

PoDI / NHS

FHWA PROJECT OF DIVISION INTEREST (PoDI)?  NO  YES

NATIONAL HIGHWAY SYSTEM?  NO  YES

# DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

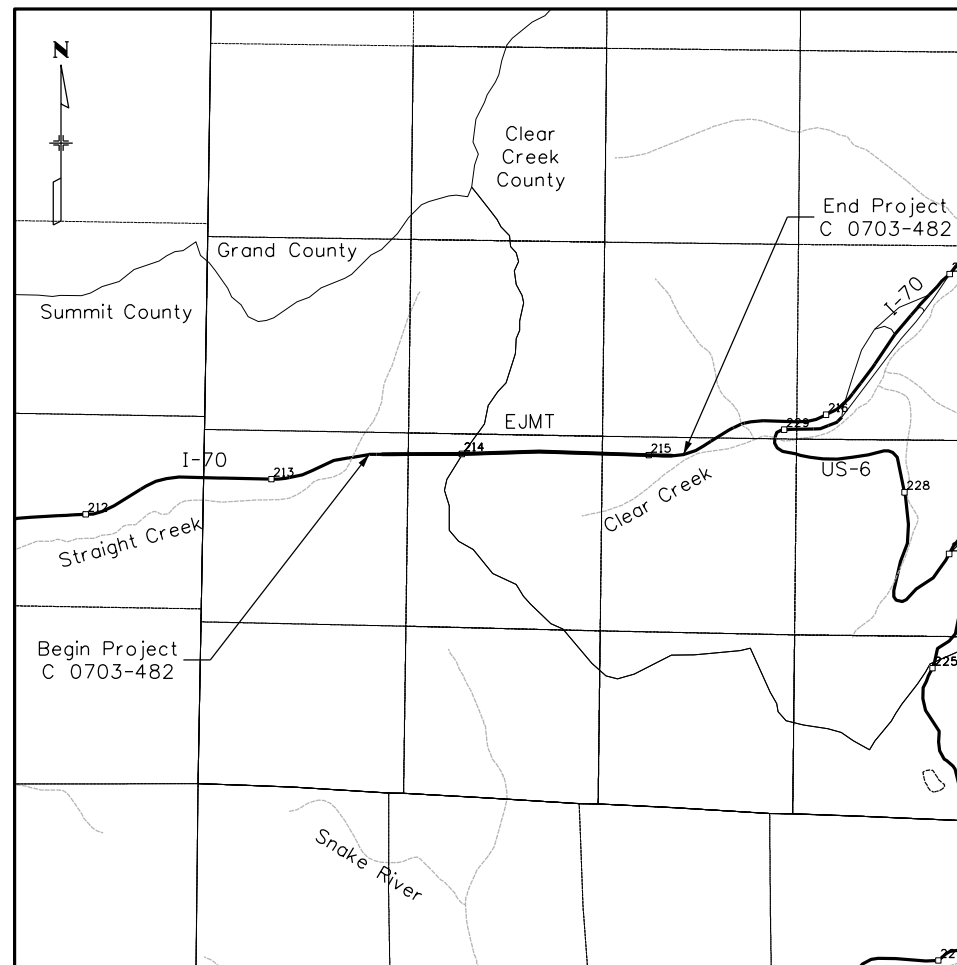
**Related Projects:**  
P. E. UNDER PROJECT:  
Project Number **C 0703-482**  
Project Code: **24210**

**R.O.W. Projects:**  
R.O.W. Project Description

## HIGHWAY CONSTRUCTION BID PLANS OF PROPOSED FEDERAL AID PROJECT NO. C 0703-482 EISENHOWER/JOHNSON MEMORIAL TUNNELS DRAINAGE, PLUMBING, HEAT TRACE CLEAR CREEK COUNTY AND SUMMIT COUNTY CONSTRUCTION PROJECT CODE NO. 24210

TABULATION OF LENGTH & DESIGN DATA		
LOCATION	FEET	
	ROADWAY	MAJOR STR.
BEGIN PROJECT C 0703-482 APPROX. MP 213.5 ON I-70	0	
STRUCTURE F-13-X JOHNSON TUNNEL STRUCTURE F-13-Y EISENHOWER TUNNEL		8,959
END PROJECT C 0703-482 APPROX. MP 215.4 ON I-70	0	
<b>TOTAL</b>	<b>0</b>	<b>8,959</b>
SUMMARY OF PROJECT LENGTH		
	FEET	MILES
ROADWAY (NET LENGTH)	0	0
MAJOR STRUCTURE	8,959	1.70
PROJECT GROSS LENGTH	8,959	1.70

SHEET NO.	INDEX OF SHEETS
1	TITLE SHEET
2	TUNNEL SECTIONS
3	ROADWAY LEVEL PLAN - WEST
4	LOWER LEVEL PLAN - EAST
5-7	HEAT TRACE POWER PLAN
8-12	ELECTRICAL POWER PLAN
13	ELECTRIAL EQUIPMENT LOCATION



**PROJECT LOCATION MAP**

**DRAFT RFP - ADDENDUM #1**

**NOVEMBER 12, 2021**

Print Date: 11/12/2021  
File Name: 24210DES\_TitleSht.dgn  
Horiz. Scale: 1:1 Vert. Scale: As Noted  
Unit Information: XXX  
**ATKINS** 7604 Technology Way, Suite 400  
Denver, CO 80237  
Phone: (303) 221-7275  
Fax: (303) 221-7276

Sheet Revisions		
Date:	Comments	Init.

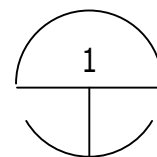
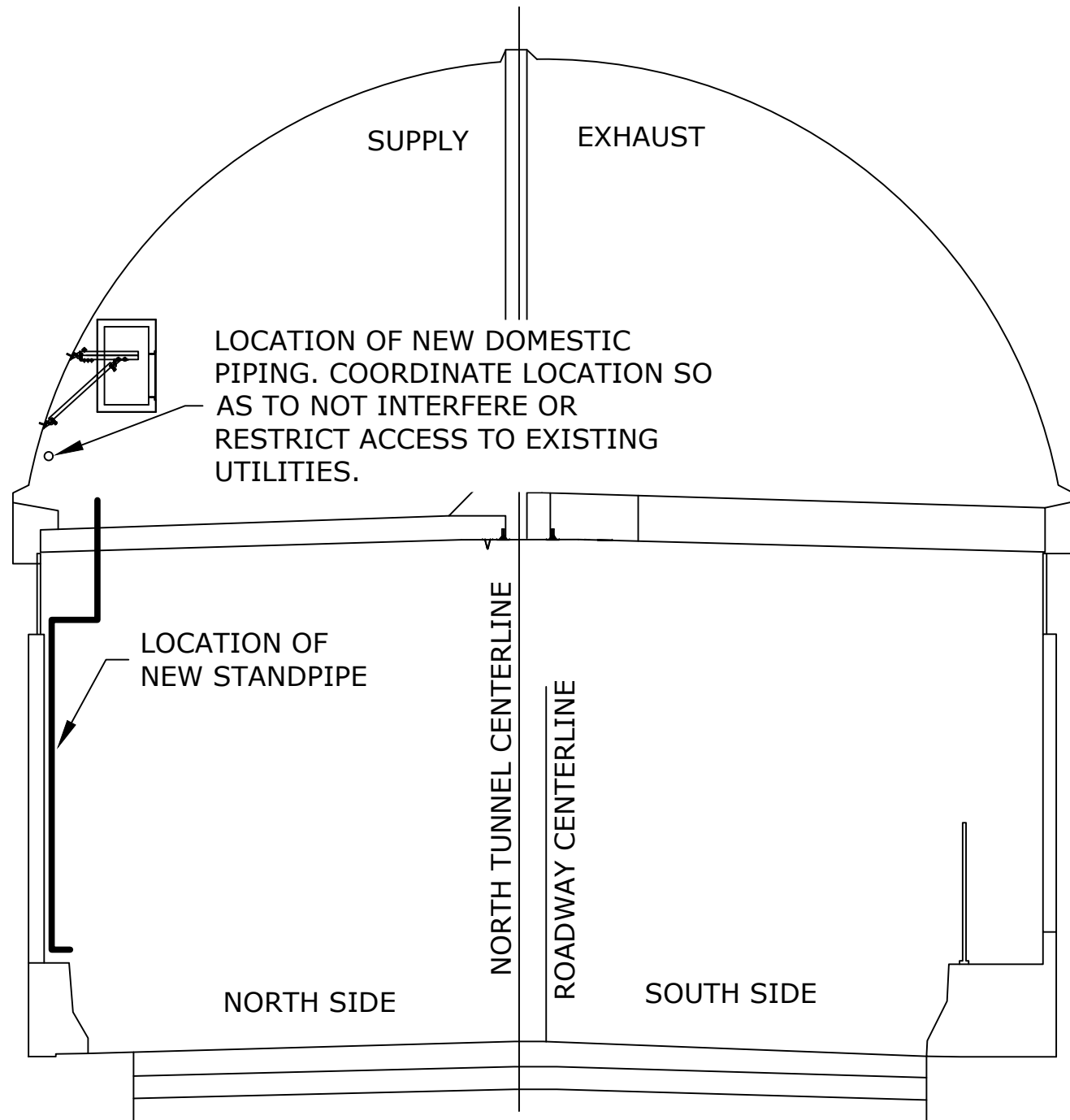
Colorado Department of Transportation  
 2829 W. Howard Pl.  
Denver, CO 80204  
Phone: 303-512-4272  
FAX: 303-757-9886  
Region 1 XXX

**Preliminary**  
No Revisions:  
Revised:  
Void:

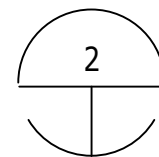
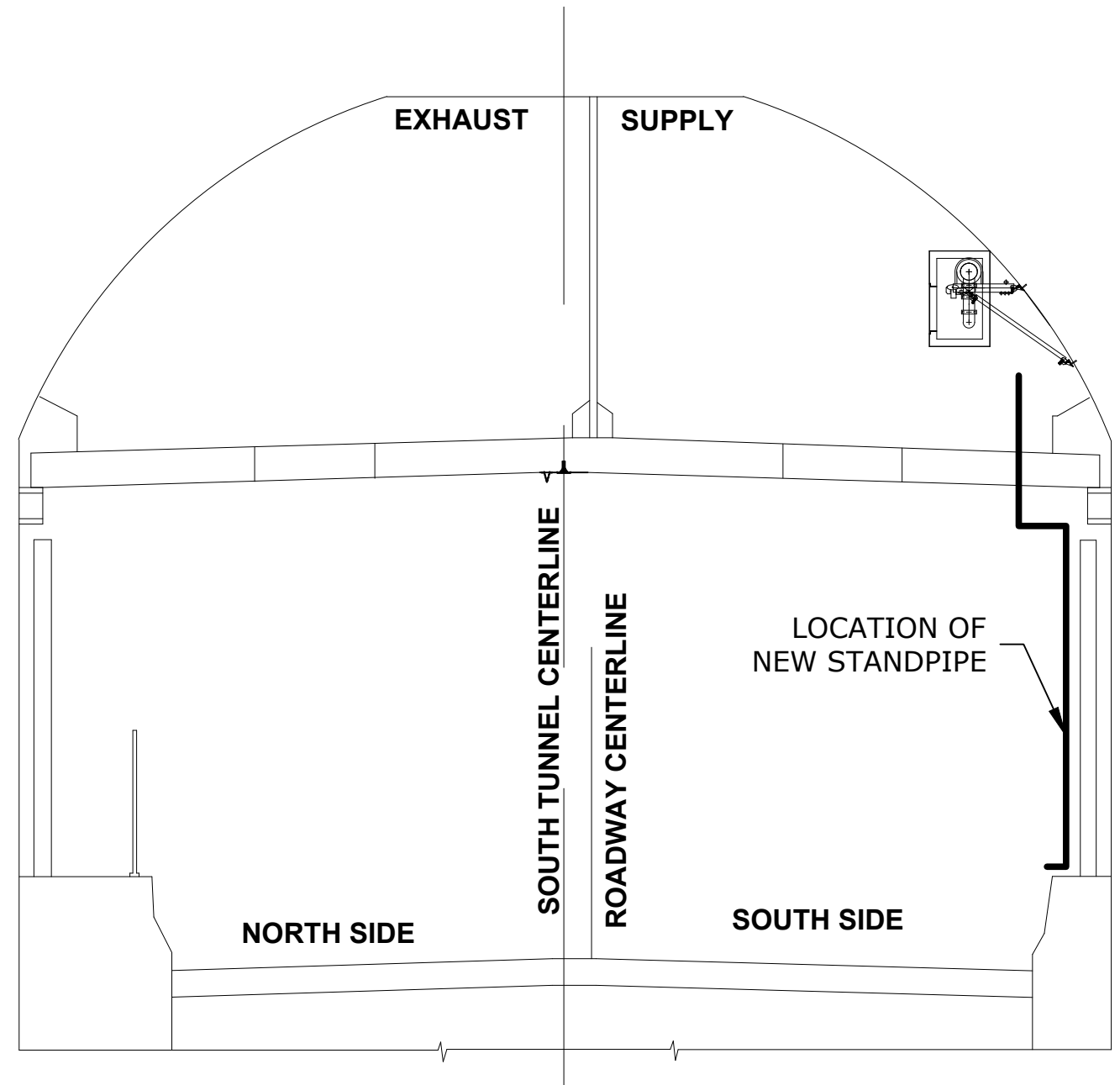
**Contract Information**

Contractor:  
Resident Engineer:  
Project Engineer:  
PROJECT STARTED: / / ACCEPTED: / /  
Comments:

Project No./Code  
C 0703-482  
24210  
Sheet Number 01



1 NORTH TUNNEL SECTION - SCHEMATIC  
SCALE:NTS



2 SOUTH TUNNEL SECTION - SCHEMATIC  
SCALE:NTS

Print Date: \$DATE\$  
File Name: \$FILES\$  
Horiz. Scale: \_\_\_\_\_ Vert. Scale: As Noted  
Unit Information

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation



2829 W. Howard Pl.  
Denver, CO 80204  
Phone: 303-512-4272  
FAX: 303-757-9886

Region 1

XXX

Preliminary

No Revisions: \_\_\_\_\_

Revised: \_\_\_\_\_

Void: \_\_\_\_\_

EJMT DPHT  
TUNNEL SECTION VIEWS  
SCHEMATIC EQUIPMENT LOCATION

Designer: \_\_\_\_\_

Detailer: \_\_\_\_\_

Sheet Subset: \_\_\_\_\_

Structure

Numbers

Subset Sheets: \_\_\_\_\_

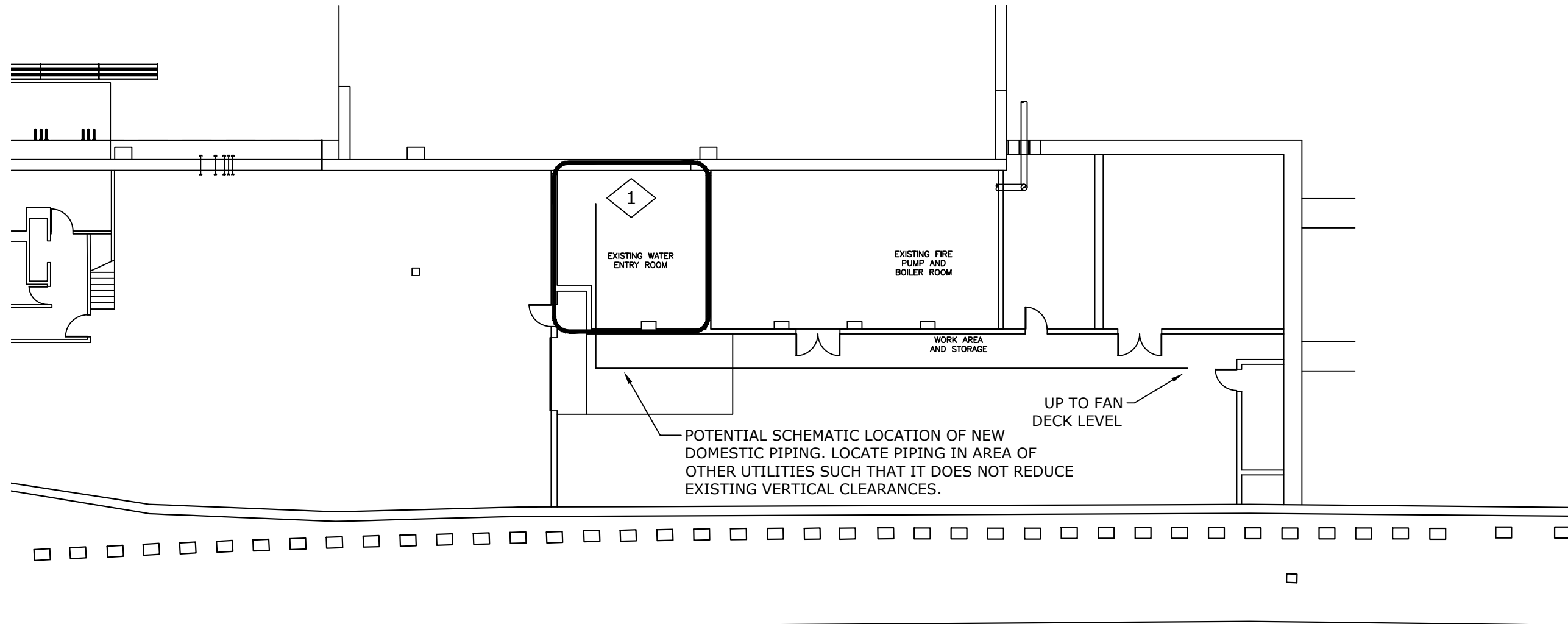
Project No./Code

C 0703-482

24210

Sheet Number

02



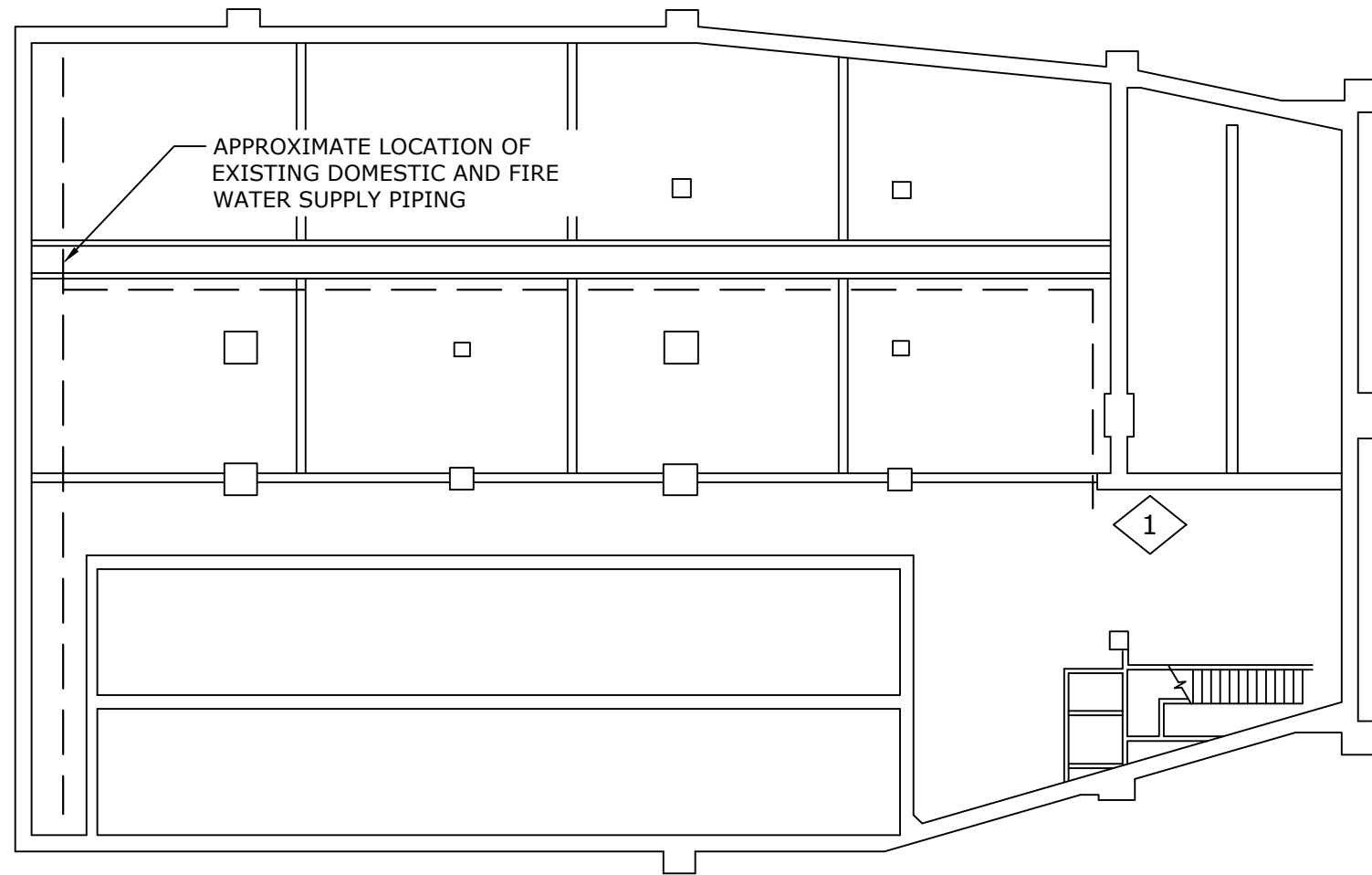
**GENERAL NOTES:**

1. DRAWING SHOWS POTENTIAL LOCATION AND ARRANGEMENT OF THE NEW DOMESTIC PIPING FROM THE NEW WATER TREATMENT EQUIPMENT. CONTRACTOR TO DETERMINE FINAL ARRANGEMENT OF ALL PIPING AND EQUIPMENT. NEW DOMESTIC WATER PIPING TO BE ROUTED TO FAN DECK LEVEL AND INTO NORTH SUPPLY PLENUM.

**KEY NOTES:**

1. LOCATION OF EXISTING DOMESTIC WATER ENTRY AND WATER TREATMENT SYSTEM. COORDINATE CONNECTION OF NEW DOMESTIC PIPING TO NEW WATER TREATMENT SYSTEM. EXISTING DOMESTIC WATER SUPPLY TO BE DISCONNECTED AND PROVIDED WITH A VALVE AND CAP WHERE IT IS DISCONNECTED FROM EXISTING SYSTEM.

Print Date: \$DATE\$ File Name: \$FILES\$ Horiz. Scale:                      Vert. Scale: As Noted Unit Information	Sheet Revisions			 Colorado Department of Transportation 2829 W. Howard Pl. Denver, CO 80204 Phone: 303-512-4272 FAX: 303-757-9886 Region 1                      XXX	Preliminary		EJMT DPHT ROADWAY LEVEL-WEST WATER TREATMENT ROOM LOCATION		Project No./Code	
	Date:	Comments	Init.		No Revisions: _____			C 0703-482		
	_____	_____	_____		Revised: _____	Designer: _____	Structure Numbers _____	24210		
	_____	_____	_____		Void: _____	Detailer: _____	Subset Sheets: _____	Sheet Number    03		



**GENERAL NOTES:**

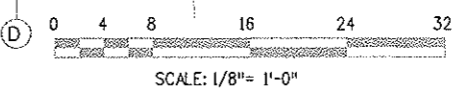
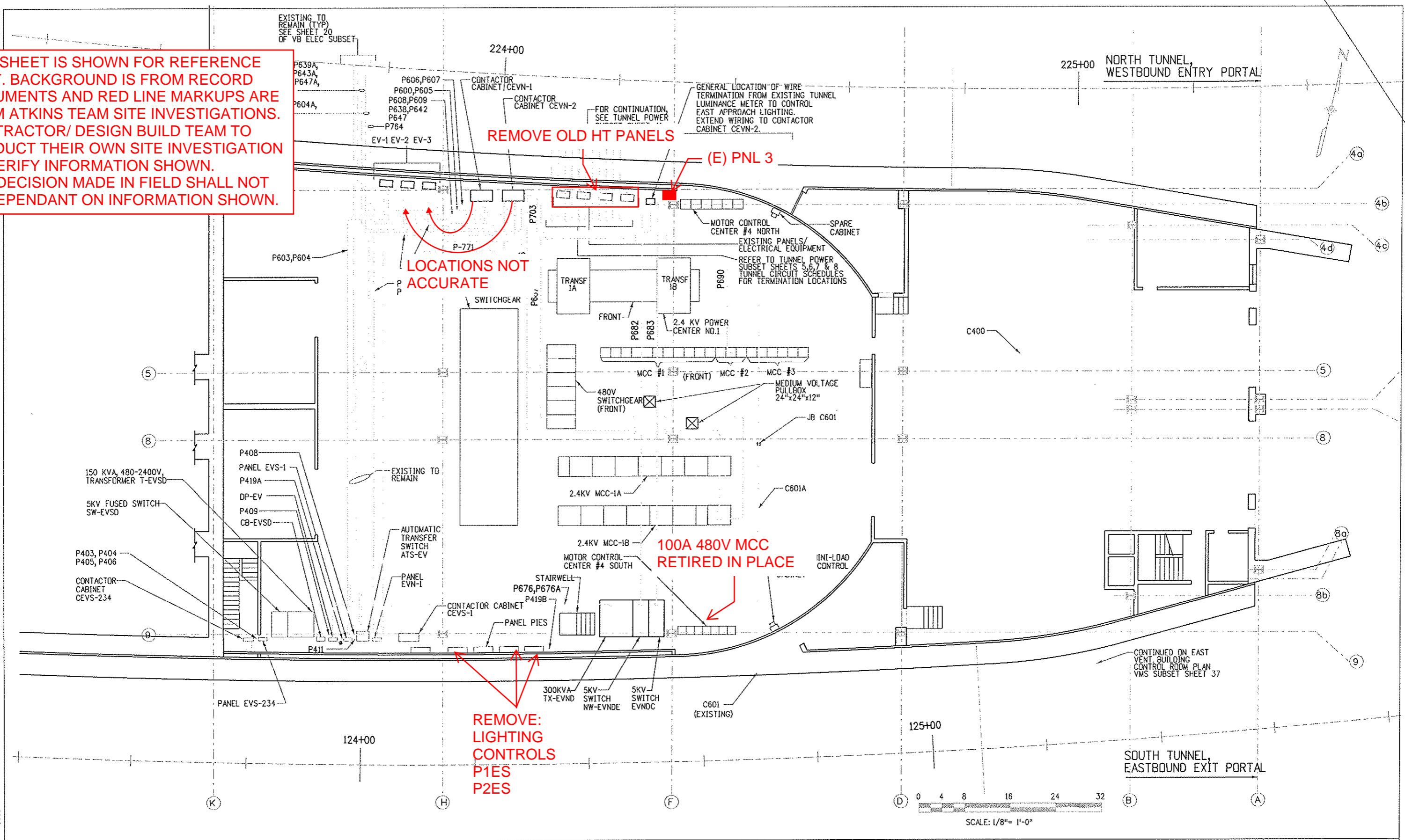
1. DRAWING SHOWS GENERAL LOCATION AND ARRANGEMENT OF THE DOMESTIC PIPING TO THE NEW WATER TREATMENT EQUIPMENT. CONTRACTOR TO DETERMINE FINAL ARRANGEMENT OF ALL PIPING AND EQUIPMENT.

**KEY NOTES:**

1. LOCATION OF EXISTING DOMESTIC WATER ENTRY AND WATER TREATMENT SYSTEM. CONNECT NEW DOMESTIC PIPING TO NEW WATER TREATMENT EQUIPMENT. PIPING TO BE ROUTED FROM NORTH PLENUM FAN DECK LEVEL TO WATER TREATMENT ROOM. EXISTING DOMESTIC AND FIRE WATER SUPPLY TO BE DISCONNECTED AND PROVIDED WITH A VALVE AND CAP WHERE IT IS DISCONNECTED FROM EXISTING SYSTEM.

Print Date: \$DATE\$ File Name: \$FILES\$ Horiz. Scale:      Vert. Scale: As Noted Unit Information	<b>Sheet Revisions</b>			Colorado Department of Transportation  2829 W. Howard Pl. Denver, CO 80204 Phone: 303-512-4272 FAX: 303-757-9886 Region 1      XXX	<b>Preliminary</b>		EJMT DPHT LOWER LEVEL-EAST <b>WATER TREATMENT ROOM LOCATION</b>		Project No./Code	
	Date:	Comments	Init.		No Revisions: _____	Designer:	Structure Numbers	C 0703-482		
	_____	_____	_____		Revised: _____	Detailer:	_____	24210		
	_____	_____	_____		Void: _____	Sheet Subset:	Subset Sheets:	Sheet Number <b>04</b>		

**THIS SHEET IS SHOWN FOR REFERENCE ONLY. BACKGROUND IS FROM RECORD DOCUMENTS AND RED LINE MARKUPS ARE FROM ATKINS TEAM SITE INVESTIGATIONS. CONTRACTOR/ DESIGN BUILD TEAM TO CONDUCT THEIR OWN SITE INVESTIGATION TO VERIFY INFORMATION SHOWN. ANY DECISION MADE IN FIELD SHALL NOT BE DEPENDANT ON INFORMATION SHOWN.**



Design File Name: DGN&SPEC  
 Plot File Name: \$PLOTFILE\$  
 Date of Plot: \$\$\$DATE\$\$\$

Computer File Information	
Creation Date:	02/26/99 Initials: SL
Last Modification Date:	03/16/07 Initials: DJB
Full Path:	14102\800Deliv\AsBuil\
Drawing File Name:	epp121en
Acad Ver.	R14 Scale: 1/8"=1'-0" Units: ENGLISH

Sheet Revisions	
07/03/07	ASBUILT DJB

Colorado Department of Transportation

P.O. BOX 399  
 DUMONT, CO. 80436  
 Phone: 303-512-5750 FAX: 303-512-5775

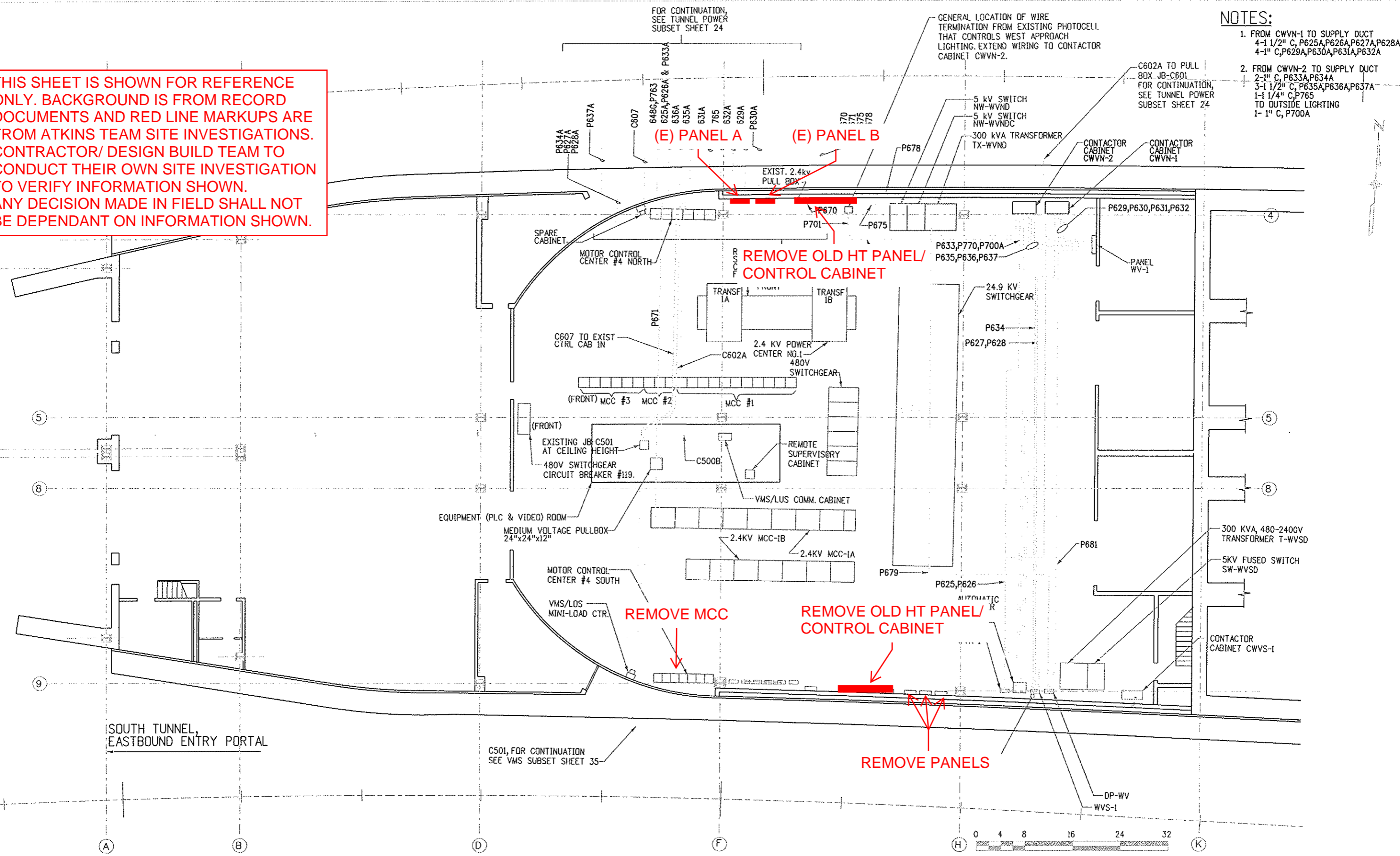
Region 1 Mountain Residency I.N.Z.

As Constructed
No Revisions:
Revised:
Void:

EAST VENT BUILDING ELECTRICAL POWER PLAN	
Designer:	E.A. GAYAMAT
Detailer:	R. MILLER
Sheet Subset:	VB ELEC
Subset Sheets:	4 of 20

Project No./Code	
IM 0703-269	13166
Sheet Number	05

**THIS SHEET IS SHOWN FOR REFERENCE ONLY. BACKGROUND IS FROM RECORD DOCUMENTS AND RED LINE MARKUPS ARE FROM ATKINS TEAM SITE INVESTIGATIONS. CONTRACTOR/ DESIGN BUILD TEAM TO CONDUCT THEIR OWN SITE INVESTIGATION TO VERIFY INFORMATION SHOWN. ANY DECISION MADE IN FIELD SHALL NOT BE DEPENDANT ON INFORMATION SHOWN.**




- NOTES:**
1. FROM CWVN-1 TO SUPPLY DUCT  
4-1 1/2" C, P625A, P626A, P627A, P628A  
4-1" C, P629A, P630A, P631A, P632A
  2. FROM CWVN-2 TO SUPPLY DUCT  
2-1" C, P633A, P634A  
3-1 1/2" C, P635A, P636A, P637A  
1-1 1/4" C, P765  
TO OUTSIDE LIGHTING  
1-1" C, P700A

Design File Name: DGN\$SPEC\*  
 Plot File Name: \$PLOTFILE\*  
 Date of Plot: \$\$\$DATE\$\$\$\$

Computer File Information	
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Last Modification Date:	05/21/07 Initials: DJB
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Sheet Revisions	
07/03/07	ASBUILT DJB

Colorado Department of Transportation



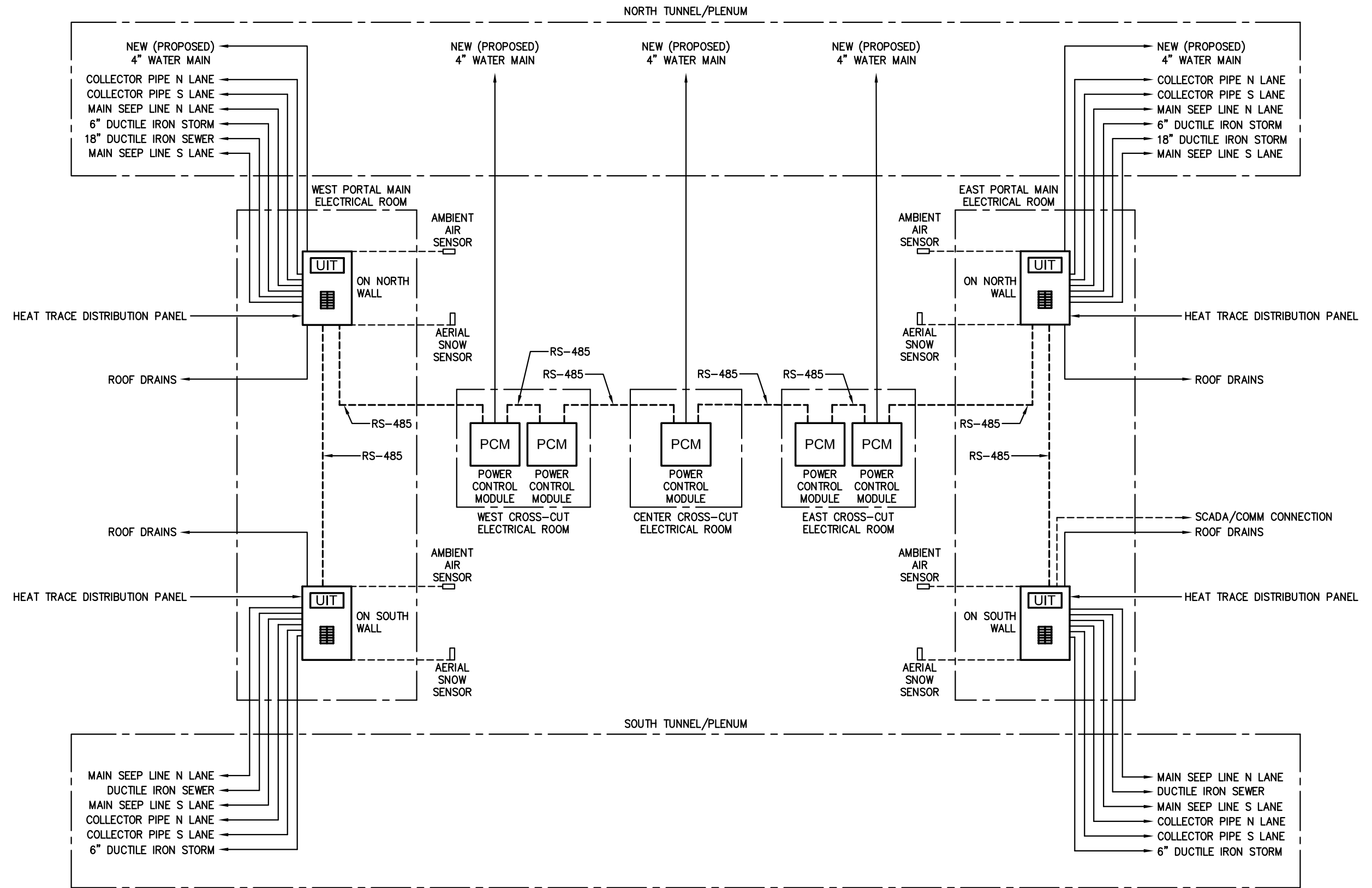
P.O. BOX 399  
 DUMONT, CO. 80436  
 Phone: 303-512-5750 FAX: 303-512-5775

Region 1 Mountain Residency I.N.Z.

As Constructed
No Revisions:
Revised:
Void:

WEST VENT BUILDING ELECTRICAL POWER PLAN	
Designer:	E.A. GAYAMAT
Detailer:	R. MILLER
Sheet Subset:	VB ELEC
Structure Numbers:	
Subset Sheets:	6 OF 20

Project No./Code	
IM 0703-269	
13166	
Sheet Number	06



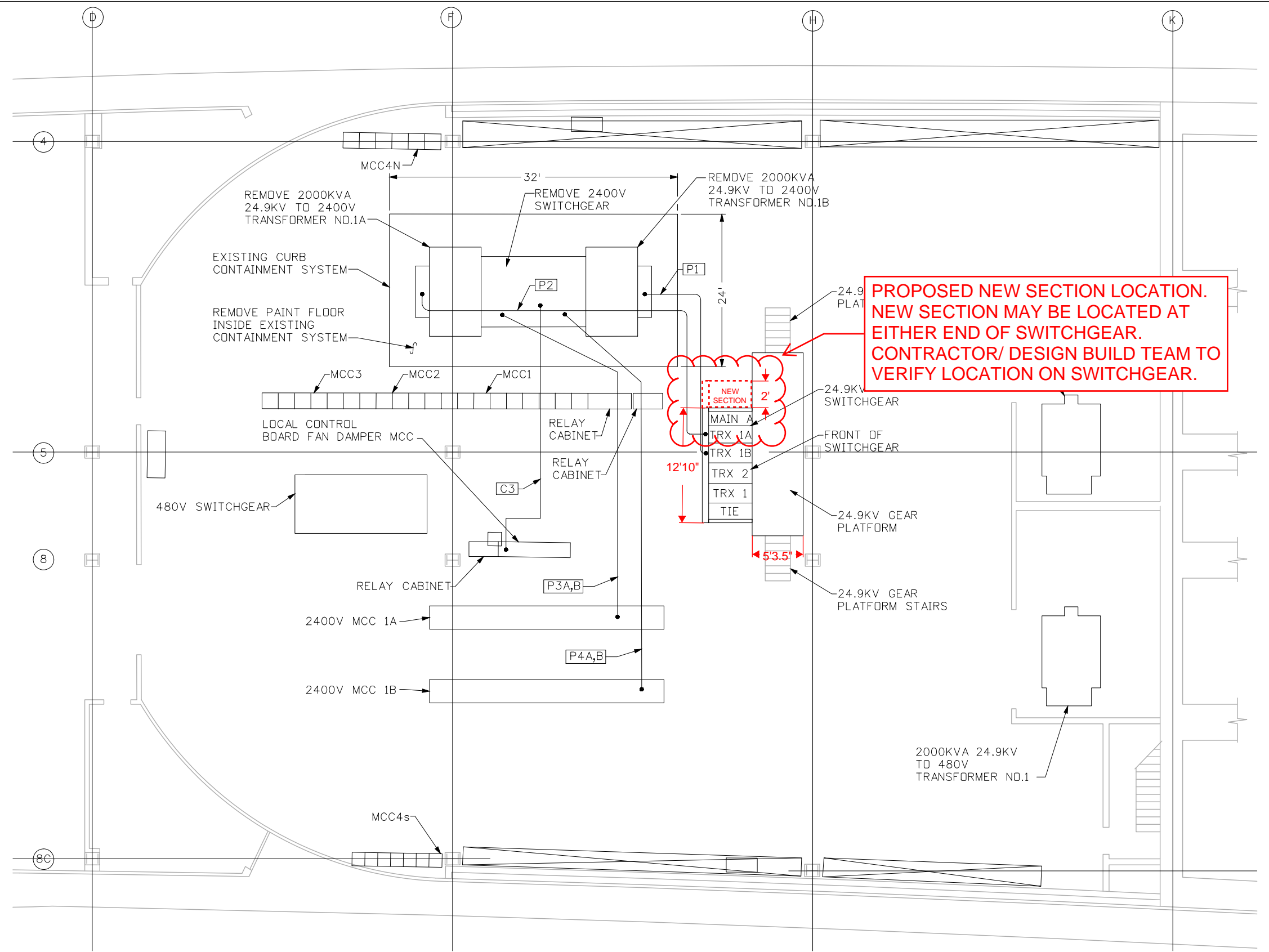
**PK Electrical, Inc.**  
*Engineering · Design · Consulting*  
 681 Sierra Rose Dr., Ste. B | Reno, Nevada 89511 | 775.826.9010  
 5105 DTC Parkway, Ste. 420 | Greenwood Village, CO 80111 | 720.481.3290  
 pkelectrical.com © 2008-2011 PK Electrical, Inc.

DRAWN:	PKE
CHECKED:	LS
DATE:	10/13/2021
JOB NUMBER:	21047
PROJECT MGR:	AW

## EISENHOWER/JOHNSON MEMORIAL TUNNEL PROPOSED HEAT-TRACE BLOCK DIAGRAM



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PROPOSED NEW SECTION LOCATION. NEW SECTION MAY BE LOCATED AT EITHER END OF SWITCHGEAR. CONTRACTOR/ DESIGN BUILD TEAM TO VERIFY LOCATION ON SWITCHGEAR.

**NOTES**

1. FLOOR ELEVATION 11,156.50'.
2. CONDUIT NUMBERS ARE KEYED TO SHEET 5, TABULATION OF WIRING. EXISTING WIRING IS THE SAME AS THE NEW WIRING.
3. EXISTING CONTAINMENT SYSTEM DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.

Print Date: 6/24/2016	
File Name: 24.9-W_Exist-Elec-Room.dgn	
Horiz. Scale: 1:12	Vert. Scale: NA
Unit Information	Unit Leader Initials
<b>PARSONS</b> <b>BRINCKERHOFF</b>	555 17th Street, Suite 500 Denver, CO 80202 Phone: (303) 832-9091 Fax: (303) 728-1936

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation  
  
 425A Corporate Circle  
 Golden, CO 80401  
 Phone: 720-497-6959 FAX: 720-497-6951  
 Region 1 JDS

As Constructed
No Revisions:
Revised:
Void:

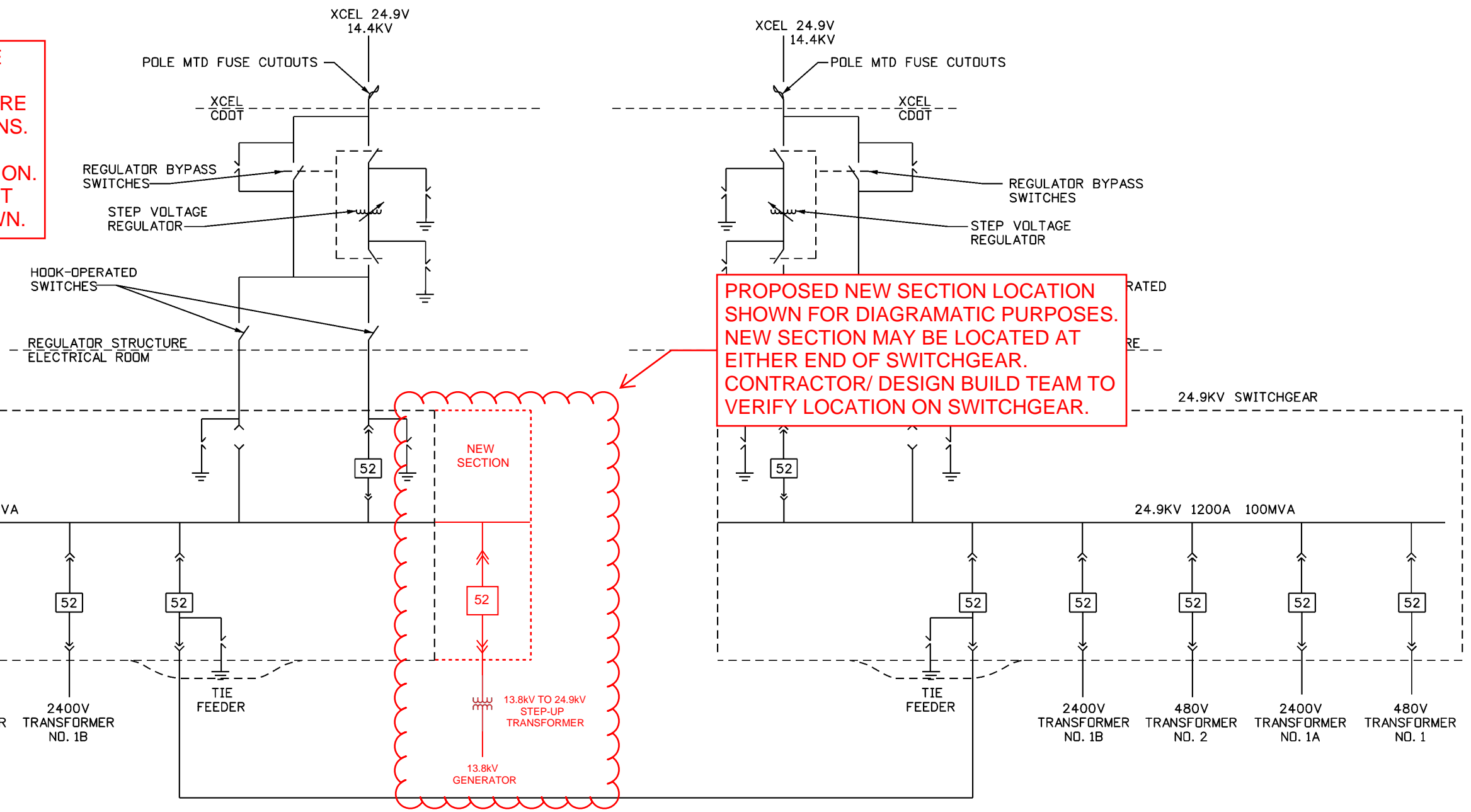
WEST VENTILATION BUILDING ELECTRICAL EQUIPMENT ROOM PLAN - EXISTING	
Designer: J. SHELDON	Structure Numbers
Detailer: J. GONZALES	
Sheet Subset:	Subset Sheets: 11 of 26

Project No./Code	NHPP 0703-420
	20323
Sheet Number	08

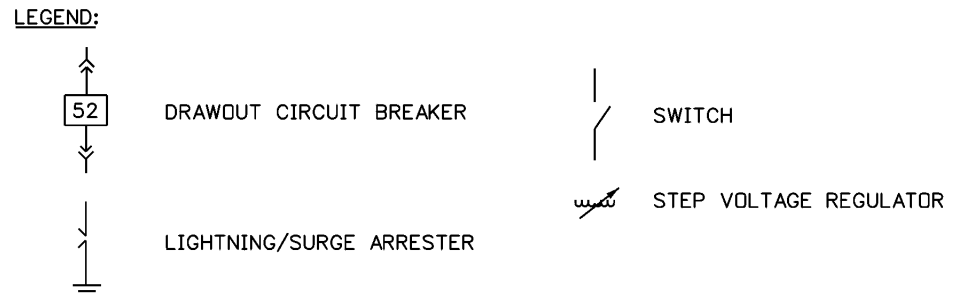
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THIS SHEET IS SHOWN FOR REFERENCE ONLY. ONE-LINE IS FROM RECORD DOCUMENTS AND RED LINE MARKUPS ARE FROM ATKINS TEAM SITE INVESTIGATIONS. CONTRACTOR/ DESIGN BUILD TEAM TO CONDUCT THEIR OWN SITE INVESTIGATION. ANY DECISION MADE IN FIELD SHALL NOT BE DEPENDANT ON INFORMATION SHOWN.



PROPOSED NEW SECTION LOCATION SHOWN FOR DIAGRAMATIC PURPOSES. NEW SECTION MAY BE LOCATED AT EITHER END OF SWITCHGEAR. CONTRACTOR/ DESIGN BUILD TEAM TO VERIFY LOCATION ON SWITCHGEAR.



NEW 24.9KV ONE-LINE DIAGRAM  
N.T.S.

Gonzales 9:02:24 AM J:\184026 - CDDT Tunnel NPS 2011\EE\MT\_25KV Switchgear - (TDS)\19373\Design\Drawings\Plan Sheet files\24.9-New\_One-Line.dgn

Print Date: 8/18/2014	
File Name: 24.9-New_One-Line.dgn	
Horiz. Scale: 1:1      Vert. Scale: As Noted	
Unit Information      Unit Leader Initials	
<b>PARSONS BRINCKERHOFF</b> 555 17th Street, Suite 500 Denver, CO 80202 Phone: (303) 832-9091 Fax: (303) 728-1936	

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

425A Corporate Circle  
Golden, CO 80401  
Phone: 720-497-6959 FAX: 720-497-6951

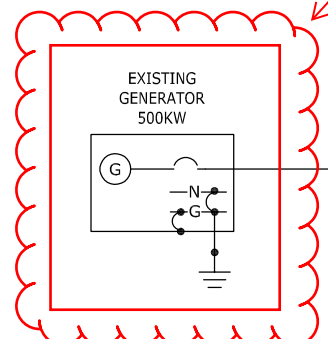
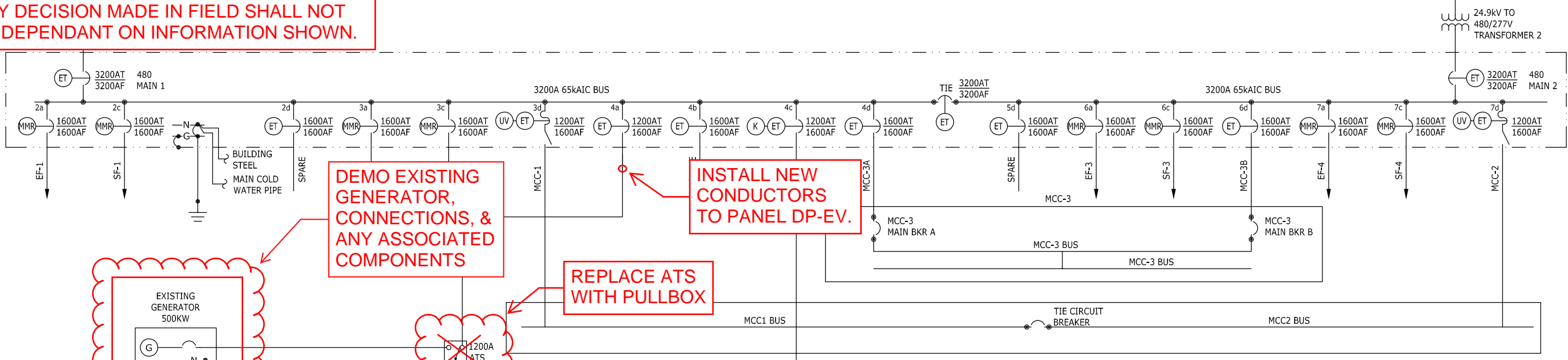
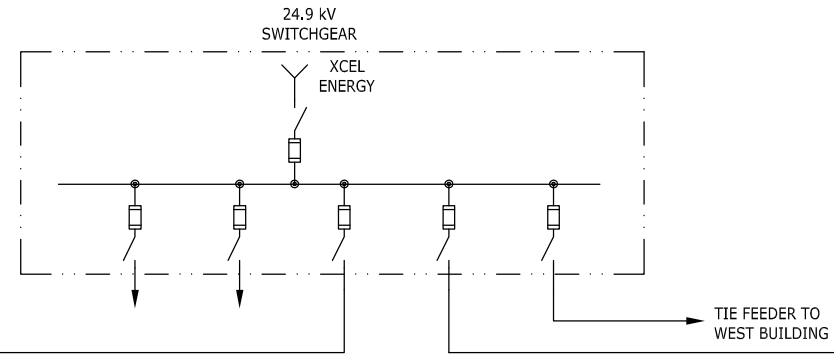
Region 1      JDS

As Constructed
No Revisions:
Revised:
Void:

NEW ONE-LINE DIAGRAM			
Designer:	J. SHELDON	Structure Numbers	
Detailer:	H. PULIDO		
Sheet Subset:		Subset Sheets:	2 of 21

Project No./Code
C 0703-399
19373
Sheet Number 09

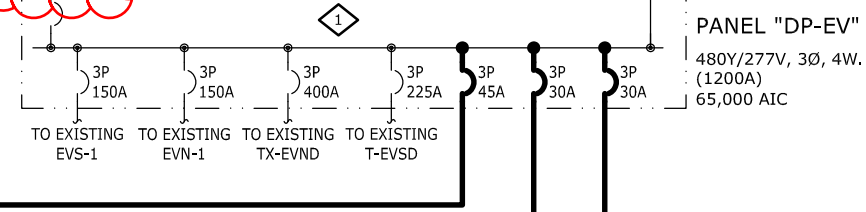
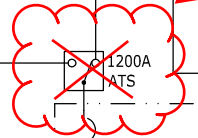
THIS SHEET IS SHOWN FOR REFERENCE ONLY. ONE-LINE IS FROM RECORD DOCUMENTS AND RED LINE MARKUPS ARE FROM ATKINS TEAM SITE INVESTIGATIONS SHOWING PROPOSED DEMOLITION WORK. CONTRACTOR/ DESIGN BUILD TEAM TO CONDUCT THEIR OWN SITE INVESTIGATION. ANY DECISION MADE IN FIELD SHALL NOT BE DEPENDANT ON INFORMATION SHOWN.



DEMO EXISTING GENERATOR, CONNECTIONS, & ANY ASSOCIATED COMPONENTS

INSTALL NEW CONDUCTORS TO PANEL DP-EV.

REPLACE ATS WITH PULLBOX

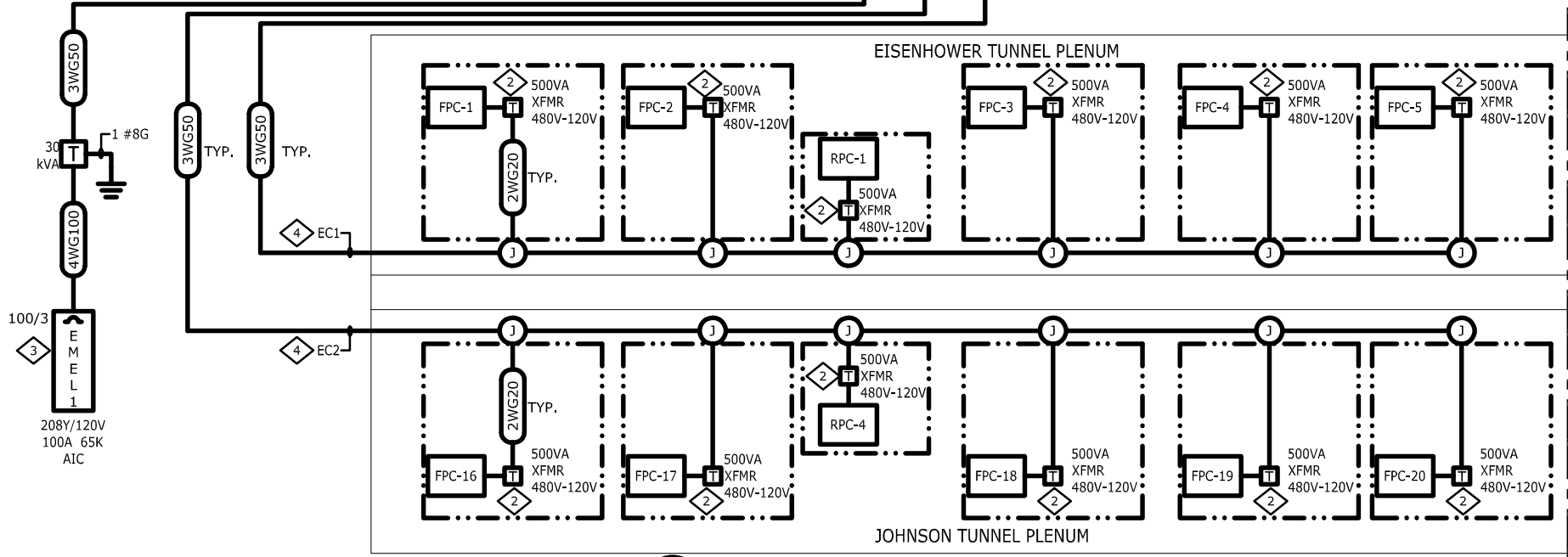


**GENERAL NOTES:**

1. ELECTRICAL CONTRACTOR RESPONSIBLE FOR DISCONNECTS, CONDUIT, WIRE, AND FINAL CONNECTIONS BETWEEN IDENTIFIED EQUIPMENT INCLUDING (BUT NOT LIMITED TO) FIRE PUMPS, FIRE PUMP CONTROLLER, CIRCULATING PUMPS, AND CONTROL PANELS.
2. REFER TO DRAWING E1.0 FOR FEEDER SCHEDULE.
3. REFER TO DRAWING E1.3 FOR "EMEL1" LOAD INFORMATION.
4. EXISTING 500KW GENERATOR LOAD IS LESS THAN 200KW.

**WORK NOTES:**

1. IN EXISTING 480/277V PANEL "DP-EV" FURNISH AND INSTALL NEW CIRCUIT BREAKERS AS SHOWN TO POWER NEW FIRE ALARM SYSTEM. RE-ARRANGE EXISTING CIRCUIT BREAKERS IN "DP-EV" AS NECESSARY TO ACCOMMODATE SPACE FOR NEW BREAKERS.
2. PROVIDE SINGLE PHASE STEP DOWN TRANSFORMER WITH PRIMARY(0.8A) AND SECONDARY(4A) OVER-CURRENT PROTECTION AND DISCONNECTING MEANS. INSTALL TRANSFORMER WITHIN THE FPC/RCP PANEL IN LOCATION SHOWN IN THE SYSTEMS GROUP DRAWINGS. COORDINATE INSTALLATION WITH SYSTEMS GROUP.
3. FURNISH, INSTALL AND WIRE NEW TRANSFORMER AND 208/120V PANEL. THIS PANEL WILL POWER THE FIRE ALARM PANELS, FIBER OPTIC LINEAR HEAT DETECTION SYSTEM, SOLENOID VALVES, VIDEO CAMERAS, WORK STATIONS, AND FLAT SCREEN DISPLAYS POWERED FROM THE EAST PORTAL.
4. ROUTE POWER FOR TUNNEL FIRE ALARM SYSTEM PANELS WITH CONDUITS SHOWN ON SYSTEMS GROUP DRAWINGS.



1 EAST VENTILATION BLDG 480V SWITCHGEAR ONE-LINE DIAGRAM  
SCALE:N.T.S.

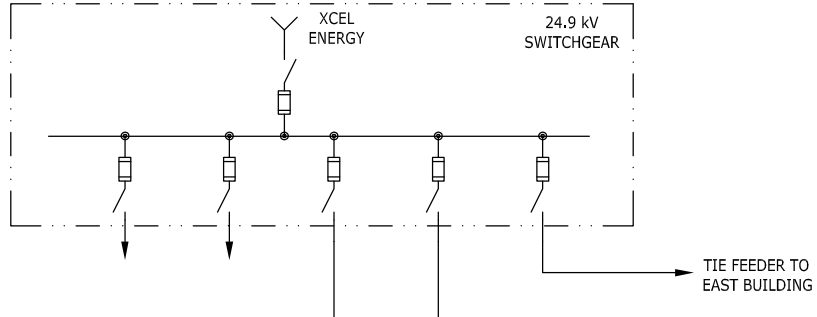
XREFS=(x4b) L:\projects\E2.2 EAST ELECTRICAL ONE-LINE DIAGRAM\Drawings\E2.2 EAST ELECTRICAL ONE-LINE DIAGRAM.dwg JAN 27, 2015 2:44PM CHENDERSON DIMSCALE=1/16

RECORD DRAWINGS - 2015-11-16

GEP  
ART

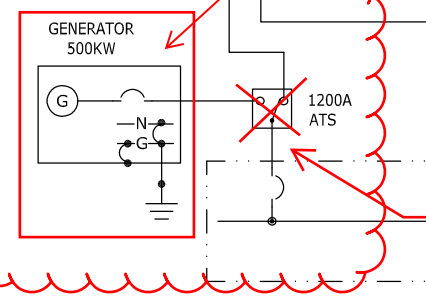
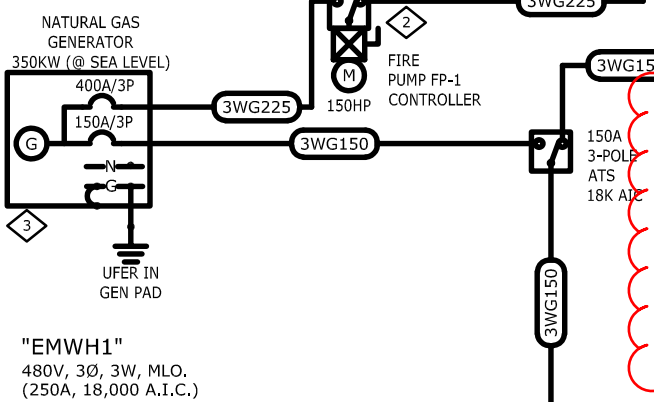
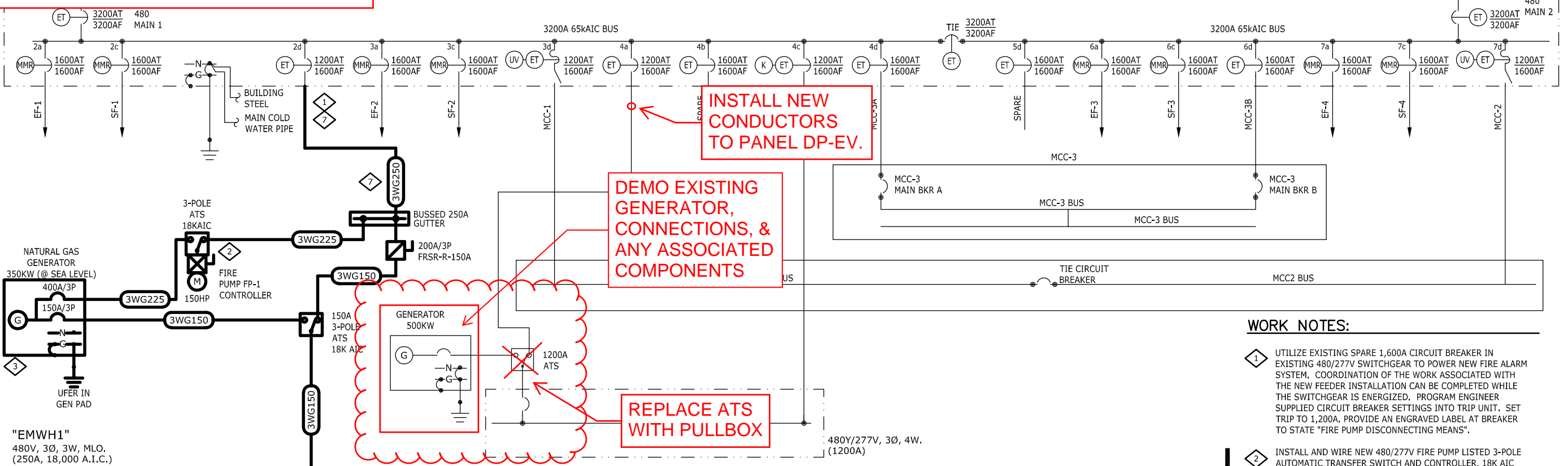
E2.2 EAST ELECTRICAL ONE-LINE DIAGRAM

**THIS SHEET IS SHOWN FOR REFERENCE ONLY. ONE-LINE IS FROM RECORD DOCUMENTS AND RED LINE MARKUPS ARE FROM ATKINS TEAM SITE INVESTIGATIONS SHOWING PROPOSED DEMOLITION WORK. CONTRACTOR/ DESIGN BUILD TEAM TO CONDUCT THEIR OWN SITE INVESTIGATION. ANY DECISION MADE IN FIELD SHALL NOT BE DEPENDANT ON INFORMATION SHOWN.**



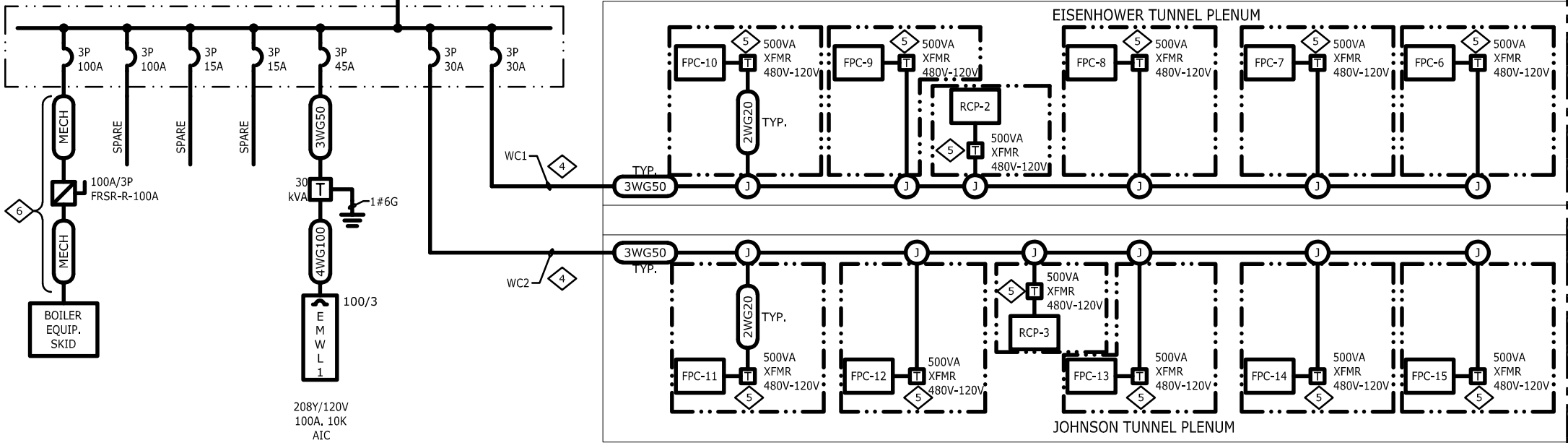
**GENERAL NOTES:**

1. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISCONNECTS, CONDUIT, WIRE, AND FINAL CONNECTIONS BETWEEN IDENTIFIED EQUIPMENT INCLUDING (BUT NOT LIMITED TO) FIRE PUMPS, FIRE PUMP CONTROLLER, CIRCULATING PUMPS, AND CONTROL PANELS.
2. REFER TO DRAWING E1.0 FOR FEEDER SCHEDULE.
3. REFER TO DRAWING E1.2 FOR GENERATOR, "EMWH1" AND "EMWL1" LOAD INFORMATION.



**WORK NOTES:**

- 1 UTILIZE EXISTING SPARE 1,600A CIRCUIT BREAKER IN EXISTING 480/277V SWITCHGEAR TO POWER NEW FIRE ALARM SYSTEM. COORDINATION OF THE WORK ASSOCIATED WITH THE NEW FEEDER INSTALLATION CAN BE COMPLETED WHILE THE SWITCHGEAR IS ENERGIZED. PROGRAM ENGINEER SUPPLIED CIRCUIT BREAKER SETTINGS INTO TRIP UNIT. SET TRIP TO 1,200A. PROVIDE AN ENGRAVED LABEL AT BREAKER TO STATE "FIRE PUMP DISCONNECTING MEANS".
- 2 INSTALL AND WIRE NEW 480/277V FIRE PUMP LISTED 3-POLE AUTOMATIC TRANSFER SWITCH AND CONTROLLER, 18K AIC RATING. PROVIDE SKID MOUNTED OR ON A HOUSEKEEPING PAD.
- 3 FURNISH, INSTALL AND WIRE NEW OUTDOOR CUMMINS GFBC 350KW (@ SEA LEVEL; DE-RATED TO 238 KW AT ELEVATION) NATURAL GAS GENERATOR WITH 105C ALTERNATOR, AND REMOTE ANNUNCIATOR (LOCATED IN FP/BOILER ROOM).
- 4 ROUTE POWER FOR TUNNEL FIRE PROTECTION SYSTEM PANELS WITH CONDUITS SHOWN ON THE SYSTEMS GROUP DRAWINGS.
- 5 PROVIDE SINGLE PHASE STEP DOWN TRANSFORMER WITH PRIMARY(0.8A) AND SECONDARY(4A) OVER-CURRENT PROTECTION AND DISCONNECTING MEANS. INSTALL TRANSFORMER WITHIN THE FPC/RCP PANEL IN LOCATION SHOWN IN THE SYSTEMS GROUP DRAWINGS. COORDINATE INSTALLATION WITH SYSTEMS GROUP.
- 6 REFER TO EQUIPMENT SCHEDULE - SHEET E1.2 FOR FEEDER SIZE TO BOILER EQUIPMENT SKID.
- 7 FEEDER AND BUSSED GUTTER ARE SIZED FOR FIRE PUMP AND CIRCULATION PUMPS NOT RUNNING SIMULTANEOUSLY.

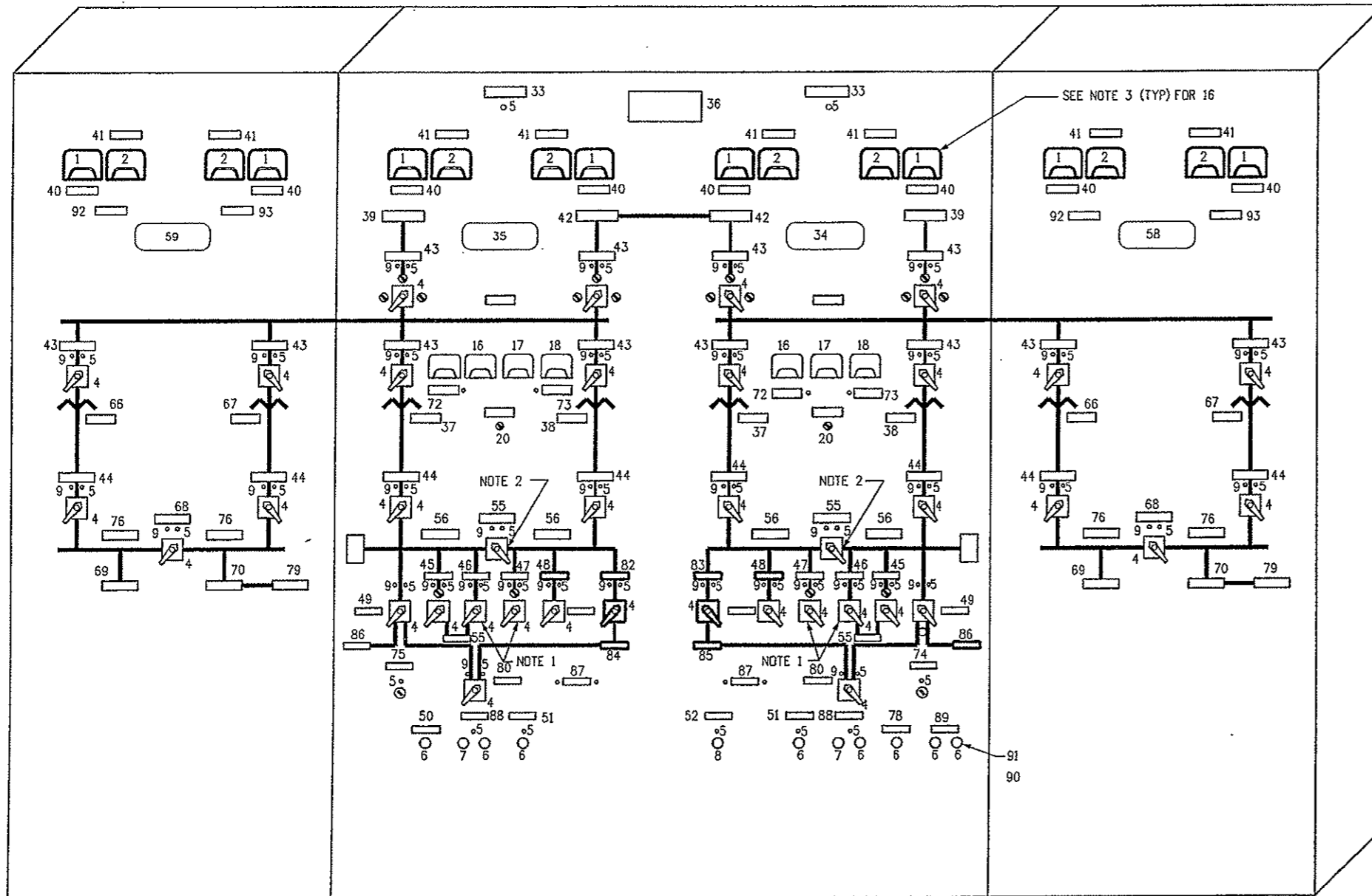


**1 WEST VENTILATION BLDG 480V SWITCHGEAR ONE-LINE DIAGRAM**  
SCALE:N.T.S.

XREFS: (x-tb) LAYOUTS: (E2.1 WEST ELECTRICAL ONE-LINE DIAGRAM) SHEETS: (Electrical\E2.1 WEST ELECTRICAL ONE-LINE DIAGRAM.dwg JAN 29, 2015 10:20AM JBAKER DIMSCALE=1 P:\181914002\DWG\jmt - fixed fire suppression system

E2.1 WEST ELECTRICAL ONE-LINE DIAGRAM

RECORD DRAWINGS - 2015-11-16



**EQUIPMENT LIST**

1. AMMETER TYPE 171-141-LSV3 0-3000 AMP. SEE NOTE 3.
2. VOLTMETER TYPE 171-031-SJSJ AC 0-600 VOLTS. SEE NOTE 3.
3. SWITCH TYPE S81, 2 STAGE WITH KIRK KEYLOCK, 55-185285P3, ON-OFF.
4. SWITCH TYPE S81, 2 STAGE 55-185285F6, ON-OFF.
5. INDICATING LIGHTS, TYPE ET 16, RED, 125 V.D.C.
6. CR2940UA202B PUSH BUTTON.
7. CR2940UB202A SELECTOR SWITCH.
8. CR2940UB202A SELECTOR SWITCH.
9. INDICATING LIGHT, TYPE ET-16 GREEN 125 V.D.C.
10. 0-5 MILLIAMMETER, TYPE 171-FXFX WITH 0-3000 AMP SCALE.
11. 0-5 MILLIAMMETER, TYPE 171-FXFX WITH 0-600 VOLT SCALE.
12. TERMINAL BOARD, (NOT SHOWN) CR151B26.
13. TRANSFORMER #1.
14. TRANSFORMER #2.
15. SWITCH, TYPE S81, WITH KIRK KEYLOCK, 55-188285P4.
16. AMP METER.
17. HERTZ METER.
18. VOLT METER.
19. APPROACH LOW OIL PRESSURE LIGHT.
20. GOVERNOR CONTROL.
21. APPROACH HIGH WATER TEMPERATURE.
22. AMMETER, AC 0-800AMP.
23. VOLTMETER, AC 0-3000 VOLT.
24. 0-5 MILLIAMMETER WITH 0-800 AMP SCALE.
25. 0-5 MILLIAMMETER WITH 0-3000 VOLT SCALE.
26. 0-5 MILLIAMMETER WITH 0-1000 AMP SCALE.
27. 0-5 MILLIAMMETER WITH 55-65 HERTZ SCALE.
28. 0-5 MILLIAMMETER WITH 0-600 VAC SCALE.
29. INDICATING LIGHT, RED 125 V.D.C.
30. PUSHBUTTON RESET.
31. SELECTOR SWITCH, SPRING RETURN TO CENTER FROM LEFT & RIGHT POSITIONS, FAST-OFF-SLOW.
32. SELECTOR SWITCH, START-STOP.

**NAMEPLATE SCHEDULE**

FIRST LINE	SECOND LINE	THIRD LINE	DETAIL
33. POWER	ON		2
34. EAST BUILDING	BUILDING		1
35. WEST BUILDING	BUILDING		1
36. POWER CONTROL	CONTROL		1
37. TRANSFORMER NO. 2		BOARD	2
38. TRANSFORMER NO. 1		SECONDARY	2
39. PUBLIC SERVICE INCOMING		SECONDARY LINE	2
40. AMMETER			2
41. VOLTMETER			2
42. 24.9 K.V.			2
43. LDAD	EMERGENCY BREAK	TIE SWITCH	2
44. AIR CIRCUIT FEEDER	CIRCUIT FEEDER	BREAKER	2
45. MCC #1	MCC #1	BREAKER	2
46. MCC #2	MCC #2	BREAKER	2
47. MCC #3	MCC #3	BREAKER A	2
48. MCC #3	MCC #3	BREAKER B	2
49. EMERGENCY GENERATOR	GENERATOR	BREAKER	2
50. TUNNEL & BUILDING NORMAL LIGHTS	GENERATOR NORMAL LIGHTS	RESET	2
51. BUILDING POWER PANELS	GENERATOR POWER PANELS	RESET	2
52. SEDIMENTATION TANKS	GENERATOR TANKS	RESET	2
53. TUNNEL & BUILDING NORMAL LIGHTS	GENERATOR NORMAL LIGHTS	RESET	2
54. EMERGENCY TIE BREAKER	GENERATOR TIE BREAKER	CONTROL	2
55. 460 VOLT BUSS	460 VOLT BUSS		2
56. 460 VOLT BUSS	460 VOLT BUSS		2
57. 24.9 K.V. BUILDING	24.9 K.V. BUILDING		2
58. EAST BUILDING	EAST BUILDING		2
59. WEST BUILDING	WEST BUILDING		2
60. TRANSFORMER NO. 1A	TRANSFORMER NO. 1A	SOUTH TUNNEL SECONDARY	2
61. TRANSFORMER NO. 1B	TRANSFORMER NO. 1B	NORTH TUNNEL SECONDARY	2
62. AMMETER			2
63. VOLTMETER			2
64. LDAD	BREAK CIRCUIT	SWITCH BREAKER	2
65. AIR	AIR		2
66. TRANSFORMER NO. 1A	TRANSFORMER NO. 1A		2
67. TRANSFORMER NO. 1B	TRANSFORMER NO. 1B		2
68. 2400 VOLT TIE	2400 VOLT TIE	BREAKER	2
69. MCC1A	MCC1A		2
70. MCC1B	MCC1B		2
71. EMERGENCY SUPPLY	EMERGENCY SUPPLY	GENERATOR	2
72. APPROACHING LOW OIL PRESS	APPROACHING LOW OIL PRESS	BREAKER	2
73. APPROACHING HIGH WATER TEMP	APPROACHING HIGH WATER TEMP	CONTROL	2
74. EMERGENCY GENERATOR	EMERGENCY GENERATOR	CONTROL	2
75. EMERGENCY GENERATOR	EMERGENCY GENERATOR	CONTROL	2
76. 2400 VOLT BUSS	2400 VOLT BUSS		2
77. WEST VENT BUILDING	WEST VENT BUILDING	EMERGENCY GENERATOR	2
78. NORTH TUNNEL LIGHTS	NORTH TUNNEL LIGHTS	BLDG & LIGHTS	2
79. SOUTH TUNNEL LIGHTS	SOUTH TUNNEL LIGHTS	NORMAL RESET	2
80. EAST PEAK SHAVING	EAST PEAK SHAVING		2
81. WEST PEAK SHAVING	WEST PEAK SHAVING		2
82. AUTOMATIC TRANSFER	AUTOMATIC TRANSFER	SWITCH	2
83. AUTOMATIC TRANSFER	AUTOMATIC TRANSFER	SWITCH	2
84. TRANSFER SWITCH	TRANSFER SWITCH	ATS-WV	2
85. TRANSFER SWITCH	TRANSFER SWITCH	ATS-EV	2
86. EMERGENCY GENERATOR	EMERGENCY GENERATOR		2
87. EAST D.C. UNDER VOLTAGE	EAST D.C. UNDER VOLTAGE	CONTROL ON	2
88. TUNNEL & BLDG. D.C. LIGHTS	TUNNEL & BLDG. D.C. LIGHTS	BROWN OUT	2
89. NORTH TUNNEL	NORTH TUNNEL		2
90. SOUTH (PUSHBUTTON)	SOUTH (PUSHBUTTON)		2
91. NORTH (PUSHBUTTON)	NORTH (PUSHBUTTON)		2
92. EXHAUST	EXHAUST		2
93. SUPPLY	SUPPLY		2

**NOTES:**

1. REWIRE TO EXCHANGE MCC#2 AND MCC #3 BREAKER CONTROL.
2. ADD NEW TIE BREAKER CONTROL SWITCH, TYPE 4.
3. PROVIDE NEW METER IN PLACE OF EXISTING METER.
4. NAMEPLATES SHALL BE ADHESIVE TYPE.
5. INDICATING LIGHTS SHALL BE MB120 BULB TYPE, NOT LED TYPE.
6. ALL MODIFICATIONS TO POWER BOARD TO BE PAID FOR AS ITEM 210-00478, MODIFY POWER CONTROL BOARD WITH THE FOLLOWING QUANTITIES:

ITEM	QUANTITY	UNIT
MODIFY POWER CONTROL BOARD	1	LS

EXISTING POWER CONTROL BOARD  
N.T.S.

THIS SHEET IS SHOWN FOR REFERENCE ONLY AND IS FROM RECORD DOCUMENTS. CONTRACTOR/ DESIGN BUILD TEAM TO CONDUCT THEIR OWN SITE INVESTIGATION TO VERIFY INFORMATION SHOWN. ANY DECISION MADE IN FIELD SHALL NOT BE DEPENDANT ON INFORMATION SHOWN.

Print Date: 10/2/2007 Drawing File Name: 16096LEDiagram01.dgn Horiz. Scale:                      Vert. Scale: Unit Information                      Unit Leader Initials	<table border="1"> <thead> <tr> <th colspan="3">Sheet Revisions</th> </tr> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sheet Revisions			Date:	Comments	Init.										Colorado Department of Transportation  Mountain Residency P.O. Box 399 Dumont, CO 80436 Phone: 303-512-5750 FAX: 303-512-5775 Region 1                      INZ	As Constructed No Revisions: 11/23/09 Revised: Void:	<b>POWER CONTROL BOARD LAYOUT AND DETAILS</b> Designer: J. SHELDON Detailer: R. KWONG Sheet Subset:                      Subset Sheets:	Project No./Code 1M-0703-319 16096 Sheet Number 12
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NOTE: NOT TO SCALE



**PK Electrical, Inc.**  
*Engineering · Design · Consulting*

681 Sierra Rose Dr., Ste. B | Reno, Nevada 89511 | 775.826.9010  
 5105 DTC Parkway, Ste. 420 | Greenwood Village, CO 80111 | 720.481.3290  
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CHECKED:	LS
DATE:	11/12/2021
JOB NUMBER:	21047
PROJECT MGR:	AW

## EISENHOWER/JOHNSON MEMORIAL TUNNEL ELECTRICAL EQUIPMENT LOCATIONS OPTION #1