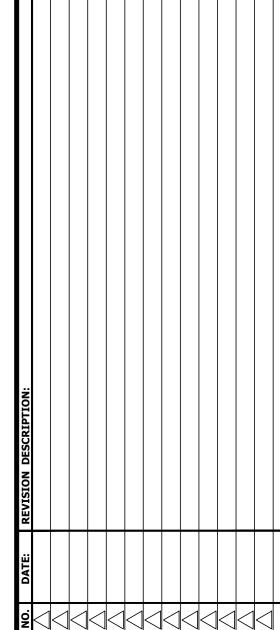


Denver, Colorado | Topeka, Kansas| Kansas Cit www.techelectronics.com

1.800.TECH.789

12/29/2021



DESCRIPTION

INITIATION & NOTIFICATION, DETAILS & BATTERY CALCULATIONS

413 NW MURRAY RD LEE'S SUMMIT, MISSOURI 64081

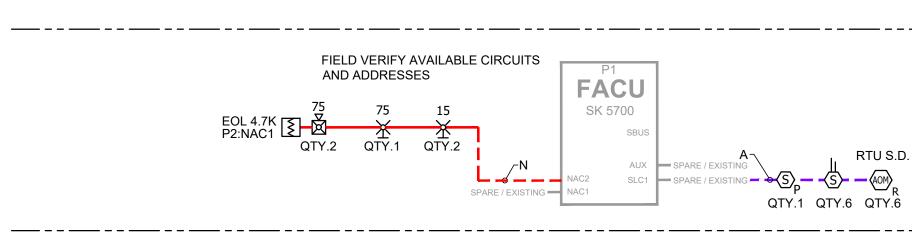
FIRE ALARM SYSTEM FOR:

FIT MUSCLE AND JOINT CLINIC

FIRE ALARM SYMBOL LEGEND		
SYMBOL	DESCRIPTION	PART NUMBER
FACU	FIRE ALARM CONTROL UNIT	5700
FAC	CELLULAR DIALER	EXISTING
⟨S⟩ _P	INTELLIGENT ADDRESSABLE PHOTO DETECTOR	SK-PHOTO-W
= \$	ADDRESSABLE DUCT DETECTOR	SK-DUCT
(AOM) _R	ADDRESSABLE RELAY MODULE	SK-RELAY
⊠ RTS	REMOTE TEST STATION	RTS151
⋉ 15	STROBE, STANDARD CD, RED	SRL
⊠⊲ ₁₅	2 WIRE HORN/STROBE, STANDARD CD, RED	P2RL
[\{\}	EOL RESISTOR	REL-4.7K

SYMBOLS SHOWN LIGHTER ARE EXISTING TO REMAIN

FIRE ALARM WIRING LEGEND			
WIRE TYPE	DESCRIPTION	LINE TYPE	
А	SIGNALING LINE - UNSHIELDED #16 TWISTED PAIR		
N	NOTIFICATION - UNSHIELDED #14 PAIR		



RISER DIAGRAM

INSTALLING CONTRACTOR WILL NEED TO PROVIDE ACCURATE AS-BUILT INFORMATION TO TECH ELECTRONICS. THIS SHALL INCLUDE ALL WIRING TYPE AND ROUTING INFORMATION FOR ALL ADDRESSABLE LOOP (SLC), HORN, SPEAKER AND STROBE (NAC) AND ZONE (IDC) CIRCUITS. THE AS-BUILT DRAWINGS SHALL SHOW THE EXACT QUANTITY AND PLACEMENT OF ALL DEVICES AND EACH EXACT DEVICE ADDRESS INSTALLED, IF APPLICABLE. ALL DELETED, ADDED AND CHANGES MUST BE SHOWN.

SHEET REFERENCE

NUMBER

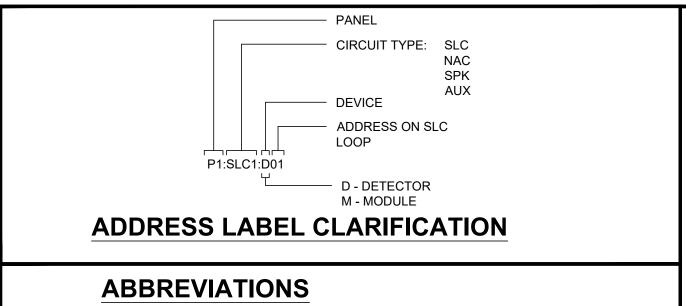
SHEET LEGEND

COVER SHEET, LEGEND & RISER DIAGRAM

SEQUENCE OF OPERATIONS MATRIX

ALL 120VAC POWER SHALL BE NOTED WITH THE CIRCUIT BREAKER NUMBER, SIZE OF BREAKER AND THE LOCATION OF THE CIRCUIT BREAKER PANEL. THE CIRCUIT BREAKER MUST BE LOCKED. ALL ABOVE INFORMATION IS REQUIRED BY AND SHALL BE PROVIDED PER NFPA 72. SEE CURRENTLY ENFORCED ORDINANCE IF NECESSARY.

Refer to the proper device installation instructions for backbox mounting height



AHJ - AUTHORITY HAVING JURISDICTION DD - DUCT DETECTOR DH - DOOR HOLDER DUA- DWELLING UNIT ALARM E- PSD/HD W/ ELEV INTERFACE ELEV1- PRIMARY ELEVATOR RECALL ELEV2- ALTERNATE ELEVATOR RECALL EST- ELEVATOR SHUNT TRIP EXG - EXISTING FH- ELEVATOR FIREHAT FL - FIELD LOCATE

FGS-FIRE PLACE GAS SHUTOFF

FM- FLUSH MOUNT

FSD- FIRE/SMOKE DAMPER KB- KNOX BOX KH- KITCHEN HOOD PIV- SPRINKLER POST INITIATOR VALVE NT- NAC TRIGGER RD- RETURN DUCT RL- RELOCATE RTU- ROOF TOP UNIT SD- SUPPLY DUCT

TS - TAMPER SWITCH

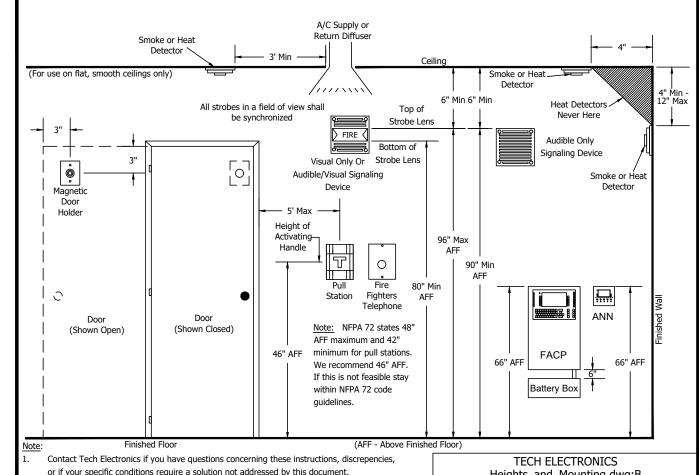
VL - VERIFY LOCATION

WP- WEATHER PROOF

WF - WATERFLOW

GENERAL INSTALLATION NOTES:

- INSTALLATION MUST COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL LAWS, REGULATIONS, CODES, AND SPECIFICATIONS. THIS SYSTEM SHALL BE IN STRICT CONFORMANCE WITH THESE DRAWINGS; 2018 IBC; NFPA 72 2016 EDITION; NFPA 70, 2017 EDITION; AND AHJ.
- WHERE CONDUCTORS ARE RUN IN CONDUIT, USE ONLY APPROVED CABLE WITHIN RACEWAYS, PIPES OR CONDUITS. ALL SHIELDED WIRE MUST BE CONTINUOUS THROUGHOUT CIRCUIT, ALL SHIELDS SHALL BE ISOLATED FROM GROUND, ALL SHIELDS SHALL TERMINATE AT THE FIRE ALARM CONTROL PANEL (FACP) ONLY.
- PER NFPA 72 2016, 17.7.1.11 WHERE DETECTORS ARE INSTALLED FOR SIGNAL INITIATION DURING CONSTRUCTION, THEY SHALL BE CLEANED AND VERIFIED TO BE OPERATING IN ACCORDANCE WITH THE LISTED SENSITIVITY, OR THEY SHALL BE REPLACED PRIOR TO THE FINAL COMMISSIONING OF THE SYSTEM. WHERE DETECTORS ARE INSTALLED BUT NOT OPERATIONAL DURING CONSTRUCTION, THEY SHALL BE PROTECTED FROM CONSTRUCTION DEBRIS, DUST, DIRT, AND DAMAGE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND VERIFIED TO BE OPERATING IN ACCORDANCE WITH THE LISTED SENSITIVITY, OR THEY SHALL BE REPLACED PRIOR TO THE FINAL COMMISSIONING OF THE SYSTEM. WHERE DETECTION IS NOT REQUIRED DURING CONSTRUCTION, DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER ALL OTHER CONSTRUCTION TRADES HAVE COMPLETED CLEANUP.
- ALL FIRE ALARM SYSTEM WIRING SHALL BE CLEAR FROM SHORTS, OPENS AND
- NOTIFICATION CIRCUIT WIRE RUNS ARE CRITICAL. ANY INCREASE IN LENGTH OF WIRE MAY AFFECT CIRCUIT CONFIGURATIONS.



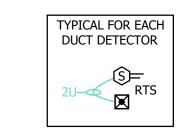
RECOMMENDED MOUNTING HEIGHTS PER CODES AND STANDARDS

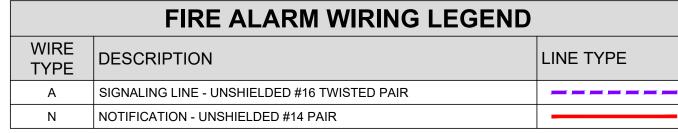
PJ2110270004

Darin Wassinger

12/10/2021 CONSTRUCTION

Heights_and_Mounting.dwg:B





SYSTEM - OUTPUTS

.

A B C D E F G H I J K L M N

PERFORM OPERATION/REPORT DEVICE STATUS

FIRE ALARM CONTROL PANEL AC POWER FAILURE

FIRE ALARM CONTROL PANEL LOW BATTERY

NOTIFICATION APPLIANCE CIRCUIT SHORTED

SEQUENCE OF OPERATIONS MATRIX

*NOTE MATRIX REFLECTS OPERATION OF DEVICE(S) INCLUDED WITH THIS PROJECT ONLY.

SYSTEM - INPUTS SMOKE DETECTOR

OPEN CIRCUIT

GROUND FAULT

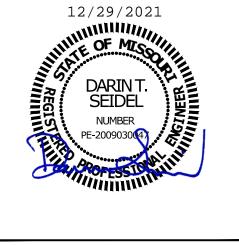
8 ALL OTHER TROUBLES

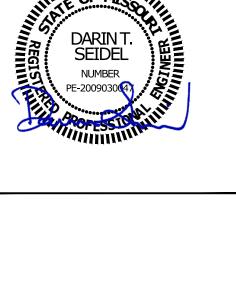
DUCT DETECTOR (AT HVAC UNIT)

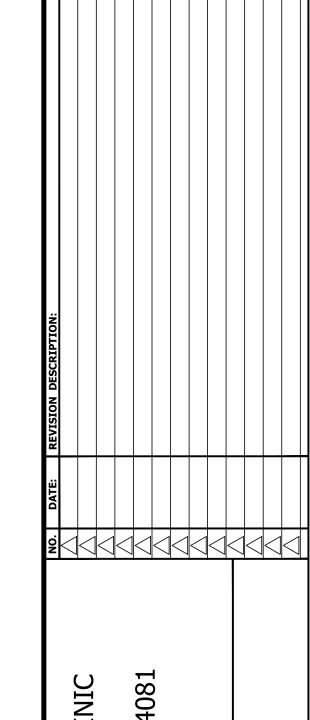


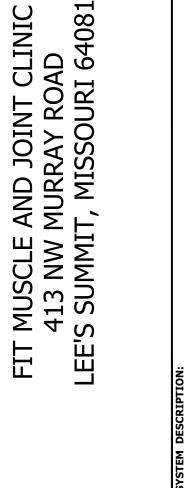








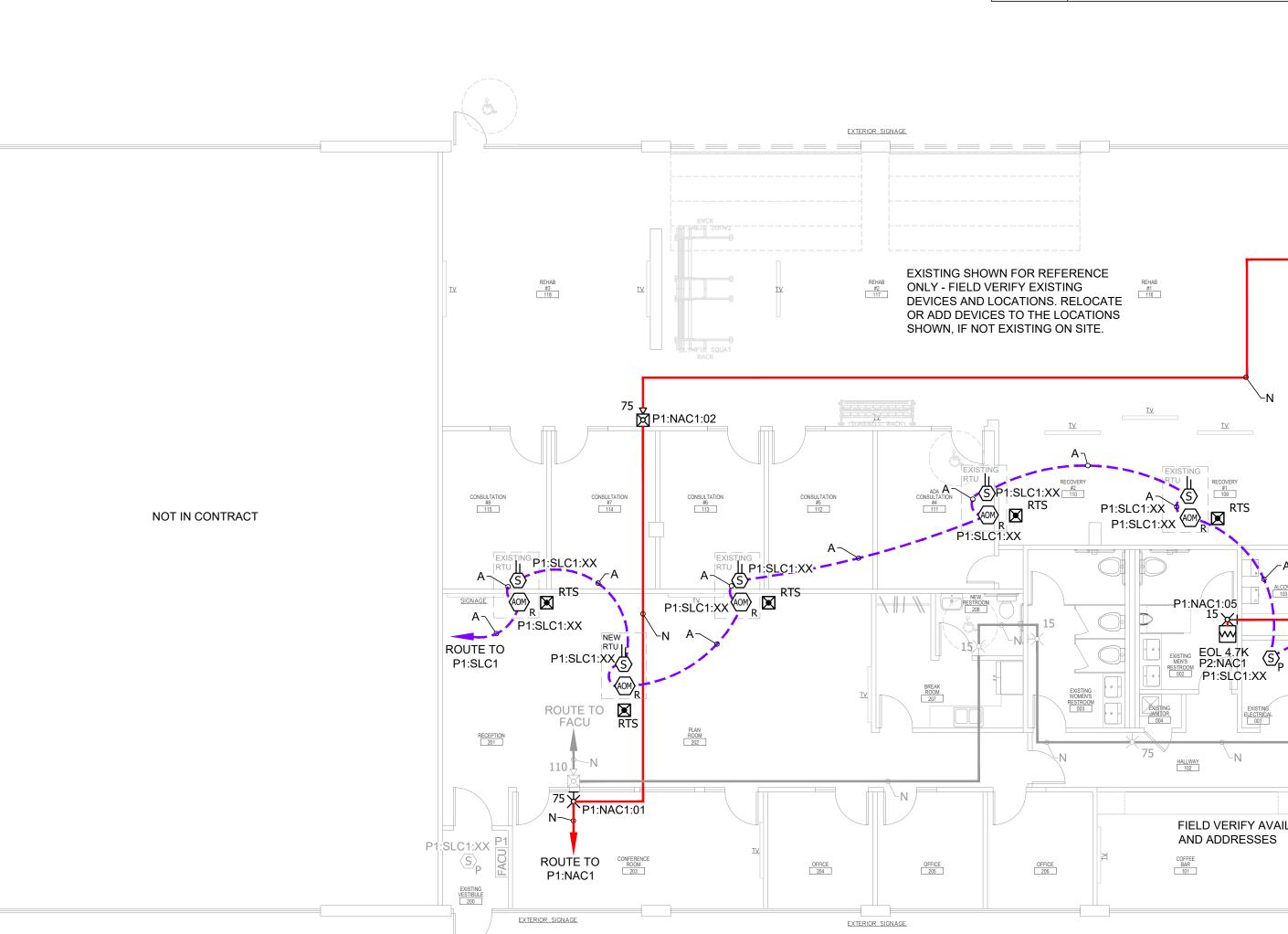


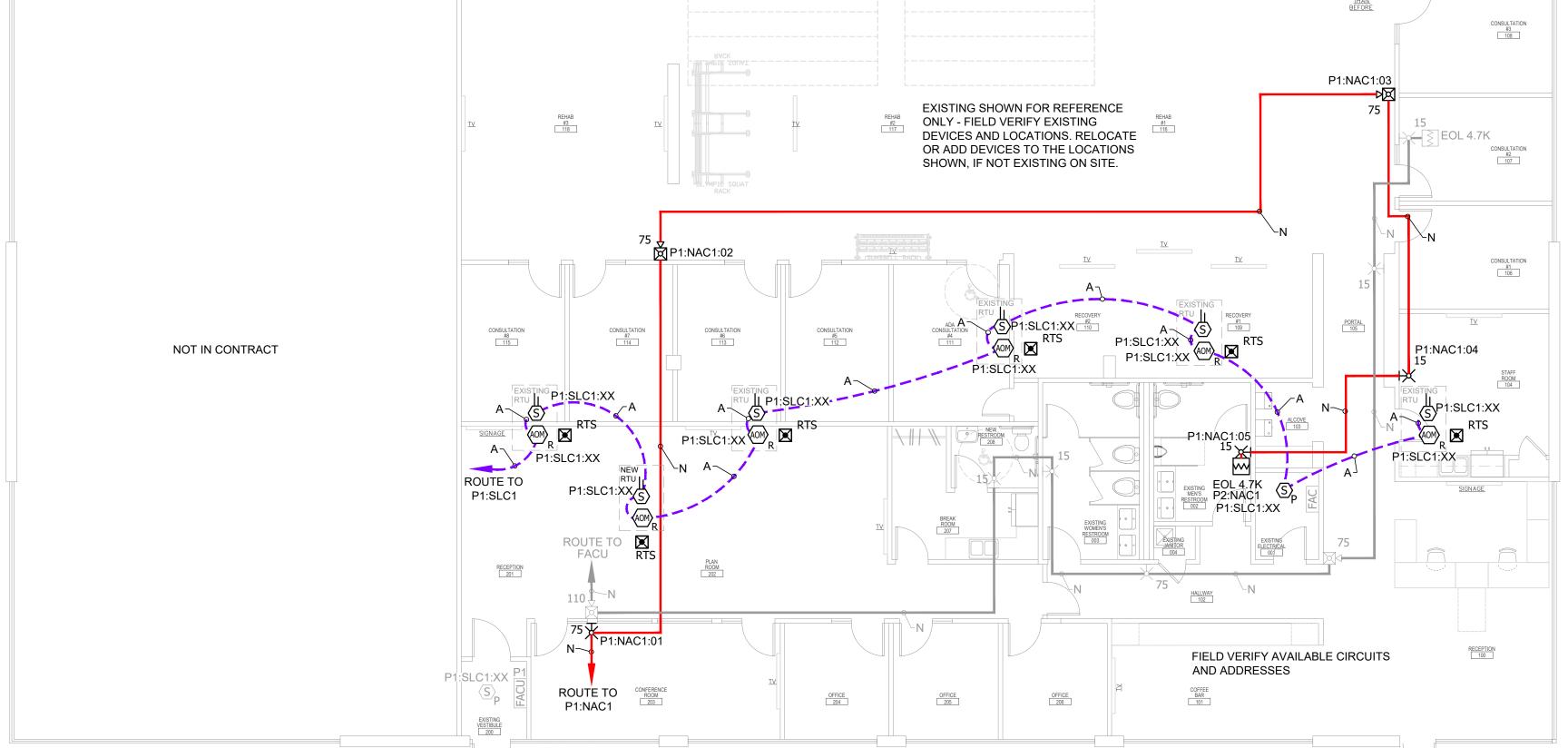


C.DiTaranto FA101

PROJECT JOB#: PJ2110270004

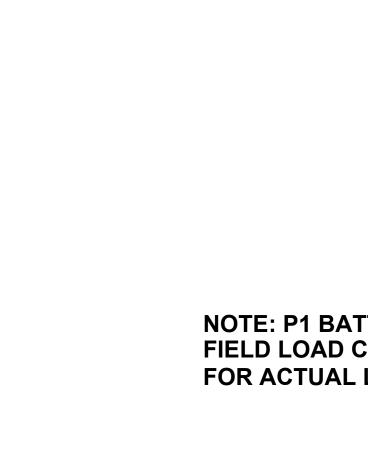
12/10/2021 CONSTRUCTION

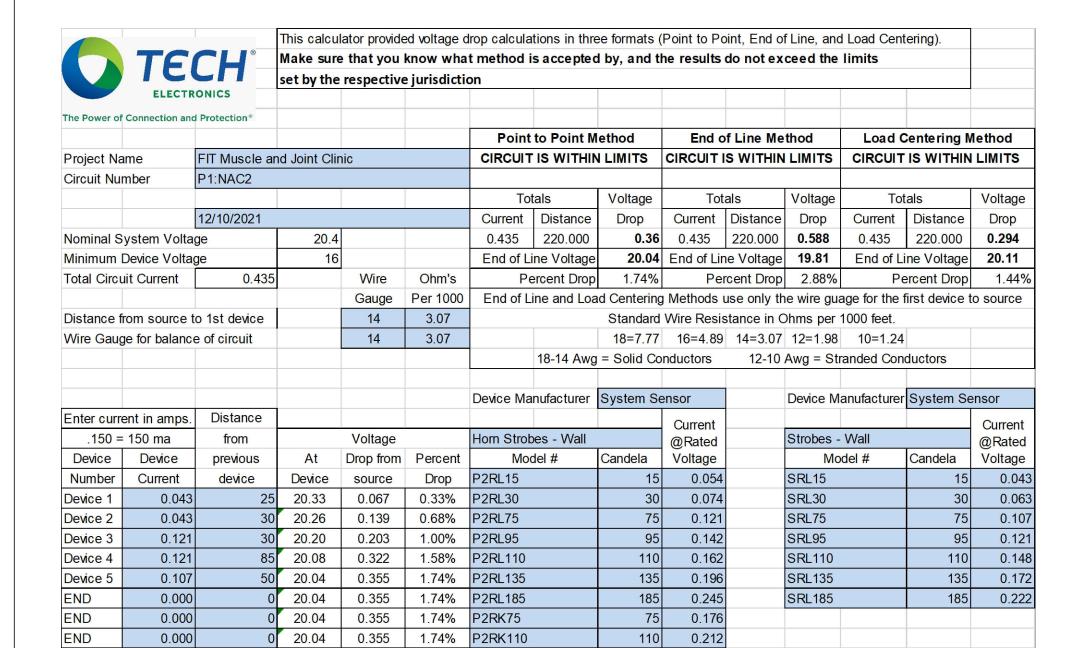






NOTE: P1 BATTERY CALCULATIONS WILL BE BASED ON FIELD LOAD CALCULATIONS, PERFORMED & ADJUSTED FOR ACTUAL LOAD DURING THE AS-BUILT PROCESS





P2R(L)(K) HORN/STROBE

FROM FACP OR NAC SUPPLY OR FROM PREVIOUS DEVICE

SR(L)(K) STROBE

SLC LOOP IN FROM PREVIOUS DEVICE

SLC LOOP OUT TO NEXT

NOTIFICATION CIRCUIT WIRING DETAIL

+ IN / COMM +

End of Line Voltage 20.04

0.435 220.000

Totals

SK-DUCT W/ RTS151

DO NOT LOOP WIRE UNDER TERMINAL 1 OR 2.
BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.

SLC LOOP IN FROM PREVIOUS DEVICE

SLC LOOP OUT

TO NEXT DEVICE

SK-PHOTO

SK-RELAY

MODULE