Mezzanine Inspection Report

Date: 10/27/14	**Station Name:** E10 Greenbelt	**Mezzanine #:** 080	**Completed By:** Mike Butler

Summary

It was not possible to complete any video scoping or pull string installation at this mezzanine. There were multiple collapses found in the faregate array and the power duct between Kiosk, Handhole 1, Handhole 2 and AFC Panel. In addition, there was also water intrusion evident in all ducts, including excessive muck build up that has contributed to multiple blockages throughout the ducts.

Scanning was conducted to identify a new route for power between Kiosk and AFC Panel. Based on the scanning results, a new power duct is proposed between the Kiosk to Room C100. Before entering Room C100, the duct will change direction through a proposed handhole and then will transition to an overhead conduit through a second proposed handhole and new junction box. The conduit will continue overhead to the end of the hallway and pass through the end wall (by core drilling) to Room C106 before feeding into the AFC Panel.

Scoping of Faregate Array(s)

Task 9	Yes/No	Notes
Communications Duct – Upper Faregate Array (~~8~~ gates)		
Was video scoping completed for the entire duct run?	No	
Were pull strings installed at all faregates in the array?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Not possible due to water intrusion, muck build up, and collapsed duct at entry points.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	N/A	3” walker duct.
9		
Power Duct - Upper Faregate Array (~~8~~ gates)		
Was video scoping completed for the entire duct run?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Not possible due to water intrusion, muck build up, and collapsed duct at entry points.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	N/A	6” walker duct.

Scoping of Power Duct - Kiosk to AFC Panel		
Task	**Yes/No**	**Notes**
Kiosk to Handhole 1 (Distance: 40')		
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	Not possible due to water intrusion, muck build up, and collapsed duct at entry points.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	6" walker duct.
Handhole 1 to Handhole 2 (Distance: 17')		
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	Not possible due to water intrusion, muck build up, and collapsed duct at entry points.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	6" walker duct.
Handhole 2 to AFC Panel (Distance: 30')		
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	Not possible due to water intrusion, muck build up, and collapsed duct at entry points.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	6" walker duct.

Observations / Issues / Next Steps

The proposed power route between Kiosk and AFC Panel is 82', including 40' of proposed duct and 42' of proposed conduit.

Refer to attached photos and drawings for additional information.

Sign Off

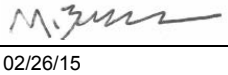
	GFP Representative	**WMATA PRGM**
Name:	Mike Butler	
Signature:		
Date:	02/26/15	

Photo #1 – Existing and Proposed Duct Route

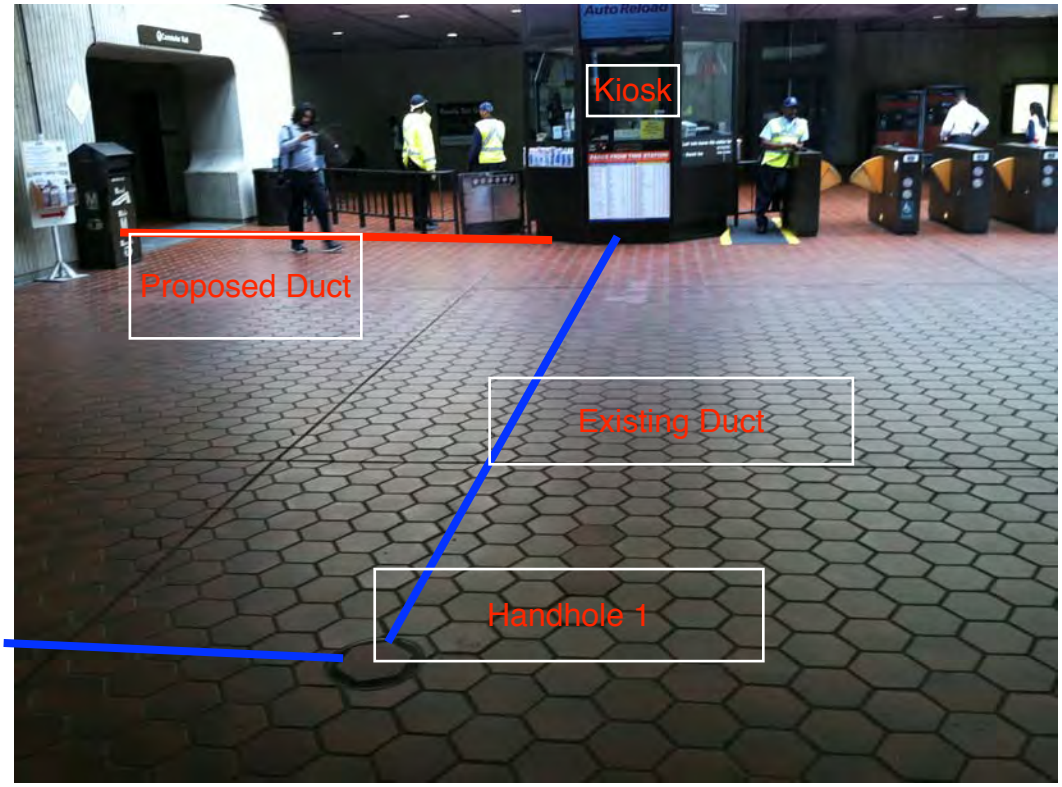


Photo #2 – Existing and Proposed Duct Route

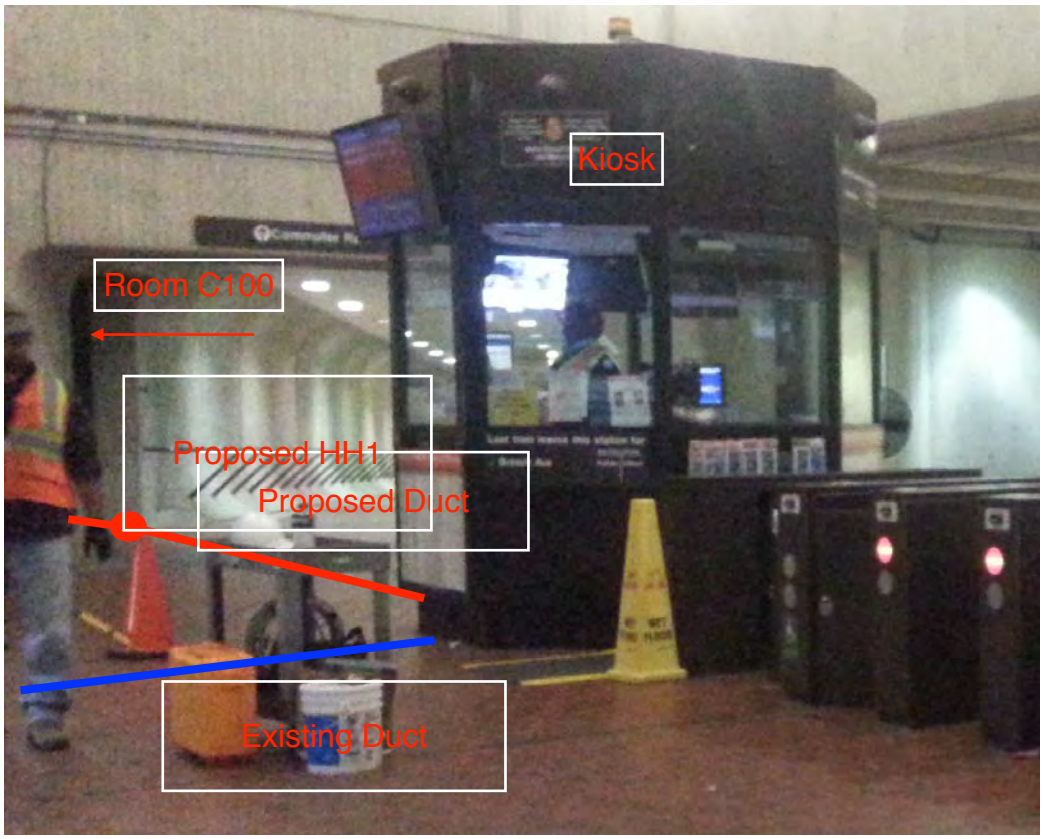


Photo #3 – Existing and Proposed Duct Route

Photo #4 – Existing and Proposed Duct Route

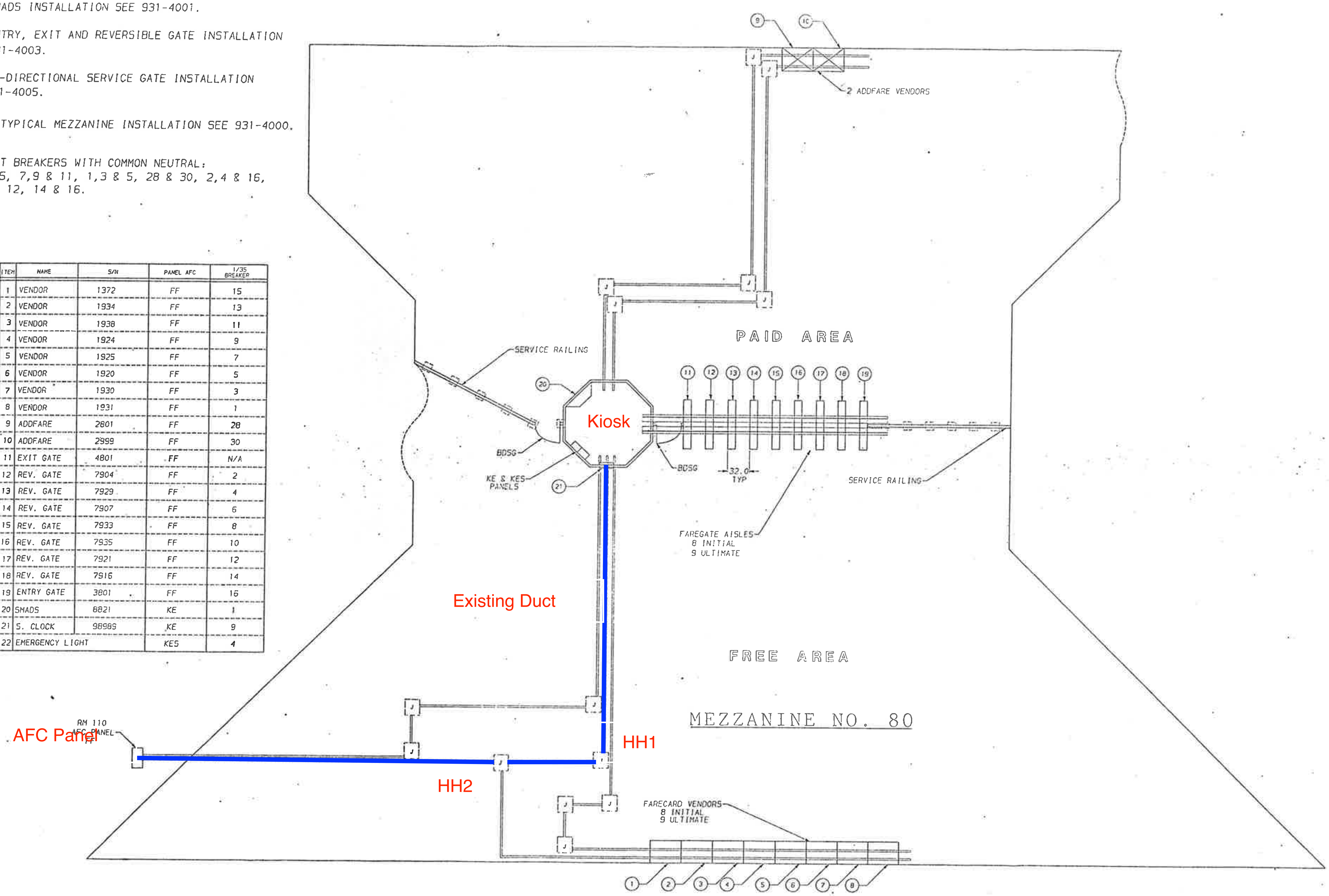
Photo #5 – Existing and Proposed Route in Room C106

Photo #6 – Condition of Existing Duct inside Kiosk

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: 13 & 15, 7,9 & 11, 1,3 & 5, 28 & 30, 2,4 & 16, 8,10 & 12, 14 & 16.

ITEM	NAME	S/N	PANEL AFC	1/35 BREAKER
1	VENDOR	1372	FF	15
2	VENDOR	1934	FF	13
3	VENDOR	1938	FF	11
4	VENDOR	1924	FF	9
5	VENDOR	1925	FF	7
6	VENDOR	1920	FF	5
7	VENDOR	1930	FF	3
8	VENDOR	1931	FF	1
9	ADDFARE	2801	FF	28
10	ADDFARE	2999	FF	30
11	EXIT GATE	4801	FF	N/A
12	REV. GATE	7904	FF	2
13	REV. GATE	7929	FF	4
14	REV. GATE	7907	FF	6
15	REV. GATE	7933	FF	8
16	REV. GATE	7935	FF	10
17	REV. GATE	7921	FF	12
18	REV. GATE	7916	FF	14
19	ENTRY GATE	3801	FF	16
20	SMADS	8821	KE	1
21	S. CLOCK	98985	KE	9
22	EMERGENCY LIGHT		KES	4

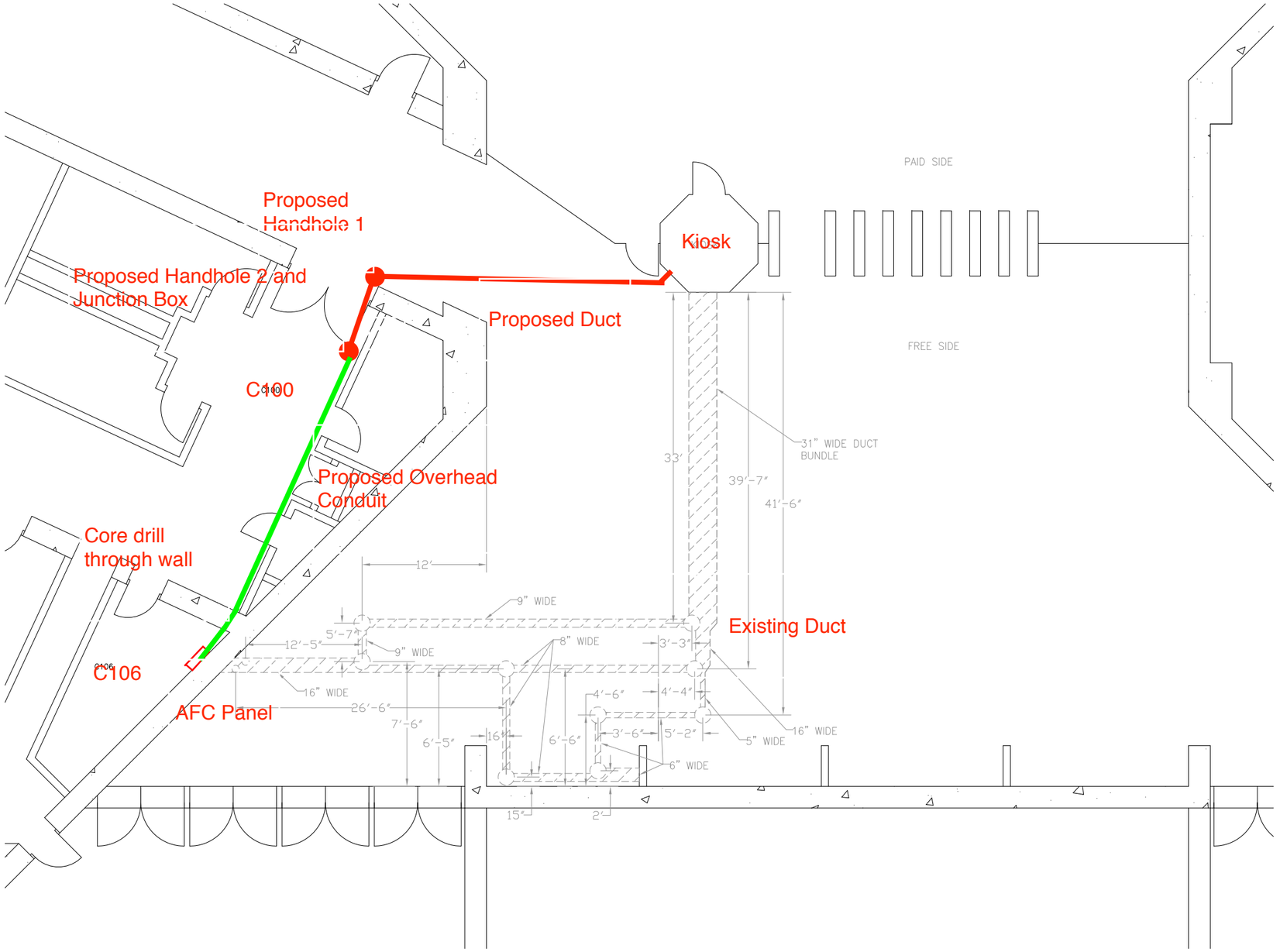


DO NOT SCALE DRAWING

CUBIC

GREENBELT STATION MEZZANINE LAYOUT

931-4026



PLAN NOTES:

1. DIMENSIONS ARE IN FEET AND INCHES.
2. DIMENSIONS ARE FOR REFERENCE ONLY.
3. EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED 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:

EXISTING DUCT

MANHOLE MH

GREENBELT STATION

E-100 SCALE: NOT TO SCALE

CONTRACT NO. XXXXXX

DESIGNED C. LOOSE 11-14 DATE	REFERENCE DRAWINGS: NUMBER / DESCRIPTION	REVISIONS: DATE / BY / DESCRIPTION
DRAWN C. LOOSE 11-14 DATE		
CHECKED M. BUTLER 11-14 DATE		
APPROVED _____ 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

15-NEPP-01
IN - FLOOR DUCT INSPECTIONS
E10 GREENBELT
EXISTING/PROPOSED DUCT & CONDUIT ROUTE

SCALE: NOT TO SCALE | DRAWING NO.: E10-E-100 | XXX