

Mezzanine Inspection Report (Scoping)

Date: 12/17/2014	Station Name: G01 Benning Road	Mezzanine #: 090	Completed By: Megan Powell
Summary			
<p>Video scoping and pull string installation was completed for the communication ducts in the upper and lower faregate arrays. Video scoping was completed for the power ducts in the upper and lower faregate arrays. However, the power ducts for the upper and lower faregate arrays had seal tight on the wires inside the kiosk and the seal tight went right into the duct which prevented access to view the wires inside the ducts to verify capacity. Pull string was installed in the 1" conduit run from the kiosk on the mezzanine level to the AFC panel on the platform level.</p> <p>Scanning is not required at this mezzanine.</p>			
Scoping of Faregate Array(s)			
Task	Yes/No	Notes	
Communications Duct – Upper Faregate Array (3 Gates)			
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Benning Rd 6inch Upper Comm to faregates Video.avi file.	
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, less than 9 wires	
Communications Duct - Lower Faregate Array (4 Gates)			
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Benning Rd 6inch Lower Comm to faregates Video.avi file.	
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, less than 5 wires	
Power Duct - Upper Faregate Array (3 Gates)			
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Benning Rd 6inch Upper Power to faregates Video.avi file.	
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, could not determine capacity due to seal tight on wires that continues into duct	
Power Duct - Lower Faregate Array (4 Gates)			
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Benning Rd 6inch Lower Power to faregates Video.avi file.	
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, could not determine capacity due to seal tight on wires that continues into duct	


Scoping of Power Duct - Kiosk to AFC Panel		
Task	Yes/No	Notes
Kiosk to Junction Box (18' run)		
Was video scoping completed for the entire duct / conduit run?	No	Conduit – no scoping required
Was pull string installed?	Yes	Pull string installed to end of conduit towards kiosk but not all the way to kiosk
Were there any obstructions or blockages? Provide details of type and specific location.	No	Conduit is cut/broke off before kiosk and will require extension of conduit/seal tight from end of conduit up to kiosk
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	Existing 1" conduit is at capacity. Pull string was installed in empty 1" conduit next to existing
Junction Box to AFC Panel (55' run)		
Was video scoping completed for the entire duct / conduit run?	No	Conduit – no scoping required
Was pull string installed?	Yes	
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	Empty 1" conduit
Observations / Issues / Next Steps		
<p>Extension of conduit/seal tight will be needed to bring pull string to kiosk from conduit underneath as the conduit is cut/broke off.</p> <p>Total run from kiosk to AFC panel is approximately 73 feet of conduit through multiple 90 degree bends.</p>		
Sign Off		
	GFP Representative	WMATA PRGM
Name:	Zach Fitzwater	
Signature:		
Date:	12/17/2014	

Photo #1 – G01 Benning Road: Ceiling tiles under kiosk where conduit run begins



Photo #2 – G01 Benning Road: Junction box in ceiling near wall on platform level

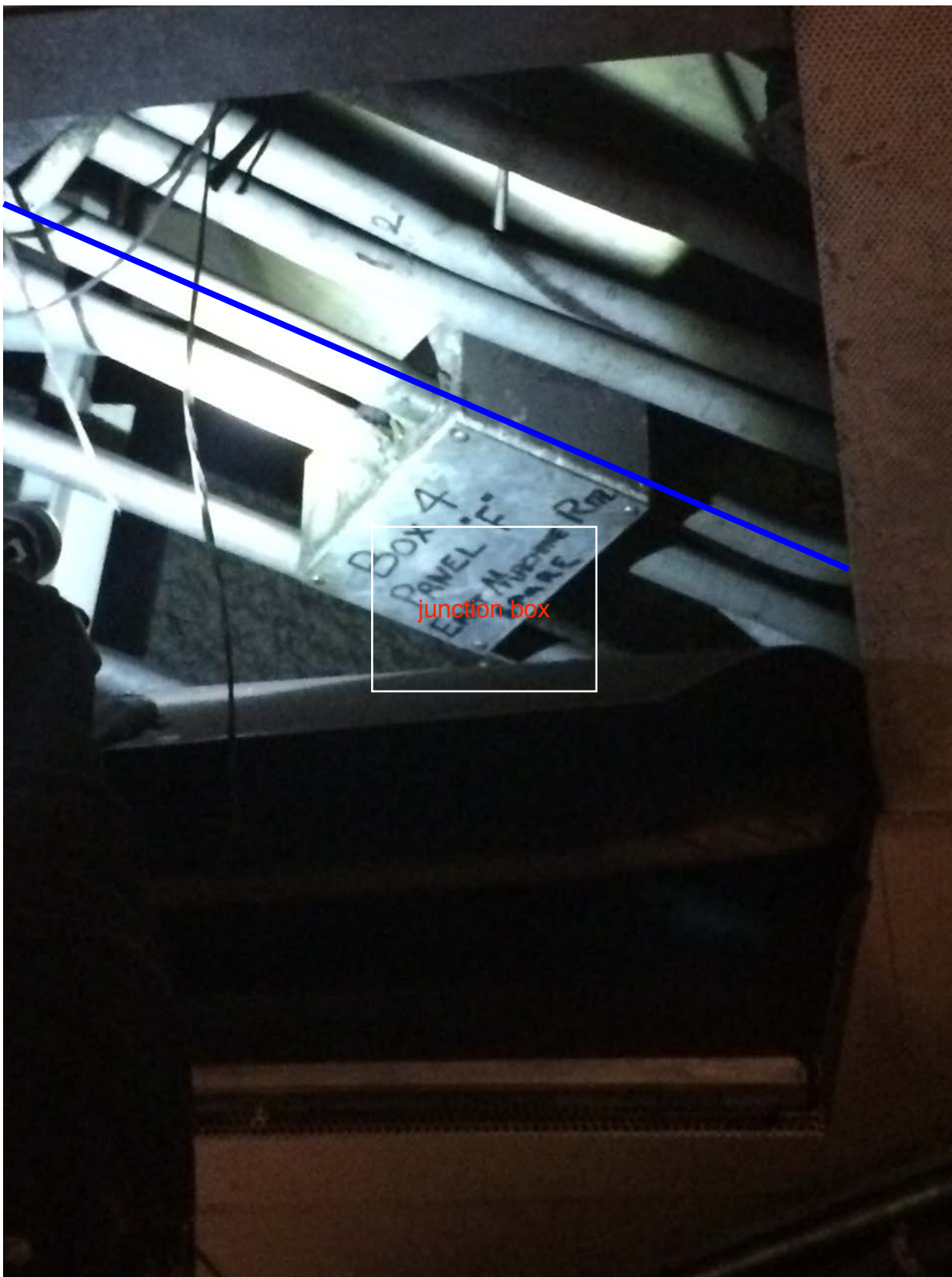


Photo #3 – G01 Benning Road: Conduit run from junction box inside AFC panel room



Photo #4 – G01 Benning Road: Conduit 90 degree bend down wall into AFC panel

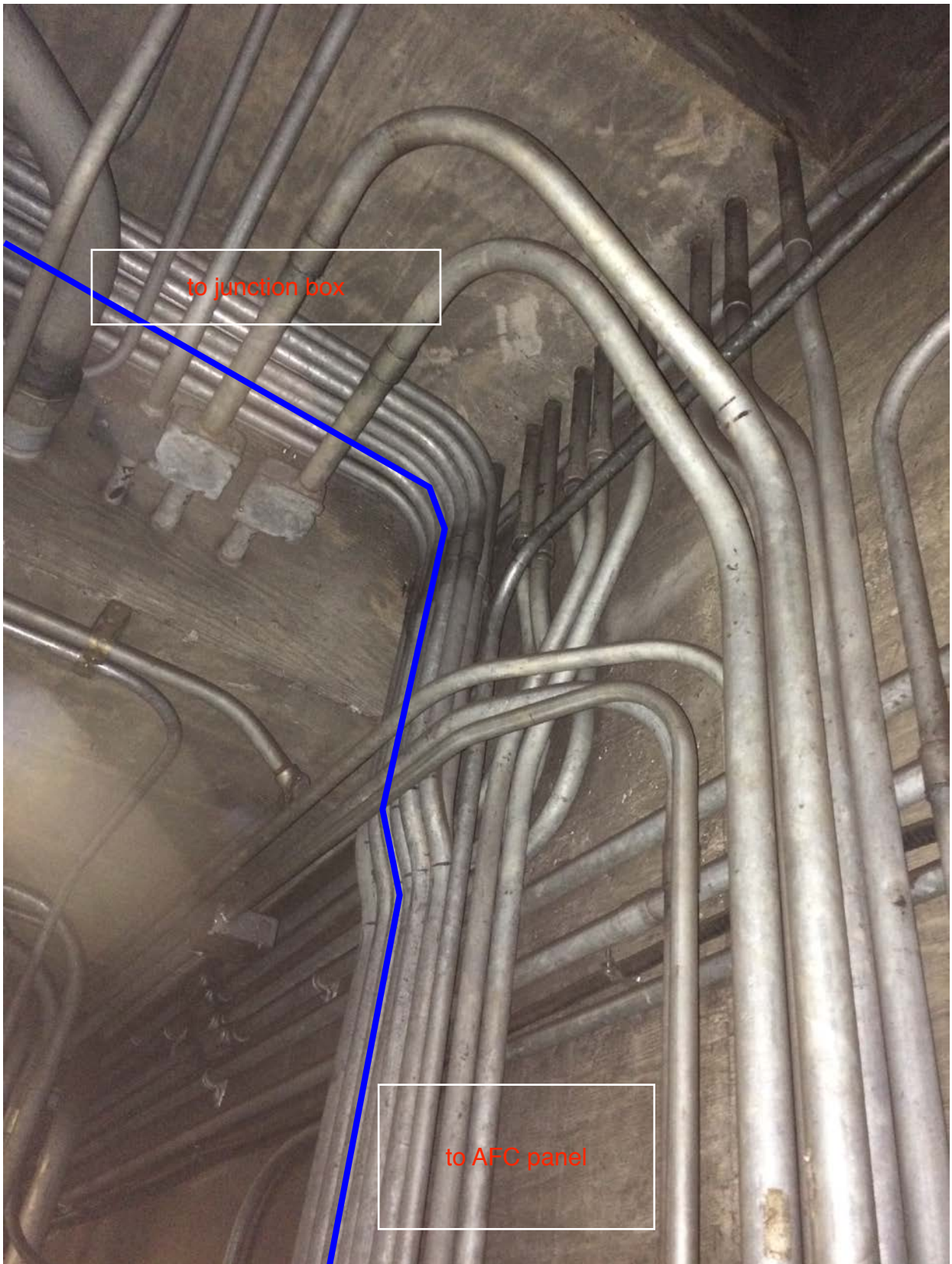
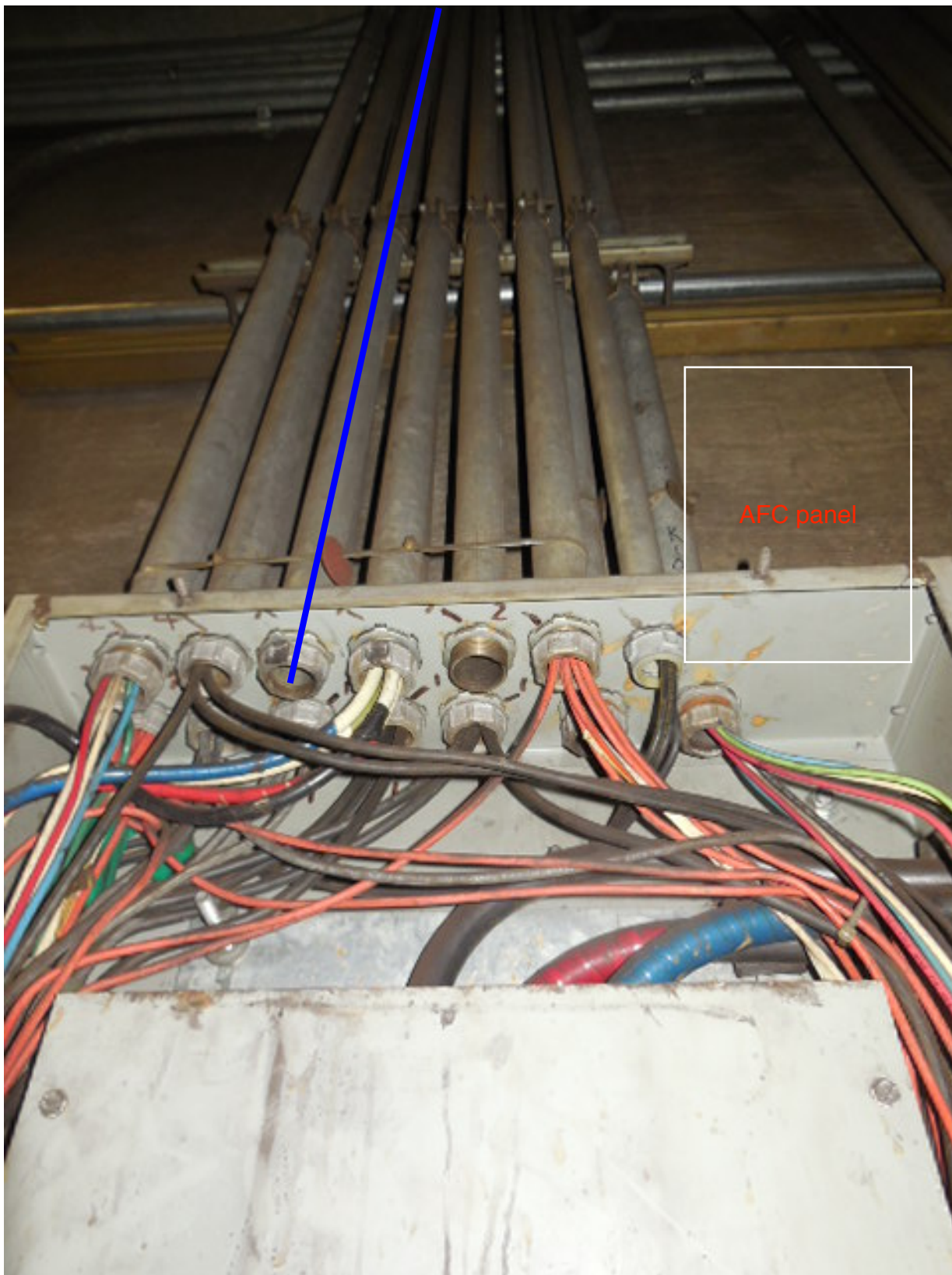
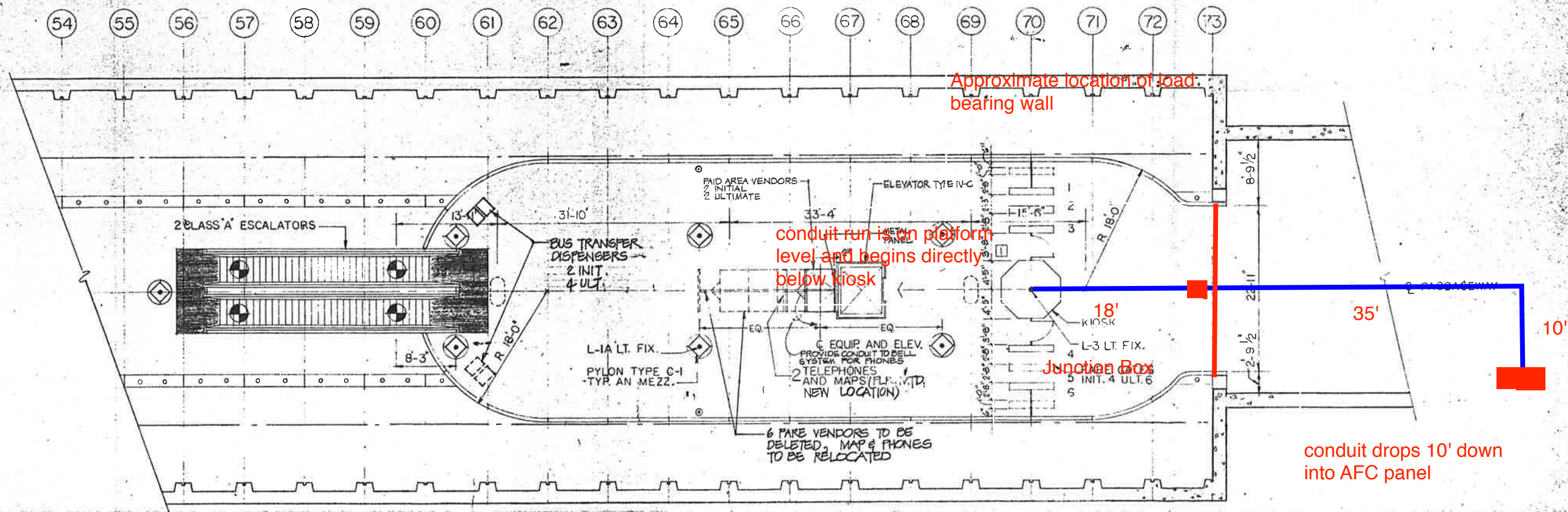


Photo #5 – G01 Benning Road: Conduit into AFC panel





DESIGNED	H.W.A.	DATE	REFERENCE DRAWINGS		REVISIONS		
			NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
DRAWN	MILA	8-19-80					
CHECKED							
APPROVED							

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WMATA

APPROVED _____ DIRECTOR OF ARCHITECTURE

APPROVED _____

DE LEUW, CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

BENNING ROAD STATION
FARE VENDORS, MAPS, PHONES
AND BUS TRANSFER DISPENSERS

SCALE 1" = 20' 2" 4" 8" 16" DRAWING NO. 90

Mezzanine Inspection Report (Scoping)

REVISION 1

Date: 01/22/2015	Station Name: G02 Capitol Heights	Mezzanine #: 091	Completed By: Zach Fitzwater
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Summary

Scoping and pull string installation was not completed at this station in the power or communication ducts for the upper and lower faregates due to collapsed ducts. All ducts were in very poor condition due to heavy water damage and rust. Ducts were collapsed either at the entrance inside the kiosk or just inside the duct entrance. Standing water present inside kiosk at the time of scoping. Scoping and pull string installation was not completed for the power run between the kiosk and AFC panel due to collapsed ducts. Rodding was attempted at all handholes for AFC power run, but could not be completed due to duct collapse. Ducts run into shared electrical trough in AFC panel room. Live wires in the shared trough would require shut down of more panels.

Scanning was done at this station. The proposed duct will run out of the kiosk at a 45 degree angle to a new proposed handhole. It will then run straight to a second proposed handhole and turn 90 degrees towards the door to the backrooms. Once inside the backroom area, the duct will stop at a third proposed handhole and transition to conduit. The conduit will come out of the floor and up the wall vertically to the ceiling. At the ceiling the conduit will turn 90 degrees and run towards the AFC room. The conduit will be core drilled through the wall and run along the ceiling of the AFC panel room and turn 90 degrees into the top of the AFC panel.

Water damage to existing ducts and water present inside the kiosk at this station indicates existing water issues.

Photos and drawings are for reference purposes only; see new schematic drawing/proposed pathway on last page.

Scoping of Faregate Array(s)

Task	Yes/No	Notes
Communications Duct – Upper Faregate Array (3 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	6" and 3" ducts collapsed and heavily damaged at entrance to ducts inside kiosk.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	
Communications Duct - Lower Faregate Array (4 Gates)		
Was video scoping completed for the entire duct run?	No	Refer to WMATA Capitol Heights 6inch Lower Comm Faregate.avi file.
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	6" and 3" ducts collapsed and heavily damaged near entrance or directly inside ducts.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	
Power Duct - Upper Faregate Array (3 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	6" and 3" ducts collapsed and heavily damaged at entrance to ducts inside kiosk.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	
Power Duct - Lower Faregate Array (4 Gates)		
Was video scoping completed for the entire duct run?	No	Refer to WMATA Capitol Heights 6inch Lower Power Faregate.avi file.
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	6" and 3" ducts collapsed and heavily damaged near entrance or directly inside ducts.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	


Scoping of Power Duct - Kiosk to AFC Panel		
Task	Yes/No	Notes
Kiosk to Handhole 1 (25' run)		
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	Ducts were collapsed at kiosk
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	
Handhole 1 to Handhole 2 (70' run)		
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	Rodding attempted from both ends. Duct in poor condition. Rod could not get past expansion joint in floor.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	
Handhole 2 to Shared Trough (5' run)		
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	Rod could not go further than wall on mezzanine floor. Duct in poor condition.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	
Shared Trough to AFC Panel (20' run)		
Was video scoping completed for the entire duct / conduit run?	No	Live wires from other panels in shared trough.
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	N/A	
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	
Observations / Issues / Next Steps		
<p>Total length of existing power run approximately 120'.</p> <p>Proposed power run to AFC panel approximately 53' of duct and 70' of conduit for 123' total.</p>		
Sign Off		
	GFP Representative	WMATA PRGM
Name:	Zach Fitzwater	
Signature:		
Date:	02/04/2015	

Photo #1 – G02 Capitol Heights: Proposed and existing duct runs from kiosk

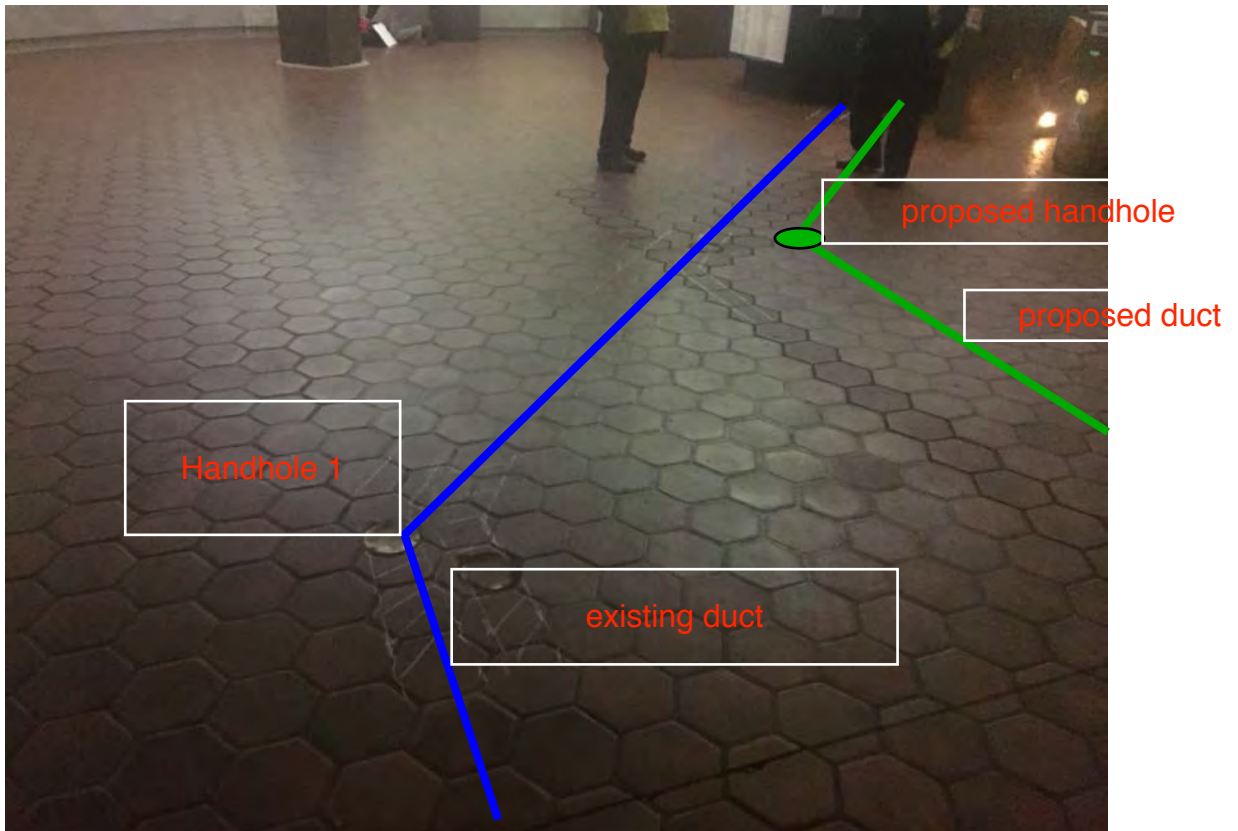


Photo #2 – G02 Capitol Heights: Proposed and existing runs on mezzanine floor

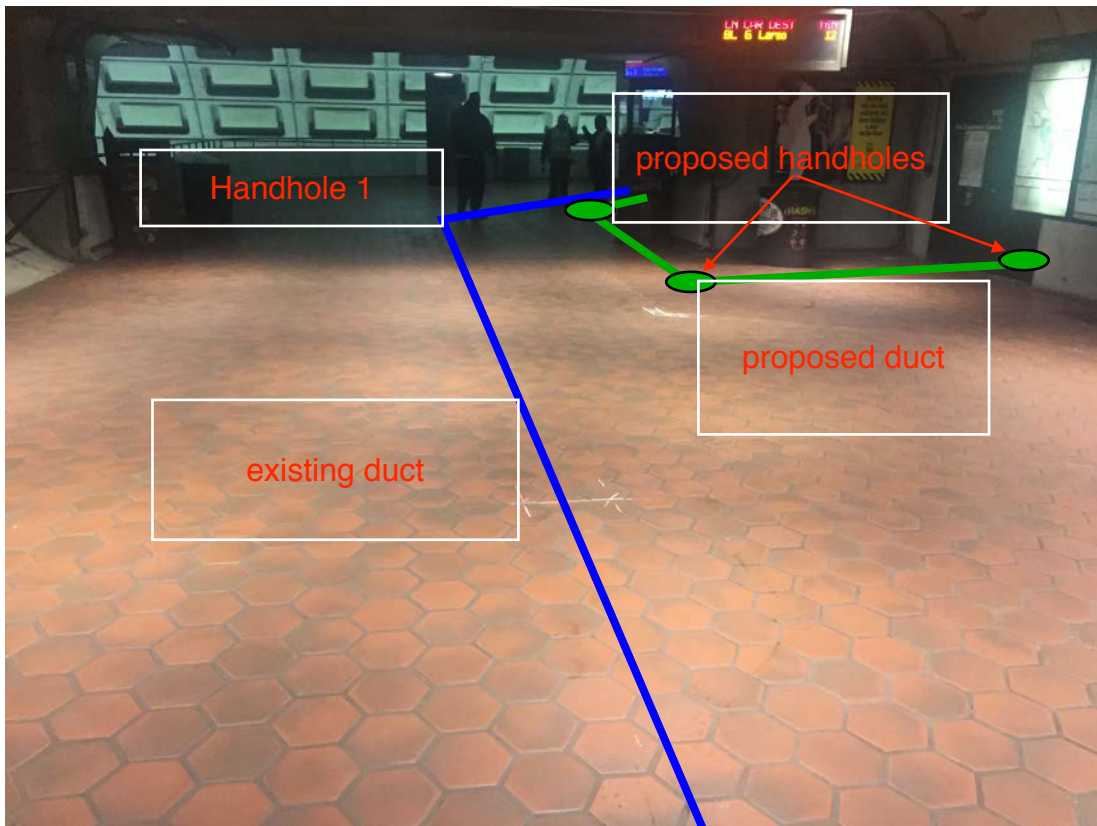


Photo #3 – G02 Capitol Heights: Proposed and existing duct runs into backrooms



Photo #4 – G02 Capitol Heights: Existing duct run into backroom shared electrical trough

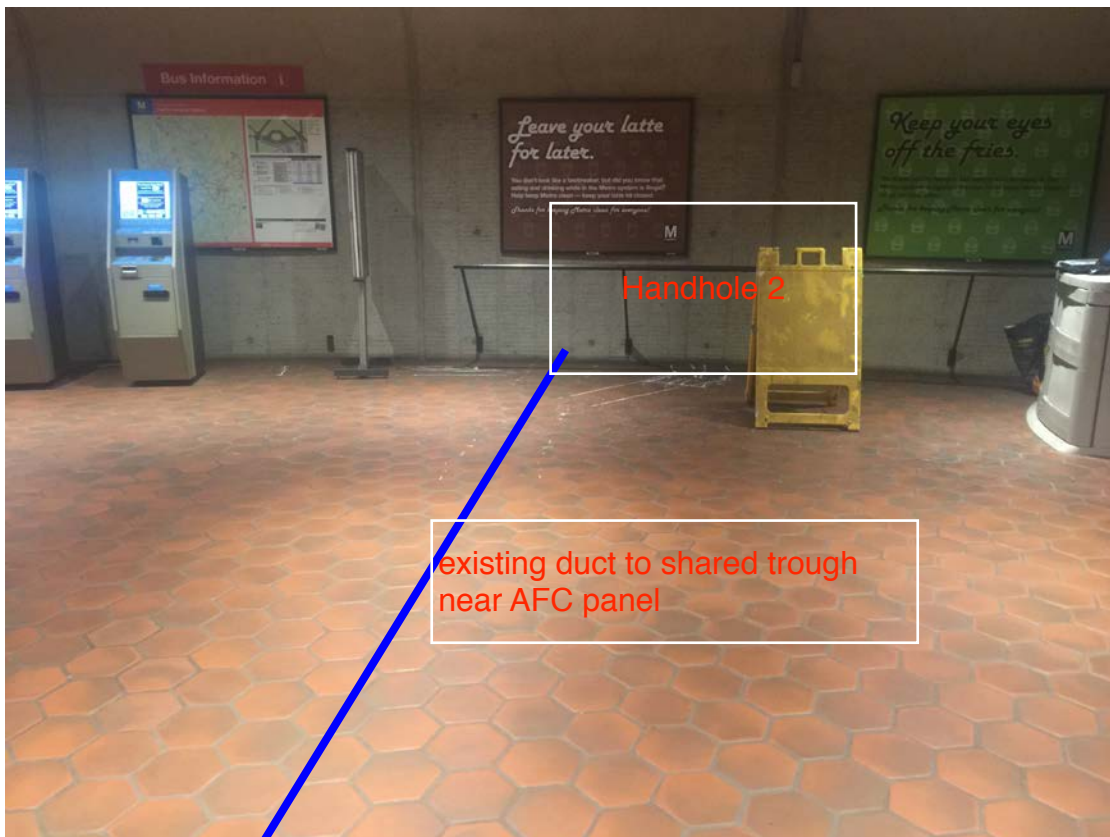


Photo #5 – G02 Capitol Heights: Proposed run transition to conduit along hallway of backrooms towards AFC panel

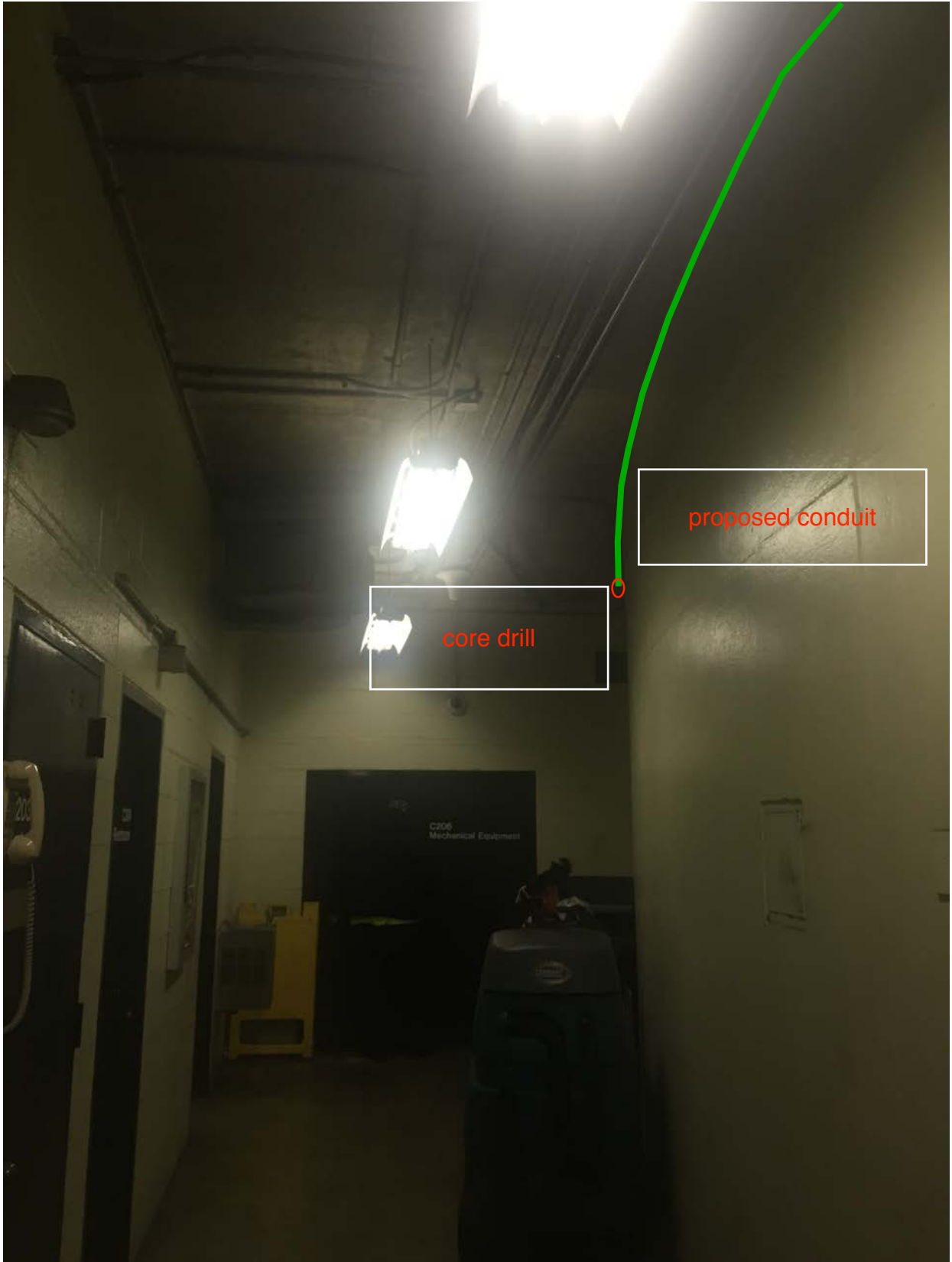


Photo #6 – G02 Capitol Heights: Proposed conduit along ceiling of AFC panel room

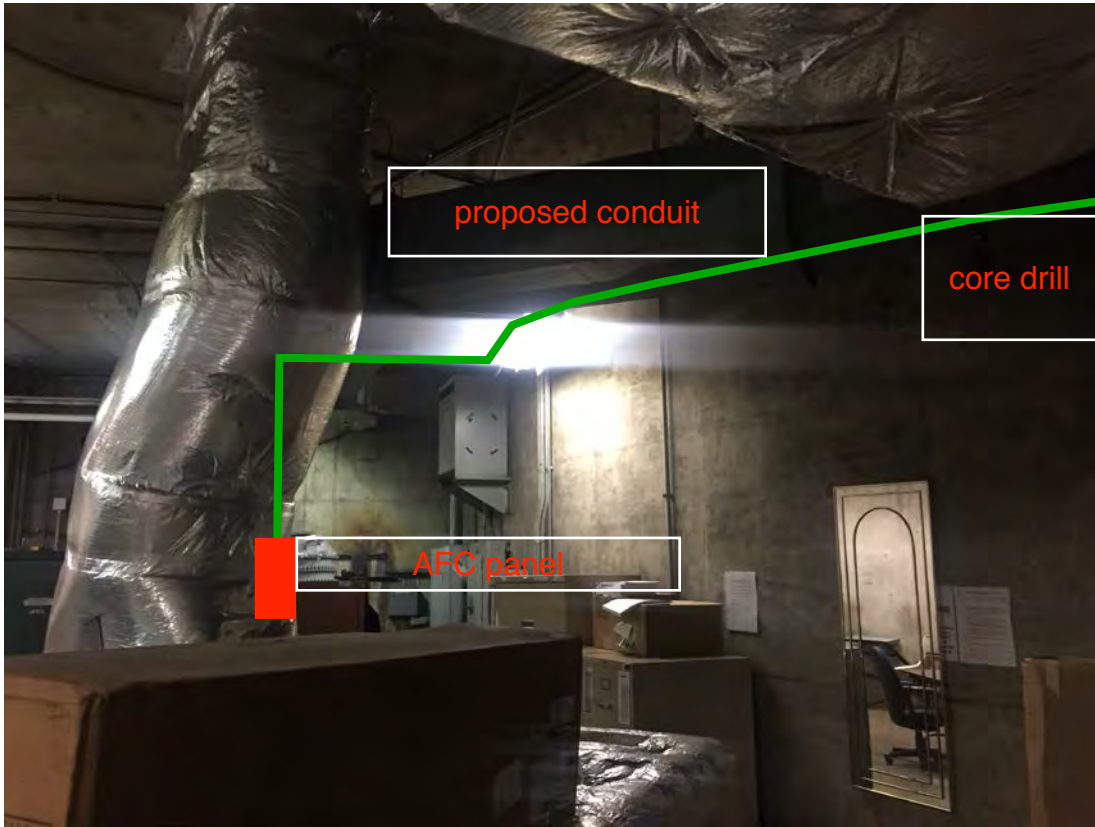
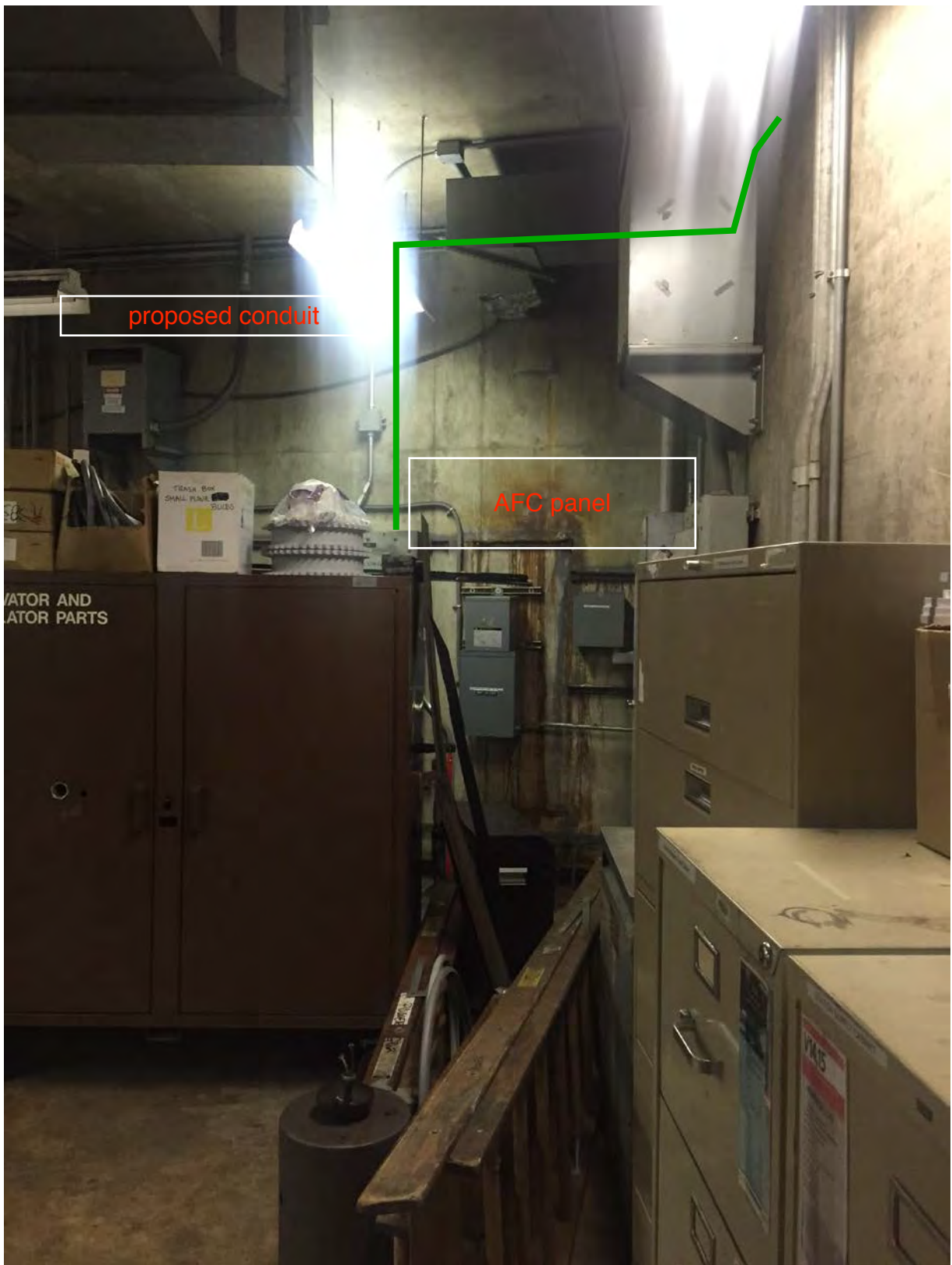
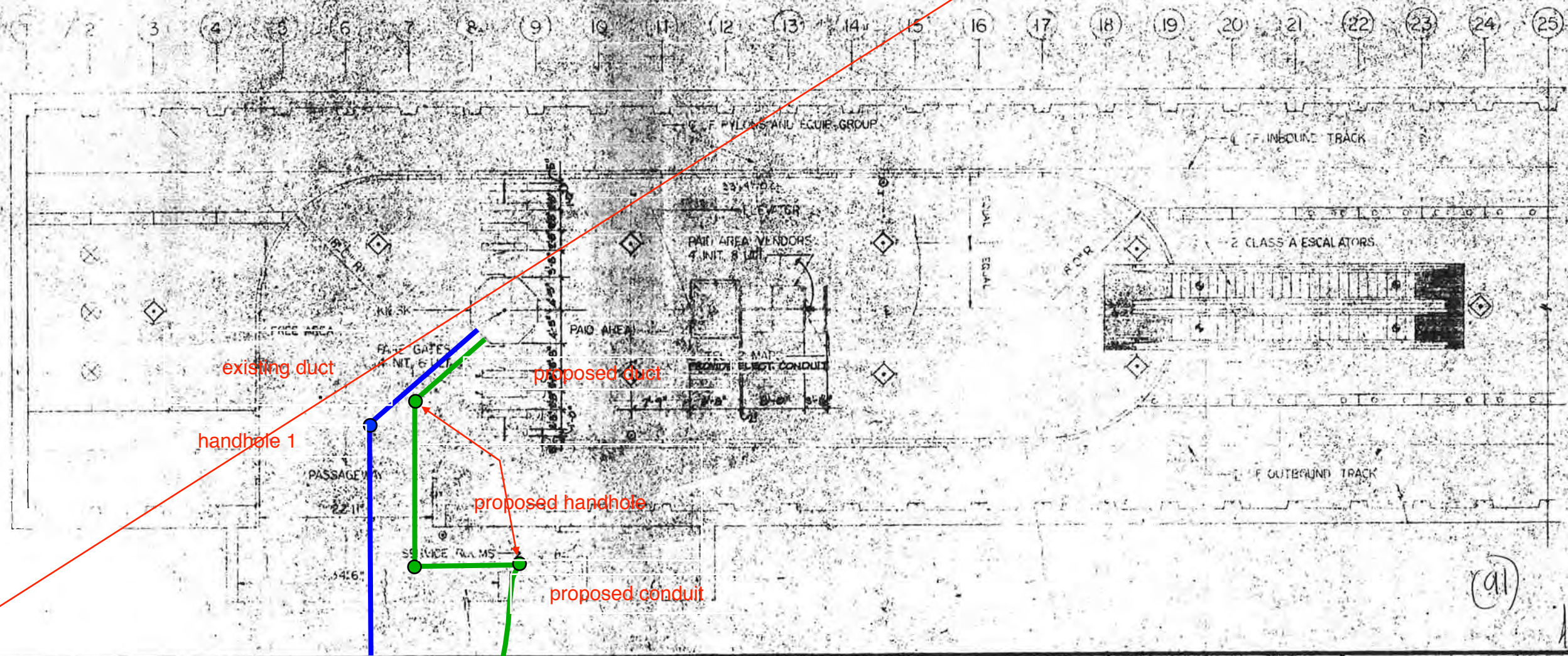


Photo #7 – G02 Capitol Heights: Proposed conduit and existing duct runs to AFC panel

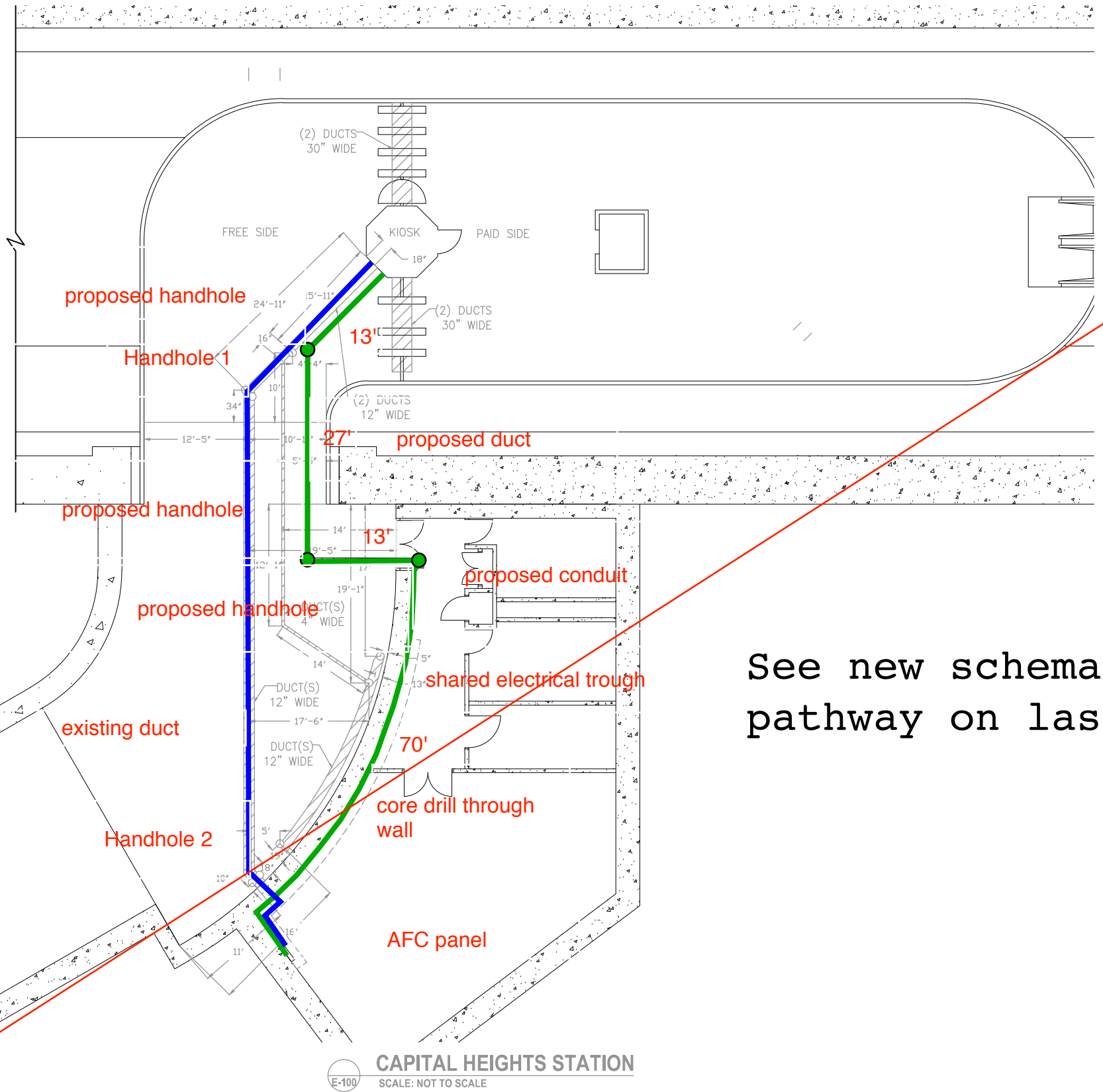


See new schematic drawing/proposed pathway on last page



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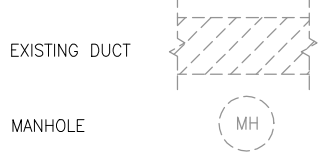
DESIGNED	12-1-74	DATE	REFERENCE DRAWINGS		REVISIONS		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY			CAPITOL HEIGHTS STATION - G-2	
RAWN	MLA	12-2-74	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION	WMATA	DE LEUW, CATHER & COMPANY	GENERAL ENGINEERING CONSULTANT	FARE MACHINES, FARE GATES, PHONES
CHECKED	BY	DATE						APPROVED	HARRY WEESE & ASSOCIATES	GENERAL ARCHITECTURAL CONSULTANT	and MAP CASES
APPROVED	DATE							APPROVED			



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:



See new schematic drawing/proposed pathway on last page

CAPITAL HEIGHTS STATION
SCALE: NOT TO SCALE

CONTRACT NO.
XXXXXX

DESIGNED	C. LOOSE	11-14
DATE		11-14
DRAWN	C. LOOSE	
DATE		11-14
CHECKED	M. BUTLER	
DATE		11-14
APPROVED		
DATE		

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS		
NUMBER	DATE	DESCRIPTION

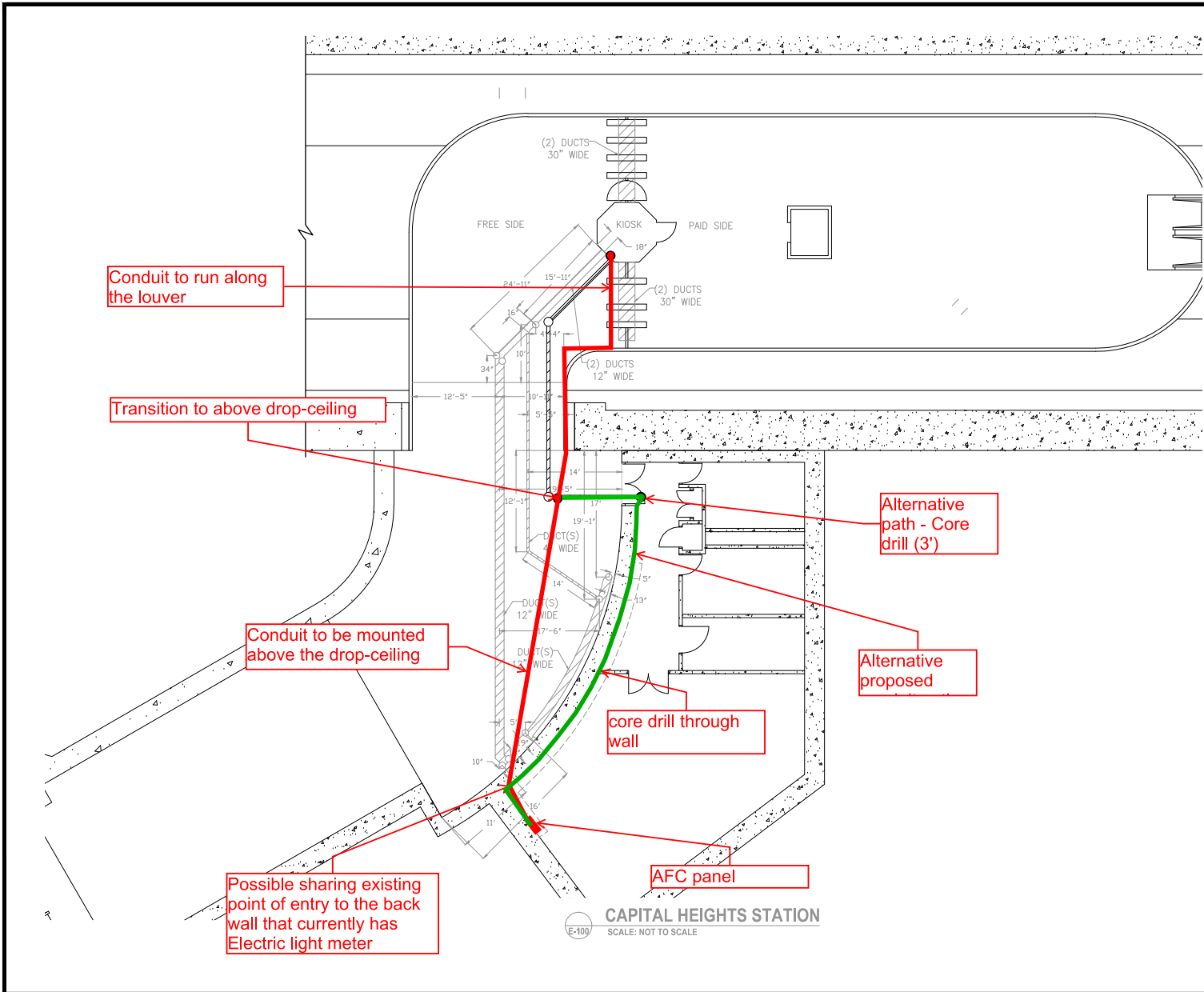
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

GFP A Gannett Fleming/Parsons JOINT VENTURE

APPROVED _____ SUBMITTED _____
PROJECT MANAGER

15-NEPP-01
IN - FLOOR DUCT INSPECTIONS
G02 Capital Heights
PROPOSED ELECTRICAL DUCT/CONDUIT PATH

SCALE: NOT TO SCALE DRAWING NO. G02-E-100 XXX



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:



CAPITAL HEIGHTS STATION
 E-100 SCALE: NOT TO SCALE

CONTRACT NO.
 XXXXXX

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

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



15-NEPP-01
 IN - FLOOR DUCT INSPECTIONS
 G02 Capital Heights
 PROPOSED ELECTRICAL DUCT/CONDUIT PATH

APPROVED _____ SUBMITTED _____ PROJECT MANAGER

SCALE: NOT TO SCALE DRAWING NO. G02-E-100 XXX