

Mezzanine Inspection Report

Date: 06/15/15	Station Name: C02 McPherson Square	Mezzanine #: 037	Completed By: Mike Butler
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Summary

NEPP-01: Video scoping and pull string installation was completed for communication ducts in upper / lower faregate arrays; respective power ducts were also video scoped. It was not possible to complete video scoping and pull string installation in existing power duct between Kiosk and AFC Panel because the duct is at capacity. Scanning was conducted to identify a proposed power route between the Kiosk and AFC Panel. There are multiple ducts running from the Kiosk to AFC Panel, and there is no clear path for a new in-floor duct. However, an alternate existing duct was identified.

NEPP-02: Video scoping and pull string installation was attempted in an alternate duct that runs parallel with existing power duct from Kiosk to AFC Panel. Video scoping was completed from Kiosk to an in-floor access panel, and from AFC Panel to the same in-floor access panel. However, it was not possible to install pull string due to access issues to the in-floor access panel. A fare vending machine (Express Vendor #37; SN:FV1880) is currently blocking access to the in-floor access panel and will need to be moved to complete the pull string installation. The alternate duct appears to be in good condition and is at minimal capacity. The alternate duct leads to Panel NMWW-1A (Room 212), which is adjacent to the existing AFC Panel NWMM-1B. Panel NWMM-1A could be used as a potential power source for the new wires, or the new NEPP wires could be routed to AFC Panel NMWW-1B.

Refer to photos and drawings for further information.

NEPP-01: Scoping of Faregate Arrays (01/26/15)

Task	Yes/No	Notes
Communications Duct – Upper Faregate Array (5 gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to "WMATA McPherson Square West 3inch Upper Comm Faregate.avi".
Were pull strings installed at all faregates in the array?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	3" duct with less than 10 wires.
Communications Duct - Lower Faregate Array (4 gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to "WMATA McPherson Square West 6inch Lower Comm Faregate.avi".
Were pull strings installed at all faregates in the array?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct with less than 10 wires.
Power Duct - Upper Faregate Array (5 gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to "WMATA McPherson Square West 6inch Upper Power Faregate.avi".
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct with less than 10 wires.
Power Duct - Upper Faregate Array (4 gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to "WMATA McPherson Square West 6inch Lower Power Faregate.avi".
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct with less than 10 wires.

NEPP-01: Scoping of Existing Power Duct - Kiosk to AFC Panel (01/26/15)		
Task	Yes/No	Notes
Kiosk to In-floor Access Panel (Distance: 57')		
Was video scoping completed for the entire duct / conduit run?	No	
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Congested wires causing obstruction at the entrance to duct.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" walker duct with more than 35 wires.
In-floor Access Panel to AFC Panel (Distance: 3')		
Was video scoping completed for the entire duct / conduit run?	No	
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Congested wires causing obstruction at the entrance to duct.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" walker duct with more than 35 wires.
NEPP-01: Scanning of Mezzanine Floor (02/26/15)		
<ul style="list-style-type: none"> - Scanning was subsequently conducted to identify a proposed power route between the Kiosk and AFC Panel. - There are multiple ducts running from the Kiosk to AFC Panel and there is no clear path for a new in-floor duct. 		


NEPP-02: Scoping of Alternate Duct - Kiosk to AFC Panel (06/15/15)		
Task	Yes/No	Notes
Kiosk to In-floor Access Panel (Distance: 57')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "C02_MZ037_McPherson Square West_Power Duct_Kiosk to Access Panel.avi"
Was pull string installed?	No	Could not gain access to in-floor access panel, which prohibited the installation of pull string. Fare vending machine needs to be moved temporarily to allow access. There are no other obstructions in duct run.
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" walker duct with 5 wires.
In-floor Access Panel to AFC Panel NMWW-1A (Distance: 3')		
Was video scoping completed for the entire duct / conduit run?	No	Vertical 90-degree bend prohibited video scoping from the AFC Panel.
Was pull string installed?	No	Could not gain access to in-floor access panel, which prohibited the installation of pull string. Fare vending machine needs to be moved temporarily to allow access. There are no other obstructions in duct run.
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" walker duct with 5 wires.
Observations / Issues / Next Steps		
<ul style="list-style-type: none"> - The alternate duct was video scoped up to the in-floor access panel from Kiosk and AFC Panel sides; however it was not possible to scope across the in-floor access panel due to multiple crossing wires. The in-floor access panel is currently inaccessible due to a fare vending machine blocking access. - Pull string installation in alternate duct between Kiosk, In-floor Access Panel and AFC Panel (NMWW-1A) should be possible if the in-floor access panel is made accessible by moving the fare vending machine. - The alternate duct is at minimal capacity and in good condition, therefore viable for further use. - It should be noted that the alternate duct leads to Panel NMWW-1A (Room 212), which is adjacent to the existing AFC Panel NWMM-1B. Panel NWMM-1A could be used as a potential power source for the new wires, or the new NEPP wires could be routed to AFC Panel NMWW-1B. 		
Sign Off		
	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:		
Date:	06/17/15	

Photo 1 – Existing and alternate duct layout on mezzanine floor



Photo 2 – Existing and alternate duct layout on mezzanine floor

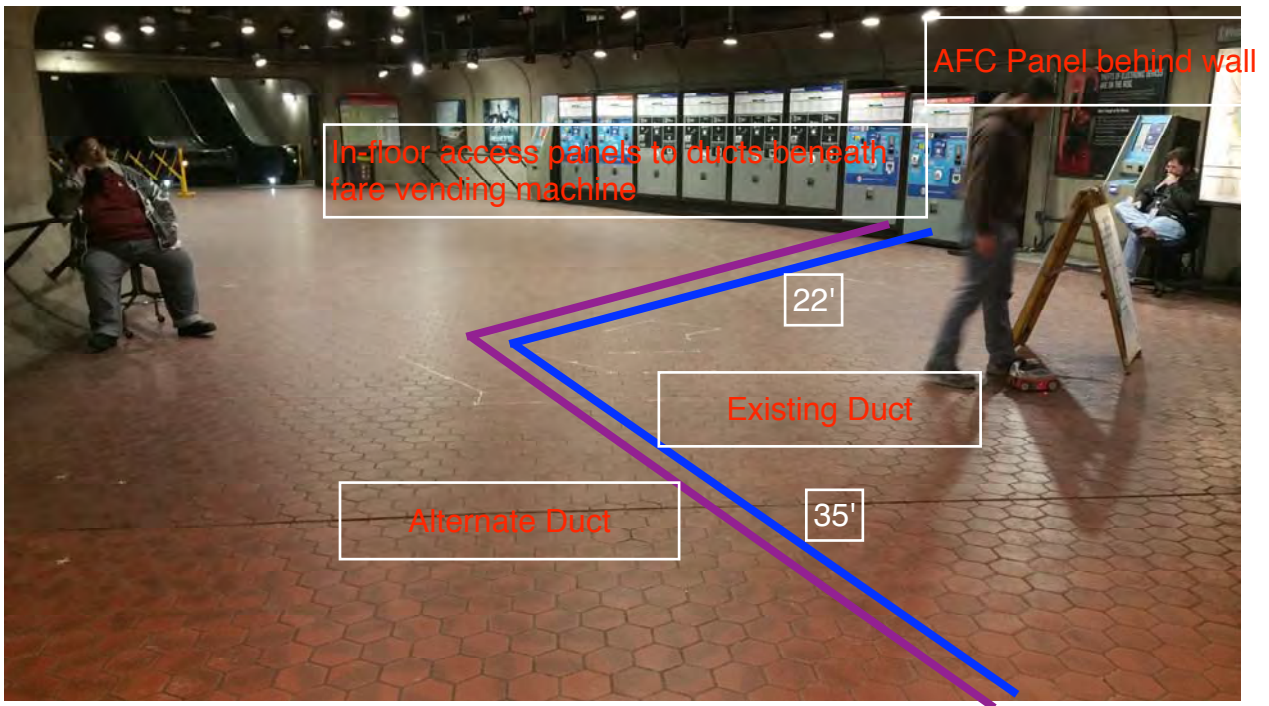


Photo 3 – In floor access panels for existing and alternate ducts (beneath fare vending machine)

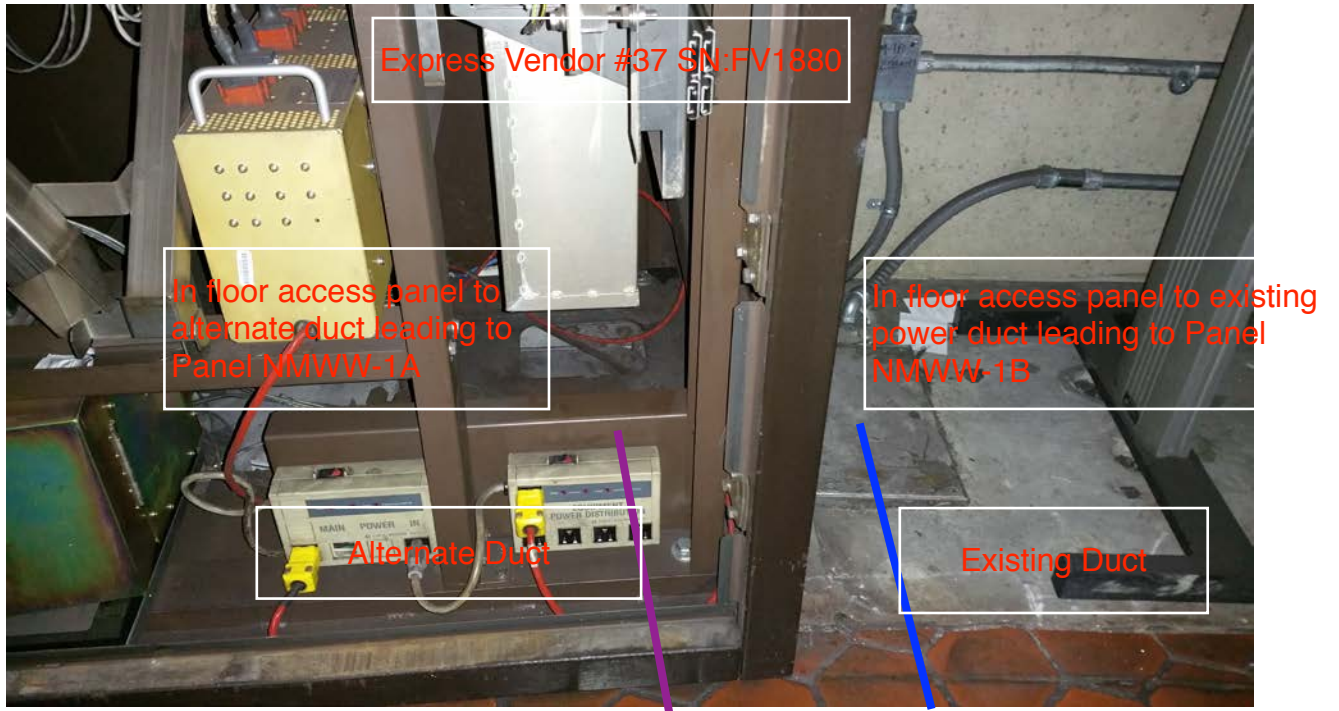


Photo 4 – AFC Panels NMWW-1B and NMWW-1A

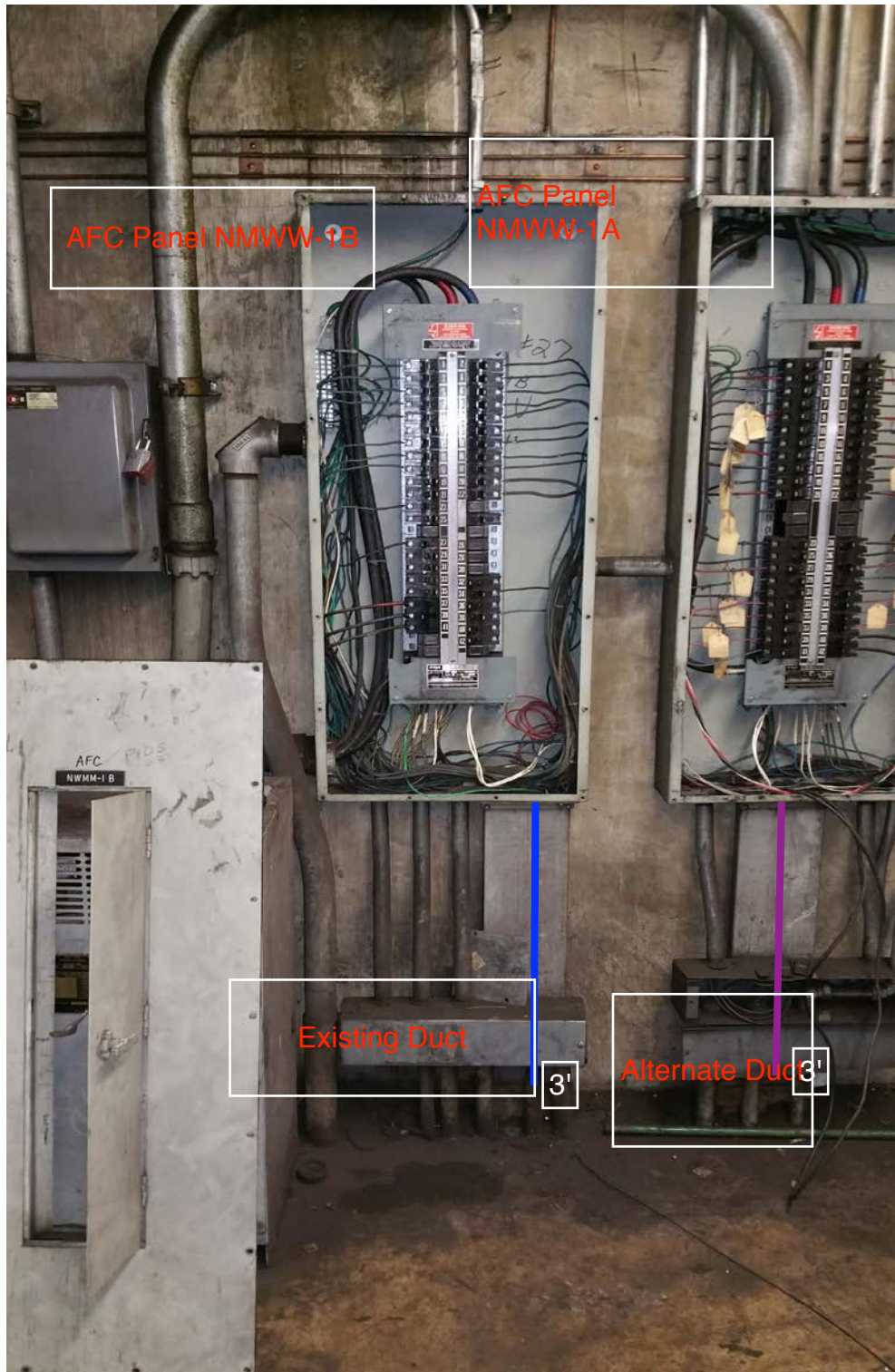


Photo 5 – AFC Panel NMWW-1B

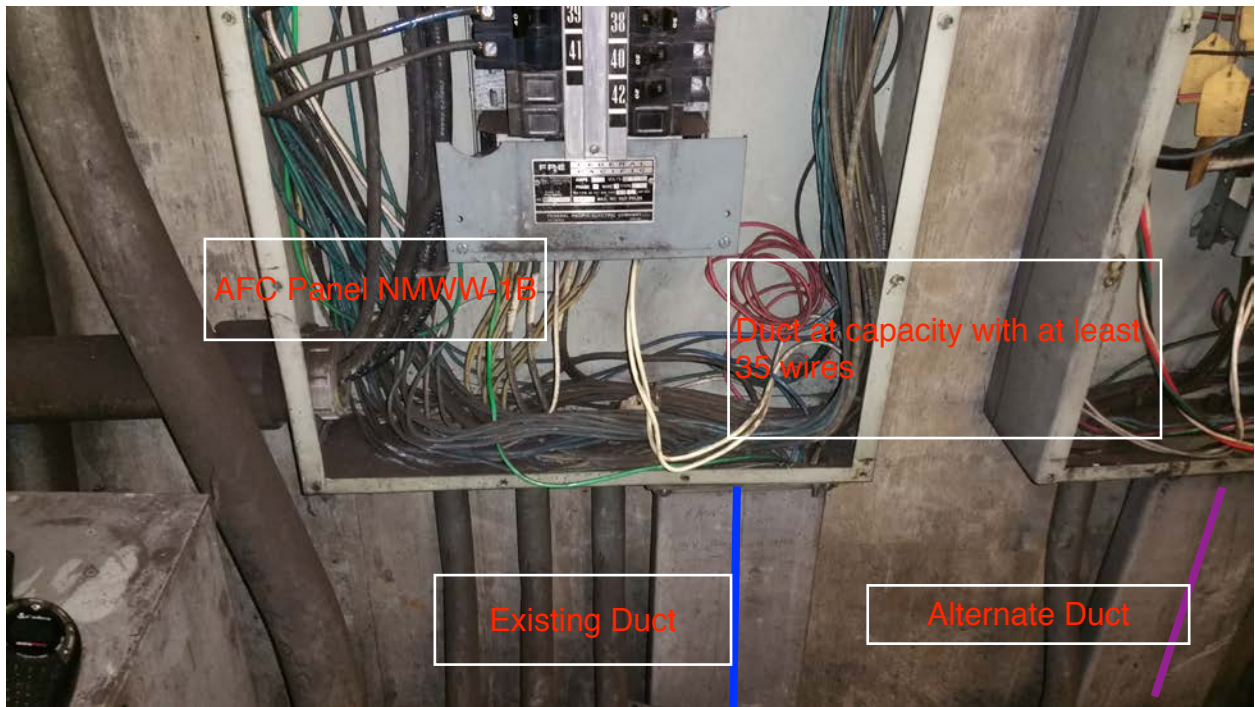
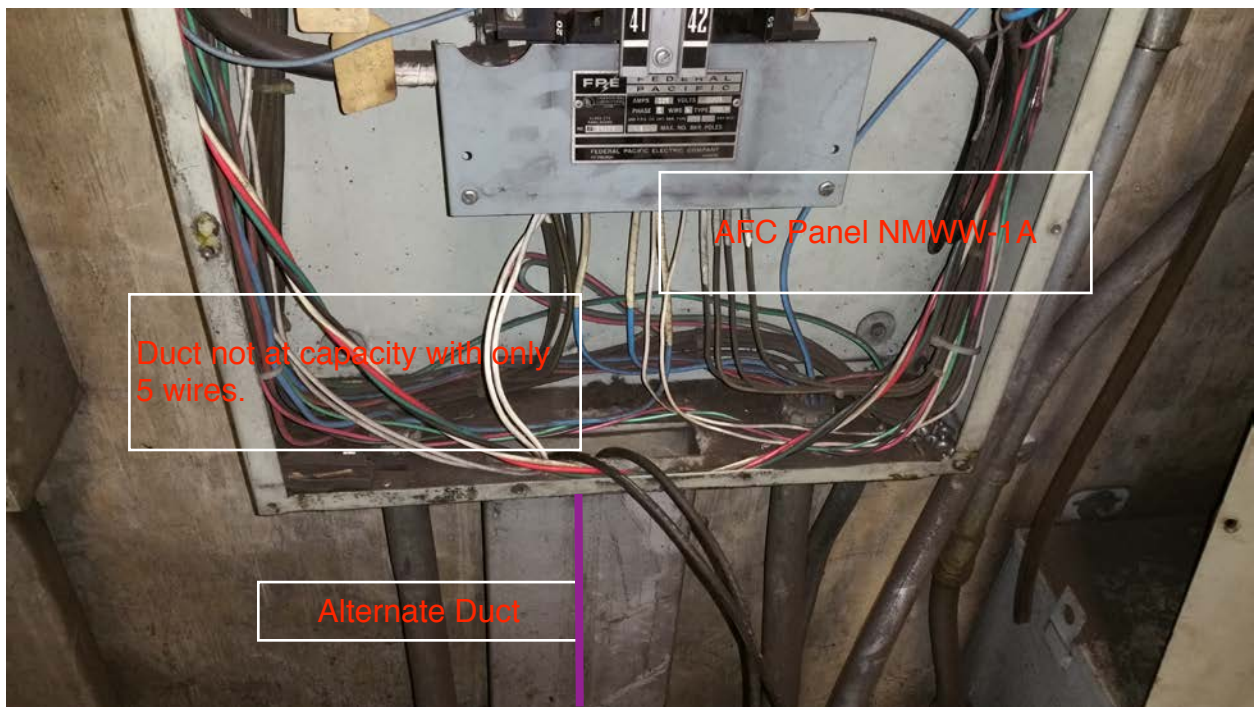


Photo 6 – AFC Panel NMWW-1A

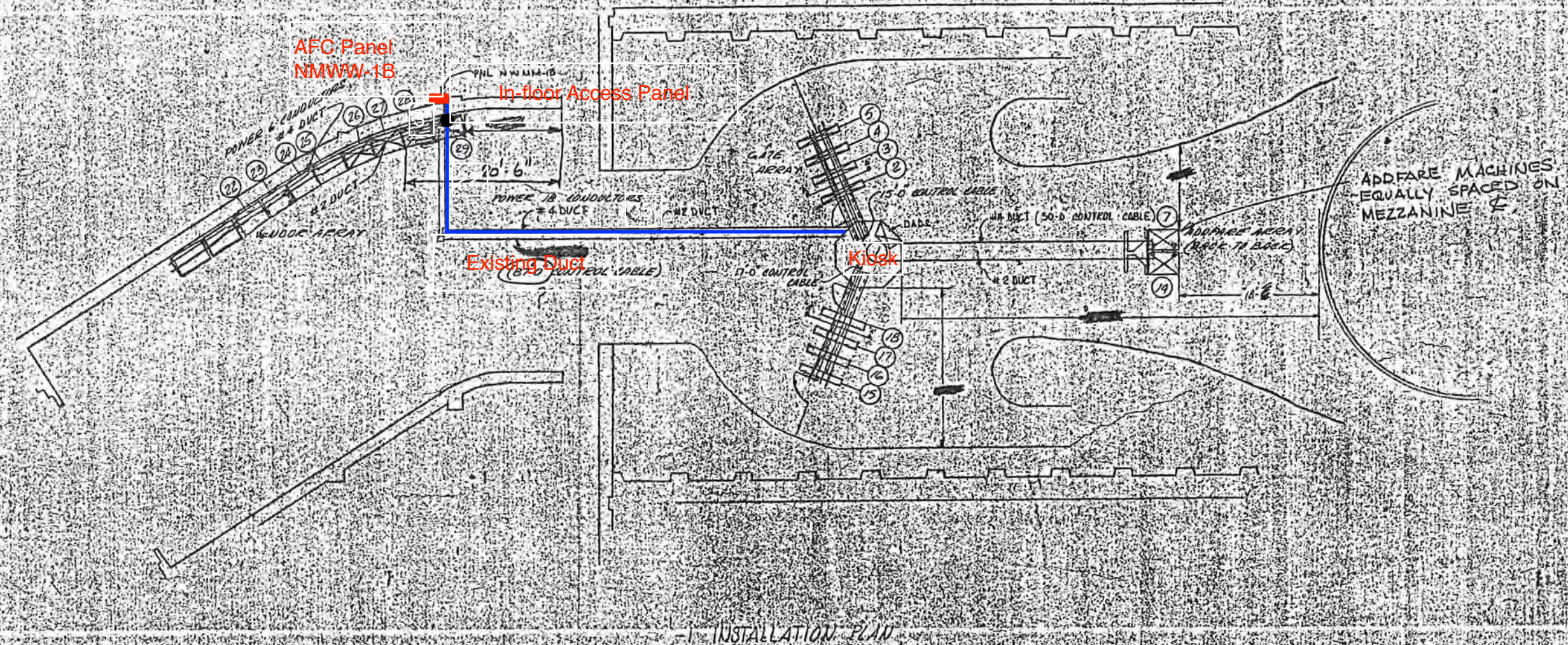


NOTES:

1. ALL INFORMATION CONCERNING DUCTS AND CONDUITS IS BASED ON INFORMATION SUPPLIED TO CUBIC WESTERN DATA BY WMATA.
2. TOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING.
3. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE 'X' DRAWN THRU THE MACHINE.
4. FOR AS BUILT CONDITIONS SEE SHEET 2.
5. FOR REFERENCE DRAWINGS SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.

REVISIONS		
DESCRIPTION	DATE	APVD

EXISTING DUCT LAYOUT



SP-22007A-110-4-0

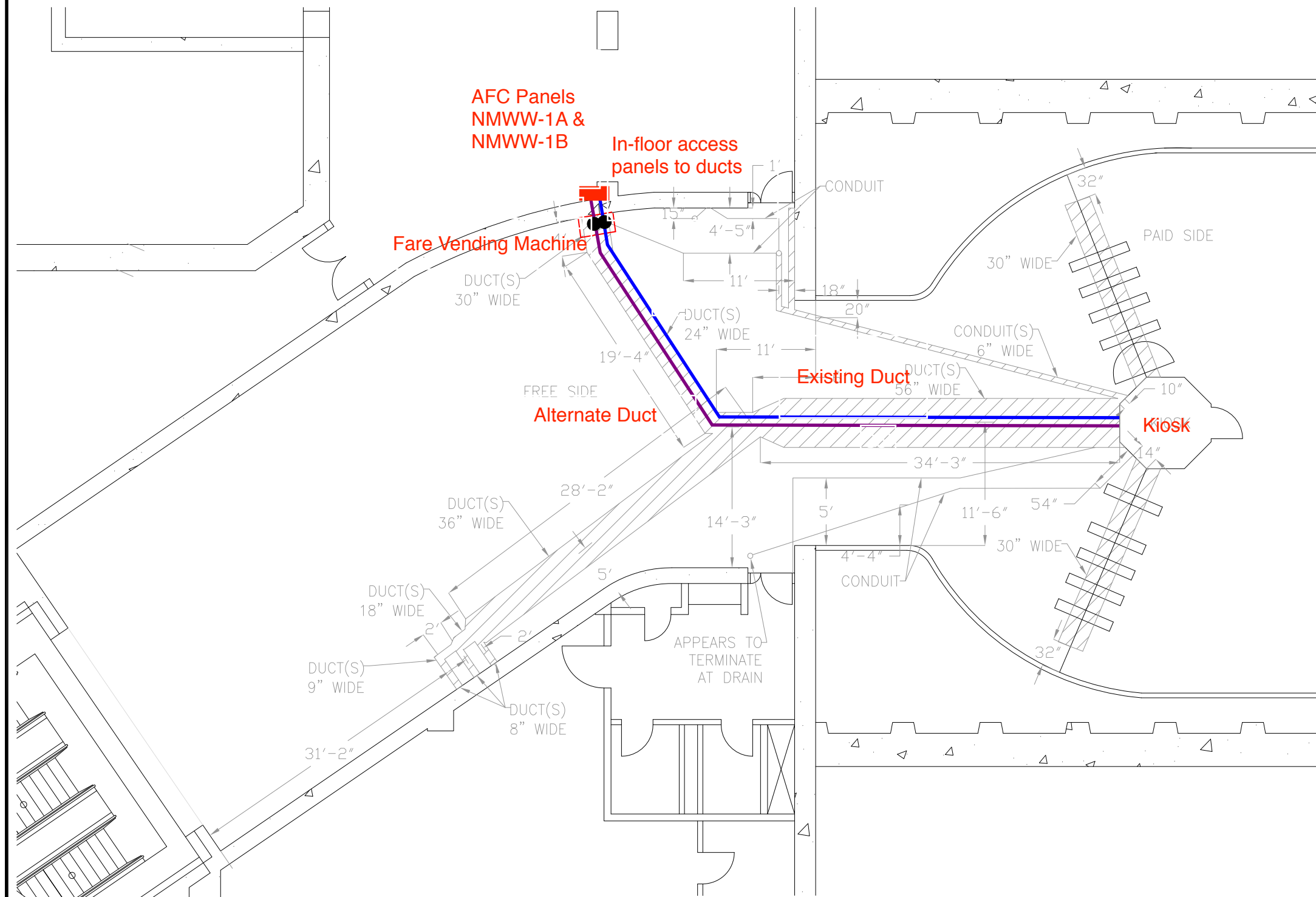
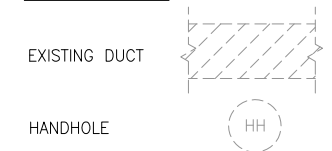
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 APPROVED AS CORRECTED
 (RESUBMITTAL REQUIRED)
 Approval Does Not Relieve the Contractor of the Responsibility for the Accuracy of this Document or for Full Compliance with the Contract Requirements.
 BY: *Patrick S. Bourne*
 For Contracting Officer
 DATE: 12-16-76

CUBIC WESTERN DATA
 McPHERSON SQUARE STATION
 WEST MEZZANINE
 AFC MACHINES
 DRAWING NUMBER: 926-0380
 SHEET: 37

PLAN NOTES:

1. DIMENSIONS ARE IN FEET AND INCHES.
2. DIMENSIONS ARE FOR REFERENCE ONLY.
3. EXISTING IN-FLOOR DUCTS/CONDUITS WERE IDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
4. THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
5. GPR SCANNING HAS THE FOLLOWING LIMITATIONS: (i) 12 INCHES VISIBLE SCANNING DEPTH; (ii) VISIBILITY BEYOND CONGESTED OR NEAR SURFACE REINFORCEMENT LAYERS; (iii) DETECTION OF PVC AND OTHER NON-METALLIC OBJECTS (iv) DETERMINATION OF SIZE AND EXTENTS OF SUBSURFACE ANOMALIES SUCH AS SLAB VOIDS OR REBAR SIZES; AND (v) VISIBILITY WHEN VARIABLE MOISTURE CONDITIONS EXIST IN THE SUBSTRATE.

LEGEND:



MCPHERSON SQUARE STATION
SCALE: NOT TO SCALE

CONTRACT NO.
XXXXXX

DESIGNED	C. LOOSE	03-15	REFERENCE DRAWINGS		REVISIONS		
			NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
DRAWN	C. LOOSE	03-15					
CHECKED	M. BUTLER	03-15					
APPROVED							

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

GFP A Gannett Fleming/Parsons JOINT VENTURE

APPROVED _____ SUBMITTED _____
PROJECT MANAGER

15-NEPP-01
IN - FLOOR DUCT INSPECTIONS
C02 McPherson Square
PROPOSED POWER RUN

SCALE: NOT TO SCALE

DRAWING NO. C02-E-100

XXX