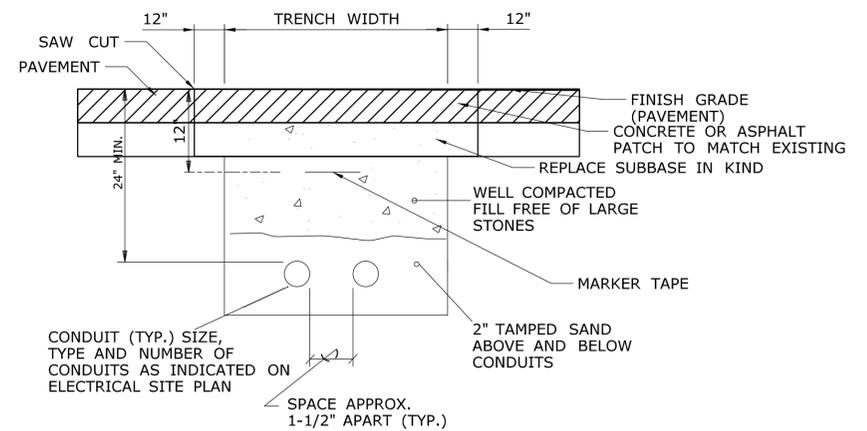


NOTE: THE PUSH BUTTON DEVICES SHALL BE INSTALLED IN PARALLEL.

TEMPORARY FUEL CONTROL ONE LINE DIAGRAM

NTS



CONDUIT TRENCH A
NTS ED-003

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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-	-	-	-
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/17/2013

DESIGNER/DRAFTER: **SKW**
CHECKED BY: **JMK**
SCALE AS NOTED

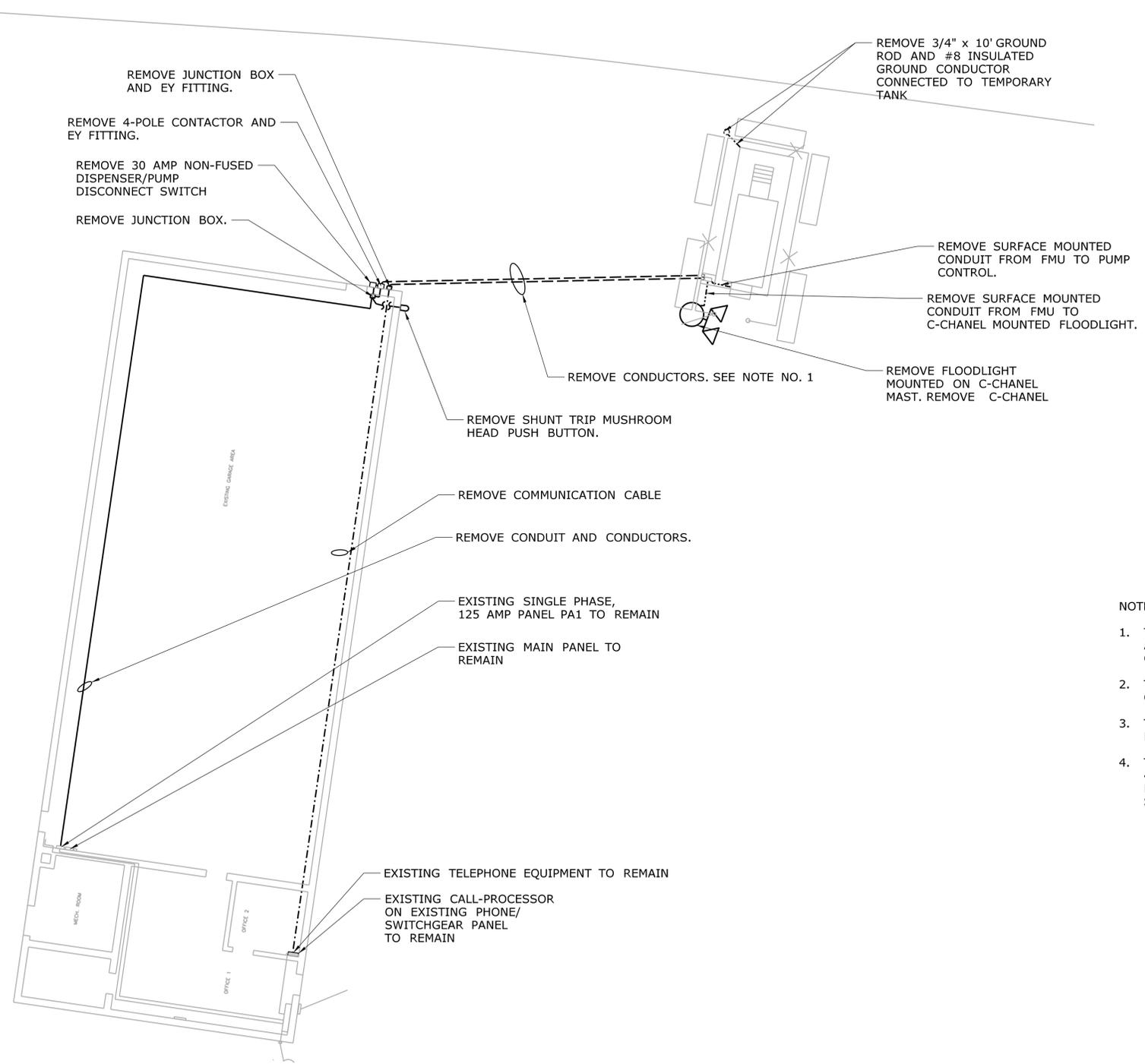


SIGNATURE/BLOCK: **OFFICE OF ENGINEERING**
APPROVED BY: *[Signature]*

PROJECT TITLE: **CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT**

TOWN: **CANTERBURY**
DRAWING TITLE: **TEMPORARY WIRING DIAGRAM PLAN**

PROJECT NO. **22-105**
DRAWING NO. **ED-003**
SHEET NO. **07.03**



REMOVE JUNCTION BOX AND EY FITTING.
 REMOVE 4-POLE CONTACTOR AND EY FITTING.
 REMOVE 30 AMP NON-FUSED DISPENSER/PUMP DISCONNECT SWITCH
 REMOVE JUNCTION BOX.

REMOVE 3/4" x 10' GROUND ROD AND #8 INSULATED GROUND CONDUCTOR CONNECTED TO TEMPORARY TANK

REMOVE SURFACE MOUNTED CONDUIT FROM FMU TO PUMP CONTROL.

REMOVE SURFACE MOUNTED CONDUIT FROM FMU TO C-CHANNEL MOUNTED FLOODLIGHT.

REMOVE FLOODLIGHT MOUNTED ON C-CHANNEL MAST. REMOVE C-CHANNEL

REMOVE CONDUCTORS. SEE NOTE NO. 1

REMOVE SHUNT TRIP MUSHROOM HEAD PUSH BUTTON.

REMOVE COMMUNICATION CABLE

REMOVE CONDUIT AND CONDUCTORS.

EXISTING SINGLE PHASE, 125 AMP PANEL PA1 TO REMAIN

EXISTING MAIN PANEL TO REMAIN

EXISTING TELEPHONE EQUIPMENT TO REMAIN

EXISTING CALL-PROCESSOR ON EXISTING PHONE/SWITCHGEAR PANEL TO REMAIN

NOTES:

1. THE CONDUCTORS SHALL BE REMOVED FROM THE TEMPORARY CONDUIT SYSTEM. ABANDON UNDERGROUND CONDUIT. THE CONTRACTOR SHALL CUT CONDUIT AT GRADE.
2. THE CONTRACTOR SHALL REPAIR ALL HOLES THAT ARE LEFT AFTER THE REMOVAL OF CONDUIT.
3. THE CONTRACTOR SHALL REMOVE ALL CONDUIT AND CONDUCTORS INSTALLED BETWEEN THE CONTACTOR, DISCONNECT AND PANEL PA1.
4. THE CONTRACTOR SHALL SALVAGE THE FMU, SHUNT TRIP MUSHROOM PUSH BUTTON, 4-POLE CONTACTOR, JUNCTION BOXES, FLOODLIGHT, FLOODLIGHT MAST, GROUND ROD, AND DISCONNECT SWITCH. ALL CONDUCTORS AND CONDUIT BEING REMOVED SHALL BE PROPERLY DISPOSED.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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-	-	-	-
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DESIGNER/DRAFTER:
SKW
 CHECKED BY:
JMK
 SCALE IN FEET
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 SCALE 1"=10'

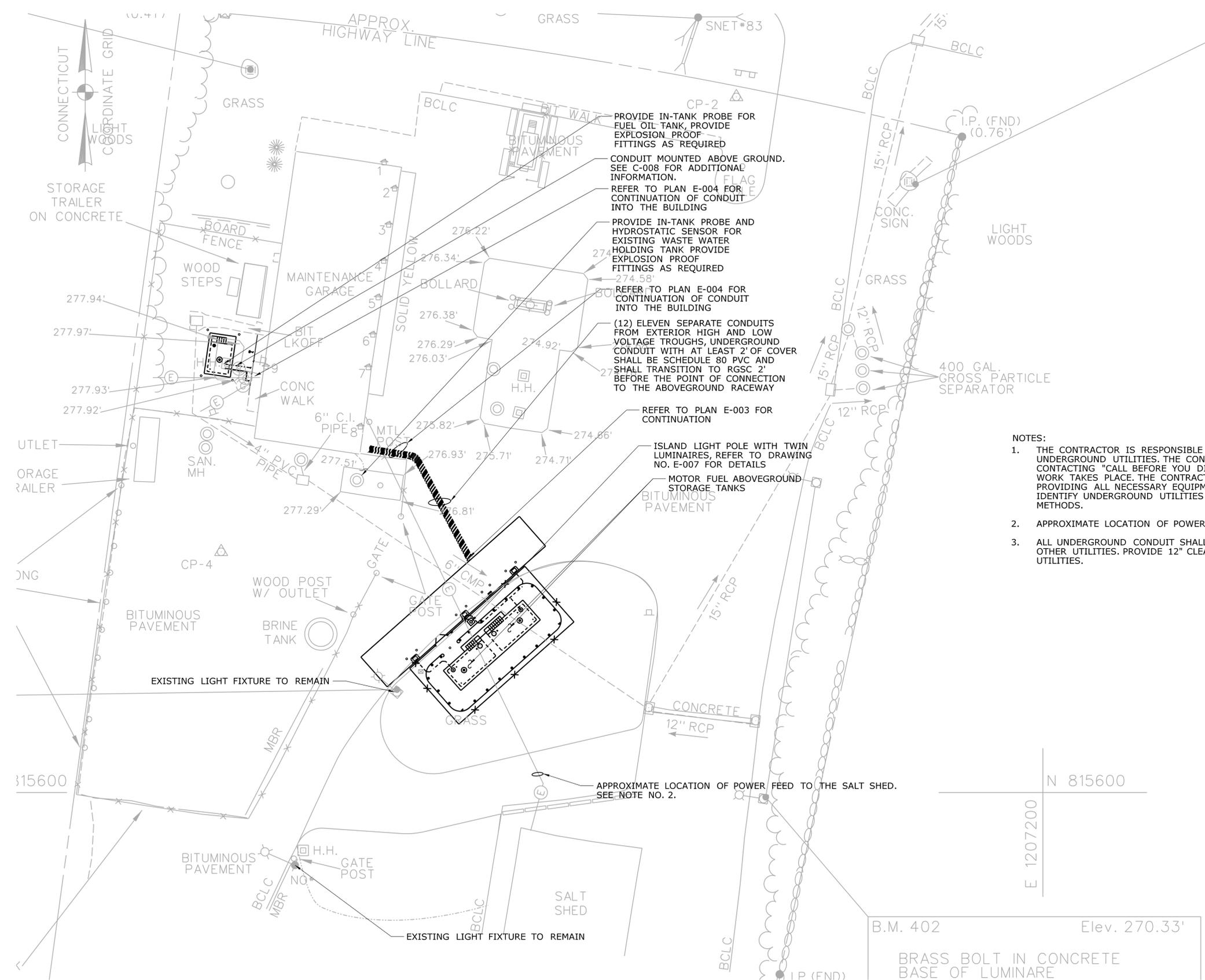


SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
 APPROVED BY: *[Signature]*

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

TOWN:
CANTERBURY
 DRAWING TITLE:
TEMPORARY ELECTRICAL DEMOLITION PLAN

PROJECT NO.
22-105
 DRAWING NO.
ED-004
 SHEET NO.
07.04



PROVIDE IN-TANK PROBE FOR FUEL OIL TANK, PROVIDE EXPLOSION PROOF FITTINGS AS REQUIRED

CONDUIT MOUNTED ABOVE GROUND. SEE C-008 FOR ADDITIONAL INFORMATION.

REFER TO PLAN E-004 FOR CONTINUATION OF CONDUIT INTO THE BUILDING

PROVIDE IN-TANK PROBE AND HYDROSTATIC SENSOR FOR EXISTING WASTE WATER HOLDING TANK PROVIDE EXPLOSION PROOF FITTINGS AS REQUIRED

REFER TO PLAN E-004 FOR CONTINUATION OF CONDUIT INTO THE BUILDING

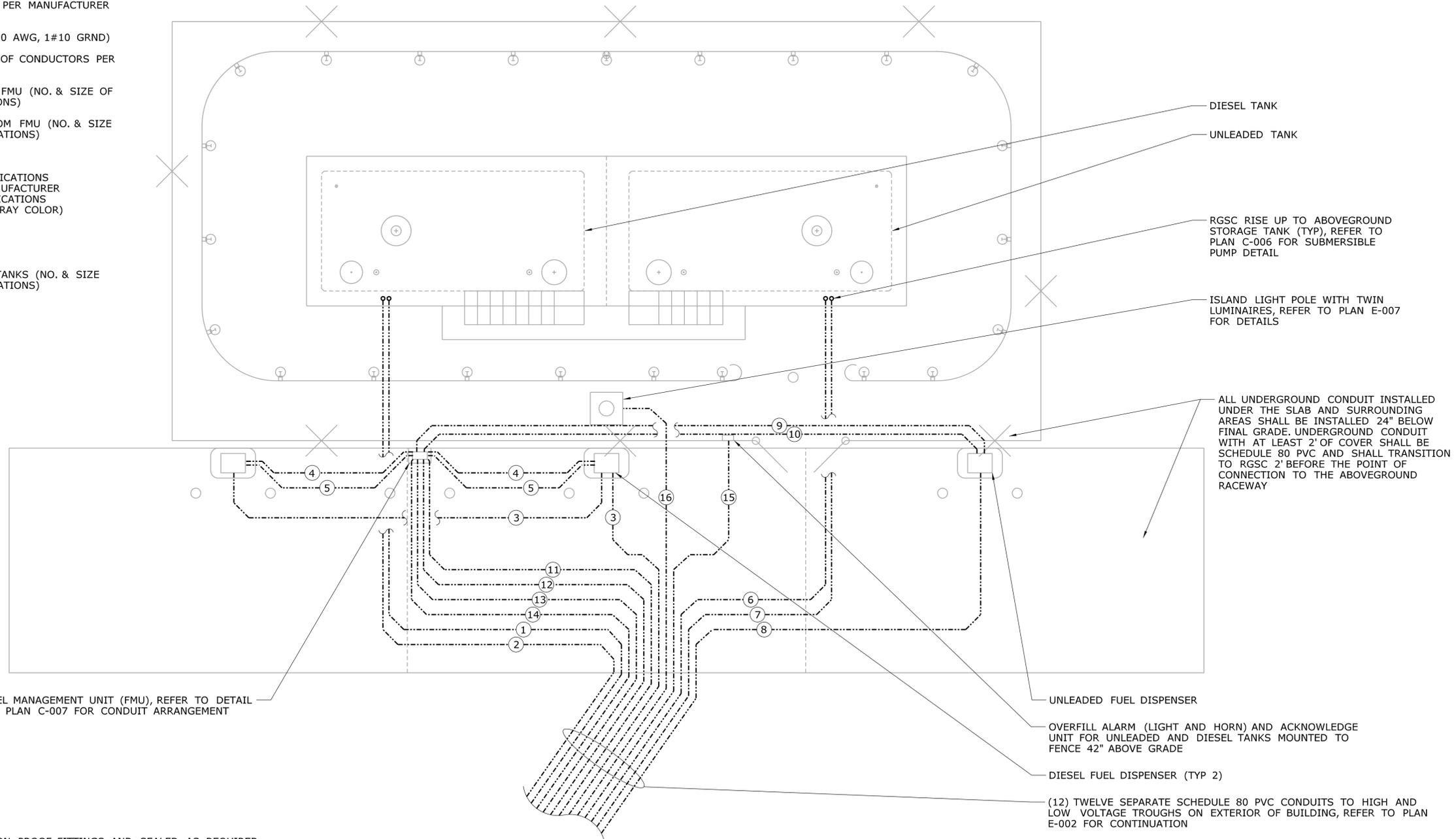
(12) ELEVEN SEPARATE CONDUITS FROM EXTERIOR HIGH AND LOW VOLTAGE TROUGHS, UNDERGROUND CONDUIT WITH AT LEAST 2' OF COVER SHALL BE SCHEDULE 80 PVC AND SHALL TRANSITION TO RGS 2' BEFORE THE POINT OF CONNECTION TO THE ABOVEGROUND RACEWAY

- NOTES:
1. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "CALL BEFORE YOU DIG" BEFORE ANY EXCAVATION WORK TAKES PLACE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY EQUIPMENT AND MATERIAL NEEDED TO IDENTIFY UNDERGROUND UTILITIES THROUGH NON-DESTRUCTIVE METHODS.
 2. APPROXIMATE LOCATION OF POWER FEED TO THE SALT SHED.
 3. ALL UNDERGROUND CONDUIT SHALL BE INSTALLED AWAY FROM OTHER UTILITIES. PROVIDE 12" CLEARANCE FROM ALL OTHER UTILITIES.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 1/22/2013	DESIGNER/DRAFTER: SKW	CHECKED BY: JMK	SCALE IN FEET 0 20 40 SCALE 1"=20'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/BLOCK: OFFICE OF ENGINEERING	APPROVED BY: <i>[Signature]</i>	PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT	TOWN: CANTERBURY	PROJECT NO. 22-105
												DRAWING TITLE: TANK MONITORING SITE PLAN	DRAWING NO. E-002
								Filename: ...FD_MSH_ELE_022_0105_E002.dgn					SHEET NO. 07.05

LEGEND

- ① IN-TANK PROBE CONDUCTORS FROM TANK MONITORING SYSTEM TO DIESEL TANK (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ② DIESEL SUBMERSIBLE PUMP AC POWER (2#10 AWG, 1#10 GRND)
- ③ DIESEL DISPENSER AC POWER (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ④ DIESEL DISPENSER PULSER CONTROL FROM FMU (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑤ DIESEL DISPENSER AC POWER CONTROL FROM FMU (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑥ IN-TANK PROBE CONDUCTORS FROM TANK MONITORING SYSTEM TO UNLEADED TANK (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑦ UNLEADED SUBMERSIBLE PUMP AC POWER (2#10 AWG, 1#10 GRND)
- ⑧ UNLEADED DISPENSER AC POWER (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑨ UNLEADED DISPENSER PULSER CONTROL FROM FMU (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑩ UNLEADED DISPENSER AC POWER CONTROL FROM FMU (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑪ FMU (3#12 AWG, 1#12 GRND)
- ⑫ FMU AND TANK MONITORING SYSTEM COMMUNICATIONS (4-CONDUCTOR SHIELDED #24 OR AS PER MANUFACTURER SPECIFICATIONS), FMU AND NETWORK COMMUNICATIONS (CAT 5E - BLUE COLOR AND CAT 5E SPARE - GRAY COLOR)
- ⑬ SPARE TO FMU
- ⑭ SPARE TO FMU
- ⑮ OVERFILL ALARM FOR UNLEADED AND DIESEL TANKS (NO. & SIZE OF CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- ⑯ ISLAND LIGHTING (2#12 AWG, 1#12 GRND)



- NOTES:
1. ALL CONDUITS SHALL BE PROVIDED WITH EXPLOSION PROOF FITTINGS AND SEALED AS REQUIRED IN ACCORDANCE WITH NFPA 70.
 2. REFER TO PLAN C-006 FOR MOTOR FUEL TANK AND PLAN C-007 FOR MOTOR FUEL ISLAND DETAILS.

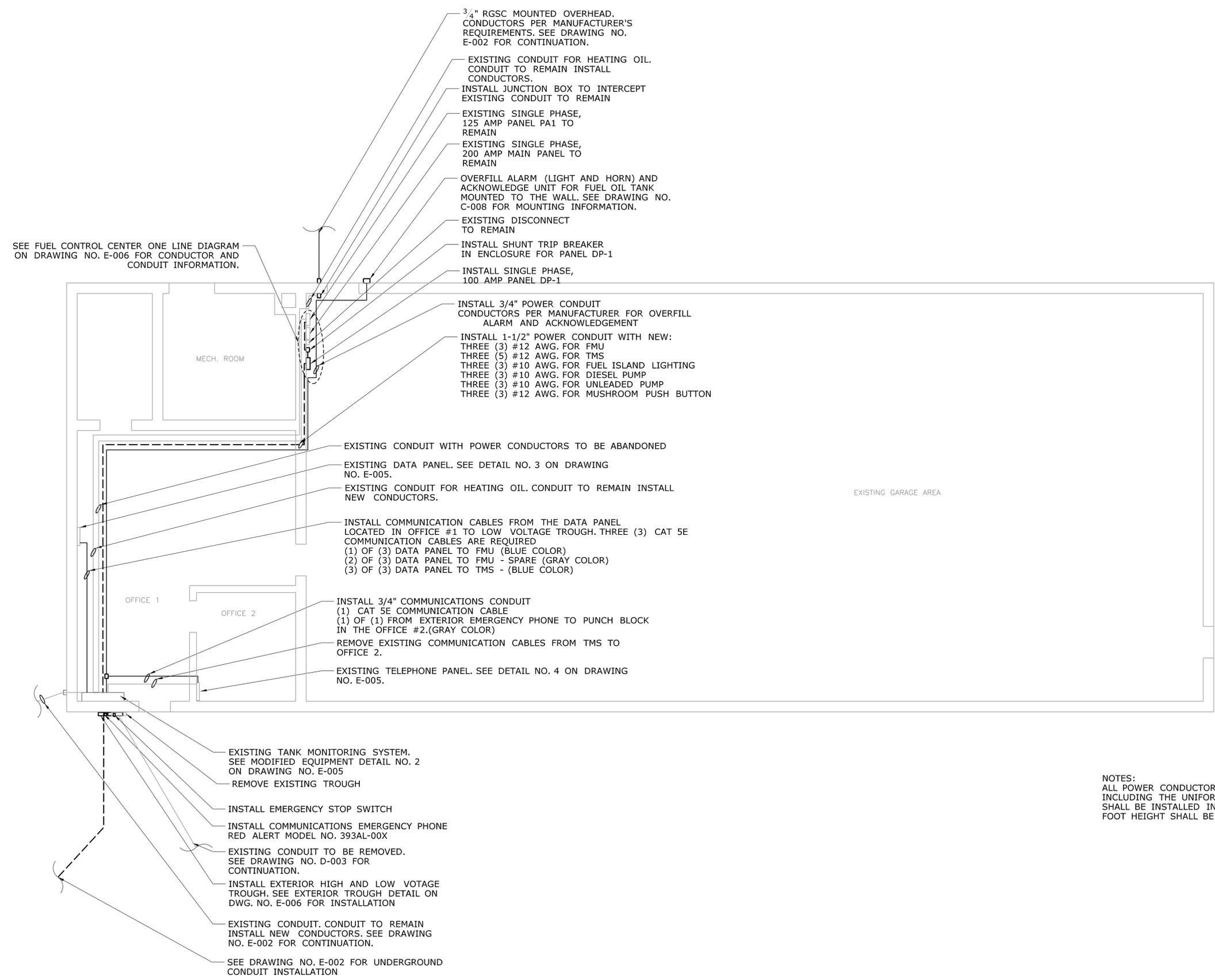
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNER/DRAFTER: JSB CHECKED BY: JWW SCALE: 1/4" = 1'-0"	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING APPROVED BY: <i>[Signature]</i>	PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT	TOWN: CANTERBURY	PROJECT NO. 22-105	DRAWING NO. E-003
REV. DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 1/22/2013	Filename: ...FD_MSH_ELE_022_0105_E003.dgn	DRAWING TITLE: MOTOR FUEL ISLAND CONDUIT	SHEET NO. 07.06	

SYMBOLS

- POWER CONDUIT
- COMMUNICATION CONDUIT
- TEMPORARY COMMUNICATION CABLE
- JUNCTION BOX
- POWER/LIGHTING PANEL
- ⊞ MUSHROOM PUSH BUTTON
- ⊞ FMU
- ⊙ UNINSTRUT WITH FLOODLIGHT
- ⊙ POLE MOUNTED LUMINAIRE

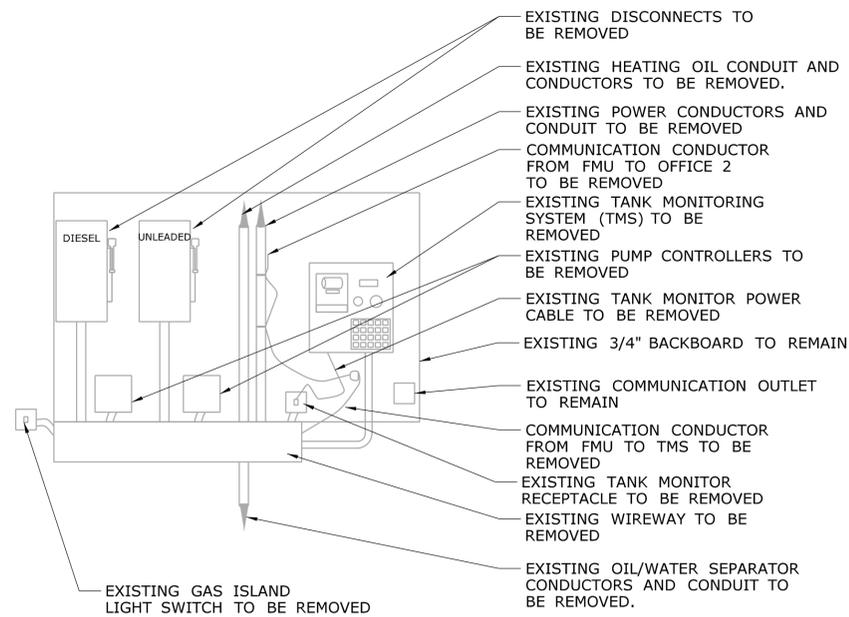
ABBREVIATIONS

- A AMPERE
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- AHU AIR HANDLING UNIT
- AUTO AUTOMATIC
- AIC AMPS INTERRUPTING CAPACITY
- C CONDUIT
- CKT. CIRCUIT
- DP1 FUEL POWER PANEL
- G, GND GROUND
- JB JUNCTION BOX
- MDP MAIN DISTRIBUTION POWER PANEL
- RGS RIGID GALVANIZED STEEL
- 3PH THREE PHASE
- 3P THREE POLE
- TYP. TYPICAL
- V VOLT
- WP WEATHERPROOF



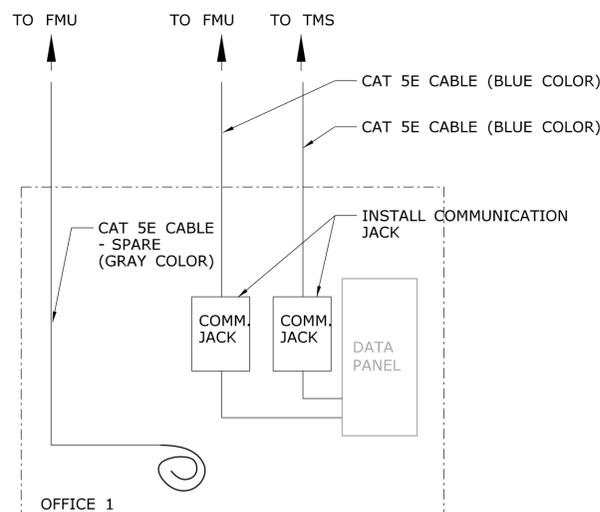
NOTES:
 ALL POWER CONDUCTORS INSTALLED IN THE BUILDING AT FLOOR LEVEL UP TO AND INCLUDING THE UNIFORMED HEIGHT OF 10 FEET ABOVE FINISHED FLOOR SHALL BE INSTALLED IN RGSC. CONDUCTORS EXTENDING BEYOND THE 10 FOOT HEIGHT SHALL BE EMT.

		DESIGNER/DRAFTER: SKW	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT	TOWN: CANTERBURY	PROJECT NO. 22-105
		CHECKED BY: JMK		APPROVED BY: 			DRAWING TITLE: ELECTRICAL PLAN
REV. DATE - - - - - - - - - - - - - - - - - -	REVISION DESCRIPTION - - - - - -	SHEET NO. - - - - - -	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. Plotted Date: 1/17/2013	SCALE IN FEET 0 5 10 SCALE 1"=5'	Filename: ...FD_MSH_ELE_022_0105_E004.dgn		SHEET NO. 07.07



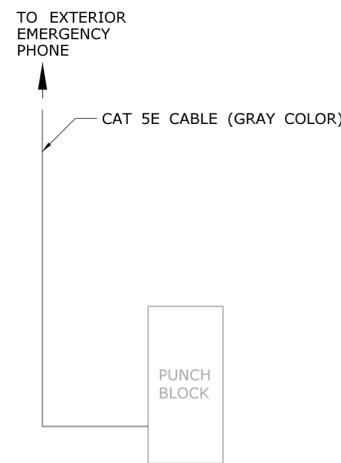
**EXISTING EQUIPMENT IN OFFICE #1
DETAIL NO. 1**

NOT TO SCALE



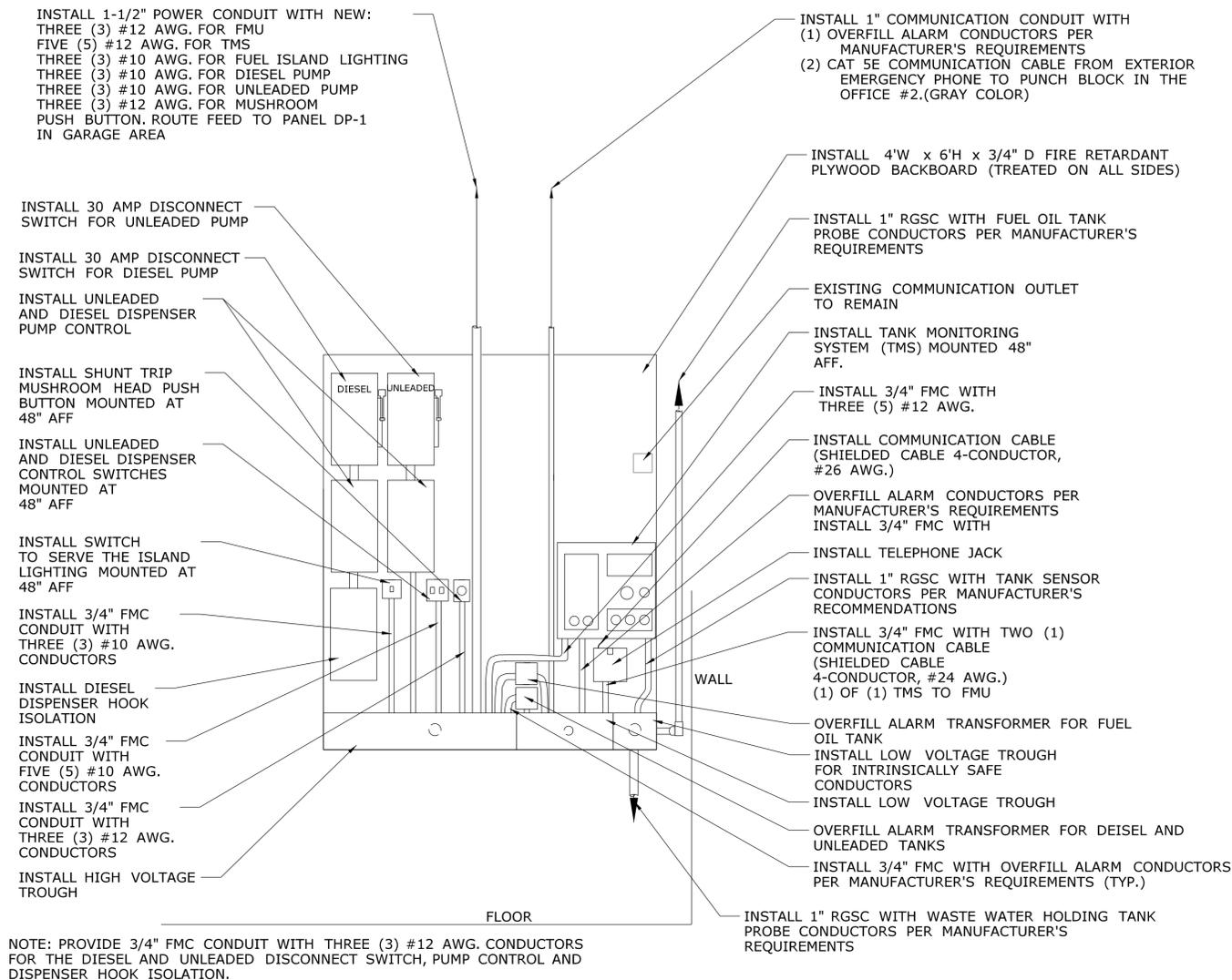
**COMMUNICATIONS ONE-LINE DIAGRAM
IN OFFICE #1
DETAIL NO. 3**

NOT TO SCALE



**COMMUNICATIONS ONE-LINE DIAGRAM
IN OFFICE #2
DETAIL NO. 4**

NOT TO SCALE



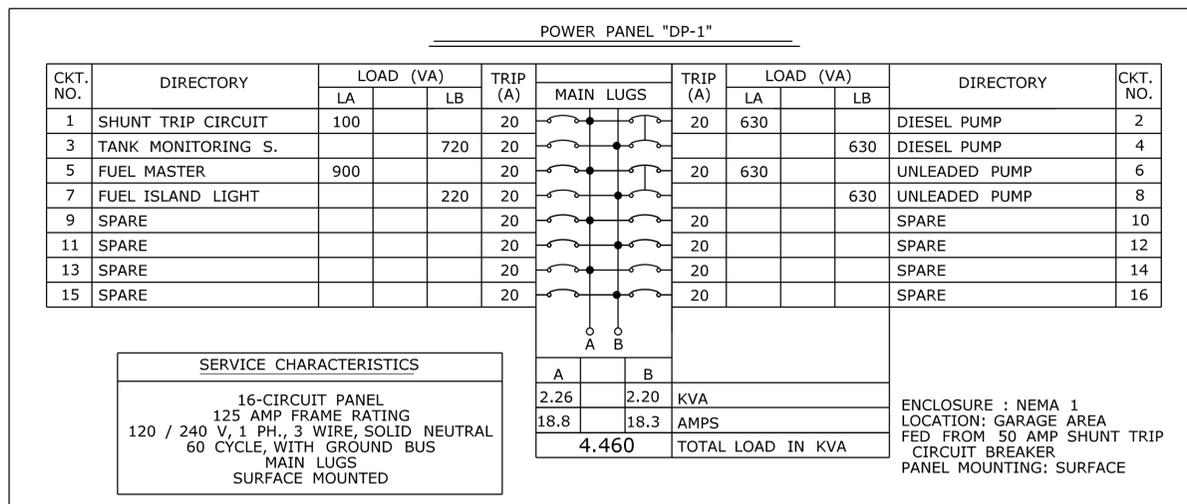
**MODIFIED EQUIPMENT IN OFFICE #1
DETAIL NO. 2**

NOT TO SCALE

COMMUNICATION NOTES:

1. MOUNT AND MAKE NECESSARY CONNECTIONS REQUIRED FOR THE NETWORK COMMUNICATION SYSTEM. THE CONTRACTOR SHALL CONTACT MR. JAMES GOODWIN AT 860-594-3544 PRIOR TO THE INSTALLATION OF THE COMMUNICATION JACKS.
2. ALL CAT 5E CABLE (GRAY) SHALL BE TERMINATED AT THE PUNCH BLOCK. THE SPARE CAT 5E CABLE (GRAY) SHALL BE ROLLED AND SECURE IT WITH CABLE TIES. ALL CAT 5E DATA CABLE (BLUE) SHALL BE TERMINATED AT THE DATA PANEL/NETWORK SWITCH.
3. CT DOT INFORMATION SYSTEM DEPARTMENT IS RESPONSIBLE FOR THE REMOVAL OF VOICE/FAX/MODEM CALL PROCESSOR.
4. CT DOT INFORMATION SYSTEMS OFFICE SHALL PROVIDE DIRECTION ON THE INSTALLATION OF TELEPHONE LINE FROM PUNCH BLOCK.

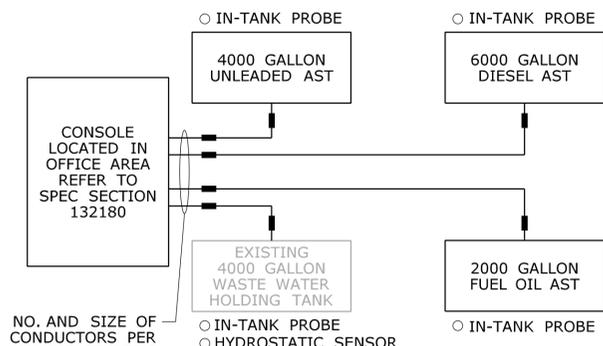
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 1/17/2013	DESIGNER/DRAFTER: SKW	CHECKED BY: JMK	SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	APPROVED BY: <i>[Signature]</i>	PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT	TOWN: CANTERBURY	PROJECT NO. 22-105
DRAWING TITLE: EXISTING EQUIPMENT & PROPOSED EQUIPMENT													
SHEET NO. 07.08													



PANEL SCHEDULE
NOT TO SCALE

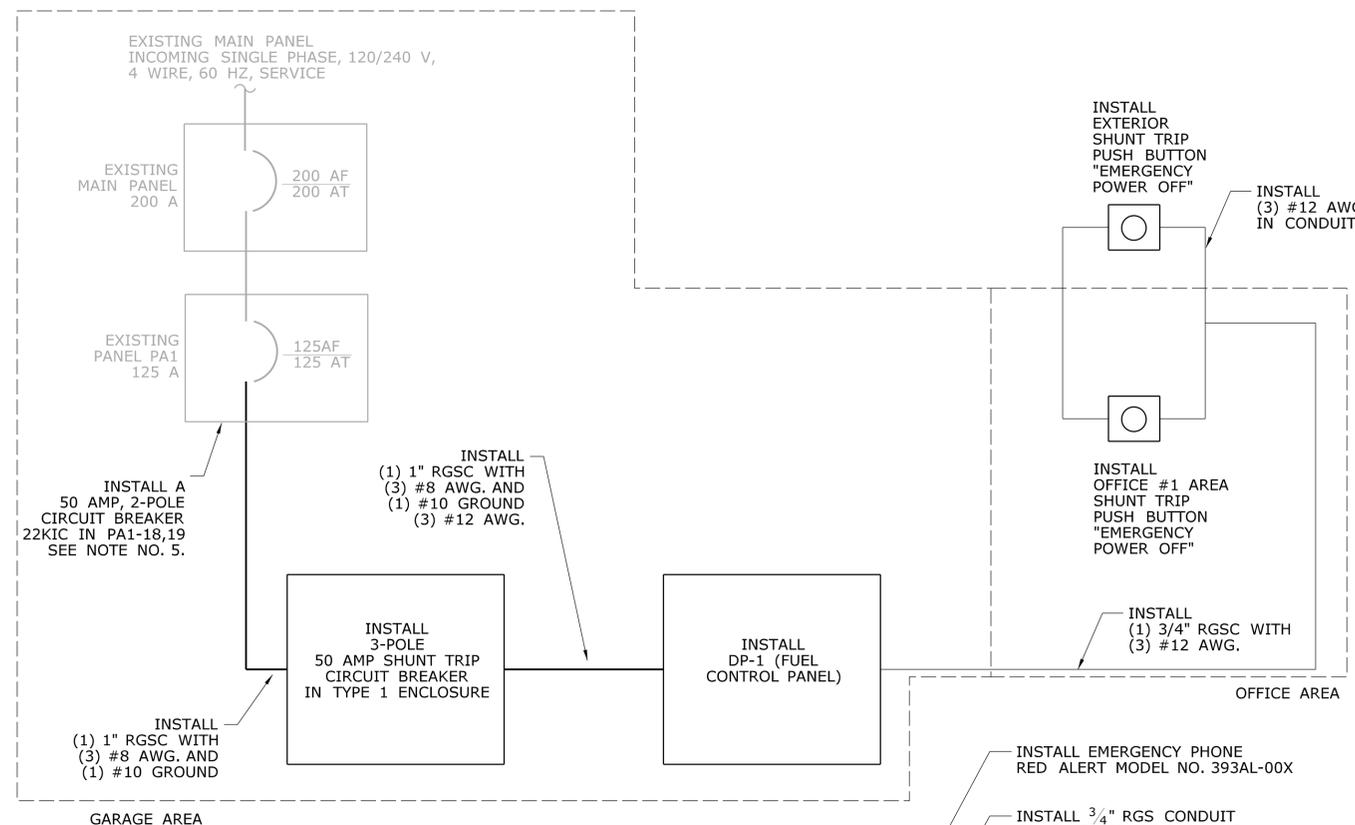
NOTES:

1. INSTALL DP-1 PANELBOARD, SQUARE D CATALOG NO. QO116M100 OR APPROVED EQUAL. DP-1 SHALL BE EQUIPPED WITH PIANO HINGED TRIMS, COPPER TIN PLATED BUS, BOLT-ON CIRCUIT BRANCH BREAKERS RATED FOR 22KIC.
2. INSTALL A 3-POLE SHUNT TRIP 50 AMP MAIN BREAKER IN NEMA TYPE 1 ENCLOSURE BETWEEN PANEL PA1 AND PANEL DP-1 FOR DISCONNECTION OF PHASE A, B, AND NEUTRAL. 3-POLE SHUNT TRIP BREAKER SHALL BE GENERAL ELECTRIC CATALOG NO. SEHA36AT0060 OR APPROVED EQUAL. REFER TO NEC 2005, ARTICLE 514. EMERGENCY SHUTOFF MUST BE MANUALLY RESET BY RESETTING SHUNT TRIP CIRCUIT BREAKER.
3. INSTALL SHUNT TRIP MUSHROOM HEAD PUSH BUTTON, LED-ILLUMINATED WITH POLYCHROMATIC GUARD, PUSH/TWIST RELEASE BUTTON. PROVIDE NAMEPLATE "FUEL ISLAND EMERGENCY POWER OFF". THE EMERGENCY STOP SWITCH INSTALLED IN OFFICE AND ON EXTERIOR OF THE BUILDING SHALL BE WIRED IN PARALLEL AND SHALL TRIP THE SHUNT TRIP BREAKER. THE SHUNT TRIP MUSHROOM HEAD PUSH BUTTON SHALL BE SIEMENS CATALOG NO. 52PR8ERA OR APPROVED EQUAL. TWO (2) ARE REQUIRED.
4. BRANCH CIRCUITS EXCEEDING 100 FEET IN LENGTH SHALL BE #10 AWG. WIRING SIZE SHALL BE ADJUSTED AS NECESSARY TO REFLECT VOLTAGE DROP.
5. REMOVE EXISTING 2-POLE CIRCUIT BREAKER IN PANEL PA1-18,19 AND REPLACE WITH 50 AMP, 2-POLE CIRCUIT BREAKER. THE CIRCUIT BREAKER SHALL BE COMPATIBLE WITH THE EXISTING PANEL.
6. THE CONTRACTOR SHALL REMOVE ALL CIRCUITS THAT ARE CURRENTLY INSTALLED ON PANEL PA1 THAT ARE ASSOCIATED WITH THE FUEL DISPENSING SYSTEM AND INSTALL CIRCUITS ON PANEL DP-1 AS INDICATED ABOVE IN THE PANEL SCHEDULE. CIRCUIT BREAKERS FOR THE EQUIPMENT BEING REMOVED FROM PANEL PA1 SHALL REMAIN AS SPARE. THE CONTRACTOR SHALL ENSURE THAT THE ALL CIRCUITS THAT WILL REMAIN ON PA1 ARE BALANCED IN ACCORDANCE TO SPECIFICATION 262416. THE CONTRACTOR SHALL PROVIDE A TYPED DIRECTORY FOR PANEL PA1.



**TANK MONITORING SYSTEM
BLOCK DIAGRAM**

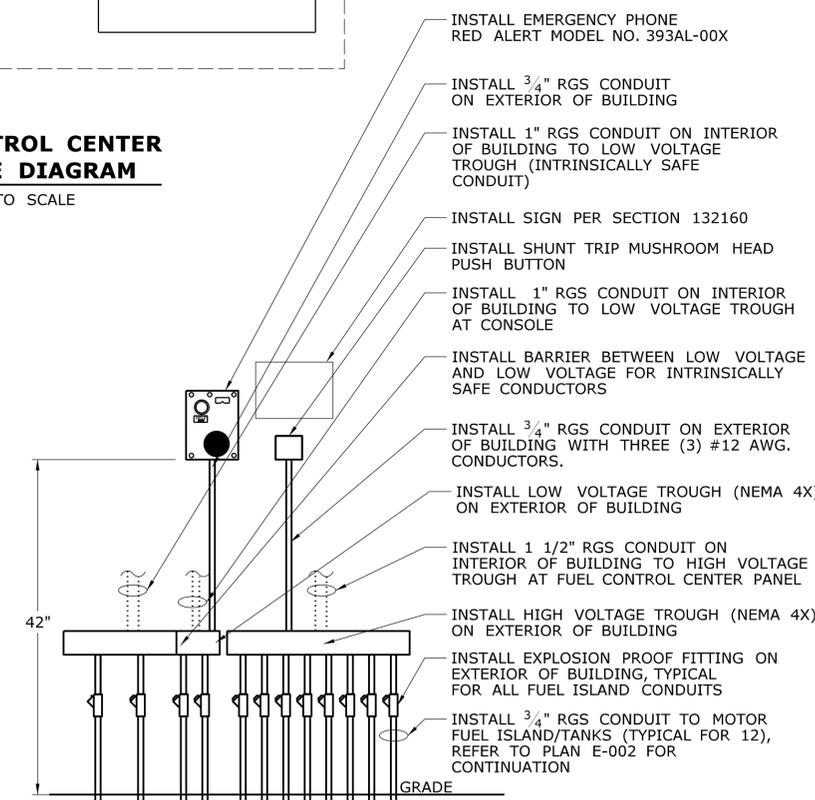
NOTE: INSTALL SCHEDULE 40 STEEL PIPE OF LENGTH REQUIRED IN TOP OF TANK TO ACCOMMODATE IN-TANK PROBE.



**FUEL CONTROL CENTER
ONE LINE DIAGRAM**
NOT TO SCALE

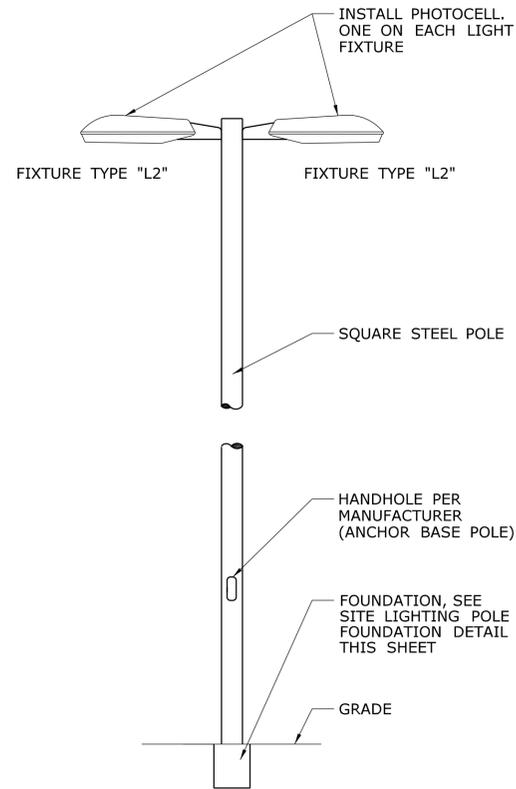
CKT. NO.	DIRECTORY	THWN CONDUCTOR SIZE (AWG.)	QUANTITY INCLUDING GROUND
1	SHUNT TRIP CIRCUIT	12	3
3	TANK MONITORING S.	12	5
5	FUEL MASTER	12	3
7	FUEL ISLAND LIGHT	10	3
2,4	DIESEL PUMP	10	3
6,8	UNLEADED PUMP	10	3

CONDUCTOR SCHEDULE
NOT TO SCALE



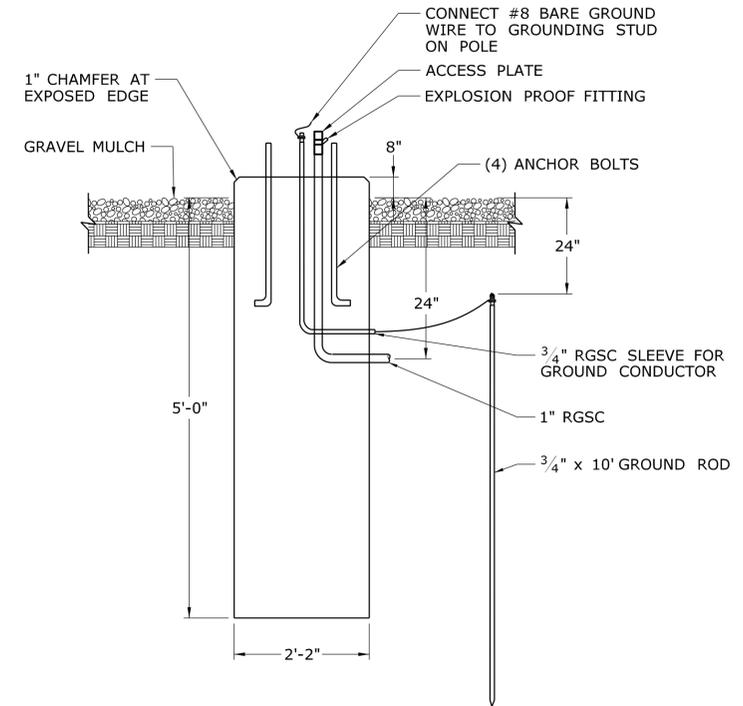
EXTERIOR TROUGH DETAIL
NOT TO SCALE

	DESIGNER/DRAFTER: SKW	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT	TOWN: CANTERBURY	PROJECT NO. 22-105
	CHECKED BY: JMK	 OFFICE OF ENGINEERING	APPROVED BY: _____ DATE: _____		DRAWING TITLE: PANELBOARD SCHEDULE AND ONE-LINE DIAGRAMS	DRAWING NO. E-006
REV. DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 1/17/2013	Filename: ...FD_MSH_ELE_022_0105_E006.dgn		SHEET NO. 07.09



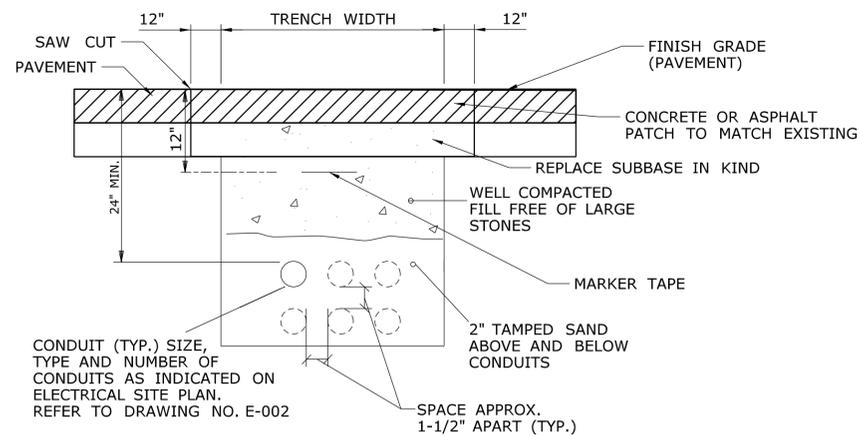
ISLAND TWIN LIGHT FIXTURE DETAIL NO. 1

NOT TO SCALE



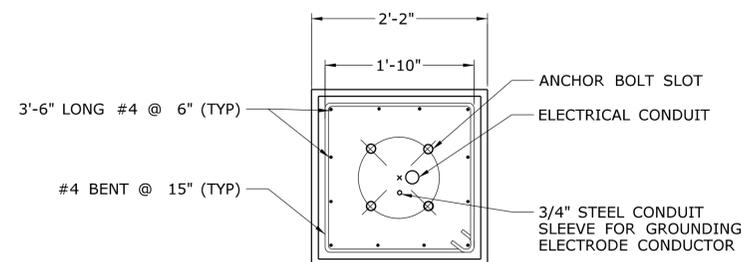
ISLAND LIGHT POLE FOUNDATION DETAIL NO. 2

NOT TO SCALE



CONDUIT TRENCH DETAIL NO. 3

NOT TO SCALE



NOTE: FACTORY SUPPLIED TEMPLATES MUST BE USED WHEN SETTING ANCHOR BOLTS, FIELD VERIFY DIMENSIONS BEFORE CONSTRUCTION.

SITE LIGHTING POLE BASE PLATE NO. 4

NOT TO SCALE

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 1/17/2013				