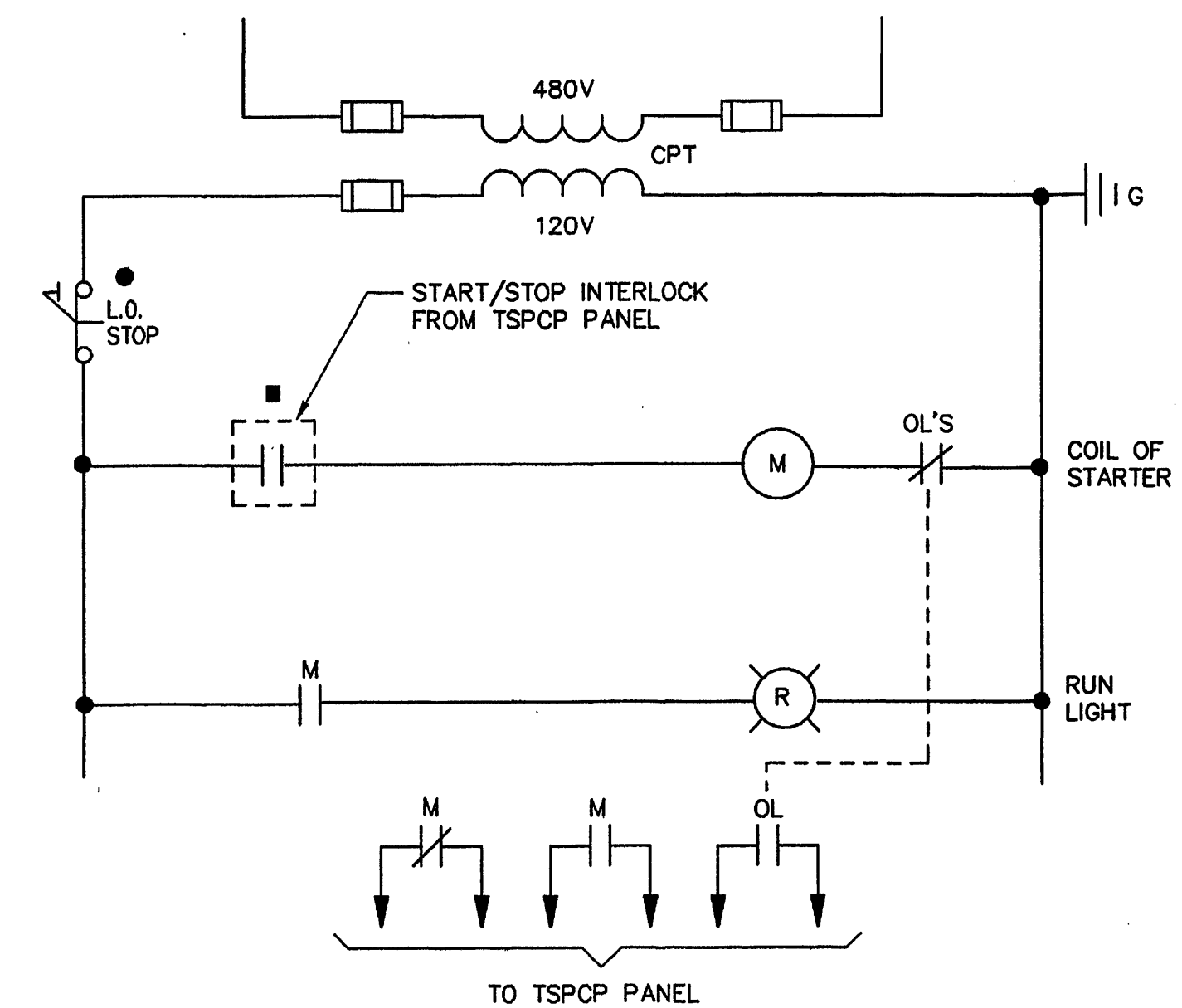
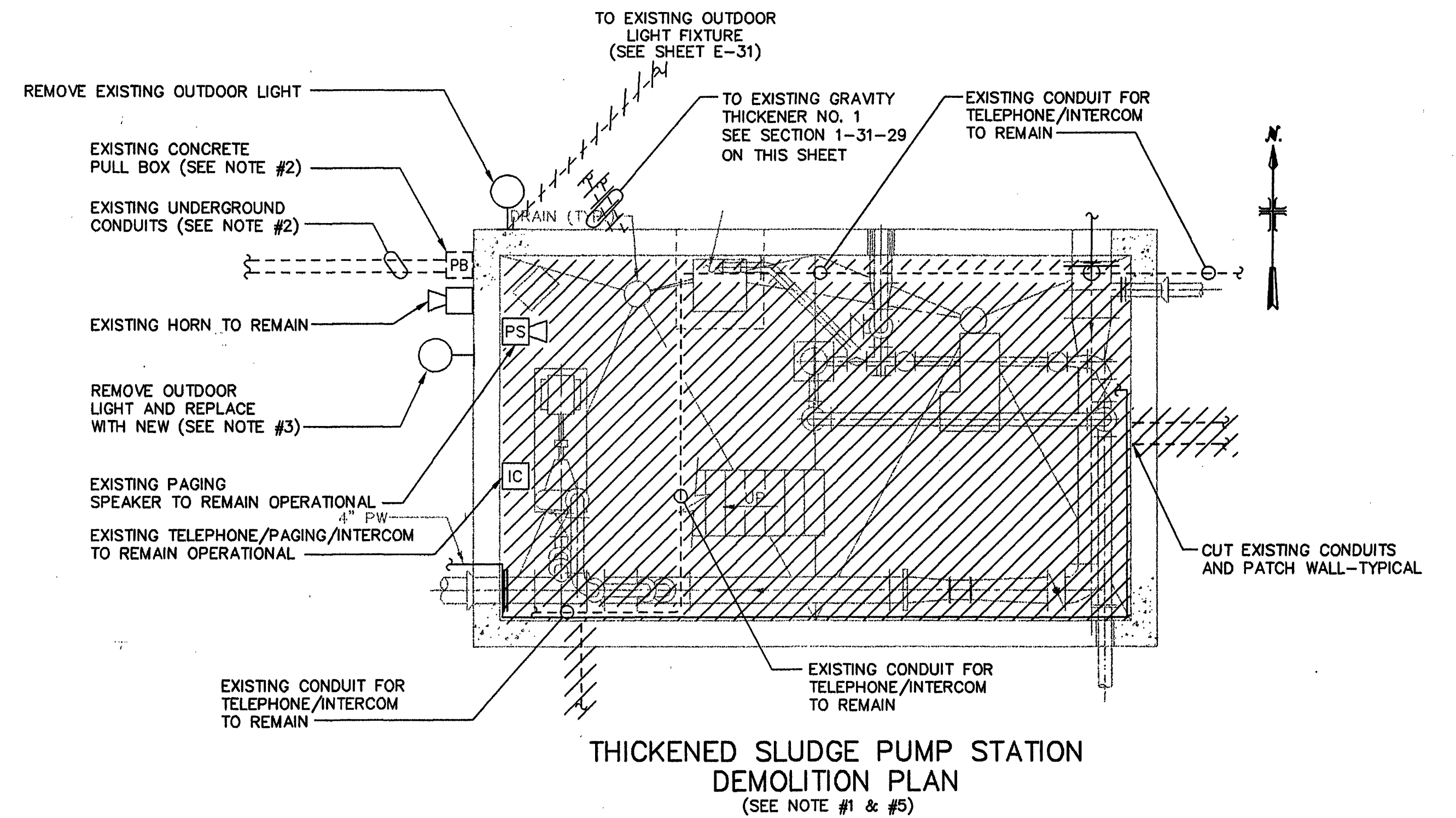
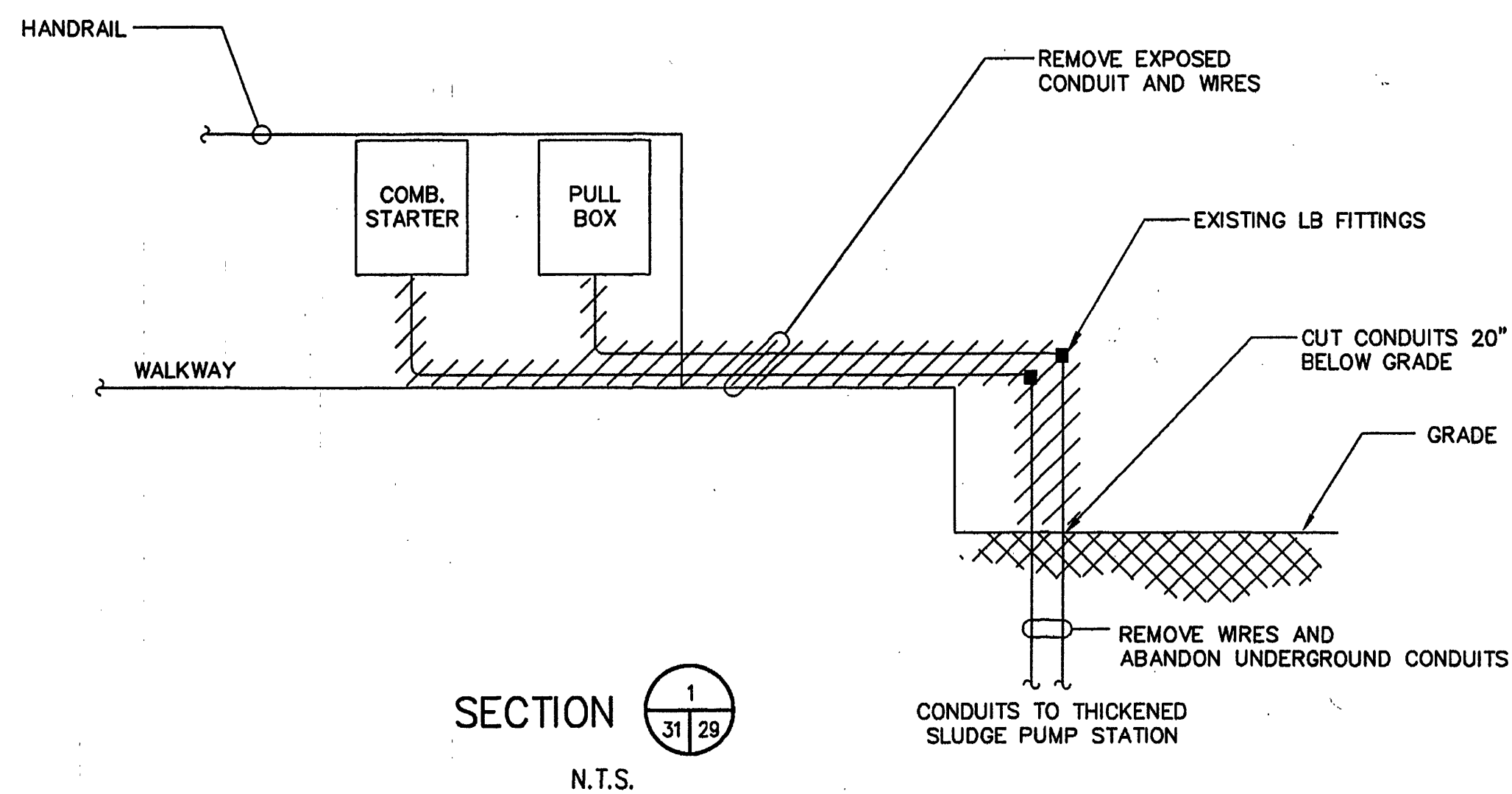


NOTES:

- CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT, INSTRUMENTS, LIGHTING FIXTURES, ASSOCIATED SWITCHES, CONDUIT AND WIRE INSIDE THE PUMP STATION EXCEPT FOR THE PAGING SPEAKER AND THE TELEPHONE/INTERCOM AND ASSOCIATED CONDUIT, WIRES AND ACCESSORIES. THE SPEAKER AND TELEPHONE/INTERCOM ARE TO REMAIN OPERATIONAL.
- EXISTING PULL BOX IS FOR 120 VOLT AND 480 VOLT POWER FROM THE BASIN CONTROL HOUSE TO THE THICKENED SLUDGE PUMP STATION. FEEDERS AND PULL BOX SHALL BE REMOVED IN A STAGED SEQUENCE. INITIALLY THE POWER TO THE EXISTING GRAVITY THICKENER NO. 1 (FED VIA THESE FEEDERS) SHALL REMAIN UNTIL THE NEW POWER FROM POWER PANEL PP-1 RE-FEEDS GRAVITY THICKENER NO. 1. AFTER GRAVITY THICKENER NO. 1 IS RE-FED AND OPERATIONAL, CONTRACTOR SHALL (FIELD DETERMINE THE PANEL'S AND CIRCUIT NUMBERS IN THE BASIN CONTROL HOUSE FOR THE EXISTING FEEDERS) DISCONNECT AND REMOVE WIRING FROM PANEL AND EXISTING CONDUITS AT THICKENED SLUDGE PUMP STATION AND LABEL CIRCUIT BREAKERS AS SPARE. REMOVE EXISTING PULL BOX AND ALL EXPOSED CONDUITS ASSOCIATED WITH THESE FEEDERS AND ABANDON EXISTING UNDERGROUND CONDUITS IN PLACE. PRIOR TO NEW POWER TO GRAVITY THICKENER NO. 1 FROM POWER PANEL PP-1 BEING INSTALLED CONTRACTOR MAY REMOVE ALL CONDUIT AND WIRE AS OUTLINED IN NOTE #1 ABOVE THAT DOES NOT EFFECT THE OPERATION OF GRAVITY THICKENER NO. 1
- CONTRACTOR SHALL REMOVE EXISTING OUTDOOR LIGHT, CONDUIT AND WIRES AND REPLACE WITH NEW IN IT'S PLACE. PROVIDE ALL NEW CONDUIT AND WIRING TO NEW LIGHT.
- TEMPORARY POWER:
 - UTILIZE EXISTING POWER SOURCES FOR CONSTRUCTION PURPOSES UNTIL NEW POWER PANEL PP-1 IS INSTALLED AND ENERGIZED.
- CONTRACTOR SHALL VERIFY IN THE FIELD ALL CONDUIT RUNS PRIOR TO DEMOLITION WORK. EXTEND AND RECONNECT EXISTING CONDUITS AS REQUIRED.

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD KVA	KVA PER LEG		LOAD KVA	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
				A	B				
1	20	PUMP STATION LIGHTING	0.72	1.64		1.00	CONTROL PANEL TSPPC POWER	20	2
3	20	PUMP STATION RECEPTACLES	0.72		1.02	0.30	OUTDOOR LIGHTING-GRAVITY THICKENER #1	20	4
5	20	EXHAUST FAN TS-EF-1 (VIA ATC PANEL)	0.70	1.10		0.40	OUTDOOR LIGHTING-GRAVITY THICKENER #2	20	6
7	20	SUPPLY FAN TS-SF-1 (VIA ATC PANEL)	1.20		1.30	0.10	FLOW TRANSMITTER FIT-104	20	8
9	20	PANEL ATC-1	0.75	0.75		-	SPARE	20	10
11	20	INSTRUMENTS	0.75		1.65	0.90	SUMP PUMP RECEPTACLE IN EMH#8	20	12
13	20	VALVE ACTUATORS	-	-		-	SPARE	20	14
15	20	SPARE	-	-		-	SPARE	20	16
17	20	SPARE	-	-		-	SPARE	20	18
19	20	SPARE	-	-		-	SPARE	20	20
21	-	SPACE	-	-		-	SPACE	-	22
23	-	SPACE	-	-		-	SPACE	-	24
MINI-POWER CENTER LIGHTING PANEL MP-2 LOCATION: THICKENED SLUDGE PUMP STATION BUILDING: THICKENED SLUDGE PUMP STATION			TOTAL KVA	3.49	3.97	SERVICE CHARACTERISTICS: 120/240 VOLT - 1 PHASE - 3 WIRE - 60 Hz PROVIDE MAIN BREAKER & SOLID NEUTRAL & GROUND BUS			
			GRAND CONNECTED TOTAL KVA		7.43				



THICKENED SLUDGE PUMP #1

1. TYPICAL FOR THICKENED SLUDGE PUMP #2 & #3.
ALL ITEMS SHOWN ON CONTROL SCHEMATICS ARE LOCATED IN COMBINATION STARTER ENCLOSURE(S) UNLESS NOTED OTHERWISE.

MALCOLM PIRNIE
11832 Rock Landing Drive, Suite 400
Newport News, Virginia 23606

REVISIONS				REMARKS
NO.	BY	DATE	REVISION	
1	ARB	JAN, 2000	RECORD DRAWING	

DES - GJM
DWN - GJM
CKD - TK/FAS



CITY OF ROANOKE, VIRGINIA
WATER POLLUTION
CONTROL PLANT
UPGRADE AND EXPANSION

GRAVITY THICKENER AND THICKENED SLUDGE PUMP STATION
DEMOLITION PLAN AND SCHEMATICS

SCALE: 3/8"=1'-0"

COPYRIGHT © 1997
MALCOLM PIRNIE, INC.
DATE MAY 1997
E SHEET 29 OF 36
CAD REF. NO. 0060E706