WICHITA AIRPORT AUTHORITY

STANDARD OPERATING PROCEDURE NO. 13

WICHITA EISENHOWER NATIONAL AIRPORT

PROCEDURES FOR MUD-TRAP, STORMWATER CLARIFIERS, OIL WATER SEPARATORS, GLYCOL COLLECTION, AND GREASE INTERCEPTOR DEVICES

Approved By:

WICHITA AIRPORT AUTHORITY

Original document signed by Victor D. White on 06/01/2018

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Victor D. White, Date
Director of Airports

SUBJECT: Maintenance and disposal procedures for Wichita Airport Authority (WAA) operated mud-trap, stormwater clarifiers, oil water separators, deicing glycol collection and grease interceptor devices.

PURPOSE: This Standard Operating Procedure (SOP) has been developed by the WAA for the internal use of its employees as a guide to comply with regulatory requirements set forth by federal, state and local environmental regulating agencies. Employees of the WAA shall refer to this SOP, or future amendments, when engaged in activities that involves these devices.

PROCEDURES:

A. MUD TRAPS

Mud traps are typically found on inlet sanitary sewer structures associated with wash bays, shop floors, or similar type draining receptacles. Their purpose is to settle out or "trap" larger, non-organic materials from entering the sewage collection system. (*Some of these units have been previously installed within a storm-water collection system; however, that is typically no longer the case*). The WAA has mud trap devices on most of its maintenance facilities. This mud trap SOP breaks these down into two regulatory categories adopted from the Kansas Department of Health and Environment (KDHE), Bureau of Waste Management Technical Guidance Document SW-1994-G3.

1) Fleet Wash Facilities. Per KDHE-BER Policy 2016-P2, mud trap waste produced from fleet wash service facilities are considered to be non-hazardous. This regulation shall be applied to the mud traps associated with the street-side maintenance services building at 1842 Midfield Road, and Airport Grounds & Fleet Building #4 at 7710 SW Boulevard.

2) AGF Building #3 Wash Facility. Per KDHE-BER Policy, sludge/solid contents within mud trap located in this classification have the potential to be hazardous by definition. The mud trap located within the north wash bay of AGF Building #3 shall be regulated as such. Additionally, all the service bay floor drains within the Building #3 maintenance shop drain to this structure. Final discharge of the liquid contents is through the sanitary sewer. Per KDHE-BER, Technical Guidance Document SW-1994-G3, an initial, one-time evaluation of the sludge/solid contents is required for hazardous waste determination, provided that maintenance procedures do not change between evaluation periods. The sludge/solids contents are to undergo the analytical evaluation defined by SW 846/1311: Volatile Organic Compounds (VOCS) and RCRA Metals using the Toxicity Characteristic Leachate Procedure (TCLP). Analytical evaluation must be performed by a KDHE Certified Laboratory.

a) Classification of the TCLP evaluation.

i. Non-Hazardous Determination. If the contents pass the TCLP evaluation, the WAA shall dispose of the contents through a qualified and licensed contract vendor. The vendor shall manifest the contents for disposal at an approved facility (*under KDHE/City of Wichita permitting*).

ii. Hazardous Determination. If the contents fail the TCLP evaluation, the WAA shall contract through a qualified and licensed contract vendor. The vendor shall manifest the contents for disposal at an approved and licensed hazardous waste receiving facility.

3) Solids Disposal. Solid contents removed during routine maintenance shall be taken to the WAA C&D material storage yard for disposal. A log of the maintenance event shall be maintained, and records shall include date/time, contractor (*if applicable*), and estimated volume of solids disposed.

Note: Combined with the above, the Environmental Services Manager (ESM) and division manager(s) shall perform a full review of all hazardous materials and procedures utilized within the maintenance program. This review should include a summary (if possible) of all known discharges to the drain structures. This may include interviews of key personnel or staff who may have knowledge of discharge activity.

B. STORMWATER CLARIFIERS

1) The WAA has four stormwater clarifiers under its jurisdiction at Eisenhower Airport; these include:

- Park & Ride Lot outfall
- Parking Garage outfall
- Learjet (Woodchuck parking lot outfall)
- AGF pavement outfall

2) These devices are designed to catch floating debris (*namely garbage items*) that could jeopardize the COW's NPDES permitting. Annual inspections shall be performed on these devices in accordance with City of Water Title 16 Ordinance. Inspections and recording of these devices shall be documented through the Veoci Operations Program utilized by the WAA. The ESM is responsible for the inspections as well as all documentation. Questions or concerns regarding the stormwater clarifiers should be directed to the ESM. Cleaning of these devices shall be accomplished through a maintenance request issued to the COW-Public Works Department.

Note: The above applies only to stormwater clarifiers under WAA jurisdiction.

C. OIL WATER SEPARATORS

1) Two 25,000 gallon oil water separators (OWS) are located on the Eisenhower Airport Terminal apron, and 20,000 gallon at aviation fuel storage and distribution facility; the locations of these OWS are:

- Near Terminal Gate 6 — 25,000 gallon
- Near Terminal Gate 9 — 25,000 gallon
- Aviation fuel storage and distribution facility — 20,000 gallon

2) The Terminal OWS units are designed to phase separate and collect petroleum liquids from stormwater. Surface waters collected by the large trench drains located in the Terminal apron will pass through these units prior to outfall. During winter months surface waters are retained post OWS units in the Glycol Collection System Holding Tank (*located underground near Terminal Gate 8*).

3) The Terminal apron separators are equipped with an alarm monitor to alert for the presence of a significant petroleum layer. Other alarms include excessive contents, and the presence of liquids within a secondary retaining wall of the unit. The Terminal apron units are designed to hold approximately 5,000 gallons of free petroleum liquid. If a large spill event were to occur, closure of both OWS effluent valves would contain and retain the discharge and prevent petroleum from entering a stormwater outfall. The WAA Airport Buildings and Utilities and ESM provide jurisdiction for the Terminal apron devices. The aviation fuel storage and distribution facility OWS is under the jurisdiction of the contracted vendor and the ESM. The ESM is to be notified prior to any closure procedures regarding these valves. Gate 10 OWS alarm monitor shown on the right side of image #**1** below.

#1 OWS oil level alarm monitor panel on right

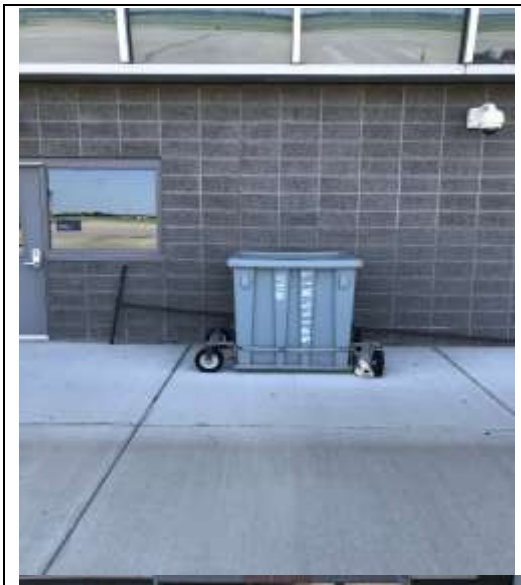
Note: Maintenance requirements regarding these units is limited. Questions or concerns regarding the OWS units should be directed to the ESM. (Additional information regarding these devices is located in the WAA-SPCC/SW3P Plan).

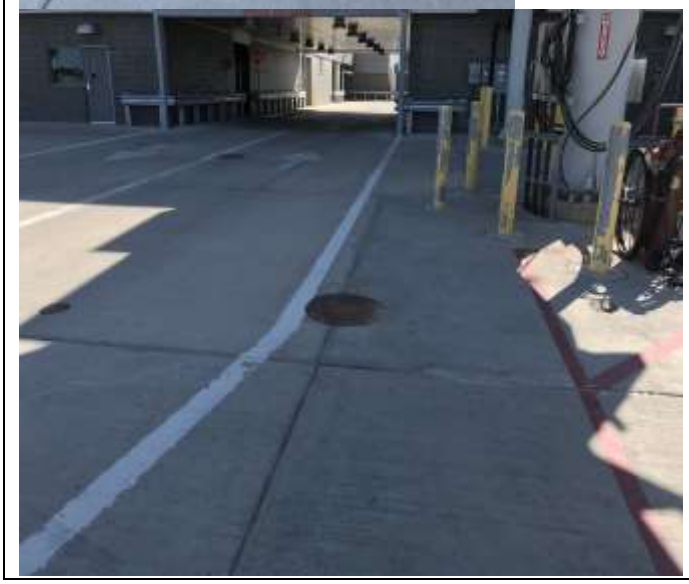
D. DEICING GLYCOL APRON COLLECTION - TERMINAL

1) During the fall through winter months, first-flush stormwater is diverted to the 140,000 gallon glycol collection tank (*underground*) located adjacent to Gate 8. Each of the OWS units have a set of post-flow control valves; these valves are manually set (*open or closed*) dependent upon time of year. In the middle to late fall, the WAA ESM and ABU staff will set the valves to divert first flush/sustained stormwater flow to the 140,000 glycol collection tank. The valves are reversed during middle spring through late summer to divert all stormwater directly to the Cowskin Creek outfall (WAA Outfalls #3 & #4). All valves are located below grade, and special "T" handle water valve type wrenches are utilized to open and close the valves.

Note: The OWS valve set located at Gate 6 are approximately 12.0' below grade and are marked as "water." The wrench which controls these valves in stored along the exterior Terminal wall located near the grey, WAA spill response cart **#2**. The utilization of this wrench requires at least two WAA staff members. This is a necessary precaution for staff safety, as well as to prevent possible damage to the Gate 6 Passenger Boarding Bridge. Image **#3** on right shows the flow control valves outlined in Figure-1.

#2 OWS valve wrench behind spill
#3 Below-grade OWS flow control valves at Gate 6 response kit at Gate 6





a) Ancillary Stormwater Sump. The existing apron stormwater collection system utilizes a portion of an earlier design for a first flush collection event. A sump pit (*containing two submersible pumps*) is located southwest of the of the Gate 10 OWS unit. This device is associated with a forced main system utilized to lift trench drain stormwater (*collected from the RON apron areas located southeast of the main Terminal*) to the Gate 10 OWS unit. Control switches for these pumps are located near the Gate 10 OWS monitor panel. Pump operation (*as well as the below grade flow control valve*) for this device are to remain the same year round. However, during a sustained heavy stormwater event, the pumps may be switched off to prevent extended wear. The left image **#4** shows the flow control valves outlined in Figure-2. The right image **#5** shows the ancillary stormwater sump control panel on left, and Gate 10 OWS alarm monitor on right. These panels are located in the Terminal 1st level mechanical room.

#4 Below grade Gate 10 OWS valves #5 Ancillary sump control panel/ OWS oil level alarm monitor panel

b) Figure-1 and Figure-2 attached to this SOP. Figures 1 and 2 contain the OWS seasonal valve settings. Please refer to these diagrams for OWS valve location and proper flow orientation.

2) The Terminal apron trench drain stormwater flows initially pass through the OWS units. During cold season aircraft deicing, this flow is diverted to a 140,000 gallon storage underground glycol collection tank located adjacent to Gate 8. Contents of this tank are then discharged to the City of Wichita (COW) sanitary sewer service main. Discharge occurs through a two inch forced main. Monitoring of tank fluid level as well as the forced main pump controlling is managed by the ABU Insight software. The end-point of the forced main line is the drive lane sanitary sewer manhole located south, southwest of the Terminal's emergency generator. When necessary, the ESM will collect samples of this discharge to under-go pH and BOD analytical evaluation (*necessary for the COW-POTW facility*).

Note: The ESM is to be made aware of any discharge to the sanitary sewer from the glycol collection tank.

E. DEICING GLYCOL APRON COLLECTION - CARGO

The Air Cargo apron has three (3) 30,000 gallon underground glycol storage tanks (*located airside near Suite #400*) which collect first flush stormwater. The inlets for these tanks are uniformly spaced along the west edge of the Cargo apron between TW connectors D1 through D2. The tanks are straight capture devices; no OWS units are located in the Cargo apron. Tank levels are monitored by the ESM. Discharge is forced through a combined header-pipe to the COW sanitary sewer service. However, each tank sump pump is individually controlled. The

ESM will observe these levels and may choose to obtain representative samples for pH and BOD determination prior to discharge.

F. GREASE INTERCEPTORS

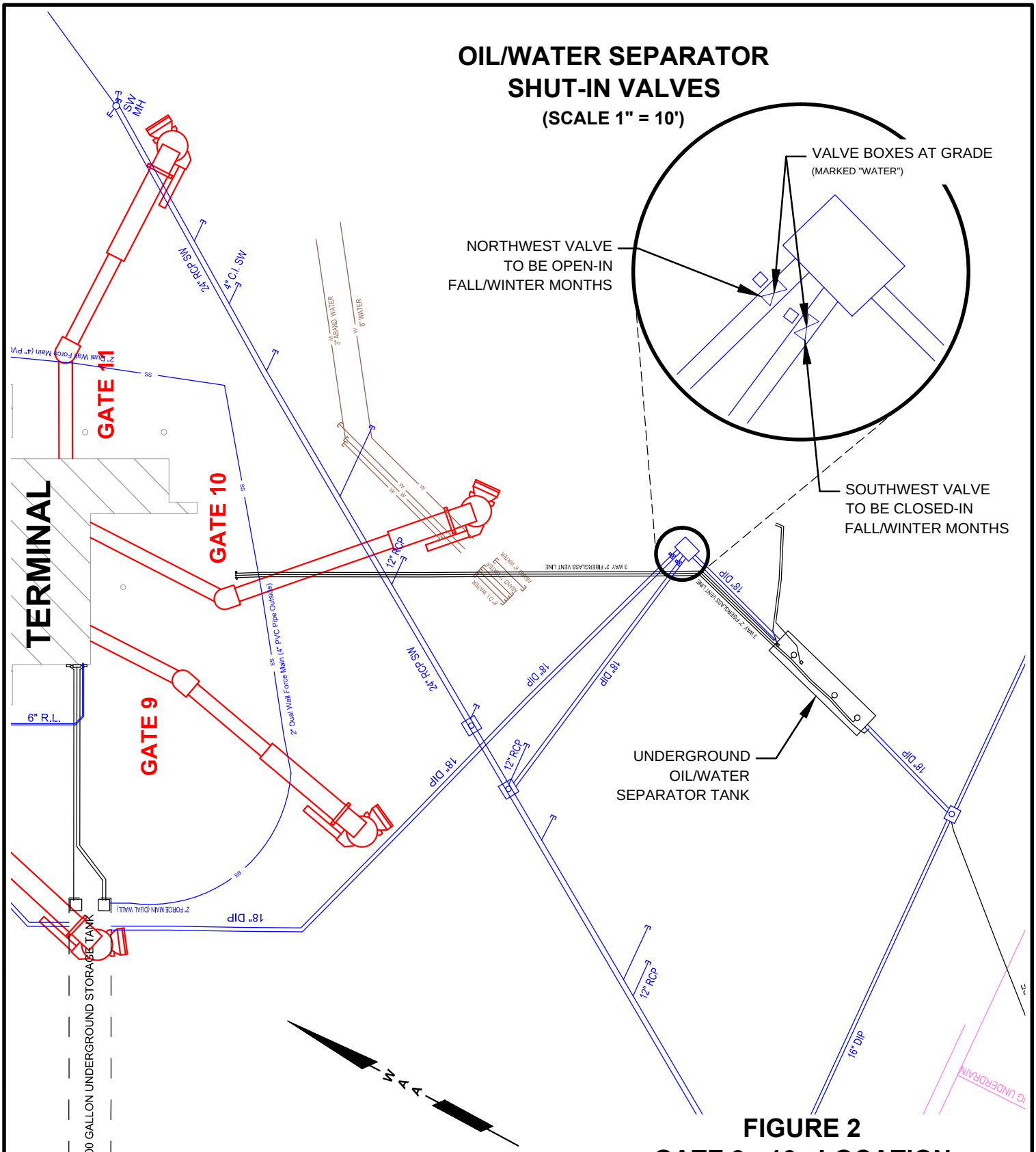
One sanitary sewer grease interceptor is located on the west side of the grease solids holding bin #**6**. These devices are regulated under an annual permit authorization issued through the City of Wichita, Code of Ordinance Chapter 16.24. These devices are designed to limit FOG (*fats, oil, grease*) from entering sanitary sewer service mains located down-stream of food services / restaurants. Inspections and/or pumping out of these units are required every 90 days. Inspections/pumping events are to be documented and retained on the form developed by the COW. Disposal of these contents shall be at a facility permitted by the COW to receive such wastes.

#6 Terminal grease interceptor access covers, right, grease solids holding bin, left

Note: The grease interceptor located at the Terminal is currently operated and maintained under a tenant concession and lease agreement. The tenant is contractually responsible for all permitting and oversight of the operational condition of the device. However, the delegated contractual obligation to the tenant for operation, maintenance, inspection, pumping, and documentation does not relieve the WAA as owner and operator to insure tenant compliance.

OIL/WATER SEPARATOR SHUT-IN VALVES

(SCALE 1" = 10')



NOTES:

1. VALVE WRENCH LOCATED ALONG TERMINAL WALL NEAR GRAY SPILL KIT
2. RIGHT TO CLOSE - LEFT TO OPEN
3. VALVES TO BE REVERSED IN SUMMER MONTHS.

FIGURE 2
GATE 9 - 10 LOCATION

OIL/WATER SEPARATOR GLYCOL COLLECTION SYSTEM

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THE WICHITA AIRPORT AUTHORITY
WICHITA, KANSAS

DATE	DRAWN BY	SCALE	SHEET
5/30/18	H.G.O.	1" = 50'	1 of 1

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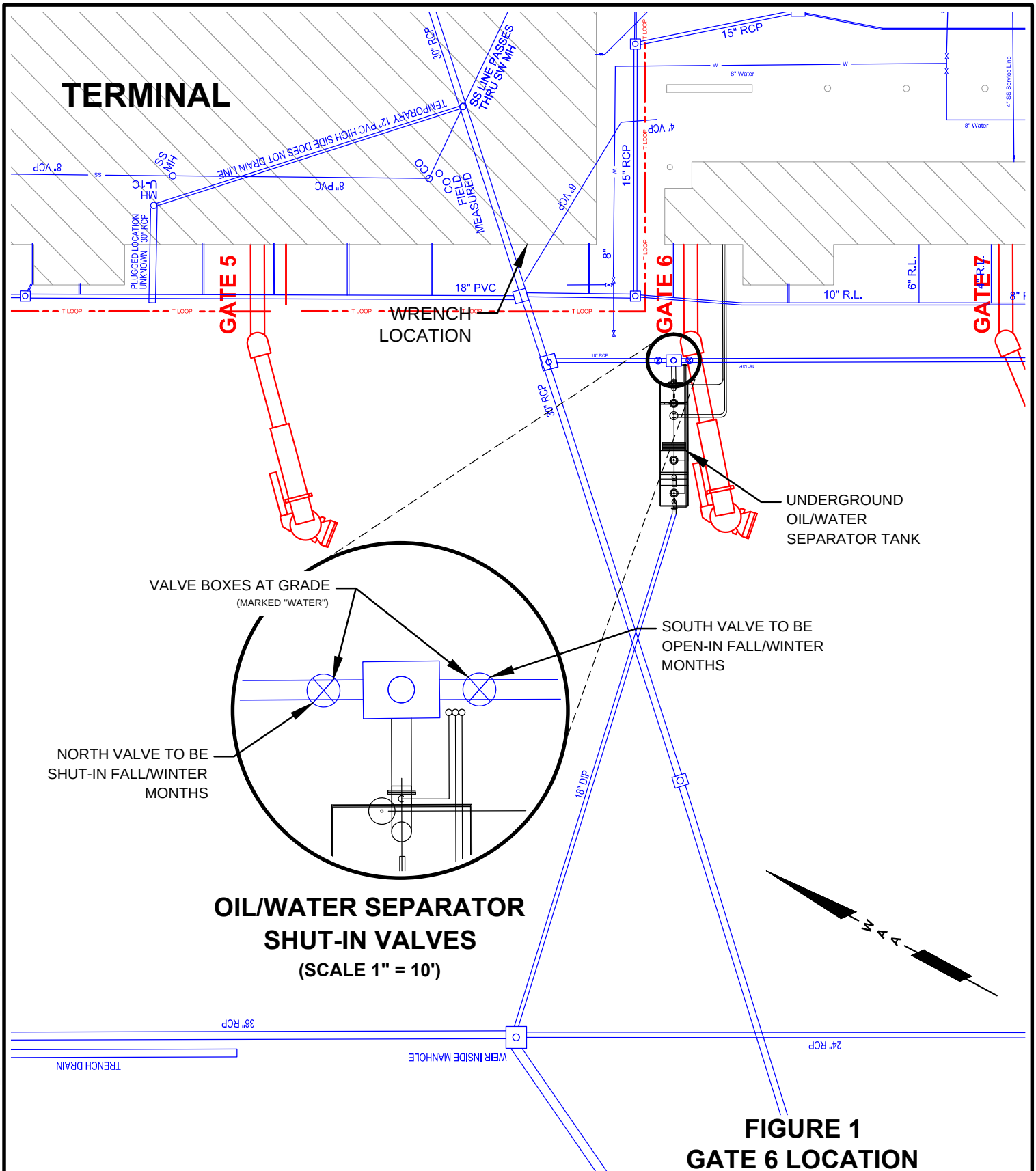

OIL/WATER SEPARATOR SHUT-IN VALVES

(SCALE 1" = 10')

FIGURE 1
GATE 6 LOCATION

NOTES:

1. VALVE WRENCH LOCATED ALONG TERMINAL WALL NEAR GRAY SPILL KIT
2. RIGHT TO CLOSE - LEFT TO OPEN
3. VALVES TO BE REVERSED IN SUMMER MONTHS.

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OIL/WATER SEPARATOR GLYCOL COLLECTION SYSTEM

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