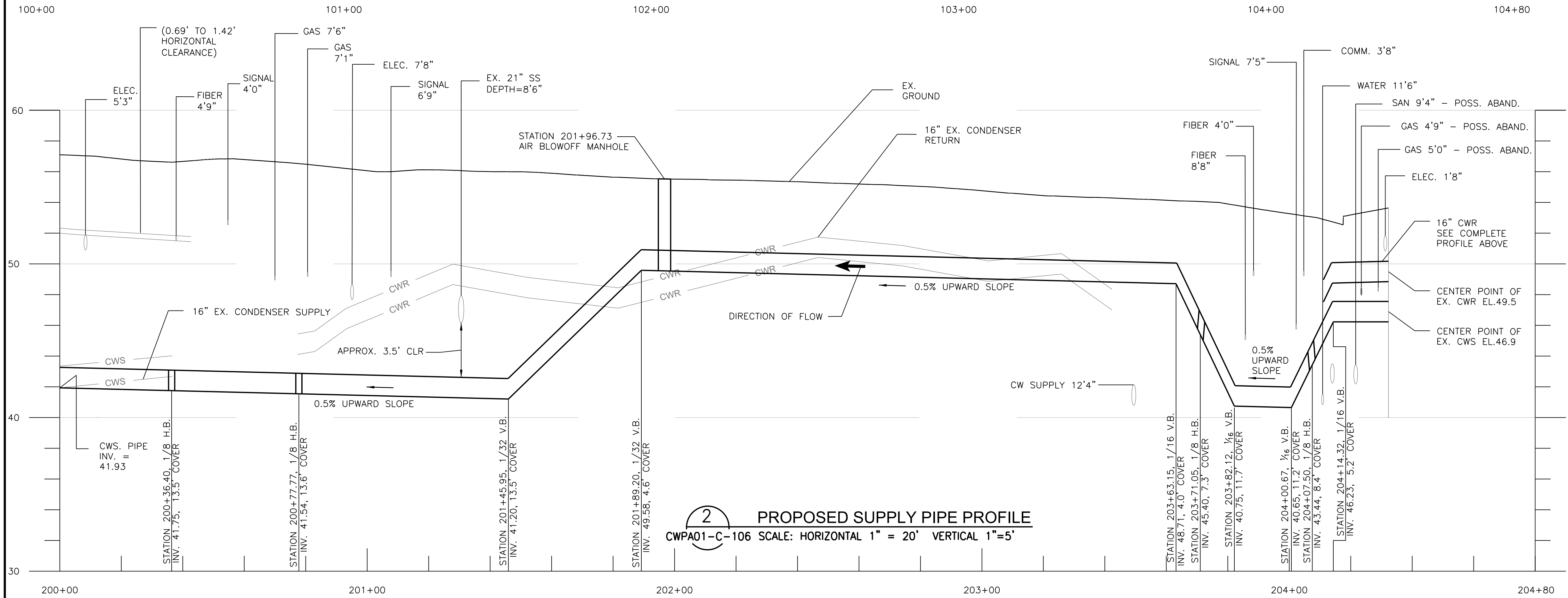
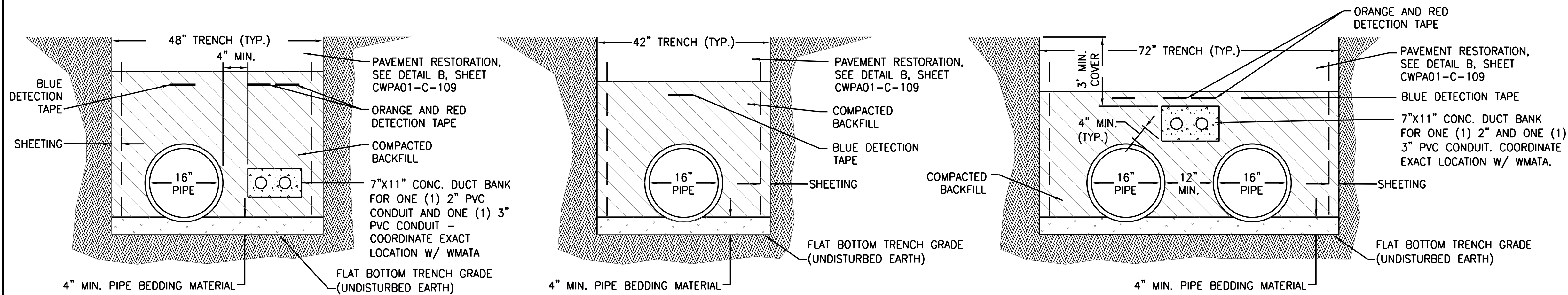


- NOTES:
- CONTRACTOR SHALL COORDINATE PROTECTION AND SUPPORT OF EXISTING UTILITIES IN ACCORDANCE WITH WMATA, DDOT AND DC WASA SPECIFICATIONS.
  - CONTRACTOR SHALL MATCH PIPE TO EXISTING ELEVATIONS AT PENETRATIONS TO CHILLER PLANT AND BASEMENT.



DESIGNED M. ABEL 03/16/17 DATE			DRAWN H. ZHOU 05/30/17 DATE			CHECKED J. WANG 08/15/17 DATE		
REFERENCE DRAWINGS			REVISIONS			WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		
NUMBER	TITLE	DATE	NUM	DESCRIPTION		DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES		
		08/15/17	0	FINAL SUBMITTAL		OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM		
						Mark H. Magnuson 8/15/2017 DATE		
						JCL 8/15/2017 DATE		
						REPLACEMENT OF FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING CIVIL CONDENSER PIPING PROFILE		
M NO. M1298		CONTRACT NO. FQ-18004		SCALE AS NOTED		DRAWING NO. CWPA01-C-106		SHEET NO. 10 of 53

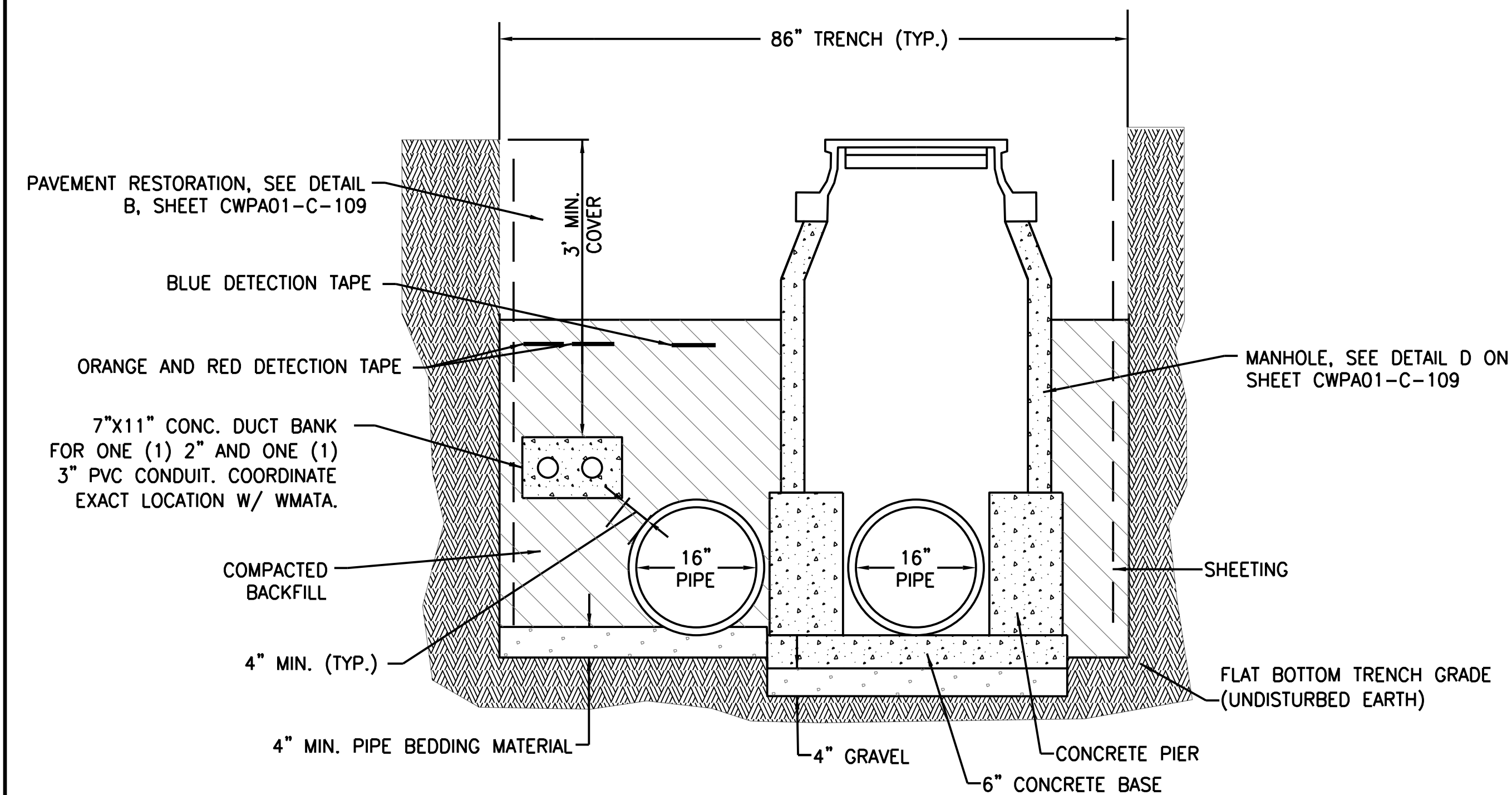




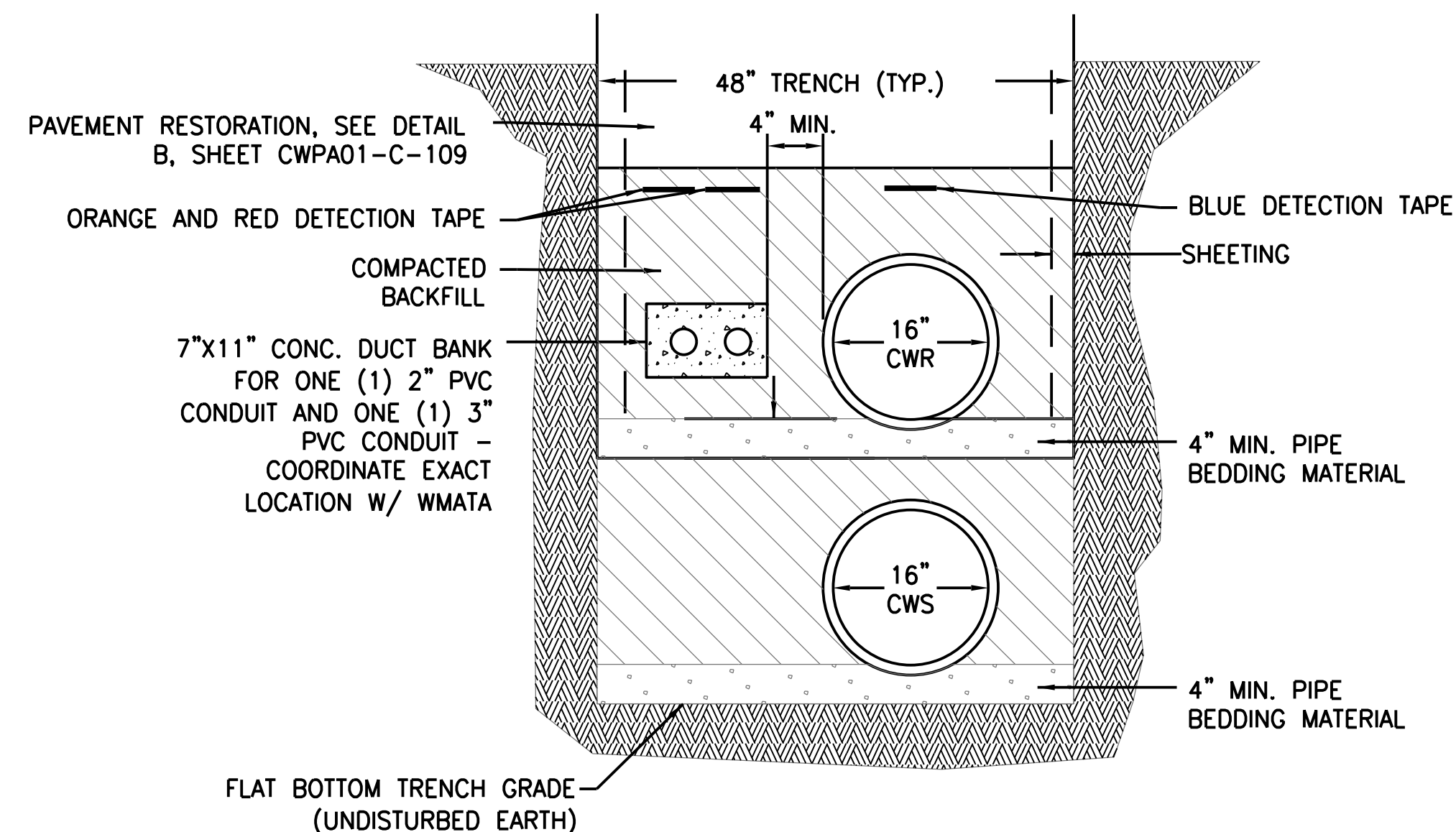
**A** RETURN PIPE PLACEMENT IN 48" TRENCH  
CWPA01-C-107 SCALE: NONE

**B** SUPPLY PIPE PLACEMENT IN 42" TRENCH  
CWPA01-C-107 SCALE: NONE

**C** DUAL HORIZONTAL PIPE PLACEMENT IN 72" TRENCH  
CWPA01-C-107 SCALE: NONE



**D** DUAL HORIZONTAL PIPE PLACEMENT IN 86" TRENCH  
AT AIR BLOWOFF MANHOLE  
CWPA01-C-107 SCALE: NONE



**E** RETURN AND SUPPLY PIPE PLACEMENT IN 48" TRENCH  
CWPA01-C-107 SCALE: NONE

NOTE:  
IN LOCATIONS WHERE DUCTBANK HAS LESS THAN 4"  
CLEARANCE WITH CONDENSER PIPE, PROTECT PIPE WITH  
OWENS CORNING FOAMULAR 1000 OR EQUAL.

- NOTES:**
- PIPE BEDDING MATERIAL SHALL BE GRAVEL OR CRUSHED STONE CONFORMING TO C-33, GRADING SIZE NO. 76 OR NO. 57.
  - WHERE EXCAVATION DEPTH GREATER THAN 4.5 FEET IS REQUIRED, EXCAVATION SUPPORT SHEETING OR OTHER SHORING METHODS SHALL BE REQUIRED.
  - SEE ELEC. DWG FOR CONC. DUCT BANK DETAILS.
  - DUCTBANK SHALL MAINTAIN 4" MINIMUM CLEARANCE WITH NEW PIPES.
  - SEE SPECIFICATION 02320 FOR TRENCH BACKFILL AND COMPACTION REQUIREMENTS.
  - THIN FILM DETECTABLE WARNING TAPE SHALL BE INSTALLED ABOVE DUCT BANK AND PIPES AT A DEPTH OF 24" BELOW SURFACE. TAPE SHALL MARK CENTERLINE OF PIPE OR CONDUIT. TAPE FOR PIPE SHALL BE BLUE AND PRINTED TO DENOTE WATER PIPE. TAPE FOR 3" CONDUIT SHALL BE RED AND PRINTED TO DENOTE POWER OR ELECTRICAL. TAPE FOR 2" CONDUIT SHALL BE ORANGE AND PRINTED TO DENOTE COMMUNICATIONS.

			REFERENCE DRAWINGS		REVISIONS		
			NUMBER	TITLE	DATE	NUM	DESCRIPTION
DESIGNED	M. ABEL	03/16/17			08/15/17	0	FINAL SUBMITTAL
DRAWN	H. ZHOU	05/30/17					
CHECKED	J. WANG	08/15/17					

**WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY**  
DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES  
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

*Mark H. Magnuson* 8/15/2017  
DATE

*JCL* 8/15/2017  
DATE

**REPLACEMENT OF  
FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING  
CIVIL  
TRENCH DETAILS**

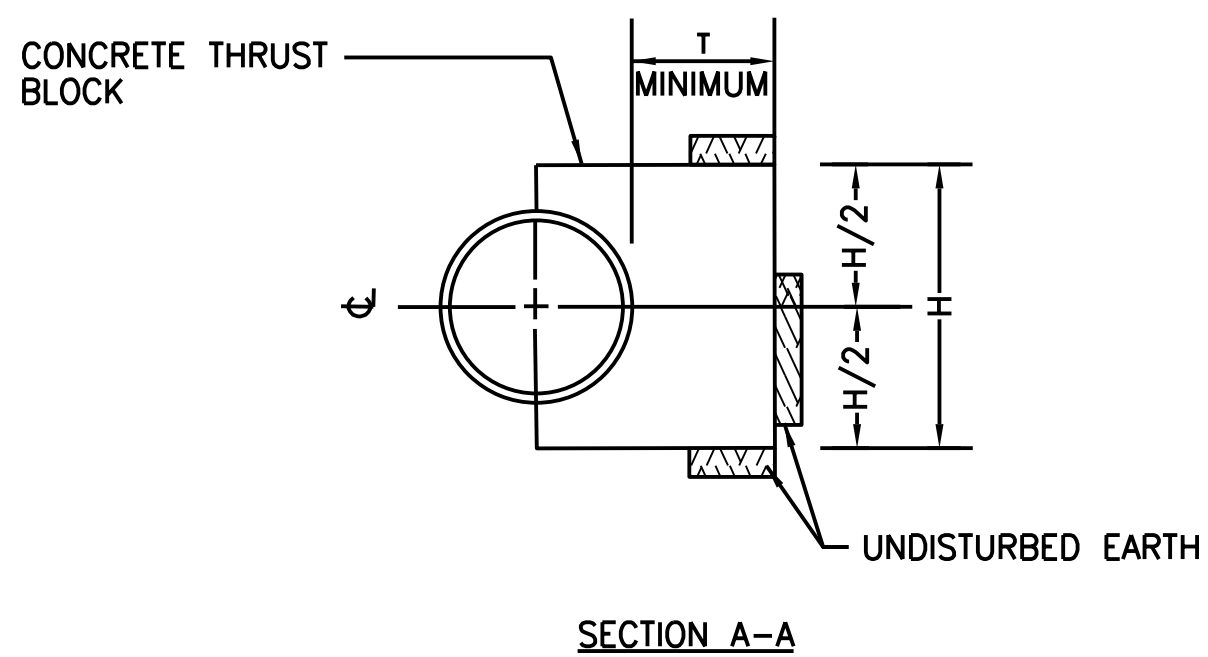
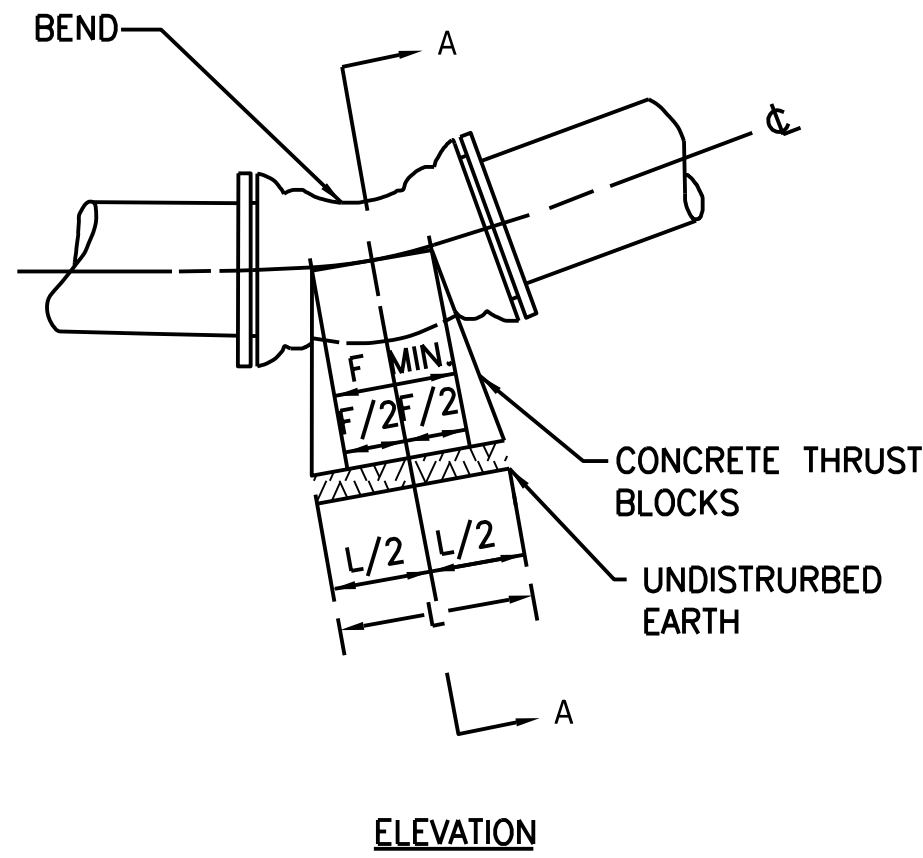
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M1298	FQ-18004	AS NOTED	CWPA01-C-107	11 of 53

**GFP** A Gannett Fleming/Parsons  
JOINT VENTURE

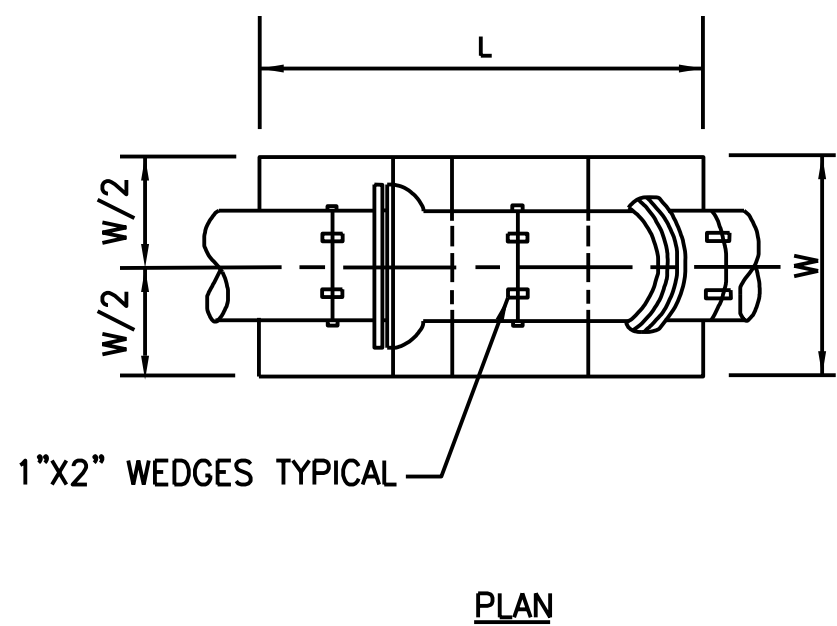
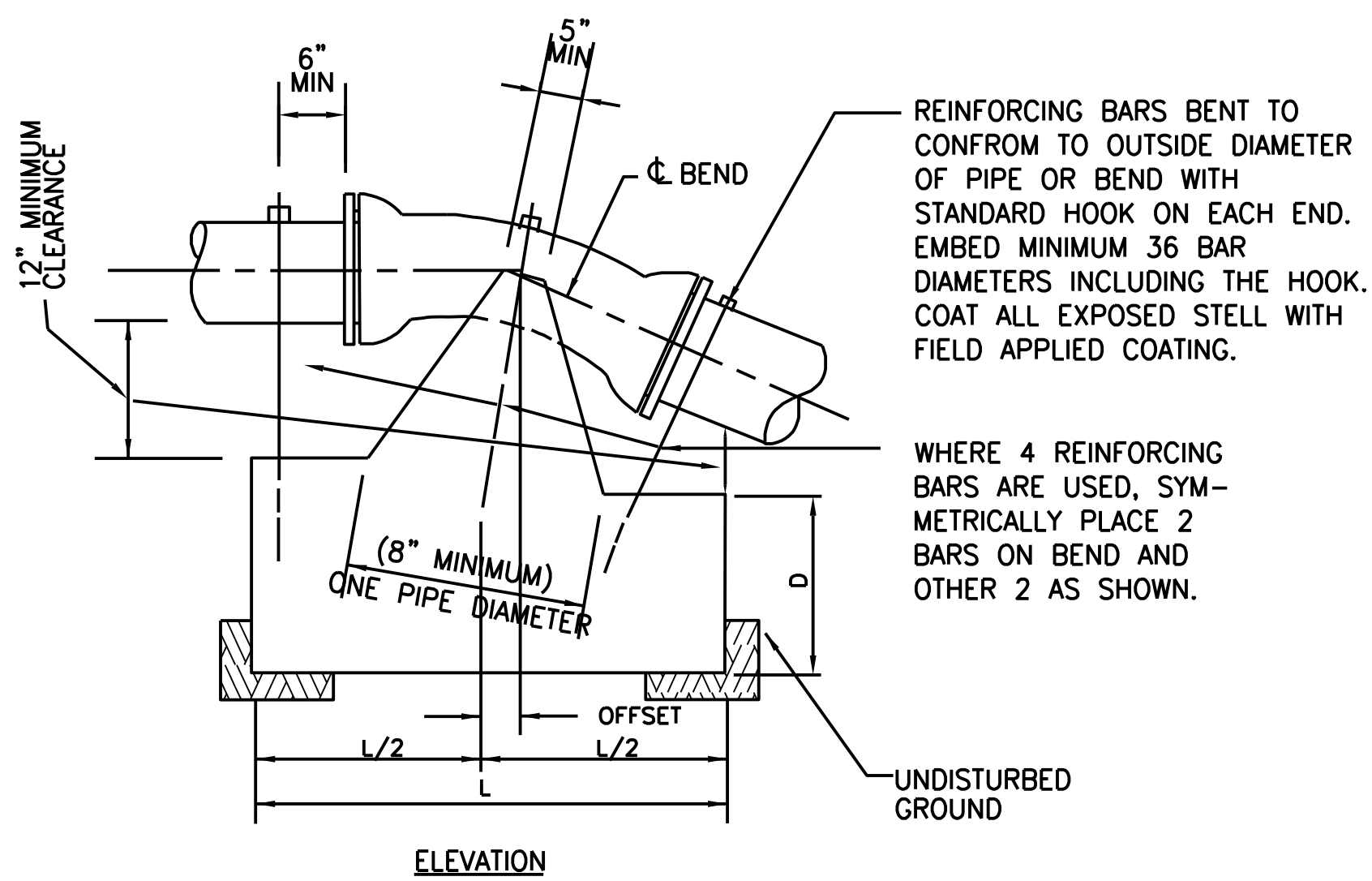
DISTRICT OF COLUMBIA  
QIONG WANG  
No. PE 807084  
8/15/2017  
CIVIL  
PROFESSIONAL ENGINEER



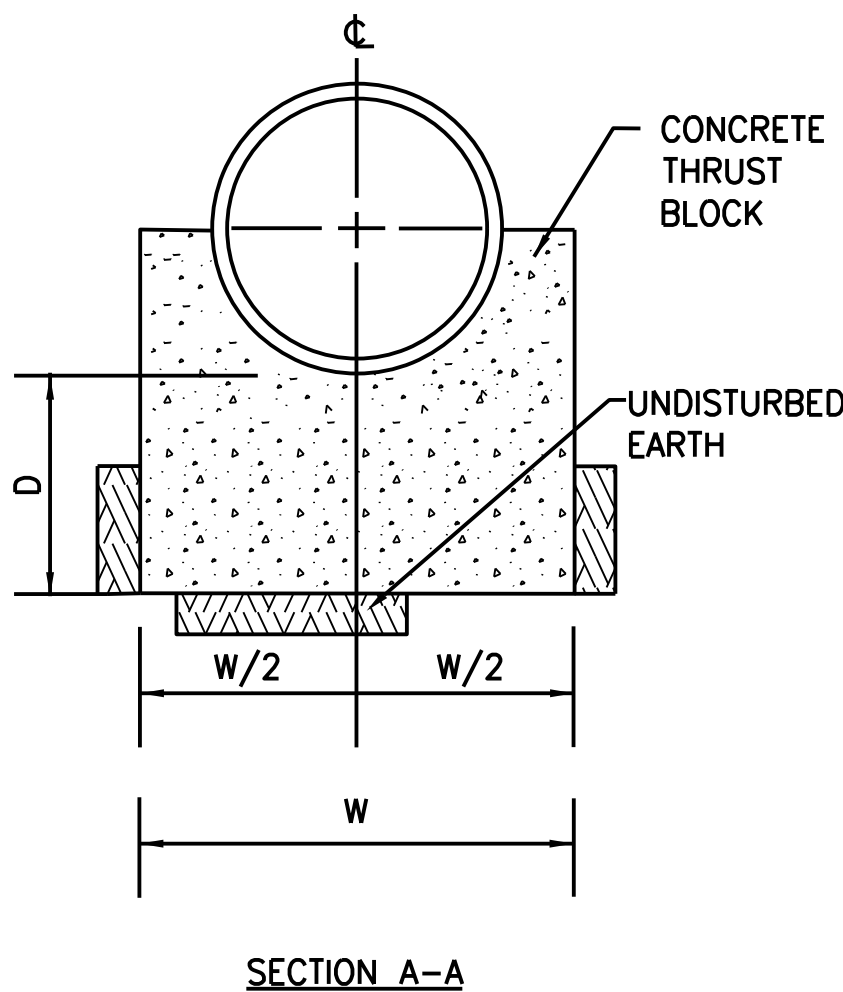
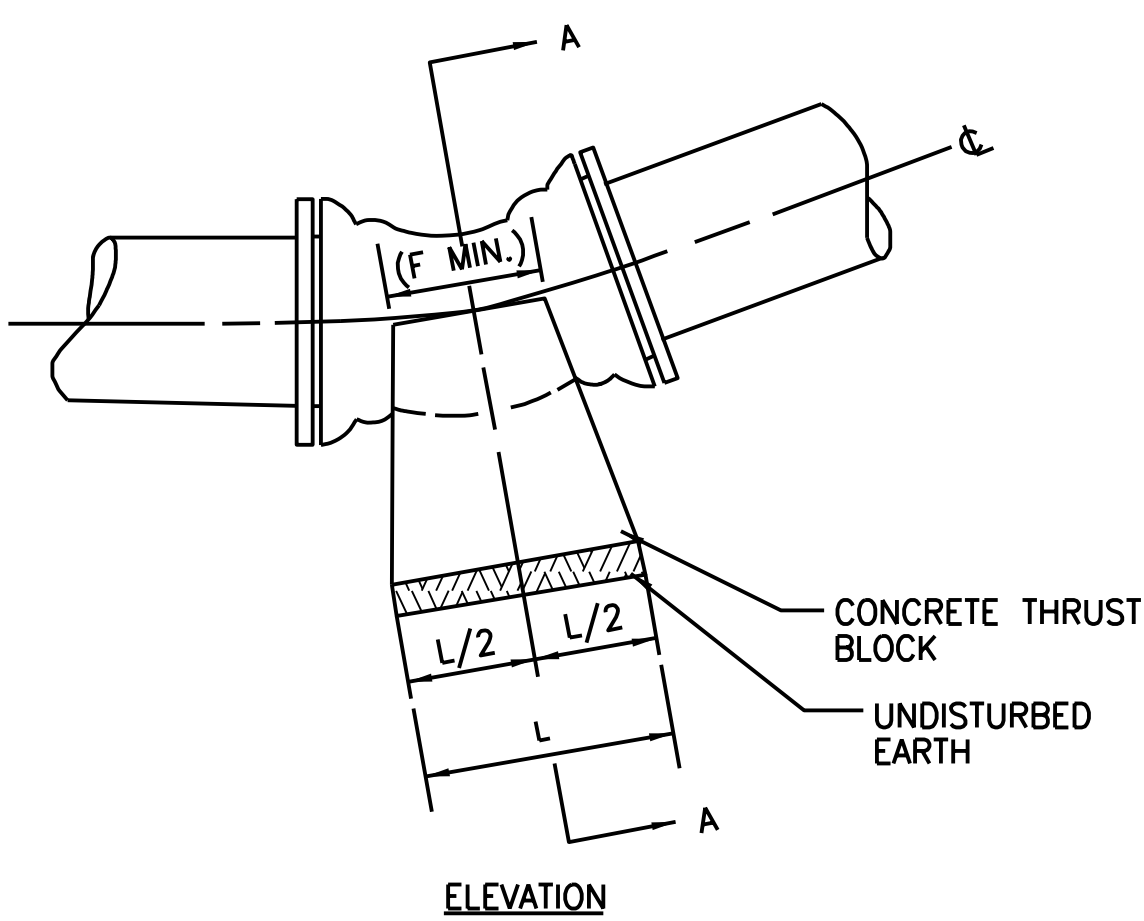
- NOTES:
1. INSTALLATION OF THRUST BLOCKS SHALL NOT INTERFERE WITH EXISTING UTILITIES. EXACT PLACEMENT OF BENDS MAY BE ALTERED AT DISCRETION OF WMATA.
  2. THRUST BLOCKS SHALL BE CAST MONOLITHICALLY WHERE THEY WILL BE SEPARATED BY LESS THAN 6".



BEND TYPE	PIPE DIAMETER	THRUST BLOCK DIMENSIONS			
		L	H	F	T
1/32	16"	3'-6"	2'-0"	1'-0"	1'-6"
1/16	16"	5'-0"	3'-0"	1'-0"	2'-0"
1/8	16"	8'-0"	4'-0"	1'-0"	3'-6"
1/4	16"	11'-6"	5'-0"	1'-0"	5'-6"



BEND		SIZE
1/32	L	5'-0"
	W	5'-0"
	D	3'-3"
	OFFSET	0'-6"
	REBAR	3-#8
1/16	L	6'-3"
	W	6'-0"
	D	4'-0"
	OFFSET	1'-0"
	REBAR	4-#8
1/8	L	7'-6"
	W	7'-0"
	D	5'-3"
	OFFSET	2'-6"
	REBAR	4-#10



BEND		SIZE
1/32	L	3'-0"
	W	2'-3"
	D	1'-0"
	F	0'-6"
1/16	L	4'-0"
	W	3'-3"
	D	1'-6"
	F	0'-6"
1/8	L	5'-0"
	W	5'-0"
	D	2'-0"
	F	0'-6"

**A** THRUST BLOCK FOR HORIZONTAL BENDS  
CWP01-C-108 SCALE: NONE

**B** ANCHORAGE FOR UPPER VERTICAL BENDS  
CWP01-C-108 SCALE: NONE

**C** ANCHORAGE FOR LOWER VERTICAL BENDS  
CWP01-C-108 SCALE: NONE

1. CONCRETE STRENGTH f'c=4000 psi AT 28 DAYS.
2. ALL DIMENSIONS ARE MINIMUMS EXCEPT WHERE LARGER DIMENSION WILL INTERFERE WITH THE PIPE JOINTS OR NOT FACILITATE BOLT REMOVAL ON MECHANICAL JOINT FITTINGS



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DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES  
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM  
*Mark H. Magnuson* 8/15/2017  
DATE

REPLACEMENT OF  
FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING  
CIVIL - THRUST BLOCK DETAILS

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M1298	FQ-18004	AS NOTED	CWPA01-C-108	12 of 53







1. ESC MEASURES SHALL BE IN PLACE BEFORE AND DURING LAND DISTURBANCE.
2. CONTACT DOEE INSPECTION (202) 535-2977 TO SCHEDULE A PRECONSTRUCTION MEETING AT LEAST THREE (3) BUSINESS DAYS BEFORE THE COMMENCEMENT OF LAND-DISTURBING ACTIVITY.
3. A COPY OF THE APPROVED PLAN SET WILL BE MAINTAINED AT THE CONSTRUCTION SITE FROM THE DATE THAT CONSTRUCTION ACTIVITIES BEGIN TO THE DATE OF FINAL STABILIZATION AND WILL BE AVAILABLE FOR DOEE INSPECTORS.
4. REQUEST A DOEE INSPECTOR'S APPROVAL AFTER THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
5. REQUEST A DOEE INSPECTOR'S APPROVAL AFTER FINAL STABILIZATION OF THE SITE AND BEFORE THE REMOVAL OF EROSION AND SEDIMENT CONTROLS.

THE PROJECT WILL REMOVE AND REPLACE THE 16-INCH DIAMETER CONDENSER PIPING SYSTEM FOR WMATA COOLING FACILITY.

1. INSTALL CURB INLET PROTECTION.
2. INSTALL TREE PROTECTION AND MEDIAN LANDSCAPE PROTECTION AS SPECIFIED.
3. TRENCHING OPERATIONS FOR THE INSTALLATION OF PIPES AND RESTORATION OF PAVEMENT.
4. WHEN SEDIMENT CONTROLS ARE NO LONGER REQUIRED AND UPON STABILIZATION OF ALL CONTRIBUTORY AREAS, REMOVE SEDIMENT CONTROLS AND CLEANUP AREAS.



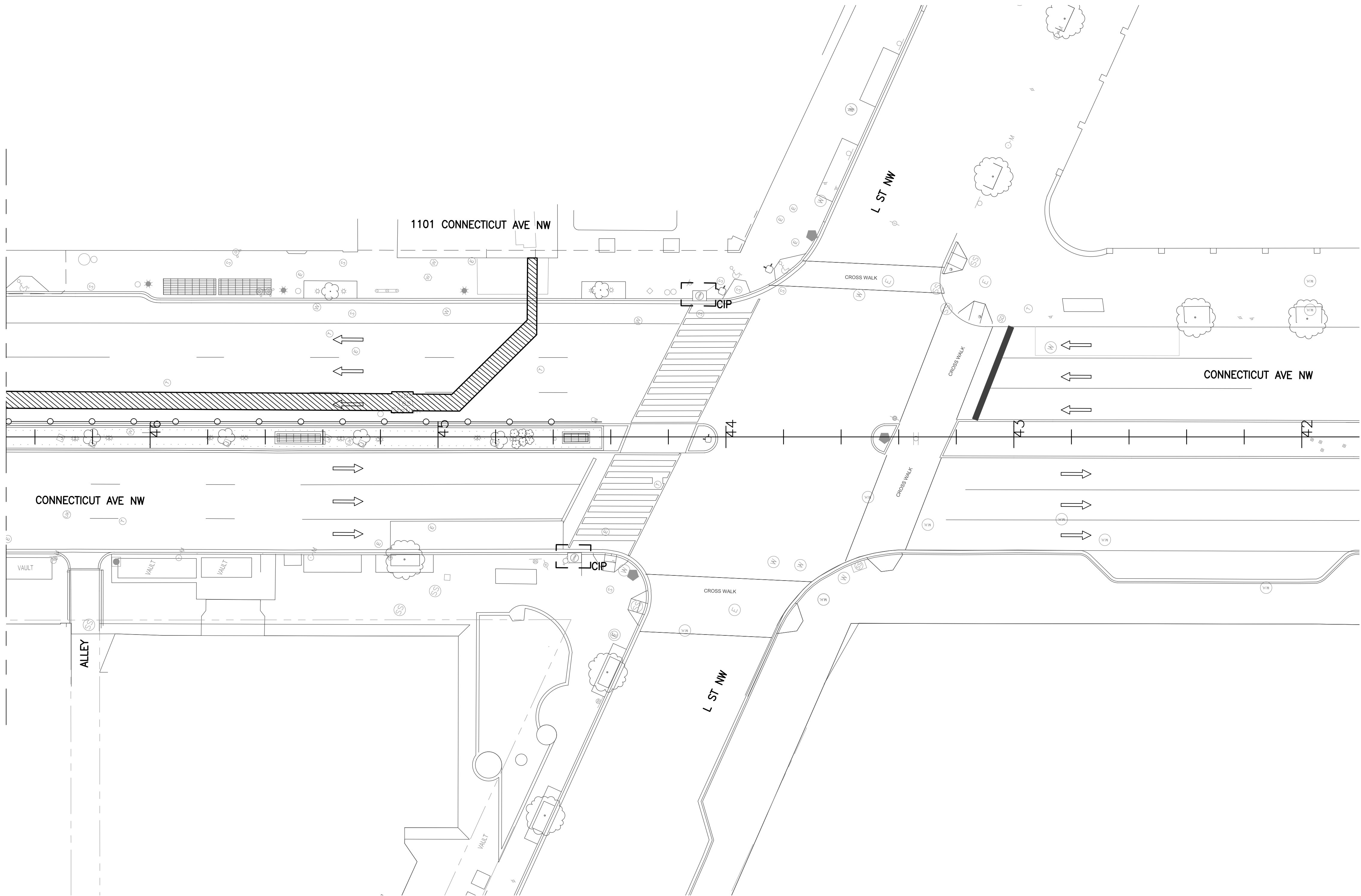
<u>SITE INFORMATION</u>	
TOTAL DISTURBED AREA:	2,525 SF
TOTAL CUT:	795.6 CY
TOTAL FILL:	689.0 CY

DESIGNED <u>K. FLYNN</u> <u>05/22/17</u> DATE			REFERENCE DRAWINGS		REVISIONS		<div><div><div>M</div><div>metro</div></div><div>WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY</div><div>DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES</div><div>OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM</div><div><div><div>Mark H. Magnuson</div><div>08/28/17</div></div><div>DATE</div><div><div>J. Ch</div><div>08/28/17</div></div><div>DATE</div></div></div>		REPLACEMENT OF FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING EROSION AND SEDIMENT CONTROL NOTES & DETAILS				
DRAWN <u>K. FLYNN</u> <u>06/08/17</u> DATE			NUMBER	TITLE	DATE	NUM			DESCRIPTION	M NO.	CONTRACT NO.	SCALE	DRAWING NO.
CHECKED <u>P. PATEL</u> <u>08/08/17</u> DATE					08/15/17	0	FINAL SUBMITTAL		M1298	FQ-18004	AS NOTED	CWPA01-C-041	14 of 53
									</				





MATCHLINE - STA. 46+50 SEE DWG. CWP01-C-143

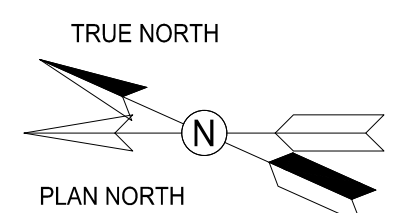



- EROSION AND SEDIMENT CONTROL LEGEND:**
- CURB INLET PROTECTION
  - LIMIT OF TRENCH EXCAVATION
  - DIRECTION OF TRAFFIC (EXISTING)
  - 8' X 4' PLYWOOD FENCE PAINTED WITH FOREST GREEN COLOR ON TEMPORARY SUPPORTS

- NOTES:**
1. FOR PIPE AND TRENCH ALIGNMENT, SEE CONDENSER PIPING PLAN.
  2. DUE TO LIMITED ROADWAY WIDTH, INSTALL TREE PROTECTION ONLY INSIDE WORK ZONES.


1 EROSION AND SEDIMENT CONTROL PLAN  
CWP01-C-144

SCALE: 1" = 20'





A Gannett Fleming/Parsons  
JOINT VENTURE



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	NUMBER	TITLE	DATE	NUM		DESCRIPTION	M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
			08/15/17	0		FINAL SUBMITTAL	M1298	FQ-18004	AS NOTED	CWPA01-C-144	16 of 53



MAINTENANCE OF TRAFFIC GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SAFETY OF THE PUBLIC, ALL ROAD USERS, AND HIS WORKERS THROUGH OUT THE CONSTRUCTION PHASE. THE MOTORIST MUST BE GUIDED IN A CLEAR AND POSITIVE MANNER WHILE APPROACHING AND PASSING THROUGH THE CONSTRUCTION AREA.

2. THE CONTRACTOR SHALL DEVELOP HIS CONSTRUCTION SCHEDULE WITHIN THE FRAMEWORK OF THE MAINTENANCE OF TRAFFIC (MOT) PLAN PROVIDED HEREIN. THE CONTRACTOR'S ACTIVITIES SHALL NOT CHANGE THE OPERATION REQUIREMENTS SET FORTH IN THIS MOT, EXCEPT AS APPROVED BY THE ENGINEER PRIOR TO THE EXECUTION OF CONSTRUCTION OPERATION.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE INSTALLATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH D.C. TEMPORARY TRAFFIC CONTROL MANUAL 2006, DDOT STANDARD DRAWINGS 2015, DDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES 2013, PEDESTRIAN SAFETY AND WORK ZONE STANDARDS 2010, UTILITY TRAFFIC CONTROL PLAN 2007, AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) 2009 EDITION AND SUBSEQUENT REVISIONS, PRIOR TO THE BEGINNING OF HIS OPERATIONS. INSTALLATION OF TRAFFIC CONTROL SIGNS AND DEVICES SHOWN IN THE PLANS ARE CONSIDERED ESSENTIALLY A MINIMUM, AND DOES NOT RELEASE THE CONTRACTOR FROM HIS RESPONSIBILITY OF ENSURING SAFE CONDITIONS DURING HIS OPERATIONS.

4. THESE MOT PLANS ARE PREPARED BASED ON THE SUGGESTED SEQUENCE OF CONSTRUCTION. THE CONTRACTOR MAY USE AN ALTERNATIVE MOT PLANS SUBJECT TO APPROVAL BY THE ENGINEER. UNLESS OTHERWISE PRE-APPROVED, TRAFFIC FLOW RESTRICTIONS AND CONTROL OF WORK SHALL BE CARRIED FORWARD IN ACCORDANCE WITH SECTION 104 AND SECTION 105 OF DDOT STANDARD SPECIFICATIONS 2013.

5. EXISTING TRAFFIC CONTROL SIGNS, STRIPING, AND DEVICES SHALL BE COVERED OVER WHEN NOT APPLICABLE.

6. DELINEATION OF PORTABLE BARRIERS SHALL BE DONE AS NOTED IN THE SPECIAL PROVISIONS OR AS SHOWN ON PLANS.

7. ANY DRAINAGE, SIGNING, LIGHTING, UTILITY, SEDIMENT CONTROL PROTECTION AND OTHER MISCELLANEOUS WORK SHALL BE PERFORMED AS REQUIRED.
8. ALL LEADING ENDS OF TEMPORARY WATER-FILLED PVC BARRICADE EXPOSED TO ON-COMING TRAFFIC SHALL BE PROTECTED WITH PORTABLE IMPACT ATTENUATOR. ALL ATTENUATORS SHALL HAVE TYPE 3 OBJECT MARKERS.

9. THE CHIEF ENGINEER WILL ROUTINELY INSPECT THE MAINTENANCE OF TRAFFIC OPERATION. ALL WORK SHALL BE ORDERED STOPPED UNTIL THE DEFICIENCIES NOTED AND CITED ARE PROMPTLY CORRECTED.

10. TEMPORARY REFLECTIVE PAVEMENT TAPE OF THE APPROVED TYPE SHALL BE USED TO DESIGNATE TRAFFIC LANES.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF PEDESTRIAN TRAFFIC DURING ALL PHASES OF CONSTRUCTION. IT SHALL INCLUDE ACCESS TO MEDIAN, PROPERTY ENTRANCES, SIDEWALKS AND BUS STOPS. ALL SIGNS AND TRAFFIC CONTROL DEVICES AND/OR TEMPORARY CONSTRUCTION REQUIRED TO MAINTAIN FULL AND SAFE PEDESTRIAN ACCESSIBILITY THRU CONSTRUCTION AREA AT ALL THE TIMES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

12. ACCESS TO LOCAL TRAFFIC SHALL BE MAINTAINED ALL THE TIME UNLESS PRIOR APPROVAL BY THE ENGINEER.

13. THE CONTRACTOR SHALL PROTECT EXISTING LANDSCAPED MEDIAN AREAS USING 8' X 4' PLYWOOD FENCE PAINTED WITH FOREST GREET COLOR ON TEMPORARY SUPPORTS, THROUGHOUT THE CONSTRUCTION OPERATION.

14. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN CROSSWALKS AND WALKWAYS AS APPROVED BY DDOT. TEMPORARY WHEELCHAIR RAMPS SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR OR AS DEEMED NECESSARY BY DDOT. COMPLIANCE TO THE AMERICAN DISABILITIES ACT (ADA) IS REQUIRED. CONTRACTORS INVOLVED IN WORK ON CROSSWALKS, SIDEWALKS AND RAMPS, BE IT NEW CONSTRUCTION OR RENOVATION, NEED TO HAVE THE APPROPRIATE SIGNAGE PRESENT OFFERING SAFE AND COMPLIANT ALTERNATIVE ROUTES FOR THE DISABLED AND PEDESTRIAN TRAFFIC.

15. THE CONTRACTOR SHALL ERECT STATIC SIGNS, "UTILITY WORK WILL START ON OR BEFORE XX-XX-XX, USE ALTERNATE ROUTES" SOON AFTER THE NOTICE TO PROCEED TO WARN THE TRAFFIC AT LEAST 7 DAYS IN ADVANCE OF CONSTRUCTION.

16. ALL TEMPORARY PVC BARRIERS SHALL HAVE REFLECTORIZED DELINEATORS SPACED AT 20FT. AMBER SHALL BE USED TO THE LEFT OF TRAFFIC AND WHITE SHALL BE USED TO THE RIGHT OF TRAFFIC.

17. ALL TRAFFIC SAFETY DRUMS USED FOR THE MAINTENANCE OF TRAFFIC SHALL BE OF A LOW-DENSITY MATERIAL.

18. SEDIMENT CONTROL PROTECTION SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION. ALL EXISTING INLETS IMPACTED BY THE CONSTRUCTION SHALL BE PROTECTED.

19. BUSINESSES AFFECTED BY ALLEY ACCESS TEMPORARY CLOSURE SHALL BE ADVISED IN WRITING BY THE CONTRACTOR TO TAKE ALTERNATIVE ALLEY EGRESS & INGRESS.

20. BUSINESSES AFFECTED BY THE DRIVEWAY ACCESS TEMPORARY CLOSURE SHALL BE ADVISED IN WRITING BY THE CONTRACTOR TO PARK THEIR VEHICLES IN NEARBY PARKING ZONES.

21. THE CONTRACTOR SHALL NOT HAVE ANY SECTION OF THE EXCAVATION OPEN SUCH AS TO COMPLETELY BLOCK TRAFFIC. COORDINATE CLOSURE OF SOUTHBOUND TURN FROM CONNECTICUT AVE NW ONTO DESALES ST NW DURING PHASES 1A AND 2B WITH DDOT.

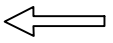
22. BUSINESSES WITH LOADING ZONES ALONG CONNECTICUT AVENUE THAT ARE AFFECTED BY THE CONSTRUCTION SHALL BE ADVISED IN WRITING AT LEAST 2 WEEKS IN ADVANCE BY THE CONTRACTOR THAT TRUCKS WILL NOT BE ABLE TO STOP IN FRONT OF THEIR BUSINESS.


23. CONTRACTOR WILL BE RESPONSIBLE FOR APPROPRIATE FLAGGING WHEN OCCUPYING A TRAVEL LANE WHILE HAULING SPOILS FROM EXCAVATION ACTIVITIES AND ANY OTHER ACTIVITIES THAT MAY OCCUPY TRAVEL LANE DURING CONSTRUCTION.


24. ALL TRENCHES EXPOSED TO TRAFFIC SHALL BE PROTECTED AND COVERED BY STEEL PLATES. STEEL PLATES SHALL BE INSTALLED ON A FIRM SUPPORT AND INSPECTED DAILY TO MAXIMIZE THE SAFETY OF ONCOMING TRAFFIC.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY RELOCATION OF THE EXISTING MAYFLOWER HOTEL TAXI STAND ALONG CONNECTICUT AVE NW BETWEEN L ST NW AND DESALES ST NW ONTO DESALES ST NW OR ANY OTHER AVAILABLE SPACE IN THE PROXIMITY OF THE EXISTING LOCATION. MOT PLANS SHALL BE MARKED UP AND SUBMITTED TO DDOT AND THE ENGINEER FOR PRIOR APPROVAL.


26. POSTED SPEED LIMIT ON CONNECTICUT AVE NW IS 25 MPH.

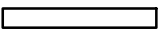
MAINTENANCE OF TRAFFIC LEGEND


- 

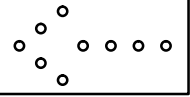
DIRECTION OF TRAFFIC (EXISTING)
- 

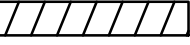
DIRECTION OF BIKE LANE (EXISTING)
- 

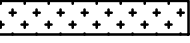
DIRECTION OF TRAFFIC (PROPOSED)
- 


TEMPORARY SIGN ON SPRING LOADED STAND OR ON TEMPORARY SUPPORT
- 


WATER-FILLED PVC BARRIER
- 

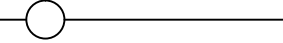
DRUMS, 10' O.C. SPACING TYP.
- 

ARROW PANEL
- 

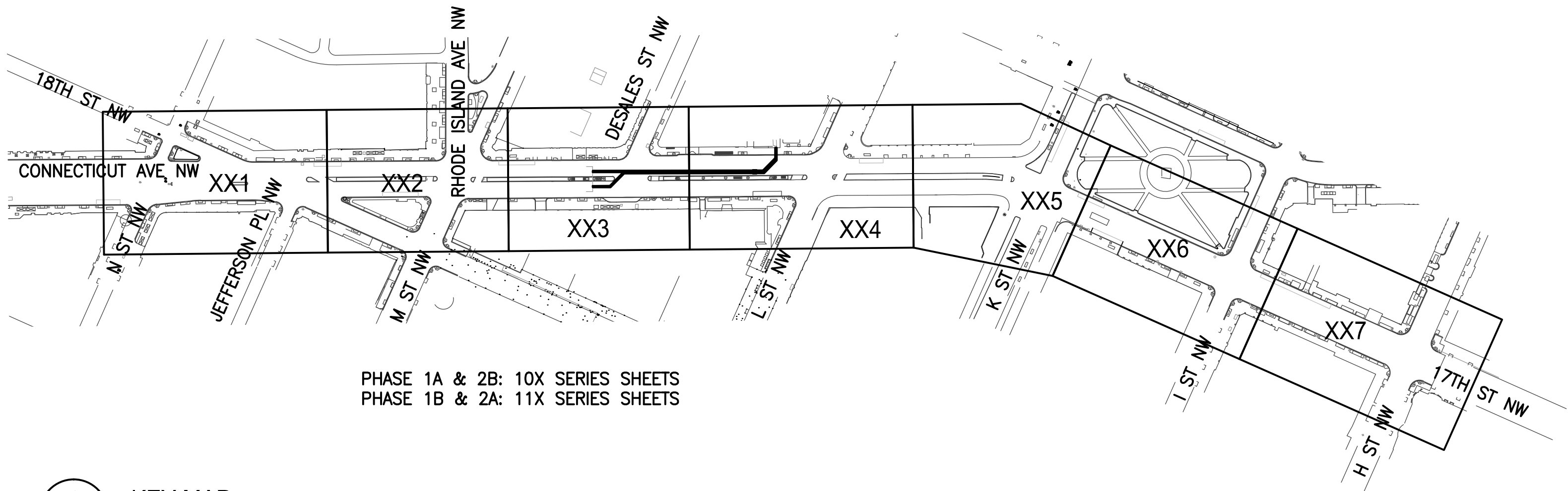
TRENCH EXCAVATION
- 

TRENCH COVERED BY STEEL PLATES
- 

WORK AREA
- 

EXISTING SIGN TO BE COVERED
- 

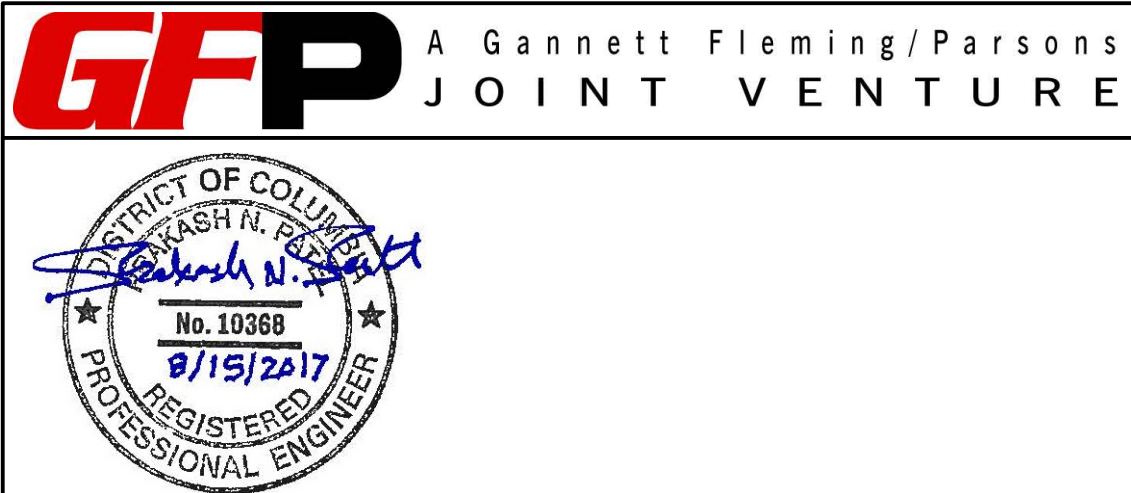
8' X 4' PLYWOOD FENCE PAINTED WITH FOREST GREEN COLOR ON TEMPORARY SUPPORTS



PHASE 1A & 2B: 10X SERIES SHEETS  
PHASE 1B & 2A: 11X SERIES SHEETS

1 KEY MAP  
CWPA01-TM-001

SCALE: NONE



			REFERENCE DRAWINGS		REVISIONS			WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		REPLACEMENT OF FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING MAINTENANCE OF TRAFFIC NOTES					
DESIGNED	K. FLYNN	05/22/17	NUMBER	TITLE	DATE	NUM	DESCRIPTION	  DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM   08/28/17 DATE	 08/28/17 DATE	M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.	
		DATE			08/15/17	0	FINAL SUBMITTAL			M1298	FQ-18004	AS NOTED	CWPA01-TM-001	17 of 53	
DRAWN	K. FLYNN	06/08/17													
		DATE													
CHECKED	P. PATEL	08/08/17													
		DATE													



SUGGESTED SEQUENCE OF CONSTRUCTION:

EARLY WORK ACTIVITIES:

EARLY WORK ACTIVITIES INCLUDE CONDENSER PIPING REPLACEMENT INSIDE THE CHILLER PLANT, AS WELL AS INSIDE THE BASEMENT AND AT THE PENTHOUSE LEVEL OF 1101 CONNECTICUT AVE NW. THIS WORK MAY CONTINUE IN SUBSEQUENT PHASES OF WORK.

ALL WORK WITHIN 1101 CONNECTICUT AVE NW SHALL BE CONDUCTED FROM 6PM TO 7AM MONDAY THROUGH FRIDAY, AND ALL DAY SATURDAY AND SUNDAY.

PHASE 1:

PHASE 1 CONSISTS OF SAW CUTTING AND REMOVING EXISTING PAVEMENT SECTION, EXCAVATING TRENCHES AT REQUIRED LINE AND GRADE, REMOVING EXISTING PIPE SECTIONS THAT ARE IN CONFLICT WITH PROPOSED WORK, ABANDONING REMAINING EXISTING PIPE IN PLACE, PROTECTING AND SUPPORTING-IN-PLACE EXISTING UTILITIES, AND INSTALLATION OF NEW 16-INCH DIAMETER CONDENSER PIPING SYSTEM. THIS WORK IS FURTHER BROKEN DOWN INTO TWO SUB-PHASES.

PHASE 1A:

- 1.CLOSURE OF SB LEFT TURN AT DESALES ST INTERSECTION SHALL ONLY OCCUR BEGINNING THURSDAY NOVEMBER 9, 2017 AT 7PM AND CONCLUDING NO LATER THAN MONDAY NOVEMBER 13, 2017 AT 5AM (VETERANS DAY WEEKEND). SAW CUTTING MAY OCCUR DURING OFF-PEAK HOURS FROM 10AM TO 3PM PRIOR TO THAT DATE.
- 2.INSTALL ADVANCE WARNING STATIC AND VARIABLE MESSAGE SIGNS FOR DETOUR AND ALTERNATE ROUTES, AS SHOWN ON PLAN.
- 3.INSTALL EROSION AND SEDIMENT CONTROL MEASURES WITHIN IMPACTED AREA.
- 4.INSTALL ALL APPLICABLE ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN.
- 5.EXCAVATE TRENCHES AT REQUIRED LINE AND GRADE. PROTECT AND SUPPORT-IN-PLACE EXISTING UTILITIES AS REQUIRED. REMOVE EXISTING CHILLER PIPE SECTIONS IN CONFLICT AS REQUIRED.
- 6.INSTALL NEW 16-INCH DIAMETER CONDENSER PIPES.
- 7.INSTALL STEEL PLATES TO COVER TRENCHES.
- 8.REMOVE ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES, EXCEPT THOSE NECESSARY FOR SUBSEQUENT PHASES OF WORK.

PHASE 1B

- 1.WORK DURING PHASE 1B IS EXPECTED TO BE 24/7 OPERATION.
- 2.MAINTAIN ALL ADVANCE WARNING STATIC AND VARIABLE MESSAGE SIGNS, INSTALLED DURING PHASE 1A FOR NB ALTERNATE ROUTE.
- 3.INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES WITHIN IMPACTED AREA.
- 4.MAINTAIN AND INSTALL ALL APPLICABLE ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN.
- 5.EXCAVATE TRENCHES AT REQUIRED LINE AND GRADE. PROTECT AND SUPPORT-IN-PLACE EXISTING UTILITIES AS REQUIRED. REMOVE EXISTING CHILLER PIPE SECTIONS IN CONFLICT AS REQUIRED.
- 6.INSTALL NEW 16-INCH DIAMETER CONDENSER PIPES.
- 7.MAINTAIN WORK ZONE SETUP FOR SUBSEQUENT PHASES OF WORK.

PHASE 2:

PHASE 2 CONSISTS OF PRESSURE TESTING THE NEWLY INSTALLED CONDENSER PIPING SYSTEM, MAKING NECESSARY FINAL PIPING REPAIR/ADJUSTMENTS AS REQUIRED, BACKFILLING TRENCHES, AND FULL DEPTH PCC BASE RESTORATIONS WITHIN IMPACTED AREAS. THIS WORK IS FURTHER BROKEN DOWN INTO TWO-SUB PHASES, WITH WORK ZONES IDENTICAL TO THOSE USED IN PHASE 1.

PHASE 2A

- 1.WORK DURING PHASE 2A IS EXPECTED TO BE 24/7 OPERATION.
- 2.MAINTAIN ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES SET UP FOR PHASE 1B WORK, INCLUDING ALTERNATE ROUTES.
- 3.INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES WITHIN IMPACTED AREA.
- 4.TEST NEWLY INSTALLED CONDENSER PIPING SYSTEM. MAKE FINAL PIPING REPAIRS AND ADJUSTMENTS AS NEEDED. REFERENCE PHASE 1A MOT PLANS AS NECESSARY TO ACCESS PIPES LOCATED BEYOND PHASE 2A WORK ZONE.
- 5.BACKFILL TRENCH UP TO THE TOP OF ROADWAY SUBGRADE LEVEL.
- 6.INSTALL REINFORCED CONCRETE PAVEMENT BASE PATCH WITHIN TRENCHED AREAS UP TO THE BOTTOM OF SURFACE COURSE IN ACCORDANCE WITH ROADWAY RESTORATION DETAIL.
- 7.INSTALL STEEL PLATES TO COVER EXPOSED CONCRETE WHILE CURING.
- 8.REMOVE ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES, EXCEPT THOSE NECESSARY FOR SUBSEQUENT PHASES OF WORK.

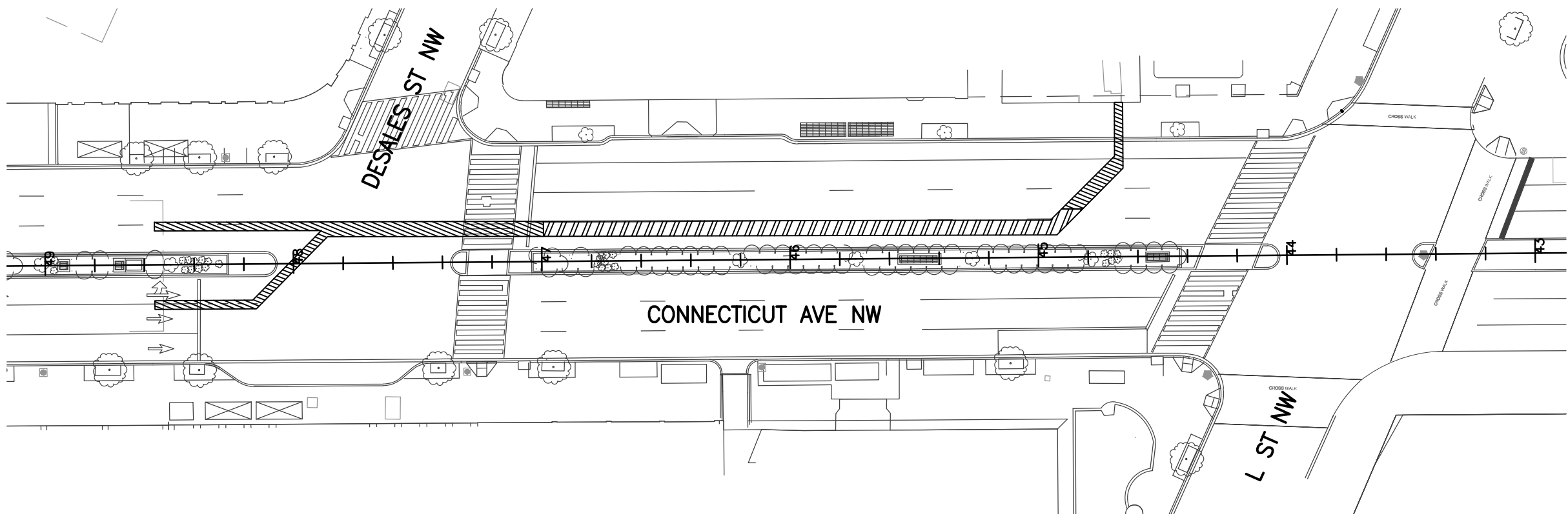
PHASE 2B

- 1.CLOSURE OF SB LEFT TURN AT DESALES ST INTERSECTION SHALL ONLY OCCUR ON A SINGLE WEEKEND, BEGINNING FRIDAY AT 7PM AND CONCLUDING NO LATER THAN MONDAY AT 5AM. CONTRACTOR SHALL COORDINATE CLOSURE WITH DDOT.
- 2.INSTALL ALL APPLICABLE ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN ON MOT PHASE 1A PLANS, INCLUDING DETOUR AND SB ALTERNATE ROUTE.
- 3.INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES WITHIN IMPACTED AREA.
- 4.BACKFILL TRENCH UP TO THE TOP OF ROADWAY SUBGRADE LEVEL.
- 5.INSTALL REINFORCED CONCRETE PAVEMENT BASE PATCH WITHIN TRENCHED AREAS UP TO THE BOTTOM OF SURFACE COURSE IN ACCORDANCE WITH ROADWAY RESTORATION DETAIL.
- 6.INSTALL STEEL PLATES TO COVER EXPOSED CONCRETE WHILE CURING.
- 7.REMOVE ADVANCE WARNING SIGNS, TRAFFIC CONTROL DEVICES, AND EROSION AND SEDIMENT CONTROL MEASURES.

PHASE 3:

PHASE 3 CONSISTS OF MILLING, AC SUPERPAVE SURFACE COURSE, PAVEMENT MARKINGS, AND SIGNING. MINIMUM TWO LANES OF NB & SB TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, USING STANDARD LANE CLOSURES.

- 1.PHASE 3 WORK SHALL BE COMPLETED DURING OFF-PEAK HOURS (10AM TO 3PM) ONLY.
- 2.INSTALL APPLICABLE ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH DDOT STANDARD SINGLE LANE CLOSURE.
- 3.REMOVE STEEL PLATES.
- 4.MILL MINIMUM TOP 2" EXISTING ASPHALT SURFACE COURSE WITHIN THE LIMIT OF PAVEMENT RESTORATION IN ACCORDANCE WITH PAVEMENT RESURFACING PLAN.
- 5.OVERLAY NEW ASPHALT SURFACE COURSE PAVEMENT, MINIMUM 2" IN ACCORDANCE WITH ROADWAY RESTORATION DETAIL.
- 6.RESTORE PAVEMENT STRIPING, MARKINGS, AND SIGNING.
- 7.REMOVE ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES. OPEN ROADWAY FULLY TO TRAFFIC.
- 8.REPEAT STEPS 1 THROUGH 6 AS REQUIRED TO RESURFACE ROADWAY IN ACCORDANCE WITH PAVEMENT RESTORATION PLAN, WHILE MAINTAINING MINIMUM 2 LANES OF NB & SB TRAFFIC.



PHASE 1A & PHASE 2B  
SUPPLY: STA. 200+00 TO 201+65  
RETURN: STA. 100+00 TO 101+53  
AND  
SUPPLY: STA. 203+84 TO 204+34  
RETURN: STA. 103+67 TO 104+18

PHASE 1B & PHASE 2A  
SUPPLY: STA. 201+65 TO 203+84  
RETURN: STA. 101+53 TO 103+67

FOR PROPOSED PIPE STATIONING, SEE  
CONDENSER PIPING PLANS.

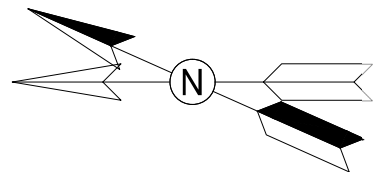
1 SEQUENCING PLAN  
CWPA01-TM-002

SCALE: NONE

PHASE 3 (CONTINUED):

IN THE EVENT THAT HOT-MIXED ASPHALT IS NOT AVAILABLE DUE TO COLD WEATHER, CONTRACTOR SHALL BACKFILL TRENCHES WITH COLD-MIXED ASPHALT, INSTALL TEMPORARY STRIPING AND PAVEMENT MARKINGS, AND OPEN ROADWAY TO ALL TRAFFIC. WHEN HOT-MIXED ASPHALT BECOMES AVAILABLE, CONTRACTOR SHALL REMOVE TEMPORARY ASPHALT, FOLLOW STEPS 1 THROUGH 8 FOR PERMANENT RESTORATION, AND OPEN ROADWAY TO TRAFFIC.

**GFP** A Gannett Fleming/Parsons  
JOINT VENTURE



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES  
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

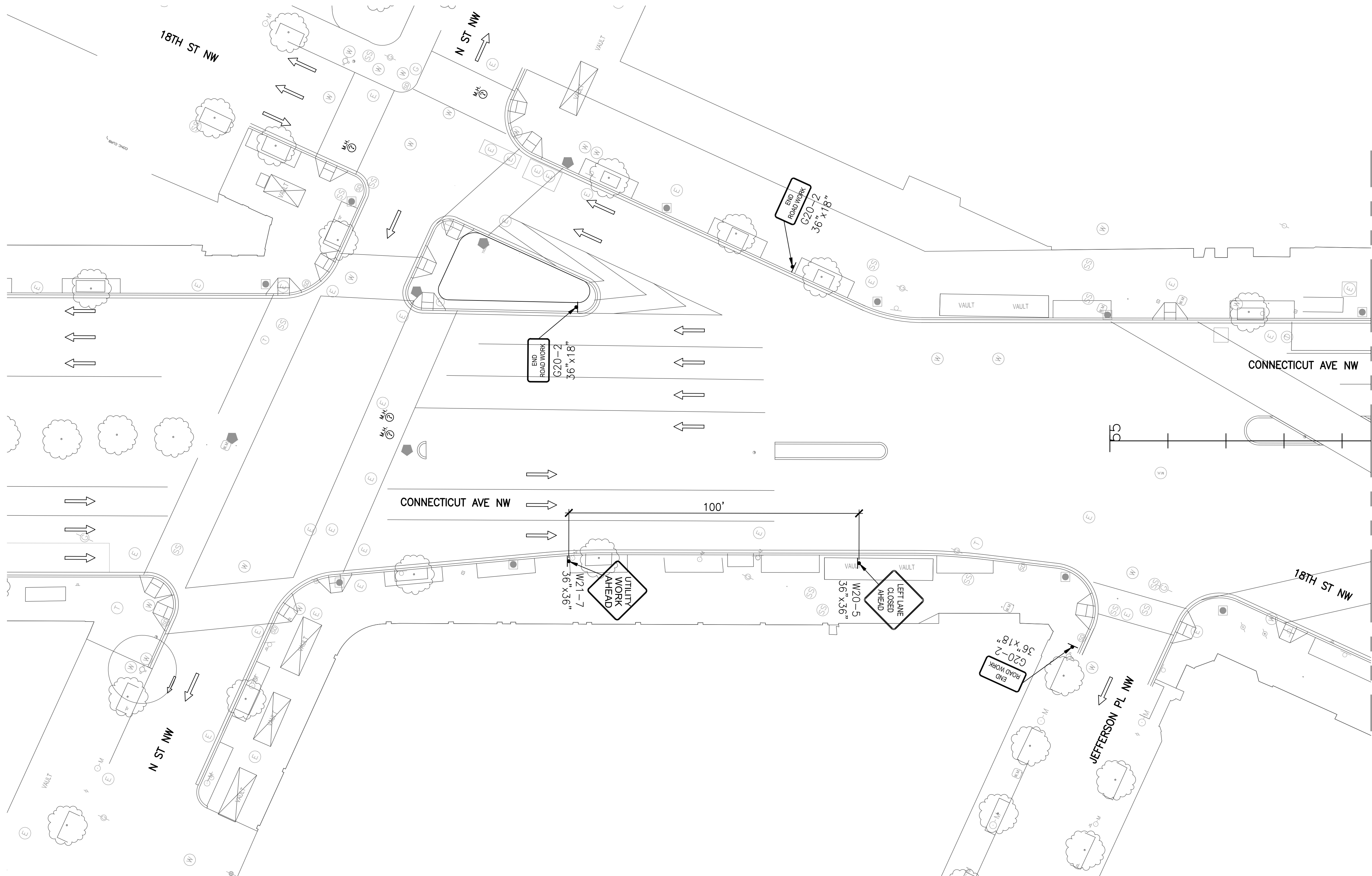
Mark H. Magnuson  
08/15/2017  
DATE

JCL  
08/15/2017  
DATE

REPLACEMENT OF  
FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING  
SUGGESTED SEQUENCE OF CONSTRUCTION

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M1298	FQ-18004	AS NOTED	CWPA01-TM-002	18 of 53



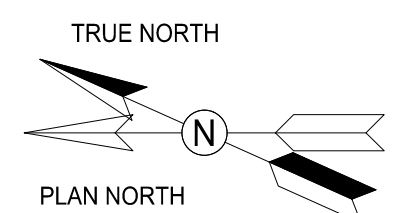


- NOTES:**
1. PHASE 1A CONSISTS OF TWO SEPARATE WORK ZONES FOR ACTIVITIES RELATED TO THE EXCAVATION OF A TRENCH AND THE INSTALLATION OF 16-INCH DIAMETER CONDENSER PIPES IN THE INTERSECTION OF CONNECTICUT AVENUE NW AND DESALES STREET NW AND NEAR 1101 CONNECTICUT AVE NW, WHILE MAINTAINING AT LEAST ONE LANE OF TRAFFIC IN THE NB AND SB DIRECTIONS ALL THE TIME.
  2. FOR MAINTENANCE OF TRAFFIC GENERAL NOTES AND LEGEND, AND SEQUENCE OF CONSTRUCTION, SEE SHEETS CWPA01-TM-001 & CWPA01-TM-002. FOR DETOUR PLAN, SEE SHEET CWPA01-TM-121. FOR ALTERNATE ROUTE PLAN, SEE SHEET CWPA01-TM-122.
  3. WORK DURING PHASE 1A IS EXPECTED TO BE 24/7 OPERATION, BEGINNING THURSDAY NOVEMBER 9, 2017 AT 7PM AND CONCLUDING NO LATER THAN MONDAY NOVEMBER 13, 2017 AT 5AM (VETERANS DAY WEEKEND). SAWCUTTING MAY OCCUR DURING MIDDAY OFF-PEAK HOURS BETWEEN 10AM AND 3PM PRIOR TO THAT DATE
  4. INTERSECTIONS OF CONNECTICUT AVE NW & 18TH ST NW, 18TH ST NW & N ST NW, AND CONNECTICUT AVE NW & N ST NW ARE SIGNALIZED.

MATCHLINE - STA. 54+10 SEE DWG. CWPA01-TM-102

1 PHASE 1A MOT PLAN  
CWPA01-TM-101

SCALE: 1" = 20'



**GFP** A Gannett Fleming/Parsons  
JOINT VENTURE

			REFERENCE DRAWINGS			REVISIONS			<div><div><div>M</div><div>metro</div></div><div>WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY</div><div>DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES</div><div>OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM</div><div><div><div><div>Mark H. Magnuson</div><div>08/15/2017</div></div><div>DATE</div></div><div><div><div>4.06</div><div>08/15/2017</div></div><div>DATE</div></div></div></div>			REPLACEMENT OF FARRAGUT NORTH & DUPONT CIRCLE CONDENSER PIPING MAINTENANCE OF TRAFFIC PLAN PHASE 1A				
DESIGNED	K. FLYNN	06/23/17 DATE	NUMBER	TITLE	DATE	NUM	DESCRIPTION					M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
DRAWN	K. FLYNN	06/26/17 DATE			08/15/17	0	FINAL SUBMITTAL					M1298	FQ-18004	AS NOTED	CWPA01-TM-101	19 of 53
CHECKED	P. PATEL	08/08/17 DATE														