

Mezzanine Inspection Report (Scoping)

Date: 02/09/2015	Station Name: C06 Arlington Cemetary	Mezzanine #: 042	Completed By: Zach Fitzwater
Summary			
<p>Video scoping and pull string installation complete for communication duct in upper and lower faregate arrays. Video scoping complete in the power duct in the lower faregate array. Video scoping only partially completed in power duct for upper faregate array due to tangled wires near the kiosk and at the 45 degree bend to faregates. Pull string was installed in vacant 2" power conduit from kiosk to AFC panel.</p> <p>Scanning is not required for this mezzanine.</p>			
Scoping of Faregate Array(s)			
Task	4	Yes/No	Notes
Communications Duct – Upper Faregate Array (5-Gates)			
Was video scoping completed for the entire duct run?		Yes	Refer to WMATA Arlington Cemetary 3inch Upper Comm Faregate.avi and WMATA Arlington Cemetary 6inch Upper Comm Faregate.avi files.
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	Minor rust and debris
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	5	No	6" duct less than 8 wires
Communications Duct - Lower Faregate Array (4-Gates)			
Was video scoping completed for the entire duct run?		Yes	Refer to WMATA Arlington Cemetary 3inch Lower Comm Faregate.avi and WMATA Arlington Cemetary 6inch Lower Comm Faregate.avi files.
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	Minor rust and debris
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	4	No	6" duct less than 8 wires
Power Duct - Upper Faregate Array (5 Gates)			
Was video scoping completed for the entire duct run?		No	Refer to WMATA Arlington Cemetary 3inch Upper Power Faregate.avi and WMATA Arlington Cemetary 6inch Upper Power Faregate.avi files.
Were there any obstructions or blockages? Provide details of type and specific location.		Yes	Heavy rust and debris in both 6" and 3" ducts. Scoping not completed in 6" duct due to camera getting stuck halfway through faregates and the 3" duct had tangled wires at the entrance of duct inside kiosk.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	5	No	6" duct less than 8 wires
Power Duct - Lower Faregate Array (4-Gates)			
Was video scoping completed for the entire duct run?		Yes	Refer to WMATA Arlington Cemetary 3inch Lower Power Faregate.avi and WMATA Arlington Cemetary 6inch Lower Power Faregate.avi files.
Were there any obstructions or blockages? Provide details of type and specific location.		Yes	Light rust and debris in both 6" and 3" ducts. 6" duct could not be scoped past 45 degree bend due to wires tangled up at bend.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.		No	3" duct less than 8 wires

Photo #1 – C06 Arlington Cemetery: Kiosk to outside wall of Room C100

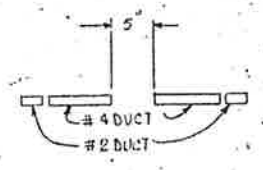
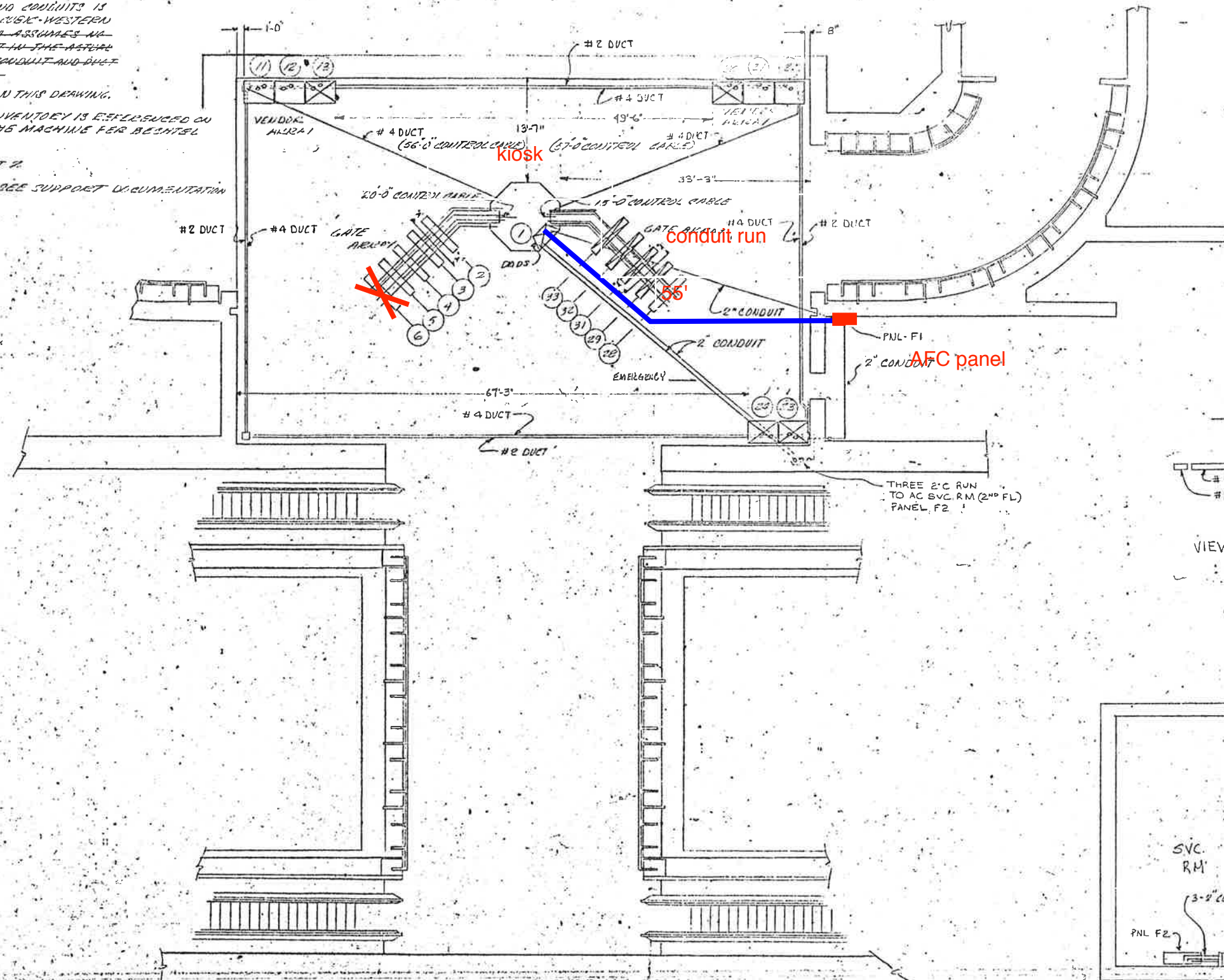


Photo #2 – C06 Arlington Cemetery: AFC Panel F-1



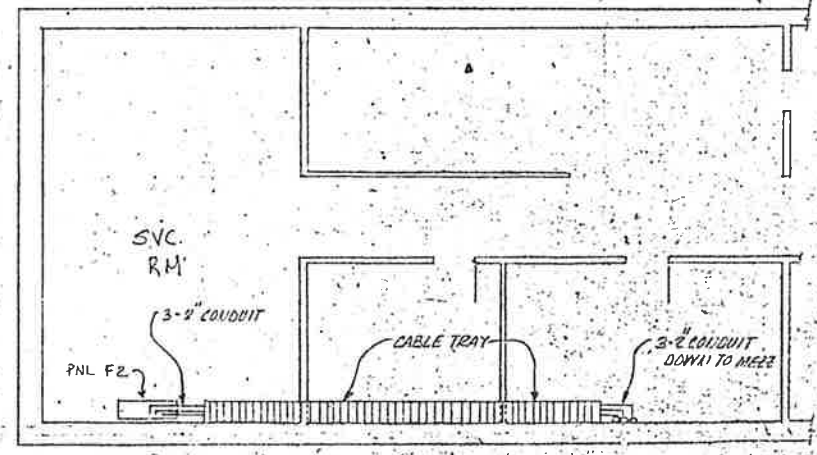
REVISIONS		
DESCRIPTION	DATE	APVD

NOTES:
 1. ALL INFORMATION CONCERNING DUCTS AND CONDUITS IS BASED ON INFORMATION SUPPLIED TO CUBIC-WESTERN DATA BY WMATA. CUBIC-WESTERN DATA ASSUMES NO RESPONSIBILITY FOR ERRORS THAT EXIST IN THE AS-BUILT DUCT AND DUCT LOCATIONS VS THE CONDUIT AND DUCT LOCATIONS DEPICTED IN THIS DRAWING.
 2. INITIAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS EFFECTED ON THIS DRAWING BY THE 'X' DRAWN THRU THE MACHINE PER BESNTEL LETTER # 175.
 3. FOR AS-BUILT CONDITIONS SEE SHEET #2.
 4. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZ MACHINE.



VIEW 'A-A'

- 1) No of conductors for power
- 2) Note 1 Not acceptable
- 3) Fence should be depicted in gate area.



DETAIL-B SVC RM SHOWING 3-2" C DOWN, 2 CABLE TRAY, 3 PNL LOCATION (F2)

-1 INSTALLATION PLAN

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

APPROVED AS CORRECTED

BY: J. J. Smith

DATE: 11-23-76

CONTRACT NUMBER 22007A		CUBIC WESTERN DATA	
DESIGN ACTIVITY APPROVAL		SIZE D	DRAWING NUMBER 926-0381
APPROVED		SCALE 1"=10'	SHEET 47

ARLINGTON CEMETERY STATION
AFC MACHINES

Mezzanine Inspection Report

Date: 06/21/15	Station Name: D01 – Federal Triangle	Mezzanine #: 053	Completed By: Mike Butler
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Summary

NEPP-01: Video scoping and pull string installation completed for communication duct for the upper faregate array. However, it should be noted that power wires for the upper faregate array share the same duct as communication wires; duct is therefore not viable for further use. Video scoping and pull string installation could not be completed for communication duct in lower faregate array due to an obstruction. Video scoping could not be completed for power duct in lower faregate array due to energized wires prohibiting safe access. An alternate duct in the lower faregate array was scoped, however this duct is obstructed. Video scoping and pull string installation was not completed in power duct between Kiosk and AFC Panel due to obstructions caused by two 45 degree bends in the mezzanine floor and a 90 degree vertical bend at the AFC panel. Per discussions with WMATA it was assumed that there would not be existing handholes at the bends; and therefore no attempts were made to open the mezzanine floor.

Scanning was completed at this mezzanine to identify a proposed power route between the Kiosk and AFC Panel. The scanning results showed that the mezzanine floor is congested with existing ducts/conduits and there is no clear route to run a proposed duct from the Kiosk to AFC Panel. However, an alternate duct running parallel to existing power duct was identified.

NEPP-02: Video scoping and pull string installation was attempted in an alternate duct that runs parallel with the existing power duct from the Kiosk to the AFC Panel. Scoping and rodding was attempted from both the Kiosk and AFC Panel, however obstructions were encountered. Video scoping showed that the duct is in bad condition and heavily corroded. An overhead conduit is proposed from the Kiosk to AFC Panel - refer to attached photos and drawings for further information.

NEPP-01: Scoping of Faregate Arrays (02/06/15)

Task	Yes/No	Notes
Communications Duct - Upper Faregate Array (4 gates)		
Was video scoping completed for the entire duct run?	Yes	
Were pull strings installed at all faregates in the array?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct is viable for further usage; however, power wires share the same duct. A new comm. duct is proposed for CAT6 installation.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct less than 10 wires.
Communications Duct - Lower Faregate Array (10 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	Duct obstructed at gate 3/4.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct less than 20 wires.
Power Duct - Upper Faregate Array 4 gates)		
Was video scoping completed for the entire duct run?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	Duct is viable for further usage; however, comm. wires share the same duct. It is recommended to remove the existing comm. wires following completion of CAT6 installation in the new comm. duct and utilize the existing duct for power wires only.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct less than 10 wires.
Power Duct - Lower Faregate Array (10 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	Duct could not be scoped due to energized wires. Scoping of alternate duct attempted, but obstruction encountered.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct less than 20 wires.


NEPP-01: Scoping of Existing Power Duct - Kiosk to AFC Panel (02/06/15)		
Task	Yes/No	Notes
Kiosk to AFC Panel (Distance: 80')		
Was video scoping completed for the entire duct / conduit run?	No	Refer to "WMATA Federal Triangle South 6inch Power Kiosk to AFC Panel.avi".
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Obstructions caused by 45 degree bend on the mezzanine floor and a 90 degree vertical bend at the AFC panel.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" duct with less than 12 wires
NEPP-01: Scanning of Mezzanine Floor (01/28/15)		
<ul style="list-style-type: none"> - Scanning of the mezzanine floor conducted to identify a proposed power route between the Kiosk and AFC Panel. - Scanning results showed that the mezzanine floor is congested with existing ducts/conduits and there is no clear route to run a proposed duct from the Kiosk to AFC Panel. - Alternate ducts running parallel to existing power duct were identified. - There is one alternate duct with existing power wires; the remaining ducts have communication wires. 		
NEPP-02: Scoping of Alternate Duct - Kiosk to AFC Panel (06/21/15)		
Kiosk to AFC Panel (Distance: 80')		
Was video scoping completed for the entire duct / conduit run?	No	Refer to "D01_MZ053_Federal Triangle_Alternate Duct_Kiosk to AFC Panel.avi" and "D01_MZ053_Federal Triangle_Alternate Duct_AFC Panel to Kiosk.avi".
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Obstructions at 45 degree bend on the mezzanine floor and a 90 degree vertical bend at the AFC panel. Duct is also heavily corroded and in poor condition.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" duct with less than 15 wires
Observations / Issues / Next Steps		
<ul style="list-style-type: none"> - The total distance of the proposed overhead conduit from Kiosk to AFC Panel is 122'. 		
Sign Off		
	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:		
Date:	06/23/15	

Photo 1 – Proposed overhead conduit in mezzanine.

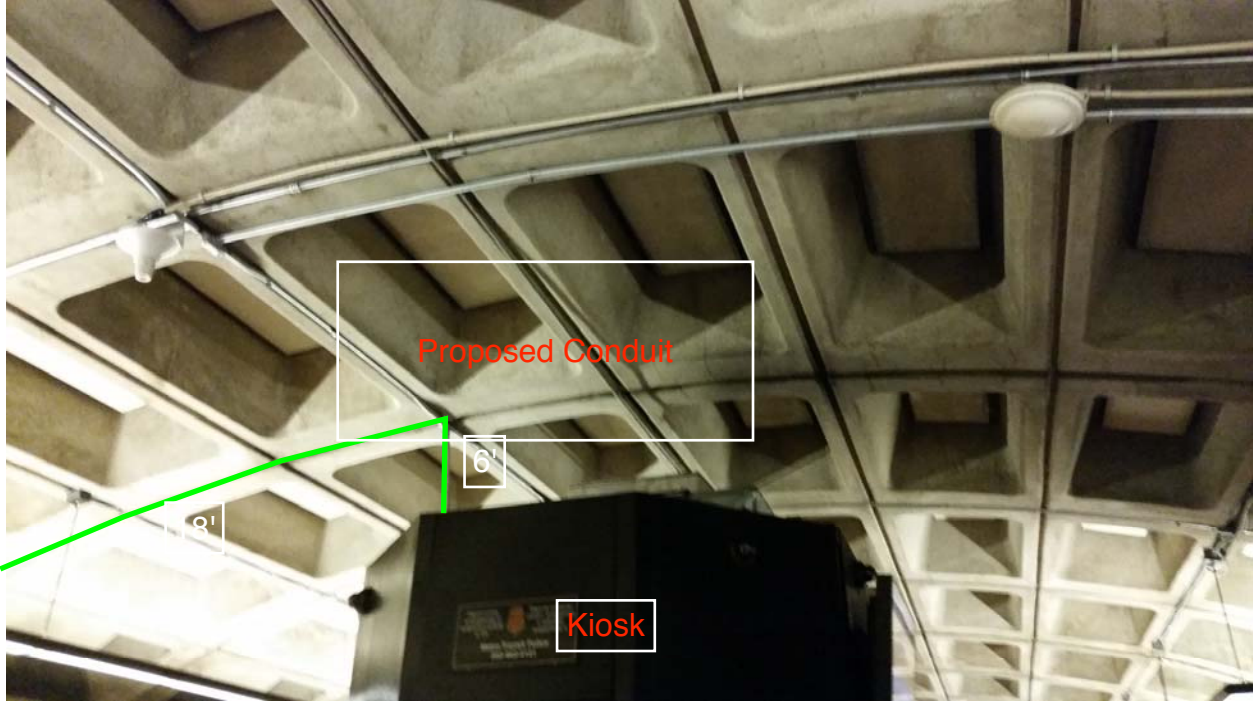


Photo 2 – Proposed overhead conduit in mezzanine.

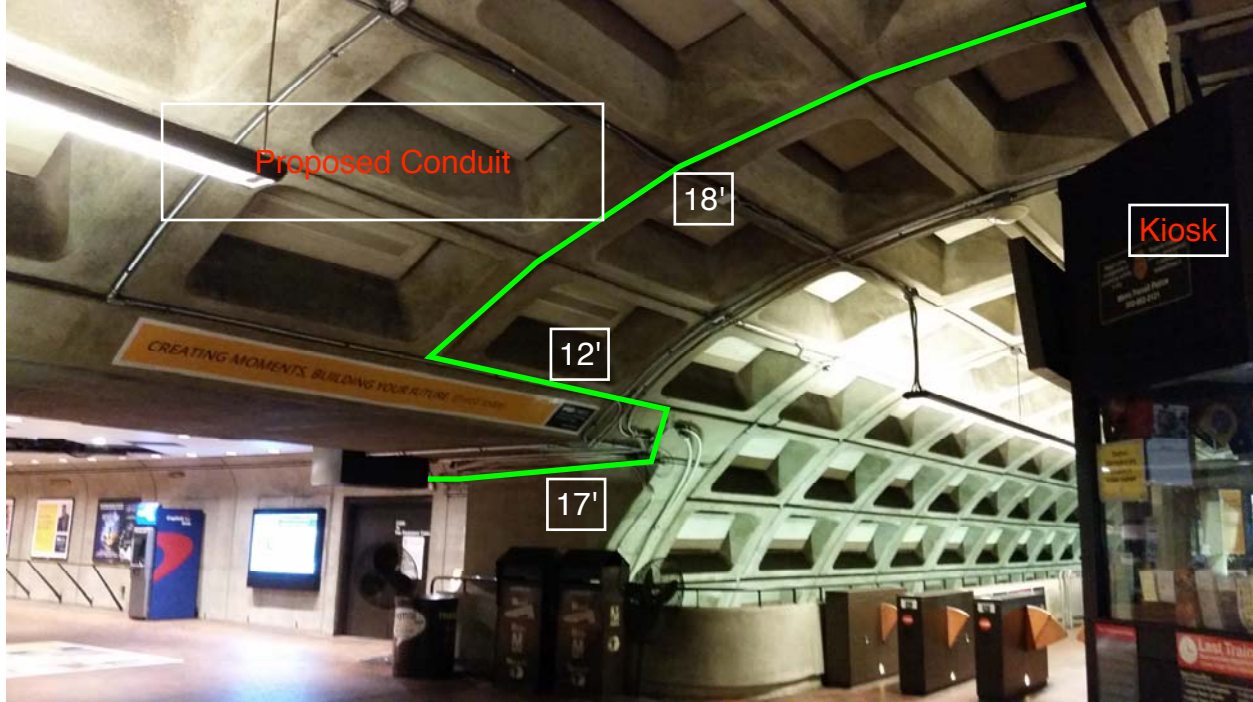


Photo 3 – Proposed overhead conduit in mezzanine.

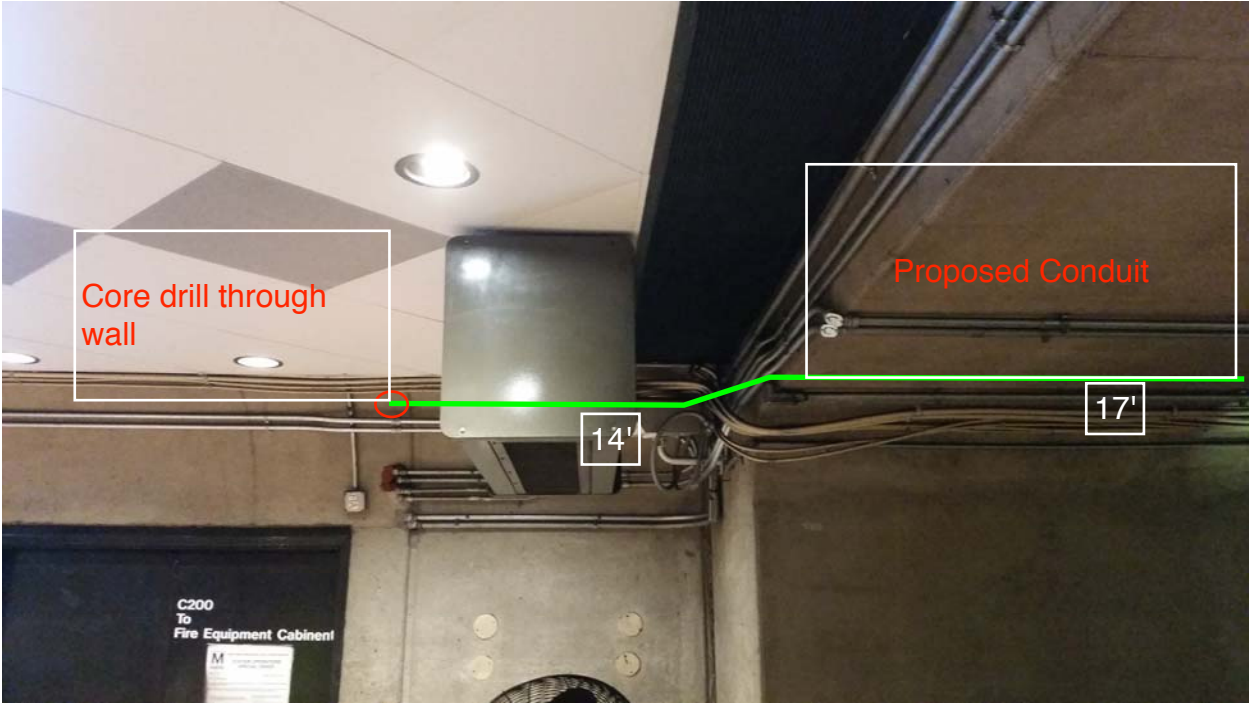


Photo 4 – Proposed overhead conduit in Room C200.

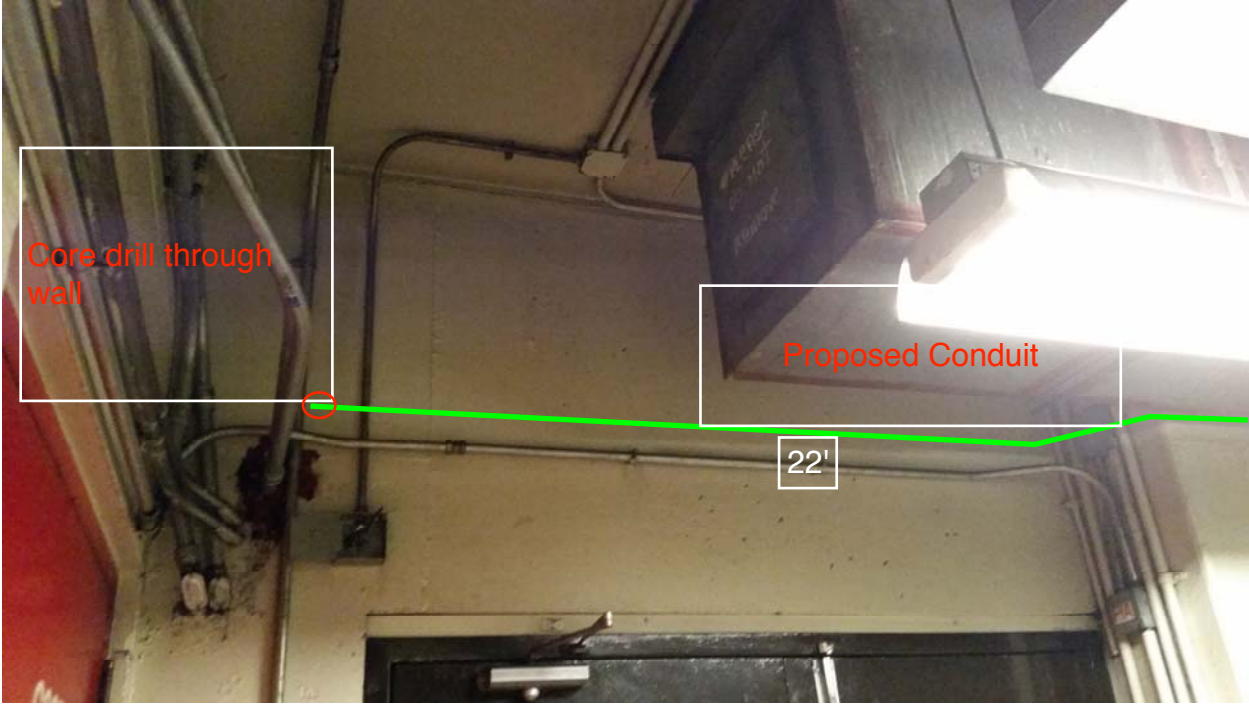


Photo 5 – Proposed overhead conduit in Room C200.

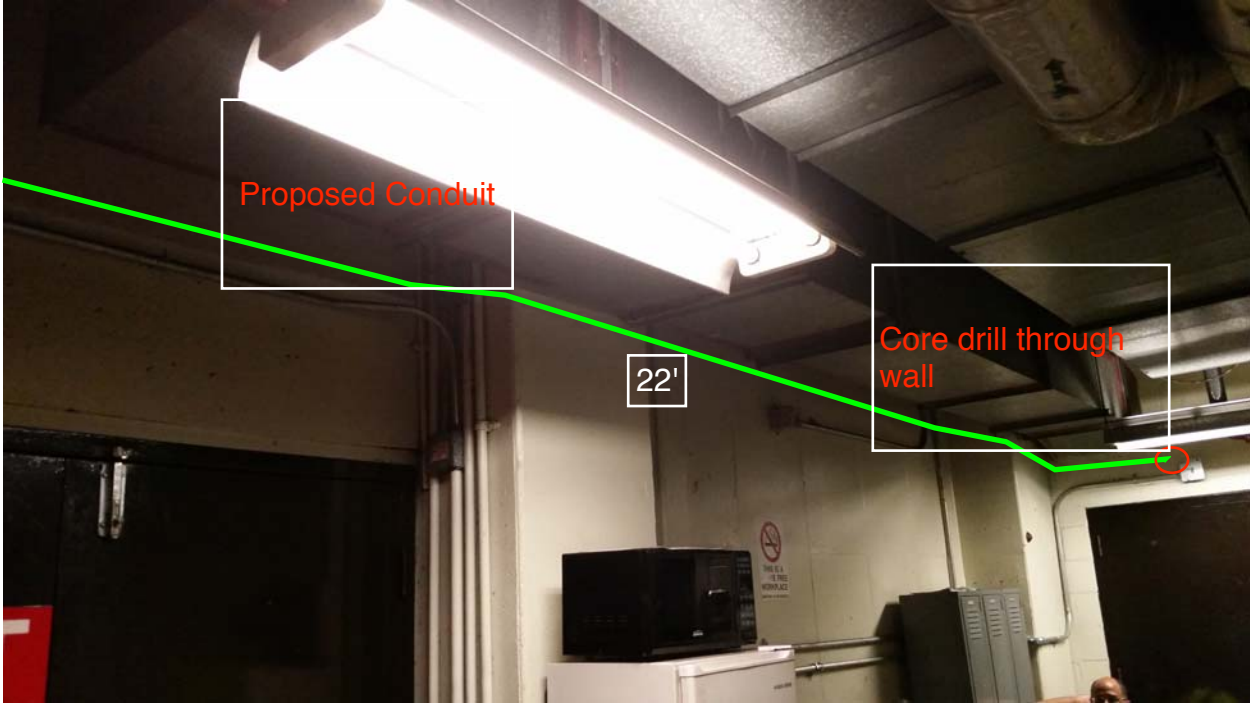


Photo 6 – Proposed overhead conduit in Room C206.

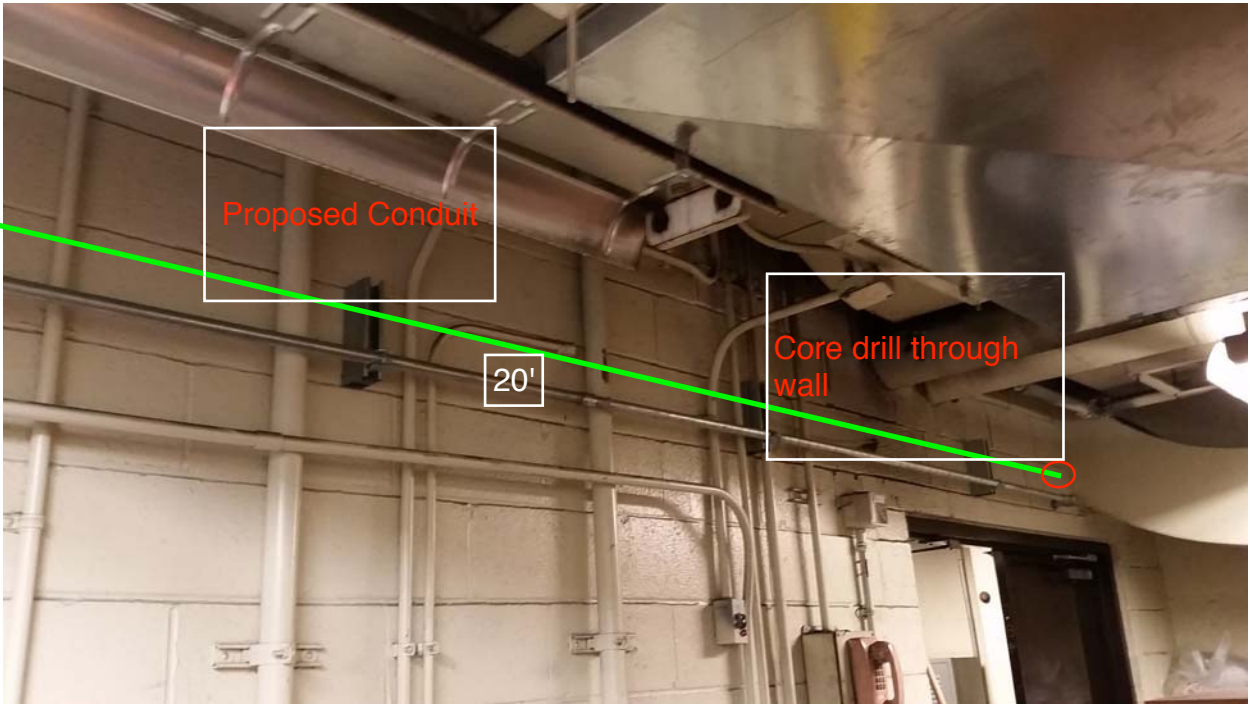


Photo 7 – Proposed overhead conduit in Room C206.

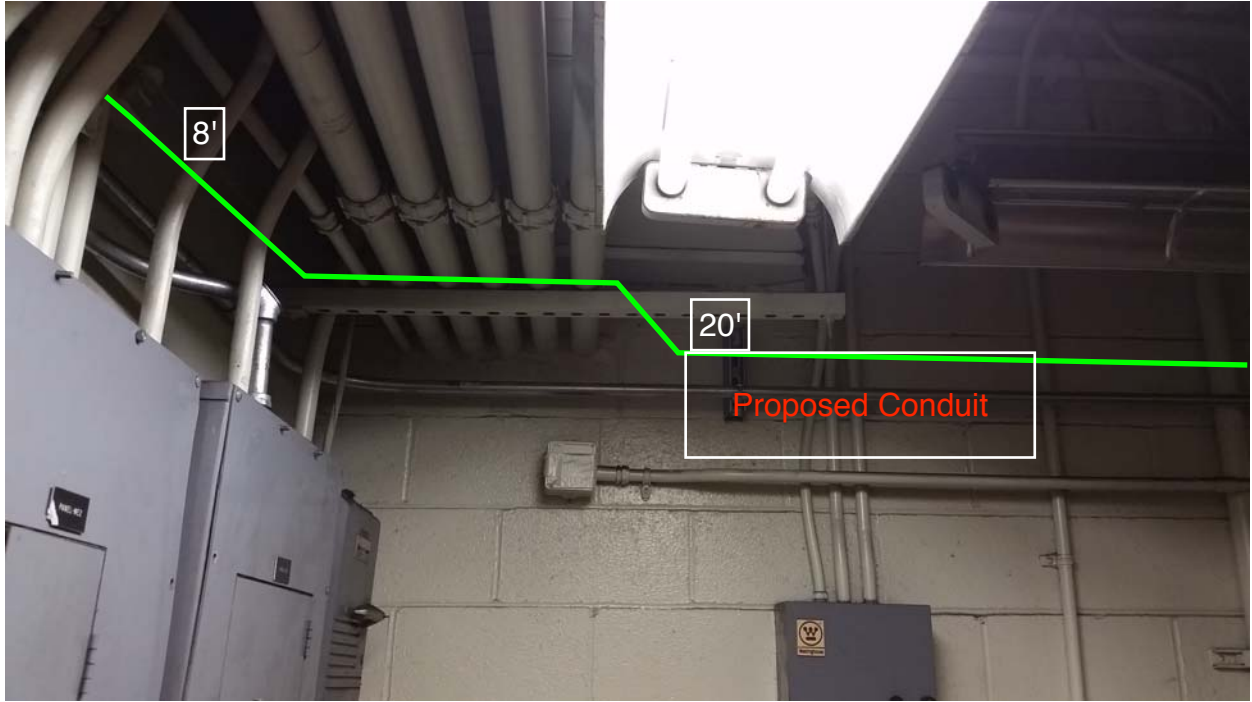
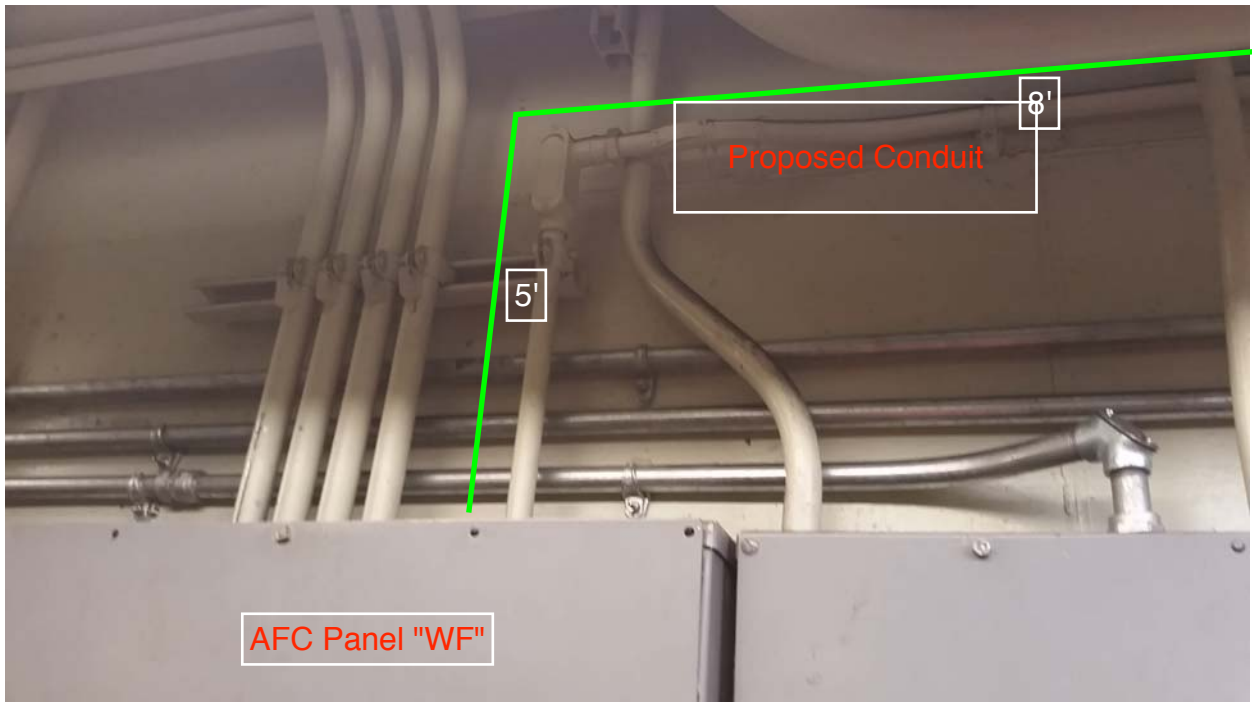


Photo 8 – Proposed overhead conduit in Room C206.

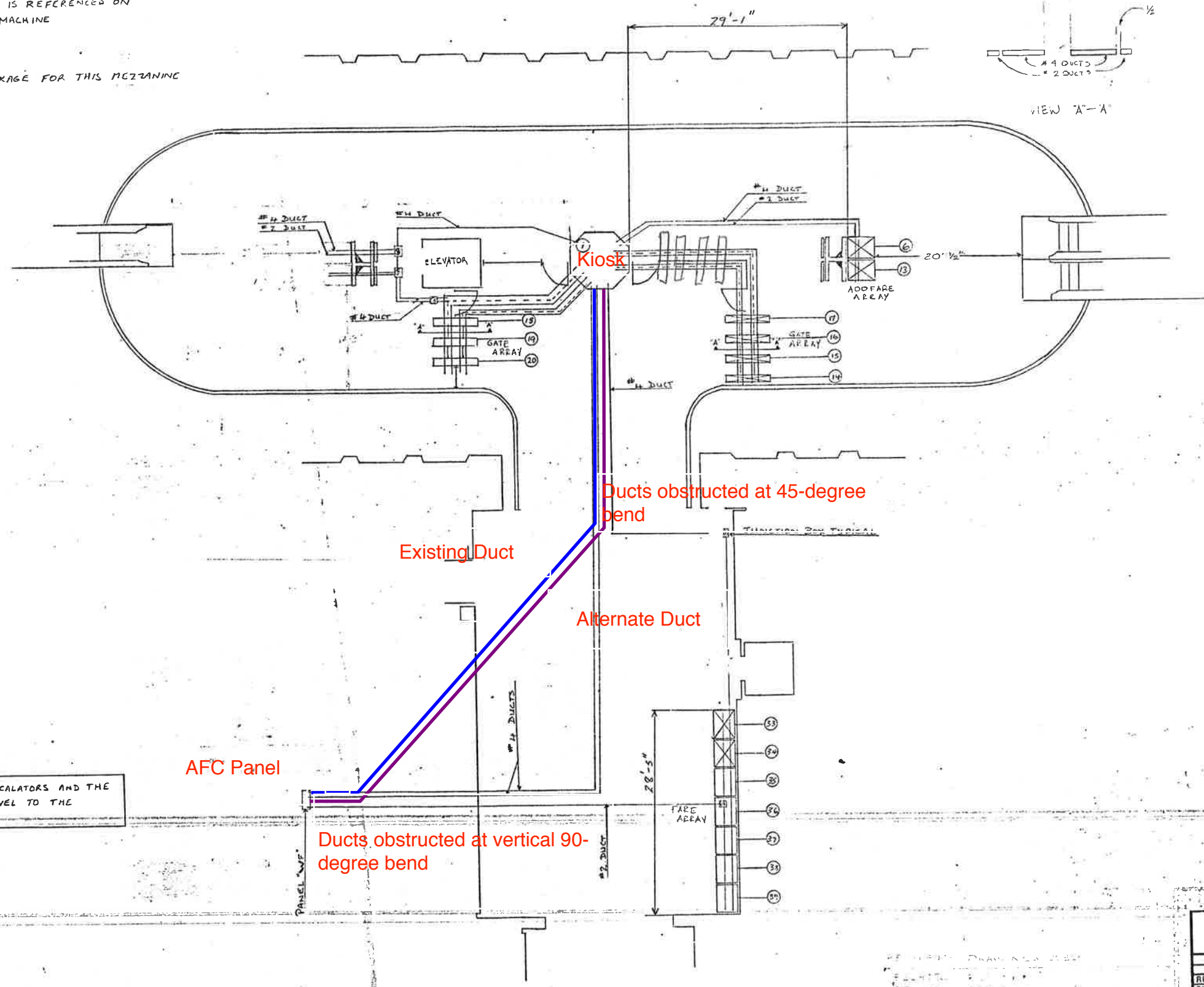


NOTES:
 ALL INFORMATION CONCERNING DUCTS AND CAUDITS IS BASED ON INFORMATION SUPPLIED TO CUBIC WESTERN AT Y. YAMATA

THE MACHINE INVENTORY IS DEPICTED ON THIS DRAWING.
 THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE 'X' DRAWN THRU THE MACHINE
 FOR AS BUILT CONDITIONS SEE SHEET 2
 FOR REF DWG'S SEE SUPPORT DOCUMENT PACKAGE FOR THIS MEZZANINE

REVISIONS		
DESCRIPTION	DATE	APVD
AS BUILT DRAWING REVISION A	7-13-77	CS

EXISTING DUCT LAYOUT



PRIORITY REQUESTS ARE HEREBY GIVEN FOR ESCALATORS AND THE ELEVATORS THAT RUNS FROM THE STREET LEVEL TO THE MEZZANINE

Ducts obstructed at 45-degree bend
 Existing Duct
 Alternate Duct
 AFC Panel
 Ducts obstructed at vertical 90-degree bend

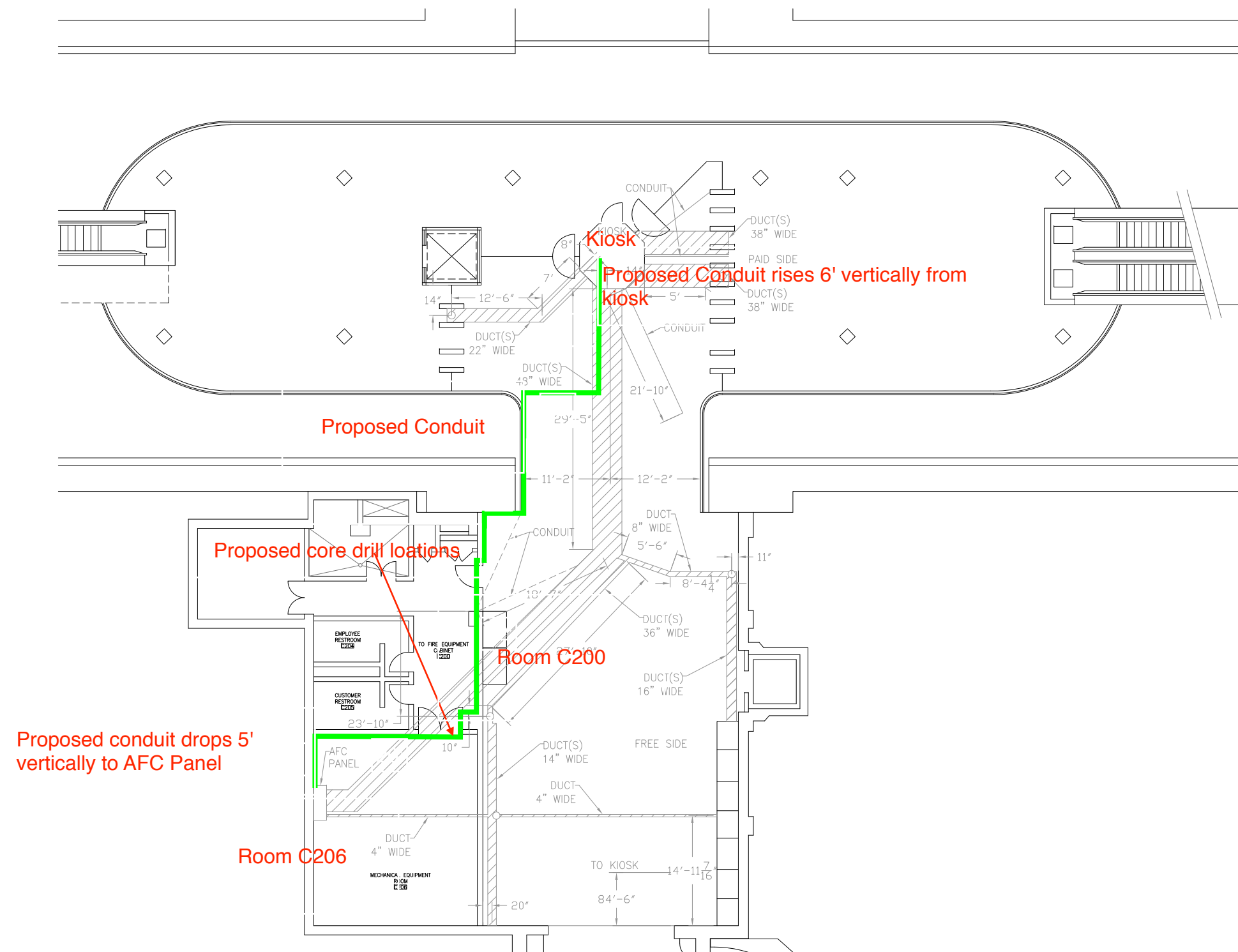
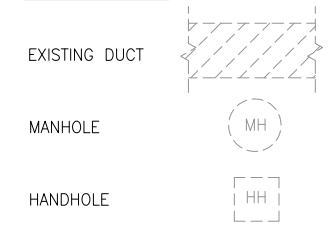
1-INSTALLATION PLAN
 (AS BUILT CONDITION) 53

CONTRACT NUMBER 22007A		CUBIC WESTERN DATA <small>A subsidiary of Cubic Corporation 9650 KEARNY MESA ROAD • POST OFFICE BOX 80787 • SAN DIEGO, CA 92128</small>	
REL ENGRG DESIGN CHECK DRAWN		FEDERAL TRIANGLE STATION AFC MACHINES	
DESIGN ACTIVITY APPROVAL	SIZE D	DRAWING NUMBER 926-0397	REV 53
APPROVED <i>[Signature]</i> 11/24/76	SCALE 1/8"=1'-0"	SHEET 1 OF 1	

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:



FEDERAL TRIANGLE STATION
SCALE: NOT TO SCALE

CONTRACT NO.
XXXXXX

DESIGNED C. LOOSE 03-15
DATE
DRAWN C. LOOSE 03-15
DATE
CHECKED M. BUTLER 03-15
DATE
APPROVED _____
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

15-NEPP-01
IN - FLOOR DUCT INSPECTIONS
D01 Federal Triangle
PROPOSED POWER RUN
SCALE
NOT TO SCALE

DRAWING NO.
D01-E-100

XXX