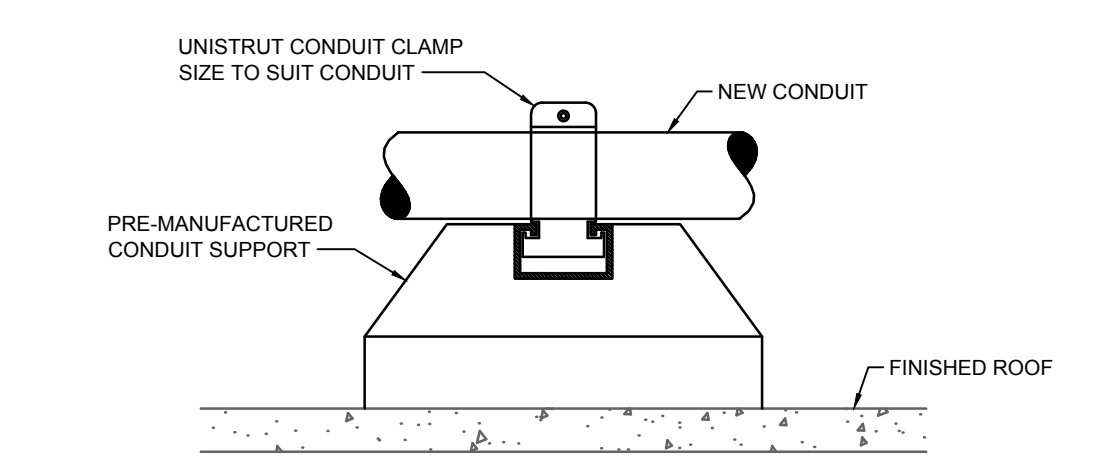
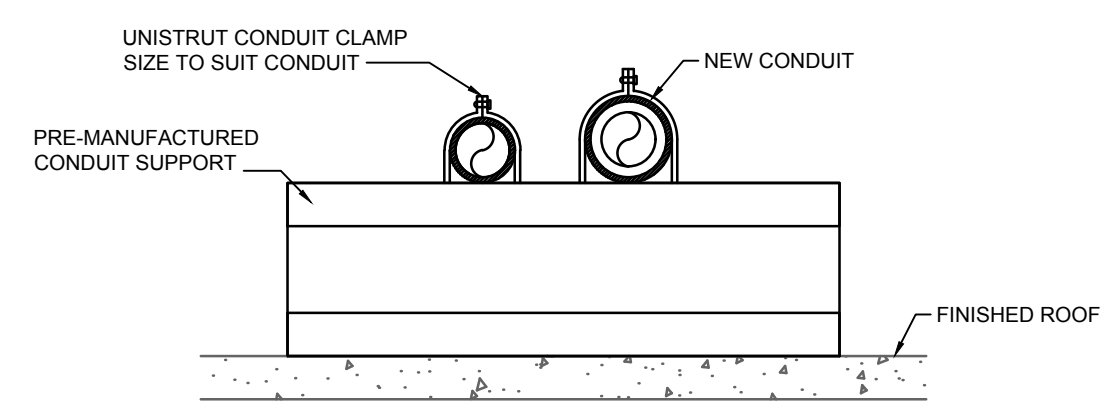


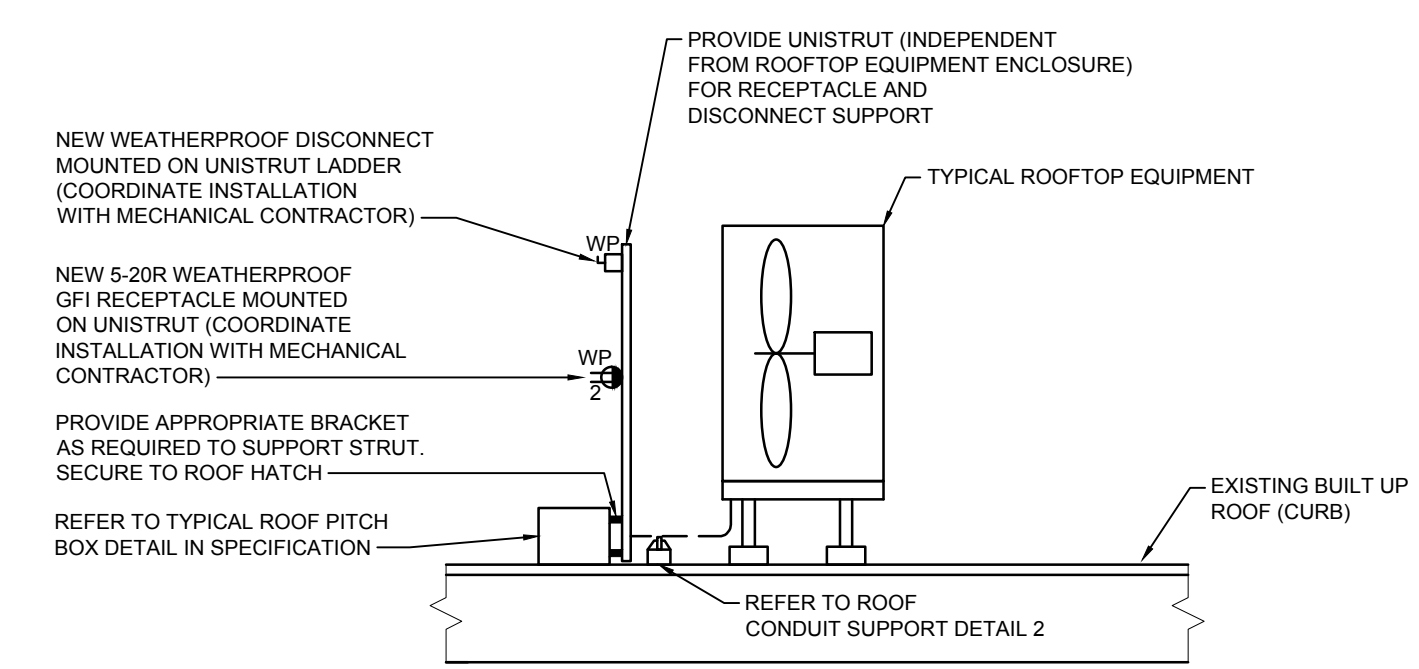
**1 PARTIAL SINGLE LINE DIAGRAM**  
E3.1 SCALE: NTS

PANEL: PNL EE FED FROM: DIST #1		LOCATION: MAINTENANCE GARAGE LOCATION: ELECTRICAL ROOM									
Designation	Load (VA)	Ckt. No.	Trk. No.	Phase	Ckt. No.	Trk. No.	Load (VA)	Designation	Load (VA)	Ckt. No.	Trk. No.
EXISTING CIRCUIT		20A	3P	1 A	2	30A	3P	EXISTING CIRCUIT		3	4
				3 B	4					5	6
				5 C	6					7 A	8
EXISTING CIRCUIT		40A	2P	7 A	8	15A	2P	EXISTING CIRCUIT		9 B	10
										11 C	12
EXISTING CIRCUIT		40A	2P	11 C	12	15A		EXISTING CIRCUIT		13 A	14
										15 B	16
EXISTING CIRCUIT		15A		15 B	16	15A		EXISTING CIRCUIT		17 C	18
										19 A	20
EXISTING CIRCUIT		20A	2P	19 A	20	15A	2P	EXISTING CIRCUIT		21 B	22
										23 C	24
EXISTING CIRCUIT		20A		21 B	22	15A		EXISTING CIRCUIT		25 A	26
										27 B	28
HEAT TRACE CONTROLLER MAINTENANCE GARAGE	200	15A	2P	25 A	26	15A	500	HRU-3 CONTROLLER MAINTENANCE GARAGE		29 C	30
	200			27 B	28	15A	500	HRU-4 CONTROLLER MAINTENANCE GARAGE		31 A	32
GAS DETECTION SENSORS MAINTENANCE GARAGE	840	15A		29 C	30	20A	1000 2R	RECEPTACLES - GFI ROOF		33 B	34
GAS DETECTION SENSORS MAINTENANCE GARAGE	840			31 A	32					35 C	36
				33 B	34					37 A	38
				35 C	36					39 B	40
				37 A	38					41 C	42
				39 B	40						
				41 C	42						
VOLTAGE:	120/208V, 3Ø, 4W	LOADS -		PH A	1540						
CAPACITY:	225A			PH B	700						
MOUNTING:	SURFACE			PH C	1840						
REMARKS:	EXISTING	TOTAL			4080						

ONLY CALCULATED LOADS FOR NEW ARE SHOWN.  
CONTRACTOR TO UPDATE PANEL SCHEDULE ACCORDINGLY. ALL CIRCUIT NUMBERS ARE ARBITRARY.  
CONTRACTOR SHALL USE CIRCUITS MADE AVAILABLE AFTER DEMOLITION.  
CONTRACTOR TO UPDATE CIRCUIT LABELS ON ALL OUTLETS TO MATCH NEW PANEL SCHEDULE.  
PROVIDE NEW BREAKERS AS REQUIRED INDICATED IN BOLD. BREAKERS TO MATCH EXISTING IN ALL RESPECTS.



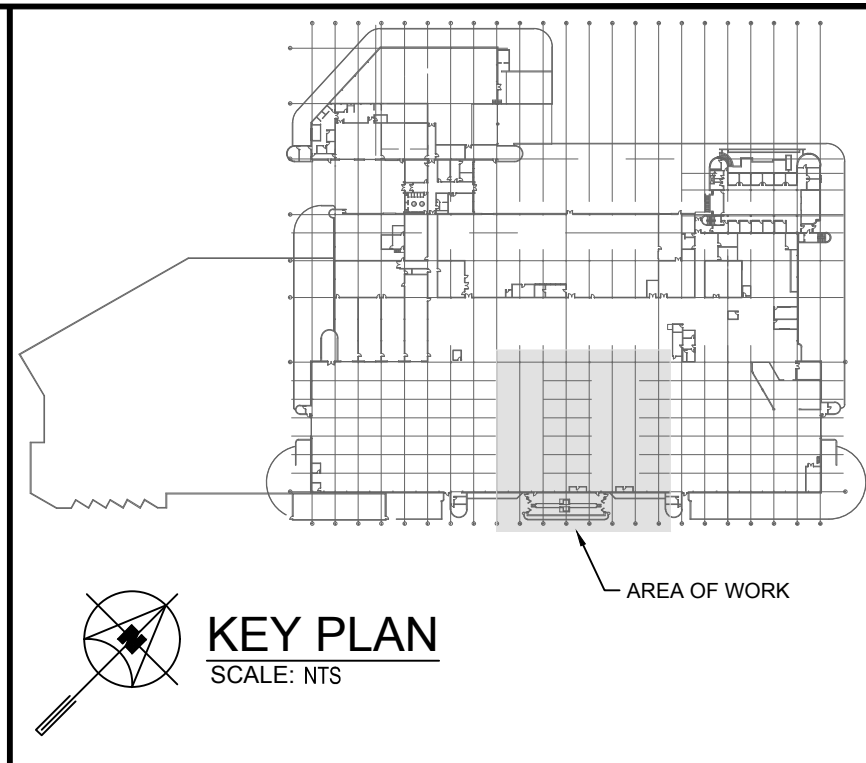
**2 TYPICAL ROOF CONDUIT SUPPORT DETAIL**  
E3.1 SCALE: NTS



**3 TYPICAL ROOF RECEPTACLE AND DISCONNECT MOUNTING DETAIL**  
E3.1 SCALE: NTS

**MOTOR SCHEDULE**

MOTOR No.	NAME	LOCATION	H.P. (kW)	VOLTS	STARTER & ACC.				CIRCUIT	STARTER LOCATION	FEEDER	REMARKS
					MAN	MAG	PL	HOA				
HRU-3	HEAT RECOVERY UNIT	LOWER ROOF	70A MOCPP 45.7 FLA	575V 3Ø					CDP-A	NEAR UNIT	3#4	PACKAGED CONTROLS SINGLE POINT CONNECTION.
HRU-4	HEAT RECOVERY UNIT	LOWER ROOF	70A MOCPP 45.7 FLA	575V 3Ø					CDP-A	NEAR UNIT	3#4	PACKAGED CONTROLS SINGLE POINT CONNECTION.
IH-23	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-24	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-29	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-32	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-33	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-34	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-35	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-36	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-37	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-40	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT
IH-41	INFARED HEATER	G TRACK	1 FLA	120V 1Ø	✓				EXST	NEAR UNIT	2#12	THERMOSTAT CONTROL BY MECH. RE-USE EXISTING CIRCUIT



**GENERAL NOTES**

- A. ALL WIRE INSTALLED IN CONDUIT UNLESS NOTED OTHERWISE.
- B. PROVIDE SEPARATE BONDING CONDUCTORS FOR ALL NEW FEEDERS.

**KEY NOTES**

- 1. SET LONG TIME AT 70A.

6			
5			
4			
3			
2			
1			
0	ISSUED FOR CONSTRUCTION	AS	23/01/25
NO.	Description	BY	DDMMYY

**ENGINEERS GEOSCIENTISTS**  
MANITOBA  
Certificate of Authorization  
**SMS Engineering Ltd.**  
No. 166

**SMS Engineering**  
770 Bradford Street Winnipeg, Canada (204) 775-0291  
24-256-01



Project Title  
**TRANSIT MAINTENANCE AND REPAIR BUILDING MECHANICAL UPGRADE - CENTRE HIGH BAY**  
WINNIPEG MANITOBA

Drawing Title  
**PARTIAL SINGLE LINE DIAGRAM, ELECTRICAL DETAILS AND ELECTRICAL SCHEDULES**

Drawn By	WPD	Checked By	BG	Approved By	AS
Scale	AS INDICATED	Date	DECEMBER 2024	Project No.	24-256-01
Revision Number	0	Drawing Number	E3.1	Sheet Order	5 OF 5

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