

Invitation For Bid [Federal]

Electrical and Data Cable Installation

RFP No.: FQ15233/ER

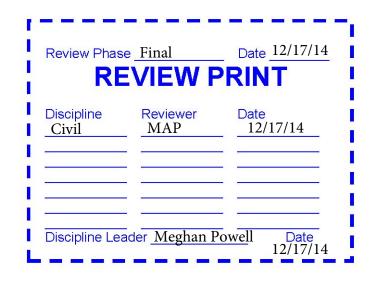
Volume 4 – Reports

Date: August 17, 2015



Project Name:	15-NEPP-01 In-Floor Duct Inspections			
Task:	Mezzanine Inspection Reports			
Date of Inspection:	August 22, 2014			
Mezzanine Inspected:	A01 - Metro Center East			
Report Includes: - Mezzanine Inspection Checklist				
	- Field Photos			

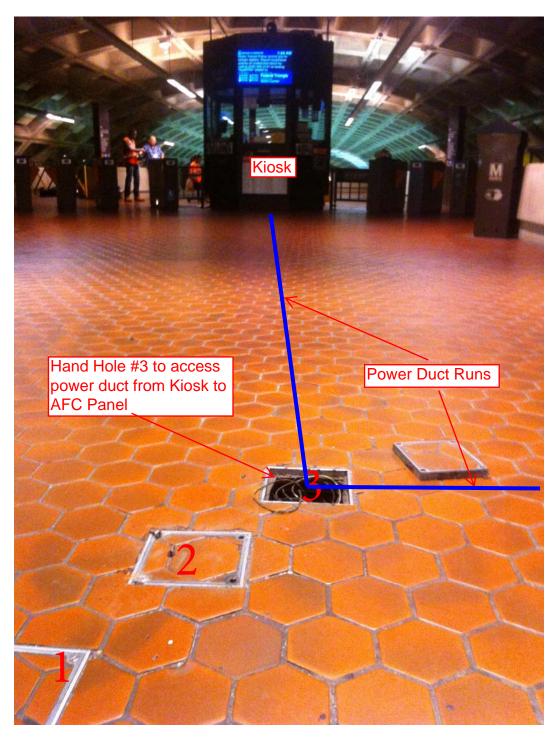
- Existing AFC Installation Plan with field notes



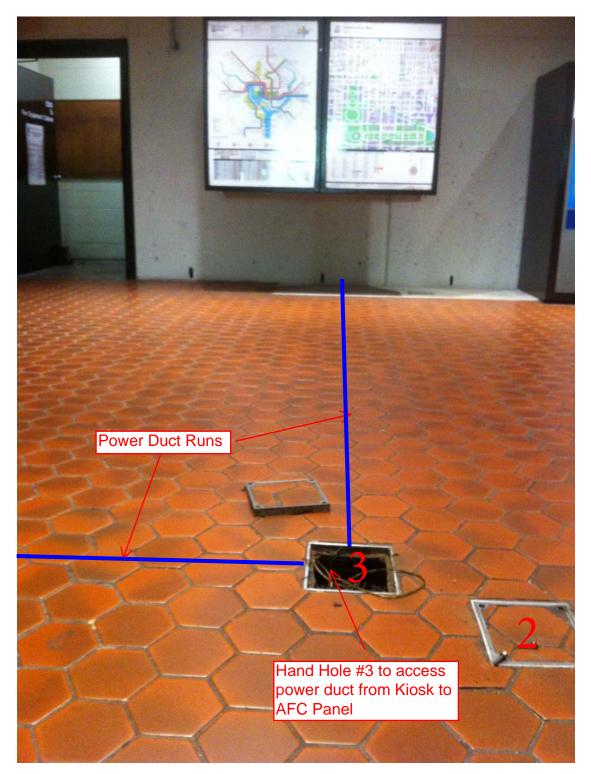
Mezzanine Inspection Report (Scoping)					
Date: 08/22/2014	ate: 08/22/2014 Station Name: A01 Metro Center East Mezzanine #: 019 Completed By: Mike Butler				
	Summary				
capacity.	ere video scoped and pull string in successfully installed in all ducts	nstalled as p	er the scope of works. No	obstructions were found and ducts are not at s mezzanine.	
		Scoping	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Du	ıct – Upper Faregate Array (4 G	ates)			
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Upper Comm Fair Gate	
Were pull strings ins array?	stalled at all faregates in the	Yes			
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No			
Communications Du	ict - Lower Faregate Array (5 G	ates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Lower Comm Fair Gate	
Were pull strings ins array?	stalled at all faregates in the	Yes			
Were there any obst details of type and s	ructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No			
Power Duct - Upper	Faregate Array (4 Gates)	I			
Was video scoping run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Power Upper Fair Gate	
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	No			
Is the duct at capacit about the dimension	ty? Provide additional details s of ducts and number of wires.	No			
Power Duct - Lower	Faregate Array (5 Gates)				
Was video scoping run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Lower Power Fair Gate	
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No			

Scoping of Power Duct - Kiosk to AFC Panel				
	Task	Yes/No		Notes
Run 1 (Kiosk to H	land Hole #3 – 45 foot straight se	ction)		
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to V Video.avi	/MATA Metro Center East Station G St. Power Kiosk to Handhole file.
Was pull string in	stalled?	Yes		
	bstructions or blockages? Provide d specific location.	No		
	uit at capacity? Provide additional dimensions of duct / conduit and	No	12 wires in	n duct
Run 2 (Hand Hole	e #3 to AFC Panel – 20 foot straig	ht section)		
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to V Panel Vid	/MATA Metro Center East Station G St. Power Handhole to AFC eo.avi file.
Was pull string in	istalled?	Yes		
	bstructions or blockages? Provide d specific location.	No		
	uit at capacity? Provide additional dimensions of duct / conduit and	No	12 wires in	n duct
		1	1	
		Obsorvation		Next Steps
				Next Steps
Refer to photos a	nd as-built drawing for details of far	egate and d	uct layouts.	
			Sign Off	
	GFP Representa	tive		WMATA PRGM
Name:	Mike Butler			
Signature:	Mizun			
Date:	09/04/2014			

Metro Center East Photo #1 – Hand Hole #3 to access power duct from Kiosk to AFC Panel - duct run from Kiosk to hand hole confirmed.

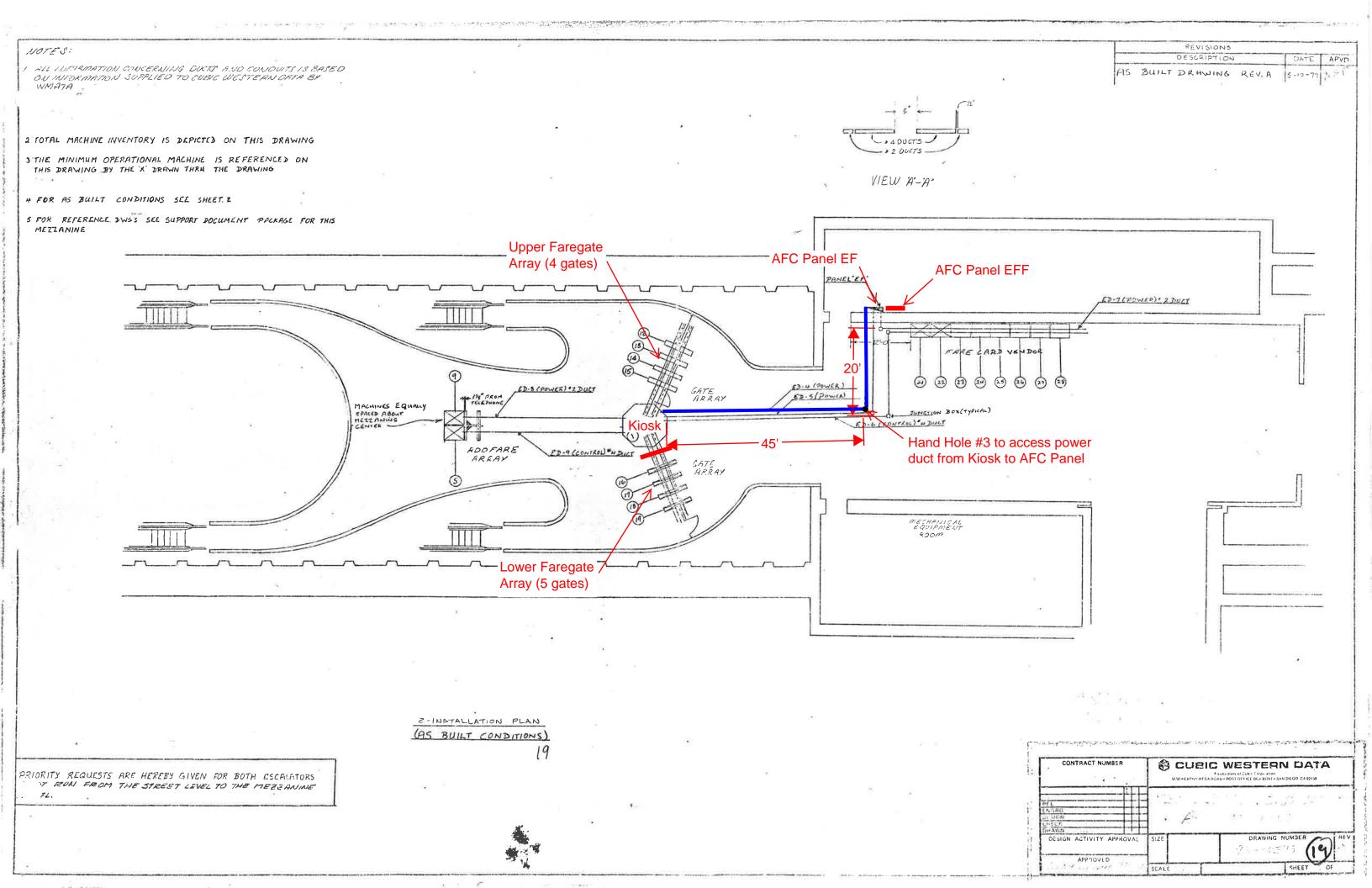


Metro Center East Photo #2 – Hand Hole #3 to access power duct from Kiosk to AFC Panel - duct run from Kiosk to hand hole confirmed.



Metro Center East Photo #3 – Close-up of Hand Hole #3 to access power duct from Kiosk to AFC Panel – 12 wires counted, therefore duct is not at capacity.





Mezzanine Inspection Report (Scoping)					
Date: 09/25/2014	Station Name: A01 Metro Cer	nter West	Mezzanine #: 001	Completed By: Tino Sahoo	
	Summary				
the upper and lower array communication		deo scoping	was completed and no pe	iosk and AFC panel. Video scoping was completed for ull string was installed for the upper and lower faregate ucts.	
		Scoping of	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Du	ıct – Upper Faregate Array (4 G	iates)			
Was video scoping o run?	completed for the entire duct	No	Cat6 cable previously in	nstalled, video scoping not completed	
Were pull strings ins array?	stalled at all faregates in the	No	Cat6 cable previously in	nstalled, pull strings not installed	
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	N/A			
	ty? Provide additional details s of ducts and number of wires.	No			
Communications Du	ict - Lower Faregate Array (4 G	ates)	Γ		
Was video scoping run?	completed for the entire duct		Cat6 cable previously in	nstalled, video scoping not completed	
Were pull strings ins array?	stalled at all faregates in the		Cat6 cable previously in	nstalled, pull strings not installed	
Were there any obst details of type and s	ructions or blockages? Provide pecific location.				
	ty? Provide additional details s of ducts and number of wires.				
Power Duct - Upper	Faregate Array (4 Gates)				
Was video scoping run?	completed for the entire duct	Yes	Refer to WMATA Metro file.	e Center West Upper Power Duct Fairgate Video.avi	
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	No			
Is the duct at capacit about the dimension	ty? Provide additional details s of ducts and number of wires.	No			
Power Duct - Lower	Faregate Array (4 Gates)				
Was video scoping run?	completed for the entire duct	Yes	Refer to WMATA Metro	o Center West Lower Power Fair gate Video.avi file.	
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No			

Scoping	g of Powe	r Duct - Ki	osk to AFC Panel
Task	Yes/No		Notes
Kiosk to Handhole 1 (50 foot run)			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to V file.	/MATA Metro Center West Power Handhole to Kiosk Video.avi
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		
landhole 1 to AFC Panel (20 foot run)			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to V Video.avi	/MATA Metro Center West Power Handhole to AFC Panel file.
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		
		T	
		l	
	Observatio	ns / Issues /	Next Steps
		Sign Off	
GFP Representa	tive		WMATA PRGM
Name: Tino Sahoo			
Signature: Jannaya Jakov			
0			

Photo #1 – A01 Metro Center West: Mezzanine level handholes

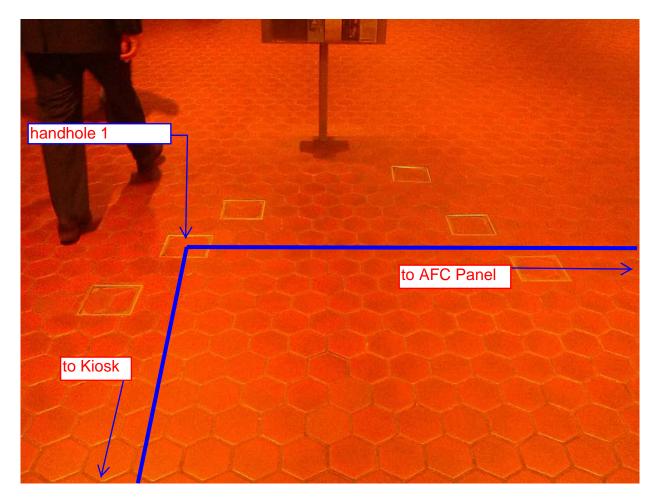
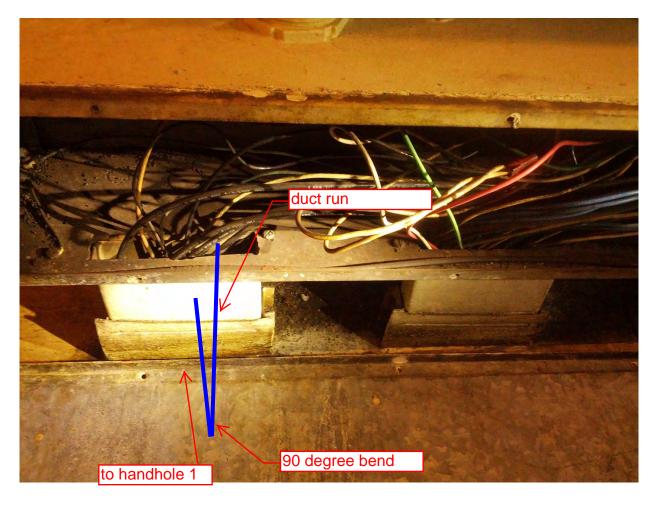
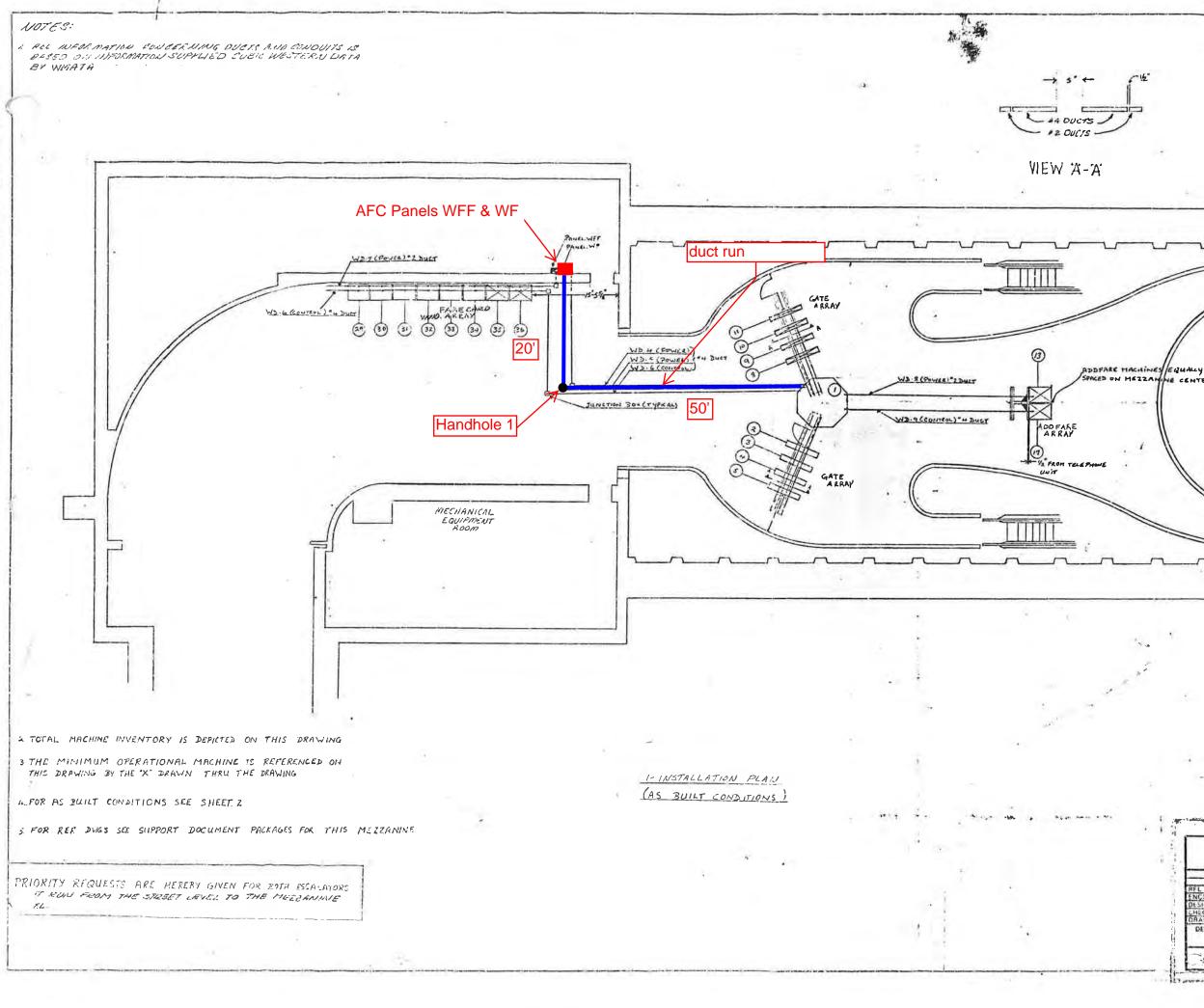


Photo #2 – A01 Metro Center West: Ducts to leading from ground level up to AFC Panel





REVISIONS DESCRIPTION DATE APYD AS BUILT DRAWING REV. A 5-10-17 2054 HE CENTER WASHINGTON METROPOLISM ATIN TO THE AND TH CONTRACT NUMBER CUBIC WESTERN DATA A subsidiary of Color Constraint 5650 KEAPNY MEBA ROAD + POST OFFICE BOX 80787 + SAN DIEGO, CA 92138 TROCEARSE IN STORESA AFT MARCHINES DESIGN ACTIVITY APPROVAL DRAWING NUMBER 926-63 01 AFPROVED APPROVED STATE SHEET SCALE

Mezzanine Inspection Report (Scoping)						
Date: 11/03/14	Station Name: A02 Farragut N	North NE	Mezzanine #: 004	Completed By: Mike Butler		
	Summary					
could not be complete completed in power du Video scoping and pu Junction Box in Room 254) and Trough (Roo A new overhead cond on the results of the si	Pull string installation completed in communication ducts for upper and lower faregate arrays; ducts are viable for future use. Video scoping could not be completed in communication ducts for upper and lower faregate arrays due to the camera size. Video scoping could not be completed in power ducts for upper and lower faregate arrays due to energized wires. Video scoping and pull string installation could not be completed in power duct between Kiosk, Handhole 1, Handhole 2, Handhole 3 and Junction Box in Room 254 due to energized wires. However, pull string was successfully installed in conduit between Junction Box (Room 254) and Trough (Room 256). Pull string was also installed in conduit between Trough and AFC Panel in Room 256. A new overhead conduit is proposed between the Kiosk and existing Junction Box in Room 254 because an in-floor duct is not feasible based on the results of the scanning. The proposed conduit will run along the ceiling from the Kiosk to the wall adjacent to Room 254 in the hallway. Core drilling is needed to allow the conduit to pass through the wall and feed into existing Junction Box. Refer to attached photos and drawings for more information.					
		Scoping of	of Faregate Array(s)			
-	Task	Yes/No		Notes		
Communications Duc	t – Upper Faregate Array (5 g					
Was video scoping co run?	ompleted for the entire duct	No	Camera was too large to inspection was performe	e get through the entire duct, therefore visual d.		
Were pull strings insta array?	alled at all faregates in the	Yes				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No	3" walker duct with less	than 8 wires.		
Communications Duct - Lower Faregate Array (3 gates)						
Was video scoping co run?	ompleted for the entire duct	No	Camera was too large to inspection was performe	o get through the entire duct, therefore visual d.		
Were pull strings insta array?	alled at all faregates in the	Yes				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less	than 10 wires.		
Power Duct - Upper F	aregate Array (5 gates)	1	Γ			
Was video scoping co run?	ompleted for the entire duct	No	Could not be completed completed as directed by	due to energized wires - no further work was y WMATA.		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A				
	? Provide additional details of ducts and number of wires.	N/A				
Power Duct - Lower F	aregate Array (3 gates)	1				
Was video scoping co run?	ompleted for the entire duct	No	Could not be completed completed as directed by	due to energized wires - no further work was y WMATA.		
Were there any obstrudetails of type and spe	uctions or blockages? Provide acific location.	N/A				
	? Provide additional details of ducts and number of wires.	N/A				

So	oping of Power	r Duct - K	Kiosk to AFC Panel		
Task	Yes/No		Notes		
Kiosk to Handhole 1, Handhole 2, Handhole	3 and Junction B	ox (Distand	ce: 70')		
Was video scoping completed for the entire d conduit run?	luct / No		t be completed due to energized wires - no further work was ed as directed by WMATA.		
Was pull string installed?	No				
Were there any obstructions or blockages? Pro details of type and specific location.	vide N/A				
Is the duct / conduit at capacity? Provide addition details about the dimensions of duct / conduit a number of wires.	onal nd N/A				
Junction Box to Trough (Distance: 60')					
Was video scoping completed for the entire d conduit run?	luct / No	Scoping o	of conduits not required.		
Was pull string installed?	Yes				
Were there any obstructions or blockages? Pro details of type and specific location.	vide No				
Is the duct / conduit at capacity? Provide addition details about the dimensions of duct / conduit a number of wires.		2" condui	it with less than 8 wires.		
Trough to AFC Panel (Distance: 20')					
Was video scoping completed for the entire d conduit run?	luct / No	Scoping o	of conduits not required.		
Was pull string installed?	Yes				
Were there any obstructions or blockages? Pro details of type and specific location.	vide No				
Is the duct / conduit at capacity? Provide addition details about the dimensions of duct / conduit a number of wires.	onal nd No	2" condui	it with less than 8 wires.		
Observations / Issues / Next Steps					
Proposed conduit run is 75' from Kiosk to Junc	tion Box (Room 2	54).			
Existing conduit run is 80' between Junction B			FC Panel (Room 256).		
		Sign Off			
GFP Repre	esentative		WMATA PRGM		
Name: Mike Butler					
Signature: M.3MM					
Date: 02/24/15					
			I		

Photo #1 – Proposed overhead conduit from Kiosk



Photo #2 – Proposed overhead conduit from Kiosk

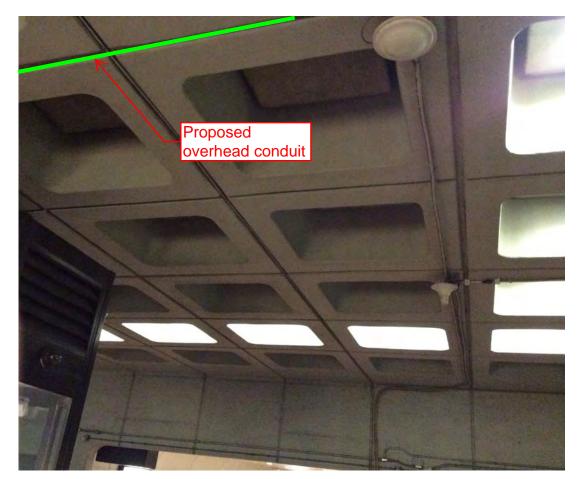
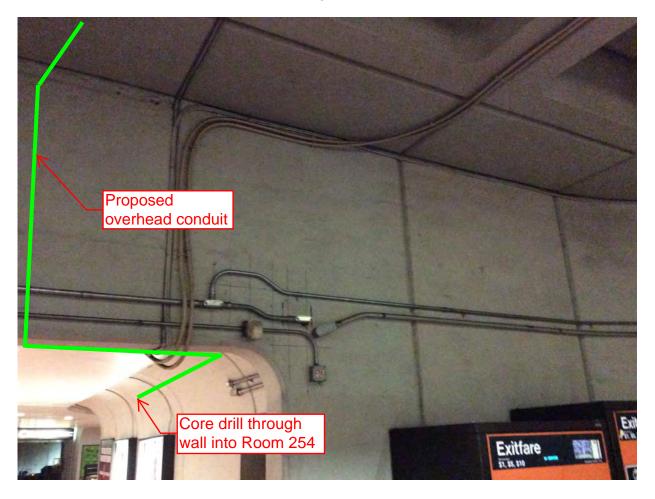
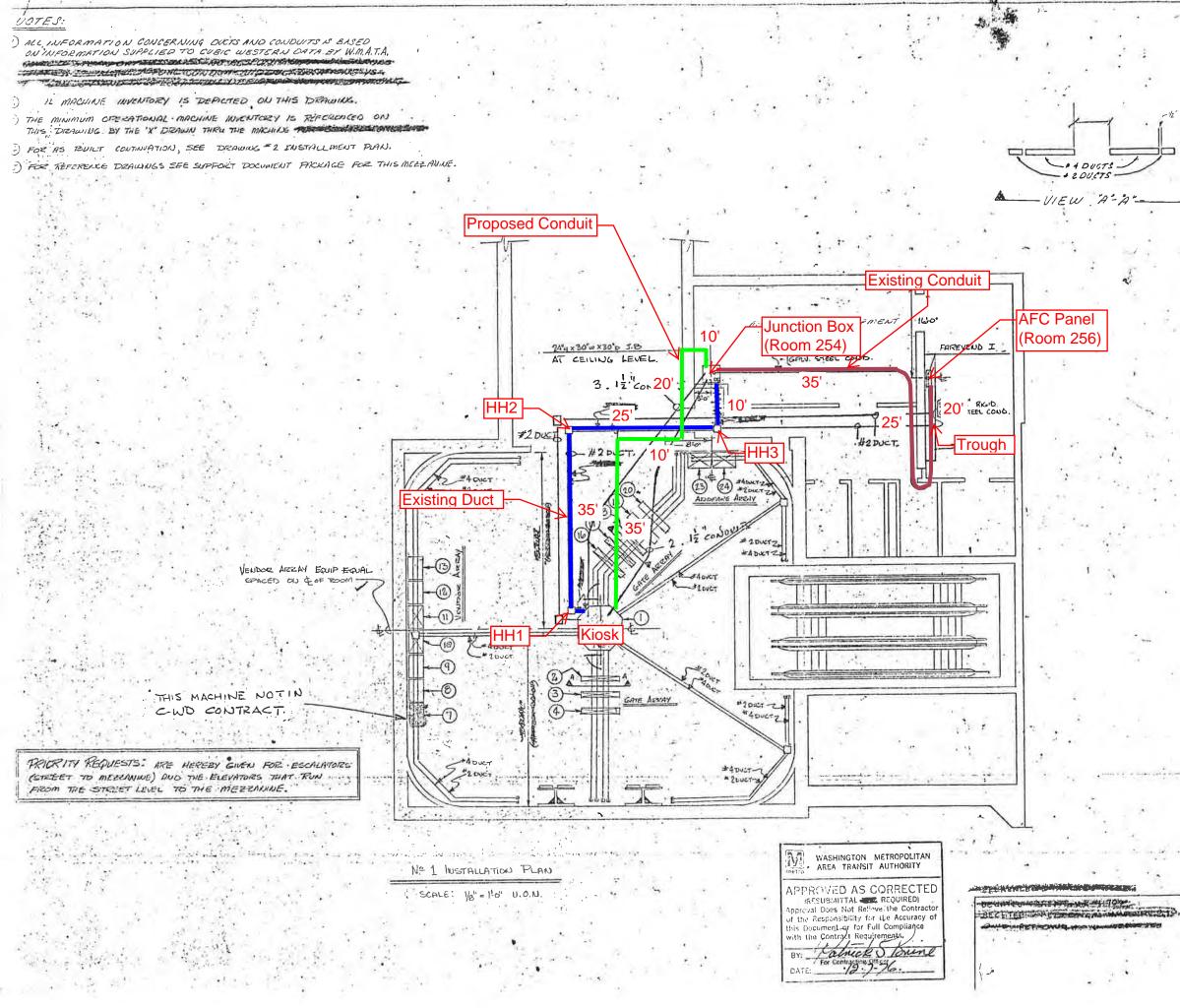


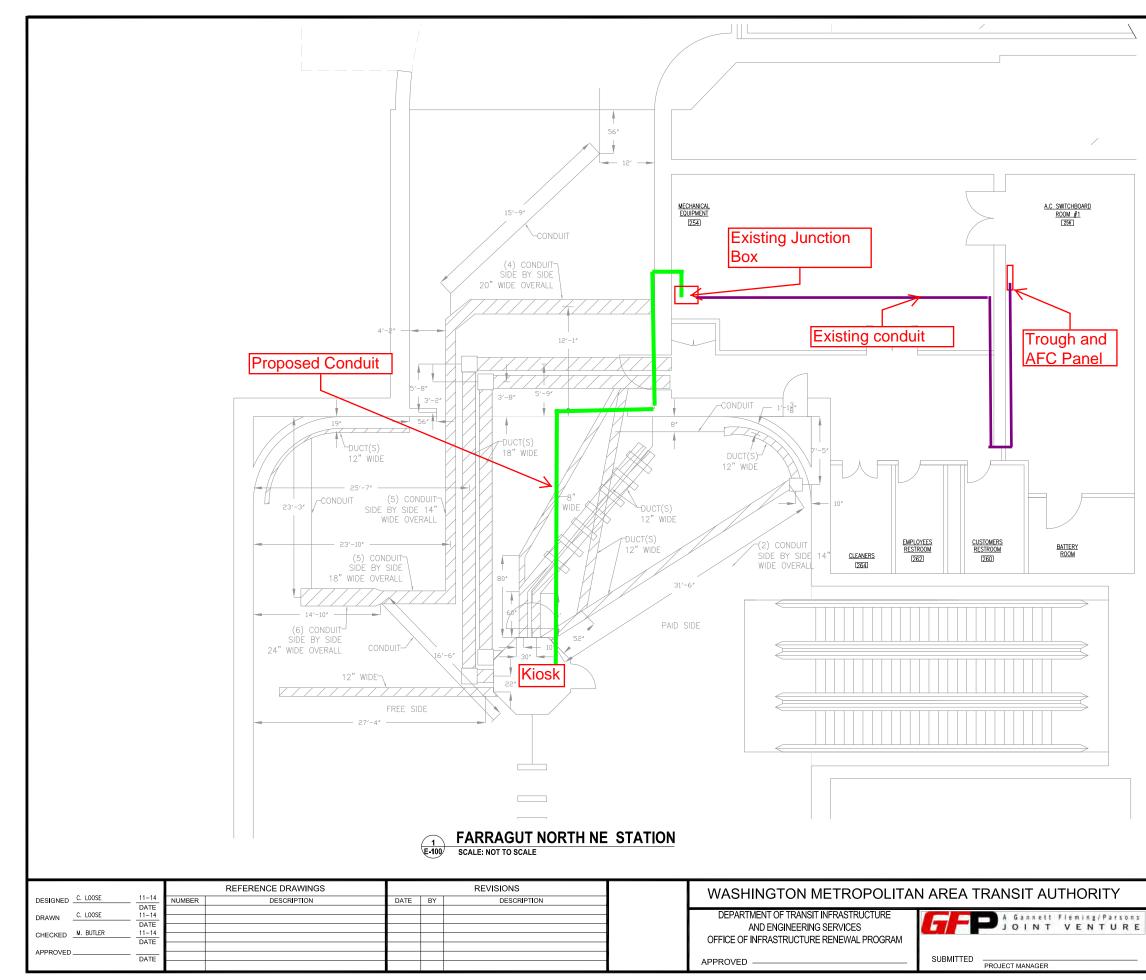
Photo #3 – Proposed overhead conduit heading towards back rooms





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DESIGN ACTIVITY APPROVAL SIZE DRAWING NUMBER
APPROVED
Brohad & 11/0/76 SCALE 1/2+10" SHEET 1 OF 3



PLAN NOTES:

- DIMENSIONS ARE IN FEET AND INCHES. DIMENSIONS ARE FOR REFERENCE ONLY.
- 2
- EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 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 SUBSTREE THE SUBSTRATE.

LEGEND:

EXISTING DUCT

MANHOLE

HANDHOLE

MH ¦ HH ¦

	XX	XXXX	
IN - FLOOR A02 Far	-NEPP-01 DUCT INSPECTI ragut North NE POWER CONDUIT		
SCALE NOT TO SCALE	drawing no. A02-E-100	XXX	

	Mezzanine Inspection Report REVISION 1					
Date: 11/06/2014	Station Name: A02 Farragut North NW Mezzanine #: 003 Completed By: Mike Butler					
	Summary					
duct; however, video s power ducts. The pow the AFC Panel to the obstruction. A proposed overhead the Kiosk to the junctii manhole and the exis mezzanine and transi may not be required.	A proposed overhead conduit path from the Kiosk to the junction box has been identified (see photos 6-10 below) since the existing conduit from the Kiosk to the junction box is deemed to be unusable. There is no room for installation of new in-floor duct based on the location of the existing manhole and the existing ducts. It is recommended to install overhead conduit from the kiosk along the recessed channel along the ceiling of the mezzanine and transition into the existing junction box located in the service hallway. There is already an existing core drill hole, so a core drill					
		Scoping o	of Faregate Array(s)			
	Task	Yes/No		Notes		
Communications Duc	ct – Upper Faregate Array (5 g	ates)				
Was video scoping co run?	ompleted for the entire duct	No	Refer to WMATA Farrag	ut NW Station Upper Comm Video.avi file.		
Were pull strings insta array?	alled at all faregates in the	Yes				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	Yes	Hit insert/coupling on wa	ilker duct at 3 rd faregate		
	? Provide additional details of ducts and number of wires.	No				
Communications Duc	ct - Lower Faregate Array (5 ga	ates)				
Was video scoping c run?	ompleted for the entire duct	No	Refer to WMATA Farrag	ut NW Station Lower Comm Video.avi file.		
Were pull strings insta array?	alled at all faregates in the	Yes				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	Yes	Apron skirt made it diffic duct on 1 st faregate.	ult to scope; scoped to about entrance of comm.		
Is the duct at capacity about the dimensions	? Provide additional details of ducts and number of wires.	No				
Power Duct - Upper F	aregate Array (5 gates)					
Was video scoping c run?	ompleted for the entire duct	Yes				
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No				
Power Duct - Lower F	Faregate Array (5 gates)					
Was video scoping c run?	ompleted for the entire duct	Yes				
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No				

Task	Yes/No	Notes
iosk to Junction Box (Approximately 40 foot run))	
Was video scoping completed for the entire duct / conduit run?	No	Refer to WMATA Farragut North NW Power Feed 2inch conduit Video (1).avi
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	90 degree bend into floor. Could not get past obstruction at bend.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	2" conduit
Junction Box to AFC Panel (20 foot 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	2" conduit
	ſ	
	Observatior	ns / Issues / Next Steps

Proposed conduit run is approximately 70 feet total between the Kiosk and the junction box. Refer to attached as-built plan for additional details.

	Sign Off					
	GFP Representative	WMATA PRGM				
Name:	Mike Butler					
Signature:	Mizun					
Date:	11/06/2014					

Farragut North NW Photo # 1 – 90 degree bend where conduit sweeps underground to junction box



Farragut North NW Photo # 2 – Overhead conduit runs in Room #200



Farragut North NW Photo # 3 – Kiosk apron skirt

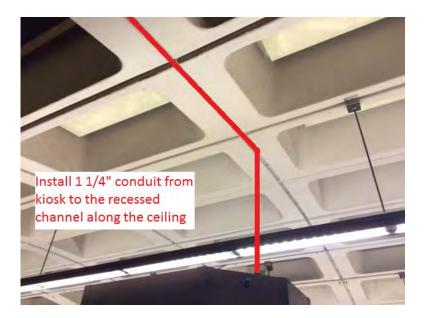


Farragut North NW Photo # 4 – Kiosk floor, there is a skirt obstruction inside Kiosk and a narrow gap for wires

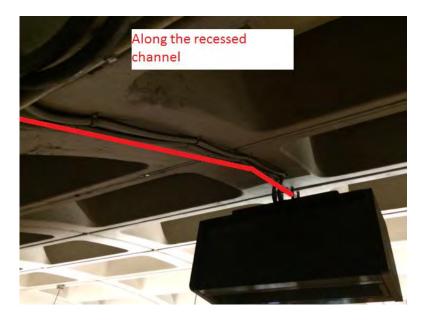


Farragut North NW Photo # 5 – Entrance to Room 200, junction box located behind door





Farragut North NW Photo # 7 - Proposed conduit run



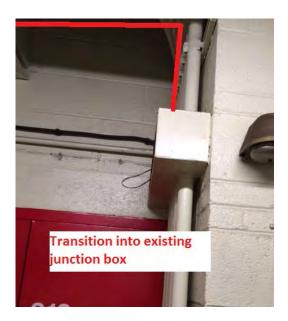
Farragut North NW Photo # 8 - Proposed conduit run



Farragut North NW Photo # 9 – Proposed conduit run through existing core drill

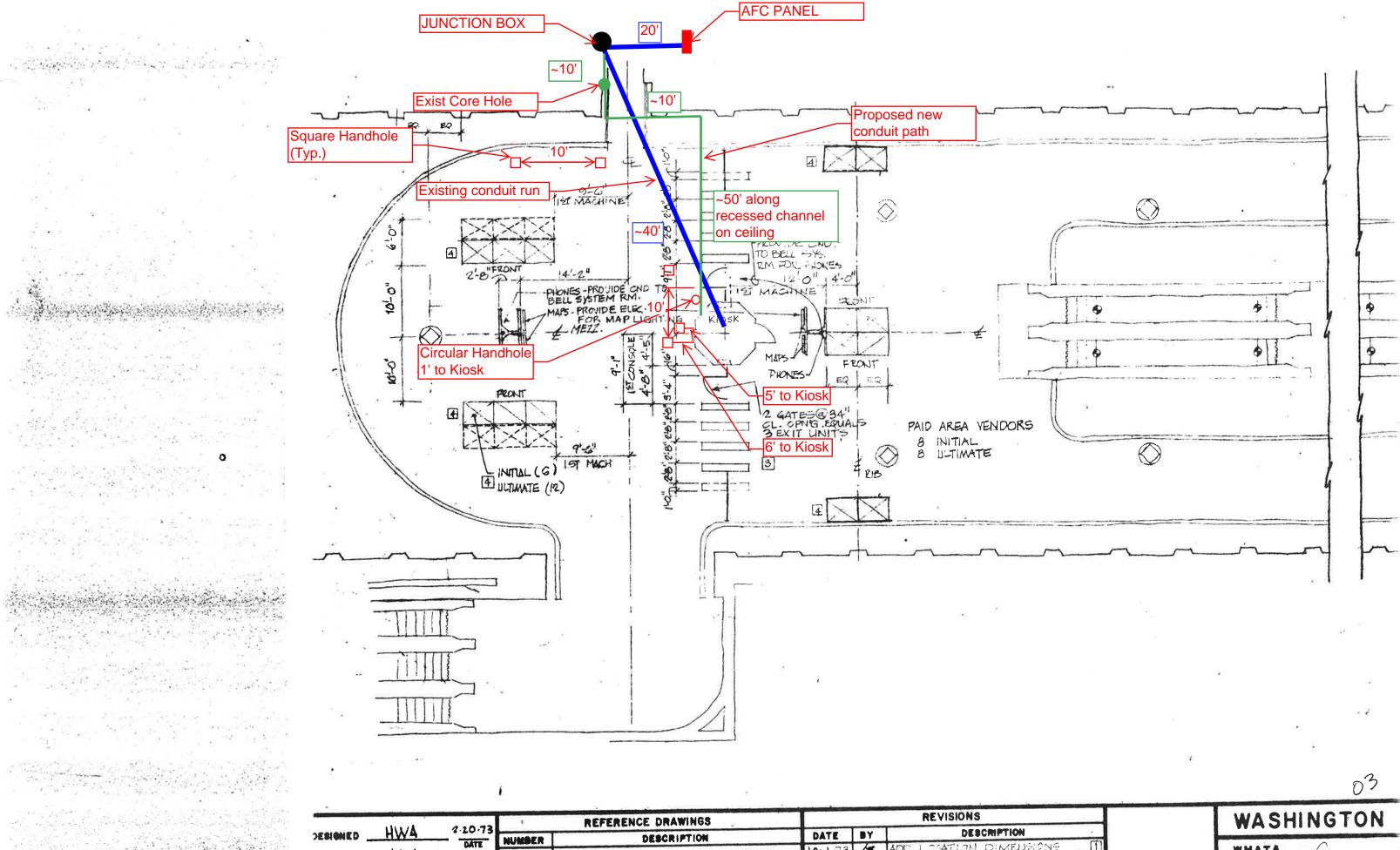


Farragut North NW Photo # 10 – Proposed conduit transition into existing junction box



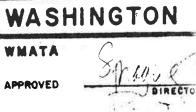
Farragut North NW Photo # 11 – Existing manhole and duct may be in the way of any proposed duct installation





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	Mez	zanine	Inspection Rep	port	
Date: 09/19/2014	Station Name: A02 - Farragut	North (SE)	Mezzanine #: 002	Completed By: Mike Butler	
			Summary		
	oull string installation was only par s as a basis for the proposed run			canning was conducted to identify existing	
video scope the pow duct. Pull string insta free from obstructior Handhole 1 and Har Handhole 2 and AF(ver duct in the upper faregate arra allation was completed in the pow hs apart from a 45-degree bend w hdhole 2, due to excessive corros C Panel, due to the presence of e	ay, due to the ver duct betwy vhich prohibit ion and colla energized wire	re being an energized en een Kiosk and Handhole ed scope passage. Pull s pses. Likewise, pull string ed in shared raceway.	th pull strings installed. It was only possible to nergency power feed in the lower faregate power 1 - video scoping showed that the duct is generally tring installation could not be installed between g installation could not be completed between	
Kiosk and AFC Pane making it difficult to p	el. The results of the scanning (at	tached) show	ed that the mezzanine flo	ducts and a proposed power duct run between the por is congested with in-floor ducts and conduits, overhead conduit from the Kiosk to AFC Panel is	
		Scoping o	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Du	uct – Upper Faregate Array (8 fa	aregates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Farra	agut North SE Upper Comm Video.avi"	
Were pull strings ins array?	stalled at all faregates in the	Yes			
Were there any obst details of type and s	tructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No	4" walker duct with less	than 15 wires	
Communications Du	uct - Lower Faregate Array (5 fa	regates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Farra	agut North SE Lower Comm Video.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	4" walker duct with less than 12 wires		
Power Duct - Upper	Faregate Array (8 faregates)				
Was video scoping completed for the entire duct run?		Yes	Refer to "WMATA Farra	agut North SE Upper Power Video.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" walker duct with less than 15 wires		
Power Duct - Lower	Faregate Array (5 faregates)				
Was video scoping run?	completed for the entire duct	No	Faregate #10 was still e panel.	energized by power feed from kiosk emergency	
Were there any obstructions or blockages? Provide details of type and specific location.		N/A			
	ty? Provide additional details is of ducts and number of wires.	N/A	6" walker duct with less	than 12 wires	

Scopin	g of Powe	r Duct - Kiosk to AFC Panel		
Task	Yes/No	Notes		
Kiosk to Handhole 1 (Distance: 16')	1			
Was video scoping completed for the entire duct / conduit run?		Refer to "WMATA Farragut North SE Handhole to Kiosk Video.avi"		
Was pull string installed?	Yes			
Were there any obstructions or blockages? Provide details of type and specific location.	No	There were no other obstructions or blockages other than the 45- degree bend in walker duct, although corrosion was clearly evident.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	4" walker duct with less than 15 wires		
Hanhole 1 to Handhole 2 (Distance: 15')	1			
Was video scoping completed for the entire duct / conduit run?	No	Not possible due to collapse.		
Was pull string installed?	No			
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct is heavily corroded and collapsed in multiple locations. Handhole 2 is also collapsed and in poor condition.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A			
Handhole 2 to AFC Panel (Distance: 20')				
Was video scoping completed for the entire duct / conduit run?	seo scoping completed for the entire duct /			
Was pull string installed?	No	due to the presence of energized wires in a shared raceway.		
Were there any obstructions or blockages? Provide details of type and specific location.	N/A	Although video scoping did not take place, a visual inspection confirmed that the duct is in poor condition with corrosion evident at each entry point.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A			
	-			
	Observation	ns / Issues / Next Steps		
Conductor Run for Proposed Overhead Conduit is a	pprox. 75' fro	om Kiosk to AFC Panel (Fare Vend 2)		
		Sign Off		
GFP Representa	ative	WMATA PRGM		
Name: Mike Butler				
Signature: Mizun				
Date: 01/03/2015				

Photo #1: Kiosk on mezzanine floor



Photo #2: Handhole 1



Photo #3: Handhole 2

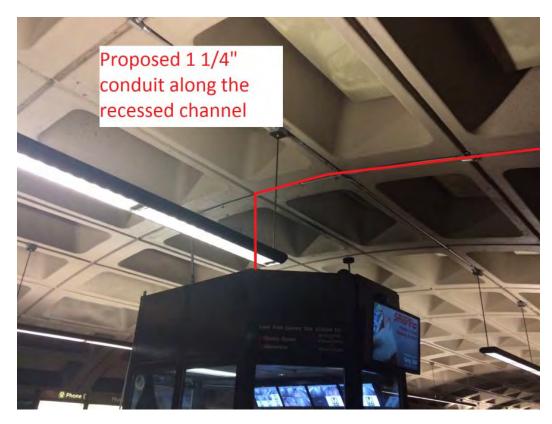


Photo #4: Entrance to backrooms and shared raceway





Photo #5: Proposed overhead conduit run from Kiosk to AFC Panel



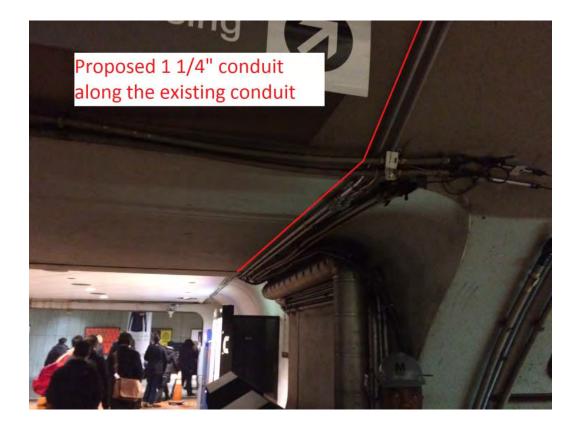
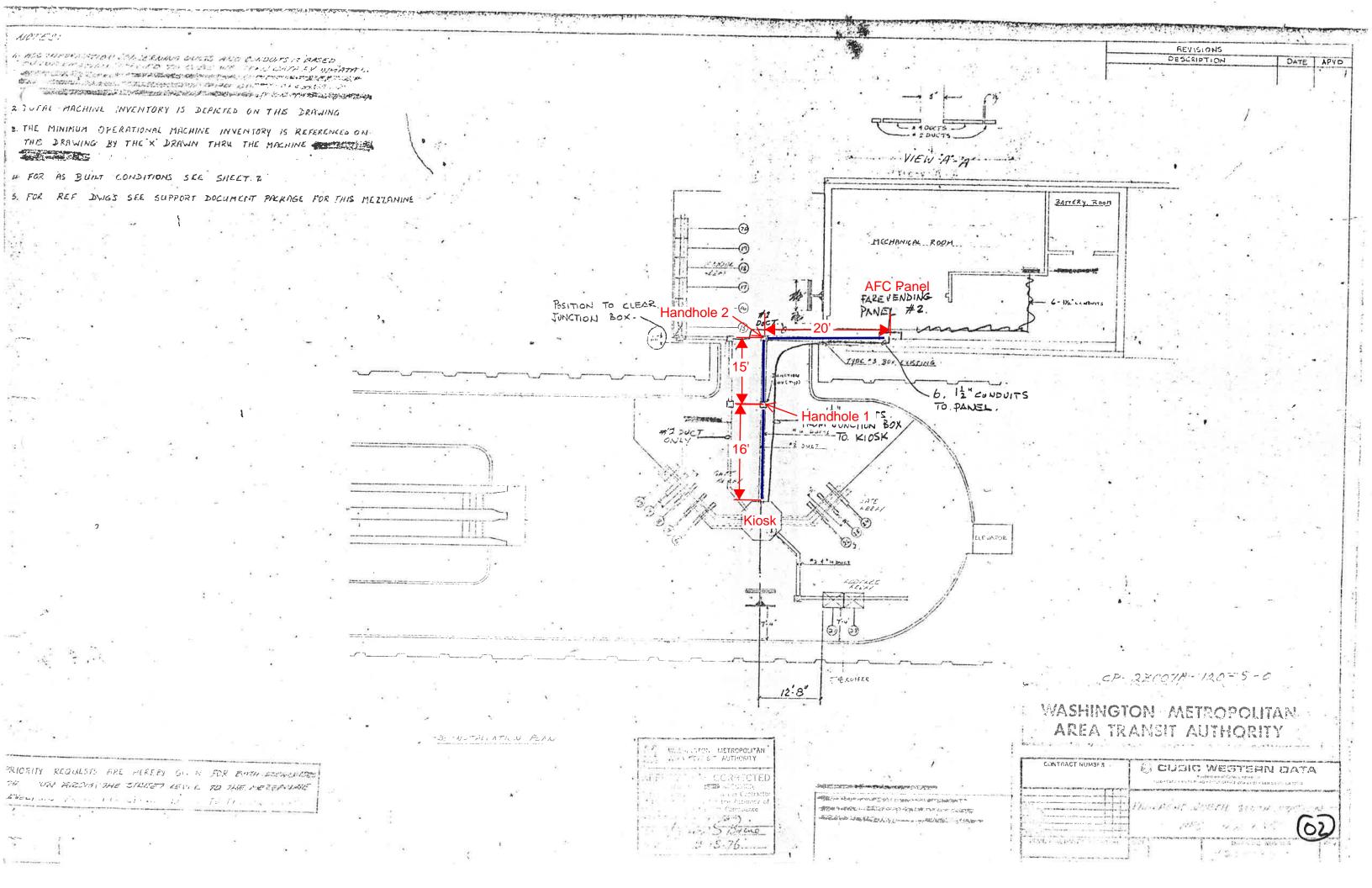


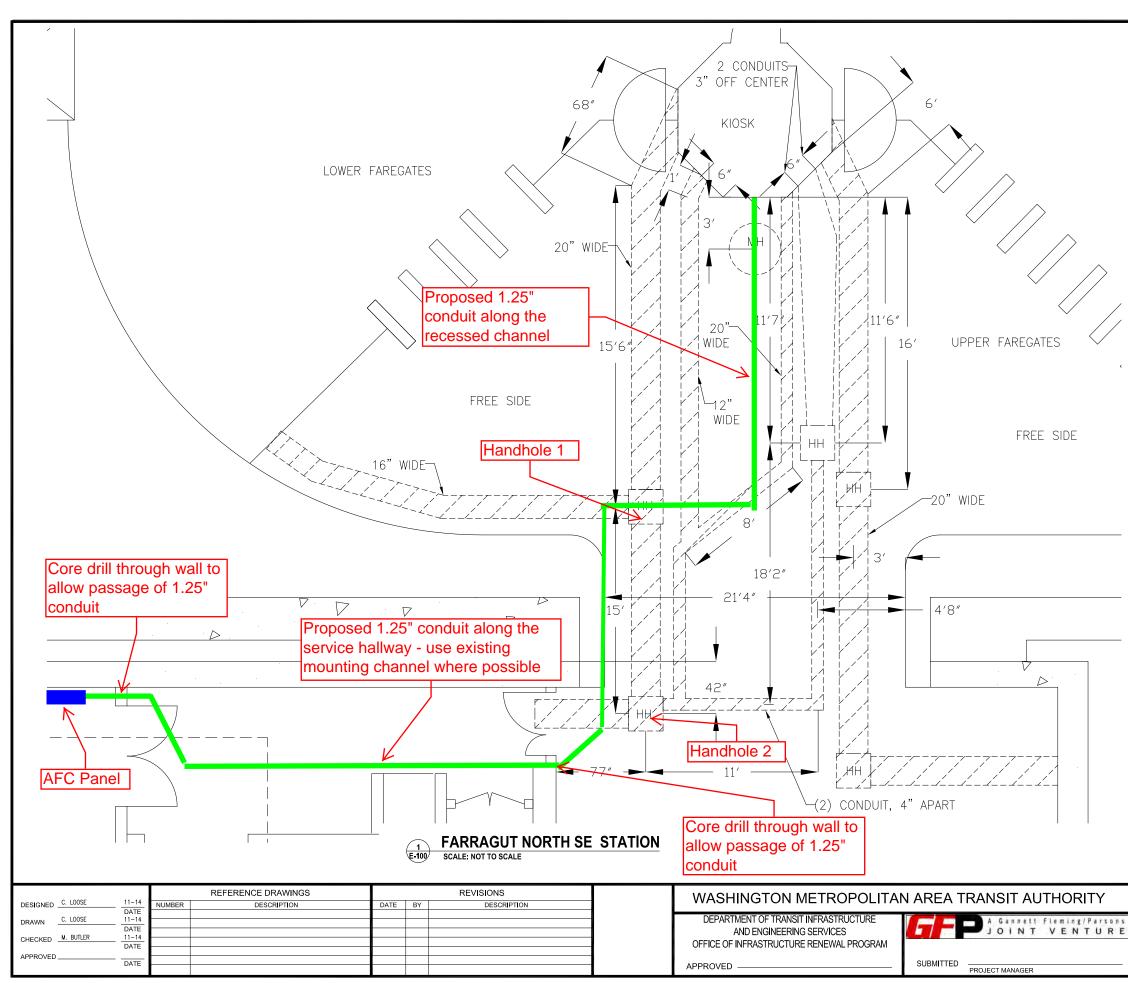
Photo #6: Proposed overhead conduit run from Kiosk to AFC Panel (continued)





Photo #7: Proposed overhead conduit run from Kiosk to AFC Panel (continued)





PLAN NOTES:

- DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
 EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
 CORE SCANNING THE FOR SCANNING THE SCANNING
- 5. GPR SCANNING HAS THE FOLLOWING LIMITATIONS: (i) 12 INCHES VISIBLE SCANNING DEPTH; (ii) VISIBILITY BEYOND INCHES VISIBLE SCANNING DEPTH; (ii) VISIBILITY BETOND 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	()
HANDHOLE	Г — Л НН J

A02 F	15-NEPP-01 OOR DUCT INSPECTIO arragut North SE (M00 SED POWER CONDUIT R	2)
scale NOT TO SCALE	drawing no. A02—E—100	XXX

	Mezzanine Inspection Report (Scoping)							
Date: 12/09/2014	Station Name: A03 Dupont Ci	rcle South	Mezzanine #: 005	Completed By: Mike Butler				
			Summary					
faregate array power of Scoping and pull string panel could not be co would consist of two conduits would need t #215. The conduit wo	ducts. g installation of the duct run fror mpleted due to energized lines. 1 ¼" conduits from the kiosk, c o penetrate the metal above the uld then need to be cored into the osed run is outlined in the photo	n kiosk to sh WMATA ha overhead in t door. The ro ne wall near t	ared pull box and pull strir s requested a proposed co he recessed channels alo un would then continue do	Ins ducts. Video scoping was completed for the ng installation between the shared pull box and AFC onduit run from the kiosk to the AFC panel. This run ng the mezzanine ceiling, into room #201. The two wn the hall and turn across the room towards room I run into an existing box and continue down into the				
		Scoping o	of Faregate Array(s)					
-	Task	Yes/No		Notes				
Communications Duc	t – Upper Faregate Array (4 G							
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Upper Comm Duct Video.avi file.				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	2" duct – less than 5 wire	es				
Communications Duc	t - Lower Faregate Array (4 G	ates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Lower Comm Duct Video.avi file.				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	2" duct – less than 5 wire	es				
Power Duct - Upper F	aregate Array (4 Gates)							
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Upper Power Duct Video.avi file.				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	4" duct – less than 5 wire	es				
Power Duct - Lower F	aregate Array (4 Gates)							
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Lower Power Duct Video.avi file.				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	4" duct – less than 5 wire	es				

Scoping of Power Duct - Kiosk to AFC Panel							
Task	Yes/No	Notes					
Kiosk to Shared Pull Box (60' run)							
Was video scoping completed for the entire duct / conduit run?	No	Hot wires prevented scoping					
Was pull string installed?	No	Hot wires prevented pull string installation					
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.	No						
Shared Pull Box to Shared Electrical Trough (30 for	oot run)						
Was video scoping completed for the entire duct / conduit run?	No	Conduit – no scoping required					
Was pull string installed?	No	Hot wires prevented pull string installation					
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.	No						
Shared Electrical Trough to AFC Panel (15 foot run	n)						
Was video scoping completed for the entire duct / conduit run?	No	Conduit – no scoping required					
Was pull string installed?	No	Hot wires prevented pull string installation					
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.	No						
	Observatior	ns / Issues / Next Steps					
Total proposed overhead conduit run of 173 feet from	n kiosk to AF	⁻ C panel.					
		0 . 0//					
		Sign Off					
GFP Representa	tive	WMATA PRGM					
Name: Mike Butler							
Signature: M.ZMM							
Date: 10/34/14							

Photo #1 – A03 Dupont Circle South: Shared pull box in Verizon room #203

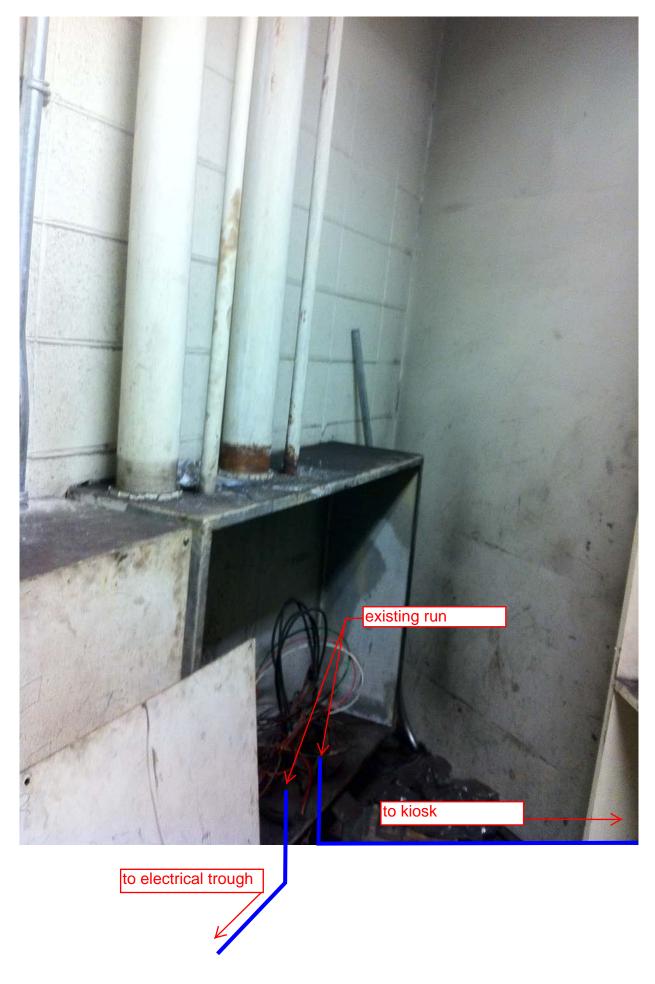


Photo #2 – A03 Dupont Circle South: AFC Panel and under floor trough in room #215

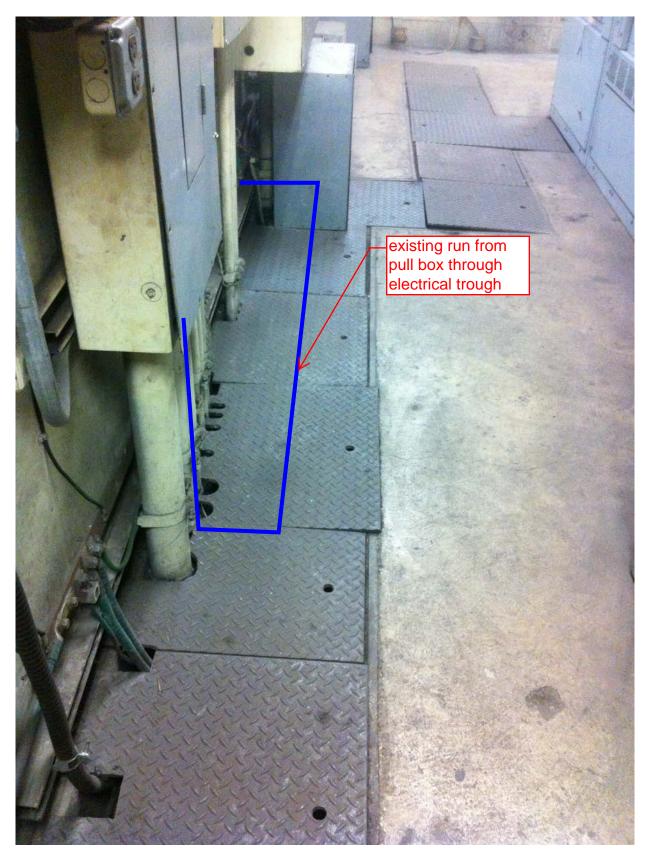
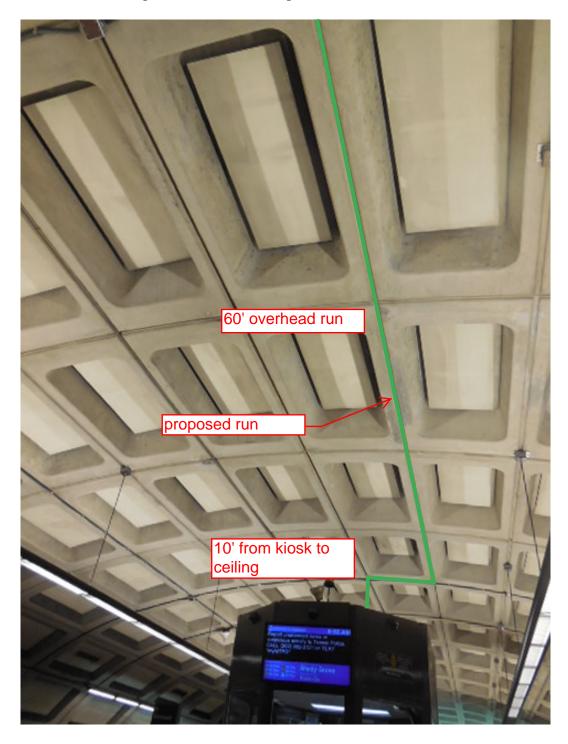
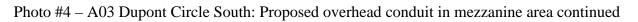


Photo #3 – A03 Dupont Circle South: Proposed overhead conduit in mezzanine area





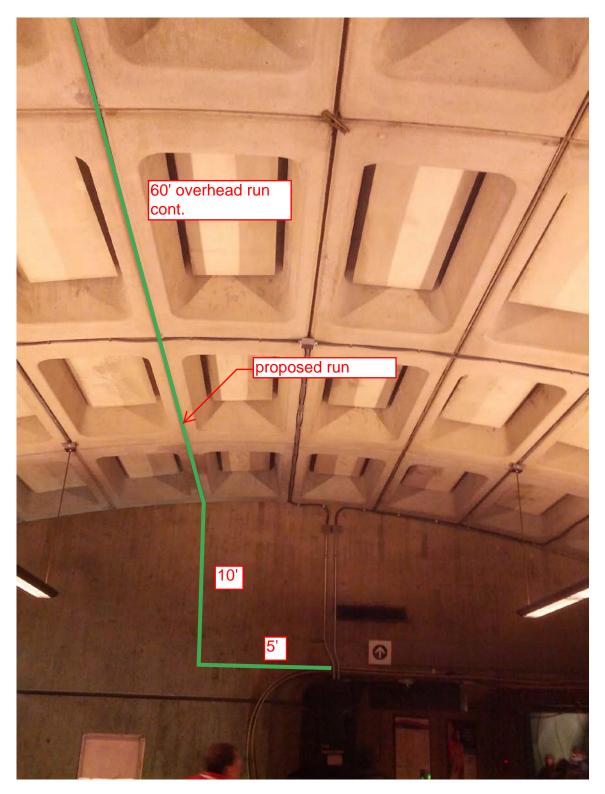


Photo #5 – A03 Dupont Circle South: Proposed overhead conduit running into Room #201. Run will need to penetrate metal over door.

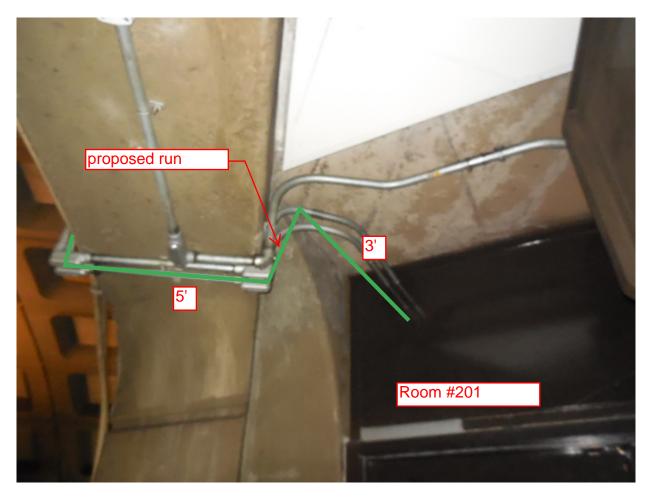


Photo #6 - A03 Dupont Circle South: Proposed overhead conduit on other side of door for room #201

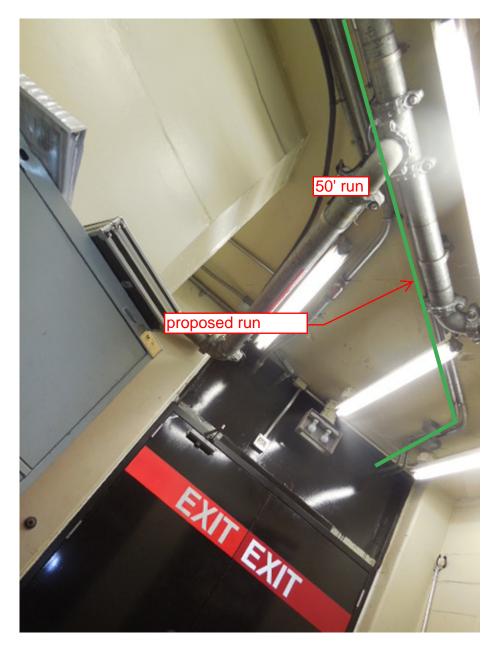
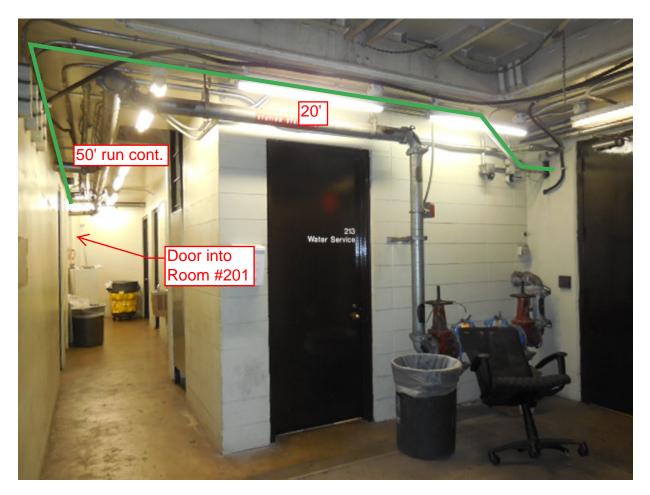


Photo #7 – A03 Dupont Circle South: Proposed conduit run continuing down hallway of room #201 and towards room #215



Picture #8 and #9 – A03 Dupont Circle South: Area in wall where proposed conduit will need to be cored through into room #215 to access AFC Panel

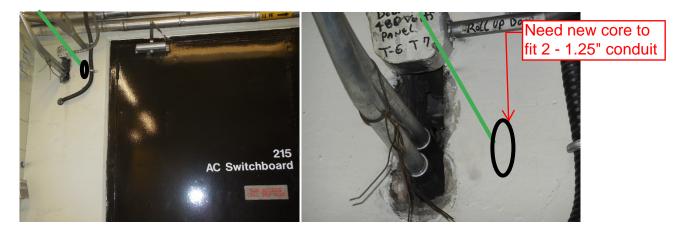
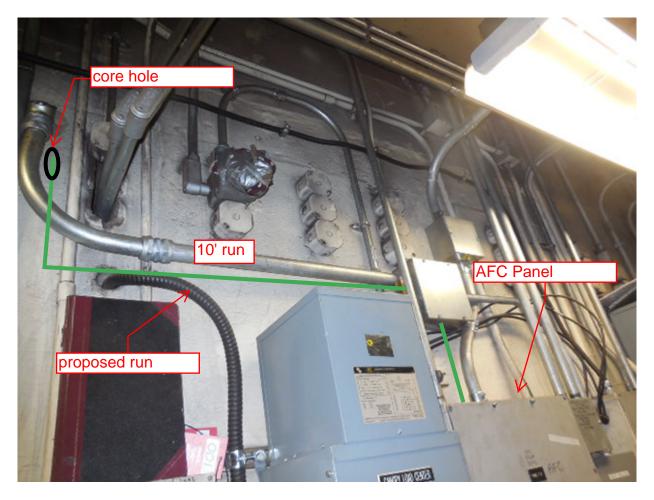
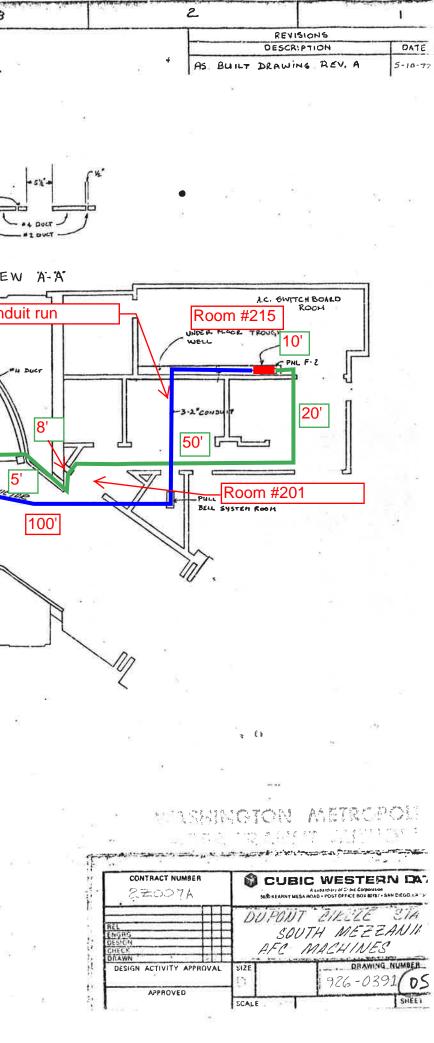


Photo #10 – A03 Dupont Circle South: Proposed conduit run penetrating wall into room #215 to access AFC panel through existing box.



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1	NOTES:					
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	4. FOR AS BUILT CONDITIONS SEE SHED S. FOR REFERENCE DRAWINGS SEL PACKAGE FOR THIS MEZEAUNIS.					
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Mezzanine Inspection Report (Scoping)							
Date: 11/13/2014	Station Name: A04 Woodley	Park	Mezzanine #: 007	Completed By: Mike Butler			
			Summary				
for communication d completed between k It was not possible to wires. Therefore, a pr	uct in the faregate array and so Kiosk, Handhole 1 and Handhole b install pull string in the remainin	oping of pow 2. Pull string ig section fro	wer duct in the faregate ar was also installed betwee m Shared Trench to AFC	This included the scoping and pull string installation ray. Video scoping and pull string installation was n Handhole 2 and Shared Trench. Panel (Room C208), due to standing water and hot shown in the attached drawing and photos.			
		Scoping c	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications Du	ct – Faregate Array (8 Gates)						
Was video scoping o run?	completed for the entire duct	Yes	Refer to "WMATA Wood	dley Park Comm Duct Video.avi" file.			
Were pull strings ins array?	talled at all faregates in the	Yes					
Were there any obstr details of type and sp	ructions or blockages? Provide becific location.	No	Minor dust and debris				
	y? Provide additional details s of ducts and number of wires.	No	3" duct, less than 15 wir	es			
Power Duct - Farega	te Array (8 Gates)	T					
Was video scoping o run?	completed for the entire duct	Yes		dley Park Power 3inch Duct Video.avi and ower 6inch Duct Video.avi" files.			
Were there any obstudent details of type and sp	ructions or blockages? Provide becific location.	No	Has a 45 degree bend.				
Is the duct at capacit about the dimensions	y? Provide additional details s of ducts and number of wires.	No	3" duct, less than 10 wir	es			

Scoping	g of Power	r Duct - Ki	osk to AFC Panel
Task	Yes/No		Notes
Kiosk to Handhole 1 (Distance = 70')		T	
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "	WMATA Woodley Park Power Kiosk to H.H.1 Duct Video.avi" file.
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	3" and 6"	ducts, 2 wires
Hanhole 1 to Handhole 2 (Distance = 15')			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "	WMATA Woodly Park Power HH1 to HH2 Duct Video.avi" file.
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	6" duct, 2	wires
Handhole 2 to Trough (Distance = 15')		1	
Was video scoping completed for the entire duct / conduit run?	No	Energized	cables laying in standing water
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	6" duct, 2	wires
Trough to AFC Panel (Distance = 27')			
Was video scoping completed for the entire duct / conduit run?	No	Conduit –	no scoping required
Was pull string installed?	No	Energized	wires laying in standing water
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	4" conduit	, 2 wires
	Observatior	ns / Issues /	/ Next Steps
Total power run from kiosk to AFC panel is approxima	tely 127'.		
		Sign Off	
		Sign Off	
GFP Representa	tive		WMATA PRGM
Name: Mike Butler			
Signature: M. 3un			

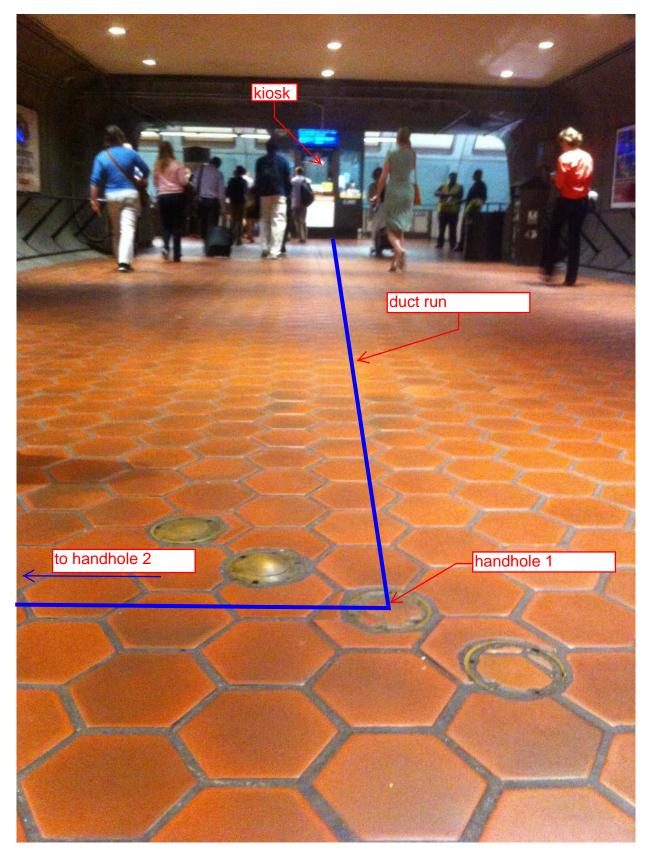


Photo #1 – A04 Woodley Park: Kiosk to handhole 1

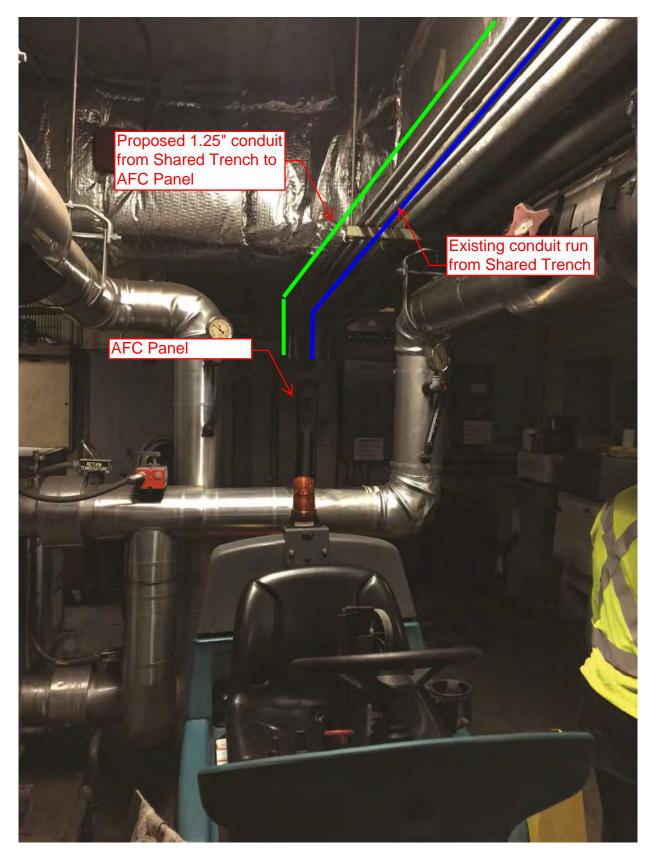
Photo #2 – A04 Woodley Park: handhole 1 to handhole 2

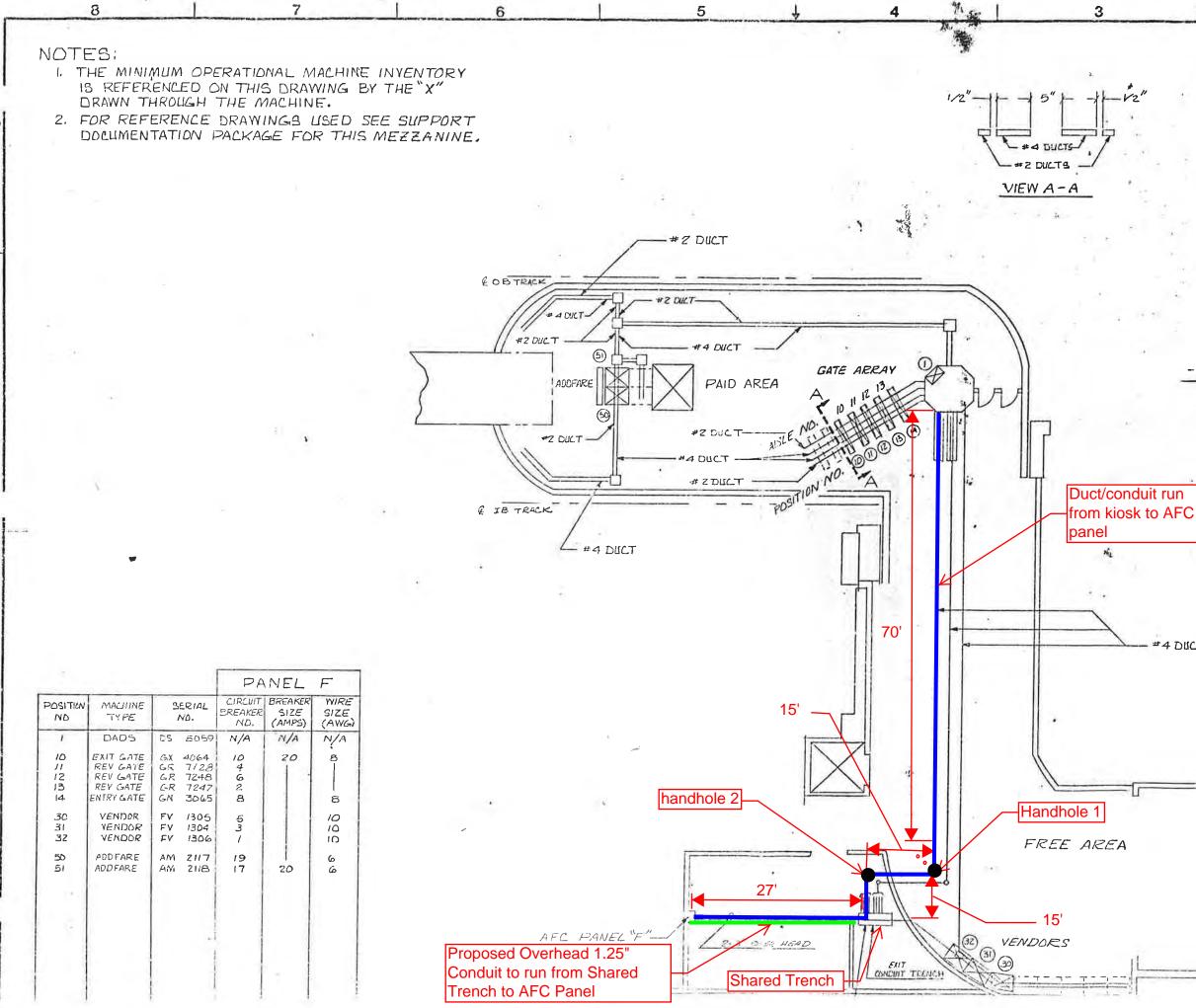


Photo #3 – A04 Woodley Park: Standing water in electrical trough









A

00 -1 INSTALLATION AS BUILT CONTRACT NUMBER B D DRAWING NUMBER 926-041 HEET / OF / MO Ceic #4 DUC7 NE \square យ៉ា D AS BUILT PARK Z DAT 1 CODE IDENT NO. 94987 REDRAWN. BY J. ETHERIDGE 5-7-82

	Mezzanin	e Inspe	ction Report	REVISION 1
Date: 11/13/2014	Station Name: A05 Cleveland	Park	Mezzanine #: 008	Completed By: Mike Butler
			Summary	
completed between ti open trench and AFC A proposed conduit rr vacant conduit and ju installed parallel to th a core drill through th #218 to avoid interfer through the wall in to	he Kiosk, Handhole 1, Handhol Panel due to energized wires. un has been identified between inction box on the wall of Room e existing conduits on the Sout e West wall into Room #218 is ence with the batteries, and the	e 2 and the o Existing duc the open tre #200 will be h wall in Roc proposed. T en run along	open trench. However, it v truns appear to be in add ench and the AFC Panel (e utilized as part of this run om #200. The conduit will he new conduit would the the South wall in Room #	o scoping and pull string installation was was not possible to install pull string between the equate condition and are not at capacity. see attached drawing and photos). The existing n. From the junction box a new conduit would be then wrap onto the West wall in Room #200, and en run along the middle of the ceiling in Room 218, parallel to the existing conduits. A core drill wall in Room #216 and connect to the AFC Panel.
		Scoping o	of Faregate Array(s)	
	Task	Yes/No		Notes
Communications Duo	ct – Upper Faregate Array (4 G	ates)		
Was video scoping co run?	ompleted for the entire duct	No	Camera malfunction and	d no scoping done on subsequent visit
Were pull strings inst array?	alled at all faregates in the	Yes		
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A		
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 10) wires.
Communications Duo	ct - Lower Faregate Array (4 G	ates)		
Was video scoping c run?	ompleted for the entire duct	No	Camera malfunction and	d no scoping done on subsequent visit
Were pull strings inst array?	alled at all faregates in the	Yes		
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A		
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 10) wires.
	aregate Array (4 Gates)	I		
Was video scoping c run?	ompleted for the entire duct	No	Camera malfunction and	d no scoping done on subsequent visit
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A		
Is the duct at capacity about the dimensions	? Provide additional details of ducts and number of wires.	No	6" duct with less than 12	2 wires.
Power Duct - Lower F	Faregate Array (4 Gates)	1		
Was video scoping c run?	ompleted for the entire duct	No	Camera malfunction and	d no scoping done on subsequent visit
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A		
	? Provide additional details of ducts and number of wires.	No	6" duct with less than 12	? wires.

	Scopin	g of Power	r Duct - K	iosk to AFC Panel
	Task	Yes/No	Τ	Notes
Kiosk to Handh	ole 1 (Distance: 60')	1	1	
Was video sco conduit run?	ping completed for the entire duct /	Yes	Refer to "	WMATA Cleveland Park Power Kiosk to HH1 Duct Video.avi" file.
Was pull string	installed?	Yes		
	obstructions or blockages? Provide and specific location.	No		
	nduit at capacity? Provide additional e dimensions of duct / conduit and s.	No		
Hanhole 1 to Ha	andhole 2 (Distance: 13')	-	-	
Was video sco conduit run?	ping completed for the entire duct /	Yes	Refer to "	WMATA Cleveland Park Power HH1 to HH2 Duct Video.avi" file.
Was pull string	installed?	Yes		
	obstructions or blockages? Provide and specific location.	No		
	nduit at capacity? Provide additional e dimensions of duct / conduit and s.	No		
Handhole 2 to C	Open Trench (Distance: 10')			
Was video sco conduit run?	ping completed for the entire duct /	Yes	Refer to " 200 Video	WMATA Cleveland Park Power HH2 to Trench in Room o.avi" file.
Was pull string	installed?	Yes		
	obstructions or blockages? Provide and specific location.	No		
Is the duct / cor details about the number of wires	No			
Open Trench to	AFC Panel (Distance: 60')			
Was video sco conduit run?	ping completed for the entire duct /	No	Could not wires	video scope or intall pull string in open trench due to live
Was pull string	installed?	No		
Were there any details of type a	N/A			
Is the duct / cor details about the number of wires	nduit at capacity? Provide additional e dimensions of duct / conduit and s.	N/A		
		Observation	ns / Issues	/ Next Steps
	ce of power run between Kiosk and A Panel (see photos and drawings for mo			ng 83' of existing duct and 55' of proposed conduit from open
			Sign Off	
	GFP Representa	tive	<u> </u>	WMATA PRGM
Name:	Mike Butler			
Signature:	Mizun			
Datas	04/00/45			

01/06/15

Date:

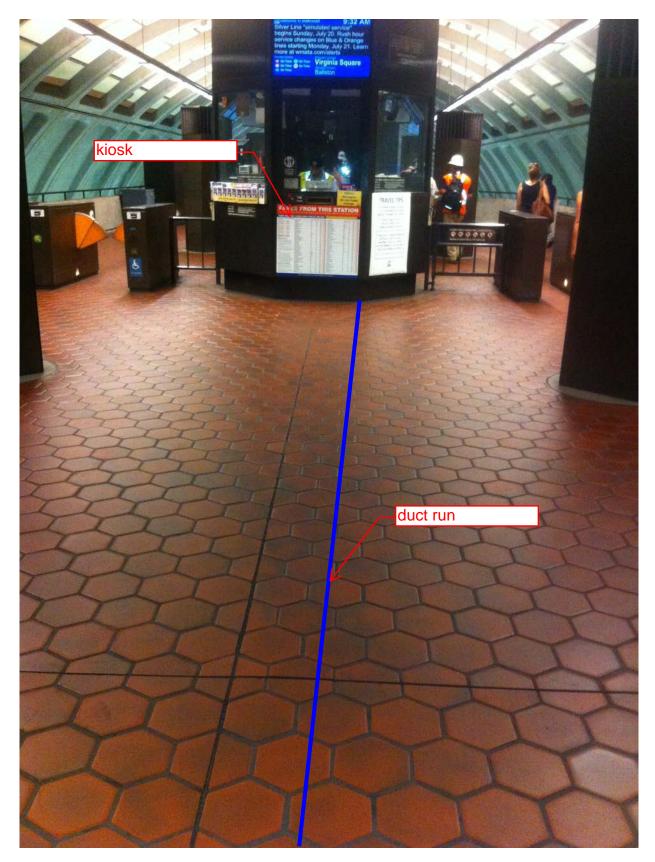






Photo #4 – A05 Cleveland Park: Conduit from junction box to open trench



Photo #5 – A05 Cleveland Park: Vacant junction box and conduit to open trench



Photo #6 – A05 Cleveland Park: Elevator Machine Room #200, proposed conduit run between open trench and Battery Room #218

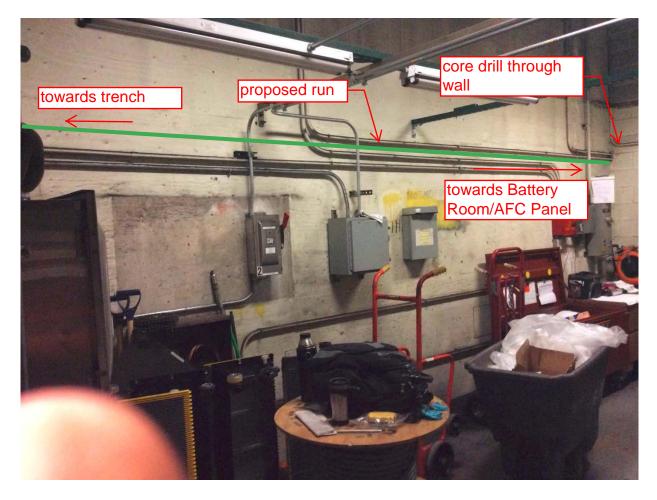


Photo #7 – A05 Cleveland Park: Battery Room #218, proposed conduit routed along right side wall at ceiling

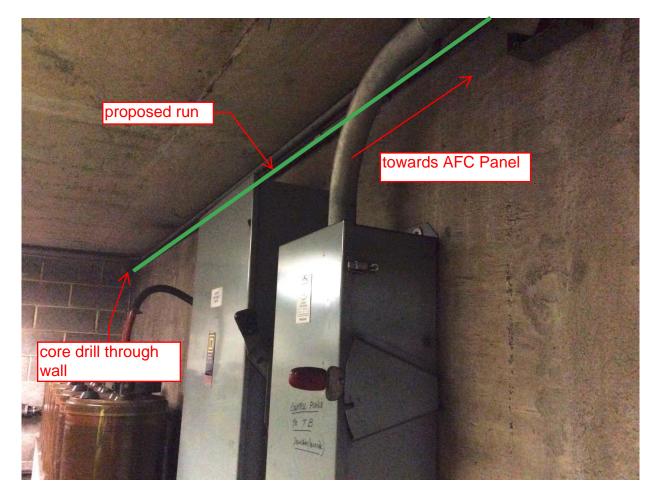
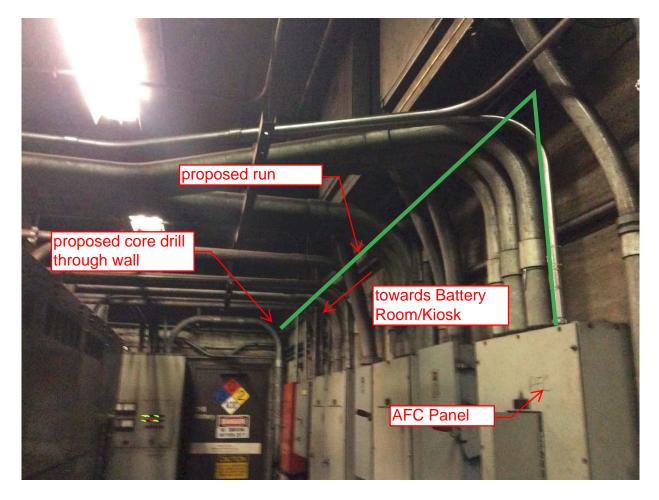
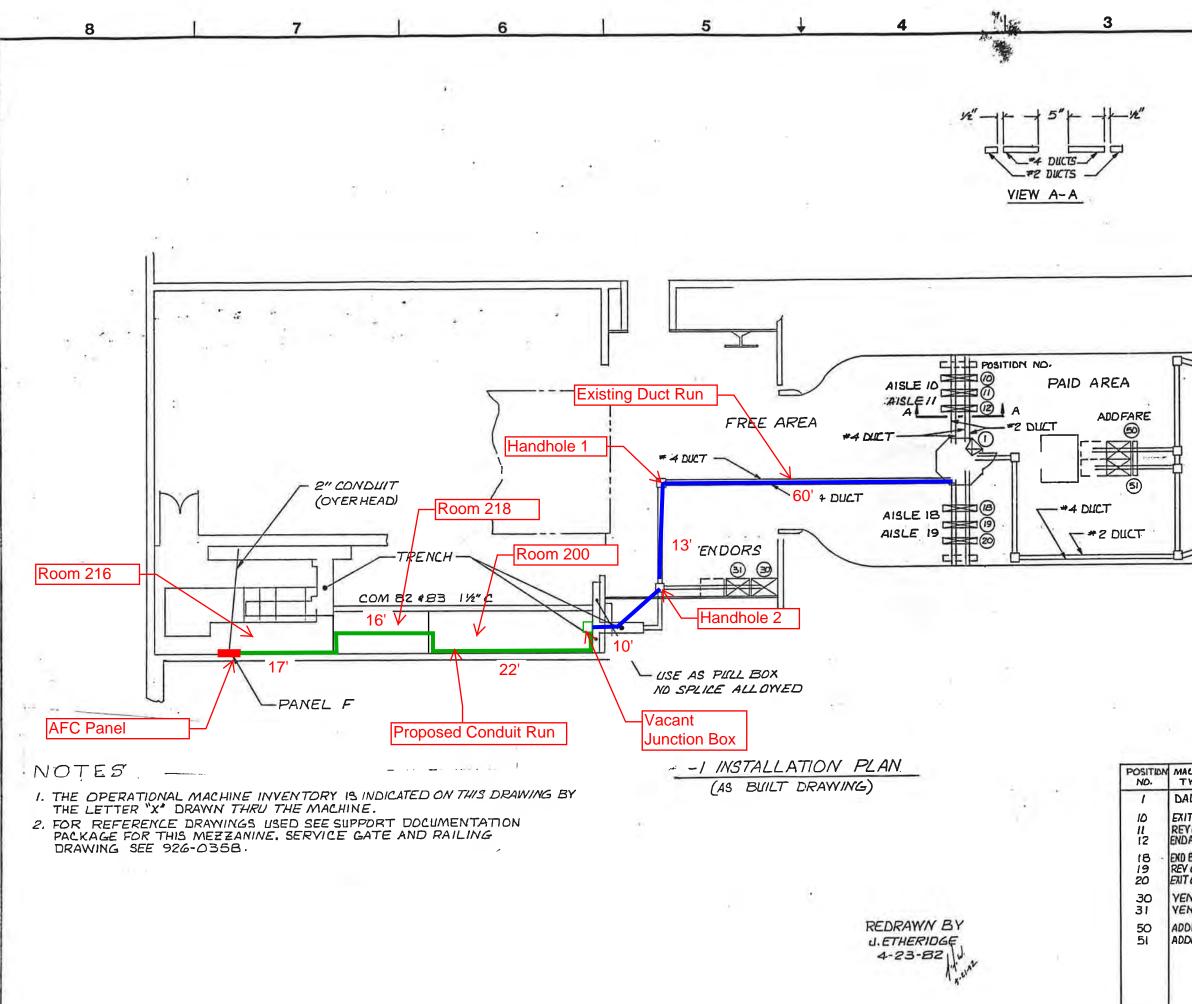


Photo # 8 – A05 Cleveland Park: Electrical Room #216, proposed conduit run along right side of wall between AFC Panel and Battery Room #218





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Mezzanine Inspection Report							
Date: 08/25/14 Station Name: A06 Van Ne	ss - UDC	Mezzanine #: 009	Completed By: Mike Butler				
		Summary					
Video scoping and pull string installation was comp between Kiosk – Handhole 1 – Handhole 2 – Tren however there was dirt and debris found at duct en It was not possible to complete pull string installati (Room # 206). There are hot wires in both trenche	ch 1 in Room tries – cleaning on in 2" condu	#200. There were no obsi g is recommended. iit between Trench 1 (Roo	tructions found and ducts are not at capacity, m # 200); Trench 2 and AFC panel F				
An overhead conduit run is proposed between Trer overhead through to Battery Room 218 and then co locations to allow the passage of of the proposed c Scanning is not required at this mezzanine.	ontinue through	h to AFC Panel in Room #	206. Core drilling of walls is required at two				
	Scoping	of Faregate Array(s)					
Task	Yes/No		Notes				
Communications Duct – Upper Faregate Array (4							
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Upp	er Gate Array Comm Duct.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	4" Duct with less than 1	0 wires				
Communications Duct - Lower Faregate Array (4	gates)	1					
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Low	er Gate Array Comm Duct.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	4" Duct with less than 1	0 wires				
Power Duct - Upper Faregate Array (4 gates)		1					
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Upp	er Gate Array Power Duct.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	4" Duct with less than 1:	2 wires				
Power Duct - Lower Faregate Array (4 gates)		1					
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Low	er Gate Array Power Duct.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	4" Duct with less than 1:	2 wires				

Scoping of Power Duct - Kiosk to AFC Panel							
Task	Yes/No		Notes				
Kiosk to Handhole 1 (Distance: 45')							
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "	WMATA Van Ness Power Handhole 1 to Kiosk Video.avi"				
Was pull string installed?	Yes						
Were there any obstructions or blockages? Provide details of type and specific location.	No	Some de	oris identified inside Handhole 1				
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	4" Duct w	ith less than 15 wires				
Hanhole 1 to Handhole 2 (Distance: 15')		1					
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "	WMATA Van Ness Power Handhole 1 to Handhole 2 Video.avi".				
Was pull string installed?	Yes						
Were there any obstructions or blockages? Provide details of type and specific location.	No	Some de	pris identified inside Handhole 2				
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	4" Duct w	ith less than 15 wires				
Handhole 2 to Trench inside Room #200 (Distance	e: 15')						
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Van Ness Power Handhole 2 to Trench Vide					
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	4" Duct with less than 15 wires					
French to AFC Panel (Distance: 60' existing, 95' p	roposed)						
Was video scoping completed for the entire duct / conduit run?	No	Video sco	ping not possible				
Was pull string installed?	No	Could not install pull string due to hot wires and standing water.					
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	Proposed conduit run to be utilized.					
	Observation	ns / Issues	/ Next Steps				
- Pull string installed between Kiosk, Handhole 1,	Handhole 2 a	and Trench	1 - total run: 75'.				
- Proposed conduit run is 95' between Trench 1 ar	nd AFC Pane	el.					
		Sign Off					
		Sign Off					
GFP Representa	ative		WMATA PRGM				

Mike Butler

11/14/14

Mizun

Name:

Signature: Date:

Photo #1 – Power duct run from Kiosk to Handhole 1 on mezzanine floor.

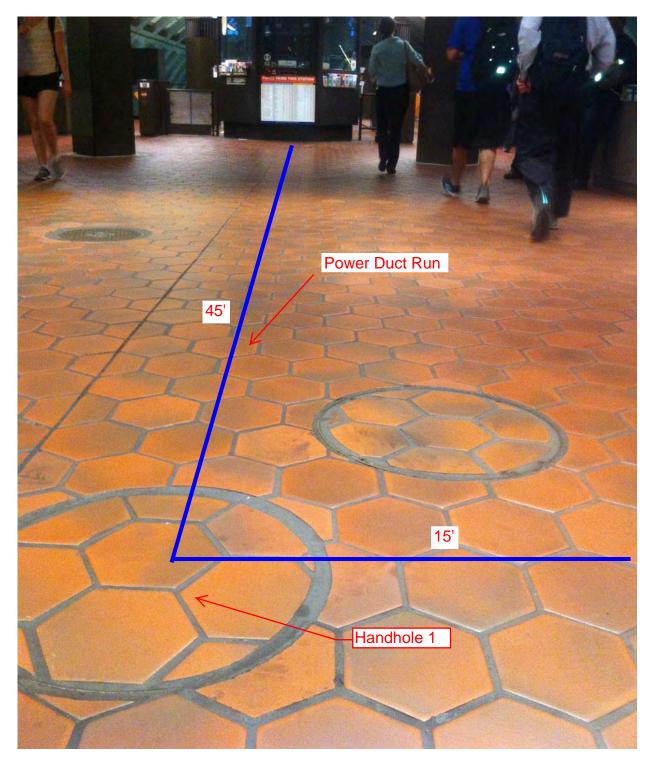


Photo #2 – Power duct run from Handhole 1 to Handhole 2 on mezzanine floor.

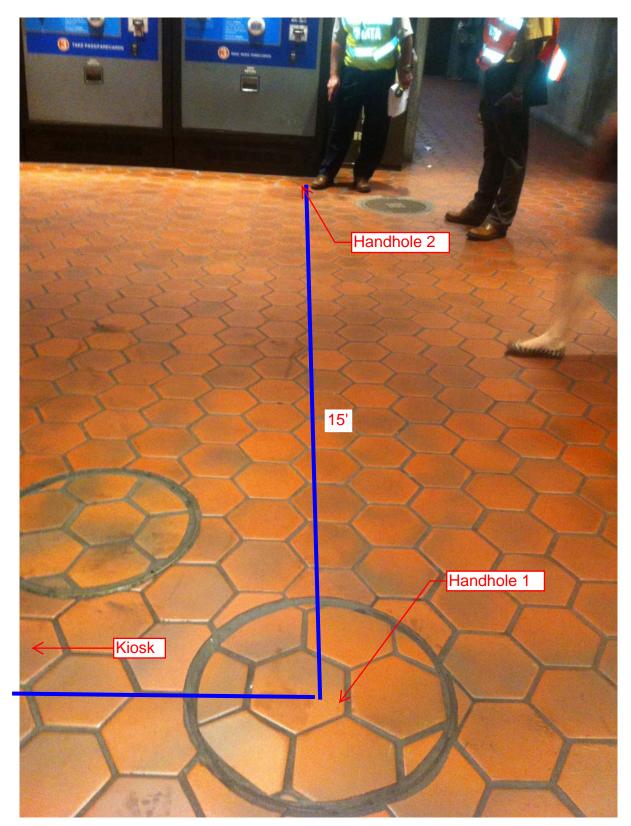


Photo #3 – Ducts from Handhole 2 entering Trench 1 in Room # 200



Photo #4 – Trench 1 in Room # 200 with overhead conduit transition, standing water evident.



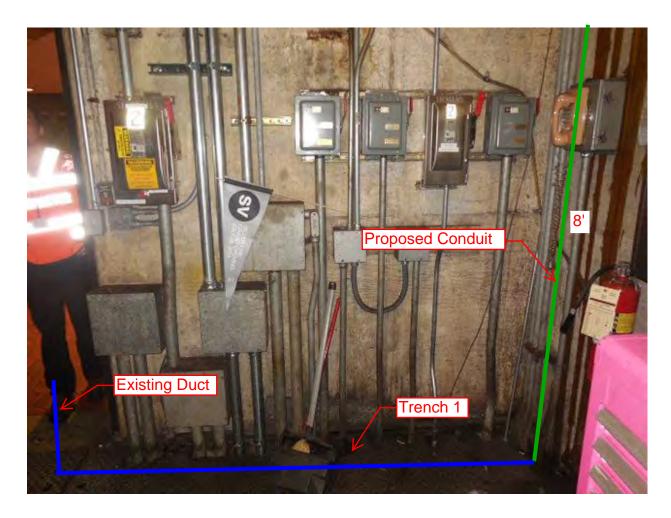


Photo #5 – Proposed Overhead Conduit from Trench 1 in Room # 200



Photo #6 – Proposed Overhead Conduit from Trench 1 in Room # 200



Photo #7 – Proposed Overhead Conduit in Room 200



Photo #8 – Proposed Overhead Conduit in Battery Room 218

Photo #9 – Proposed Overhead Conduit in Battery Room 218



Photo #10 – Proposed Overhead Conduit in Room 206

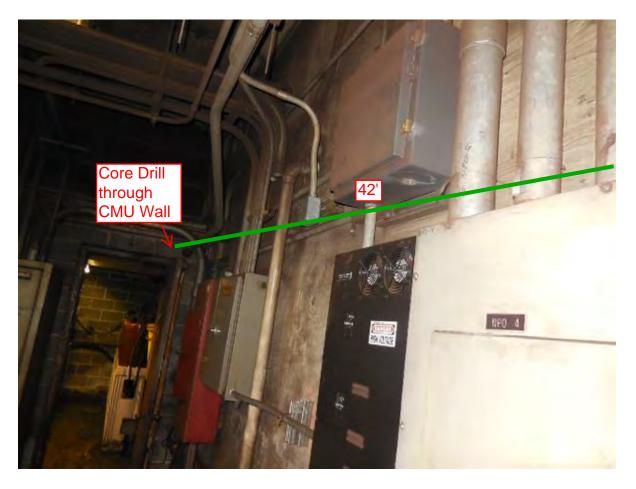
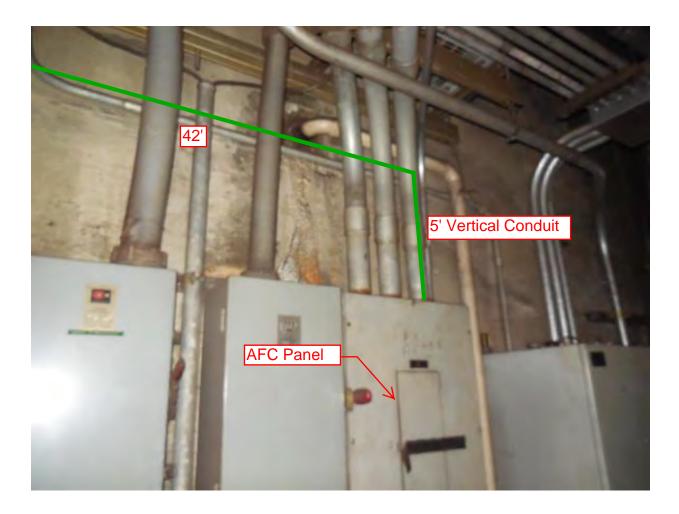
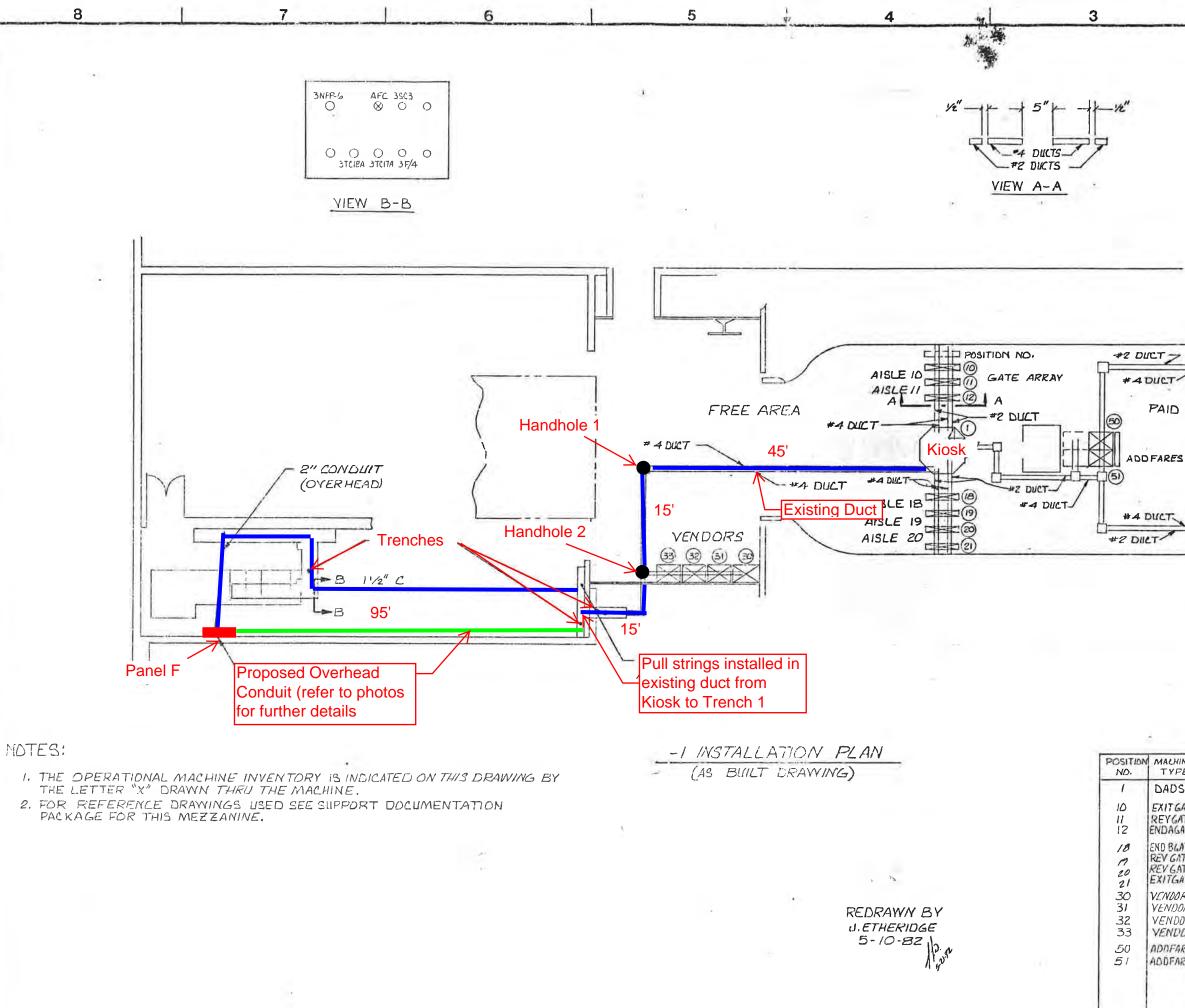


Photo #11 – Proposed Overhead Conduit feeding AFC Panel in Room 206

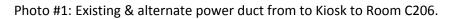




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	Mezzanine Inspection Report							
Date: 02/02/15	Station Name: A07 Tenleytow	n-AU	Mezzanine #: 010	Completed By: Mike Butler				
			Summary	·				
and pull string installat between Handhole 2 a	tion completed for power duct b and AFC Panel due to a collaps	etween Kios ed duct.	k, Handhole 1 and Handhol	e installed in communication duct. Video scoping le 2. However, it was not possible to complete works				
wires inside. Pull strin	g was installed in the alternate of	duct from Kic	osk to Room C206. A propo	through the ground and is exposed showing no sed junction box and conduit is proposed nnection between the Kiosk and AFC Panel.				
		Scoping of	of Faregate Array(s)					
-	Task	Yes/No		Notes				
Communications Duc	t –Faregate Array (8 gates)		1					
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Tenleytown Sta	tion Upper Comm Video (1).avi				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	Yes	Minor obstructions due to	o debris and stuffed rags.				
	? Provide additional details of ducts and number of wires.	No						
Power Duct - Faregate	e Array (8 gates)							
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Tenleytown Sta	tion Upper Power Video.avi				
Were there any obstruder details of type and spe	uctions or blockages? Provide ecific location.	Yes	Minor obstructions due to	debris and stuffed rags.				
	? Provide additional details of ducts and number of wires.	No						
	Scoping of	Existing F	Power Duct - Kiosk to	AFC Panel				
Kiosk to Handhole 1 ((3') to Handhole 2 (115')							
Was video scoping co conduit run?	ompleted for the entire duct /	Yes		town Station Power Kiosk to Handhole 1 wn power duct Handhole 1 to Handhole 2.avi"				
Was pull string install	ed?	Yes						
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No						
	capacity? Provide additional nsions of duct / conduit and	No	6" walker duct with less th	han 12 wires.				
Handhole 2 to AFC Pa	anel (25')	1						
Was video scoping co conduit run?	ompleted for the entire duct /	No	Refer to "WMATA Tenley Video.avi"	town Station Power Manhole to AFC Panel				
Was pull string install	ed?	No						
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	Yes	There is a collapse in the	duct, 9' from Handhole 2.				
	capacity? Provide additional ensions of duct / conduit and	No	6" walker duct with less th	han 12 wires.				

Scoping of Alternate Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes	
Kiosk to Handho	le 1A (Distance: 3')		•		
Was video scopi conduit run?	ng completed for the entire duct /	No			
Was pull string in	stalled?	Yes			
	bstructions or blockages? Provide d specific location.	No			
details about the number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	This is an	empty 6" duct (refer to attached drawing for route details).	
Handhole 1A to D	Ouct Stub-up in Room C206 (Dista	nce: 137')			
Was video scopi conduit run?	ng completed for the entire duct /	No			
Was pull string in	stalled?	Yes			
Were there any obstructions or blockages? Provide details of type and specific location.		No			
	uit at capacity? Provide additional dimensions of duct / conduit and	No	This is an empty 6" duct (refer to attached drawing for route details).		
		Observation	ns / Issues	/ Next Steps	
The total distance	e of alternate duct run is 140' and p	oposed con	duit is 30'.		
	drawings and photos for further de			ad proposed conduit rups	
			ing duoto di		
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	02/09/15				



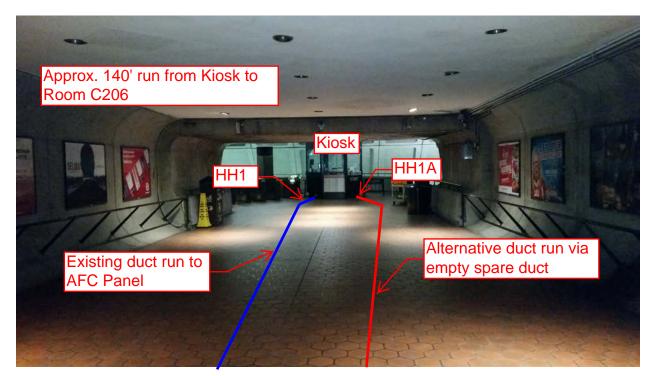


Photo #2: Existing & alternate power duct from to Kiosk to handholes.

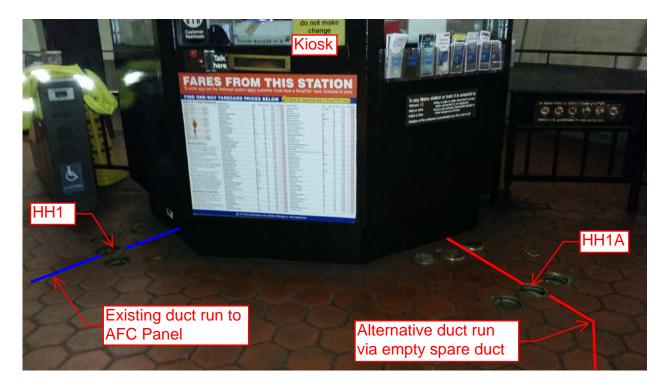


Photo #3: Existing power duct run – Handhole 2

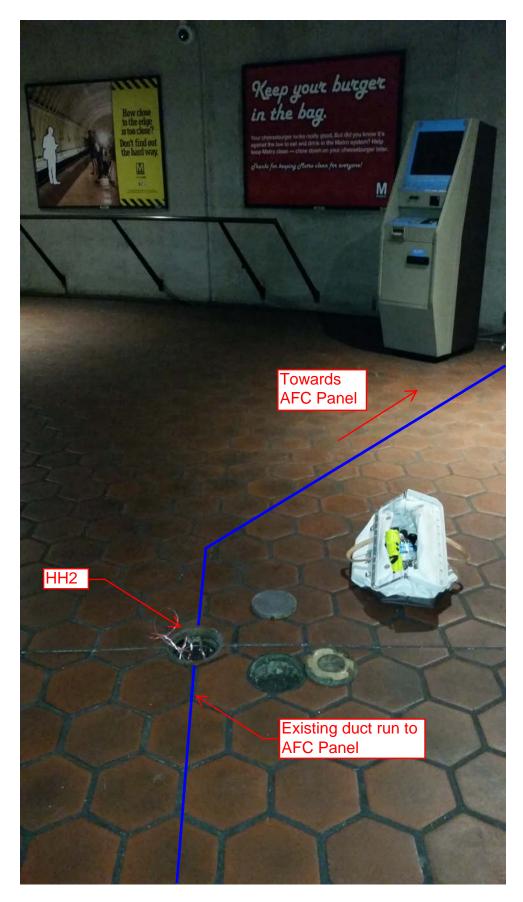
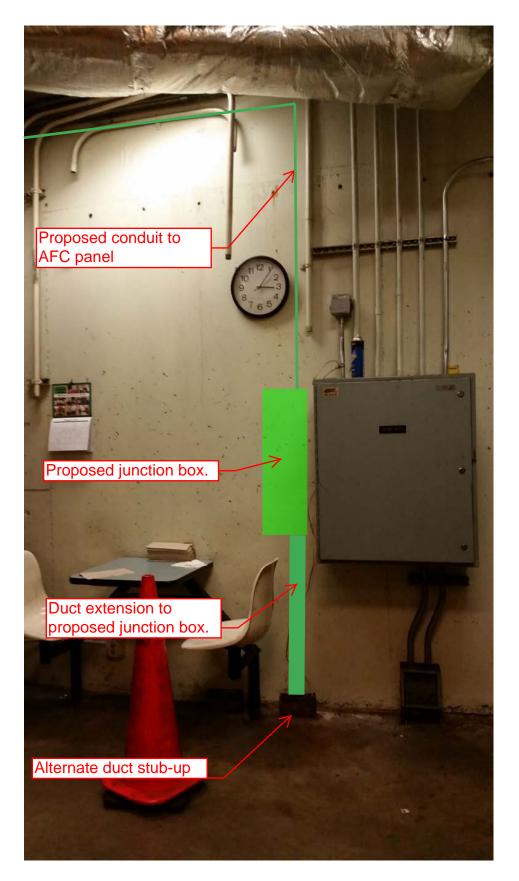


Photo #4: AFC Panel in room C206



Photo #5: Alternate duct with stub-up in room C206 with proposed junction box and conduit run to AFC panel



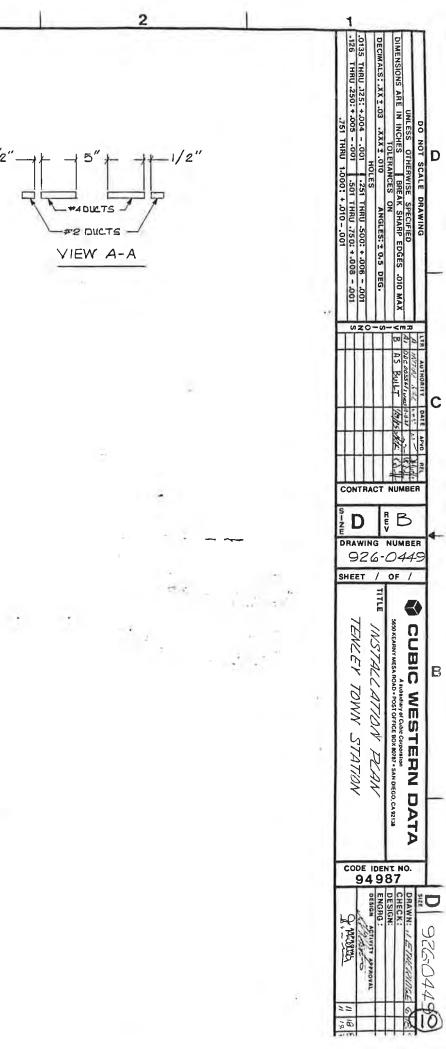
Proposed conduit to AFC panel AFC Panel

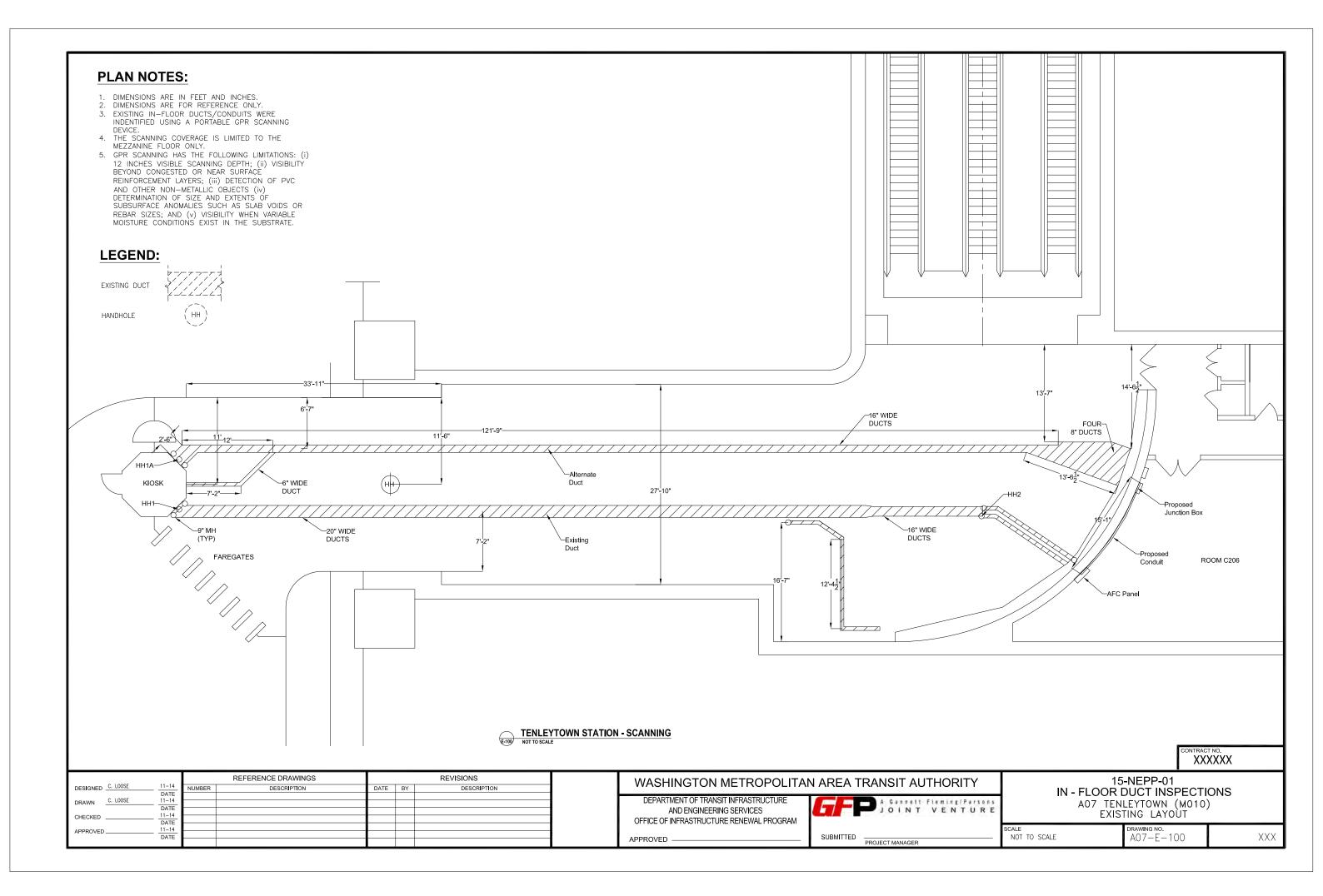
Photo #6: Proposed conduit run to AFC panel

	8	1	7	1	6		5	+	4	1	3
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	Mezzanine Inspection Report (Scoping)								
Date: 08/29/2014	Station Name: A08 Friendship	Heights (N)	Mezzanine #: 011	Completed By: Tino Sahoo					
	Summary								
ducts were video-scop scoped and are under capacity. Obstructions sweep to the cable tro	bed and are under capacity; pull r capacity. The power ducts from s were encountered on the power bugh connected to the AFC panel igh connected to the AFC panel.	strings were the kiosk to or duct run fre el could not b	e installed to all faregates. the AFC panel (via 2 me om the kiosk to the first m	is 100% complete. Both upper and lower comm array Both upper and lower power array ducts were video- zzanine handholes) were video-scoped and are under ezzanine handhole. The 90-degree walker duct e tight radius. Pull strings were installed from the					
		Scoping o	of Faregate Array(s)						
	Task	Yes/No		Notes					
Communications Duc	ct – Upper Faregate Array (5 G	ates)							
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to FRIENDSHIP I	HGTS-COM_UPPER ARRAY.avi file.					
Were pull strings insta array?	alled at all faregates in the	Yes							
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No							
	? Provide additional details of ducts and number of wires.	No							
Communications Duc	ct - Lower Faregate Array (5 G	ates)							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to FRIENDSHIP I	HGTS-COM_LOWER ARRAY.avi file.					
Were pull strings insta array?	alled at all faregates in the	Yes							
Were there any obstrudetails of type and specific	uctions or blockages? Provide ecific location.	No							
	? Provide additional details of ducts and number of wires.	No							
Power Duct - Upper F	aregate Array (5 Gates)								
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to FRIENDSHIP I	HGTS-PWR_UPPER ARRAY.avi file.					
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No							
	? Provide additional details of ducts and number of wires.	No							
Power Duct - Lower F	Faregate Array (5 Gates)								
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to FRIENDSHIP I	HGTS-PWR_LOWER ARRAY.avi file.					
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No							
	? Provide additional details of ducts and number of wires.	No							

Scoping of Power Duct - Kiosk to AFC Panel					
Task	Yes/No	Notes			
Kiosk to Handhole 1					
Was video scoping completed for the entire duct / conduit run?	No	Duct was video-scoped successfully to kiosk on reverse run from handhole to kiosk. Refer to FRIENDSHIP HGTS-PWR_KIOSK - MANHOLE.avi file and to FRIENDSHIP HGTS-PWR_MANHOLE - KIOSK.avi files.			
Was pull string installed?	Yes				
Were there any obstructions or blockages? Provide details of type and specific location.	No	Scope hit obstruction at 18' in walker duct from kiosk.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No				
Handhole 1 to Handhole 2		-			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to FRIENDSHIP HGTS-PWR_MANHOLE – MANHOLE (MID).avi file.			
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				
Handhole 2 to AFC Panel					
Was video scoping completed for the entire duct / conduit run?	No	Video-scope could not negotiate 90-degree sweep in walker duct. Refer to FRIENDSHIP HGTS-PWR_MANHOLE TO 90.avi file.			
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				
	-				
	Oha ť	a / January / Marie Champ			
	Observation	ns / Issues / Next Steps			
Total duct run from Kiosk to AFC Panel is 120 feet.					
		Sign Off			
GFP Representa	ntive	WMATA PRGM			
Name: Tino Sahoo					
Signature: Tanmaya Schoo					
Date: 08/29/2014					



Photo #1: A08 Friendship Heights – Lock-out tag-out of AFC Panel main breaker

Photo #2: A08 Friendship Heights – AFC Panel MNCC Schedule

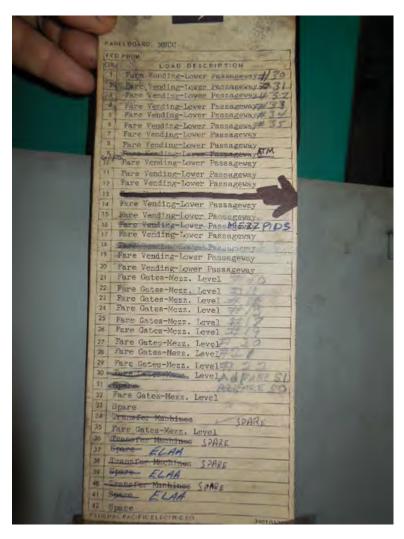




Photo #3: A08 Friendship Heights – Pull string installed in faregate array duct

Photo #4: A08 Friendship Heights – Installing pull string between kiosk and AFC panel

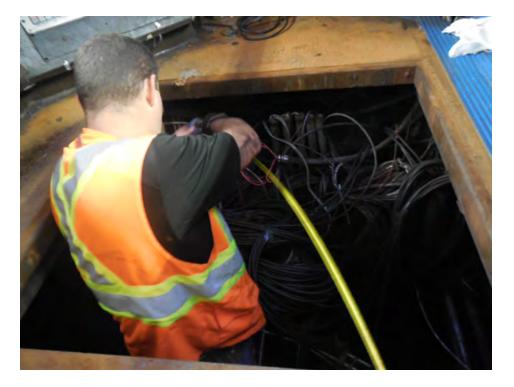


Photo #5: A08 Friendship Heights – Installing pull string in handholes between kiosk and AFC panel

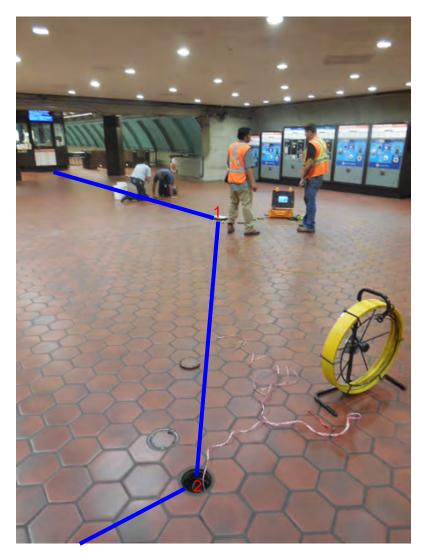


Photo #6: A08 Friendship Heights – Video-scoping the power ducts between kiosk and AFC panel

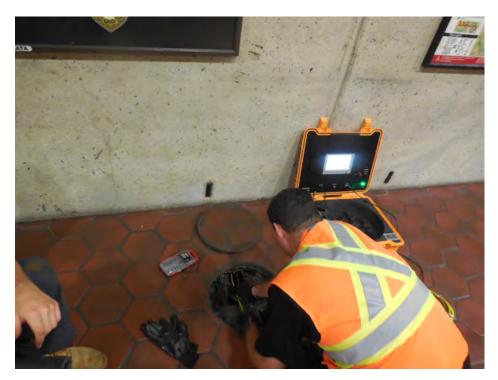
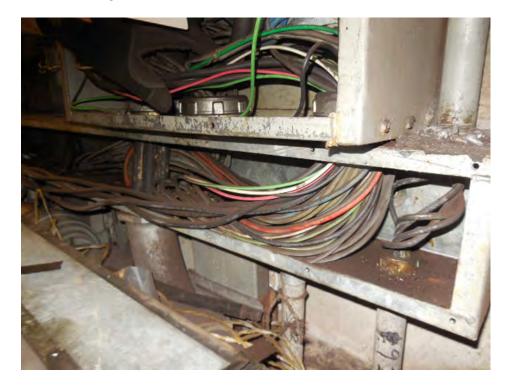
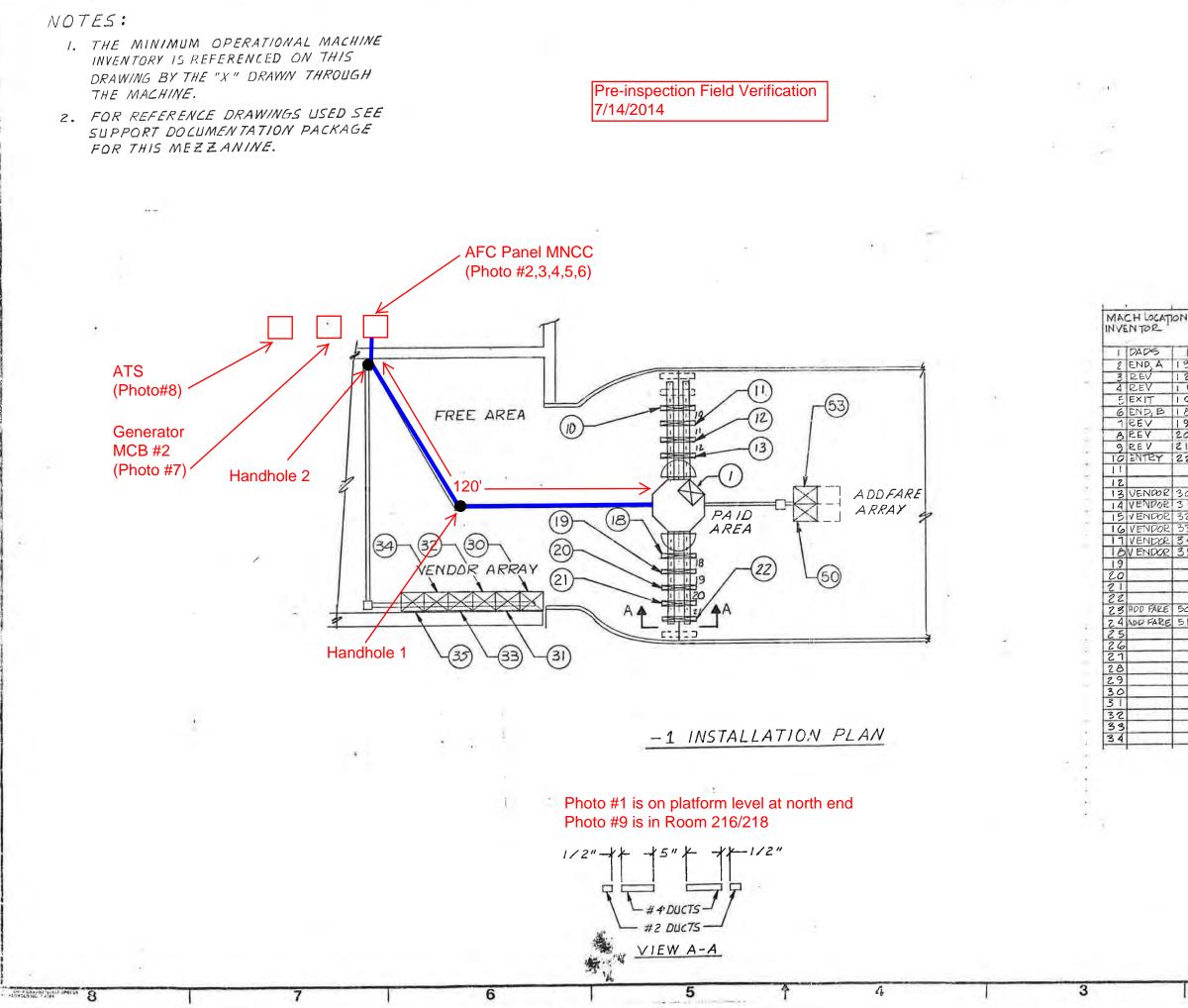


Photo #7: A08 Friendship Heights – Cable trough below AFC Panel. Power ducts from kiosk feed into bottom of trough





			DO NOT SCALE DRAWING UNLESS OTHERNISE SPECIFIED DIMENSIONS ARE IN INCHES BREAK SHARP EDGES .010 MAX TOLERANGES ON DECIMALS: .XX 1.03 .XX 1.010 ANGLES: 1.0.5 DEG. HOLES .013 THEU .1251 +.004001 .251 THRU .500: +.005001 .751 THRU .501 THRU .500: +.005001	D
TON CWD C/B SERIAL NO'S NO'S 1 053505 EMER. 13 GA5502 24 12 GR7511 23 1 0 GR4503 21 10 GR4503 21 10 GR4503 21 10 GR4503 25 19 GR1509 26 20 SR1518 27 21 427501 28	G 20 AMPS *12		CONTRACT NUMBER	с
22 QN 3505 29 30 FVIII8 [31 FVI323 2 32 FV1268 3 35 FV1163 4 34 FVI340 5 35 FV1164 6			DRAWING NUMBER 926-0446 SHEET 1 OF / FX /F	4-
50 AM2135 31 51 AM2130 30	20 AMPS & 6 20 AMPS & 6	5	CUBIC WESTERN DATA A NUBHORY OF CLOBE CONSIST SOON KEARNY MEAN PROVINCES IN FOR CANSIST ITLE INSTALLATION PLAN - FR IENDSHIP HEIGHTS STATION - NORTH	В
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ł	2		CODE IDENT. NO. 94987 DRAWN: DESIGN APPROVAL	DOOR ONNE

	Mezzanine Inspection Report REVISION 1								
Date: 02/06/15	Station Name: A08 Friendship	o Heights Sou	uth Mezzanine #: 104	Completed By: Mike Butler					
	Summary								
array also video scope	Video scoping and pull string installation completed for communication duct in upper faregate array; respective power duct in upper faregate array also video scoped. Faregate ducts in good condition and not at capacity.								
obstructions. Howeve found between the ov	Video scoping and pull sting installation could not be completed in existing 2" conduit between Kiosk and AFC Panel due to multiple obstructions. However, pull string was installed in 2" conduit between AFC Panel and overhead trough. An empty 1" conduit was also found between the overhead trough and northern end wall of platform ceiling plenum.								
New conduit is proposed between Kiosk and the northern end wall. The full run between the Kiosk and AFC Panel will utilize the existing empty 1" conduit passing through the northern end wall and 2" conduit between overhead trough and AFC Panel (pull string installed). The proposed conduit will run vertically down from the Kiosk to proposed Junction Box 1 and then along the platform ceiling plenum until it reaches the northern end wall. The conduit transition to a proposed liquidite conduit (in order to get past ceiling obstructions) before feeding into proposed Junction Box 2. The existing empty 1" conduit feeds from Junction Box 2 through the northern end wall and into the electrical room. Once inside the electrical room, additional liquiditie conduit is proposed from 1" empty conduit to overhead trough above the AFC Panel.									
Refer to photos and d	rawings for more information.	Sconing	of Faregate Array(s)						
	Task			Notes					
	ct – Upper Faregate Array (5 g	Yes/No ates)							
	ompleted for the entire duct	Yes	Refer to "WMATA Friendship	Heights South Upper Comm Video (2).avi"					
Were pull strings insta array?	alled at all faregates in the	Yes							
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No							
	? Provide additional details of ducts and number of wires.	No	4" walker duct with less than a	10 wires.					
Power Duct - Upper F	aregate Array (5 gates)								
	ompleted for the entire duct	Yes	Refer to "WMATA Friendship	Heights South Upper Power Video.avi"					
Were there any obstrudet and specified of the second s	uctions or blockages? Provide ecific location.	No							
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less than	12 wires.					

Scoping of Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes	
Kiosk to AFC Par	nel (Distance Unknown)	-	-		
Was video scopii conduit run?	ng completed for the entire duct /	No	Refer to " Video.avi space Vi	WMATA Friendship Heights Left 2inch conduit to open space and "WMATA Friendship Heights Middle 2inch conduit to open deo.avi"	
Was pull string in	stalled?	No			
Were there any of details of type and	bstructions or blockages? Provide d specific location.	Yes			
Is the duct / conducted details about the only number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	2" condui	with less than 10 wires.	
			1		
		Observation		/ Novt Stons	
Observations / Issues / Next Steps The proposed conduit run is 95' from Kiosk to AFC Panel, including 50' of new conduit in ceiling plenum, 10' of new liquidtite conduit, 5' of existing 1" conduit through the wall and 30' of existing 2" conduit in Room 201 (please refer to attached photos). The AFC Panel is located on the mezzanine level in Room 201, but access is wayside from the platform level.					
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	02/17/15				

Photo #1: Proposed conduit in ceiling plenum at platform level beneath Kiosk

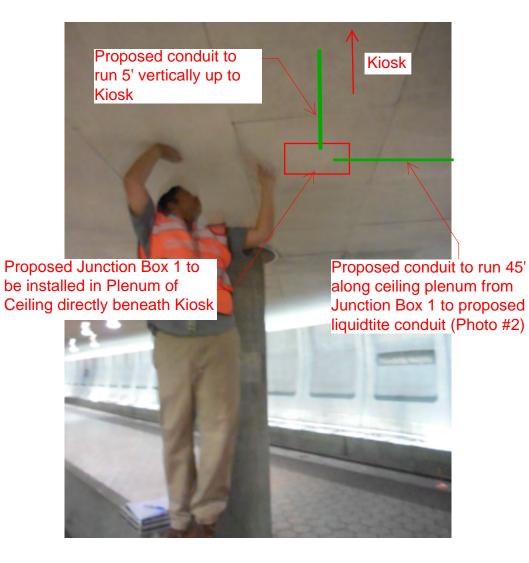
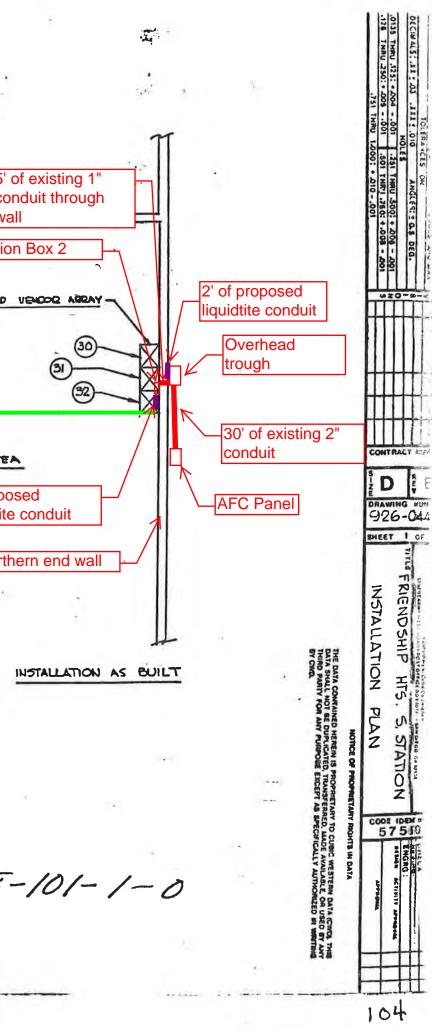


Photo #2: Proposed conduit in ceiling plenum at platform level beneath Kiosk



	5' c cor
ADDFARE ARRAY	Junction
Proposed conduit runs vertically down 5' from Kiosk to platform ceiling.	Proposed conduit in ceiling plenum
STAIRWELL JUNCTION BOX 1	45' 15 14 FEEL AREA 13 12 8' propos liquidtite
PAID AREA	Inorthe
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY	ZZANINE PLAN
APPROVED AS CORRECTED (RESUBMITTAL NOT REQUIRED) Approval Does Not Relieve the Contractor of the Responsibility for the Accuracy of this Document or for Full Compliance with the Contract Requirements.	CP.26007E-
BY: For Contracting Officer	

		1	PANEL		MSAA	
MACHINE	SERIAL	10		WIRE SIZE		
AFEE DISPENSER		11	FGIO	122	4	
X FET DISPENSER		12	F6 11	T		3 . Q
ECADS	D5 804C	3	F6 12	T		
EXIT GATE	GX 4531	14	F6 13	T		
REV. GATE	GR 7524	5	F6 14	T		1.5
1	GR 7520	16	F6 15	T	1	12000
	62 1525	7	F6 16	T		10000
1	6R 7554	8	SPARE			1
	GR 7551	19	VF 30		1900-	1
ENTRY GATE		10	VF 31	31	YPER B	
HARECARD VEND	FV 1310	11	VF 32			1.
	FV 1086					
1	FV 1503					· · · · · · · · · · · · · · · · · · ·
ADDFARE	AM 2700	14	AM 51			1
ADDFARE	AM 2701	15	FER A			
		116	AM 50			120-2
1		17	SPARE			1.55
		18	SPARE	-		
		21		42		
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Mez	REVISION 1					
Date: 01/08/2015 Station Name: A11 Grosvence	or	Mezzanine #: 014	Completed By: Tino	Sahoo		
		Summary				
Video scoping for communications and power ducts in upper and lower faregate arrays was completed. Pull string was installed in communications duct for upper and lower faregate arrays. Video scoping of the power duct from the kiosk to the AFC panel was attempted in both 6" walker duct runs. Power duct run 1 was at 90% capacity and could not be scoped. Power duct run 2 could not be scoped from the kiosk to the handhole due to welded metal plate obstruction under the kiosk. Power duct run 2 was scoped from the first handhole towards the AFC panel but could not be completed due to the duct being collapsed at the expansion joint near the electrical rooms. Scanning was completed at this station. Due to the amount of existing ducts and conduit runs in the mezzanine level floor, a new in-floor duct run is not feasible. A proposed overhead conduit run has been identified. The proposed conduit will run vertically up from the kiosk, along the ceiling of the mezzanine and core into backroom (Room 207). A new junction box is proposed at core drill location. Once inside the Room 207, the conduit will snake around the internal wall and then run vertically down to the floor. The proposed conduit will continue overhead from proposed junction box to the AFC panel in Room 107. Refer to photos and drawings for further information.						
	Scoping	of Faregate Array(s)				
Task	Yes/No		Notes			
Communications Duct – Upper Faregate Array (3 0	Sates)					
Was video scoping completed for the entire duct run?	No			omm Duct Video.avi file. Video 3 due to existing wires blocking		
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 10 wire	2S			
Communications Duct - Lower Faregate Array (3 G	ates)	T				
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Grosve	enor Station Lower Co	omm Duct 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 10 wire	S			
Power Duct - Upper Faregate Array (3 Gates)	1					
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Grosve	enor 6inch Upper Pov	ver 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 less than 10 wire	9S			
Power Duct - Lower Faregate Array (3 Gates)	1					
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Grosve Grosvenor 3inch Lower		ver Video.avi and WMATA		
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" and 3" ducts less thar	n 10 wires			

Scoping of Power Duct - Kiosk to AFC Panel						
Task		Yes/No		Notes		
Kiosk to Handho	le 1 (15' run)		1			
Was video scopi conduit run?	ng completed for the entire duct /	No				
Was pull string in	nstalled?	No				
	bstructions or blockages? Provide d specific location.	Yes		etal plate obstruction under kiosk at the entrance of the duct and duct was at capacity		
Is the duct / cond details about the number of wires.	Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		6" duct les	s than 15 wires		
Handhole 1 to Ex	pansion Joint (80' run)					
Was video scopi conduit run?	ng completed for the entire duct /	No				
Was pull string ir	nstalled?	No				
	bstructions or blockages? Provide d specific location.	Yes	Duct was	collapsed approximately 90' into the run at the expansion joint.		
Is the duct / cond details about the number of wires.	Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		6" duct les	s than 15 wires		
		E	1			
Observations / Issues / Next Steps						
Total distance of	proposed conduit run is 142' from k					
	-		Sign Off			
	GFP Representative			WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizun					
Date:	4/20/2015					

Photo #1 – Existing duct and proposed overhead conduit on mezzanine floor



Photo #2 – Existing duct and proposed overhead conduit on mezzanine floor

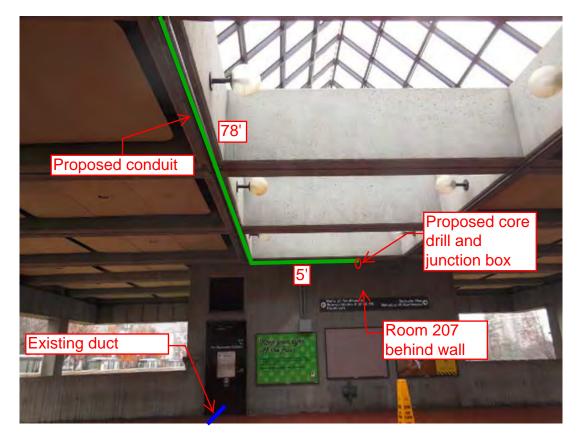


Photo #3 – Existing and proposed conduits to AFC Panel in AC Switchboard Room 107

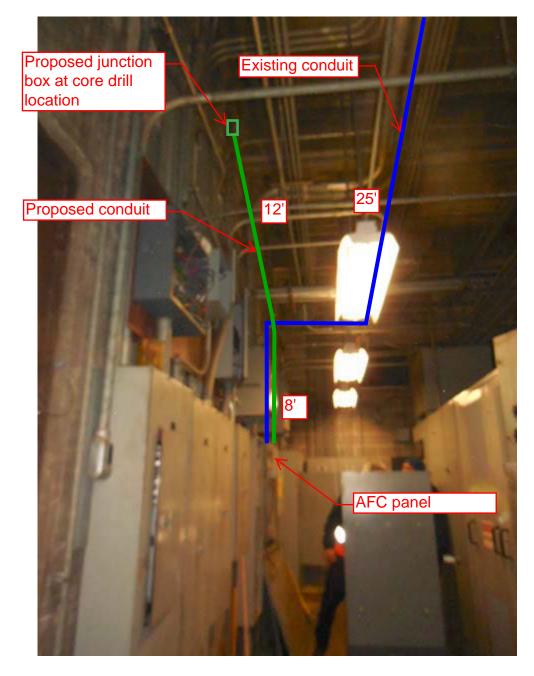


Photo #4 – Existing and proposed conduits to AFC Panel in AC Switchboard Room 107



NOTES:

I. 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.

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UNDER FLOOR DUCT - CONTROL 3> 3 V8" X 114" A UNDER FLOOR DUCT - POWER 642" X 142"

10.4

I DADS / EMERG

2 ENDA 13 25

3 REV 12 21

4 REV 11 17

5 EXIT 10 19

6 END B 18 29 7 PEV. 19 21 8 PEV 20 28 9 ENTRY 21 23

11 VENDOR 30 1

12 VENDOR 31 3

13 VENDOR 32 11

A VENDOR 33 5

9

1

15 VENDOR 34

16 VENDOR 35

10

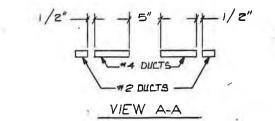
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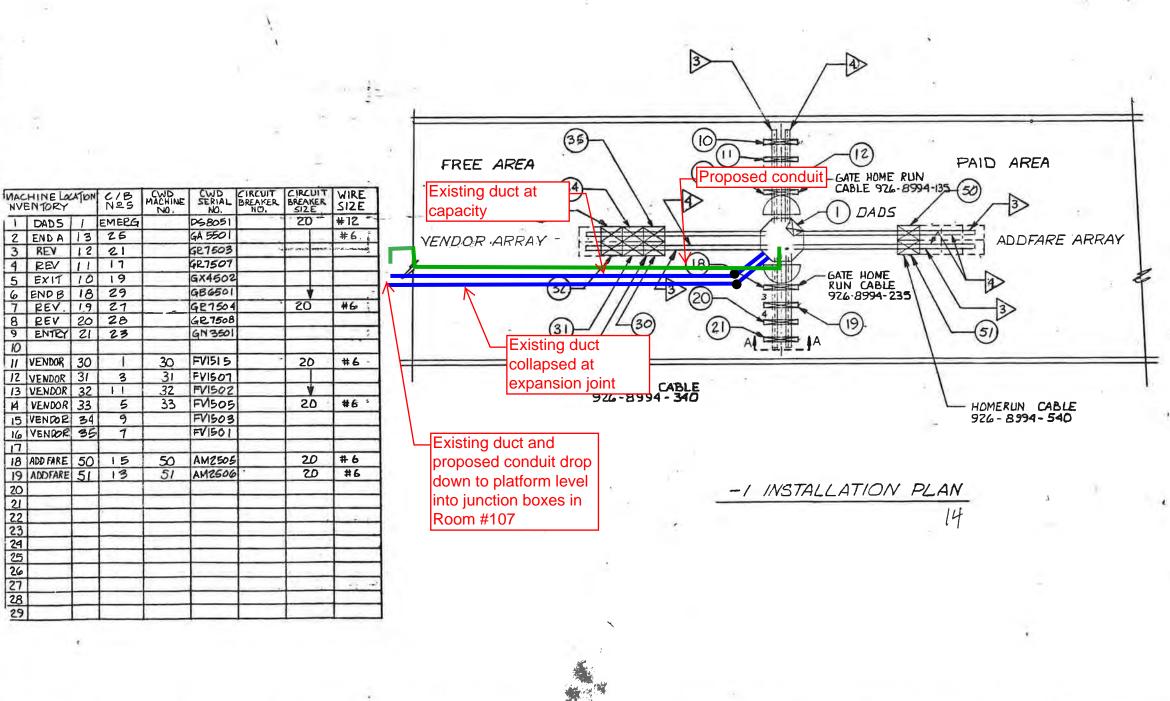
BEGADER NO. A ADM



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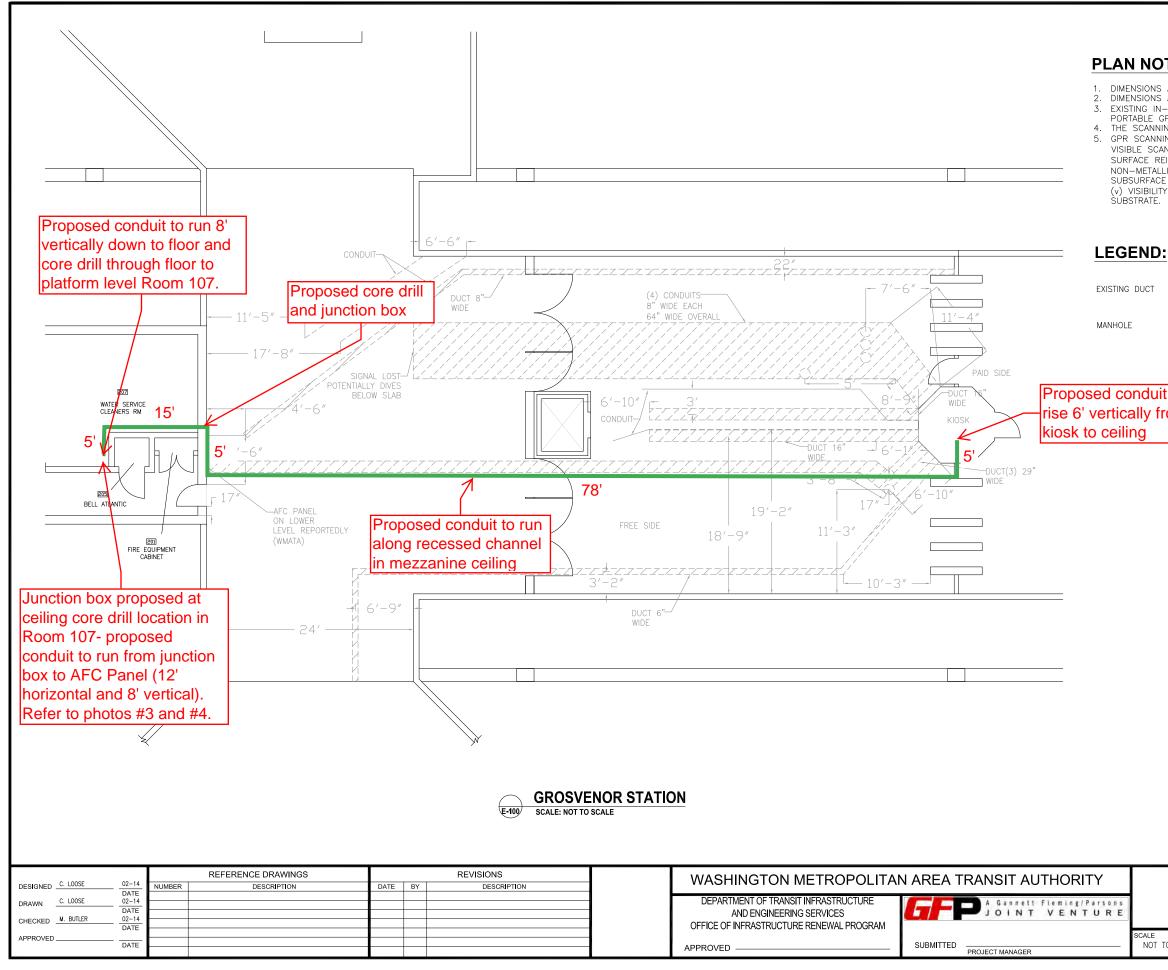
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CONTRACT NUMBER		Y	DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES I BIREAK SHARP EI TOLERANGES ON DECIMALS: XX ± .03 .XX ± .010 ANGLES: 4 HOLES ANGLES: 4.005001 .251 THRU .500: .126 THRU .250: +.005001 .501 THRU .500; .751 THRU 1.000: +.010001
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PLAN NOTES:

DIMENSIONS ARE IN FEET AND INCHES. DIMENSIONS ARE FOR REFERENCE ONLY.

EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.

THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY. 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.

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		t no. XXXX			
15-NEPP-01 IN - FLOOR DUCT INSPECTIONS A11 GROSVENOR PROPOSED CONDUIT PATH					
scale NOT TO SCALE	drawing no. A11-E-100	XXX			

Mezzanine Inspection Report (Scoping)						
Date: 09/10/2014	Station Name: A12 White Flin	t	Mezzanine #: 015	Completed By: Tino Sahoo		
			Summary			
Scoping was completed at station where possible (see details below). Pull string was installed in the faregate communication ducts and the power duct between the Kiosk and AFC Panel. An emergency power feed precluded scoping of the upper faregate array power duct.						
Scoping of Faregate Array(s)						
	Task	Yes/No		Notes		
Communications Due	ct – Upper Faregate Array (4 G	iates)				
Was video scoping co run?	ompleted for the entire duct	No	Refer to WMATA White	Flint Upper Fairgate Comm Video.avi file.		
Were pull strings inst array?	alled at all faregates in the	Yes				
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	No	Scoping completed only	8 feet from kiosk due to insert and cables.		
	Provide additional details of ducts and number of wires.	No	8 wires in duct.			
Communications Due	ct - Lower Faregate Array (3 G	ates)				
Was video scoping c run?	completed for the entire duct	Yes	Refer to WMATA White	Flint Lower Fairgate Comm Video.avi file.		
Were pull strings inst array?	alled at all faregates in the	Yes				
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No				
Power Duct - Upper F	Faregate Array (4 Gates)					
Was video scoping c run?	completed for the entire duct	No	Refer to WMATA White	Flint Upper Fairgate Power Video.avi file.		
Were there any obstrudet details of type and sp	uctions or blockages? Provide ecific location.	No	Left duct: Energized wire Right duct: Scope hit ins	e due to emergency feed. sert after 4 feet.		
	?? Provide additional details of ducts and number of wires.	No	Left duct: 7 wires Right duct: 8 wires			
Power Duct - Lower Faregate Array (3 Gates)						
Was video scoping c run?	completed for the entire duct	No	Refer to WMATA White	Flint Lower Fairgate Power Video.avi file.		
Were there any obstruction details of type and sp	uctions or blockages? Provide ecific location.	No	Scope hit insert after 6 feet.			
	? Provide additional details of ducts and number of wires.	No				

Scopir	ng of Power	r Duct - Kiosk to AFC Panel
Task	Yes/No	Notes
Kiosk to AFC Panel (75 foot section)	_	
Was video scoping completed for the entire duct / conduit run?	No	Refer to WMATA White Flint Power Kiosk to AFC Panel Video.avi file.
Was pull string installed?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	Video scoping completed 23 feet. Scope hit 45 degree bend in walker duct run. Minimal debris
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	
Handhole 1 to Handhole 2 / AFC Panel (N/A)		
Was video scoping completed for the entire duct / conduit run?	N/A	
Was pull string installed?	N/A	
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	
Handhole 2 to Handhole 3 / AFC Panel (N/A)		
Was video scoping completed for the entire duct / conduit run?	N/A	
Was pull string installed?	N/A	
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	
	Observation	ns / Issues / Next Steps
Emergency feed from Panel KE runs through the le	ft power duct	(upper array) which causes faregate #18 to remain energized.
		Sign Off
GFP Represent	ative	WMATA PRGM
Name: Tino Sahoo		
Signature: Tanmaya Jahoo		
Date: 09/10/2014		
		I



Photo #1: A12 White Flint – Lock-out tag-out of AFC Panel source breaker

Photo #2: A12 White Flint – Pull string installation in faregate array duct

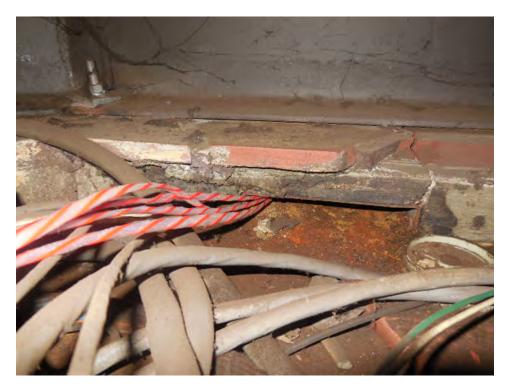


Photo #3: A12 White Flint – Power duct under kiosk floor under capacity





Photo #4: A12 White Flint – Pull string installation in faregate



Photo #5: A12 White Flint – Video-scoping faregate array ducts

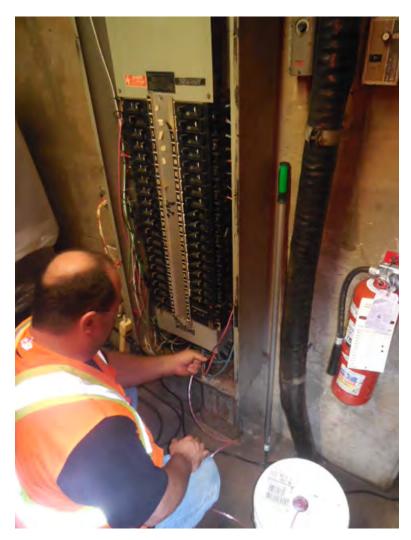
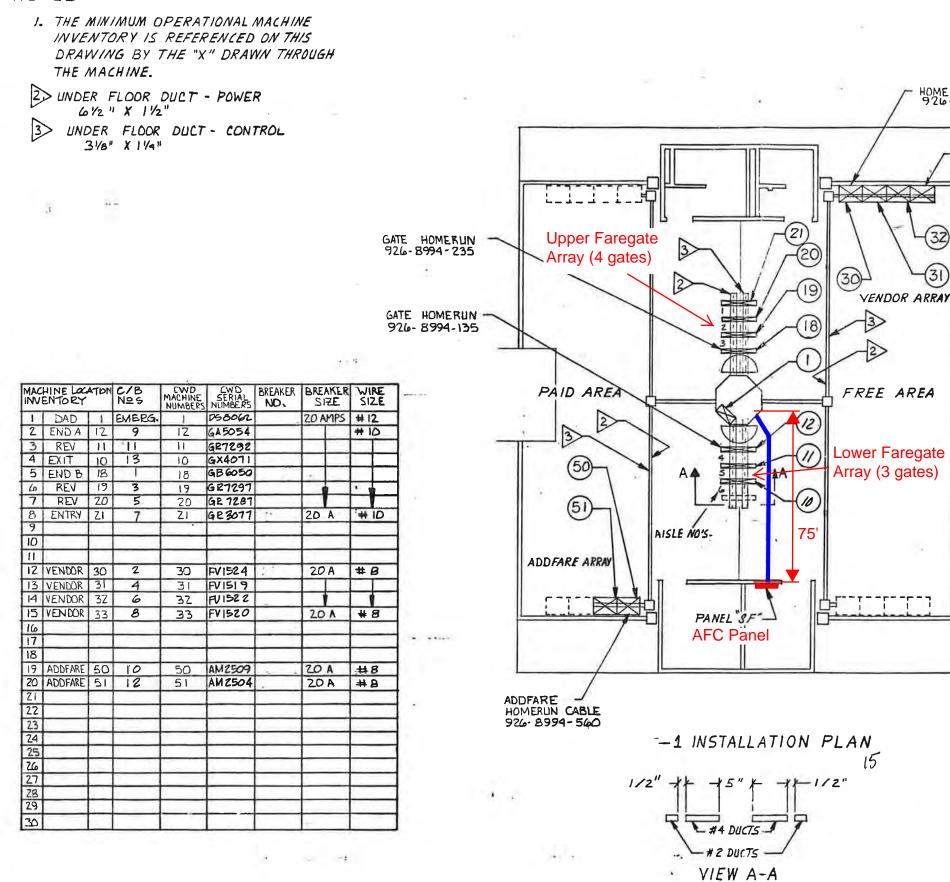


Photo #6: A12 White Flint – Pull string installation in AFC panel from kiosk



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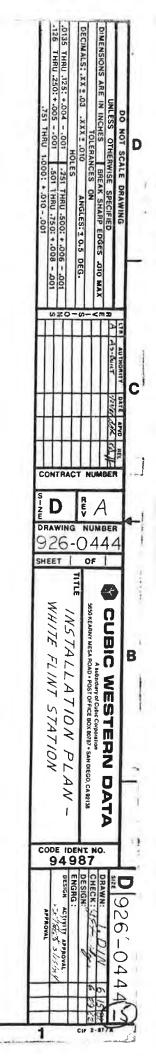
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HOME RUN CABLE

(33)

(3Z)

(31)



	Mezzanine Inspection Report (Scoping) REVISION 1						
Date: 08/07/2014	Station Name: A13 - Twinbrook Mezzanine #: 016 Completed By: Tino Sahoo						
			Summary				
Pull string installation was completed for communication ducts in upper / lower faregate arrays. Video scoping was completed for lower comm. duct, however there was an obstruction in the upper comm. duct that prevented the passage of video scope. Video scoping was completed for the power ducts in the upper / lower faregate arrays. Pull string installation was completed in power duct between Kiosk, Handhole and AFC Panel. However, video scoping could not be completed due to an obstruction between Kiosk and Handhole, and the 90-degree vertical bend below the AFC Panel. Scanning was not requred at this mezzanine.							
		Scoping c	of Faregate Array(s)				
-	Fask	Yes/No		Notes			
Communications Duc	t – Upper Faregate Array (4 g	ates)					
Was video scoping co run?	ompleted for the entire duct	No	Refer to TWIN BROOK-	COM_UPPER ARRAY	.avi file.		
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spe	ctions or blockages? Provide cific location.	Yes	Scope was obstructed b	y a cluster of wires ne	ar the end of duct.		
	Provide additional details of ducts and number of wires.	No	4" duct with less than 12	2 wires.			
Communications Duc	t - Lower Faregate Array (3 ga	ates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to TWIN BROOK-	COM_LOWER ARRA	∕.avi file.		
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and spe	ctions or blockages? Provide cific location.	No					
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 12	2 wires.			
	aregate Array (4 gates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to TWINBROOK-F	PWR UPPER ARRAY.a	avi file.		
Were there any obstru details of type and spe	ctions or blockages? Provide ecific location.	Yes	Far right power duct was scoped successfully.	s obstructed; middle p	ower duct was		
	? Provide additional details of ducts and number of wires.	No	6" ducts with less than	14 wires.			
Power Duct - Lower F	aregate Array (3 gates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to TWIN BROOK-	PWR_LOWER ARRAY	Y.avi file.		
Were there any obstrudetails of type and spe	ctions or blockages? Provide cific location.	No					
	? Provide additional details of ducts and number of wires.	No	6" ducts with less than 1	14 wires.			

Scoping of Power Duct - Kiosk to AFC Panel				
Task	Yes/No		Notes	
Kiosk to Handhole 1 (Distance: 60')	1			
Was video scoping completed for the entire duct / conduit run?	No	Refer to T	WIN BROOK-PWR_KIOSK – MANHOLE.avi file.	
Was pull string installed?	Yes			
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Scope was obstructed at 23 feet from the kiosk.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" power duct with less than 12 wires.		
Handhole 1 AFC Panel (Distance: 5')	-	-		
Was video scoping completed for the entire duct / conduit run?	No	Refer to T	WIN BROOK-PWR_AFC PANEL TO MANHOLE.avi file.	
Was pull string installed?	Yes			
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Scope cou Panel.	ald not negotiate 90-degree walker duct bend below AFC	
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and No 6" power duct wi number of wires.		luct with less than 12 wires.		
	T	T		
	Ohaarustisu		Nové Stono	
Observations / Issues / Next Steps The total distance of existing power duct between Kiosk and AFC Panel is 65'.				
		Sign Off		
GFP Representa	ntive		WMATA PRGM	
Name: Tino Sahoo				
Signature: Janmaya Sachoo				
Date: 08/07/2014				



Photo #1: A13 Twinbrook – Lock-out tag-out of feeder breaker to AFC Panel

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Photo #2: A13 Twinbrook – Open AFC Panel

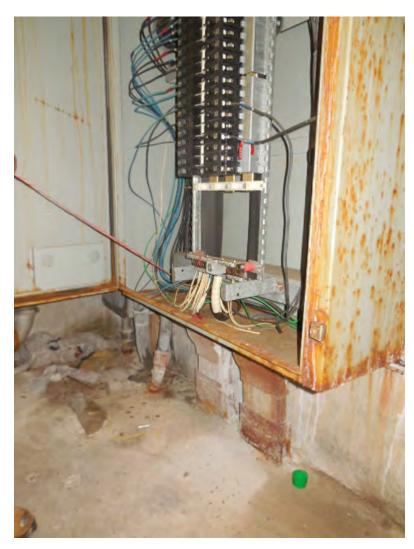


Photo #3: A13 Twinbrook – Pull string installation to AFC Panel

Photo #4: A13 Twinbrook – AFC Panel Schedule

Klock - PANEL 2. Buss Spare FARE CAFE CONSOLE FRee AleA Velde Pros Area Ventor 4. 33 1. 23. ..- 32 . . 5 6. " 1-34 ····· 12 8. " " 11 "- 3D 10. " " -189. 1-16 12. " 25 n 14. " 10 13. 19 16. . " " 2.4 15. " " S-1170 @ 114 18. " " -5 17. Partie Are 11 H 20. " " "-21 ... 50 19. 21. Smart Trip the 22. Sus Trans: DISP SMAKE Smale IRIP 51 24. "SPARE 26. Map Case 25. PIDS mezzi stow 28, Bus Trans, Diep. ------27. 29. . . 32. Map Case 34. Spare spare 36. apagure Spare 35. 38. Spare 37. Spare



Photo #5: A13 Twinbrook – Pull string installation to mezzanine handhole

Photo #6: A13 Twinbrook – Video-scoping between kiosk and mezzanine handhole



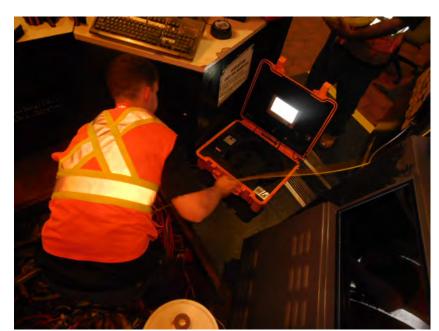


Photo #7: A13 Twinbrook – Video-scoping of faregate array ducts

Photo #8: A13 Twinbrook – Inserting fish tape into faregate array ducts



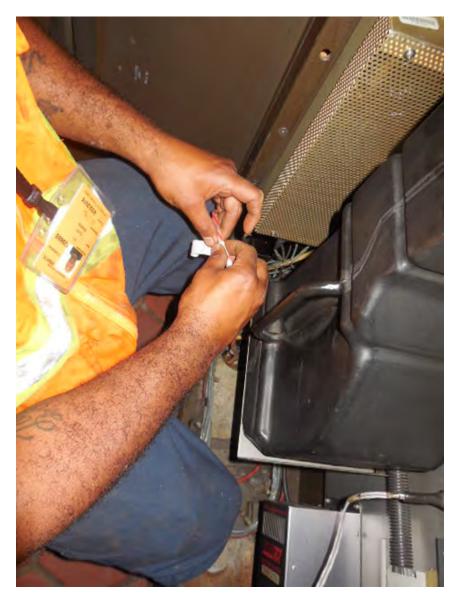
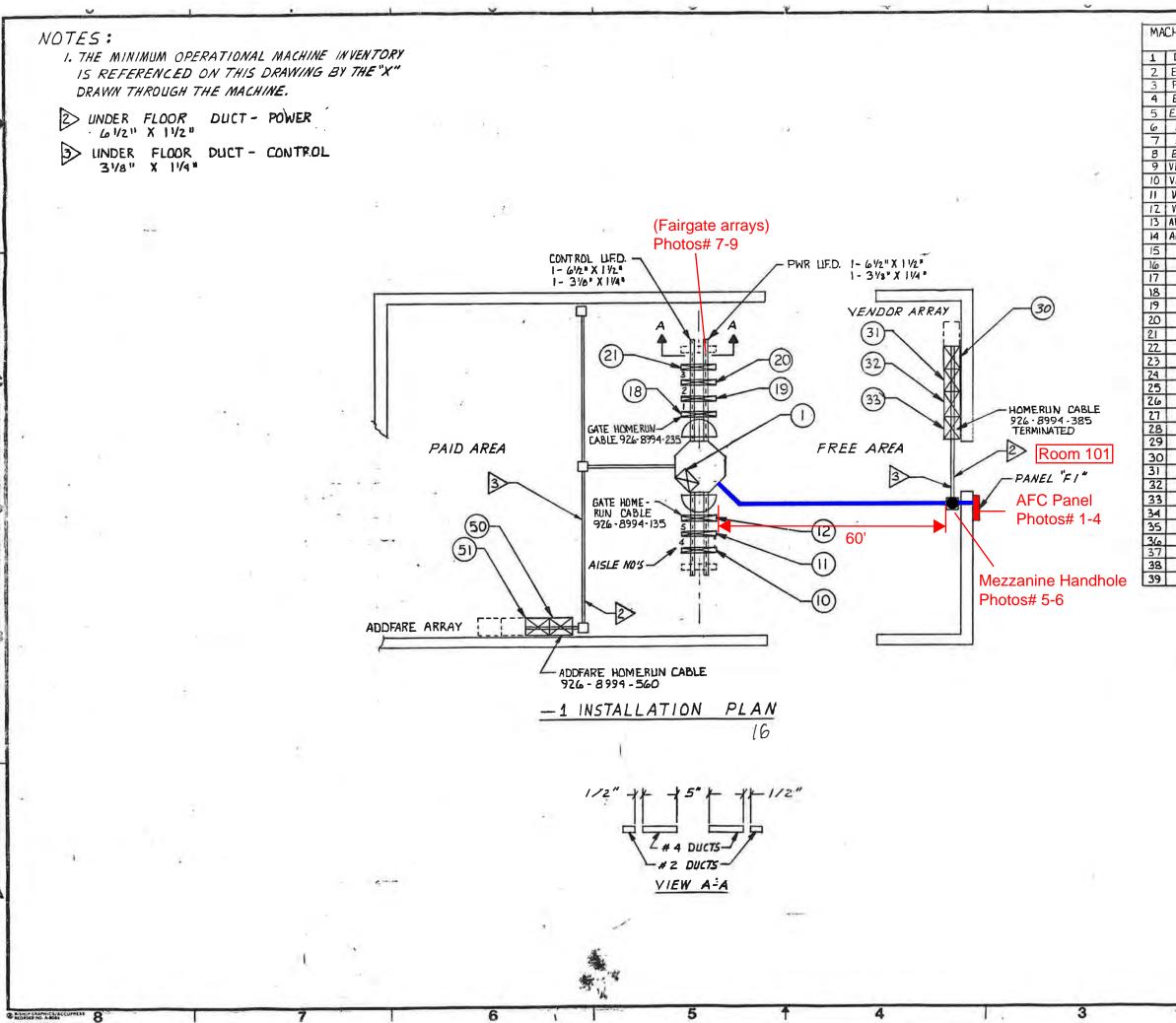


Photo #9: A13 Twinbrook – Installation of pull string in faregate array ducts



		6	_	_1			10	-	0	ar	1
CHINE	OCATION /	MACHINE	CWD	CB	CB SIZE	WIRE	.126	.0135	DECIMALS: .XX 1.03	DIMENSIONS ARE IN INCHES	
DADS		N05.	SERIAL NO. PS 8068	EHERC	20	#12	THRU .250: + .005001 .751 THRU	THRU .125: +.004001	ALS	NOISI	
END A		12	GA 50 57	3	20	#10	1.25	.125	.XX	SAR	
REV EXIT		11	GR 7280 GX 4070	5	20 20	# 10 # 10			1.03	m Ly	1
ENDB		18	GB 6051	9	20	# 10	005001 .751 THRU	04	.x.	UNLESS N	
REV		19	GE7293 GE7290	11	20	# 1D	THRU	.00	TOLERAN	HES OT	D
REV ENTRY		20	GN 3063	13 15	20 20	# 10 # 10	5-	H	-	HES BRE	2
VENDOR		30	FV1523	10	20	#12	1.000: +.010001	.251	CES		
VENDOR		31	FV1517	8	20 20	#12	+.01	-1	AN	SPECIFIE AK SHARP	ĩ
VENDOR		33	FV1514	4	20	# 12	00	THRU .500: + .006	NANGLES: 1 0.5 DEG.	SPECIFIED	
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	Mezzanine Inspection Report (Scoping)						
Date: 09/08/14 Station Name	Date: 09/08/14 Station Name: A14 Rockville Mezzanine #: 017 Completed By: Mike Butler						
			Summary				
were successfully video scoped and The power duct between Kiosk, Han Walker ducts are not at capacity and	pull string instal dhole 1, Handho appear to be go	led. Both Up le 2 and AFC od condition	per and Lower faregate a Panel was also video sco and viable for further use,	er and Lower faregate array communication ducts rray power ducts were successfully video scoped. oped and pull string installed. however there was a partial obstruction between a previous handhole may have been. Since pull			
string was installed without any probl							
Total power duct run from Kiosk to A	Total power duct run from Kiosk to AFC Panel is 90 feet.						
		Scoping o	of Faregate Array(s)				
Task		Yes/No		Notes			
Communications Duct – Upper Fare	egate Array (4 g	ates)					
Was video scoping completed for the run?	e entire duct	Yes	Refer to WMATA Rockv	ille Upper Fairgate Comm Video.avi.			
Were pull strings installed at all fares array?	gates in the	Yes					
Were there any obstructions or block details of type and specific location.	ages? Provide	No					
Is the duct at capacity? Provide addit about the dimensions of ducts and ne		No	4" Duct with less than 10) wires – not at capacity.			
Communications Duct - Lower Fare	egate Array (4 g	ates)					
Was video scoping completed for th run?	ne entire duct	Yes	Refer to WMATA Rockv	ille Lower Fairgate Comm Video.avi			
Were pull strings installed at all fares array?	gates in the	Yes					
Were there any obstructions or block details of type and specific location.	ages? Provide	No					
Is the duct at capacity? Provide addit about the dimensions of ducts and ne		No	4" Duct with less than 10) wires – not at capacity.			
Power Duct - Upper Faregate Array	(4 gates)	1	ſ				
Was video scoping completed for th run?	ne entire duct	Yes	Refer to WMATA Rockv	ille Upper Fairgate Power Video.avi.			
Were there any obstructions or block details of type and specific location.	ages? Provide	No					
Is the duct at capacity? Provide addit about the dimensions of ducts and ne		No	6" Duct with less than 12	2 wires – not at capacity.			
Power Duct - Lower Faregate Array	(4 gates)						
Was video scoping completed for th run?	ne entire duct	Yes	Refer to WMATA Rockv	ille Lower Fairgate Power Video.avi.			
Were there any obstructions or block details of type and specific location.	ages? Provide	No					
Is the duct at capacity? Provide addit about the dimensions of ducts and nu		No	6" Duct with less than 12	2 wires – not at capacity.			

Scoping of Power Duct - Kiosk to AFC Panel				
	Task	Yes/No		Notes
Kiosk to Handhol	e 1 (Distance: 12')			
Was video scopir conduit run?	ng completed for the entire duct /	Yes	Refer to V	VMATA Rockville Power Kiosk to handhole1 Video.avi
Was pull string in	stalled?	Yes		
	bstructions or blockages? Provide d specific location.	No		
Is the duct / conducted details about the of number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" Duct w	ith less than 15 wires – not at capacity.
Handhole 1 to Ha	ndhole 2 (Distance: 70')	1	1	
Was video scopir conduit run?	ng completed for the entire duct /	Yes		VMATA Rockville Power handhole2 to handhole1 Video.avi and Rockville Power handhole 1 to handhole2 video.avi.
Was pull string in	stalled?	Yes		
	bstructions or blockages? Provide d specific location.	Yes	Partial ob	struction 48' from Handhole 1 (see details below)
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" Duct w	ith less than 15 wires – not at capacity.
Handhole 2 to AF	C Panel (Distance: 8')			
Was video scopir conduit run?	ng completed for the entire duct /	Yes		
Was pull string in	stalled?	Yes		
Were there any ol details of type and	bstructions or blockages? Provide d specific location.	No		
Is the duct / conducted details about the of number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" Duct w	ith less than 15 wires – not at capacity.
		Observation	ns / Issues	/ Next Steps
entryway adjace the camera head	nt to room C113. The concrete floo d got stuck on a dip, which looked li	r appears to ike a circular	have been cut-out in f	2, 48' from Handhole 1 after the duct passes through backroom repaired, and possibly a handhole removed. When scoping he bottom of the duct. This occurred when scoping from both n and overall the duct appears in good condition.
			Sign Off	
	GFP Representa	tive	Sign Off	WMATA PRGM
Nama	•			
Name:	Mike Butler			

Mizun

31/12/14

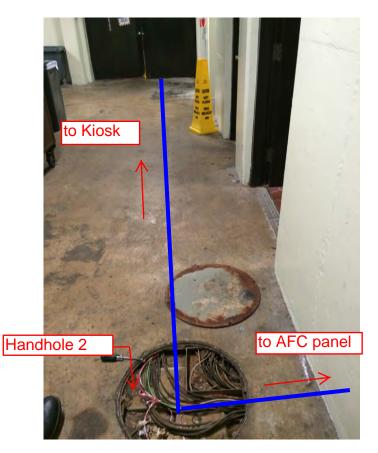
Signature:

Date:



Rockville Photo #1 – Duct route between Kiosk and Electrical Room

Rockville Photo #2 – Duct route between Kiosk and Electrical Room



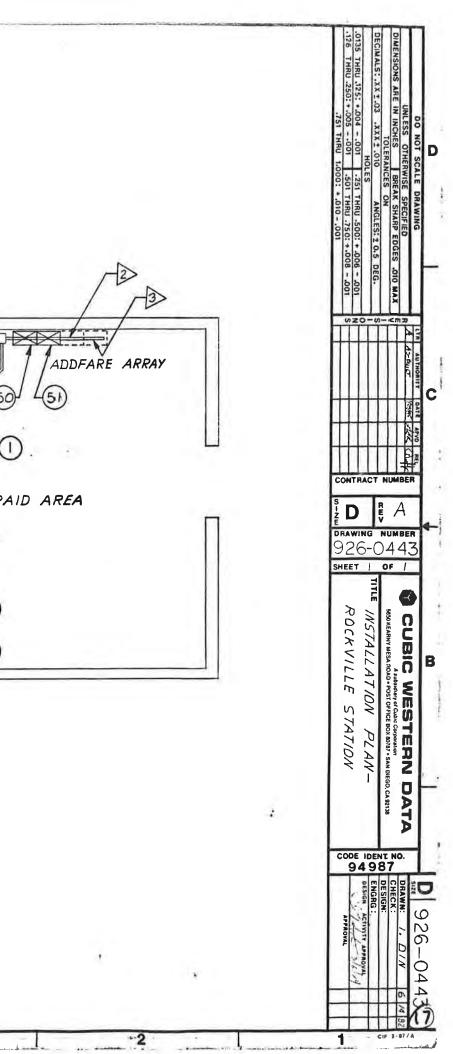
Rockville Photo #3 – Concrete repair to floor in back hallway outside Room C113



NOTES:			
I. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE. UNDER FLOOR DUCT - POWER	11		
G 1/2" X 1/2" J UNDER FLOOR DUCT - CONTROL			
31/8" X 11/4"			
	- 1		RUN CABLE 994-355
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	F		(12) (5
		2	5)
• · · · · · · · · · · · · · · · · · · ·		GATE HOME RUN CABLE 926-8994-135	
ACHINELOCATION C/B CWD CWD CURCUIT CURCUIT VI	RE		P
INVENTORY NOS, NUMBER NUMBER NO. SIZE SIZ	Hand hole 2	FREE AREA Kiosk	
2 END A 13 /3 GA 5061 20 AMPS # 3 REV 11 12 GE 7295	8 8'	70' GATE HOME RUN CABLE 926-8994-235	
4 REV 9 11 421300 5 EXIT 1 10 4X4501		Hand hole 1	A (19)
6 END B 15 18 GB6061	AFC Panel		20
8 REV 19 20 GR 7242 ¥ 9 ENTRY 21 21 GN 3503 20 AMPS #/	Minor obstruction	33	
	inside duct	VENDOR ARRAY	~21
12 13 YENDOR 8 30 FV1352 ZD AMIS ##			
14 VENDOR 10 31 FV1506 #0 15 VENDOR 12 32 FV1509 #0	L	HOME RUN CABLE	2,
16 VENDOR 14 33 FV1504 2DAMPS #	6	926-8994-355	
/8		INSTALLATION PLAN	
20 21 ADDFARE 1 G SO AM2503 ZO AMPS #	-ID	IT IT	
22 ADDFARE 18 51 AM 2038 20 AMPS # 23			
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	Mezzanine Inspection Report (MIR) REVISION 1						
Date : 06/01/2015	Station Name : B01 Gallery Pl	lace (West)	Mezzanine #: 020	Completed By: Mike B	utler		
			Summary				
scoping could not be However, pull string w conduit between Han Kiosk and AFC Pane and no space to insta NEPP-02: Video scop and Shared Trough in will run from Shared T	 NEPP-01: Video scoping completed for power / communication ducts in faregate arrays; pull strings installed in communication ducts. Video scoping could not be completed between Kiosk, Handhole 1, Handhole 2 and Handhole 3 due to multiple collapses in the power duct. However, pull string was installed between Handhole 2 and Handhole 3 despite a collapsed duct. Pull string was also installed in the power conduit between Handhole 3, a junction box and the AFC Panel. Scanning was conducted to identify a proposed duct route between the Kiosk and AFC Panel. The scanning results showed that the mezzanine floor has multiple ducts between the Kiosk and the back rooms, and no space to install a new in-floor duct. NEPP-02: Video scoping and pull string installation was completed in Alternate Duct between Kiosk, Handhole 4, Handhole 5, Handhole 6 and Shared Trough in Room W202. Alternate Duct is in good condition, not at capacity and viable for use. A proposed overhead conduit will run from Shared Trough to AFC Panel in Room W202, thus completing the power run from Kiosk to AFC Panel. Refer to attached photos and drawings for further details about existing and proposed ducts / conduits. 						
	NEPP-0)1: Scopin	g of Faregate Arrays	(01/09/15)5)			
Tas	k	Yes/No		Notes			
Communication Duct	- Upper Faregate Array (4 gate	es)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Galler	ry Place Mezz 20 Upper	Comm Fair Gate Video.avi"		
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	3" walker duct, not at ca	pacity (< 12 wires).			
Communication Duct	- Lower Faregate Array (3 gate	es)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer "WMATA Gallery	Place Mezz 20 Lower Co	omm Fair Gate Video.avi"		
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No					
	Provide additional details of ducts and number of wires.	No	3" walker duct, not at ca	pacity (< 12 wires).			
Power Duct - Upper F	aregate Array (4 gates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Galle	ry Place West 6inch Upp	er Power Faregate.avi"		
Were there any obstrudetails of type and specified	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	6" walker duct, not at ca	pacity (< 10 wires).			
Power Duct - Lower F	aregate Array (3 gates))						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Galler	ry Place Mezz 20 Lower	Power Fair Gate Video.avi"		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	6" walker duct, not at ca	pacity (< 10 wires).			

Tech		xisting Power Duct (01/09/15)
Task	Yes/No	Notes
Kiosk to Handhole 1 (Distance: 10'))		I
Was video scoping completed for the entire duct / conduit run?	No	Refer to "WMATA Gallery Place West Power Kiosk to HH1.avi"
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct collapsed.
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 (Distance: 42')		
Was video scoping completed for the entire duct / conduit run?	No	Refer to "WMATA Gallery Place West Power HH1 to HH2.avi"
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct collapsed.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	
andhole 2 to Handhole 3 (Distance: 20')		
Was video scoping completed for the entire duct / conduit run?	No	
Was pull string installed?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct collapsed shortly after opening, no scoping completed.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	
landhole 3 to Junction Box to AFC Panel (Distanc	e: 25')	
Was video scoping completed for the entire duct / conduit run?	No	Scoping not required for conduits.
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	3" conduit with less than 8 wires.

- Scanning was conducted to identify a proposed duct route between the Kiosk and AFC Panel.

- The scanning results showed that the mezzanine floor has multiple ducts between the Kiosk and the back rooms, and there is no

space to install a new in-floor duct.

- Refer to scanning drawing for the layout of existing ducts on the mezzanine floor.

NEPP-02: Scoping of Alternate Duct (06/01/15)					
	Task	Yes/No		Notes	
Kiosk to Handho	le 4 (Distance: 5')	J			
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to '	B01_MZ020_Gallery Place West_Kiosk to HH4.avi"	
Was pull string in	istalled?	Yes			
	bstructions or blockages? Provide d specific location.	No			
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 15 wires.	
Handhole 4 to Ha	Indhole 5 (Distance: 40')		T		
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to '	B01_MZ020_Gallery Place West_HH4 to HH5.avi"	
Was pull string in	stalled?	Yes			
	bstructions or blockages? Provide d specific location.	No			
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 15 wires.	
Handhole 5 to Ha	andhole 6 (Distance: 40' approx.)				
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to "	B01_MZ020_Gallery Place West_HH6 to HH5.avi"	
Was pull string installed?		Yes			
	Were there any obstructions or blockages? Provide details of type and specific location.				
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 15 wires.	
Handhole 6 to Sh	ared Trough in Room W202 (Dist	ance: 1')			
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to "	B01_MZ020_Gallery Place West_HH6 to Trough.avi"	
Was pull string in	stalled?	Yes			
	bstructions or blockages? Provide d specific location.	No			
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 15 wires.	
		Addit	ional Com	ments	
proposed co	 The distance of proposed power route from Kiosk to AFC Panel is 136', including 86' of existing alternate duct and 50' of proposed conduit. Alternate duct is in good condition and not at capacity. 				
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	nature: M.Zun				

Date:

06/01/15

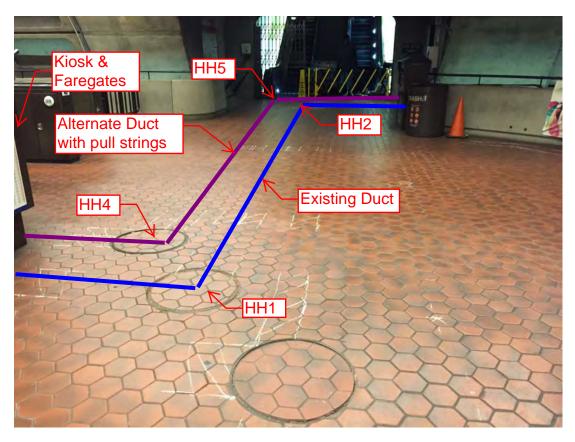


Photo #1: Mezzanine layout showing existing / alternate duct runs.

Photo #2: Mezzanine layout showing existing / alternate duct runs.

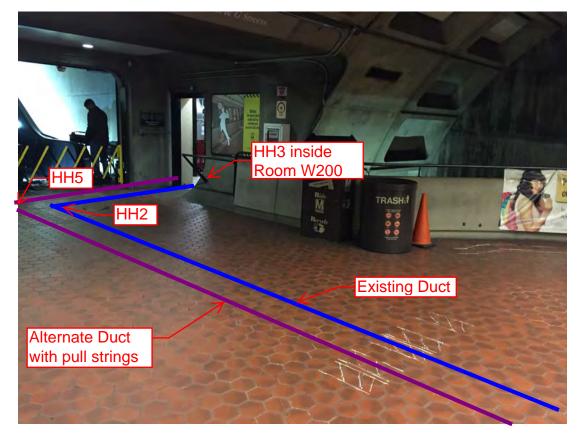


Photo #3: Alternate duct path in Room W200.



Photo #4: Handhole 6 for alternate duct in Room W200.

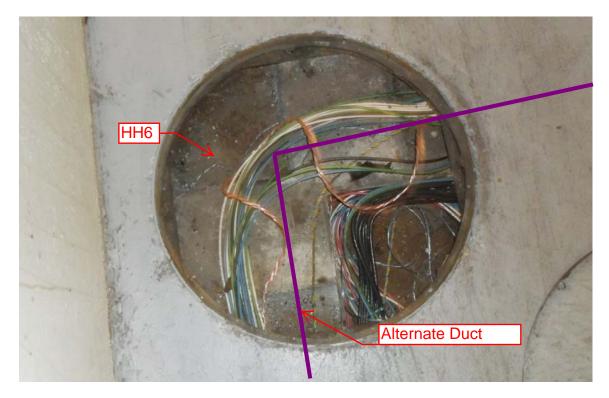


Photo #5: Alternate Duct entry to Shared Trough in Room W202.

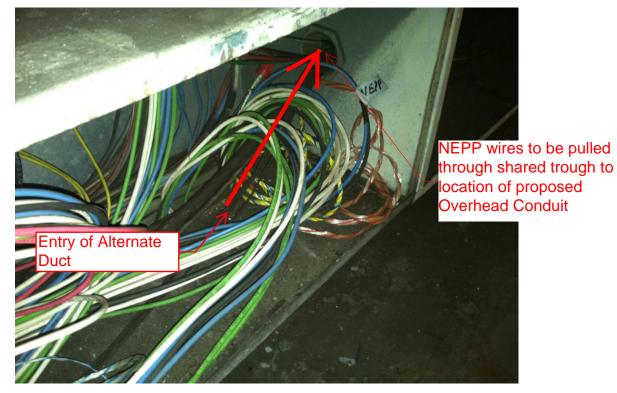
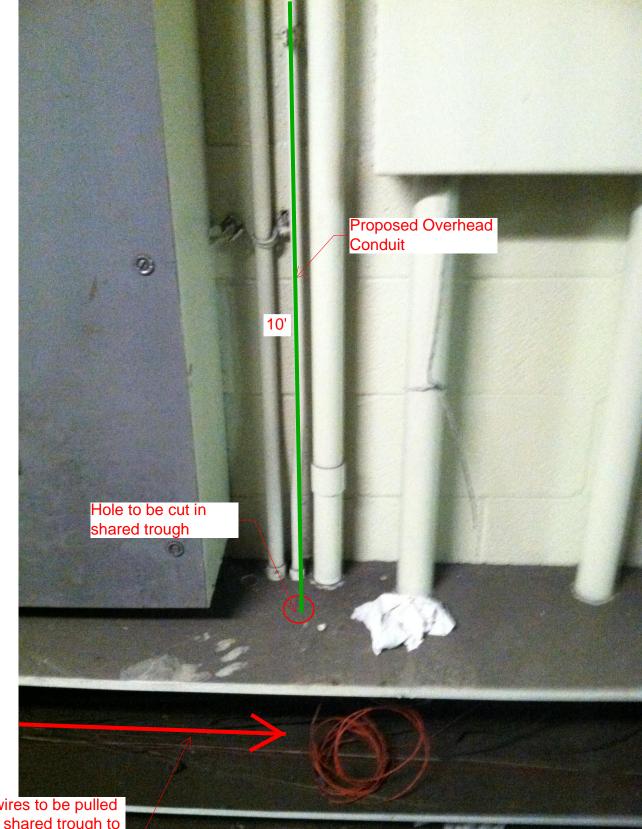


Photo #6: NEPP wires to be pulled through Shared Trough in Room W202.



Photo #7: Proposed Overhead Conduit from Shared Trough in Room W202.



NEPP wires to be pulled through shared trough to location of proposed Overhead Conduit Photo #8: Proposed Overhead Conduit in Room W202.

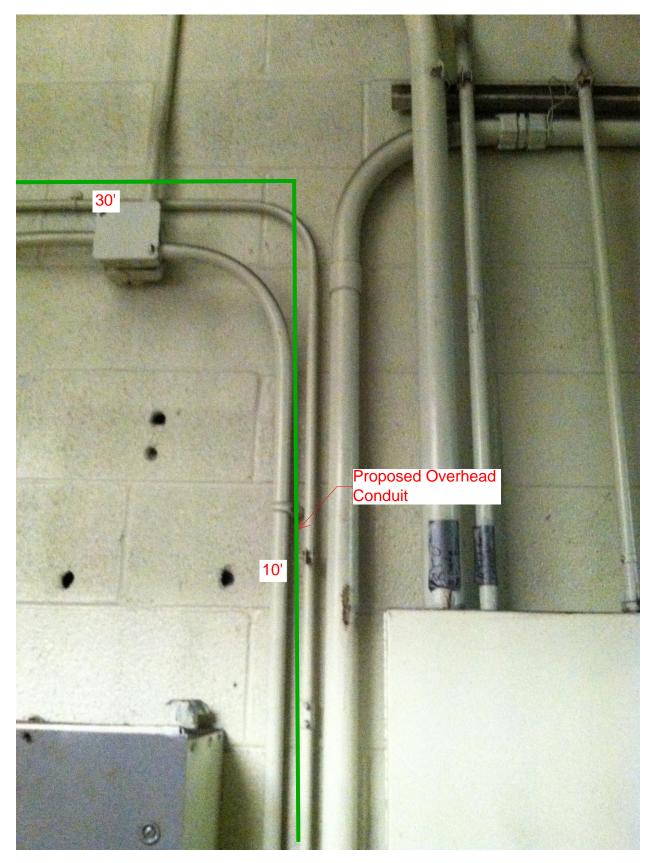


Photo #9: Proposed Overhead Conduit in Room W202.

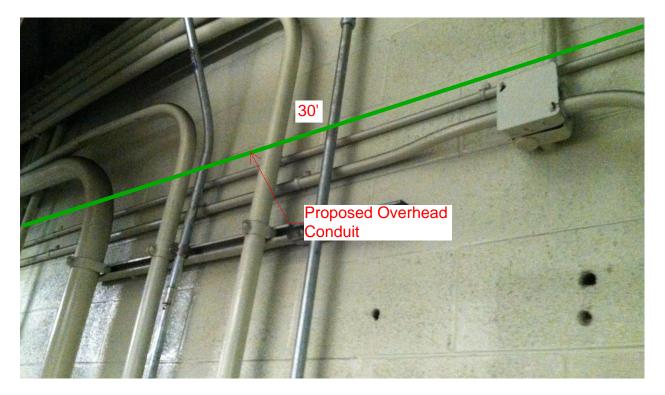


Photo #10: Proposed Overhead Conduit in Room W202.

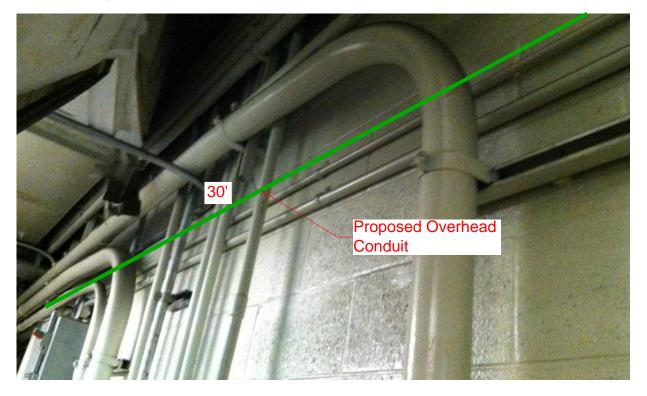


Photo #11: Proposed Overhead Conduit in Room W202.

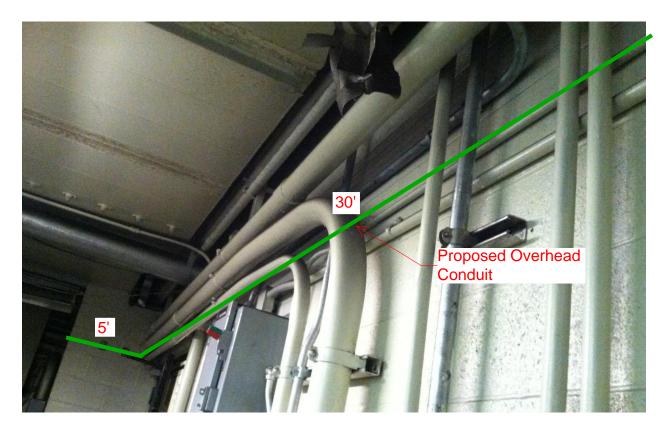
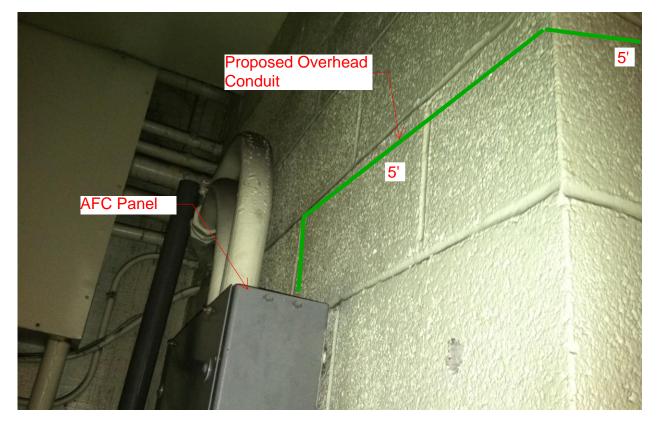


Photo #12: Proposed Overhead Conduit feeding AFC Panel in Room W202.



NOTES:

1. ALL INFORMATION CONSERVING DUCTS AND CONDULTS IN BASED ON INFORMATION SUPPLIED TO CUBIC WESTERN OATA BY BECKTEL.

& YOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING

I THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE X. DRAWN THRU THE MACHINE T

. FOR AS BUILT CONDITIONS SEE SHEET 2

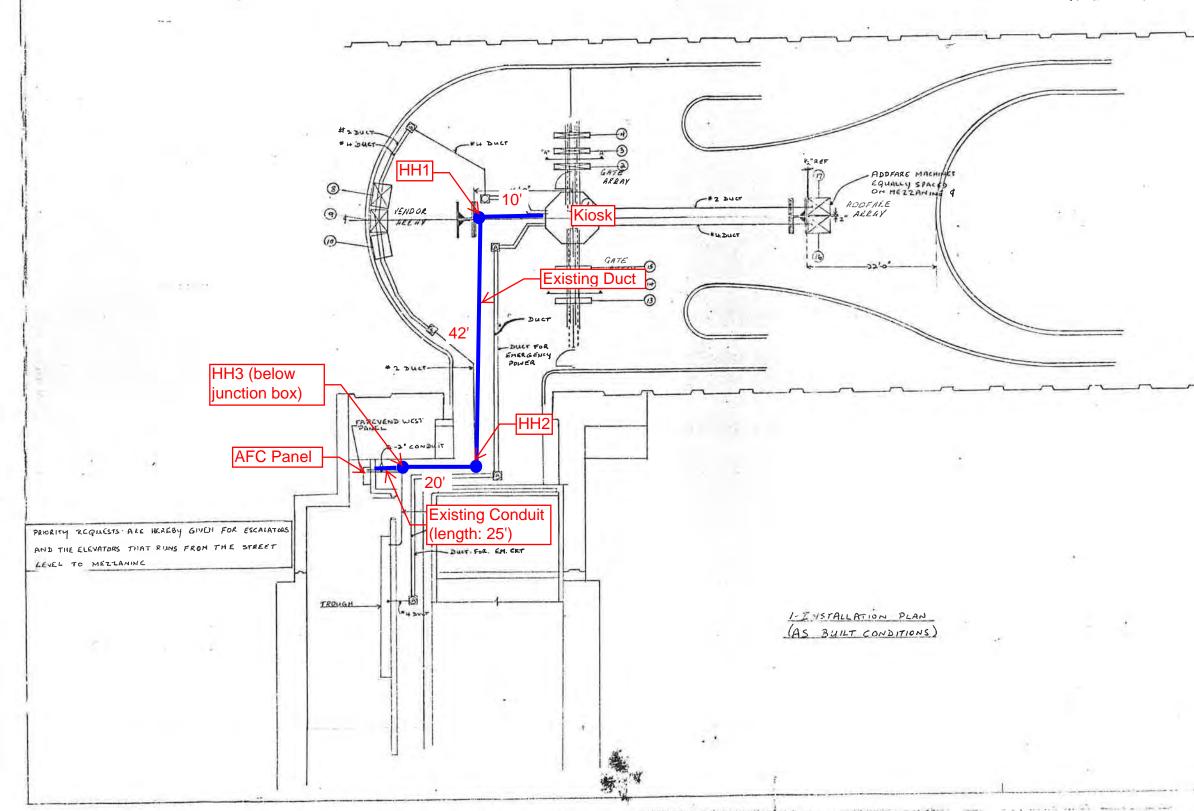
5. FOR REF DWGS SEE SUPPORT DOLUMENT PACKAGE FOR THIS MEZZANINE





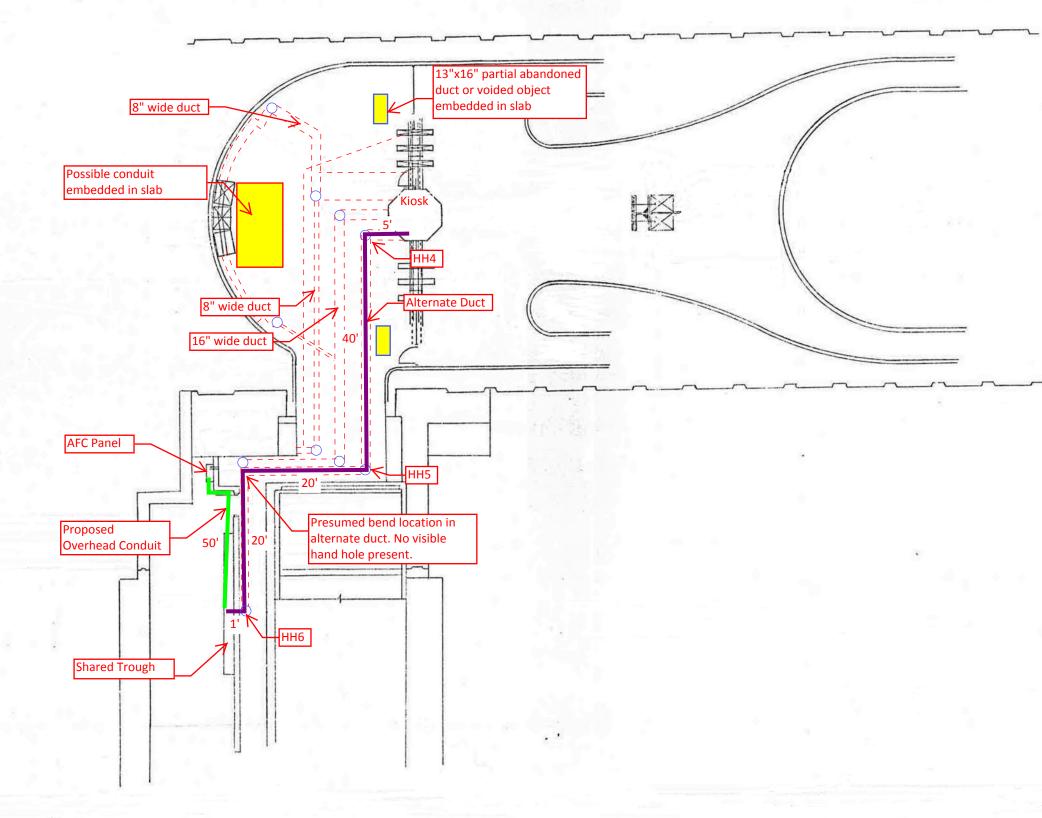
UIGW A'-A"

+ 4 DUCTS -



REVISIONS DESCRIPTION DATE APVD AS BUILT DRAWING REV. A 5-10-77 900-1 100 **VIE KINH** CUBIC WESTERN DATA CONTRACT NUMBER A subsidiery of CLC is Corpolation 5650 KEAFNY MESA BOAD + POUT OFFICE BUX 80787 + SAN DIEGO CA +2138 GRELERY PLACE UNST STATICH AFC MACHINES GRAWN TT DRAWING NUMBER DESIGN ACTIVITY APPROVAL Sec. Sec. 1 026-0383 APPROVED SHEET SCALE 14.0

PROPOSED POWER ROUTE FROM KIOSK TO AFC PANEL





Mezzanine Inspection Report (Scoping)					
Date: 10/08/2014 Station Name: B02 Judiciary	Square (Eas	t) Mezzanine #: 023	Completed By: Mike Butler		
· · · · ·		Summary			
Scoping of power ducts in both Upper and Lower faregate arrays was completed. Pull strings were already installed in Upper/Lower communication ducts under a separate contract for CAT6 wire installation; therefore, no scoping was completed or pull strings installed in the communication ducts. Scoping was completed between Kiosk and Shared Trough (adjacent to AFC Panel). Pull string in power duct between Kiosk and Shared Trough was installed previously under a separate contract and was checked and tested to confirm the strings' routing and ntegrity. It was not possible to scope or install pull string between the Shared Trough and AFC Panel because there were energized wires that bosed a safety hazard to contractor.					
	Scoping of	of Faregate Array(s)			
Task	Yes/No		Notes		
Communications Duct – Upper Faregate Array (3 f	aregates)				
Was video scoping completed for the entire duct run?	N/A				
Were pull strings installed at all faregates in the array?	Yes		t, wires, and pull strings (labeled 'AFC') were te array prior to inspection work (Photos 1 & 2).		
Were there any obstructions or blockages? Provide details of type and specific location.	N/A				
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	Communication ducts are	e not at capacity.		
Communications Duct - Lower Faregate Array (3	aregates)	ſ			
Was video scoping completed for the entire duct run?	N/A				
Were pull strings installed at all faregates in the array?	Yes		t, wires, and pull strings (labeled 'AFC') were te array prior to inspection work.		
Were there any obstructions or blockages? Provide details of type and specific location.	N/A				
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	Communication ducts are	e not at capacity.		
Power Duct - Upper Faregate Array (3 faregates)					
Was video scoping completed for the entire duct run?	Yes	WMATA Judiciary Squar	e East Upper Power Duct Video.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	Eight (8) wires were iden	tified in 4" wide / 1" deep ducts.		
Power Duct - Lower Faregate Array (3 faregates)					
Was video scoping completed for the entire duct run?	Yes	WMATA Judiciary Squar	e East Lower Power Duct Video.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	Eight (8) wires were iden	tified in 4" wide / 1" deep ducts.		

Task	Yes/No	r Duct - Kiosk to AFC Panel Notes
	162/110	Notes
Kiosk to Handhole 1 (length: 45 feet)		
Was video scoping completed for the entire duct / conduit run?	Yes	WMATA Judiciary Square East Power Kiosk to Handhole1 Video.avi
Was pull string installed?	Yes	Pull string in power duct was installed previously under a separate contract and was checked and tested to confirm the strings' routing and integrity.
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	Ten (10) wires were identified in 4" wide / 1" deep ducts.
landhole 1 to Handhole 2 (length: 15 feet)		
Was video scoping completed for the entire duct / conduit run?	Yes	WMATA Judiciary Square East Power Handhole 1 to Handhole 2 Video.av
Was pull string installed?	Yes	Pull string in power duct was installed previously under a separate contrac and was checked and tested to confirm the strings' routing and integrity.
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	Ten (10) wires were identified in 4" wide / 1" deep ducts.
Handhole 2 to Shared Trough (length: 10 feet)		
Was video scoping completed for the entire duct / conduit run?	No	Energized wires in shared trough prevented video scoping.
Was pull string installed?	Yes	Pull string in power duct was installed previously under a separate contrac and was checked and tested to confirm the strings' routing and integrity.
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	Ten (10) wires were identified in 4" wide / 1" deep ducts.
Shared Trough/Conduit to AFC Panel (length: 5 fee	∋t)	
Was video scoping completed for the entire duct / conduit run?	No	Energized wires in shared trough prevented video scoping.
Was pull string installed?	No	There is currently no pull string between shared trough and AFC Panel.
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	The conduit between the Shared Trough and AFC Panel is not at capacity
	Observatio	ns / Issues / Next Steps
Power conductor run is approximately 75' between th N/A - Not Applicable		

Sign Off		
	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:	Mizun	
Date:	10/29/2014	



Photo #1: B02 Judiciary Square (East) – Faregate with new comm. duct and cable installed

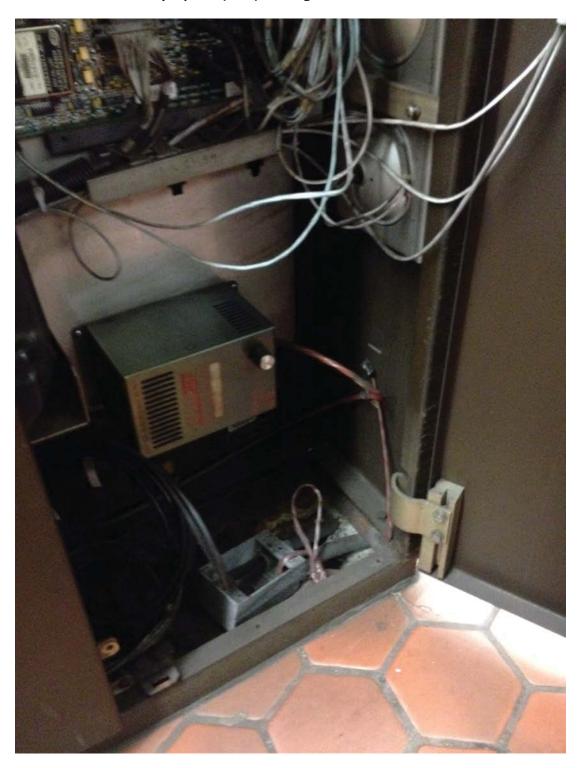


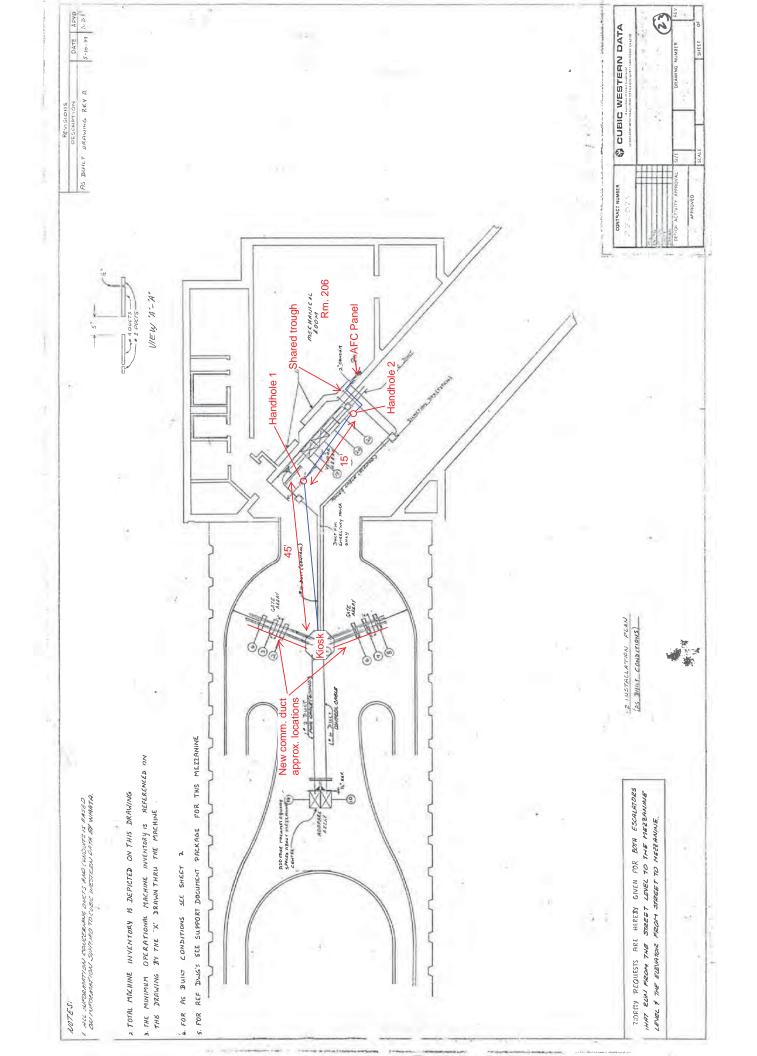
Photo #2: B02 Judiciary Square (East) – Faregate with new comm. duct and cable installed

Photo #3: B02 Judiciary Square (East) – Mezzanine level handholes. Power duct run is through handholes at the bottom center and center-right of photo. Handhole near the center of photo is not part of power duct run.



Photo #4: B02 Judiciary Square (East) – Shared cable trough in room 206. Power duct enters trough from the bottom at left.





Mezzanine Inspection Report (Scoping)								
Date: 11/05/14	Station Name: B02 Judiciary S	Square West	Mezzanine #: 022	Completed By: Mike Butler				
			Summary					
was successfully com and pull string installa Trough adjacent to Af wires. WEAA, WMP, 1 to identify Handhole 2 A proposed conduit ru would run along the co concrete walls above run along the top of th	The completion of video scoping and pull string installation was partially completed for this mezzanine. Video scoping and pull string installation was successfully completed for Upper and Lower Faregate Arrays – ducts are in good condition and not at capacity. However, video scoping and pull string installation could not be completed between Kiosk and AFC Panel. There were energized wires found in Handhole 1 and Shared Trough adjacent to AFC Panel. Due to the number of wires in the shared trough, it was not possible to determine the origin of the energized wires. WEAA, WMP, WMPB, WME, WMPA, WMPP, and WEA all feed into the shared trough (refer to photos). In addition, it was not possible to identify Handhole 2 as it appears to have been removed or covered up, prohibiting access and verification of duct route.							
		Scoping o	of Faregate Array(s)					
	Task	Yes/No		Notes				
Communications Duc	ct – Upper Faregate Array (2 g	ates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Judic	iary Square West Upper Comm Duct Video.avi"				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	4" Power Duct with less	than 8 wires.				
Communications Duc	ct - Lower Faregate Array (3 ga	ates)	Γ					
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Judic	iary Square West Lower Comm Duct Video.avi"				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	4" Power Duct with less	than 8 wires.				
Power Duct - Upper F	aregate Array (2 gates)		1					
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Judic	iary Square West Upper Power Duct Video.avi"				
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	6" Power Duct with less	than 8 wires.				
Power Duct - Lower F	aregate Array (3 gates)							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Judic	iary Square West Lower Power Duct Video.avi"				
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	6" Power Duct with less	than 8 wires.				

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No		Notes		
Kiosk to Handhol	le 1 (Distance: 60')		1			
Was video scopir conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.		
Was pull string in	stalled?	No				
	bstructions or blockages? Provide d specific location.	N/A				
	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" Power	Duct		
Handhole 1 to Ha	ndhole 2 (Distance: Unknown)		1			
Was video scopii conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.		
Was pull string in	stalled?	No				
	bstructions or blockages? Provide d specific location.	N/A	Location	of Handhole 2 is not visible on the mezzanine floor.		
details about the onumber of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" Power	Duct		
Handhole 2 to Sh	ared Trough (Distance: Unknown)				
Was video scopii conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.		
Was pull string in	Was pull string installed?		Courd not video scope of install pull strings due to ellergized wiles.			
Were there any obstructions or blockages? Provide details of type and specific location.		N/A	Location of Handhole 2 is not visible on the mezzanine floor.			
Is the duct / conducted details about the on number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" Power Duct			
Shared Trough to	o AFC Panel (Distance: 25')					
Was video scopii conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.		
Was pull string in	stalled?	No				
Were there any ol details of type and	bstructions or blockages? Provide d 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	25' long trough			
	(Observation	ns / Issues	/ Next Steps		
- The proposed overhead power conduit run from the Kiosk to the AFC Panel is 185'. Refer to AFC As-built and photos for details.						
			Sign Off			
	GFP Representat	tive		WMATA PRGM		
Name:	Mike Butler					
Signature:	ature: M.Zun					
Date:	01/02/2015					

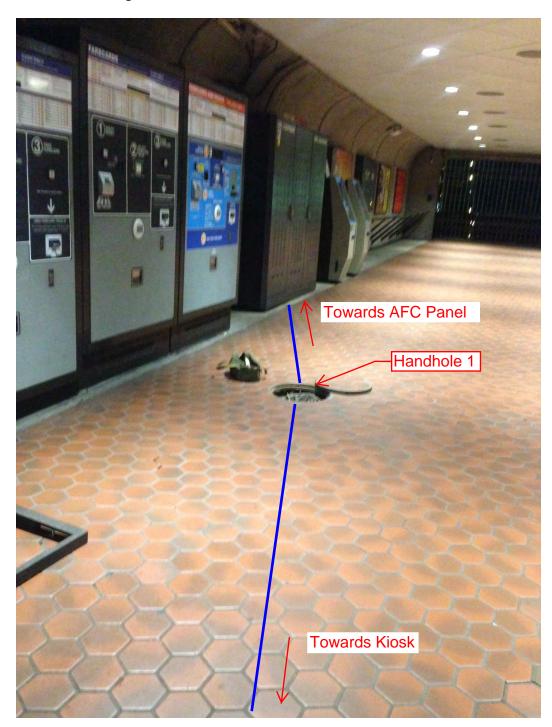


Photo # 1 – Existing Duct run from Kiosk to Hand Hole 1 on mezzanine floor.

Photo # 2 – Shared Trough in Room 205.



Photo # 3 – Proposed Conduit Run

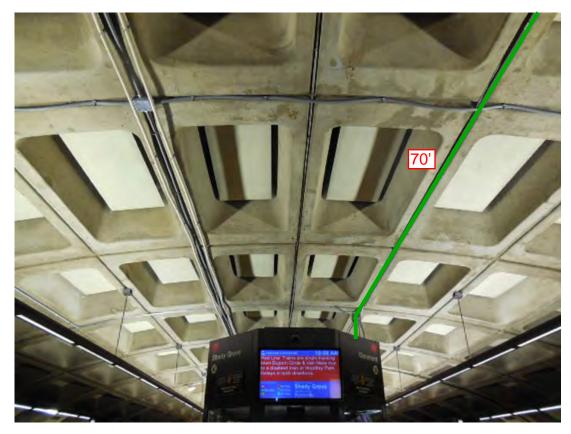


Photo # 4 – Proposed Conduit Run



Photo # 5 – Proposed Conduit Run from mezzanine to Room 201

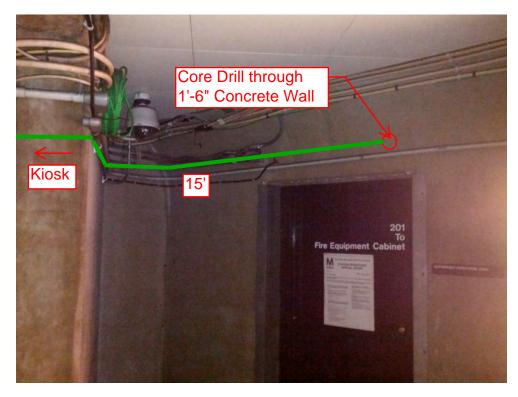
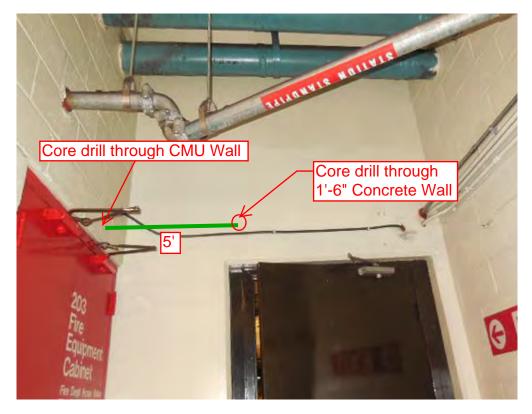


Photo # 6– Proposed Conduit Run between Room 201 and Room 203



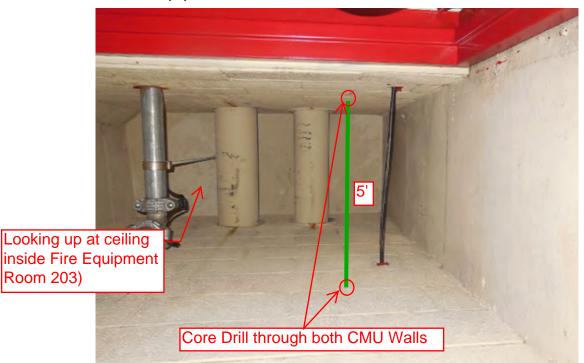


Photo # 7 – Proposed Conduit Run (Room 203 and Room 205) - looking up at ceiling inside Fire Equipment Room 203.

Photo # 8 – Proposed Conduit Run in Room 205

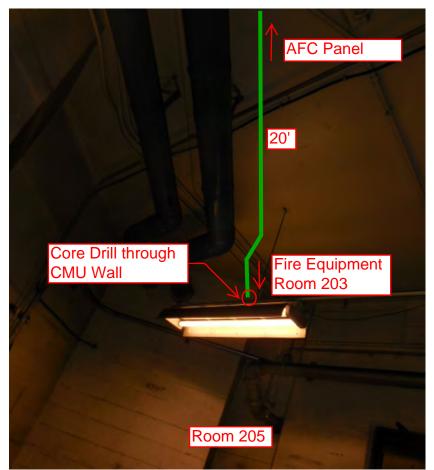
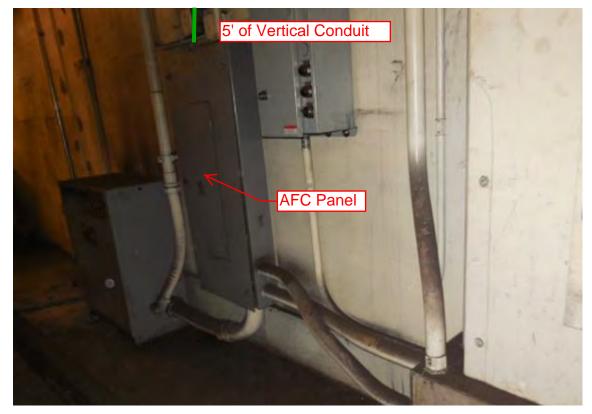
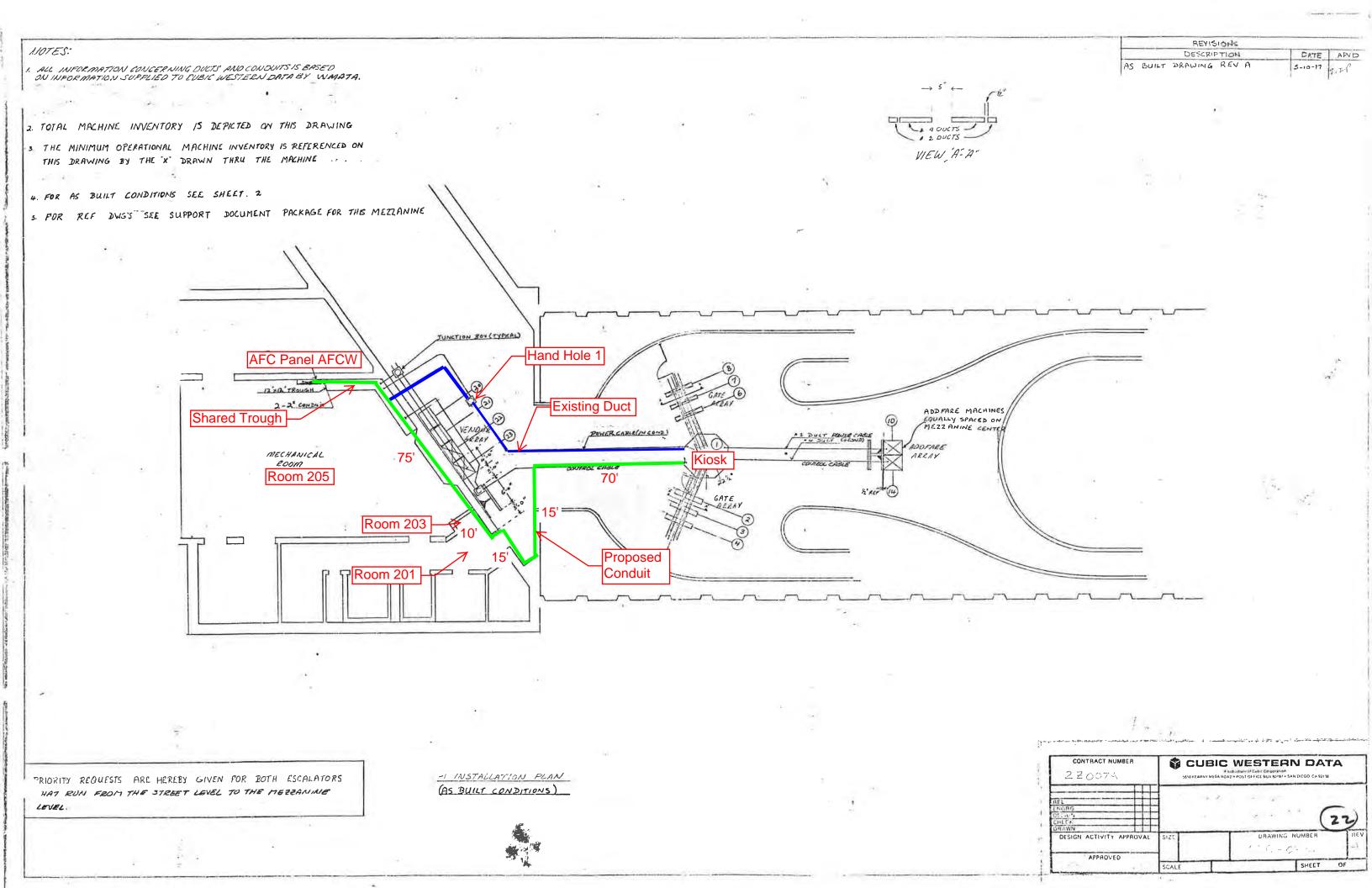


Photo # 9 – Proposed Conduit Run in Room 205



Photo # 10 – Proposed Conduit Run in Room 205





Date: 01/06/15	Station Name: B03 Union Sta	tion North	Mezzanine #: 025	Completed By: Mike Butler
	otation name. Boo onion ota			Completed By. Wike Duter
			Summary	
Upper and Lower co an apron skirt obstru	ommunication ducts, as well as the	Lower power	er duct. However, it was n uct form the Kiosk to the A	Arrays. Video scoping was completed in the ot possible to scope the Upper power duct due to AFC Panel could not be scoped due to the tion from WMATA.
the Kiosk to the adja		and then con	tinue along the wall until i	vings and photos). The proposed conduit will run fror t reaches the wall outside of Mechanical Room 214. AFC Panel.
		Scoping o	of Faregate Array(s)	
	Task	Yes/No		Notes
Communications D	uct – Upper Faregate Array (5 f	aregates)		
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Union	n Station N Upper Comm Fairgate Video.avi"
Were pull strings in array?	stalled at all faregates in the	Yes		
Were there any obs details of type and s	tructions or blockages? Provide specific location.	No		
	ity? Provide additional details ns of ducts and number of wires.	No	4"walker duct with less	than 8 wires
Communications D	uct - Lower Faregate Array (8 fa	aregates)		
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Union	n Station N Lower Comm Fairgate Video.avi"
Were pull strings in array?	stalled at all faregates in the	Yes		
Were there any obs details of type and s	tructions or blockages? Provide specific location.	No	No obstructions, but the the duct.	ere was limited space around the 45 degree bend in
Is the duct at capac about the dimension	ity? Provide additional details as of ducts and number of wires.	No	4"walker duct with less	than 12 wires
Power Duct - Upper	r Faregate Array (5 faregates)			
Was video scoping run?	completed for the entire duct	No	Video scoping not comp	pleted as per direction from WMATA.
Were there any obs details of type and s	tructions or blockages? Provide specific location.	Yes	Duct was inaccessible o	due to skirt obstruction.
	ity? Provide additional details as of ducts and number of wires.	N/A		
ower Duct - Lowe	r Faregate Array (8 faregates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Union	n Station N Lower Power Fairgate Video.avi"
Were there any obs details of type and s	tructions or blockages? Provide specific location.	No	No obstructions, but the the duct.	ere was limited space around the 45 degree bend in

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No		Notes		
Kiosk to AFC Par	nel (Distance: 75')					
Was video scopi conduit run?	ing completed for the entire duct /	No	Video sco	ping not completed as per direction from WMATA.		
Was pull string ir	nstalled?	No				
Were there any o details of type an	bstructions or blockages? Provide d specific location.	N/A				
Is the duct / cond details about the number of wires.	luit at capacity? Provide additional dimensions of duct / conduit and	N/A				
		1	1			
		Observatior	ns / Issues .	/ Next Steps		
The proposed ou						
The proposed overhead conduit run is approximately 125' from the Kiosk to the AFC Panel (refer to photos and drawing).						
			Sign Off			
	GFP Representa	tive		WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizun					
Date:	01/09/15					



Photo #2 - Proposed conduit run along overhead beam to adajcent wall

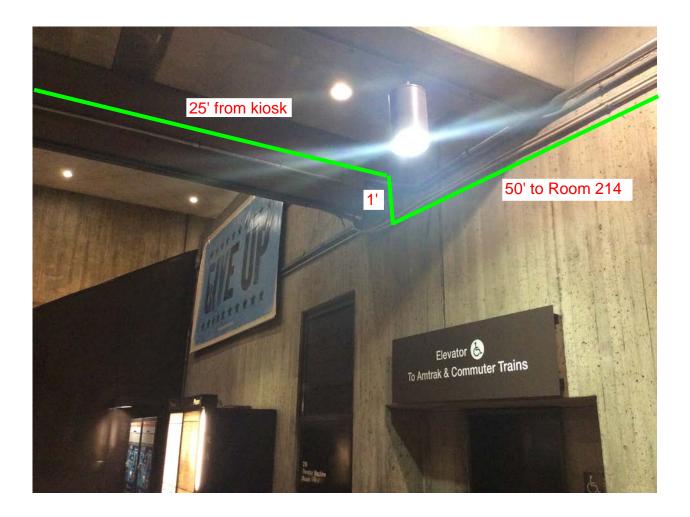


Photo #3 - Proposed conduit run along adajcent wall to Mechanical Room 214

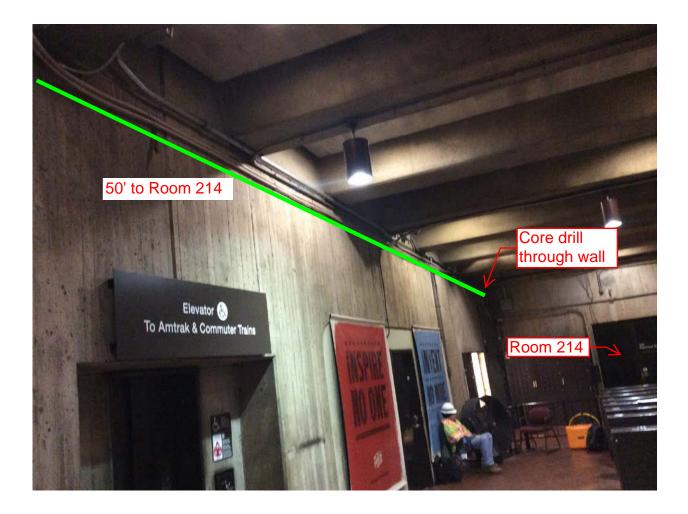


Photo #4 - Proposed conduit run along wall to Mechanical Room 214 (core drilll required)

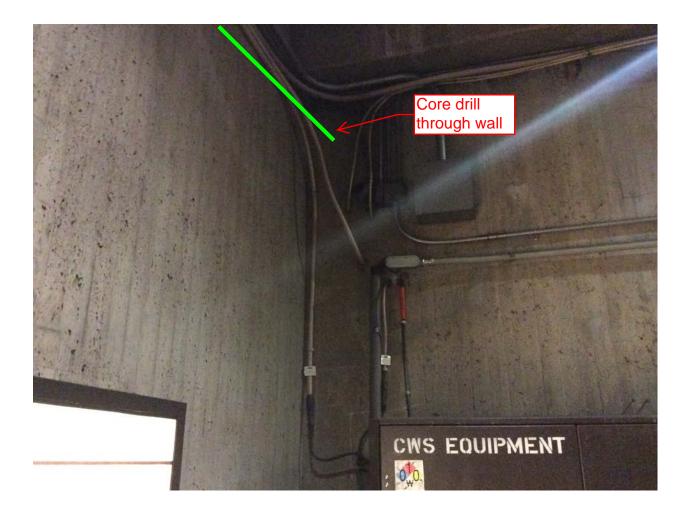


Photo #5 - Proposed conduit run along wall inside Mechanical Room 214 (core drilll required)

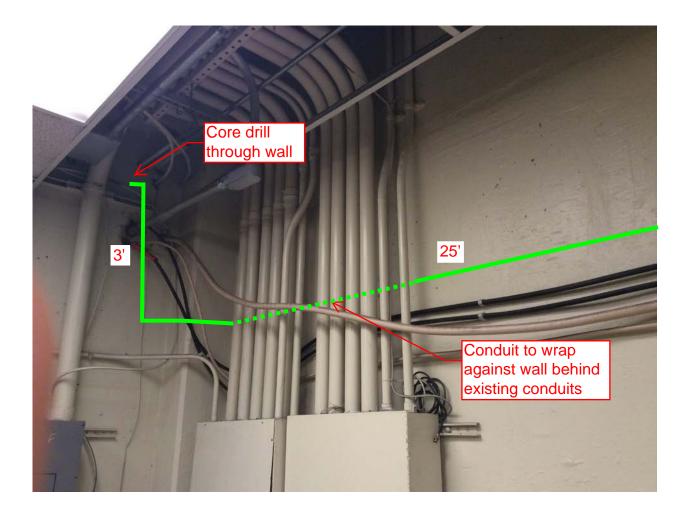


Photo #6 - Proposed conduit run along wall inside Mechanical Room 214

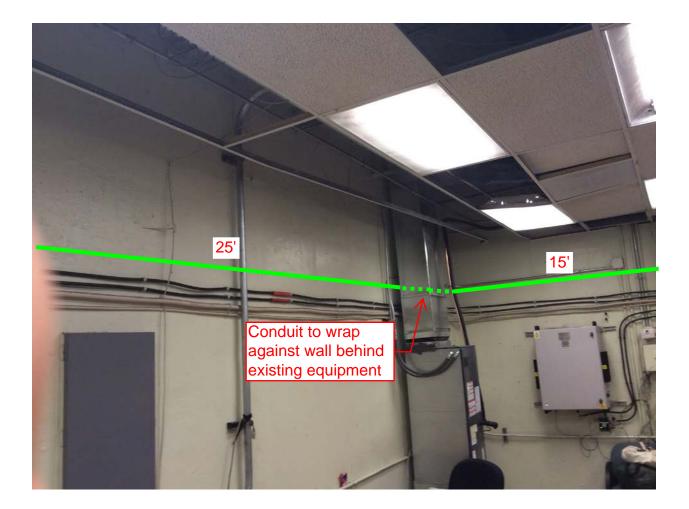
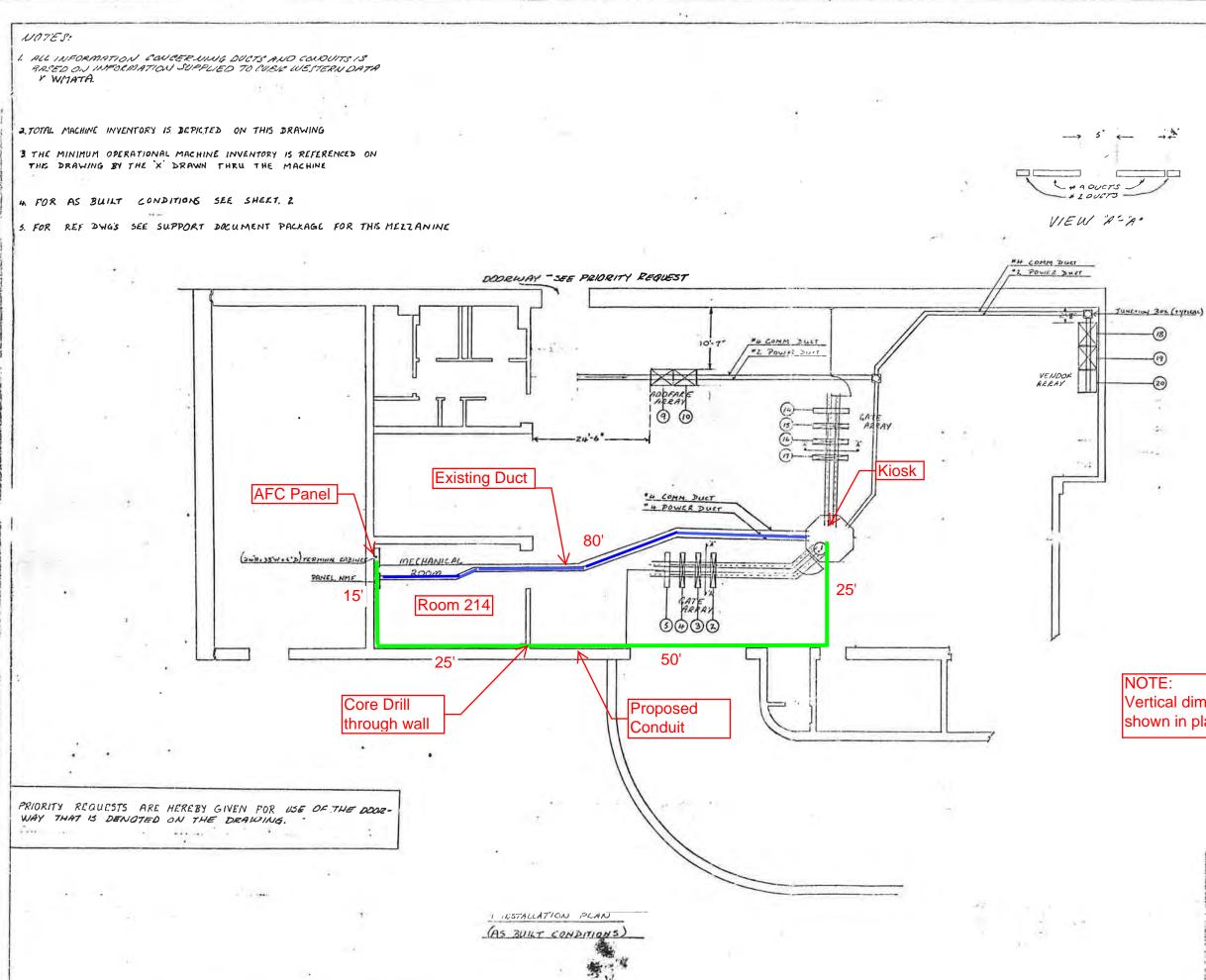


Photo #7 - Proposed conduit run connecting to AFC Panel inside Mechanical Room 214





REVISIONS DESCRIPTION DATE APVD AS BUILT DRAWING REVA 5-10-77 20751 Vertical dimensions for proposed conduit not shown in plan view. Refer to photographs.

CONTRACT NUMBER	CUBIC WESTERN DATA A LINIGUY OF CLOIC CORDANO MODIEARINI WESA ROAD - POST OFFICE BDI MODED CA VELSE MODIEARINI WESA ROAD - POST OFFICE BDI MODED CA VELSE		
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APPROVED	SIZE		DRAWING NUMBER

Mezzanine Inspection Report (Scoping)								
Date: 09/18/2014	Station Name: B04 Rhode Isla	and Avenue	Mezzanine #: 026	Completed By: Mike Butler				
Summary								
Scoping of power/ communication ducts in Upper and Lower faregates completed; pull string installed in communication ducts. Scoping and pull string installation completed for power duct between Kiosk and AFC Panel. All ducts are not at capacity. A minor obstruction was found at the kiosk entrance to the lower faregate array - there appears to be mortar and debris blocking the entrance to one of the power ducts. However, this did not impact the scoping and pull string installation as there was an alternative parallel duct that had a clear pathway. Total power conductor run is approximately 95 feet between Kiosk and AFC Panel. Scanning is not_required at this mezzanine.								
		Scoping o	of Faregate Array(s)					
٢	Fask	Yes/No		Notes				
Communications Duc	t – Upper Faregate Array (4 fa	aregates)						
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Rhode Island U	pper Comm Video.avi				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	actions or blockages? Provide acific location.	No						
	Provide additional details of ducts and number of wires.	No	Duct is 4" wide and 1" de	eep with less than 10 wires inside.				
Communications Duc	t - Lower Faregate Array (4 fa	aregates)						
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Rhode Island L	ower Comm Video.avi				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	actions or blockages? Provide ecific location.	No						
	Provide additional details of ducts and number of wires.	No	Duct is 4" wide and 1" de	eep with less than 10 wires inside.				
Power Duct - Upper Fa	aregate Array (4 faregates)							
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Rhode Island U	pper Power Left Video.avi				
Were there any obstru details of type and spe	ctions or blockages? Provide cific location.	No						
	? Provide additional details of ducts and number of wires.	No	Duct is 4" wide and 1" de	eep with less than 10 wires inside.				
Power Duct - Lower F	aregate Array (4 faregates)							
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Rhode Island P	ower Left Video.avi				
Were there any obstru details of type and spe	actions or blockages? Provide acific location.	Yes	- there appears to be mo	und at the kiosk entrance to the lower faregate array rtar and debris blocking the entrance to one of the e power duct with clear pathway was used.				
	? Provide additional details of ducts and number of wires.	No	Duct is 4" wide and 1" de	eep with less than 10 wires inside.				

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No		Notes		
Kiosk to AFC Par	nel (length: 95 feet)	1	1			
Was video scopi conduit run?	ing completed for the entire duct /	Yes		Rhode Island Kiosk to AFC Panel.avi direct run from the Kiosk to the AFC Panel (see photos 1, 2 & 3)		
Was pull string in	nstalled?	Yes				
Were there any o details of type an	bstructions or blockages? Provide d specific location.	No				
Is the duct / cond details about the number of wires.	luit at capacity? Provide additional dimensions of duct / conduit and	No	Duct is 4"	wide and 1" deep with less than 10 wires inside.		
			1			
			1			
			1			
		Observatior	ns / Issues	/ Next Steps		
	clean and remove the mortar / debri run from kiosk to AFC Panel is 95 f		ne entry to t	ne power duct in the kiosk.		
			Sign Off			
	GFP Representa	tive		WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizur					
Date:	10/29/2014					



Photo #1: B04 Rhode Island Ave. - View of kiosk from free side.

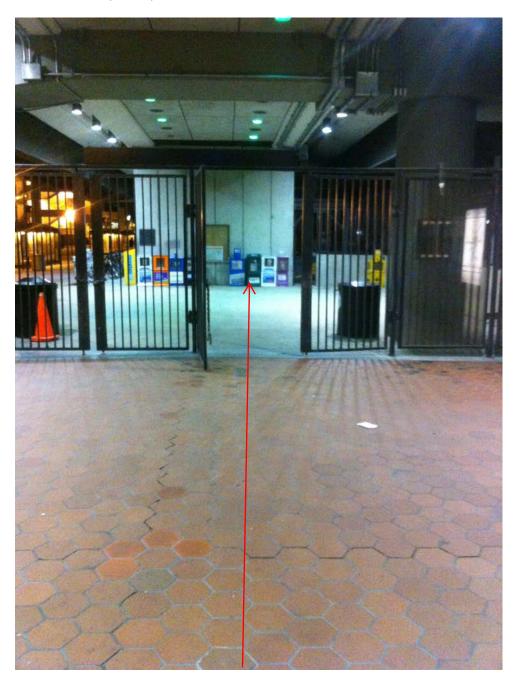


Photo #2: B04 Rhode Island Ave. - View of free side of mezzanine; presumed duct path from kiosk (behind) to AFC panel (past door on far wall).

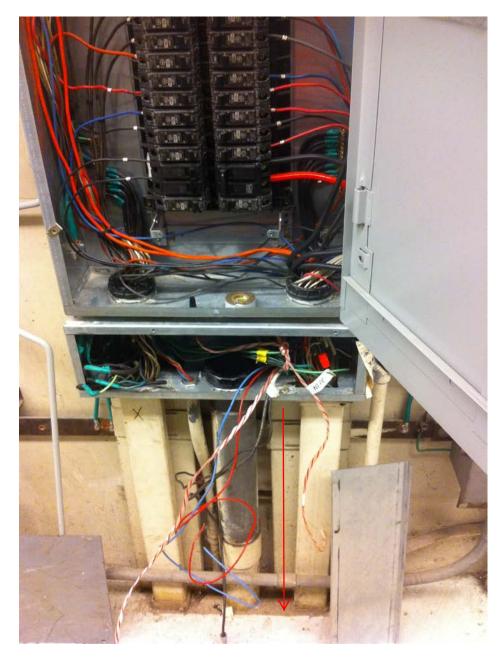
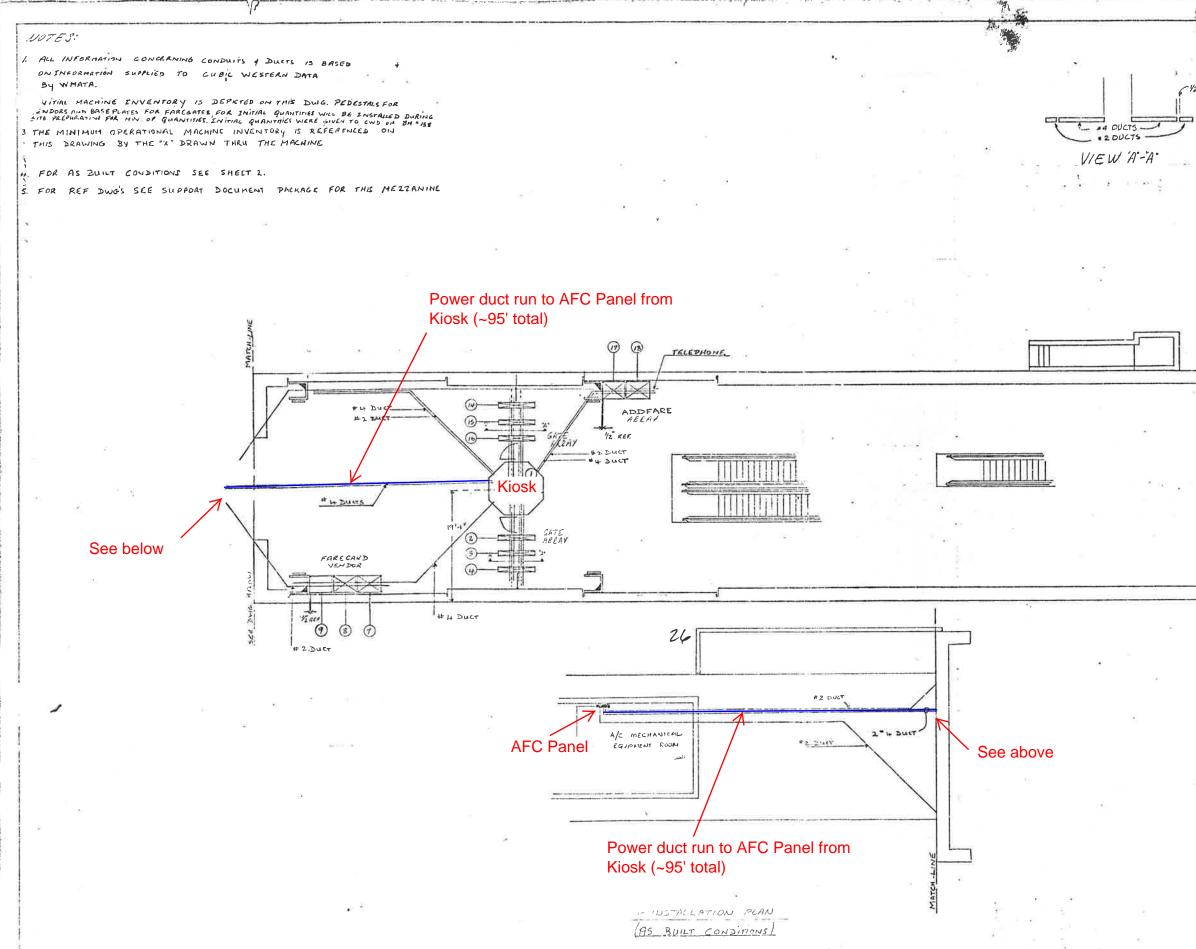


Photo #3: B04 Rhode Island Ave. – Installation of pull string in AFC Panel.



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Mezzanine Inspection Report								
Date: 10/16/14	Station Name: B05 Brookland	-CUA	Mezzanine #: 027	Completed By: Mike Butler				
Summary								
Video scoping and pull string installation was only partially completed for this mezzanine. Video scoping and pull string installation was completed for communication ducts in Upper and Lower Faregate Arrays; respective power ducts were also video scoped. It should be noted that extensive rust and corrosion was found in upper/lower faregate ducts, however there appears to be sufficient capacity for new wires. Contractor was unable to install pull string in power duct between Kiosk and AFC Panel due to an obstruction found at 40' from kiosk entrance; the obstruction was recorded by video scoping. Scanning of the mezzanine floor was completed to determine the existing layout of in-floor ducts and a proposed power duct / conduit run between the Kiosk and AFC Panel. A proposed power duct, that will run along a different path than the original duct run due to space constraints (see drawing), is proposed from the Kiosk to just outside Room C101 (Elevator Machine room). A proposed handhole is located in the mezzanine floor just outside Room C101. The duct will transition to conduit inside Room C101 via a junction box. The conduit will proceed up the west wall of Room C101 and across the ceiling before exiting the room through the wall next to door (wall to be core drilled). The conduit will continue along the hallway until it reaches the entrance to Room C106 (see photo #6 and7), where it will then pass through the wall (wall to be core drilled) and proceed to the AFC Panel.								
		Scoping of	of Faregate Array(s)					
	Task	Yes/No		Notes				
Communications Duc	ct – Upper Faregate Array (4 fa	regates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Brookl	and Upper Comm Fairgate Video.avi"				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No	Extensive duct corrosion	a evident.				
	Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires. No 4" walker duct with less than 10 wires							
Communications Duc	ct - Lower Faregate Array (4 fa	regates)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Brookl	and Lower Comm FairgateVVideo.avi "				
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstrudetails of type and specified	uctions or blockages? Provide ecific location.	No	Extensive duct corrosion	n evident.				
	? Provide additional details of ducts and number of wires.	No	4" walker duct with less	than 10 wires				
Power Duct - Upper F	aregate Array (4 faregates)							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Brookl	and Upper Power Fairgate Video.avi "				
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No	Extensive duct corrosion) evident.				
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less	than 12 wires				
Power Duct - Lower F	aregate Array (4 faregates)							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Brookl	and Lower Power Fairgate Video.avi "				
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No	Extensive duct corrosion) evident.				
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less	than 12 wires				

Scoping of Power Duct - Kiosk to AFC Panel							
	Task	Yes/No		Notes			
Kiosk to AFC Par	nel (Distance: 110')						
Was video scopi conduit run?	ng completed for the entire duct /	Partially		WMATA BrooklandLLeft Power duct Kiosk to AFC Video.avi ATA Brookland Right Power duct Kiosk to AFC Video.avi"			
Was pull string in	stalled?	No					
	bstructions or blockages? Provide d specific location.	Yes	power due	ction, which appears to be a collapsed duct was found in the t at 40' from the Kiosk. The scoping showed that the duct also sive corrosion and is in bad condition.			
	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" walker	duct with less than 15 wires			
			I				
			-				
			1				
			-				
		Observatior	ns / Issues /	Next Steps			
There were no ha				ng power duct run from the Kiosk to the AFC Panel.			
	wer duct run is approximately 65' fr						
	nduit run is approximately 65' from I						
			Sign Off				
	GFP Representa	tive		WMATA PRGM			
Name:	Mike Butler						
Signature:	Mizun						
Date:	01/03/2015						

Photo # 1 – Existing and proposed duct run from Kiosk (Angle 1).

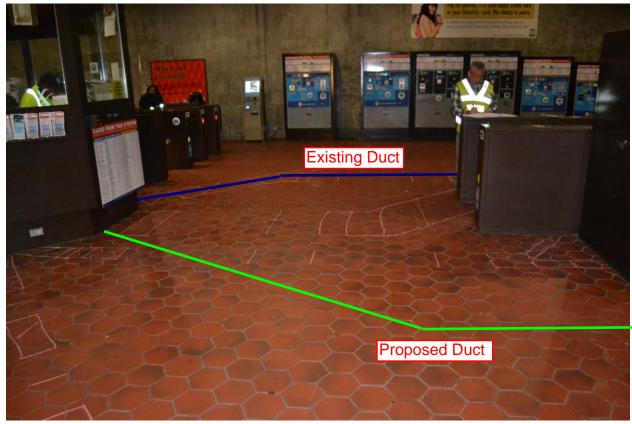


Photo # 2 – Existing and proposed duct run from Kiosk (Angle 2).



Photo # 3 – Continuation of existing and proposed duct run from Kiosk (Angle 1).

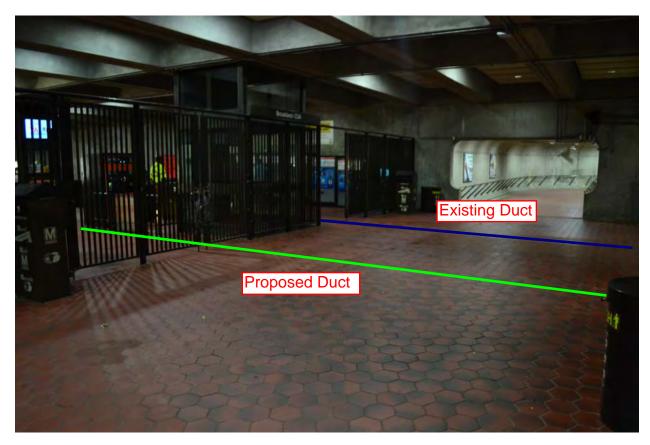


Photo # 4– Continuation of proposed duct run from Kiosk (Angle 2)



Photo # 5 – Proposed duct approach to back rooms



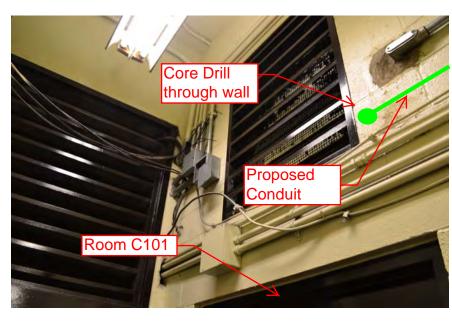


Photo #6 - Proposed conduit from Elevator Machine Room C101



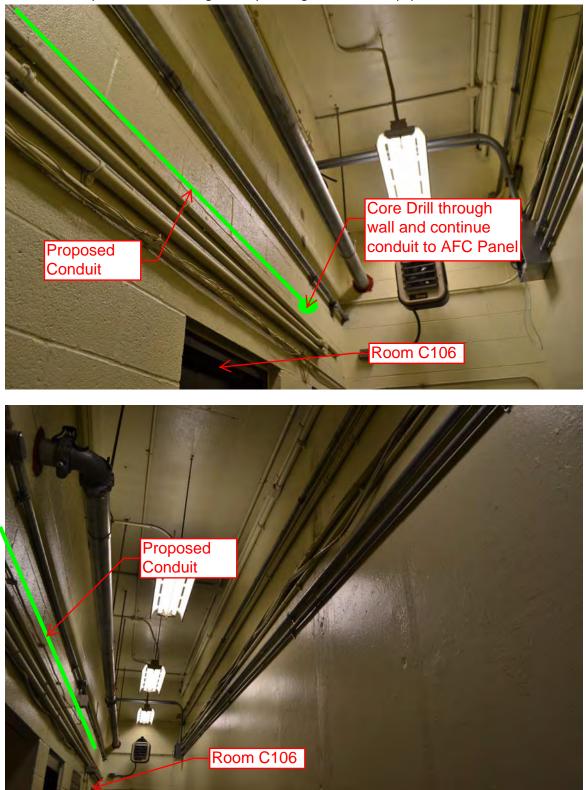
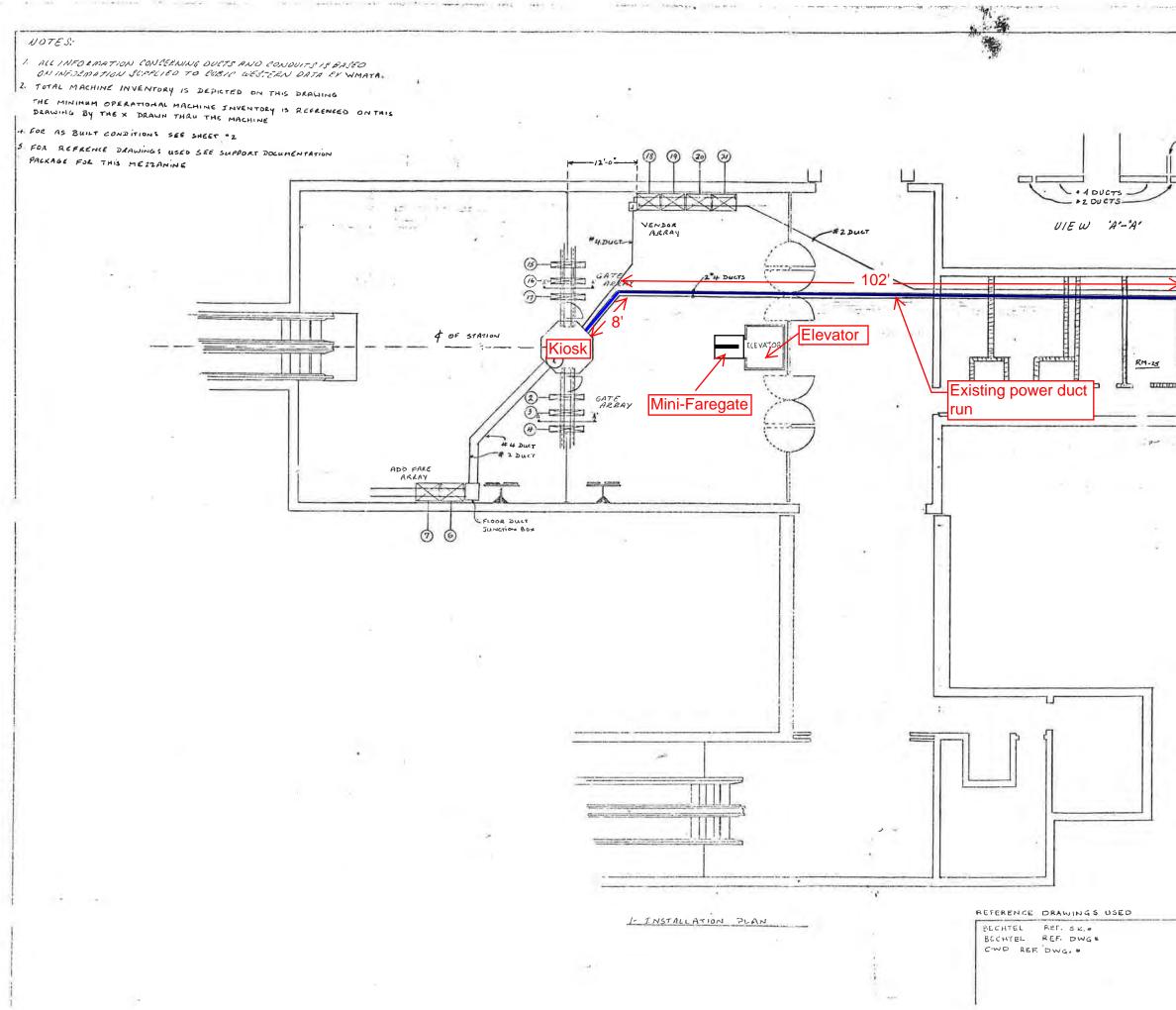


Photo #7 - Proposed conduit along hallway leading to Electrical Equipment Room C106



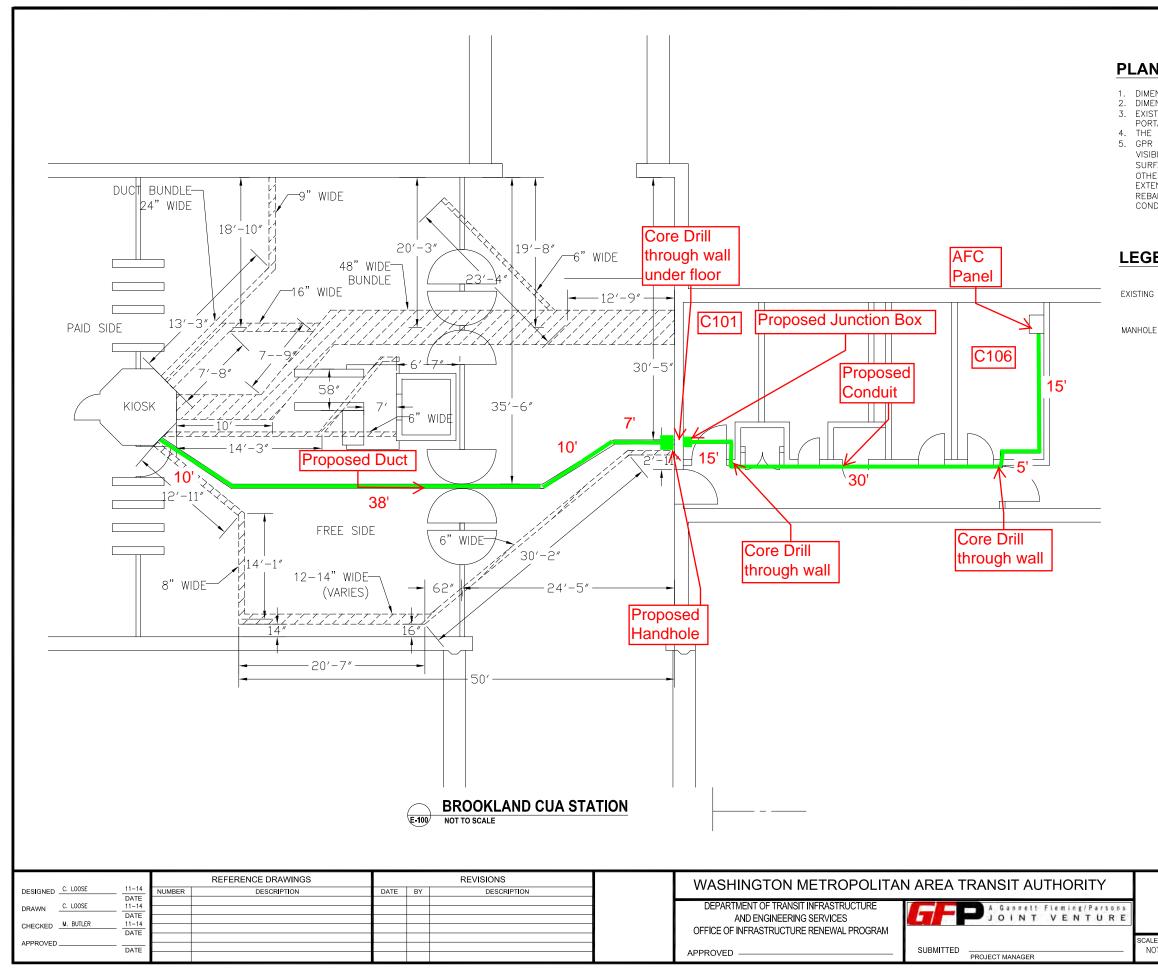
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PLAN NOTES:

DIMENSIONS ARE IN FEET AND INCHES. DIMENSIONS ARE FOR REFERENCE ONLY. EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE. THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY. THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY. 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:

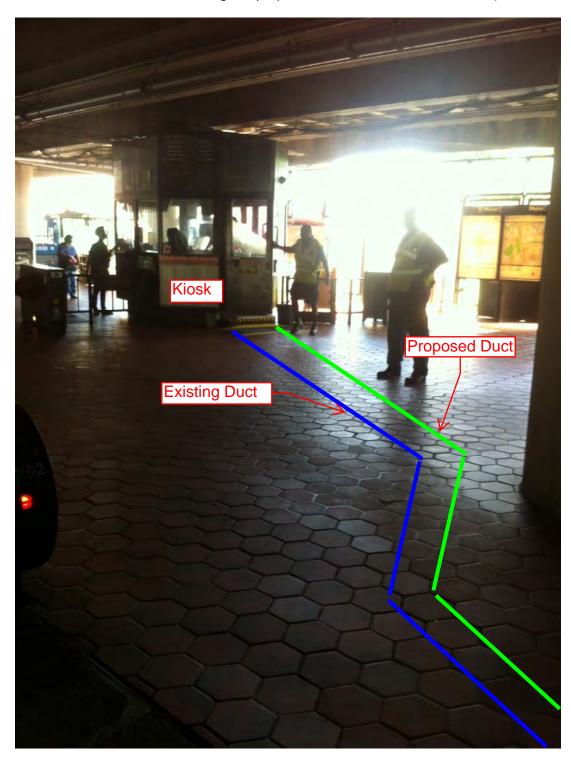
EXISTING DUCT

MH

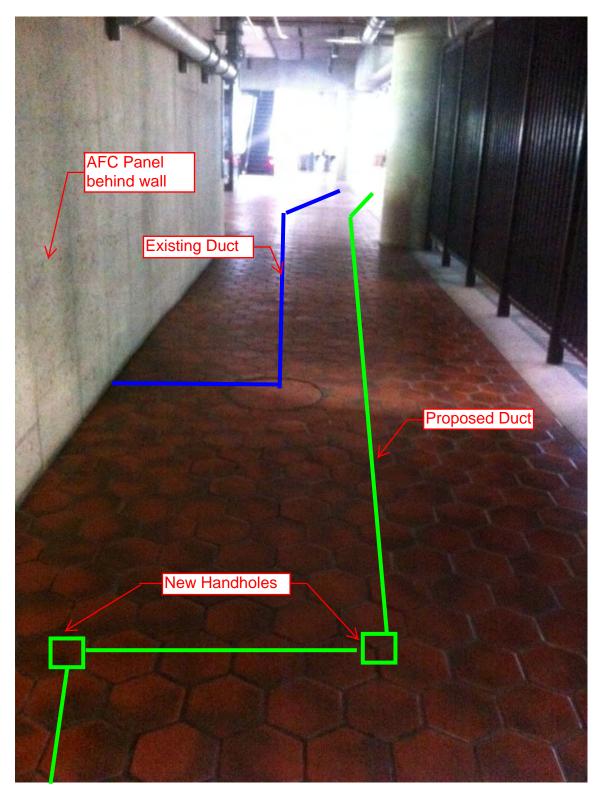
		t no. XXXX				
15-NEPP-01 IN - FLOOR DUCT INSPECTIONS B05 BROOKLAND CUA (M027) PROPOSED ELECTRICAL DUCT PATH						
SCALE NOT TO SCALE	drawing no. B05-E-100	XXX				

	Mezzanine Inspection Report						
Date: 09/17/14 Stat	tion Name: B06 Fort Totter	า	Mezzanine #: 026	Completed By: Mike Butler			
			Summary	·			
both in both the faregate common installed in faregate common Kiosk and Handhole by util during video scoping. Scanning of the mezzanine attached drawing shows the	ommunication and power d unication ducts due to colla izing an existing pull string e floor was completed to de e proposed duct / conduit r	ucts and the pses and ina however it i termine layc oute, which	power duct between the l accessibility issues. A pull s not advisable to re-use t out of existing in-floor duct comprises a 150' duct run	caused by water intrusion. Collapses were found Kiosk and AFC Panel. Pull string could not be string was installed in the power duct between the this duct as there are were multiple collapses found s and a proposed duct / conduit route. The from the Kiosk to backrooms (including tition wall and then into AFC Panel.			
		Scoping of	of Faregate Array(s)				
Task		Yes/No		Notes			
Communications Duct – U	Ipper Faregate Array (5 fa	regates)					
Was video scoping comple run?	eted for the entire duct	No	Array could not be reach ducts.	ned; only accessible through lower faregate array			
Were pull strings installed array?	at all faregates in the	No					
Were there any obstruction details of type and specific		N/A					
Is the duct at capacity? Pro about the dimensions of du		N/A					
Communications Duct - Lo	ower Faregate Array (4 fa	regates)					
Was video scoping compl run?	eted for the entire duct	Partially					
Were pull strings installed array?	at all faregates in the	No					
Were there any obstruction details of type and specific	0	Yes	Left duct is collapsed at first faregate.	2 feet from kiosk; right duct has heavy debris after			
Is the duct at capacity? Pro about the dimensions of du		N/A	4" walker duct with less	than 10 wires			
Power Duct - Upper Fareg	ate Array (5 faregates)						
Was video scoping compl run?	eted for the entire duct	No	Array could not be react ducts.	ned; only accessible through lower faregate array			
Were there any obstruction details of type and specific		N/A					
Is the duct at capacity? Pro about the dimensions of du		N/A					
Power Duct - Lower Fareg	ate Array (4 faregates)						
Was video scoping compl run?	eted for the entire duct	Partially					
Were there any obstruction details of type and specific		Yes	Left duct is collapsed at kiosk.	duct entrance; right duct is collapsed at 4 feet from			
Is the duct at capacity? Pro about the dimensions of du		N/A	6" walker duct with less	than 12 wires			

Scoping of Power Duct - Kiosk to AFC Panel					
Task	Yes/No	Notes			
Kiosk to Handhole (Distance: 140')					
Was video scoping completed for the entire duct / conduit run?	Partially	Not possible due to collapsed duct			
Was pull string installed?	Yes	Existing pull string used to install new pull string, however it is not advisable to install new wires due to compromised condition of existing duct and limited available capacity.			
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Right duct: Obstruction at 50 feet from handhole towards kiosk Left duct: Obstruction at 80 feet from handhole towards kiosk			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" walker duct with 21 wires in right duct; 20 wires in left duct			
Handhole to AFC Panel (Distance: 5')					
Was video scoping completed for the entire duct / conduit run?	No	Not possible due to collapsed duct.			
Was pull string installed?	No				
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Collapsed duct close to handhole.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" walker duct with 21 wires in right duct; 20 wires in left duct			
	Observation	na / Jaquag / Navit Stang			
	Observation	ns / Issues / Next Steps			
		Sign Off			
GFP Representa	tive	WMATA PRGM			
Name: Mike Butler					
Signature: M.ZM					
Date: 01/03/2015					



Photo# 1: B06 Fort Totten – Existing and proposed duct runs on mezzanine level (towards Kiosk)



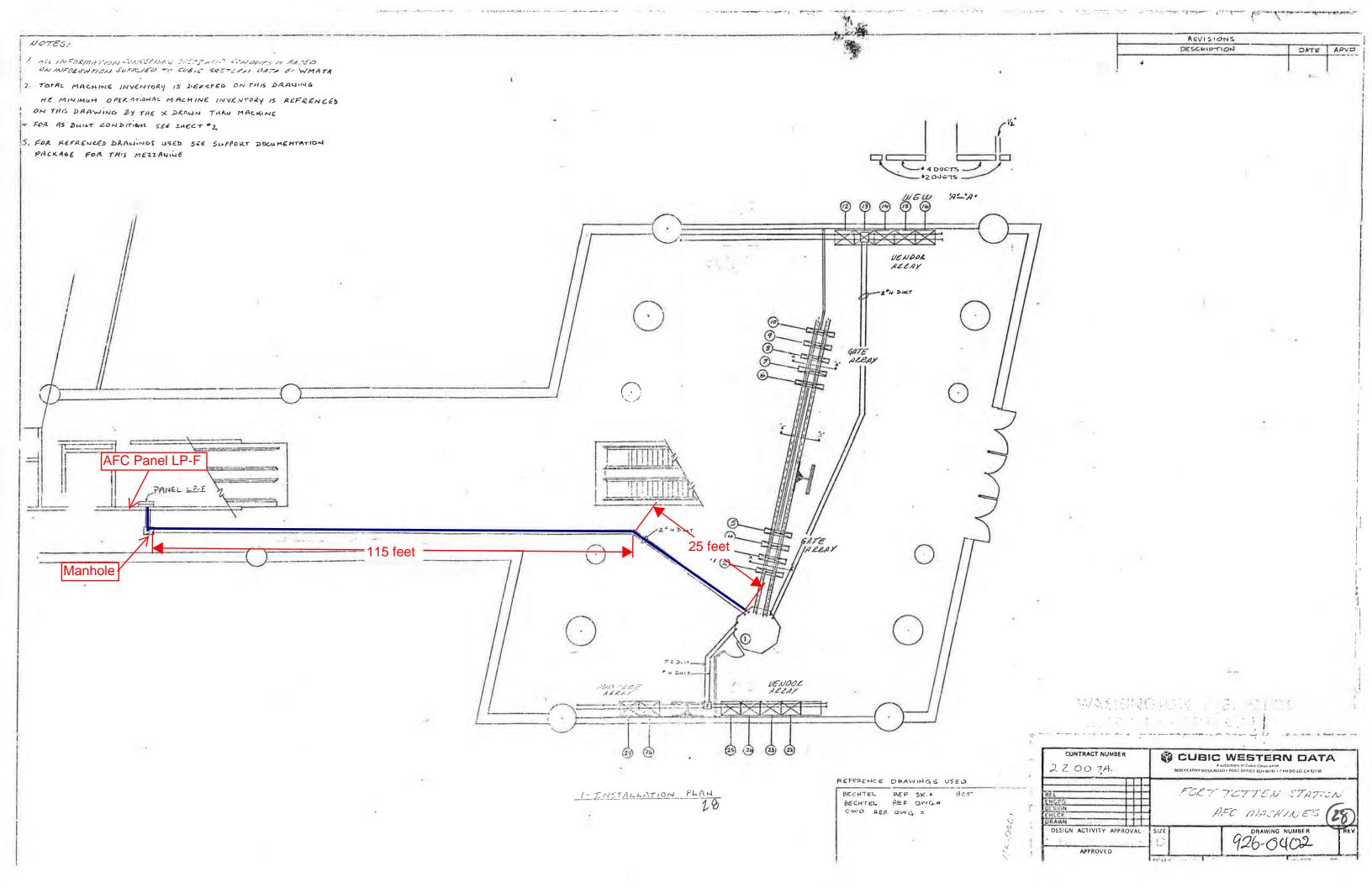
Photo# 2: B06 Fort Totten – Existing and proposed duct runs near AFC Panel

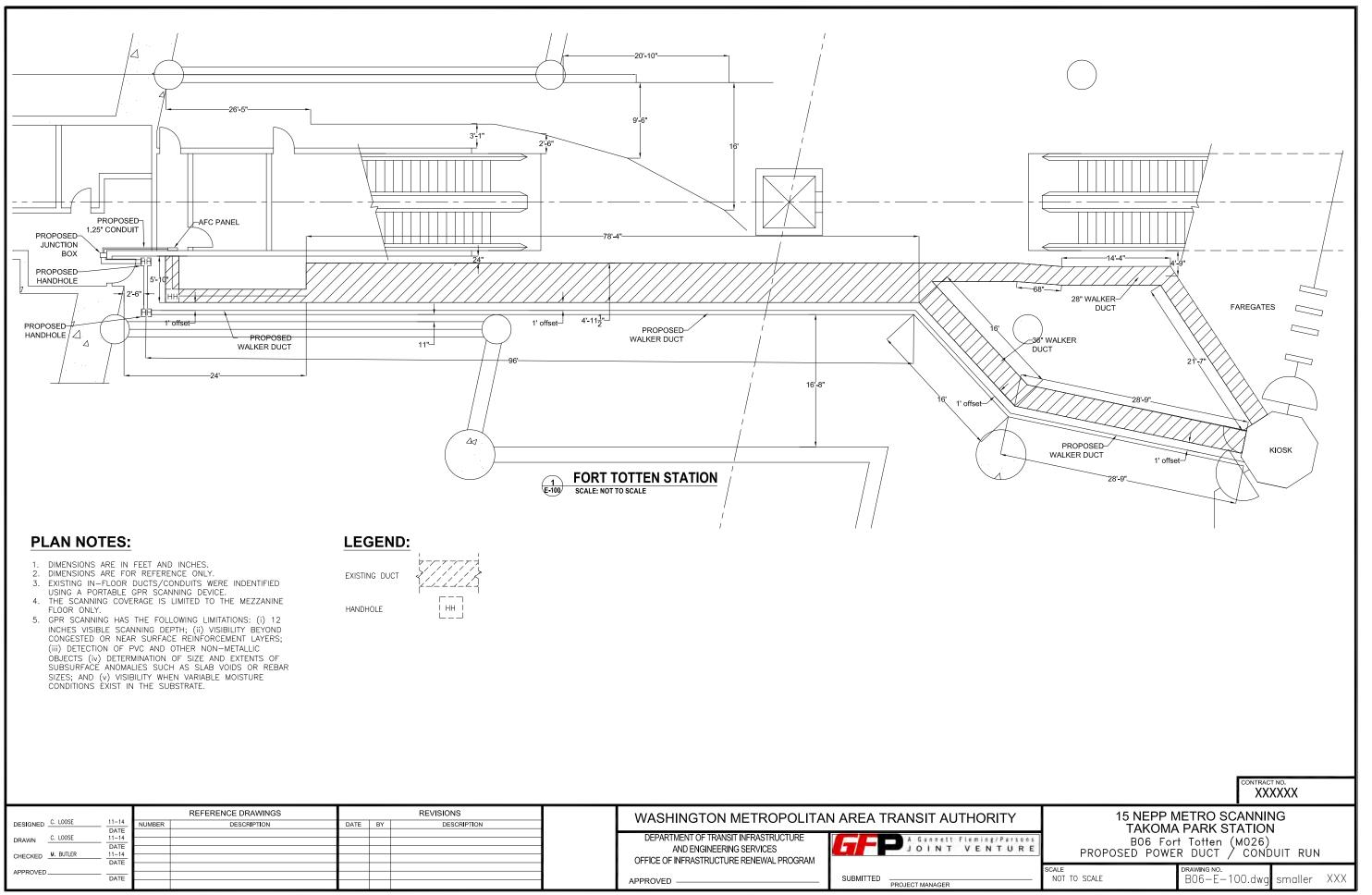
Photo #3: B06 Fort Totten – Poor condition of Handhole on mezzanine floor



Photo #4: B06 Fort Totten – Pull string installed in power duct run from handhole to kiosk







		REFERENCE DRAWINGS			REVISIONS	WASHINGTON METROPOLITA		
DESIGNED <u>C. LOOSE</u> <u>11-14</u> DATE	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION	WASHINGTON METROLOGINA		
DRAWN <u>C. LOOSE</u> <u>11–14</u> DATE						DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES	FF	A Gannett Fleming/Parsons
CHECKED M. BUTLER 11-14 DATE						OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM		
APPROVED DATE						APPROVED	SUBMITTED	PROJECT MANAGER

Mezzanine Inspection Report (MIR)						
Date: 09/15/2014 Station Name	: B07 Takoma		Mezzanine #: 029	Completed By: Mike Butler		
			Summary			
Scoping was completed as much as corrosion from water intrusion, it was attached photos.	possible with mu not possible to f	Itiple obstruc ully complete	ctions found in all walker d e any scoping or pull string	ucts. Due to the obstructions and substantial g installation. Obstructions are shown in the		
	7-E-100, which i	s attached to	this report. The proposed	dentified. A new route for proposed duct I in-floor walker duct runs parallel to the existing nto AFC Panel LP-F.		
The total length of the new walker du Hand Hole to AFC Panel.	ict is approximati	ely 34' from I	Kiosk to proposed Hand H	ole; the new conduit is approximately 4' from		
		Scoping o	of Faregate Array(s)			
Task		Yes/No		Notes		
Communications Duct – Upper Fare	egate Array (6 tu	urnstiles)				
Was video scoping completed for the run?	e entire duct	Partially		string installation could not be completed due to		
Were pull strings installed at all farec array?	gates in the	No	obstruction.			
Were there any obstructions or block details of type and specific location.	ages? Provide	Yes	An obstruction (possibly collapsed duct) observed by video scoping approximately 2 feet from the Kiosk (see photo #1)			
Is the duct at capacity? Provide addit about the dimensions of ducts and nu		N/A	4" wide duct.			
Communications Duct - Lower Fare	gate Array					
Was video scoping completed for th run?	ne entire duct	N/A				
Were pull strings installed at all faregarray?	gates in the	N/A				
Were there any obstructions or block- details of type and specific location.	ages? Provide	N/A				
Is the duct at capacity? Provide addit about the dimensions of ducts and nu		N/A				
Power Duct - Upper Faregate Array	(6 turnstiles)					
Was video scoping completed for th run?	ne entire duct	Partially	Video scoping could not	be completed due to obstruction.		
Were there any obstructions or block details of type and specific location.	ages? Provide	Yes		collapsed duct) observed by video foot from the Kiosk (see photo #2)		
Is the duct at capacity? Provide addit about the dimensions of ducts and nu		N/A	4" wide duct.			
Power Duct - Lower Faregate Array						
Was video scoping completed for th run?	ne entire duct	N/A				
Were there any obstructions or block- details of type and specific location.	ages? Provide	N/A				
Is the duct at capacity? Provide addit about the dimensions of ducts and nu		N/A				

S	Scoping of Power	r Duct - K	iosk to AFC Panel
Task	Yes/No		Notes
Kiosk to Hand hole 1 (35 feet)		I	
Was video scoping completed for the entire conduit run?	e duct / Partially		ping and pull string installation could not be completed due to
Was pull string installed?	No	obstructio	n.
Were there any obstructions or blockages? P details of type and specific location.	rovide Yes	respective	ons were found at 4 and 15 feet from the kiosk (photos #3 and 4, ely), possibly collapsed duct. Attempts were made to scope from of the run.
Is the duct / conduit at capacity? Provide add details about the dimensions of duct / conduit number of wires.		4" wide de	uct.
Hand hole 1 to Hand hole 2 (7 feet)			
Was video scoping completed for the entire conduit run?	e duct / No		ping and pull string installation could not be completed due to
Was pull string installed?	No	obstructio	n.
Were there any obstructions or blockages? P details of type and specific location.	rovide Yes	Obstructio	on at entry to hand hole (photo #5)
Is the duct / conduit at capacity? Provide add details about the dimensions of duct / conduit number of wires.		4" wide de	uct.
Hand hole 2 to AFC Panel (3 feet)		T	
Was video scoping completed for the entire conduit run?	e duct / No	Video sco obstructio	ping and pull string installation could not be completed due to n.
Was pull string installed?	No		
Were there any obstructions or blockages? P details of type and specific location.	rovide Yes	Obstructio	on at entry to hand hole (photo #6)
Is the duct / conduit at capacity? Provide add details about the dimensions of duct / conduit number of wires.		4" wide de	Jct.
		T	
		muotiene ()	
		rvations / I	
Substantial corrosion and broken parts of ex the mezzanine level. Unable to install pull str			thed photos), due to extensive water intrusion throughout a duct.
		Sign Off	
GFP Rep	resentative	o.gn on	WMATA PRGM
Name: Mike Butler			
Signature: M.ZMA	-		
Date: 11/12/2014			

Photo #1: B07 Takoma - Still image of obstruction in faregate array comm. duct



Photo #2: B07 Takoma - Still image of obstruction in faregate array power duct

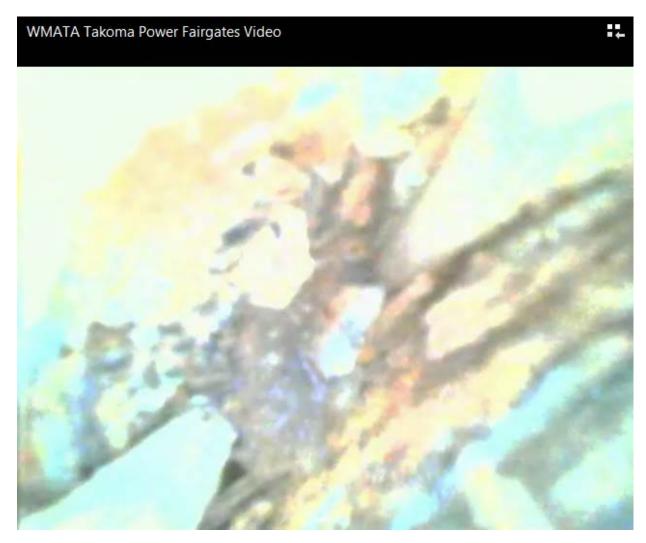


Photo #3: B07 Takoma - Still image of obstruction in power duct from kiosk to handhole



Photo #4: B07 Takoma - Still image of obstruction in power duct from handhole to kiosk

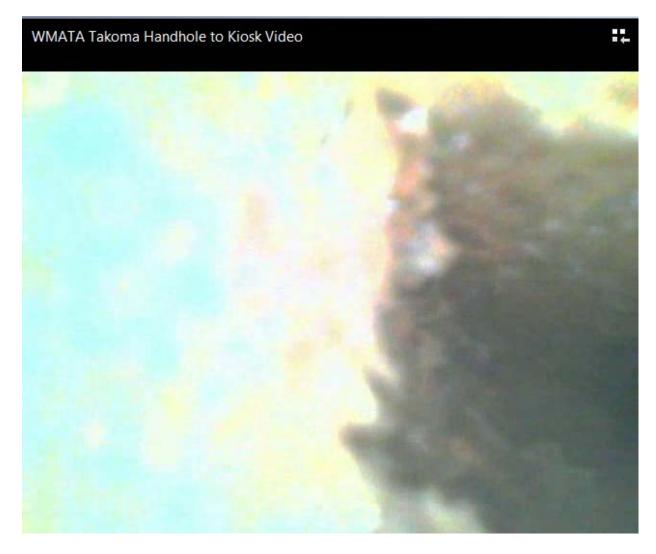






Photo #6: B07 Takoma – Poor conditions in second handhole

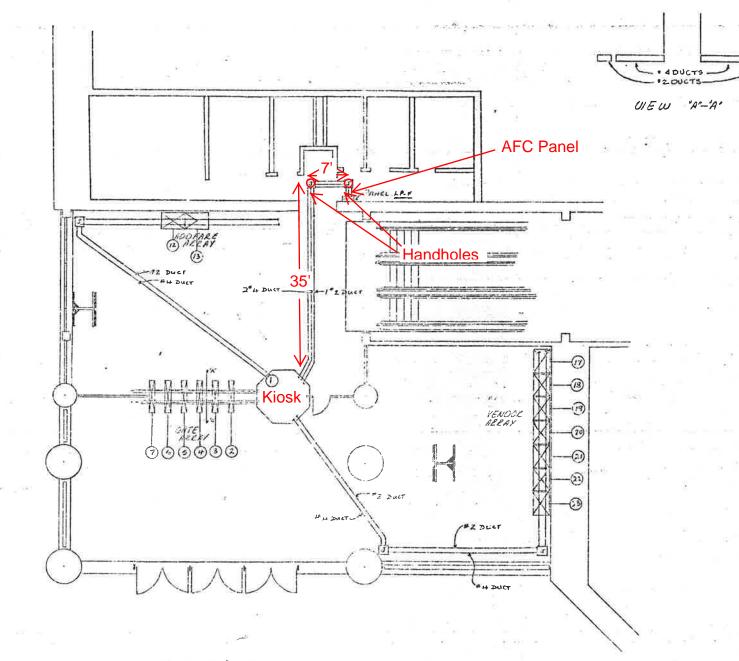
- NOTES:
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+ FOR AS BUILT CONDITIONS SEE SHEET "2

5 FOR REFRENCED DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE

* 020



1- INSTALLATION PLAN 29

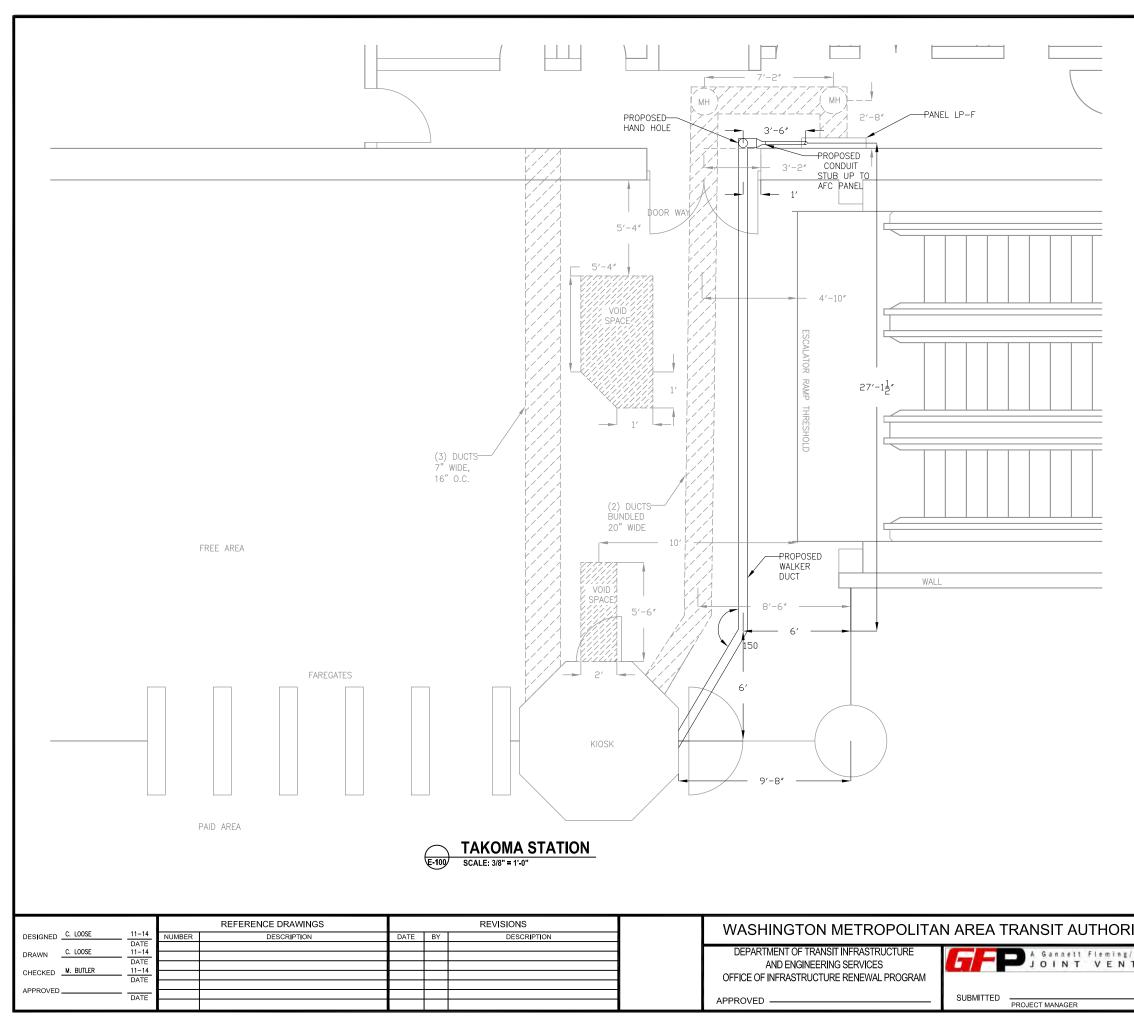
> REFERENCE DRAWINGS USED BECHTEL REF SK -BECHTEL REF. DWG.+ CHUD REF. DWG. #

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PLAN NOTES:

- DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
- 3. EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE. THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
- 4. 5. GPR SCANNING HAS THE FOLLOWING LIMITATIONS: (i) 12 INCHES
- VISIBLE SCANNING DEPTH; (ii) VISIBILITY BEYOND CONGESTED OR NEAR VISIBLE SCANNING DEPTH; (II) VISIBILITY BETOND CONCESTED 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 SUBSTRATE.

LEGEND:

EXISTING DUCT

MANHOLE

MH

			t NO. XXXX			
ITY	15-NEPP-01 IN - FLOOR DUCT INSPECTIONS					
Parsons TURE	B07 TAKOMA (M029) PROPOSED ELECTRICAL DUCT PATH					
	NOT TO SCALE	DRAWING NO. B07-E-100	XXX			

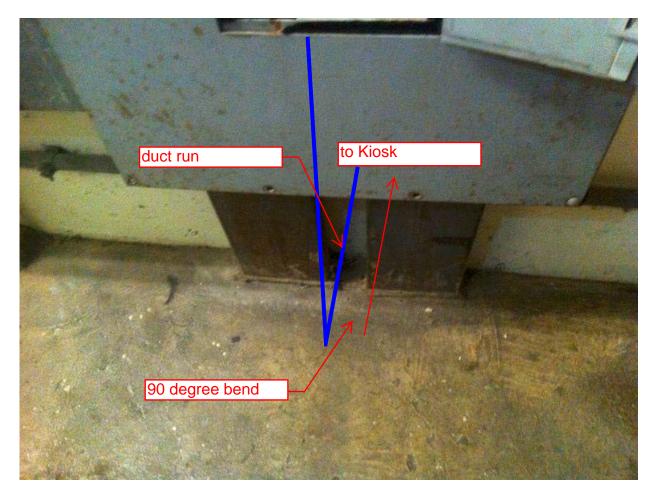
Mezzanine Inspection Report (Scoping)					
Date: 09/12/2014	Station Name: B08 – Silver S	pring North	Mezzanine #: 031	Completed By: Tino Sahoo	
			Summary		
				er and lower faregate array communications duct and as possible for the upper and lower faregate array	
There were some min array power duct.	nor obstructions encountered wh	ile video sco	ping the lower faregate an	ray communications duct and the upper faregate	
Scanning is not requir	red.				
		Scoping o	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Duc	ct – Upper Faregate Array (3 G	ates)			
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Silver	Spring North Upper Comm Duct Video.avi file.	
Were pull strings insta array?	alled at all faregates in the	Yes			
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No			
	? Provide additional details of ducts and number of wires.	No			
Communications Duc	ct - Lower Faregate Array (3 G	ates)			
Was video scoping c run?	completed for the entire duct	No	26 of 29 feet of the lowe Refer to WMATA Silver	r comm. array run was successfully video scoped. Spring North Lower Comm Duct Video.avi file.	
Were pull strings insta array?	alled at all faregates in the	Yes			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	Yes	Insert/riser to faregate c	reates a partial obstruction	
	Provide additional details of ducts and number of wires.	No			
Power Duct - Upper F	Faregate Array (3 Gates)				
Was video scoping c run?	ompleted for the entire duct	No	Refer to WMATA Silver	er array power duct was successfully video scoped. Spring North Upper Power A Duct.avi and WMATA er Power B Duct.avi files.	
Were there any obstrudetails of type and spectrum	uctions or blockages? Provide ecific location.	Yes	Duct is full of rust and de get new wiring through e	ebris and possibly collapsed; Should be able to existing ducts.	
	? Provide additional details of ducts and number of wires.	No			
Power Duct - Lower F	Faregate Array (3 Gates)		[
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Silver	Spring Lower Power Video.avi file.	
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No			
	? Provide additional details of ducts and number of wires.	No			

	Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No			Notes		
Kiosk to AFC Pa	nel (50 foot run)						
Was video scop conduit run?	ing completed for the entire duct /	No	degree wa	of power duct from alker duct bend at sk to AFC Video.av	AFC Panel. Refe	nel was completed to 90 er to WMATA Silver Spring	
Was pull string i	nstalled?	Yes					
Were there any o details of type ar	obstructions or blockages? Provide ad specific location.	No					
Is the duct / cond details about the number of wires.	duit at capacity? Provide additional dimensions of duct / conduit and	No					
		I	T				
		Observatior	ns / Issues /	/ Next Steps			
			Sign Off				
	GFP Representa	tive			WMATA I	PRGM	
Name:	Tino Sahoo						
Signature:	Tanonaya Dahoo						
Date:	9/12/2014						



Photo #1 – B08 Silver Spring North: Kiosk on Mezzanine level

Photo #2 – B08 Silver Spring North: Duct run into AFC Panel

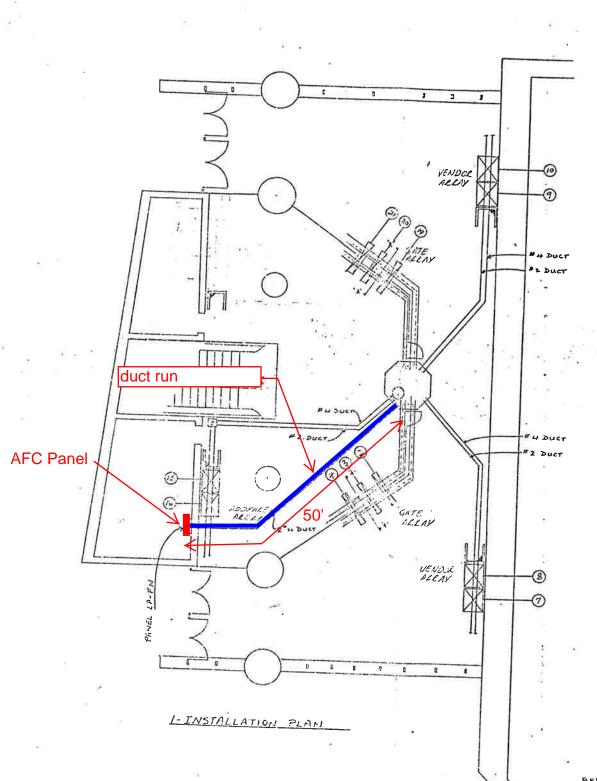




ALL INFORMATION CONCELNING DUCTS AND CONDUMS IS BASED ON THEORMATION SUPPLIED TO CLOIC WESTERN LATA S' WINNER 2. TOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING

3. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFRENCED ON THIS DRAWING BY THE X DRAWN THRU THE MACHINE H. FOR AS BUILT CONDITIONS SEE SHEET D

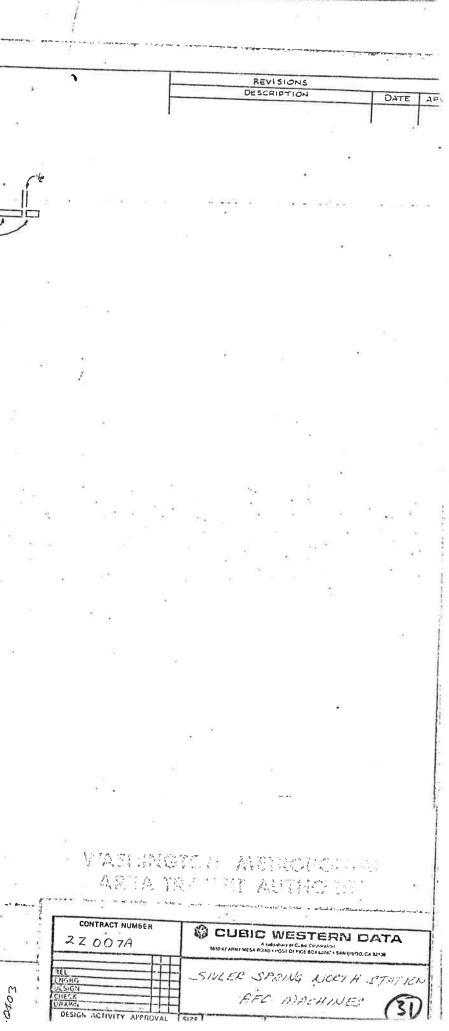
FOR REFRENCED , DRAWINGS USED SEE SUPPORT DOCUMENTATION



4 DUCTS . Z DUCTS

UIEW 'A-A'

REFERENCE DRAWINGS USED BECHTEL REF. SK.+ BECHTEL REF. DWG.+ C-WD REF. DWG.+



Mezzanine Inspection Report REVISION 1						
Date: 09/11/14	Station Name: B08 Silver Spri	ng South	Mezzanine #: 030	Completed By: Mike Butler		
			Summary			
and pull string insta the Kiosk. Mini-fare #3 and as-built drav Scanning was cond Kiosk to AFC Panel base of the wall bet	allation was completed between K gates on mezzanine floor were su ving for location. lucted to identify a new route from I. When the proposed duct reache ween the mezzanine and Room11	the Kiosk to s the wall, th 9. Once insi	C Panel; however there ideo scoped and pull strin AFC Panel. A new duct is ere will be a proposed ha ide Room 119, the duct w	re installed in communication duct. Video scoping was a partial collapse in the walker duct 15' from ng installed in communication duct. Refer to Photo s proposed to run parallel to existing duct from indhole and then the duct will core drill through the ill stub-up vertically and transition to an overhead		
conduit (via a juncti	on box) that will feed into the top o	of the AFC P	aneı.			
		Scoping of	of Faregate Array(s)			
	Task	Yes/No		Notes		
Communications D	uct – Upper Faregate Array (6 g	ates)				
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Upper Faregate Comm Video.avi".		
Were pull strings in array?	stalled at all faregates in the	Yes				
Were there any obs details of type and s	specific location.	No				
	ity? Provide additional details ns of ducts and number of wires.	No	3" walker duct, not at ca	apacity (< 10 wires).		
Communications D	uct - Lower Faregate Array (6 ga	ates)				
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Lower Faregate Comm Video.avi".		
Were pull strings in array?	stalled at all faregates in the	Yes				
Were there any obs details of type and s	specific location.	No				
	ity? Provide additional details ns of ducts and number of wires.	No	3" walker duct, not at ca	apacity (< 10 wires).		
Power Duct - Upper	r Faregate Array (6 gates)					
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Upper Faregate Power Video.avi"		
Were there any obs details of type and s	structions or blockages? Provide specific location.	No				
	ity? Provide additional details ns of ducts and number of wires.	No	6" walker duct, not at ca	apacity (< 8 wires).		
ower Duct - Lowe	r Faregate Array (6 gates)					
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Lower Faregate Power Video.avi"		
Were there any obs details of type and s	structions or blockages? Provide specific location.	No				
	ity? Provide additional details ns of ducts and number of wires.	No	6" walker duct, not at ca	apacity (< 8 wires).		

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No		Notes		
Kiosk to AFC Par	el (Distance: 46')	-				
Was video scopii conduit run?	ng completed for the entire duct /	Yes	Refer to "	WMATA Silver Spring South Kiosk to AFC Panel Video.avi".		
Was pull string in	stalled?	Yes				
Were there any of details of type and	bstructions or blockages? Provide d specific location.	Yes	Duct colla	psed 15' from Kiosk.		
	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" walker	duct, not at capacity (< 8 wires).		
Observations / Issues / Next Steps						
more information.				and 10' of conduit) - refer to photos and drawings for ompleted in 3" communicaton duct; video scoping was also		
completed in 6" power duct. Both ducts are not at capacity (less than 10 wires) and have no obstructions. Refer to video files: "WMATA Silver Spring South Mini Fairgate Comm Video.avi" and "WMATA Silver Spring South Mini Fairgate Power Video.avi".						
Sign Off						
	GFP Representa	tive	Sign On	WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizur	_				
Date:	02/06/15					

Photo #1 – Proposed and existing ducts on mezzanine floor



Photo #2 – Proposed and existing ducts on mezzanine floor

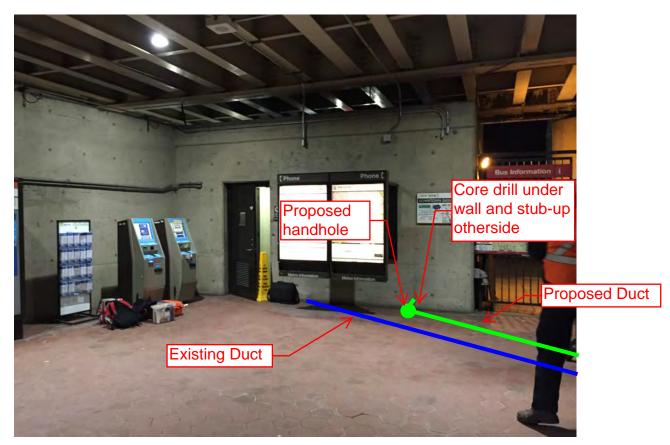


Photo #3 – Mini-faregates on mezzanine floor



NOTES.

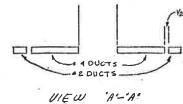
1. ALL INFORMATION CONCERNING DUCTS AND CONDUITS IS BASED ON INFORMATION SUPPLIED TO CUEIC WESTERN DATA BY WM ATA.

2. TOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING IE MINIMUM OPERATIONAL MACHINE ENVENTORY IS REFRENCED ON THIS DRAWING BY THE X. DRAWN THRU THE MACHINE.

H. FOR AS BUILT CONDITIONS SEE SHEET *2

5. FOR REFRENCED DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE

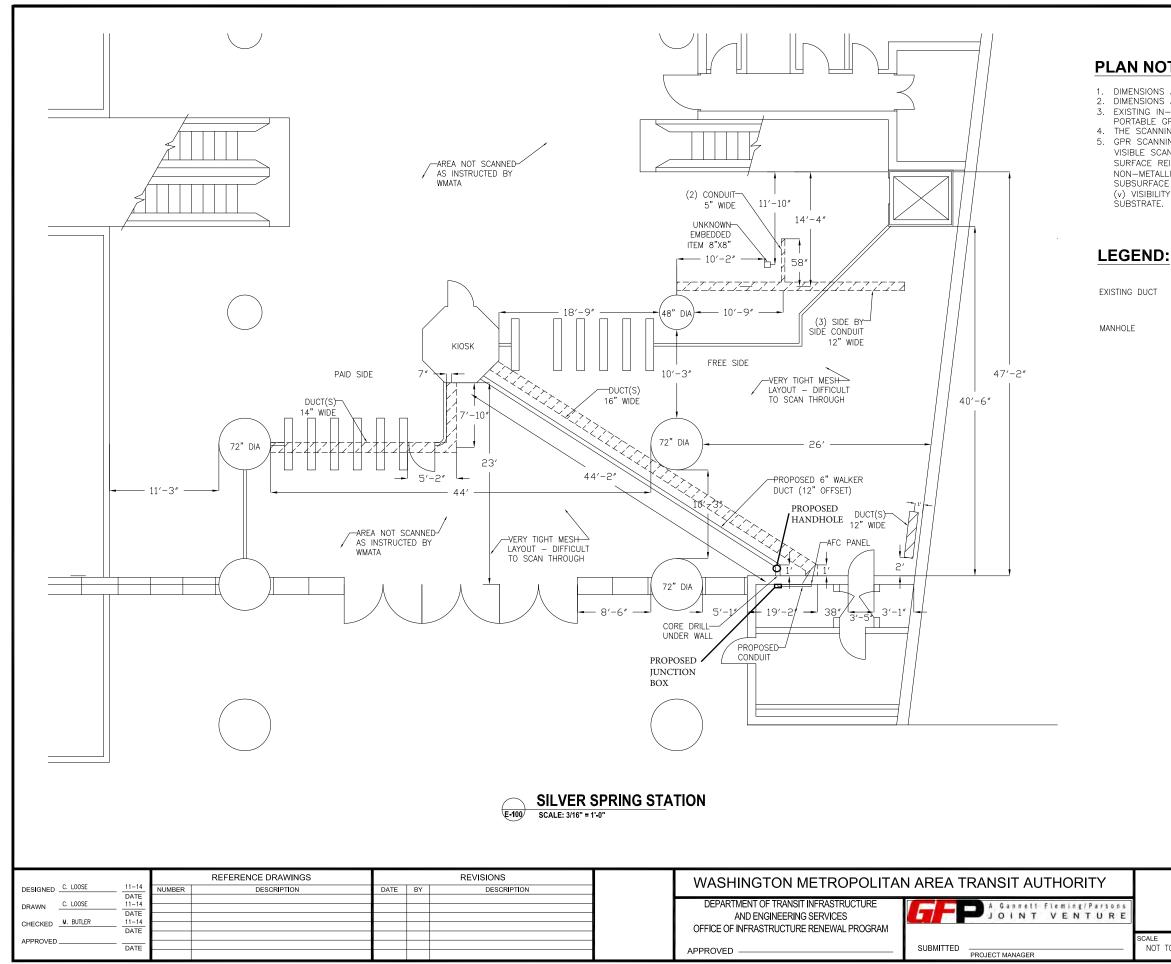
.



Mini-faregates (4 gates) ------ADD FALEY (\cdot) Z DUCT L Duct (2) (2) (2) (3) 0300 \odot - Le $U U_1 U$ GATE ALRAY GATE A. (2) Existing Duct Proposed 6" Duct 12" Offset) LA DUCTS 44' Proposed Handhole PANEL . I.P.FS 10 Proposed Junction Box AFC Panel Proposed Conduit (Room 119) 1- INSTALLATION PLAN

> REFERENCE DRAWINGS USED BECHTEL REF. 5K.# BECHTEL REF. ONG.# CNO REF. DWG. #

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PLAN NOTES:

DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
 EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
 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.

		t NO. XXXX				
15-NEPP-01 IN - FLOOR DUCT INSPECTIONS B08 SILVER SPRING SOUTH PROPOSED ELECTRICAL DUCT PATH						
scale NOT TO SCALE	drawing no. B08-E-100	XXX				

Mezzanine Inspection Report (Scoping)					
Date: 11/17/2014	Station Name: B09 Forest Gle	en	Mezzanine #: 032	Completed By: Mike Butler	
			Summary		
faregate array was a completed due to iss existing conduit runs boxes, troughs, etc through handholes 1 down the hall, and w continue down the sr the wall to the AFC p	Iso successfully completed. Scop sues identifying the existing run fr vertically down from the AFC par A proposed run has been establis and 2 and continue into the junc rap the walls of the two staircase	bing and pull om the juncti nel across tw shed from the tion box in ro s up to room be cored aga	string installation for the p ion box to the AFC panel, to levels to the kiosk throu e kiosk to the AFC panel. om C100. From the juncti C101 where it would be o	completed. Video scoping for the power duct in the power run from the kiosk to the AFC panel was not as well as hot wires from other panels. It appears the igh multiple shared raceways including junction The run would utilize the existing duct from the kiosk on box, a proposed conduit run would then continue pored through the wall above the door. It would then inside C106, it would turn and run overhead along	
		Scoping o	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Du	ict – Faregate Array (8 Gates)	1			
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Fores	t Glen Comm Video.avi file	
Were pull strings ins array?	stalled at all faregates in the	Yes			
Were there any obsta details of type and sp	ructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No			
Power Duct - Farega	te Array (8 Gates)	1			
Was video scoping run?	completed for the entire duct	Yes	Refer to WMATA Fores	t Glen Power Duct Video.avi file	
Were there any obst details of type and sp	ructions or blockages? Provide pecific location.	No			
	ty? Provide additional details s of ducts and number of wires.	No			
		1			

Scoping of Power Duct - Kiosk to AFC Panel					
Task	Yes/No		Notes		
Kiosk to Handhole 1 (15' run)		-			
Was video scoping completed for the entire duct / conduit run?	No	Live wires prevented scoping			
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.	No				
Handhole 1 to Handhole 2 (20' run)	I	I			
Was video scoping completed for the entire duct / conduit run?	No	Live wires prevented scoping			
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.	No				
Handhole 2 to Junction box (20' run)		I			
Was video scoping completed for the entire duct / conduit run?	No	Live wires prevented scoping			
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.	No				
Junction box to AFC Panel (Length of existing run	undetermin	ned)			
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.	N/A				
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A	Existing conduit run could not be traced between the Junction Box and AFC Panel. A proposed conduit option was identified.			
Observations / Issues / Next Steps					
Total proposed run is approximately 210' from Kiosk junction box, and 145' of proposed conduit between th			udes 65' of existing duct from the duct from the kiosk to the panel.		
0: 0#					
GFP Representa	Sign Off GFP Representative WMATA PRGM				
Name: Mike Butler					
Signature: M.ZMM					
Date: 11/17/14					

Photo #1 - Existing run from kiosk to handhole 1

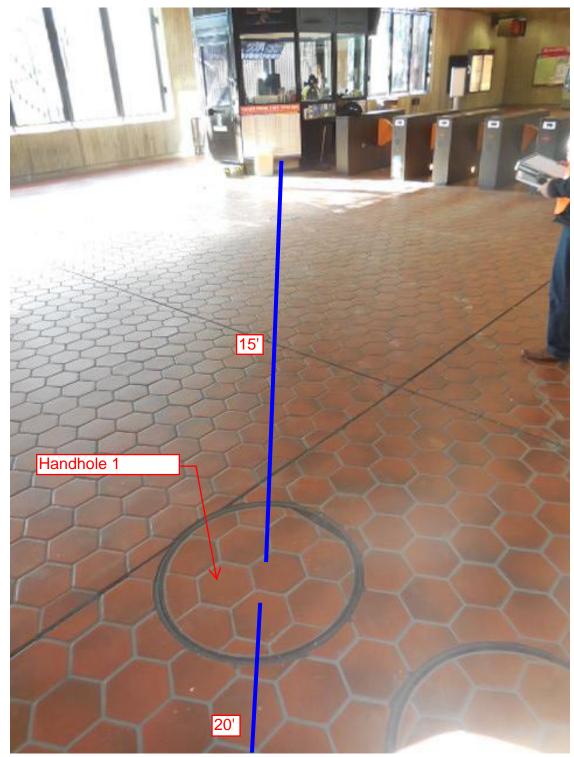




Photo #2 - Existing duct run from handhole 2 to junction box

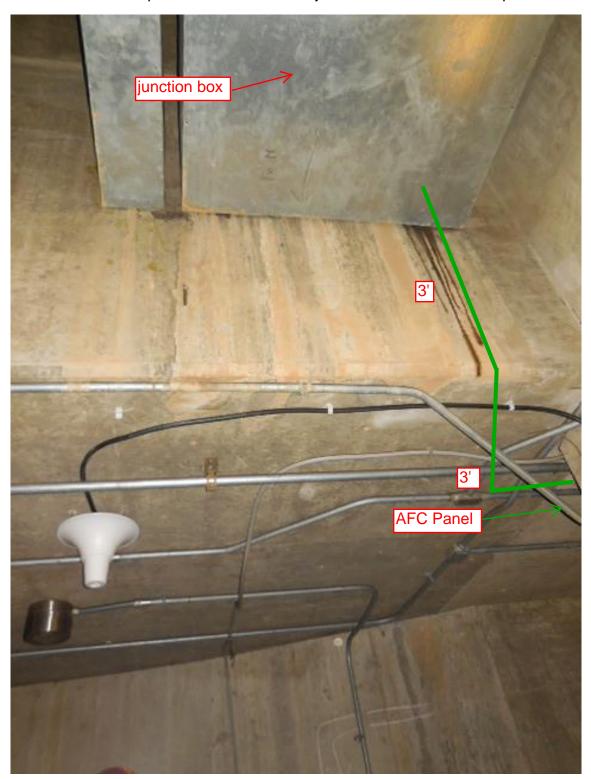


Photo #3 - Proposed conduit run from junction box towards AFC panel

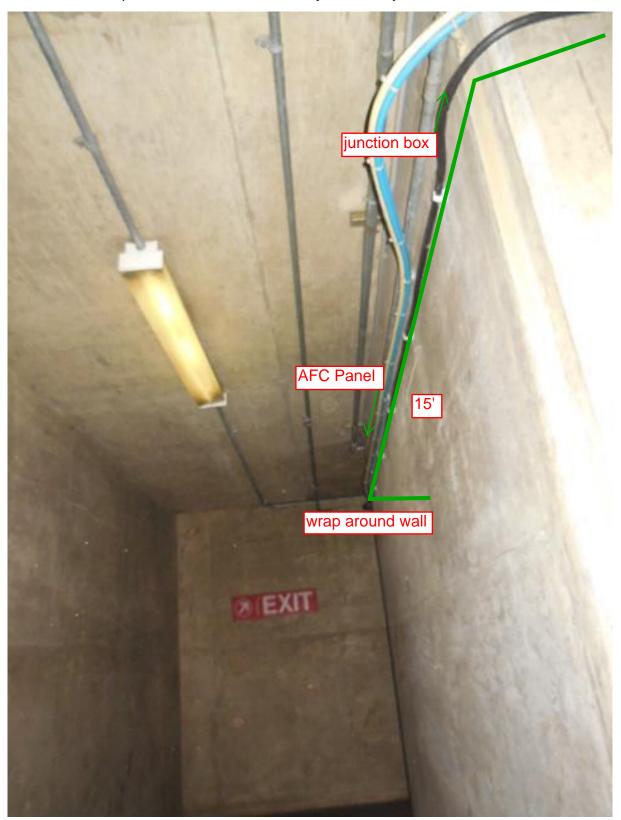


Photo #4 - Proposed conduit run in hallway between junction box and Room C101

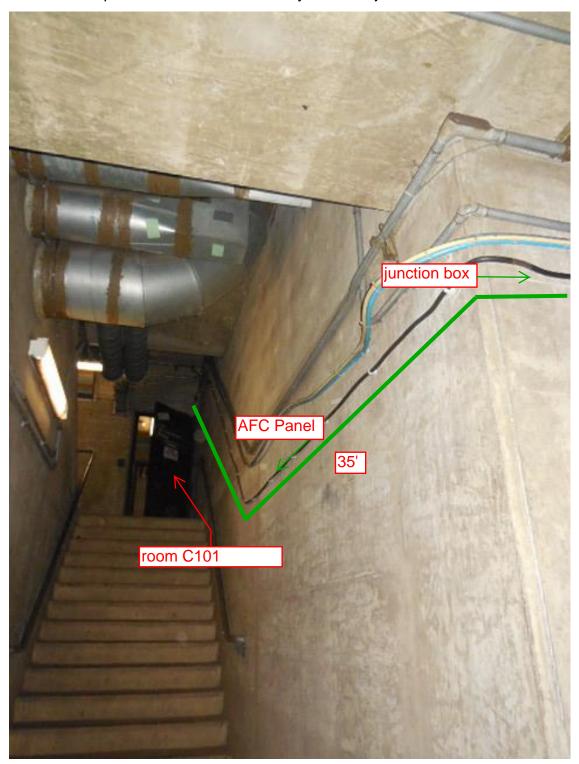


Photo #5 - Proposed conduit run in hallway between junction box and Room C101

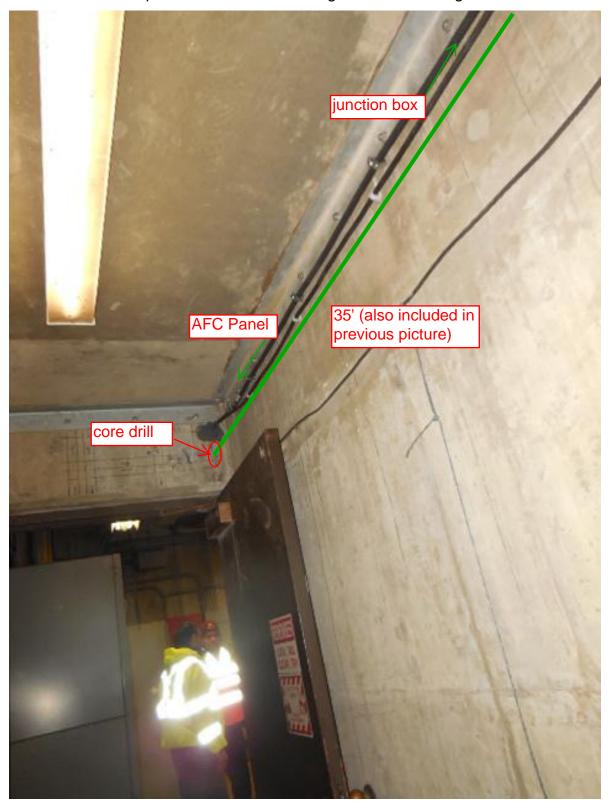


Photo #6 - Proposed conduit run showing core drill entering Room C101

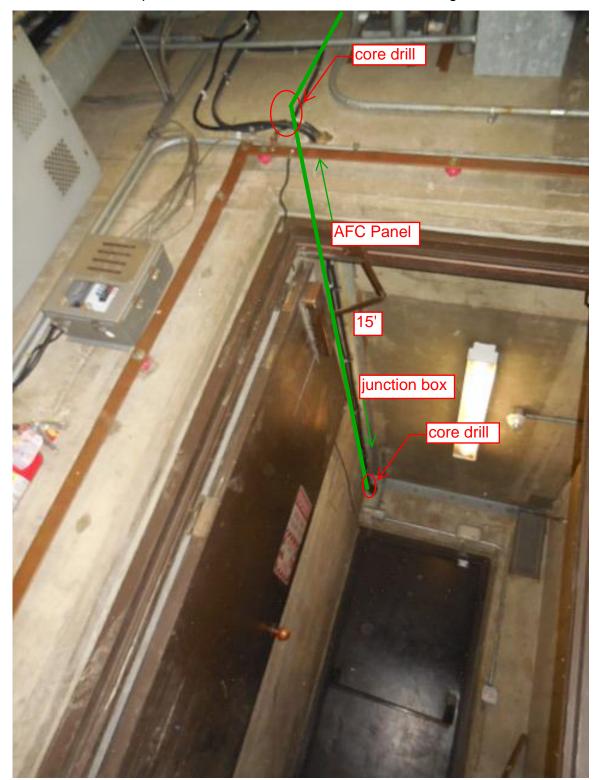


Photo #7 - Proposed conduit run from Room C101 entering Room C106

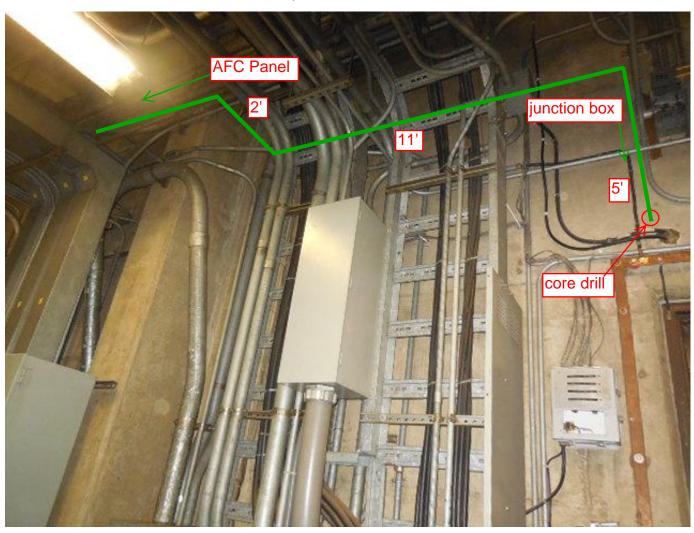


Photo #8 - Proposed conduit run inside Room C106

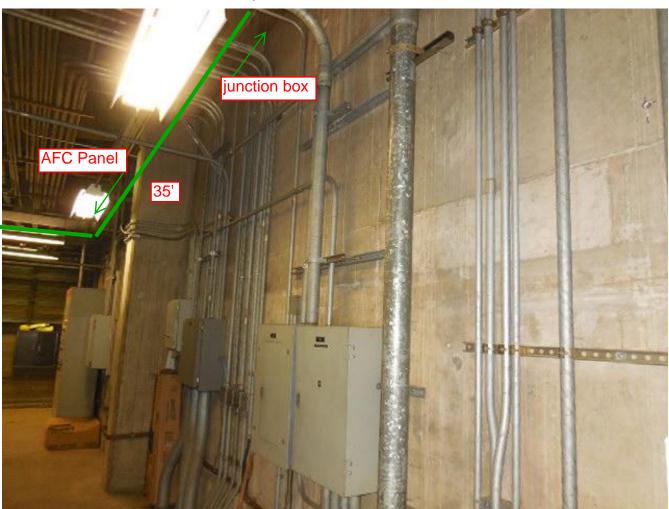


Photo #9 - Proposed conduit run inside Room C106



Photo #10 - Proposed conduit run inside Room C106

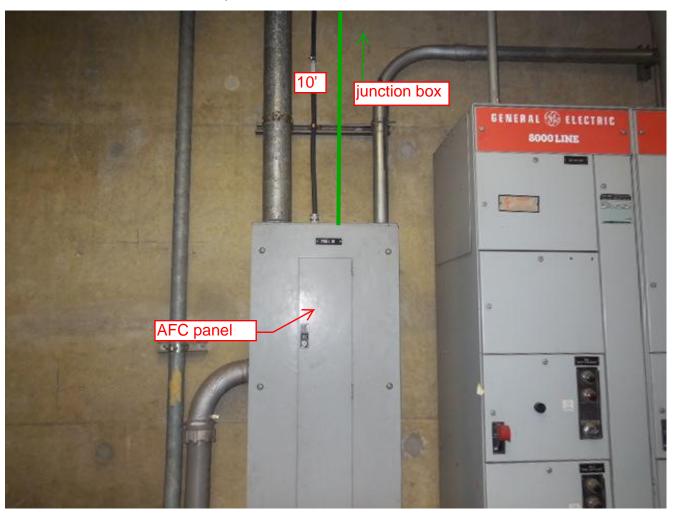
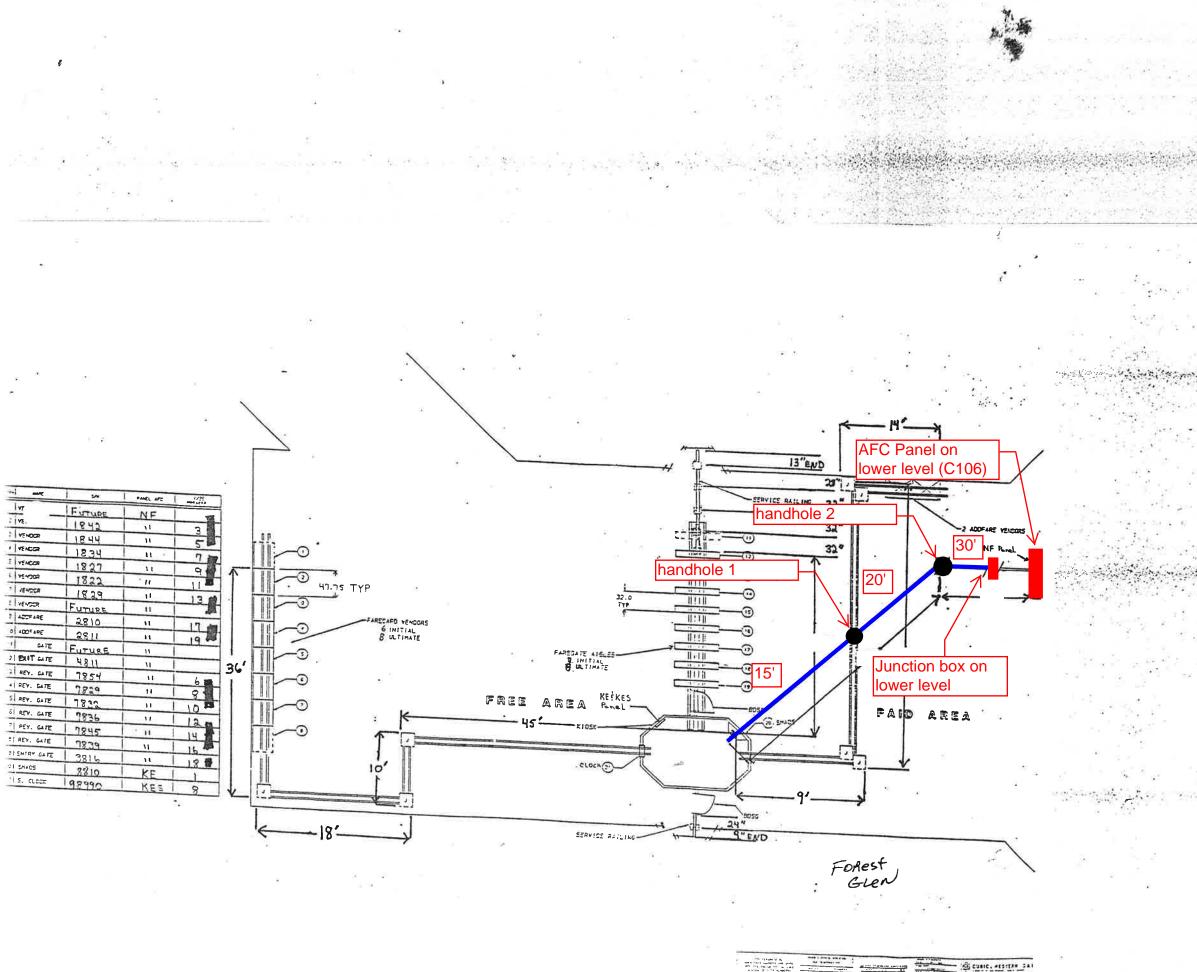


Photo #11 - Proposed conduit run connection to AFC Panel



660 GR (105 GR (107) Sec. 32

Mezzanine Inspection Report REVISION 1					REVISION 1	
Date: 09/03/2014	Station Name: B10 Wheaton		Mezzanine #: 033	Completed By: Tir	no Sahoo	
	Summary					
	structions. The power ducts fro				or the comm. and power faregate andholes were successfully video	
Scanning is not required per scope of work, but it is recommended for the comm. and power faregate array ducts						
		Scoping o	of Faregate Array(s)			
-	Task	Yes/No		Notes		
Communications Duc	t – Upper Faregate Array (10	Gates)				
Was video scoping co run?	ompleted for the entire duct	No	Refer to WMATA Wheat Wheaton Fairgate Com		Left Duct Video.avi and WMATA b.avi files.	
Were pull strings insta array?	alled at all faregates in the	No	No faregates had pull st	rings installed.		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	Yes			fore hitting an obstruction. oded from sitting in water.	
	? Provide additional details of ducts and number of wires.	N/A				
Communications Duc	ct - Lower Faregate Array (N/A)				
Was video scoping c run?	ompleted for the entire duct	N/A				
Were pull strings insta array?	alled at all faregates in the	N/A				
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A				
	? Provide additional details of ducts and number of wires.	N/A				
Power Duct - Upper F	aregate Array (10 gates)	-				
Was video scoping c run?	ompleted for the entire duct	No	Refer to WMATA Wheat Wheaton Fairgate Powe		Left Duct Video.avi and WMATA avi files.	
Were there any obstrudetails of type and specified	uctions or blockages? Provide ecific location.	Yes			fore hitting an obstruction. roded from sitting in water.	
	? Provide additional details of ducts and number of wires.	N/A				
Power Duct - Lower F	aregate Array (N/A)					
Was video scoping c run?	ompleted for the entire duct	N/A				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A				
	? Provide additional details of ducts and number of wires.	N/A				

Scopin	g of Powe	r Duct - Ki	osk to AFC Panel
Task	Yes/No		Notes
Kiosk to Handhole 1 (12 foot section)	•		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to V	VMATA Wheaton Power Kiosk to Mandhole Video.avi file.
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		
Handhole 1 to Handhole 2 (21 foot section)			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to V	VMATA Wheaton Power Handhole to Handhole.avi file.
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		
Handhole 2 to AFC Panel (33 foot section)			
Was video scoping completed for the entire duct / conduit run?	No	Bends pre Wheaton	evented video scoping from being completed. Refer to WMATA Power Handhole to 90 into JBox Video (1).avi file.
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		
	Observation	ns / Issues /	Next Steps
		Sign Off	
GFP Represent	ative		WMATA PRGM
Name: Tino Sahoo			
Date: 09/03/2014			

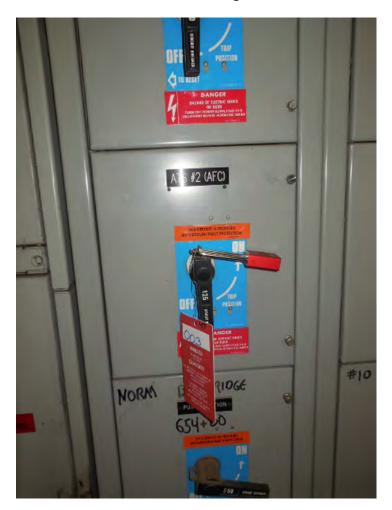


Photo #1: B10 Wheaton: Lock-out Tag-out of the feed breakers for the AFC Panel

Photo #2: B10 Wheaton: Lock-out Tag-out of the feed breakers for the AFC Panel



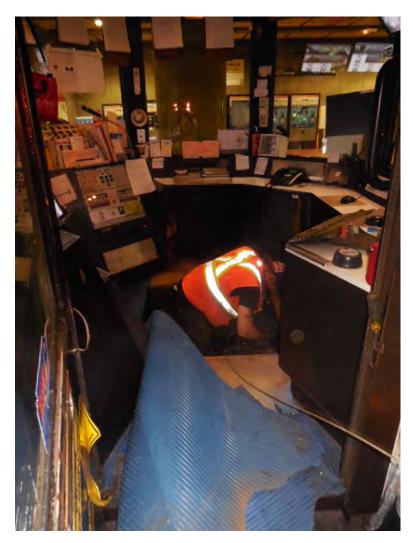


Photo #3: B10 Wheaton: Pushing in fish tape for the faregate array ducts

Photo #4: B10 Wheaton: Attempting to video-scope the faregate array ducts

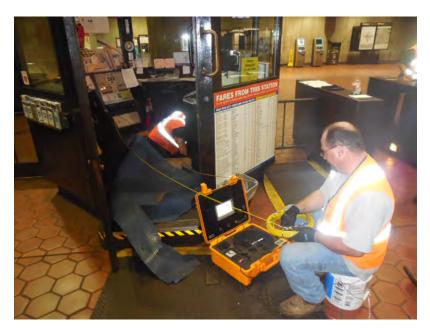


Photo #5: B10 Wheaton: Attempting to rod the faregate array ducts



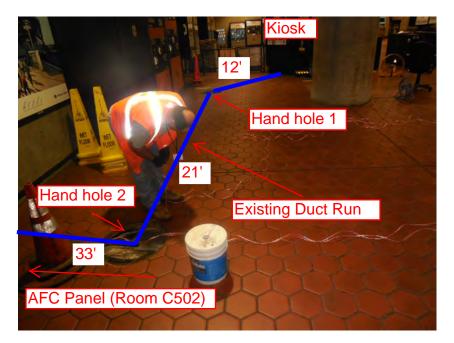
Photo #6: B10 Wheaton: Corroded communications duct opening in kiosk



Photo #7: B10 Wheaton: Corroded communications duct opening in kiosk



Photo #8: B10 Wheaton: Installing pull strings between the kiosk and AFC panel via the mezzanine handholes



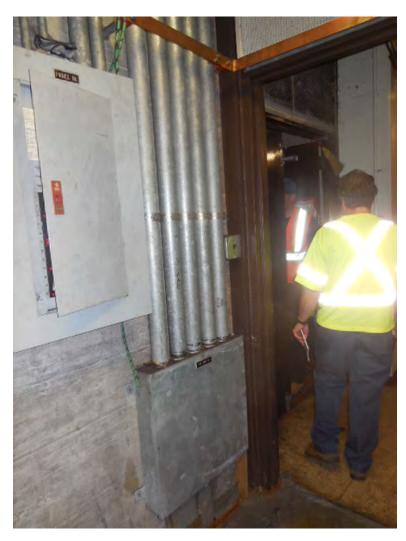
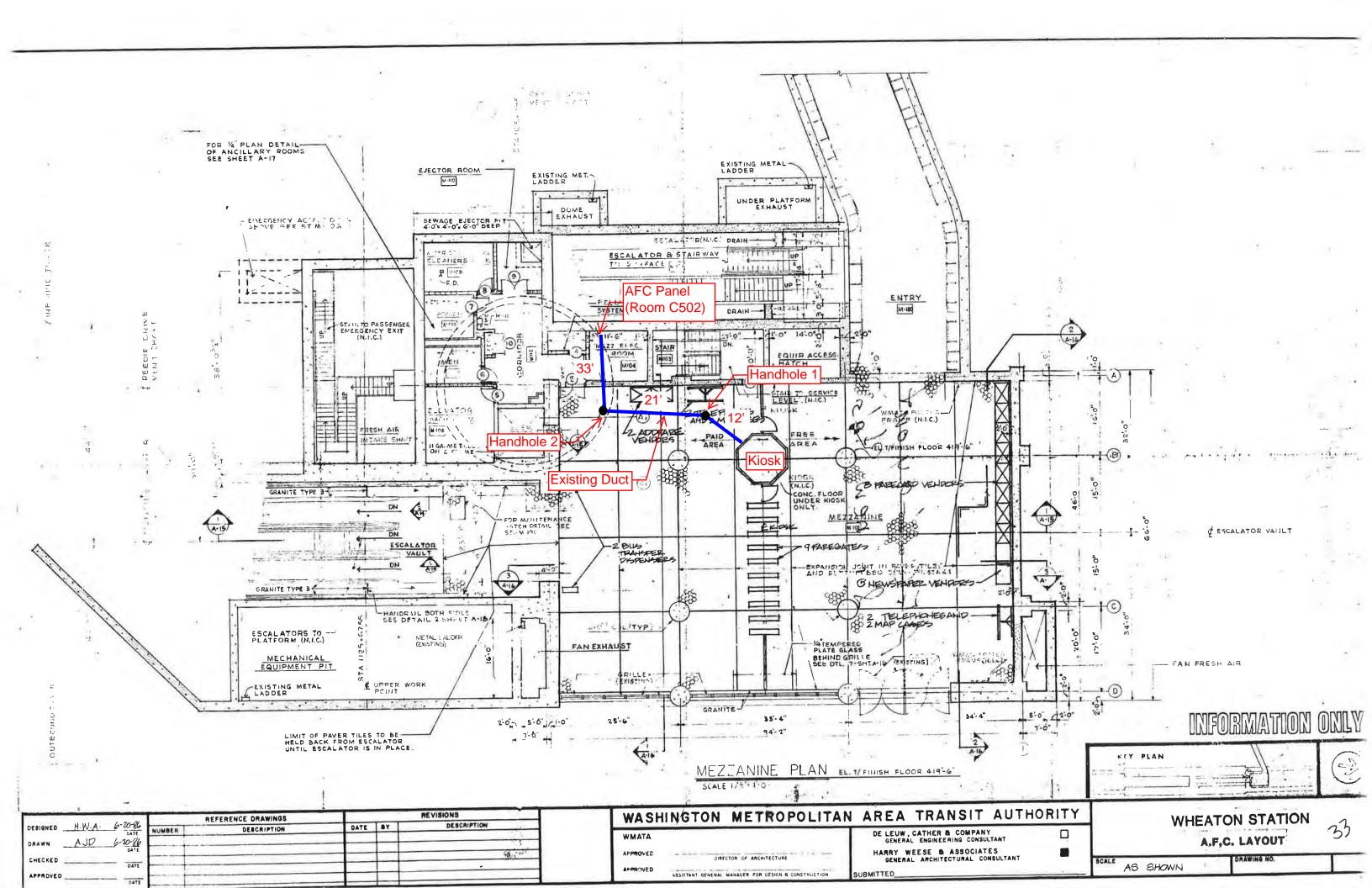


Photo #9: B10 Wheaton: Junction box near the AFC panel



Photo #10: B10 Wheaton: Installing the pull string in the junction box near the AFC panel



Mezzanine Inspection Report Revision 1					
Date: 06/03/15	Station Name: B11 Glenmont		Mezzanine #: 034	Completed By: Mike But	tler
Summary					
Handhole 1 to AFC Pa scoping or pull string in scope the upper farega duct run from Kiosk to damage. Scanning of the mezza Kiosk and Handhole 1	ing and pull string installation wa nnel. Video scoping was also co nstallation in upper faregate con ate power duct due to obstruction Handhole 1 could not be completed anine floor was completed to de . The scanning results showed to were also identified during scan	mpleted in lo nmunication ons and wate leted due to termine the e that there is s	wer faregate power duct. I duct due to obstructions a r intrusion. Video scoping multiple obstructions, whic existing layout of in-floor du	However, it was not possi nd water intrusion. Nor wa and pull string installation h appear to have been ca ucts and a proposed powe	ible to complete video as it possible to video for the 140' power aused by water er duct run between the
	ing and pull string installation wa uct runs parallel with the existin				ble 2 and AFC
	NEPP-	01: Scopir	ng of Faregate Arrays	(09/03/14)	
7	Task	Yes/No		Notes	
Communications Duc	t – Upper Faregate Array (6 fa	aregates)			
Was video scoping co duct run?	ompleted for the entire	No	Video scoping and pull s	tring installation was not	possible due to water
Were pull strings insta the array?	alled at all faregates in	No	intrusion and obstruction	S.	
Were there any obstru Provide details of type		Yes	attempts from the farega	n at the apron of the kios te end of duct were also be under water and corroo	unsuccessful. In addition,
	Provide additional details of ducts and number of wires.	N/A	4" walker duct with less	than 12 wires	
Communications Duc	t - Lower Faregate Array (6 fa	regates)			
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Glenm	nont Lower Fairgate Com	m Video.avi"
Were pull strings insta the array?	alled at all faregates in	Yes			
Were there any obstru Provide details of type		No	There were no obstruction and corrosion was visible	ons or blockages, howeve e.	er some water intrusion
	? Provide additional details of ducts and number of wires.	No	4" walker duct with less	than 12 wires.	
Power Duct - Upper F	aregate Array (6 faregates)				
Was video scoping co run?	ompleted for the entire duct	No	Video scoping was not p	ossible due to water intru	ision and obstructions.
Were there any obstru Provide details of type	ctions or blockages? and specific location.	Yes	attempts from the farega	n at the apron of the kios ate end of duct were also be under water and corroo	unsuccessful. In addition,
	? Provide additional details of ducts and number of wires.	N/A	4" walker duct with less	than 12 wires.	
Power Duct - Lower F	aregate Array (6 faregates)				
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Glenn	nont Lower Fairgate Powe	er Video.avi"
Were there any obstru Provide details of type		No	There were no obstruction and corrosion was visible	ons or blockages, howeve e.	er some water intrusion
	? Provide additional details of ducts and number of wires.	No	4" walker duct with less	than 12 wires.	

NEPP-01: Scoping of Existing Power Duct (09/03/14)			
Task	Yes/No	Notes	
Kiosk to Handhole 1 (Distance: 140')			
Was video scoping completed for the entire duct / conduit run?	No		
Was pull string installed??	No	Video scoping and pull string installation was not possible due to water intrusion and obstructions.	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Obstruction in duct was encountered almost immediately from the kiosk end, and at 20' from the handhole end. Duct has extensive corrosion with clear signs of water intrusion.	
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" walker duct with less than 15 wires	
Handhole 1 to AFC Panel (Distance: 15')			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Glenmont Power Kiosk to Handhole Video.avi"	
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	6" walker duct with less than 15 wires	
NEPP-01:	Scanning	of Mezzanine Floor (10/22/14)	
 Scanning was conducted to identify a proposed duo The scanning results showed that there are mulitple Refer to scanning drawing for the layout of existing 	e ducts runn	ing side-by-side from the Kiosk to AFC Panel.	

- An AFC as-built drawing does not exist for this mezzanine.

NEPP-02: Scoping of Alternate Power Duct (06/03/15)					
	Task	Yes/No		Notes	
Kiosk to Handhol	e 2 (Distance: 140')				
Was video scopin conduit run?	ng completed for the entire duct /	Partially	Refer to " "B11_MZ	B11_MZ034_Glenmont_Kiosk to HH2.avi" and 034_Glenmont_HH2 to Kiosk.avi"	
Was pull string in	stalled?	Yes			
Were there any old details of type and	bstructions or blockages? Provide d specific location.	Yes	The video	o scope could not get past the two 45-degree bends.	
	uit at capacity? Provide additional dimensions of duct / conduit and	No	Empty 6"	walker duct	
Handhole 2 to AF	C Panel (Distance: 15')	T	•		
Was video scopin conduit run?	ng completed for the entire duct /	Yes	Refer to "	B11_MZ034_Glenmont_HH2 to AFC Panel.avi"	
Was pull string in	stalled?	Yes			
Were there any ol details of type and	bstructions or blockages? Provide d specific location.	No			
Is the duct / conducted details about the only number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	Empty 6"	walker duct	
Observations / Issues / Next Steps					
- The distance	- The distance of alternate power duct from Kiosk to AFC Panel is 155'.				
Sign Off					
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	06/03/15				

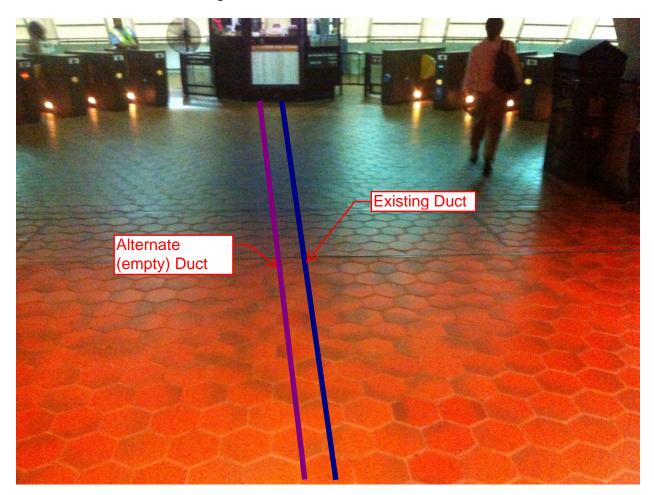
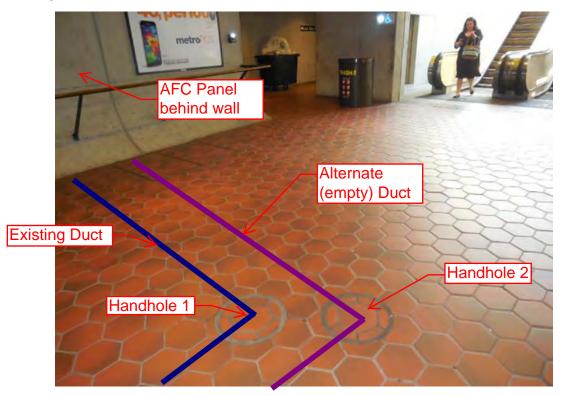


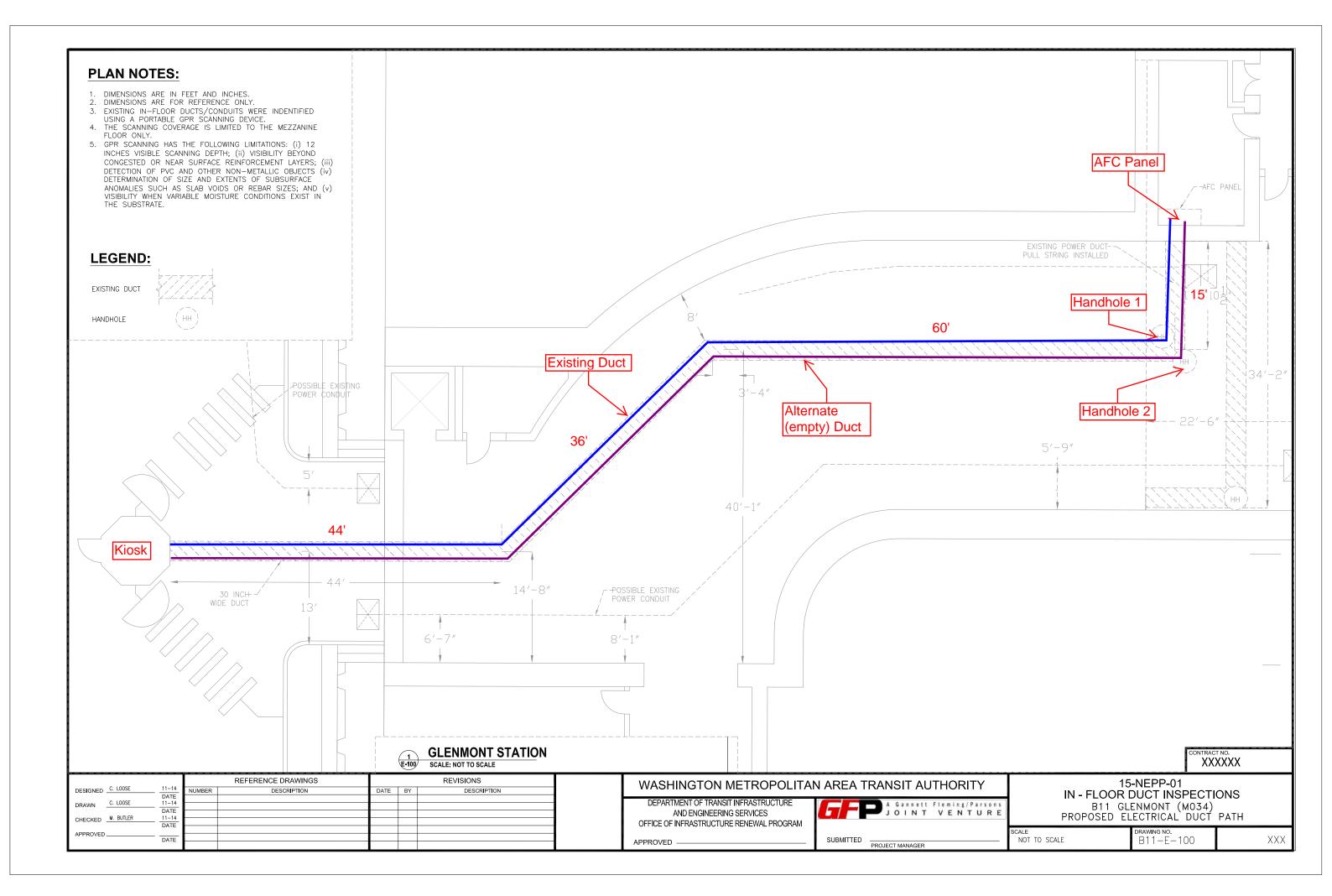
Photo #1: B11 Glenmont - Existing and Alternate Duct Runs from Kiosk

Photo #2: B11 Glenmont – Existing and Alternate Duct Runs from Kiosk to AFC Panel in Room #103, including hand hole locations.



Photo #3: B11 Glenmont – Existing and Alternate Duct Runs from Kiosk to AFC Panel in Room #103, including hand hole locations.





Mezzanine Inspection Report (Scoping)					
Date: 10/02/2014	Station Name: B35 New York	Ave North	Mezzanine #: 109	Completed By: Mike Butler	
Summary					
from power conduit to	smaller 'armored flexible cable: sistency, it is recommended to i	omm. ducts. s' in the elect	Pull string installed in pow trical room next to the AFC	rer conduit from kiosk to electrical room. A transition Panel prevented scoping and pull string installation ored flex cable between conduit stub up and AFC	
		Scoping o	of Faregate Array(s)		
·	Task	Yes/No		Notes	
Communications Duc	et – Upper Faregate Array (6 G	iates)			
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA New Y	ork North Mezz Comm Fairgate Video.avi file.	
Were pull strings insta array?	alled at all faregates in the	Yes	Pull strings installed and	I labeled "NEPP"	
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No	Water and mud was obs	erved inside walker ducts	
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 8	wires	
Communications Duc	ct - Lower Faregate Array (N/A	.)	Γ		
Was video scoping c run?	ompleted for the entire duct	N/A			
Were pull strings insta array?	alled at all faregates in the	N/A			
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A			
	? Provide additional details of ducts and number of wires.	N/A			
Power Duct - Upper F	aregate Array (6 Gates)				
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA New Y file.	ork North Mezz Power Right Fairgate Video (1).avi	
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No	Water and mud was obs	erved inside walker ducts	
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 12	? wires	
Power Duct - Lower F	Faregate Array (N/A)				
Was video scoping c run?	ompleted for the entire duct	N/A			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	N/A			
	? Provide additional details of ducts and number of wires.	N/A			

Scoping of Power Duct - Kiosk to AFC Panel				
	Task	Yes/No		Notes
Kiosk to Condui	it 'Stub-up' in Electrical Room #110	0 (80 foot ru	ın)	
Was video scop conduit run?	bing completed for the entire duct /	No	Conduit d	oes not require scoping
Was pull string i	installed?	Yes	Pull string	is installed and labeled "NEPP"
Were there any details of type a	obstructions or blockages? Provide nd specific location.	No	Conduit h	as 90 degree bends
	duit at capacity? Provide additional e dimensions of duct / conduit and s.	No	2" conduit	t with less than 10 wires
Conduit 'Stub-u	p' to AFC Panel(15 foot run)			
Was video scop conduit run?	bing completed for the entire duct /	No	Conduit c	ould not be scoped or pulled due to small armored flex cables
Was pull string i	installed?	No	(see phot	JS).
Were there any details of type an	obstructions or blockages? Provide nd specific location.	N/A		
Is the duct / cond details about the number of wires	duit at capacity? Provide additional e dimensions of duct / conduit and 	N/A		
			1	
		Observatior	ns / Issues ,	/ Next Steps
No existing as-b	uilt available.			
			Sign Off	
	GFP Representative			WMATA PRGM
Name:	Mike Butler			
Signature:	Mizun			
Date:	10/02/2014			

Photo #1 – Kiosk and Faregates on Mezzanine Floor

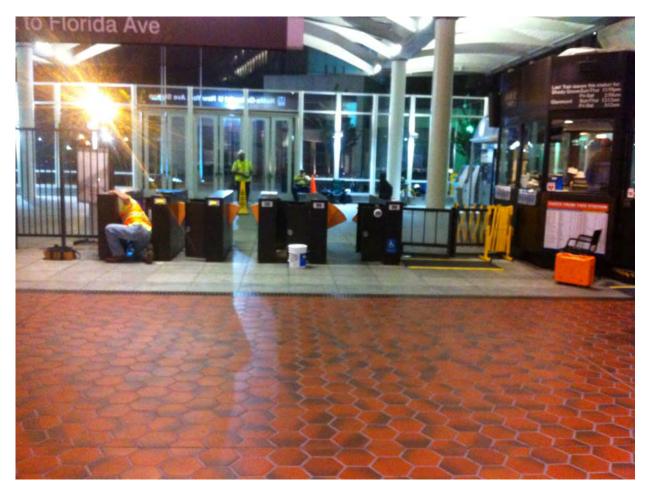
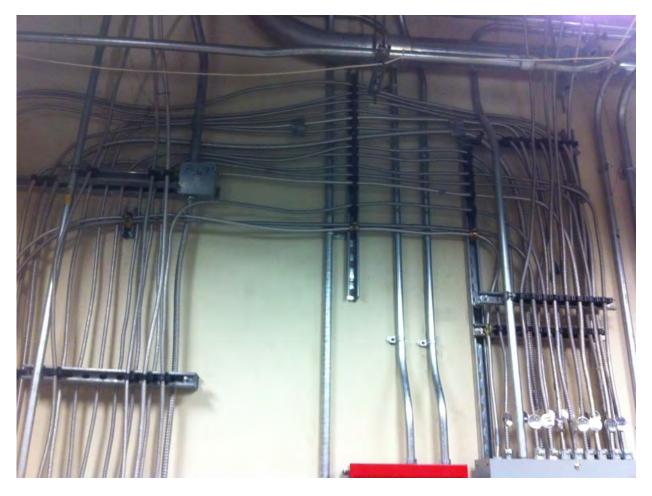


Photo #2 – Power Conduit transition to Armored Flex Cables leading to AFC Panel (Electrical Room 110)



Photo #3 –Armored Flex Cables leading to AFC Panel (Electrical Room 110)



Mezzanine Inspection Report (Scoping)						
Date: 11/05/2014	Station Name: B35 New York	Ave South	Mezzanine #: 108	Completed By: Mike Butler		
	Summary					
power duct for the fam A proposed route was chase room #109, bet being used inside roor power room #101 nex	egate array. identified for the power conduit nind elevator room #107, and pu m #109 approximately 35 feet d t to the AFC panel. The 4 inch a as used to bridge the run from t cant.	run from the Ill string was own the hall f and 1 inch stu	kiosk to the AFC panel. A installed to a stub up. The irom the 4 inch stub up, an ib ups could be connected	faregate array. Video scoping was completed for the 4 inch conduit runs from the kiosk to the cable re were four available 1 inch ground conduits not d these 1 inch conduits run and stub up inside the by a proposed conduit run along the wall. The 1 and pull string was installed. Both the 4 inch and 1		
		Scoping of	of Faregate Array(s)			
	Task	Yes/No		Notes		
Communications Duc	ct – Faregate Array (4 Gates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA New Y	ork Ave South Comm Fair Gate Video.avi file.		
Were pull strings insta array?	alled at all faregates in the	Yes				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No				
Power Duct - Upper F	aregate Array (4 Gates)	L				
	ompleted for the entire duct	Yes	Refer to WMATA New Y	'ork Ave South Right Power Fair Gate Video.avi file.		
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No				
	? Provide additional details of ducts and number of wires.	No				

Scoping of Power Duct - Kiosk to AFC Panel			
Task			
Kiosk to 4" stub up (~60 foot run)	1		
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	Conduit v	acant
1" stub up to AFC Panel (~130 foot 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	Conduit v	acant
	<u> </u>		
	Observation	ns / Issues	Next Steps
No existing As-builts available.			
A proposed conduit run, approximately 35 feet long,	, will be need	led betweer	the 4 inch and 1 inch stub ups.
		Sign Off	
GFP Representa	ativo		WMATA PRGM
GFF Representa			WWATAFNOW

	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:	Mizun	
Date:	11/05/2014	

Photo #1 – B35 New York Ave South: 4 inch stub up at first run from kiosk

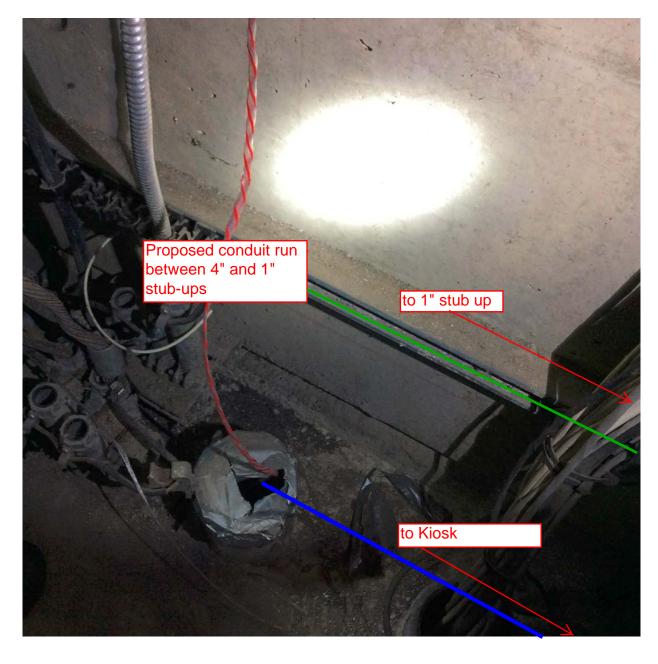


Photo #2 – B35 New York Ave South: 1 inch stub up starting run to AFC Panel

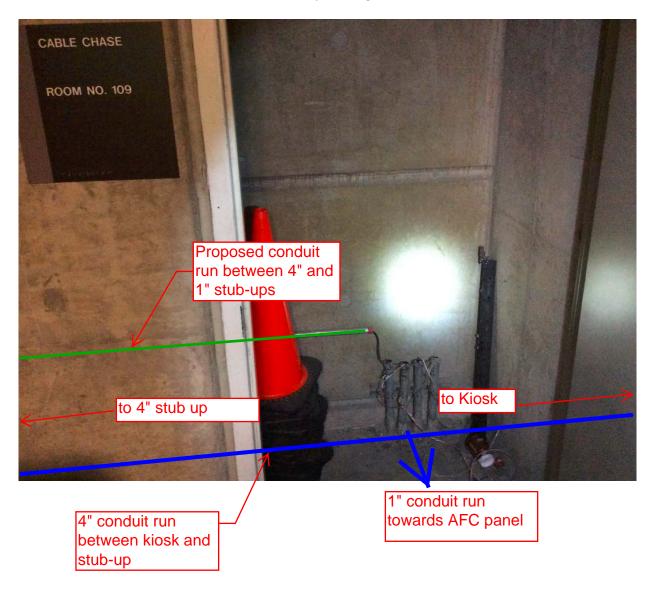


Photo #3 – B35 New York Ave South: AFC Panel near 1 inch stub up



1" conduit towards proposed connection to 4" stub up

Mezzanine Inspection Report							
Date: 2/25/2015	Station Name: C01 – Metro C	enter North	Mezzanine #: 035	Completed By: Mike Butler			
			Summary				
Pull string installation was completed in communication duct for upper faregate array. However, pull string installation was not possible in communication duct for lower faregate array due to an obstruction, potentially a collapsed duct 10' from kiosk. Video scoping in comm. and power ducts for upper / lower faregates was not possible due to skirt obstruction. Video scoping and pull string installation was completed between Kiosk, Handhole and AFC Panel in Room N206; ducts are not at capacity and are viable for future use. Scanning is not required at this mezzanine.							
		Scoping	of Faregate Array(s)				
	Task		I alegale Allay(s)	Notes			
	ct – Upper Faregate Array (4 g	Yes/No ates)		notes			
Was video scoping co run?	ompleted for the entire duct	No	Video scoping was not	possible due to skirt obstruction.			
Were pull strings inst array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	N/A					
Communications Due	ct - Lower Faregate Array (4 ga	ates)					
Was video scoping c run?	completed for the entire duct	No	Video scoping was not	possible due to skirt obstruction.			
Were pull strings inst array?	alled at all faregates in the	No					
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	Yes	An obstruction, potentia	Ily a collapse 10' away from kiosk.			
	? Provide additional details of ducts and number of wires.	N/A					
Power Duct - Upper F	Faregate Array (4 gates)						
Was video scoping c run?	completed for the entire duct	No	Video scoping was not	possible due to skirt obstruction.			
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A					
	?? Provide additional details of ducts and number of wires.	N/A					
Power Duct - Lower F	Faregate Array (4 gates)						
Was video scoping c run?	completed for the entire duct	No	Video scoping was not p	possible due to skirt obstruction.			
Were there any obstruction details of type and sp	uctions or blockages? Provide ecific location.	N/A					
	? Provide additional details of ducts and number of wires.	N/A					

Task	Yes/No	r Duct - Kiosk to AFC Panel Notes
Kiosk to Handhole 1 (Distance =25')	163/110	INDICS
Nosk to Handhole 1 (Distance =25°)		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Metro Center North 6inch Power HH1 to Kiosk.avi"
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	6" walker duct with less than 10 wires.
lanhole 1 to AFC panel (Distance = approx. 40')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Metro Center North 6inch Power HH1 to AFC Panel.avi
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	6" walker duct with less than 10 wires
	Observation	ns / Issues / Next Steps
	Cost valio	io / iouco / here olepo

There are two power duct runs from Kiosk to AFC Panel, however the alternate run is at capacity.
An existing AFC installation plan is not available for this mezzanine - refer to attached photos and sketch instead.

Sign Off							
	GFP Representative	WMATA PRGM					
Name:	Mike Butler						
Signature:	Mizun						
Date:	2/26/2015						

Photo #1 - Existing duct run on mezzanine floor.

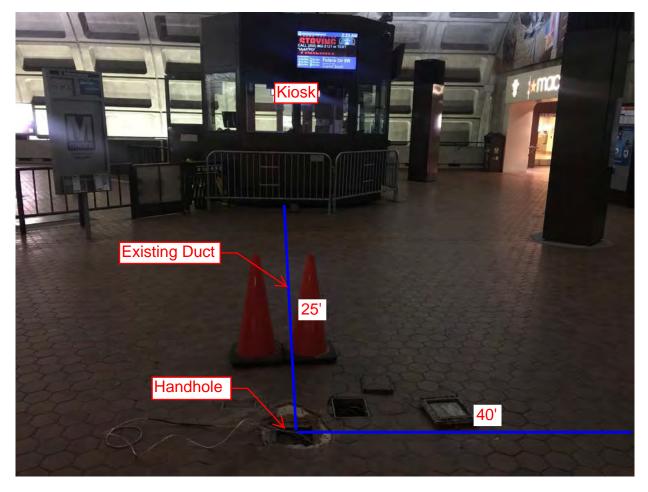


Photo #2 - Existing duct run on mezzanine floor.

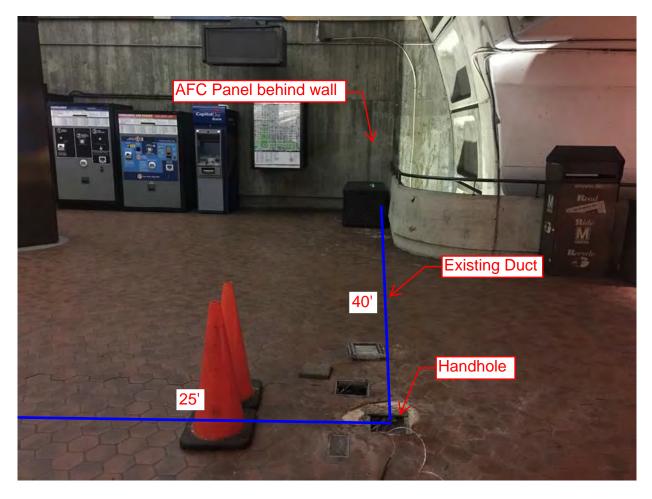
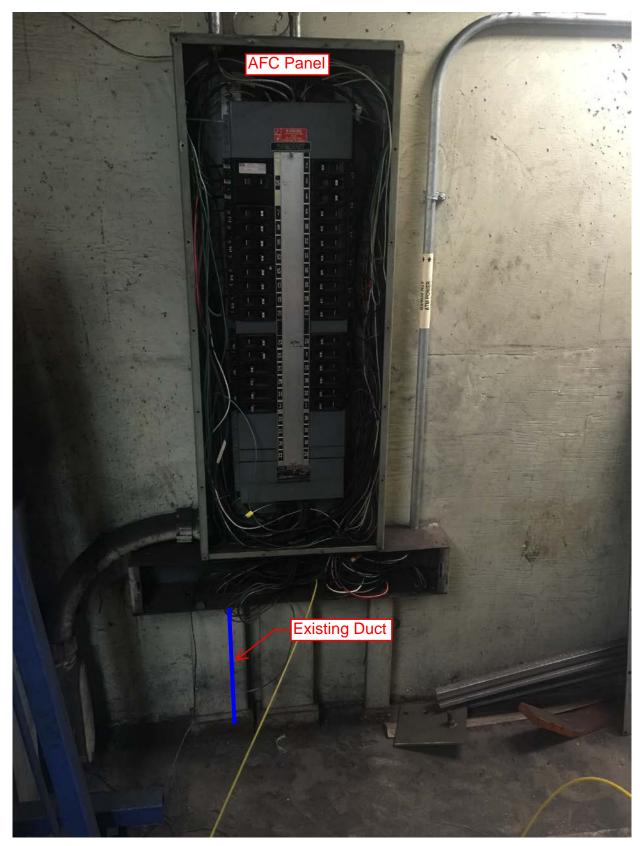
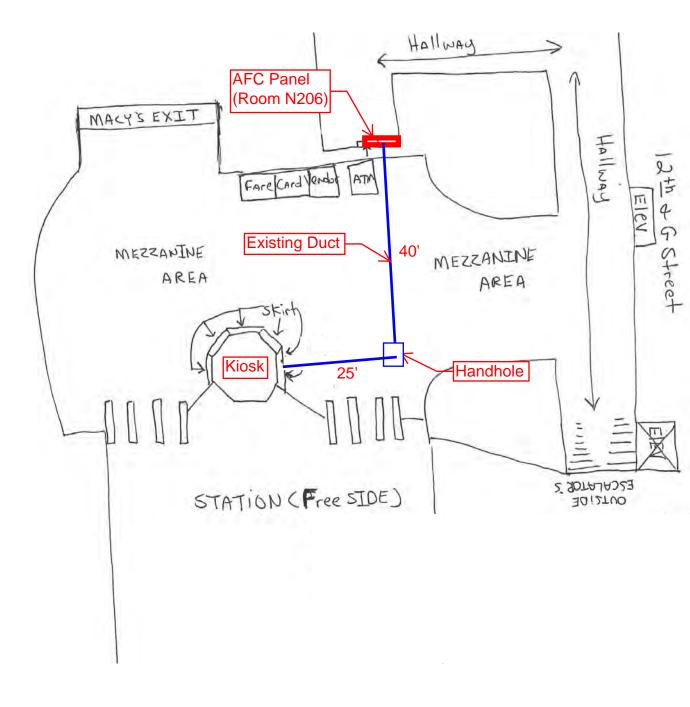


Photo #3 - AFC Panel and duct connection in Room N206.





DRAWING NOT TO SCALE

Mezzanine Inspection Report									
Date: 10/29/14	Date: 10/29/14 Station Name: C01 Metro Center South			Completed By: Mike Butler					
			Summary						
scoped and pull string for the communication In addition, scoping w additional scoping is n	Video scoping and pull string installation at Metro Center South was partially completed. The power duct between the Kiosk and AFC Panel was scoped and pull string was installed; duct is clear from obstructions and not at capacity. Scoping and pull string installation was <u>not</u> completed for the communication duct in the faregate array due to apron skirt obstruction. However, CAT6 is already installed in the communication duct. In addition, scoping was <u>not</u> completed for the power duct in the faregate array due to apron skirt obstruction. As per WMATA's direction, additional scoping is not needed at this mezzanine. Scanning is not required at this mezzanine.								
		Scoping o	of Faregate Array(s)						
	Task	Yes/No		Notes					
Communications Duo	ct – Upper Faregate Array (8 fa	aregates)	Γ						
Was video scoping co run?	ompleted for the entire duct	No	Could not be completed	l due to kiosk skirt apron obstruction.					
Were pull strings inst array?	alled at all faregates in the	No							
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A							
	? Provide additional details of ducts and number of wires.	N/A							
Power Duct - Upper F	Faregate Array (8 faregates)								
	completed for the entire duct	No	Could not be completed	due to kiosk skirt apron obstruction.					
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	N/A							
Is the duct at capacity about the dimensions	?? Provide additional details of ducts and number of wires.	N/A							

Scoping of Power Duct - Kiosk to AFC Panel				
	Task	Yes/No	Notes	
Kiosk to Handho	le 1 (Distance: 80')			
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to "WMATA Metro Center South Power Handhole to Kiosk Video.avi"	
Was pull string in	stalled?	Yes		
Were there any o details of type and	bstructions or blockages? Provide d specific location.	No		
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker duct with less than 12 wires	
Hanhole 1 to AFC	C Panel (Distance: 30')			
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to "WMATA Metro Center South Power Handhole to AFC Panel Video.avi"	
Was pull string in	stalled?	Yes		
Were there any o details of type and	bstructions or blockages? Provide d specific location.	No		
Is the duct / cond details about the number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker duct with less than 12 wires	
		Observation	s / Issues / Next Steps	
- CAT6 cables	already installed inside Faregate ca	binets #10 tl	nru #16 under CIP-092 project.	
	ct run between the Kiosk and AFC I			
- An AFC instal	lation plan is not available for this m	iezzanine.		
			Sign Off	
	GFP Representa	tive	WMATA PRGM	
Nama			WWATAPROW	
Name: Signature:	Mike Butler			
	01/15/15			
Date:	01/10/13			

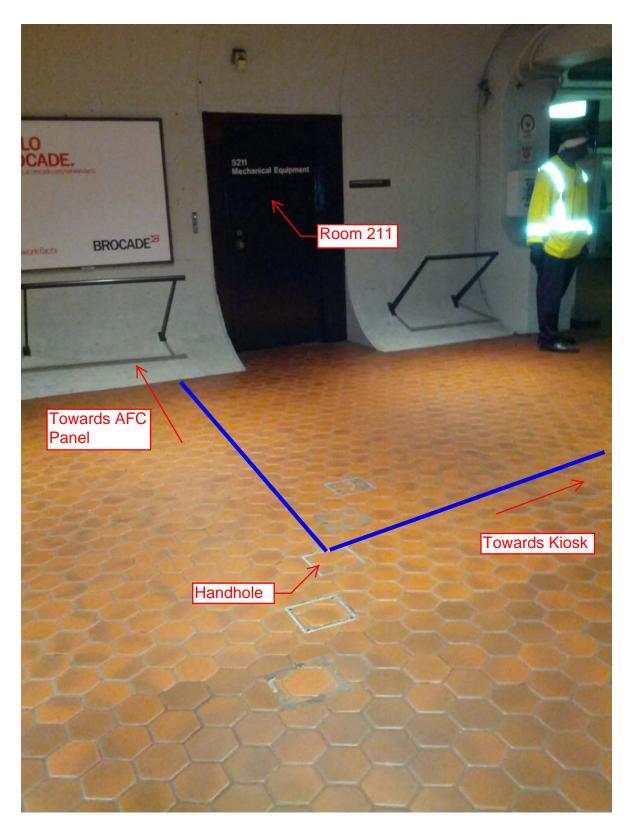
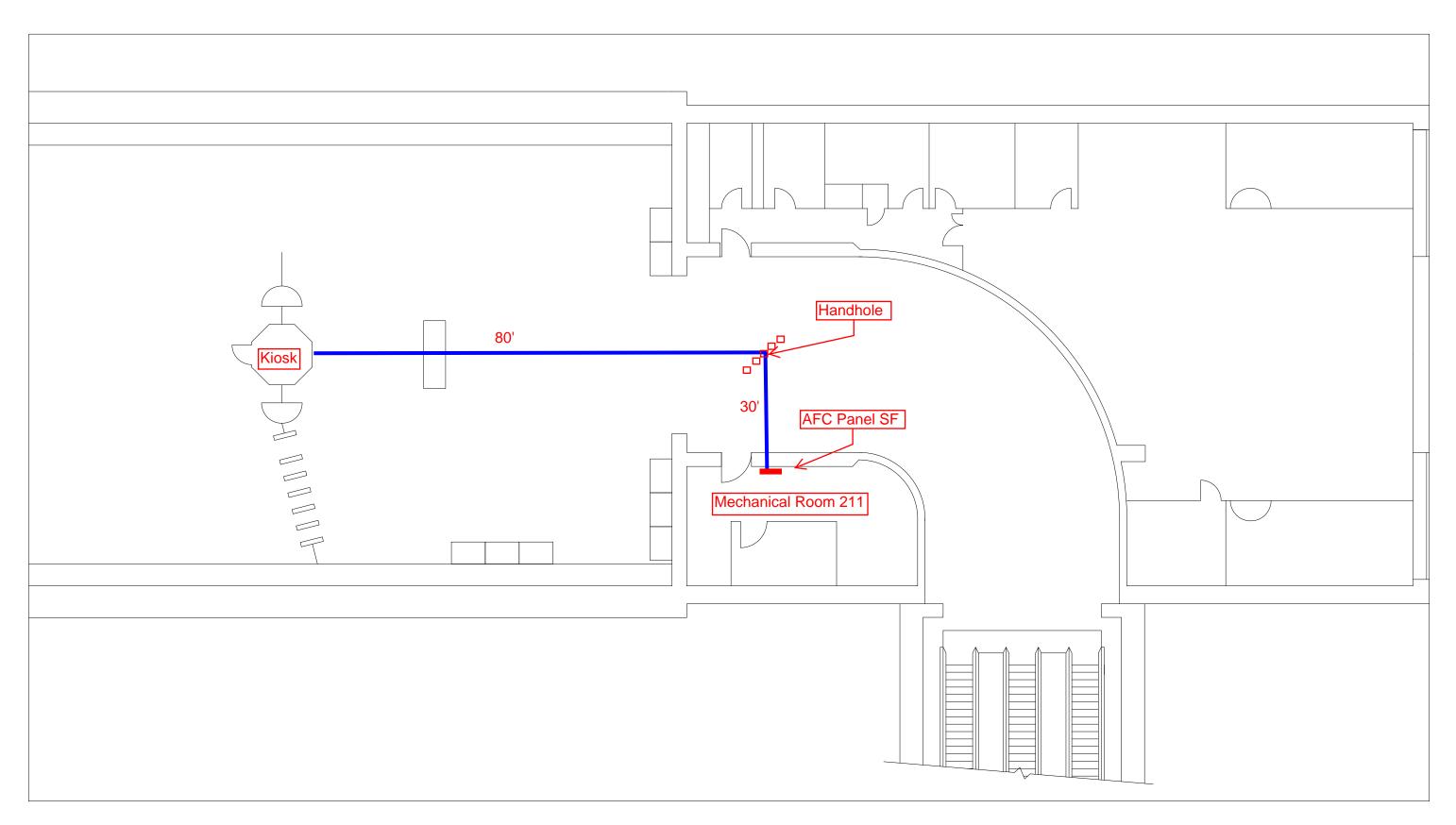


Photo #1 – Handholes located on Mezzanine Level outside Mechanical Room Room 211



Photo #2 – Kiosk and faregates on mezzanine level.

Sketch - Metro Center South (M052)



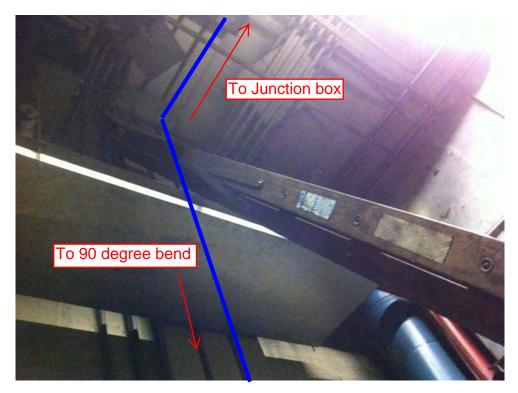
	Mezzanine Inspection Report (Scoping) REVISION 1							
Date: 10/31/14	Station Name: F01 Gallery Pla	ace North	Mezzanine #: 069	Completed By: Mike	e Butler			
	Summary							
Video scoping is complete for this station. The ducts are not at capacity and they are free from obstructions. However, pull string installation is could not be completed between Kiosk and AFC Panel due to inaccessibility of junction box (see photo #2) on the ceiling of Room N101 on the platform level. The junction box is 20' above the ground and is not safely reachable by ladders (see photo #1) – there is no safe place to secure the ladder with the junction box in reach. Scaffolding is required to reach the Junction Box. Scanning is not necessary.								
		Scoping o	of Faregate Array(s)					
	Task	Yes/No		Notes				
Communications Duc	ct – Upper Faregate Array (5 G	iates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Galler	y Place Upper Comm	Fairgate Video.avi file.			
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No						
Communications Duc	ct - Lower Faregate Array (5 G	ates)	ſ					
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Galler	y Place Lower Comm	Fairgate Video.avi file.			
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No						
Power Duct - Upper F	aregate Array (5 Gates)							
Was video scoping c run?	ompleted for the entire duct	Yes						
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No						
Power Duct - Lower F	aregate Array (5 Gates)	1						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Galler	y Place Lower Power	Fairgate Video.avi file.			
Were there any obstrudet details of type and spectrum	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No						

	Scoping of Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes		
Kiosk to Junction Bo	x (Room N101) – 45'					
Was video scoping conduit run?	ompleted for the entire duct /	Yes	Refer to V	VMATA Gallery Place Handhole to Kiosk Video.avi file.		
Was pull string install	ed?	No		ght could be seen inside the junction box from the ground level However, it was not possible to access box and install pull string		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No				
Is the duct / conduit at details about the dime number of wires.	t capacity? Provide additional ensions of duct / conduit and	No				
Junction Box (Room	N101) to AFC Panel – 35'					
Was video scoping conduit run?	ompleted for the entire duct /	No		bend was encountered where the duct transitions from wall to (see photo).		
Was pull string install	ed?	No	Need safe	e access to Junction Box 20' above ground level		
Were there any obstructions or blockages? Provide details of type and specific location.		No		ctions in vertical duct run from AFC panel to ceiling. Assuming no ns in horizontal duct run on ceiling between 90 degree bend and ox.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		No				
		-				
			L			
		Observation	ns / Issues /	Next Steps		
				fely. The junction box is centrally positioned on the ceiling, away ther temporary support is needed to safely access the junction		
			Sign Off			
	GFP Representa	tive		WMATA PRGM		
Name: Mi	ke Butler					
Signature:	M. ZMAN					
/						

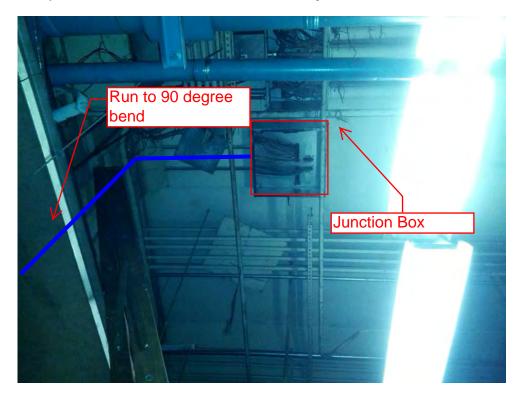
Date:

10/31/14

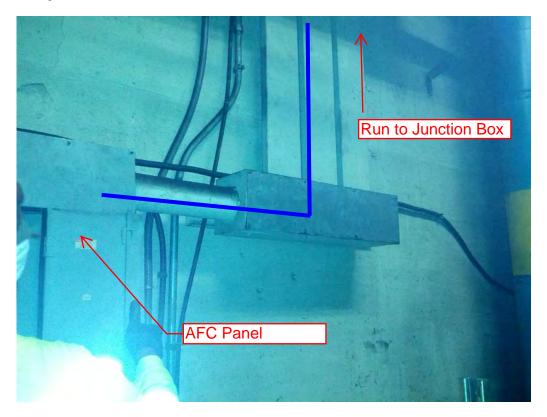
Gallery Place North Photo #1 - Due to obstructions on the wall and limited space in Room N101, there is no secure area to place the ladder and have access to the Junction Box in the ceiling.



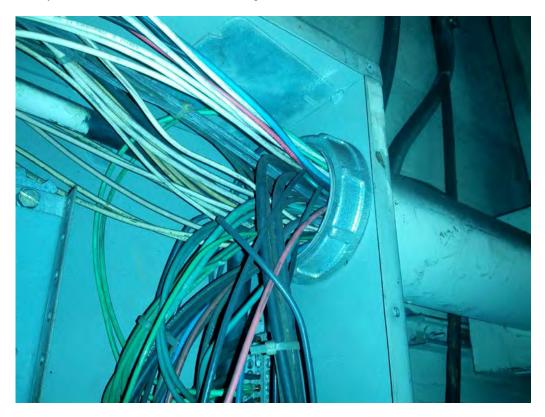
Gallery Place North Photo #2 - Junction box 20' above ground level under Mezzanine level.

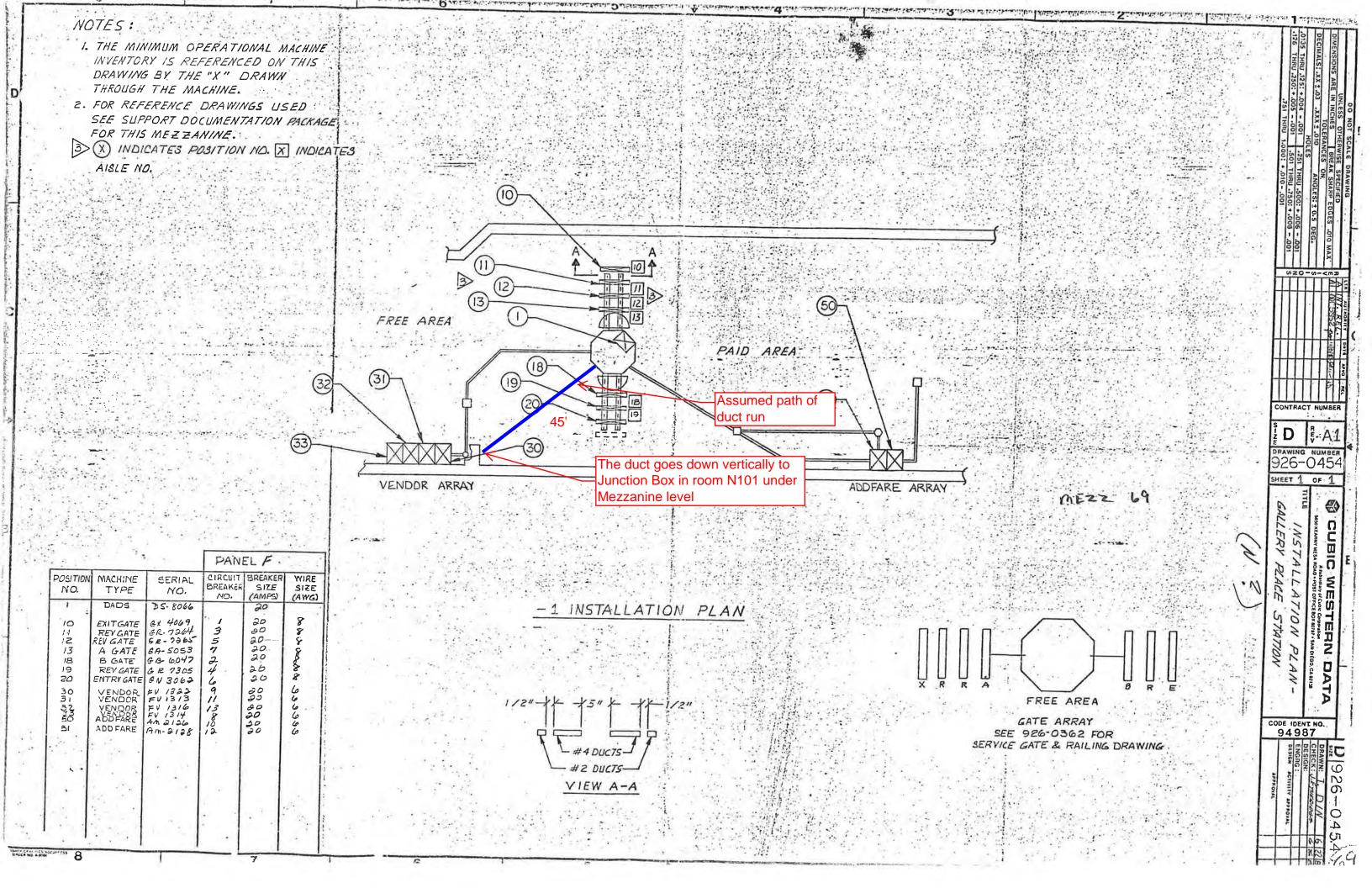


Gallery Place North Photo #3 – Wires from Junction Box come down in ducts and converge into larger conduit leading to AFC Panel.



Gallery Place North Photo #4 – Wires coming from conduit inside of AFC Panel.







ELECTRICAL AND DATA CABLE INSTALLATION

For

Washington Metropolitan Area Transit Authority

Contract Number FQ 15233

VOLUME 4

Mezzanine Inspection Report

July 15, 2015

Final Submission

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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MIR_B35_New York Ave South_MZ108	123
MIR_F01_Gallery Place North_MZ069	128
	MIR_B02_Judiciary Sq East_MZ023 MIR_B02_Judiciary Square West_MZ022 MIR_B03_Union Station North_MZ025 MIR_B04_Rhode Island Ave_MZ026 MIR_B05 Brookland CUA_M027 MIR_B06_Fort Totten_MZ026 MIR_B07_Takoma_MZ029 MIR_B08_Silver Spring North_MZ031 MIR_B08_Silver Spring South_MZ030 MIR_B09_Forest Glen_MZ032 MIR_B10_Wheaton_MZ033 MIR_B11_Glenmont_MZ034 MIR_B35_New York Ave North_MZ109 MIR_B35_New York Ave South_MZ108

Mezzanine Inspection Report (Scoping)							
Date: 09/25/2014	Station Name: A01 Metro Cer	nter West	Mezzanine #: 001	Completed By: Tino Sahoo			
			Summary				
Video scoping was completed and pull string was installed for the power duct between the kiosk and AFC panel. Video scoping was completed for the upper and lower faregate array power ducts. No video scoping was completed and no pull string was installed for the upper and lower faregate array communications duct. Cat6 cable has already been installed in the communications ducts. Scanning is not required at this mezzanine.							
		Scoping of	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications Due	ct – Upper Faregate Array (4 G	ates)					
Was video scoping c run?	ompleted for the entire duct	No	Cat6 cable previously ir	nstalled, video scoping not completed			
Were pull strings inst array?	alled at all faregates in the	No	Cat6 cable previously ir	nstalled, pull strings not installed			
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	N/A					
	? Provide additional details of ducts and number of wires.	No					
Communications Due	ct - Lower Faregate Array (4 G	ates)					
Was video scoping o run?	completed for the entire duct		Cat6 cable previously ir	nstalled, video scoping not completed			
Were pull strings inst array?	alled at all faregates in the		Cat6 cable previously ir	nstalled, pull strings not installed			
Were there any obstruct details of type and sp	uctions or blockages? Provide ecific location.						
	/? Provide additional details of ducts and number of wires.						
Power Duct - Upper F	Faregate Array (4 Gates)						
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Metro file.	Center West Upper Power Duct Fairgate Video.avi			
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	No					
Is the duct at capacity about the dimensions	?? Provide additional details of ducts and number of wires.	No					
Power Duct - Lower I	Faregate Array (4 Gates)	1	1				
Was video scoping c run?	completed for the entire duct	Yes	Refer to WMATA Metro	Center West Lower Power Fair gate Video.avi file.			
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No					

	Scoping	g of Power	r Duct - Ki	osk to AFC Panel
	Task	Yes/No		Notes
Kiosk to Handhole 1	(50 foot run)			
Was video scoping c conduit run?	completed for the entire duct /	Yes	Refer to V file.	/MATA Metro Center West Power Handhole to Kiosk Video.avi
Was pull string instal	led?	Yes		
Were there any obstruct details of type and sp	uctions or blockages? Provide ecific location.	No		
Is the duct / conduit a details about the dime number of wires.	t capacity? Provide additional ensions of duct / conduit and	No		
andhole 1 to AFC P	Panel (20 foot run)			
Was video scoping c conduit run?	completed for the entire duct /	Yes	Refer to V Video.avi	/MATA Metro Center West Power Handhole to AFC Panel file.
Was pull string instal	led?	Yes		
Were there any obstruct details of type and sp	uctions or blockages? Provide ecific location.	No		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		No		
			1	
		Observetion		Nové Céana
			137 135465	Next Steps
			Sign Off	
	GFP Representa	tive		WMATA PRGM
	no Sahoo			
	anoraya Schoo			
Date: 09	9/25/2014			

Photo #1 – A01 Metro Center West: Mezzanine level handholes

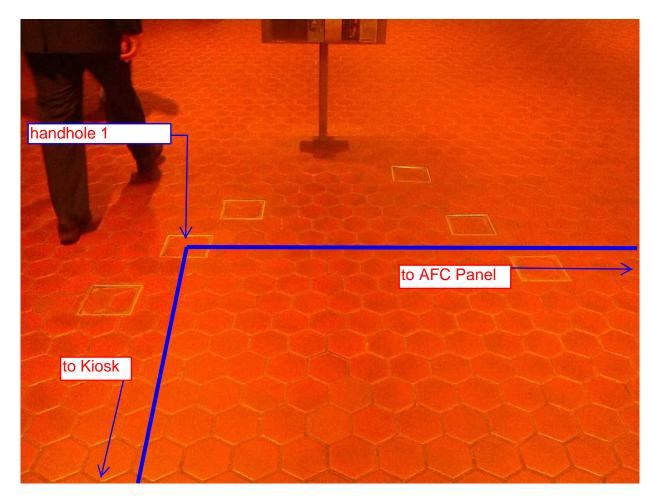
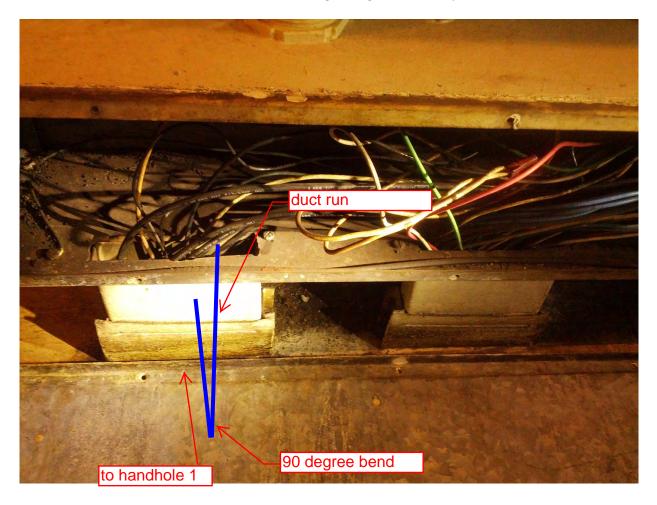
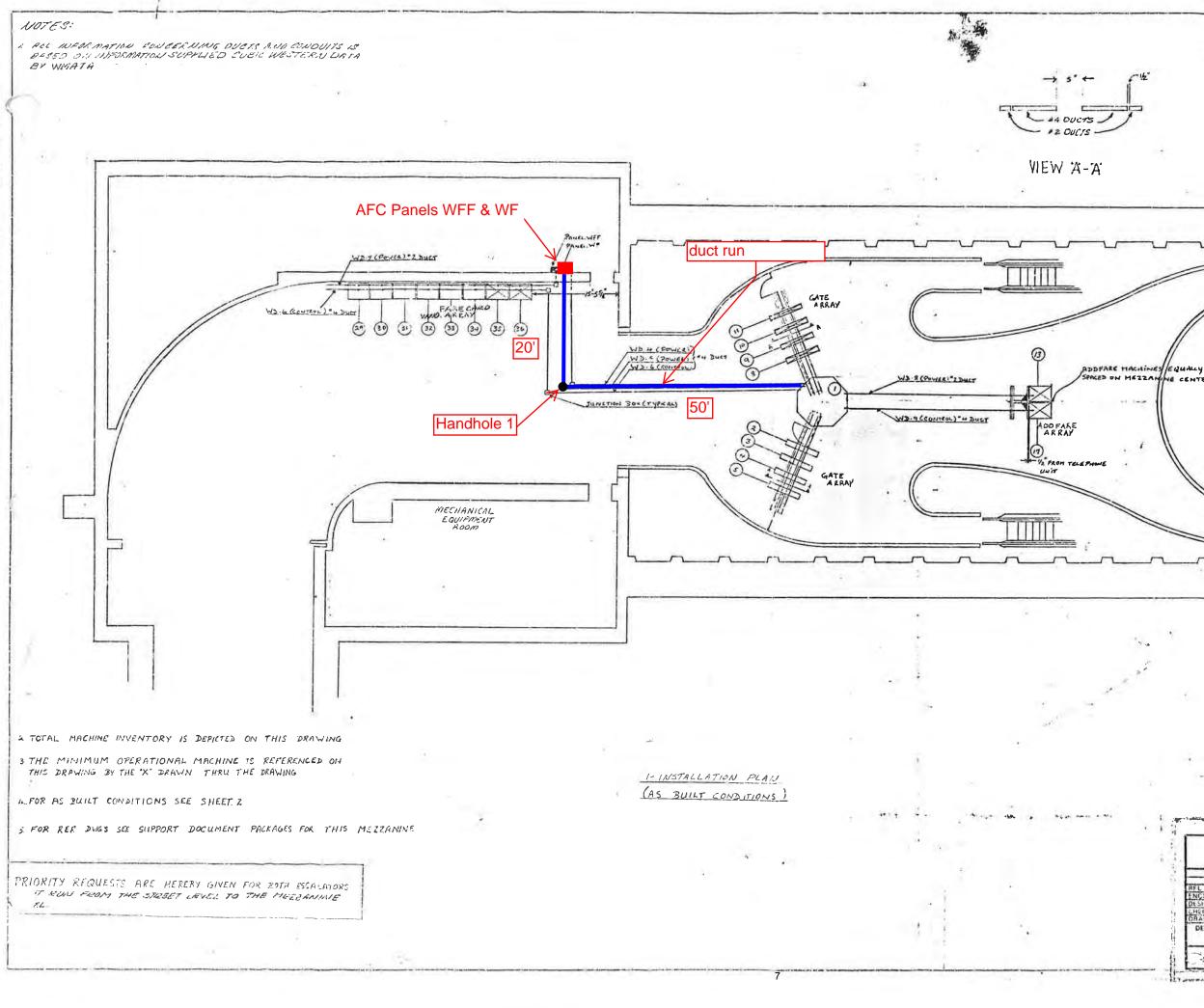


Photo #2 – A01 Metro Center West: Ducts to leading from ground level up to AFC Panel





REVISIONS DESCRIPTION DATE APYD AS BUILT DRAWING REV. A 5-10-17 2054 HE CENTER WASHINGTON METROPOLISM ATIN TO THE AND TH CONTRACT NUMBER CUBIC WESTERN DATA A subsidiary of Color Condition 5650 KEARNY MEBA ROAD + POST OFFICE BOX 80787 + SAN DIEGO, CA 92138 TROCEARSE IN STORESA AFT MARCHINES DESIGN ACTIVITY APPROVAL DRAWING NUMBER 926-63 01 AFPROVED APPROVED STATE SHEET SCALE

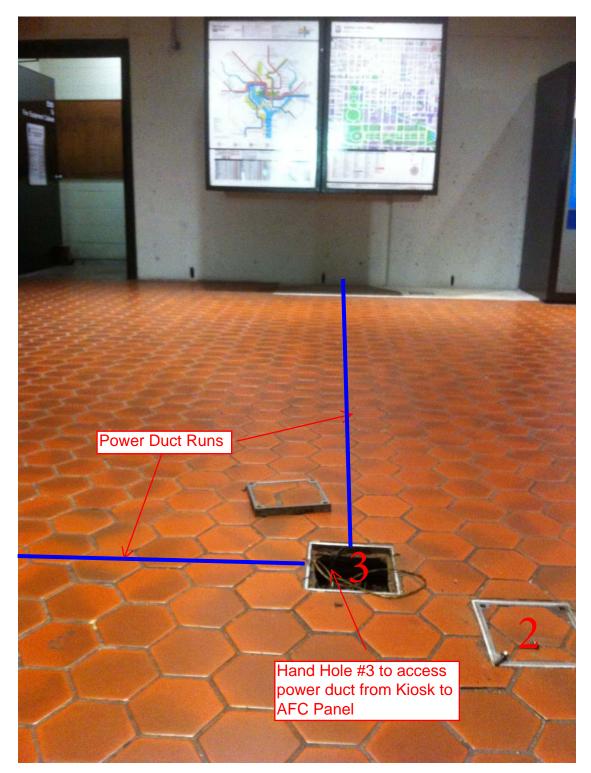
Mezzanine Inspection Report (Scoping)								
Date: 08/22/2014	Station Name: A01 Metro Cer	nter East	Mezzanine #: 019	Completed By: Mike Butler				
			Summary					
All ducts/conduits were video scoped and pull string installed as per the scope of works. No obstructions were found and ducts are not at capacity. Since pull string was successfully installed in all ducts, scanning will not be necessary at this mezzanine.								
		Scoping of	of Faregate Array(s)					
	Task	Yes/No		Notes				
Communications Due	ct – Upper Faregate Array (4 G							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Upper Comm Fair Gate				
Were pull strings inst array?	alled at all faregates in the	Yes						
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	No						
	y? Provide additional details of ducts and number of wires.	No						
Communications Due	ct - Lower Faregate Array (5 G	ates)						
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Lower Comm Fair Gate				
Were pull strings inst array?	alled at all faregates in the	Yes						
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	No						
	y? Provide additional details of ducts and number of wires.	No						
	Faregate Array (4 Gates)	ľ						
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Power Upper Fair Gate				
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	No						
	y? Provide additional details of ducts and number of wires.	No						
Power Duct - Lower I	Faregate Array (5 Gates)							
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Metro Video.avi file.	Center East Station G St. Lower Power Fair Gate				
Were there any obstr details of type and sp	uctions or blockages? Provide ecific location.	No						
	y? Provide additional details of ducts and number of wires.	No						

Scoping of Power Duct - Kiosk to AFC Panel								
Task		Yes/No		Notes				
Run 1 (Kiosk to H	land Hole #3 – 45 foot straight se	ction)						
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to V Video.avi	VMATA Metro Center East Station G St. Power Kiosk to Handhole file.				
Was pull string in	stalled?	Yes						
Were there any o details of type and	bstructions or blockages? Provide d specific location.	No						
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		No	12 wires i	n duct				
Run 2 (Hand Hole	e #3 to AFC Panel – 20 foot straig	ht section)						
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to WMATA Metro Center East Station G St. Power Handhole to AFC Panel Video.avi file.					
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	12 wires in	n duct				
		1	I					
		Observatior	ns / Issues /	/ Next Steps				
Refer to photos a	nd as-built drawing for details of far							
			Sign Off					
	GFP Representative			WMATA PRGM				
Name:	Mike Butler							
Signature:	Mizun							
Date:	09/04/2014							

Metro Center East Photo #1 – Hand Hole #3 to access power duct from Kiosk to AFC Panel - duct run from Kiosk to hand hole confirmed.

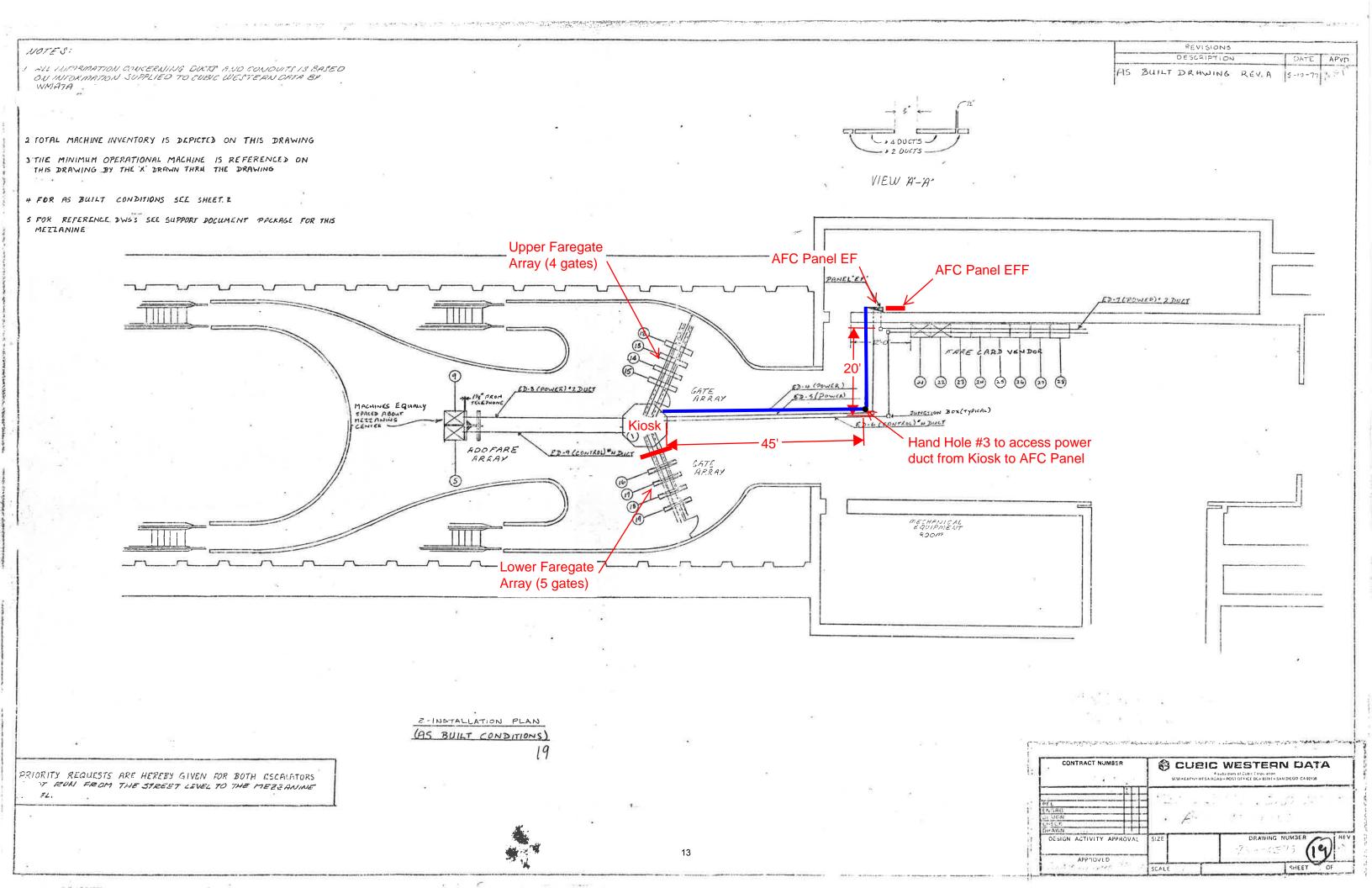


Metro Center East Photo #2 – Hand Hole #3 to access power duct from Kiosk to AFC Panel - duct run from Kiosk to hand hole confirmed.



Metro Center East Photo #3 – Close-up of Hand Hole #3 to access power duct from Kiosk to AFC Panel – 12 wires counted, therefore duct is not at capacity.





			Inspection Rep					
Date: 09/19/2014	Station Name: A02 - Farragut	North (SE)	Mezzanine #: 002	Completed By: Mike Butler				
		:	Summary					
	oull string installation was only par s as a basis for the proposed run			canning was conducted to identify existing				
video scope the pow duct. Pull string insta free from obstruction Handhole 1 and Har	ver duct in the upper faregate arra allation was completed in the pow hs apart from a 45-degree bend w	y, due to the er duct betwe hich prohibite ion and colla	re being an energized en een Kiosk and Handhole ed scope passage. Pull s pses. Likewise, pull string	th pull strings installed. It was only possible to hergency power feed in the lower faregate power 1 - video scoping showed that the duct is generally tring installation could not be installed between g installation could not be completed between				
Kiosk and AFC Pane making it difficult to p	el. The results of the scanning (att	tached) show	ed that the mezzanine flo	ducts and a proposed power duct run between the por is congested with in-floor ducts and conduits, overhead conduit from the Kiosk to AFC Panel is				
Scoping of Faregate Array(s)								
	Task	Yes/No		Notes				
communications Du	uct – Upper Faregate Array (8 fa	aregates)						
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Farra	agut North SE Upper Comm Video.avi"				
Were pull strings ins array?	stalled at all faregates in the	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	4" walker duct with less than 15 wires					
Communications Du	uct - Lower Faregate Array (5 fa	regates)						
Was video scoping completed for the entire duct run?		Yes	Refer to "WMATA Farragut North SE Lower Comm Video.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						
	ty? Provide additional details s of ducts and number of wires.	No	4" walker duct with less than 12 wires					
ower Duct - Upper	Faregate Array (8 faregates)	· · · · · ·						
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Farragut North SE Upper Power Video.avi"					
Were there any obst details of type and s	ructions or blockages? Provide pecific location.	No						
	ty? Provide additional details is of ducts and number of wires.	No	6" walker duct with less than 15 wires					
ower Duct - Lower	Faregate Array (5 faregates)	· · ·						
Was video scoping run?	completed for the entire duct	No	Faregate #10 was still energized by power feed from kiosk emergency panel.					
Were there any obst details of type and s	tructions or blockages? Provide pecific location.	N/A						
	ty? Provide additional details s of ducts and number of wires.	N/A	6" walker duct with less	than 12 wires				

Scoping of Power Duct - Kiosk to AFC Panel						
Task		Yes/No		Notes		
Kiosk to Handh	ole 1 (Distance: 16')					
Was video scor conduit run?	ping completed for the entire duct /	Partially	Refer to "WMATA Farragut North SE Handhole to Kiosk Video.avi"			
Was pull string installed?		Yes				
Were there any obstructions or blockages? Provide details of type and specific location.		No		There were no other obstructions or blockages other than the 45- degree bend in walker duct, although corrosion was clearly evident.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		No	4" walker	4" walker duct with less than 15 wires		
Hanhole 1 to Ha	andhole 2 (Distance: 15')					
Was video scop conduit run?						
Was pull string	installed?	No	Not possible due to collapse.			
Were there any obstructions or blockages? Provide details of type and specific location.		Yes	Duct is heavily corroded and collapsed in multiple locations. Handhole 2 is also collapsed and in poor condition.			
	nduit at capacity? Provide additional e dimensions of duct / conduit and s.	N/A				
Handhole 2 to A	AFC Panel (Distance: 20')	Γ	T			
Was video scoping completed for the entire duct / conduit run?		No	It was no	It was not possible to complete video scoping or pull string installation due to the presence of energized wires in a shared raceway.		
Was pull string installed?		No				
Were there any obstructions or blockages? Provide details of type and specific location.		N/A		Although video scoping did not take place, a visual inspection confirmed that the duct is in poor condition with corrosion evident at each entry point.		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		N/A				
		Observation	ns / Issues	/ Next Steps		
Conductor Run	for Proposed Overhead Conduit is a	oprox. 75' fro	om Kiosk to	AFC Panel (Fare Vend 2)		
			Sign Off			
Nomo	GFP Representative					
Name:	Mike Butler					
Signature:						
Date:	01/03/2015		15			

Photo #1: Kiosk on mezzanine floor



Photo #2: Handhole 1



Photo #3: Handhole 2



Photo #4: Entrance to backrooms and shared raceway



Photo #5: Proposed overhead conduit run from Kiosk to AFC Panel



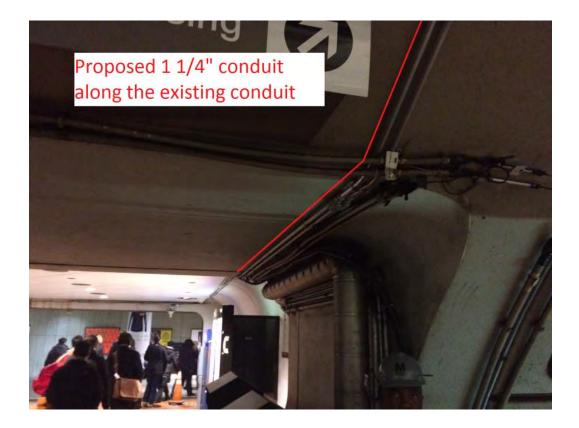


Photo #6: Proposed overhead conduit run from Kiosk to AFC Panel (continued)

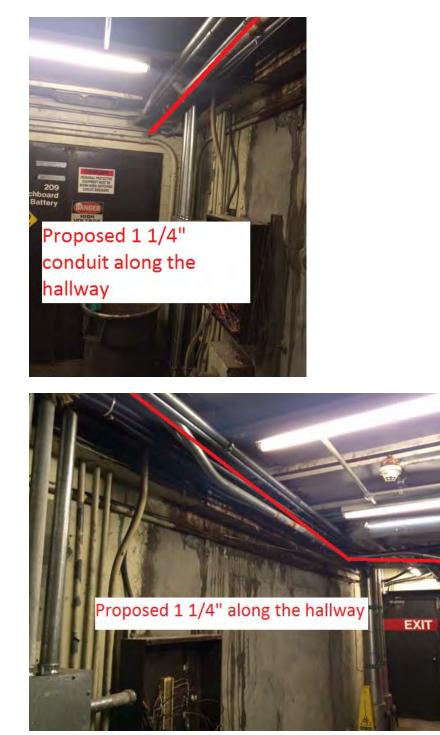
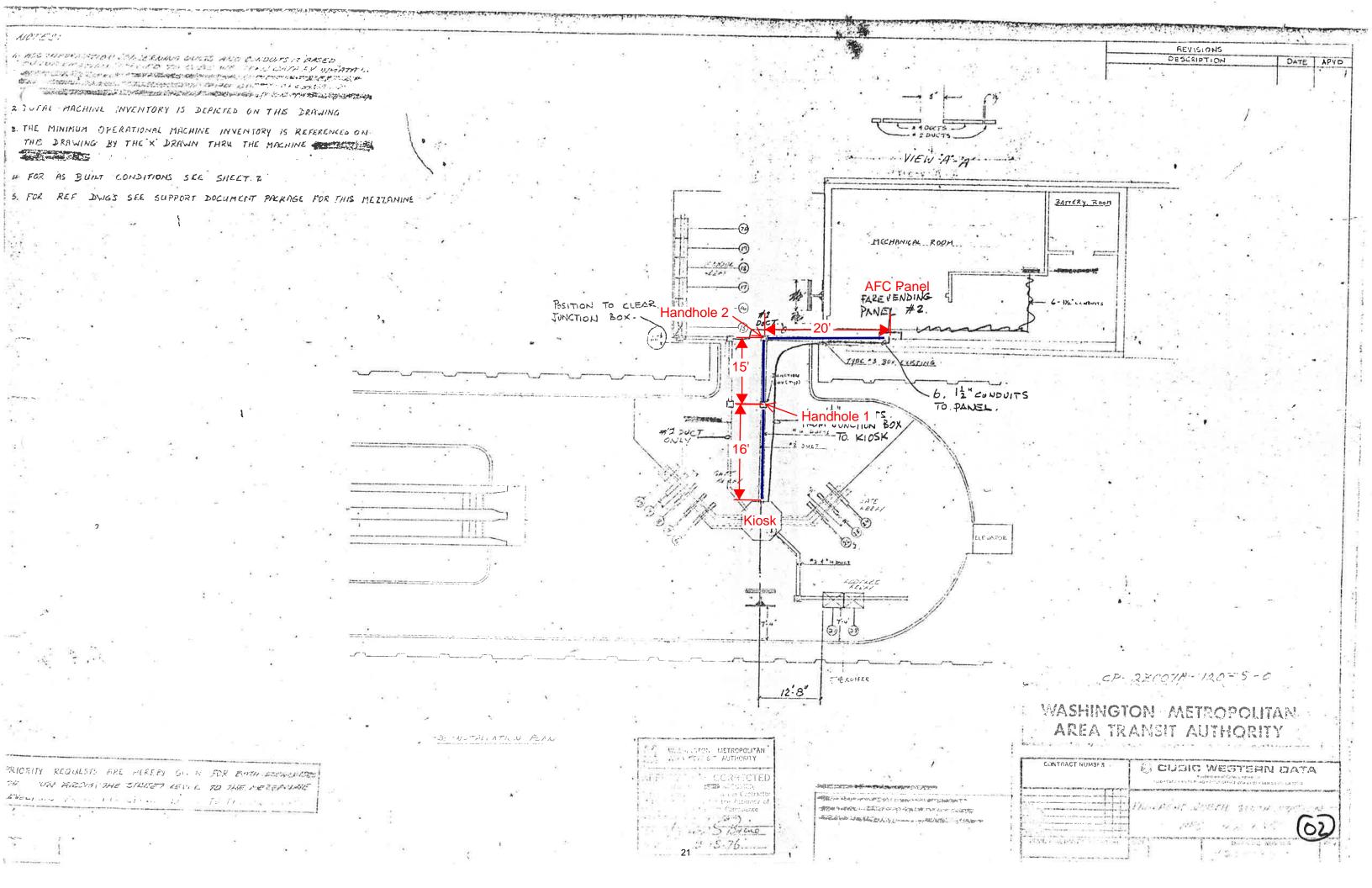
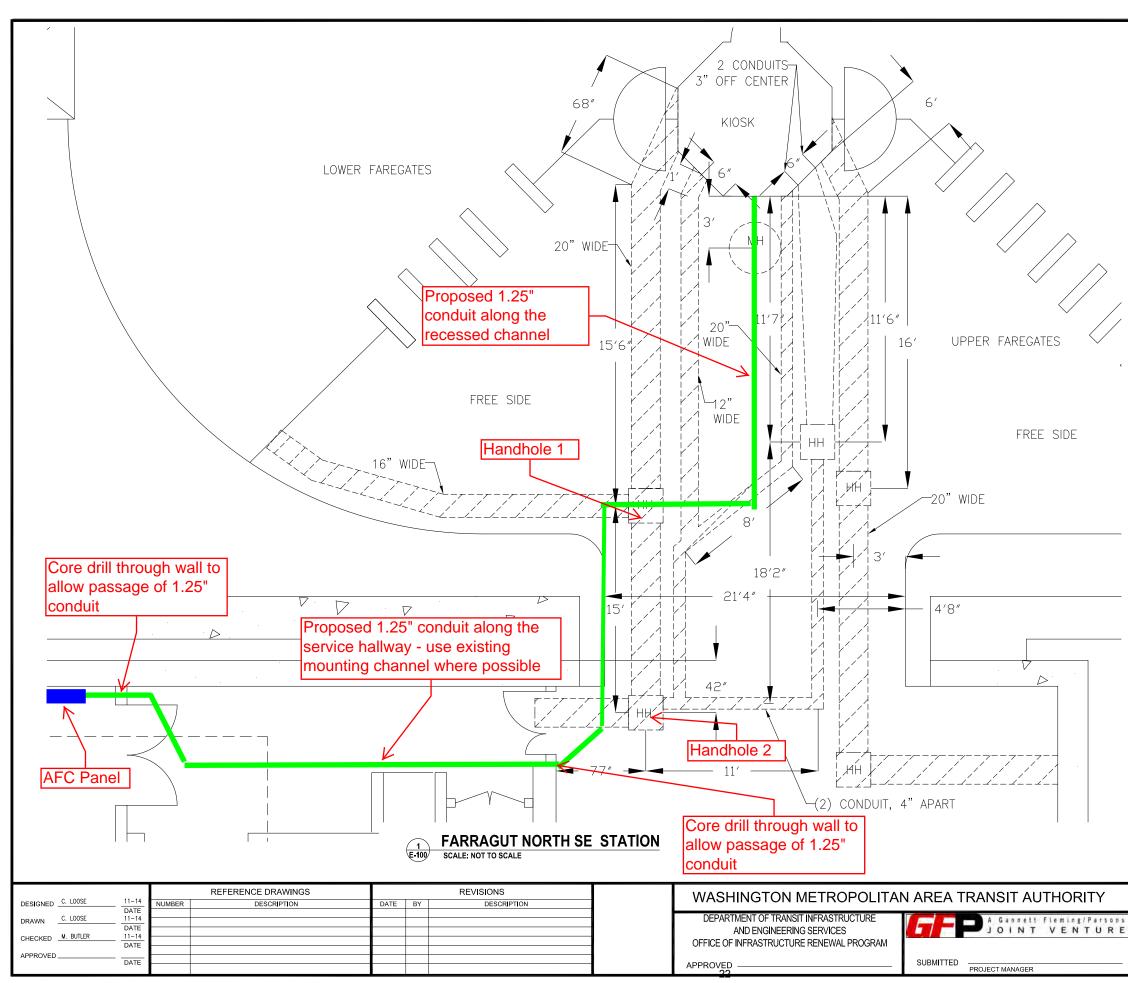




Photo #7: Proposed overhead conduit run from Kiosk to AFC Panel (continued)





PLAN NOTES:

- DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
 EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
 CORE SCANNING THE FOR SCANNING THE SCANNING
- 5. GPR SCANNING HAS THE FOLLOWING LIMITATIONS: (i) 12 INCHES VISIBLE SCANNING DEPTH; (ii) VISIBILITY BEYOND INCHES VISIBLE SCANNING DEPTH; (ii) VISIBILITY BETOND 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	()
HANDHOLE	┌ ─ ┐ HH └ _ ┘

A02 F	15-NEPP-01 DOR DUCT INSPECTIO arragut North SE (MOO SED POWER CONDUIT R	2)
scale NOT TO SCALE	drawing no. A02-E-100	XXX

	Mez	zanine	Inspection Rep	ort REVISION 1
Date: 11/06/2014	Station Name: A02 Farragut N	North NW	Mezzanine #: 003	Completed By: Mike Butler
			Summary	
duct; however, video s power ducts. The pow the AFC Panel to the obstruction. A proposed overhead the Kiosk to the junction manhole and the exist	scoping was not completed due ver run between the Kiosk and A junction box in the service hallw conduit path from the Kiosk to t on box is deemed to be unusabl ting ducts. It is recommended to tion into the existing junction box	to obstructio FC Panel is ay. Pull string he junction b le. There is n install overh	ns. Video scoping was cor conduit; therefore, video s g could not be installed fro pox has been identified (se to room for installation of n tead conduit from the kiosh	he upper and lower faregate array communications mpleted for both the upper and lower faregate array coping is not required. Pull string was installed from m the junction box to the Kiosk due to an e photos 6-10 below) since the existing conduit from ew in-floor duct based on the location of the existing c along the recessed channel along the ceiling of the is already an existing core drill hole, so a core drill
		Scoping o	of Faregate Array(s)	
	Task	Yes/No		Notes
Communications Duc	t – Upper Faregate Array (5 g			
Was video scoping co run?	ompleted for the entire duct	No	Refer to WMATA Farrag	ut NW Station Upper Comm Video.avi file.
Were pull strings insta array?	alled at all faregates in the	Yes		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	Yes	Hit insert/coupling on wa	lker duct at 3 rd faregate
	? Provide additional details of ducts and number of wires.	No		
Communications Duc	et - Lower Faregate Array (5 ga	ates)		
Was video scoping c run?	ompleted for the entire duct	No	Refer to WMATA Farrag	ut NW Station Lower Comm Video.avi file.
Were pull strings insta array?	alled at all faregates in the	Yes		
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	Yes	Apron skirt made it diffic duct on 1 st faregate.	ult to scope; scoped to about entrance of comm.
	? Provide additional details of ducts and number of wires.	No		
Power Duct - Upper F	aregate Array (5 gates)			
Was video scoping c run?	ompleted for the entire duct	Yes		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No		
Power Duct - Lower F	aregate Array (5 gates)			
Was video scoping c run?	ompleted for the entire duct	Yes		
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No		

		r Duct - Kiosk to AFC Panel
Task	Yes/No	Notes
Kiosk to Junction Box (Approximately 40 foot run)		
Was video scoping completed for the entire duct / conduit run?	No	Refer to WMATA Farragut North NW Power Feed 2inch conduit Video (1).avi
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	90 degree bend into floor. Could not get past obstruction at bend.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	2" conduit
unction Box to AFC Panel (20 foot 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	2" conduit
	Observation	ns / Issues / Next Steps

	Sign Off	
	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:	Mizun	
Date:	11/06/2014	

Farragut North NW Photo # 1 – 90 degree bend where conduit sweeps underground to junction box



Farragut North NW Photo # 2 – Overhead conduit runs in Room #200



Farragut North NW Photo # 3 – Kiosk apron skirt



Farragut North NW Photo # 4 – Kiosk floor, there is a skirt obstruction inside Kiosk and a narrow gap for wires

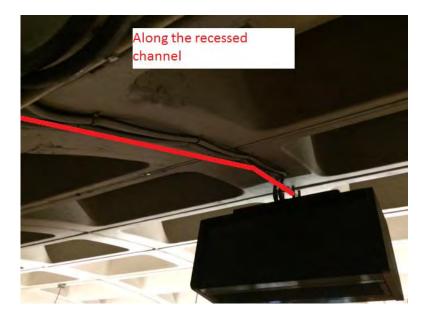


Farragut North NW Photo # 5 – Entrance to Room 200, junction box located behind door





Farragut North NW Photo # 7 - Proposed conduit run



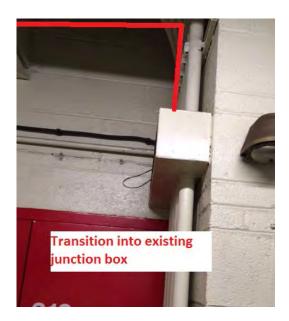
Farragut North NW Photo # 8 - Proposed conduit run



Farragut North NW Photo # 9 – Proposed conduit run through existing core drill

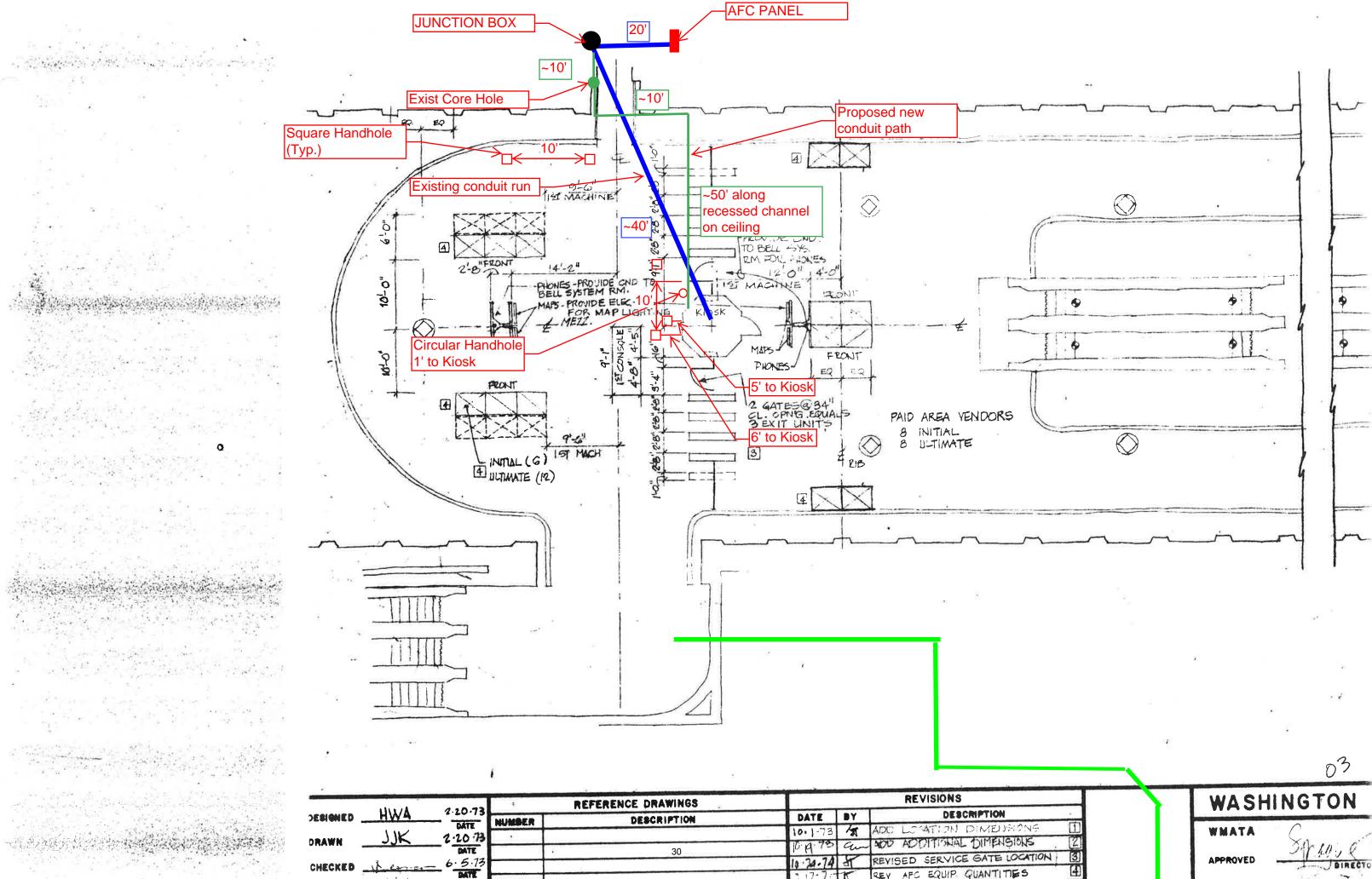


Farragut North NW Photo # 10 – Proposed conduit transition into existing junction box



Farragut North NW Photo # 11 – Existing manhole and duct may be in the way of any proposed duct installation





()		ľ	4	EFERENCE DRAWINGS			REVISIONS
DESIGNED	<u>HWA</u>	2.20.73	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
	JJK	04TE	HO HERE N		10.1-73		ADD LOTATION DIMENS
DRAWN		2.20 PATE		30	10-19-73	an	SOD ADDITIONAL DIMENS
	ik en -	6.5.73		50	10.20.74	8	REVISED SERVICE GATE L
CHECKED	- Martin	DATE			217-75	T	REY AFC EQUIP QUANTIT

-

	Mezzanin	e Inspe	ection Report (S	Scoping)
Date: 11/03/14	Station Name: A02 Farragut N	North NE	Mezzanine #: 004	Completed By: Mike Butler
			Summary	
could not be complete completed in power du Video scoping and pu Junction Box in Room 254) and Trough (Roo A new overhead cond on the results of the si	ed in communication ducts for u ucts for upper and lower farega Il string installation could not be a 254 due to energized wires. Ho om 256). Pull string was also ins luit is proposed between the Kic canning. The proposed conduit	oper and low te arrays due completed in owever, pull stalled in con osk and exist will run along	er faregate arrays due to t to energized wires. In power duct between Kios string was successfully ins duit between Trough and / ing Junction Box in Room g the ceiling from the Kiosł	s; ducts are viable for future use. Video scoping the camera size. Video scoping could not be sk, Handhole 1, Handhole 2, Handhole 3 and talled in conduit between Junction Box (Room AFC Panel in Room 256. 254 because an in-floor duct is not feasible based k to the wall adjacent to Room 254 in the hallway. Inction Box. Refer to attached photos and drawings
		Scoping of	of Faregate Array(s)	
-	Task	Yes/No		Notes
Communications Duc	t – Upper Faregate Array (5 g			
Was video scoping co run?	ompleted for the entire duct	No	Camera was too large to inspection was performe	o get through the entire duct, therefore visual d.
Were pull strings insta array?	alled at all faregates in the	Yes		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No	3" walker duct with less	than 8 wires.
Communications Duc	et - Lower Faregate Array (3 g	ates)		
Was video scoping co run?	ompleted for the entire duct	No	Camera was too large to inspection was performe	o get through the entire duct, therefore visual ed.
Were pull strings insta array?	alled at all faregates in the	Yes		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less	than 10 wires.
Power Duct - Upper F	aregate Array (5 gates)			
Was video scoping co run?	ompleted for the entire duct	No	Could not be completed completed as directed by	due to energized wires - no further work was y WMATA.
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A		
	? Provide additional details of ducts and number of wires.	N/A		
Power Duct - Lower F	aregate Array (3 gates)			
Was video scoping co run?	ompleted for the entire duct	No	Could not be completed completed as directed by	due to energized wires - no further work was y WMATA.
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A		
	? Provide additional details of ducts and number of wires.	N/A		

	Scopin	g of Powe	r Duct - Ki	osk to AFC Panel	
	Task	Yes/No			Notes
Kiosk to Handhol	e 1, Handhole 2, Handhole 3 and	Junction B	ox (Distand	æ: 70')	
Was video scopir conduit run?	ng completed for the entire duct /	No		be completed due to e d as directed by WMAT	nergized wires - no further work was A.
Was pull string in	stalled?	No			
Were there any ob details of type and	ostructions or blockages? Provide d specific location.	N/A			
Is the duct / condu details about the c number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A			
Junction Box to T	rough (Distance: 60')	T	T		
Was video scopir conduit run?	ng completed for the entire duct /	No	Scoping o	f conduits not required	
Was pull string in	stalled?	Yes			
Were there any ob details of type and	ostructions or blockages? Provide d specific location.	No			
	uit at capacity? Provide additional dimensions of duct / conduit and	No	2" conduit	with less than 8 wires.	
Trough to AFC Pa	anel (Distance: 20')				
Was video scopir conduit run?	ng completed for the entire duct /	No	Scoping c	f conduits not required	
Was pull string in	stalled?	Yes			
Were there any ob details of type and	ostructions or blockages? Provide d specific location.	No			
	uit at capacity? Provide additional dimensions of duct / conduit and	No	2" conduit	with less than 8 wires.	
		Observation	ns / Issues /	/ Next Steps	
Proposed conduit	run is 75' from Kiosk to Junction B	lox (Room 2	54).		
Existing conduit ru	un is 80' between Junction Box (Ro	oom 254),Tro	ough and Af	FC Panel (Room 256).	
			Sign Off		
	GFP Representa	ntive			WMATA PRGM
Name:	Mike Butler				
Signature:	Mizun				
Date:	02/24/15				

Photo #1 – Proposed overhead conduit from Kiosk



Photo #2 – Proposed overhead conduit from Kiosk

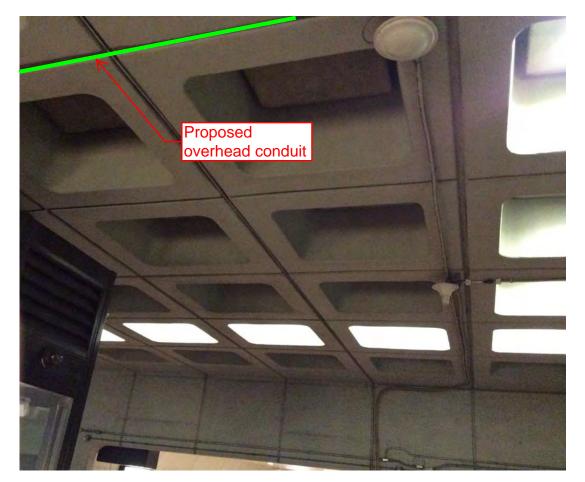
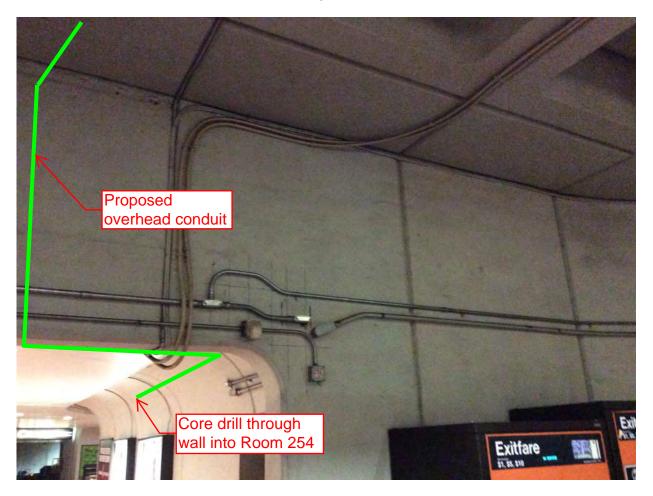
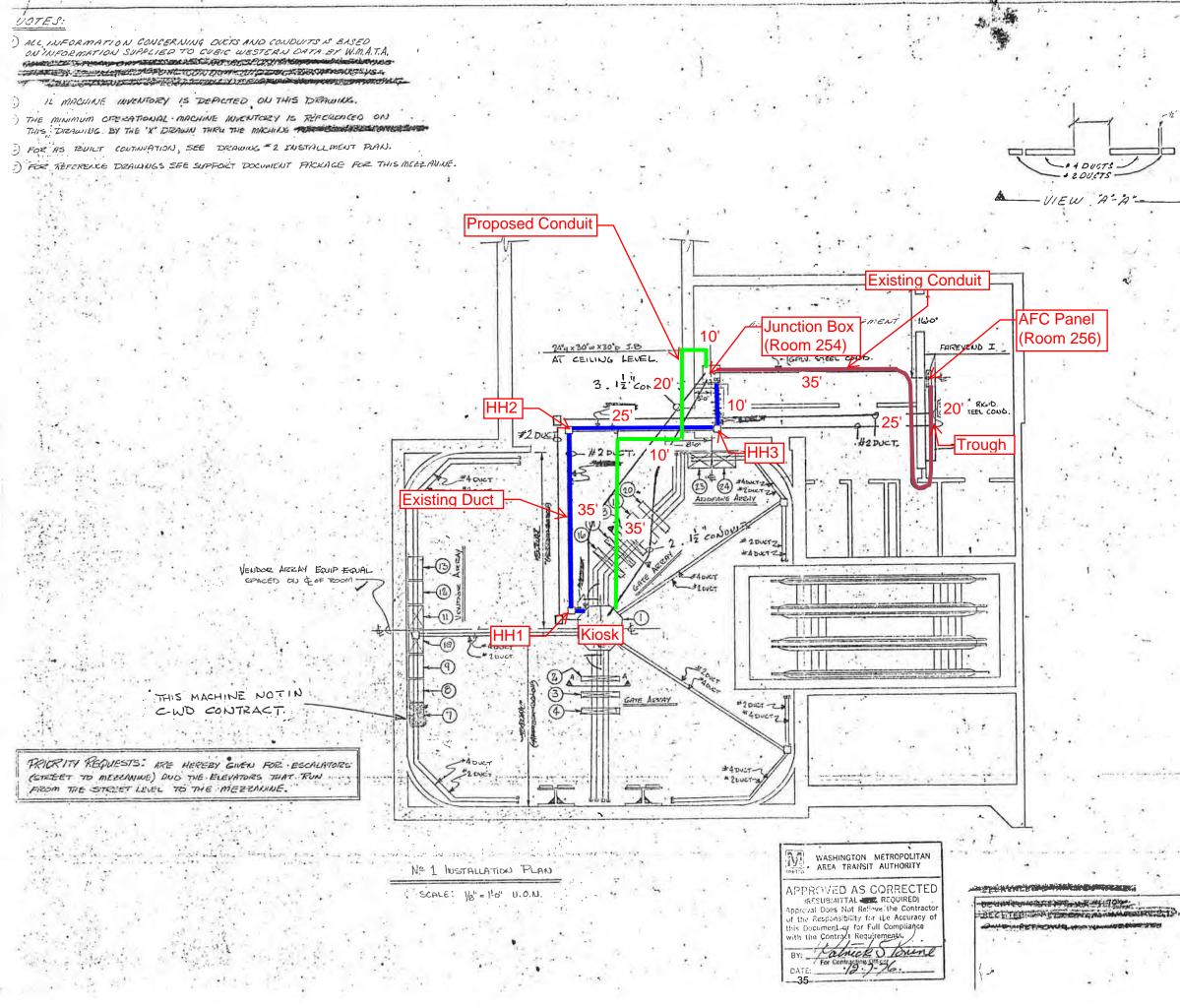


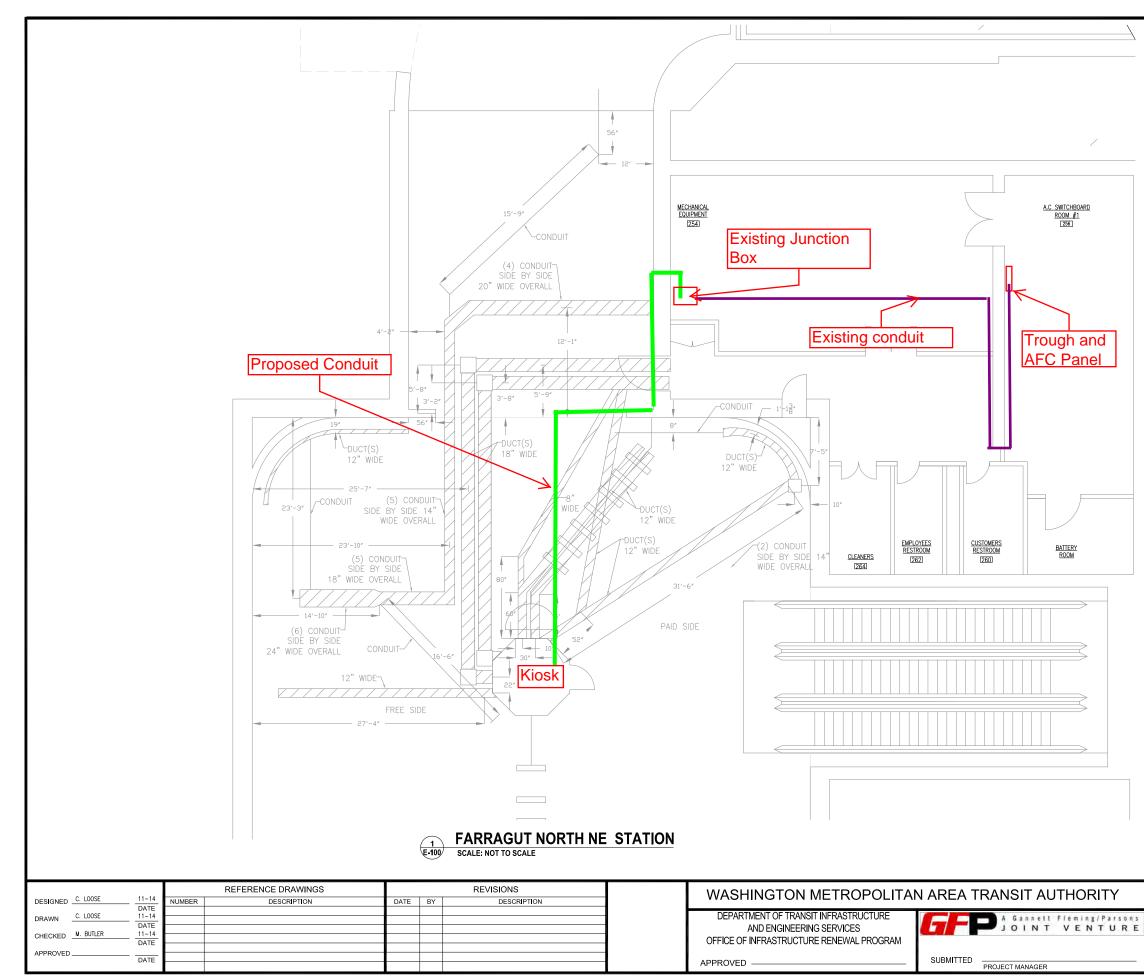
Photo #3 – Proposed overhead conduit heading towards back rooms





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REVISIONS DESCRIPTIONS DATE APVD
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DESIGN ACTIVITY APPROVAL SIZE DRAWING NUMBER
APPROVED
Brohad & 11/0/76 SCALE 1/2+10" SHEET 1 OF 3



PLAN NOTES:

- DIMENSIONS ARE IN FEET AND INCHES. DIMENSIONS ARE FOR REFERENCE ONLY.
- 2
- EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 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 SUBSTREE THE SUBSTRATE.

LEGEND:

EXISTING DUCT

MANHOLE

HANDHOLE

MH і нн і

	XX	XXXX	
IN - FLOOR A02 Far	-NEPP-01 DUCT INSPECTI ragut North NE POWER CONDUIT		
SCALE NOT TO SCALE	drawing no. A02-E-100	XXX	

	Mezzanin	e Inspe	ection Report (S	Scoping)
Date: 12/09/2014	Station Name: A03 Dupont Ci	rcle South	Mezzanine #: 005	Completed By: Mike Butler
			Summary	
faregate array power of Scoping and pull strin- panel could not be co would consist of two conduits would need t #215. The conduit wo	ducts. g installation of the duct run fror mpleted due to energized lines. 1 ¼" conduits from the kiosk, c o penetrate the metal above the uld then need to be cored into th osed run is outlined in the photo	n kiosk to sh WMATA ha overhead in t door. The r ne wall near	nared pull box and pull strir s requested a proposed co he recessed channels alo un would then continue do	Ins ducts. Video scoping was completed for the ng installation between the shared pull box and AFC onduit run from the kiosk to the AFC panel. This run ng the mezzanine ceiling, into room #201. The two wn the hall and turn across the room towards room I run into an existing box and continue down into the
		Scoping of	of Faregate Array(s)	
-	Task	Yes/No		Notes
Communications Duc	et – Upper Faregate Array (4 G	iates)		
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Upper Comm Duct Video.avi file.
Were pull strings insta array?	alled at all faregates in the	Yes		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No	2" duct – less than 5 wire	es
Communications Duc	ct - Lower Faregate Array (4 G	ates)		
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Lower Comm Duct Video.avi file.
Were pull strings insta array?	alled at all faregates in the	Yes		
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No	2" duct – less than 5 wire	es
Power Duct - Upper F	aregate Array (4 Gates)			
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Upper Power Duct Video.avi file.
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No	4" duct – less than 5 wire	es
Power Duct - Lower F	aregate Array (4 Gates)			
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Dupon	t circle South Lower Power Duct Video.avi file.
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No		
	? Provide additional details of ducts and number of wires.	No	4" duct – less than 5 wire	es

conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a details about the dim number of wires. Shared Pull Box to S Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	Task I Box (60' run) completed for the entire duct / lled? ructions or blockages? Provide becific location. at capacity? Provide additional ensions of duct / conduit and Shared Electrical Trough (30 fc completed for the entire duct / lled? ructions or blockages? Provide	Yes/No No No N/A No	Hot wires	Notes prevented scoping prevented pull string installation no scoping required prevented pull string installation
Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a details about the dim number of wires. Shared Pull Box to S Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	completed for the entire duct / lled? ructions or blockages? Provide becific location. at capacity? Provide additional ensions of duct / conduit and Shared Electrical Trough (30 fc completed for the entire duct / lled? ructions or blockages? Provide becific location.	No N/A No Dot run) No No	Hot wires	prevented pull string installation
conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a details about the dim number of wires. Shared Pull Box to S Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	Iled? ructions or blockages? Provide becific location. at capacity? Provide additional ensions of duct / conduit and Shared Electrical Trough (30 fc completed for the entire duct / Iled? ructions or blockages? Provide becific location.	No N/A No Dot run) No No	Hot wires	prevented pull string installation
Were there any obstr details of type and sp Is the duct / conduit a details about the dim number of wires. Shared Pull Box to S Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	ructions or blockages? Provide becific location. at capacity? Provide additional ensions of duct / conduit and Shared Electrical Trough (30 fc completed for the entire duct / lled? ructions or blockages? Provide becific location.	N/A No Dot run) No No	Conduit –	no scoping required
details of type and sp Is the duct / conduit a details about the dim number of wires. Shared Pull Box to S Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	becific location. at capacity? Provide additional lensions of duct / conduit and Shared Electrical Trough (30 fo completed for the entire duct / lled? ructions or blockages? Provide becific location.	No pot run) No No		
details about the dim number of wires. Shared Pull Box to S Was video scoping of conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	ensions of duct / conduit and Shared Electrical Trough (30 fo completed for the entire duct / lled? ructions or blockages? Provide becific location.	No No		
Was video scoping o conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	completed for the entire duct / lled? ructions or blockages? Provide pecific location.	No		
conduit run? Was pull string instal Were there any obstr details of type and sp Is the duct / conduit a	lled? ructions or blockages? Provide becific location.	No		
Were there any obstr details of type and sp Is the duct / conduit a	ructions or blockages? Provide becific location.		Hot wires	prevented pull string installation
details of type and sp Is the duct / conduit a	pecific location.	N/A		
Is the duct / conduit a	at capacity? Provide additional			
details about the dim number of wires.	ensions of duct / conduit and	No		
Shared Electrical Tre	ough to AFC Panel (15 foot run	n)		
Was video scoping o conduit run?	completed for the entire duct /	No	Conduit –	no scoping required
Was pull string insta	lled?	No	Hot wires	prevented pull string installation
Were there any obstr details of type and sp	ructions or blockages? Provide becific location.	N/A		
Is the duct / conduit a details about the dim number of wires.	at capacity? Provide additional ensions of duct / conduit and	No		
		Observatior	ns / Issues /	Next Steps
Total proposed overl	head conduit run of 173 feet fron	n kiosk to AF	C panel.	
			Sign Off	
	GFP Representa	tive		WMATA PRGM
Neme	-			
	like Butler			
Signature:	Mizin			
Date: 10	0/34/14		38	

Photo #1 – A03 Dupont Circle South: Shared pull box in Verizon room #203



Photo #2 – A03 Dupont Circle South: AFC Panel and under floor trough in room #215

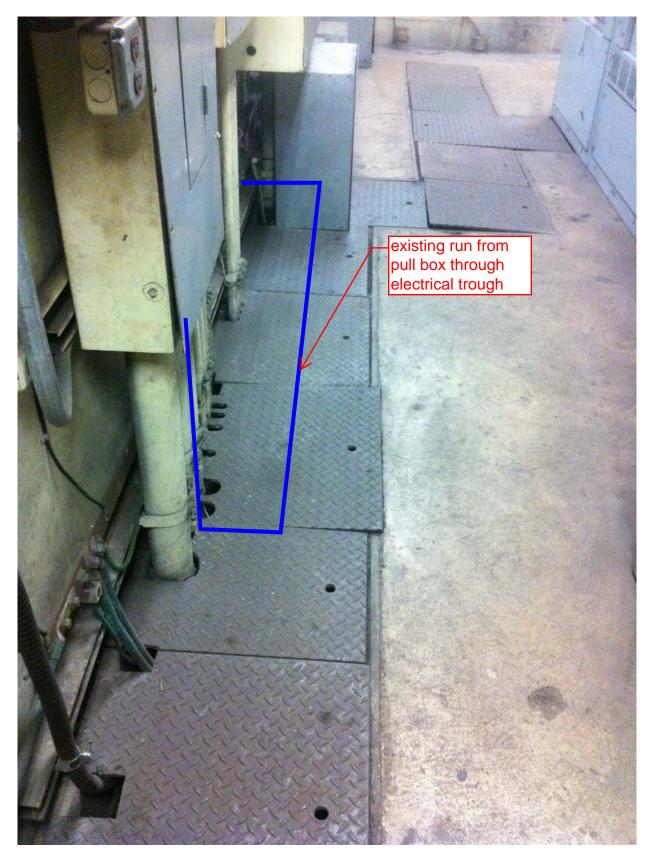
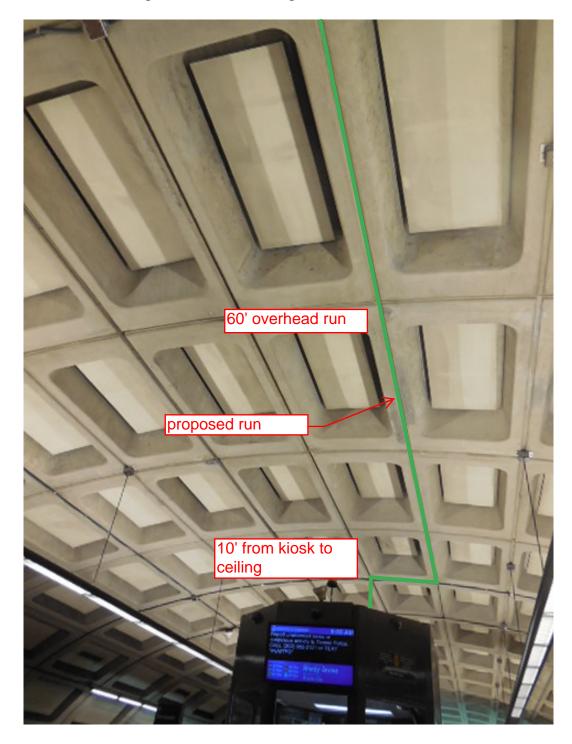
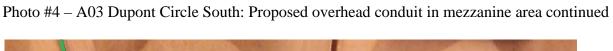


Photo #3 – A03 Dupont Circle South: Proposed overhead conduit in mezzanine area





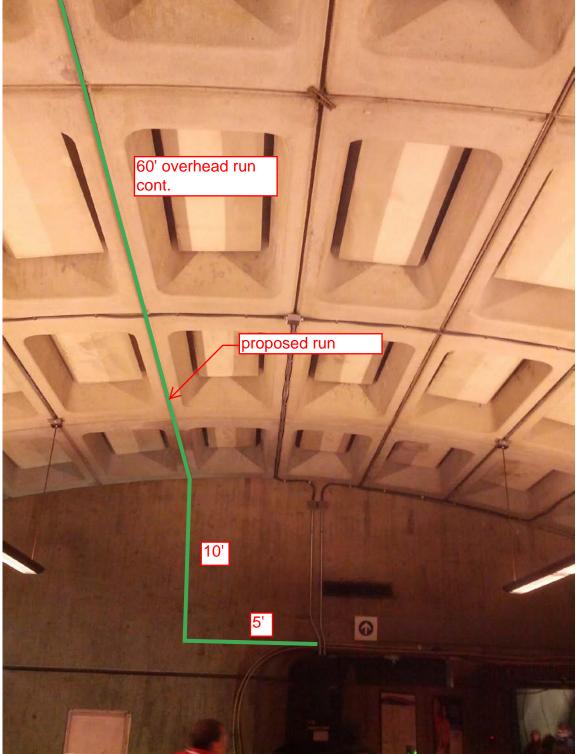


Photo #5 – A03 Dupont Circle South: Proposed overhead conduit running into Room #201. Run will need to penetrate metal over door.

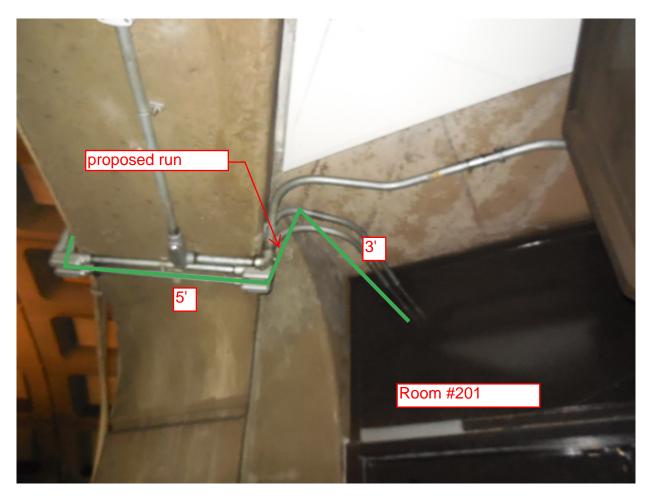


Photo #6 - A03 Dupont Circle South: Proposed overhead conduit on other side of door for room #201

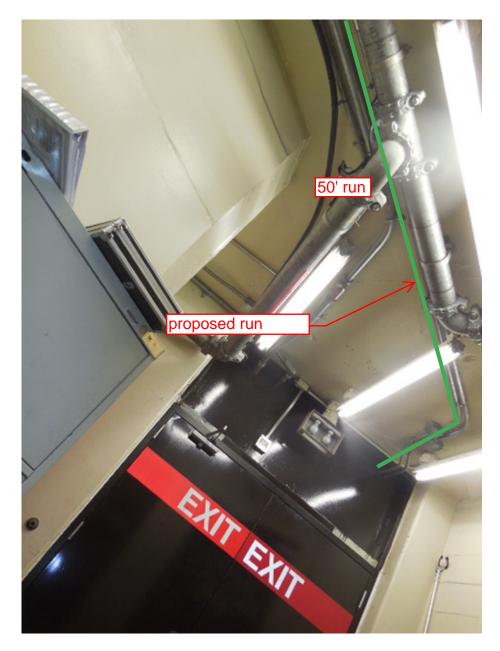
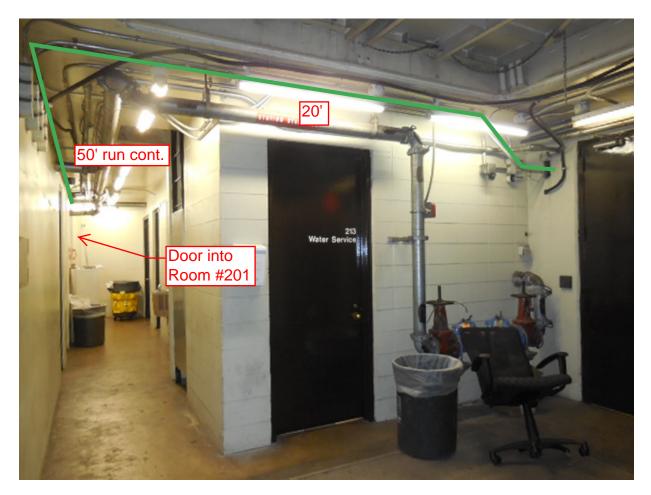


Photo #7 – A03 Dupont Circle South: Proposed conduit run continuing down hallway of room #201 and towards room #215



Picture #8 and #9 – A03 Dupont Circle South: Area in wall where proposed conduit will need to be cored through into room #215 to access AFC Panel

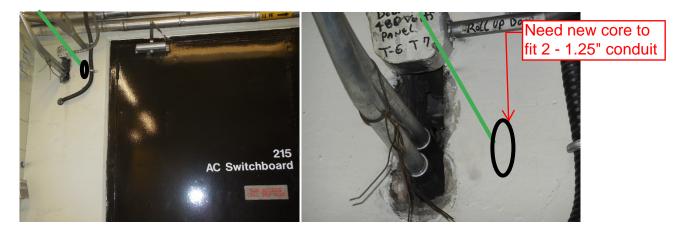
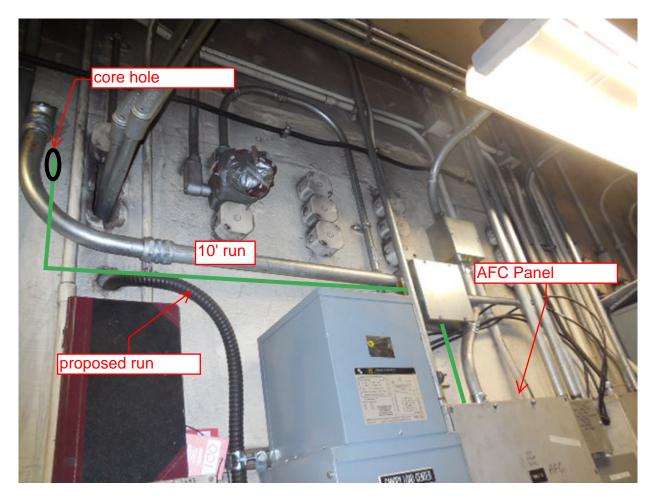
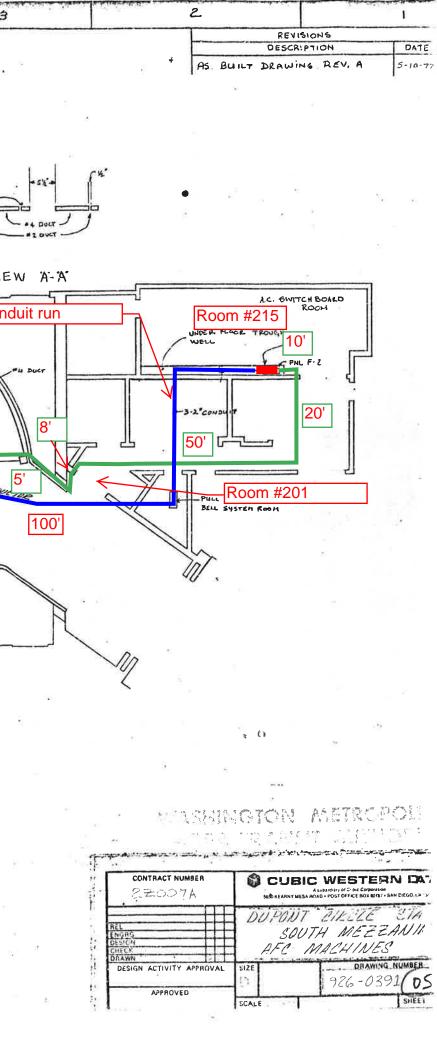


Photo #10 – A03 Dupont Circle South: Proposed conduit run penetrating wall into room #215 to access AFC panel through existing box.



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	NOTES:					
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	4. FOR AS BUILT CONDITIONS SEE SHEB 5. FOR KEFESEENCE DRAWINGS SEL PACKAGE FOR THIS MEZEAUNIS.					
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Mezzanine Inspection Report (Scoping)						
Date: 11/13/2014	Station Name: A04 Woodley	Park	Mezzanine #: 007	Completed By: Mike Butler		
		Summary				
The majority of video scoping and pull string installation was completed at this mezzanine. This included the scoping and pull string installation for communication duct in the faregate array and scoping of power duct in the faregate array. Video scoping and pull string installation was completed between Kiosk, Handhole 1 and Handhole 2. Pull string was also installed between Handhole 2 and Shared Trench. It was not possible to install pull string in the remaining section from Shared Trench to AFC Panel (Room C208), due to standing water and hot wires. Therefore, a proposed overhead conduit is reccomended for the remaining section as shown in the attached drawing and photos. No scanning was needed at this mezzanine.						
		Scoping o	of Faregate Array(s)			
	Task	Yes/No		Notes		
Communications Du	ct – Faregate Array (8 Gates)	r T				
Was video scoping o run?	completed for the entire duct	Yes	Refer to "WMATA Woo	dley Park Comm Duct Video.avi" file.		
Were pull strings inst array?	talled at all faregates in the	Yes				
Were there any obstr details of type and sp	ructions or blockages? Provide becific location.	No	Minor dust and debris			
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.		No	3" duct, less than 15 wi	res		
Power Duct - Farega	te Array (8 Gates)	1				
Was video scoping o run?	completed for the entire duct	Yes		dley Park Power 3inch Duct Video.avi and 'ower 6inch Duct Video.avi" files.		
Were there any obstr details of type and sp	ructions or blockages? Provide becific location.	No	Has a 45 degree bend.			
Is the duct at capacity about the dimensions	y? Provide additional details s of ducts and number of wires.	No	3" duct, less than 10 wi	res		

Scoping of Power Duct - Kiosk to AFC Panel					
Task		Yes/No	Notes		
Kiosk to Handhole	e 1 (Distance = 70')		ſ		
Was video scoping completed for the entire duct / conduit run?		Yes	Refer to "WMATA Woodley Park Power Kiosk to H.H.1 Duct Video.avi" t		
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	3" and 6" ducts, 2 wires		
Hanhole 1 to Hand	hole 2 (Distance = 15')				
Was video scoping completed for the entire duct / conduit run?		Yes	Refer to "WMATA Woodly Park Power HH1 to HH2 Duct Video.avi" file.		
Was pull string ins	talled?	Yes			
Were there any obstructions or blockages? Provide details of type and specific location.		No			
details about the d number of wires.	it at capacity? Provide additional imensions of duct / conduit and	No	6" duct, 2 wires		
Handhole 2 to Tro	ugh (Distance = 15')				
Was video scopin conduit run?	g completed for the entire duct /	No	Energized cables laying in standing water		
Was pull string installed?		Yes			
Were there any obstructions or blockages? Provide details of type and specific location.		No			
Is the duct / condu details about the d number of wires.	No	6" duct, 2 wires			
Trough to AFC Pa	nel (Distance = 27')				
Was video scoping completed for the entire duct / conduit run?		No	Conduit – no scoping required		
Was pull string installed?		No	Energized wires laying in standing water		
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	4" conduit, 2 wires		
		Observation	ns / Issues	/ Next Steps	
Total power run from kiosk to AFC panel is approximately 127'.					
Sign Off					
	Sign Off				
GFP Representative		WMATA PRGM			
Name: Mike Butler					
Signature: M.Zun					
Date: 11/13/2014					

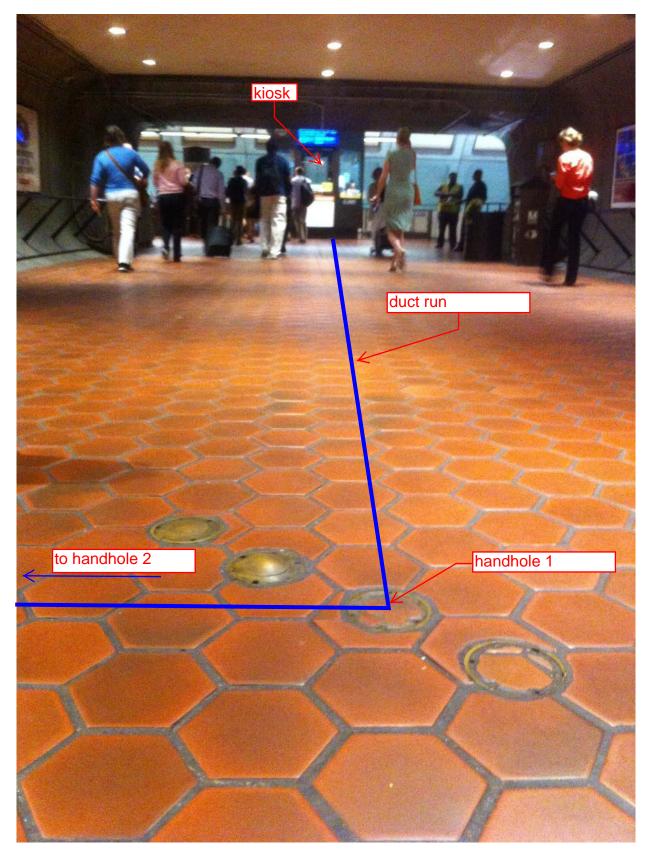


Photo #1 – A04 Woodley Park: Kiosk to handhole 1

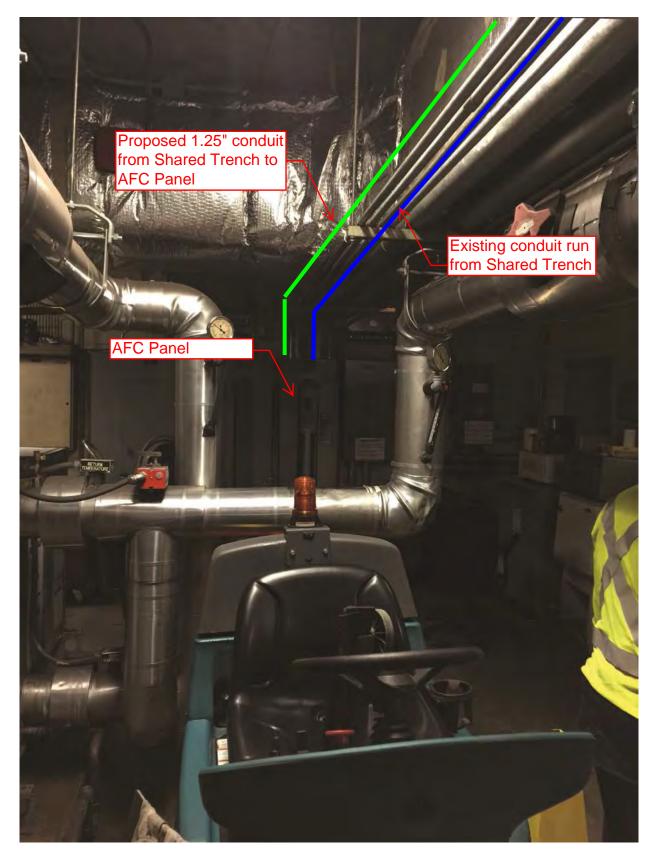
Photo #2 – A04 Woodley Park: handhole 1 to handhole 2

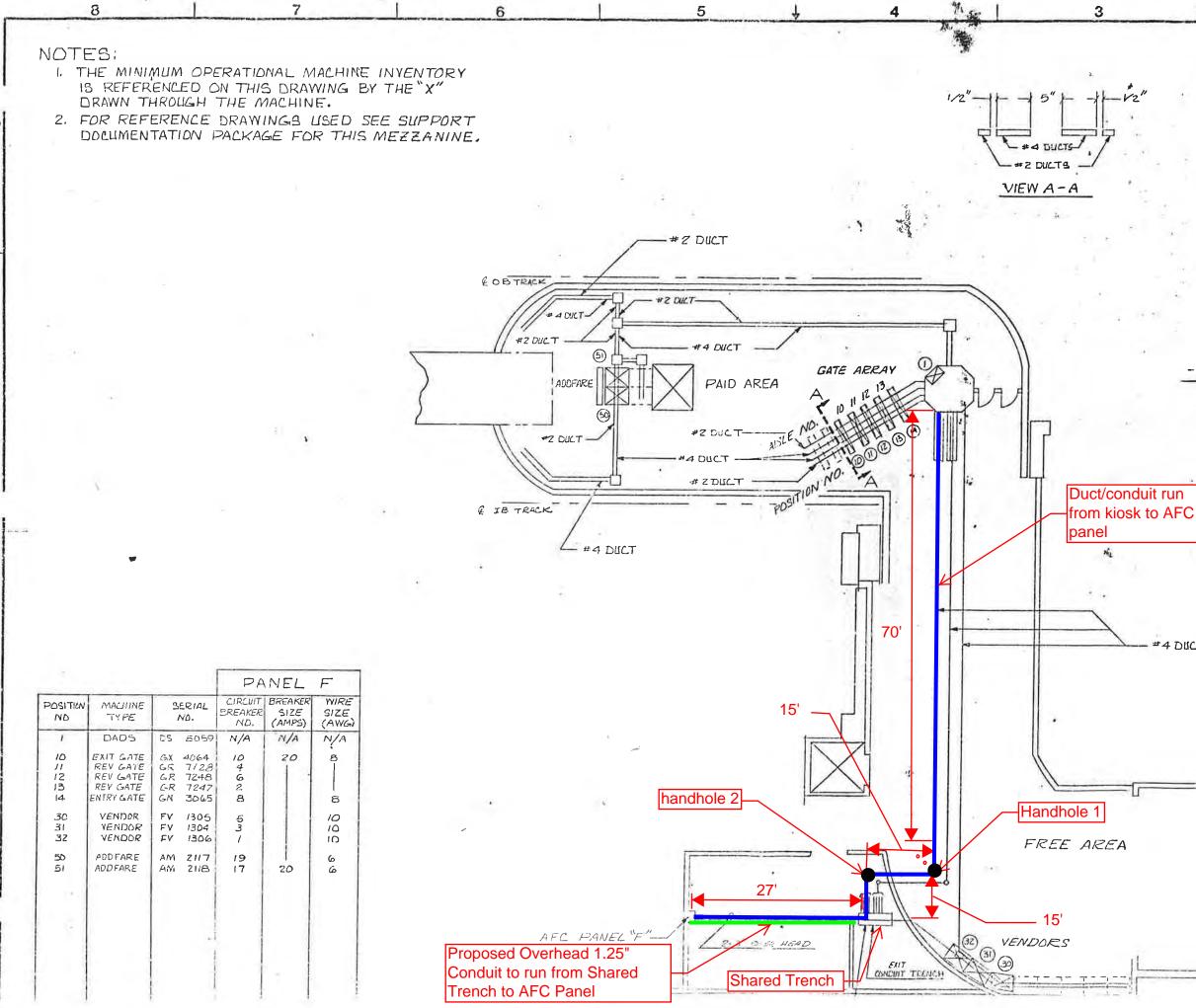


Photo #3 – A04 Woodley Park: Standing water in electrical trough







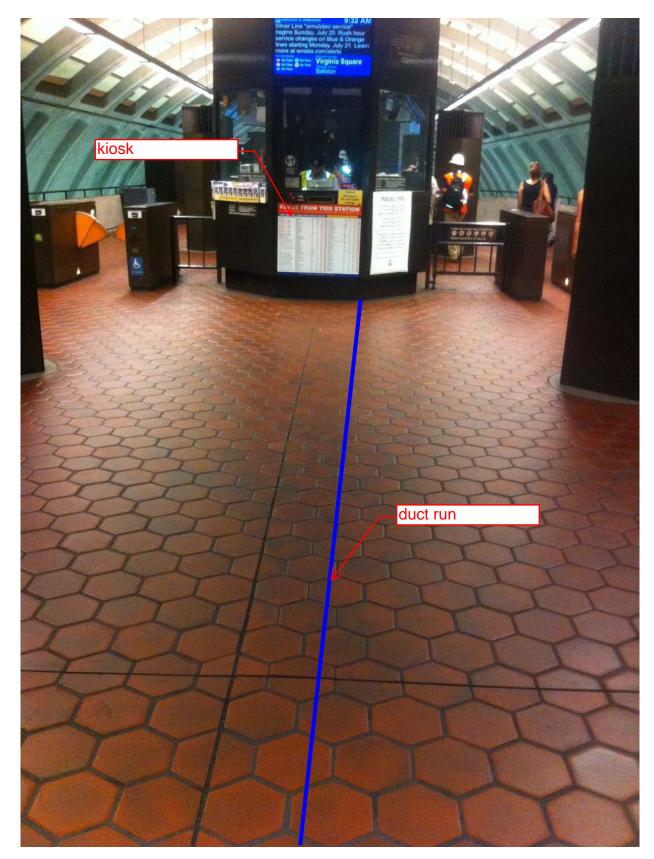


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00 -1 INSTALLATION AS BUILT CONTRACT NUMBER B D DRAWING NUMBER 926-041 HEET / OF / MO Ceic #4 DUC7 ME \square យ៉ា D AS BUILT PARK Z DAT 1 CODE IDENT NO. 94987 REDRAWN. BY J. ETHERIDGE 5-7-82

	Mezzanin	e Inspe	ection Report	REVISION 1	
Date: 11/13/2014	Station Name: A05 Cleveland	l Park	Mezzanine #: 008	Completed By: Mike Butler	
	Summary				
Summary Pull string was installed in the upper and lower faregate array communication ducts. Video scoping and pull string installation was completed between the Kiosk, Handhole 1, Handhole 2 and the open trench. However, it was not possible to install pull string between the open trench and AFC Panel due to energized wires. Existing duct runs appear to be in adequate condition and are not at capacity. A proposed conduit run has been identified between the open trench and the AFC Panel (see attached drawing and photos). The existing vacant conduit and junction box on the wall of Room #200 will be utilized as part of this run. From the junction box a new conduit would be installed parallel to the existing conduits on the South wall in Room #200. The conduit will then wrap onto the West wall in Room #200, and a core drill through the West wall into Room #218 is proposed. The new conduit would then run along the middle of the existing conduits. A core drill through the wall in to Room #216 is also proposed. The new conduit would run along the wall in Room #216 and connect to the AFC Panel. No scanning was required at this mezzanine.					
		Scoping of	of Faregate Array(s)		
-	Task	Yes/No		Notes	
Communications Duc	t – Upper Faregate Array (4 G	ates)			
Was video scoping co run?	ompleted for the entire duct	No	Camera malfunction and	no scoping done on subsequent visit	
Were pull strings insta array?	alled at all faregates in the	Yes			
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A			
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.		No	4" duct with less than 10 wires.		
Communications Duc	et - Lower Faregate Array (4 G	ates)			
Was video scoping co run?	ompleted for the entire duct	No	Camera malfunction and	I no scoping done on subsequent visit	
Were pull strings insta array?	alled at all faregates in the	Yes			
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A			
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.		No	4" duct with less than 10) wires.	
Power Duct - Upper F	aregate Array (4 Gates)	1			
Was video scoping co run?	ompleted for the entire duct	No	Camera malfunction and	I no scoping done on subsequent visit	
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A			
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.		No	6" duct with less than 12 wires.		
Power Duct - Lower F	aregate Array (4 Gates)	1			
Was video scoping co run?	ompleted for the entire duct	No	Camera malfunction and	no scoping done on subsequent visit	
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A			
	? Provide additional details of ducts and number of wires.	No	6" duct with less than 12	? wires.	

Scopin	g of Power	Duct - Kiosk to AFC Panel
Task	Yes/No	Notes
Kiosk to Handhole 1 (Distance: 60')	T	
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Cleveland Park Power Kiosk to HH1 Duct Video.avi" file.
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	
Hanhole 1 to Handhole 2 (Distance: 13')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Cleveland Park Power HH1 to HH2 Duct Video.avi" file.
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	
Handhole 2 to Open Trench (Distance: 10')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Cleveland Park Power HH2 to Trench in Room 200 Video.avi" file.
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	
Open Trench to AFC Panel (Distance: 60')	I	
Was video scoping completed for the entire duct / conduit run?	No	Could not video scope or intall pull string in open trench due to live wires
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	
	Observation	ns / Issues / Next Steps
The total distance of power run between Kiosk and A trench to AFC Panel (see photos and drawings for mo		138', including 83' of existing duct and 55' of proposed conduit from open on).
		Sign Off
		Sign Off
GFP Representa	ative	WMATA PRGM
Name: Mike Butler		
Signature: M.3MM		



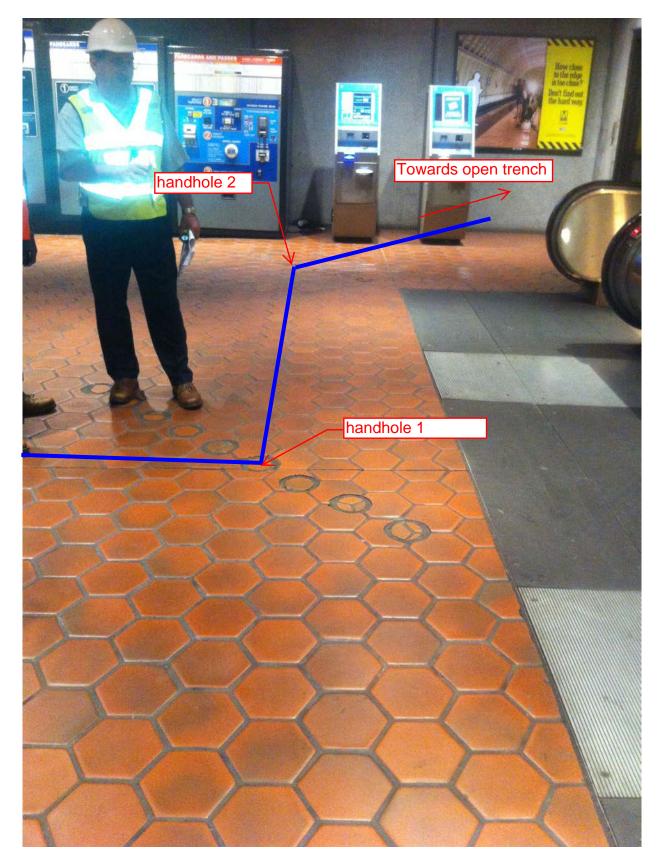




Photo #4 – A05 Cleveland Park: Conduit from junction box to open trench



Photo #5 – A05 Cleveland Park: Vacant junction box and conduit to open trench

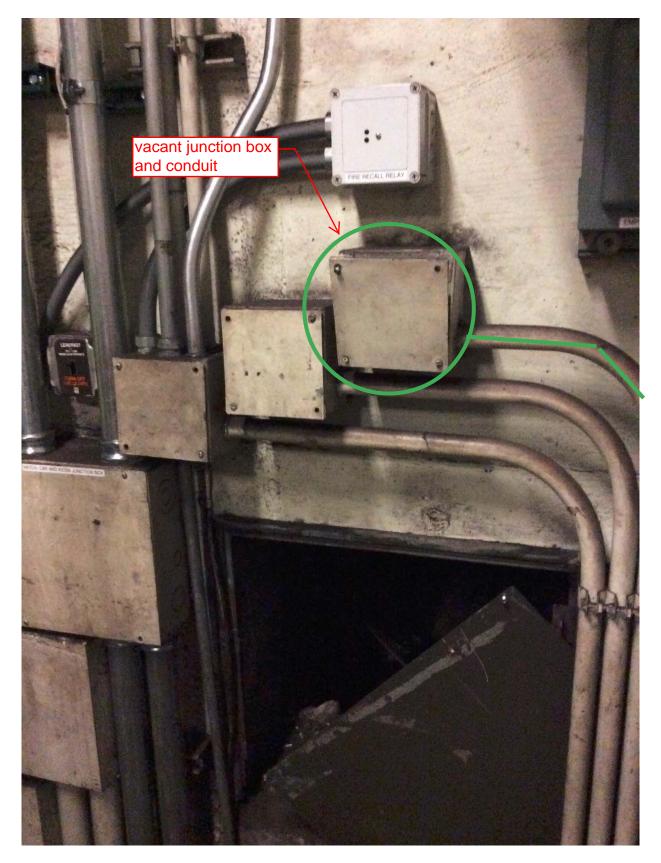


Photo #6 – A05 Cleveland Park: Elevator Machine Room #200, proposed conduit run between open trench and Battery Room #218

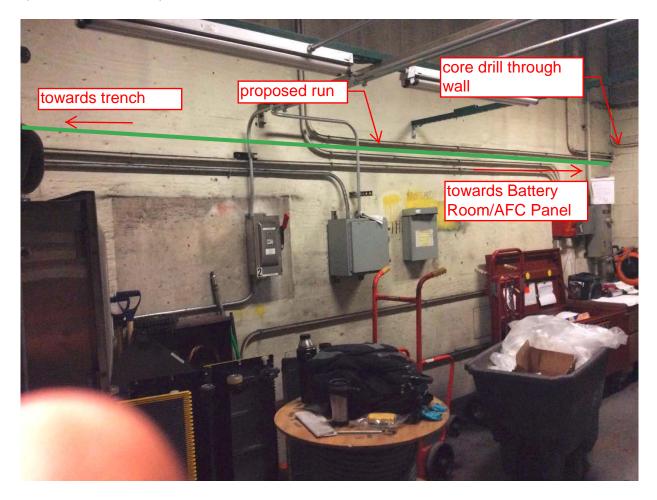


Photo #7 – A05 Cleveland Park: Battery Room #218, proposed conduit routed along right side wall at ceiling

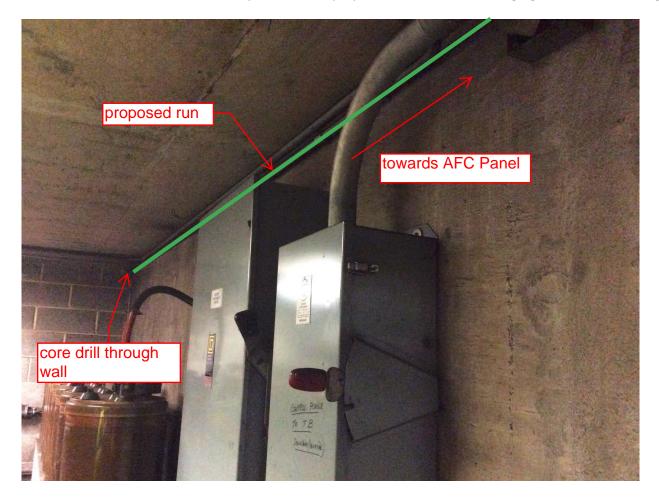
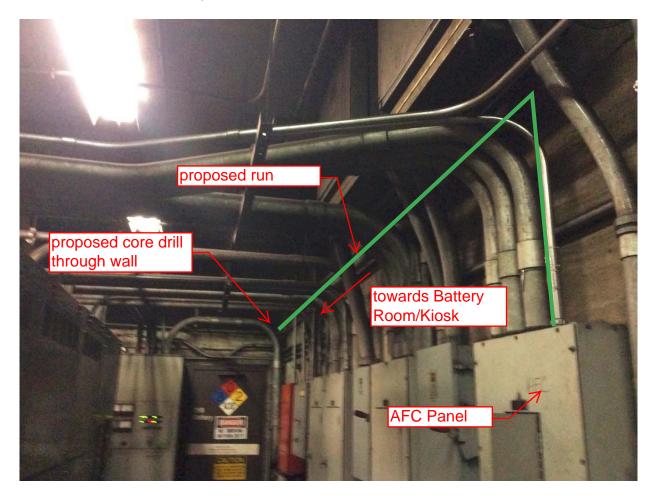
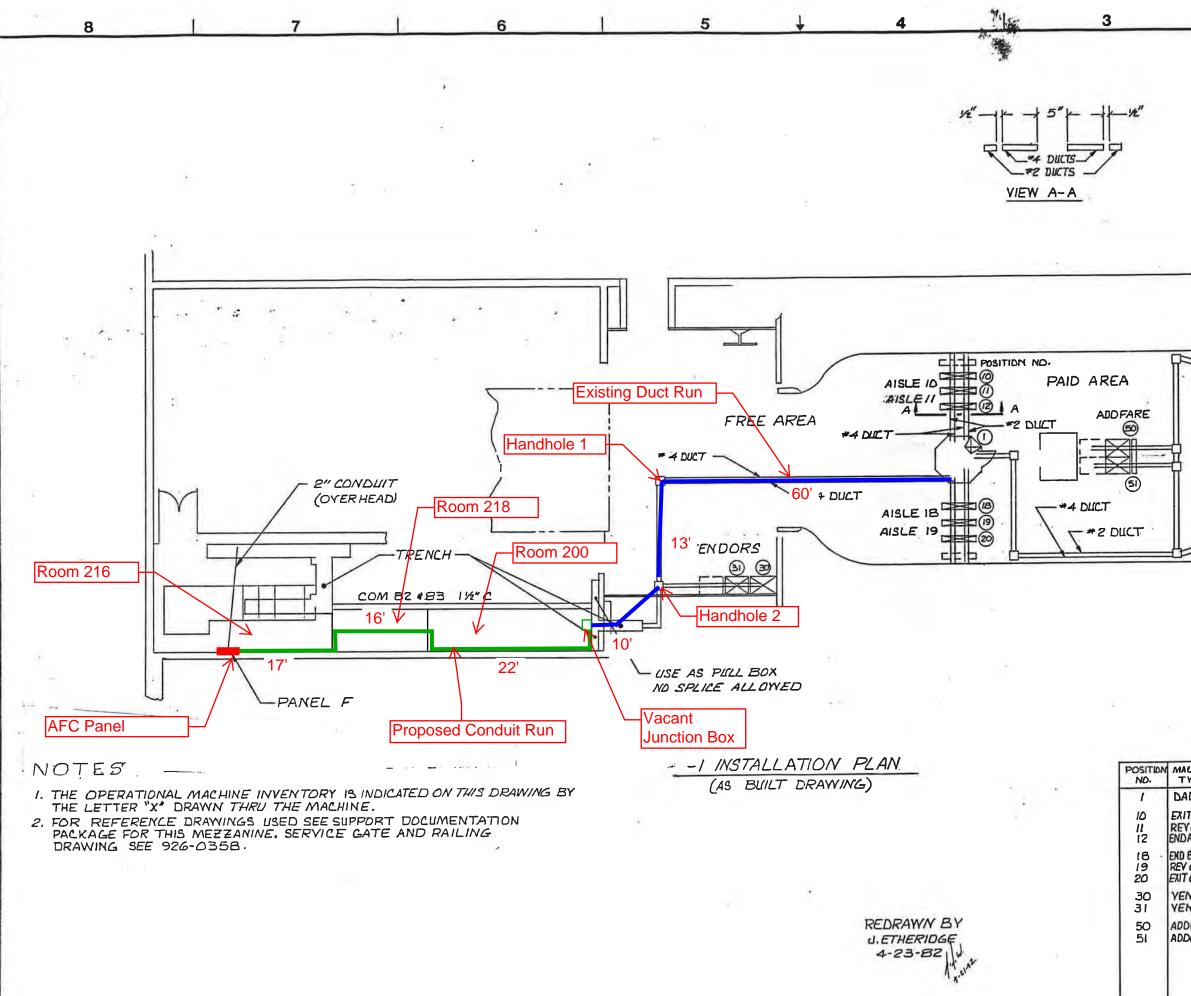


Photo # 8 – A05 Cleveland Park: Electrical Room #216, proposed conduit run along right side of wall between AFC Panel and Battery Room #218





PRIAL Control to the control of the contr	ANGLES: 2 OS DEG. S GUARANT LE 1994 ES ANGLES: 2 OS DEG. S GUARANT LE 1994 2251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 - 201 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500: + 200 N S GUARANT LE 1994 -251 THRU 500 N S GUARANT LE 1994 -251 THRU 5	501 THRU .501 - 5005 - 501 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				×/A		REAKER SIZES) N/A ZO	CUIT AKER /A 260 402 13		8003 4065 7241 5051 6059 7036 3066 1308 1308	GOG GGE FF	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES BEEK SHARP DECIMALS:.XXI.03 .XXXI.010 ANGLESI HOLESI .0135 THRU .1251 +.004001 L.251 THRU .500 .126 THRU .2501 +.005001 L.501 THRU .500 .126 THRU .250100501000	010 1.00	S NO -S - VER B INTERNO	CONTRACT NUMBER	DRAWING NUMBE 926-0414 SHEET / OF /	THE INSTALL CLEVELAND	ATION PLA PARK STA	PLAN TATION	CODE IDENT NO. 94987 AU THON AU THON
GX GA GA GA GA FV FV	Image: Second State Image: Second State Second State NO. DS BOO3 N/A N/A N/A N/A Second State Second State DS BOO3 N/A N/A N/A N/A N/A Second State Second State Second State Second State </th <td>PANEL.F. SERIAL CIRCUIT MAREL.F. SERIAL CIRCUIT SERIAL SIZE SABO3 N/A V/A N/A GR 724/1 B GR 724/1 B GR 724/1 B GR 726/1 B GR 7026/1 B FV 1308 I IO IO</td> <td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td> <td>SERIAL NO. CIRCUIT BREAKER NO. BREAKER SIZE (AMPS) WIRE SIZE AWZ. DS 8003 N/A N/A N/A DS 8003 N/A N/A N/A GX 4065 I2. ZO B GR 7241 G I I GB 6059 4 I G GR 7036 IO I IO FY I308 I IO IO FY I307 3 IO IO</td> <td>SERIAL NO. CIRCUIT BREAKER SIZE BREAKER SIZE WIRE SIZE DS 8003 N/A N/A N/A DS 8003 N/A N/A N/A GX 4065 IZ ZO B GR 7241 G I I GA 5051 B I I GR 7036 IO I IO FY I308 I IO IO</td> <td>SERIAL NO. CIRCUIT BREAKER NO. BREAKER SIZE (AMPS) SIZE SIZE SIZE SIZE SIZE DS 8003 N/A N/A N/A N/A N/A N/A GX 4065 IZ. ZO GR 7241 G G G G GR 7241 G G G G G G G GR 7036 IC G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G</td> <td>SERIAL CIRCUIT BREAKER SIZE NO. BREAKER SIZE CAMPS) DS 8003 N/A N/A N/A GX 4065 IZ ZO GR 7241 G GA 5051 B GR 7036 IO GR 7036 IO GR 7036 IO EX 3066 Z FY 1308 I FY 1307 3 I FY 1307 S I</td> <td>SERIAL NO. BREAKER NO. C. DS 8003 N/A GX 4065 12 GR 7241 G GA 5051 B GB 6059 4 GR 7036 10 EX 3066 2 FV 1308 1 FV 1307 3</td> <td>DS 8003 N GX 4065 I GR 7241 GA 5051 G GB 6059 GR 7036 N EX 3066 FV 1308 FV 1307</td> <td>NG DS 8003 GX 4065 GR 7241 GA 5051 GB 6059 GR 7036 EX 3066 FV 1308 FV 1308 FV 1307</td> <td>DS GR GR GR GR FY</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>PANEL F</td> <td>DS8003 N/A N/A N/A</td> <td>GB 4059 4 GR 7036 10 EX 3066 2 8 FY 1308 1 10</td>	PANEL.F. SERIAL CIRCUIT MAREL.F. SERIAL CIRCUIT SERIAL SIZE SABO3 N/A V/A N/A GR 724/1 B GR 724/1 B GR 724/1 B GR 726/1 B GR 7026/1 B FV 1308 I IO IO	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SERIAL NO. CIRCUIT BREAKER NO. BREAKER SIZE (AMPS) WIRE SIZE AWZ. DS 8003 N/A N/A N/A DS 8003 N/A N/A N/A GX 4065 I2. ZO B GR 7241 G I I GB 6059 4 I G GR 7036 IO I IO FY I308 I IO IO FY I307 3 IO IO	SERIAL NO. CIRCUIT BREAKER SIZE BREAKER SIZE WIRE SIZE DS 8003 N/A N/A N/A DS 8003 N/A N/A N/A GX 4065 IZ ZO B GR 7241 G I I GA 5051 B I I GR 7036 IO I IO FY I308 I IO IO	SERIAL NO. CIRCUIT BREAKER NO. BREAKER SIZE (AMPS) SIZE SIZE SIZE SIZE SIZE DS 8003 N/A N/A N/A N/A N/A N/A GX 4065 IZ. ZO GR 7241 G G G G GR 7241 G G G G G G G GR 7036 IC G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G G	SERIAL CIRCUIT BREAKER SIZE NO. BREAKER SIZE CAMPS) DS 8003 N/A N/A N/A GX 4065 IZ ZO GR 7241 G GA 5051 B GR 7036 IO GR 7036 IO GR 7036 IO EX 3066 Z FY 1308 I FY 1307 3 I FY 1307 S I	SERIAL NO. BREAKER NO. C. DS 8003 N/A GX 4065 12 GR 7241 G GA 5051 B GB 6059 4 GR 7036 10 EX 3066 2 FV 1308 1 FV 1307 3	DS 8003 N GX 4065 I GR 7241 GA 5051 G GB 6059 GR 7036 N EX 3066 FV 1308 FV 1307	NG DS 8003 GX 4065 GR 7241 GA 5051 GB 6059 GR 7036 EX 3066 FV 1308 FV 1308 FV 1307	DS GR GR GR GR FY								PANEL F	DS8003 N/A N/A N/A	GB 4059 4 GR 7036 10 EX 3066 2 8 FY 1308 1 10

Mez	Mezzanine Inspection Report					
Date: 08/25/14 Station Name: A06 Van Ness	s - UDC	Mezzanine #: 009	Completed By: Mike Butler			
		Summary				
Video scoping and pull string installation was comple between Kiosk – Handhole 1 – Handhole 2 – Trenci however there was dirt and debris found at duct entri It was not possible to complete pull string installation (Room # 206). There are hot wires in both trenches	n 1 in Room les – cleaning n in 2" condu , and there is	#200. There were no obst g is recommended. it between Trench 1 (Roo standing water inside Tre	m # 200); Trench 2 and AFC panel F ench 1 (see photos).			
An overhead conduit run is proposed between Trenc overhead through to Battery Room 218 and then cor locations to allow the passage of of the proposed con Scanning is not required at this mezzanine.	tinue through	n to AFC Panel in Room #2	206. Core drilling of walls is required at two			
	Scoping	of Faregate Array(s)				
Task	Yes/No		Notes			
Communications Duct – Upper Faregate Array (4 g	jates)	1				
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Upp	er Gate Array Comm Duct.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	4" Duct with less than 10) wires			
Communications Duct - Lower Faregate Array (4 g	ates)	1				
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Low	er Gate Array Comm Duct.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	4" 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 "Van Ness Upp	er Gate Array Power Duct.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	4" Duct with less than 12	2 wires			
Power Duct - Lower Faregate Array (4 gates)	T					
Was video scoping completed for the entire duct run?	Yes	Refer to "Van Ness Low	er Gate Array Power Duct.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	4" Duct with less than 12	2 wires			

	_	r Duct - Kiosk to AFC Panel
Task	Yes/No	Notes
Kiosk to Handhole 1 (Distance: 45')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Van Ness Power Handhole 1 to Kiosk Video.avi"
Was pull string installed?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	Some debris identified inside Handhole 1
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	4" Duct with less than 15 wires
Ianhole 1 to Handhole 2 (Distance: 15')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Van Ness Power Handhole 1 to Handhole 2 Video.avi"
Was pull string installed?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	Some debris identified inside Handhole 2
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	4" Duct with less than 15 wires
landhole 2 to Trench inside Room #200 (Distance	: 15')	
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Van Ness Power Handhole 2 to Trench Video.avi".
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	4" Duct with less than 15 wires
rench to AFC Panel (Distance: 60' existing, 95' pr	oposed)	
Was video scoping completed for the entire duct / conduit run?	No	Video scoping not possible
Was pull string installed?	No	Could not install pull string due to hot wires and standing water.
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	Proposed conduit run to be utilized.
	Observation	ns / Issues / Next Steps
 Pull string installed between Kiosk, Handhole 1, H Proposed conduit run is 95' between Trench 1 an 		
		Sign Off

	Sig	n Off	
	GFP Representative		WMATA PRGM
Name:	Mike Butler		
Signature:	Mizun		
Date:	11/14/14 6	67	

Photo #1 – Power duct run from Kiosk to Handhole 1 on mezzanine floor.

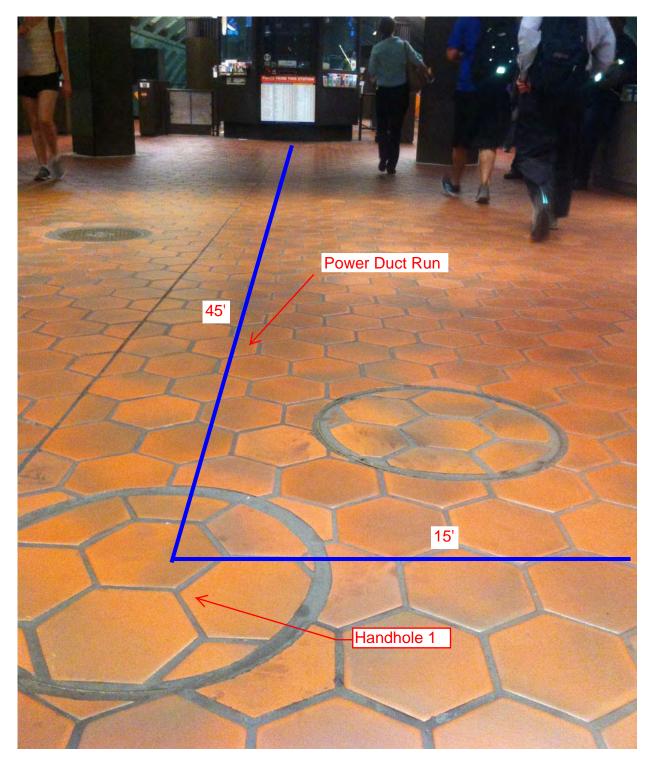


Photo #2 – Power duct run from Handhole 1 to Handhole 2 on mezzanine floor.

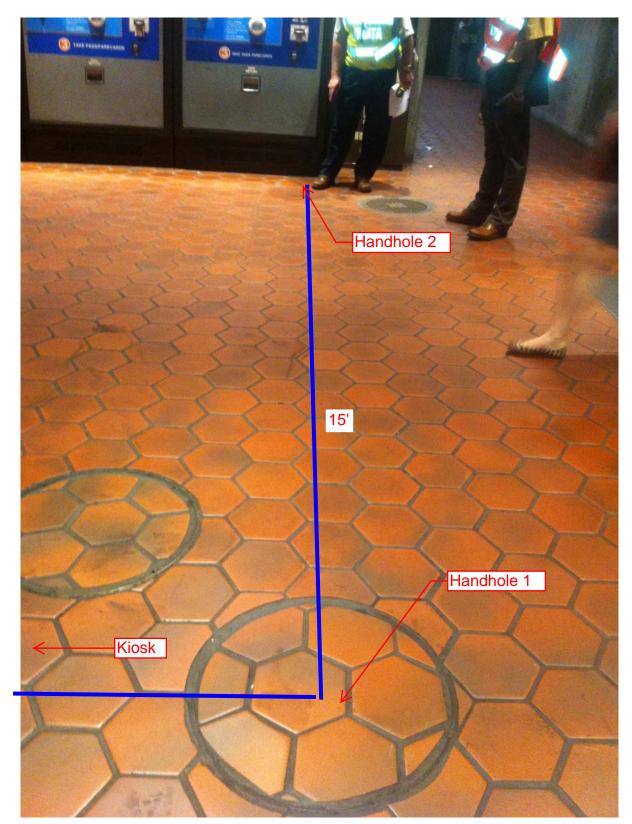


Photo #3 – Ducts from Handhole 2 entering Trench 1 in Room # 200



Photo #4 – Trench 1 in Room # 200 with overhead conduit transition, standing water evident.



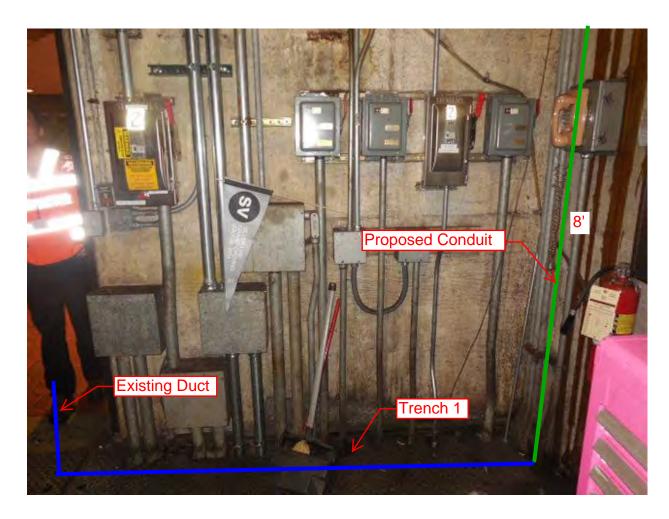


Photo #5 – Proposed Overhead Conduit from Trench 1 in Room # 200



Photo #6 – Proposed Overhead Conduit from Trench 1 in Room # 200



Photo #7 – Proposed Overhead Conduit in Room 200



Photo #8 – Proposed Overhead Conduit in Battery Room 218

Photo #9 – Proposed Overhead Conduit in Battery Room 218



Photo #10 – Proposed Overhead Conduit in Room 206

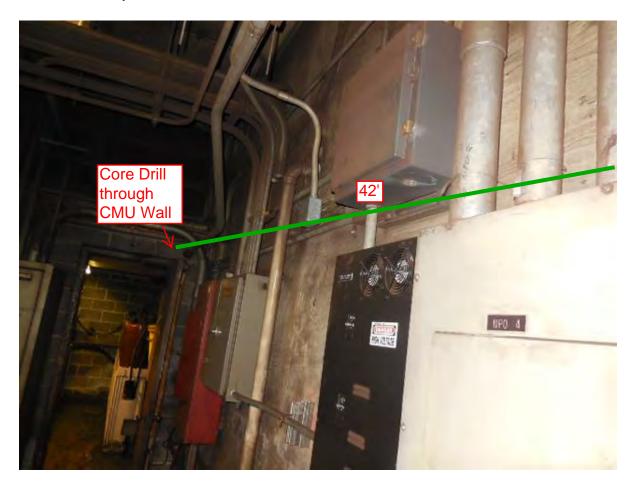
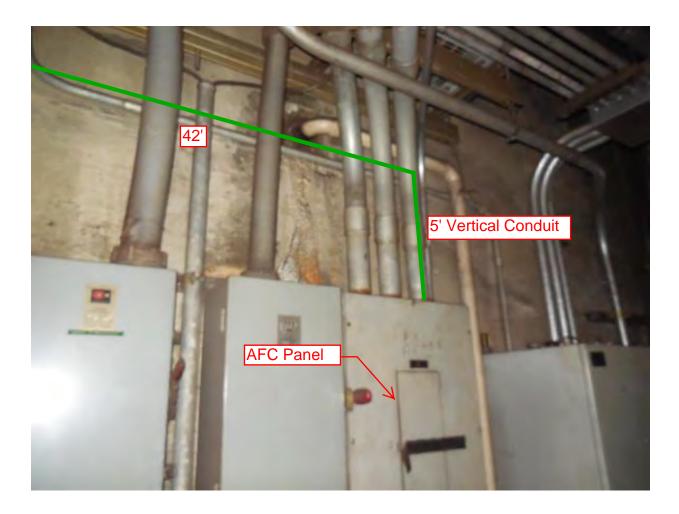
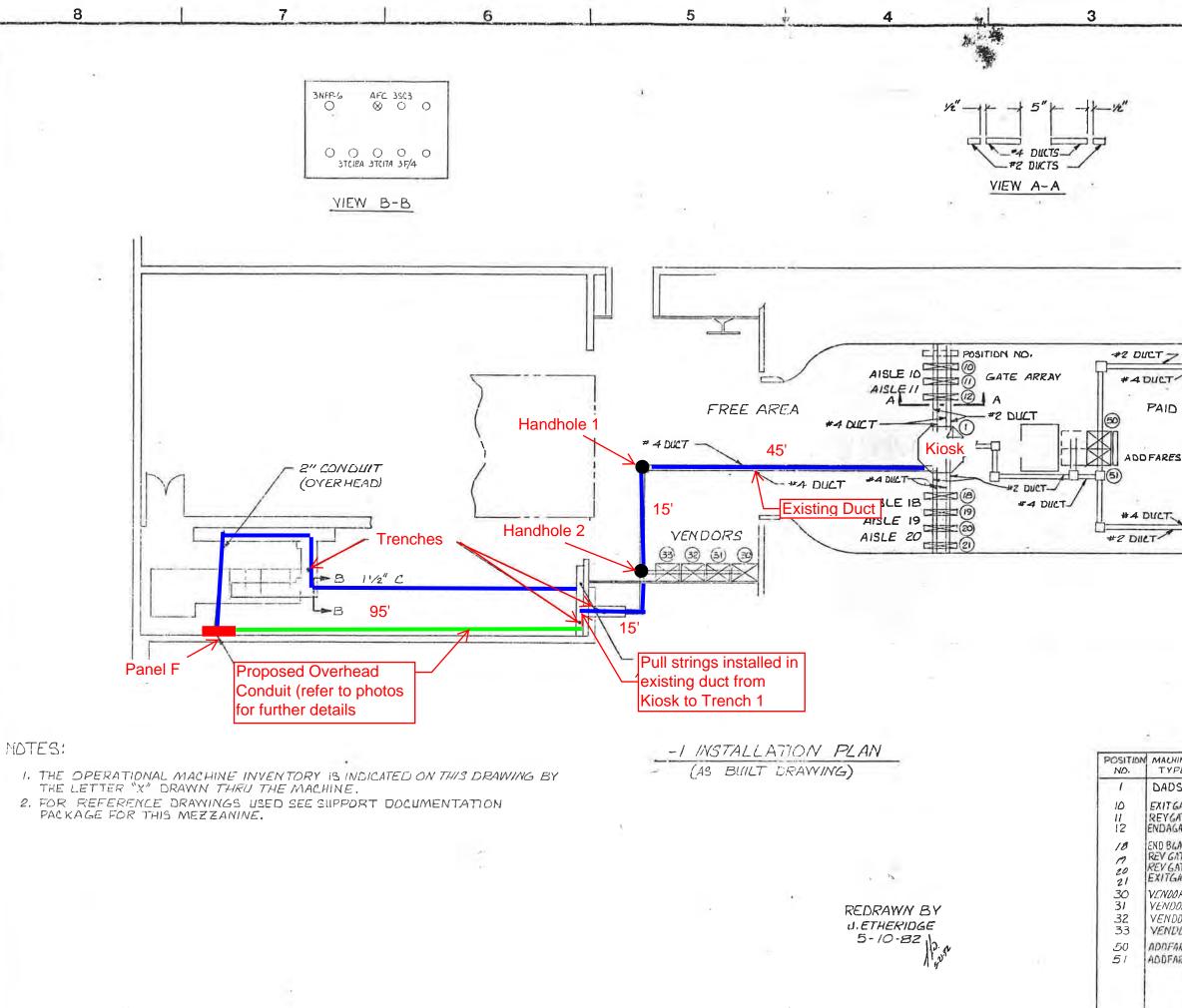


Photo #11 – Proposed Overhead Conduit feeding AFC Panel in Room 206





	2	1	5	0135 1.126	
				MALS: .XX 1.03 .XXX 1.010 HOL 1 THRU .255: +.004001 THRU .250: +.005001 .751 THRU 1.0	DO NOT SCALE DO NOT SCALE UNLESS OTHERWISE OTMENSIONS ARE IN INCHES
					ORAWING SPECIFIED AX SHARP EDGES
AREA	\				C A INTROMITY ONTE APO B PERIORS 90
	7			926-C	B UMBER 4/5 DF /
D38058 TE GX4062 TE GR 7244 TE GA 5050	CIRCUIT BREAKEN REAKER SIZE NO. (AMPS) N/A N/A 13 20 12 10	F SAWE N/A B		AN	Ā
NE GB 6060 TE GR 7246 TE GR 7245 NE GX 3064 R FV 1303 NR FV 1300 DR FV 1300 RF 1300 RE AM 2115 RE AM 2116	2 4 6 8 7 5 3 1 21 19 20	8 10 10 10 10 10 6 6		CODE IN THE RESIGN ACTIVITY APPROVAL	7
					ROA C

	Mez	zanine	Inspection Rep	ort	
Date: 02/02/15	Station Name: A07 Tenleytow	/n-AU	Mezzanine #: 010	Completed By: Mike Butler	
			Summary		
and pull string installati between Handhole 2 a Scanning identified an wires inside. Pull string	ion completed for power duct b nd AFC Panel due to a collaps alternate walker duct from the g was installed in the alternate of	etween Kios ed duct. Kiosk to Roo duct from Kio	k, Handhole 1 and Handhol om C206; the duct stubs up osk to Room C206. A propo	e installed in communication duct. Video scoping le 2. However, it was not possible to complete work: through the ground and is exposed showing no used junction box and conduit is proposed nnection between the Kiosk and AFC Panel.	
		Scoping	of Faregate Array(s)		
Т	ask	Yes/No		Notes	
Communications Duct	t –Faregate Array (8 gates)				
Was video scoping co run?	mpleted for the entire duct	Yes	WMATA Tenleytown Sta	tion Upper Comm Video (1).avi	
Were pull strings insta array?	lled at all faregates in the	Yes			
Were there any obstrue details of type and spe	ctions or blockages? Provide cific location.	Yes	Minor obstructions due to debris and stuffed rags.		
	Provide additional details of ducts and number of wires.	No			
Power Duct - Faregate	e Array (8 gates)	1			
Was video scoping co run?	ompleted for the entire duct	Yes	WMATA Tenleytown Sta	tion Upper Power Video.avi	
Were there any obstrue details of type and spe	ctions or blockages? Provide cific location.	Yes	Minor obstructions due to debris and stuffed rags.		
	Provide additional details of ducts and number of wires.	No			
	Scoping of	Existing F	Power Duct - Kiosk to	AFC Panel	
Kiosk to Handhole 1 (3	3') to Handhole 2 (115')				
	ompleted for the entire duct /	Yes		rtown Station Power Kiosk to Handhole 1 wn power duct Handhole 1 to Handhole 2.avi"	
Was pull string installe	ed?	Yes			
Were there any obstrue details of type and spe	ctions or blockages? Provide cific location.	No			
	capacity? Provide additional nsions of duct / conduit and	No	6" walker duct with less the	han 12 wires.	
Handhole 2 to AFC Pa	inel (25')	·	L		
Was video scoping co conduit run?	ompleted for the entire duct /	No	Refer to "WMATA Tenley Video.avi"	town Station Power Manhole to AFC Panel	
Was pull string installe	ed?	No			
Were there any obstrue details of type and spe	ctions or blockages? Provide cific location.	Yes	There is a collapse in the	e duct, 9' from Handhole 2.	
	capacity? Provide additional nsions of duct / conduit and	No	6" walker duct with less th	han 12 wires.	

	Scoping of A	Alternate P	ower Duc	ct - Kiosk to AFC Panel
	Task	Yes/No		Notes
Kiosk to Handho	le 1A (Distance: 3')			
Was video scopi conduit run?	ng completed for the entire duct /	No		
Was pull string in	istalled?	Yes		
	bstructions or blockages? Provide d specific location.	No		
	uit at capacity? Provide additional dimensions of duct / conduit and	No	This is an	empty 6" duct (refer to attached drawing for route details).
Handhole 1A to D	Ouct Stub-up in Room C206 (Dista	ince: 137')	•	
Was video scopi conduit run?	ng completed for the entire duct /	No		
Was pull string in	stalled?	Yes		
	bstructions or blockages? Provide d specific location.	No		
	uit at capacity? Provide additional dimensions of duct / conduit and	No	This is an	empty 6" duct (refer to attached drawing for route details).
Observations / Issues / Next Steps				
The total distance	e of alternate duct run is 140' and p	roposed con	duit is 30'.	
	l drawings and photos for further de			ad proposed conduit rups
			ing duois ai	
			Sign Off	
	GFP Representa	tive		WMATA PRGM
Name:	Mike Butler			
Signature:	Mizun			
Date:	02/09/15			



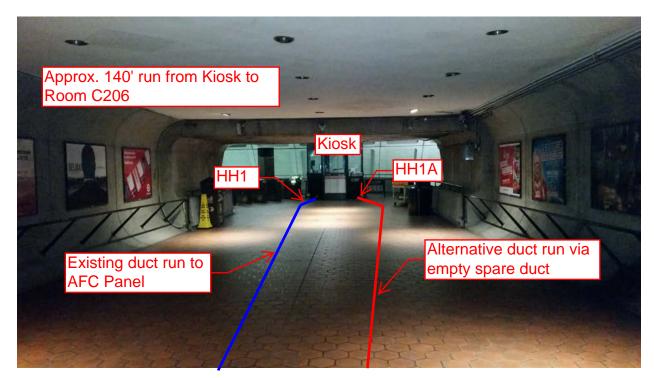


Photo #2: Existing & alternate power duct from to Kiosk to handholes.



Photo #3: Existing power duct run – Handhole 2

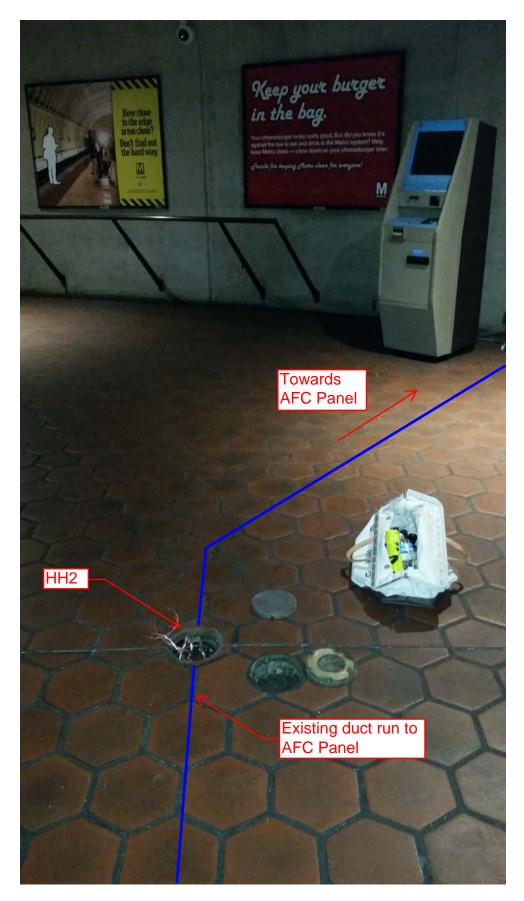


Photo #4: AFC Panel in room C206



Photo #5: Alternate duct with stub-up in room C206 with proposed junction box and conduit run to AFC panel

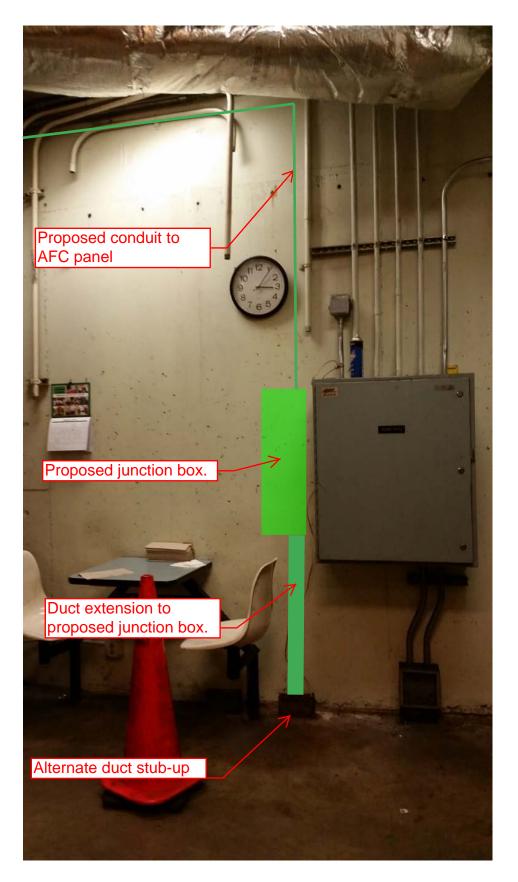
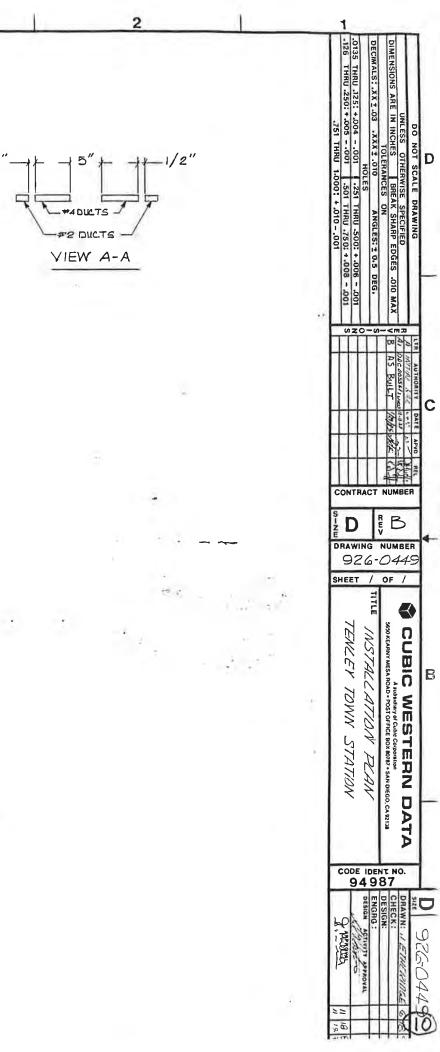
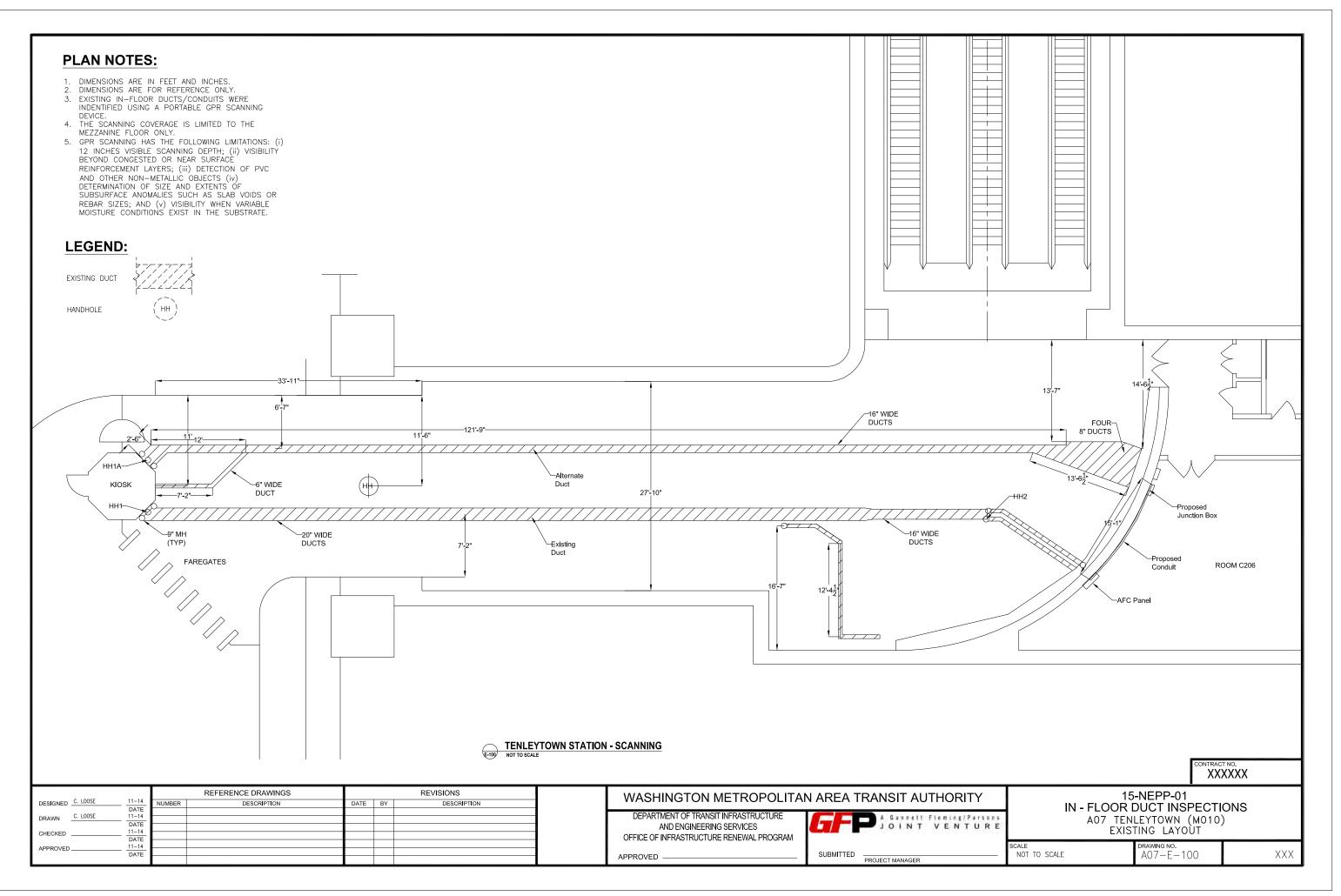




Photo #6: Proposed conduit run to AFC panel

	8 7	1 6	1	5 +	4	3	
NO	TES						
1.	THE MINIMUM OPERATION MACHINE INY IS REFERENCED ON THIS DRAWING BY DRAWN THROUGH THE MACHINE.					~	
- 2.	FOR REFERENCE DRAWINGS USED S SUPPORT DOLLMENTATION PACKAGE I THIS MEZZANINE,			4	141	1/2'	·_
	×		7	· ·			
-	·		PA	D AREA	· · · · ·	//	
	MACH LOCATION C.W.D. C./B. BREAKER WIRE INVENTORS GERIAL NO GIZE SIZE			POSITION NO.	-0-		
	1 DADS 1 D38501 1 20 AMP 2 ENTRY 17 GN3504 1 * 6 3 REV 1.0 3		ADD FARE ARRAY				
-	4 REV 1.5 5	1		(16) (5)	N S		
2 -	6 REV 13 9 7 REV 12 11 8 REV 11 13				3' '		
	9 EXIT 10 15 20 AMPS 6		4(51)		14 15	HH1A	
	12 13 VENDR 30 FV1236 2 20AMPS * 8 14 31 FV1331 4	1-1-1 	1	a states	SLE ND.		
14 L	16 33 FVI317 8			The v	HH1/		
	17 34 FV1324 10 V 18 VENCOR 35 FV1330 12 20 AMPS * 8 19						
					115'		
2	23 24 ADDFARE 50 AM2133 19 20 AMPS # 4	ana ing sa			115		
-	25 ADDFARE 5 AM2134 11 20 AMPS . 4					137' E AREA	
· · ·							
		÷.					
					25' VENDO	R ARRAY	
			19		E CO		
	8			4		-@	
				AFC Panel			
			÷	Proposed	30'	13	
				to AFC P	anel VC ",	Alternate duct	
				- / /N	STALLATION PL	AN	
-				86			





	Mezzanin	e Inspe	ction Report (Scoping)
Date: 08/29/2014	Station Name: A08 Friendship	o Heights (N)	Mezzanine #: 011	Completed By: Tino Sahoo
		;	Summary	
ducts were video-sca scoped and are undo capacity. Obstruction sweep to the cable t	oped and are under capacity; pull er capacity. The power ducts from ns were encountered on the power rough connected to the AFC panel ough connected to the AFC panel	l strings were n the kiosk to er duct run fro el could not b	installed to all faregates. the AFC panel (via 2 me om the kiosk to the first m	is 100% complete. Both upper and lower comm array Both upper and lower power array ducts were video- zzanine handholes) were video-scoped and are under lezzanine handhole. The 90-degree walker duct e tight radius. Pull strings were installed from the
		Scoping o	f Faregate Array(s)	
	Task	Yes/No		Notes
Communications Du	uct – Upper Faregate Array (5 G	ates)		
Was video scoping or run?	completed for the entire duct	Yes	Refer to FRIENDSHIP	HGTS-COM_UPPER ARRAY.avi file.
Were pull strings ins array?	stalled at all faregates in the	Yes		
Were there any obst details of type and s	ructions or blockages? Provide pecific location.	No		
	ty? Provide additional details s of ducts and number of wires.	No		
Communications Du	uct - Lower Faregate Array (5 G	ates)		
Was video scoping run?	completed for the entire duct	Yes	Refer to FRIENDSHIP	HGTS-COM_LOWER ARRAY.avi file.
Were pull strings ins array?	stalled at all faregates in the	Yes		
Were there any obst details of type and s	ructions or blockages? Provide pecific location.	No		
Is the duct at capacination about the dimension	ty? Provide additional details s of ducts and number of wires.	No		
Power Duct - Upper	Faregate Array (5 Gates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to FRIENDSHIP	HGTS-PWR_UPPER ARRAY.avi file.
Were there any obst details of type and s	ructions or blockages? Provide pecific location.	No		
	ty? Provide additional details s of ducts and number of wires.	No		
Power Duct - Lower	Faregate Array (5 Gates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to FRIENDSHIP	HGTS-PWR_LOWER ARRAY.avi file.
Were there any obst details of type and s	ructions or blockages? Provide pecific location.	No		
	ty? Provide additional details s of ducts and number of wires.	No		

Scoping of Power Duct - Kiosk to AFC Panel						
Task	Yes/No	Notes				
Kiosk to Handhole 1						
Was video scoping completed for the entire duct / conduit run?	No	Duct was video-scoped successfully to kiosk on reverse run from handhole to kiosk. Refer to FRIENDSHIP HGTS-PWR_KIOSK - MANHOLE.avi file and to FRIENDSHIP HGTS-PWR_MANHOLE - KIOSK.avi files.				
Was pull string installed?	Yes					
Were there any obstructions or blockages? Provide details of type and specific location.	No	Scope hit obstruction at 18' in walker duct from kiosk.				
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No					
Handhole 1 to Handhole 2						
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to FRIENDSHIP HGTS-PWR_MANHOLE – MANHOLE (MID).avi file.				
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					
Handhole 2 to AFC Panel	T					
Was video scoping completed for the entire duct / conduit run?	No	Video-scope could not negotiate 90-degree sweep in walker duct. Refer to FRIENDSHIP HGTS-PWR_MANHOLE TO 90.avi file.				
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					
	Observation	ns / Issues / Next Steps				
Total duct run from Kiosk to AFC Panel is 120 feet.						
		Sign Off				
		Sign Off				
GFP Representa	ative	WMATA PRGM				
Name: Tino Sahoo						
Signature: Tanmaya Sakoo						
Date: 08/29/2014						
L		89				



Photo #1: A08 Friendship Heights – Lock-out tag-out of AFC Panel main breaker

Photo #2: A08 Friendship Heights – AFC Panel MNCC Schedule

PANELDOARD. MICC FCD PRUM LOAD DESCRIPTION Fare Vending-Lover Passageway 7 10
 Fare Vending-Lover Passageway 7 3
 Fare Vending-Lover Passageway 7
 Fare Vending-Lover Passageway
 Fare Vending-Lover Passageway
 Fare Vending-Lover Passageway Pare Tending-Lover Passageway Fare Vending-Lover Passageway Fare Vending-Lover Passageway Fare Vending-Lower Passagevey 14 0 Pare Vending-Lover Passageway 16 Sam where Passagerray Fare Vending-Lower Passageway 25 Pare Vending-Lower Passageway Pare Gates-Mezz. Level 21 Fare Gates-Mezz. Level Pare Gates-Mezz. Level Pare Gates-Mezz. Level 72 23 24 Fare Gates-Mezz. Level Fare Gates-Mezz. Level 25 26 Fare Gates-Mezz. Level Pare Gates-Mezz. Level 78. 27 Pars Gates-Mezz. Level SI Pare Gates-Mezz, Level 33 Spare Transfer Machines 34 SPARE Fare Gates-Merz, Level Transfer Machines SPARE Transfer Machines SPARE 34 Spare- ELAA 39 40 Transfer Marthanes Spars Space ELAA Upace MAL PACIFIC ELECTRICE



Photo #3: A08 Friendship Heights – Pull string installed in faregate array duct

Photo #4: A08 Friendship Heights – Installing pull string between kiosk and AFC panel

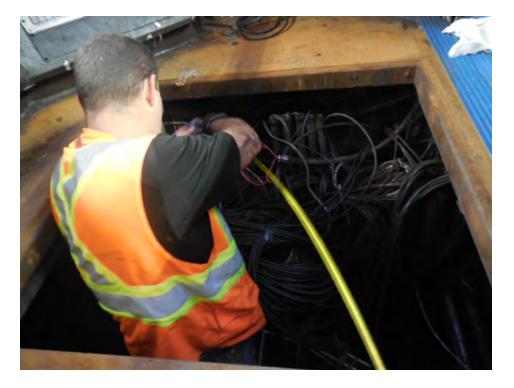


Photo #5: A08 Friendship Heights – Installing pull string in handholes between kiosk and AFC panel

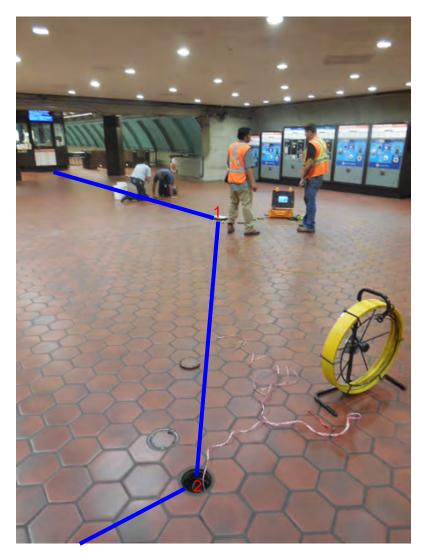


Photo #6: A08 Friendship Heights – Video-scoping the power ducts between kiosk and AFC panel

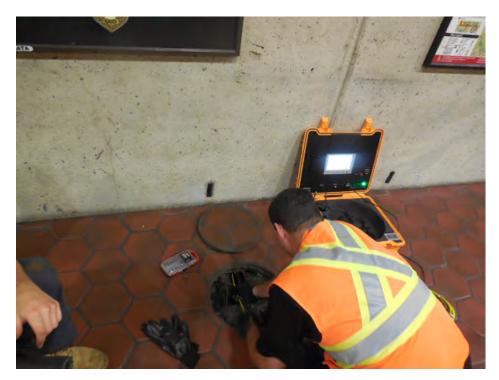
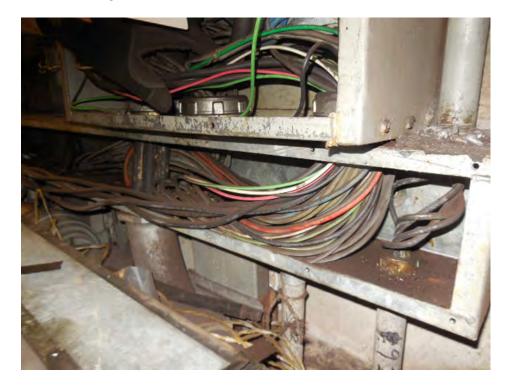
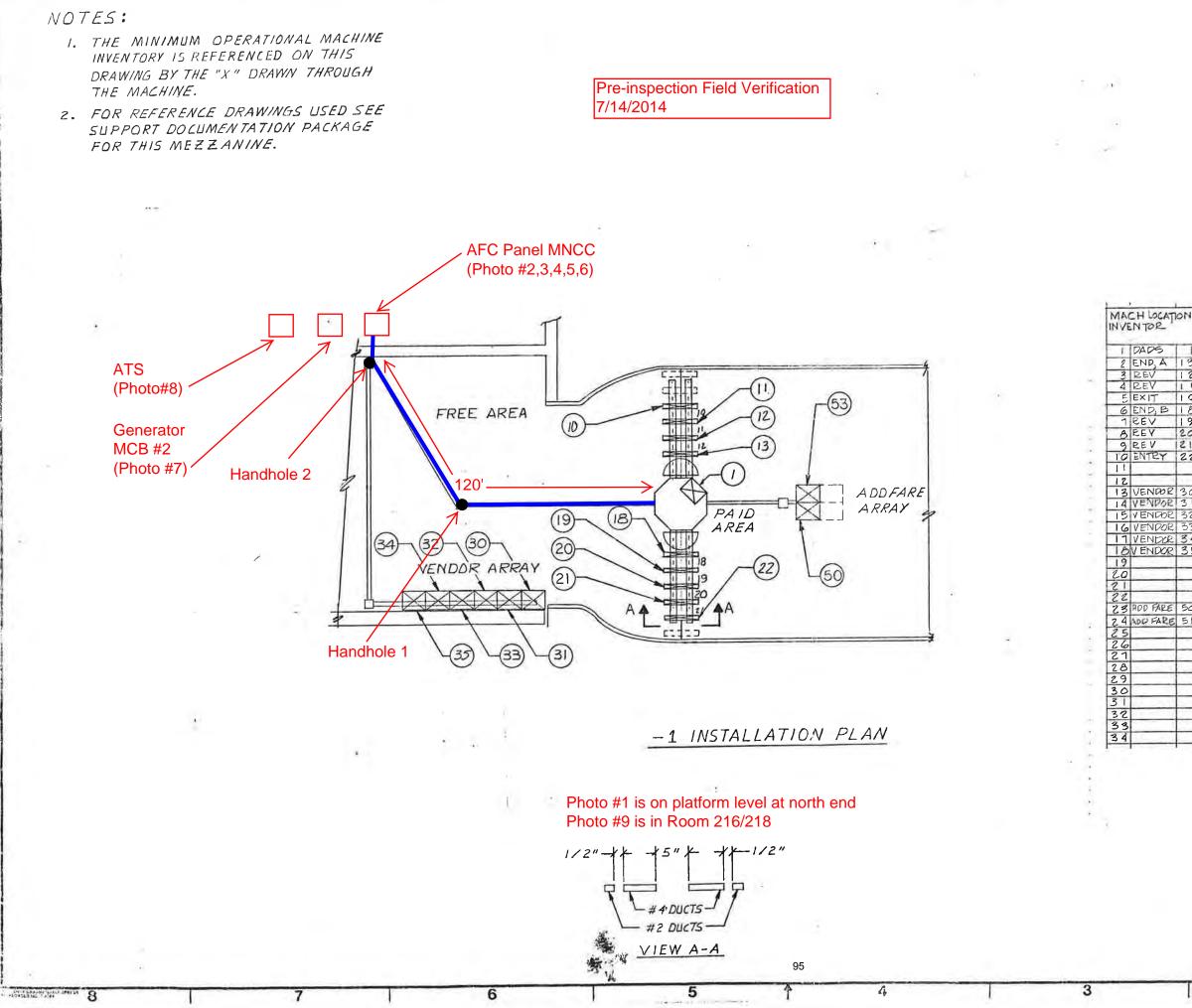


Photo #7: A08 Friendship Heights – Cable trough below AFC Panel. Power ducts from kiosk feed into bottom of trough





			DO NOT SCALE DRAWING UNLESS OTHERNISE SPECIFIED DIMENSIONS ARE IN INCHES BREAK SHARP EDGES .010 MAX TOLERANGES ON DECIMALS: .XX 1.03 .XX 1.010 ANGLES: 1.0.5 DEG. HOLES .013 THEU .1251 +.004001 .251 THRU .500: +.005001 .751 THRU .501 THRU .500: +.005001	D
TON CWD C/B SERIAL NO'S NO'S 1 053505 EMER. 13 GA5502 24 12 GR7511 23 1 0 GR4503 21 10 GR4503 21 10 GR4503 21 10 GR4503 25 19 GR1509 26 20 SR1518 27 21 427501 28	G 20 AMPS *12		CONTRACT NUMBER	с
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ł	2		CODE IDENT. NO. 94987 DRAWN: DESIGN APPROVAL	DOOR ONNE

	Mez	zanine	Inspection Report	REVISION 1
Date: 02/06/15 Station	Name: A08 Friendshi	p Heights So	uth Mezzanine #: 104	Completed By: Mike Butler
			Summary	
array also video scoped. Fare Video scoping and pull sting in	gate ducts in good cond stallation could not be	dition and not completed in	t at capacity. n existing 2" conduit between Kid	y; respective power duct in upper faregate osk and AFC Panel due to multiple ough. An empty 1" conduit was also
found between the overhead to New conduit is proposed betweenty 1" conduit passing throup proposed conduit will run vertir reaches the northern end wall. feeding into proposed Junction the electrical room. Once inside above the AFC Panel.	rough and northern end een Kiosk and the nort ugh the northern end w cally down from the Kio . The conduit will transi n Box 2. The existinng le the electrical room, a	d wall of platf thern end wal vall and 2" co osk to propos ition to a prop empty 1" con	orm ceiling plenum. II. The full run between the Kiosl nduit between overhead trough ed Junction Box 1 and then alor posed liquidtite conduit (in order iduit feeds from Junction Box 2	k and AFC Panel will utilize the existing and AFC Panel (pull string installed). The ng the platform ceiling plenum until it to get past ceiling obstructions) before through the northern end wall and into " empty conduit to overhead trough
Refer to photos and drawings	for more information.	Scoping	of Faregate Array(s)	
Task		Yes/No		Notes
Communications Duct – Upp	er Faregate Array (5 g			
Was video scoping completed run?	for the entire duct	Yes	Refer to "WMATA Friendship	Heights South Upper Comm Video (2).avi"
Were pull strings installed at a array?	all faregates in the	Yes		
Were there any obstructions o details of type and specific loca		No		
Is the duct at capacity? Provid about the dimensions of ducts		No	4" walker duct with less than 1	10 wires.
Power Duct - Upper Faregate	Array (5 gates)			
Was video scoping complete		Yes	Defer to "MMATA Friendship	Heighte South Upper Dower Video ov"
run?		Yes	Refer to WMATA Friendship	Heights South Upper Power Video.avi"
Were there any obstructions o details of type and specific loca		No		
Is the duct at capacity? Provid- about the dimensions of ducts		No	6" walker duct with less than 1	12 wires.
		1	1	

	Scoping of Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes		
Kiosk to AFC Par	nel (Distance Unknown)					
Was video scopi conduit run?	ng completed for the entire duct /	No	Refer to " Video.avi space Vi	WMATA Friendship Heights Left 2inch conduit to open space " and "WMATA Friendship Heights Middle 2inch conduit to open deo.avi"		
Was pull string in	stalled?	No				
	bstructions or blockages? Provide d specific location.	Yes				
Is the duct / cond details about the number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	2" condui	t with less than 10 wires.		
		1	r			
		Observatior	ns / Issues	/ Next Steps		
The proposed conduit run is 95' from Kiosk to AFC Panel, including 50' of new conduit in ceiling plenum, 10' of new liquidtite conduit, 5' of existing 1" conduit through the wall and 30' of existing 2" conduit in Room 201 (please refer to attached photos). The AFC Panel is located on the mezzanine level in Room 201, but access is wayside from the platform level.						
			Sign Off			
	GFP Representa	tive		WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizun					
Date:	02/17/15					

Photo #1: Proposed conduit in ceiling plenum at platform level beneath Kiosk

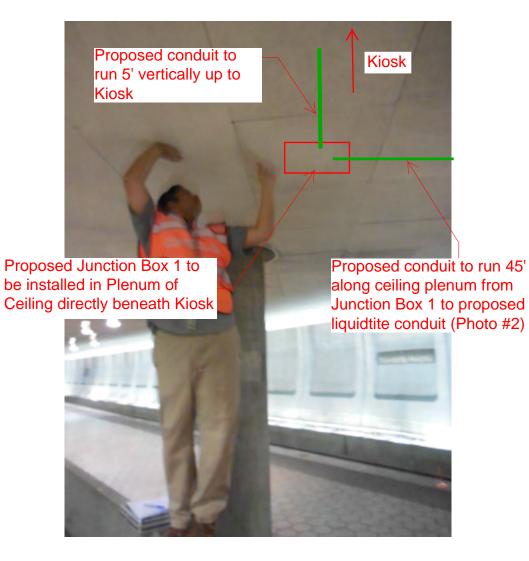
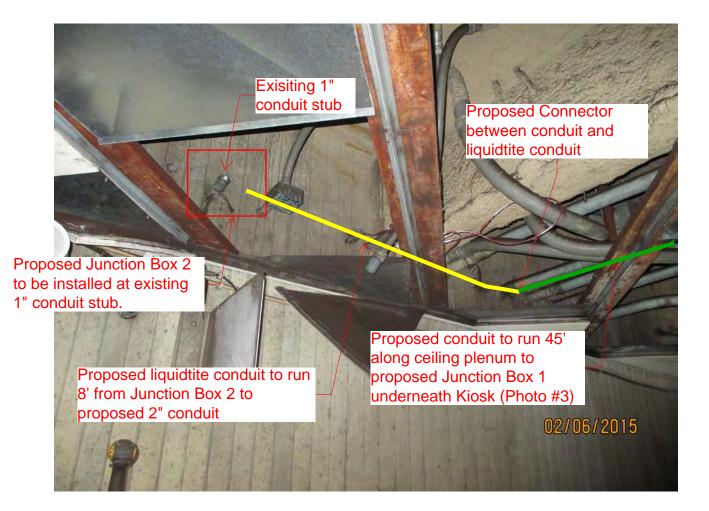
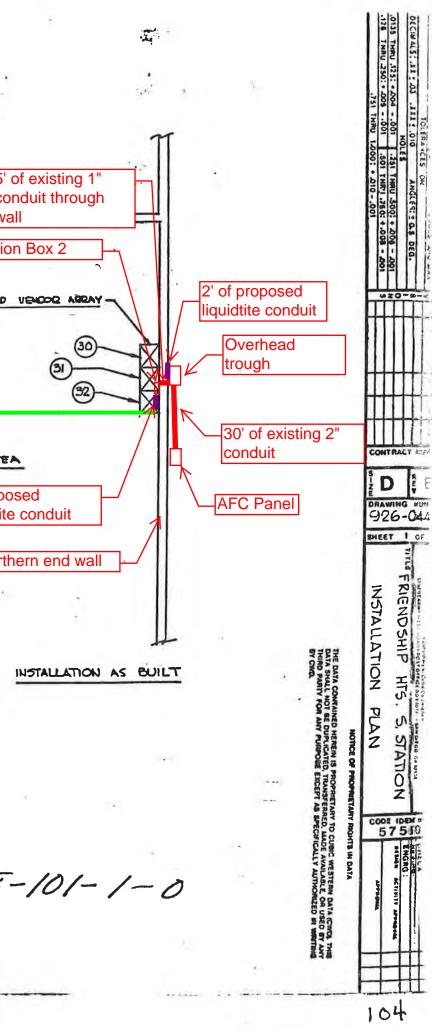


Photo #2: Proposed conduit in ceiling plenum at platform level beneath Kiosk



	r'
	5' cor cor wa
ADDFARE ARRAY	Junction
	FACELARD
Proposed conduit runs vertically down 5' from Kiosk to platform ceiling.	
(note:	45'
	FEEL AREA
STAIRWELL JUNCTION BOX 1	8' propo liquidtite
	north
PAID AREA	
	سلمل
• **	*
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY	¥.
APPROVED AS CORRECTED	- 31
(RESUBMITTAL NOT REQUIRED) Approval Does Not Relieve the Contractor of the Responsibility for the Accuracy of this Document or for Full Compliance	2 2 6007E.
with the Contract Requirements.	*
BY: For Contracting Officer	
100	

				PANEL	1	MSAA	
NUMBER	MACHINE	SERIAL	C	NUM			WIRE SIZE
A	AFEE DISDENSER		11	FGIO	12:	4	1
8	X FET DISPENSER		12	F6 11	T		1.6
1	ECADS	D5 8040	3	F6 12	1		1
10	EXIT GATE	GX 4531	14	F6 13	T		
11	REV. GATE	GR 7524	5	FG 14	T		1.5.
12	1	GR 7520	16	F6 15	T		12000
13		62 1525	7	F6 16	1		10000
14	1	6R 7554	0	SPACE	1		1
15	1	GR 7551	19	VF 30		· · · · · · · · · · · · · · · · · · ·	1
16	ENTRY GATE	GN 3533	10	VF 31	131	XPER B	1200
30	FARECARD VEND	FV 1310	11	VF 32			11
31		FV 1086	12	FUTURE 33			
32	1	FV 1503	13	SPARE			1
50	ADDFARE	AM 2700	14	AM 51	10		-
51	ADDFARE	AM 2701	15	FER A			
			16	AM 50			120-2
	1		17	SPARE			
			18	SPARE			
			21		42		



Mezzanine Inspection Report REVISION 1						
Date: 01/08/2015 Station Name: A11 Grosvence	or	Mezzanine #: 014	Completed By: Tind	o Sahoo		
Summary						
Video scoping for communications and power ducts in upper and lower faregate arrays was completed. Pull string was installed in communications duct for upper and lower faregate arrays. Video scoping of the power duct from the kiosk to the AFC panel was attempted in both 6" walker duct runs. Power duct run 1 was at 90% capacity and could not be scoped. Power duct run 2 could not be scoped from the kiosk to the handhole due to welded metal plate obstruction under the kiosk. Power duct run 2 was scoped from the first handhole towards the AFC panel but could not be completed due to the duct being collapsed at the expansion joint near the electrical rooms. Scanning was completed at this station. Due to the amount of existing ducts and conduit runs in the mezzanine level floor, a new in-floor duct run is not feasible. A proposed overhead conduit run has been identified. The proposed conduit will run vertically up from the kiosk, along the ceiling of the mezzanine and core into backroom (Room 207). A new junction box is proposed at conduit will core drill through the floor and feed into a proposed junction box on the ceiling of Room 107 at platform level. The proposed conduit will continue overhead from proposed junction box to the AFC panel in Room 107. Refer to photos and drawings for further information.						
	Scoping	of Faregate Array(s)				
Task	Yes/No		Notes			
Communications Duct – Upper Faregate Array (3 0	Gates)					
Was video scoping completed for the entire duct run?	No			Comm Duct Video.avi file. Video 3 due to existing wires blocking		
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 10 wire	2S			
Communications Duct - Lower Faregate Array (3 G	ates)	1				
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Grosv	enor Station Lower C	Comm Duct 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 10 wire	s			
Power Duct - Upper Faregate Array (3 Gates)						
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Grosv	enor 6inch Upper Po	wer 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 less than 10 wire	÷S			
Power Duct - Lower Faregate Array (3 Gates)						
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Grosv Grosvenor 3inch Lower		wer Video.avi and WMATA 3.		
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" and 3" ducts less that	ו 10 wires			

Scoping of Power Duct - Kiosk to AFC Panel					
Task		Yes/No		Notes	
Kiosk to Handhole 1 (15' run)					
Was video scoping completed fo conduit run?	or the entire duct /	No			
Was pull string installed?		No			
Were there any obstructions or bl details of type and specific locatio		Yes		etal plate obstruction under kiosk at the entrance of the duct and duct was at capacity	
Is the duct / conduit at capacity? I details about the dimensions of du number of wires.	Provide additional uct / conduit and	No	6" duct les	s than 15 wires	
Handhole 1 to Expansion Joint ((80' run)				
Was video scoping completed fo conduit run?	or the entire duct /	No			
Was pull string installed?		No			
Were there any obstructions or bl details of type and specific locatio	ockages? Provide n.	Yes	Duct was	collapsed approximately 90' into the run at the expansion joint.	
Is the duct / conduit at capacity? F details about the dimensions of du number of wires.	Provide additional uct / conduit and	No	6" duct les	s than 15 wires	
			I		
				Next One	
		Observation	ns / Issues /	Next Steps	
Total distance of proposed condu	uit run is 142' from k	Kiosk to AFC	panel.		
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name: Mike Butler		-			
Signature: M.3M	2				
Date: 4/20/2015					
-4/20/2015					

Photo #1 – Existing duct and proposed overhead conduit on mezzanine floor

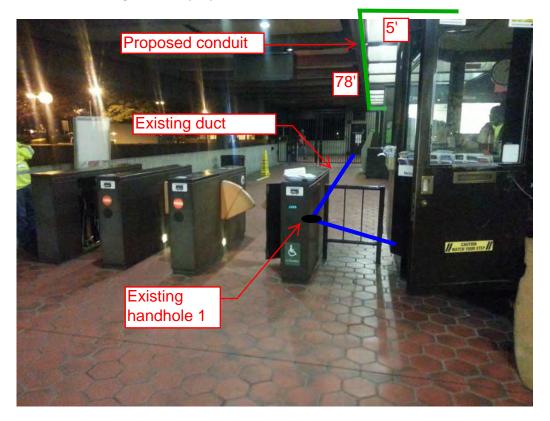


Photo #2 – Existing duct and proposed overhead conduit on mezzanine floor

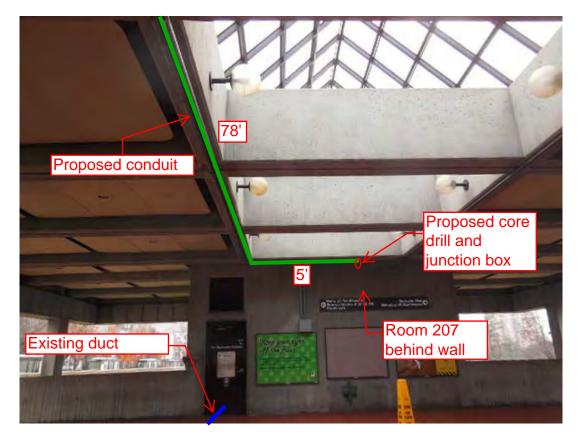


Photo #3 – Existing and proposed conduits to AFC Panel in AC Switchboard Room 107

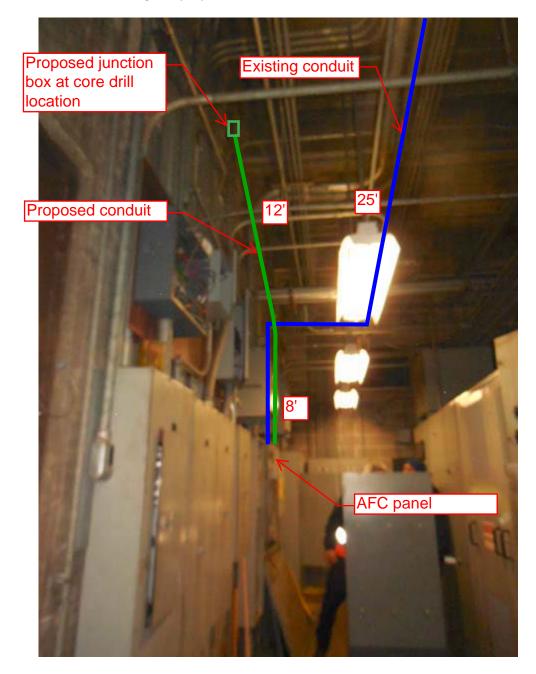


Photo #4 – Existing and proposed conduits to AFC Panel in AC Switchboard Room 107



NOTES:

2 ENDA 13 25

5 EXIT 10 19

11 VENDOR 30

14 VENDOR 33

15 VENDOR 34

16 VENDOR 35

13 VENDOR 32 11

1

10

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BEGADER NO. A ADM

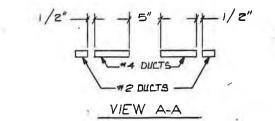
I. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE.

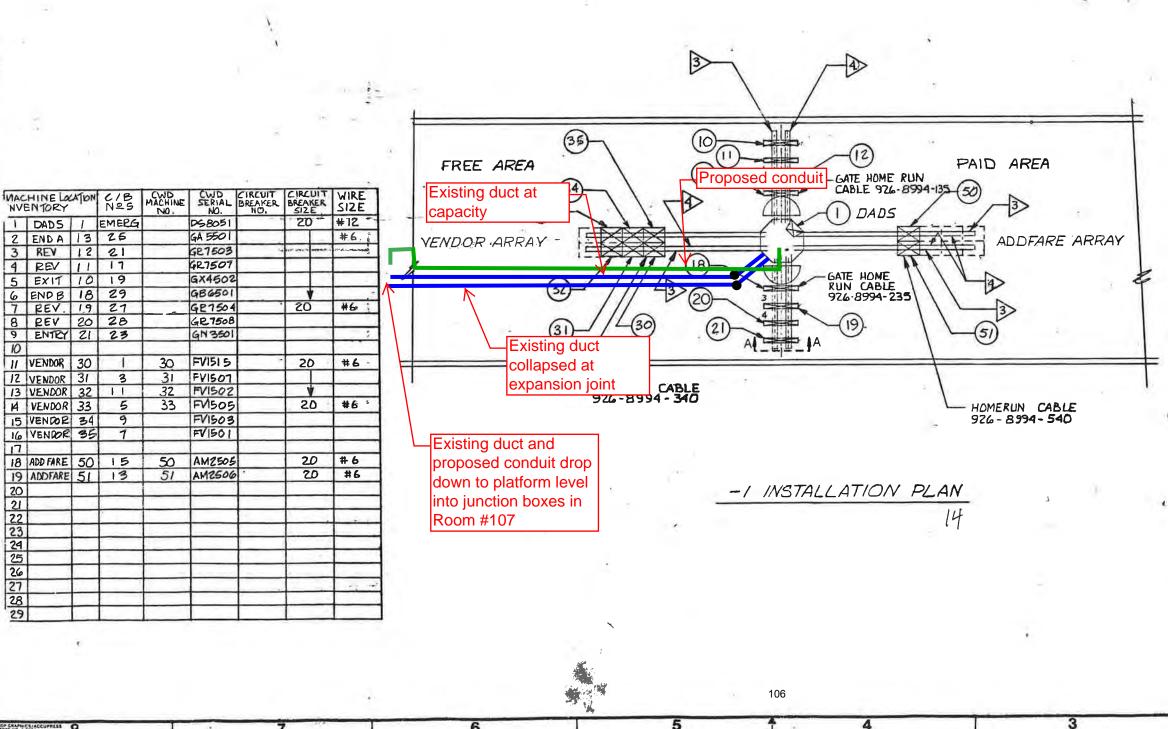
2. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.

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UNDER FLOOR DUCT - CONTROL 3> 3 V8" X 114" A UNDER FLOOR DUCT - POWER 642" X 142"

10.4





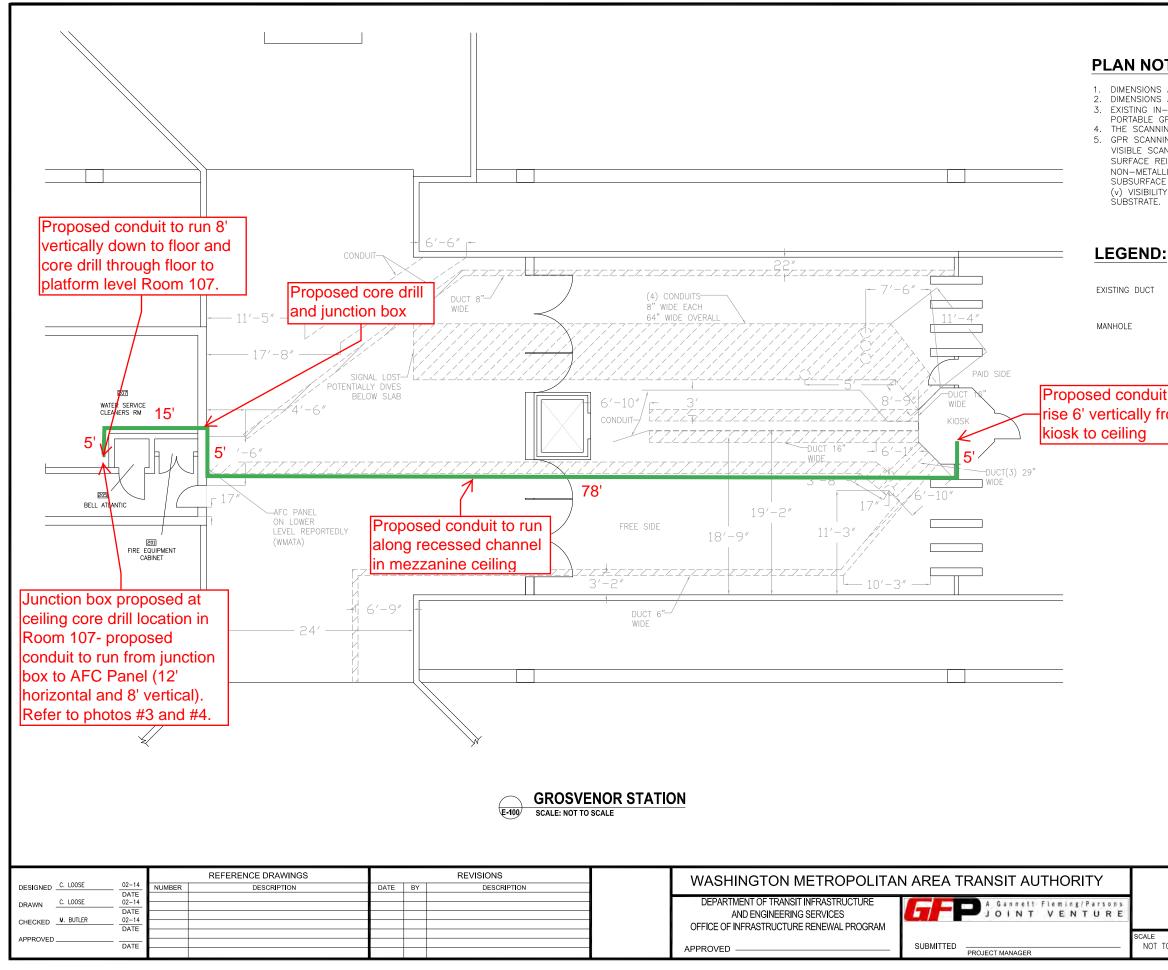
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	÷.		CODE IDENT NO. 94987	DODA



PLAN NOTES:

DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
 EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
 CONDUCTION CONSTITUTE FOLLOWING CONTRACTIONS: (2) 12 INCULTS

THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY. 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.

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CONTRACT NO.					
15-NEPP-01 IN - FLOOR DUCT INSPECTIONS A11 GROSVENOR PROPOSED CONDUIT PATH					
scale NOT TO SCALE	drawing no. A11-E-100	XXX			

Mezzanine Inspection Report (Scoping)						
Date: 09/10/2014 Station Name:	A12 White Flin	t	Mezzanine #: 015	Completed By: Tino Sahoo		
			Summary			
	Scoping was completed at station where possible (see details below). Pull string was installed in the faregate communication ducts and the power duct between the Kiosk and AFC Panel. An emergency power feed precluded scoping of the upper faregate array power duct.					
		Scoping c	of Faregate Array(s)			
Task	noto Arrow (A C	Yes/No		Notes		
Communications Duct – Upper Fareg						
Was video scoping completed for the run?		No	Refer to WMATA White	Flint Upper Fairgate Comm Video.avi file.		
Were pull strings installed at all farega array?	ates in the	Yes				
Were there any obstructions or blocka details of type and specific location.	ges? Provide	No	Scoping completed only	/ 8 feet from kiosk due to insert and cables.		
Is the duct at capacity? Provide additic about the dimensions of ducts and nur		No	8 wires in duct.			
Communications Duct - Lower Fareg	ate Array (3 G	ates)				
Was video scoping completed for the run?	entire duct	Yes	Refer to WMATA White	Flint Lower Fairgate Comm Video.avi file.		
Were pull strings installed at all farega array?	ates in the	Yes				
Were there any obstructions or blocka details of type and specific location.	ges? Provide	No				
Is the duct at capacity? Provide additionabout the dimensions of ducts and nur		No				
Power Duct - Upper Faregate Array (4 Gates)					
Was video scoping completed for the run?	e entire duct	No	Refer to WMATA White	Flint Upper Fairgate Power Video.avi file.		
Were there any obstructions or blocka details of type and specific location.	ges? Provide	No	Left duct: Energized wir Right duct: Scope hit in	e due to emergency feed. sert after 4 feet.		
Is the duct at capacity? Provide additic about the dimensions of ducts and nur		No	Left duct: 7 wires Right duct: 8 wires			
Power Duct - Lower Faregate Array (3 Gates)					
Was video scoping completed for the run?	e entire duct	No	Refer to WMATA White	Flint Lower Fairgate Power Video.avi file.		
Were there any obstructions or blocka details of type and specific location.	ges? Provide	No	Scope hit insert after 6	feet.		
Is the duct at capacity? Provide additic about the dimensions of ducts and nur		No				

Scopin	g of Power	Duct - Kiosk to AFC Panel
Task	Yes/No	Notes
Kiosk to AFC Panel (75 foot section)	I	
Was video scoping completed for the entire duct / conduit run?	No	Refer to WMATA White Flint Power Kiosk to AFC Panel Video.avi file.
Was pull string installed?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	Video scoping completed 23 feet. Scope hit 45 degree bend in walker duct run. Minimal debris
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	
Handhole 1 to Handhole 2 / AFC Panel (N/A)	T	
Was video scoping completed for the entire duct / conduit run?	N/A	
Was pull string installed?	N/A	
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	
Handhole 2 to Handhole 3 / AFC Panel (N/A)		
Was video scoping completed for the entire duct / conduit run?	N/A	
Was pull string installed?		
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	
	T	
	Observation	ns / Issues / Next Steps
Emergency feed from Panel KE runs through the left	power duct	(upper array) which causes faregate #18 to remain energized.
		Sim Off
		Sign Off
GFP Representa	ative	WMATA PRGM
Name: Tino Sahoo		
Signature: Tanmaya Sahoo		
Date: 09/10/2014		109



Photo #1: A12 White Flint – Lock-out tag-out of AFC Panel source breaker

Photo #2: A12 White Flint – Pull string installation in faregate array duct



Photo #3: A12 White Flint – Power duct under kiosk floor under capacity





Photo #4: A12 White Flint – Pull string installation in faregate



Photo #5: A12 White Flint – Video-scoping faregate array ducts

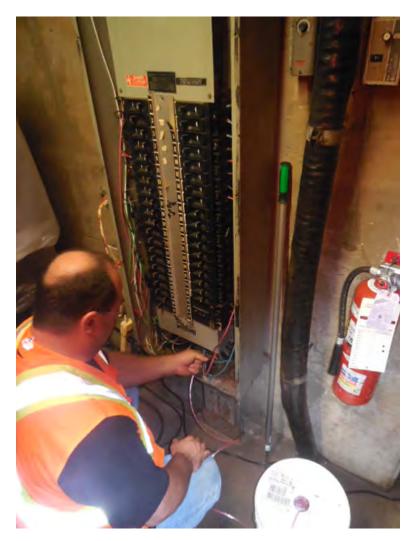
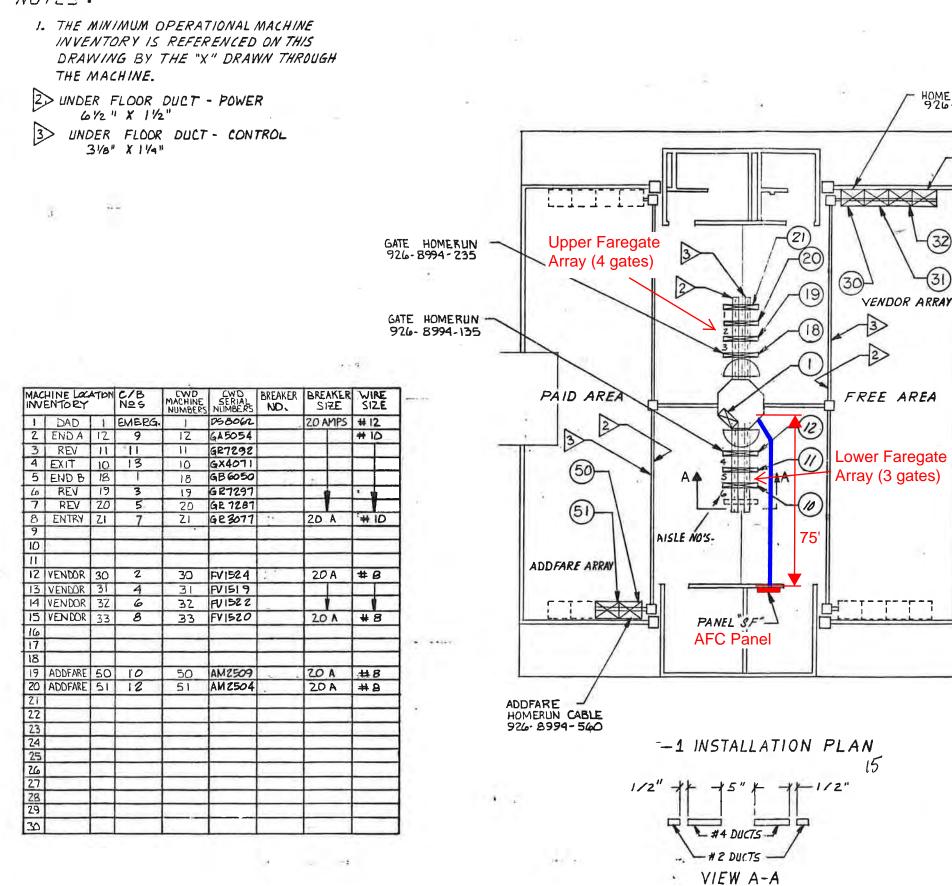


Photo #6: A12 White Flint – Pull string installation in AFC panel from kiosk



B ALLINGA GRAPHICA/ACC

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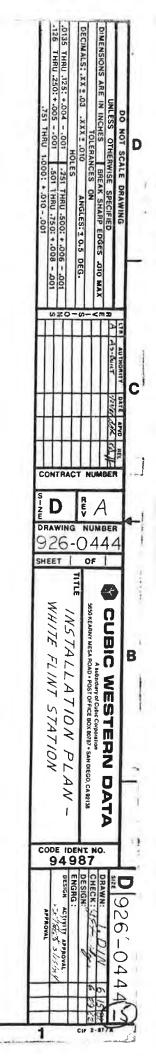
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HOME RUN CABLE

(33)

(3Z)

(31)



Mezzanine Inspection Report (Scoping) REVISION 1								
Date: 08/07/2014	Station Name: A13 - Twinbroo	ok	Mezzanine #: 016	Completed By: Tino	Sahoo			
	Summary							
Summary Pull string installation was completed for communication ducts in upper / lower faregate arrays. Video scoping was completed for lower comm. duct, however there was an obstruction in the upper comm. duct that prevented the passage of video scope. Video scoping was completed for the power ducts in the upper / lower faregate arrays. Pull string installation was completed in power duct between Kiosk, Handhole and AFC Panel. However, video scoping could not be completed due to an obstruction between Kiosk and Handhole, and the 90-degree vertical bend below the AFC Panel. Scanning was not requred at this mezzanine.								
		Scoping o	of Faregate Array(s)					
	Task	Yes/No		Notes				
Communications Duc	ct – Upper Faregate Array (4 g	ates)						
Was video scoping co run?	ompleted for the entire duct	No	Refer to TWIN BROOK-	COM_UPPER ARRAY	1.avi file.			
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	Yes	Scope was obstructed b	y a cluster of wires ne	ear the end of duct.			
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 12	2 wires.				
Communications Duc	ct - Lower Faregate Array (3 ga	ates)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to TWIN BROOK-	COM_LOWER ARRA	Y.avi file.			
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 12	2 wires.				
Power Duct - Upper F	aregate Array (4 gates)							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to TWINBROOK-F	PWR UPPER ARRAY.	avi file.			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	Yes	Far right power duct was scoped successfully.	s obstructed; middle p	oower duct was			
	? Provide additional details of ducts and number of wires.	No	6" ducts with less than	14 wires.				
Power Duct - Lower F	Faregate Array (3 gates)	1	1					
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to TWIN BROOK-	PWR_LOWER ARRA	Y.avi file.			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	6" ducts with less than 1	14 wires.				

Scopir	ng of Power	Duct - Ki	osk to AFC Panel			
Task	Yes/No		Notes			
Kiosk to Handhole 1 (Distance: 60')		1				
Was video scoping completed for the entire duct / conduit run?	No	Refer to T	WIN BROOK-PWR_KIOSK – MANHOLE.avi file.			
Was pull string installed?	Yes					
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Scope wa	s obstructed at 23 feet from the kiosk.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" power	luct with less than 12 wires.			
Handhole 1 AFC Panel (Distance: 5')						
Was video scoping completed for the entire duct / conduit run?	No	Refer to T	Refer to TWIN BROOK-PWR_AFC PANEL TO MANHOLE.avi file.			
Was pull string installed?	Yes					
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Scope cor Panel.	Scope could not negotiate 90-degree walker duct bend below AFC Panel.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	6" power	power duct with less than 12 wires.			
		1				
	Observation	ns / Issues /	Next Steps			
The total distance of existing power duct between K	iosk and AFC	C Panel is 6	5'.			
		Sign Off				
GFP Represent	ative		WMATA PRGM			
Name: Tino Sahoo						
Signature: Tanmaya Sachoo	T					
Date: 08/07/2014						



Photo #1: A13 Twinbrook – Lock-out tag-out of feeder breaker to AFC Panel

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Photo #2: A13 Twinbrook – Open AFC Panel

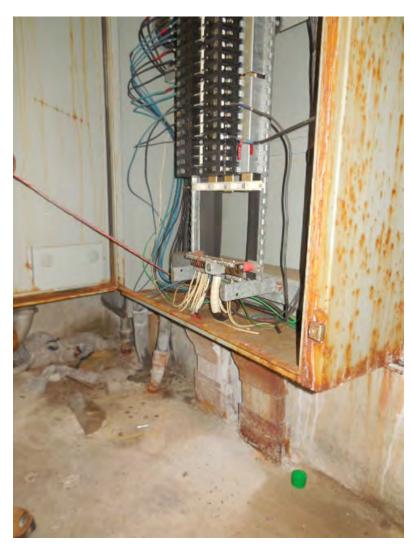


Photo #3: A13 Twinbrook – Pull string installation to AFC Panel

Photo #4: A13 Twinbrook – AFC Panel Schedule

Klosk - PANEL Klock - Panel 2. Buse Spare FARE GATE CONSOLE Free Area Ventor 4. FRee AREA Vold Too Area Ventor 4. 33 1. 23. " " 5 37 6. 1-34 ····· 12 8. "- 3D 10. " " 189. 1-16 12. " n 14. 2013. 11 16. " " 2.4 15. " " SAR CH 18. " " 5 17. Patrician 20. " " "-21 . 81 11 50 19. 21. Smart Trip to 22. Sus Trans. DISp.SARKE Smale HRIP - 51 24. " SPARE 26. Map Case 25. PIDS mezzi stow 28, Bus Trans, Diep. -49 27. 29. 32. Map Case 34. Spare spare 36. - manare Spare 35. 38. Spare 37. Spare



Photo #5: A13 Twinbrook – Pull string installation to mezzanine handhole

Photo #6: A13 Twinbrook – Video-scoping between kiosk and mezzanine handhole



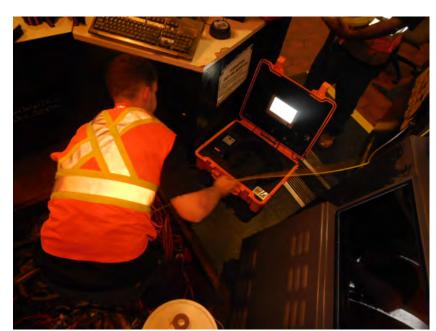


Photo #7: A13 Twinbrook – Video-scoping of faregate array ducts

Photo #8: A13 Twinbrook – Inserting fish tape into faregate array ducts



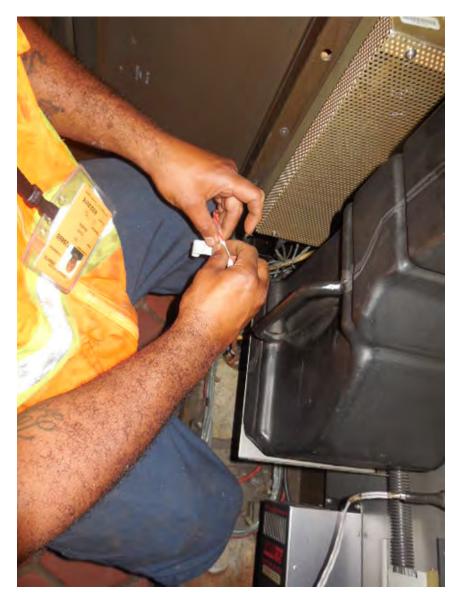
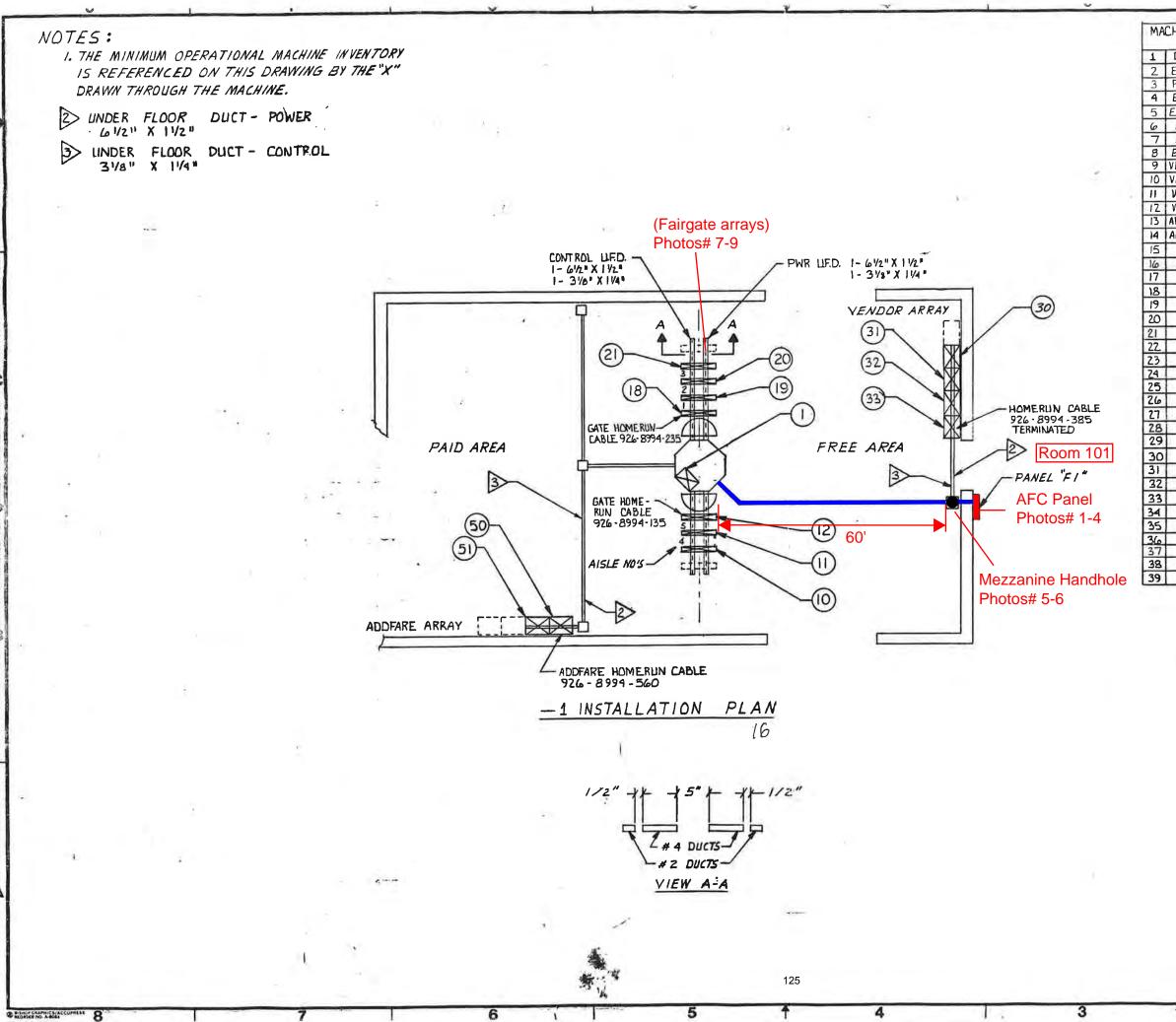


Photo #9: A13 Twinbrook – Installation of pull string in faregate array ducts



		6		_1	_			
CHINE	OCATION /	MACHINE	CWD	CB	CB SIZE	WIRE	DO NOI DIMENSIONS ARE IN INCHESS O DECIMALS: XX 1.03 .XX 1 .0135 THRU .250: +.00400 .126 THRU .250: +.00500 .751 THR	
DADS		N05.	SERIAL NO. P58068	EVERC	20	#12	DO NOT UNLESS OT UNLESS OT TOLE UNLESS TOLE TOLE UNLESS - 2003 - 2001 THRU .250: +.004001 THRU .250: +.005001 THRU .251: HRU	
END A		12	GA 50 57	3	20	#10	.XX	
REV EXIT		11	GR 7280 GX 4070	5 1	20 20	# 10 # 10	1.03	
ENDB		18	GB 6051	9	20	# 10	DO N IN INCHE 1003	
REV		19	GE 7293	11	20	# 1D	DO NOT SC LLESS OTHER INCHES TOLERAT .XXX ± .010 0004001 0005001 0005001 0005001	
REV ENTRY		20 21	GE7290 GN 3063	13	20 20	# 10 # 10		
VENDOR		30	FV1523	10	20	#12	OT SCALE DRAWING OTHERWISE SPECIFIED S BREAK SHARP E 2.010 ANGLES ON 2.010 ANGLES: HOLES ANGLES: 001 .251 THRU .500 001 .251 THRU .500 001 .001 +.010001	ž.
VENDOR		31	FV1517	8	20 20	#12 #12	AK SPE	÷.
VENDOR		33	FV1514	4	20	#12	LE DRAWING WISE SPECIFIED BREAK SHARP EDGES JOO CES ON ANGLES: 1 0.5 DEG. 251 THRU .500; +.0060 .501 THRU .750; +.0080 .501 THRU .750; +.0080	
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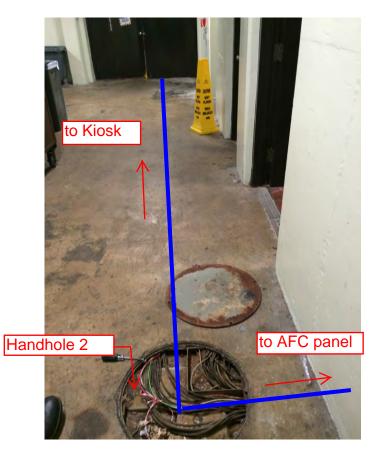
Mezzanine Inspection Report (Scoping)							
Date: 09/08/14	Station Name: A14 Rockville		Mezzanine #: 017	Completed By: Mike Butler			
			Summary				
All video scoping and pull string installation was completed for this mezzanine. Both Upper and Lower faregate array communication ducts were successfully video scoped and pull string installed. Both Upper and Lower faregate array power ducts were successfully video scoped. The power duct between Kiosk, Handhole 1, Handhole 2 and AFC Panel was also video scoped and pull string installed. Walker ducts are not at capacity and appear to be good condition and viable for further use, however there was a partial obstruction between Handhole 1 and Handhole 2, which appears to be a dip in the bottom side of the duct where a previous handhole may have been. Since pull string was installed without any problem and the duct is in good condition, scanning is not required at this mezzanine. Total power duct run from Kiosk to AFC Panel is 90 feet.							
		Scoping c	of Faregate Array(s)				
-	Task	Yes/No		Notes			
Communications Duc	et – Upper Faregate Array (4 g		<u> </u>				
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Rockv	ille Upper Fairgate Comm Video.avi.			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	4" Duct with less than 10) wires – not at capacity.			
Communications Duc	et - Lower Faregate Array (4 ga	ates)					
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Rockv	ille Lower Fairgate Comm Video.avi			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	4" Duct with less than 10) wires – not at capacity.			
Power Duct - Upper F	aregate Array (4 gates)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Rockv	ille Upper Fairgate Power Video.avi.			
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	6" Duct with less than 12	2 wires – not at capacity.			
Power Duct - Lower F	aregate Array (4 gates)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Rockv	ille Lower Fairgate Power Video.avi.			
Were there any obstrudet details of type and spectrum	uctions or blockages? Provide ecific location.	No					
Is the duct at capacity about the dimensions	? Provide additional details of ducts and number of wires.	No	6" Duct with less than 12	2 wires – not at capacity.			

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No	Notes			
Kiosk to Handhole	e 1 (Distance: 12')					
Was video scopin conduit run?	g completed for the entire duct /	Yes	Refer to WMATA Rockville Power Kiosk to handhole1 Video.avi			
Was pull string ins	stalled?	Yes				
Were there any ob details of type and	structions or blockages? Provide specific location.	No				
	it at capacity? Provide additional imensions of duct / conduit and	No	6" Duct with less than 15 wires – not at capacity.			
Handhole 1 to Har	ndhole 2 (Distance: 70')					
Was video scopin conduit run?	g completed for the entire duct /	Yes	Refer to WMATA Rockville Power handhole2 to handhole1 Video.avi a WMATA Rockville Power handhole 1 to handhole2 video.avi.	nd		
Was pull string ins	stalled?	Yes				
Were there any ob details of type and	structions or blockages? Provide specific location.	Yes	Partial obstruction 48' from Handhole 1 (see details below)			
details about the d number of wires.	it at capacity? Provide additional imensions of duct / conduit and	No	6" Duct with less than 15 wires – not at capacity.			
Handhole 2 to AFC	C Panel (Distance: 8')					
Was video scopin conduit run?	g completed for the entire duct /	Yes				
Was pull string ins	stalled?	Yes				
	Were there any obstructions or blockages? Provide details of type and specific location.					
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 – not at capacity.			
				_		
		Observatior	ns / Issues / Next Steps			
entryway adjacer the camera head	nt to room C113. The concrete floo got stuck on a dip, which looked li	r appears to ke a circular	d Handhole 2, 48' from Handhole 1 after the duct passes through backroo b have been repaired, and possibly a handhole removed. When scoping r cut-out in the bottom of the duct. This occurred when scoping from both g installation and overall the duct appears in good condition.			
			0	_		
			Sign Off			
	GFP Representa	tive	WMATA PRGM			
Name:	Mike Butler					
Signature:	Mizun					
Date:	31/12/14		127			



Rockville Photo #1 – Duct route between Kiosk and Electrical Room

Rockville Photo #2 – Duct route between Kiosk and Electrical Room



Rockville Photo #3 – Concrete repair to floor in back hallway outside Room C113

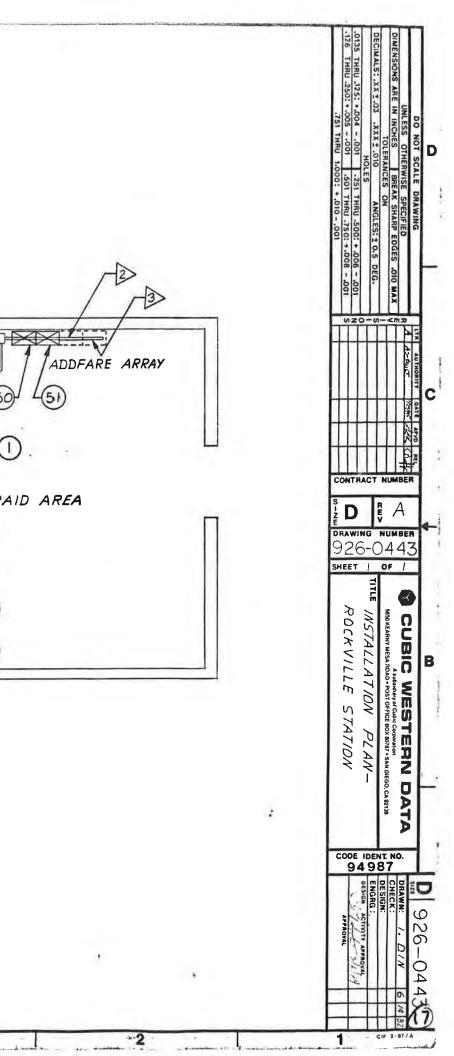


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-				VENDOR ARRAY	
	F			3	
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•				GATE HOME BUN	
MACHINE CATION C/B CWD CWD CURCUIT XINVENTORY NOS NUMBER NUMBER	CURCUIT WIRE			GATE HOME RUN CABLE 926-8994-135 FREE AREA	Kiosk
I DAD EMERA 1 8065	ZDAMPS #12	Hand hole		GATE HOME RUN 12	Kiosk
Z END A 13 13 GA 5061 3 REV 11 12 GE7295 4 REV 9 11 GE7300	2D AMPS # B	8'	70'	CABLE 926-8994-235	4 (19)
5 EXIT 1 10 GX 4501 6 END B 15 18 GB6061		FC Panel		Hand hole 1	
7 REV 17 19 GE7286 8 REV 19 20 GE7242 9 ENTRY 21 21 GN 3503			./	32	
9 ENTRY 21 21 GN 3503 10 11		Minor obstruction		WOOR ARRAY	
12 13 YENDOR 8 30 FVI>52	2.0 AMPS ##6				AISLE NO'S.
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Mezzanine Inspection Report							
Station Name: C01 – Metro Center North Mezzanine #: 035 Completed By: Mike Butler							
		Summary					
Pull string installation was completed in communicat communication duct for lower faregate array due to power ducts for upper / lower faregates was not post Video scoping and pull string installation was comp and are viable for future use. Scanning is not required at this mezzanine.	an obstructionsible due to	upper faregate array. Ho on, potentially a collapsed skirt obstruction.	d duct 10' from kiosk. Video scoping in comm. and				
	Scoping	of Faregate Array(s)					
Task	Yes/No		Notes				
Communications Duct – Upper Faregate Array (4 g	jates)	1					
Was video scoping completed for the entire duct run?	No	Video scoping was not	possible due to skirt obstruction.				
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.	N/A						
Communications Duct - Lower Faregate Array (4 g	ates)	1					
Was video scoping completed for the entire duct run?	No	Video scoping was not	possible due to skirt obstruction.				
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	An obstruction, potentia	ally a collapse 10' away from kiosk.				
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	N/A						
Power Duct - Upper Faregate Array (4 gates)	1						
Was video scoping completed for the entire duct run?	No	Video scoping was not	possible due to skirt obstruction.				
Were there any obstructions or blockages? Provide details of type and specific location.	N/A						
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	N/A						
Power Duct - Lower Faregate Array (4 gates)	-						
Was video scoping completed for the entire duct run?	No	Video scoping was not	possible due to skirt obstruction.				
Were there any obstructions or blockages? Provide details of type and specific location.	N/A						
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	N/A						

Scoping of Power Duct - Kiosk to AFC Panel Task Yes/No Notes					
	163/140	NOICES			
Kiosk to Handhole 1 (Distance =25')					
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Metro Center North 6inch Power HH1 to Kiosk.avi"			
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	6" walker duct with less than 10 wires.			
anhole 1 to AFC panel (Distance = approx. 40')					
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Metro Center North 6inch Power HH1 to AFC Panel.avi			
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	6" walker duct with less than 10 wires			
	Observation	ns / Issues / Next Steps			

- There are two power duct runs from Kiosk to AFC Panel, however the alternate run is at capacity. - An existing AFC installation plan is not available for this mezzanine - refer to attached photos and sketch instead.

Signature:

Date:

2/26/2015

Sign Off **GFP** Representative WMATA PRGM Mike Butler Name: Mizun

Photo #1 - Existing duct run on mezzanine floor.

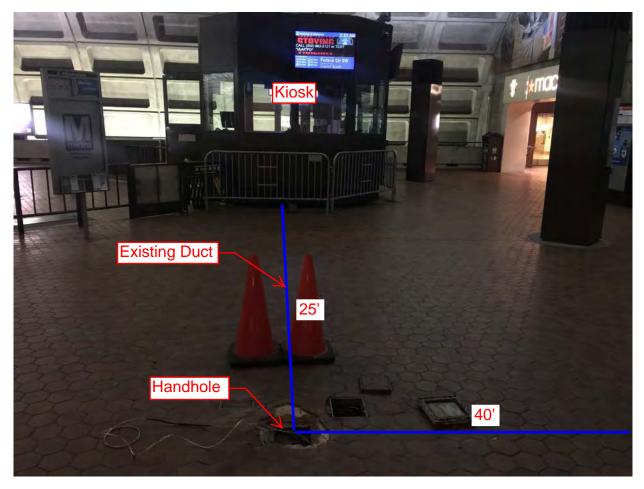


Photo #2 - Existing duct run on mezzanine floor.

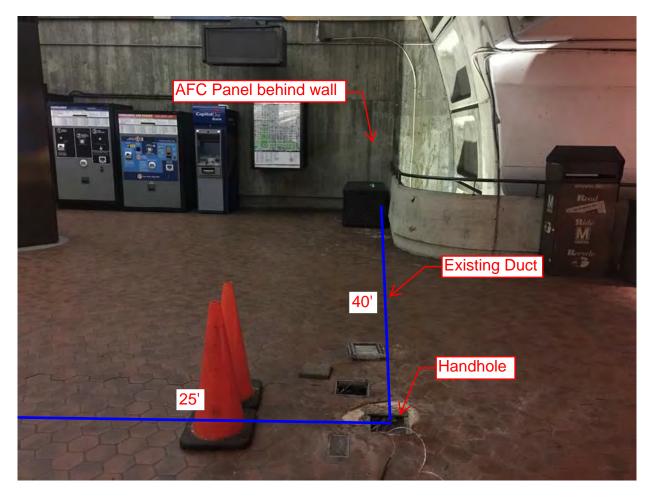
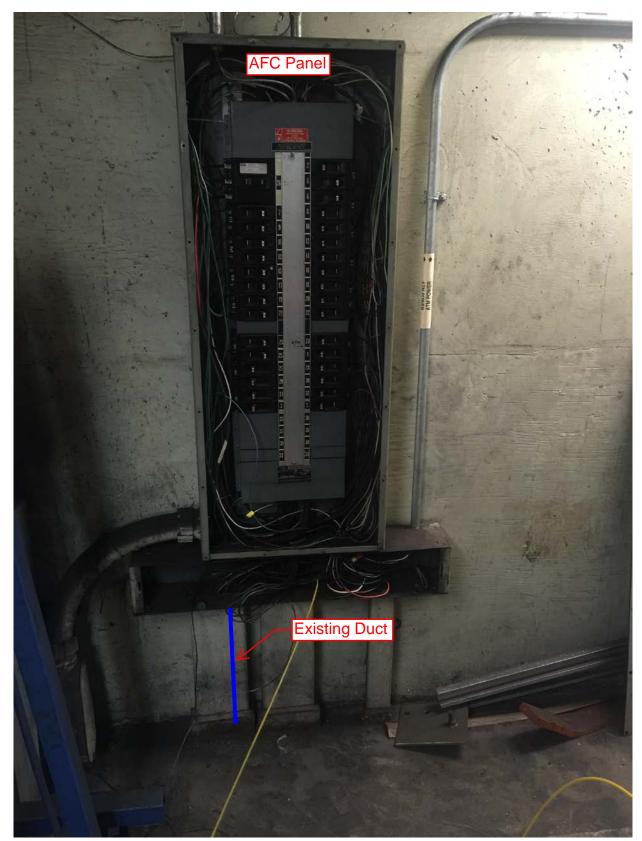
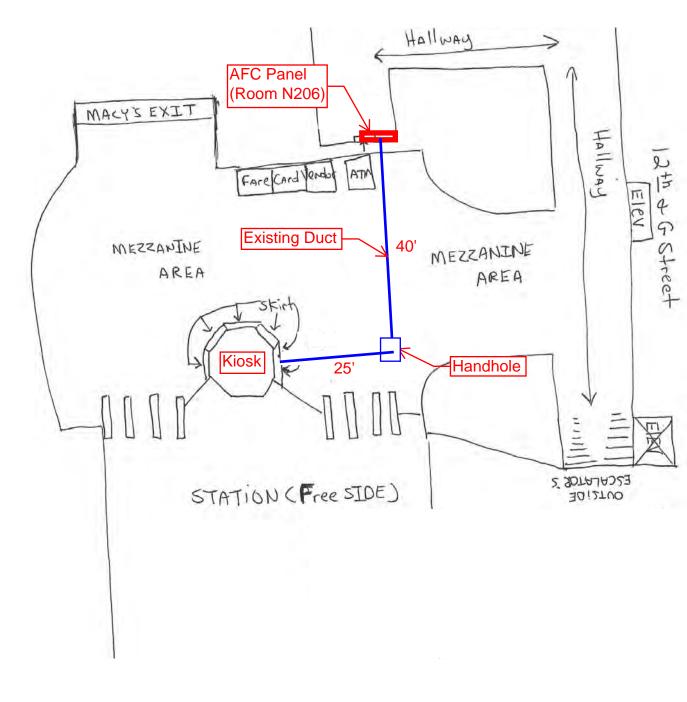


Photo #3 - AFC Panel and duct connection in Room N206.





DRAWING NOT TO SCALE

	Mezzanine Inspection Report						
Date: 10/29/14 Station Name: C01 Metro Center South Mezzanine #: 052 Completed By: Mike Butler							
	4		Summary				
scoped and pull string for the communication In addition, scoping w additional scoping is n	g was installed; duct is clear from n duct in the faregate array due	n obstruction to apron skir	is and not at capacity. Sc t obstruction. However, C	he power duct between the Kiosk and AFC Panel was coping and pull string installation was <u>not</u> completed CAT6 is already installed in the communication duct. In skirt obstruction. As per WMATA's direction,			
		Scoping o	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications Due	ct – Upper Faregate Array (8 fa	aregates)					
Was video scoping co run?	ompleted for the entire duct	No	Could not be completed	due to kiosk skirt apron obstruction.			
Were pull strings inst array?	alled at all faregates in the	No					
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	N/A					
	? Provide additional details of ducts and number of wires.	N/A					
		1	Γ				
Power Duct - Upper F	Faregate Array (8 faregates)		l				
	completed for the entire duct	No	Could not be completed	due to kiosk skirt apron obstruction.			
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A					
	/? Provide additional details of ducts and number of wires.	N/A					

Scoping of Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes	
Kiosk to Handhol	e 1 (Distance: 80')				
Was video scopir conduit run?	ng completed for the entire duct /	Yes	Refer to "\	WMATA Metro Center South Power Handhole to Kiosk Video.avi"	
Was pull string in	stalled?	Yes			
Were there any of details of type and	bstructions or blockages? Provide d specific location.	No			
details about the onumber of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 12 wires	
Hanhole 1 to AFC	Panel (Distance: 30')	-	1		
Was video scopii conduit run?	ng completed for the entire duct /	Yes	Refer to "\ Video.avi"	WMATA Metro Center South Power Handhole to AFC Panel	
Was pull string in	stalled?	Yes			
Were there any ol details of type and	bstructions or blockages? Provide d specific location.	No			
Is the duct / conducted details about the only number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 12 wires	
		ſ	I		
		Observation	ns / Issues /	/ Next Steps	
- CAT6 cables a	already installed inside Faregate ca	binets #10 tl	hru #16 und	ler CIP-092 project.	
	ct run between the Kiosk and AFC I				
-			Toximatory		
- AN AFC Instal	lation plan is not available for this m	iezzanine.			
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	01/15/15				

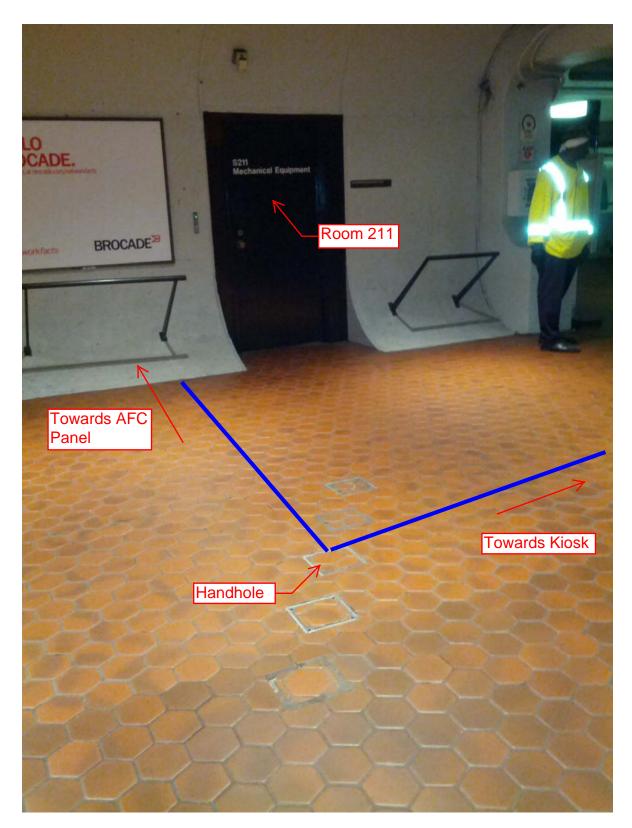
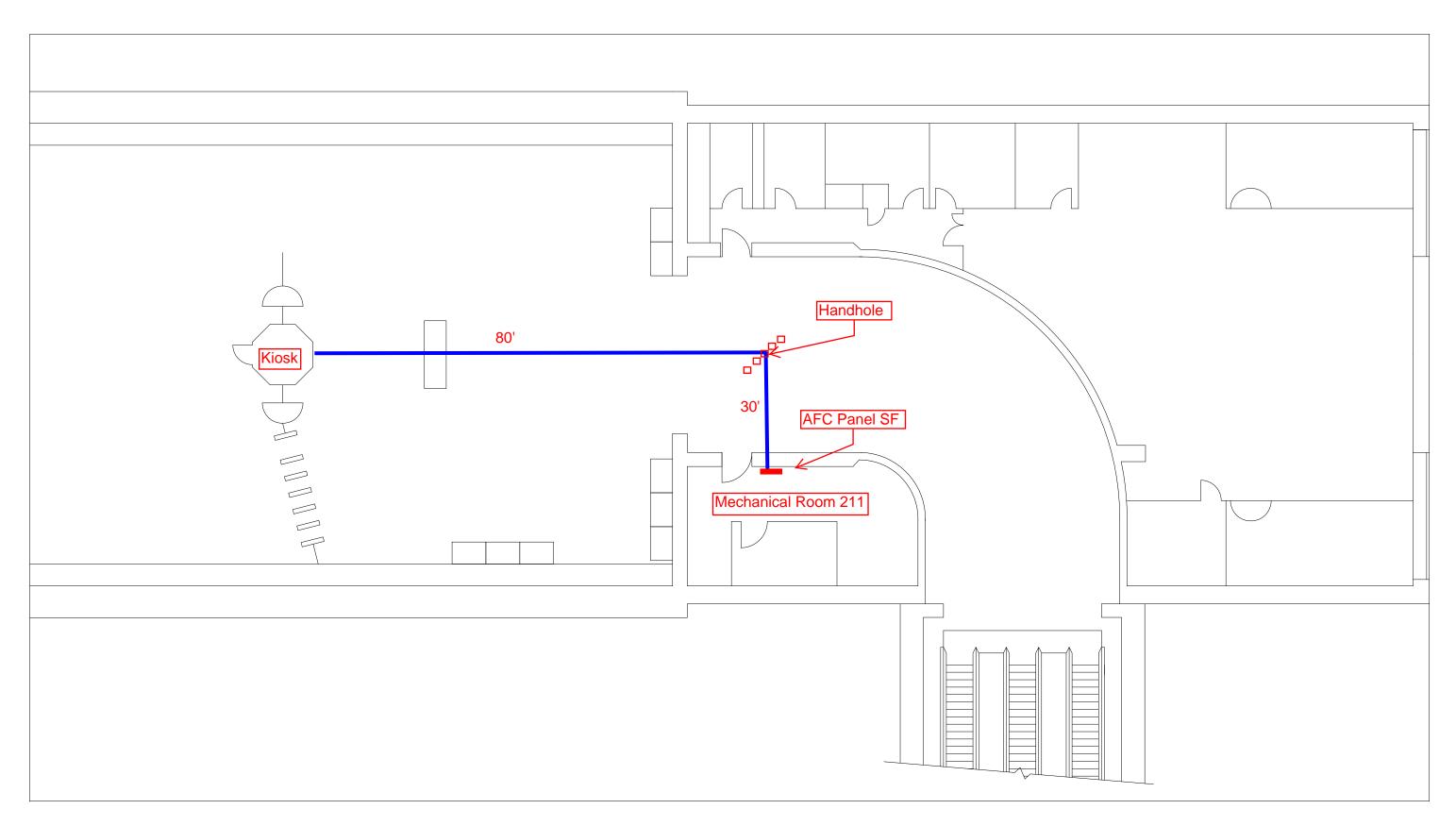


Photo #1 – Handholes located on Mezzanine Level outside Mechanical Room Room 211



Photo #2 – Kiosk and faregates on mezzanine level.

Sketch - Metro Center South (M052)





ELECTRICAL AND DATA CABLE INSTALLATION

For

Washington Metropolitan Area Transit Authority

Contract Number FQ 15233

VOLUME 4

Mezzanine Inspection Report

July 15, 2015

Final Submission

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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MIR_B02_Judiciary Sq East_MZ023	15
MIR_B02_Judiciary Square West_MZ022	22
MIR_B03_Union Station North_MZ025	31
MIR_B04_Rhode Island Ave_MZ026	41
MIR_B05 Brookland CUA _M027	50
MIR_B06_Fort Totten_MZ026	59
MIR_B07_Takoma_MZ029	66
MIR_B08_Silver Spring North_MZ031	76
MIR_B08_Silver Spring South_MZ030	81
MIR_B09_Forest Glen_MZ032	87
MIR_B10_Wheaton_MZ033	101
MIR_B11_Glenmont_MZ034	112
MIR_B35_New York Ave North_MZ109	118
MIR_B35_New York Ave South_MZ108	123
MIR_F01_Gallery Place North_MZ069	128
	MIR_B02_Judiciary Sq East_MZ023 MIR_B02_Judiciary Square West_MZ022 MIR_B03_Union Station North_MZ025 MIR_B04_Rhode Island Ave_MZ026 MIR_B05 Brookland CUA_M027 MIR_B06_Fort Totten_MZ026 MIR_B07_Takoma_MZ029 MIR_B08_Silver Spring North_MZ031 MIR_B08_Silver Spring South_MZ030 MIR_B09_Forest Glen_MZ032 MIR_B10_Wheaton_MZ033 MIR_B11_Glenmont_MZ034 MIR_B35_New York Ave North_MZ109 MIR_B35_New York Ave South_MZ108

Mezzanine Inspection Report (MIR) REVISION 1								
Date : 06/01/2015	J/2015 Station Name : B01 Gallery Place (West) Mezzanine #: 020 Completed By: Mike Butler							
	Summary							
scoping could not be However, pull string w conduit between Han Kiosk and AFC Pane and no space to insta NEPP-02: Video scop and Shared Trough ir will run from Shared T	 NEPP-01: Video scoping completed for power / communication ducts in faregate arrays; pull strings installed in communication ducts. Video scoping could not be completed between Kiosk, Handhole 1, Handhole 2 and Handhole 3 due to multiple collapses in the power duct. However, pull string was installed between Handhole 2 and Handhole 3 despite a collapsed duct. Pull string was also installed in the power conduit between Handhole 3, a junction box and the AFC Panel. Scanning was conducted to identify a proposed duct route between the Kiosk and AFC Panel. The scanning results showed that the mezzanine floor has multiple ducts between the Kiosk and the back rooms, and no space to install a new in-floor duct. NEPP-02: Video scoping and pull string installation was completed in Alternate Duct between Kiosk, Handhole 4, Handhole 5, Handhole 6 and Shared Trough in Room W202. Alternate Duct is in good condition, not at capacity and viable for use. A proposed overhead conduit will run from Shared Trough to AFC Panel in Room W202, thus completing the power run from Kiosk to AFC Panel. Refer to attached photos and drawings for further details about existing and proposed ducts / conduits. 							
	NEPP-0)1: Scopin	g of Faregate Arrays	(01/09/15)5)				
Tas	sk	Yes/No		Notes				
Communication Duct	- Upper Faregate Array (4 gate	es)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Galle	ry Place Mezz 20 Upp	er Comm Fair Gate Video.avi"			
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	3" walker duct, not at ca	pacity (< 12 wires).				
Communication Duct	- Lower Faregate Array (3 gate	es)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer "WMATA Gallery	Place Mezz 20 Lower	Comm Fair Gate Video.avi"			
Were pull strings insta array?	alled at all faregates in the	Yes						
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	3" walker duct, not at ca	pacity (< 12 wires).				
Power Duct - Upper F	aregate Array (4 gates)							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Galle	ry Place West 6inch U	pper Power Faregate.avi"			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	6" walker duct, not at ca	pacity (< 10 wires).				
Power Duct - Lower F	aregate Array (3 gates))							
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Galle	ry Place Mezz 20 Low	er Power Fair Gate Video.avi"			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No						
	? Provide additional details of ducts and number of wires.	No	6" walker duct, not at ca	pacity (< 10 wires).				

NEPP-01: Scoping of Existing Power Duct (01/09/15)					
Task	Yes/No	Notes			
Kiosk to Handhole 1 (Distance: 10'))	r				
Was video scoping completed for the entire duct / conduit run?	No	Refer to "WMATA Gallery Place West Power Kiosk to HH1.avi"			
Was pull string installed?	No				
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct collapsed.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A				
andhole 1 to Handhole 2 (Distance: 42')					
Was video scoping completed for the entire duct / conduit run?	No	Refer to "WMATA Gallery Place West Power HH1 to HH2.avi"			
Was pull string installed?	No				
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct collapsed.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A				
andhole 2 to Handhole 3 (Distance: 20')					
Was video scoping completed for the entire duct / conduit run?	No				
Was pull string installed?	Yes				
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct collapsed shortly after opening, no scoping completed.			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	N/A				
landhole 3 to Junction Box to AFC Panel (Distanc	e: 25')				
Was video scoping completed for the entire duct / conduit run?	No	Scoping not required for conduits.			
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	3" conduit with less than 8 wires.			

- Scanning was conducted to identify a proposed duct route between the Kiosk and AFC Panel.

- The scanning results showed that the mezzanine floor has multiple ducts between the Kiosk and the back rooms, and there is no

space to install a new in-floor duct.

- Refer to scanning drawing for the layout of existing ducts on the mezzanine floor.

NEPP-02: Scoping of Alternate Duct (06/01/15)							
	Task Yes/No Notes						
Kiosk to Handhol	le 4 (Distance: 5')						
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to '	B01_MZ020_Gallery Place West_Kiosk to HH4.avi"			
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	6" walker	duct with less than 15 wires.			
Handhole 4 to Ha	ndhole 5 (Distance: 40')		T				
Was video scopii conduit run?	ng completed for the entire duct /	Yes	Refer to '	B01_MZ020_Gallery Place West_HH4 to HH5.avi"			
Was pull string in	stalled?	Yes					
	bstructions or blockages? Provide d specific location.	No					
	uit at capacity? Provide additional dimensions of duct / conduit and	No	6" walker	duct with less than 15 wires.			
Handhole 5 to Ha	ndhole 6 (Distance: 40' approx.)						
Was video scoping completed for the entire duct / conduit run?		Yes	Refer to "B01_MZ020_Gallery Place West_HH6 to HH5.avi"				
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	6" walker	duct with less than 15 wires.			
Handhole 6 to Sh	ared Trough in Room W202 (Dist	ance: 1')					
Was video scoping completed for the entire duct / conduit run?		Yes	Refer to "	B01_MZ020_Gallery Place West_HH6 to Trough.avi"			
Was pull string in	stalled?	Yes					
	bstructions or blockages? Provide d specific location.	No					
	Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and No number of wires.			duct with less than 15 wires.			
		Addit	ional Com	nents			
 The distance of proposed power route from Kiosk to AFC Panel is 136', including 86' of existing alternate duct and 50' of proposed conduit. Alternate duct is in good condition and not at capacity. 							
			Sign Off				
	GFP Representa	tive		WMATA PRGM			
Name:	Mike Butler						
Signature: M.Zun							

Date:

06/01/15

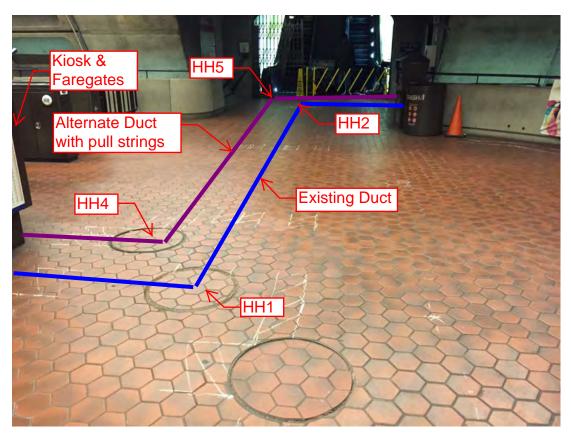


Photo #1: Mezzanine layout showing existing / alternate duct runs.

Photo #2: Mezzanine layout showing existing / alternate duct runs.

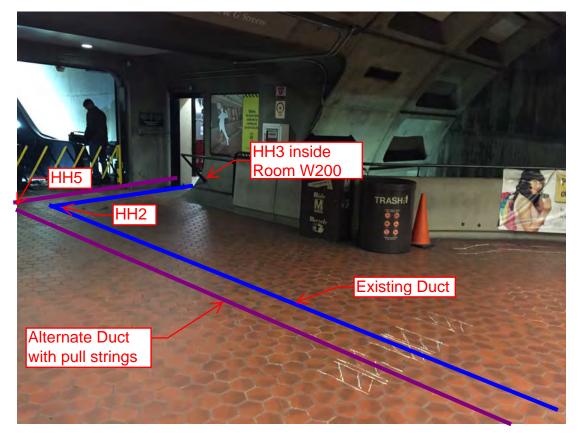


Photo #3: Alternate duct path in Room W200.



Photo #4: Handhole 6 for alternate duct in Room W200.

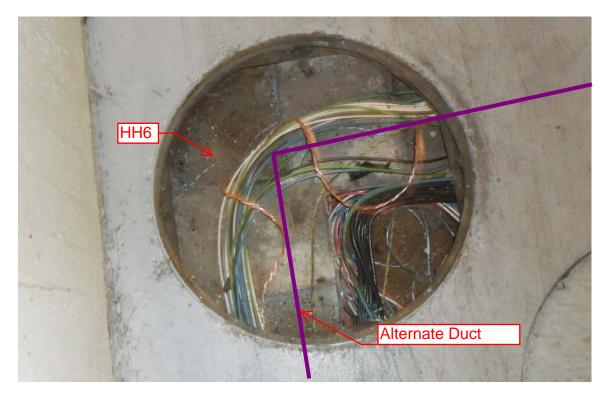


Photo #5: Alternate Duct entry to Shared Trough in Room W202.

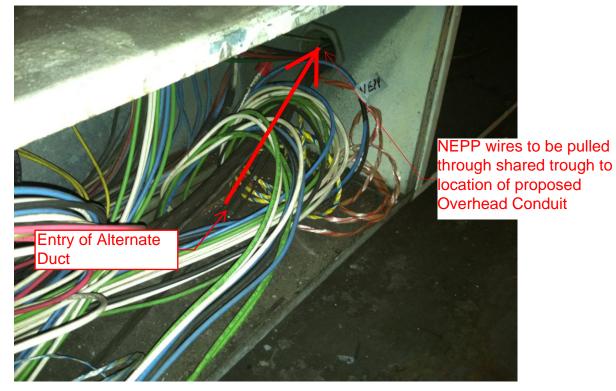
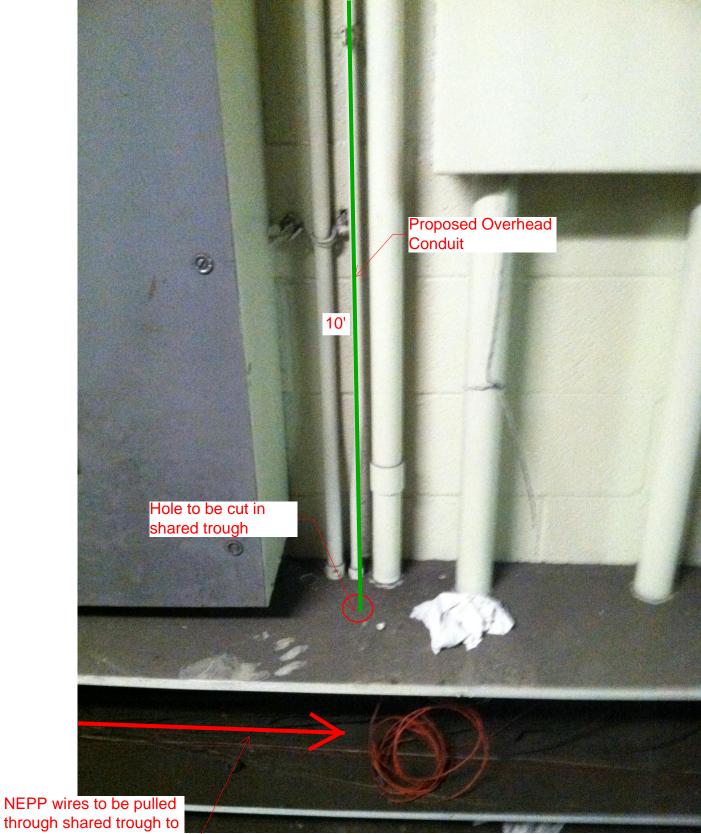


Photo #6: NEPP wires to be pulled through Shared Trough in Room W202.



Photo #7: Proposed Overhead Conduit from Shared Trough in Room W202.



NEPP wires to be pulled through shared trough to location of proposed Overhead Conduit Photo #8: Proposed Overhead Conduit in Room W202.



Photo #9: Proposed Overhead Conduit in Room W202.

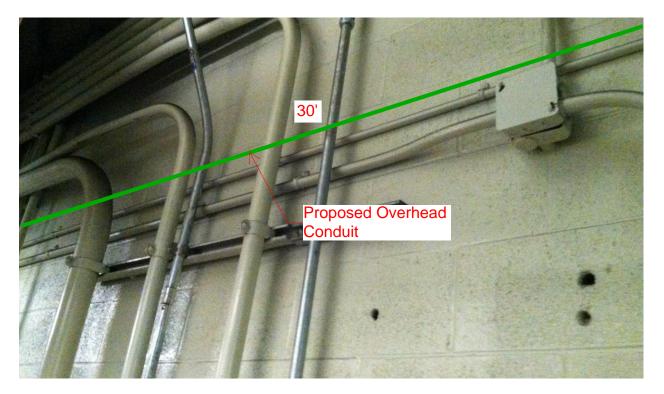


Photo #10: Proposed Overhead Conduit in Room W202.

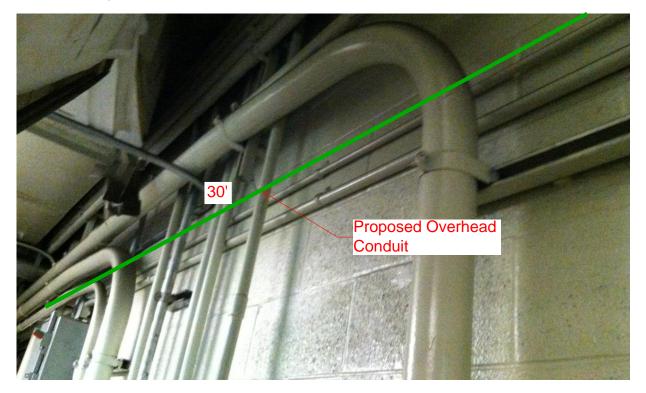
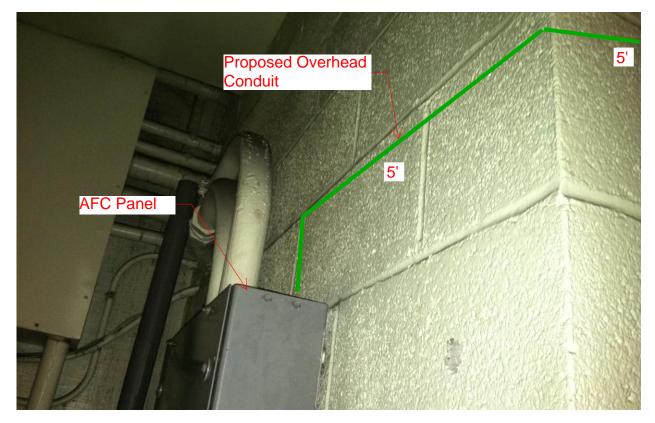


Photo #11: Proposed Overhead Conduit in Room W202.



Photo #12: Proposed Overhead Conduit feeding AFC Panel in Room W202.



NOTES:

1. ALL INFORMATION CONSERVING DUCTS AND CONDULTS IN BASED ON INFORMATION SUPPLIED TO CUBIC WESTERN OATA BY BECKTEL.

& YOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING

I THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE X. DRAWN THRU THE MACHINE T

. FOR AS BUILT CONDITIONS SEE SHEET 2

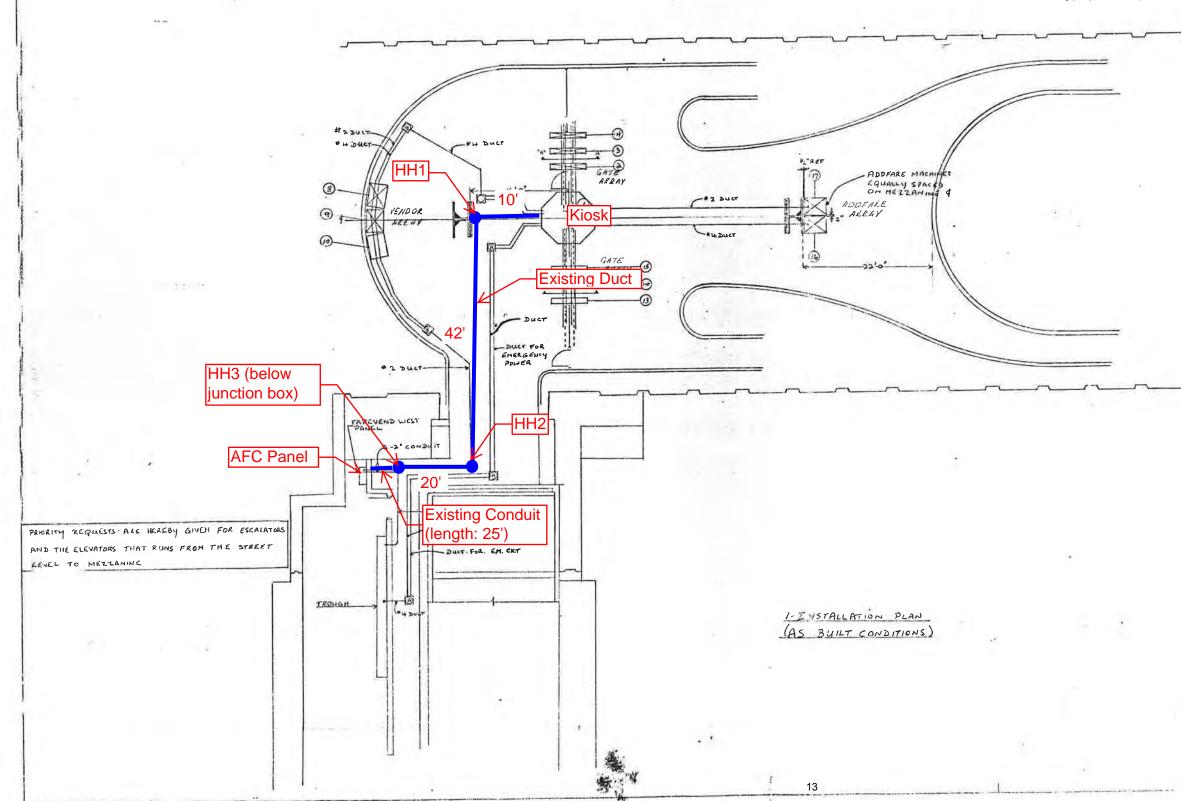
5. FOR REF DWGS SEE SUPPORT DOLUMENT PACKAGE FOR THIS MEZZANINE





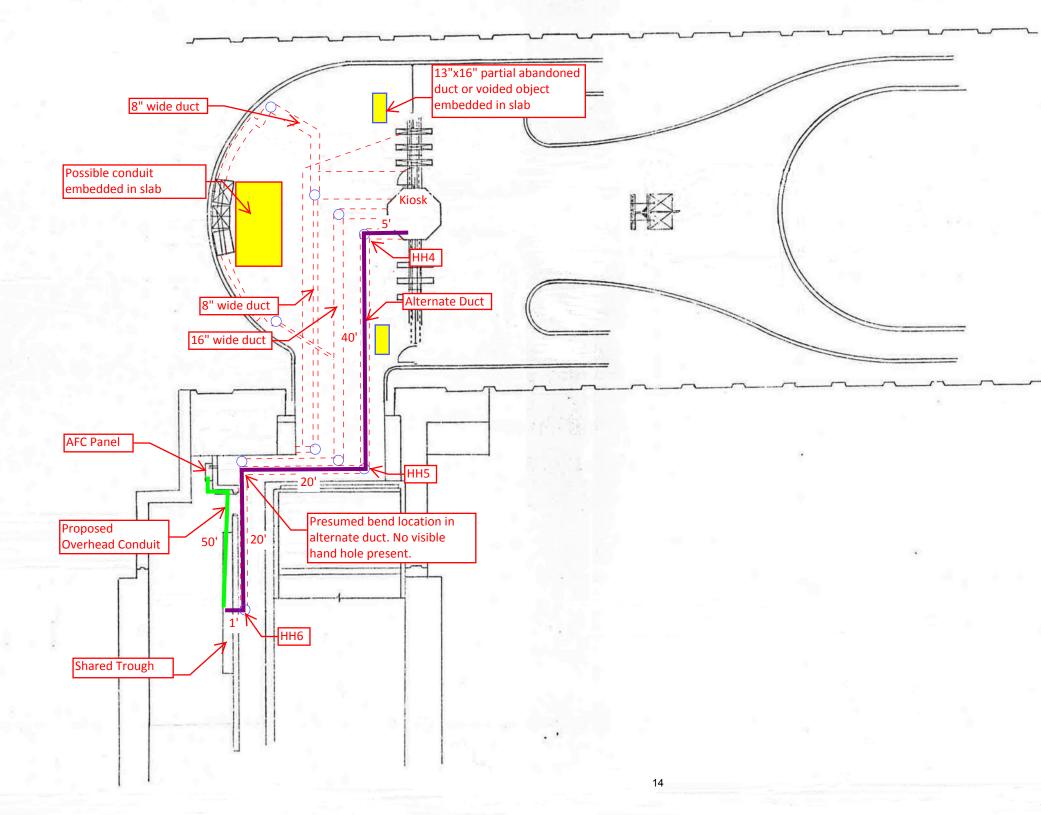
UIGW A'-A"

+ 4 DUCTS -



REVISIONS DESCRIPTION DATE APVD AS BUILT DRAWING REV. A 5-10-77 -**VIE KINH** CUBIC WESTERN DATA CONTRACT NUMBER A subledity of CLC is Corpolation 5650 KEAFNY MESA BOAD + POUT OFFICE BUX 80787 + SAN DIEGO CA +2138 GRELERY PLACE UNST STATICN AFC MACHINES GRAWN TT DRAWING NUMBER DESIGN ACTIVITY APPROVAL Sec. Sec. 1 026-0383 APPROVED SHEET SCALE 14.0

PROPOSED POWER ROUTE FROM KIOSK TO AFC PANEL





Mezzanine Inspection Report (Scoping)								
Date: 10/08/2014 Station Name: B02 Judiciary Square (East) Mezzanine #: 023 Completed By: Mike Butler								
	Summary							
Scoping of power ducts in both Upper and Lower fare communication ducts under a separate contract for CA communication ducts. Scoping was completed betwee Kiosk and Shared Trough was installed previously un integrity. It was not possible to scope or install pull str posed a safety hazard to contractor. Total power conductor run is approximately 75 feet bet Scanning is <u>not</u> required at this mezzanine.	AT6 wire insta en Kiosk and der a separa ing between	allation; therefore, no scop Shared Trough (adjacent t te contract and was check the Shared Trough and Af	ing was completed or pull strings installed in the to AFC Panel). Pull string in power duct between ked and tested to confirm the strings' routing and					
	Scoping o	of Faregate Array(s)						
Task	Yes/No		Notes					
Communications Duct – Upper Faregate Array (3 f	aregates)							
Was video scoping completed for the entire duct run?	N/A							
Were pull strings installed at all faregates in the array?	Yes		ct, wires, and pull strings (labeled 'AFC') were ate array prior to inspection work (Photos 1 & 2).					
Were there any obstructions or blockages? Provide details of type and specific location.	N/A							
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	Communication ducts a	re not at capacity.					
Communications Duct - Lower Faregate Array (3 f	aregates)							
Was video scoping completed for the entire duct run?	N/A							
Were pull strings installed at all faregates in the array?	Yes		ct, wires, and pull strings (labeled 'AFC') were ate array prior to inspection work.					
Were there any obstructions or blockages? Provide details of type and specific location.	N/A							
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	Communication ducts a	re not at capacity.					
Power Duct - Upper Faregate Array (3 faregates)		ſ						
Was video scoping completed for the entire duct run?	Yes	WMATA Judiciary Squa	re East Upper Power Duct Video.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	Eight (8) wires were ider	ntified in 4" wide / 1" deep ducts.					
Power Duct - Lower Faregate Array (3 faregates)								
Was video scoping completed for the entire duct run?	Yes	WMATA Judiciary Squa	re East Lower Power Duct Video.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	Eight (8) wires were ider	ntified in 4" wide / 1" deep ducts.					

Task	Yes/No	
	Tes/NO	Notes
iosk to Handhole 1 (length: 45 feet)	T	
Nas video scoping completed for the entire duct / conduit run?	Yes	WMATA Judiciary Square East Power Kiosk to Handhole1 Video.avi
Nas pull string installed?	Yes	Pull string in power duct was installed previously under a separate contract and was checked and tested to confirm the strings' routing and integrity.
Nere there any obstructions or blockages? Provide details of type and specific location.	No	
s the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	Ten (10) wires were identified in 4" wide / 1" deep ducts.
andhole 1 to Handhole 2 (length: 15 feet)	1	
Nas video scoping completed for the entire duct / conduit run?	Yes	WMATA Judiciary Square East Power Handhole 1 to Handhole 2 Video.av
Nas pull string installed?	Yes	Pull string in power duct was installed previously under a separate contrac and was checked and tested to confirm the strings' routing and integrity.
Nere there any obstructions or blockages? Provide details of type and specific location.	No	
s the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	Ten (10) wires were identified in 4" wide / 1" deep ducts.
andhole 2 to Shared Trough (length: 10 feet)	1	
Was video scoping completed for the entire duct / conduit run?	No	Energized wires in shared trough prevented video scoping.
Nas pull string installed?	Yes	Pull string in power duct was installed previously under a separate contract and was checked and tested to confirm the strings' routing and integrity.
Nere there any obstructions or blockages? Provide details of type and specific location.	No	
s the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	Ten (10) wires were identified in 4" wide / 1" deep ducts.
hared Trough/Conduit to AFC Panel (length: 5 fe	et)	
Nas video scoping completed for the entire duct / conduit run?	No	Energized wires in shared trough prevented video scoping.
Nas pull string installed?	No	There is currently no pull string between shared trough and AFC Panel.
Were there any obstructions or blockages? Provide details of type and specific location.	No	
s the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	The conduit between the Shared Trough and AFC Panel is not at capacity
	Observation	ns / Issues / Next Steps
Power conductor run is approximately 75' between the	he Kinsk and	AFC Panel
V/A - Not Applicable		

Sign Off		
	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:	Mizur	
Date:	10/29/2014 16	



Photo #1: B02 Judiciary Square (East) – Faregate with new comm. duct and cable installed

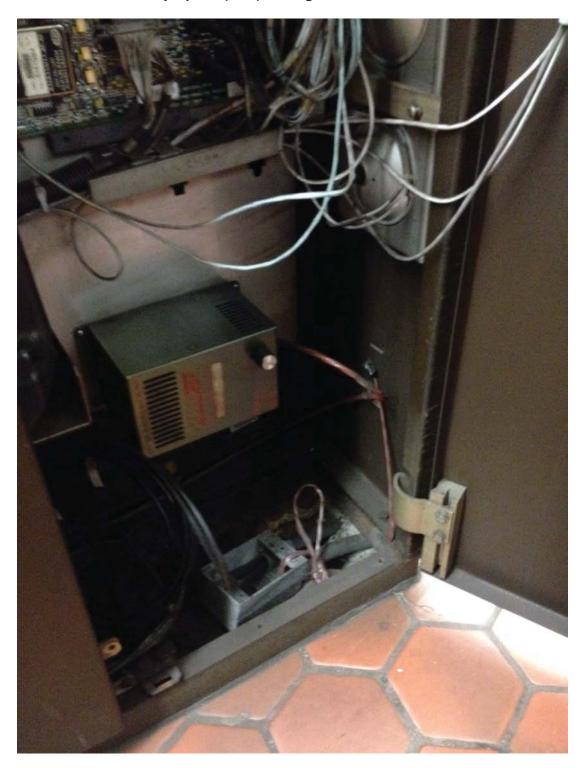


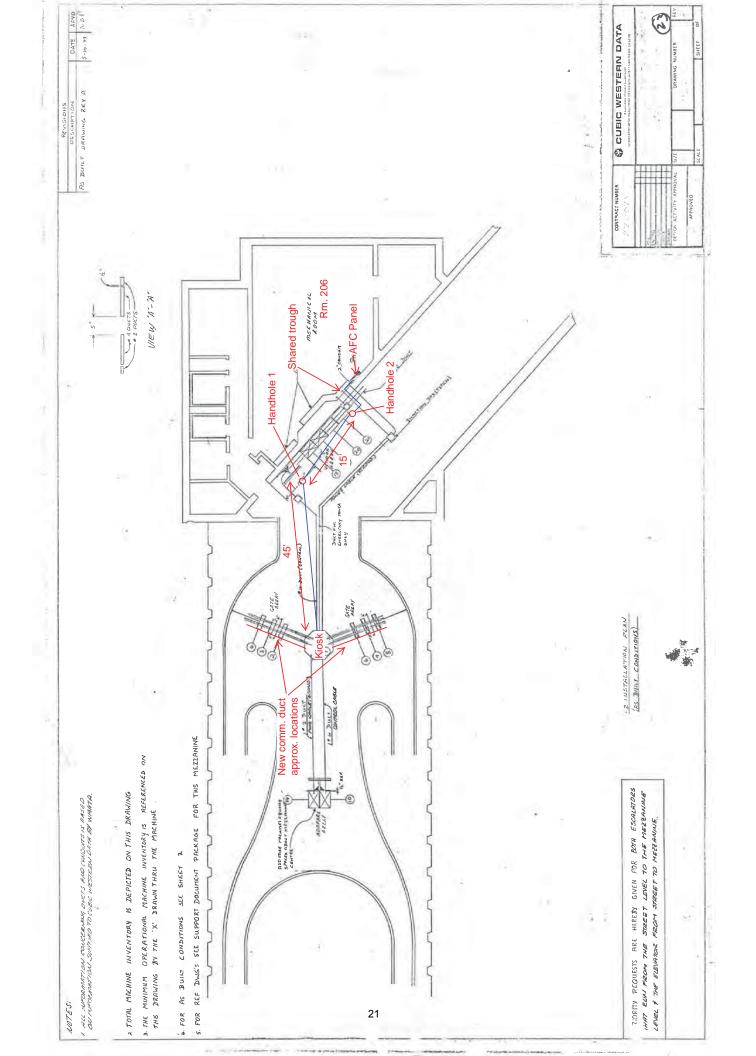
Photo #2: B02 Judiciary Square (East) – Faregate with new comm. duct and cable installed

Photo #3: B02 Judiciary Square (East) – Mezzanine level handholes. Power duct run is through handholes at the bottom center and center-right of photo. Handhole near the center of photo is not part of power duct run.



Photo #4: B02 Judiciary Square (East) – Shared cable trough in room 206. Power duct enters trough from the bottom at left.





	Mezzanine Inspection Report (Scoping)						
Date: 11/05/14	Station Name: B02 Judiciary S	Square West	Mezzanine #: 022	Completed By: Mike Butler			
			Summary				
was successfully com and pull string installa Trough adjacent to Af wires. WEAA, WMP, 1 to identify Handhole 2 A proposed conduit ru would run along the co concrete walls above run along the top of th	pleted for Upper and Lower Far tion could not be completed bet FC Panel. Due to the number of WMPB, WME, WMPA, WMPP, a 2 as it appears to have been rem un has been identified between the eiling in the mezzanine area and	lation was pa egate Arrays ween Kiosk a wires in the and WEA all loved or cove he Kiosk and I then drop d m 203. A thi	artially completed for this is artially completed for this is and AFC Panel. There we shared trough, it was not feed into the shared troug ered up, prohibiting access the AFC Panel (see attac own and run along the was rd core drill would be used	mezzanine. Video scoping and pull string installation dition and not at capacity. However, video scoping ere energized wires found in Handhole 1 and Shared possible to determine the origin of the energized gh (refer to photos). In addition, it was not possible is and verification of duct route. ched photos and drawing). The proposed conduit II. The conduit would be core drilled through the d to enter Room 205. The proposed conduit would			
		Scoping of	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications Duc	ct – Upper Faregate Array (2 g	ates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to "WMATA Judic	ciary Square West Upper Comm Duct Video.avi"			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	4" Power Duct with less	s than 8 wires.			
Communications Duc	ct - Lower Faregate Array (3 ga	ates)					
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Judio	ciary Square West Lower Comm Duct Video.avi"			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	4" Power Duct with less	s than 8 wires.			
Power Duct - Upper F	aregate Array (2 gates)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Judio	ciary Square West Upper Power Duct Video.avi"			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	6" Power Duct with less	s than 8 wires.			
Power Duct - Lower F	Faregate Array (3 gates)		1				
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to "WMATA Judic	ciary Square West Lower Power Duct Video.avi"			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No	6" Power Duct with less	s than 8 wires.			

	Scoping	g of Powe	r Duct - Ki	osk to AFC Panel	
	Task	Yes/No		Notes	
Kiosk to Handhol	e 1 (Distance: 60')		1		
Was video scopir conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.	
Was pull string installed?		No			
Were there any old details of type and	bstructions or blockages? Provide d specific location.	N/A			
Is the duct / condu details about the o number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" Power I	Duct	
Handhole 1 to Ha	ndhole 2 (Distance: Unknown)		1		
Was video scopir conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.	
Was pull string in	stalled?	No			
Were there any ol details of type and	bstructions or blockages? Provide d specific location.	N/A	Location o	f Handhole 2 is not visible on the mezzanine floor.	
details about the onumber of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" Power I	Duct	
Handhole 2 to Sha	ared Trough (Distance: Unknown)	1		
Was video scopir conduit run?	ng completed for the entire duct /	No	Could not video scope or install pull strings due to energized wires.		
Was pull string in	Was pull string installed?				
Were there any obstructions or blockages? Provide details of type and specific location.		N/A	Location of Handhole 2 is not visible on the mezzanine floor.		
Is the duct / condu details about the o number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" Power Duct		
Shared Trough to	AFC Panel (Distance: 25')				
Was video scopir conduit run?	ng completed for the entire duct /	No	Could not	video scope or install pull strings due to energized wires.	
Was pull string in	stalled?	No			
Were there any ol details of type and	bstructions or blockages? Provide d specific location.	N/A			
Is the duct / condu details about the o number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	25' long tr	bugh	
		Observation	ns / Issues /	Next Steps	
- The propose	ed overhead power conduit run from	n the Kiosk t	o the AFC F	anel is 185'. Refer to AFC As-built and photos for details.	
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	01/02/2015				
			23		

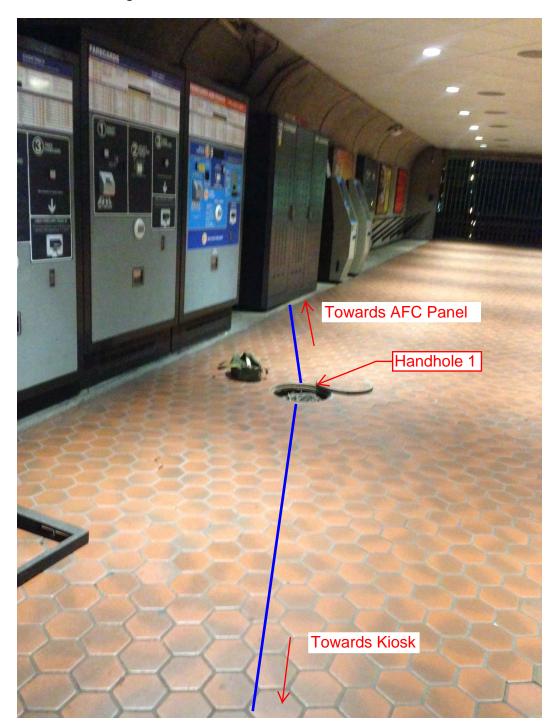


Photo # 1 – Existing Duct run from Kiosk to Hand Hole 1 on mezzanine floor.

Photo # 2 – Shared Trough in Room 205.

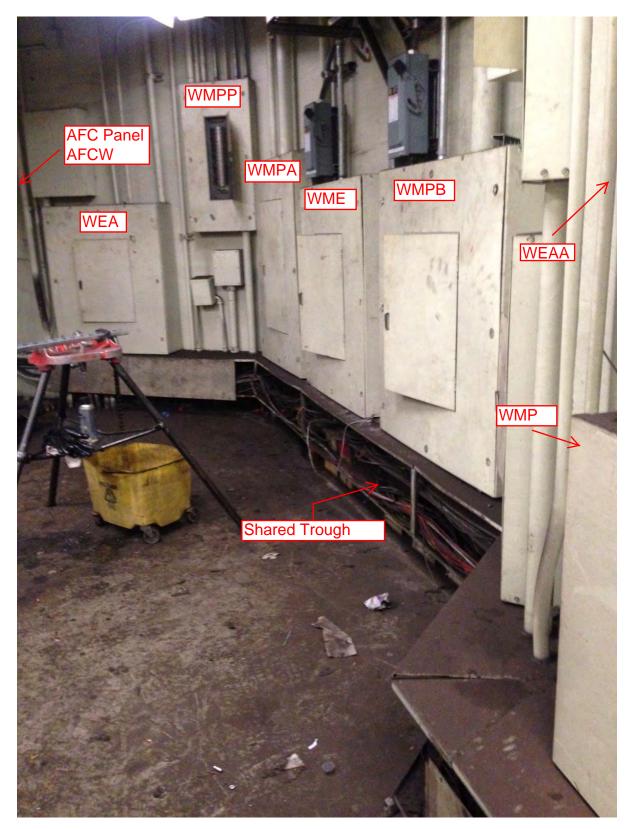


Photo # 3 – Proposed Conduit Run

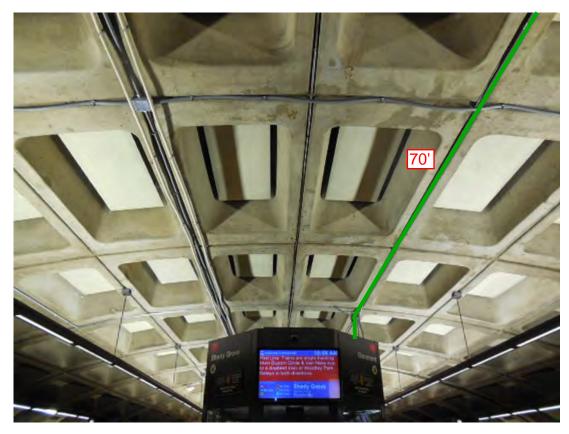


Photo # 4 – Proposed Conduit Run



Photo # 5 – Proposed Conduit Run from mezzanine to Room 201

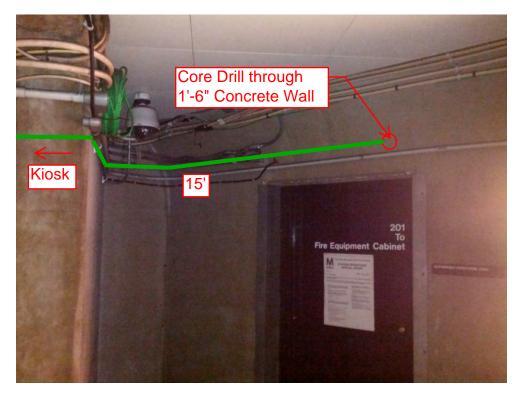
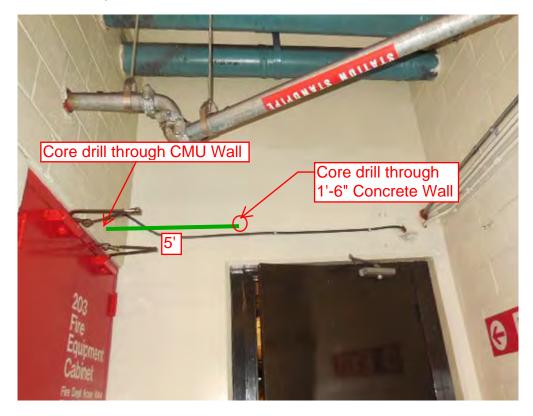


Photo # 6– Proposed Conduit Run between Room 201 and Room 203



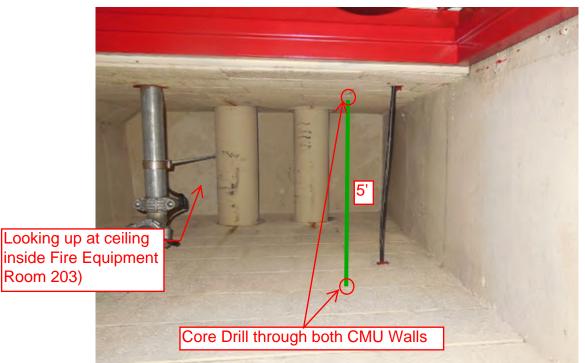


Photo # 7 – Proposed Conduit Run (Room 203 and Room 205) - looking up at ceiling inside Fire Equipment Room 203.

Photo # 8 – Proposed Conduit Run in Room 205

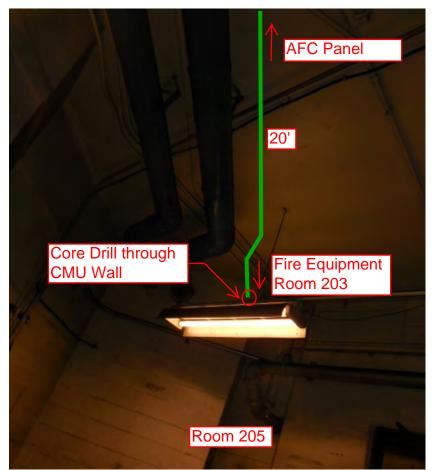
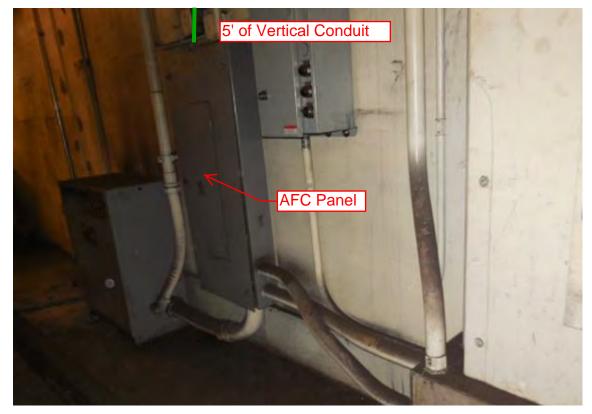
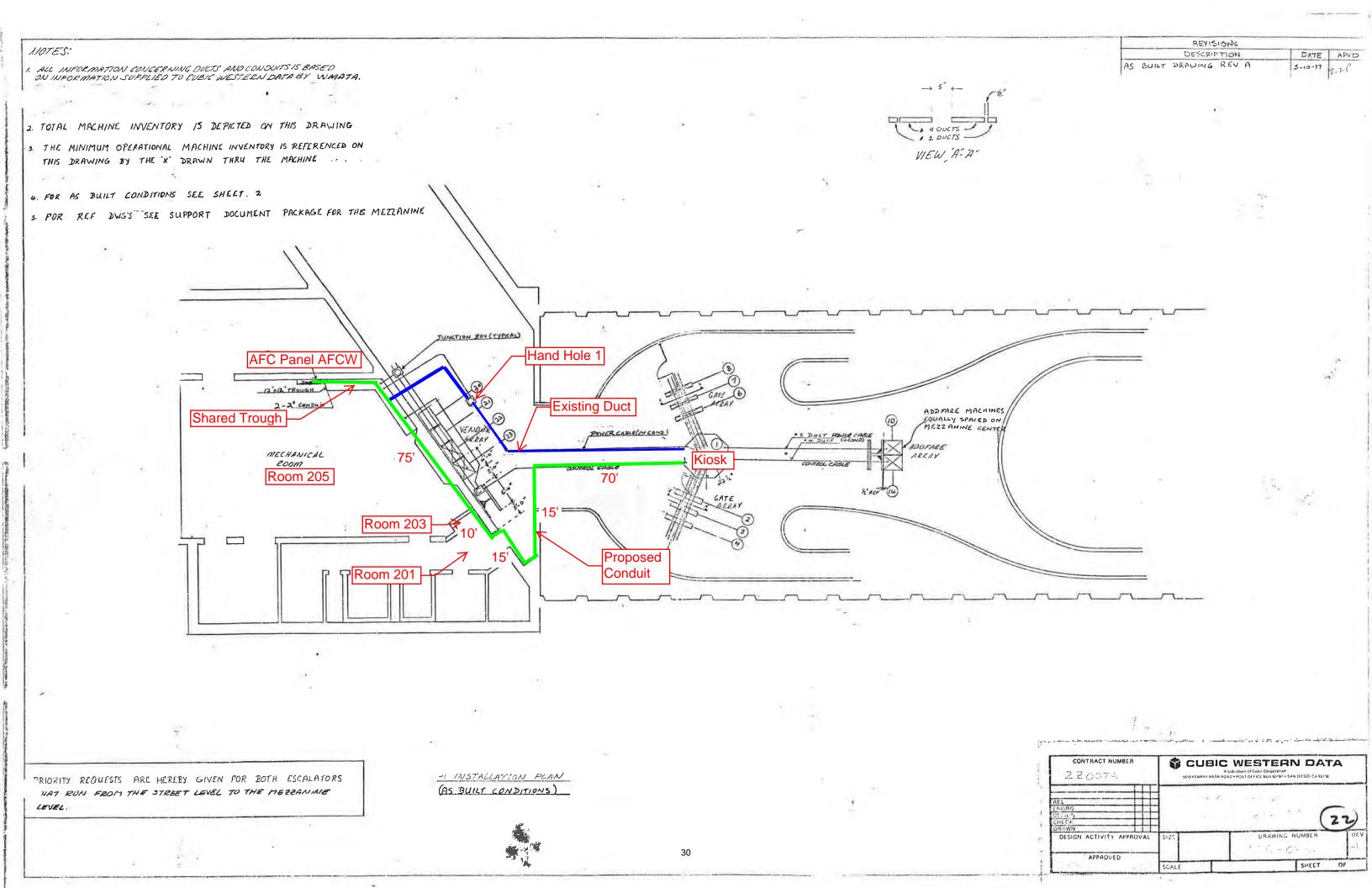


Photo # 9 – Proposed Conduit Run in Room 205



Photo # 10 – Proposed Conduit Run in Room 205





Date: 01/06/15	Station Name: B03 Union Sta	tion North	Mezzanine #: 025	Completed By: Mike Butler			
	Summary						
Upper and Lower c an apron skirt obstr presence of energin A conduit run has t the Kiosk to the ad	communication ducts, as well as the ruction at the entrance to the duct. T zed wires; subsequent scoping atte peen proposed between the Kiosk a	E Lower power The power di mpts were n and AFC Par and then con	er duct. However, it was n uct form the Kiosk to the A ot completed as per direc nel (refer to attached draw tinue along the wall until i	vings and photos). The proposed conduit will run fror t reaches the wall outside of Mechanical Room 214.			
		Scoping of	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications	Duct – Upper Faregate Array (5 f	aregates)					
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Union	n Station N Upper Comm Fairgate Video.avi"			
Were pull strings ir array?	nstalled at all faregates in the	Yes					
Were there any obs details of type and	structions or blockages? Provide specific location.	No					
	city? Provide additional details of ducts and number of wires.	No	4"walker duct with less	than 8 wires			
Communications	Duct - Lower Faregate Array (8 fa	aregates)					
Was video scoping run?	g completed for the entire duct	Yes	Refer to "WMATA Union	n Station N Lower Comm Fairgate Video.avi"			
Were pull strings in array?	nstalled at all faregates in the	Yes					
Were there any ob- details of type and	structions or blockages? Provide specific location.	No	No obstructions, but there was limited space around the 45 degree be the duct.				
	city? Provide additional details ns of ducts and number of wires.	No	4"walker duct with less than 12 wires				
Power Duct - Uppe	er Faregate Array (5 faregates)						
Was video scoping run?	g completed for the entire duct	No	Video scoping not comp	pleted as per direction from WMATA.			
Were there any obs details of type and	structions or blockages? Provide specific location.	Yes	Duct was inaccessible of	due to skirt obstruction.			
Is the duct at capac about the dimensio	city? Provide additional details ons of ducts and number of wires.	N/A					
Power Duct - Lowe	er Faregate Array (8 faregates)	-					
Was video scoping run?	g completed for the entire duct	Yes	Refer to "WMATA Union	n Station N Lower Power Fairgate Video.avi"			
Were there any ob- details of type and	structions or blockages? Provide specific location.	No	No obstructions, but the the duct.	ere was limited space around the 45 degree bend in			

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No		Notes		
Kiosk to AFC Par	nel (Distance: 75')	1				
Was video scopii conduit run?	ng completed for the entire duct /	No	Video sco	oping not completed as per direction from WMATA.		
Was pull string in	stalled?	No				
Were there any o details of type and	bstructions or blockages? Provide d specific location.	N/A				
Is the duct / conducted details about the only number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	N/A				
		1	1			
		1	1			
		Observation	ns / Issues	/ Next Steps		
The proposed ov	erhead conduit run is approximately	y 125' from tl	he Kiosk to	the AFC Panel (refer to photos and drawing).		
			Sign Off			
	GFP Representa	itive		WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizun					
Date:	01/09/15					



Photo #2 - Proposed conduit run along overhead beam to adajcent wall

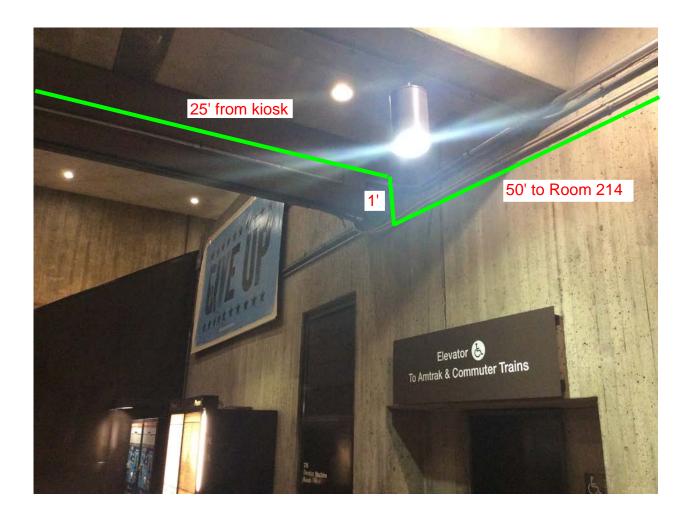


Photo #3 - Proposed conduit run along adajcent wall to Mechanical Room 214

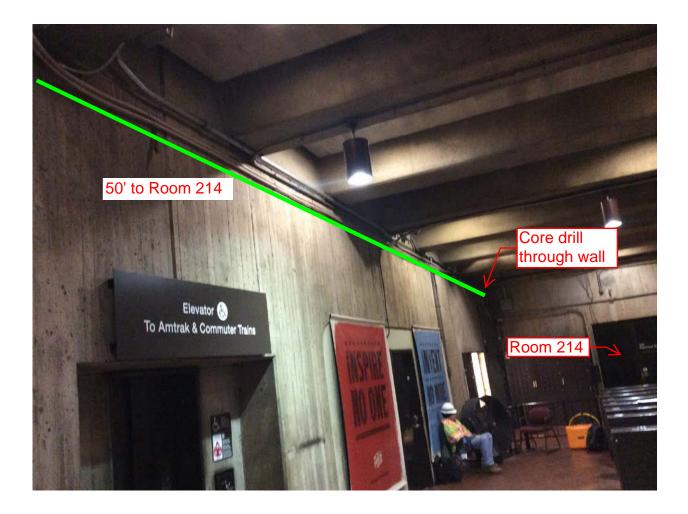


Photo #4 - Proposed conduit run along wall to Mechanical Room 214 (core drilll required)

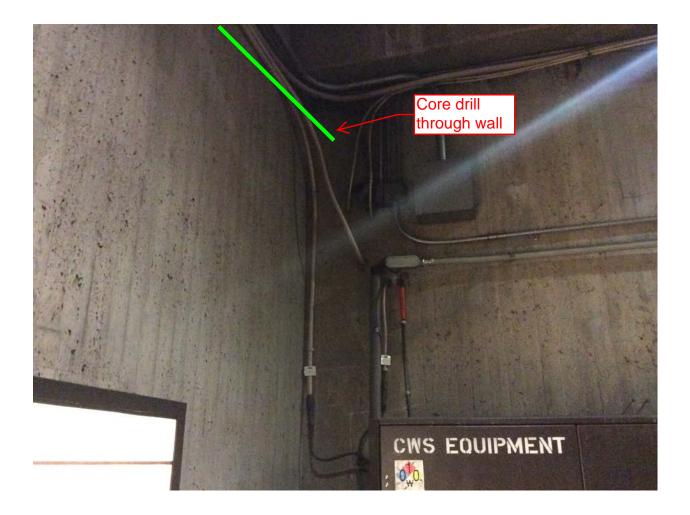


Photo #5 - Proposed conduit run along wall inside Mechanical Room 214 (core drilll required)

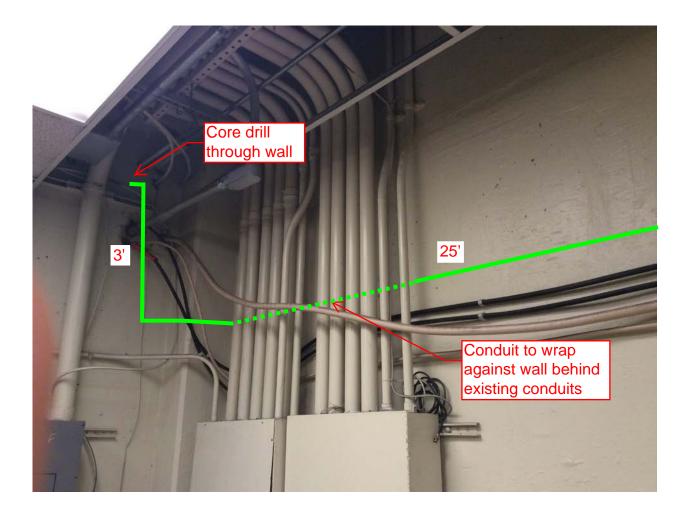


Photo #6 - Proposed conduit run along wall inside Mechanical Room 214

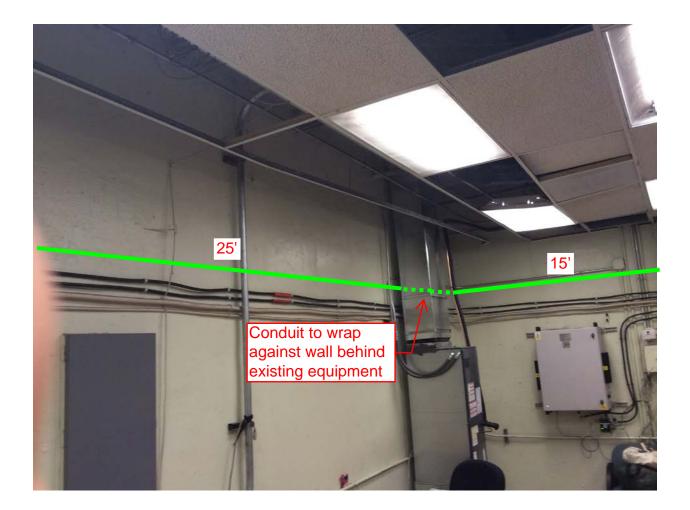
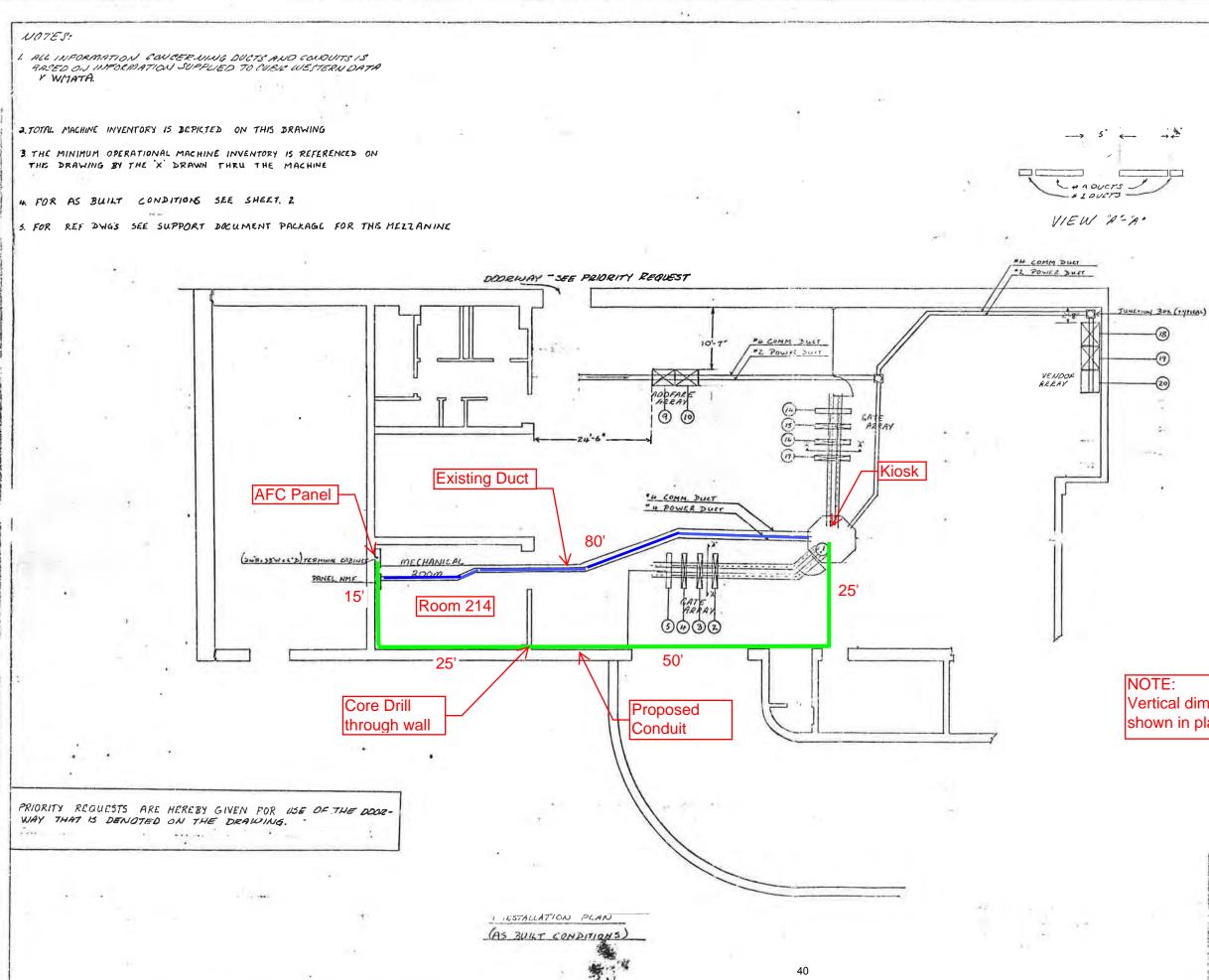


Photo #7 - Proposed conduit run connecting to AFC Panel inside Mechanical Room 214





REVISIONS DESCRIPTION DATE APVD AS BUILT DRAWING REVA 5-10-77 20791 Vertical dimensions for proposed conduit not shown in plan view. Refer to photographs.

CONTRACT NUMBER	CUBIC WESTERN DATA As Infidiary of Cubic Carporation MSD KEARINY WESA RUADY POST OFFICE BD: 90767 - SAN DIEGO CA 92130		
REL			ale have a set of the second s
APPROVED	SIZC		DRAWING NUMBER

Mezzanine Inspection Report (Scoping)							
Date: 09/18/2014 Station Name: B04 Rhode Isl	and Avenue	Mezzanine #: 026	Completed By: Mike Butler				
· ·		Summary					
Scoping of power/ communication ducts in Upper and pull string installation completed for power duct betwee the kiosk entrance to the lower faregate array - there However, this did not impact the scoping and pull stri Total power conductor run is approximately 95 feet be Scanning is <u>not</u> required at this mezzanine.	een Kiosk an appears to b ng installation	d AFC Panel. All ducts are e mortar and debris blockin as there was an alternation	not at capacity. A minor obstruction was found at ng the entrance to one of the power ducts.				
	Scoping	of Faregate Array(s)					
Task	Yes/No		Notes				
Communications Duct – Upper Faregate Array (4 f	aregates)						
Was video scoping completed for the entire duct run?	Yes	WMATA Rhode Island U	pper Comm Video.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	Duct is 4" wide and 1" de	ep with less than 10 wires inside.				
Communications Duct - Lower Faregate Array (4 f	aregates)						
Was video scoping completed for the entire duct run?	Yes	WMATA Rhode Island L	ower Comm Video.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	Duct is 4" wide and 1" de	eep with less than 10 wires inside.				
Power Duct - Upper Faregate Array (4 faregates)	T						
Was video scoping completed for the entire duct run?	Yes	WMATA Rhode Island U	pper Power Left Video.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	Duct is 4" wide and 1" de	eep with less than 10 wires inside.				
Power Duct - Lower Faregate Array (4 faregates)	1						
Was video scoping completed for the entire duct run?	Yes	WMATA Rhode Island P	ower Left Video.avi				
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	- there appears to be mo	and at the kiosk entrance to the lower faregate array rtar and debris blocking the entrance to one of the e power duct with clear pathway was used.				
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	Duct is 4" wide and 1" de	ep with less than 10 wires inside.				

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No	Notes			
Kiosk to AFC Par	nel (Distance: 110')					
Was video scopi conduit run?	ng completed for the entire duct /	Partially	Refer to "WMATA BrooklandLLeft Power duct Kiosk to AFC Video.avi " and WMATA Brookland Right Power duct Kiosk to AFC Video.avi"			
Was pull string in	stalled?	No				
	bstructions or blockages? Provide d specific location.	Yes	An obstruction, which appears to be a collapsed duct was found in the power duct at 40' from the Kiosk. The scoping showed that the duct also has extensive corrosion and is in bad condition.			
	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" walker duct with less than 15 wires			
			T			
		I				
			-			
		Observation	ns / Issues / Next Steps			
The proposed po	wer duct run is approximately 65' fr	om Kiosk to	to the existing power duct run from the Kiosk to the AFC Panel. Room C101. to AFC Panel (Fare Vend 2) in Room C106.			
			0' 0 <i>tt</i>			
	GFP Representa	tive	Sign Off WMATA PRGM			
Name:	Mike Butler					
Signature:	Mizun					
Date:	01/03/2015					

Photo # 1 – Existing and proposed duct run from Kiosk (Angle 1).

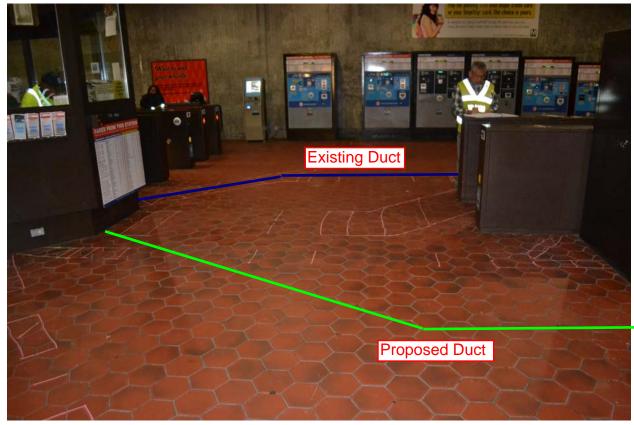


Photo # 2 – Existing and proposed duct run from Kiosk (Angle 2).



Photo # 3 – Continuation of existing and proposed duct run from Kiosk (Angle 1).

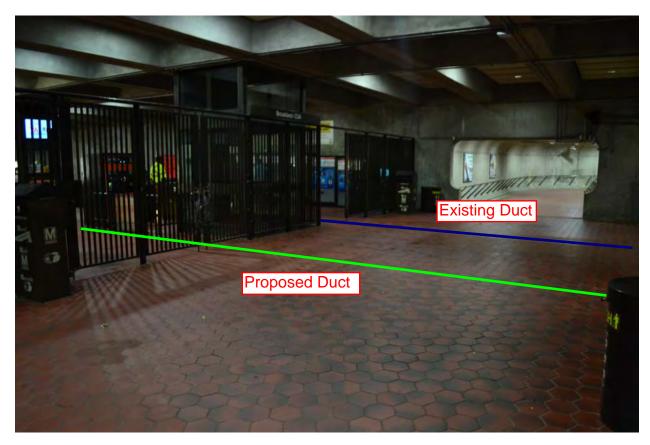


Photo # 4– Continuation of proposed duct run from Kiosk (Angle 2)



Photo # 5 – Proposed duct approach to back rooms



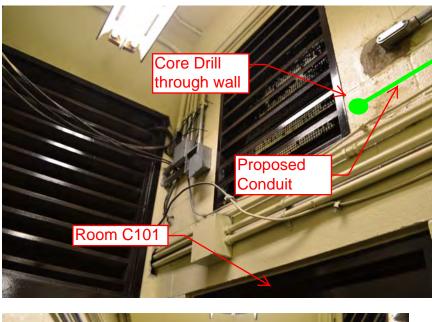


Photo #6 - Proposed conduit from Elevator Machine Room C101



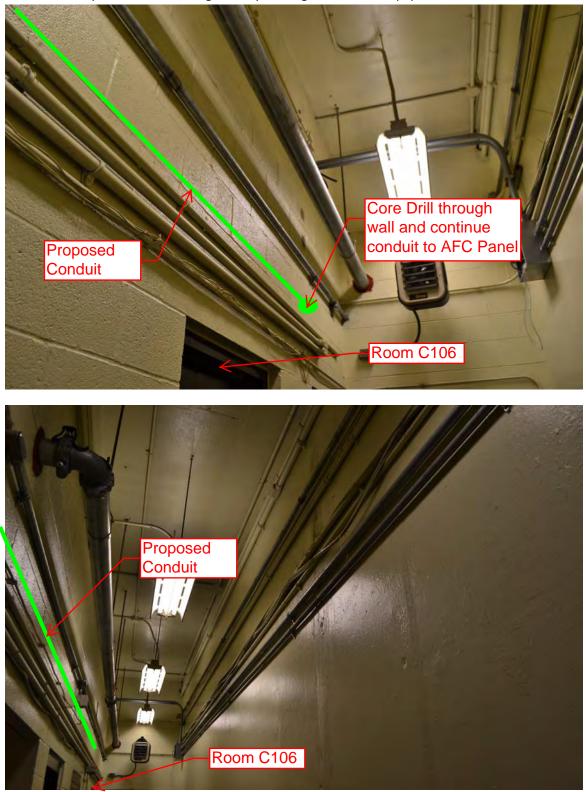
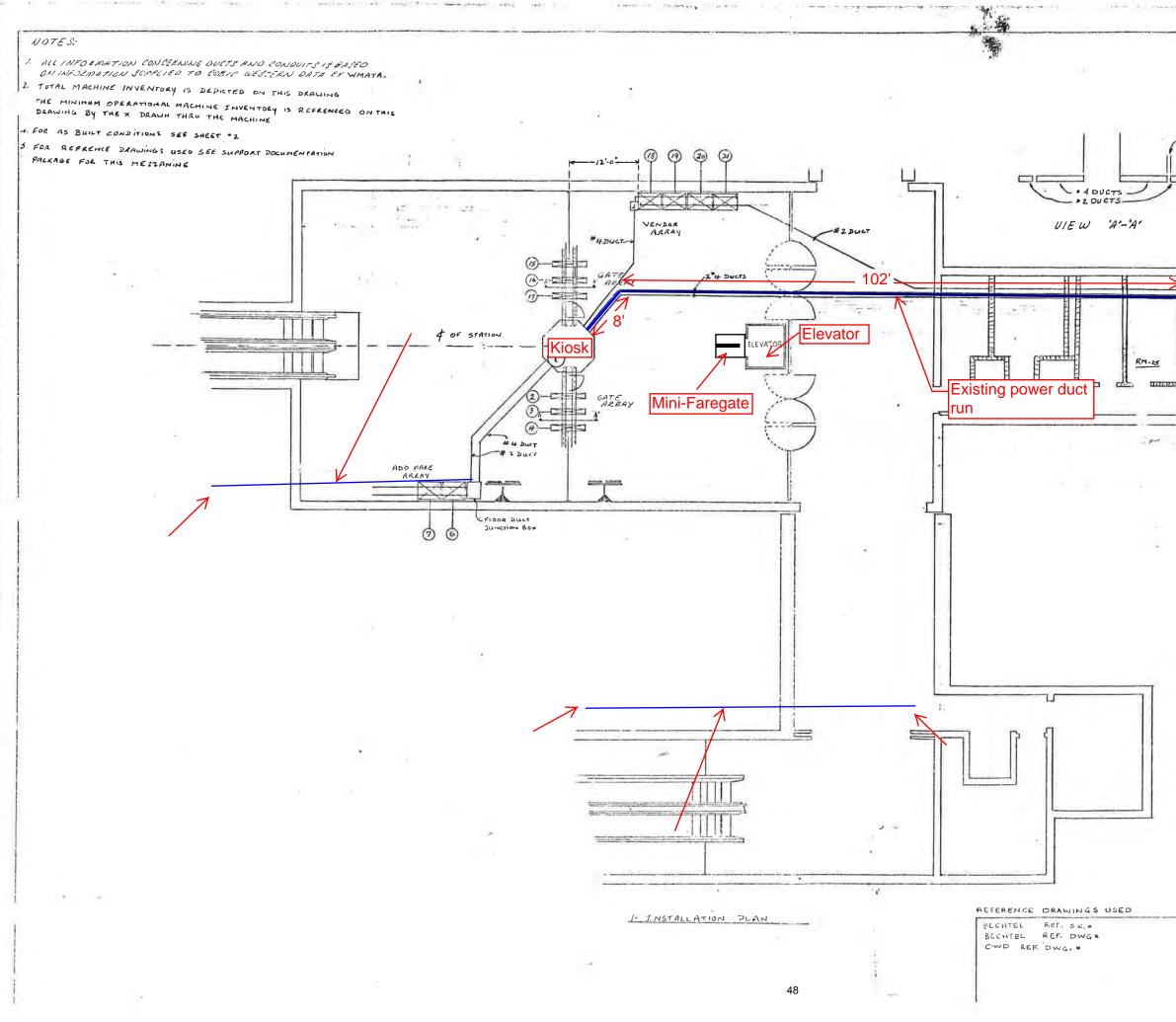


Photo #7 - Proposed conduit along hallway leading to Electrical Equipment Room C106

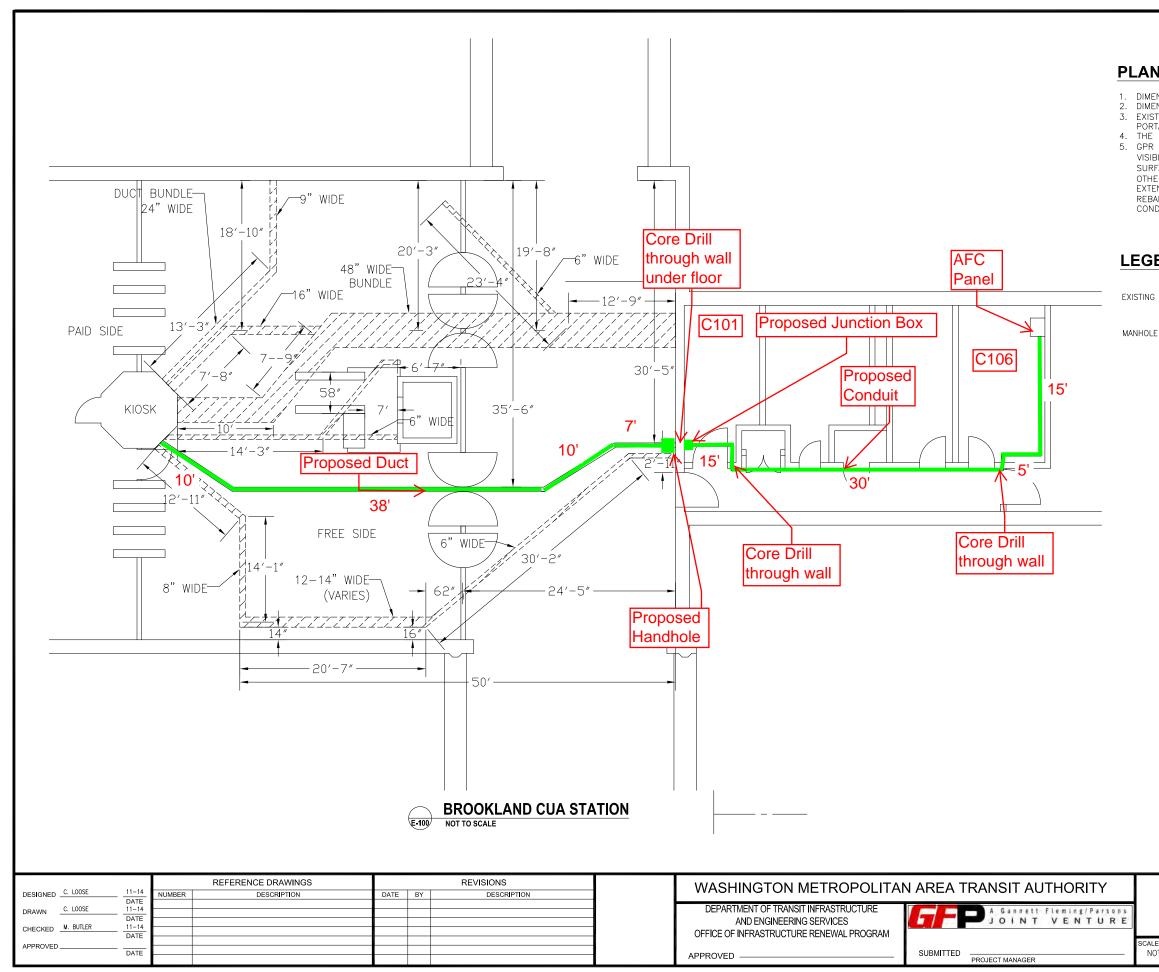


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PLAN NOTES:

DIMENSIONS ARE IN FEET AND INCHES. DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS ARE FOR REFERENCE ONLY. EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE. THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY. 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

MH

		t no. XXXX				
15-NEPP-01 IN - FLOOR DUCT INSPECTIONS B05 BROOKLAND CUA (M027) PROPOSED ELECTRICAL DUCT PATH						
SCALE NOT TO SCALE	drawing no. B05-E-100	XXX				

Mezzanine Inspection Report							
Date: 10/16/14	Station Name: B05 Brookland	-CUA	Mezzanine #: 027	Completed By: Mike Butler			
			Summary				
Video scoping and pull string installation was only partially completed for this mezzanine. Video scoping and pull string installation was completed for communication ducts in Upper and Lower Faregate Arrays; respective power ducts were also video scoped. It should be noted that extensive rust and corrosion was found in upper/lower faregate ducts, however there appears to be sufficient capacity for new wires. Contractor was unable to install pull string in power duct between Kiosk and AFC Panel due to an obstruction found at 40' from kiosk entrance; the obstruction was recorded by video scoping. Scanning of the mezzanine floor was completed to determine the existing layout of in-floor ducts and a proposed power duct / conduit run between the Kiosk and AFC Panel. A proposed power duct, that will run along a different path than the original duct run due to space constraints (see drawing), is proposed from the Kiosk to just outside Room C101 (Elevator Machine room). A proposed handhole is located in the mezzanine floor just outside Room C101. The duct will transition to conduit inside Room C101 via a junction box. The conduit will proceed up the west wall of Room C101 and across the ceiling before exiting the room through the wall next to door (wall to be core drilled). The conduit will continue along the hallway until it reaches the entrance to Room C106 (see photo #6 and7), where it will then pass through the wall (wall to be core drilled) and proceed to the AFC Panel.							
		Scoping o	of Faregate Array(s)				
-	Fask	Yes/No		Notes			
Communications Duc	t – Upper Faregate Array (4 fa	regates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Brook	and Upper Comm Fairgate Video.avi"			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spe	ctions or blockages? Provide cific location.	No	Extensive duct corrosior	n evident.			
	? Provide additional details of ducts and number of wires.	No	4" walker duct with less	than 10 wires			
Communications Duc	t - Lower Faregate Array (4 fa	regates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Brookl	and Lower Comm FairgateVVideo.avi "			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and spe	actions or blockages? Provide ecific location.	No	Extensive duct corrosior	n evident.			
	? Provide additional details of ducts and number of wires.	No	4" walker duct with less	than 10 wires			
	aregate Array (4 faregates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Brookl	and Upper Power Fairgate Video.avi "			
Were there any obstru details of type and spe	ctions or blockages? Provide ecific location.	No	Extensive duct corrosior	n evident.			
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less	than 12 wires			
Power Duct - Lower F	aregate Array (4 faregates)						
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Brook	and Lower Power Fairgate Video.avi "			
Were there any obstru details of type and spe	actions or blockages? Provide ecific location.	No	Extensive duct corrosior	n evident.			
	? Provide additional details of ducts and number of wires.	No	6" walker duct with less	than 12 wires			

Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No	Notes			
Kiosk to AFC Par	nel (Distance: 110')					
Was video scopi conduit run?	ng completed for the entire duct /	Partially	Refer to "WMATA BrooklandLLeft Power duct Kiosk to AFC Video.avi " and WMATA Brookland Right Power duct Kiosk to AFC Video.avi"			
Was pull string in	stalled?	No				
	bstructions or blockages? Provide d specific location.	Yes	An obstruction, which appears to be a collapsed duct was found in the power duct at 40' from the Kiosk. The scoping showed that the duct also has extensive corrosion and is in bad condition.			
	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" walker duct with less than 15 wires			
			T			
		I				
			-			
		Observation	ns / Issues / Next Steps			
The proposed po	wer duct run is approximately 65' fr	om Kiosk to	to the existing power duct run from the Kiosk to the AFC Panel. Room C101. to AFC Panel (Fare Vend 2) in Room C106.			
			0' 0 <i>tt</i>			
	GFP Representa	tive	Sign Off WMATA PRGM			
Name:	Mike Butler					
Signature:	Mizun					
Date:	01/03/2015					

Photo # 1 – Existing and proposed duct run from Kiosk (Angle 1).



Photo # 2 – Existing and proposed duct run from Kiosk (Angle 2).



Photo # 3 – Continuation of existing and proposed duct run from Kiosk (Angle 1).

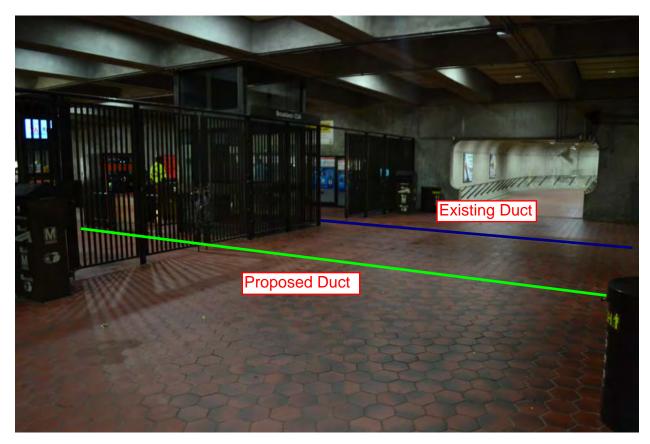


Photo # 4– Continuation of proposed duct run from Kiosk (Angle 2)



Photo # 5 – Proposed duct approach to back rooms





Photo #6 - Proposed conduit from Elevator Machine Room C101



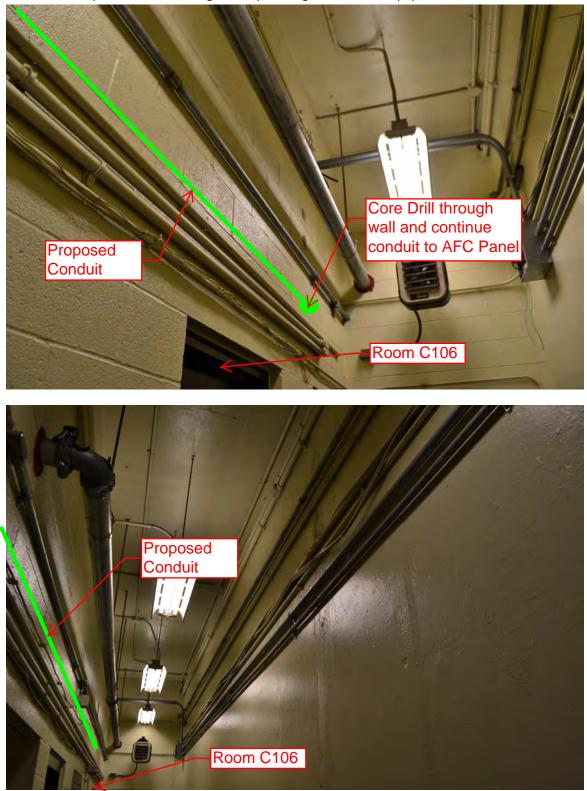
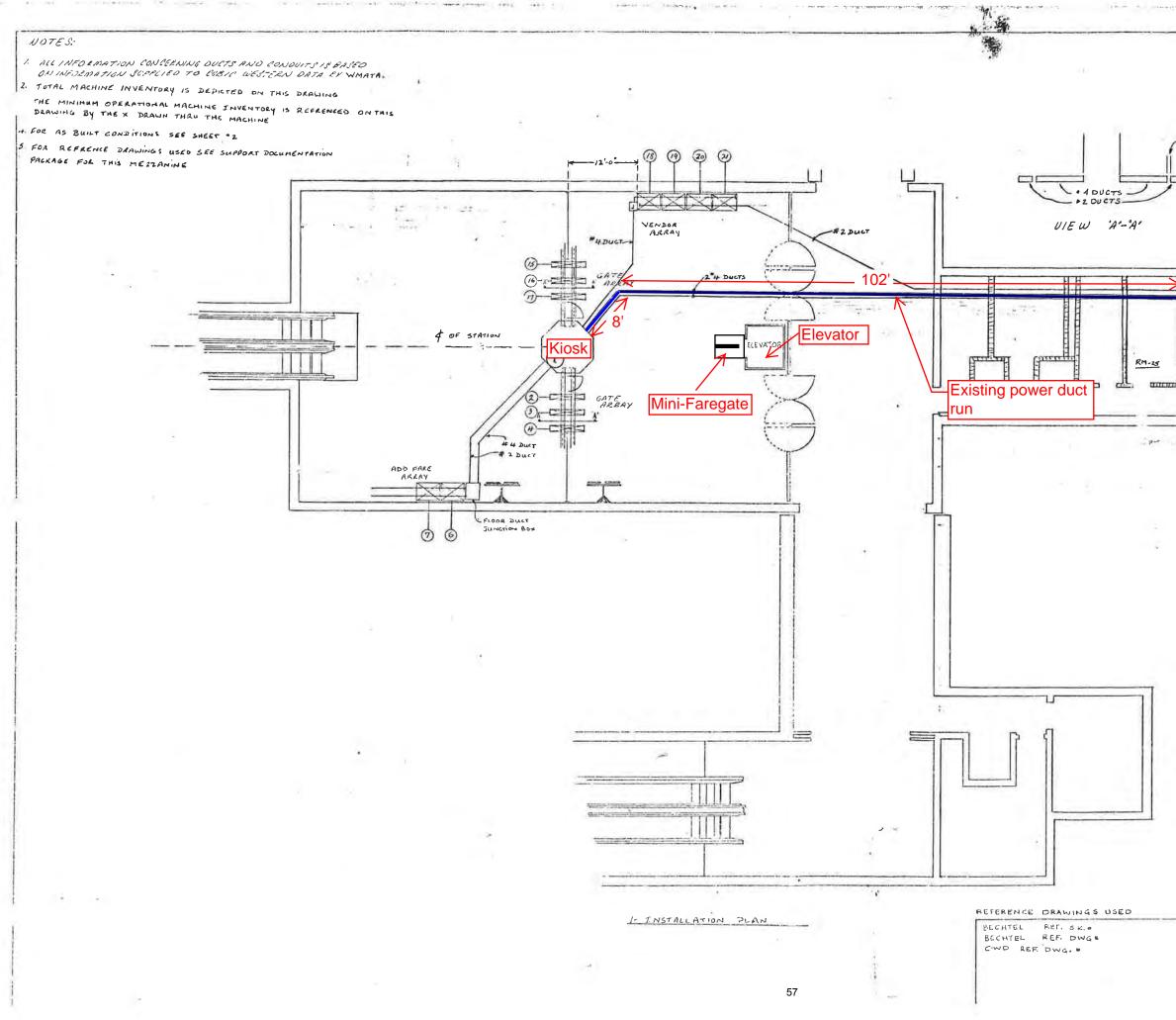


Photo #7 - Proposed conduit along hallway leading to Electrical Equipment Room C106



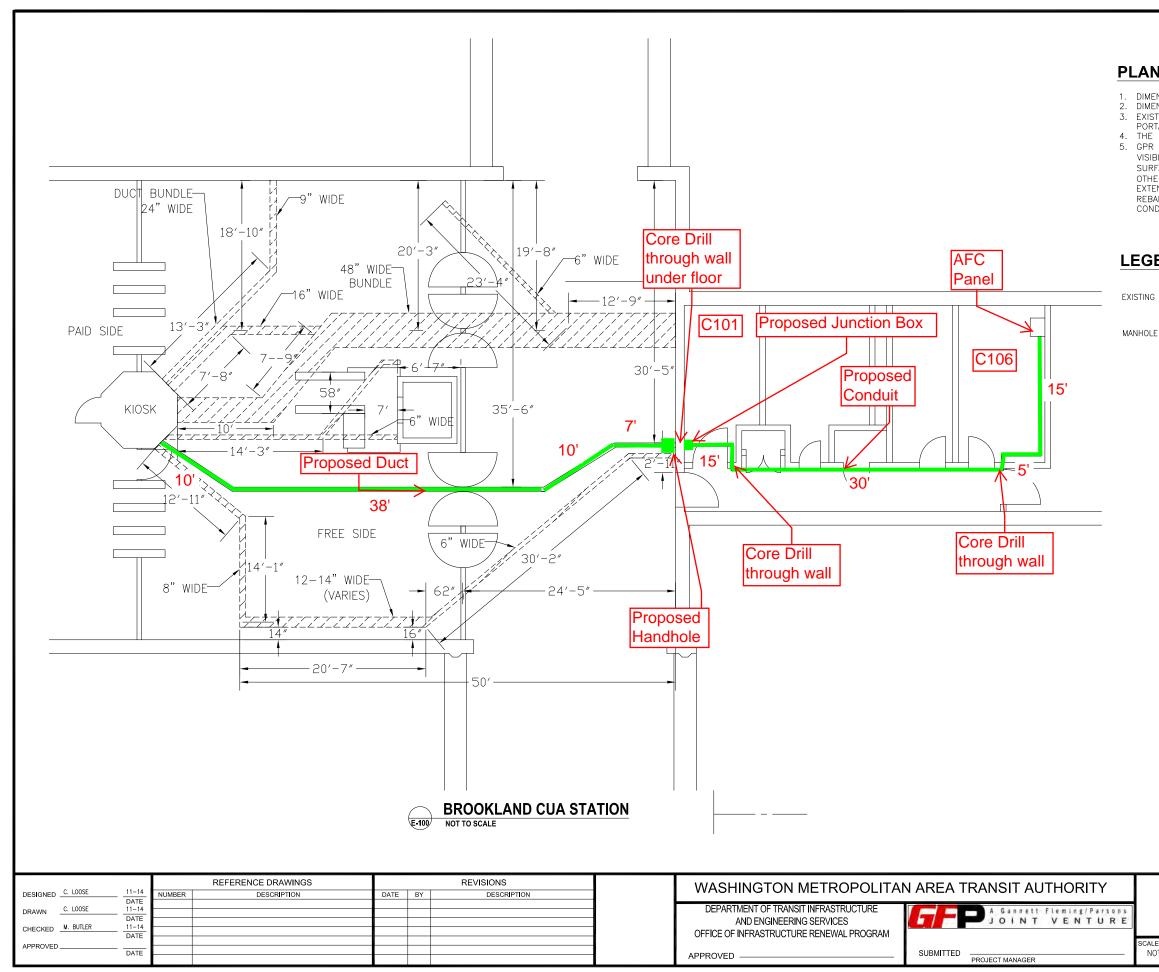
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PLAN NOTES:

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LEGEND:

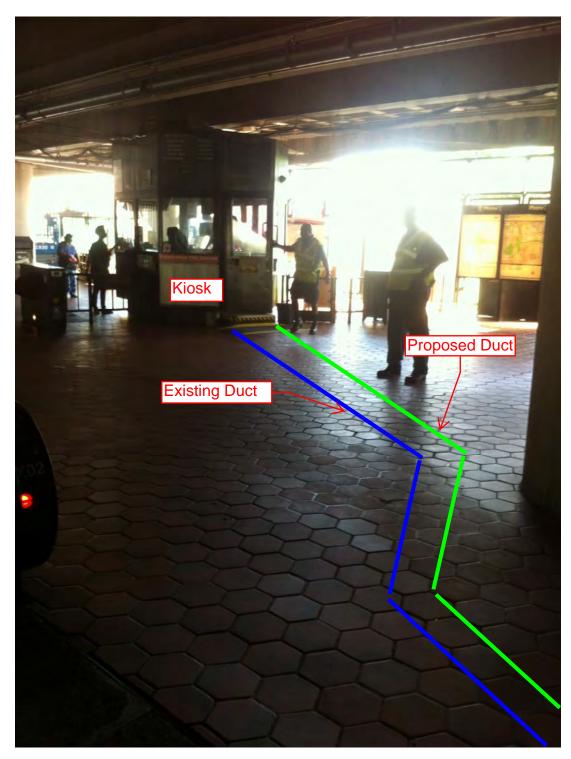
EXISTING DUCT

MH

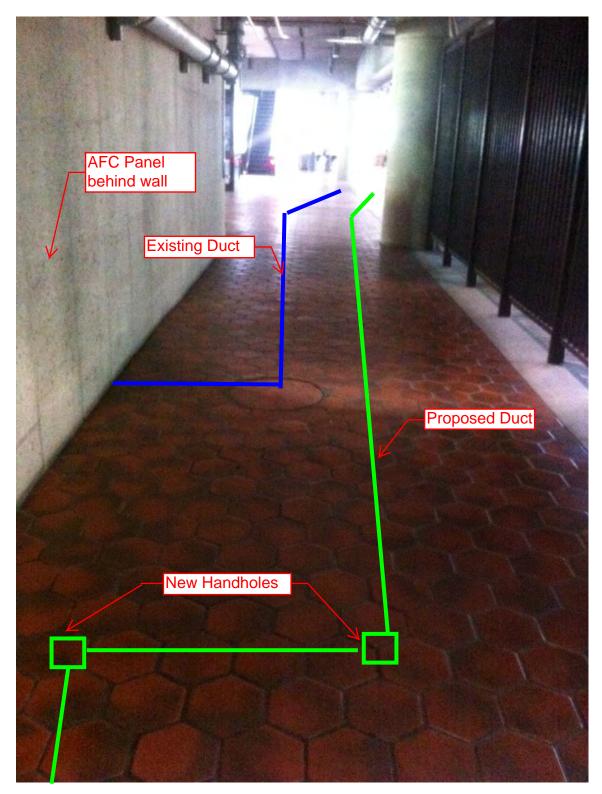
		t no. XXXX
IN - FLOOR I B05 BROOK	-NEPP-01 DUCT INSPECTI (LAND CUA (M02 ECTRICAL DUCT	27)
SCALE NOT TO SCALE	drawing no. B05-E-100	XXX

	Mezzanine Inspection Report							
Date: 09/17/14	Station Name: B06 Fort Totter	n	Mezzanine #: 026	Completed By: Mike Butler				
			Summary					
Overall, the walker ducts at this mezzanine are in poor condition due to extensive corrosion caused by water intrusion. Collapses were found both in both the faregate communication and power ducts and the power duct between the Kiosk and AFC Panel. Pull string could not be installed in faregate communication ducts due to collapses and inaccessibility issues. A pull string was installed in the power duct between the Kiosk and Handhole by utilizing an existing pull string, however it is not advisable to re-use this duct as there are were multiple collapses foun during video scoping. Scanning of the mezzanine floor was completed to determine layout of existing in-floor ducts and a proposed duct / conduit route. The attached drawing shows the proposed duct / conduit route, which comprises a 150' duct run from the Kiosk to backrooms (including two handholes) followed by a transition to an overhead conduit running for 10' through a partition wall and then into AFC Panel.								
		Scoping of	of Faregate Array(s)					
	Task	Yes/No		Notes				
Communications Duo	ct – Upper Faregate Array (5 fa	regates)						
Was video scoping co run?	ompleted for the entire duct	No	Array could not be react ducts.	hed; only accessible through lower faregate array				
Were pull strings inst array?	alled at all faregates in the	No						
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A						
	? Provide additional details of ducts and number of wires.	N/A						
Communications Duc	ct - Lower Faregate Array (4 fa	regates)						
Was video scoping c run?	ompleted for the entire duct	Partially						
Were pull strings insta array?	alled at all faregates in the	No						
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	Yes	Left duct is collapsed at first faregate.	2 feet from kiosk; right duct has heavy debris after				
	? Provide additional details of ducts and number of wires.	N/A	4" walker duct with less	than 10 wires				
Power Duct - Upper F	aregate Array (5 faregates)							
Was video scoping c run?	ompleted for the entire duct	No	Array could not be react ducts.	hed; only accessible through lower faregate array				
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	N/A						
	? Provide additional details of ducts and number of wires.	N/A						
Power Duct - Lower F	Faregate Array (4 faregates)							
Was video scoping c run?	ompleted for the entire duct	Partially						
Were there any obstru details of type and sp	uctions or blockages? Provide ecific location.	Yes	Left duct is collapsed at kiosk.	duct entrance; right duct is collapsed at 4 feet from				
	? Provide additional details of ducts and number of wires.	N/A	6" walker duct with less	than 12 wires				

Scoping of Power Duct - Kiosk to AFC Panel					
Tasl	k	Yes/No	Notes		
Kiosk to Handhole (Distand	ce: 140')	1			
Was video scoping comple conduit run?	eted for the entire duct /	Partially	Not possible due to collapsed duct		
Was pull string installed?		Yes	Existing pull string used to install new pull string, however it is not advisab to install new wires due to compromised condition of existing duct and limited available capacity.		
Were there any obstructions details of type and specific l	s or blockages? Provide ocation.	Yes	Right duct: Obstruction at 50 feet from handhole towards kiosk Left duct: Obstruction at 80 feet from handhole towards kiosk		
Is the duct / conduit at capa details about the dimension number of wires.	city? Provide additional s of duct / conduit and	Yes	6" walker duct with 21 wires in right duct; 20 wires in left duct		
Handhole to AFC Panel (Di	istance: 5')				
Was video scoping comple conduit run?	eted for the entire duct /	No	- Not possible due to collapsed duct.		
Was pull string installed?		No			
Were there any obstructions details of type and specific l	s or blockages? Provide ocation.	Yes	Collapsed duct close to handhole.		
Is the duct / conduit at capa details about the dimensions number of wires.	city? Provide additional s of duct / conduit and	Yes	6" walker duct with 21 wires in right duct; 20 wires in left duct		
		Observation	ns / Issues / Next Steps		
			Sign Off		
	GFP Representa	itive	WMATA PRGM		
Name: Mike But	tler				
Signature:	m				
Date: 01/03/20)15				
1					



Photo# 1: B06 Fort Totten – Existing and proposed duct runs on mezzanine level (towards Kiosk)



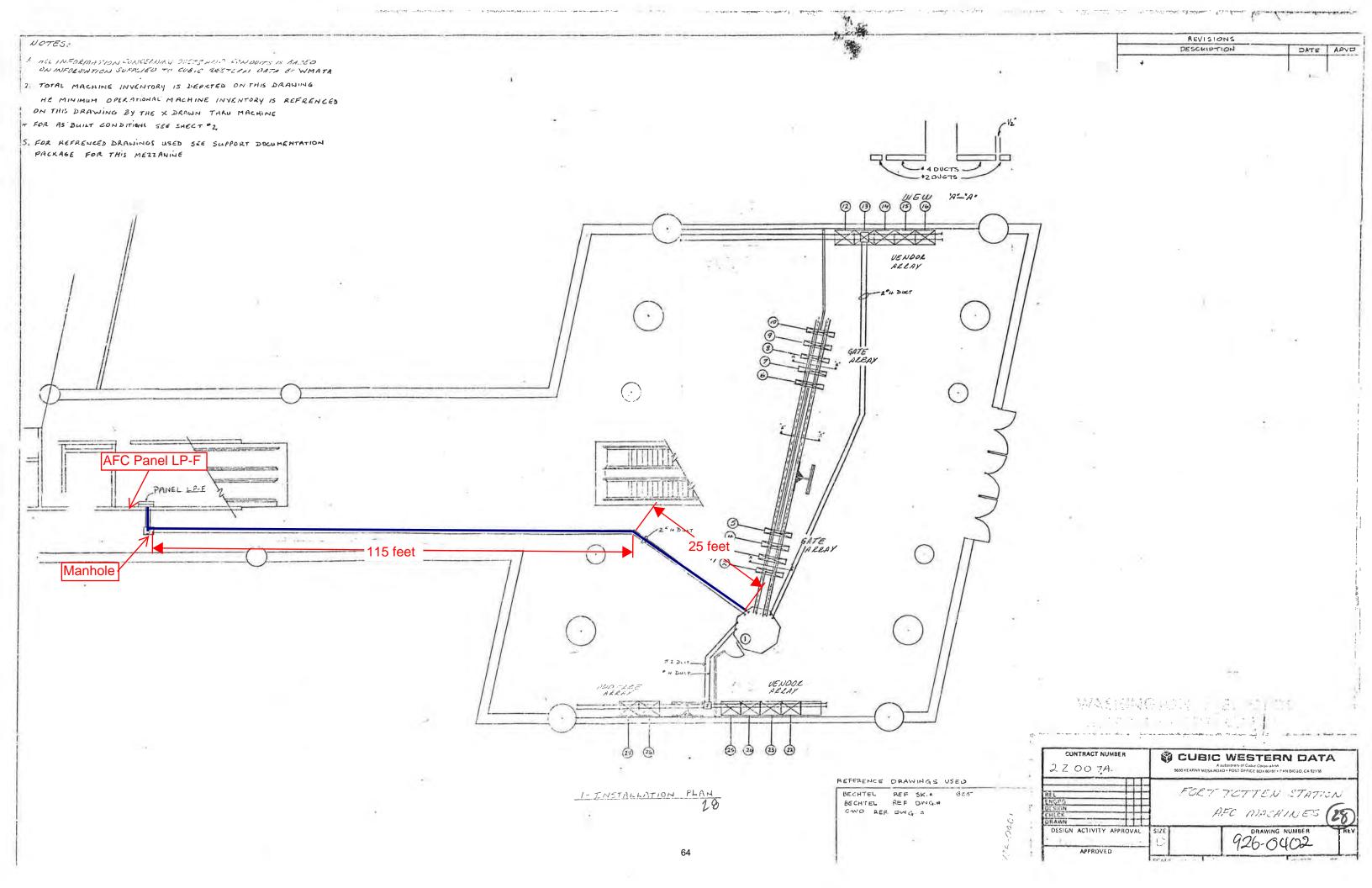
Photo# 2: B06 Fort Totten – Existing and proposed duct runs near AFC Panel

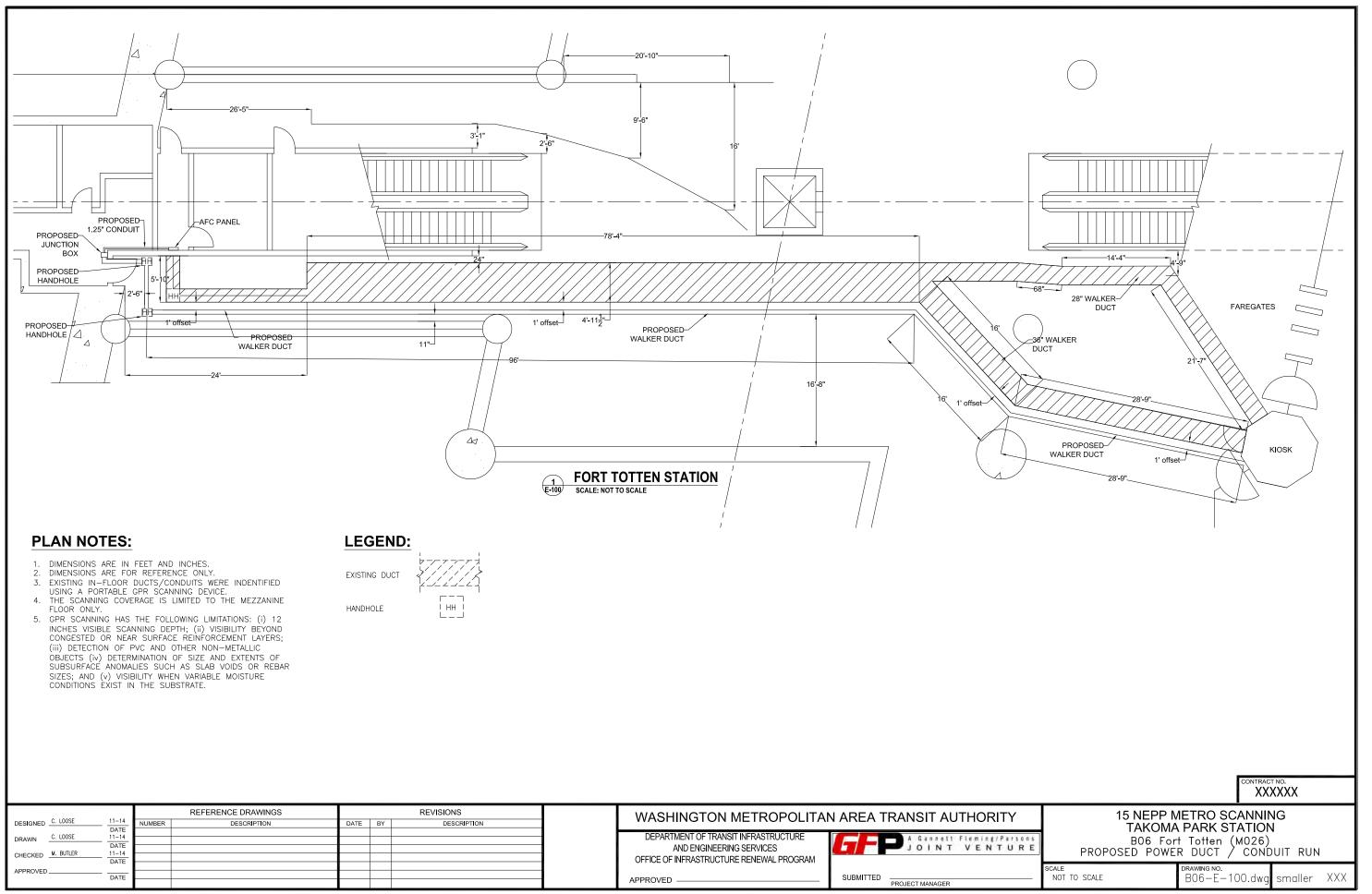
Photo #3: B06 Fort Totten – Poor condition of Handhole on mezzanine floor



Photo #4: B06 Fort Totten – Pull string installed in power duct run from handhole to kiosk







	REFERENCE DRAWINGS	REVISIONS	WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DESIGNED C. LOOSE 11-14 DATE	NUMBER DESCRIPTION	DATE BY DESCRIPTION	WASHINGTON METROLOEITAN AREA TRANSIT AUTHORIT
DRAWN C. LOOSE 11-14			DEPARTMENT OF TRANSIT INFRASTRUCTURE
CHECKED M. BUTLER 11-14			AND ENGINEERING SERVICES
DATE			OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED DATE			SUBMITTED
			APPROVED SUBMITTEDPROJECT MANAGER

Mezzanine Inspection Report (MIR)						
Date: 09/15/2014 Station Name: B07 Takoma	a	Mezzanine #: 029	Completed By: Mike Butler			
		Summary				
Scoping was completed as much as possible with multiple obstructions found in all walker ducts. Due to the obstructions and substantial corrosion from water intrusion, it was not possible to fully complete any scoping or pull string installation. Obstructions are shown in the attached photos.						
Scanning of the mezzanine was completed on 10/20/2014 and existing in-floor ducts were identified. A new route for proposed duct replacement is shown in Drawing B07-E-100, which is attached to this report. The proposed in-floor walker duct runs parallel to the existing duct to a new hand hole in Room C100 before transitioning to a conduit that feeds directly into AFC Panel LP-F.						
The total length of the new walker duct is approxim Hand Hole to AFC Panel.	ately 34' from	Kiosk to proposed Hand H	ole; the new conduit is approximately 4' from			
	Scoping	of Faregate Array(s)				
Task	Yes/No		Notes			
Communications Duct – Upper Faregate Array (6	turnstiles)					
Was video scoping completed for the entire duct run?	Partially		string installation could not be completed due to			
Were pull strings installed at all faregates in the array?	No	obstruction.				
Were there any obstructions or blockages? Provide details of type and specific location.	Yes		collapsed duct) observed by video scoping n the Kiosk (see photo #1)			
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires	. N/A	4" wide duct.				
Communications Duct - Lower Faregate Array						
Was video scoping completed for the entire duct run?	N/A					
Were pull strings installed at all faregates in the array?	N/A					
Were there any obstructions or blockages? Provide details of type and specific location.	N/A					
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires	. N/A					
Power Duct - Upper Faregate Array (6 turnstiles)						
Was video scoping completed for the entire duct run?	Partially	Video scoping could not	be completed due to obstruction.			
Were there any obstructions or blockages? Provide details of type and specific location.	Yes		collapsed duct) observed by video foot from the Kiosk (see photo #2)			
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires	. N/A	4" wide duct.				
Power Duct - Lower Faregate Array		-				
Was video scoping completed for the entire duct run?	N/A					
Were there any obstructions or blockages? Provide details of type and specific location.	N/A					
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires	. N/A					

Scoping of Power Duct - Kiosk to AFC Panel						
Т	ask	Yes/No		Notes		
Kiosk to Hand hole 1 (3	35 feet)		1			
Was video scoping com conduit run?	pleted for the entire duct /	Partially		pping and pull string installation could not be completed due to		
Was pull string installed?		No	obstructio	n.		
Were there any obstructi details of type and specil	ions or blockages? Provide fic location.	Yes	respective	ons were found at 4 and 15 feet from the kiosk (photos #3 and 4, ely), possibly collapsed duct. Attempts were made to scope from s of the run.		
	apacity? Provide additional ions of duct / conduit and	N/A	4" wide d	uct.		
Hand hole 1 to Hand he	ole 2 (7 feet)					
Was video scoping com conduit run?	pleted for the entire duct /	No		ping and pull string installation could not be completed due to		
Was pull string installed	?	No	obstructio	n.		
Were there any obstructi details of type and specil	ions or blockages? Provide fic location.	Yes	Obstructio	on at entry to hand hole (photo #5)		
	apacity? Provide additional ions of duct / conduit and	N/A	4" wide d	uct.		
Hand hole 2 to AFC Pa	nel (3 feet)					
Was video scoping com conduit run?	pleted for the entire duct /	No	Video sco obstructio	pping and pull string installation could not be completed due to n.		
Was pull string installed	?	No				
	Were there any obstructions or blockages? Provide details of type and specific location.		Obstruction at entry to hand hole (photo #6)			
	apacity? Provide additional ions of duct / conduit and	N/A	4" wide duct.			
		[1			
			rvations / I			
	d broken parts of existing du able to install pull strings due			ched photos), due to extensive water intrusion throughout g duct.		
			Sign Off			
	GFP Representa	tive		WMATA PRGM		
Name: Mike	Butler					
Signature:	im					
Date: 11/12	2/2014					
Fuid. 11/12			67			

Photo #1: B07 Takoma - Still image of obstruction in faregate array comm. duct



Photo #2: B07 Takoma - Still image of obstruction in faregate array power duct

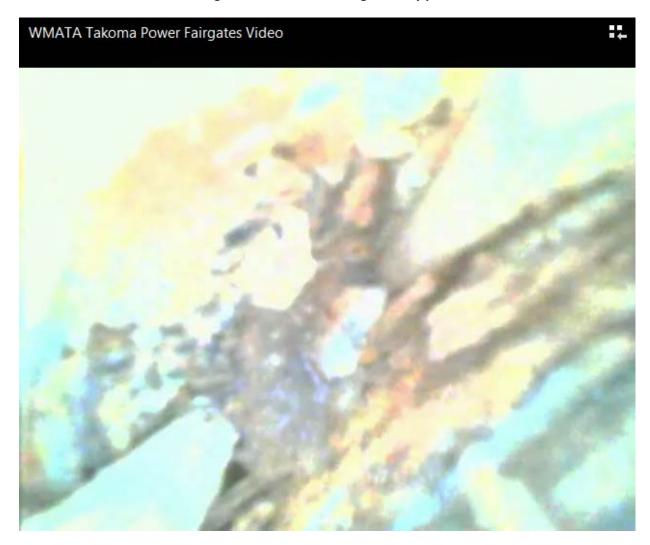


Photo #3: B07 Takoma - Still image of obstruction in power duct from kiosk to handhole



Photo #4: B07 Takoma - Still image of obstruction in power duct from handhole to kiosk

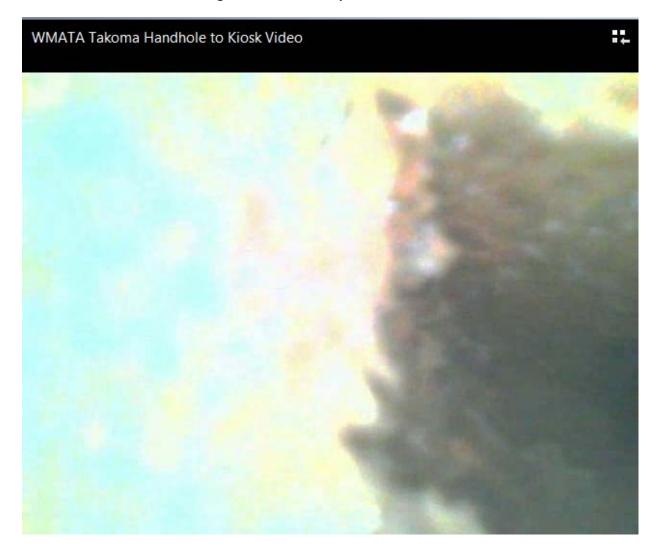






Photo #6: B07 Takoma – Poor conditions in second handhole

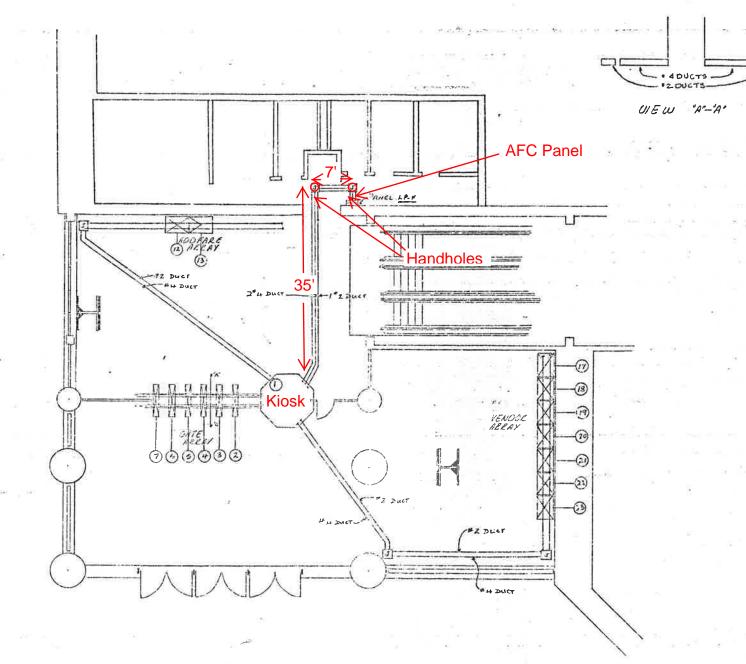
- NOTES:
- A ILL INFOLMATION CONCERNING OUCTS AND CONDUTS IN PASED + ON INFORMATION SUPPLIED TO SUBSE LUESTERN DATA BE WMATA

2. TOTAL MACHINE INVENTORY IS DEPKTED ON THIS DRAWING TE MINIMUM OPERATION AL MACHINE INVENTORY IS REFRENCED ON THIS DRAWING BY THE X DRAWN THRW THE MACHINE

+ FOR AS BUILT CONDITIONS SEE SHEET "2

5 FOR REFRENCED DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE

* 020



1- INSTALLATION PLAN 29

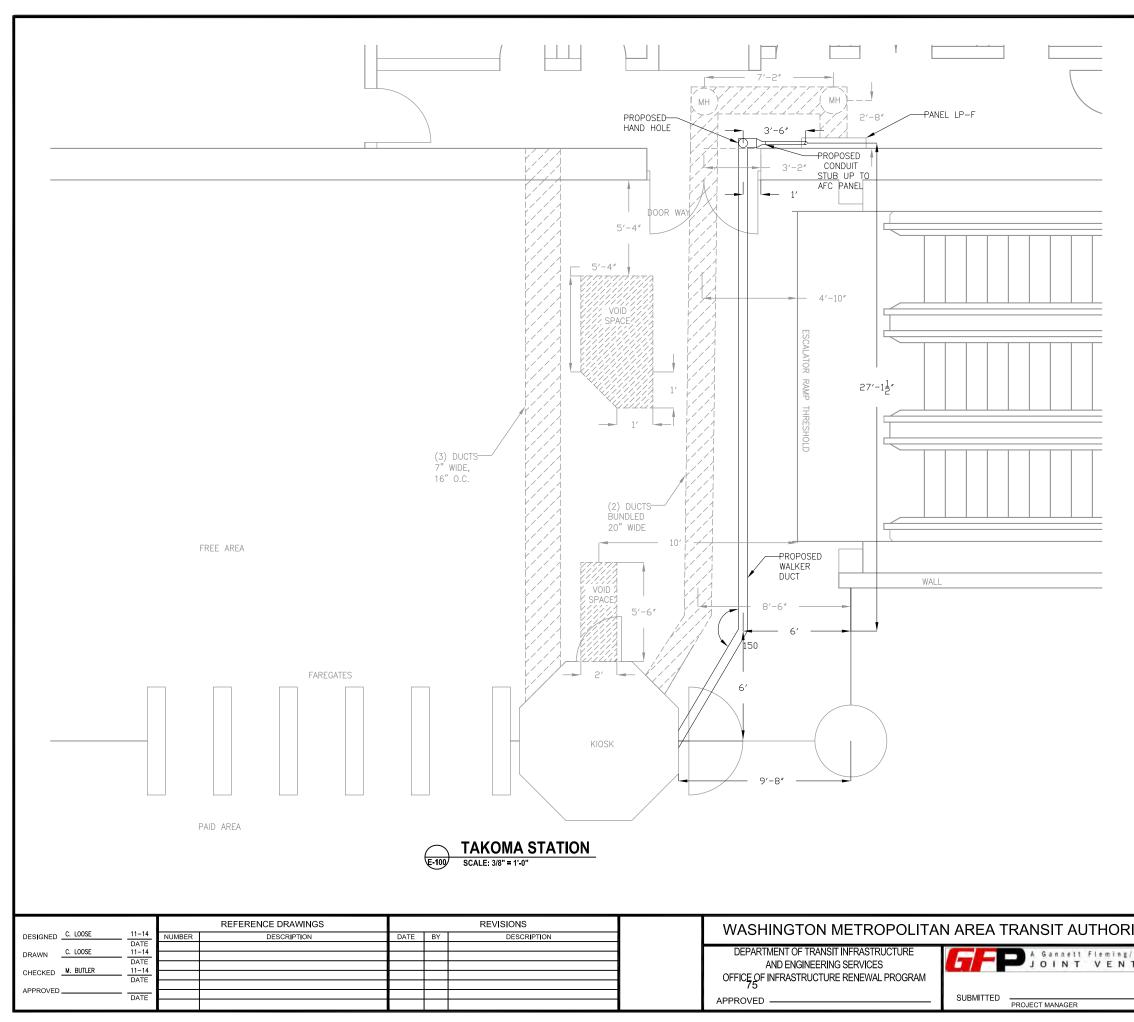
> REFERENCE DRAWINGS USED BECHTEL REF SK." BECHTEL REF DWG." CHUD REF. DWG. #

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PLAN NOTES:

- DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
- 3. EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE. THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
- 4. 5. GPR SCANNING HAS THE FOLLOWING LIMITATIONS: (i) 12 INCHES
- VISIBLE SCANNING DEPTH; (ii) VISIBILITY BEYOND CONGESTED OR NEAR VISIBLE SCANNING DEPTH; (II) VISIBILITY BETOND 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

			t NO. XXXX	
ITY		-NEPP-01 DUCT INSPECTI	ONS	
Parsons TURE	B07 TAKOMA (M029)			
	NOT TO SCALE	DRAWING NO. B07-E-100	XXX	

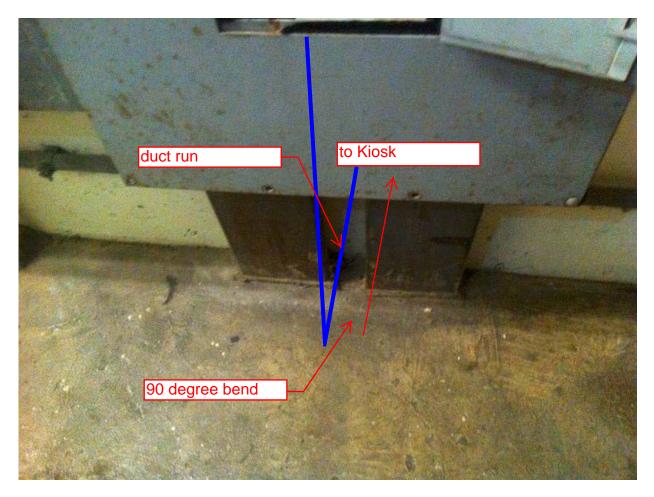
	Mezzanine Inspection Report (Scoping)						
Date: 09/12/2014	Station Name: B08 – Silver S	oring North	Mezzanine #: 031	Completed By: Tino Sahoo			
			Summary				
	Video scoping was completed as much as possible, and pull string was installed for the upper and lower faregate array communications duct and power duct between the kiosk and AFC Panel. Video scoping was also completed as much as possible for the upper and lower faregate array power ducts.						
There were some min array power duct.	There were some minor obstructions encountered while video scoping the lower faregate array communications duct and the upper faregate array power duct.						
Scanning is not requir	red.						
		Scoping of	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications Duc	ct – Upper Faregate Array (3 G	ates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Silver	Spring North Upper Comm Duct Video.avi file.			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No					
Communications Duc	ct - Lower Faregate Array (3 G	ates)					
Was video scoping c run?	ompleted for the entire duct	No	26 of 29 feet of the lowe Refer to WMATA Silver	er comm. array run was successfully video scoped. Spring North Lower Comm Duct Video.avi file.			
Were pull strings insta array?	alled at all faregates in the	Yes					
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	Yes	Insert/riser to faregate c	creates a partial obstruction			
	? Provide additional details of ducts and number of wires.	No					
Power Duct - Upper F	aregate Array (3 Gates)	L					
Was video scoping c run?	ompleted for the entire duct	No	Refer to WMATA Silver	er array power duct was successfully video scoped. Spring North Upper Power A Duct.avi and WMATA er Power B Duct.avi files.			
Were there any obstrudet and specified of the second specified of the second specified of the second specified of the second sec	uctions or blockages? Provide ecific location.	Yes	Duct is full of rust and d get new wiring through	lebris and possibly collapsed; Should be able to existing ducts.			
	? Provide additional details of ducts and number of wires.	No					
Power Duct - Lower F	Faregate Array (3 Gates)						
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA Silver	Spring Lower Power Video.avi file.			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No					

	Scoping of Power Duct - Kiosk to AFC Panel						
	Task	Yes/No	Notes				
Kiosk to AFC Par	nel (50 foot run)		•				
Was video scopi conduit run?	ng completed for the entire duct /	No	Scoping of power duct from kiosk to AFC Panel was completed to 90 degree walker duct bend at AFC Panel. Refer to WMATA Silver Spring North Kiosk to AFC Video.avi file.				
Was pull string in	stalled?	Yes					
Were there any o details of type and	bstructions or blockages? Provide d specific location.	No					
Is the duct / cond details about the number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No					
		Γ	1				
		Observation	ns / Issues / Next Steps				
			Sign Off				
	GFP Representa	tive	WMATA PRGM				
Name:	Tino Sahoo						
Signature:	Tanmuya Sakoo						
Date:	9/12/2014						



Photo #1 – B08 Silver Spring North: Kiosk on Mezzanine level

Photo #2 – B08 Silver Spring North: Duct run into AFC Panel

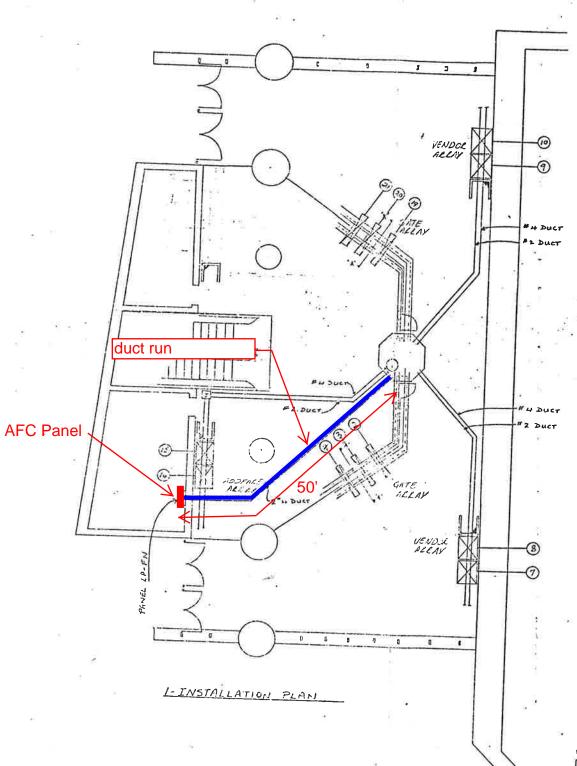


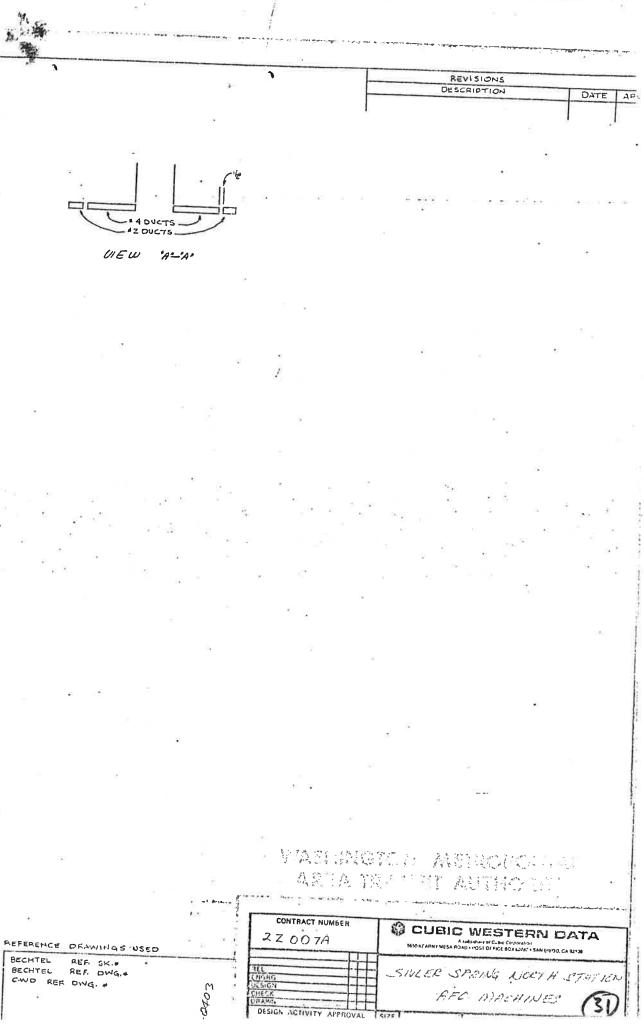
NOTES ..

ALL INFORMATION CONCELNING DUCTS AND CONDUMS IS BASED ON THEORMATION SUPPLIED TO CLOIC WESTERN LATA S' WINNER 2. TOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING

3. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFRENCED ON THIS DRAWING BY THE X DRAWN THRU THE MACHINE H. FOR AS BUILT CONDITIONS SEE SHEET D

FOR REFRENCED , DRAWINGS USED SEE SUPPORT DOCUMENTATION





	Station Names Dog Officer O	na Court	Morrowing # 000	Commission During REVISION 1
Date: 09/11/14	Station Name: B08 Silver Spri	ng South	Mezzanine #: 030	Completed By: Mike Butler
			Summary	
and pull string insta	allation was completed between K gates on mezzanine floor were su	iosk and AF	C Panel; however there	re installed in communication duct. Video scoping was a partial collapse in the walker duct 15' from g installed in communication duct. Refer to Photo
Kiosk to AFC Panel base of the wall bet	I. When the proposed duct reaches	s the wall, th 9. Once ins	ere will be a proposed ha ide Room 119, the duct w	s proposed to run parallel to existing duct from ndhole and then the duct will core drill through the ill stub-up vertically and transition to an overhead
		Scoping	of Faregate Array(s)	
	Task	Yes/No		Notes
communications D	uct – Upper Faregate Array (6 g	ates)		
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Upper Faregate Comm Video.avi".
Were pull strings in array?	stalled at all faregates in the	Yes		
Were there any obs details of type and s	structions or blockages? Provide specific location.	No		
	ity? Provide additional details ns of ducts and number of wires.	No	3" walker duct, not at ca	apacity (< 10 wires).
Communications D	uct - Lower Faregate Array (6 ga	ates)		
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Lower Faregate Comm Video.avi".
Were pull strings in array?	stalled at all faregates in the	Yes		
Were there any obs details of type and s	structions or blockages? Provide specific location.	No		
	ity? Provide additional details ns of ducts and number of wires.	No	3" walker duct, not at ca	apacity (< 10 wires).
Power Duct - Upper	r Faregate Array (6 gates)			
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Upper Faregate Power Video.avi"
Were there any obs details of type and s	structions or blockages? Provide specific location.	No		
	eity? Provide additional details ns of ducts and number of wires.	No	6" walker duct, not at ca	apacity (< 8 wires).
ower Duct - Lowe	r Faregate Array (6 gates)		I	
Was video scoping run?	completed for the entire duct	Yes	Refer to "WMATA Silve	r Spring South Lower Faregate Power Video.avi"
Were there any obs details of type and s	structions or blockages? Provide specific location.	No		
le the dust at sones	ity? Provide additional details			

	Scoping of Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes		
Kiosk to AFC Par	nel (Distance: 46')					
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to "	WMATA Silver Spring South Kiosk to AFC Panel Video.avi".		
Was pull string ir	nstalled?	Yes				
	bstructions or blockages? Provide d specific location.	Yes	Duct colla	apsed 15' from Kiosk.		
	uit at capacity? Provide additional dimensions of duct / conduit and	N/A	6" walker	duct, not at capacity (< 8 wires).		
			1			
		Observatior	ns / Issues	/ Next Steps		
more information The mini-faregate completed in 6" p	es (4 gates) had video scoping and power duct. Both ducts are not at ca	pull string in: pacity (less t	stallation co	and 10' of conduit) - refer to photos and drawings for ompleted in 3" communicaton duct; video scoping was also es) and have no obstructions. Refer to video files: Silver Spring South Mini Fairgate Power Video.avi".		
			Sign Off			
	GFP Representa	tive		WMATA PRGM		
Name:	Mike Butler					
Signature:	Mizun					
Date:	02/06/15					

Photo #1 – Proposed and existing ducts on mezzanine floor



Photo #2 – Proposed and existing ducts on mezzanine floor

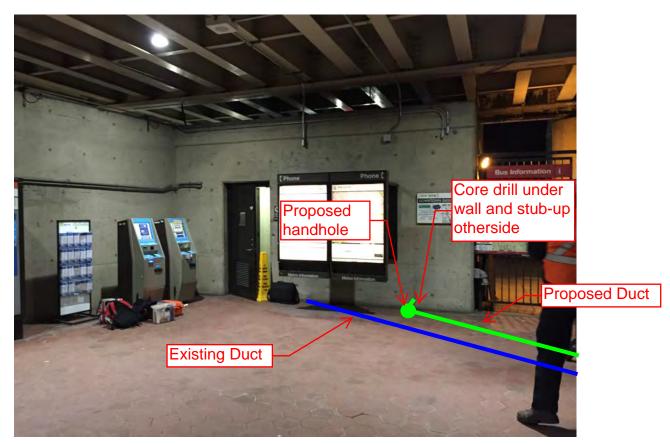
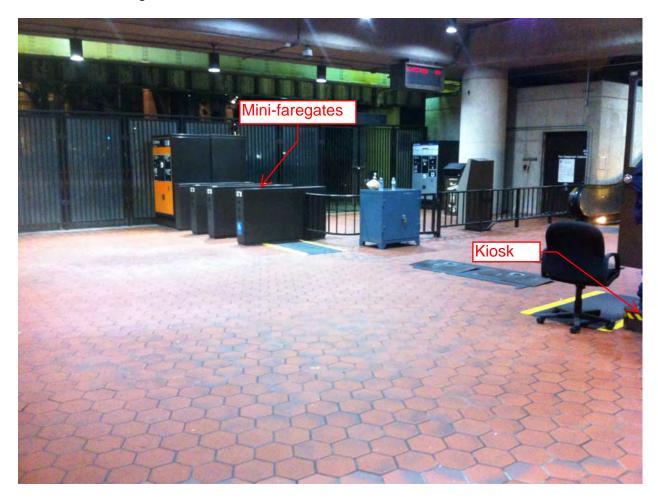


Photo #3 – Mini-faregates on mezzanine floor



NOTES.

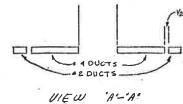
1. ALL INFORMATION CONCERNING DUCTS AND CONDUITS IS BASED ON INFORMATION SUPPLIED TO CUBIC WESTERN DATA BY WM ATA.

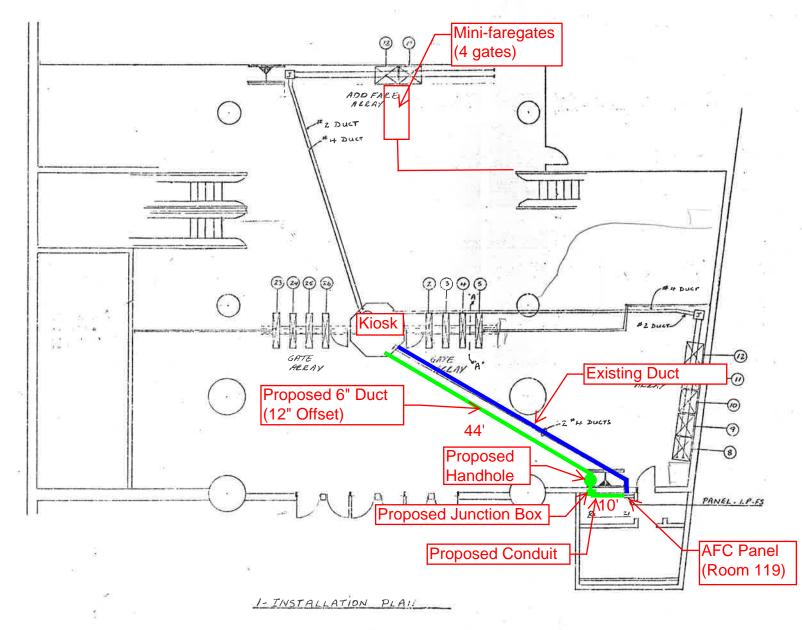
2. TOTAL MACHINE INVENTORY IS DEPICTED ON THIS DRAWING IE MINIMUM OPERATIONAL MACHINE ENVENTORY IS REFRENCED ON THIS DRAWING BY THE X. DRAWN THRU THE MACHINE.

H. FOR AS BUILT CONDITIONS SEE SHEET *2

5. FOR REFRENCED DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE

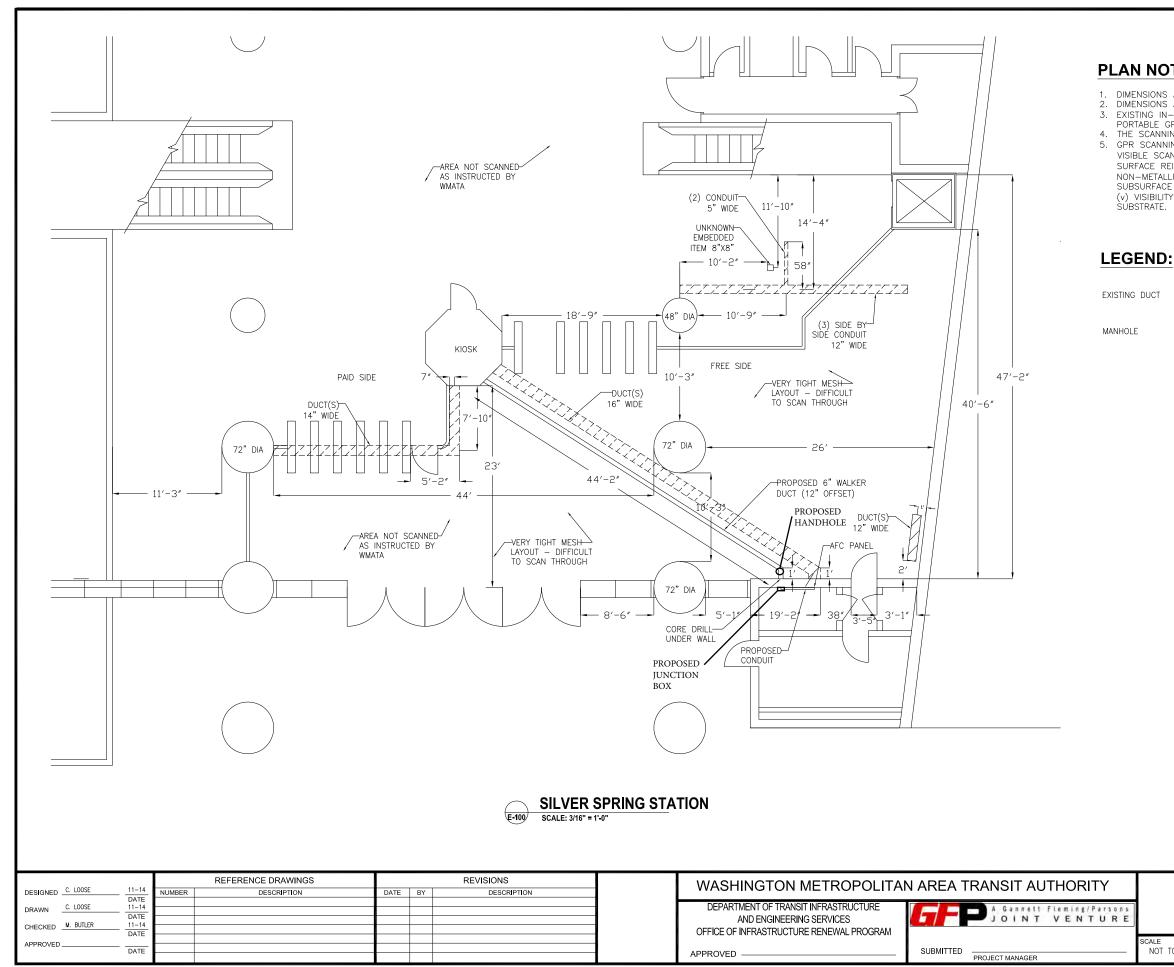
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REFERENCE DRAWINGS USED BECHTEL REF. SK.# BECHTEL REF. DWG.# CWD REF. DWG. #

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PLAN NOTES:

DIMENSIONS ARE IN FEET AND INCHES.
 DIMENSIONS ARE FOR REFERENCE ONLY.
 EXISTING IN-FLOOR DUCTS/CONDUITS WERE INDENTIFIED USING A PORTABLE GPR SCANNING DEVICE.
 THE SCANNING COVERAGE IS LIMITED TO THE MEZZANINE FLOOR ONLY.
 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.

		t NO. XXXX				
15-NEPP-01 IN - FLOOR DUCT INSPECTIONS B08 SILVER SPRING SOUTH PROPOSED ELECTRICAL DUCT PATH						
scale NOT TO SCALE	drawing no. B08-E-100	XXX				

Mezzanine Inspection Report (Scoping)					
Date: 11/17/2014	Station Name: B09 Forest Gle	en	Mezzanine #: 032	Completed By: Mike Butler	
	1		Summary	-	
faregate array was al completed due to iss existing conduit runs boxes, troughs, etc. / through handholes 1 down the hall, and wi continue down the sin the wall to the AFC p	Iso successfully completed. Scop ues identifying the existing run fr vertically down from the AFC par A proposed run has been establis and 2 and continue into the junct rap the walls of the two staircase	bing and pull om the juncti nel across tw shed from the tion box in ro s up to room be cored aga	string installation for the p ion box to the AFC panel, ro levels to the kiosk throu e kiosk to the AFC panel. om C100. From the juncti C101 where it would be c	completed. Video scoping for the power duct in the power run from the kiosk to the AFC panel was not as well as hot wires from other panels. It appears the igh multiple shared raceways including junction The run would utilize the existing duct from the kiosk on box, a proposed conduit run would then continue pored through the wall above the door. It would then inside C106, it would turn and run overhead along	
		Scoping o	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Du	ct – Faregate Array (8 Gates)				
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Fores	t Glen Comm Video.avi file	
Were pull strings ins array?	talled at all faregates in the	Yes			
Were there any obstr details of type and sp	ructions or blockages? Provide becific location.	No			
	y? Provide additional details s of ducts and number of wires.	No			
		1			
Power Duct - Farega	te Array (8 Gates)				
Was video scoping o run?	completed for the entire duct	Yes	Refer to WMATA Fores	t Glen Power Duct Video.avi file	
Were there any obstr details of type and sp	ructions or blockages? Provide becific location.	No			
	y? Provide additional details s of ducts and number of wires.	No			
		1			

Scoping of Power Duct - Kiosk to AFC Panel					
Task		Yes/No	Notes		
Kiosk to Handho	le 1 (15' run)		-		
Was video scopi conduit run?	ng completed for the entire duct /	No	Live wire	s prevented scoping	
Was pull string ir	nstalled?	No			
	bstructions or blockages? Provide d specific location.	N/A			
	luit at capacity? Provide additional dimensions of duct / conduit and	No			
Handhole 1 to Ha	andhole 2 (20' run)	-			
Was video scopi conduit run?	ng completed for the entire duct /	No	Live wire	s prevented scoping	
Was pull string ir	nstalled?	No			
	bstructions or blockages? Provide d specific location.	N/A			
	luit at capacity? Provide additional dimensions of duct / conduit and	No			
Handhole 2 to Ju	nction box (20' run)		T		
Was video scopi conduit run?	ng completed for the entire duct /	No	Live wire	s prevented scoping	
Was pull string ir	nstalled?	No			
	bstructions or blockages? Provide d specific location.	N/A			
	luit at capacity? Provide additional dimensions of duct / conduit and	No			
Junction box to	AFC Panel (Length of existing run	undetermin	ned)		
Was video scopi conduit run?	ng completed for the entire duct /	No			
Was pull string ir	nstalled?	No			
	bstructions or blockages? Provide d 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	Existing conduit run could not be traced between the Junction Box and AFC Panel. A proposed conduit option was identified.		
Observations / Issues / Next Steps					
Total proposed run is approximately 210' from Kiosk to AFC panel. This includes 65' of existing duct from the duct from the kiosk to the junction box, and 145' of proposed conduit between the junction box and AFC panel.					
Sign Off					
	GFP Representative WMATA PRGM			WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	11/17/14				
88					

Photo #1 - Existing run from kiosk to handhole 1

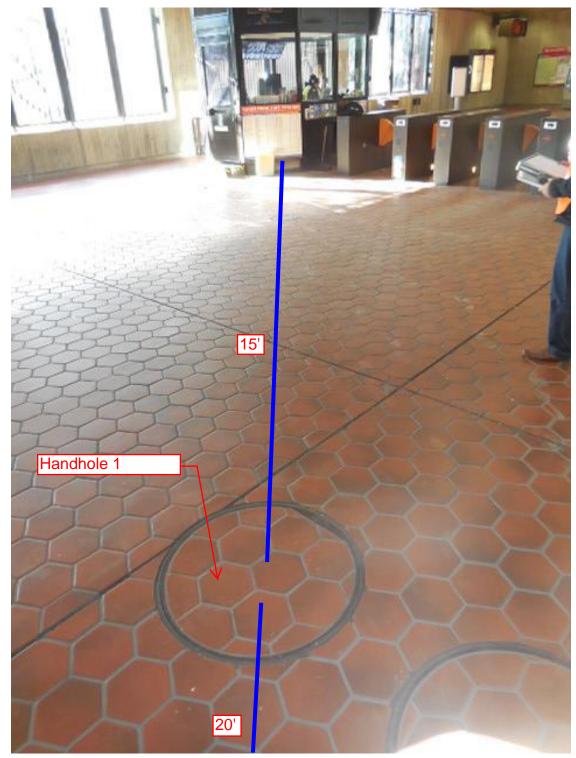




Photo #2 - Existing duct run from handhole 2 to junction box

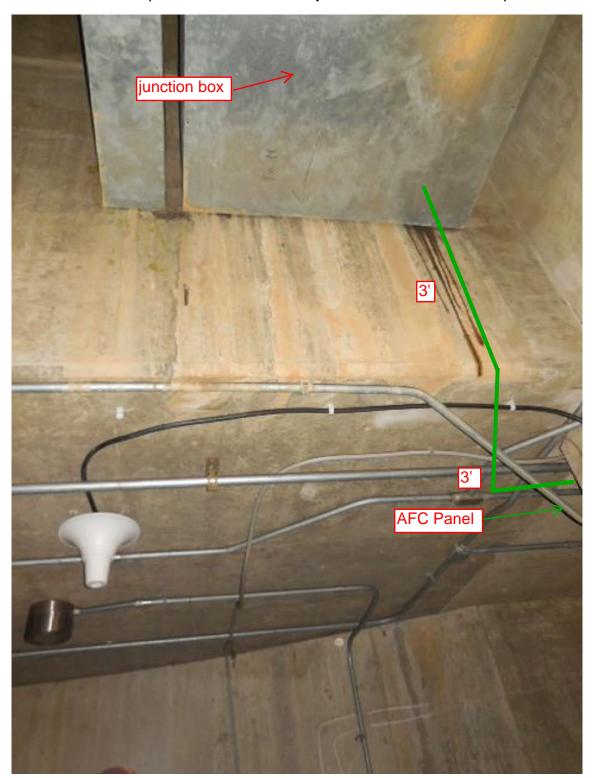


Photo #3 - Proposed conduit run from junction box towards AFC panel

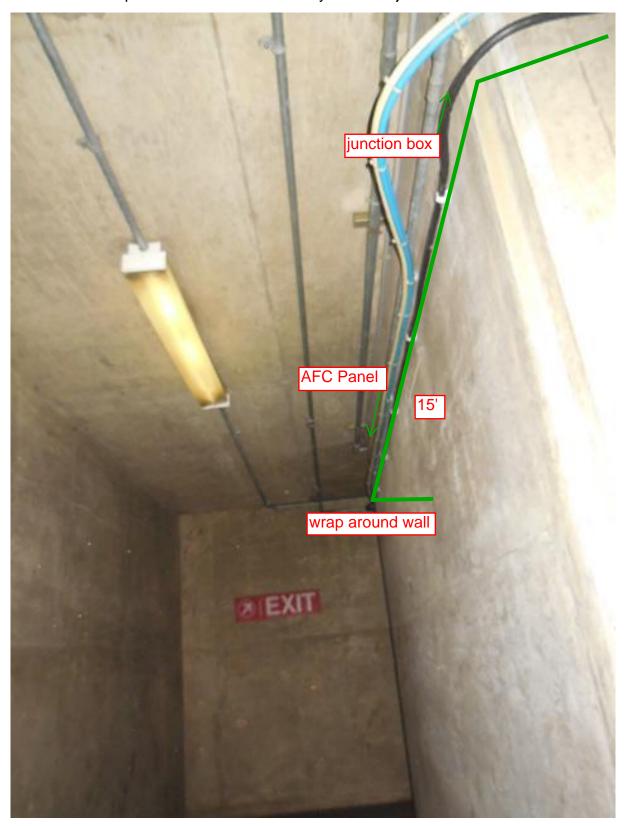


Photo #4 - Proposed conduit run in hallway between junction box and Room C101

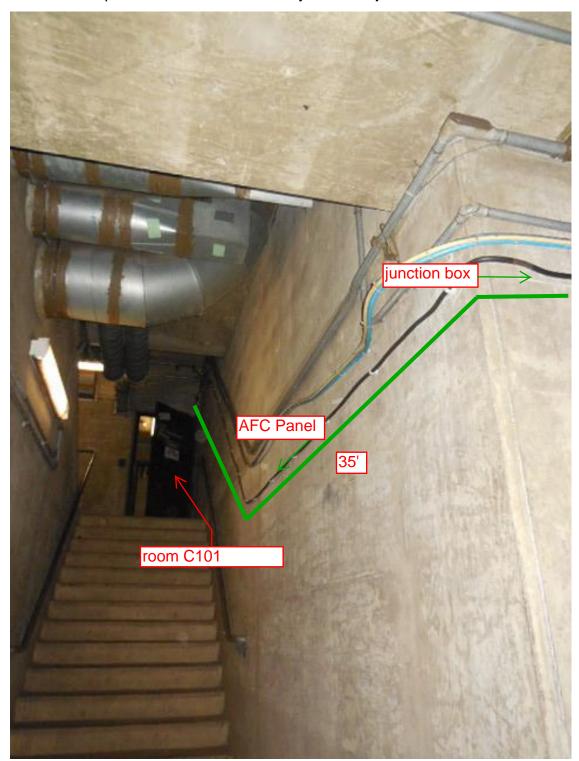


Photo #5 - Proposed conduit run in hallway between junction box and Room C101

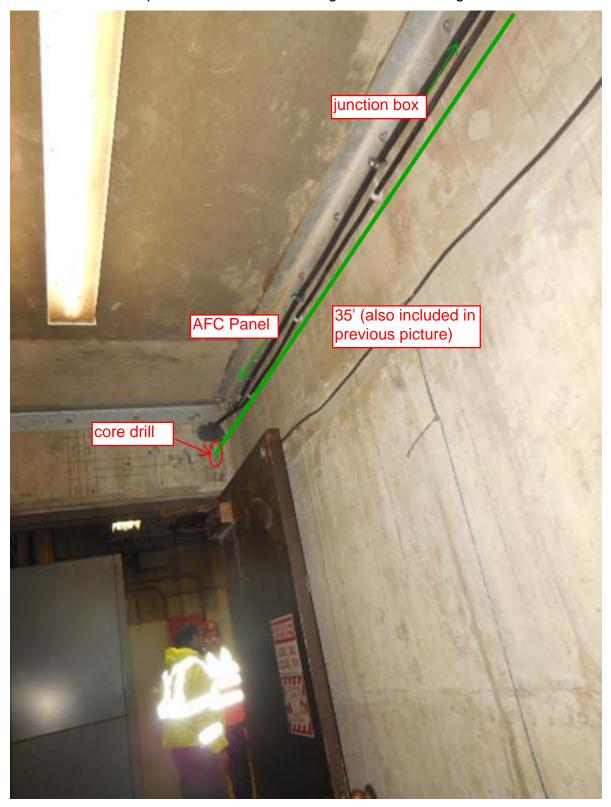


Photo #6 - Proposed conduit run showing core drill entering Room C101

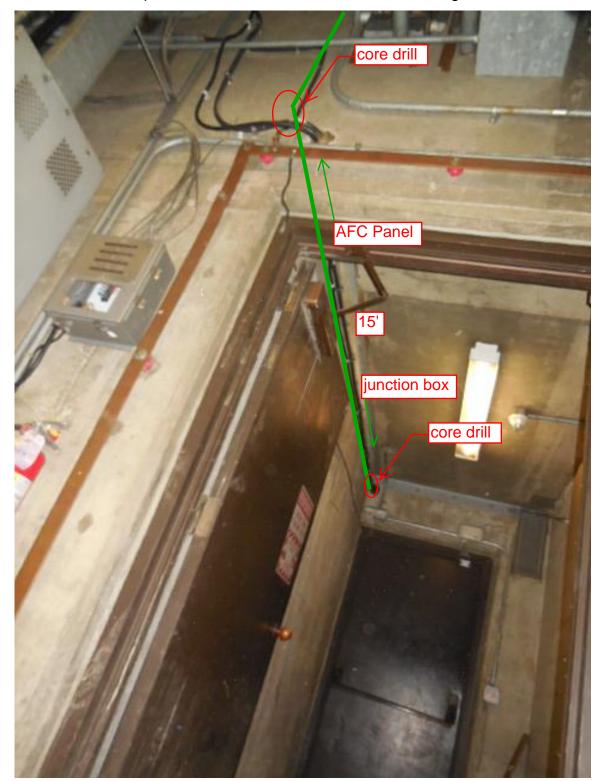


Photo #7 - Proposed conduit run from Room C101 entering Room C106

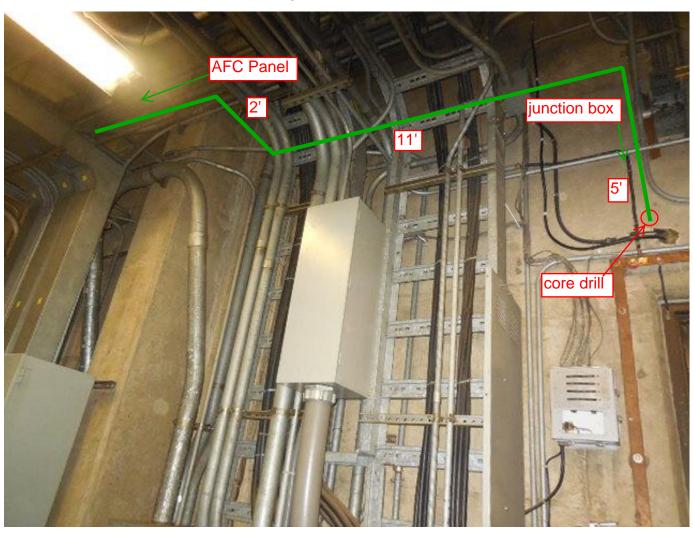


Photo #8 - Proposed conduit run inside Room C106

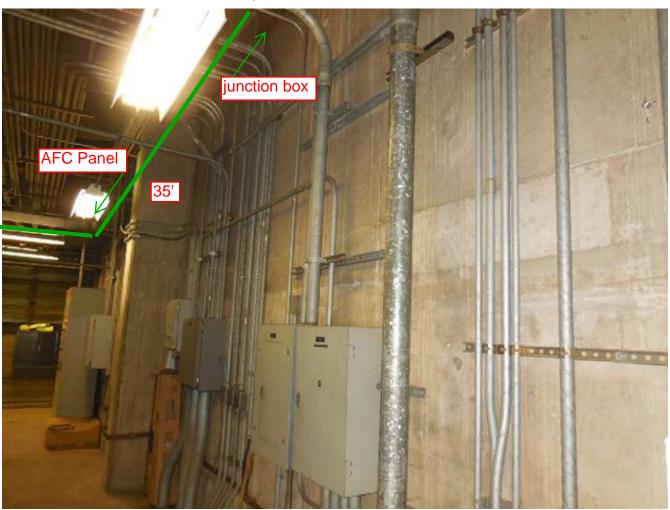


Photo #9 - Proposed conduit run inside Room C106



Photo #10 - Proposed conduit run inside Room C106

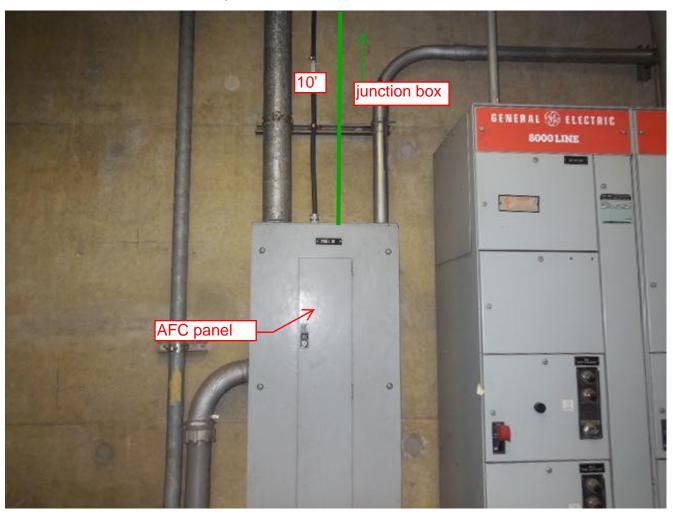
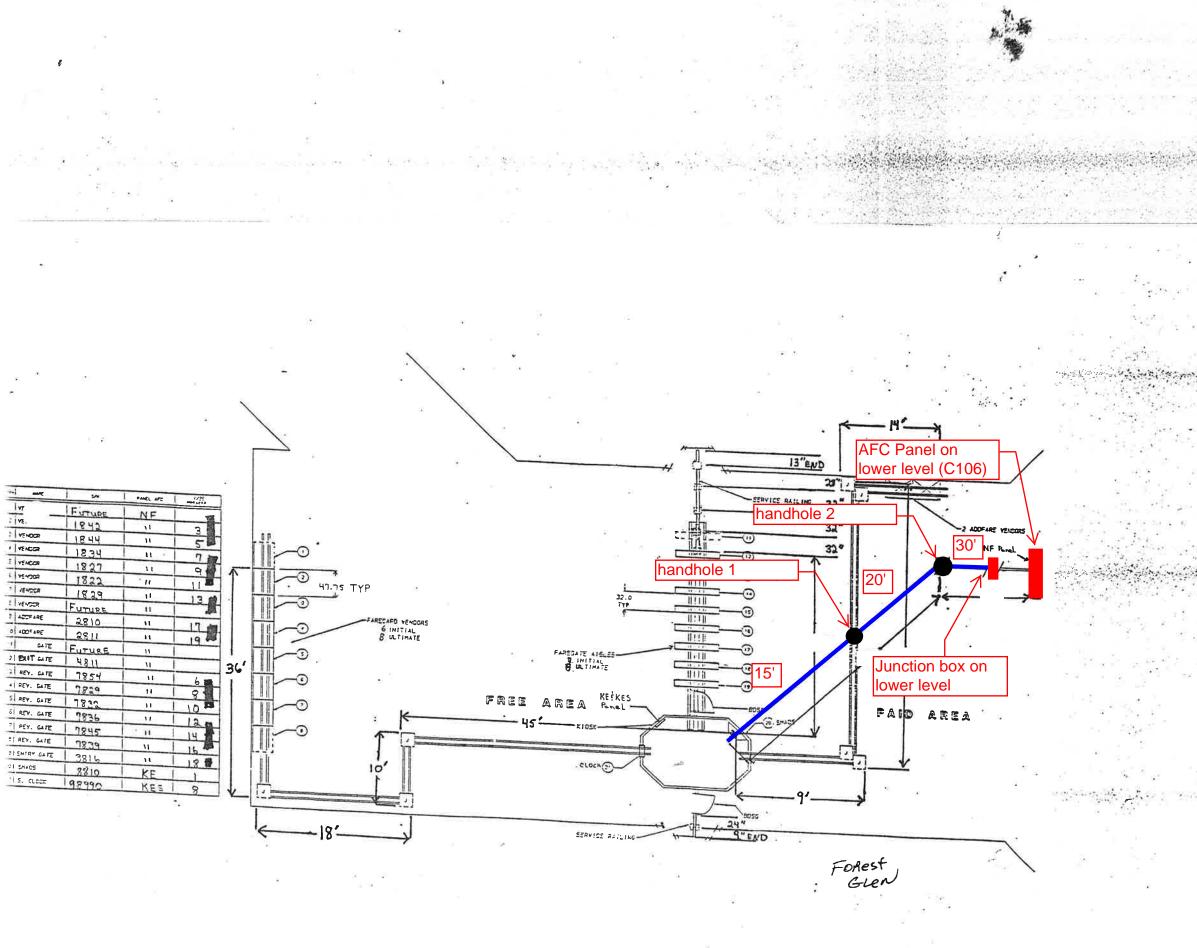


Photo #11 - Proposed conduit run connection to AFC Panel



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15331422 Sec. 32

Mezzanine Inspection Report REVISION 1						
Date: 09/03/2014	Station Name: B10 Wheaton		Mezzanine #: 033	Completed By: Tino Sahoo		
			Summary			
array ducts due to ob	Scoping was completed to the extent possible. Video scoping and pull string installation was not completed for the comm. and power faregate array ducts due to obstructions. The power ducts from the kiosk to (PANEL AFC) via two mezzanine level handholes were successfully video scoped and had pull strings installed.					
Scanning is not requir	Scanning is not required per scope of work, but it is recommended for the comm. and power faregate array ducts					
		Scoping c	of Faregate Array(s)			
-	Task	Yes/No		Notes		
Communications Duc	t – Upper Faregate Array (10	Gates)				
Was video scoping co run?	ompleted for the entire duct	No		on Fairgate Comm Left Duct Video.avi and WMATA n Right duct ZVideo.avi files.		
Were pull strings insta array?	alled at all faregates in the	No	No faregates had pull st	rings installed.		
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	Yes		feet into the run before hitting an obstruction. duct is heavily corroded from sitting in water.		
	? Provide additional details of ducts and number of wires.	N/A				
Communications Duc	ct - Lower Faregate Array (N/A	.)				
Was video scoping c run?	ompleted for the entire duct	N/A				
Were pull strings insta array?	alled at all faregates in the	N/A				
Were there any obstrudetails of type and spe	uctions or blockages? Provide ecific location.	N/A				
Is the duct at capacity about the dimensions	? Provide additional details of ducts and number of wires.	N/A				
Power Duct - Upper F	aregate Array (10 gates)					
Was video scoping c run?	ompleted for the entire duct	No		on Fairgate Power Left Duct Video.avi and WMATA r Right duct Video.avi files.		
Were there any obstrudetails of type and specified	uctions or blockages? Provide ecific location.	Yes		feet into the run before hitting an obstruction. duct is heavily corroded from sitting in water.		
	? Provide additional details of ducts and number of wires.	N/A				
Power Duct - Lower F	aregate Array (N/A)					
Was video scoping c run?	ompleted for the entire duct	N/A				
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A				
	? Provide additional details of ducts and number of wires.	N/A				

	Scoping	g of Power	r Duct - Ki	osk to AFC Panel
	Task	Yes/No		Notes
Kiosk to Handhol	le 1 (12 foot section)			
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to V	/MATA Wheaton Power Kiosk to Mandhole Video.avi file.
Was pull string in	stalled?	Yes		
	bstructions or blockages? Provide d specific location.	No		
Is the duct / cond details about the number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No		
Handhole 1 to Ha	ndhole 2 (21 foot section)			
Was video scopi conduit run?	ng completed for the entire duct /	Yes	Refer to V	/MATA Wheaton Power Handhole to Handhole.avi file.
Was pull string in	stalled?	Yes		
Were there any o details of type and	bstructions or blockages? Provide d specific location.	No		
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		No		
Handhole 2 to AF	C Panel (33 foot section)			
Was video scopi conduit run?	ng completed for the entire duct /	No	Bends pre Wheaton	vented video scoping from being completed. Refer to WMATA Power Handhole to 90 into JBox Video (1).avi file.
Was pull string in	stalled?	Yes		
Were there any o details of type and	bstructions or blockages? Provide d specific location.	No		
Is the duct / conducted details about the number of wires.	uit at capacity? Provide additional dimensions of duct / conduit and	No		
		Observatior	ns / Issues /	Next Steps
number of wires.		Observation	ns / Issues /	Next Steps
			Sign Off	
	GFP Representa	tive		WMATA PRGM
Name:	Tino Sahoo			
Signature:	Tanmaya Schoo			
Date:	09/03/2014			

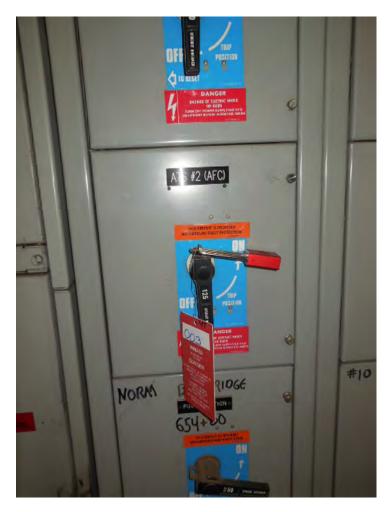


Photo #1: B10 Wheaton: Lock-out Tag-out of the feed breakers for the AFC Panel

Photo #2: B10 Wheaton: Lock-out Tag-out of the feed breakers for the AFC Panel



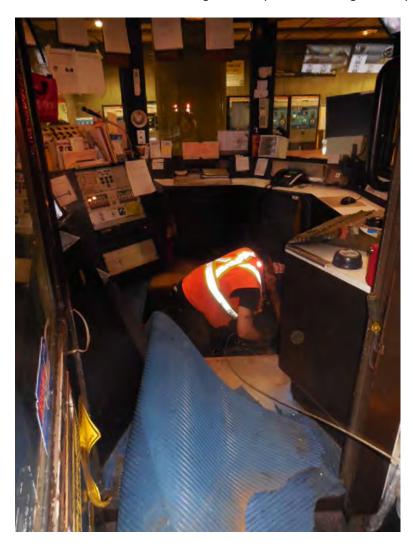


Photo #3: B10 Wheaton: Pushing in fish tape for the faregate array ducts

Photo #4: B10 Wheaton: Attempting to video-scope the faregate array ducts



Photo #5: B10 Wheaton: Attempting to rod the faregate array ducts



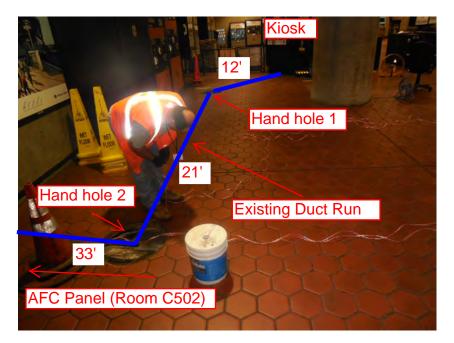
Photo #6: B10 Wheaton: Corroded communications duct opening in kiosk



Photo #7: B10 Wheaton: Corroded communications duct opening in kiosk



Photo #8: B10 Wheaton: Installing pull strings between the kiosk and AFC panel via the mezzanine handholes



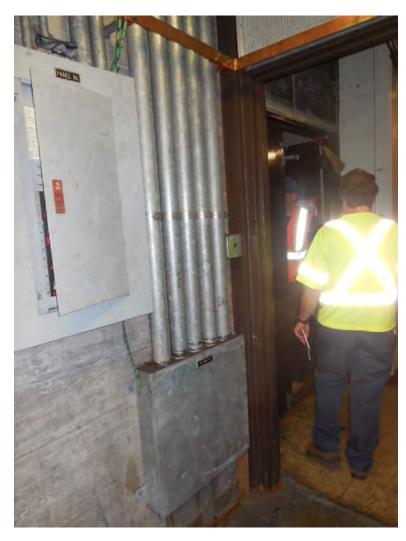
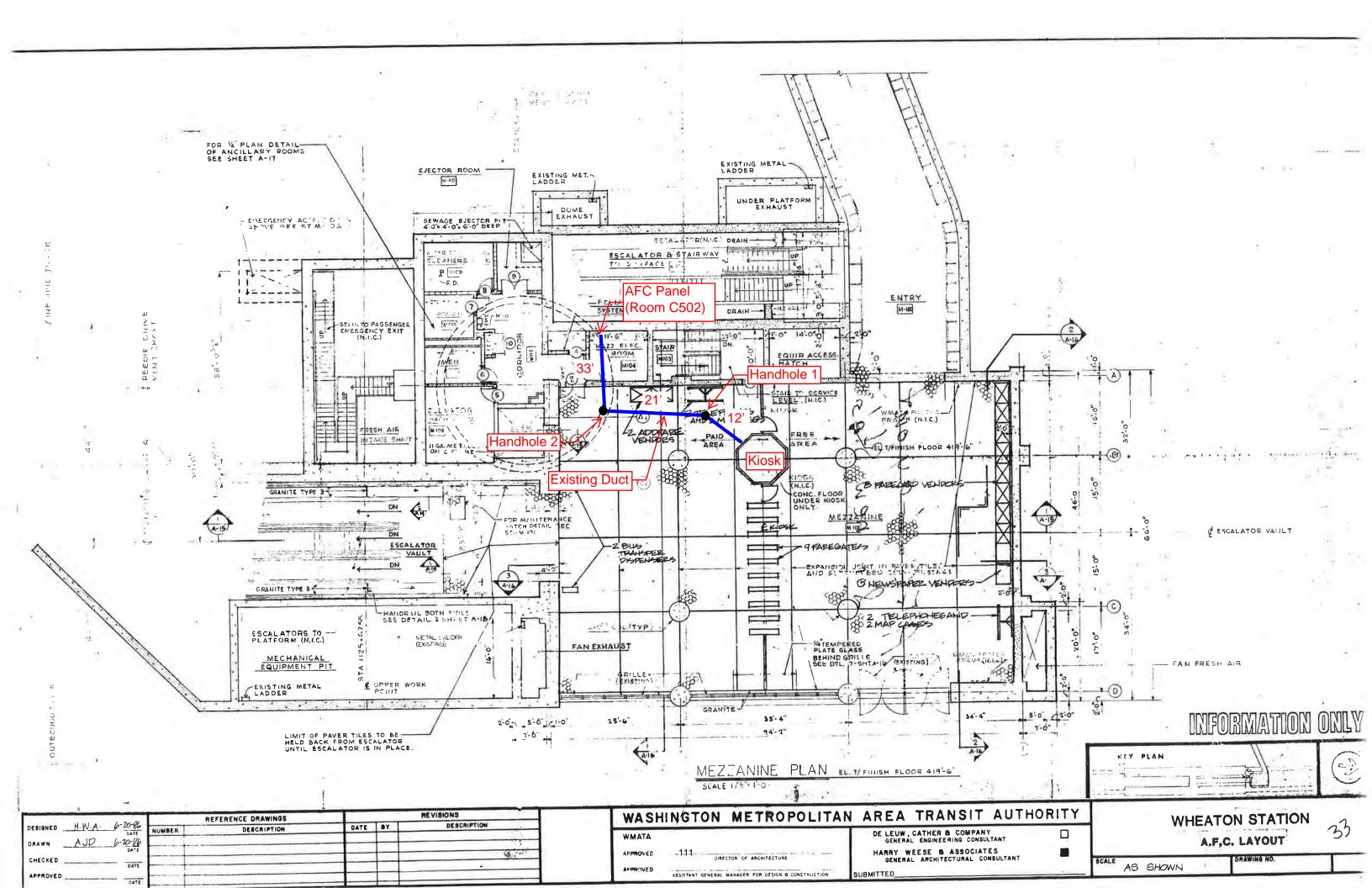


Photo #9: B10 Wheaton: Junction box near the AFC panel



Photo #10: B10 Wheaton: Installing the pull string in the junction box near the AFC panel



Mezzanine Inspection Report Revision 1						
Date: 06/03/15	Station Name: B11 Glenmont		Mezzanine #: 034	Completed By: Mike Bu	utler	
			Summary			
Handhole 1 to AFC Pan scoping or pull string ins scope the upper faregat duct run from Kiosk to H damage. Scanning of the mezzar	g and pull string installation wa el. Video scoping was also co stallation in upper faregate con e power duct due to obstructio landhole 1 could not be compl nine floor was completed to de The scanning results showed t	mpleted in lo mmunication ons and wate eted due to termine the e	wer faregate power duct. duct due to obstructions a r intrusion. Video scoping multiple obstructions, which existing layout of in-floor d	However, it was not poss and water intrusion. Nor w and pull string installation ch appear to have been c ucts and a proposed pow	sible to complete video vas it possible to video n for the 140' power aused by water ver duct run between the	
Kiosk and AFC Panel w NEPP-02: Video scopin	g and pull string installation wa	ning. as completed	d in an empty alternate du	ct between Kiosk, Handh		
	NEPP-	01: Scopir	ng of Faregate Arrays	s (09/03/14)		
Ta	ask	Yes/No		Notes		
Communications Duct	 Upper Faregate Array (6 fa 	regates)				
Was video scoping con duct run?	npleted for the entire	No		string installation was not	possible due to water	
Were pull strings install the array?	led at all faregates in	No	intrusion and obstruction	15.		
Were there any obstruc Provide details of type a		Yes	Rodder hit an obstruction at the apron of the kiosk in duct; further roddin attempts from the faregate end of duct were also unsuccessful. In addit 75% of duct appears to be under water and corroded.			
	Provide additional details f ducts and number of wires.	N/A	4" walker duct with less than 12 wires			
Communications Duct	- Lower Faregate Array (6 fa	regates)				
Was video scoping cor run?	npleted for the entire duct	Yes	Refer to "WMATA Glenr	nont Lower Fairgate Com	nm Video.avi"	
Were pull strings install the array?	led at all faregates in	Yes				
Were there any obstruc Provide details of type a		No	There were no obstructi and corrosion was visib	ons or blockages, howev le.	ver some water intrusion	
	Provide additional details f ducts and number of wires.	No	4" walker duct with less	than 12 wires.		
Power Duct - Upper Fa	regate Array (6 faregates)		l .			
Was video scoping cor run?	npleted for the entire duct	No	Video scoping was not p	possible due to water intr	usion and obstructions.	
Were there any obstruc Provide details of type a		Yes	attempts from the fareg		sk in duct;further rodding o unsuccessful. In addition, oded.	
	Provide additional details f ducts and number of wires.	N/A	4" walker duct with less	than 12 wires.		
Power Duct - Lower Fa	regate Array (6 faregates)					
Was video scoping cor run?	npleted for the entire duct	Yes	Refer to "WMATA Glenr	nont Lower Fairgate Pow	ver Video.avi"	
Were there any obstruc Provide details of type a	tions or blockages? and specific location.	No	There were no obstructi and corrosion was visib	ons or blockages, howev le.	ver some water intrusion	
	Provide additional details f ducts and number of wires.	No	4" walker duct with less	than 12 wires.		

Task	Yes/No	Notes
	Tes/NO	Notes
Kiosk to Handhole 1 (Distance: 140')		
Was video scoping completed for the entire duct / conduit run?	No	
Was pull string installed??	No	Video scoping and pull string installation was not possible due to water intrusion and obstructions.
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Obstruction in duct was encountered almost immediately from the kiosk end, and at 20' from the handhole end. Duct has extensive corrosion with clear signs of water intrusion.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" walker duct with less than 15 wires
andhole 1 to AFC Panel (Distance: 15')		
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to "WMATA Glenmont Power Kiosk to Handhole Video.avi"
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	6" walker duct with less than 15 wires
NEPP-01:	Scanning	of Mezzanine Floor (10/22/14)
- Scanning was conducted to identify a proposed due	ct route betw	veen the Kiosk and AFC Panel.
- The scanning results showed that there are mulitple		
- Refer to scanning drawing for the layout of existing		
 An AFC as-built drawing does not exist for this mez 	zanine.	

NEPP-02: Scoping of Alternate Power Duct (06/03/15)					
	Task	Yes/No		Notes	
Kiosk to Handho	le 2 (Distance: 140')	ſ	T		
Was video scopi conduit run?	ing completed for the entire duct /	Partially	Refer to " "B11_MZ	'B11_MZ034_Glenmont_Kiosk to HH2.avi" and /034_Glenmont_HH2 to Kiosk.avi"	
Was pull string ir	nstalled?	Yes			
Were there any o details of type an	obstructions or blockages? Provide d specific location.	Yes	The video	o scope could not get past the two 45-degree bends.	
details about the number of wires.	luit at capacity? Provide additional dimensions of duct / conduit and	No	Empty 6'	' walker duct	
Handhole 2 to Al	FC Panel (Distance: 15')		I		
Was video scopi conduit run?	ing completed for the entire duct /	Yes	Refer to "	B11_MZ034_Glenmont_HH2 to AFC Panel.avi"	
Was pull string ir	nstalled?	Yes			
Were there any c details of type an	obstructions or blockages? Provide d specific location.	No			
Is the duct / cond details about the number of wires.	luit at capacity? Provide additional dimensions of duct / conduit and	No	Empty 6'	' walker duct	
			1		
		Observation	ns / Issues	/ Next Steps	
- The distance	e of alternate power duct from Kiosk	to AFC Pan	el is 155'.		
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	06/03/15				

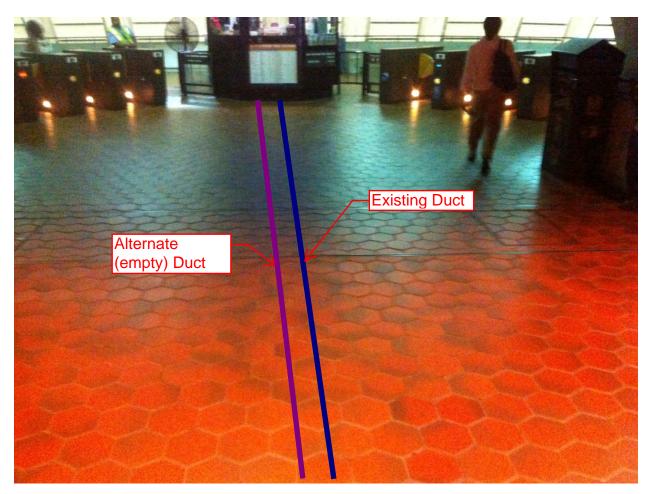
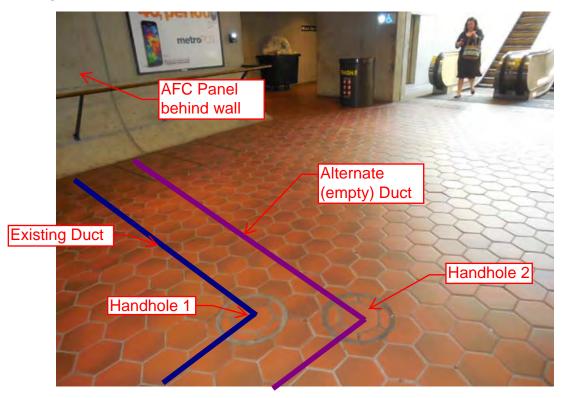


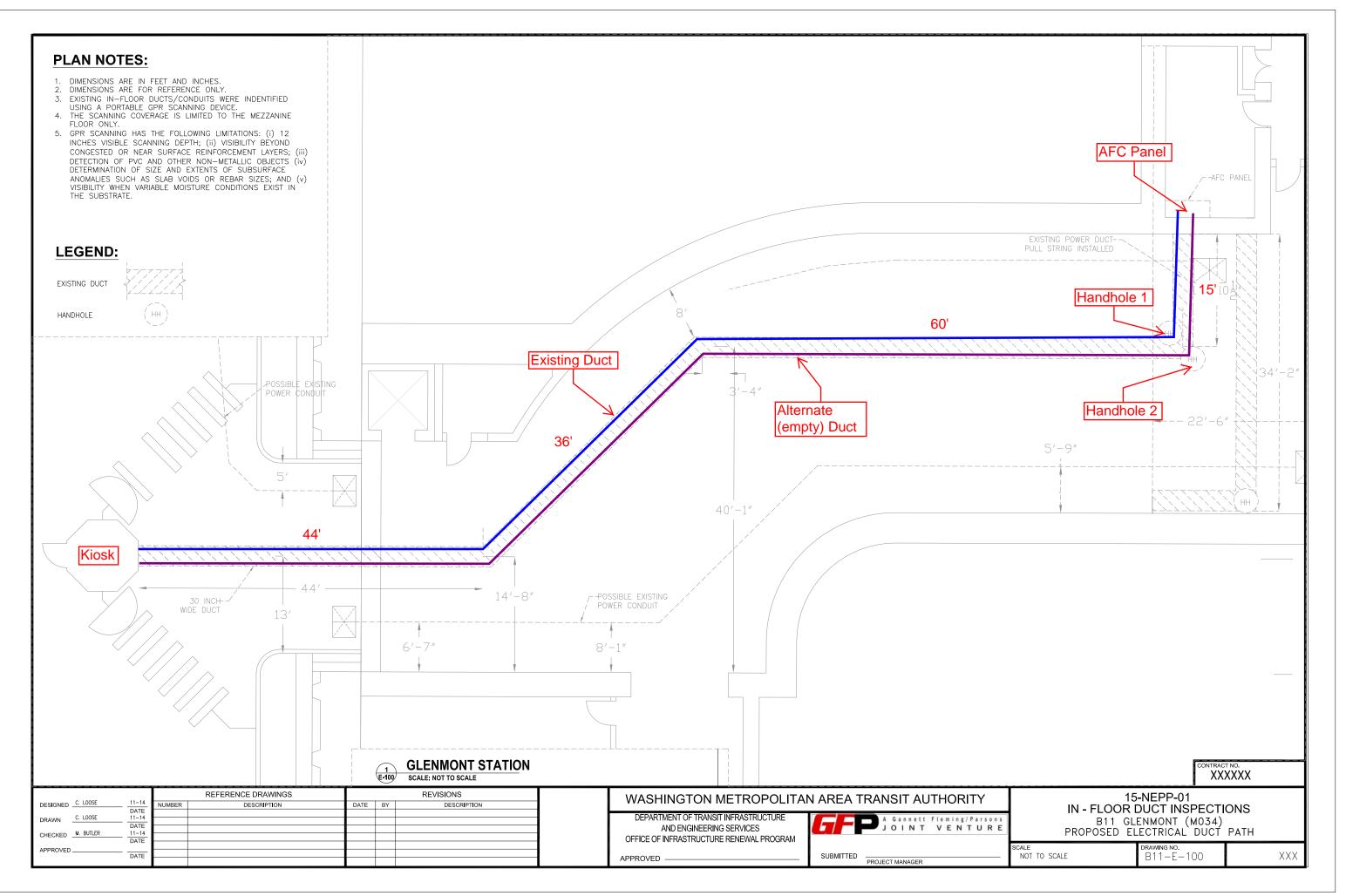
Photo #1: B11 Glenmont - Existing and Alternate Duct Runs from Kiosk

Photo #2: B11 Glenmont – Existing and Alternate Duct Runs from Kiosk to AFC Panel in Room #103, including hand hole locations.



Photo #3: B11 Glenmont – Existing and Alternate Duct Runs from Kiosk to AFC Panel in Room #103, including hand hole locations.





Mezzanine Inspection Report (Scoping)					
Date: 10/02/2014	Pate: 10/02/2014 Station Name: B35 New York Ave North Mezzanine #: 109 Completed By: Mike Butler				
	•		Summary		
Video scoping and pull string installed in power and comm. ducts. Pull string installed in power conduit from kiosk to electrical room. A transition from power conduit to smaller 'armored flexible cables' in the electrical room next to the AFC Panel prevented scoping and pull string installation (see photos). For consistency, it is recommended to install new NEPP wires inside new armored flex cable between conduit stub up and AFC Panel. Scanning is not required at this station.					
		Scoping o	of Faregate Array(s)		
	Task	Yes/No		Notes	
Communications Duc	et – Upper Faregate Array (6 G	iates)			
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA New Y	ork North Mezz Comm Fairgate Video.avi file.	
Were pull strings insta array?	alled at all faregates in the	Yes	Pull strings installed and	labeled "NEPP"	
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	No	Water and mud was obs	erved inside walker ducts	
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 8 v	wires	
Communications Duc	ct - Lower Faregate Array (N/A	.)	Γ		
Was video scoping c run?	ompleted for the entire duct	N/A			
Were pull strings insta array?	alled at all faregates in the	N/A			
Were there any obstru details of type and spe	uctions or blockages? Provide ecific location.	N/A			
	? Provide additional details of ducts and number of wires.	N/A			
Power Duct - Upper F	aregate Array (6 Gates)				
Was video scoping c run?	ompleted for the entire duct	Yes	Refer to WMATA New Y file.	ork North Mezz Power Right Fairgate Video (1).avi	
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	No	Water and mud was obs	erved inside walker ducts	
	? Provide additional details of ducts and number of wires.	No	4" duct with less than 12	wires	
Power Duct - Lower F	aregate Array (N/A)	I			
Was video scoping c run?	ompleted for the entire duct	N/A			
Were there any obstru details of type and spo	uctions or blockages? Provide ecific location.	N/A			
	? Provide additional details of ducts and number of wires.	N/A			

Scoping of Power Duct - Kiosk to AFC Panel					
	Task	Yes/No		Notes	
Kiosk to Condui	it 'Stub-up' in Electrical Room #110	0 (80 foot ru	ın)		
Was video scop conduit run?	bing completed for the entire duct /	No	Conduit d	oes not require scoping	
Was pull string i	installed?	Yes	Pull string	is installed and labeled "NEPP"	
Were there any details of type ar	obstructions or blockages? Provide nd specific location.	No	Conduit h	as 90 degree bends	
details about the number of wires		No	2" conduit	t with less than 10 wires	
Conduit 'Stub-u	p' to AFC Panel(15 foot run)				
Was video scop conduit run?	bing completed for the entire duct /	No	Conduit c	ould not be scoped or pulled due to small armored flex cables	
Was pull string i	installed?	No	(see phot	JS).	
Were there any details of type ar	obstructions or blockages? Provide nd specific location.	N/A			
Is the duct / cond details about the number of wires	duit at capacity? Provide additional e dimensions of duct / conduit and 	N/A			
		1	1		
		Observatior	ns / Issues ,	/ Next Steps	
No existing as-b	uilt available.				
			Sign Off		
	GFP Representa	tive		WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				
Date:	10/02/2014				

Photo #1 – Kiosk and Faregates on Mezzanine Floor

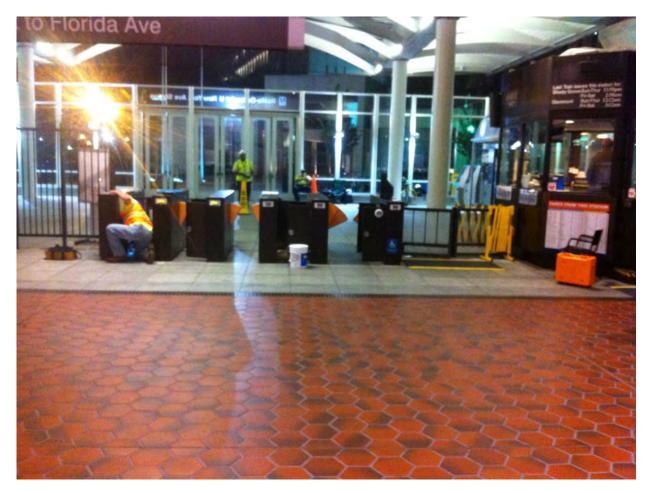


Photo #2 – Power Conduit transition to Armored Flex Cables leading to AFC Panel (Electrical Room 110)



Photo #3 – Armored Flex Cables leading to AFC Panel (Electrical Room 110)



Mezzanine Inspection Report (Scoping)					
Date: 11/05/2014	Station Name: B35 New York	Ave South	Mezzanine #: 108	Completed By: Mike Butler	
			Summary		
power duct for the fared A proposed route was i chase room #109, behi being used inside room power room #101 next	gate array. dentified for the power conduit nd elevator room #107, and pu #109 approximately 35 feet do to the AFC panel. The 4 inch a s used to bridge the run from t ant.	run from the Ill string was own the hall f and 1 inch stu	kiosk to the AFC panel. A installed to a stub up. Ther from the 4 inch stub up, an ub ups could be connected	faregate array. Video scoping was completed for the 4 inch conduit runs from the kiosk to the cable re were four available 1 inch ground conduits not d these 1 inch conduits run and stub up inside the by a proposed conduit run along the wall. The 1 and pull string was installed. Both the 4 inch and 1	
		Scoping c	of Faregate Array(s)		
Ta	ask	Yes/No		Notes	
	- Faregate Array (4 Gates)	163/10			
Was video scoping cor run?	npleted for the entire duct	Yes	Refer to WMATA New Y	ork Ave South Comm Fair Gate Video.avi file.	
Were pull strings instal array?	lled at all faregates in the	Yes			
Were there any obstruct details of type and spec	ctions or blockages? Provide cific location.	No			
	he duct at capacity? Provide additional details but the dimensions of ducts and number of wires.				
		T			
Power Duct - Upper Fa	regate Array (4 Gates)				
Was video scoping co run?	mpleted for the entire duct	Yes	Refer to WMATA New Y	ork Ave South Right Power Fair Gate Video.avi file.	
Were there any obstruct details of type and spec	ctions or blockages? Provide cific location.	No			
	Provide additional details f ducts and number of wires.	No			

	Scoping	g of Power	r Duct - Ki	osk to AFC Panel	
	Task	Yes/No		Notes	
Kiosk to 4" stu	b up (~60 foot run)	1	1		
Was video sco conduit run?	ping completed for the entire duct /	No	Conduit –	no scoping required	
Was pull string	installed?	Yes			
Were there any details of type a	v obstructions or blockages? Provide and specific location.	No			
Is the duct / cor details about th number of wires	nduit at capacity? Provide additional the dimensions of duct / conduit and s.	No	Conduit v	acant	
1" stub up to A	FC Panel (~130 foot run)	ſ	T		
Was video sco conduit run?	ping completed for the entire duct /	No	Conduit –	no scoping required	
Was pull string	installed?	Yes			
Were there any details of type a	v obstructions or blockages? Provide and specific location.	No			
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.		No	Conduit vacant		
			1		
			L		
		Observation	ns / Issues /	Next Steps	
No existing As-	-builts available.				
A proposed cor	nduit run, approximately 35 feet long,	will be need	led betweer	the 4 inch and 1 inch stub ups.	
			Sign Off		
	GFP Representa	tive	orgin on	WMATA PRGM	
Name:	Mike Butler				
Signature:	Mizun				

11/05/2014

Date:

Photo #1 – B35 New York Ave South: 4 inch stub up at first run from kiosk

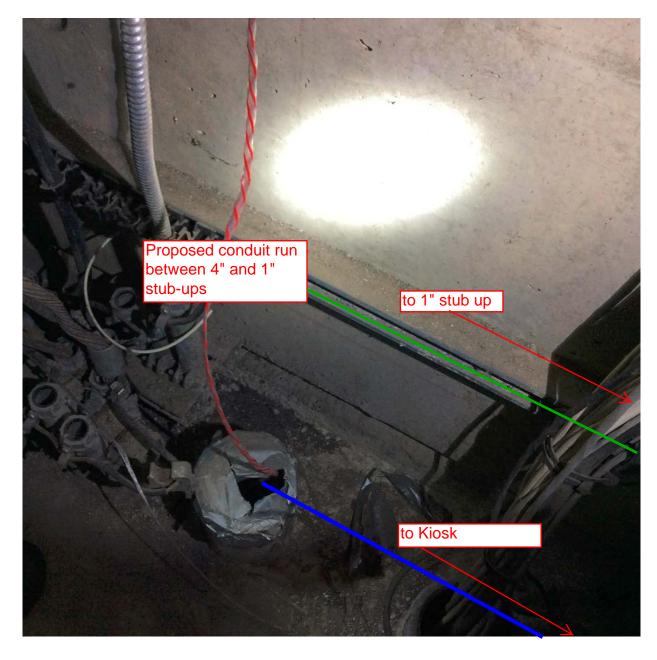


Photo #2 – B35 New York Ave South: 1 inch stub up starting run to AFC Panel

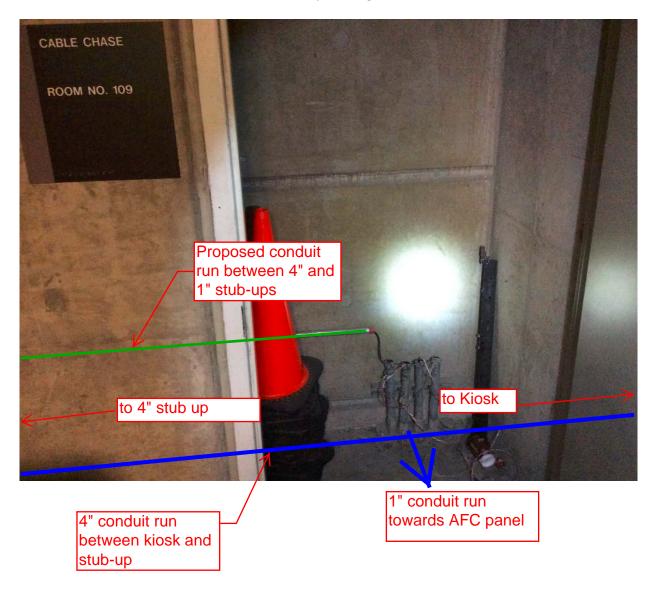


Photo #3 – B35 New York Ave South: AFC Panel near 1 inch stub up

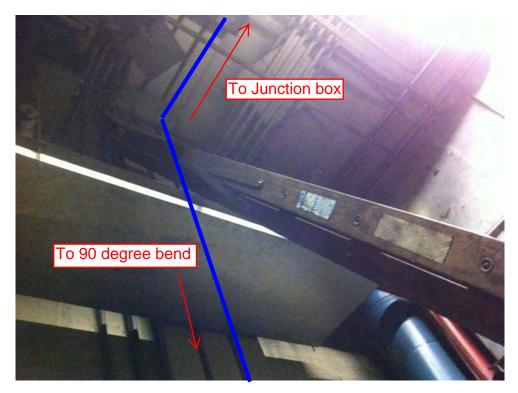


1" conduit towards proposed connection to 4" stub up

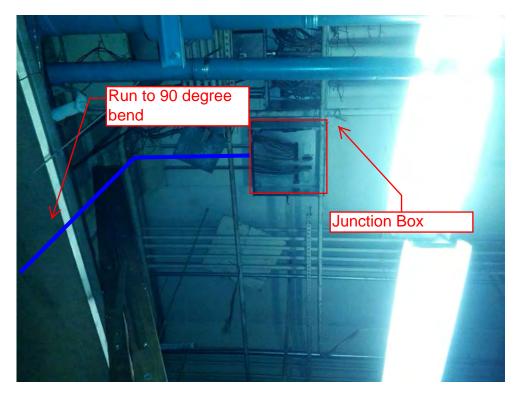
	Mezzanine Inspection Report (Scoping) REVISION 1						
Date: 10/31/14	Station Name: F01 Gallery Pla	ace North	Mezzanine #: 069	Completed By: Mik	e Butler		
			Summary				
could not be complete platform level. The jur	plete for this station. The ducts a ed between Kiosk and AFC Pan- nction box is 20' above the groun nction box in reach. Scaffolding i ssary.	el due to inad	ccessibility of junction box safely reachable by ladde	(see photo #2) on th	e ceiling of Room N101 on the		
		Scoping o	of Faregate Array(s)				
	Task	Yes/No		Notes			
Communications Due	ct – Upper Faregate Array (5 G	ates)					
Was video scoping co run?	ompleted for the entire duct	Yes	Refer to WMATA Gallery	y Place Upper Comr	n Fairgate Video.avi file.		
Were pull strings inst array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	No					
	/? Provide additional details of ducts and number of wires.	No					
Communications Due	ct - Lower Faregate Array (5 G	ates)					
Was video scoping c run?	completed for the entire duct	Yes	Refer to WMATA Gallery	y Place Lower Comr	n Fairgate Video.avi file.		
Were pull strings inst array?	alled at all faregates in the	Yes					
Were there any obstrudetails of type and sp	uctions or blockages? Provide ecific location.	No					
	/? Provide additional details of ducts and number of wires.	No					
Power Duct - Upper F	Faregate Array (5 Gates)	1					
Was video scoping c run?	completed for the entire duct	Yes					
Were there any obstrudet details of type and sp	uctions or blockages? Provide ecific location.	No					
	Provide additional details of ducts and number of wires.	No					
Power Duct - Lower F	Faregate Array (5 Gates)						
Was video scoping c run?	completed for the entire duct	Yes	Refer to WMATA Gallery	y Place Lower Powe	r Fairgate Video.avi file.		
Were there any obstruction details of type and sp	uctions or blockages? Provide ecific location.	No					
	? Provide additional details of ducts and number of wires.	No					

Scopin	g of Power	r Duct - Ki	osk to AFC Panel
Task	Yes/No		Notes
Kiosk to Junction Box (Room N101) – 45'			
Was video scoping completed for the entire duct / conduit run?	Yes	Refer to V	VMATA Gallery Place Handhole to Kiosk Video.avi file.
Was pull string installed?	No		ght could be seen inside the junction box from the ground level However, it was not possible to access box and install pull string.
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		
Junction Box (Room N101) to AFC Panel – 35'			
Was video scoping completed for the entire duct / conduit run?	No		e bend was encountered where the duct transitions from wall to (see photo).
Was pull string installed?	No	Need safe	e access to Junction Box 20' above ground level
Were there any obstructions or blockages? Provide details of type and specific location.	No		ctions in vertical duct run from AFC panel to ceiling. Assuming no ns in horizontal duct run on ceiling between 90 degree bend and ox.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No		
		L <u>.</u>	
There is no secure location to place a ladder and acc	cess the junc	ction box sa	/ Next Steps fely. The junction box is centrally positioned on the ceiling, away ther temporary support is needed to safely access the junction
		Sign Off	
GFP Representa	tive		WMATA PRGM
Name: Mike Butler			
Signature: M.ZMM			
Date: 10/31/14			

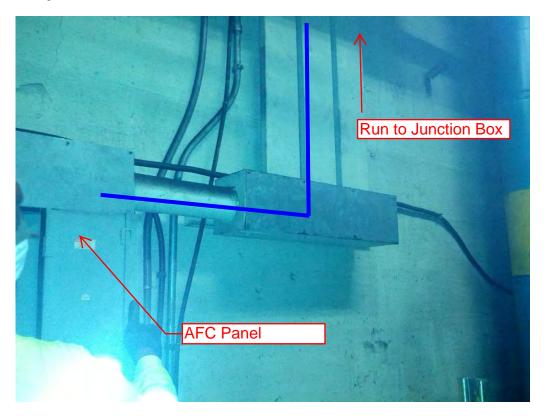
Gallery Place North Photo #1 - Due to obstructions on the wall and limited space in Room N101, there is no secure area to place the ladder and have access to the Junction Box in the ceiling.



Gallery Place North Photo #2 - Junction box 20' above ground level under Mezzanine level.

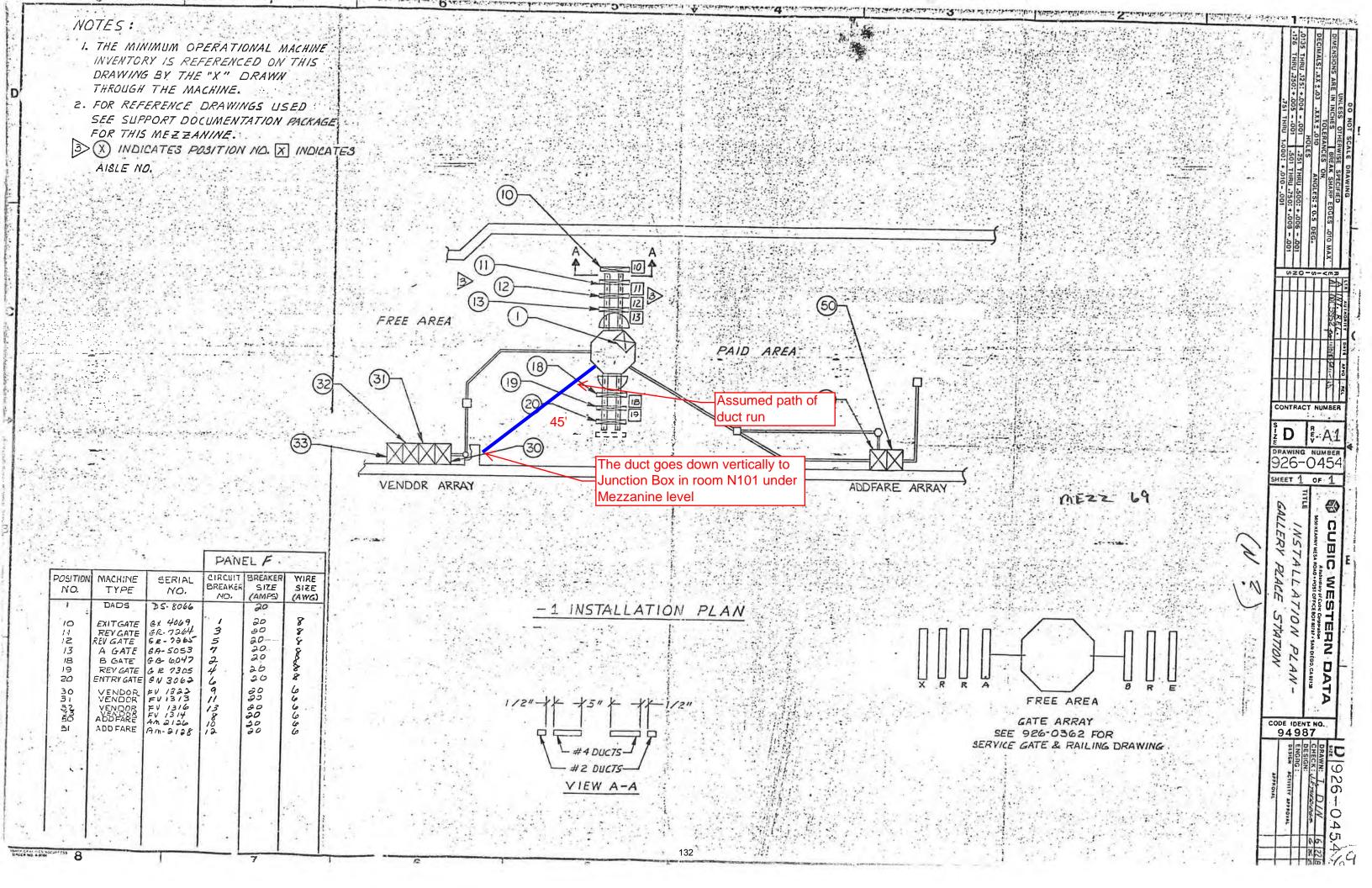


Gallery Place North Photo #3 – Wires from Junction Box come down in ducts and converge into larger conduit leading to AFC Panel.



Gallery Place North Photo #4 – Wires coming from conduit inside of AFC Panel.





WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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ELECTRICAL AND DATA CABLE INSTALLATION

For

Washington Metropolitan Area Transit Authority

Contract Number FQ 15233

VOLUME 4

Mezzanine Inspection Report

July 15, 2015

Final Submission