TATITLEK, ALASKA
ALASKA ENERGY AUTHORITY
BULK FUEL UPGRADE
ISSUED FOR CONSTRUCTION
DESIGN DRAWINGS

PROJECT AREA MAP

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CE-14054

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ALASKA ENERGY AUTHORITY

TATITLEK, ALASKA
BULK FUEL UPGRADE
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DESIGN DRAWINGS
ADD ALT 1 & 2 NOTES:

1. The existing tanks shall remain in operation until the new tank farm is fully operational.

2. See specifications for more details regarding description of work.

3. Contractor shall take ownership of the existing tanks, unusable contents, and all attached fuel system components and is responsible for removal from the community when the project is complete.

4. Contractor is responsible for coordinating with tank owner prior to tank removal.

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**EXISTING 2000 GALLON TANK**

**EXISTING 10000 GALLON TANK**

ADD ALT 1 - REMOVAL OF 2000 GALLON CONCRETE FUEL TANK

ADD ALT 2 - REMOVAL OF 10000 GALLON DOUBLE WALL FUEL TANK
TANK FARM OPERATIONS SCHEMATIC

FILLING TANK TIA AND TIB FROM FUEL TRUCK

1. Before beginning the fuel process, the operator shall:
   a. Close ground connections
   b. Connect the fuel truck grounding system and attach truck ground cable to a metal nozzle located inside TANK FARM/SECONDARY CONTAINMENT AREA
   c. Issue tank TIA & TIB should be closed one at a time
   d. Line pressure will be supplied by the fuel truck pumping system
   e. The tank farm operator will monitor the filling process via a clock gauge and closing valve at each tank

2. At the conclusion of filling, stop pumps, disconnect fill hose, and secure caps of cap and spill response cover

BULK TRANSFER/REEL OPERATION

The bulk transfer reel is used to automate the filling of all existing equipment by bulk transfer:

1. Prior to filling, turn off engine, check wheels and connect static grounding cable
2. Open isolation valve, input desired fuel volume into pre-set meter, set spring loaded mechanical valve and depress pump start button to grease valve
3. Unwind hose, place nozzle in approved fuel container and depress button to initiate flow
4. Flow will automatically stop at pre-set volume, but pump will continue to run
5. When filling is complete, depress pump stop button, wind hose onto reel, hang up nozzle, and note volume of fuel dispensed

RETAIL SALES DISPENSER OPERATION

Retail fuel credit/debit card sales transactions will be conducted via electronic card reader located at the retail dispenser. The electronic system will be located at the ESI clinic building. Upon initial cash sales, the attendant will be notified by the system.
1. WHERE BURIED PIPELINE CROSSES EXISTING TRAILED UPLAND ELEVATION AS DESCRIBED ON DRAWING, ADJUST PIPE alignments TO ACCOMMODATE ELEVATION.

2. SEE SPEC FOR BACK FILT REQUIREMENTS.

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DIKE DRAIN & SUMP INSTALLATION:

1. FABRICATE DUMP FROM AD 410 (DIA) DRAIN PIPE, SMOOTH TO PIPE DRAIN WALL SLOTTED ON 4” HOLES EVERY 12” EA. WALL.

2. DESIGNER LINER AS REQUIRED.

3. ¾” NPT THREAD B/B VALVE WITH CAP.

4. 1-½” ENDS TEE valves WITH CAP.

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BURIED PIPE DETAIL:

1. ¾” NPT THREAD B/B VALVE WITH CAP.

2. 1-½” ENDS TEE valves WITH CAP.

3. 1-½” ENDS TEE valves WITH CAP.

4. AS REQUIRED.

5. AS REQUIRED.

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PRESSURE TEST CONNECTION:

1. ¾” NPT THREAD B/B VALVE WITH CAP.

2. 1-½” ENDS TEE valves WITH CAP.

3. 1-½” ENDS TEE valves WITH CAP.

4. AS REQUIRED.

5. AS REQUIRED.

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TYPICAL LINER INSTALLATION:

1. 3 LAYERS OF NON-WOVEN GEOTEXTILE OVER TOP.

2. TYPE II GRAVEL OVER TYPE I FILT.

3. 3 LAYERS OF NON-WOVEN GEOTEXTILE OVER TOP.

4. NON-WOVEN GEOTEXTILE.

5. 3” OF TYPE II GRAVEL OVER TYPE I FILT.
Gate Detail

General notes:
1. Maximum fill post spacing 75 feet. Each fill post shall be connected with a diagonal brace rail to the adjacent line posts.
2. Brace rails and miss posts shall be securely fastened to posts with brace bands and secured two-up adapter for miss post.
3. Install 1 piece gate at one egress point.
4. Gates at concrete wall (when egress points with stairs shall be marked above stair platform as shown) shall be egress points without stairs shall be installed flush with top of stairs.
5. Man gates on concrete side wall at locations where no stairs are provided shall not include the stair platform. Install gate with handrail can be between bottom of gate and top of concrete wall.
6. See electrical sheet for grounding.

CAL-WHOE PIPE STRAP BOLTED TO WALL WITH LOT RED HEAT SHARK BY 3/4" 2 1/2" OF CAP FOR PIPE STRAP WITH 1/4" VERTICAL SEPARATION.
CONTROL SPECIFICATION - DIV 26 SPECIFICATIONS TAKE PRECEDENCE OVER THIS SPECIFICATION SHOULD DIFFERENCES OCCUR.

OETAS 49 SPECIAL PROJECT NO. B 123456

William M. McDonald

COMPONENT SCHEDULE

TERMINAL BLOCKS SHALL BE OF THE SHUNT TYPE AS SHOWN ON THE TERMINAL BLOCKS DRAWING. ALL TERMINAL BLOCKS SHALL BE MARKED WITH THE LETTERS OR NUMBERS IDENTIFIED IN THE DRAWING.

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**Electrical Site Plan**

**Performance Requirements for Point of Sale System Electrical:***

- **Contractor is responsible for the following:**
  1. Coordination with the POS equipment vendor and the owner as required.
  2. Providing electrical support for the components related to the POS control panel, card reader, fuel dispenser, and communication.
  3. Providing interfaces between CO, card reader, dispenser, and POS system.
  4. Providing installation, including data and power for POS modules at emergency switch connectors, remote retail counters.
  5. Antenna poles, installation of coax and antennas per manufacturers' requirements. Installation to include grounding and surge protection at structure penetrations.
  6. Providing operator training for the POS, card reader, and dispenser sales system during startup and commissioning.
  7. Providing as-built drawings showing all new work and interfaces with CO, card reader, and dispenser.
  8. All wiring and infrastructure installation shall be performed in accordance with the project specifications and where not explicitly specified then in accordance with the applicable code.
  9. Contractor must provide a complete, secure, and operable point of sale and fuel dispensing system. See technical specifications for more detail.

*Note: This text describes a diagram related to a technical specification for an electrical site plan. The diagram includes various elements such as electrical connections, grounding points, and equipment layouts for a POS system installation.*