ELECTRICAL AND DATA CABLE INSTALLATION

for

Washington Metropolitan Area Transit Authority

Contract Number FQ17021

VOLUME 4

Pre-Inspection Reports
Part 2b
Green and Yellow Lines

November 13, 2016

Final Submission

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

VOLUME 4 **PAGE NO.**

PRE-INSPECTION REPORTS

PART 2B

GREEN & YELLOW LINES

TABLE OF CONTENTS

1	MIR_C09_CRYSTAL CITY_MZ045	3
2	MIR_C10_REAGAN NATIONAL AIRPORT (SOUTH MEZZ)_MZ046	12
3	MIR_C10_REAGAN NATIONAL AIRPORT (NORTH MEZZ)_MZ093	19
4	MIR_C10_REAGAN NATIONAL AIRPORT (MINI MEZZ)_MZ093M	
5	MIR_C12_BRADDOCK ROAD_MZ047	37
6	MIR_C13_KING STREET-OLD TOWN_MZ048	47
7	MIR_C13_KING STREET-OLD TOWN (NEW ENTRANCE)_MZ048M	
8	MIR_C13_KING STREET-OLD TOWN (NORTH MEZZ)_MZ112	64
9	MIR_C15_HUNTINGTON (NORTH MEZZANINE)_MZ050	77
10	MIR_C15_HUNTINGTON (SOUTH MEZZANINE)_MZ051	89
11	MIR_E01_MOUNT VERNON SQUARE_MZ070	95
12	MIR_E02_SHAW-HOWARD U (SOUTH MEZZANINE)_MZ071	107
13	MIR_E02_SHAW-HOWARD U (NORTH MEZZANINE)_MZ072	122
14	MIR_E03_U STREET (EAST MEZZANINE)_MZ073	132
15	MIR_E03_U STREET (WEST MEZZANINE))_MZ074	146
16	MIR_E05_GEORGIA AVENUE_MZ076	163
17	MIR_E07_WEST HYATTSVILLE_MZ077	175
18	MIR_E08_PRINCE GEORGE'S PLAZA_MZ078	186
19	MIR_E09_COLLEGE PARK_MZ079	196
20	MIR_E10_GREENBELT_MZ080	207
21	MIR_F02_ARCHIVES_MZ081	217
22	MIR_F03_L'ENFANT PLAZA (NORTH MEZZANINE)_MZ082	228
23	MIR_F04_WATERFRONT_MZ083	248
24	MIR_F05_NAVY YARD-BALLPARK (WEST MEZZANINE)_MZ105	268
25	MIR_F06_ANACOSTIA (NORTH MEZZANINE)_MZ085	278
26	MIR_F06_ANACOSTIA (SOUTH MEZZANINE)_MZ106	292
27	MIR_F07_CONGRESS HEIGHTS_MZ086	310
28	MIR_F08_SOUTHERN AVENUE_MZ107	323
29	MIR_F09_NAYLOR ROAD_MZ087	332
30	MIR_F11_BRANCH AVENUE_MZ089	344

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 10/09/2014	**Station Name:** C09 Crystal City	**Mezzanine #** 045	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: M Source Breaker Name/Number: Circuit #17 Electrical AFC Panel Name/Number: Panel 2MM	C302 C302 C302	S.O. Request: SOURCE PANELS: SWBD FB4 (AFC Source); SWBD FB1 and SWBD FB2 (Common Trough Source SWBDS.) Breakers:
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		Panel M (Circuit #8) on SWBD FB4 (West Side); Panel 1MPO (Circuit #3) on SWBD FB1 (East Side); Panel 2MPO (Circuit #1) on SWBD FB1 (East Side); Panel 4MPO (Circuit #7) on SWBD FB2 (East Side)
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. YES (see notes)		Shared trough for feed panels located at Track #2 East and West ends. Panels "M", "1MPO", "2MPO", "4MPO", and "2MM" feed into trough.
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: MECH (Chiller Plant Access)		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		Transition may be very difficult. Need Mech escort for access to room C206 (Chiller Plant); junction box inside this room.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:		

Photo #1: C09 Crystal City – Common trough in Room C302

Photo #2: C09 Crystal City – AFC Panel 2MM feeding into common trough in Room C302

Photo #3: C09 Crystal City – AFC Panel 2MM feeding into common trough in Room C302

Photo #4: C09 Crystal City – Other panels feeding into common trough in Room C302

Photo #5: C09 Crystal City – Common trough in Room C302

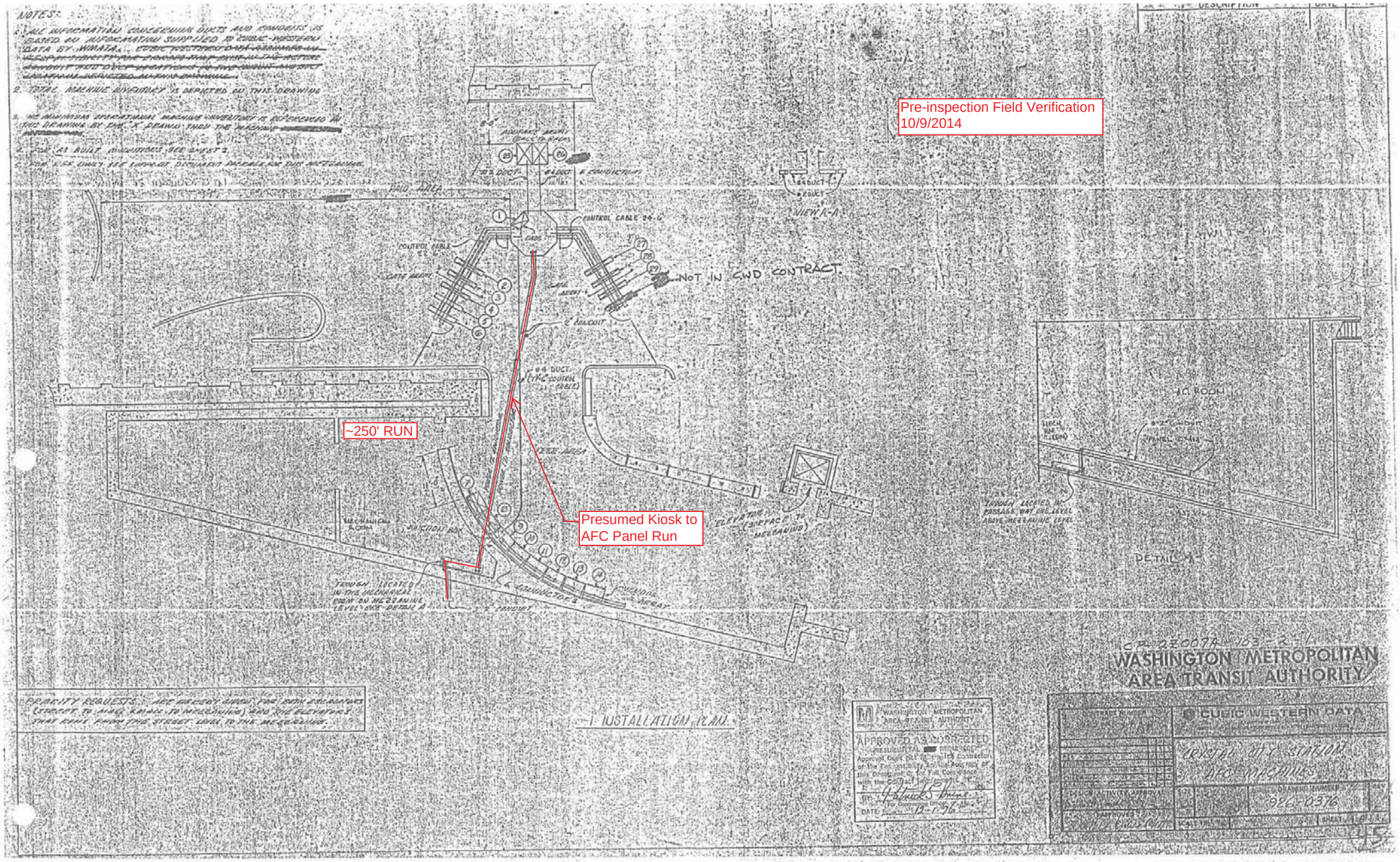
Photo #6: C09 Crystal City – Common trough in Room C302

Photo #7: C09 Crystal City – Conduits top feeding into AFC panel 2MM

Photo #8: C09 Crystal City – Conduits and trough in machine room C206

Photo #9: C09 Crystal City – Source breaker for AFC Panel 2MM on Panel M

Photo #10: C09 Crystal City – Source breakers on Panel FB1 for panels feeding into common trough


Pre-inspection Field Verification
10/9/2014
~250' RUN
Presumed Kiosk to
AFC Panel Run
NOT IN CWD CONTRACT
WASHINGTON METROPOLITAN
AREA TRANSIT AUTHORITY
CUBIC WESTERN DATA
926-0376

Pre-inspection Field Verification
10/9/2014

EXISTING PANEL "2MM" ✓

AMPERES: 300	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 200AMCB	PHASE: 3	LOCATION: ELEC. EQUIPMENT ROOM C302 ✓	
RATING: 10KAIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP)	1
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE (KIOSK)	1&2
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	29	- - C	30	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	31	A - -	32	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	33	- B -	34	1	20	0.0	SPARE	
SPACE	0.0	-	-	35	- - C	36	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	37	A - -	38	3	30	2.9	EXIST. KIOSK LOAD CENTER "KES"	
SPARE	0.0	20	1	39	- B -	40	-	-	2.5		
SPARE	0.0	20	1	41	- - C	42	-	-	2.5		

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	12.8 x 50%		6.4 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	30.3 KVA	TOTAL DEMAND KVA	24.7 KVA
		TOTAL DEMAND AMPS	68.8 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	11.7 KVA		
PHASE B:	10.5 KVA		
PHASE C:	8.1 KVA		

NOTES: A. EXISTING PANEL ✓ "2MM" IS FED FROM 277/480V, 3ø, 4W EXISTING PANEL "M" LOCATED IN ELEC. EQUIPMENT RM. C302, ✓ CIRCUIT #17-250A/3P VIA 150KVA TRANSFORMER.

B. EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
* 1-3" C. TO TRANSFORMER (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP OF PANEL BY:
* 4-1 1/2" C. (3-WIRING FILL >40%)(1-WIRING FILL >20%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. NOO 08-14 DATE
DRAWN C. NOO 08-14 DATE
CHECKED B. KNUB 08-14 DATE
APPROVED N/A DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

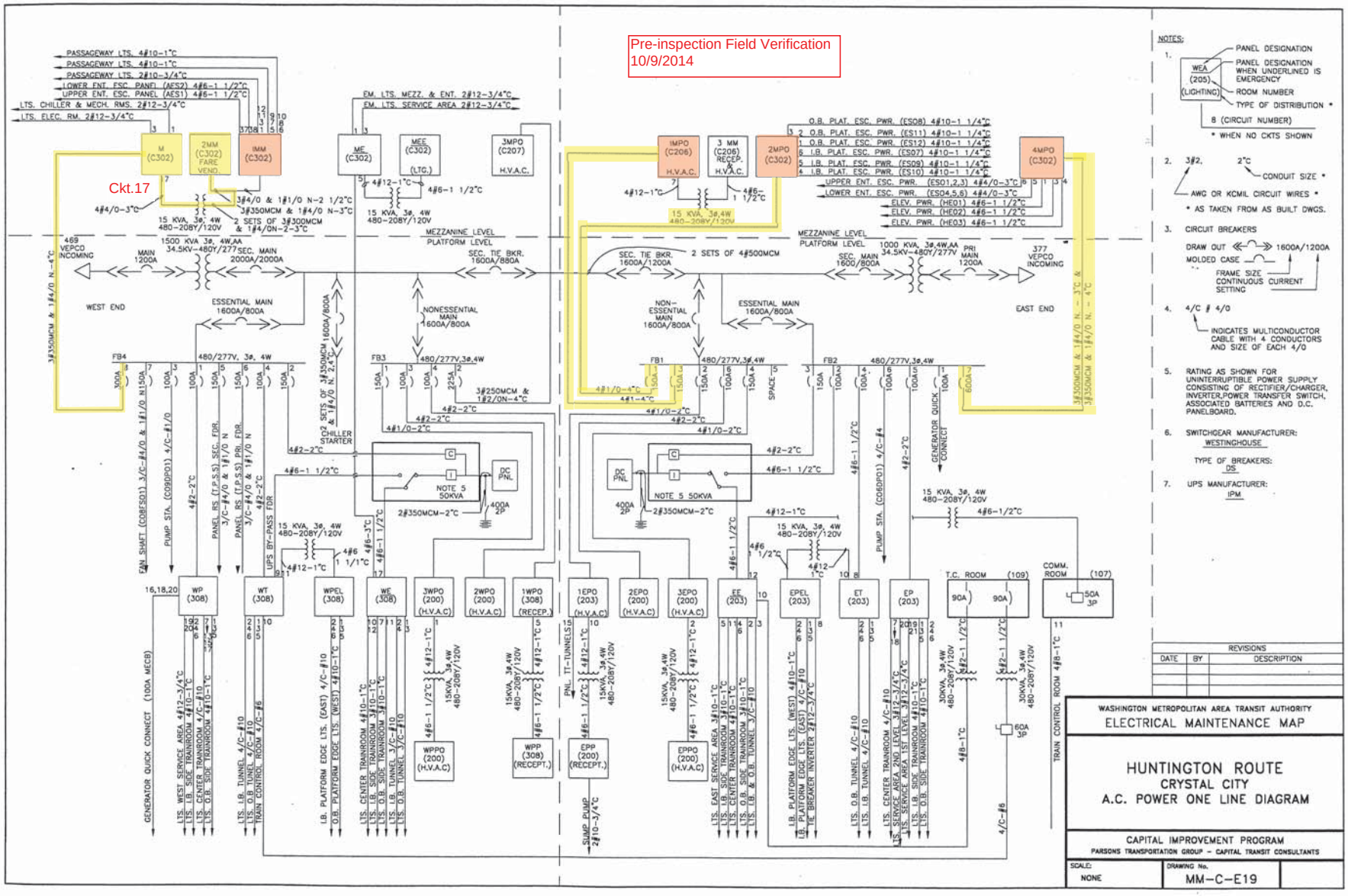
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED

GFP A Gannett Fleming/Parsons JOINT VENTURE
SUBMITTED
PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
CRYSTAL CITY
PANEL SCHEDULE

SCALE: NOT TO SCALE
DRAWING NO: C09-E-102



= Panels that feed into common trough and need to be de-energized

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 10/07/2014	**Station Name:** C10 Reagan Airport South	**Mezzanine #** 046	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Panel SLE Source Breaker Name/Number: Circuit #1 Disconnect switch 'Train Control Power' Electrical AFC Panel Name/Number: F, Train Control Power Panel	C116 C116 C108	Source Panel: SLE (AFC Source Panel) (Rm C116) Breakers: Circuit #1 on Panel SLE Disconnect switch 'Train Control Power' Affected Panels: F (Rm C108) AFC Panel Train Control Power Panel (Rm C108)
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: LOW Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. YES (see notes)		Shares trough with Train Control Power Panel which is sourced from Panel SLE Circuit #10 or has 'Train Control Power' Disconnect Switch.
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: ATC		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits/duct on same level.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

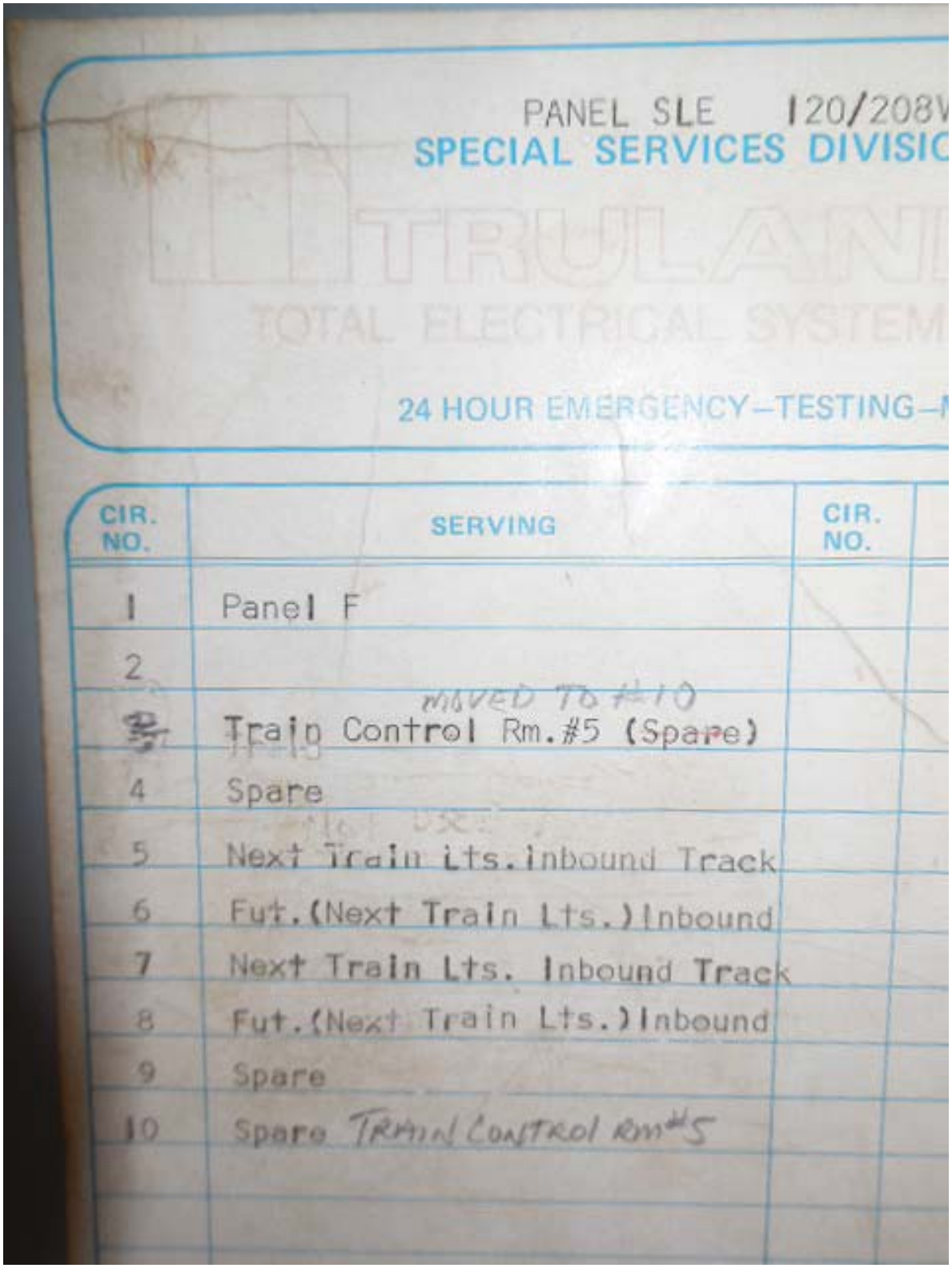
Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	Oscar Ilgan
Signature:		
Date:	10/07/14	

Photo #1: C10 Reagan Airport South – Handholes at Mezzanine & Kiosk

Photo #2: C10 Reagan Airport South – Handholes in hallway to Station Facility Rooms

Photo #3: C10 Reagan Airport South – Panel SLE in Room C116

Photo #4: C10 Reagan Airport South – Panel SLE Schedule



PANEL SLE 120/208V

SPECIAL SERVICES DIVISIO

TRULAN

TOTAL ELECTRICAL SYSTEM

24 HOUR EMERGENCY–TESTING–M

CIR. NO.	SERVING	CIR. NO.
1	Panel F	
2		
3	MOVED TO #10 Train Control Rm.#5 (Spare)	
4	Spare	
5	Next Train Lts. Inbound Track	
6	Fut.(Next Train Lts.)Inbound	
7	Next Train Lts. Inbound Track	
8	Fut.(Next Train Lts.)Inbound	
9	Spare	
10	Spare TRAIN CONTROL RM#5	

EXISTING PANEL "F"(North)

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 225A MCB	PHASE: 3	LOCATION: ELEC EQUIPMENT RM. 119	
RATING: 10KAIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION	
SPARE	0.0	20	1	1	A - -	2	3	20	3.3	EXIST. LOAD CENTER "KES"	
EXISTING VENDOR	0.8	20	1	3	- B -	4	-	-	3.3		
EXISTING VENDOR	0.8	20	1	5	- - C	6	-	-	3.3		
EXISTING VENDOR	0.8	20	1	7	A - -	8	3	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	9	- B -	10	-	-	0.8		
SPARE	0.0	20	1	11	- - C	12	-	-	0.8		
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP)	1
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.0	SPARE (KIOSK)	1&2
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	31	A - -	32	-	-	0.0	SPARE	
SPARE	0.0	20	1	33	- B -	34	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	35	- - C	36	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	37	A - -	38	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	39	- B -	40	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	41	- - C	42	-	-	0.0	SPARE	

NOTES. 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	12.4 x 50%		6.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	29.9 KVA	TOTAL DEMAND KVA	24.6 KVA
		TOTAL DEMAND AMPS	67.8 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	11.3 KVA
PHASE B:	8.7 KVA
PHASE C:	8.9 KVA

NOTES: A. EXISTING PANEL "F" IS FED FROM 277/480V, 3ø, 4W EXISTING PANEL "HM1" LOCATED IN ELEC. EQUIPMENT 119, CIRCUIT #25-150/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E22).

B. EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 2-6 1/2"x 1 1/2" FLOOR DUCT (1-WIRING FILL >40%)(1-WIRING FILL >10%).
- 3-1/2" C. (2-WIRING FILL >40%)(1-EMPTY CONDUIT).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).
- 3-1/2" C. (WIRING FILL >40%).
- 1-#12 WIRING.

EXISTING PANEL "F"(South)

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 200A MCB	PHASE: 3	LOCATION: ELEC. EQUIPMENT RM. C108	
RATING: 10KAIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	21	- B -	22	1	20	0.0	NEW KIOSK RECEPT. (IT &NEPP)	1
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE (KIOSK)	1&2
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	29	- - C	30	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	-	-	31	A - -	32	1	20	0.0	SPARE	
SPARE	0.0	-	-	33	- B -	34	1	20	0.0	SPARE	
SPARE	0.0	-	-	35	- - C	36	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	-	-	37	A - -	38	3	30	2.9	EXIST. LOAD CENTER "KES"	
SPARE	0.0	-	-	39	- B -	40	-	-	2.5		
EXISTING VENDOR	0.8	-	-	41	- - C	42	-	-	2.5		

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	12.8 x 50%		6.4 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	30.3 KVA	TOTAL DEMAND KVA	24.7 KVA
		TOTAL DEMAND AMPS	68.5 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	11.7 KVA
PHASE B:	8.9 KVA
PHASE C:	9.7 KVA

NOTES: A. EXISTING PANEL "F" IS FED FROM 120/208V, 3ø, 4W EXISTING SWBD. "SLE" LOCATED IN AC SWBD. BATTERY RM. C116, ~~CIRCUIT #2~~ CIRCUIT #1 -200/3P (SEE ATTACHED DWG. MM-C-E22).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-3/4" C. (WIRING FILL >40%).
- 1-#12 WIRING.

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 2-4" C. TO TRANSFORMER (WIRING FILL >40%).

Pre-inspection Field Verification 10/07/2014

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED	C NGO	09-14	DATE
DRAWN	C NGO	09-14	DATE
CHECKED	B IDILBI	09-14	DATE
APPROVED	N/A		DATE

REFERENCE DRAWINGS		REVISIONS		
NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE

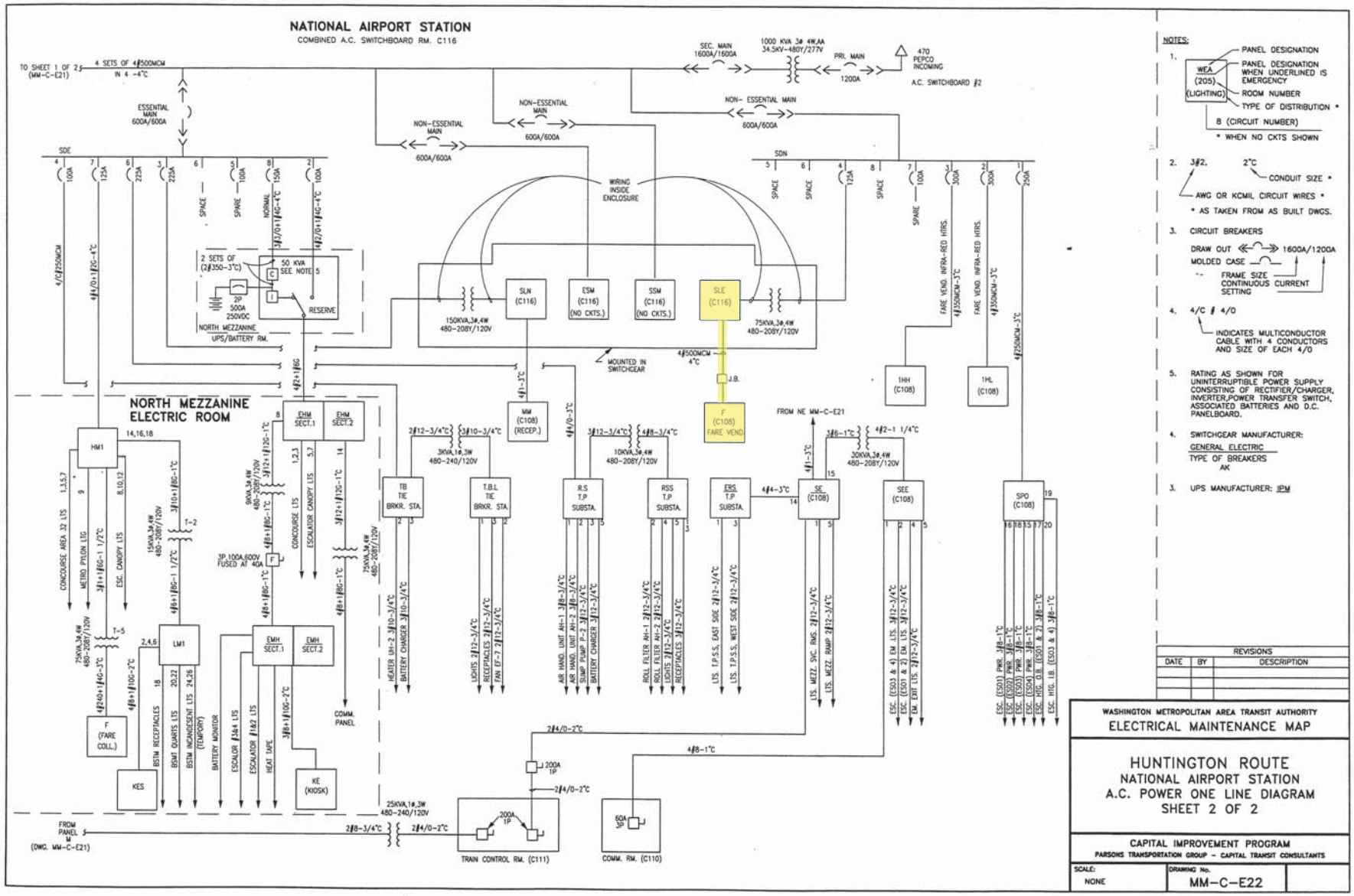
SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
NATIONAL AIRPORT - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE

DRAWING NO: C10-E-102

Pre-inspection Field Verification 10/07/2014



O:\ELECT\NewMaintMap\C-Route\MM-C-E22.dwg Wed Jun 21 16:22:44 2000 LP

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 10/07/2014	**Station Name:** C10 Reagan Airport North	**Mezzanine #** 093	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: HM1 Source Breaker Name/Number: 'PNL F TS' Electrical AFC Panel Name/Number: F	119 119 119	Emergency circuits are: Circuits 2,4,6 of source panel LM1 to de-energize KES Panel. Disconnect switch for Panels EMH Sect 1 and EMH Sect 2. **Neither of these could be verified or found in field.
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH and LOW		S.O.: Source Panels: HM1 (Rm 119) AFC Source Panel LM1 (Rm 119) KES Source Panel EMH Sect 1 (Rm 119) KE (Kiosk) Source Panel EMH Sect 2 (Rm 119) KE (Kiosk) Source Panel Breakers: 'PNL F TS' of Panel HM1 Circuits 2,4,6 of Panel LM1 'Disconnect Switch' for Panels EMH Sect 1 and EMH Sect 2. Affected Panels: F (AFC Panel) KES (Kiosk Panel) in Kiosk KE (Kiosk Panel) in Kiosk
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO	C106	
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: AFC		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits/duct are on same level.

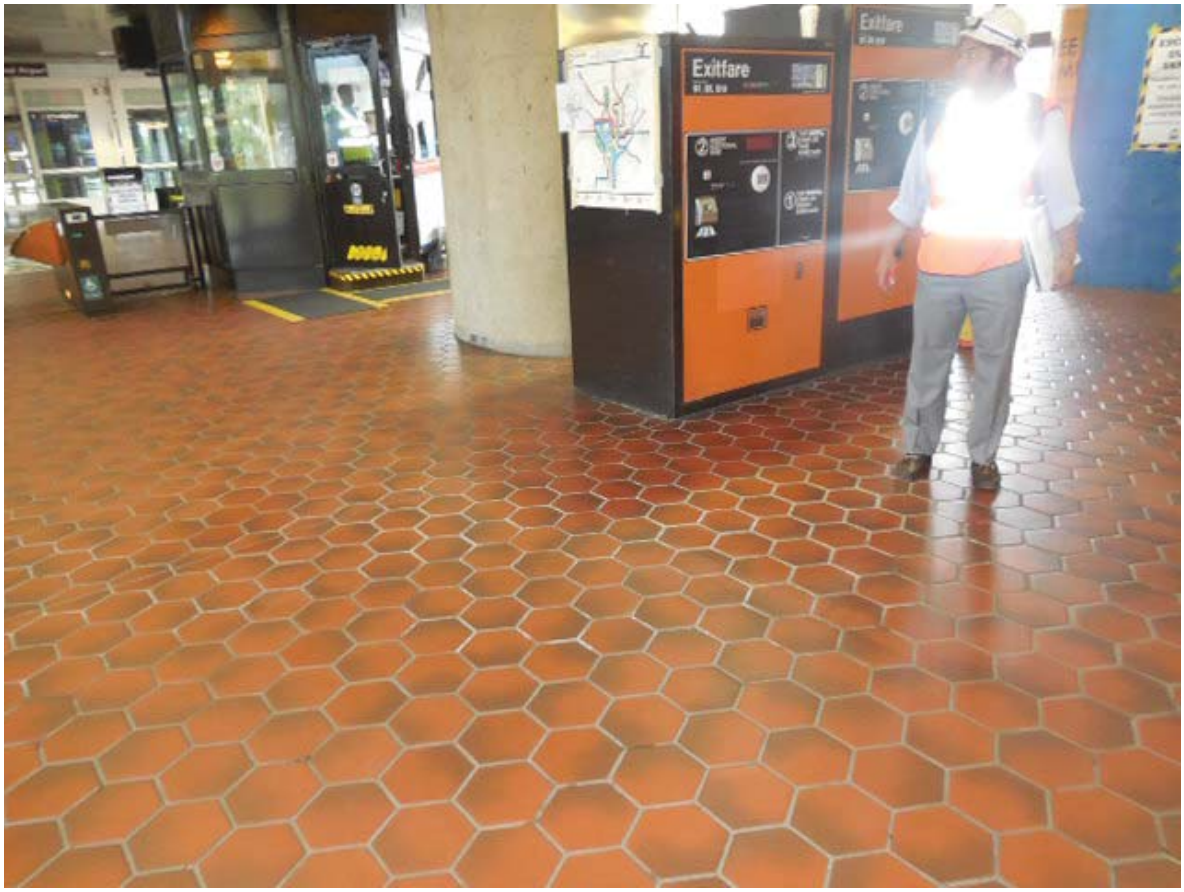
Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

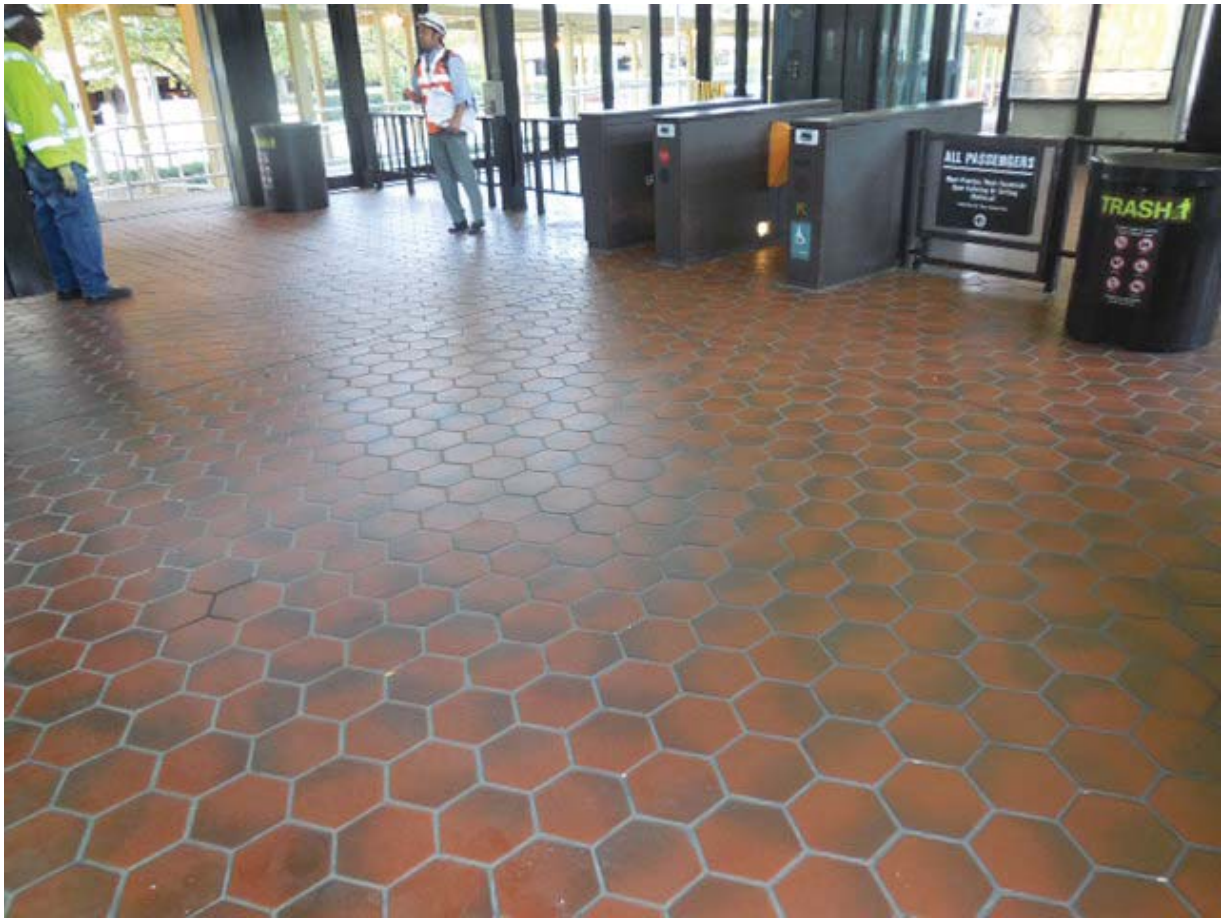
Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:	10/07/14	

Picture 1: C10 Reagan Airport North – Handhole at Mezzanine

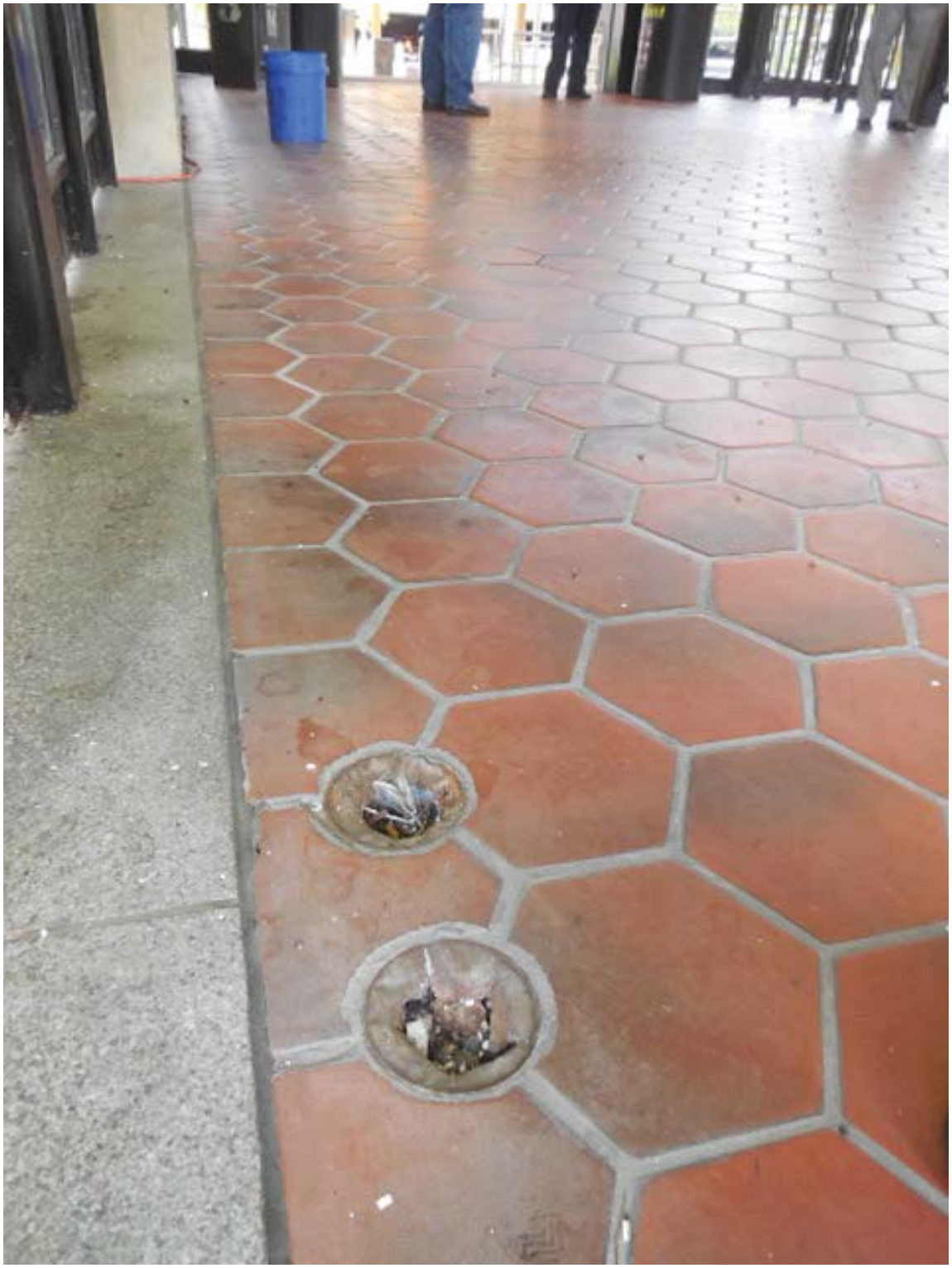


Picture 2: C10 Reagan Airport North – Handholes at Mini-Mezzanine



Picture 3: C10 Reagan Airport North – Handholes at Mini-Mezzanine

Picture 4: C10 Reagan Airport North – Handholes at Mini-Mezzanine



Picture 5: C10 Reagan Airport North – Handholes at Mini-Mezzanine

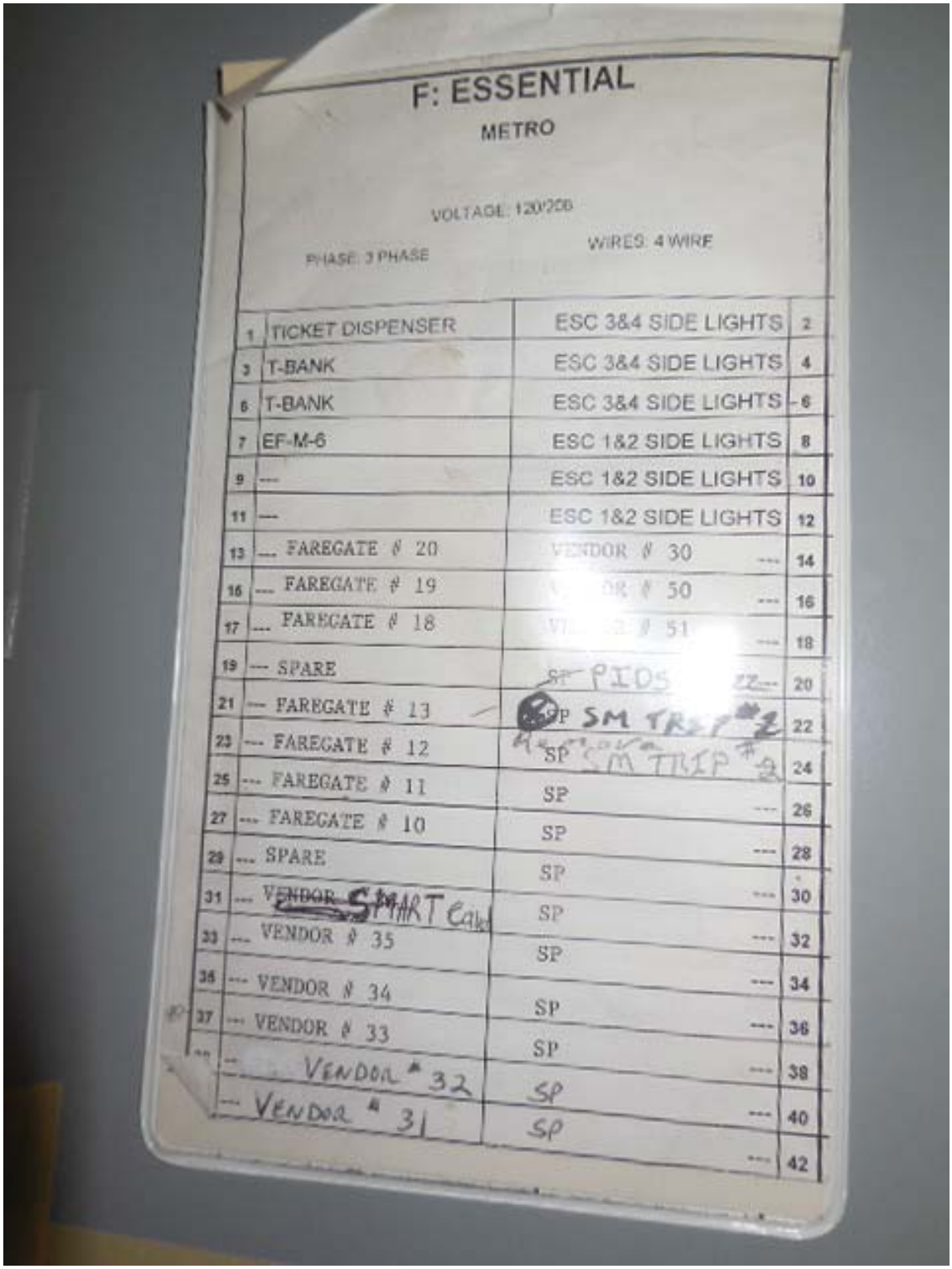
Picture 6: C10 Reagan Airport North – Handholes at Mini-Mezzanine

Picture 7: C10 Reagan Airport North – Handhole in Room 119

Picture 8: C10 Reagan Airport North – Panel F in Room 119

Picture 9: C10 Reagan Airport North – Panel F in Room 119

Picture 10: C10 Reagan Airport North – Panel F Schedule



F: ESSENTIAL

METRO

VOLTAGE: 120/208

PHASE: 3 PHASE

WIRES: 4 WIRE

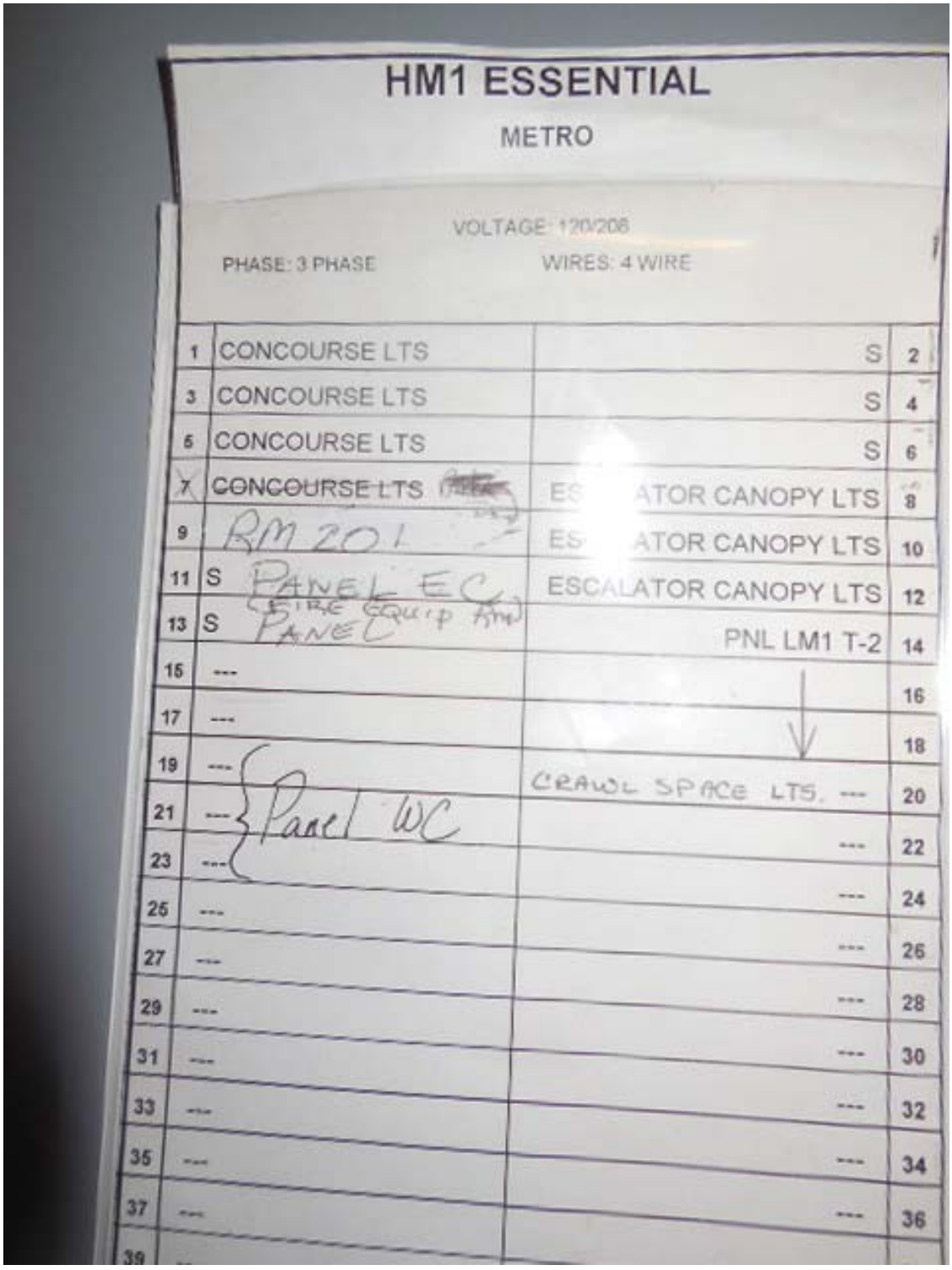
1	TICKET DISPENSER	ESC 3&4 SIDE LIGHTS	2
3	T-BANK	ESC 3&4 SIDE LIGHTS	4
5	T-BANK	ESC 3&4 SIDE LIGHTS	6
7	EF-M-6	ESC 1&2 SIDE LIGHTS	8
9	---	ESC 1&2 SIDE LIGHTS	10
11	---	ESC 1&2 SIDE LIGHTS	12
13	--- FAREGATE # 20	VENDOR # 30 ---	14
15	--- FAREGATE # 19	VENDOR # 50 ---	16
17	--- FAREGATE # 18	VENDOR # 51 ---	18
19	--- SPARE	~~SP~~ PIDS ---	20
21	--- FAREGATE # 13	SP SM TRIP #2	22
23	--- FAREGATE # 12	SP SM TRIP #2	24
25	--- FAREGATE # 11	SP ---	26
27	--- FAREGATE # 10	SP ---	28
29	--- SPARE	SP ---	30
31	--- VENDOR ~~SPARE~~ SMART Cab	SP ---	32
33	--- VENDOR # 35	SP ---	34
35	--- VENDOR # 34	SP ---	36
37	--- VENDOR # 33	SP ---	38
---	--- VENDOR # 32	SP ---	40
---	--- VENDOR # 31	SP ---	42

Picture 11: C10 Reagan Airport North – Panel F – Ducts below Panel

Picture 12: C10 Reagan Airport North – Panel HM1 in Room 119

Picture 13: C10 Reagan Airport North – Panel HM1 in Room 119

Picture 14: C10 Reagan Airport North – Panel HM1 Schedule



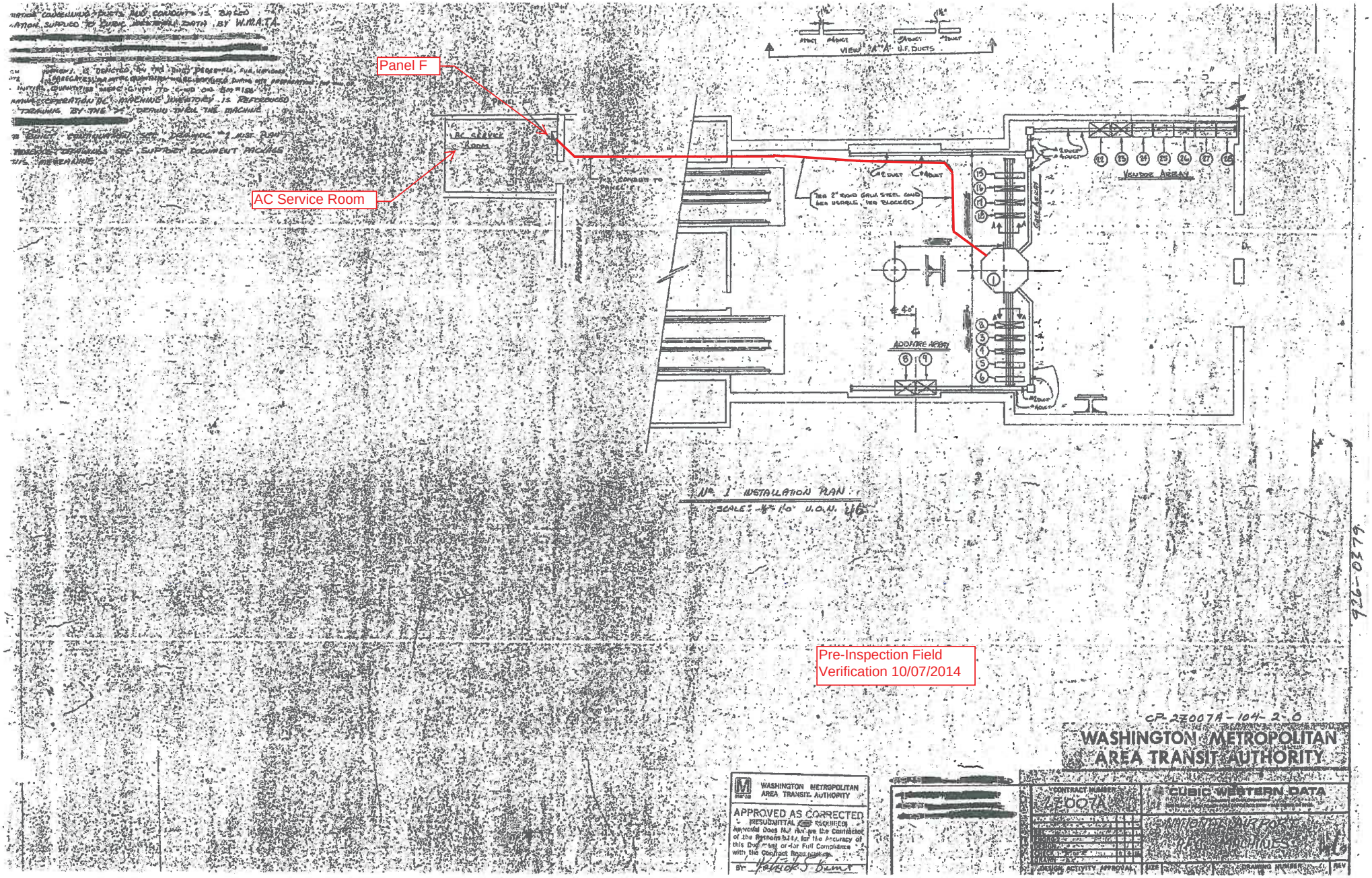
HM1 ESSENTIAL

METRO

VOLTAGE: 120/208

PHASE: 3 PHASE WIRES: 4 WIRE

1	CONCOURSE LTS	S	2
3	CONCOURSE LTS	S	4
5	CONCOURSE LTS	S	6
7	CONCOURSE LTS	ES ATOR CANOPY LTS	8
9	RM 201	ES ATOR CANOPY LTS	10
11	S PANEL EC	ESCALATOR CANOPY LTS	12
13	S (FIRE EQUIP RM) PANEL	PNL LM1 T-2	14
15	---	↓	16
17	---	↓	18
19	---	CRAWL SPACE LTS. ---	20
21	--- Panel WC	---	22
23	---	---	24
25	---	---	26
27	---	---	28
29	---	---	30
31	---	---	32
33	---	---	34
35	---	---	36
37	---	---	
39			


Panel F
AC Service Room
VIEW "A-A" U.F. DUCTS
NO. 1 INSTALLATION PLAN
SCALE: 1/4" = 1'-0" U.O.N.
Pre-Inspection Field Verification 10/07/2014
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
APPROVED AS CORRECTED
CUBIC WESTERN DATA
CP-27007A-104-2.0
4730-234

EXISTING PANEL "F"(North)

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 225A MCB	PHASE: 3	LOCATION: ELEC EQUIPMENT RM. 119	
RATING: 10KAIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION	
SPARE	0.0	20	1	1	A - -	2	3	20	3.3	EXIST. LOAD CENTER "KES"	
EXISTING VENDOR	0.8	20	1	3	- B -	4	-	-	3.3		
EXISTING VENDOR	0.8	20	1	5	- - C	6	-	-	3.3		
EXISTING VENDOR	0.8	20	1	7	A - -	8	3	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	9	- B -	10	-	-	0.8		
SPARE	0.0	20	1	11	- - C	12	-	-	0.8		
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP)	1
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.0	SPARE (KIOSK)	1&2
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	31	A - -	32	-	-	0.0	SPARE	
SPARE	0.0	20	1	33	- B -	34	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	35	- - C	36	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	37	A - -	38	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	39	- B -	40	-	-	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	41	- - C	42	-	-	0.0	SPARE	

NOTES. 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	12.4 x 50%		6.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	29.9 KVA	TOTAL DEMAND KVA	24.6 KVA
		TOTAL DEMAND AMPS	67.8 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	11.3 KVA
PHASE B:	8.7 KVA
PHASE C:	8.9 KVA

NOTES: A. EXISTING PANEL "F" IS FED FROM 277/480V, 3ø, 4W EXISTING PANEL "HM1" LOCATED IN ELEC. EQUIPMENT 119, ~~CIRCUIT PNL F TS (Circuit #25) #25~~ 150/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E22).

B. EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 2-6 1/2"x 1 1/2" FLOOR DUCT (1-WIRING FILL >40%)(1-WIRING FILL >10%).
- 3-1/2" C. (2-WIRING FILL >40%)(1-EMPTY CONDUIT).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).
- 3-1/2" C. (WIRING FILL >40%).
- 1-#12 WIRING.

Pre-inspection Field Verification 10/07/2014

EXISTING PANEL "F"(South)

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 200A MCB	PHASE: 3	LOCATION: ELEC. EQUIPMENT RM. C108	
RATING: 10KAIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	21	- B -	22	1	20	0.8	NEW KIOSK RECEPT. (IT &NEPP)	1
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE (KIOSK)	1&2
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	29	- - C	30	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	-	-	31	A - -	32	1	20	0.0	SPARE	
SPARE	0.0	-	-	33	- B -	34	1	20	0.0	SPARE	
SPARE	0.0	-	-	35	- - C	36	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	-	-	37	A - -	38	3	30	2.9	EXIST. LOAD CENTER "KES"	
SPARE	0.0	-	-	39	- B -	40	-	-	2.5		
EXISTING VENDOR	0.8	-	-	41	- - C	42	-	-	2.5		

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	12.8 x 50%		6.4 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	30.3 KVA	TOTAL DEMAND KVA	24.7 KVA
		TOTAL DEMAND AMPS	68.5 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	11.7 KVA
PHASE B:	8.9 KVA
PHASE C:	9.7 KVA

NOTES: A. EXISTING PANEL "F" IS FED FROM 120/208V, 3ø, 4W EXISTING SWBD. "SLE" LOCATED IN AC SWBD. BATTERY RM. C116, CIRCUIT #2-200/3P (SEE ATTACHED DWG. MM-C-E22).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-3/4" C. (WIRING FILL >40%).
- 1-#12 WIRING.

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 2-4" C. TO TRANSFORMER (WIRING FILL >40%).

CONTRACT NO 14-FQ10060-CENI-24

DESIGNED C NGO 09-14 DATE
DRAWN C NGO 09-14 DATE
CHECKED B IDILBI 09-14 DATE
APPROVED N/A DATE

REFERENCE DRAWINGS		REVISIONS		
NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

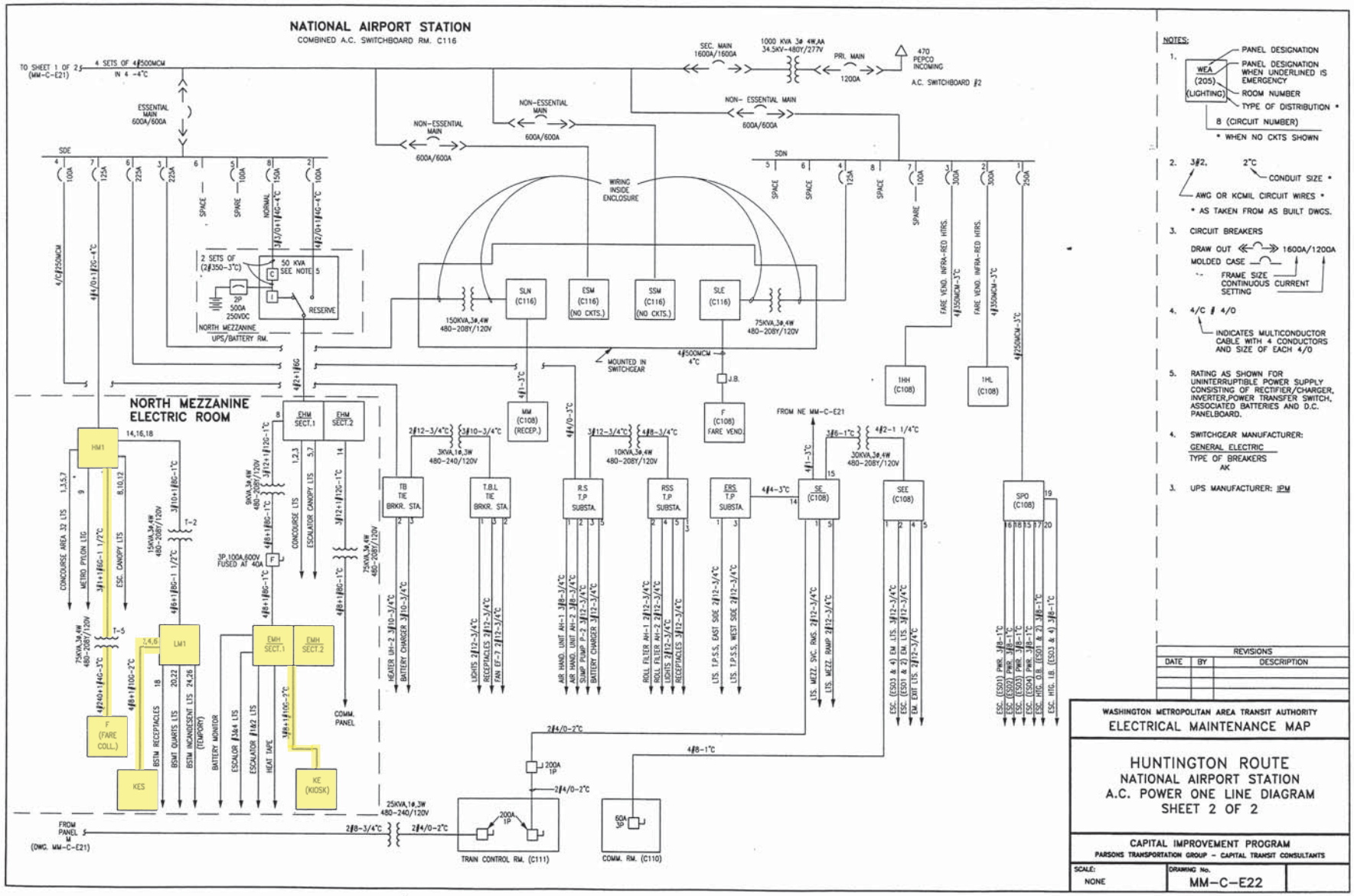
GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
NATIONAL AIRPORT - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE
DRAWING NO: C10-E-102

Pre-inspection Field Verification 10/07/2014



Pre-Inspection Mezzanine Walkthrough Checklist

REVISION 1

Date: 10/07/2014	**Station Name:** C12 Braddock Road	**Mezzanine #:** MZ047	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify that electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: SWBD #2 Source Breaker Name/Number: "Panel F" Electrical AFC Panel Name/Number: Panel F	C111 C111 C111	
☑	Verify if disconnect switch is connected to the AFC electrical power panel. Low or High voltage SMNT/POWR escorts requirements?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH AND LOW VOLTAGE		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to be de-energized.	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of duct / conduit, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☐ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		One handhole in corridor at mezzanine level (cover loose)
☑	Identify handhole or manhole access requirement.	Required PLNT Mason for handhole/manhole access? NO Identified Conduit/Duct Transition to mezzanine level? YES		Conduit/duct transistion on multiple levels

Emergency Power Verification

Check	Task	Equipment	Room ID	Notes
☑	Verify if AFC electrical panel is connected to an Automatic Transfer Switch (ATS).	ATS Name/Number:		
☑	Verification of Kiosk Emergency Panel(s) (KE, KES, KESS, etc)	Source Panel Name/Number: SEL Source Breaker Name/Number: Breaker #2 Panel Name/Number: KE	C111 C11 Kiosk	

Notes and Discrepancies:

Sign Off	**GFP Representative**	**WMATA PRGM**
Name:	Tino Sahoo	
Signature:		
Date:	10/07/2014	

Photo #1: C12 Braddock Road – Mezzanine area

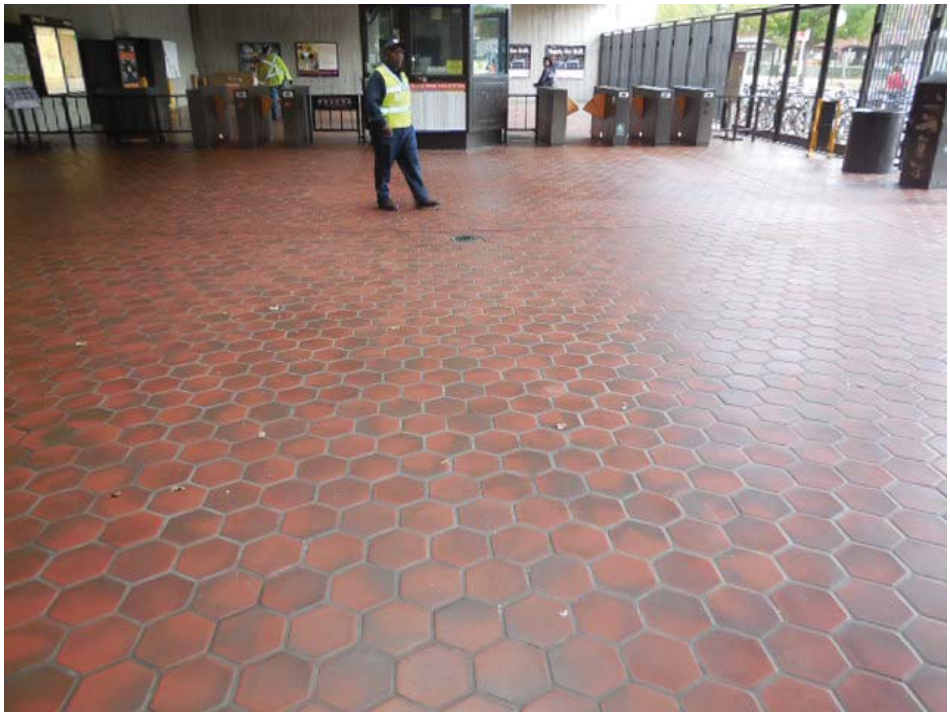


Photo #2: C12 Braddock Road – Handhole in Mezzanine area

Photo #3: C12 Braddock Road – Handhole in corridor

Photo #4: C12 Braddock Road – Ducts to Bottom of Panel F in Room C111

Photo #5: C12 Braddock Road – Panel F in Room C111

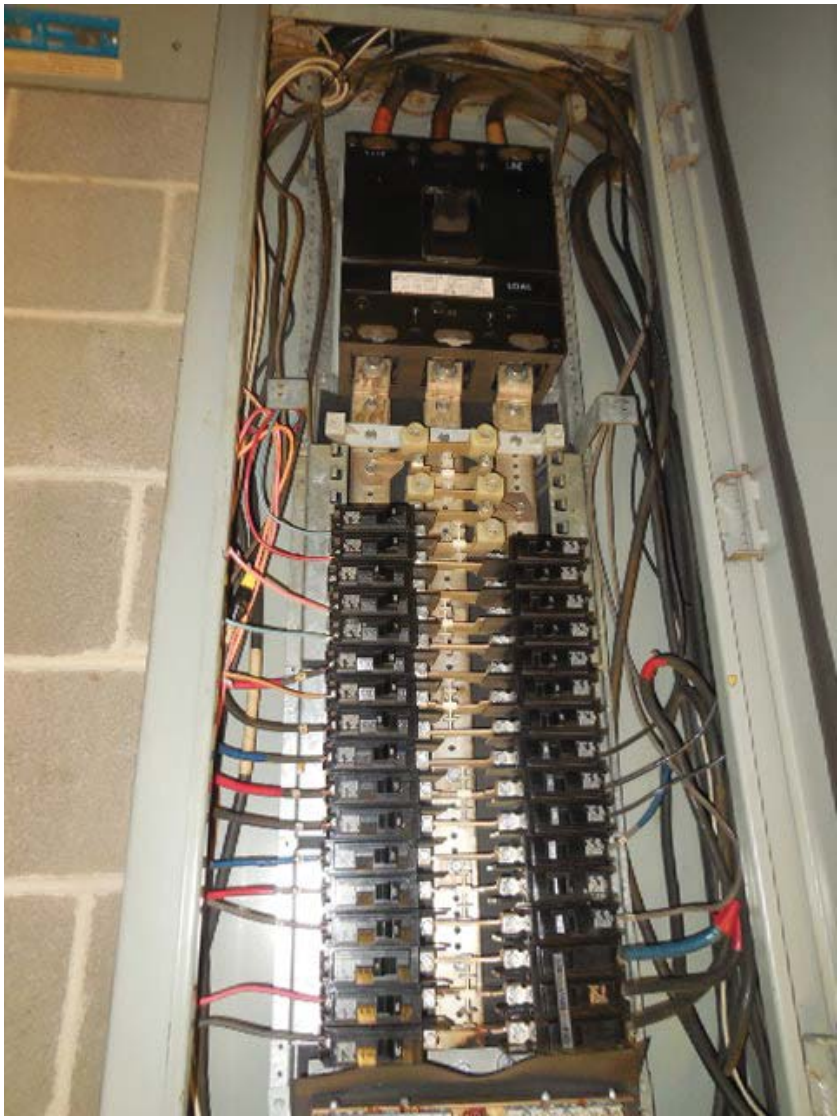
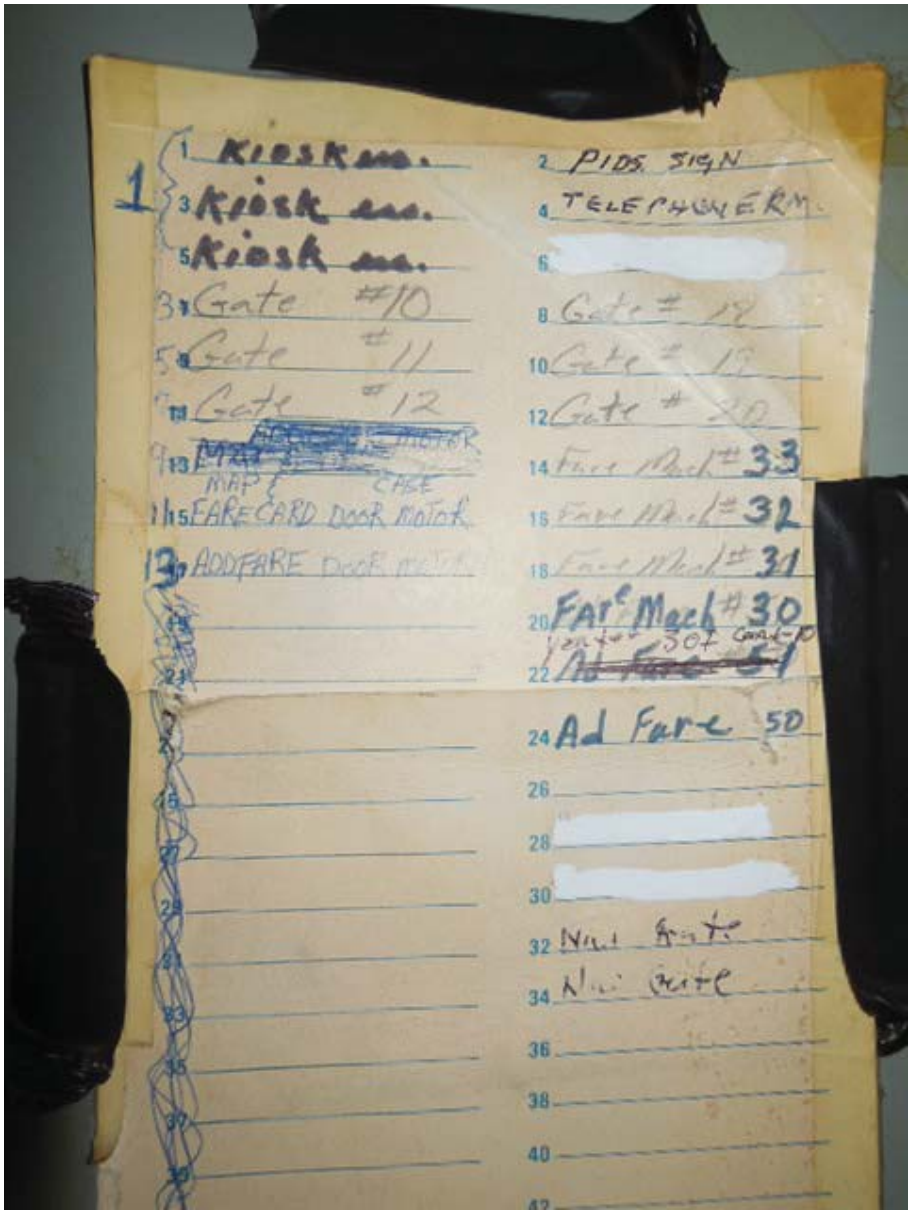


Photo #6: C12 Braddock Road – Panel F schedule in Room C111

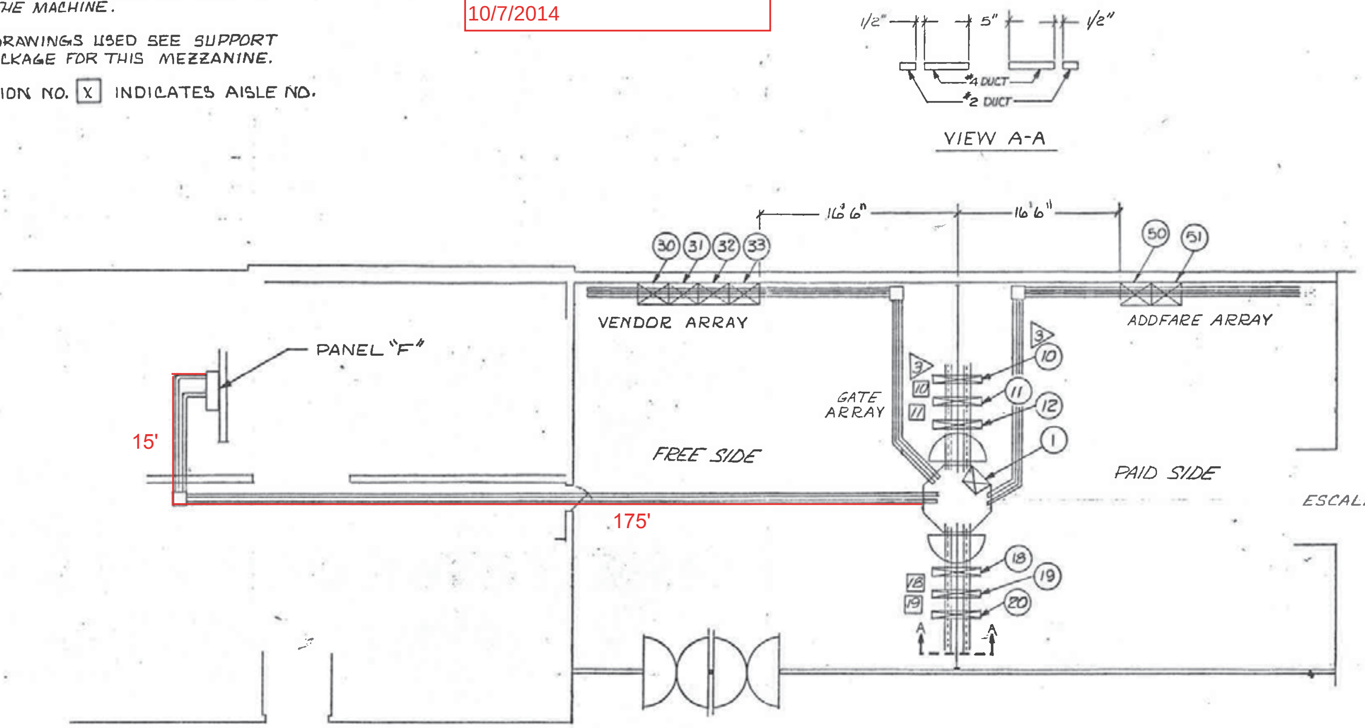


NOTES

1. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE.
2. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.

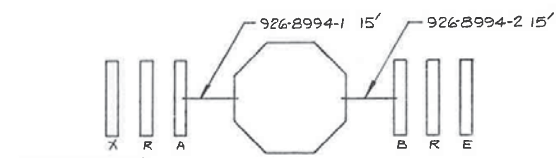
3 (X) INDICATES POSITION NO. [X] INDICATES AISLE NO.

Pre-inspection Field Verification
10/7/2014



-1 INSTALLATION PLAN

			PANEL F		
POSITION NO.	MACHINE TYPE	SERIAL NO.	CIRCUIT BREAKER NO.	BREAKER SIZE (AMPS)	WIRE SIZE (AWG)
1	DADS	DS8070	KIOSK	20	
10	EXIT GATE	GX 4074	7	20	6
11	REV GATE	GR 7263	9	20	6
12	A GATE	GA 5048	11	20	6
18	B GATE	GB 6055	8	20	6
19	REV GATE	GR 7255	10	20	6
20	ENTRYGATE	GN 3073	12	20	6
30	VENDOR	FV 1315	20	20	8
31	VENDOR	FV 1328	18	20	8
32	VENDOR	FV 1338	16	20	8
33	VENDOR	FV 1327	14	20	8
50	ADD FARE	AM 2132	24	20	8
51	ADDFARE	AM 2125	22	20	8



GATE ARRAY
SEE 926-0351 FOR SERVICE GATE & RAILING DRAWING

CUBIC WESTERN DATA

TITLE: INSTALLATION PLAN BRADDOCK ROAD STATION

SIZE D | REV A1

DRAWING NUMBER 926-0420

SHEET 1 OF 1

CODE IDENT NO. 94987

926-0420

47

Pre-inspection Field Verification
10/7/2014

EXISTING PANEL "F"

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 225AMCB	PHASE: 3	LOCATION: AC SWBD RM. C111	
RATING: 10KAIC	WIRE: 4	SECTION: 1 OF 1	

		CKT BKRS		CKT.			CKT.	CKT BKRS			
LOAD DESCRIPTION	KVA	AMP	POLE	NO.			NO.	POLE	AMP	KVA	LOAD DESCRIPTION
EXIST. LOAD CENTER "KES"	2.9	20	3	1	A	-	2	1	20	0.8	EXISTING VENDOR
	2.5	-	-	3	-	B	4	1	20	0.8	EXISTING VENDOR
	2.5	-	-	5	-	C	6	1	30	0.8	SPARE
EXISTING VENDOR	0.8	30	1	7	A	-	8	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	9	-	B	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	-	C	12	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	13	A	-	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	-	B	16	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	17	-	C	18	1	20	0.8	EXISTING VENDOR
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	19	A	-	20	1	20	0.8	EXISTING VENDOR
1&2 SPARE (KIOSK)	0.0	20	1	21	-	B	22	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	23	-	C	24	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	25	A	-	26	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	27	-	B	28	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	29	-	C	30	1	20	0.0	SPARE
SPACE	0.0	-	-	31	A	-	32	1	20	0.8	EXISTING VENDOR
SPACE	0.0	-	-	33	-	B	34	1	20	0.8	EXISTING VENDOR
SPACE	0.0	-	-	35	-	C	36	-	-	0.0	SPACE
SPACE	0.0	-	-	37	A	-	38	-	-	0.0	SPACE
SPACE	0.0	-	-	39	-	B	40	-	-	0.0	SPACE
SPACE	0.0	-	-	41	-	C	42	-	-	0.0	SPACE

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1PCB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.0 x 50%		4.0 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	26.5 KVA	TOTAL DEMAND KVA	22.3 KVA
		TOTAL DEMAND AMPS	61.8 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	10.1 KVA		
PHASE B:	8.1 KVA		
PHASE C:	7.3 KVA		

NOTES: A. EXISTING PANEL "F" IS FED FROM 277/480V, 3Ø, 4W EXISTING SWBD. "#2" LOCATED IN AC SWBD RM. C111, ~~CIRCUIT #1 - 125/3P~~ VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E25).

B. EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 2-6 1/2"x 1 1/2" FLOOR DUCT (1-WIRING FILL >40%)(1-WIRING FILL >20%).

EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-#12 WIRING.

Breaker "Panel F"
(Breaker #1) - 125/3P

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED	C. HOO	09-14 DATE
DRAWN	C. HOO	09-14 DATE
CHECKED	R. KELB	09-14 DATE
APPROVED	N/A	DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

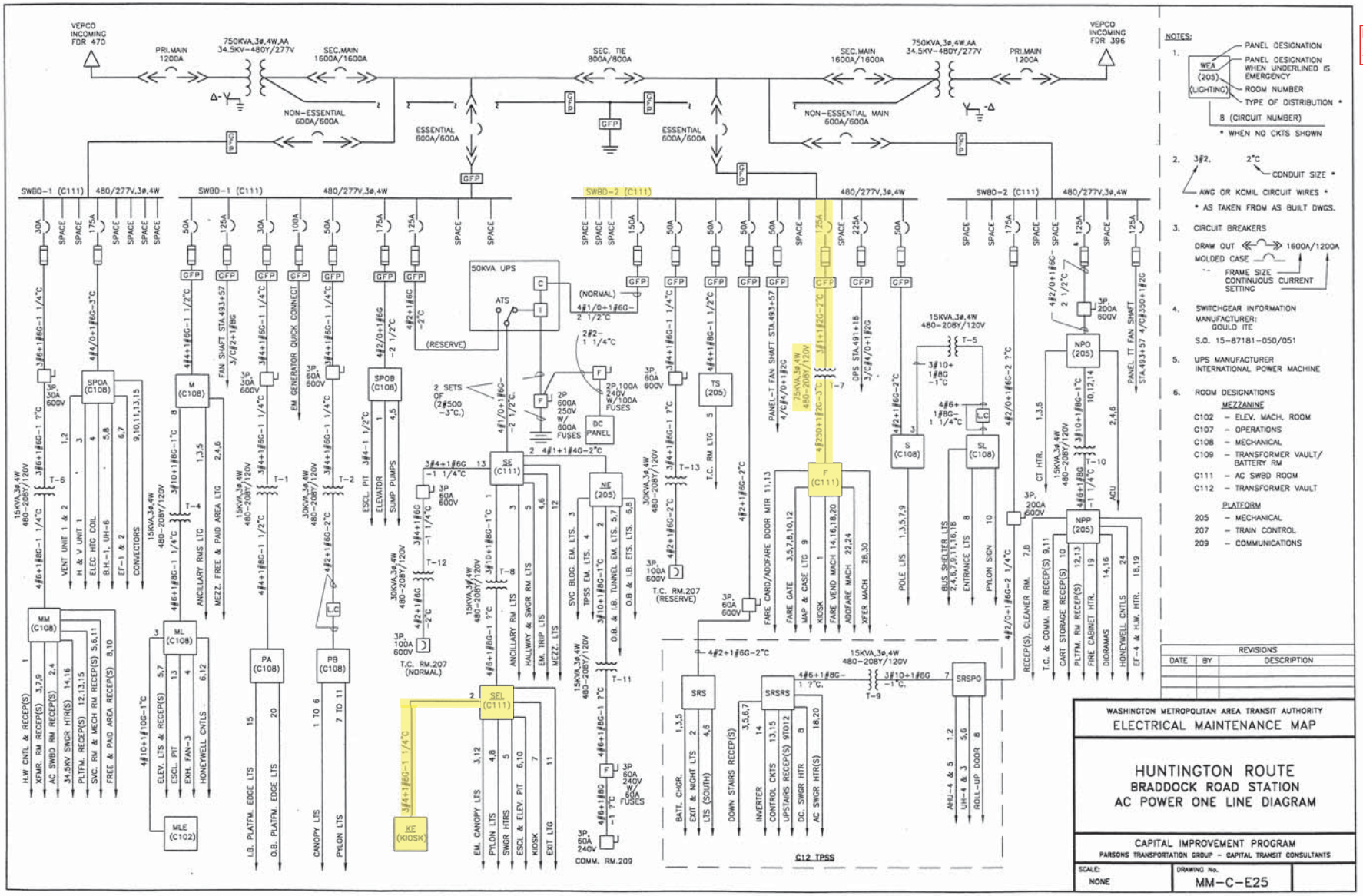
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE
SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
BRADDOCK ROAD
PANEL SCHEDULE

SCALE: NOT TO SCALE
DRAWING NO: C12-E-102



Pre-inspection Field Verification
10/7/2014

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 10/07/2014	**Station Name:** C13 King Street (South)	**Mezzanine #** 048	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Essential Main B (AFC) EL (Kiosk Emergency) Source Breaker Name/Number: Ckt. #7: "Panel F1 & F2" (AFC), Ckt. #1 (KE) Electrical AFC Panel Name/Number: F1 and F2 / KE	C103 C103 C103	Emergency Circuit: Source Panel EL, Circuit #1 to de-energize KE (Kiosk) Panel
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH AND LOW VOLTAGE		High and Low Voltage escorts are required
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: AFC		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits and ducts are on one level. Over 200' run.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:	10/7/14	

Photo #1: C13 King Street (South) – Kiosk at mezzanine level

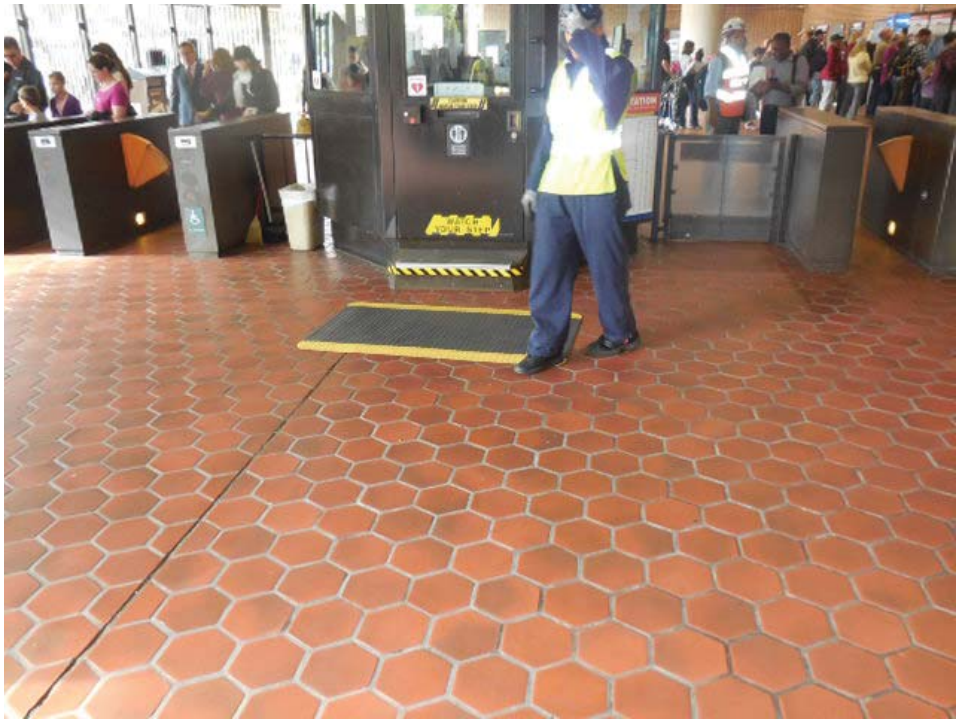


Photo #2: C13 King Street (South) – Free Side of Mezzanine level, presumed path of power duct

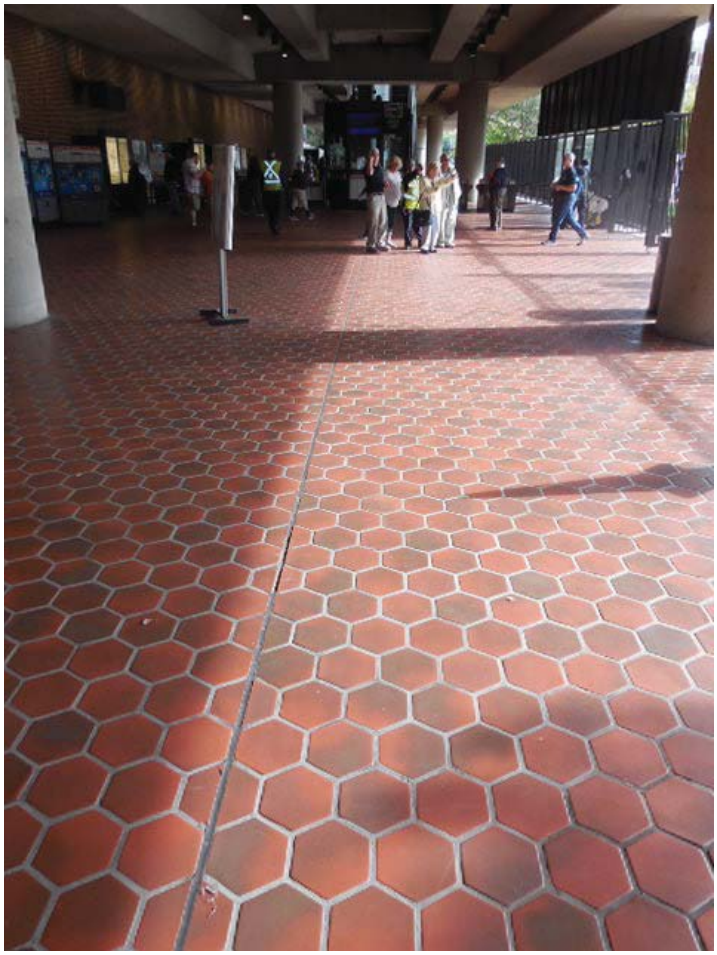


Photo #3: C13 King Street (South) – Handholes in mezzanine floor

Photo #4: C13 King Street (South) – Handholes in mezzanine floor

Photo #5: C13 King Street (South) – Mini-mezzanine mezzanine area

Photo #6: C13 King Street (South) – Mini-mezzanine mezzanine faregate array and floor handhole

Photo #7: C13 King Street (South) – Handhole in mezzanine floor

Photo #8: C13 King Street (South) – Switchboard circuit label for Panels F1 and F2

Photo #9: C13 King Street (South) – Ducts and conduits into panels F1 and F2 in Room C103

Photo #10: C13 King Street (South) – Panel F1 in Room C103

Photo #11: C13 King Street (South) – Schedule of Panel F1 in Room C103

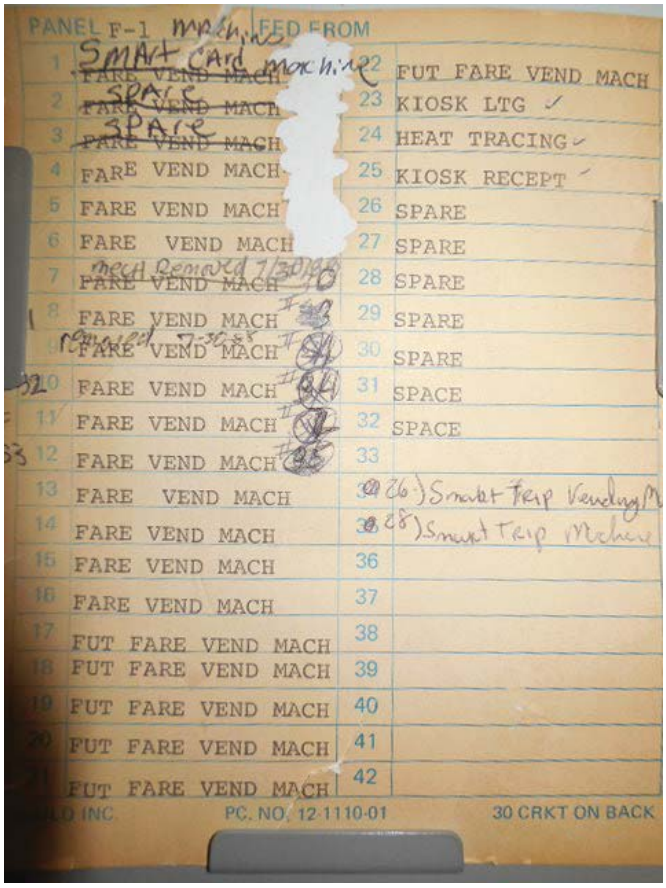
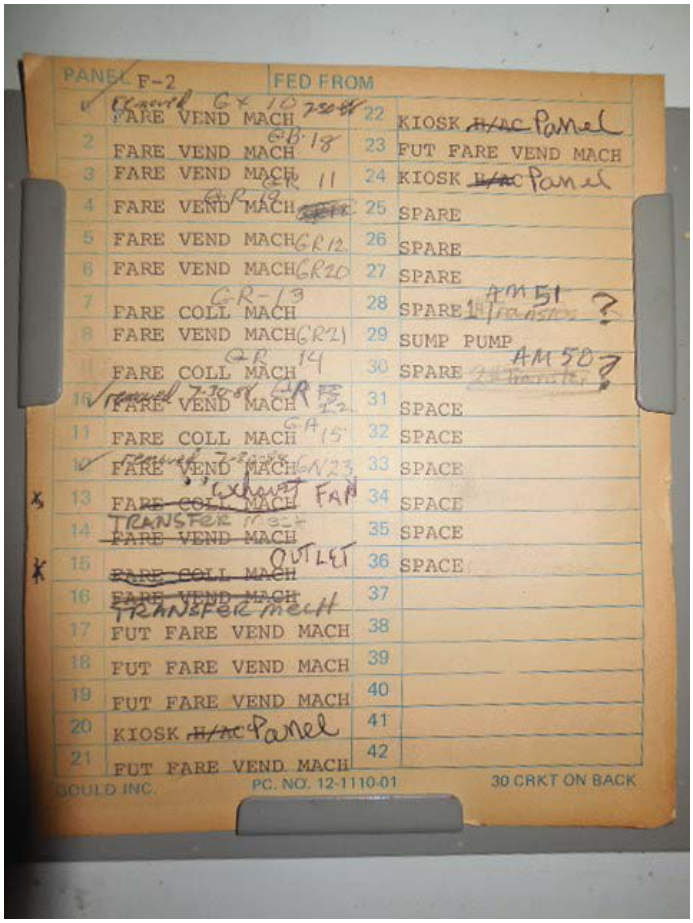


Photo #12: C13 King Street (South) – Panel F2 in Room C103

Photo #13: C13 King Street (South) – Schedule of Panel F2 in Room C103

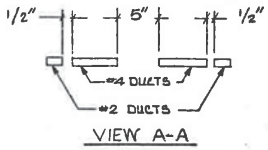


NOTES:

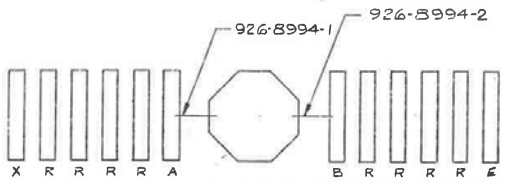
1. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE.
2. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.

(3) (X) INDICATES POSITION NO. [X] INDICATES AISLE NO.

Pre-inspection Field Verification
10/7/2014

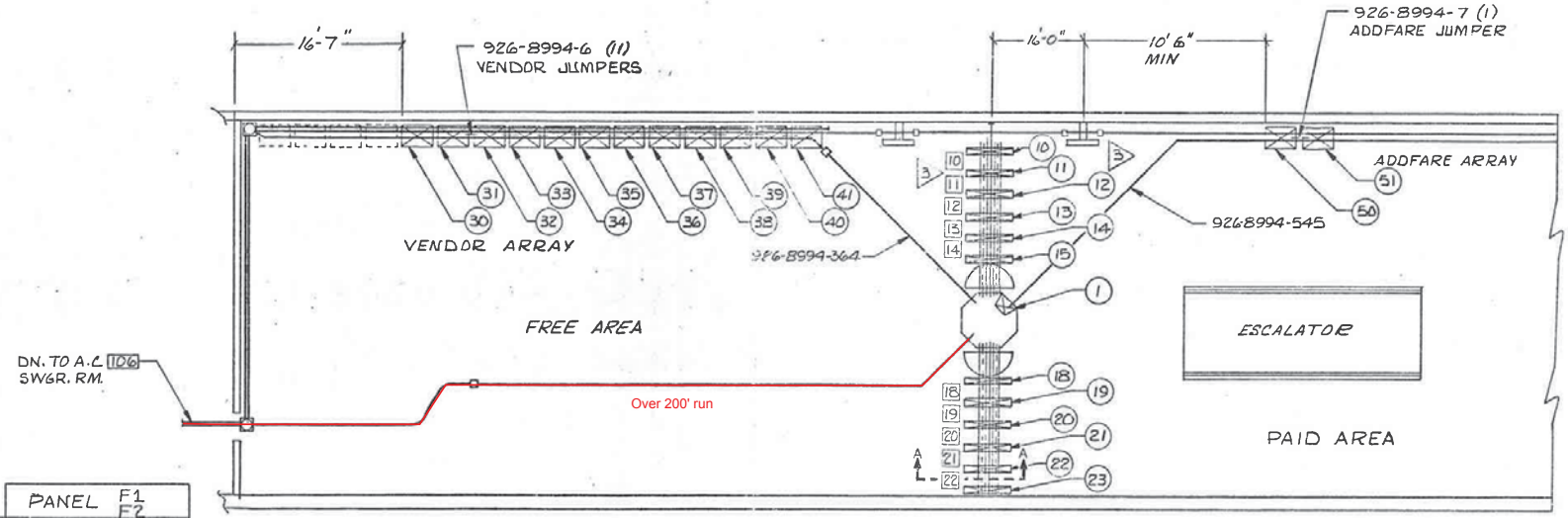


VIEW A-A



GATE ARRAY ROTATED 90° CCW
SEE 926-0361 FOR SERVICE GATE & RAILING DRAWING
FREE AREA

926-8998-1 (9)
926-8996-1 (9)
926-8997-1 (9)
926-8993-1 (10)



-1 INSTALLATION PLAN

POSITION NO.	MACHINE TYPE	SERIAL NO.	PANEL F1 F2 CIRCUIT BREAKER NO.	BREAKER SIZE (AMPS)	WIRE SIZE (AWG)
1	DADS	8072	KIOSK	20	10
10	EXIT GATE	GX 4066	1	20	10
11	REV GATE	GR 7267	3	20	10
12	REV GATE	GR 7269	5	20	10
13	REV GATE	GR 7307	7	20	10
14	REV GATE	GR 7306	9	20	10
15	A GATE	GA 5049	11	20	10
18	B GATE	GB 6048	2	20	10
19	REV GATE	GR - 7268	4	20	10
20	REV GATE	GR - 7271	6	20	10
21	REV GATE	GR - 7270	8	20	10
22	REV GATE	GR - 7272	10	20	10
30	VENDOR	FV - 1047	1	20	8
31	VENDOR	FV - 1331	3	20	8
32	VENDOR	FV - 1317	5	20	8
33	VENDOR	FV - 1330	2	20	8
34	VENDOR	FV - 1324	4	20	8
35	VENDOR	FV - 1332	6	20	8
36	VENDOR	FV - 1310	7	20	8
37	VENDOR	FV - 1333	9	20	8
38	VENDOR	FV - 1325	11	20	8
39	VENDOR	FV - 1318	8	20	6
40	VENDOR	FV - 1291	10	20	6
41	VENDOR	FV - 1326	12	20	6
50	ADDFARE	AM - 2124	28	20	6
51	ADDFARE	AM - 2119	30	20	6
23	ENTRY	GN - 3075	12	20	10

REDRAWN 7-27-82
BY J. ETHERIDGE

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
BREAK SHARP EDGES .010 MAX
DECIMALS: XX ± .03 XXX ± .010
FRACTIONS ± 1/64
ANGLES ± 0.5 DEG.
HOLES
.0135 THRU .1251 +.004 -.000
.126 THRU .2501 +.005 -.000
.251 THRU .5001 +.008 -.001
.501 THRU .7501 +.008 -.001
.751 THRU 1.0001 +.010 -.001
SIZE

LTR	DESCRIPTION	AUTHORITY	DATE	APVD	REL
A	INITIAL RELEASE				

CONTRACT NUMBER
SHEET 1 OF 1
DRAWING NUMBER 926-0418
SIZE D REV B1

CUBIC WESTERN DATA
A subsidiary of Cubic Corporation
5650 KEARNY MESA ROAD • POST OFFICE BOX 83787 • SAN DIEGO, CA 92138

TITLE
INSTALLATION PLAN
KING STREET STATION

CODE IDENT NO. 94987

DRAWN	J. ETHERIDGE	12-2-82	
CHECK	J.F. WELTS	12-2-82	
DESIGN	J.F. WELTS	12-2-82	
ENGRG	L.D. RUGE	12-2-82	
DESIGN ACTIVITY APPROVAL	ANTHONY W. PUMA	12-2-82	

SIZE D 926-0418 REV 48

CIP 2-87/A

EXISTING PANEL "F1"

AMPERES: 150	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 150A MCB	PHASE: 3	LOCATION: AC SWBD RM. C103	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

	LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION
	EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.0	SPARE
	EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.0	SPARE
	EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.0	SPARE
1	NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
1&2	SPARE (KIOSK)	0.0	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
	SPARE	0.0	20	1	13	A - -	14	1	20	0.0	SPARE
	SPARE	0.0	20	1	15	- B -	16	1	20	0.0	SPARE
	EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR
	SPARE	0.0	20	1	27	- B -	28	1	20	0.8	EXISTING VENDOR
	SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
	SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE
	SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE
	SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	5.2 x 50%		2.6 KVA
MISC APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	0.0 x 125%		0.0 KVA
AC	0.0 x 100%		0.0 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**16.2 KVA**	**TOTAL DEMAND KVA**	**12.6 KVA**
		TOTAL DEMAND AMPS	**35.0 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**5.6 KVA**		
PHASE B:	**4.9 KVA**		
PHASE C:	**5.6 KVA**		

NOTES: A. EXISTING PANEL "F1" IS FED FROM 277/480V, 3ø, 4W EXISTING SWBD. "ENSSENTIAL MAIN B" LOCATED IN AC SWBD C103, CIRCUIT #7-175/3P VIA 112KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E26).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-6 1/2"x 1 1/2" BUS DUCT (WIRING FILL >40%).
- 2-3/4" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 1-C" C. TO WIRE TROUGH (WIRING FILL >40%).

Pre-inspection Field Verification
10/7/2014

EXISTING PANEL "F2"

AMPERES: 150	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 150A MCB	PHASE: 3	LOCATION: AC SWBD BATTERY RM C103	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

	LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT NO.		CKT NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION
	EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
	EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.0	SPARE
	EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR
1	NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR
1&2	SPARE (KIOSK)	0.0	20	1	19	A - -	20	1	20	2.9	EXIST. LOAD CENTER "KES"
	SPARE	0.0	20	1	21	- B -	22	1	20	2.5	
	SPARE	0.0	20	1	23	- - C	24	1	20	2.5	
	SPARE	0.0	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR
	SPARE	0.0	20	1	27	- B -	28	1	20	0.8	EXISTING VENDOR
	SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
	SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE
	SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE
	SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	5.6 x 50%		2.8 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**23.1 KVA**	**TOTAL DEMAND KVA**	**21.1 KVA**
		TOTAL DEMAND AMPS	**58.5 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**7.7 KVA**		
PHASE B:	**8.1 KVA**		
PHASE C:	**7.3 KVA**		

NOTES: A. EXISTING PANEL "F2" IS FED FROM 277/480V, 3ø, 4W EXISTING SWBD. "ENSSENTIAL MAIN B" LOCATED IN AC SWBD C103, CIRCUIT #7-175/3P VIA 112KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E26).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-6 1/2"x 1 1/2" BUS DUCT (WIRING FILL >40%).
- 1-3/4" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. HOO 09-14 DATE
DRAWN C. HOO 09-14 DATE
CHECKED B. IDLIS 09-14 DATE
APPROVED N/A DATE

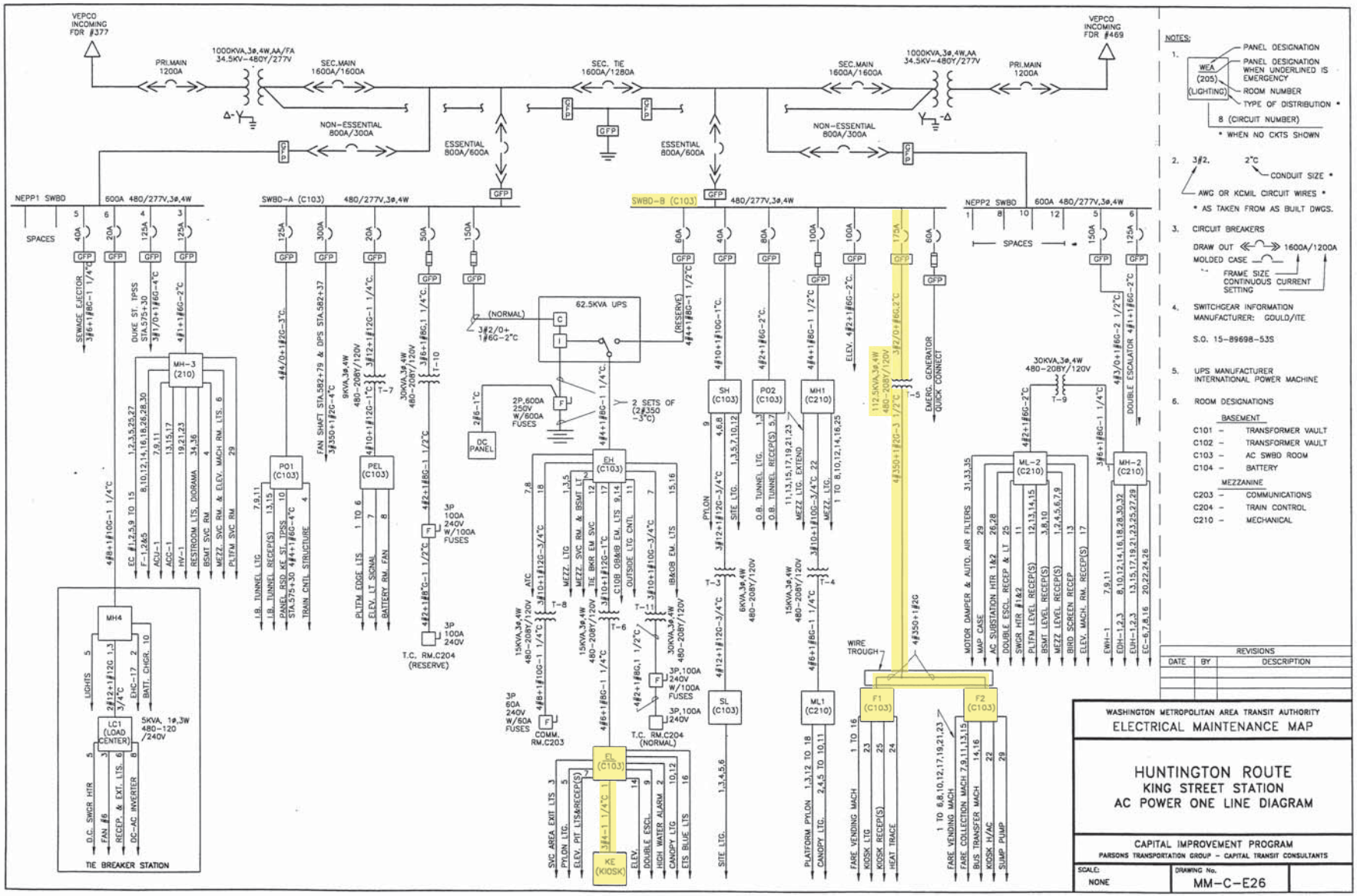
REFERENCE DRAWINGS		REVISIONS		
NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED

GFP A Gannett Fleming/Parsons JOINT VENTURE
SUBMITTED
PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
KING STREET - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE
DRAWING NO: C13-E-102



NOTES:

1. WEA (205) (LIGHTING) 8 (CIRCUIT NUMBER) * WHEN NO CKTS SHOWN
   - PANEL DESIGNATION
   - PANEL DESIGNATION WHEN UNDERLINED IS EMERGENCY
   - ROOM NUMBER
   - TYPE OF DISTRIBUTION *
2. 3#2, 2"C — CONDUIT SIZE * — AWG OR KCMIL CIRCUIT WIRES * * AS TAKEN FROM AS BUILT DWGS.
3. CIRCUIT BREAKERS — DRAW OUT / MOLDED CASE — 1600A/1200A — FRAME SIZE CONTINUOUS CURRENT SETTING
4. SWITCHGEAR INFORMATION MANUFACTURER: GOULD/ITE S.O. 15-89698-53S
5. UPS MANUFACTURER INTERNATIONAL POWER MACHINE
6. ROOM DESIGNATIONS

BASEMENT	
C101 –	TRANSFORMER VAULT
C102 –	TRANSFORMER VAULT
C103 –	AC SWBD ROOM
C104 –	BATTERY
MEZZANINE	
C203 –	COMMUNICATIONS
C204 –	TRAIN CONTROL
C210 –	MECHANICAL

REVISIONS		
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

ELECTRICAL MAINTENANCE MAP

HUNTINGTON ROUTE
KING STREET STATION
AC POWER ONE LINE DIAGRAM

CAPITAL IMPROVEMENT PROGRAM

PARSONS TRANSPORTATION GROUP – CAPITAL TRANSIT CONSULTANTS

SCALE: NONE

DRAWING No. MM-C-E26

Pre-inspection Field Verification
10/7/2014

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 01/15/2015	**Station Name:** King Street North - C13	**Mezzanine #:** MZ112	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify that electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: NESS Source Breaker Name/Number: "Panel NF" Electrical AFC Panel Name/Number: NF	N201 N201 N201	S.O. Request: Source Panel - Panel NES Breaker: Breaker "Trans T-7" Panels Affected: Panel NF, Panel NES, Panel NESS
☑	Verify if disconnect switch is connected to the AFC electrical power panel. Low or High voltage SMNT/POWR escorts requirements?	Disconnect Name/Number: SMNT/POWR escorts: HIGH Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to be de-energized.	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. YES (see notes)		AFC Panel NF shares a trough with Panels NES and NESS.
☑	Identify the assumed pathway of duct / conduit, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☑ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Mason for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		Conduit/ducts on multiple levels. AFC Panel Room N201 is two floors above Mezzanine.

Emergency Power Verification

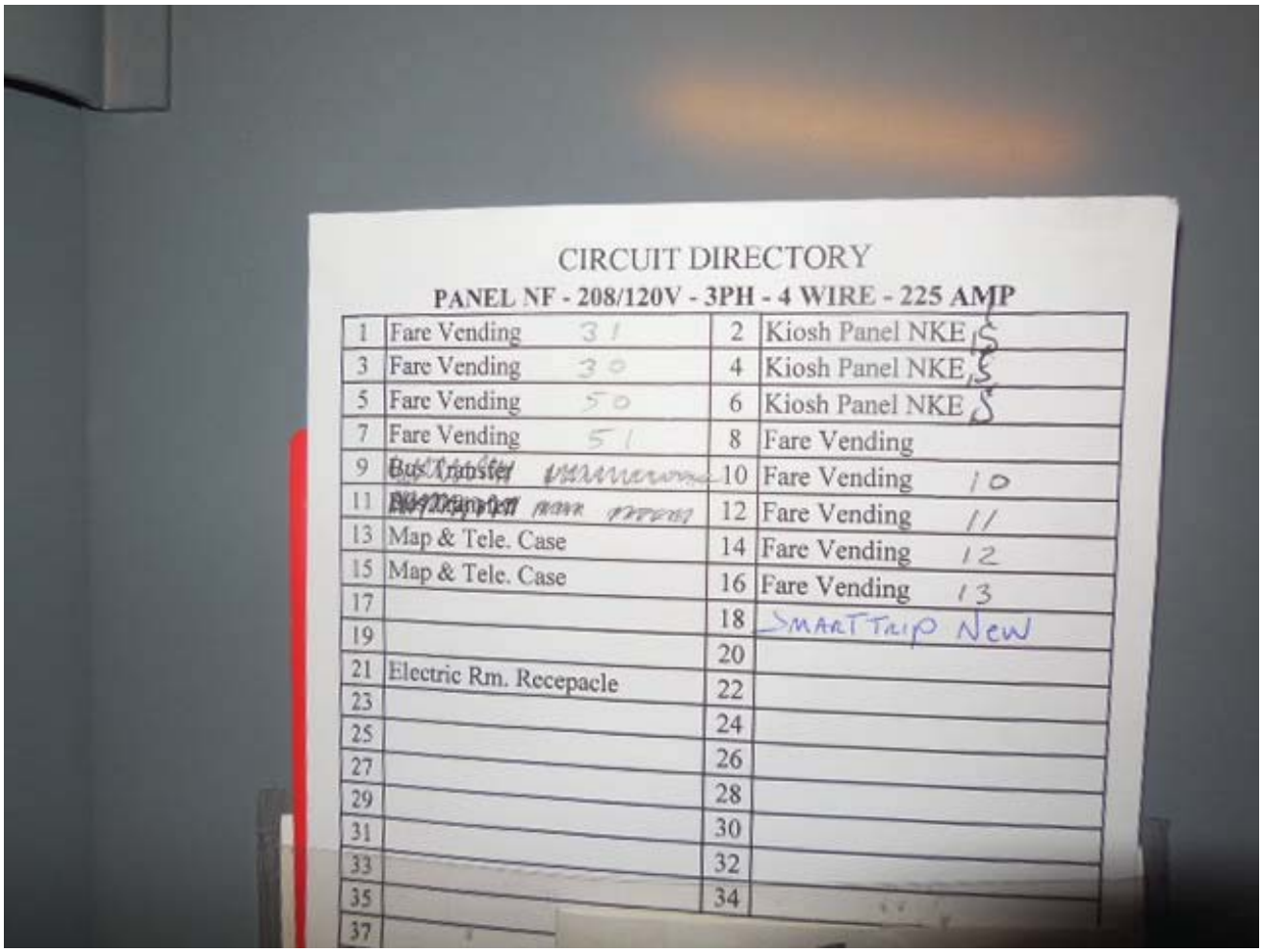
Check	Task	Equipment	Room ID	Notes
☑	Verify if AFC electrical panel is connected to an Automatic Transfer Switch (ATS).	ATS Name/Number:		
☑	Verification of Kiosk Emergency Panel(s) (KE, KES, KESS, etc)	Source Panel Name/Number: Source Breaker Name/Number: Panel Name/Number:		

Notes and Discrepancies:

Sign Off	**GFP Representative**	**WMATA PRGM**
Name:	Tino Sahoo	
Signature:		
Date:	01/15/2015	

King Street North Photo #1 – AFC Panel NF located in Electrical Room #N201

King Street North Photo #2 – "Panel NF" Panel Schedule - Electrical Room #N201



CIRCUIT DIRECTORY

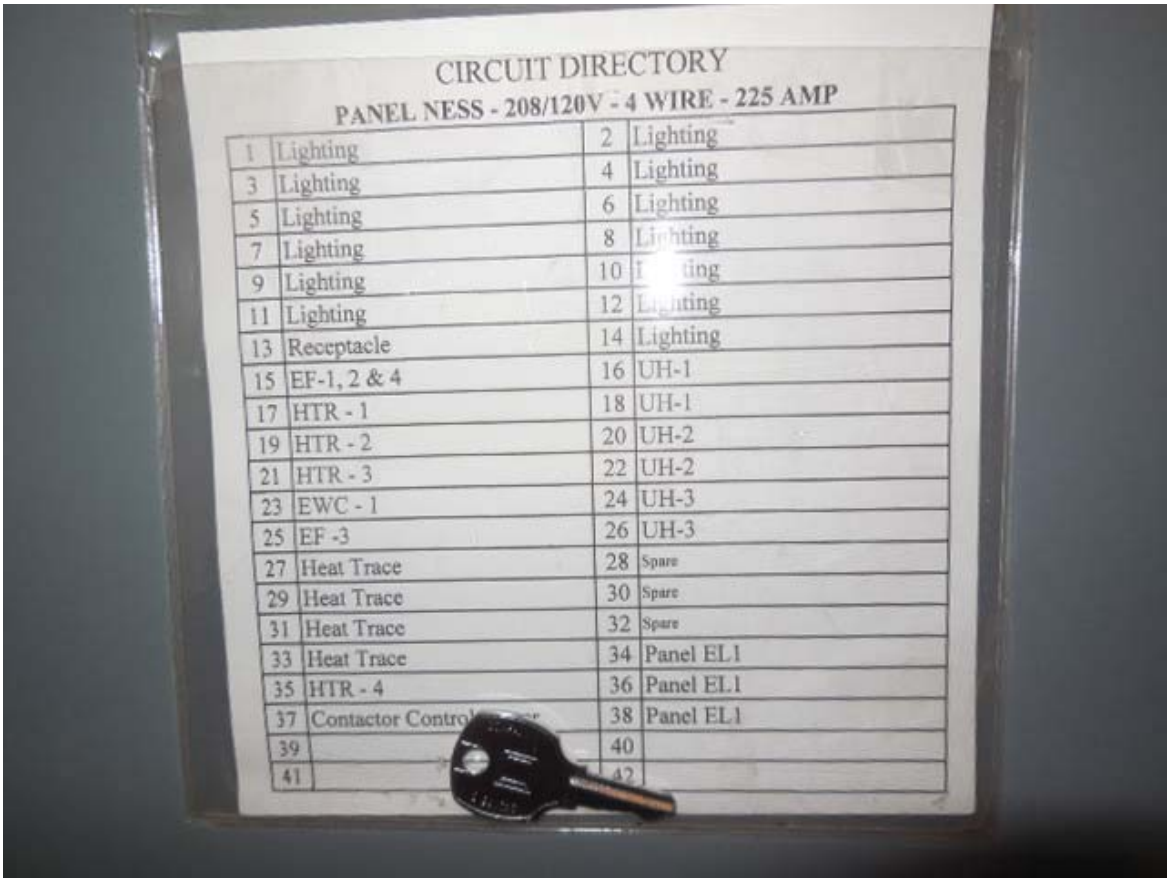
PANEL NF - 208/120V - 3PH - 4 WIRE - 225 AMP

1	Fare Vending 31	2	Kiosh Panel NKE
3	Fare Vending 30	4	Kiosh Panel NKE
5	Fare Vending 50	6	Kiosh Panel NKE
7	Fare Vending 51	8	Fare Vending
9	Bus Transfer	10	Fare Vending 10
11		12	Fare Vending 11
13	Map & Tele. Case	14	Fare Vending 12
15	Map & Tele. Case	16	Fare Vending 13
17		18	SMARTTRIP NEW
19		20	
21	Electric Rm. Recepacle	22	
23		24	
25		26	
27		28	
29		30	
31		32	
33		34	
35			
37			

King Street North Photo #3 – "Panel NF" Side Feed Conduits into Shared Trough - Electrical Room #N201

King Street North Photo #4 – Shared Trough for AFC Panel NF, Source Panel NESS, and Panel NES

King Street North Photo #5 – Source Panel NESS Panel Schedule - Electrical Room #N201

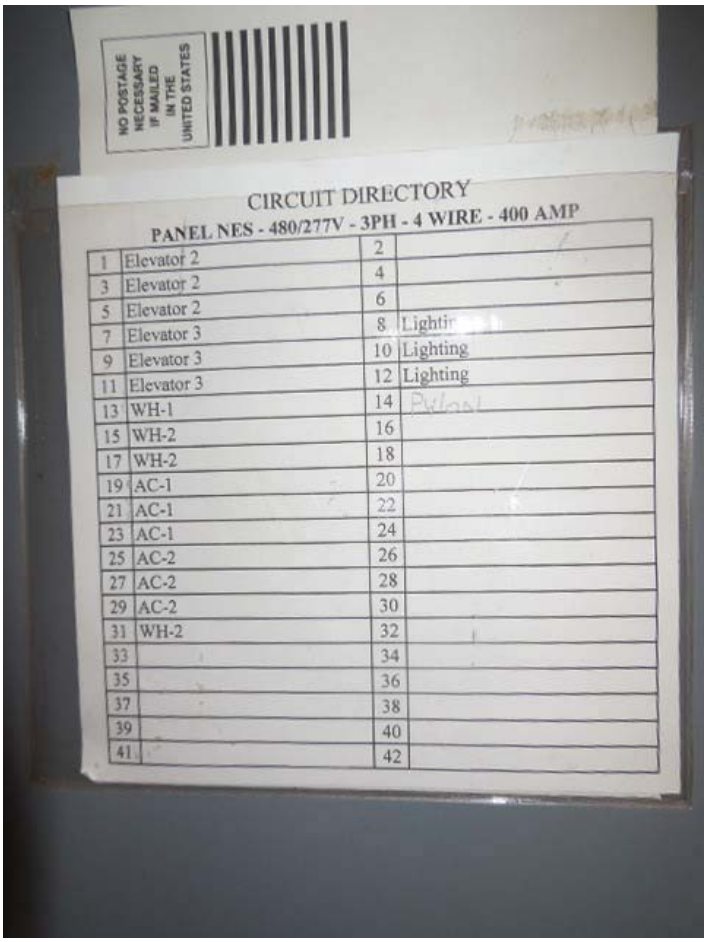


CIRCUIT DIRECTORY

PANEL NESS - 208/120V - 4 WIRE - 225 AMP

1	Lighting	2	Lighting
3	Lighting	4	Lighting
5	Lighting	6	Lighting
7	Lighting	8	Lighting
9	Lighting	10	Lighting
11	Lighting	12	Lighting
13	Receptacle	14	Lighting
15	EF-1, 2 & 4	16	UH-1
17	HTR - 1	18	UH-1
19	HTR - 2	20	UH-2
21	HTR - 3	22	UH-2
23	EWC - 1	24	UH-3
25	EF -3	26	UH-3
27	Heat Trace	28	Spare
29	Heat Trace	30	Spare
31	Heat Trace	32	Spare
33	Heat Trace	34	Panel EL1
35	HTR - 4	36	Panel EL1
37	Contactor Control	38	Panel EL1
39		40	
41		42	

King Street North Photo #6 – Panel NES which feeds Panel NESS Panel Schedule- Electrical Room #N201



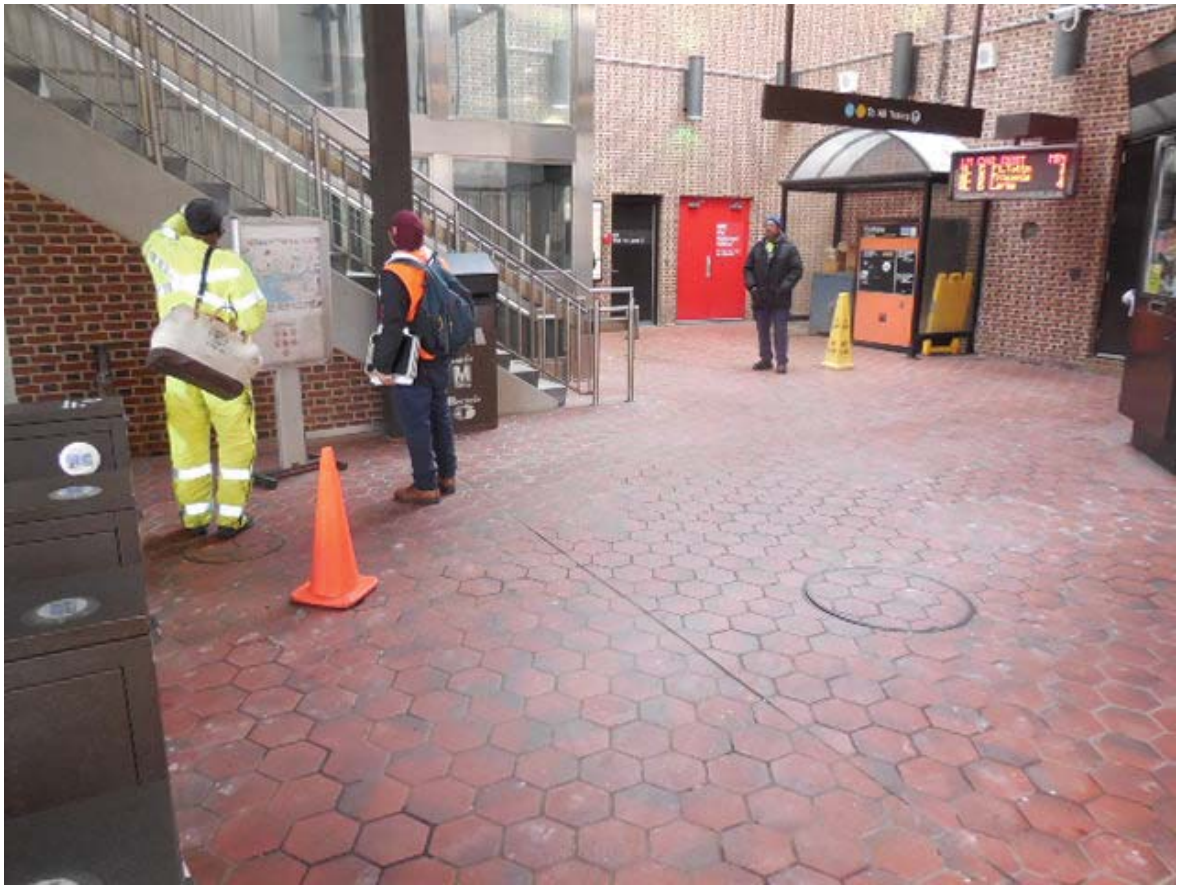
CIRCUIT DIRECTORY

PANEL NES - 480/277V - 3PH - 4 WIRE - 400 AMP

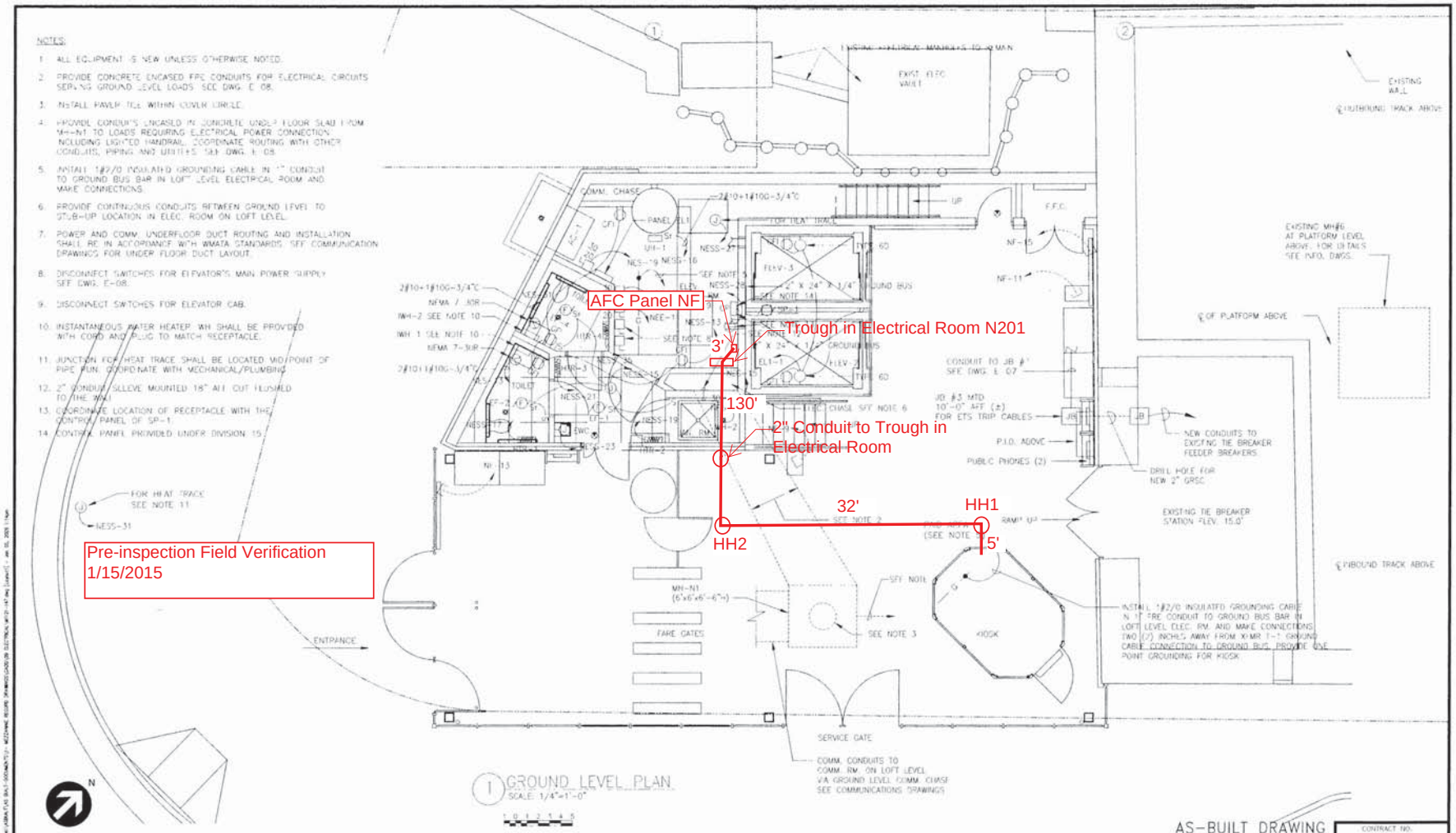
1	Elevator 2	2	
3	Elevator 2	4	
5	Elevator 2	6	
7	Elevator 3	8	Lighti
9	Elevator 3	10	Lighting
11	Elevator 3	12	Lighting
13	WH-1	14	Pylon
15	WH-2	16	
17	WH-2	18	
19	AC-1	20	
21	AC-1	22	
23	AC-1	24	
25	AC-2	26	
27	AC-2	28	
29	AC-2	30	
31	WH-2	32	
33		34	
35		36	
37		38	
39		40	
41		42	

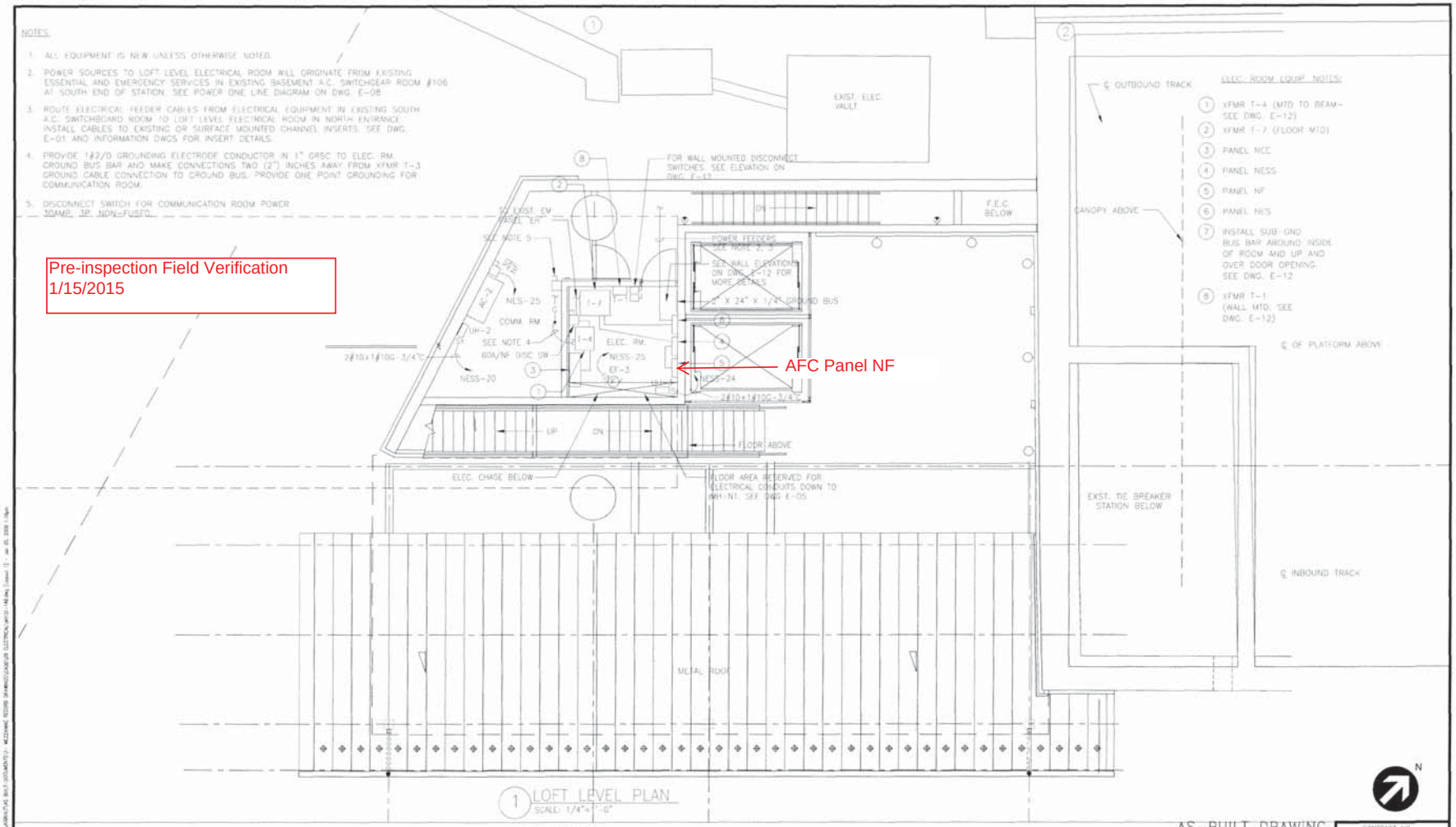
King Street North Photo #7 – Panel NES Main Breaker (Service Disconnect) used to de-energize Panel NES, Panel NESS and AFC Panel NF as all three panels share trough.

King Street North Photo #8 – Manholes in Mezzanine Area used for Routing of Power Conductor from Electrical Room two Floors Up to Mezzanine



King Street North #9 – Handhole in Mezzanine Area used for Routing of Power Conductors from AFC Panel to Kiosk


AFC Panel NF
Trough in Electrical Room N201
3'
130'
2" Conduit to Trough in Electrical Room
32'
HH1
HH2
5'
Pre-inspection Field Verification
1/15/2015
NOTES:
1. ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED.
2. PROVIDE CONCRETE ENCASED FPC CONDUITS FOR ELECTRICAL CIRCUITS SERVING GROUND LEVEL LOADS. SEE DWG. E-08.
3. INSTALL PAVER TILE WITHIN COVER CIRCLE.
4. PROVIDE CONDUITS UNCASED IN CONCRETE UNDER FLOOR SLAB FROM MH-N1 TO LOADS REQUIRING ELECTRICAL POWER CONNECTION, INCLUDING LIGHTED HANDRAIL. COORDINATE ROUTING WITH OTHER CONDUITS, PIPING AND UTILITIES. SEE DWG. E-08.
5. INSTALL 1#2/0 INSULATED GROUNDING CABLE IN 1" CONDUIT TO GROUND BUS BAR IN LOFT LEVEL ELECTRICAL ROOM AND MAKE CONNECTIONS.
6. PROVIDE CONTINUOUS CONDUITS BETWEEN GROUND LEVEL TO STUB-UP LOCATION IN ELEC. ROOM ON LOFT LEVEL.
7. POWER AND COMM. UNDERFLOOR DUCT ROUTING AND INSTALLATION SHALL BE IN ACCORDANCE WITH WMATA STANDARDS. SEE COMMUNICATION DRAWINGS FOR UNDERFLOOR DUCT LAYOUT.
8. DISCONNECT SWITCHES FOR ELEVATOR'S MAIN POWER SUPPLY SEE DWG. E-08.
9. DISCONNECT SWITCHES FOR ELEVATOR CAB.
10. INSTANTANEOUS WATER HEATER WH SHALL BE PROVIDED WITH CORD AND PLUG TO MATCH RECEPTACLE.
11. JUNCTION FOR HEAT TRACE SHALL BE LOCATED MID POINT OF PIPE RUN. COORDINATE WITH MECHANICAL/PLUMBING.
12. 2" CONDUIT SLEEVE MOUNTED 18" AFF CUT FLUSHED TO THE WALL
13. COORDINATE LOCATION OF RECEPTACLE WITH THE CONTROL PANEL OF SP-1.
14. CONTROL PANEL PROVIDED UNDER DIVISION 15.
1 GROUND LEVEL PLAN
SCALE: 1/4"=1'-0"
AS-BUILT DRAWING
AUGUST 16, 2007
CONTRACT NO. 1C1011
REFERENCE DRAWINGS
REVISIONS
08/16/2007
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
URS
2020 K STREET N.W. SUITE 300
WASHINGTON, DC 20006
TELE. 202.872.0277
Grunley-Walsh
HUNTINGTON ROUTE
KING STREET STATION
GROUND LEVEL PLAN
SCALE 1/4"=1'-0"
DRAWING NO. C10L-E-05
M1121-147



AS-BUILT DRAWING
AUGUST 16, 2007

CONTRACT NO. 1C1011

DESIGNED	DATE
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

08/16/2007

GRUNLEY WALSH

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

URS 2020 K STREET N.W. SUITE 300 WASHINGTON, DC 20006 TELE. 202.872.0277

Grunley-Walsh 11910 Parklawn Drive, Suite U Rockville, MD 20852

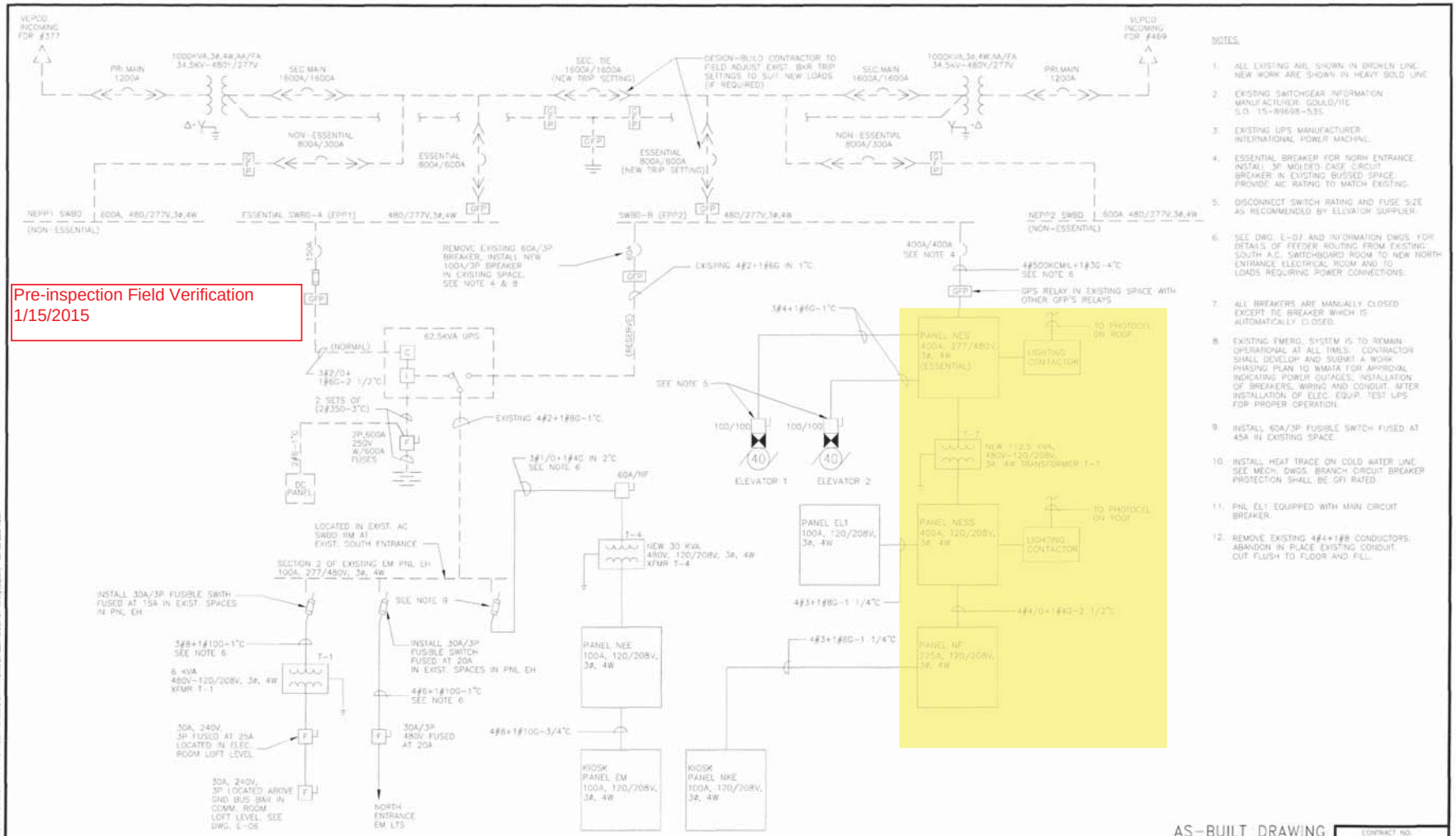
HUNTINGTON ROUTE
KING STREET STATION

LOFT LEVEL PLAN

SCALE: 1/4"=1'-0" 0 1 2 3 4 5

DRAWING NO. C10L-E-06

M1121-148



Pre-inspection Field Verification
1/15/2015

NOTES:

1. ALL EXISTING ARE SHOWN IN BROKEN LINE. NEW WORK ARE SHOWN IN HEAVY SOLID LINE.
2. EXISTING SWITCHGEAR INFORMATION: MANUFACTURER: GOULD/ITE S.O. 15-89698-535.
3. EXISTING UPS MANUFACTURER: INTERNATIONAL POWER MACHINE.
4. ESSENTIAL BREAKER FOR NORTH ENTRANCE INSTALL 3P MOLDED CASE CIRCUIT BREAKER IN EXISTING BUSSED SPACE. PROVIDE AIC RATING TO MATCH EXISTING.
5. DISCONNECT SWITCH RATING AND FUSE SIZE AS RECOMMENDED BY ELEVATOR SUPPLIER.
6. SEE DWG. E-07 AND INFORMATION DWGS. FOR DETAILS OF FEEDER ROUTING FROM EXISTING SOUTH A.C. SWITCHBOARD ROOM TO NEW NORTH ENTRANCE ELECTRICAL ROOM AND TO LOADS REQUIRING POWER CONNECTIONS.
7. ALL BREAKERS ARE MANUALLY CLOSED EXCEPT TIE BREAKER WHICH IS AUTOMATICALLY CLOSED.
8. EXISTING FMERG. SYSTEM IS TO REMAIN OPERATIONAL AT ALL TIMES. CONTRACTOR SHALL DEVELOP AND SUBMIT A WORK PHASING PLAN TO WMATA FOR APPROVAL INDICATING POWER OUTAGES, INSTALLATION OF BREAKERS, WIRING AND CONDUIT. AFTER INSTALLATION OF ELEC. EQUIP. TEST UPS FOR PROPER OPERATION.
9. INSTALL 60A/3P FUSIBLE SWITCH FUSED AT 45A IN EXISTING SPACE.
10. INSTALL HEAT TRACE ON COLD WATER LINE. SEE MECH. DWGS. BRANCH CIRCUIT BREAKER PROTECTION SHALL BE GFI RATED.
11. PNL EL1 EQUIPPED WITH MAIN CIRCUIT BREAKER.
12. REMOVE EXISTING 4#4+1#8 CONDUCTORS. ABANDON IN PLACE EXISTING CONDUIT. CUT FLUSH TO FLOOR AND FILL.

AS-BUILT DRAWING
AUGUST 16, 2007

CONTRACT NO. 1C1011

DESIGNED	C.B.	7/25/04
DRAWN	K.P.	7/25/04
CHECKED	S.S.	7/25/04
APPROVED	R.C.	7/25/04

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

08/16/2007

GRUNLEY-WALSH

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

URS 2020 K STREET N.W. SUITE 300 WASHINGTON, DC 20006 TELE. 202.872.0277

GRUNLEY-WALSH 11910 Parklawn Drive, Suite U Rockville, MD 20852

HUNTINGTON ROUTE
KING STREET STATION

ELECTRICAL SINGLE LINE DIAGRAM

SCALE: NONE

DRAWING NO.: C10L-E-08

M1121-150

Pre-Inspection Mezzanine Walkthrough Checklist

REVISION 1

Date: 10/07/2014	**Station Name:** C15 Huntington North	**Mezzanine #:** 050	**Completed By:** Tino Sahoo

Check	Task	Equipment		Room ID	Notes
☑	Verify that electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number:	NPOE	129	Rm 129 is located on platform level
		Source Breaker Name/Number:	Breaker #6	129	
		Electrical AFC Panel Name/Number:	NF	129	
☑	Verify if disconnect switch is connected to the AFC electrical power panel. Low or High voltage SMNT/POWR escorts requirements?	Disconnect Name/Number:	N/A		
		SMNT/POWR escorts:	HIGH and LOW Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to be de-energized.	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes.	NO	C106	
☑	Identify the assumed pathway of duct / conduit, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑	COMM / IT ☐ ELES ☐		
		RAIL ☐	CMNT ☐		
		Other Access/Support:			
☑	Identify handhole or manhole access requirement.	Required PLNT Mason for handhole/manhole access?	YES (see notes)		Conduit/duct run from platform level to mezzanine level.
		Identified Conduit/Duct Transition to mezzanine level?	YES		

Emergency Power Verification

Check	Task	Equipment		Room ID	Notes
☑	Verify if AFC electrical panel is connected to an Automatic Transfer Switch (ATS).	ATS Name/Number:			
☑	Verification of Kiosk Emergency Panel(s) (KE, KES, KESS, etc)	Source Panel Name/Number:	NEE	129	Breaker #38 of AFC Panel (NF) feeds emergency circuits to Kiosk Panels also.
		Source Breaker Name/Number:	Breaker #13	129	
		Panel Name/Number:	Kiosk Emergency Panel	Kiosk	

Notes and Discrepancies: Panel KE (Breaker #3,5) de-energizes emergency power to faregates.

Sign Off	**GFP Representative**	**WMATA PRGM**
Name:	Tino Sahoo	
Signature:	Tarmina Sahoo	
Date:	10/07/14	

Photo #1: C15 Huntington North – Handholes at Mezzanine

Photo #2: C15 Huntington North – Handholes at Mezzanine

Photo #3: C15 Huntington North – Handholes at Mezzanine

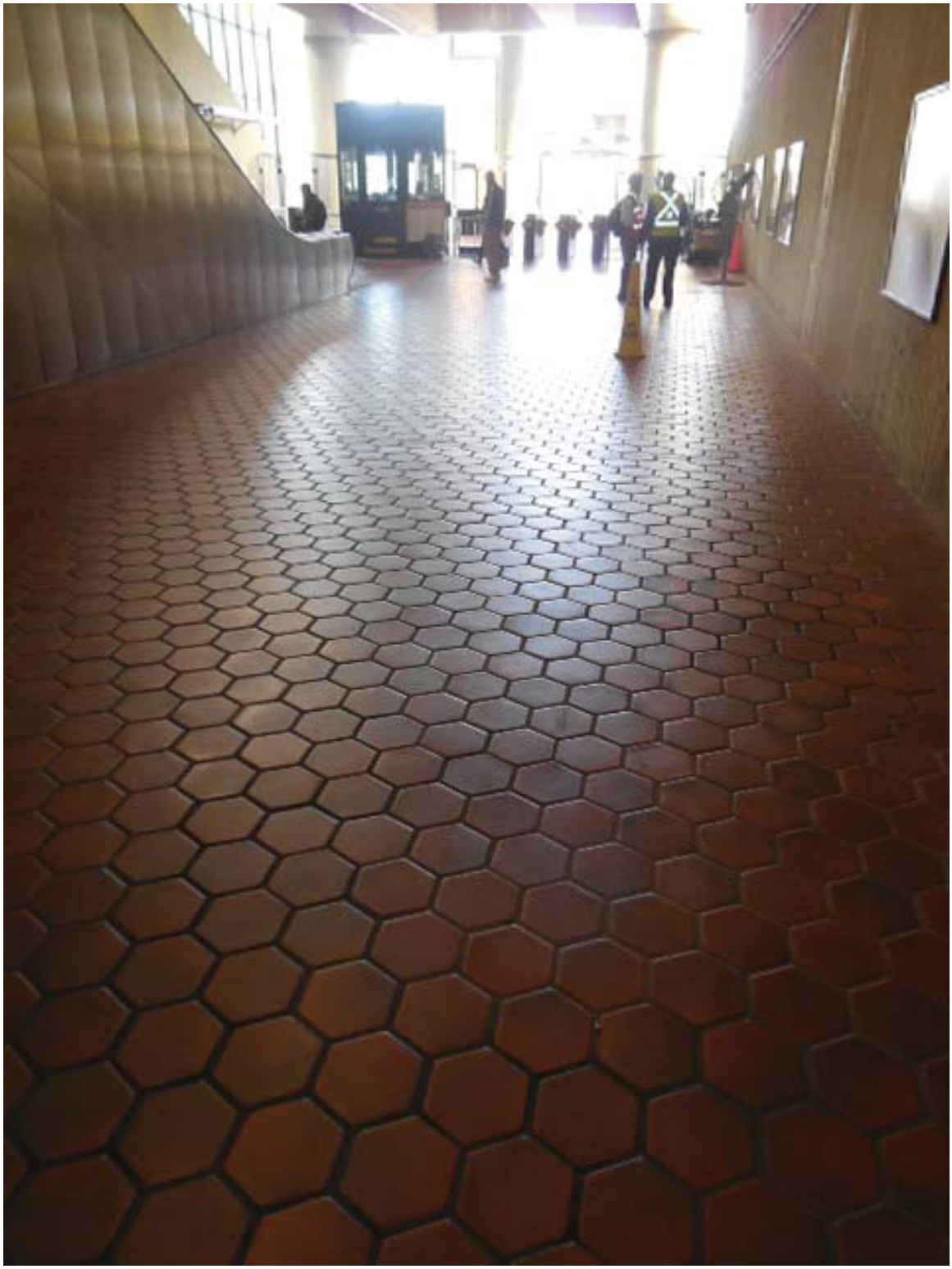


Photo #4 & 5: C15 Huntington North – Panel NPOE in Room 129

Photo #6: C15 Huntington North – Panel NPOE – Panel Schedule

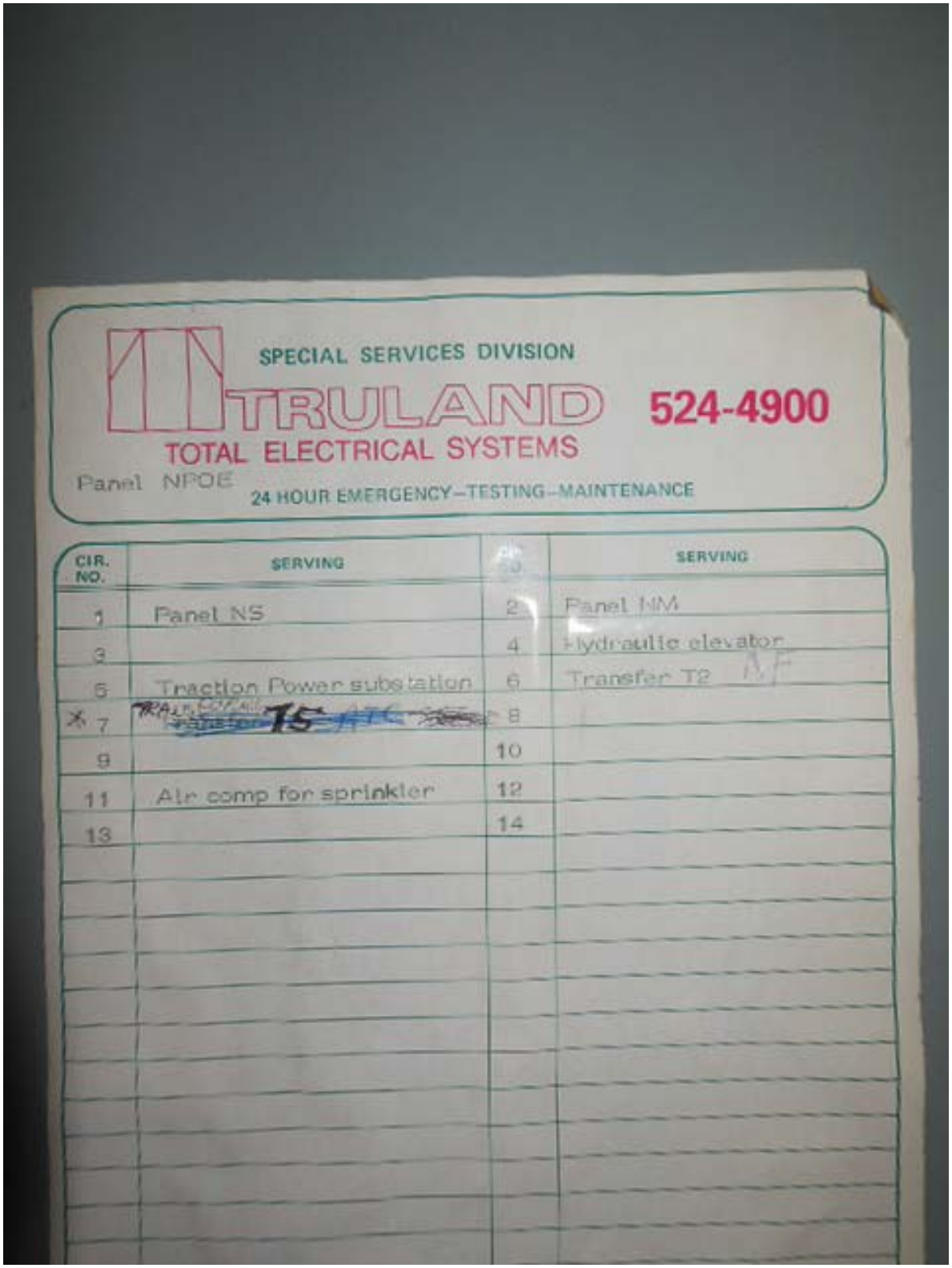


Photo #7: C15 Huntington North – Panel NPOE – Circuit #6 to de-energize AFC Panel NF

Photo #8: C15 Huntington North – AFC Panel NF – Ducts below Panel

Photo #9 & 10: C15 Huntington North – AFC Panel NF – Bottom of Panel

NOTES:

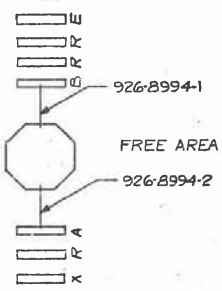
1. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE.
2. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.

(3) (X) INDICATES POSITION NO. [X] INDICATES AISLE NO.

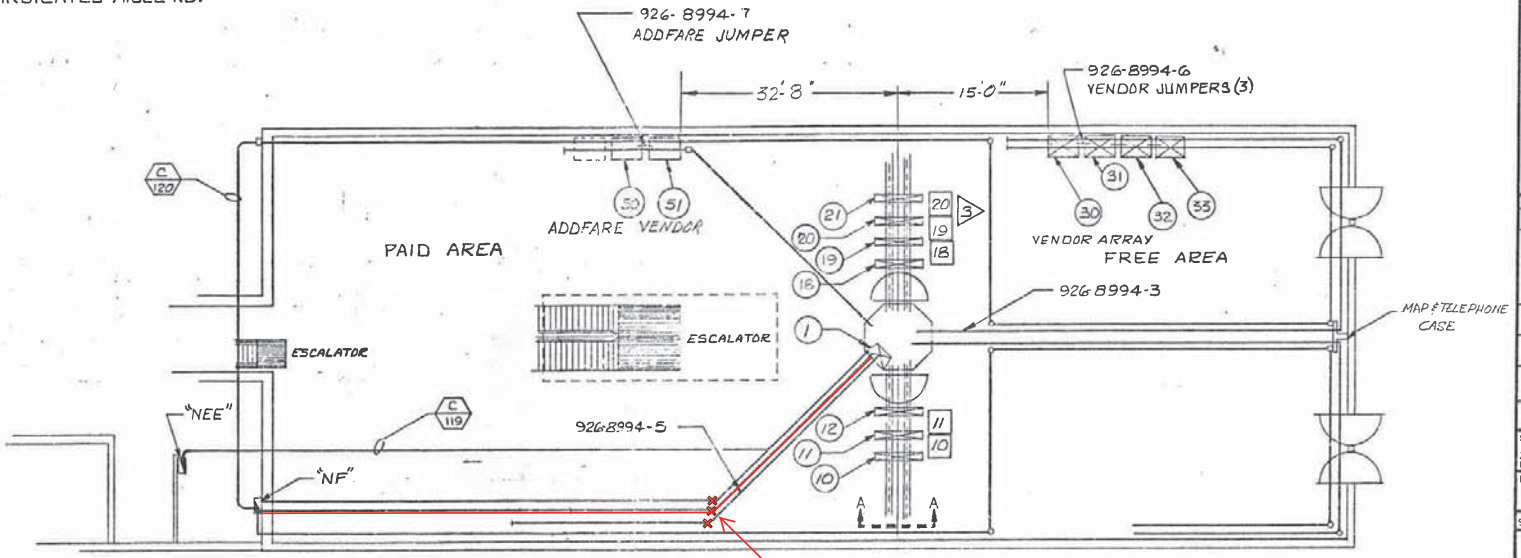
Pre-inspection Field Verification 10/07/2014

50

926-8996-1(4)
926-8998(4)
926-8993-1(5)
926-8997-1(4)

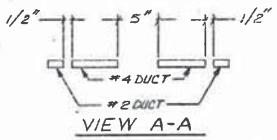


GATE ARRAY
SEE 926-0353 FOR SERVICE GATE & RAILING DRAWING



Handholes not seen during Pre-inspection.

POSITION NO.	MACHINE TYPE	SERIAL NO.	PANEL NF CIRCUIT BREAKER NO.	BREAKER SIZE (AMPS)	WIRE SIZE (AWG)
1	DADS	DS8071	K10SK	20	
10	EXIT GATE	GX4075	1	20	8
11	REV GATE	GR 7274	3	20	8
12	A GATE	GR 5056	5	20	8
18	B GATE	GB 6054	7	20	8
19	REV GATE	GR 7284	9	20	8
20	REV GATE	GR 7273	11	20	8
21	ENTRY	GN 3071	13	20	8
30	VENDOR	FV 1347	2	20	6
31	VENDOR	FV 1349	4	20	6
32	VENDOR	FV 1348	6	20	6
33	VENDOR	FV 1292	8	20	6
50	ADDFARE	AM 2130	10	20	6
51	ADDFARE	AM 2131	12	20	6



-1 INSTALLATION PLAN NORTH

AS BUILT DRAWNING

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
BREAK SHARP EDGES .010 MAX
TOLERANCES ON
DECIMALS: .XX ±.03 .XXX ±.010
ANGLES: ± 0.5 DEG.
HOLES
.0135 THRU .125 +.004 -.000
.126 THRU .500 +.005 -.000
.501 THRU .750 +.005 -.001
.751 THRU 1.000 +.010 -.001

REV	DESCRIPTION	AUTHORITY	DATE	APVD	REL
A	INITIAL ISSUE				

CONTRACT NUMBER

SIZE D DWG B1

DRAWING NUMBER 926-0417

SHEET 1 OF 2

CUBIC WESTERN DATA
SAN DIEGO, CALIFORNIA
A SUBSIDIARY OF CUBIC CORPORATION

TITLE INSTALLATION PLAN HUNTINGTON STATION NORTH

CODE IDENT NO. 94987

DRAWN J. FITZGERALD
CHECK
ENGRG DESIGN
APPROVAL

926-0417 (50)

CIF 2-87/A

EXISTING PANEL "NF"

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 200A MCB	PHASE: 3	LOCATION: ELEC. EQUIPMENT BATTERY 129	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

		CKT BKRS		CKT.		CKT.	CKT BKRS			
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO.	POLE	AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
1&2 SPARE (KIOSK)	0.0	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	27	- B -	28	1	20	0.0	SPARE
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
SPARE	0.0	20	1	31	A - -	32	-	-	0.0	SPACE
SPARE	0.0	20	1	33	- B -	34	-	-	0.0	SPACE
SPARE	0.0	20	1	35	- - C	36	3	40	2.9	EXIST. LOAD CENTER "KES"
SPACE	0.0	-	-	37	A - -	38	-	-	2.5	
SPACE	0.0	-	-	39	- B -	40	-	-	2.5	
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.0 x 50%		4.0 KVA
MISC APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	25.5 KVA	TOTAL DEMAND KVA	22.3 KVA
		TOTAL DEMAND AMPS	61.8 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	8.1 KVA		
PHASE B:	8.9 KVA		
PHASE C:	8.5 KVA		

NOTES: A. EXISTING PANEL "NF" IS FED FROM 277/480V, 3ø, 4W EXISTING PANEL "NPOE" LOCATED IN AC SWBD BATTERY RM ~~216,~~ 129 CIRCUIT #6-125/3P VIA 75 KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E37).

B. EXISTING WIRING FED FROM BOTTOM PANEL BY:
- 1-6"x 6" WIRE TROUGH THRU 3-2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP PANEL BY:
- 1-1/2" C. (WIRING FILL >40%).

Pre-inspection Field Verification 10/07/2014

EXISTING PANEL "SF"

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 225A MLO	PHASE: 3	LOCATION: ELEC. EQUIPMENT 416	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

		CKT BKRS		CKT.		CKT.	CKT BKRS			
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO.	POLE	AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	30	0.0	SPARE
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
1&2 SPARE (KIOSK)	0.0	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	27	- B -	28	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
SPARE	0.0	20	1	31	A - -	32	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	33	- B -	34	1	20	0.0	SPARE
SPARE	0.0	20	1	35	- - C	36	1	20	0.0	SPARE
SPARE	0.0	20	1	37	A - -	38	3	40	2.9	EXIST. LOAD CENTER "KES"
SPARE	0.0	20	1	39	- B -	40	-	-	2.5	
SPARE	0.0	20	1	41	- - C	42	-	-	2.5	

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.0 x 50%		4.0 KVA
MISC APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	25.5 KVA	TOTAL DEMAND KVA	22.3 KVA
		TOTAL DEMAND AMPS	61.8 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	9.3 KVA		
PHASE B:	8.1 KVA		
PHASE C:	8.1 KVA		

NOTES: A. EXISTING PANEL "SF" IS FED FROM 120/208V, 3ø, 4W EXISTING PANEL "SPOEL" LOCATED IN AC SWBD ROOM 216, CIRCUIT #2-200/3P (SEE ATTACHED DWG. MM-C-E37).

B. EXISTING WIRING FED FROM BOTTOM PANEL BY:
- 3-4" C. (WIRING FILL >30%).
- 1-3/4" C. (WIRING FILL >20%).

EXISTING WIRING FED FROM TOP PANEL BY:
- 3-3/4" C. (WIRING FILL >40%).
- 1-1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM LEFT SIDE PANEL BY:
- 1-4" C. (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. NDO 09-14 DATE
DRAWN C. NDO 09-14 DATE
CHECKED B. KOLB 09-14 DATE
APPROVED N/A DATE

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS		
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE

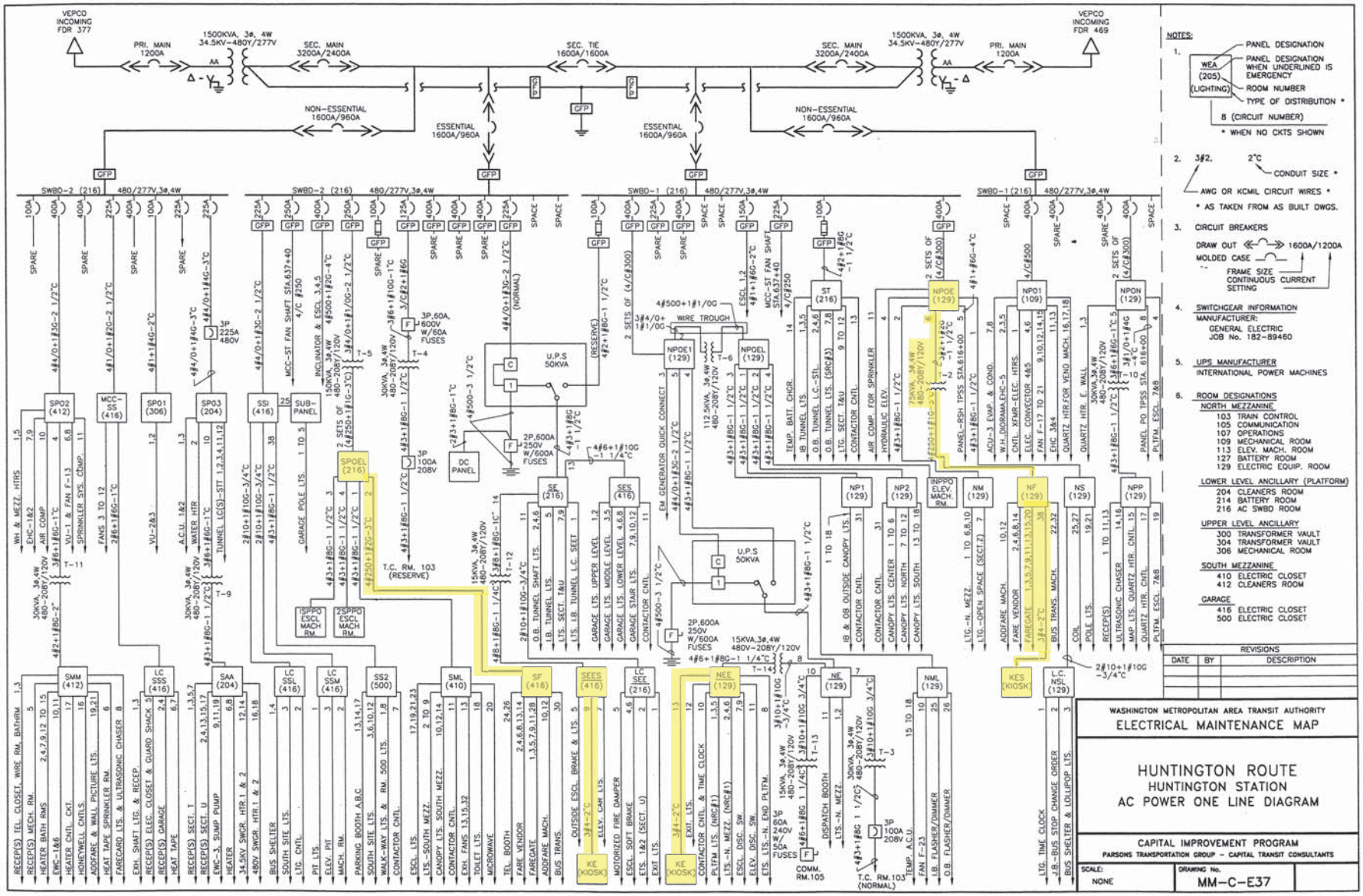
SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
HUNTINGTON - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE

DRAWING NO: C15-E-102

Pre-inspection Field Verification 10/07/2014



Pre-Inspection Mezzanine Walkthrough Checklist

Date: 10/07/2014	**Station Name:** C15 Huntington South	**Mezzanine #** 051	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: SPOEL SEES Source Breaker Name/Number: Circuit #2, 3PH Circuit #9, (Panel SEES) Electrical AFC Panel Name/Number: SF, KE (Kiosk)	216 416 216 416 416,Kiosk	Rm 216 is located on platform level Track 1 wayside. Rm 416 is located in Parking Garage. Emergency circuit is Circuit #9 on Source Panel 'SEES' for KE (Kiosk Panel).
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: LOW Voltage		Source Panels: SPOEL (Rm 216) AFC Source SEES (RM 416) KE (Kiosk) Source Breakers: Circuit #2 of Panel SPOEL Circuit #9 of Panel SEES Affected Panels: SF (416) AFC Panel KE (Kiosk) Panel located in Kiosk
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO	C106	
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☐ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: AFC		Need AFC manhole access under machine. Hard to fish.
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? NO Identified Conduit/Duct Transition to mezzanine level? NO		Conduit/duct run on multiple levels. Junction box located under fare-card vending machine. Over 150' run from AFC Panel (SF) to Kiosk.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:	10/07/14	

Photo 1: C15 Huntington South – Panel SPOEL in Rm 216 – Panel Schedule

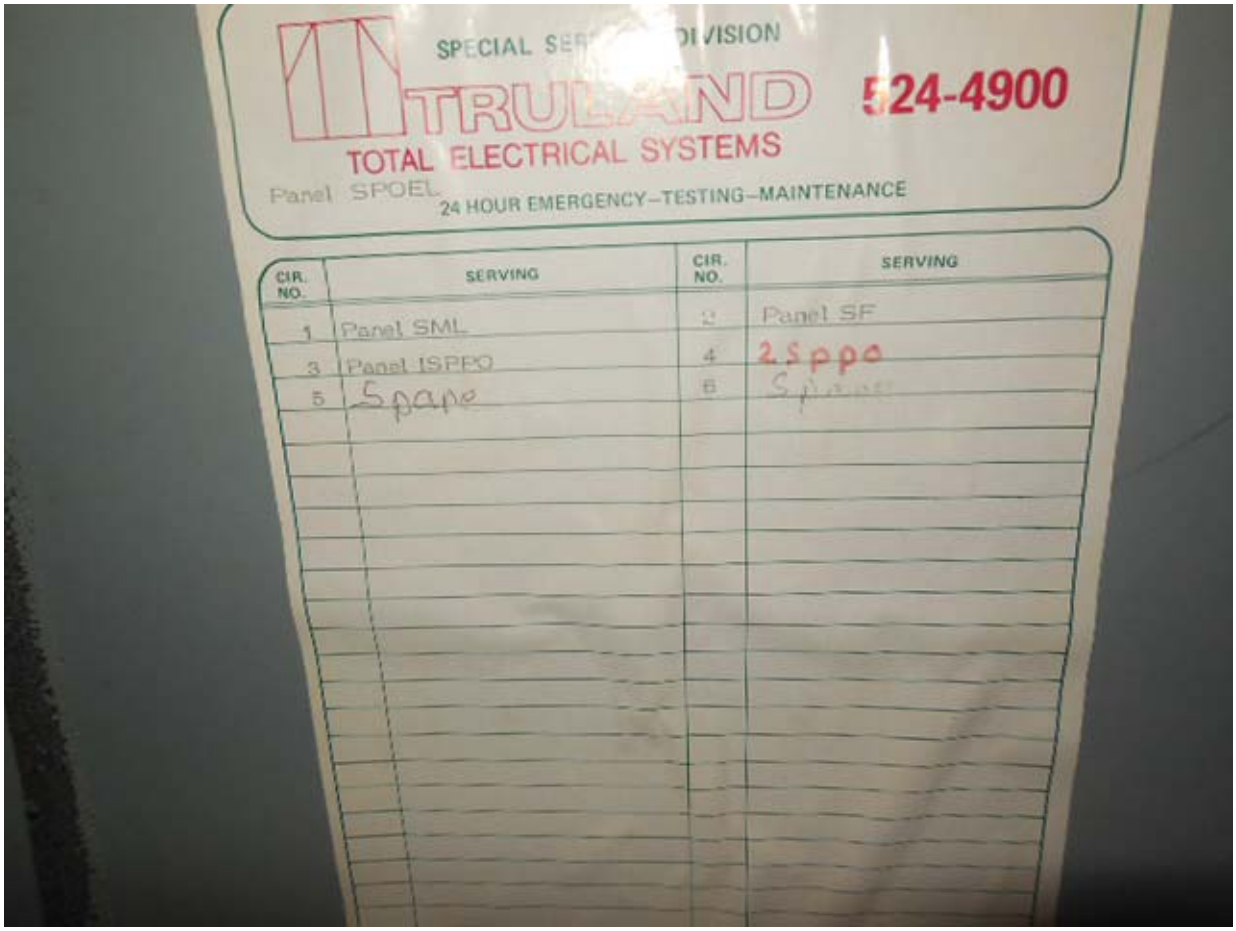


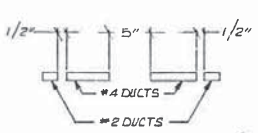
Photo 2: C15 Huntington South – Panel SPOEL in Rm 216 – Circuit #2

NOTES:

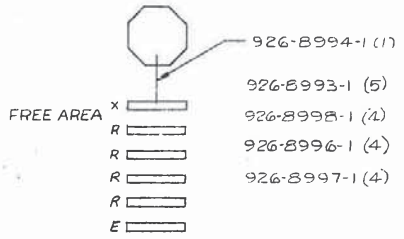
1. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE.
2. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.

(3) (X) INDICATES POSITION NO. [X] INDICATES AISLE NO.

Pre-inspection Field Verification 10/07/2014

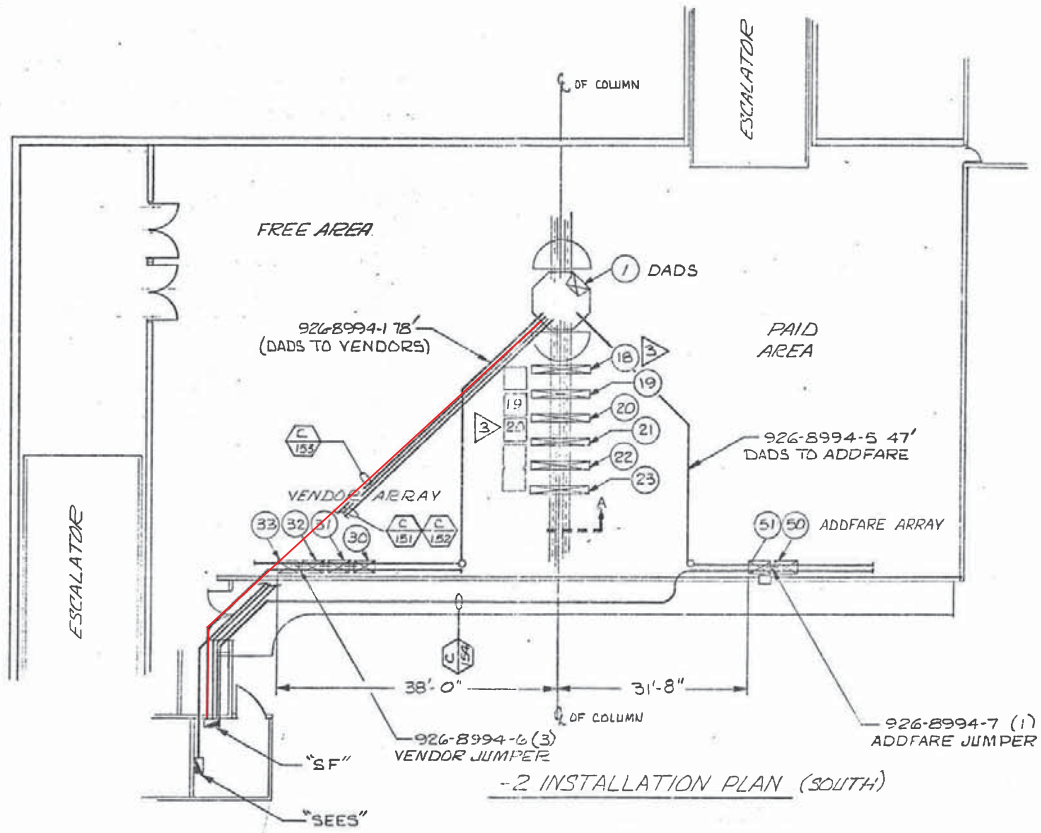


VIEW A-A



GATE ARRAY

SEE 926-0353 FOR SERVICE GATE & RAILING DRAWING



-2 INSTALLATION PLAN (SOUTH)

POSITION NO.	MACHINE TYPE	SERIAL NO.	PANEL SF CIRCUIT BREAKER NO.	BREAKER SIZE (AMPS)	WIRE SIZE (AWG)
1	DADS	DS 8067	KIOSK	20	
18	EXIT GATE	GX 4030	1	20	6
19	REV GATE	GR 7275	3	20	6
20	REV GATE	GR 7260	5	20	6
21	REV GATE	GR 7258	7	20	6
22	REV GATE	GR 7253	9	20	6
23	ENTRY GATE	GN 3001	11	20	6
30	VENDOR	FV 1354	2	20	8
31	VENDOR	FV 1346	4	20	8
32	VENDOR	FV 1339	6	20	8
33	VENDOR	FV 1345	8	20	8
50	ADDFARE	AM 2129	10	20	8
51	ADDFARE	AM 2127	12	20	8

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. BREAK SHARP EDGES .010 MAX

DECIMALS: .XX ± .03 .XXX ± .010 ANGLES ± 0.5 DEG.

HOLES

SIZE	THRU	±	−
.035 THRU .125	.004	.001	.001
.126 THRU .250	.005	.001	.001
.251 THRU .500	.006	.001	.001
.501 THRU .750	.008	.001	.001
.751 THRU 1.000	.010	.001	.001

SIZE	LTR	REVISIONS	DATE	APVD
		PRE-INSPECTION FIELD VERIFICATION	10/07/2014	

CONTRACT NUMBER

SIZE D REV B1

DRAWING NUMBER 926-0417

SHEET 2 OF 2

TITLE

CUBIC WESTERN DATA

A SUBSIDIARY OF CUBIC CORPORATION

9333 CLAIREMONT MESA BLVD • P.O. OFFICE BOX 80787 • SAN DIEGO, CA 92138

CODE IDENT NO. 94987

SIZE D

DRAWN

CHECK

ENGRG

926-0417

51

EXISTING PANEL "NF"

AMPERES: 225		VOLTS: 120/208			MOUNTING: SURFACE						
MAINS: 200A MCB		PHASE: 3			LOCATION: ELEC. EQUIPMENT BATTERY 129						
RATING: 10K AIC		WIRE: 4			SECTION: 1 OF 1						
		CKT BKRS		CKT.		CKT.	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO.	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR	
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR	
1&2 SPARE (KIOSK)	0.0	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	27	- B -	28	1	20	0.0	SPARE	
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE	
SPARE	0.0	20	1	31	A - -	32	-	-	0.0	SPACE	
SPARE	0.0	20	1	33	- B -	34	-	-	0.0	SPACE	
SPARE	0.0	20	1	35	- - C	36	3	40	2.9	EXIST. LOAD CENTER "KES"	
SPACE	0.0	-	-	37	A - -	38	-	-	2.5		
SPACE	0.0	-	-	39	- B -	40	-	-	2.5		
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE	

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.0 x 50%		4.0 KVA
MISC APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	25.5 KVA	TOTAL DEMAND KVA	22.3 KVA
		TOTAL DEMAND AMPS	61.8 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	8.1 KVA
PHASE B:	8.9 KVA
PHASE C:	8.5 KVA

NOTES: A. EXISTING PANEL "NF" IS FED FROM 277/480V, 3Φ, 4W EXISTING PANEL "NPOE" LOCATED IN AC SWBD BATTERY RM 216, CIRCUIT #6-125/3P VIA 75 KVA TRANSFORMER (SEE ATTACHED DWG. MM-C-E37).

B. EXISTING WIRING FED FROM BOTTOM PANEL BY:
- 1-6"x 6" WIRE TROUGH THRU 3-2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP PANEL BY:
- 1-1/2" C. (WIRING FILL >40%).

Pre-inspection Field Verification 10/07/2014

EXISTING PANEL "SF"

AMPERES: 225		VOLTS: 120/208			MOUNTING: SURFACE						
MAINS: 225A MLO		PHASE: 3			LOCATION: ELEC. EQUIPMENT 416						
RATING: 10K AIC		WIRE: 4			SECTION: 1 OF 1						
		CKT BKRS		CKT.		CKT.	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO.	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	30	0.0	SPARE	
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR	
1&2 SPARE (KIOSK)	0.0	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	27	- B -	28	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE	
SPARE	0.0	20	1	31	A - -	32	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	33	- B -	34	1	20	0.0	SPARE	
SPARE	0.0	20	1	35	- - C	36	1	20	0.0	SPARE	
SPARE	0.0	20	1	37	A - -	38	3	40	2.9	EXIST. LOAD CENTER "KES"	
SPARE	0.0	20	1	39	- B -	40	-	-	2.5		
SPARE	0.0	20	1	41	- - C	42	-	-	2.5		

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.0 x 50%		4.0 KVA
MISC APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	25.5 KVA	TOTAL DEMAND KVA	22.3 KVA
		TOTAL DEMAND AMPS	61.8 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	9.3 KVA
PHASE B:	8.1 KVA
PHASE C:	8.1 KVA

NOTES: A. EXISTING PANEL "SF" IS FED FROM 120/208V, 3Φ, 4W EXISTING PANEL "SPOEL" LOCATED IN AC SWBD ROOM 216, CIRCUIT #2-200/3P (SEE ATTACHED DWG. MM-C-E37).

B. EXISTING WIRING FED FROM BOTTOM PANEL BY:
- 3-4" C. (WIRING FILL >30%).
- 1-3/4" C. (WIRING FILL >20%).

EXISTING WIRING FED FROM TOP PANEL BY:
- 3-3/4" C. (WIRING FILL >40%).
- 1-1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM LEFT SIDE PANEL BY:
- 1-4" C. (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED	C. NDO	09-14 DATE
DRAWN	C. NDO	09-14 DATE
CHECKED	B. IDLER	09-14 DATE
APPROVED	N/A	DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

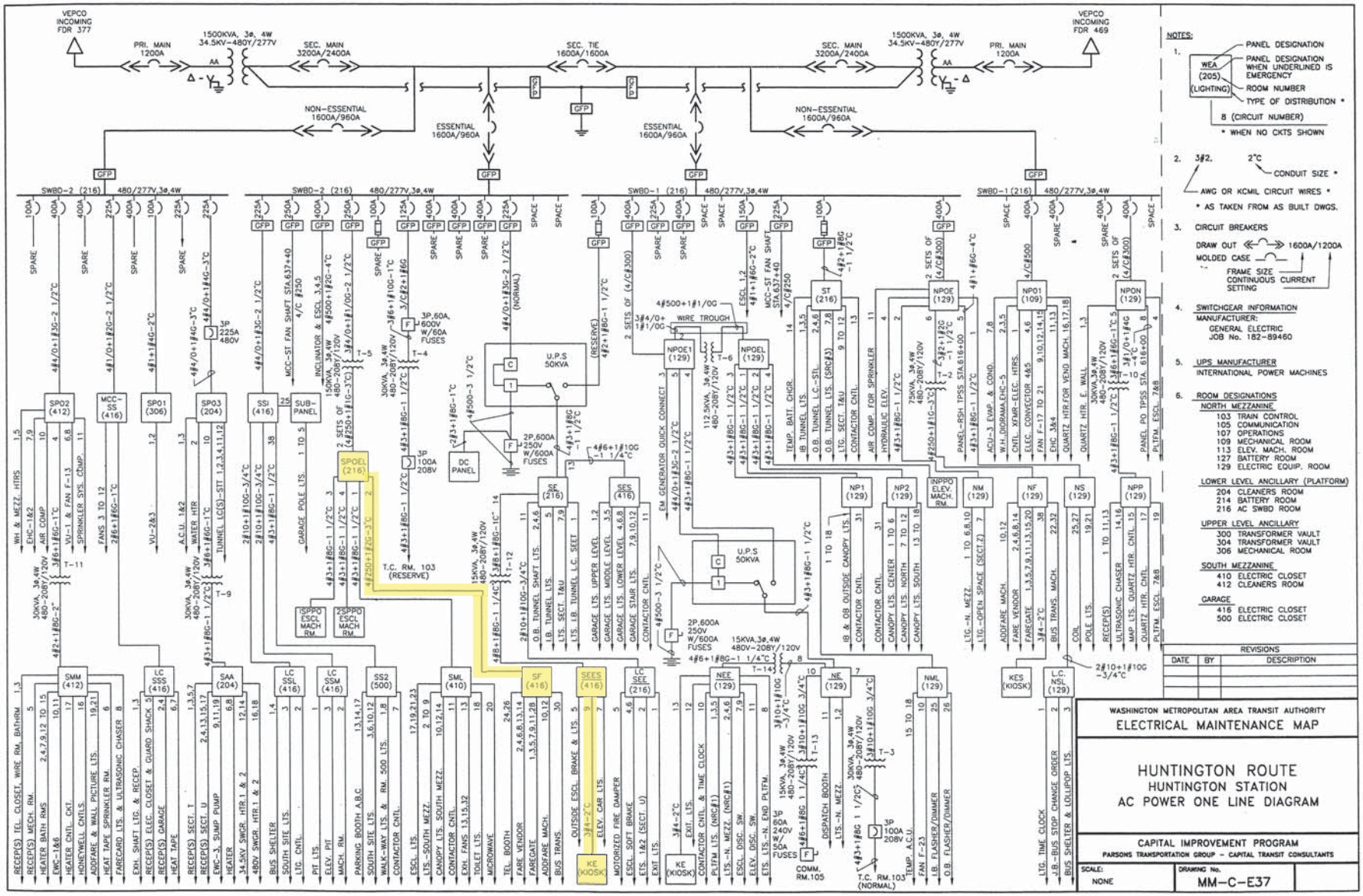
GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
HUNTINGTON - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE

DRAWING NO: C15-E-102



Pre-inspection Field Verification 10/07/2014

0:\ELECT\NewMaintMap\C-Route\MM-C-E37.dwg Mon Jun 12 18:27:53 2000 LP

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 08/28/2014	**Station Name:** Mt. Vernon Square	**Mezzanine #** 070	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: MPPE Source Breaker Name/Number: Circuit #4, 3PH Electrical AFC Panel Name/Number: F	C207 C207 C207	C207 is Electrical Equipment Room located on Mezzanine Level. Room C207 is located inside of room C204.
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: SMNT/POWR escorts: LOW Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits/duct on same level (Mezzanine)

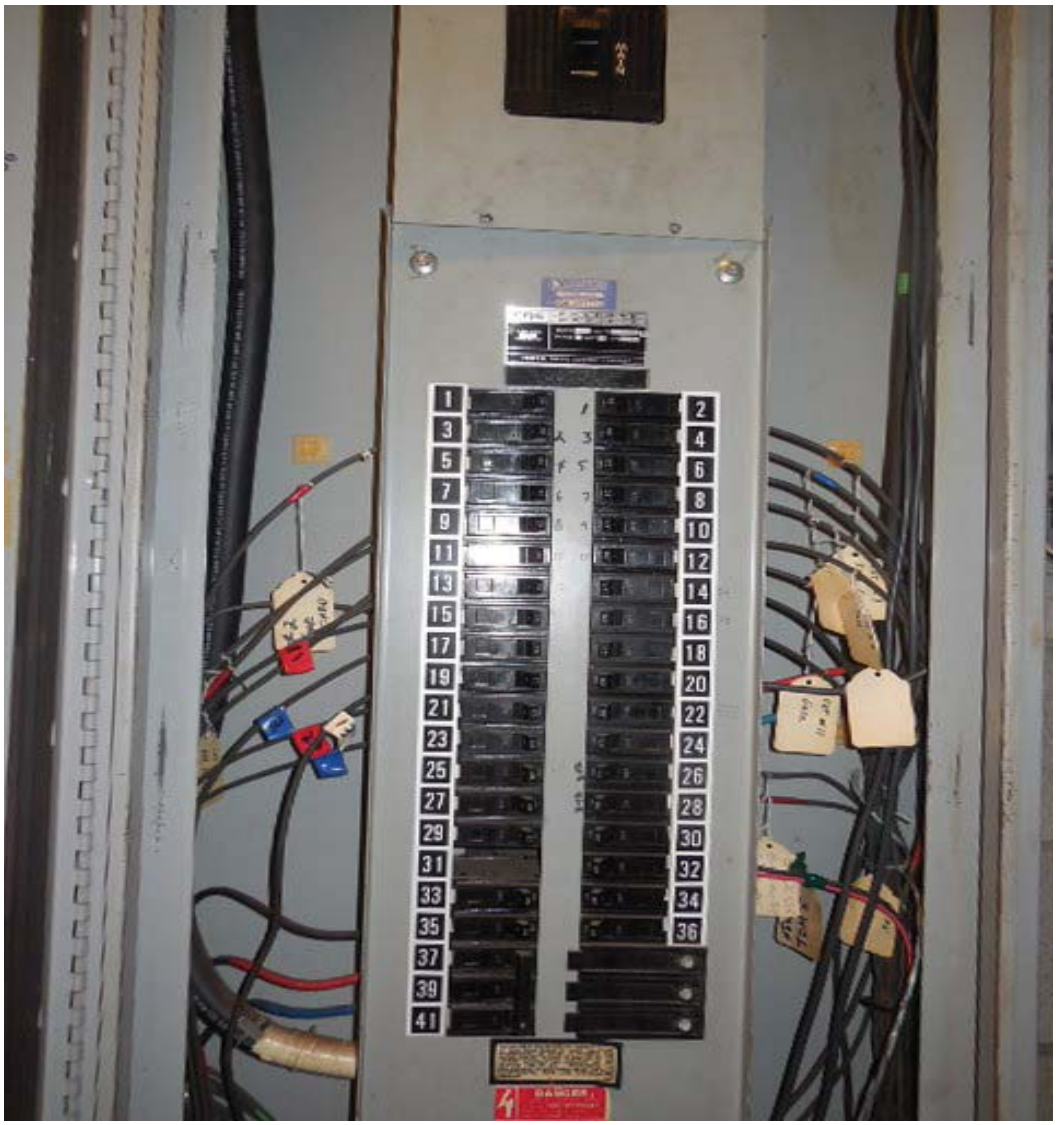
Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:	Tinomena Sahoo	
Date:	08/28/2014	

Mt. Vernon Photo #1 – AFC Panel (F) - Room C207 (Mezzanine Level)

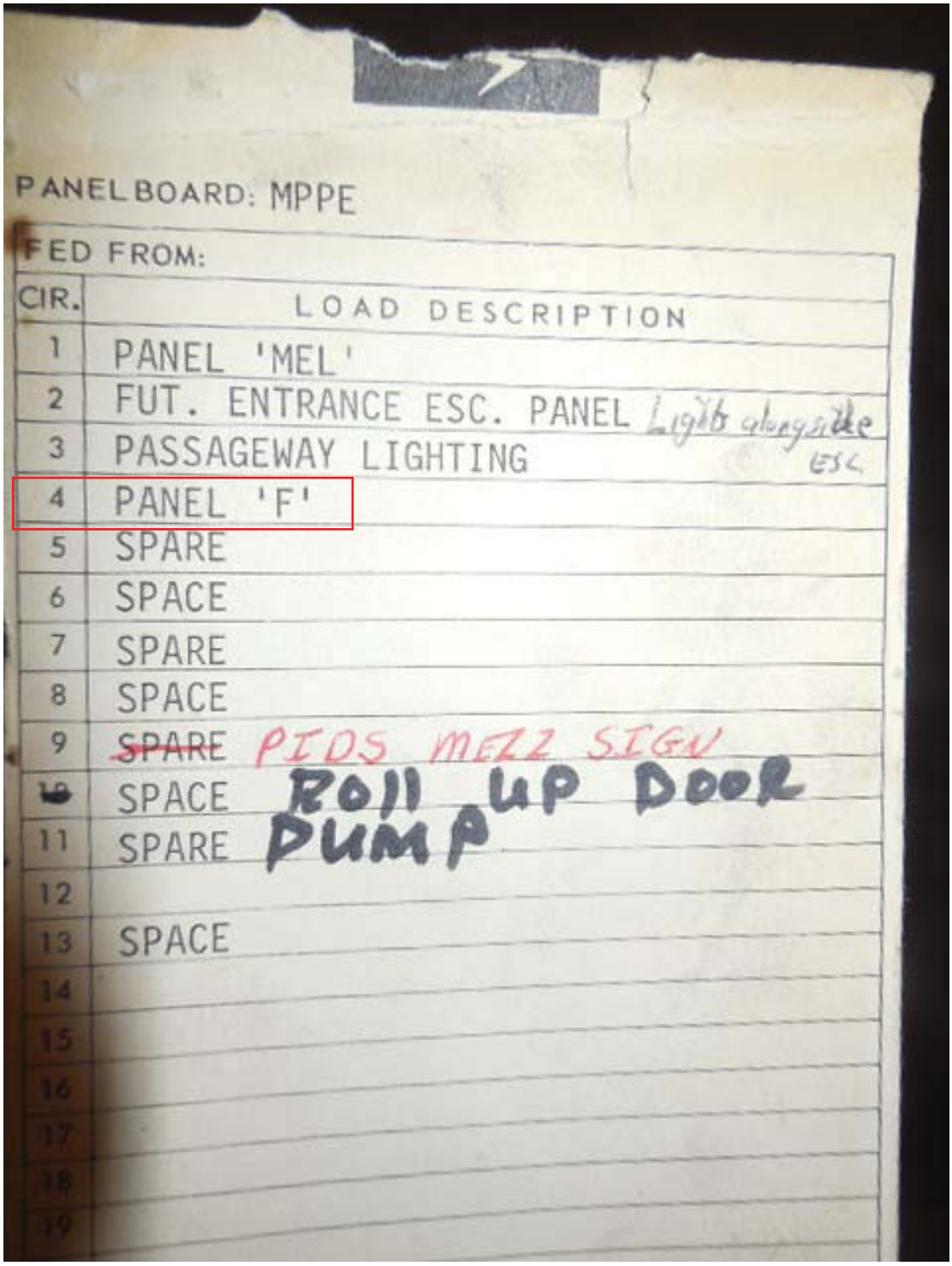


Mt. Vernon Photo #2 – AFC Panel (F) Panel Schedule

Mt. Vernon Photo #3 – AFC Panel (F) Walker Duct to transition to Mezzanine Floor

Mt. Vernon Photo #4– – AFC Source Panel (MPPE) located in Room #C207 on Mezzanine Level. Source Breaker (Circuit #4, 3PH) for AFC Panel (F)

Mt. Vernon Photo #5 - AFC Source Panel (MPPE) located in Room #C207 on Mezzanine Level Panel Schedule



PANEL BOARD: MPPE

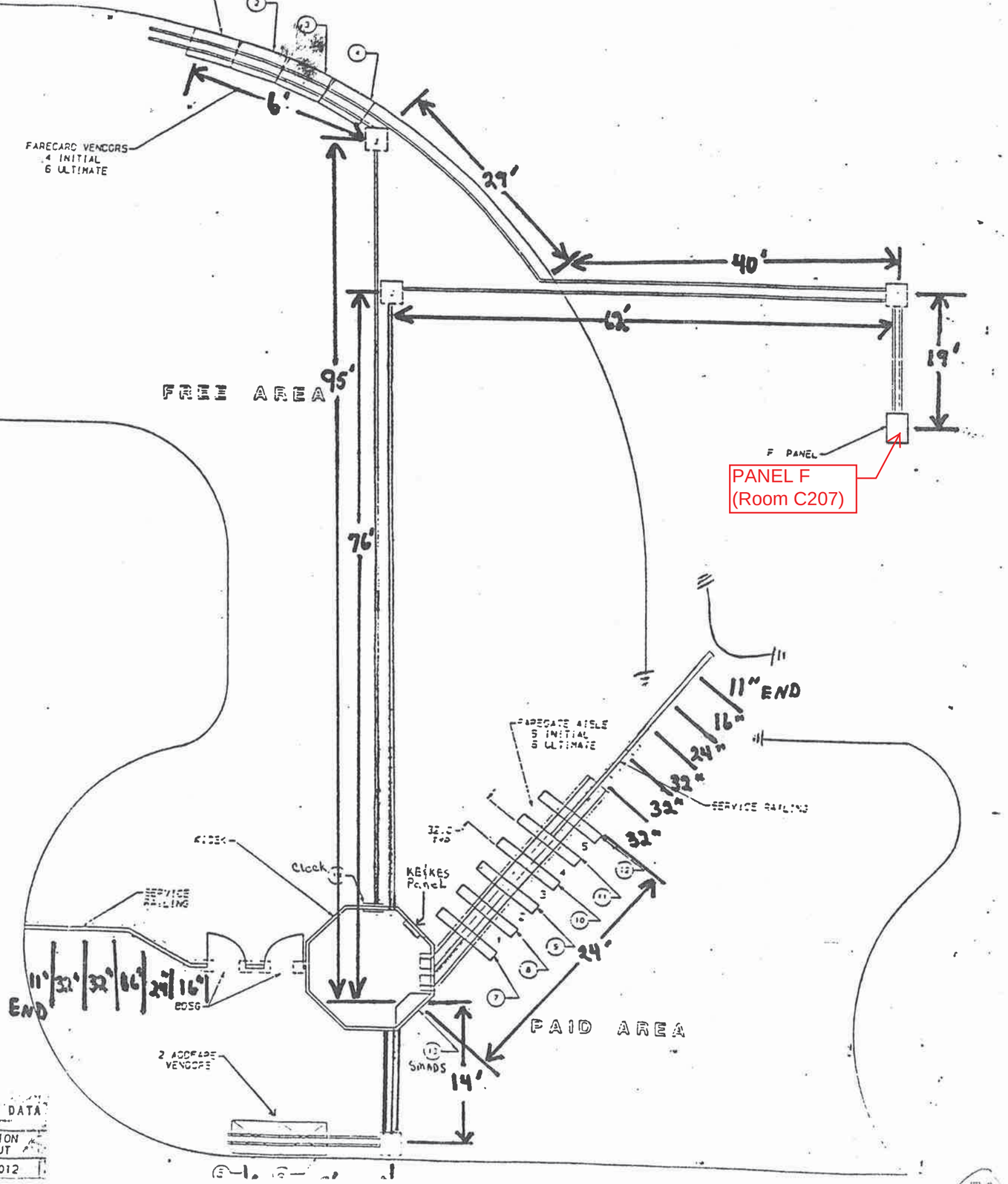
FED FROM:

CIR.	LOAD DESCRIPTION
1	PANEL 'MEL'
2	FUT. ENTRANCE ESC. PANEL Light alongside ESC
3	PASSAGEWAY LIGHTING
4	PANEL 'F'
5	SPARE
6	SPACE
7	SPARE
8	SPACE
9	~~SPARE~~ PIDS MEZZ SIGN
10	SPACE Roll up Door
11	SPARE Pump
12	
13	SPACE
14	
15	
16	
17	
18	
19	

Mt. Vernon Photo #6 – Manhole located in hallway of C204 in which walker duct runs through to another manhole in mezzanine area by kiosk. About 81’ from AFC Panel (F).

Mt. Vernon Photo #7 – Handholes located in mezzanine area by kiosk. About 75’ from Kiosk.

1	VENDOR	FV1851	F	2
2	VENDOR	FV1510	F	3
3	VENDOR	FV1845	F	4
4	VENDOR	FV1832	F	5
5	ADDFARE	AF2814	F	6
6	ADDFARE	AF2815	F	7
7	ENTRY GATE	EG3810	F	8
8	REV. GATE	RG7844	F	9
9	REV. GATE	RG7843	F	10
10	REV. GATE	RG7824	F	11
11	REV. GATE	RG7822	F	12
12	EXIT GATE	XG4807		
13	SMADS	SM8808	KE	1
14	CLOCK	98911	KES	8
	Emergency Lights		KE	4



SEE SEPARATE PL WHEN ITEM NUMBERS ARE USED THEIR DESIGNATION MAY BE USED IN LIEU OF ITEM NUMBERS.

NEXT ASSY XXX-XXXX/X#X

CUBIC WESTERN DATA

MT. VERNON STATION
MEZZANINE LAYOUT

931-4012

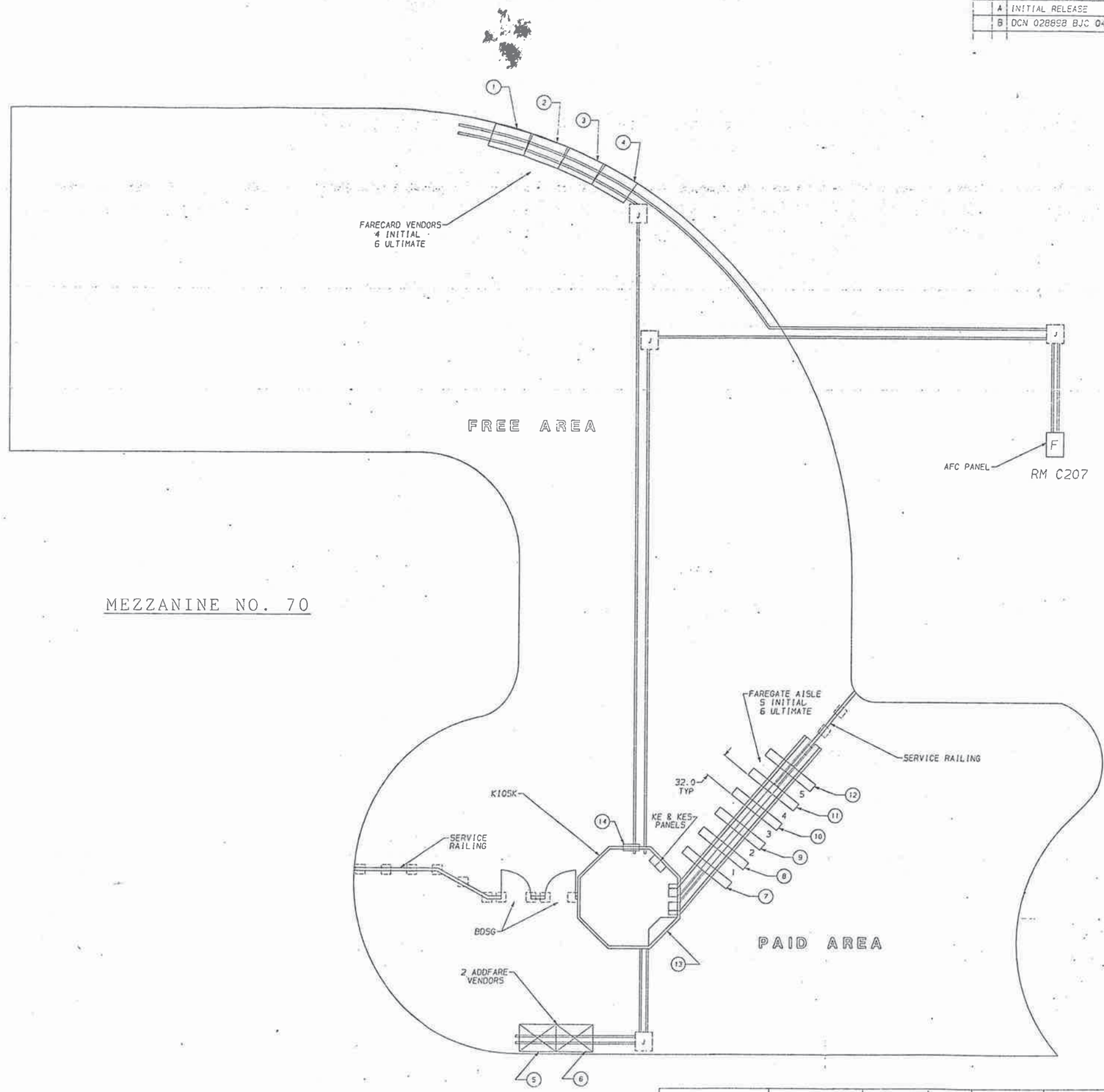
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	01/10/92	R. KUITE
	B	DCN 028898 BJC 04/03/92	4/3/92	

NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL: 2, 3 & 4; 6 & 7; 8, 9 & 10; 11 & 12.

ITEM	NAME	S/N	PANEL AFC	KIOSK EMERGENCY BREAKER
1	VENDOR	1851	F	2
2	VENDOR	1810	F	3
3	VENDOR	1845	F	4
4	VENDOR	1832	F	5
5	ADDFARE	2814	F	6
6	ADDFARE	2815	F	7
7	ENTRY GATE	3810	F	8
8	REV. GATE	7844	F	9
9	REV. GATE	7843	F	10
10	REV. GATE	7809	F	11
11	REV. GATE	7807	F	12
12	EXIT GATE	4807	F	N/A
13	SMADS	8808	KE	1
14	CLOCK	58911	KES	8
15	EMERGENCY LT		KE	4

MEZZANINE NO. 70



SEE SEPARATE PL WHEN ITEM NUMBERS ARE USED (REF DESIGNATION MAY BE USED IN LIEU OF ITEM NUMBERS)	HOLE TOLERANCES ARE: HOLE DIA / TOLERANCES: .0135 THRU .125 ±.004 – .001; .126 THRU .250 ±.005 – .001; .251 THRU .500 ±.006 – .001; .501 THRU .750 ±.008 – .001; .751 THRU 1.000 ±.010 – .001	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: LINEAR .X ±.03, .XX ±.010; ANGULAR ±0°30'	DATE: 26 OCT 1988; FILE NAME: 931-4012.VW; FILE LOCATION: CUBIC\DRAWING\APPROVALS	CUBIC APPLICATIONS GROUP, COLLECTION GROUP, WESTRAN DATA DIVISION
NEXT ASSY: NONE			BY: ENGR. R. KUITE 01/10/92; PROJ ENGR.; CONTRACT MANAGER 01/10/92	TITLE: MT. VERNON STATION MEZZANINE LAYOUT
DO NOT SCALE DRAWING				SIZE: E; CAGE NO. 87600; DWG NO. 931-4012; REV B; SCALE 1/45; SHEET 1 OF 1

EXISTING PANEL "F"

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 225A MCB	PHASE: 3	LOCATION: ELECTRICAL EQUIPMENT ROOM C207	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

		CKT BKRS		CKT.		CKT.	CKT BKRS			
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO.	POLE	AMP	KVA	LOAD DESCRIPTION
SPARE	0.0	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
1 NEW KIOPSK RECEPT. (IT & NEPP)	0.8	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR
1&2 SPARE (KIOSK)	0.0	20	1	27	- B -	28	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
SPACE	0.0	20	1	31	A - -	32	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	33	- B -	34	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	35	- - C	36	1	20	0.0	SPARE
EXIST. KIOSK LOAD CENTER "KES"	3.3	40	3	37	A - -	38	-	-	0.0	SPACE
	2.5	-	-	39	- B -	40	-	-	0.0	SPACE
	2.5	-	-	41	- - C	42	-	-	0.0	SPACE
-	0.0	-	-	43	A - -	44	-	-	0.0	-

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	13.2 x 50%		6.6 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	30.7 KVA	TOTAL DEMAND KVA	24.9 KVA
		TOTAL DEMAND AMPS	69.0 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	11.3 KVA		
PHASE B:	11.3 KVA		
PHASE C:	5.6 KVA		

NOTES:
A. EXISTING PANEL "F" IS FED FROM 120/208V, 3ø, 4W EXISTING PANEL "MPPE" LOCATED IN ELECTRICAL EQUIPMENT RM. C207, #4-225/3P (SEE ATTACHED DWG. MM-E-E06).
B. EXISTING WIRING FED FROM TOP OF PANEL BY:
* 1-4" C. TO PANEL "MPPE" (WIRING FILL >40%).
EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
* 2-6 1/2"x 1 1/2" FLOOR DUCT (WIRING FILL >40%).
* 2-3/4" C. (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED	C. NGO	06-14 DATE
DRAWN	C. NGO	06-14 DATE
CHECKED	S. IDLEI	06-14 DATE
APPROVED	N/A	DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

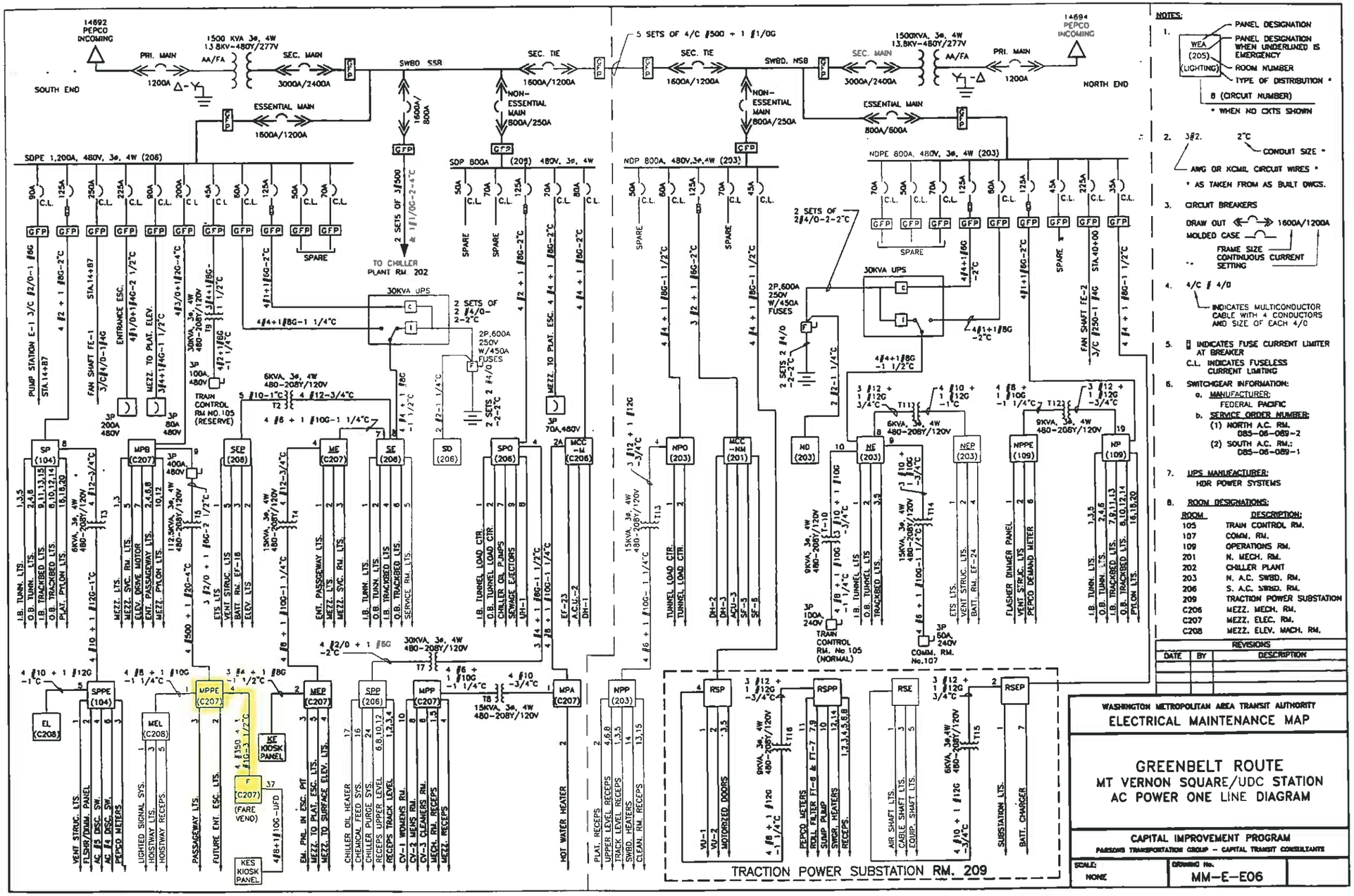
GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
MT VERNON SQUARE
PANEL SCHEDULE

SCALE: NOT TO SCALE

DRAWING NO.: E01-E-102



NOTES:

1. WEA (205) (LIGHTING) — PANEL DESIGNATION; PANEL DESIGNATION WHEN UNDERLINED IS EMERGENCY; ROOM NUMBER; TYPE OF DISTRIBUTION *; B (CIRCUIT NUMBER); * WHEN NO CKTS SHOWN
2. 3#2. 2"C — CONDUIT SIZE *; AWG OR KCMIL CIRCUIT WIRES *; * AS TAKEN FROM AS BUILT DWGS.
3. CIRCUIT BREAKERS — DRAW OUT 1600A/1200A; MOLDED CASE; FRAME SIZE CONTINUOUS CURRENT SETTING
4. 4/C # 4/0 — INDICATES MULTICONDUCTOR CABLE WITH 4 CONDUCTORS AND SIZE OF EACH 4/0
5. GFP INDICATES FUSE CURRENT LIMITER AT BREAKER; C.L. INDICATES FUSELESS CURRENT LIMITING
6. SWITCHGEAR INFORMATION:
   a. MANUFACTURER: FEDERAL PACIFIC
   b. SERVICE ORDER NUMBER: (1) NORTH A.C. RM. D85-06-089-2; (2) SOUTH A.C. RM.: D85-06-089-1
7. UPS MANUFACTURER: MDR POWER SYSTEMS
8. ROOM DESIGNATIONS:

ROOM	DESCRIPTION:
105	TRAIN CONTROL RM.
107	COMM. RM.
109	OPERATIONS RM.
201	N. MECH. RM.
202	CHILLER PLANT
203	N. A.C. SWBD. RM.
206	S. A.C. SWBD. RM.
209	TRACTION POWER SUBSTATION
C206	MEZZ. MECH. RM.
C207	MEZZ. ELEC. RM.
C208	MEZZ. ELEV. MACH. RM.

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

ELECTRICAL MAINTENANCE MAP

GREENBELT ROUTE
MT VERNON SQUARE/UDC STATION
AC POWER ONE LINE DIAGRAM

CAPITAL IMPROVEMENT PROGRAM

PARSONS TRANSPORTATION GROUP – CAPITAL TRANSIT CONSULTANTS

SCALE: NONE

DRAWING No. MM-E-E06

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/30/2014	**Station Name:** E02 Shaw-Howard U (S)	**Mezzanine #** 071	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Essential SWBD LOAD Source Breaker Name/Number: "PANEL SF" Circuit #5 Electrical AFC Panel Name/Number: SF	220 220 208	AC Switchboard room is located on platform level, Track 2 wayside.
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		Kiosk Emergency Panel is Panel SKE (Kiosk). Source Panel is Panel SMEP (Rm. 208) and circuit #6.
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		Access to multiple handholes are required.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:	9/30/14	

Photo #1: E02 Shaw-Howard U (South) – Panel SF in Room 208

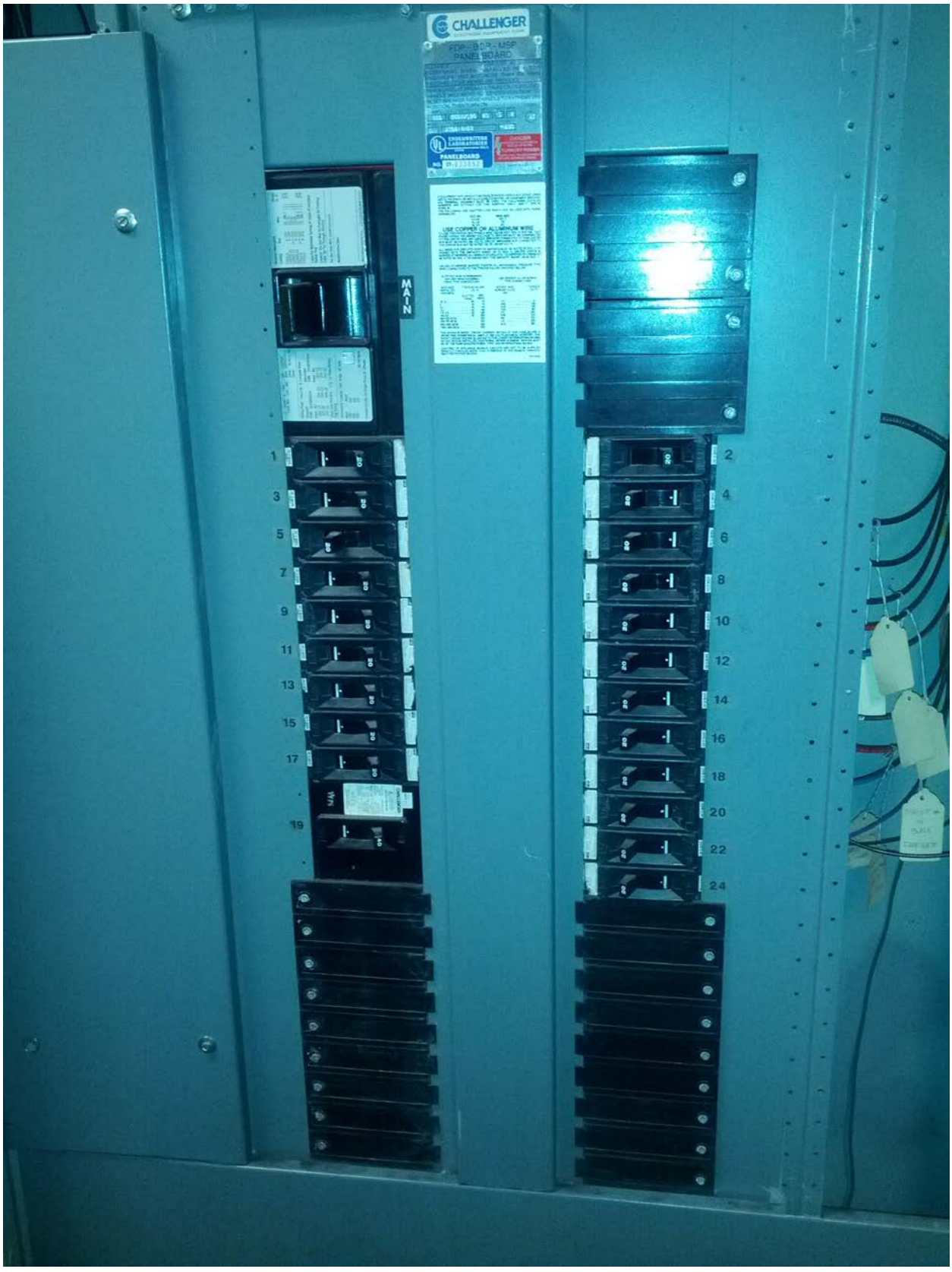


Photo #2: E02 Shaw-Howard U (South) – Top of Panel SF in Room 208

Photo #3: E02 Shaw-Howard U (South) – Junction box and drop to Panel SF in Room 208

Photo #4: E02 Shaw-Howard U (South) – Junction Box and Riser near Room 208

Photo #5: E02 Shaw-Howard U (South) – Junction Box, riser, and walker duct near Room 208

Photo #6: E02 Shaw-Howard U (South) – Conduit Riser near Room 208

Photo #7: E02 Shaw-Howard U (South) – Mezzanine level handhole opposite Room 208

Photo #8: E02 Shaw-Howard U (South) – Mezzanine level handhole

Photo #9: E02 Shaw-Howard U (South) – Mezzanine level handholes

Photo #10: E02 Shaw-Howard U (South) – Mezzanine level handholes

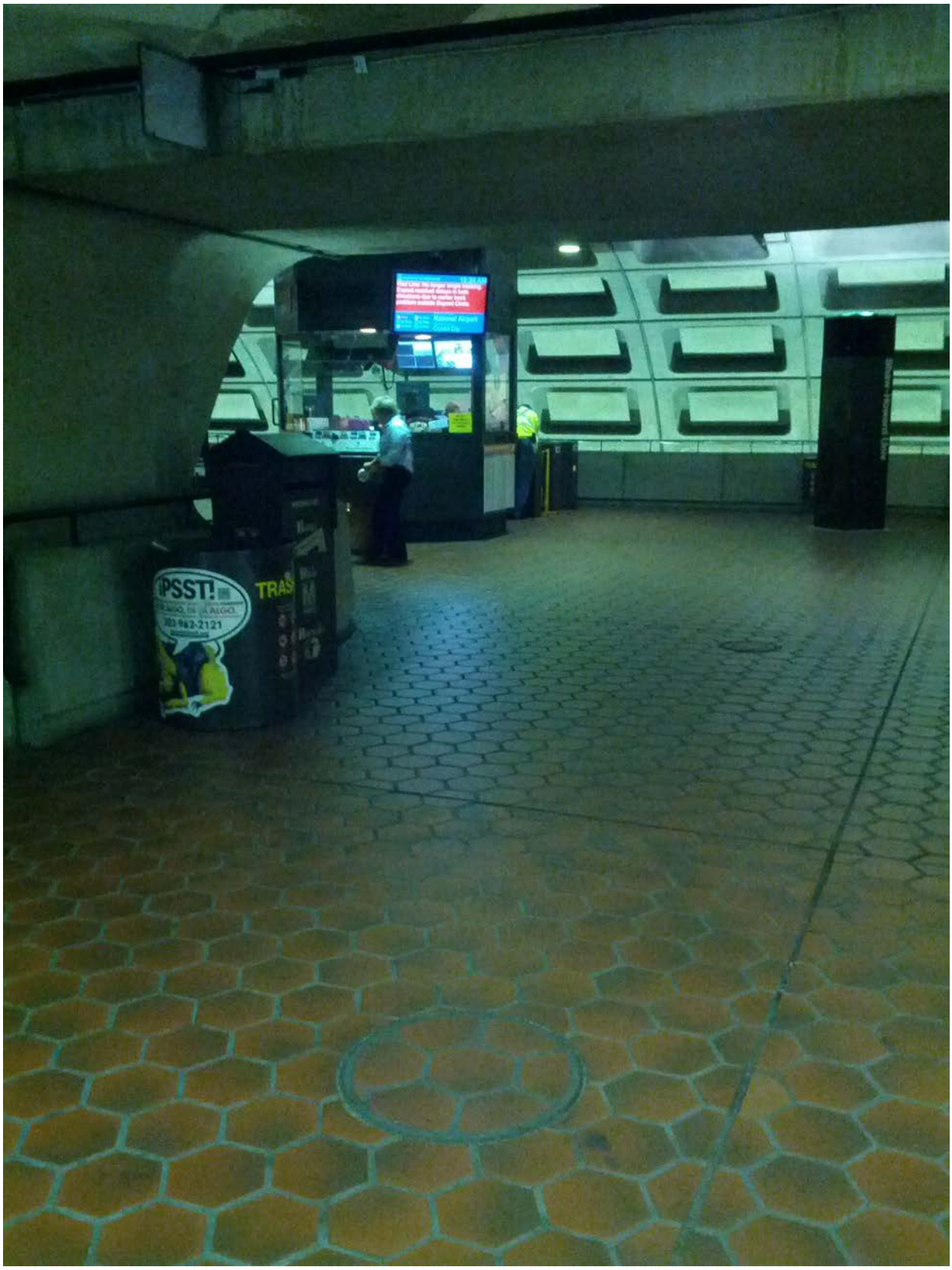


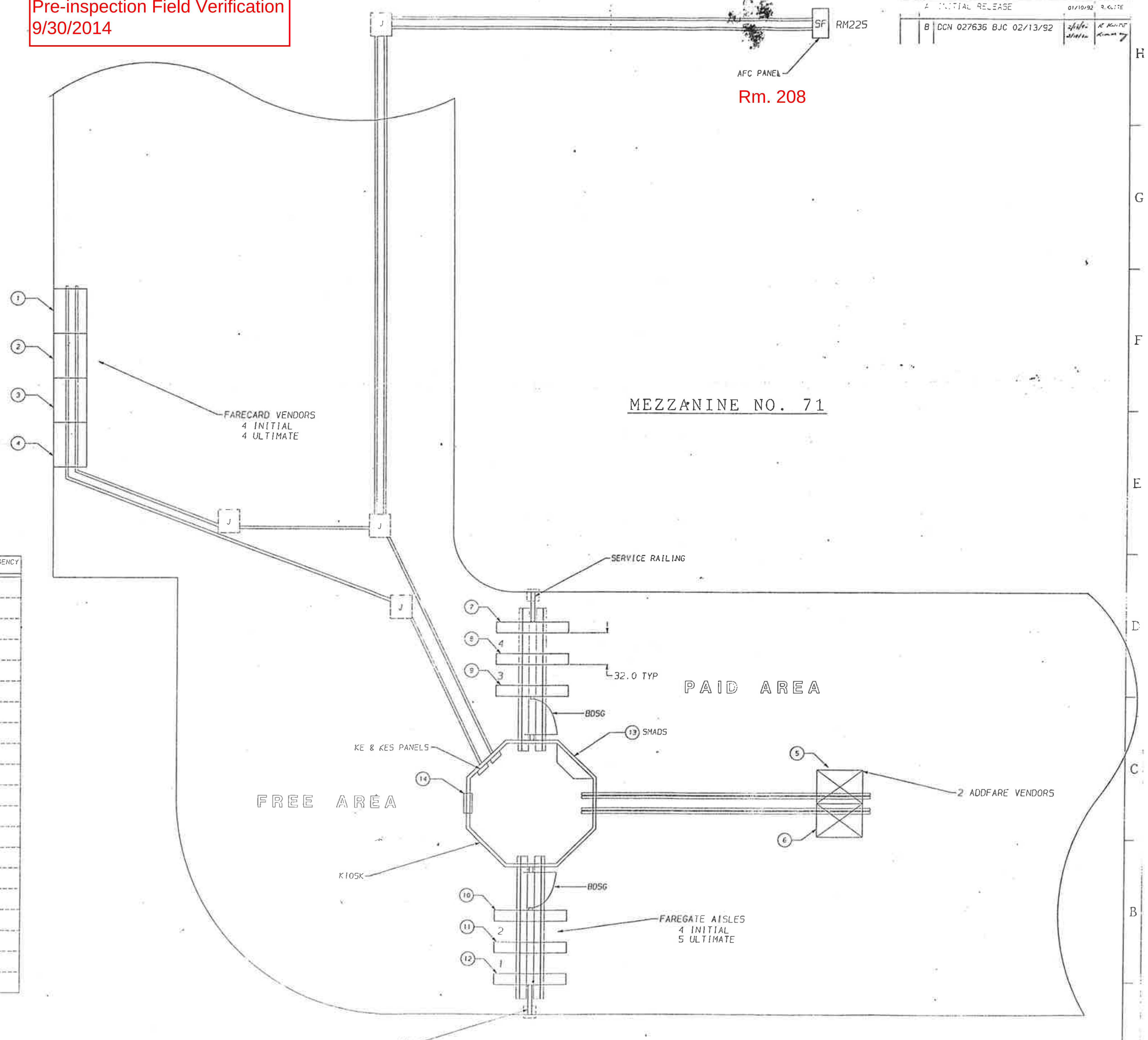
Photo #11: E02 Shaw-Howard U (South) – SWBD Breaker for panel SF

Pre-inspection Field Verification
9/30/2014

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	01/10/92	R. KOITE
	B	CCN 027636 BJC 02/13/92		

NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL: 7, 9 & 11; 16 & 18; 2 & 4; 6 & 8.



ITEM	NAME	S/N	PANEL AFC	KIOSK EMERGENCY BREAKER
1	VENDOR			
2	VENDOR	1854	SF	11
3	VENDOR	1853	SF	9
4	VENDOR	[illegible]	SF	7
5	ADDFARE	2824	SF	16
6	ADDFARE	2822	SF	18
7	EXIT GATE	4824	SF	N/A
8	REV. GATE	7891	SF	12
9	ENTRY GATE	3820	SF	10
10	EXIT GATE	4822	SF	N/A
11	REV. GATE	7871	SF	6
12	ENTRY GATE	[illegible]	SF	8
13	SMADS	8813	KE	1
14	SMADS CLOCK	95715	KES	7
15	EMERGENCY LT		KES	4

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES

NEXT ASSY: NONE

R. KOITE

CUBIC AUTOMATIC REVENUE COLLECTION GROUP WESTERN DATA DIVISION

SHAW STATION SOUTH MEZZANINE LAYOUT

DWG NO 931-4014 REV B

Pre-inspection Field Verification
9/30/2014

EXISTING PANEL "NF"

AMPERES 400		VOLTS. 120/208			MOUNTING: SURFACE						
MAINS: 250A MCB		PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 205						
RATING: 10K AIC		WIRE: 4			SECTION: 1 OF 1						
		CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO.	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
1&2 SPARE (KIOSK)	0.0	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	3.3	40	3	17	- - C	18	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	19	A - -	20	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	21	- B -	22	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	23	- - C	24	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	25	A - -	26	-	-	0.0	SPACE	
SPACE	0.0	-	-	27	- B -	28	-	-	0.0	SPACE	
SPACE	0.0	-	-	29	- - C	30	-	-	0.0	SPACE	
SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE	
SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE	
SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE	
SPACE	0.0	-	-	37	A - -	38	-	-	0.0	SPACE	
SPACE	0.0	-	-	39	- B -	40	-	-	0.0	SPACE	
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE	

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	6.0 x 50%		3.0 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**23.5 KVA**	**TOTAL DEMAND KVA**	**21.3 KVA**
		TOTAL DEMAND AMPS	**59.0 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**8.1 KVA**		
PHASE B:	**7.3 KVA**		
PHASE C	**8.1 KVA**		

NOTES: A. EXISTING PANEL "NF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "NSB" LOCATED IN AC SWBD. ROOM 223, #6-125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E08).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (1-WIRING FILL >40%).
- 3-3" C. (1-EMPTY & 2-WIRING FILL >40%).
- 2-3/4" C. (WIRING FILL >40%).

EXISTING PANEL "SF" ✓

AMPERES 400		VOLTS 120/208			MOUNTING: SURFACE						
MAINS: 250A MCB		PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 208 ✓						
RATING: 10K AIC		WIRE: 4			SECTION: 1 OF 1						
		CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXIST. LOAD CENTER "KES"	3.3	40	3	19	A - -	20	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	21	- B -	22	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	23	- - C	24	1	20	0.8	EXISTING VENDOR	
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	25	A - -	26	-	-	0.0	SPACE	
1&2 SPARE (KIOSK)	0.0	20	1	27	- B -	28	-	-	0.0	SPACE	
SPACE	0.0	-	-	29	- - C	30	-	-	0.0	SPACE	
SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE	
SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE	
SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE	
SPACE	0.0	-	-	37	A - -	38	-	-	0.0	SPACE	
SPACE	0.0	-	-	39	- B -	40	-	-	0.0	SPACE	
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE	

NOTES 1. PROVIDE 2-NEW 20A, 1P CB IN AVAILABLE SPACES (NEW CB'S SHALL MATCH EXISTING CB'S) AND CONNECT NEW FEEDER TO 2-NEW CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.4 x 50%		4.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**25.9 KVA**	**TOTAL DEMAND KVA**	**22.5 KVA**
		TOTAL DEMAND AMPS	**62.4 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**9.7 KVA**		
PHASE B:	**8.1 KVA**		
PHASE C	**8.1 KVA**		

NOTES: A. EXISTING PANEL ✓ "SF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "SSB" LOCATED IN AC SWBD. ROOM 220, ~~#8~~-125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E08).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (1-WIRING FILL >40%).
- 3-3" C. (1-EMPTY & 2-WIRING FILL >40%).
- 2-3/4" C. (WIRING FILL >40%).

Rm 220 - Track 2 Wayside
Essential Circuit #5

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. MOO	08-14 DATE	REFERENCE DRAWINGS	REVISIONS
DRAWN C. MOO	08-14 DATE	NUMBER / DESCRIPTION	DATE / BY / DESCRIPTION
CHECKED S. DUS	08-14 DATE		
APPROVED N/A	DATE		

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
SHAW - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE

DRAWING NO.: E02-E-102

PEPCO INCOMING 15204
PRI.MAIN 1200A
1500 KVA,3Ø,4W 13.8KV–480/277V
AA/FA
3000A
SEC. MAIN 3200A/2400A
SEC. TIE 1600A/1200A
SOUTH END
ESSENTIAL 1600A/1200A
NON-ESSENTIAL 1600A/225A
4 SETS OF 4/C # 500 & 1#1/0G.
SEC. TIE 1600A/1200A
SEC. MAIN 3200A/2400A
3000A
1500 KVA,3Ø,4W 13.8 KV–480/277V
AA/FA
PEPCO INCOMING 15207
PRI. MAIN 1200A
NORTH END
NON-ESSENTIAL 1600A /225A
ESSENTIAL 1600A/900A
GFP
SDPE 1200A 480V. 3Ø,4W (220)
NDP 800A 480V.3Ø,4W (220)
NDP 800A 480V.3Ø,4W (223)
NDPE 1200A 480V.3Ø,4W (223)
2 SETS OF 2#4/0 IN 2–2"C.
30KVA
3#1+1#6G–2"C.
4#4+1#8G–1 1/4"C.
2#2+ 1 1/4"C
SD
2P 600A 250V W/450A FUSES
F
40KVA
3#1/0+ 1#6G –2"C.
2#2–1 1/4"C
ND
2P, 600A 250V W/ 450A FUSES
4#4+1#8G –1 1/4"C.
FAN SHAFT FE–2
3/C # 250+1#4G STA.40+00
4/C # 6+1#8G–2"C.
4/C #6+1#8G–2"C.
3/C#1+1#6G –2"C.
75KVA,3Ø,4W 480–208Y/120V
4#300+1#2G–3 1/2"C.
ENTRANCE ESC.4/C#2+1#6G–3"C.
4#500+1#2G–4"C.
9 KVA,3Ø,4W 480–208Y/120V
3P 150A 480V
3P 30A 480V
T16
T5
4#10–1"C.
15KVA,3Ø, 4W,480– 208Y/ 120V
4#8+ 1#10G –1 1/4"C.
SPPE (104)
6KVA 3Ø 4W 480– 208Y/120V
T3
T1
5#10–3/4"C.
4#12–3/4"C.
4#4+1#8G–1 1/4"C.
4/C#8+1#8G–2"C.
SME (208)
4#2+1#8G–2"C.
4/C#2+1#8G–2"C.
3#2+1#6G–1 1/2"C.
30KVA 3Ø,4W 480– 208Y /120V
T14
3#8+1#10G–1"C.
4/C#8+ 1#10G. –2"C.
NME (205)
6KVA,3Ø,4W 480–208Y/120V
T9
15KVA,3Ø,4W 480–208Y/120V
T11
ENTRANCE ESC.
4/C#2+1#6G–3"C.
4#4/0+1#6G–3"C.
T17
3/C#2+ 1#8G.–2"C.
75KVA,3Ø,4W 480–208Y/120V
MEZZ. TO PLAT. ELEV. 3#8+1#10G–1"C.
4/C#2+1#6G–3"C.
FAN SHAFT FE–3 3/C#4/0+1#6G. STA.67+00
SMPB (208)
SP (104)
SEP (220)
SF (208)
FARE VEND.
SPO (220)
SMPA (208)
MCC–S (222)
NPP (223)
NPO (223)
NMPA (205)
MCC–N (219)
NE (223)
NEP (223)
NPPE (103)
NP (103)
NF (208)
FARE VEND.
NMPB (205)
3P 60A,240V TRAIN CONTROL RM.(105) (RESERVE)
4#8+1#10G–UFD
I.B TRACKBED LTS
O.B TUNN LTS
PLAT.PYLON LTS
PUMP SP–1&2
TRACK LEVEL LTS
FLSHR/DIMMER
CLEAN.OUTLET
FAN EF–8
ETS.LTS
I.B TUNN LTS
I.B TRACKBED LTS
UPPER LEVEL LTS
SVC.RM.LTS
MEZZ.LTS
PUMP SP–3
I.B.TUNN.LOAD CTRS
O.B.TUNN.LOAD CTRS
SEW.EJEC.SE–1
CV–1,2,3
MEZZ.ESC.
WATER HTR
ACU–2
ACU–1
SF–1
SF–2
UH–1
UH–2
DIORAMA LTS
SWBD HTRS
UPPER.LVL.RECEPS
TRK.LVL.RECEPS
PLATFORM RECEPS
CV–4,5,6
ACU–3
FAN EF–14
ACU–4
UH–4
EF–12
SF–4
DH–1
SVC.RM LTS
PASSAGEWAY LTS
ETS LTS
ELEV.CAB LTS
FLSHER/DIMMER
CLEAN OUTLET
FAN EF–13
I.B.TRACKBED LTS
O.B.TRACKBED LTS
4#12+3/4"C.
I.B.TUNN LTS
O.B.TUNN LTS
4#8+1#10G–UFD
NKES KIOSK
T12 15KVA 30,4W 480– 208Y/ 120V
4#8+1#10G–1 1/4"C.
ESC.
MEZZ.LTS
SVC.RM.LTS
PASSSAGEWAY LTS
STA.67+00
4#8–2"C.
ENT. ESC. PNL
SMPPE (208)
ENT. ESC. PANEL
SKES KIOSK
SKE KIOSK
SMEP (208)
3#10+ 1#10G– 1 1/2"C.
4#8+ 1#10G –1 1/4"C
15KVA 3Ø,4W 480– 208Y/ 120V
T2
4#10–1"C.
3#8+1#10G–1"C.
T7
15KVA,3Ø, 4W.480– 208Y–120V
4#8+ 1#10G –1 1/4"C
SPP (220)
T6
30KVA,3Ø, 4W.480– 208Y/120V
4#2+ 1#8G –2"C
SVC.AREA RECEPS
MEZZ.ESC.LTS
MEZZ.ESC.RECEPS
FT–3 & EF–20
ENT.ESC.LTS
MEZZ.ESC.LTS
TRK.LVL.RECEPS
UPPER.LVL.RECEPS
DIORAMAS
EF–9&10
4#10–3/4"C
3#10+ 1#10G 1 1/2"C.
4#6+1#8G–1 1/2"C
T15
15KVA 3Ø,4W 480– 208Y /120V
NKE KIOSK
NMEP (205)
4#8+ 1#10G –1 1/2"C
T10
15KVA, 3Ø,4W 480– 208Y/ 120V
T8
6KVA 3Ø,4W 480– 208Y /120V
5#12+3/4"C.
3P 60A, 240V COMM. RM.(107)
3#10+3/4"C.
T13
9KVA 3Ø,4W 480– 208Y /120V
4#8+ 1#10G –1 1/4"C
(NORMAL)
3P 60A 240V TRAIN CONTROL RM.(105)
MEZZ.ESC.LTS
SVC.RM.RECEPS
MEZZ.ESC.RECEPS
FAN EF–21
ELEV.CAB.LTS
MEZZ.ESC.LTS
PASSAGEWAY LTS.
ENT.ESC.LTS
NEL–2 (227)
NEL–1 (215)
5#10–1"C.
NMPPE (205)
3P 150A 480V
ENTRANCE ESC.
4/C#2+1#6G–3"C.
T17
3/C#2+ 1#8G.–2"C.
75KVA,3Ø,4W 480–208Y/120V
4#300+1#2G–3 1/2"C
NF (208)
FARE VEND.
T12 15KVA 30,4W 480– 208Y/ 120V
4#8+1#10G–1 1/4"C.
NKES KIOSK
4#8–2"C.
ENT. ESC. PNL

Pre-inspection Field Verification 9/30/2014

NOTES:

1. WEA (205) 8 (CIRCUIT NUMBER)
   - PANEL DESIGNATION
   - PANEL DESIGNATION WHEN UNDERLINED IS EMERGENCY
   - ROOM NUMBER
2. 3#2, 2"C
   - CONDUIT SIZE •
   - AWG OR KCMIL CIRCUIT WIRES •
   - • AS TAKEN FROM AS BUILT DWGS.
3. CIRCUIT BREAKERS
   DRAW OUT 1600A/1200A
   - FRAME SIZE
   - CONTINUOUS CURRENT SETTING
4. 4/C # 4/0
   - INDICATES MULTICONDUCTOR CABLE WITH 4 CONDUCTORS AND SIZE OF EACH 4/0
5. INDICATES FUSE CURRENT LIMITER AT BREAKER
6. SWITCHGEAR INFORMATION:
   MANUFACTURER–WESTINGHOUSE
   ORDER NO.–VN–10001
   DWG. NO.–ST88D1360 (NORTH)
   DWG. NO.–ST88D1361 (SOUTH)
7. UPS MANUFACTURER:
   HDR POWER SYSTEMS
8. ROOM DESIGNATIONS:

ROOM	DESCRIPTION
103	N. MECH.RM.(TRACK LEVEL)
104	S. MECH.RM.(TRACK LEVEL)
105	TRAIN CONTROL RM.
107	COMM.RM.
205	ELEC.RM.(S. ENT.MEZZ.)
208	ELEC.RM.(N. ENT.MEZZ.)
215	N. ENT. ELEV.MACH. RM.
219	MECH.RM.(N. UPPER LEVEL)
220	S. A.C.RM.(S. UPPER LEVEL)
222	MECH.RM.(S. UPPER LEVEL)
223	N. A.C.RM.(N. UPPER LEVEL)
227	S. SVC. AREA ELEV.MACH.RM.

REVISIONS		
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

ELECTRICAL MAINTENANCE MAP

GREENBELT ROUTE
SHAW STATION
AC POWER ONE LINE DIAGRAM

CAPITAL IMPROVEMENT PROGRAM
PARSONS TRANSPORTATION GROUP – CAPITAL TRANSIT CONSULTANTS

SCALE:	DRAWING No.	
NONE	MM–E–E08	

O:\ELECT\NewMaintMap\E-Route\MM-E-E08.dwg Wed Jun 14 10:37:23 2000 LP