	601.20		



SURVEY CONTROL SCALE: GRAPHIC

PHOTO # 1 : TANK FARM SITE AT VENETIE AIRPORT, SUMMER 2021

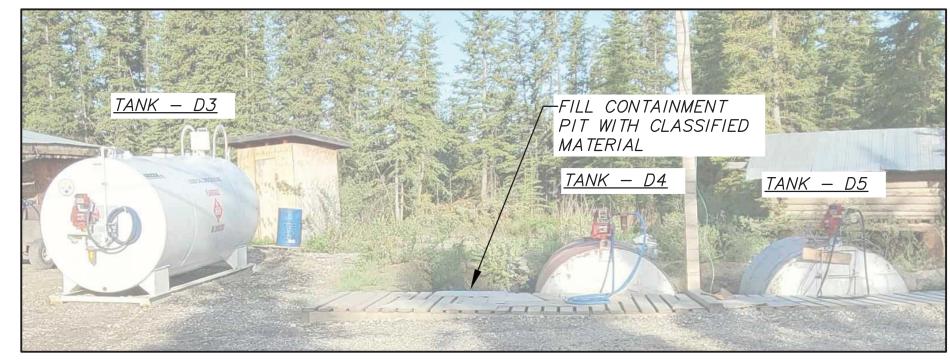


PHOTO # 2 : EXISTING RETAIL DISPENSING STATION, SUMMER 2021

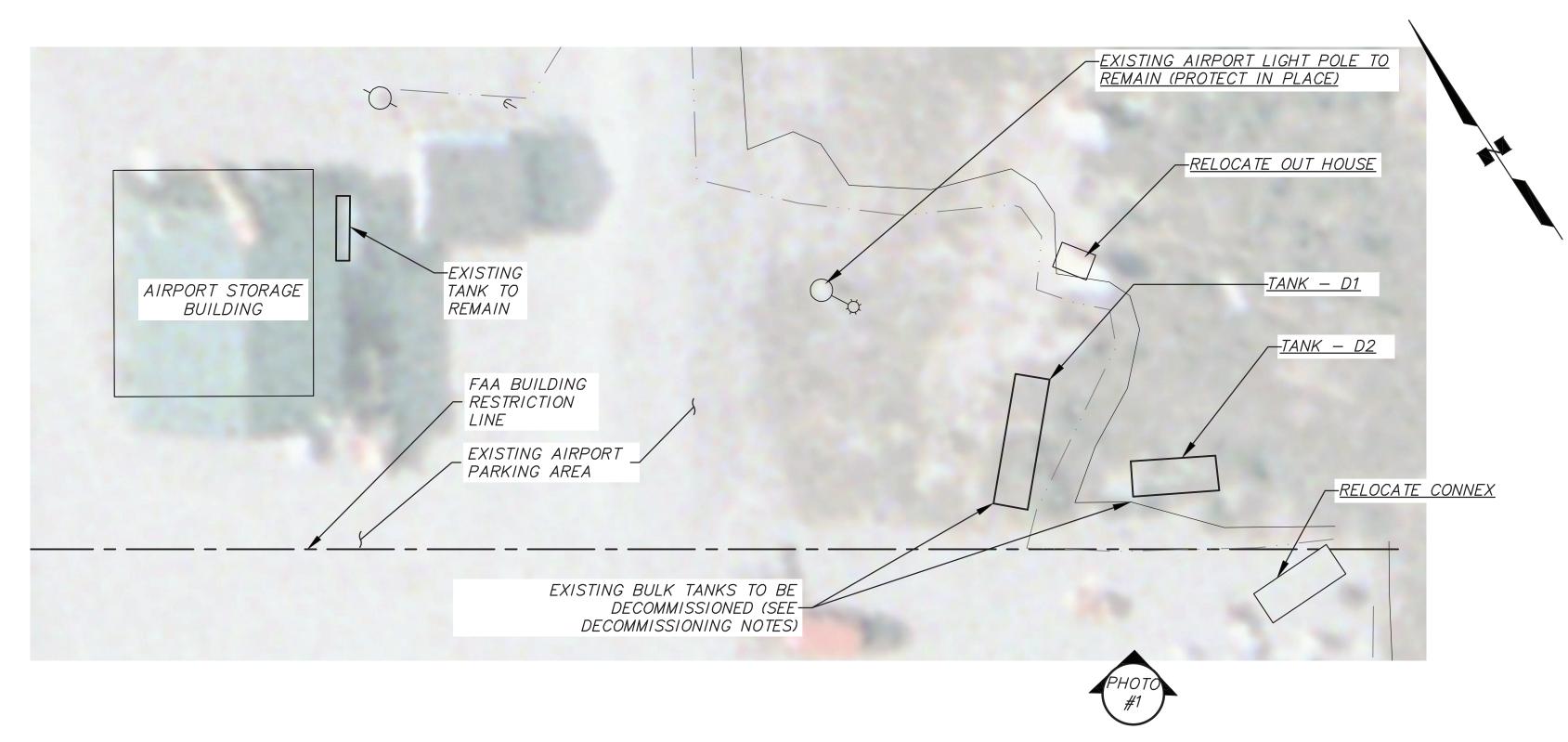
GENERAL NOTES:

- 1. THE PROJECT SITES MAY CONTAIN MISCELLANEOUS DEBRIS INCLUDING CONNEXES, OLD CONSTRUCTION EQUIPMENT, CONSTRUCTION MATERIALS ETC. CONTRACTOR SHALL COORDINATE WITH AEA/VILLAGE AS NECESSARY TO RELOCATE DEBRIS THAT INTERFERES WITH PROPOSED IMPROVEMENTS TO APPROVED OFFSITE LOCATION AT NO ADDITIONAL COST.
- 2. CONTRACTOR DECOMMISSIONING WORK SHALL INCLUDE DECOMMISSIONING OF EXISTING TANKS AND PIPELINES AS SHOWN ON THIS SHEET AND DESCRIBED IN THE SPECIFICATIONS.
- 3. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM OWNER PRIOR TO PROCEEDING WITH DECOMMISSIONING ITEMS. ALL RESIDUE SHALL BE DISPOSED OF IAW APPLICABLE STATE, FEDERAL AND LOCAL LAWS AND ORDINANCES.

DECOMMISSIONING NOTES:

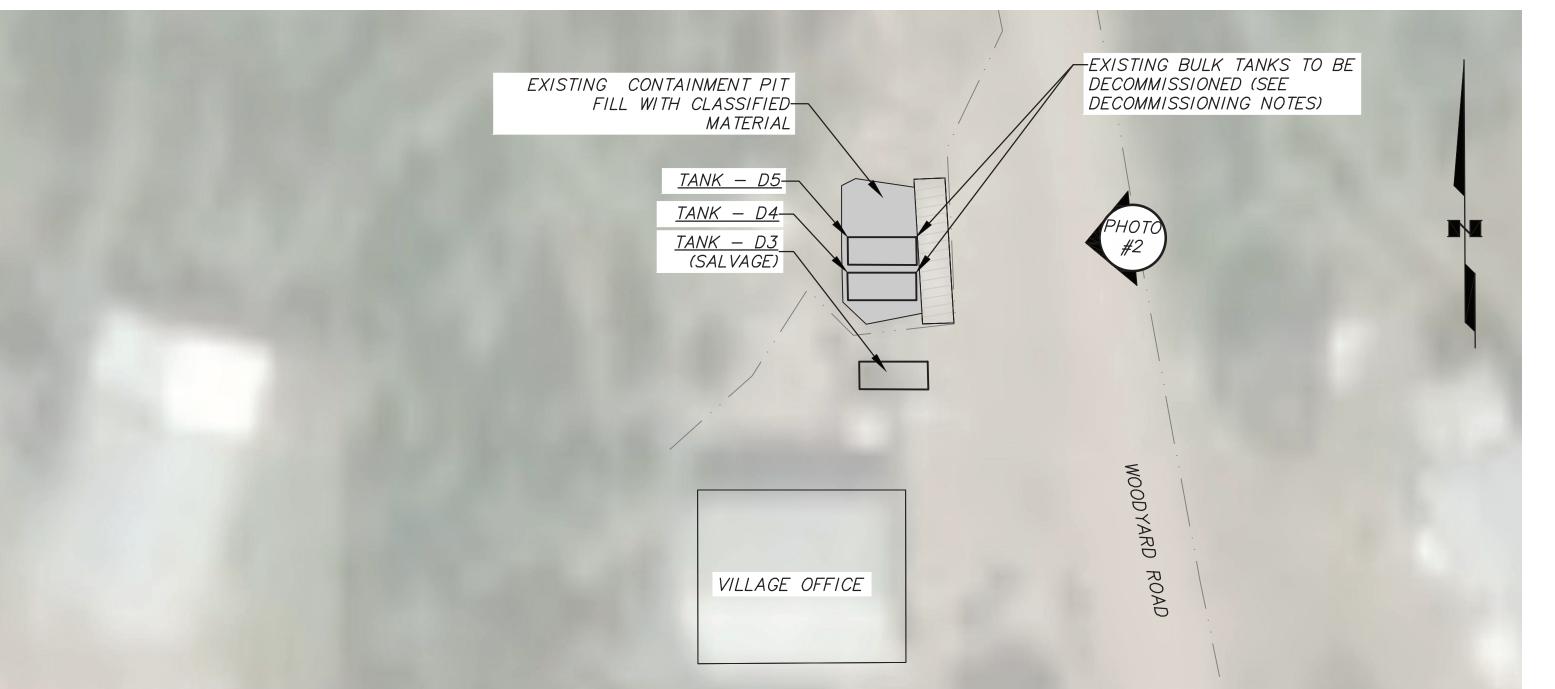
- A. FUEL PIPELINE LOCATIONS SHOWN ARE APPROXIMATE. DECOMMISSION & DISPOSE OF ALL EXISTING ABOVE AND BELOW GRADE FUEL PIPING ASSOCIATED WITH TANKS SCHEDULED FOR DECOMMISSIONING. SEE SPECIFICATIONS FOR PROCEDURES.
- B. SEE SPECIFICATIONS FOR TANK DECOMMISSIONING REQUIREMENTS.
- C. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE VILLAGE OF VENETIE PRIOR TO BEGINNING ANY DECOMMISSIONING/DEMOLITION WORK. DELIVER SALVAGED EQUIPMENT TO OWNER DESIGNATED LOCATION.
- D. CONTRACTOR SHALL PROVIDE TEMPORARY FUEL STORAGE, DISPENSING AND PIPING SYSTEMS AS NECESSARY TO PROVIDE UNINTERRUPTED FUEL SUPPLY TO THE EXISTING POWER PLANT AND RETAIL DISPENSING FACILITIES THROUGHOUT CONSTRUCTION.
- E. ALL DECOMMISSIONED PIPING, TANKS, AND FUEL SYSTEM COMPONENTS SHALL BE DISPOSED OF IAW SPECIFICATIONS.

	TANK DECOMMISSIONING SCHEDULE SCHEDULE							
TANK ID	APPROX. SIZE	APPROX CAPACITY (GAL)	PRODUCT	TYPE	OWNER	NOTES		
D1	8'X30'	10,000	UNKNOWN	HORIZONTAL	THE VILLAGE OF VENETIE	DECOMISSSION		
D2	8' X 20'	8,000	UNKNOWN	HORIZONTAL	THE VILLAGE OF VENETIE	DECOMISSSION		
D3	6'X 15'	2,800	UNKNOWN	HORIZONTAL	THE VILLAGE OF VENETIE	SALVAGE		
D4	_	1,500	GASOLINE	HORIZONTAL	THE VILLAGE OF VENETIE	DECOMMISSION		
D5	_	1000	DIESEL	HORIZONTAL	THE VILLAGE OF VENETIE	DECOMMISSION		



TANK FARM SITE DECOMMISSIONING PLAN

SCALE: GRAPHIC



RETAIL DISPENSER SITE DECOMMISSIONING PLAN

SCALE: GRAPHIC



ADE

		VALVE SCHEDUL	.E					
VALVE ID	SIZE	END CONNECTION		COMM	ENT			
BALL VALVES (BV)								
BV-1-4	3 "	FLANGED		_				
BV-5 TO BV-7	3 "	FLANGED		-				
PRESSURE RELIEF	VALVES	(PRV)						
PRV-1, PRV- 2	1"	FLANGED	PRESSURE	RELIEF	SET	ΑТ	30	PS
PRV- 3	1"	FLANGED	PRESSURE	RELIEF	SET	ΑТ	30	PS
PRV-4 TO PRV- 7	1"	FLANGED	PRESSURE	RELIEF	SET	ΑТ	30	PS
PRV-8, PRV-9	1"	FLANGED	PRESSURE	RELIEF	SET	ΑТ	30	PS
PRV-10, PRV-11	1"	FLANGED	PRESSURE	RELIEF	SET	ΑТ	30	PS
ANTI-SIPHON VAL	VES (AS)	/)						
ASV-1	2"	FLANGED		-				
ASV-2	2"	FLANGED		-				
CHECK VALVE (CV)								
CV-1, CV - 2	3 "			_				
FILL LIMITING VAL	FILL LIMITING VALVES (FLV)							
FLV-1	2"	FLANGED		_				
FLV-2	2"	FLANGED		_				

MISCELLANEOUS COMPONENT SCHEDULE						
COMPONENT ID	SIZE	END CONNECTION	COMMENT			
STRAINERS (S)						
S-1, S-2	3 "	FLANGED	-			
S-2, S-3	2"	FLANGED	_			
FLEX CONNECTS (FC)						
FC-1 TO FC-3	3"X18"	FLANGED	-			
FC-4 TO FC-7	2"X18"	FLANGED				
FC-8 TO TO FC-9	1.5""X18"	FLANGED	1			
FC-10 TO FC-11	2"X18"	FLANGED	_			
QUICK COUPLER (QC)						
QC-1 & 2	3 "	FLANGED	_			
QC-3 & 4	2"	THREADED	_			

PUMP SCHEDULE							
TYPE	PRODUCT	LOCATION	MOTOR (HP)				
CENTIFUGAL	GASOLINE	PUMP CABINET					
CENTIFUGAL	DIESEL	PUMP CABINET					
SUBMERSIBLE	DIESEL	TANK4A	3/4				
SUBMERSIBLE	GASOLINE	TANK 4B	3/4				
	CENTIFUGAL CENTIFUGAL SUBMERSIBLE	CENTIFUGAL GASOLINE CENTIFUGAL DIESEL SUBMERSIBLE DIESEL	CENTIFUGAL GASOLINE PUMP CABINET CENTIFUGAL DIESEL PUMP CABINET SUBMERSIBLE DIESEL TANK4A				

	TANK SCHEDULE						
TANK ID	SIZE (NOTE 2)	CAPACITY	PRODUCT	TYPE	OWNER		
T1	8' X22'	8,000 GALLONS	DIESEL	UL 142 - SINGLE WALL	THE VILLAGE OF VENETIE		
T2	8' X22'	8,000 GALLONS	DIESEL	UL 142 - SINGLE WALL	THE VILLAGE OF VENETIE		
Т3	8' X21.5'	5,00 GALLONS	GASOLINE	UL 142 - SINGLE WALL	THE VILLAGE OF VENETIE		
T4 (4A –4B)	8' X21.5'	5,00 GALLONS	HALF GASOLINE & HALF DIESEL	UL 2085 — DUAL COMPARTMENT PROTECTED	THE VILLAGE OF VENETIE		

NOTES:

- 1. SEE SPECIFICATIONS FOR ADDITIONAL COMPONENT REQUIREMENTS.
- 2. CONTRACTOR SHALL VERIFY TANK
 AND EQUIPMENT DIMENSIONS ARE
 COMPATIBLE WITH AIR FREIGHT
 SIZE AND WEIGHT RESTRICTIONS
 PRIOR TO BIDDING. IMMEDIATELY
 ALERT ENGINEER IF DIMENSIONAL
 MODIFICATIONS ARE REQUIRED.

	SPILL RESPONSE EQUIPMENT
QUANTITY	ITEM/DESCRIPTION
ABSORBENT MATERIAL A	AND CONTAINERS
3 EA	OVERPACK DRUMS, 95 GALLON POLY
1 EA	OPEN-TOP DRUM, 55 GALLON, METAL
2EA	ABSORBENT ROLL, MIN 30"x140', MIN ABSORB 50 GAL/BALE
2EA	ABSORBENT PADS, MIN 16"x20", 100 PIECES EA, MIN ABSORB 24 GAL.BALE
6EA	ABSORBENT BOOM, MIN 4" x40', MIN 100 GAL/40'
2EA	ABSORBENT SWEEP, 19"x100', MIN ABSORB 25 GAL/BALE
PERSONAL PROTECTIVE	EQUIPMENT
4 PARI	GLOVES, NITRILE AF18 CHEM-RESITS, PAIRS
4 EA	TYVEK SUITS, XL POLETHYLENE COATED
4 EA	GOOGLES
4 EA	HARDHATS
RECOVERY EQUIPMENT	
2 EA	500 GALLON FOLD—A—TANK
1 EA	2-INCH PORTABLE CENTRIFUGAL PUMP, GAS-POWERED GARMAN RUPP #82D1-8-X RATED AT 160 GPM WITH 2" CAMLOCKS
	(PRE-APPROVED ALTERNATE OPTION #1: MARLOW 2AM32-P RATED AT 120 GPM WITH2" CAMLOCKS)
	(PRE-APPROVED ALTERNATE OPTION #2: HOMELITE #320 RATED AT 140 GPM WITH2" CAMLOCKS)
1 EA	DISHCHARGE HOSE WITH 2" CAMLOCKS. 100' TOTAL LENGTH
1 EA	SUCTION HOSE WITH 2" CAMLOCKS, 50' TOTAL LENGTH
2 EA	SHOVEL
2 EA	RAKE
2 ROLL	GARBAGE/DISPOSAL BAGS
MISCELLANEOUS	
1 EA	SMART ASH INCINERATOR
1 EA	CONNEX, 20 FOOT, LOCKABLE, (LIKE NEW CONDITION)
10 EA	PADLOCKS, KEYED-ALIKE

VENETIE, ALASKA SYSTEM UPGRADE **G1.4**

NOTES:

- 1. INSTALL PORTABLE FIRE EXTINGUISHERS AT LOCATIONS SHOWN. PROVIDE TWO SPARES. EXTINGUISHERS MOUNTED OUTSIDE SHALL BE WITHIN APPROVED WEATHER PROOF ENCLOSURES.
- 2. THERE ARE NO KNOWN PROPERTY LINES AT THE PROPOSED PROJECT SITES. THE TANK FARM LOCATION WAS ESTABLISHED IN REFERENCE TO THE "BUILDING RESTRICTION LINE" DESIGNATED ON THE AIRPORT LAYOUT PLAN.

SETBACK/SEPARATION REQUIREMENTS:

THE PROPOSED TANK FARM AND RETAIL DISPENSING TANK WILL PERFORM — BULK STORAGE AND RETAIL DISPENSING FOR THE VILLAGE OF VENETIE. ALL TANKS ARE INSTALLED ABOVE GROUND. TO COMPLY WITH THE REQUIREMENTS OF THE 2012 INTERNATIONAL FIRE CODE, THE 2018 ALASKA ENERGY AUTHORITY/DIVISION OF FIRE PREVENTION MEMORANDUM OF AGREEMENT, AND STATE OF ALASKA REGULATIONS, THE FOLLOWING MINIMUM SETBACKS ARE REQUIRED:

- 10' FROM THE DISPENSER TO ALL BUILDINGS AND PROPERTY LINES.
- 30' FROM 751-12,000 GAL BULK STORAGE TANKS TO THE NEAREST PROPERTY LINE WHICH IS OR CAN BE BUILT UPON.
- 25' FROM THE BULK TRANSFER HOSE STAND TO THE NEAREST TANK, THE NEAREST IMPORTANT BUILDING, THE NEAREST PROPERTY LINE WHICH IS OR CAN BE BUILT UPON, COMBUSTIBLE MATERIALS, AND FIXED SOURCES OF IGNITION.

WARNING SIGNS & INFORMATION PLACARD SCHEDULE:

PROVIDE ALL SIGNS INDICATED IN THE SCHEDULE BELOW, QUANTITY & LOCATION AS INDICATED ON THE DRAWINGS. ALL SIGNS SHALL BE CONSTRUCTED FROM 0.08" ALUMINUM PLATE, AND SIZED IAW 2012 IFC. SIGN LETTERING IS SHOWN BELOW IN QUOTATIONS. PROVIDE 3/16" HOLES IN ALL FOUR CORNERS. PROVIDE NON-REFLECTIVE VINYL BACKGROUND, 3M 3650-10, WITH 3M SERIES 225 HIGH PERFORMANCE VINYL LETTERS, ONE SIDE ONLY, COLOR AS INDICATED. ATTACH TO FENCING WITH GALVANIZED HOG RINGS OR STAINLESS STEEL CABLE TIÉS. SIGNAGE PLACED DIRECTLY ON TANKS SHALL CONSIST OF HIGH QUALITY ADHESIVE BACK DECALS OR PAINTED STENCILS.

<u>WARNING SIGNS</u> - RED LETTERING ON WHITE BACKGROUND (3" HIGH X 1/2" STROKE LETTERS)

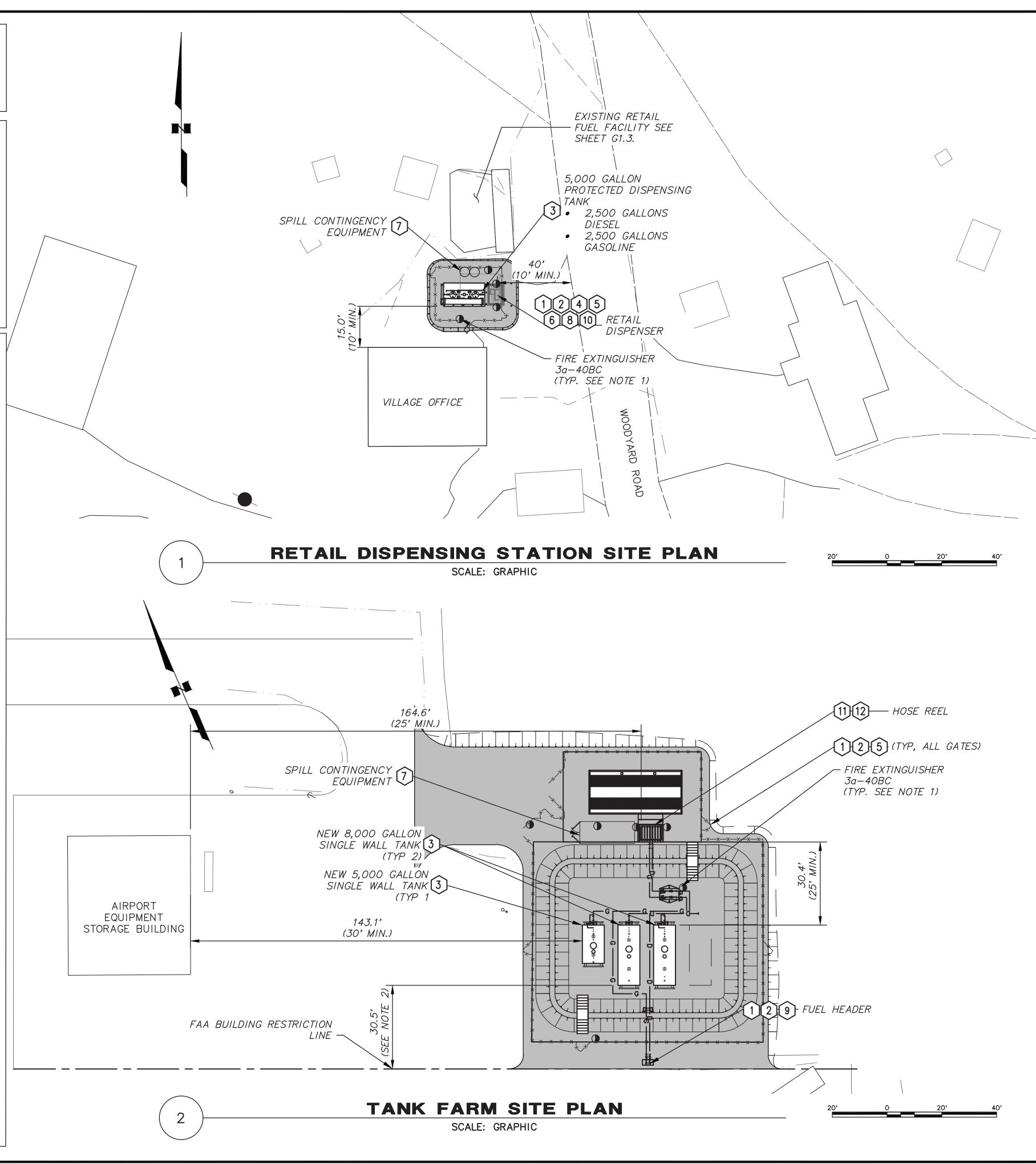
- "DANGER FLAMMABLE LIQUIDS"
- "NO SMOKING NO OPEN FLAMES"
- "FLAMMABLE ____ GALLONS GASOLINE" OR "COMBUSTIBLE ____ GALLONS DIESEL", INSERT VOLUME IN GALLONS AS APPROPRIATE.

<u>INFORMATIONAL PLACARDS</u> - BLACK LETTERING ON WHITE BACKGROUND (2" HIGH 1/2" STROKE

- (4)"IMPORTANT PRIOR TO DISPENSING:
 - 1. NO SMOKING.
 - SHUT OFF MOTOR.
 - 3. DISCHARGE YOUR STATIC ELECTRICITY BEFORE FUELING BY TOUCHING A METAL SURFACE AWAY FROM THE NOZZLE.
 - 4. TO PREVENT STATIC CHARGE, DO NOT RE-ENTER YOUR VEHICLE WHILE GASOLINE IS
 - 5. IF A FIRE STARTS, DO NOT REMOVE NOZZLE BACK AWAY IMMEDIATELY
 - 6. IT IS UNLAWFUL AND DANGEROUS TO DISPENSE FUEL INTO UNAPPROVED CONTAINERS
 - 7. NO FILLING OF PORTABLE CONTAINERS IN OR ON A MOTOR VEHICLE. PLACE
- CONTAINER ON GROUND BEFORE FILLING"
- "IN CASE OF FIRE SPILL OR RELEASE:
 - 1. USE EMERGENCY SHUTOFF
 - 2. CONTACT TANK FARM OWNER
- 3. REPORT ACCIDENT TO ADEC"
- PROVIDE ADEC SPILL SIGN: CONTRACTOR TO CONTACT ADEC FOR CURRENT SPILL REPORTING PLACARD (907-269-3063)
- "SPILL CONTINGENCY EQUIPMENT"
- "EMERGENCY SHUTOFF" SEE ELECTRICAL FOR SIGN LOCATIONS
- "PRESSURE NOT TO EXCEED 75 PSI" (NOTE THIS SIGN SHALL BE PERMANENTLY AFFIXED TO THE BARGE HEADER SUPPORT). SEE DETAIL

<u>INSTRUCTION PLACARDS</u> - BLUE LETTERING ON WHITE BACKGROUND (1/2" HIGH X 3/8" STROKE LETTERS)

- 1. SFF ATTENDAN
 - 1. SEE ATTENDANT TO PRE-PAY FOR FUEL
 - 2. REMOVE NOZZLE, LIFT LEVER AND BEGIN FUELING
 - 3. REPLACE NOZZLE AFTER FUELING
 - 4. SEE ATTENDANT FOR RECEIPT"
- "BULK TRANSFER:
- 1. SHUT OFF VEHICLE AND CONNECT GROUNDING REEL.
 - RESET METER SET TO DESIRED VOLUME AND OPEN METER VALVE
 - 3. DEPRESS "PUMP ON" BUTTON LOCATED NEAR HOSE REEL.
 - 4. UNWIND HOSE
 - 5. PLACE NOZZLE IN FUEL RECEPTACLE
 - 6. DEPRESS NOZZLE LEVER TO BEGIN FLOW
 - 7. WHEN FUELING IS COMPLETE DEPRESS "PUMP OFF" BUTTON, REWIND HOSE AND HANG UP NOZZLE"
- [12] PROVIDE PLACARDS INDICATING PRODUCT TYPE AT HOSE REEL



G1.5