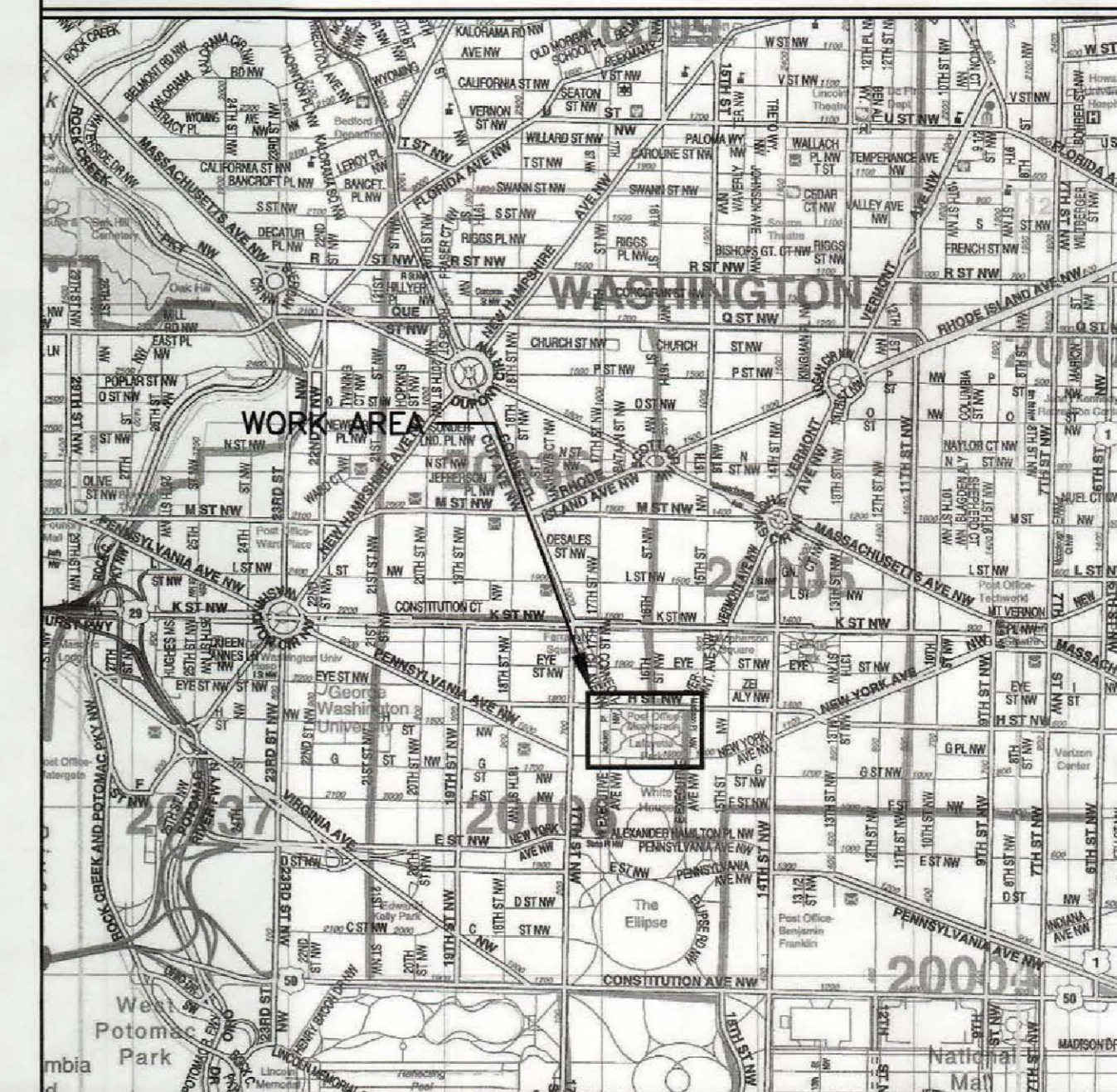


U.S. DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE  
**REPLACE STORM WATER DRAIN LINES AT LAFAYETTE PARK**

PRESIDENT'S PARK (WHHO)  
 WASHINGTON, D.C.  
 PMIS #187290B  
 (PRPA 15017)

DCWATER (PPRL:18-17166) 2ND SUBMISSION

VICINITY MAP



WSAC#: 18-353600

PPRL#: 18-17166

WORK AREA  
 LOT 800  
 SQUARE 0187  
 PENNSYLVANIA AVE  
 NW & 16TH ST. NW,  
 WASHINGTON, DC  
 20001

GENERAL NOTES

1. ALL ARCHITECTURAL & ENGINEERING WORK SHALL CONFORM TO THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) & FAMILY OF INTERNATIONAL CODES. WORK SHALL CONFORM TO THE LIFE SAFETY CODE.
2. ALL NEW WORK SHALL COMPLY WITH ADAABAAG, THE AMERICANS WITH DISABILITIES ACT (ADA 28 CFR PART 36) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES; ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES WHERE APPLICABLE.
3. UTILITY MARKING: NOTIFY MISS UTILITY OR OTHER QUALIFIED UTILITY LOCATING SERVICE 48 HOURS PRIOR TO COMMENCEMENT OF ON-SITE WORK. CONTRACTOR(S) SHALL BE RESPONSIBLE FOR CONTACTING MISS UTILITY OR SECURING A PRIVATE UTILITY LOCATING SERVICE, IN ADVANCE, FOR MARKING OF ALL UNDERGROUND UTILITIES WITHIN WORK ZONES WHERE DIGGING, TEST PITS, PROBES, ETC. ARE ANTICIPATED. [REDACTED] OR 811.
4. NOTIFY COR A MINIMUM OF 72 HOURS IN ADVANCE OF BORING, DIGGING OR ANY GROUND DISTURBING ACTIVITIES. A NPS ARCHEOLOGIST AND/OR CULTURAL RESOURCE MANAGER MAY BE INVOLVED TO OBSERVE WORK IN PROGRESS.
5. ALL WORK SHALL BE IN ACCORDANCE WITH STANDARD OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) GUIDELINES AND REGULATIONS.
6. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL CONSTRUCTION PERMITS. SEE SPECIFICATION SECTION 01010, SUMMARY OF WORK FOR LIST OF APPLICABLE PERMITS AND DOCUMENTATION.

INDEX OF DRAWINGS

SEE SHEET G-002

PROJECT NARRATIVE

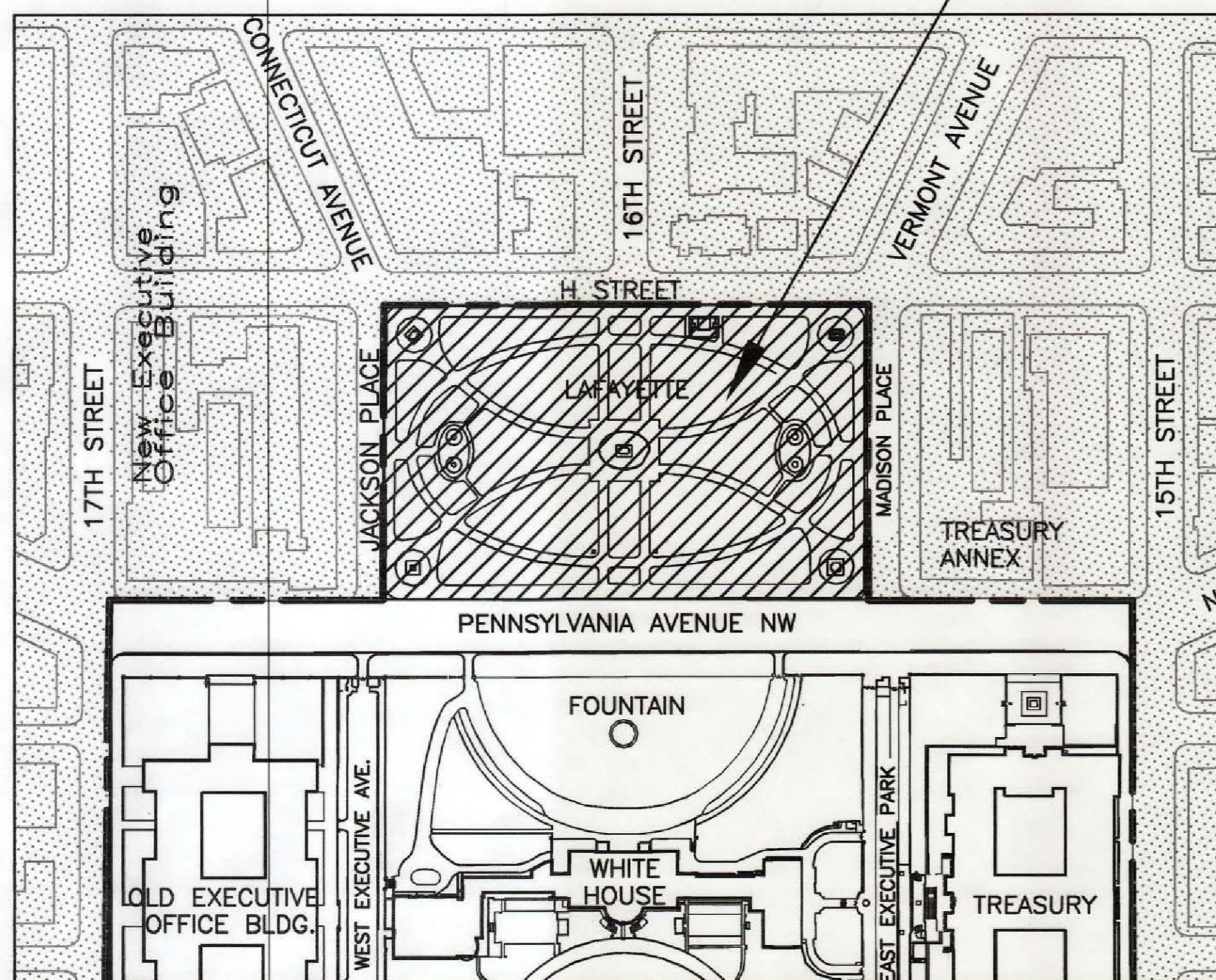
THE PROJECT LOCATION IS BOUNDED BY PENNSYLVANIA AVE NW, H STREET NW, MADISON PLACE, AND JACKSON PLACE IN WASHINGTON DC.

THE PURPOSE OF THE PROJECT IS TO REPLACE THE EXISTING STORM DRAIN LINES AT LAFAYETTE PARK. MANY OF THE EXISTING STORM DRAIN INLETS AND PIPES THROUGHOUT THE PARK APPEAR TO BE UNDERSIZED AND/OR CLOGGED CAUSING WATER TO BACK-UP AND FLOOD THE GRASS AREA AND SIDEWALKS DURING HEAVY RAIN OR WHEN THE FOUNTAINS ARE BEING DRAINED.

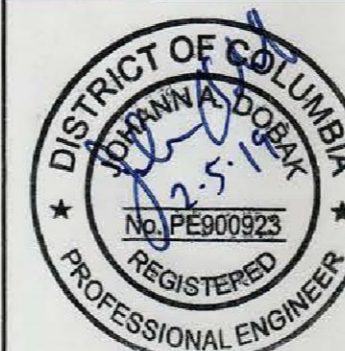
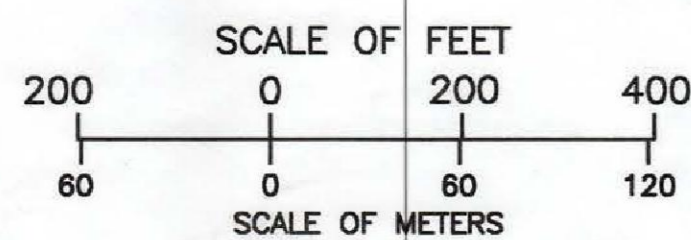
THE EXISTING STORM LATERAL WILL GROUTED AND ABANDONED IN PLACE. THE NEW 21" STORM LATERAL WILL BE CONNECTED TO THE EXISTING CSO INSIDE A NEW MANHOLE LOCATED IN MADISON PLACE.

THE PROPOSED DESIGN WILL MEET THE PEAK STORM LOADING REQUIREMENTS AS PER LATEST DOE STANDARDS AND SPECIFICATIONS FOR REPLACEMENT AND/OR LINED DRAIN PIPING & INLET SIZING.

THE PROPOSED PROJECT DOES NOT CONTAIN MORE THAN 5000 SF OF DISTURBANCE. THEREFORE, UNDER THE REQUIREMENTS OF 21 DCMR CHAPTER 5 THE PROJECT IS NOT REQUIRED TO PROVIDE STORM WATER MANAGEMENT FACILITIES.



LOCATION MAP



Mark	Sheet	REVISION	Date	Initial

100% CONSTRUCTION DOCUMENT SUBMISSION  
**G001**  
 SUB SHEET NUMBER

COVER SHEET  
 TITLE OF DRAWING

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 LAFAYETTE PARK  
 PRESIDENT'S PARK (WHITE HOUSE)

187290B	NPT/SRC
PERM	NPT/SRC
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GENERAL UTILITY NOTES

- THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE BASED ON FIELD SURVEY DATA AND/OR RECORD DRAWINGS. THE INFORMATION SHOWN IS NOT NECESSARILY COMPLETE AND THE LOCATIONS OF THE UTILITIES SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO START OF THE WORK. IF THE FIELD CONDITIONS ARE FOUND TO VARY FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE COR PRIOR TO PROCEEDING WITH CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE/FURNISH SERVICES OF A QUALIFIED PRIVATE UTILITY LOCATOR 48 HOURS PRIOR TO START OF CONSTRUCTION. CONTRACTOR(S) SHALL BE RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITY LOCATOR IN ADVANCE OF ON-SITE WORK. FOR THE MARKING OF ALL UNDERGROUND UTILITIES WITHIN WORK ZONES WHERE DIGGING, TEST PITS, PROBES, ETC. ARE ANTICIPATED. NOTIFY COR A MINIMUM OF 72 HOURS IN ADVANCE OF BORING, DIGGING AND/OR LOCATING WORK SO THAT NPS ARCHAEOLOGIST AND/OR CULTURAL RESOURCE MANAGER MAY OBSERVE WORK IN PROGRESS.
- THE UTILITY MARKING CREW SHALL NOT SPRAY PAINT ON THE BUILDING OR EXISTING STRUCTURES. ACCEPTABLE SPRAY PAINTING ONLY TO BE USED IN AREAS THAT ARE TO BE DISTURBED. METHODS SUCH AS FLAGGING & CHALK ARE TO BE UTILIZED
- THE CONTRACTOR SHALL VERIFY ALL THE EXISTING VERTICAL AND HORIZONTAL UTILITY CROSSINGS.
- THE CONTRACTOR SHALL LOCATE AND PROTECT ALL STRUCTURES AND UNDERGROUND UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO STRUCTURES AND UTILITIES AS A RESULT OF CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE COR AT NO ADDITIONAL COST.
- ALL WORK HOUR RESTRICTIONS AS INDICATED IN THE CONTRACT DOCUMENTS SHALL BE OBSERVED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE PROJECT SITE DAILY AND DISPOSE OF IT PROPERLY OFFSITE. THE HAULING AND DISPOSAL OF DEBRIS SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS OF THE COR.
- PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES AROUND ALL DISTURBED AREAS AND PROTECT ALL STORM INLET STRUCTURES.
- ALL WORK AREAS ARE TO BE SECURED BY 8' HIGH CHAIN LINK FENCE ON CONCRETE BLOCKS OR OTHER COR APPROVED FENCING, THE CONTRACTOR SHALL COORDINATE WITH THE COR REGARDING THE LOCATION OF TEMPORARY FENCING.
- THE CONTRACTOR SHALL COORDINATE ANY PORTION OF THEIR WORK WITH THAT OF OTHERS THAT MAY BE PERFORMED ADJACENT TO, OR IN CLOSE PROXIMITY TO, SUCH WORK IN THEIR CONTRACT OR OTHERS.
- THE CONTRACTOR SHALL VERIFY, BY FIELD MEASUREMENT, THE REQUIRED DIMENSION OF ALL PIPES, FITTINGS, EQUIPMENT AND STRUCTURES TO ASSURE PROPER CLEARANCE AND SPACING PRIOR TO FABRICATION OR INSTALLATION.
- THE NPS SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR INJURY SUSTAINED DURING CONSTRUCTION BY ANY PERSON, VEHICLES OR EQUIPMENT USED ON OR ADJACENT TO THE SITE.

EARTHWORK NOTES

- UNSUITABLE EXISTING FILL, SOFT OR LOOSE NATURAL SOILS, ORGANIC MATERIAL, AND RUBBLE SHALL BE STRIPPED TO APPROVED SUB-GRADES AS DETERMINED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER AND APPROVED BY THE COR. THE ACTUAL DEPTH OF STRIPPING NECESSARY TO PROVIDE A SUITABLE BASE FOR PLACEMENT AND COMPACTION OF EARTHWORK MAY INCLUDE TOPSOIL AND OTHER SOFT SURFACE LAYERS WITH OR WITHOUT ORGANIC MATTER.
- SUB-GRADES SHALL BE INSPECTED FOR PROPER COMPACTION BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF ANY FILL.
- FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES LOOSE THICKNESS, WITH FILLER MATERIALS COMPACTED BY HAND OPERATED TAMPERS OR LIGHT COMPACTION EQUIPMENT. FILL SHOULD BE COMPACTED AT LEAST +/-2% OF OPTIMUM MOISTURE CONTENT TO AT LEAST 95% OF MAXIMUM DRY DENSITY IN ALL AREAS EXCEPT FOR IN CRITICAL ROOT ZONES WHERE COMPACTION SHALL BE 85% OF MAXIMUM DRY DENSITY
- CONTRACTOR'S STAGING AREA MUST BE KEPT NEAT AT ALL TIMES. THE STAGING AREA FENCE AS WELL AS THE CONSTRUCTION FENCING SHALL BE KEPT FREE OF SIGNS AND GRAFFITI AT ALL TIMES.
- ANY DAMAGE RESULTING FROM ESTABLISHING THE STAGING AREA SHALL BE RESTORED UPON DEMOLITION.
- A JOB OFFICE CONTAINER, IF REQUIRED, SHALL BE WITHIN THE FENCED AREA ALONG WITH ALL MACHINES, EQUIPMENT AND MATERIALS USED SPECIFICALLY FOR THIS PROJECT, AND SHALL ALSO INCLUDE THE DUMPSTER.
- CONTRACTOR SHALL RESTORE CONSTRUCTION STAGING AREA (TEMPORARY STOCKYARD) TO PRE-WORK CONDITIONS.

ABBREVIATIONS

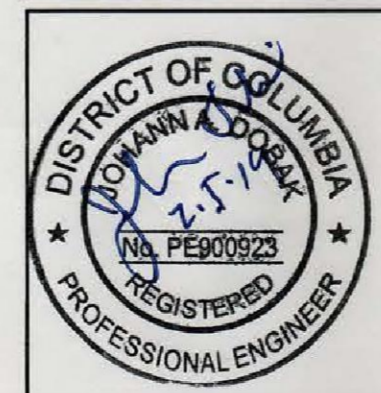
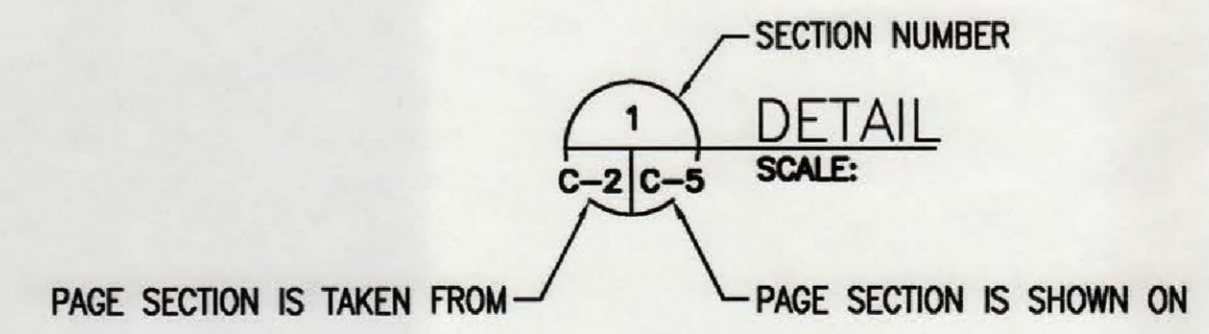
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	# NO	NUMBER
ABAND	ABANDON	N/A	NOT AVAILABLE
AC	ACRE	NEF	NO END FOUND
APPROX	APPROXIMATE	NIC	NOT IN CONTRACT
ARCH	ARCHITECTURAL	NPS	NATIONAL PARK SERVICE
ASPH	ASPHALT	NTS	NOT TO SCALE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	OHW	OVERHEAD WIRE
AVE	AVENUE	PROP	PROPOSED
BC	BOTTOM OF CURB	PSI	POUNDS PER SQUARE INCH
BIT	BITUMINOUS	PVC	POLYVINYL CHLORIDE
BLDG	BUILDING	PVMT	PAVEMENT
BM	BENCH MARK	RCP	REINFORCED CONCRETE PIPE
B/W	BETWEEN	REQD	REQUIRED
C&G	CURB & GUTTER	S/W	SIDEWALK
CADD	COMPUTER AIDED DRAFTING AND DESIGN	S	SECOND
CALC	CALCULATION	SAN	SANITARY
CB	CATCH BASIN	SCE	STABILIZED CONSTRUCTION ENTRANCE
CC	CENTER TO CENTER	SEW	SEWER
CCI	CONSTRUCTION CONTRACT INSPECTOR	SF	SILT FENCE
CFS	CUBIC FEET PER SECOND	SQ	SQUARE
CI	CURB INLET	SS	SANITARY SEWER
CIP	CAST IN PLACE	STA	STATION
CL	CENTER LINE	STD	STANDARD
CLF	STOCKADE FENCE	STM	STORM
CMP	CORRUGATED METAL PIPE	STR	STRUCTURE
CO	CLEAN OUT	SWM	STORM WATER MANAGEMENT
COMM	COMMUNICATION	T&B	TOP & BOTTOM
CND	CONDUIT	T	TELEPHONE
CONC	CONCRETE	TBD	TO BE DETERMINED
COR	CONTRACTING OFFICER'S REPRESENTATIVE	TP	TREE PROTECTION
CU	CUBIC	TRANS	TRANSFORMER
DATUR	DEPICTED ACCORDING TO UTILITY RECORD	TYP	TYPICAL
DEMO	DEMOLISH	UNG	UNDERGROUND
DI	DROP INLET	UNK	UNKNOWN
DIA	DIAMETER	UNO	UNLESS NOTED OTHERWISE
DOEE	DISTRICT DEPARTMENT OF THE ENVIRONMENT	UTIL	UTILITY
DWGS	DRAWINGS	W/	WITH
ELEC	ELECTRIC	W	WATER
EXPJ	EXPANSION JOINT		
ELEV	ELEVATION		
EOI	END OF INVESTIGATION		
EP	EDGE OF PAVEMENT		
EW	EACH WAY		
EX	EXISTING		
FDC	FIRE DEPARTMENT CONNECTION		
FH	FIRE HYDRANT		
FT	FEET		
G	GAS		
GEN	GENERATOR		
HC	HANDICAP		
HGL	HYDRAULIC GRADE LINE		
HR	HOUR		
HT	HEIGHT		
ID	INSIDE DIAMETER		
IN	INCH		
INV	INVERT		
IP	INLET PROTECTION		
L/P	LIGHT POLE		
LBS	POUNDS		
LF	LINEAR FEET		
LOD	LIMITS OF DISTURBANCE		
MAX	MAXIMUM		
MG	MATCH GRADE		
MH	MANHOLE		
MNGT	MANAGEMENT		
MIN	MINIMUM/MINUTE		

LEGEND

○	ROAD SIGN
⊕	UTILITY MANHOLE
☆	LIGHT POLE
⊙	ELECTRIC MANHOLE
⊗	SANITARY MANHOLE
⊘	STORM MANHOLE
⊚	DROP INLET-GRATE
⊛	WATER METER
⊜	FIRE HYDRANT
⊝	WATER MANHOLE
⊞	TRAFFIC LIGHT POLE
⊟	HANDICAP RAMP/PARKIN
⊠	FLY TRAVERSE
⊡	TRAVERSE
⊢	ACCESS ROUTE
⊣	LIMIT OF DISTURBANCE
⊤	PATH OR TRAIL
⊥	SIGN
⊦	SANITARY SEWER
⊧	STORM DRAINAGE
⊨	COMBINED SEWER
⊩	UNKNOWN UTILITY
⊪	BURIED TELEPHONE
⊫	BURIED ELECTRIC
⊬	GAS LINE
⊭	WATERLINE
⊮	CURB AND GUTTER
⊯	EDGE OF PAVEMENT
⊰	CENTERLINE
⊱	GUARD RAIL
⊲	TREE LINE
⊳	CHAIN LINK FENCE

SHEET # OF #	SUB SHEET	SHEET TITLE
1	G001	COVER SHEET
2	G002	GENERAL NOTES & LEGEND
3	C100	OVERALL SHEET LAYOUT
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5	C102	EXISTING CONDITION & DEMOLITION PLAN
6	C103	EXISTING CONDITION & DEMOLITION PLAN
7	C104	EXISTING CONDITION & DEMOLITION PLAN
8	C105	OVERALL SITE PLAN
9	C106	SITE PLAN
10	C107	SITE PLAN
11	C108	SITE PLAN
12	C109	SITE PLAN
13	C201	STORM DRAIN PROFILES
14	C202	STORM DRAIN PROFILES
15	C203	STORM DRAIN PROFILES
16	C301	EROSION & SEDIMENT CONTROL PLAN
17	C302	EROSION & SEDIMENT CONTROL PLAN
18	C303	EROSION & SEDIMENT CONTROL PLAN
19	C304	EROSION & SEDIMENT CONTROL PLAN
20	C305	EROSION & SEDIMENT CONTROL NOTES
21	C306	EROSION & SEDIMENT CONTROL NOTES
22	C307	EROSION & SEDIMENT CONTROL DETAILS
23	C401	PRE-DEVELOPMENT DRAINAGE AREAS
24	C402	PRE-DEVELOPMENT DRAINAGE AREAS
25	C403	PRE-DEVELOPMENT DRAINAGE AREAS
26	C404	PRE-DEVELOPMENT DRAINAGE AREAS
27	C405	PRE-DEVELOPMENT CALCULATIONS
28	C406	POST-DEVELOPMENT DRAINAGE AREAS
29	C407	POST-DEVELOPMENT DRAINAGE AREAS
30	C408	POST-DEVELOPMENT DRAINAGE AREAS
31	C409	POST-DEVELOPMENT DRAINAGE AREAS
32	C410	POST-DEVELOPMENT CALCULATIONS
33	C501	DETAILS
34	C502	DETAILS
35	C503	DETAILS
36	C601	CONSTRUCTION PHASING PLAN
37	L100	SITE PLAN
38	L101	SITE PLAN PHASE 1
39	L102	SITE PLAN PHASE 2
40	L103	SITE PLAN PHASE 3
41	L104	SITE PLAN PHASE 4
42	L201	TREE PRESERVATION PLAN PHASE 1
43	L202	TREE PRESERVATION PLAN PHASE 2
44	L203	TREE PRESERVATION PLAN PHASE 3
45	L204	TREE PRESERVATION PLAN PHASE 4
46	L205	TREE PRESERVATION SURVEY
47	L401	SOIL PLAN PHASE 1
48	L402	SOIL PLAN PHASE 2
49	L403	SOIL PLAN PHASE 3
50	L404	SOIL PLAN PHASE 4
51	L501	PLANTING PLAN PHASE 1
52	L502	PLANTING PLAN PHASE 2
53	L503	PLANTING PLAN PHASE 3
54	L504	PLANTING PLAN PHASE 4
55	L901	DETAILS
56	L902	DETAILS
57	L903	DETAILS
58	L904	DETAILS
59	L905	DETAILS
60	L906	DETAILS
61	L907	DETAILS
62	L908	DETAILS

SYMBOLS



Mark	Sheet	REVISION	Date	Initial

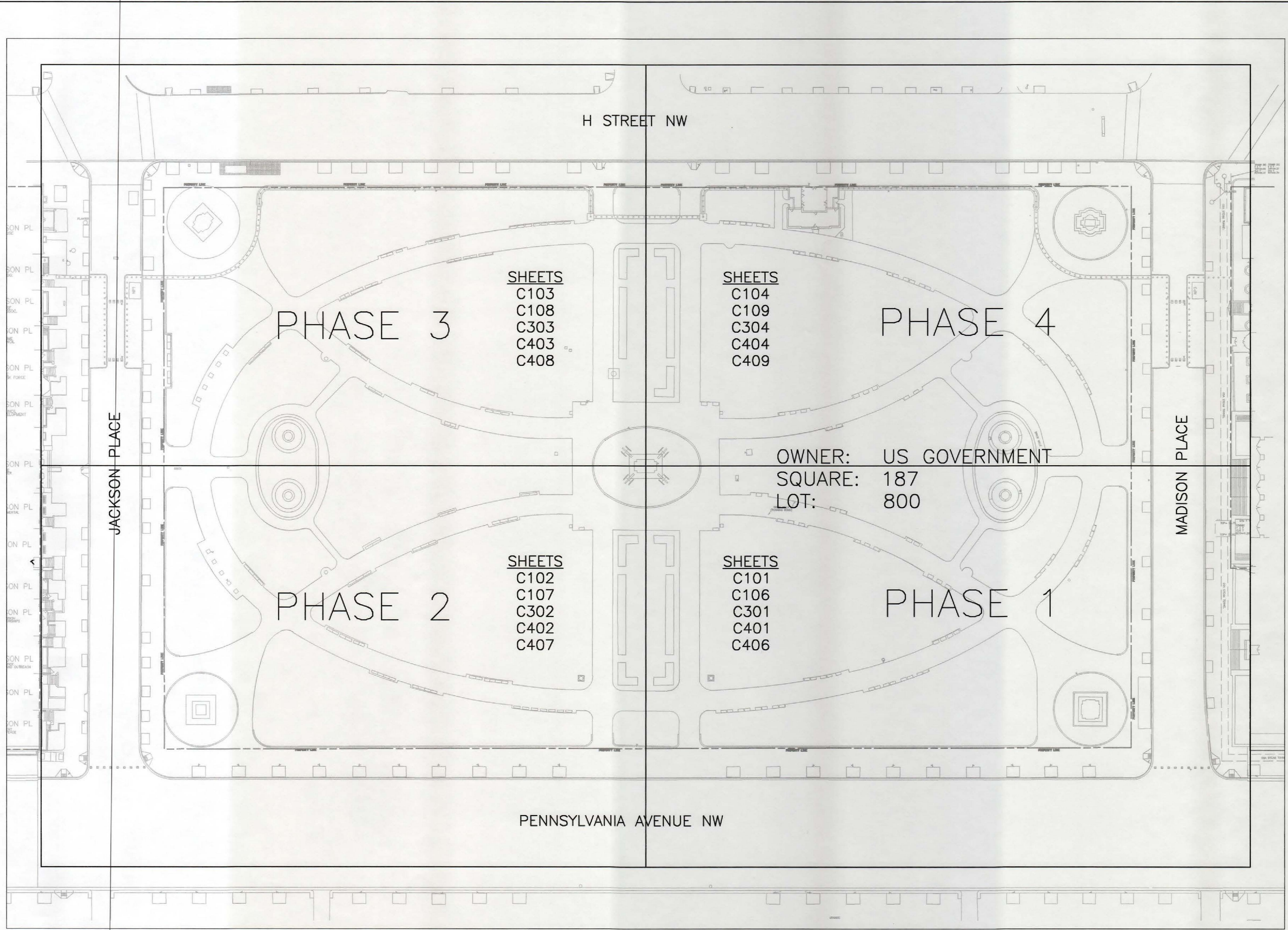
GENERAL NOTES & LEGEND  
TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION  
 G002  
 SUB SHEET NUMBER

UNITED STATES DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

187290B
NPT/SRC
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DO
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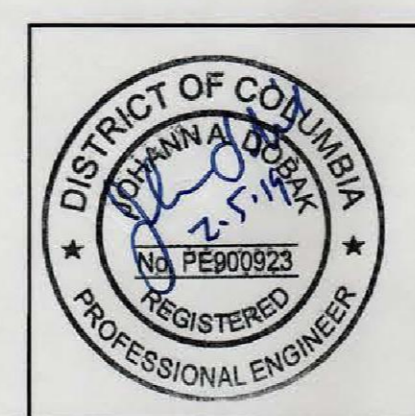
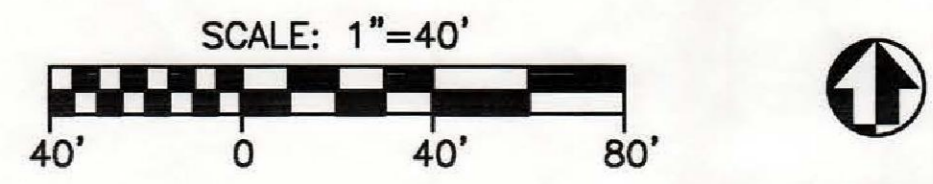
**EXISTING CONDITION NARRATIVE**

THE LAFAYETTE PARK IS THE NORTHERN SECTION OF PRESIDENT'S PARK. THE PARK IS A SEVEN ACRE RECTANGLE BOUNDED BY PENNSYLVANIA AVENUE TO SOUTH, H STREET TO THE NORTH, MADISON PLACE TO THE EAST AND JACKSON PLACE TO THE WEST.

THE PROJECT IS TO REPLACE THE EXISTING STORM DRAIN SYSTEM WHICH IS SERVING GARDEN, TWO FOUNTAINS AND A LODGE HOUSE. MANY OF THE EXISTING DRAINS ARE PARTIALLY COLLAPSED OR PLUGGED AND DO NOT ALLOW FOR A PROPER STORM WATER DRAINAGE WITHIN THE PARK. SEVERAL INLET STRUCTURES TO THE STORM DRAINS HAVE SETTLED OR ARE BROKEN.

NO WETLANDS, STREAMS OR WATER COURSES ARE ON PROJECT SITE OR ADJACENT TO PROPERTY.

ALL SURVEY DATA WAS RECORDED ON THE MARYLAND STATE PLANE NAD 27 HORIZONTAL DATUM AND NAVD 29 ON VERTICAL DATUM.



**ALPHA CORPORATION**  
 21351 RIDGETOP CIRCLE  
 SUITE 200  
 DULLES, VA. 20188  
 www.alphacorporation.com

Mark	Sheet	REVISION	Date	Initial

**OVERALL SHEET LAYOUT**  
 TITLE OF DRAWING

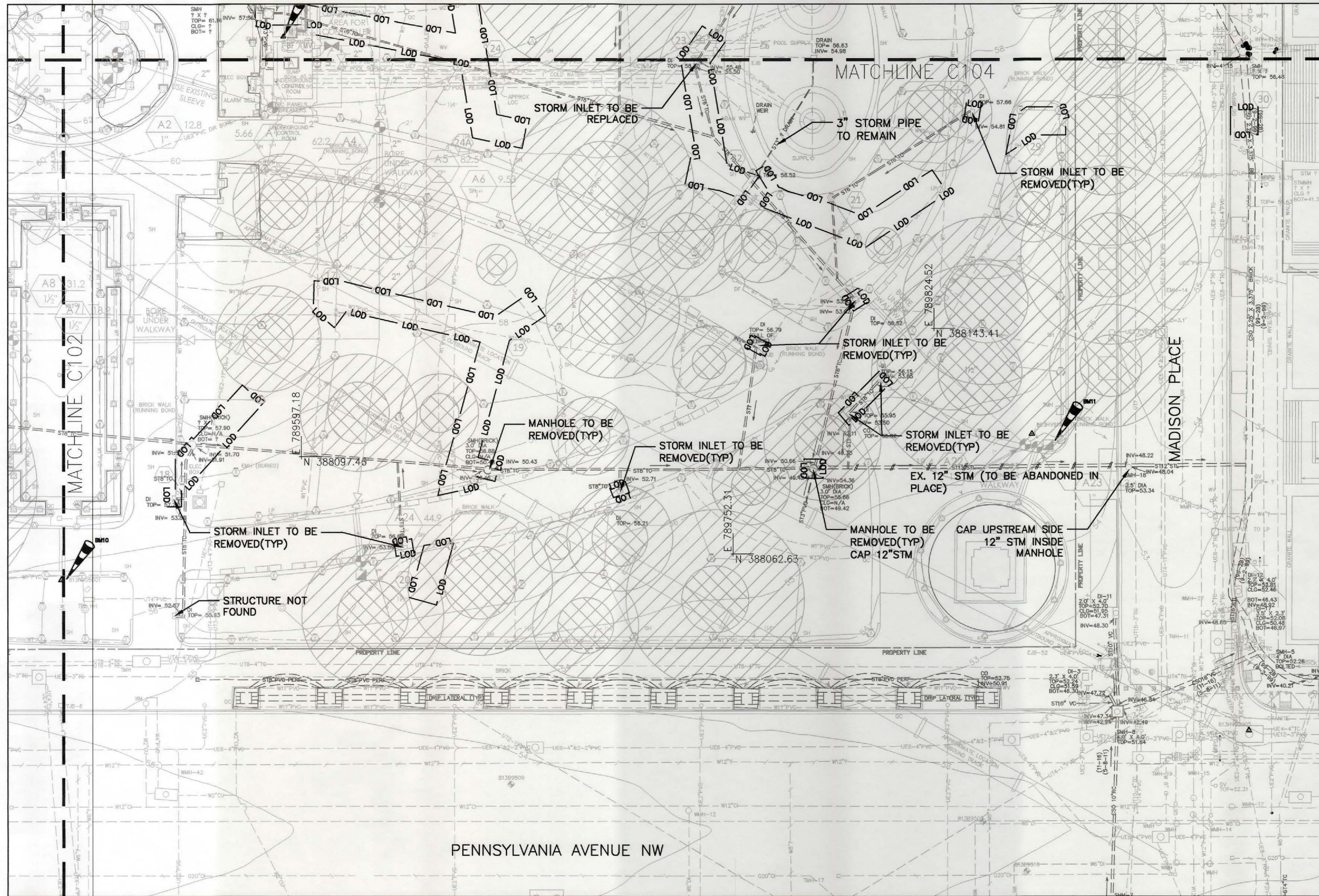
100% CONSTRUCTION DOCUMENT SUBMISSION  
**C100**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
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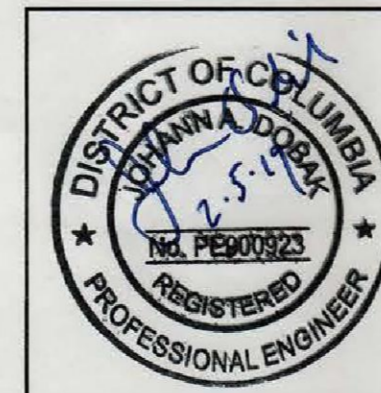
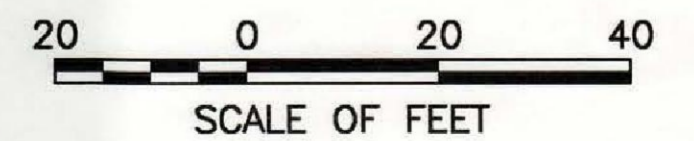
BENCHMARKS			
	NORTHING	EASTING	ELEVATION
BM10	N 388053.62	E 789512.73	56.74
BM11	N 388103.12	E 789867.91	55.03

- NOTE:**
- ALL EXISTING INLET STRUCTURES AND MANHOLES ARE TO BE COMPLETELY DEMOLISHED AND REMOVED UPON COMPLETION & ACCEPTANCE OF NEW STORM SEWER SYSTEM. AREA TO BE PROPERLY BACKFILLED AND RESTORED TO TURF OR BRICK SIDEWALK AS APPROPRIATE AND APPROVED BY THE COR.
  - ALL EXISTING STORM PIPES WITHIN THE PARK ARE TO BE REMOVED AS NECESSARY AND PERMANENTLY CAPPED AND ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON PLAN.
  - IRRIGATION LINES ARE TO BE AVOIDED AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY CO, IF EXISTING IRRIGATION INFRASTRUCTURE IS DAMAGED DURING CONSTRUCTION ACTIVITIES.
  - THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTMENTS TO THE EXISTING IRRIGATION SYSTEM.
  - SEE SHEET C501 DETAIL 4 FOR INLET REMOVAL

DC Water | Preliminary Plan Approval  
 Maximo #: 18-17166 (PPA)  
 Name (print): Brian J. McDevitt  
 Signature: [Signature]  
 Date: 4/10/2018

DC Water | Final Plan Approval  
 Maximo #: 18-353600 (WSAC)  
 Name (print): [Signature]  
 Signature: [Signature]  
 Date: 1/29/2019

- LEGEND**
- BM# BENCHMARK
  - LOD LIMITS OF DISTURBANCE (LOD)
  - STORM PIPE ABANDON IN PLACE



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Mark	Sheet	REVISION	Date	Initial

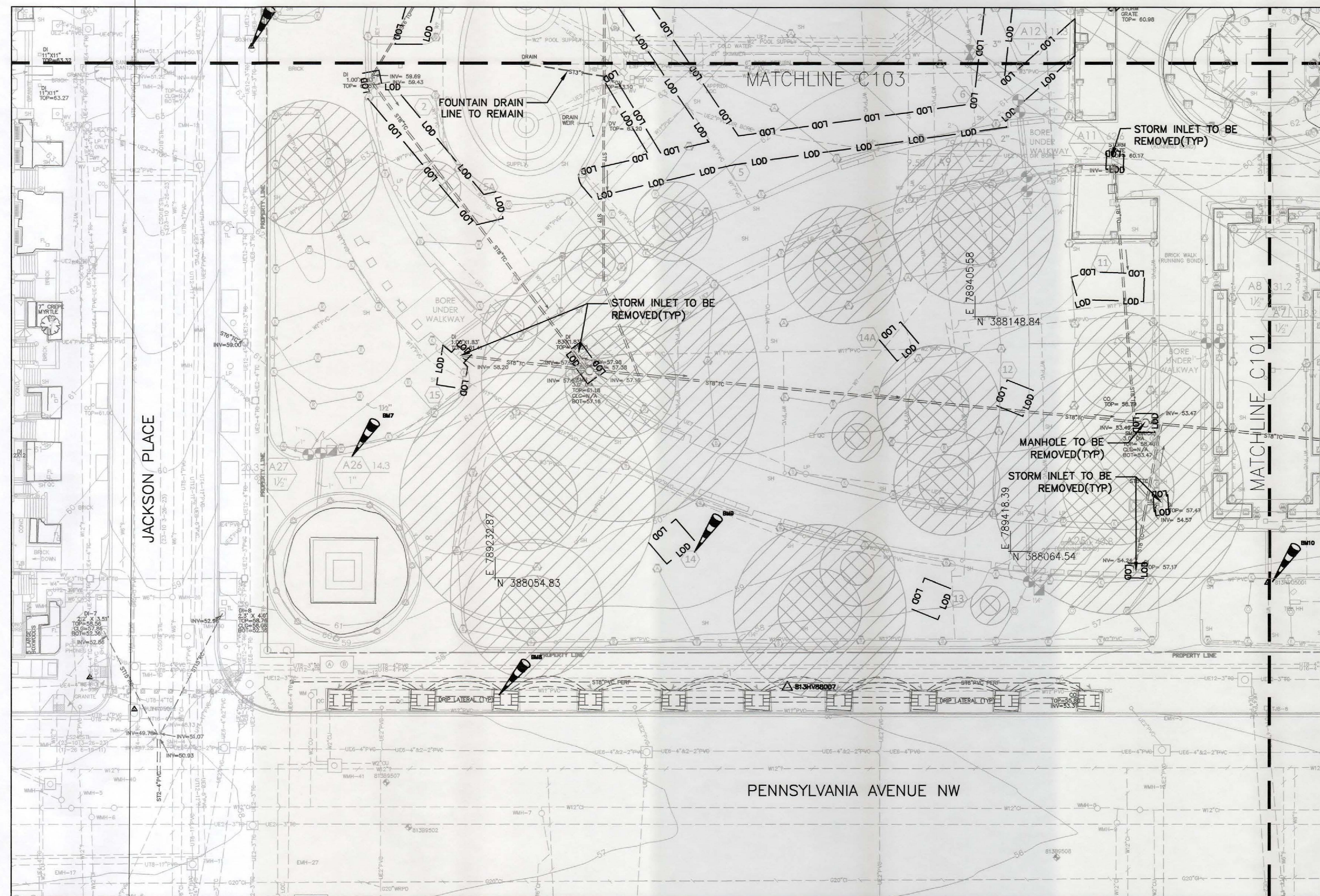
EXISTING CONDITION & DEMOLITION PLAN  
 TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION  
 C101  
 SUB SHEET NUMBER

UNITED STATES DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

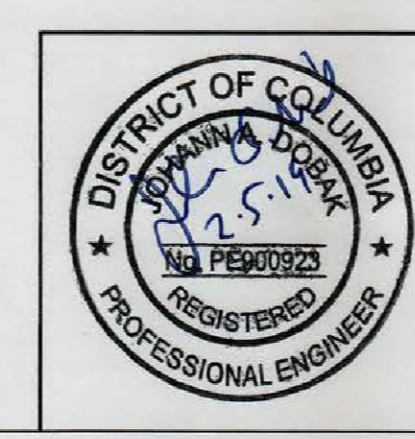
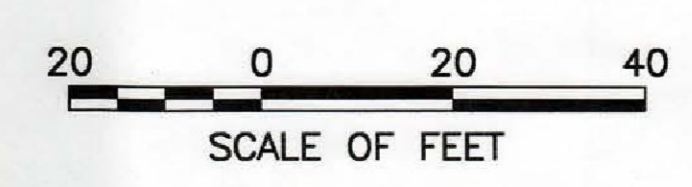
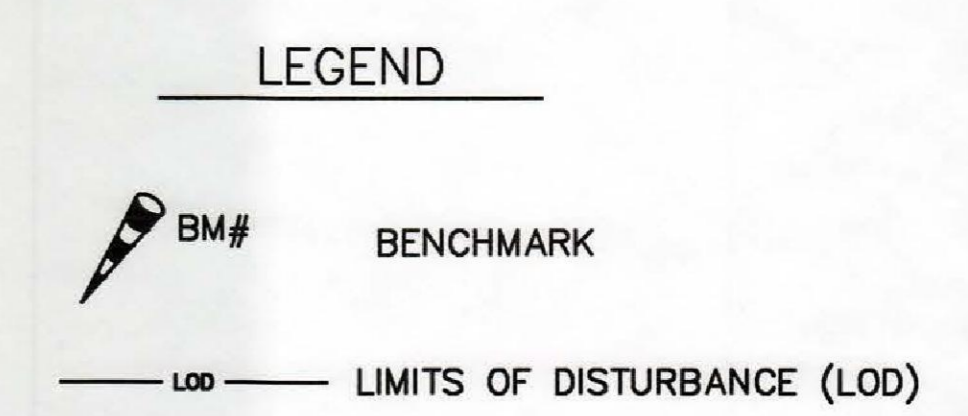
187290B
NPT/SRC
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NO
803
142683
02.23.2018
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BENCHMARKS			
	NORTHING	EASTING	ELEVATION
BM7	N 388098.17	E 789181.23	60.98
BM8	N 388012.82	E 789234.33	57.28
BM9	N 388064.16	E 789304.60	59.52
BM10	N 388053.62	E 789512.73	56.74

- NOTE:**
- ALL EXISTING INLET STRUCTURES AND MANHOLES ARE TO BE COMPLETELY DEMOLISHED AND REMOVED UPON COMPLETION & ACCEPTANCE OF NEW STORM SEWER SYSTEM. AREA TO BE PROPERLY BACKFILLED AND RESTORED TO TURF OR BRICK SIDEWALK AS APPROPRIATE AND APPROVED BY THE COR.
  - ALL EXISTING STORM PIPES WITHIN THE PARK ARE TO BE REMOVED AS NECESSARY AND PERMANENTLY CAPPED AND ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON PLAN.
  - IRRIGATION LINES ARE TO BE AVOIDED AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY CO, IF EXISTING IRRIGATION INFRASTRUCTURE IS DAMAGED DURING CONSTRUCTION ACTIVITIES.
  - THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTMENTS TO THE EXISTING IRRIGATION SYSTEM.
  - SEE SHEET C501 DETAIL 4 FOR INLET REMOVAL



**ALPHA CORPORATION**  
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Mark	Sheet	REVISION	Date	Initial

EXISTING CONDITION & DEMOLITION PLAN  
 TITLE OF DRAWING

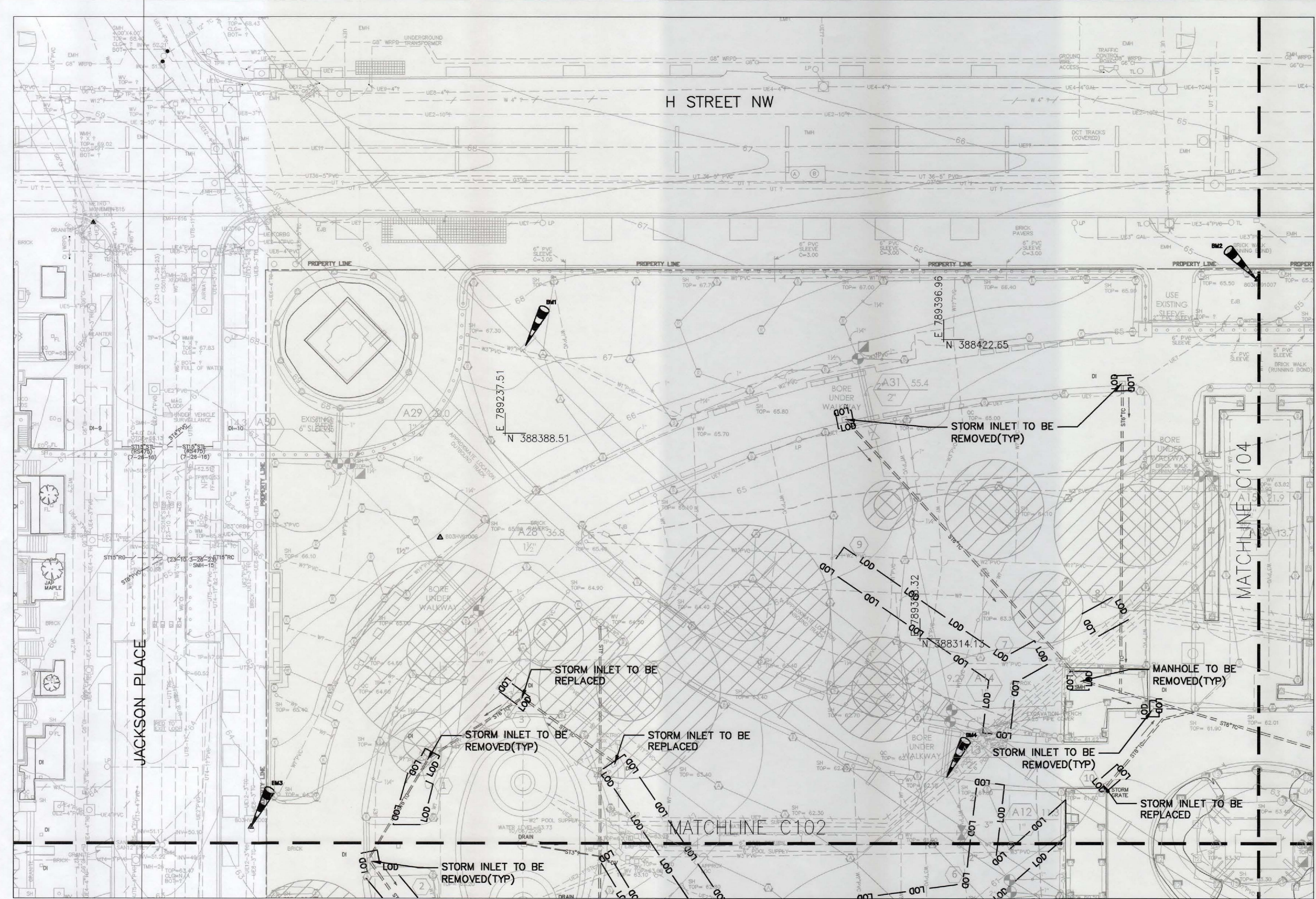
100% CONSTRUCTION DOCUMENT SUBMISSION  
**C102**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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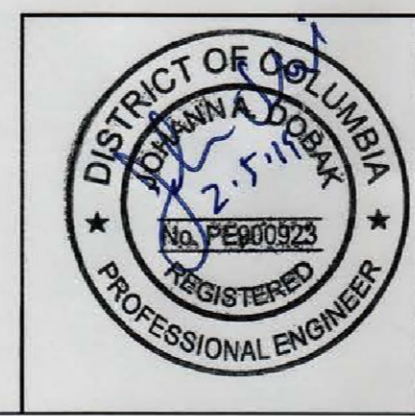
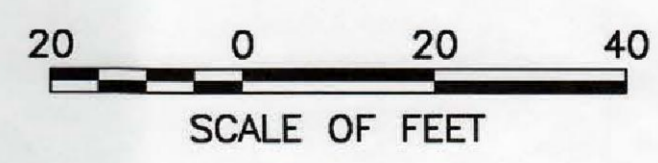
BENCHMARKS			
	NORTHING	EASTING	ELEVATION
BM1	N 388420.29	E 789244.83	67.36
BM2	N 388444.34	E 789510.81	65.02
BM3	N 388245.59	E 789144.96	63.45
BM4	N 388263.76	E 789398.01	61.89

- NOTE:**
- ALL EXISTING INLET STRUCTURES AND MANHOLES ARE TO BE COMPLETELY DEMOLISHED AND REMOVED UPON COMPLETION & ACCEPTANCE OF NEW STORM SEWER SYSTEM. AREA TO BE PROPERLY BACKFILLED AND RESTORED TO TURF OR BRICK SIDEWALK AS APPROPRIATE AND APPROVED BY THE COR.
  - ALL EXISTING STORM PIPES WITHIN THE PARK ARE TO BE REMOVED AS NECESSARY AND PERMANENTLY CAPPED AND ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON PLAN.
  - IRRIGATION LINES ARE TO BE AVOIDED AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY CO, IF EXISTING IRRIGATION INFRASTRUCTURE IS DAMAGED DURING CONSTRUCTION ACTIVITIES.
  - THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTMENTS TO THE EXISTING IRRIGATION SYSTEM.
  - SEE SHEET C501 DETAIL 4 FOR INLET REMOVAL.

**LEGEND**

BM# BENCHMARK

LOD LIMITS OF DISTURBANCE (LOD)



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**C103**

EXISTING CONDITION & DEMOLITION PLAN

TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION

**C103**

SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

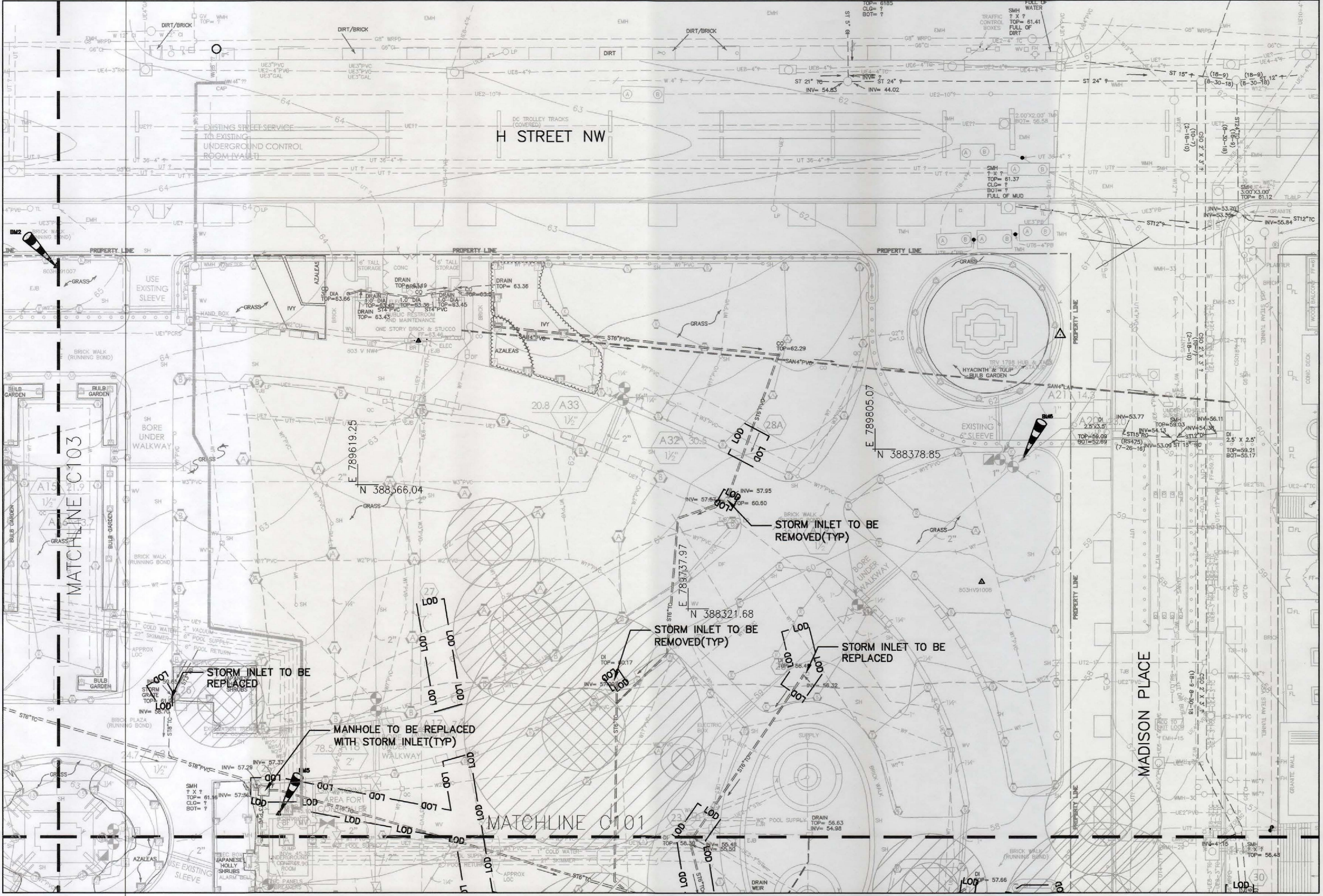
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 142683  
 02.23.2018

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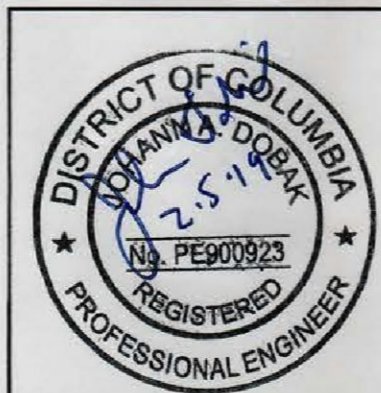
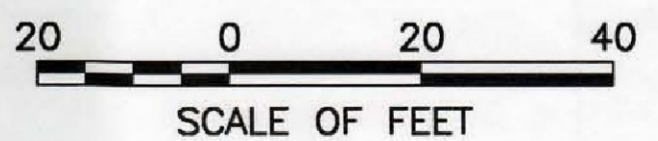


BENCHMARKS			
	NORTHING	EASTING	ELEVATION
BM2	N 388444.34	E 789510.81	65.02
BM5	N 388248.22	E 789590.96	60.64
BM6	N 388375.16	E 789857.98	60.24

- NOTE:**
1. ALL EXISTING INLET STRUCTURES AND MANHOLES ARE TO BE COMPLETELY DEMOLISHED AND REMOVED UPON COMPLETION & ACCEPTANCE OF NEW STORM SEWER SYSTEM. AREA TO BE PROPERLY BACKFILLED AND RESTORED TO TURF OR BRICK SIDEWALK AS APPROPRIATE AND APPROVED BY THE COR.
  2. ALL EXISTING STORM PIPES WITHIN THE PARK ARE TO BE REMOVED AS NECESSARY AND PERMANENTLY CAPPED AND ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON PLAN.
  3. IRRIGATION LINES ARE TO BE AVOIDED AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY CO, IF EXISTING IRRIGATION INFRASTRUCTURE IS DAMAGED DURING CONSTRUCTION ACTIVITIES.
  4. THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTMENTS TO THE EXISTING IRRIGATION SYSTEM.
  5. SEE SHEET C501 DETAIL 4 FOR INLET REMOVAL

**LEGEND**

- BM# BENCHMARK
- LOD LIMITS OF DISTURBANCE (LOD)



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EXISTING CONDITION & DEMOLITION PLAN  
 TITLE OF DRAWING

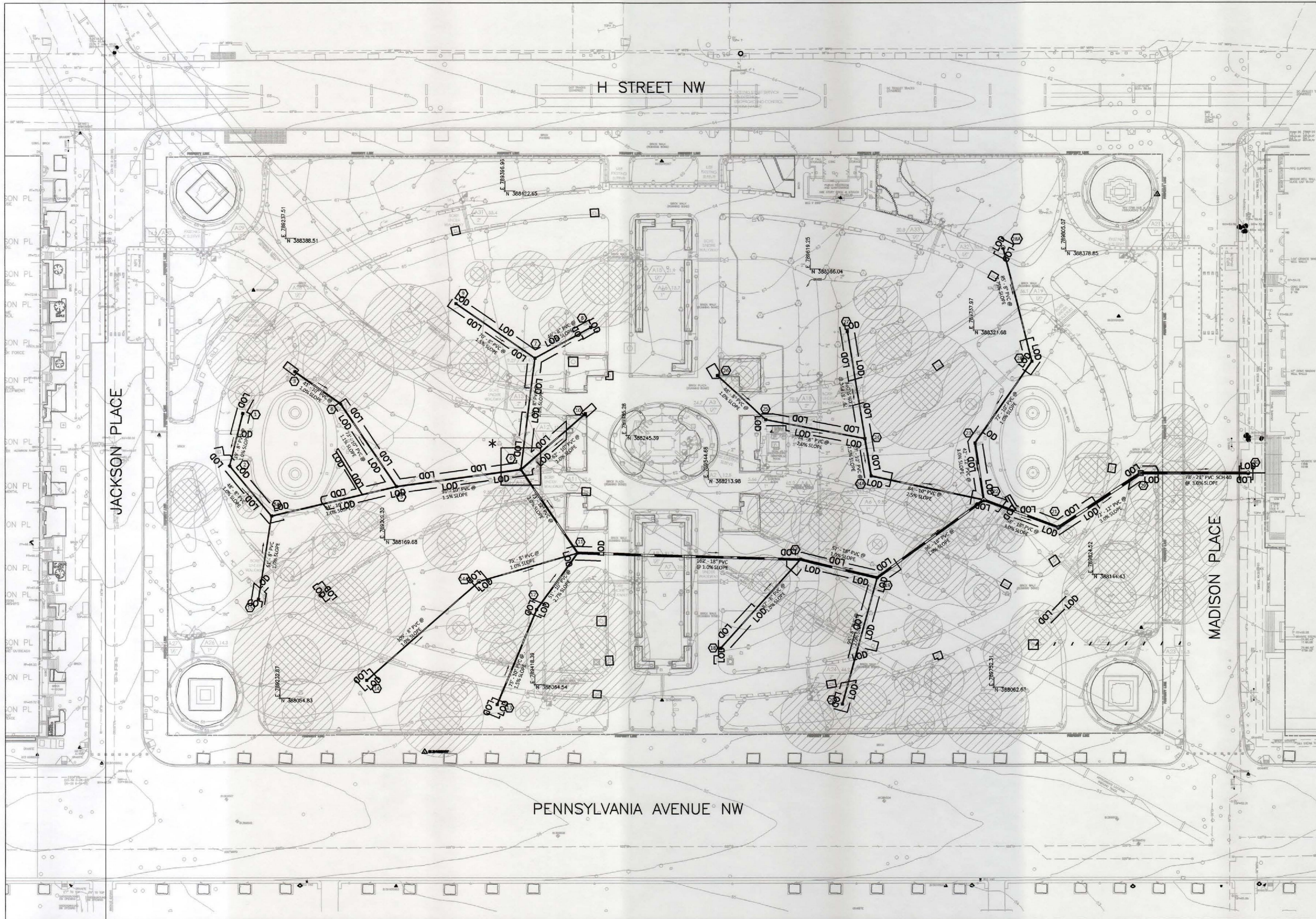
100% CONSTRUCTION DOCUMENT SUBMISSION  
**C104**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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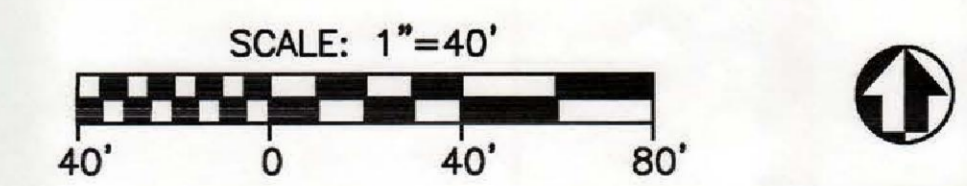




dcw DC Water | Preliminary Plan Approval  
 Maximo #: 18-17166 (1 PCL)  
 Name (print): Brian T. McDermott  
 Signature: [Signature]  
 Date: 7/10/2018

dcw DC Water | Final Plan Approval  
 Maximo #: 18-25860 (USAC)  
 Name (print): Jigar Bhatt  
 Signature: [Signature]  
 Date: 1/21/2019

NOTE:  
**TRENCHLESS TECHNOLOGY:**  
 MICRO DRILLING SHALL BE USED FOR UTILITY WORK UNDER MADISON PLACE  
 JACK AND BORE SHALL BE USED FOR UTILITY WORK UNDER LANDSCAPED AREAS WITHIN LAFAYETTE PARK.  
 \*CONTRACTOR TO RELOCATE EXISTING IRRIGATION LATERAL PER DIRECTION FROM COR.



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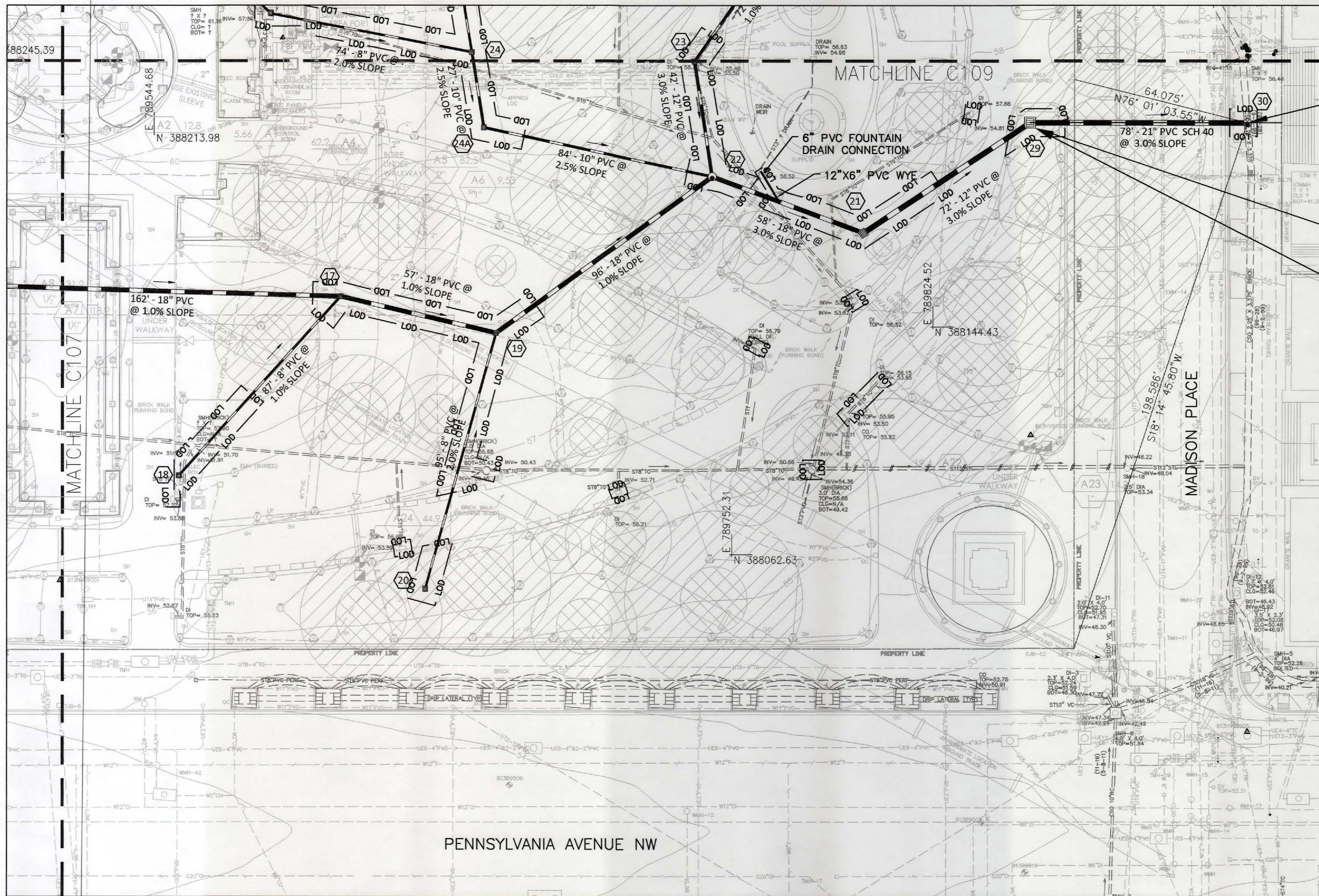
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100% CONSTRUCTION DOCUMENT SUBMISSION  
**C105**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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- 1 PROPOSED CSO CONNECTION  
C106 C502
- 2 PRECAST 48"X48" INLET  
C106 C501
- 1 TIDFLEX FLAP GATE  
C106 C503

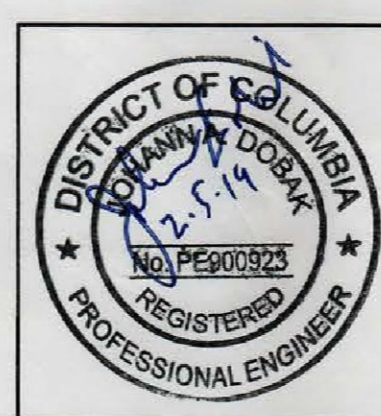
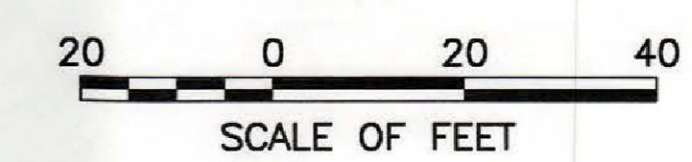
DC Water | Preliminary Plan Approval  
 Maximo #: 18-17166 (PPAC)  
 Name (print): Barry J. McQuinn  
 Signature: [Signature]  
 Date: 9/10/2018

DC Water | Final Plan Approval  
 Maximo #: 18-233600 (LWSAC)  
 Name (print): Jagan Bhatt  
 Signature: [Signature]  
 Date: 1/29/2019

- NOTE:**
- CONTRACTOR TO USE LEAST INVASIVE METHODS POSSIBLE TO PERFORM INSTALLATION OF PIPES AND STRUCTURES

**LEGEND**

- PROPOSED STORM PIPE
- PROPOSED STORM INLET 1 5  
C106 C501 C106 C501
- PROPOSED STORM MANHOLE 3  
C106 C501
- LOD LIMIT OF DISTURBANCE



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**C106**  
 SUB SHEET NUMBER

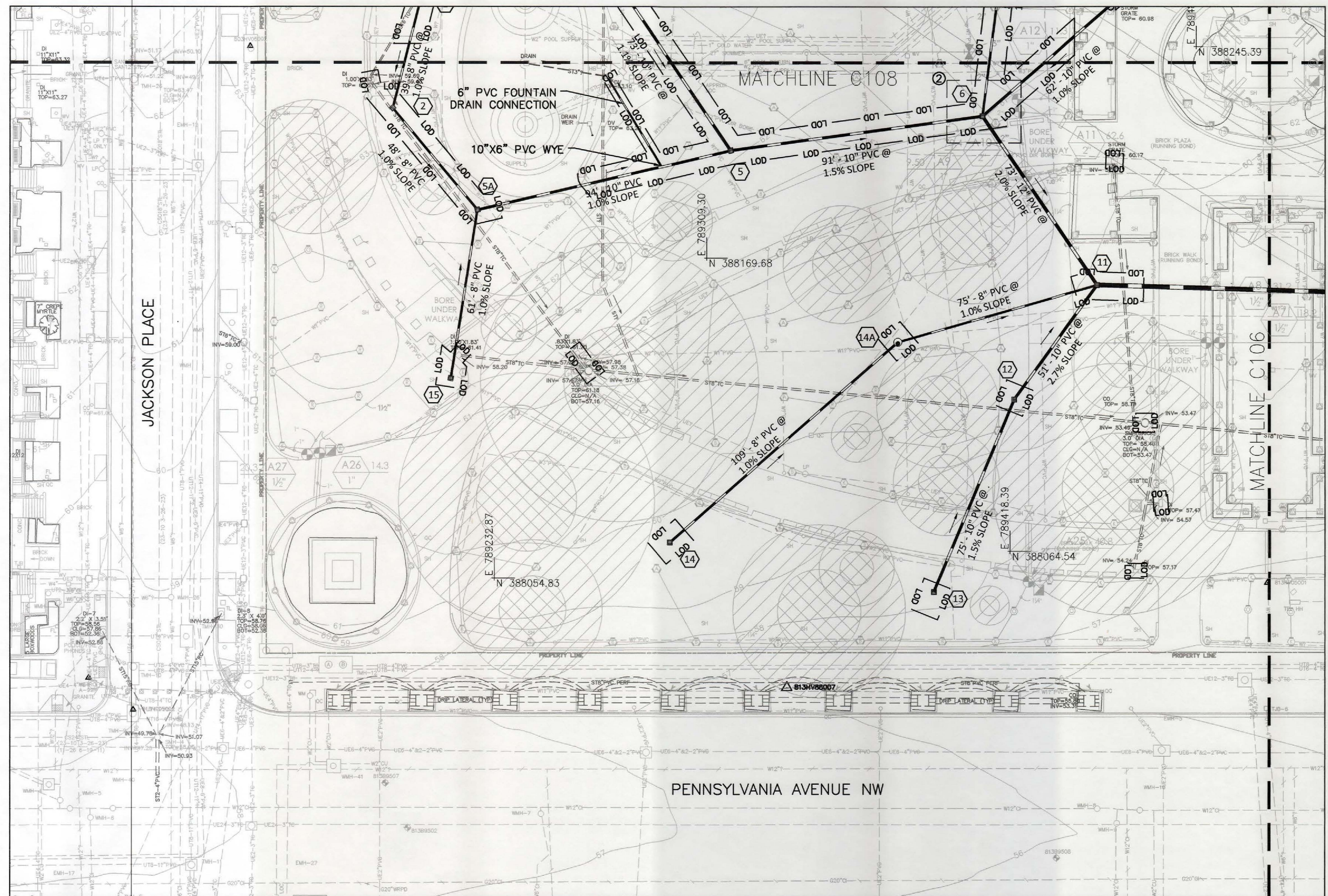
UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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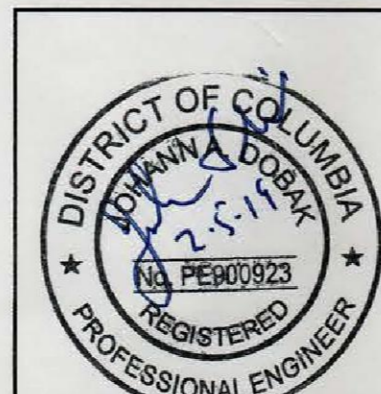
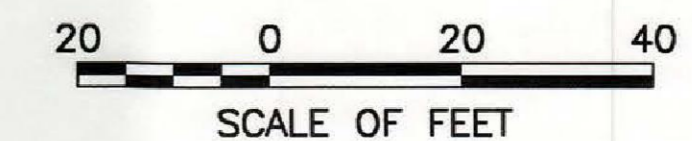
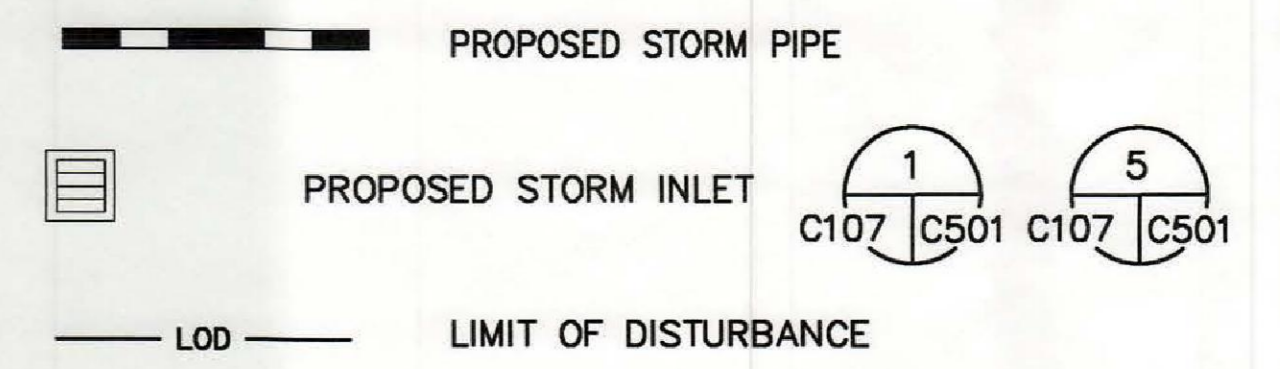
**SITE PLAN**  
 TITLE OF DRAWING





- NOTE:**
- CONTRACTOR TO USE LEAST INVASIVE METHODS POSSIBLE TO PERFORM INSTALLATION OF PIPES AND STRUCTURES
  - AT STRUCTURE #6, CONTRACTOR TO RELOCATE EXISTING IRRIGATION LATERAL AROUND NEW INLET.

**LEGEND**



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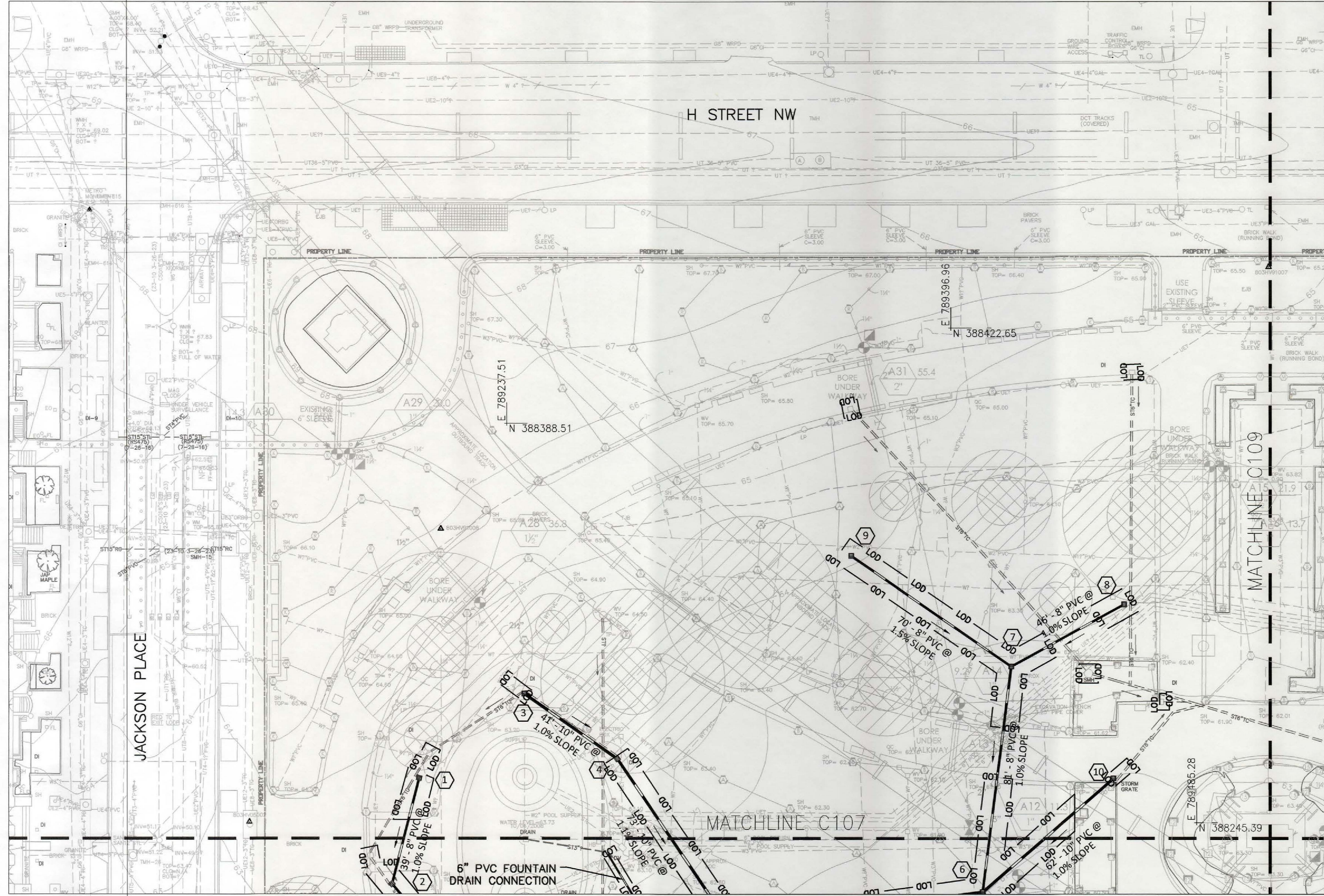
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 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

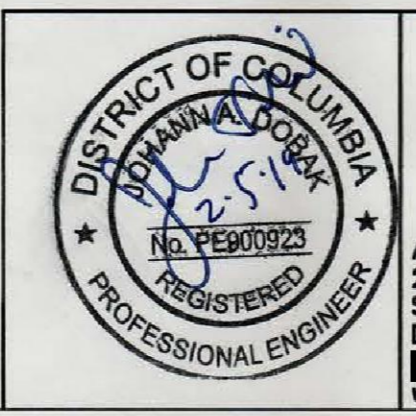
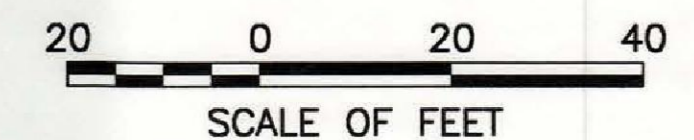
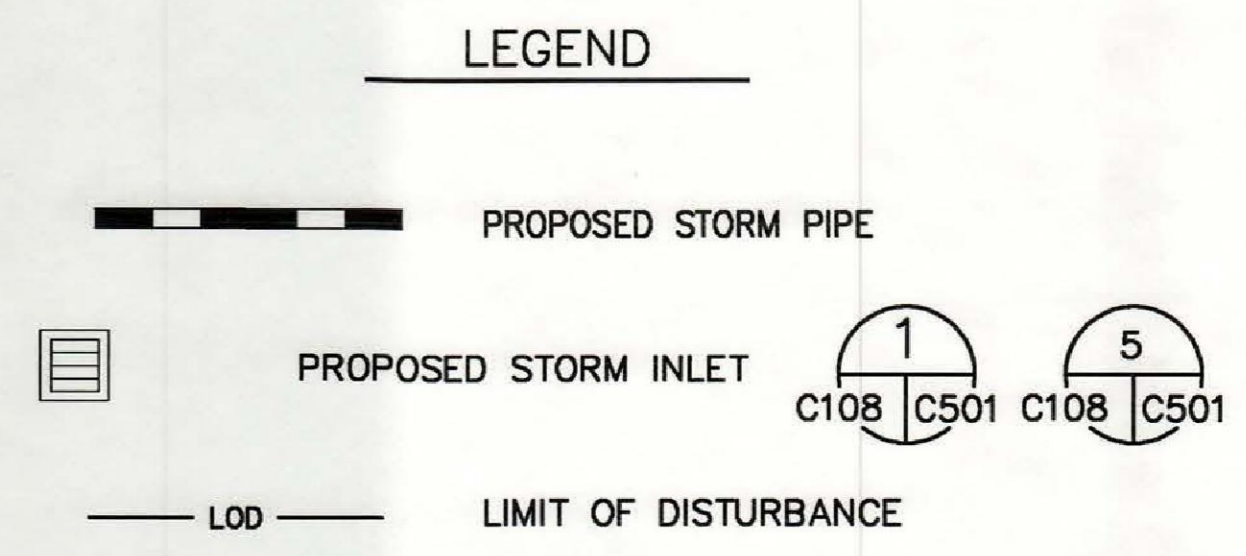
REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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**NOTE:**  
 1. CONTRACTOR TO USE LEAST INVASIVE METHODS POSSIBLE TO PERFORM INSTALLATION OF PIPES AND STRUCTURES



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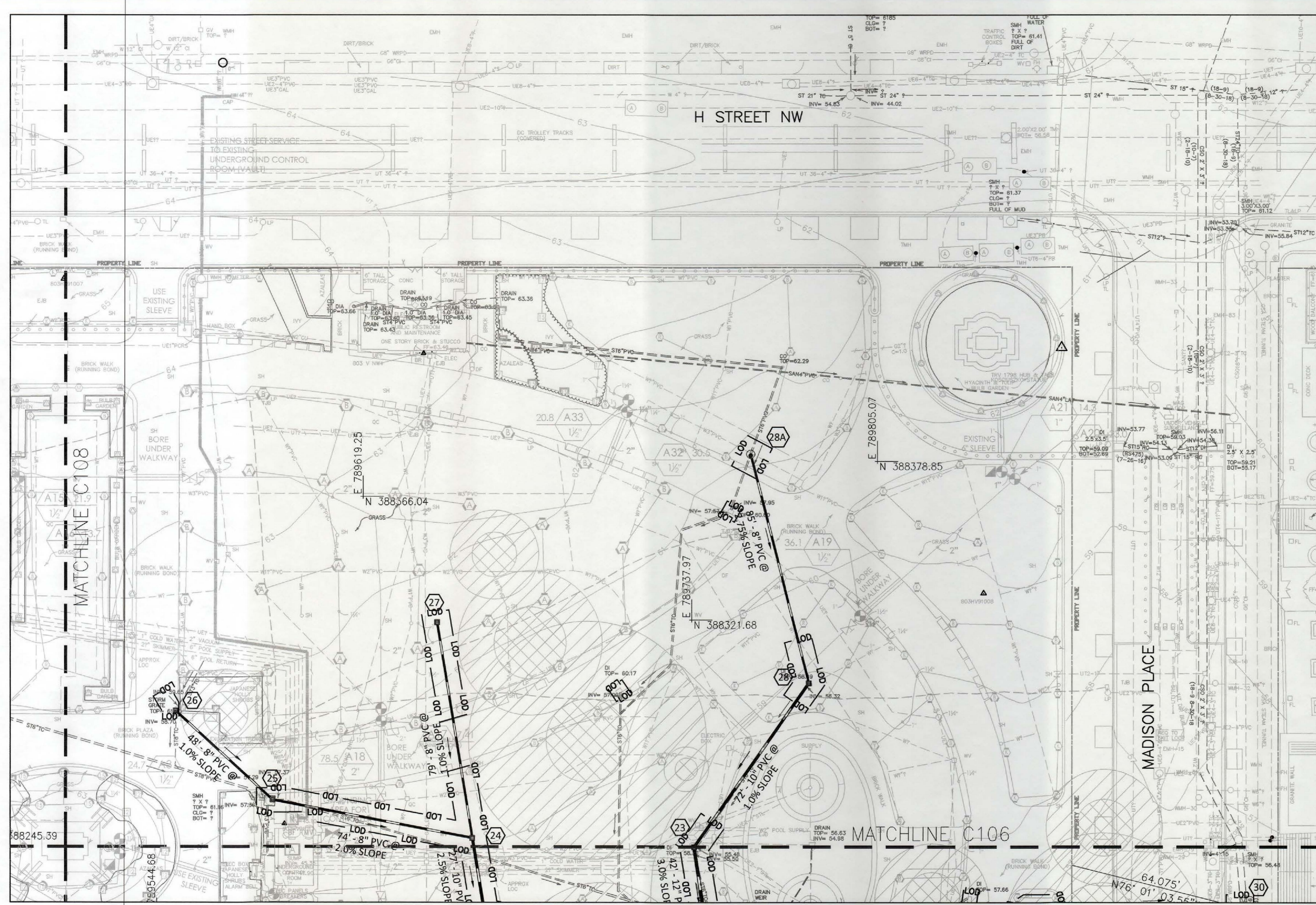
100% CONSTRUCTION DOCUMENT SUBMISSION  
**C108**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

TITLE OF PROJECT  
**REPLACE STORM WATER DRAIN LINES**  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)

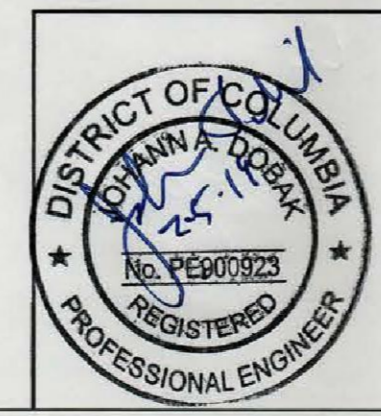
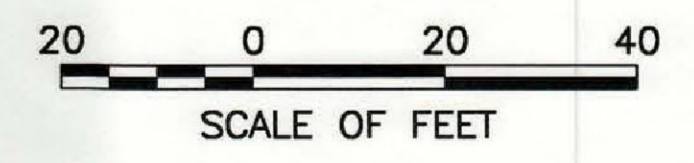
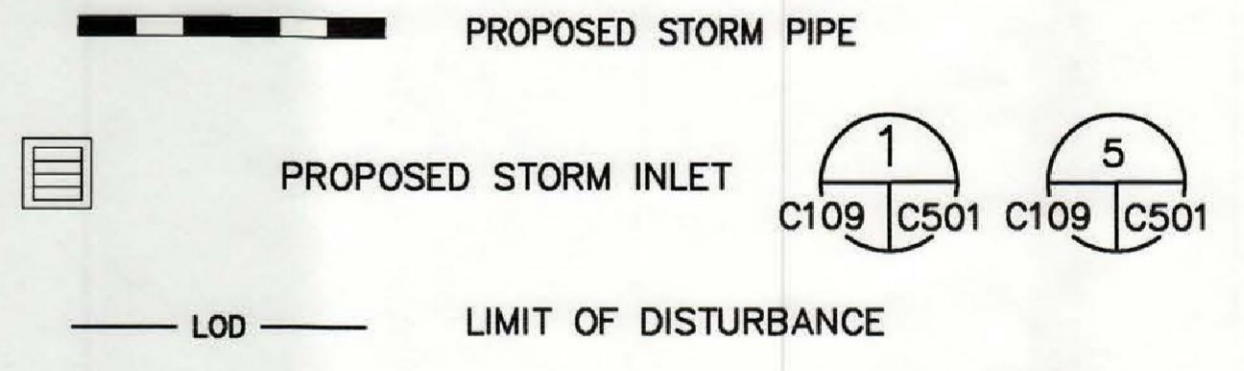
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**NOTE:**  
 1. CONTRACTOR TO USE LEAST INVASIVE METHODS POSSIBLE TO PERFORM INSTALLATION OF PIPES AND STRUCTURES

**LEGEND**



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**SITE PLAN**  
 TITLE OF DRAWING

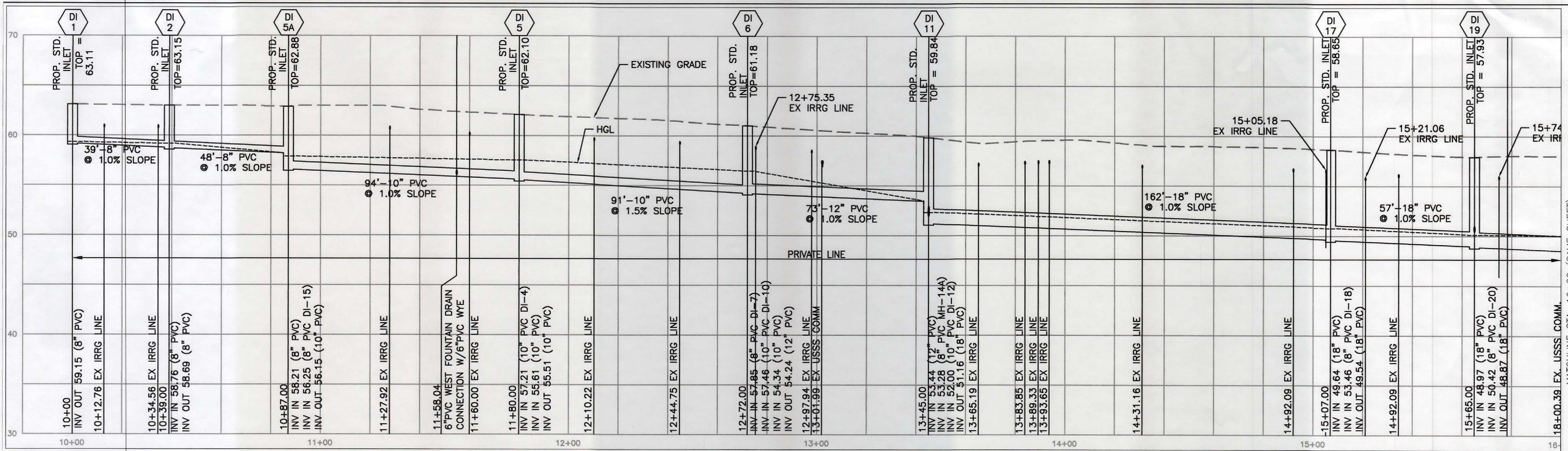
**100% CONSTRUCTION DOCUMENT SUBMISSION**  
**C109**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

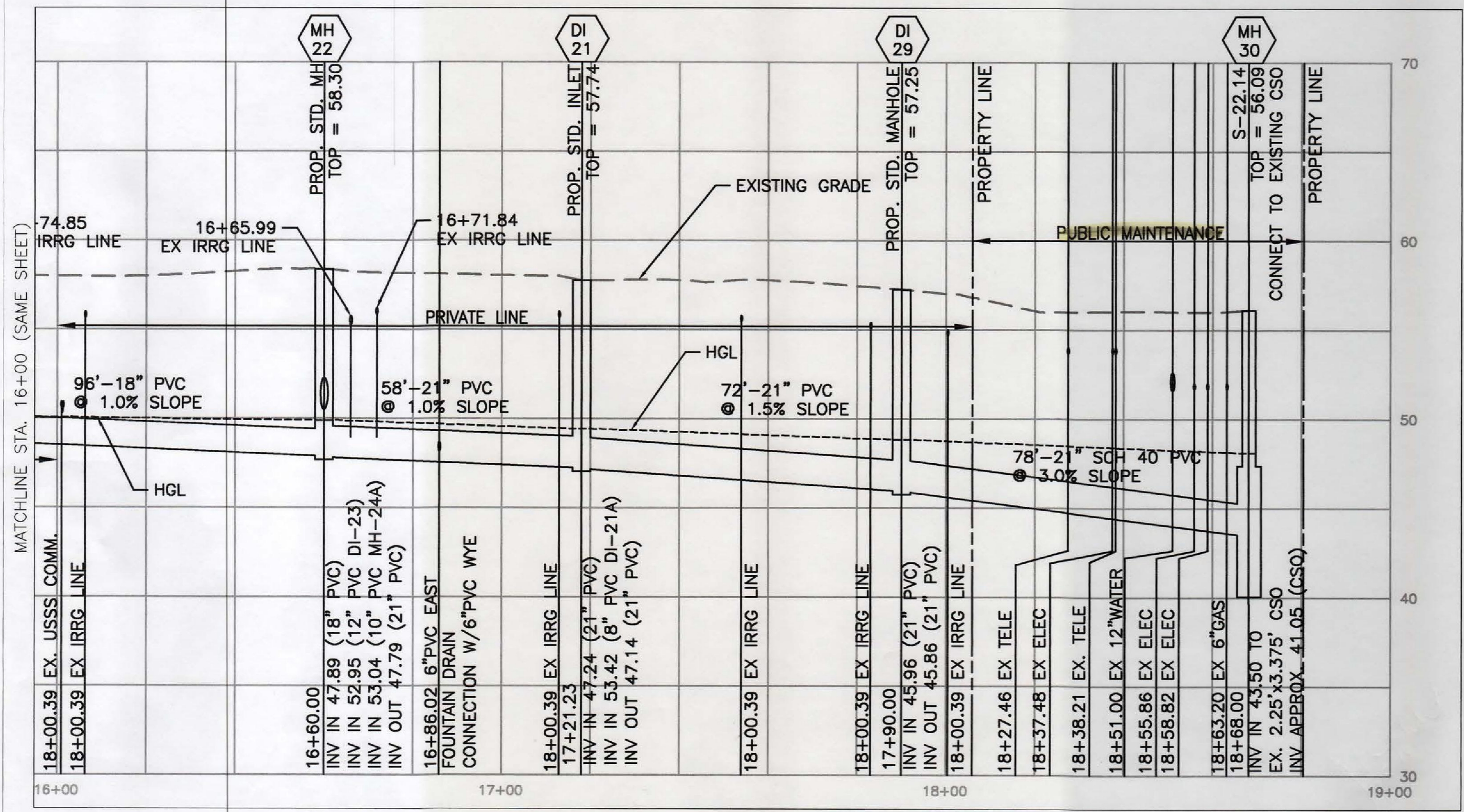
**REPLACE STORM WATER DRAIN LINES**  
 TITLE OF PROJECT  
**LAFAYETTE PARK**  
 LOCATION WITHIN PARK  
**PRESIDENT'S PARK (WHITE HOUSE)**  
 NAME OF PARK

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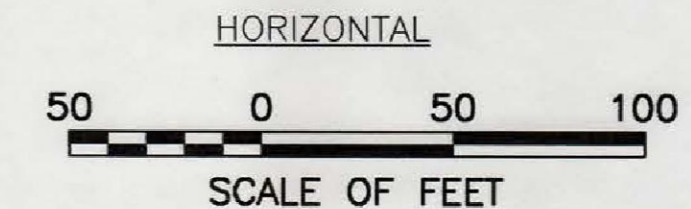




DI-1 TO MH-31



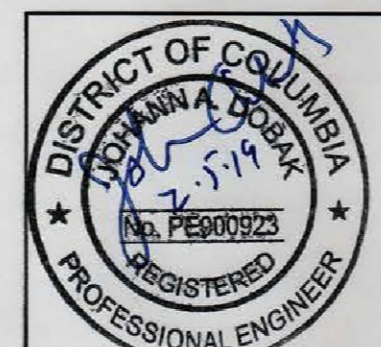
INVERT	0.80 * d	INLET NO.	OUTLET WATER SURFACE ELEV.	D <sub>o</sub>	Q <sub>o</sub>	L <sub>o</sub>	S <sub>o</sub> %	H <sub>1</sub>	V <sub>o</sub>	H <sub>2</sub>	Q <sub>1</sub>	V <sub>1</sub>	QV <sub>1</sub>	V <sub>1</sub> <sup>2</sup> /2g	H <sub>1</sub>	ANG.	H <sub>1</sub>	H <sub>1</sub>	1.3H <sub>1</sub>	0.5H <sub>1</sub>	FINAL H	INLET WATER SURFACE ELEV.	RIM ELEV.	JUNCTION LOSS									
																								H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>	H <sub>1</sub>
59.15	59.88333	DI-1	59.68	8	0.11	39.00	0.0001	0.00	2.15	0.02	0.00	1.85	0	0.05	0.02	0	0.00	0.04	0.05	0.00	0.05	59.73	63.11										
58.89	59.22333	DI-2	59.22	8	0.78	48.00	0.0030	0.14	3.55	0.05	0.11	0.60	0	0.01	0.00	63	0.00	0.05	0.07	0.00	0.21	59.44	63.15										
58.45	59.11667	DI-3	59.12	10	0.80	41.00	0.0009	0.04	3.80	0.06	0.00	3.14	0	0.15	0.05	0	0.00	0.11	0.14	0.00	0.18	59.30	73.00										
57.94	58.61	DI-4	58.61	10	0.97	73.00	0.0014	0.10	2.39	0.02	0.80	3.80	3	0.22	0.08	21	0.04	0.14	0.18	0.09	0.28	58.89	73.50										
55.51	56.17667	DI-5	56.18	10	2.79	91.00	0.0116	1.05	2.91	0.03	2.54	2.54	6	0.10	0.04	64	0.06	0.13	0.16	0.08	1.21	57.39	62.70										
56.15	56.82	DI-5A	56.82	10	1.57	94.00	0.0037	0.34	2.54	0.03	1.37	3.44	5	0.18	0.06	63	0.10	0.19	0.25	0.13	0.80	57.41	62.88										
55.74	56.54	DI-6	56.54	12	7.08	73.00	0.0282	2.06	4.53	0.08	5.48	0.88	5	0.01	0.00	82	0.01	0.08	0.12	0.06	2.17	58.71	61.18										
58.67	59.20	DI-7	59.20	8	1.27	81.00	0.0079	0.64	3.34	0.04	0.71	3.19	2	0.16	0.06	62	0.09	0.19	0.24	0.12	0.88	60.08	75.70										
59.23	59.76	DI-8	59.76	8	0.44	46.00	0.0009	0.04	3.19	0.04	0.00	2.77	0	0.12	0.04	0	0.00	0.08	0.11	0.05	0.15	59.91	74.80										
59.85	60.38	DI-9	60.38	8	0.27	70.00	0.0004	0.02	3.22	0.04	0.00	2.38	0	0.09	0.03	0	0.00	0.07	0.09	0.00	0.12	60.50	73.60										
56.45	57.12	DI-10	57.12	10	1.42	61.00	0.0030	0.18	4.27	0.07	0.00	3.85	0	0.23	0.08	0	0.00	0.15	0.00	0.08	0.33	57.45	70.00										
51.16	52.36	DI-11	52.36	18	9.33	162.00	0.0056	0.91	3.46	0.05	8.55	2.89	25	0.13	0.05	72	0.08	0.17	0.00	0.09	1.08	53.44	66.75										
52.52	53.19	DI-12	53.19	10	0.91	51.00	0.0012	0.06	2.89	0.03	0.58	3.42	2	0.18	0.06	13	0.02	0.11	0.15	0.07	0.21	53.39	60.90										
53.38	54.05	DI-13	54.05	10	0.58	75.00	0.0005	0.04	3.42	0.05	0.00	2.84	0	0.13	0.04	0	0.00	0.09	0.12	0.06	0.15	54.20	56.60										
55.22	55.75	DI-14	55.75	8	0.56	109.00	0.0015	0.17	3.33	0.04	0.00	2.93	0	0.13	0.05	0	0.00	0.09	0.00	0.04	0.26	56.01	59.72										
56.86	57.39333	DI-15	57.39	8	0.59	61.00	0.0017	0.10	3.44	0.05	0.00	3.06	0	0.15	0.05	0	0.00	0.10	0.00	0.05	0.20	57.59	61.55										
49.54	50.74	DI-17	50.74	18	10.40	57.00	0.0070	0.40	3.61	0.05	10.05	3.46	35	0.19	0.07	61	0.10	0.22	0.28	0.14	0.68	51.42	73.80										
54.33	54.86333	DI-18	54.86	8	0.72	87.00	0.0025	0.22	3.61	0.05	0.00	3.29	0	0.17	0.06	0	0.00	0.11	0.14	0.07	0.36	55.23	73.50										
48.87	50.27	DI-19	50.27	21	12.22	98.00	0.0042	0.42	3.16	0.04	11.07	2.75	30	0.12	0.04	48	0.08	0.14	0.18	0.09	0.32	50.79	86.00										
52.25	52.78333	DI-20	52.78	8	0.67	95.00	0.0022	0.21	4.59	0.08	0.00	3.20	0	0.16	0.06	0	0.00	0.14	0.18	0.00	0.39	53.17	84.50										
47.14	48.54	DI-21	48.54	21	17.33	72.00	0.0085	0.62	3.80	0.06	17.14	4.20	72	0.27	0.10	48	0.12	0.28	0.36	0.18	0.97	49.51	74.50										
53.38	54.18	DI-23	54.18	12	2.43	42.00	0.0033	0.14	3.80	0.06	1.51	4.20	6	0.27	0.10	48	0.12	0.28	0.36	0.18	0.50	54.68	74.50										
54.28	54.94667	DI-24	54.95	10	2.39	27.00	0.0085	0.23	3.57	0.05	1.69	3.30	6	0.17	0.06	70	0.10	0.21	0.28	0.14	0.50	55.45	68.00										
53.91	54.57667	DI-24A	54.58	10	2.49	84.00	0.0092	0.77	3.42	0.05	2.39	3.57	9	0.20	0.07	41	0.08	0.19	0.25	0.12	1.02	55.60	61.50										
55.11	55.64333	DI-25	55.64	8	1.33	74.00	0.0086	0.64	3.30	0.04	0.83	3.73	3	0.22	0.06	69	0.13	0.25	0.32	0.16	0.96	56.60	60.88										
57.58	58.11333	DI-26	58.11	8	0.83	48.00	0.0034	0.16	3.73	0.05	0.00	3.47	0	0.19	0.07	0	0.00	0.12	0.16	0.08	0.32	58.43	61.98										
57.28	57.81333	DI-27	57.81	8	0.36	79.00	0.0006	0.05	3.02	0.04	0.00	2.60	0	0.10	0.04	0	0.00	0.07	0.09	0.05	0.14	57.96	61.51										
54.2	54.87	DI-28	54.87	10	1.51	72.00	0.0034	0.24	4.20	0.07	0.20	3.73	1	0.22	0.08	0	0.00	0.14	0.19	0.09	0.43	55.30	58.49										
45.86	47.26	DI-29	47.26	21	18.37	78.00	0.0096	0.75	6.30	0.15	17.33	5.60	97	0.49	0.17	33	0.15	0.48	0.62	0.31	1.37	48.63	57.25										
54.03	54.56	MH-14A	54.56	8	0.56	75.00	0.0015	0.11	9.04	0.32	0.56	0.00	0	0.00	0.00	25	0.00	0.32	0.00	0.16	0.43	55.00	60.36										
47.79	49.19	MH-22	49.19	21	17.14	55.00	0.0084	0.46	7.07	0.19	17.14	9.04	155	1.27	0.44	56	0.65	1.30	0.00	0.00	1.76	50.95	58.30										
56.65	57.18	MH-28A	57.18	8	0.20	85.00	0.0002	0.02	4.20	0.07	0.00	3.73	0	0.22	0.08	0	0.00	0.14	0.19	0.09	0.20	57.39	61.15										
42.35	48.1	MH-30	48.10	21	18.37	1.00	0.0096	0.01	5.73	0.13	18.37	0.00	0	0.00	0.00	0	0.00	0.13	0.17	0.08	0.18	48.28	56.09										



DC Water | Preliminary Plan Approval  
 Maximo #: 18-17166 (PPA)  
 Name (print): [Signature]  
 Signature: [Signature]  
 Date: 4/10/2019

DI-1 TO MH-30

DC Water | Final Plan Approval  
 Maximo #: 18-353600 (WSAC)  
 Name (print): [Signature]  
 Signature: [Signature]  
 Date: 1/29/2019



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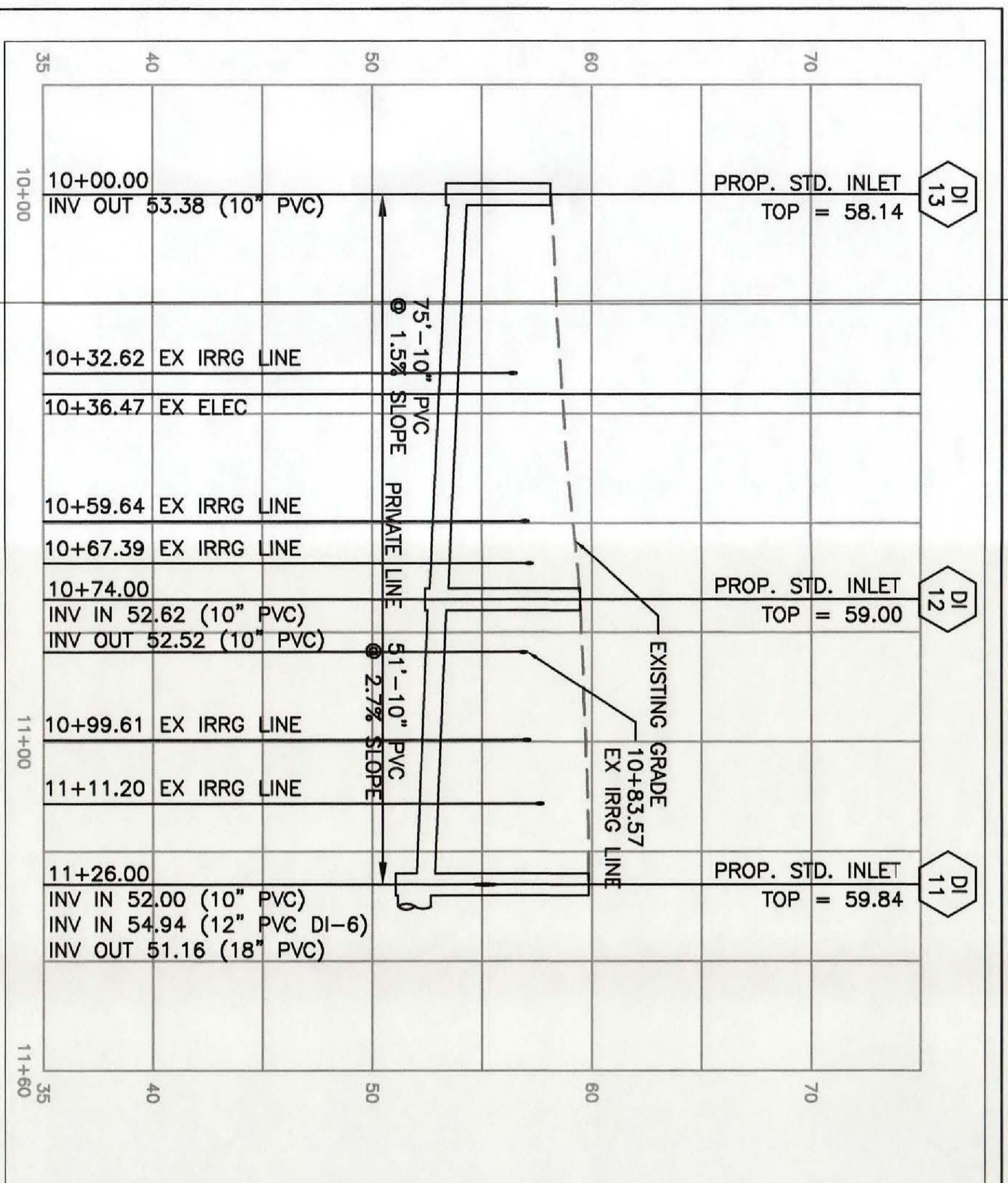
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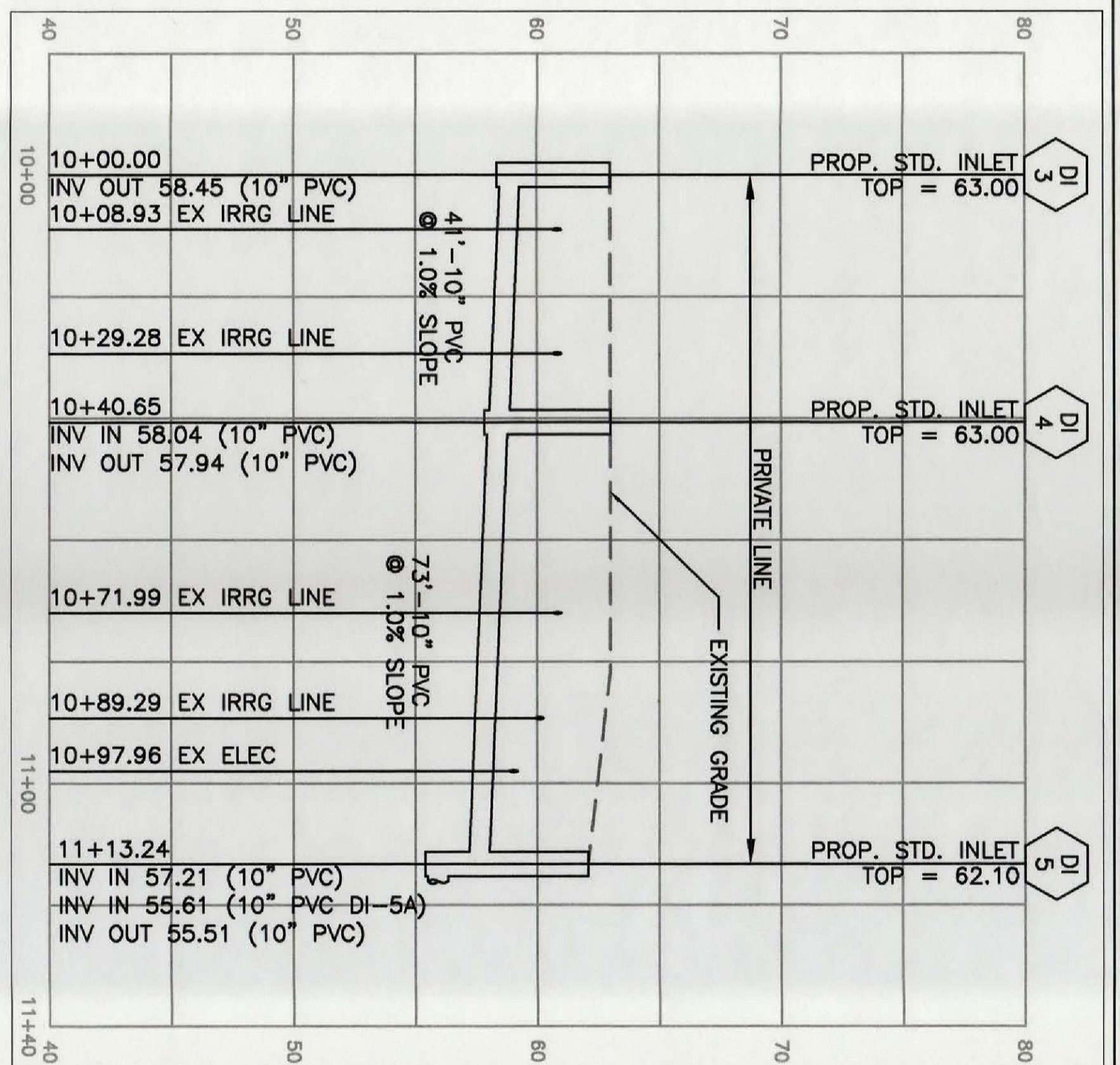
UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

187290B  
 NPT/SRC  
 NPT/SRC  
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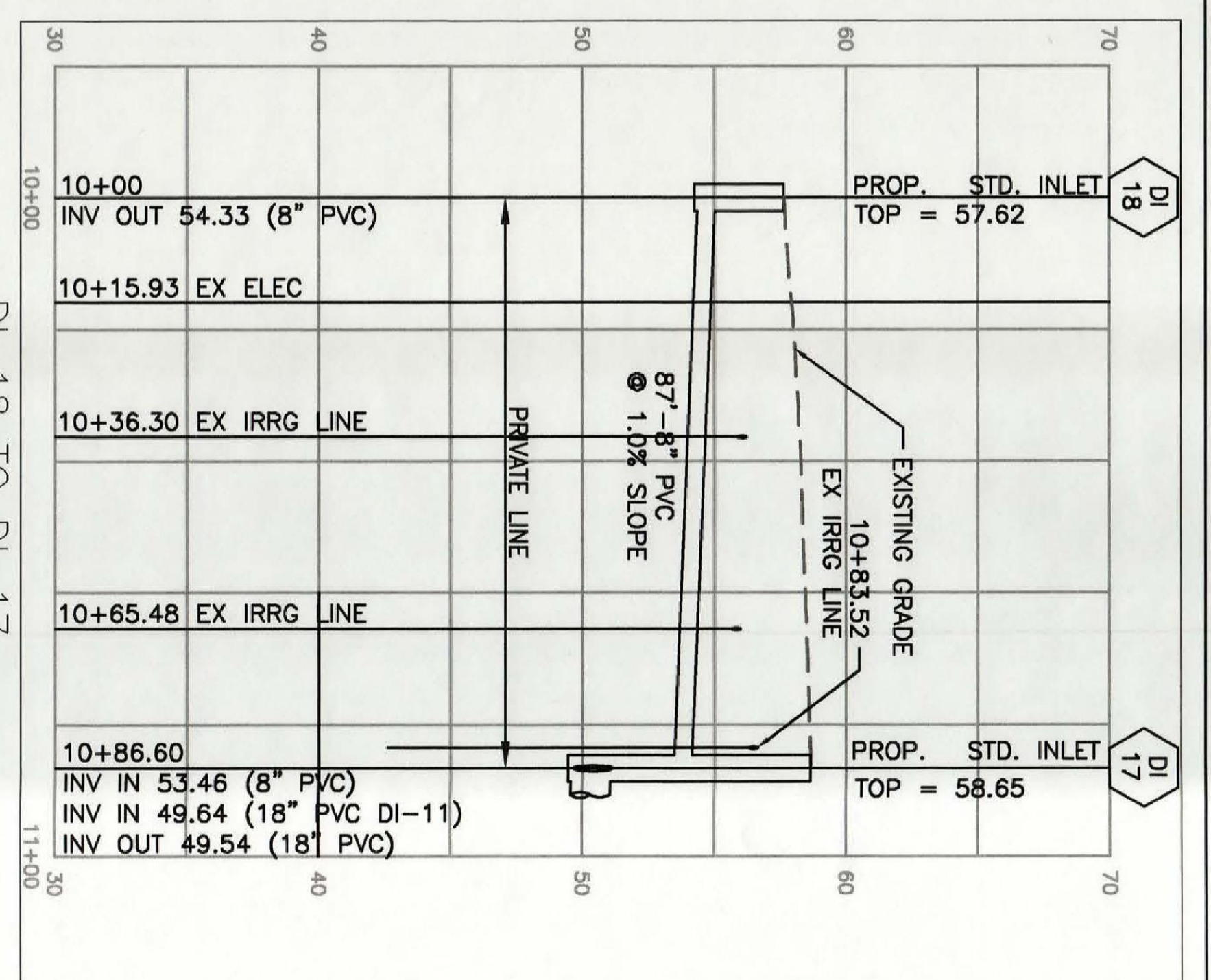




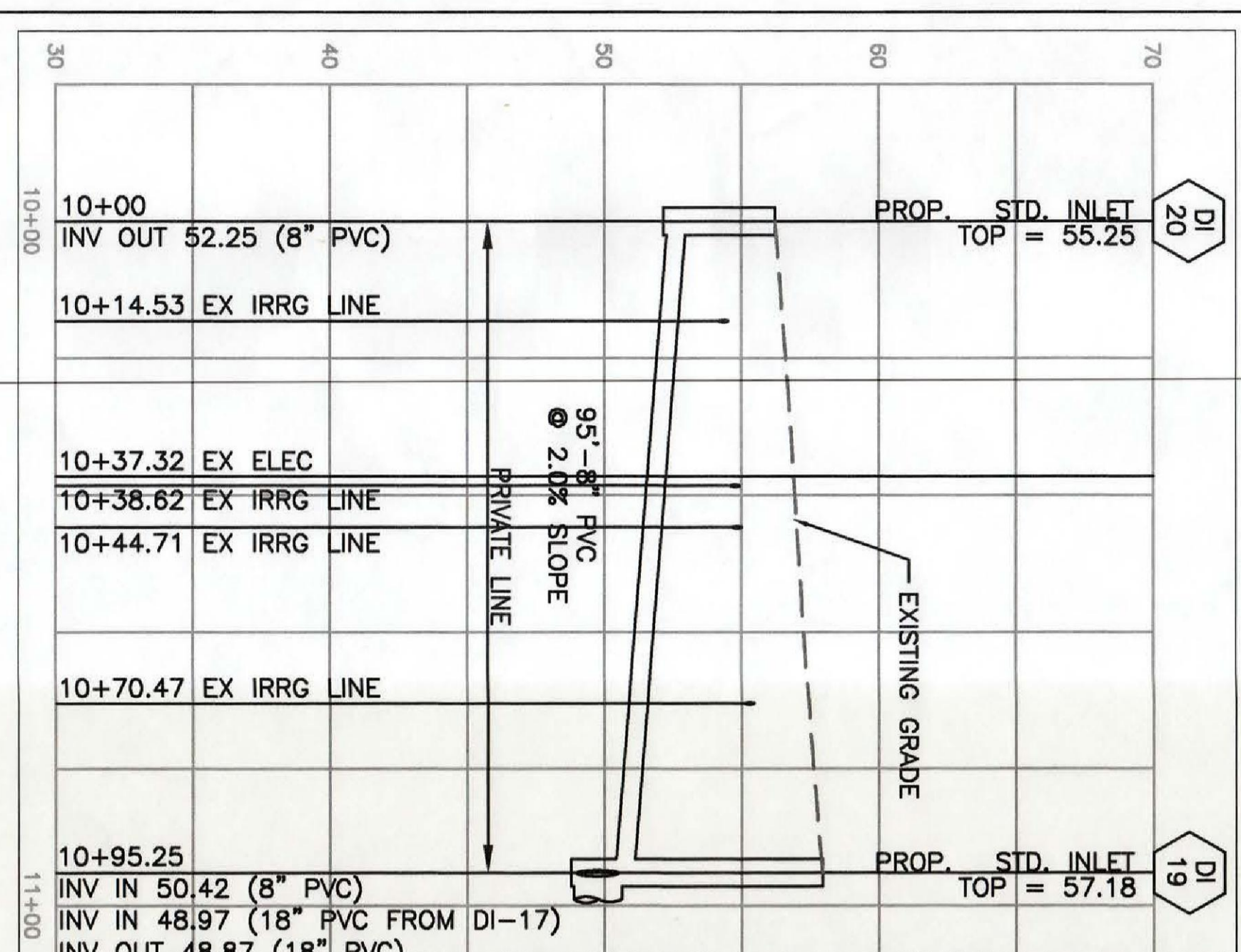
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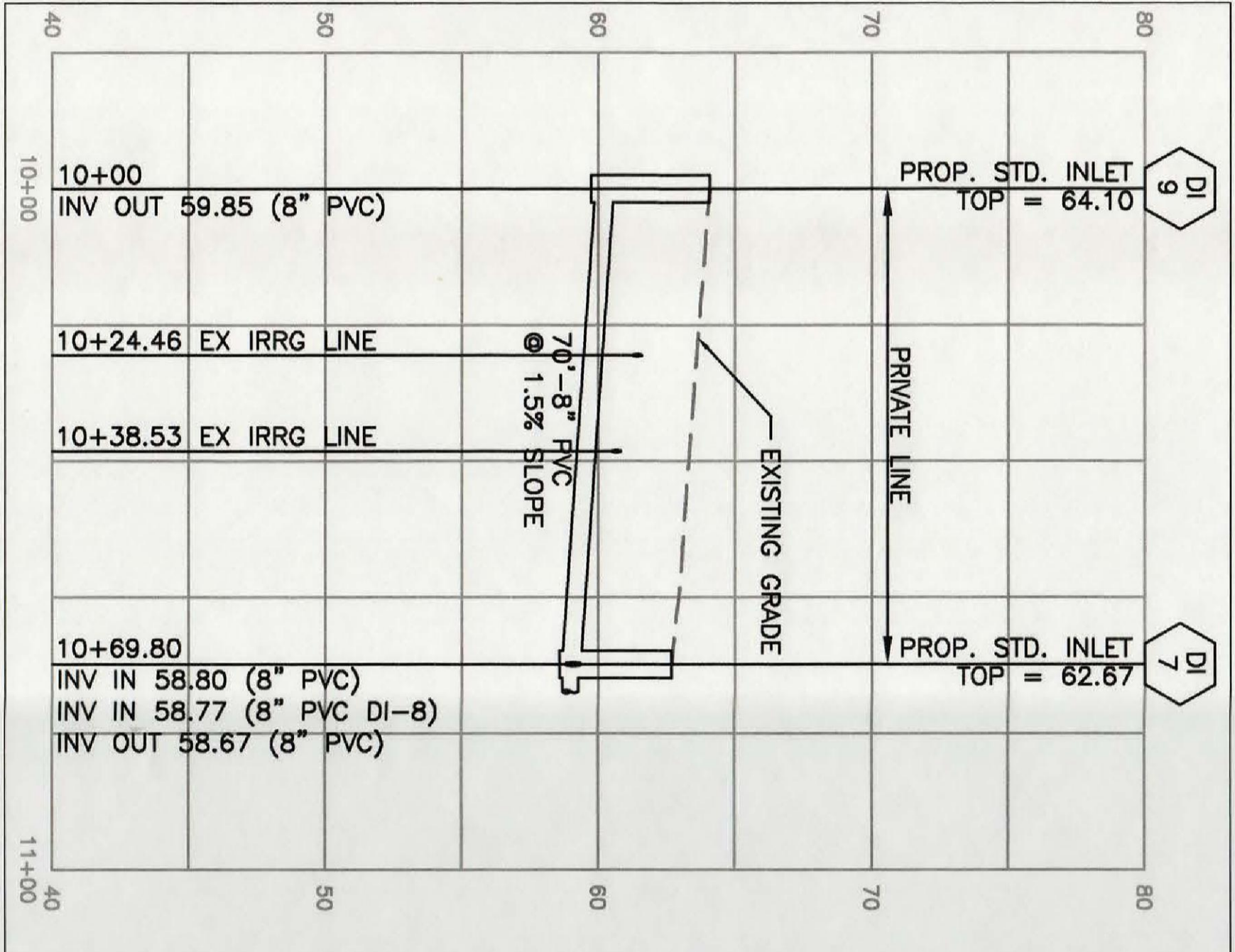
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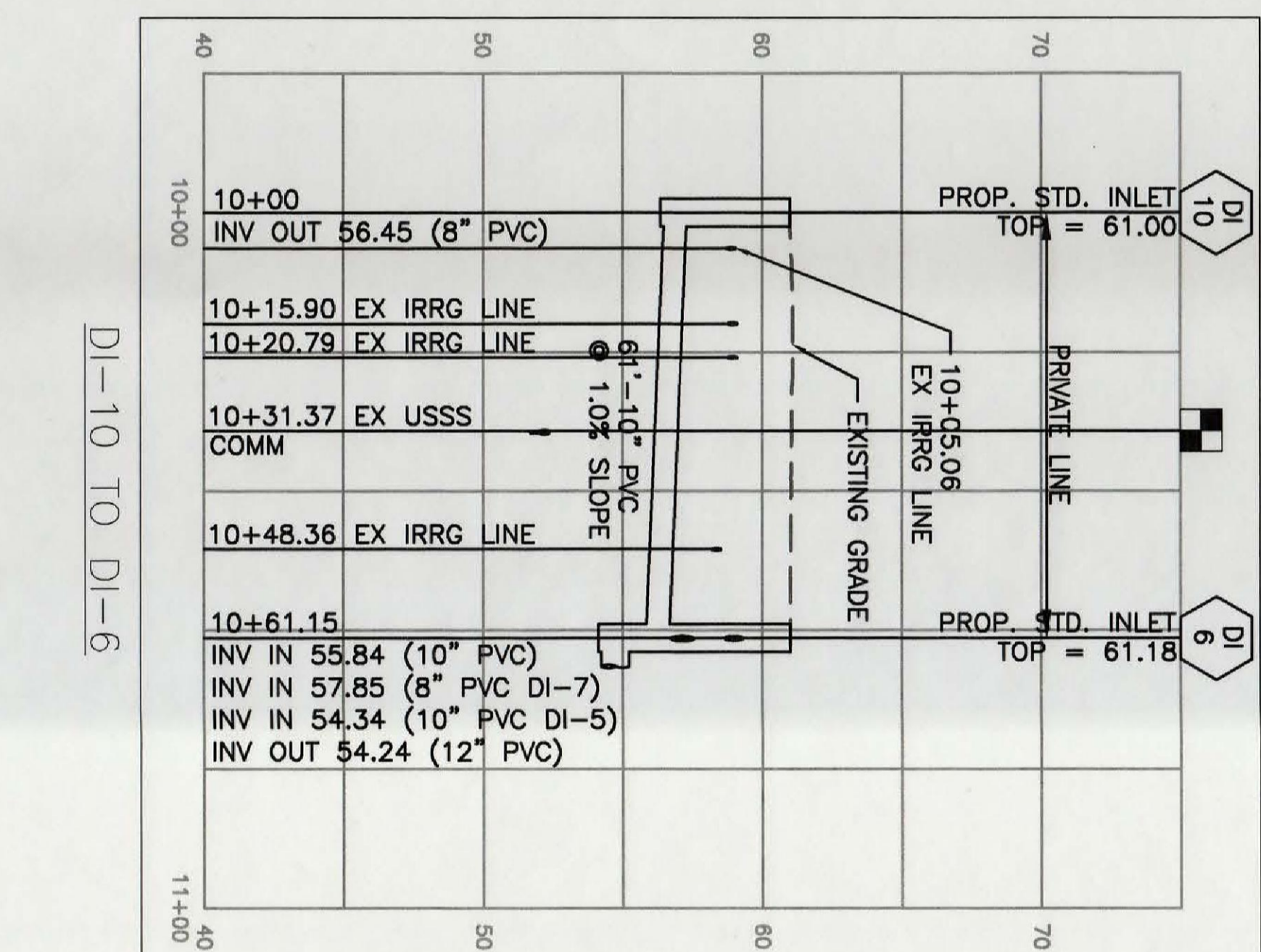
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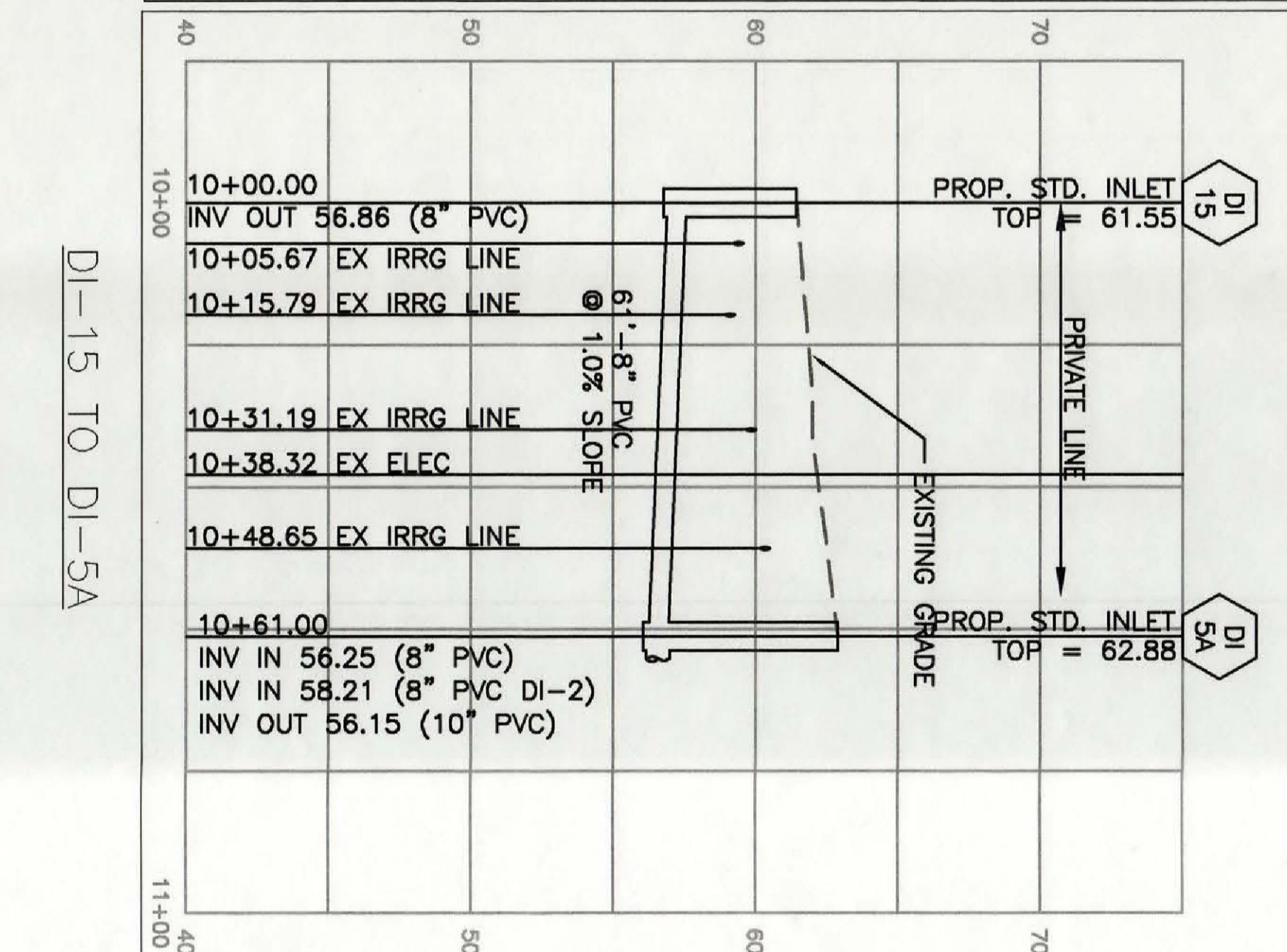
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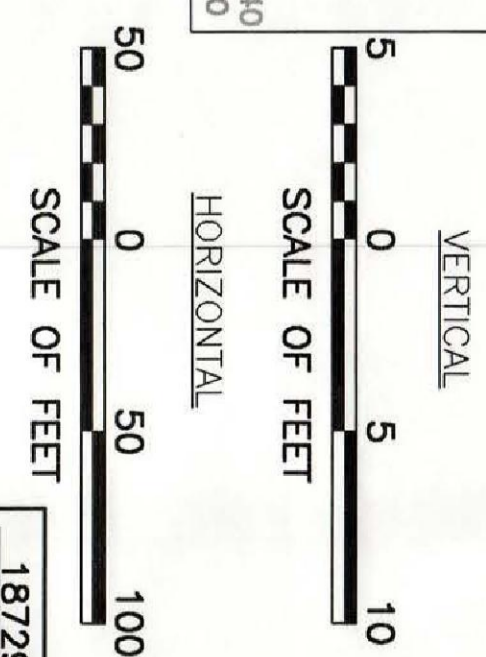
DI-9 TO DI-7



DI-10 TO DI-6



DI-15 TO DI-5A



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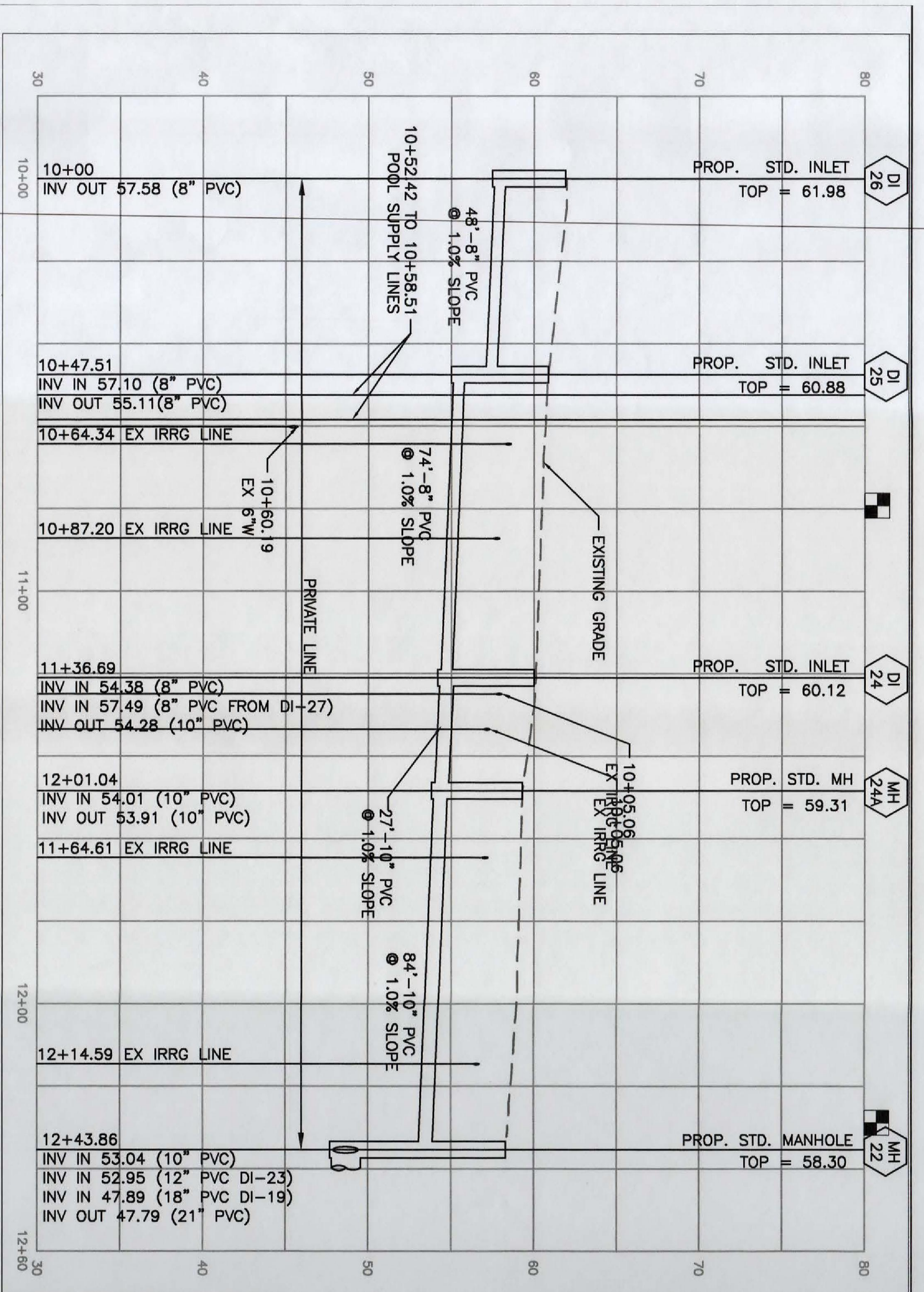
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 SUBMISSION  
**C202**  
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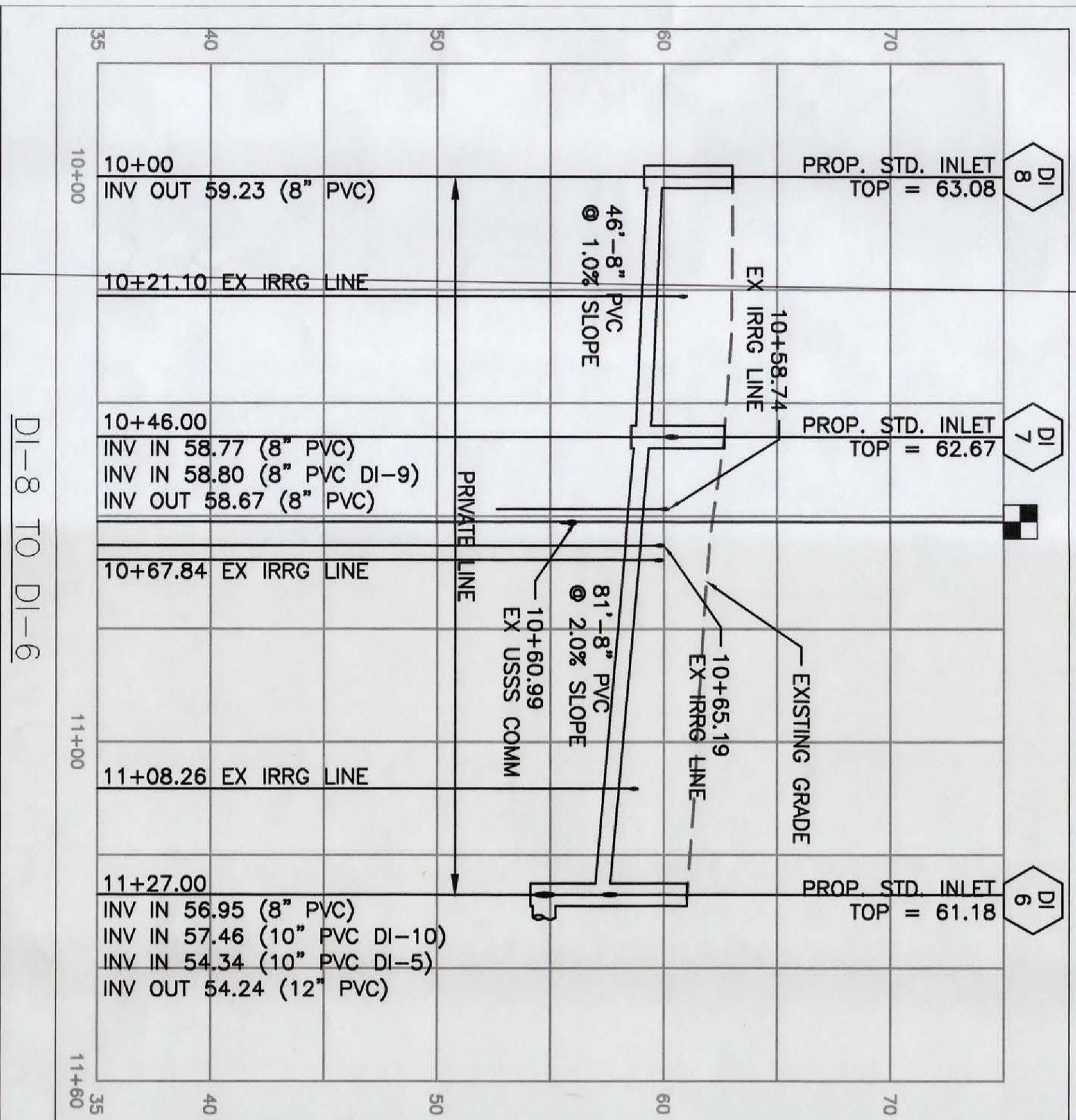
UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
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 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)

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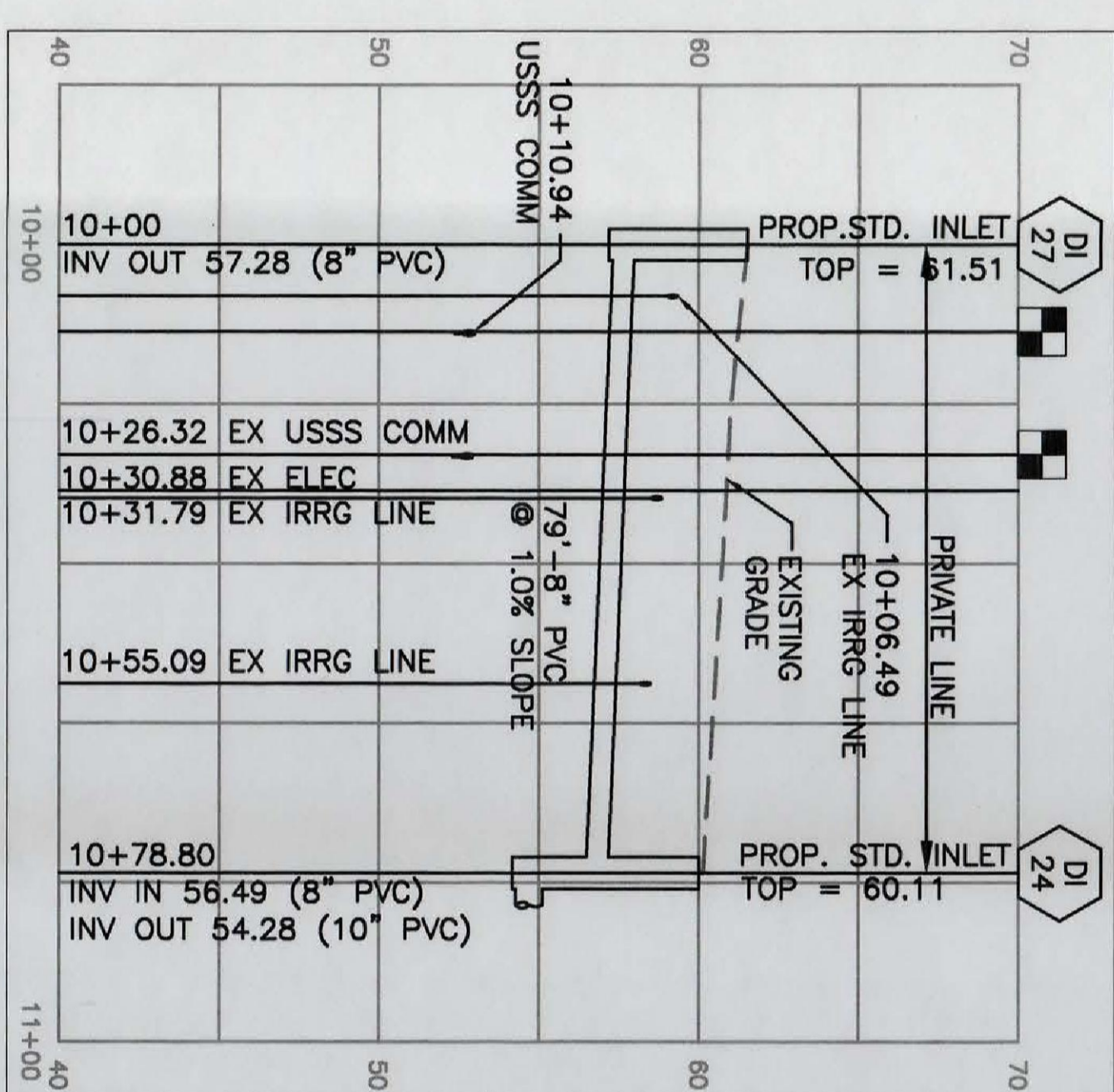




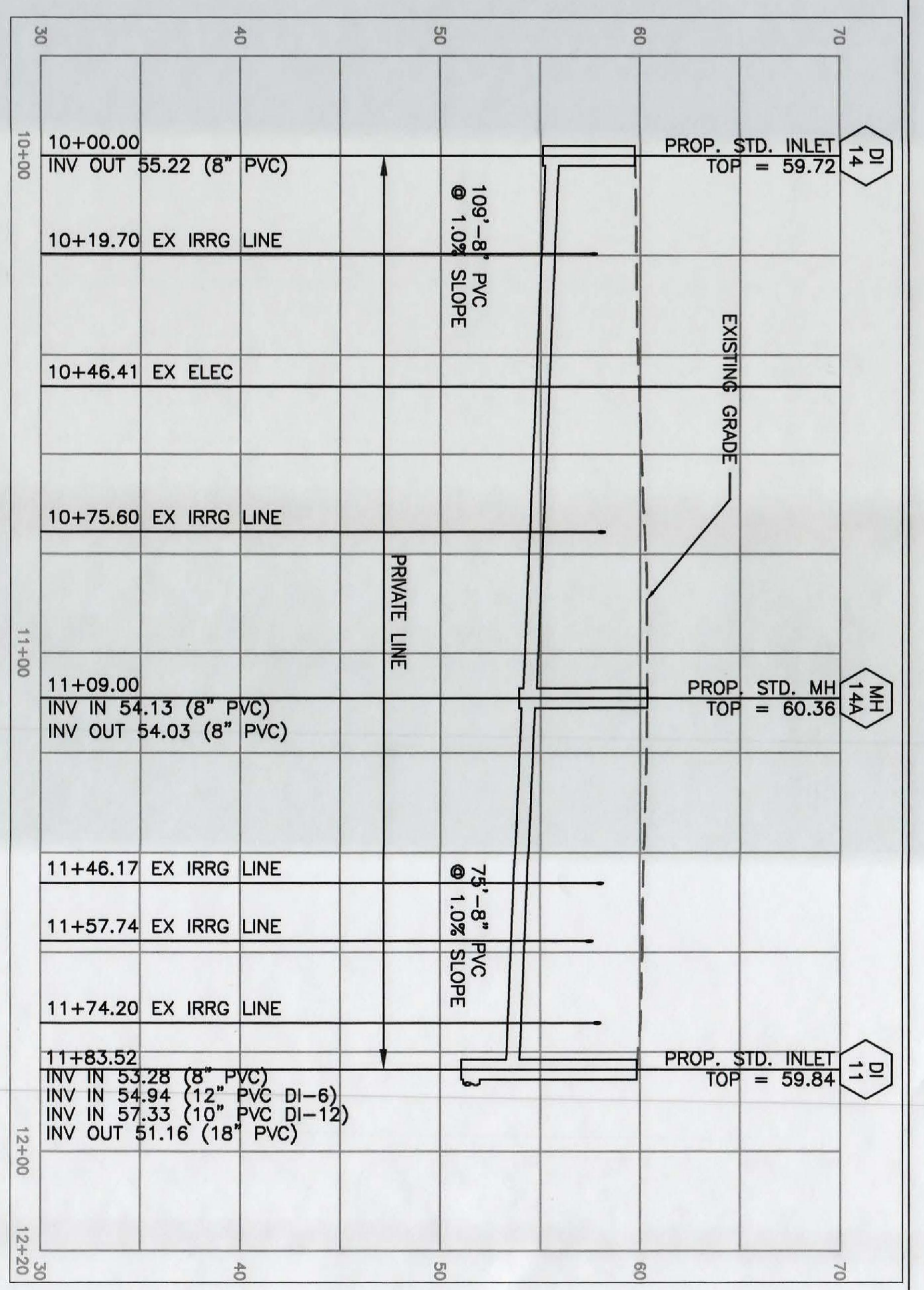
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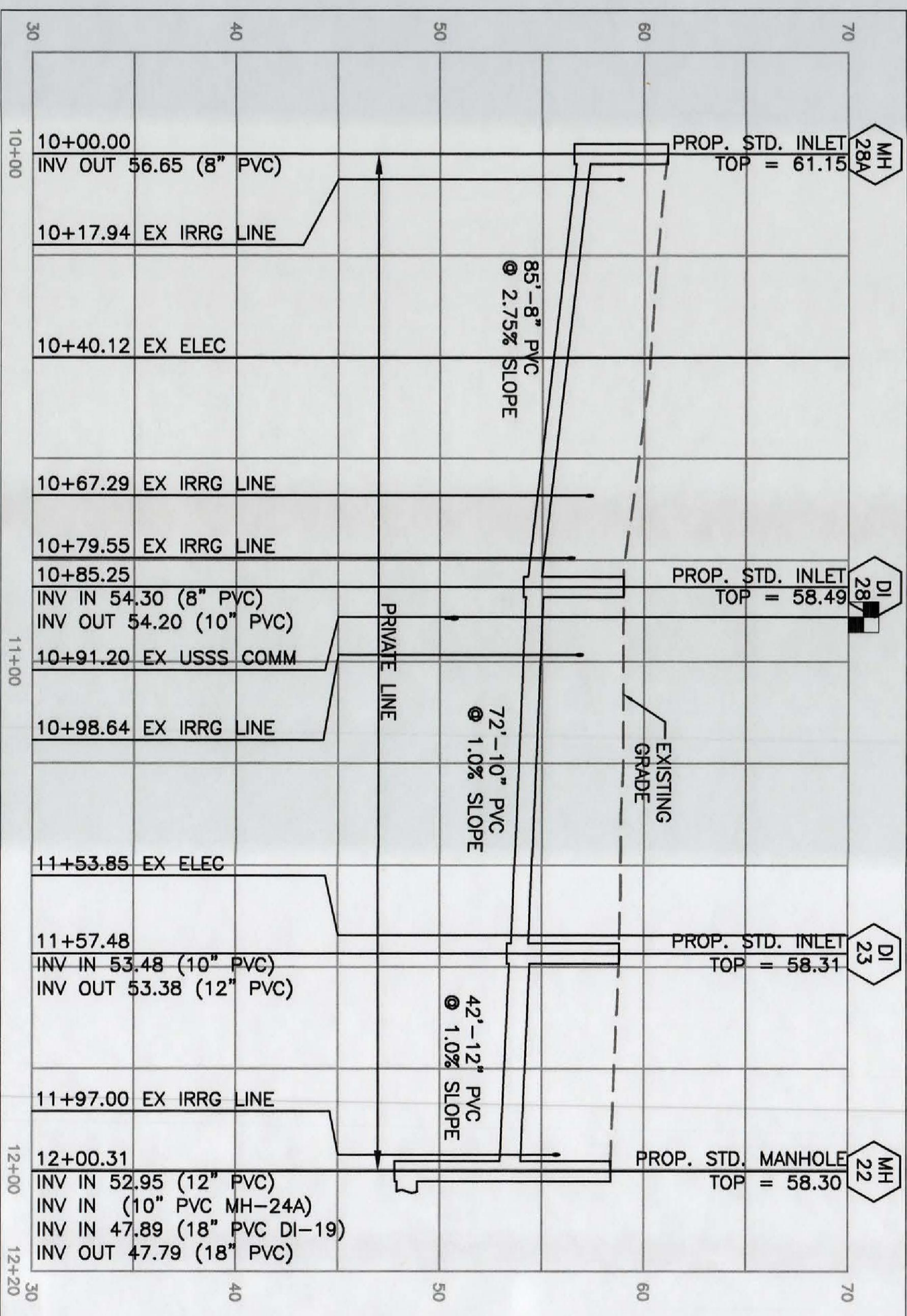
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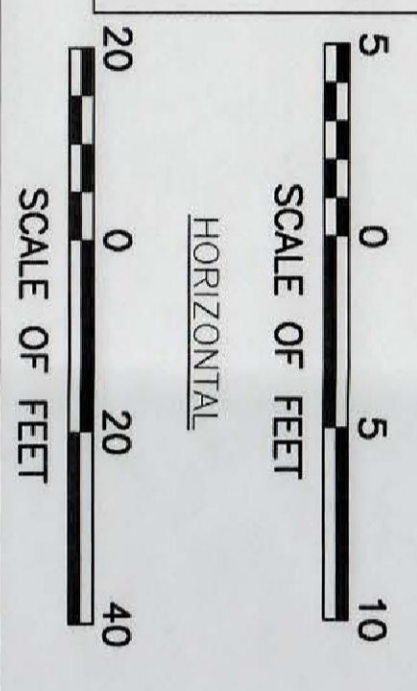
DI-27 TO DI-24



DI-14 TO MH-11



MH-28A TO DI-23



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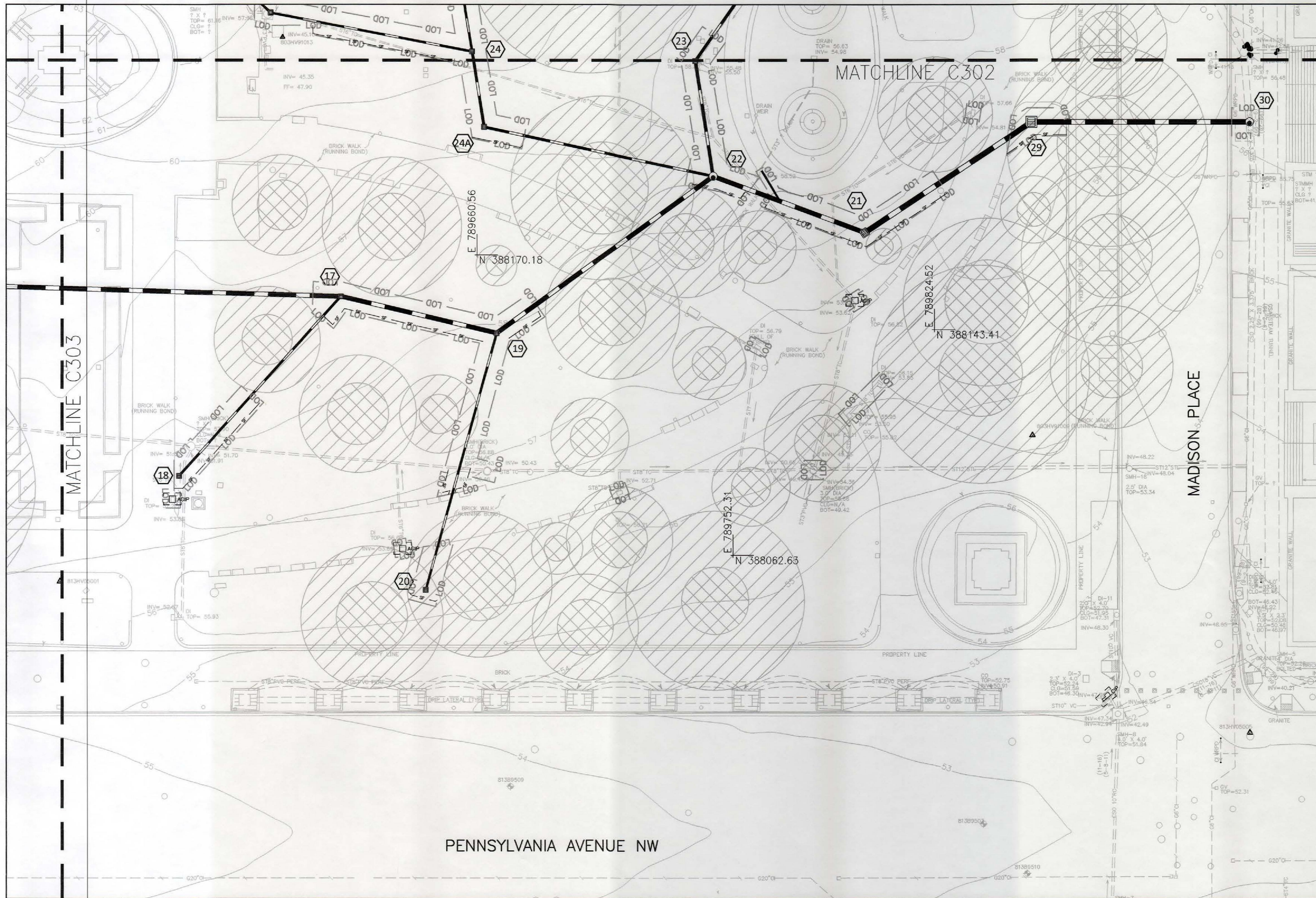
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REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 NAME OF PARK

UNITED STATES  
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 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 REGION AND PROJECT MANAGEMENT

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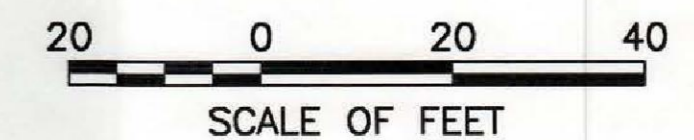
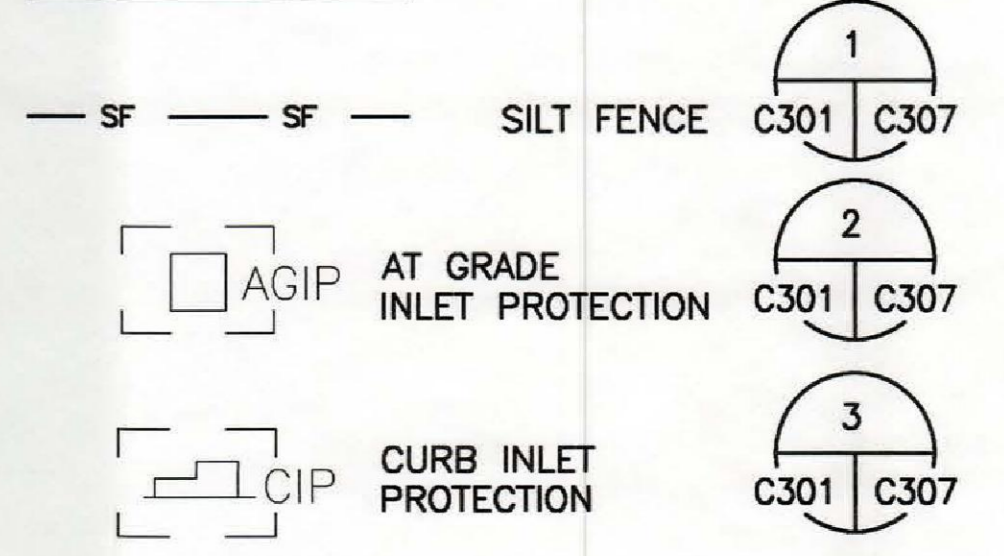




**NOTES:**

1. CONTRACTOR SHALL USE LIGHT RUBBER TIRE VEHICLES FOR MINIMUM SITE DISTURBANCE.
2. CONTRACTOR TO WORK WITHIN MIN. 3 DAY DRY WEATHER (NOAA) FORECAST.
3. SAME DAY STABILIZATION WILL BE REQUIRED FOR ALL PROPOSED WORK AREAS.
4. NO AREAS SHALL BE LEFT UN-STABILIZED OVERNIGHT UNLESS RUNOFF IS DIRECTED TO A DOE APPROVED DEVICE. ALL EXCAVATIONS SHALL BE COVERED AND TARPED IF LEFT OPEN OVERNIGHT OR WEEKENDS.
5. CONTRACTOR SHALL PROTECT EXISTING STORM SYSTEM FROM SEDIMENT AND DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD.
6. ALL EXISTING TREES SHALL BE PROTECTED DURING CONSTRUCTION.
7. CONTRACTOR SHALL COORDINATE THE DIRECTIONAL DRILLING LAYOUT WITH COR PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
8. CONSTRUCTION ENTRANCE IS NOT ALLOWED FOR THE PROPOSED PROJECT SITE.

**LEGEND**



**WARNING - EROSION & SEDIMENT CONTROL SHALL BE STRICTLY ENFORCED !**



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**EROSION & SEDIMENT CONTROL PLAN**  
 TITLE OF DRAWING

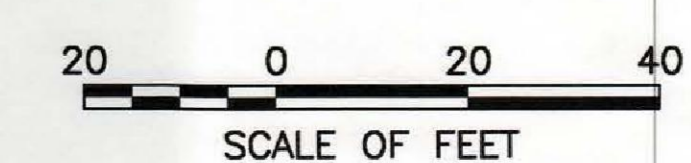
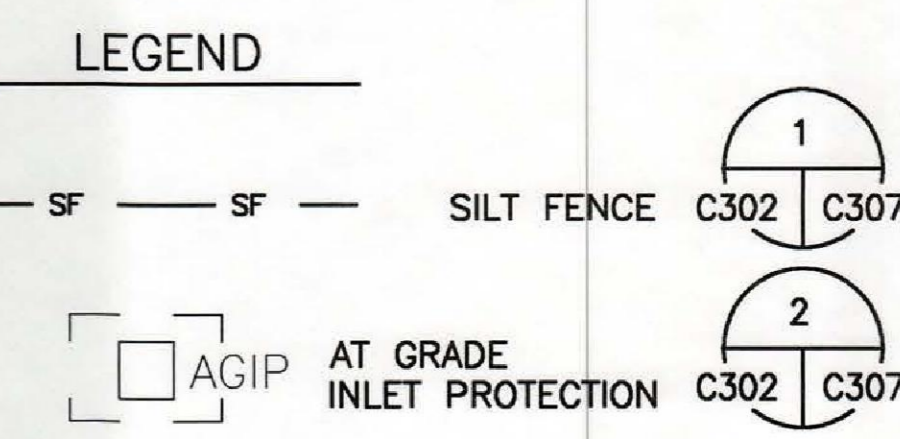
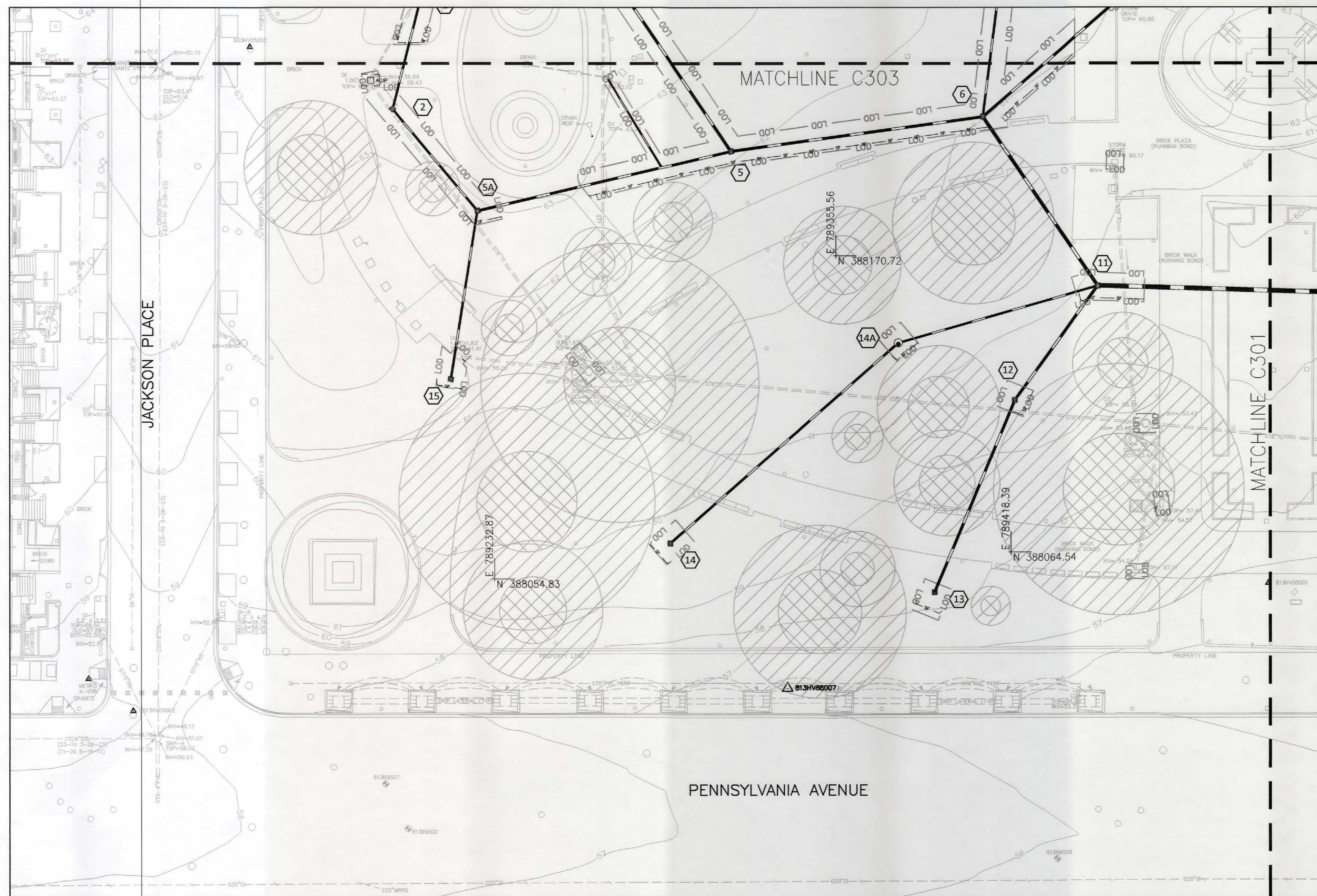
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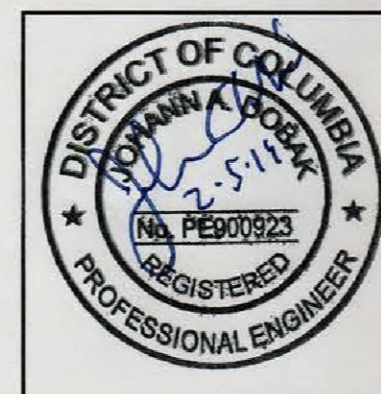
REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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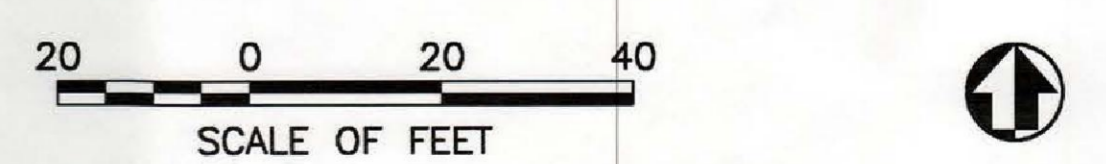
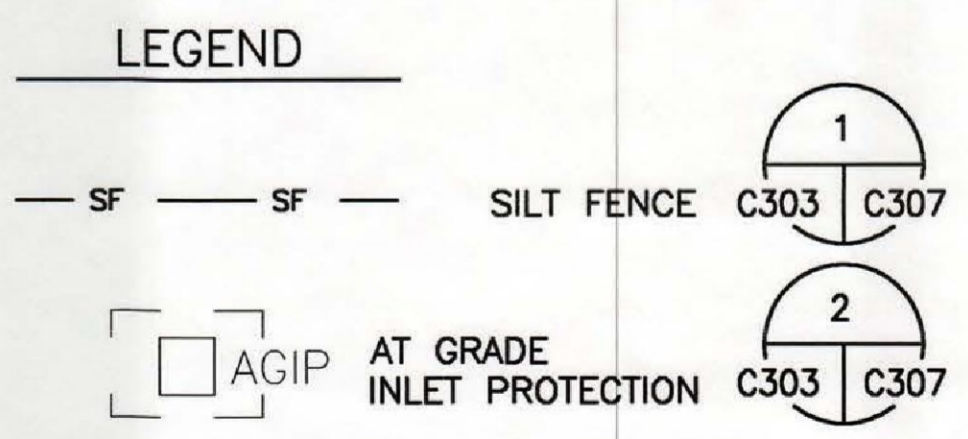
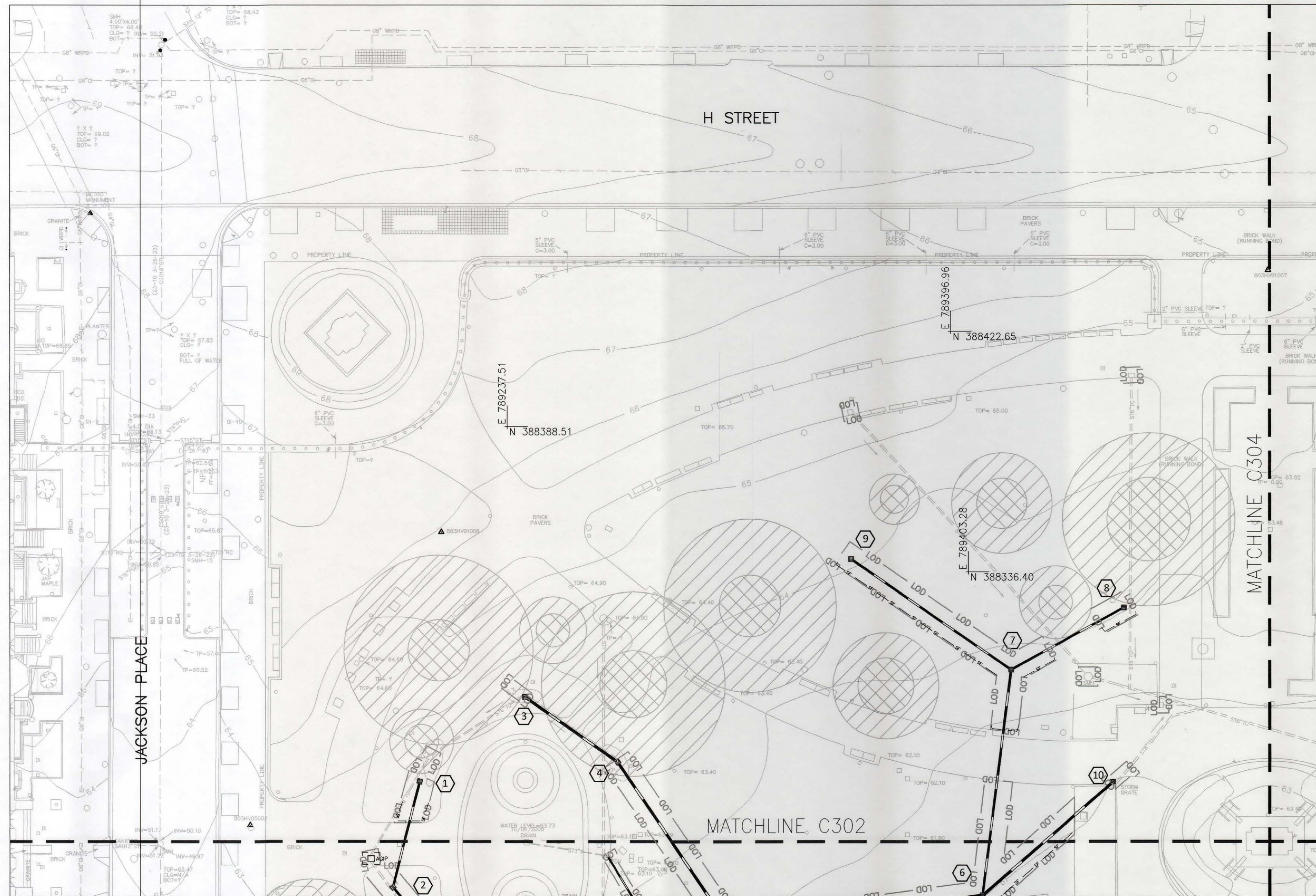
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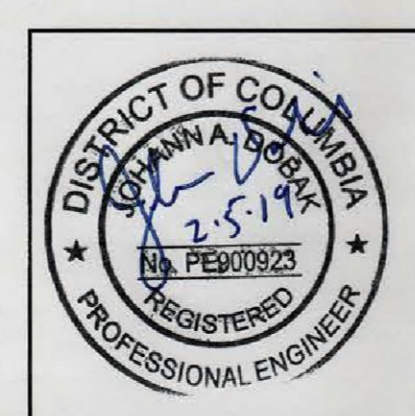
REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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**WARNING - EROSION & SEDIMENT CONTROL SHALL BE STRICTLY ENFORCED !**



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 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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**EROSION AND SEDIMENT CONTROL NARRATIVE**

THIS PROJECT WILL REPLACE THE EXISTING STORM DRAIN LINES IN LAFAYETTE PARK, WASHINGTON, DC. MANY OF THE EXISTING STORM PIPES THROUGHOUT THE PARK APPEAR TO BE UNDERSIZED AND PLUGGED UP OR NOT WORKING CAUSING WATER TO BACK-UP AND FLOOD THE GRASS AREA AND SIDEWALKS DURING HEAVY RAINS OR WHEN THE FOUNTAINS ARE BEING DRAINED. THE PROPOSED DESIGN WILL MEET THE PEAK STORM LOADING REQUIREMENTS AS PER LATEST DC STANDARDS AND SPECIFICATION FOR REPLACEMENT AND/OR LINED PIPING AND INLETS SIZING. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE UTILIZED TO CONTROL EROSION AND SEDIMENTATION FROM ALL LAND DISTURBING ACTIVITIES REQUIRED FOR THIS PROJECT. MEASURES INCLUDE BUT ARE NOT LIMITED TO INLET PROTECTION, DEWATERING DEVICE, SILT FENCE AND TEMPORARY CONSTRUCTION FENCE. ALSO INCLUDED ARE RAPID STABILIZATION OF DISTURBED AREAS, DAILY CLEANING OF ADJACENT ROADWAYS WITH A SWEEPER TRUCK WHEN REQUIRED, AND PROPER DISPOSAL OF SURPLUS MATERIALS.

IN ADDITION TO THE MEASURES STATED ABOVE, THE FOLLOWING PARAGRAPHS INDICATE SEDIMENT AND EROSION CONTROL PRACTICES THAT SHALL BE PERFORMED: PRIOR TO CLEARING THE WORK AREA, INSTALL SEDIMENT CONTROL MEASURES AS SHOWN ON E&S PLANS. ALL E&S MEASURES SHALL BE DONE TO THE SATISFACTION OF THE INSPECTION AUTHORITY. POST-CONSTRUCTION OF THE STORM PIPES SHOULD BE INSPECTED FOR CONSTRUCTION DEBRIS AND SEDIMENT, AND PROPERLY DISPOSING OF ANY MATERIALS FOUND.

**EROSION AND SEDIMENT CONTROL NOTES**

- DO NOT ALLOW TRACKED MUD AND DEBRIS TO ACCUMULATE ON STREETS. CLEAN STREETS ON A DAILY BASIS WITH A VACUUM SWEEPER TRUCK TO THE SATISFACTION OF THE SEDIMENT CONTROL OFFICER.
- EQUIPMENT WORKING ON DISTURBED AREAS SHALL NOT ENTER ADJACENT ROADWAYS UNTIL IT HAS BEEN INSPECTED AND CLEANED TO THE SATISFACTION OF THE SEDIMENT CONTROL OFFICER.
- ALL INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAIN EVENT TO ENSURE THAT THE GEOTEXTILE AND/OR THE FILTER STONE IS NOT CLOGGED. WHEN CLOGGED THE GEOTEXTILE SHALL BE REPLACED AND THE STONE CLEANED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY INLET OR DRAIN PIPE THAT BECOMES FILLED OR CLOGGED AS A RESULT OF CONSTRUCTION.
- ALL DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.
- IF STOCKPILING IS ALLOWED, ALL STOCKPILES SHALL BE STABILIZED WITH DDOE INSPECTOR APPROVAL, AND WILL REMAIN STABILIZED FOR THE THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL PROPERLY DISPOSE OF ANY SEDIMENT CLEANED OUT OF TRAPS OR PIPES IN ACCORDANCE WITH ALL APPLICABLE LAWS & REGULATIONS.
- ALL DISTURBED AREAS SHALL BE STABILIZED WITH DDOE INSPECTOR APPROVAL AS THE SITE REACHES FINAL GRADES.
- ALL DEWATERING SHALL BE DISCHARGED THROUGH AN APPROVED DEWATERING STRUCTURE PRIOR TO DISCHARGE INTO THE EXISTING STORM DRAIN.

**SEQUENCE OF CONSTRUCTION**

- THE CONTRACTOR SHALL CALL THE INSPECTION/ENFORCEMENT BRANCH, WATERSHED PROTECTION DIVISION, DISTRICT DEPARTMENT OF THE ENVIRONMENT AT [REDACTED] FOR A PRE-CONSTRUCTION MEETING 3 DAYS PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY.
- INSTALL ALL EROSION AND SEDIMENT CONTROLS, INCLUDING PERIMETER CONTROLS, INLET PROTECTION, SILT FENCE AND TEMPORARY CONSTRUCTION FENCE AS THE FIRST ITEM OF CONSTRUCTION IN ACCORDANCE WITH ESC PLAN AND DETAIL SHEETS. THEN SCHEDULE AN INSPECTION OF PERIMETER CONTROLS.
- PROVIDE TEMPORARY BYPASS PIPING AS NECESSARY TO CONVEY TREATED STORM WATER TO THE EXISTING STORM SYSTEM.
- COMPLETELY STABILIZE ALL AREAS.
- CONDUCT REQUIRED TESTING.
- INSPECT ALL STORM INLETS AND PIPES FOR SEDIMENT. REMOVE SEDIMENT AND PROPERLY DISPOSE OF.

**SEDIMENT CONTROL FOR UTILITY CONSTRUCTION**

- PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
- WHEN CONDUCTING UNDERGROUND UTILITY WORK DO NOT OPEN MORE THAN FIVE HUNDRED LINEAR FEET (500FT) OF TRENCH AT ANY ONE TIME.
- IMMEDIATELY FOLLOWING PIPE INSTALLATION, BACK FILL, COMPACT AND STABILIZE THE TRENCH AT THE END OF EACH WORKING DAY.
- PLACE TEMPORARY SILT FENCE IMMEDIATELY AROUND ANY STOCKPILE OF EXCAVATED TRENCH MATERIAL INTENDED TO REMAIN LONGER THAN ONE WORKING DAY. COVER THE EXCAVATED TRENCH MATERIAL WITH AN IMPERMEABLE MATERIAL, SUCH AS PLASTIC SHEETING, SUFFICIENTLY ANCHORED SO AS NOT TO BE DISPLACED BY HIGH WINDS.
- WHEN DEWATERING OF TRENCHES IS REQUIRED, USE PORTABLE SEDIMENT TANKS. PUMP SEDIMENT LADEN WATER FROM THE TRENCHES INTO A SEDIMENT TANK BEFORE DISCHARGE OFF THE SITE OR TO A STORM DRAINAGE SYSTEM PROTECTED BY AN APPROVED INLET PROTECTION DEVICE.
- MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES. DO NOT REMOVE EROSION AND SEDIMENT CONTROL DEVICES UNTIL THE CONTRIBUTING AREAS ARE STABILIZED AND THE REMOVAL HAS BEEN APPROVED BY THE EROSION & SEDIMENT CONTROL INSPECTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ACCESS TO ALL EROSION AND SEDIMENT CONTROL DEVICES UNTIL THE DEVICES ARE REMOVED.
- THE EROSION AND SEDIMENT CONTROL SEQUENCES PRESENTED ON THIS SHEET SHOULD BE USED FOR GUIDANCE ONLY. COORDINATE THE INSTALLATION AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES WITH THE EROSION & SEDIMENT CONTROL INSPECTOR.

**CONSTRUCTION AND INSPECTION CONTROL SCHEDULE**

- PRECONSTRUCTION MEETINGS ARE REQUIRED PRIOR TO COMMENCEMENT OF ANY LAND-DISTURBING ACTIVITIES AND PRIOR TO THE CONSTRUCTION OF ANY BMP'S. CONTACT DDOE 3 DAYS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY.
- INSPECTIONS DURING CONSTRUCTION-THE CONTRACTOR SHALL CONTACT DDOE 3 DAYS PRIOR TO ANY STAGE OF BMP CONSTRUCTION, OR OTHER ACTIVITY REQUIRING INSPECTION.
- FINAL INSPECTION-THE CONTRACTOR SHALL CONTACT DDOE TO SCHEDULE A FINAL INSPECTION 1 WEEK PRIOR TO THE COMPLETION OF A BMP CONSTRUCTION FOR FINAL INSPECTION OF THE BMP.

**DUST CONTROL STANDARDS & SPECIFICATIONS**

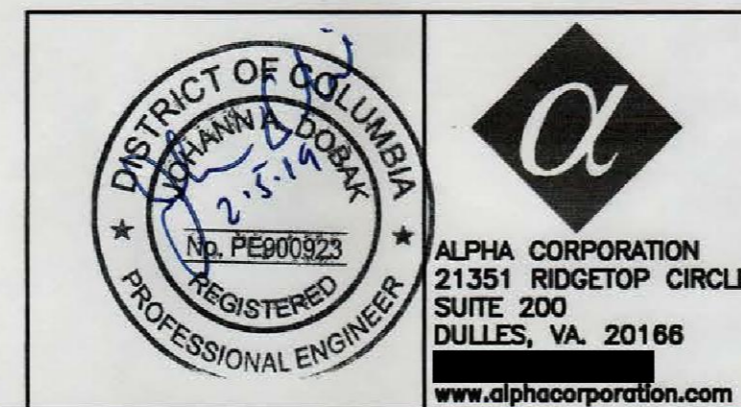
- THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE SO AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
- THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
- THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
- THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
- FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
  - APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE.
  - ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER.
  - DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8kPa), MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
- FOR WATER APPLICATION TOPSOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
  - APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.
  - LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
  - APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND THE SITE BOUNDARIES.

DDOE SOIL EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES	
1.	Following initial land disturbance or re-disturbance, permanent or interim stabilization must be completed within seven (7) calendar days for the surfaces of all perimeter controls, dikes, swales, ditches, perimeter slopes, and slopes greater than three (3) horizontal to one (1) vertical (3:1); and fourteen (14) days for all other disturbed or graded areas on the project site. These requirements do not apply to areas shown on the plan that are used for material storage other than stockpiling, or for those areas on the plan where actual construction activities are being performed. Maintenance shall be performed as necessary so that stabilized areas continuously meet the appropriate requirements of the District of Columbia Standards and Specifications for Soil Erosion and Sediment Control (ESC). [21 DCMR § 542.9 (o)]
2.	ESC measures shall be in place before and during land disturbance. [21 DCMR § 543.6]
3.	Contact DDOE Inspection [REDACTED] to schedule a preconstruction meeting at least three (3) business days before the commencement of a land-disturbing activity. [21 DCMR § 503.7 (a)]
4.	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 DDOE inspectors. [21 DCMR § 542.15]
5.	ESC measures shall be in place to stabilize an exposed area as soon as practicable after construction activity has temporarily or permanently ceased but no later than fourteen (14) days following cessation, except that temporary or permanent stabilization shall be in place at the end of each day of underground utility work that is not contained within a larger development site. [21 DCMR § 543.7]
6.	Stockpiled material being actively used during a phase of construction shall be protected against erosion by establishing and maintaining perimeter controls around the stockpile. [21 DCMR § 543.16 (a)]
7.	Stockpiled material not being actively used or added to shall be stabilized with mulch, temporary vegetation, hydro-seed or plastic within fifteen (15) calendar days after its last use or addition. [21 DCMR § 543.16 (b)]
8.	Protect best management practices from sedimentation and other damage during construction for proper post construction operation. [21 DCMR § 543.5]
9.	Request a DDOE inspector's approval after the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. [21 DCMR § 542.12 (a)]
10.	Request a DDOE inspector's approval after final stabilization of the site and before the removal of erosion and sediment controls. [21 DCMR § 542.12 (b)]
11.	Final stabilization means that all land-disturbing activities at the site have been completed and either of the following two criteria have been met: (1) a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of seventy percent (70%) of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or (2) equivalent permanent stabilization measures have been employed (such as the use of riprap, gabions, or geotextiles). [21 DCMR § 542.12 (b.1, b.2)]
12.	Follow the requirements of the United States Environmental Protection Agency approved Stormwater Pollution Prevention Plan (SWPPP) and maintain a legible copy of this SWPPP on site. [21 DCMR § 543.10 (b)]
13.	Post a sign on site that notifies the public to contact DDOE in the event of erosion or other pollution. This sign must be in plain view of and readable by the public at a distance of twelve feet (12 ft). The sign will be placed at each entrance to the site or as directed by the DDOE inspector. The sign will provide DDOE's telephone number (202-535-2977) and email address. [21 DCMR § 543.22]
If a site disturbs 5,000 square feet of land or greater, the ESC plan must contain the following statement:	
14.	A Responsible Person must be present or available while the site is in a land-disturbing phase. The Responsible Person is charged with being available to (a) inspect the site and its ESC measures at least once biweekly and after a rainfall event to identify and remedy each potential or actual erosion problem, (b) respond to each potential or actual erosion problem identified by construction personnel, and (c) speak on site with DDOE to remedy each potential or actual erosion problem. A Responsible Person shall be (a) licensed in the District of Columbia as a civil or geotechnical engineer, a land surveyor, or architect; or (b) certified through a training program that DDOE approves, including a course on erosion control provided by another jurisdiction or professional association. During construction, the Responsible Person shall keep on site proof of professional licensing or of successful completion of a DDOE-approved training program. [21 DCMR § 547]

TOTAL AREA OF SITE	7.00	ACRES
AREA DISTURBED	0.30	ACRES
TOTAL CUT	TBD	CUBIC YARDS *
TOTAL FILL	TBD	CUBIC YARDS *
OFFSITE WASTE/BORROW AREA LOCATION	TBD	CUBIC YARDS FILL OFFSITE SOURCE

\* THESE NUMBERS SHALL BE USED FOR PERMIT PURPOSES ONLY AND NOT FOR BIDDING.

**WARNING - EROSION & SEDIMENT CONTROL SHALL BE STRICTLY ENFORCED !**



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EROSION & SEDIMENT CONTROL NOTES  
 TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION  
 C305  
 SUB SHEET NUMBER

UNITED STATES DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT  
 REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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**TURFGRASS ESTABLISHMENT**

AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.

NOTE: CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

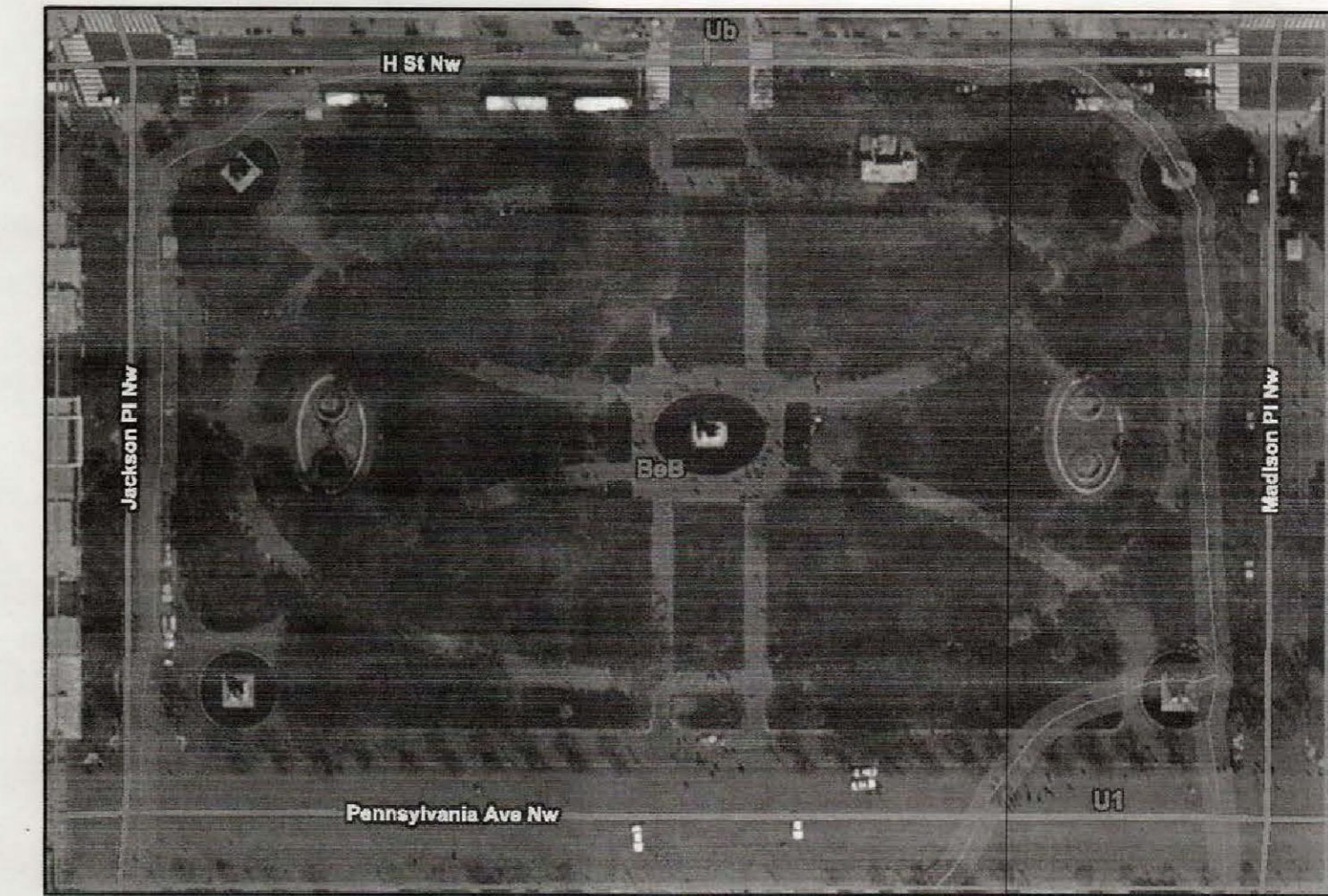
**A. TURFGRASS MIXTURES**

- i. KENTUCKY BLUEGEASS – FULL SUN MIXTURE – FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL OF MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS/1000 SQUARE FEET. MINIMUM OF THREE BLUEGRASS CULTIVARS SHOULD BE CHOSEN RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF 35% OF THE MIXTURE BY WEIGHT.
- ii. KENTUCKY BLUEGRASS/PERENNIAL RYE – FULL SUN MIXTURE – FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE/1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM 10% TO 35% OF THE MIXTURE WEIGHT.
- iii. TALL FESCUE/KENTUCKY BLUEGRASS – FULL SUN MIXTURE – FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 –100%, CERTIFIED 0–5%. SEEDING RATE: 5 TO 8 LB/1000 SF. ONE OR MORE CULTIVARS MAY BE BLENDED.
- iv. KENTUCKY BLUEGRASS/FINE FESCUE – SHADE MIXTURE – FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30–40% AND CERTIFIED FINE FESCUE AND 60–70%. SEEDING RATE: 1 1/2 –3 LBS/1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM 10% TO 35% OF THE MIXTURE WEIGHT.

SEE SPECIFICATION SECTION 329200 TURFS AND GRASSES FOR SODDING REQUIREMENTS

**Pollution Prevention Good Housekeeping Stamp Notes**

<b>Fuels and Oils</b>	On-site refueling will be conducted in a dedicated location away from access to surface waters. Install containment berms and, or secondary containments around refueling areas and storage tanks. Spills will be cleaned up immediately and contaminated soils disposed of in accordance with all federal and District of Columbia regulations. Petroleum products will be stored in clearly labeled tightly sealed containers. All vehicles on site will be monitored for leaks and receive regular preventive maintenance activities. Any asphalt substances used on site will be applied according to manufacturer's recommendations. Spill kits will be included with all fueling sources and maintenance activities.
<b>Solid Waste</b>	No solid materials shall be discharged to surface water. Solid materials including building materials, garbage and paint debris shall be cleaned up daily and deposited into dumpsters, which will be periodically removed and deposited into a landfill.
<b>Abrasive Blasting</b>	Water blasting, sandblasting, and other forms of abrasive blasting on painted surfaces built prior to 1978 may only be performed if an effective containment system prevents dispersal of paint debris.
<b>Fertilizer</b>	Fertilizers will be applied only in the minimum amounts recommended by the manufacturer, worked into the soil to limit exposure to stormwater, and stored in a covered shed. Partially used bags will be transferred to a sealable bin to avoid spills.
<b>Paint and Other Chemicals</b>	All paint containers and curing compounds will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewers, but will be properly disposed of according to manufacturer's recommendations. Spray guns will be cleaned on a removable tarp. Chemicals used on site are kept in small quantities and in closed containers undercover and kept out of direct contact with stormwater. As with fuels and oils, any inadvertent spills will be cleaned up immediately and disposed of according federal and District of Columbia regulations.
<b>Concrete</b>	Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash on site, except in a specially designated concrete disposal area. Form release oil for decorative stone work will be applied over a pallet covered with an absorbent material to collect excess fluid. The absorbent material will be replaced and disposed of properly when saturated.
<b>Water Testing</b>	When testing and, or cleaning water supply lines, the discharge from the tested pipe will be collected and conveyed to a completed stormwater conveyance system for ultimate discharge into a stormwater best management practice (BMP).
<b>Sanitary Waste</b>	Portable lavatories located on site will be serviced on a regular basis by a contractor. Portable lavatories will be located in an upland area away from direct contact with surface waters. Any spills occurring during servicing will be cleaned immediately and contaminated soils disposed of in accordance with all federal and District of Columbia regulations.

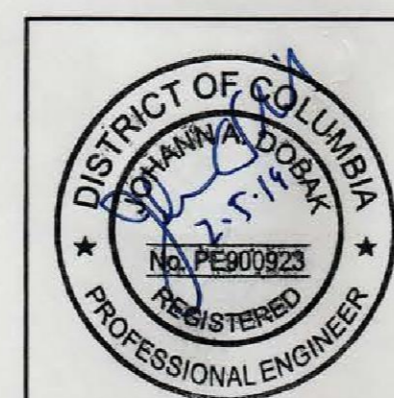


SOIL MAP

MAP SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP	PERCENT OF SITE
U1	Udorthents	-	3.9%
Ub	Urban Land	-	22.9%
BeB	Beltsville-Urban land complex, 0 to 8% SLOPES	C	73.2%

GOOD HOUSEKEEPING NOTES

**WARNING - EROSION & SEDIMENT CONTROL SHALL BE STRICTLY ENFORCED !**



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**EROSION & SEDIMENT CONTROL NOTES**  
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**C306**  
 SUB SHEET NUMBER

UNITED STATES DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

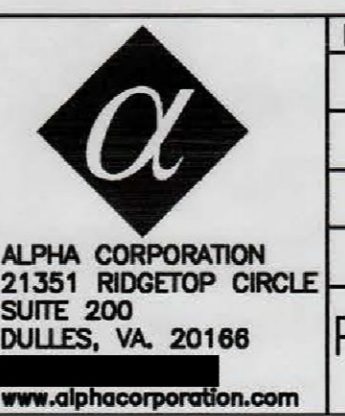
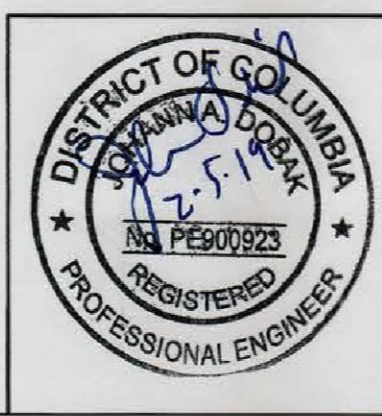
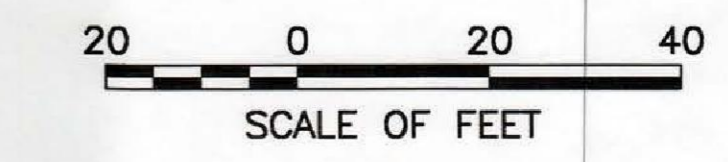
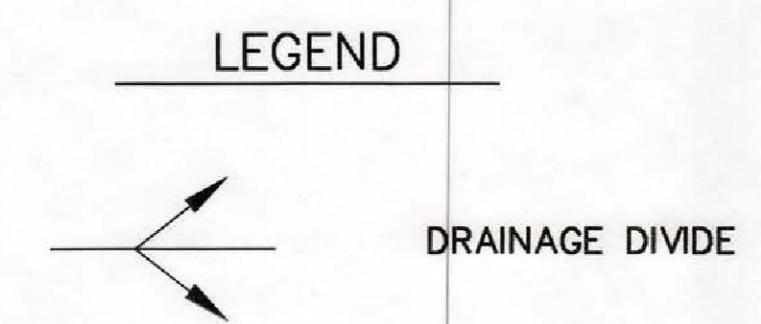
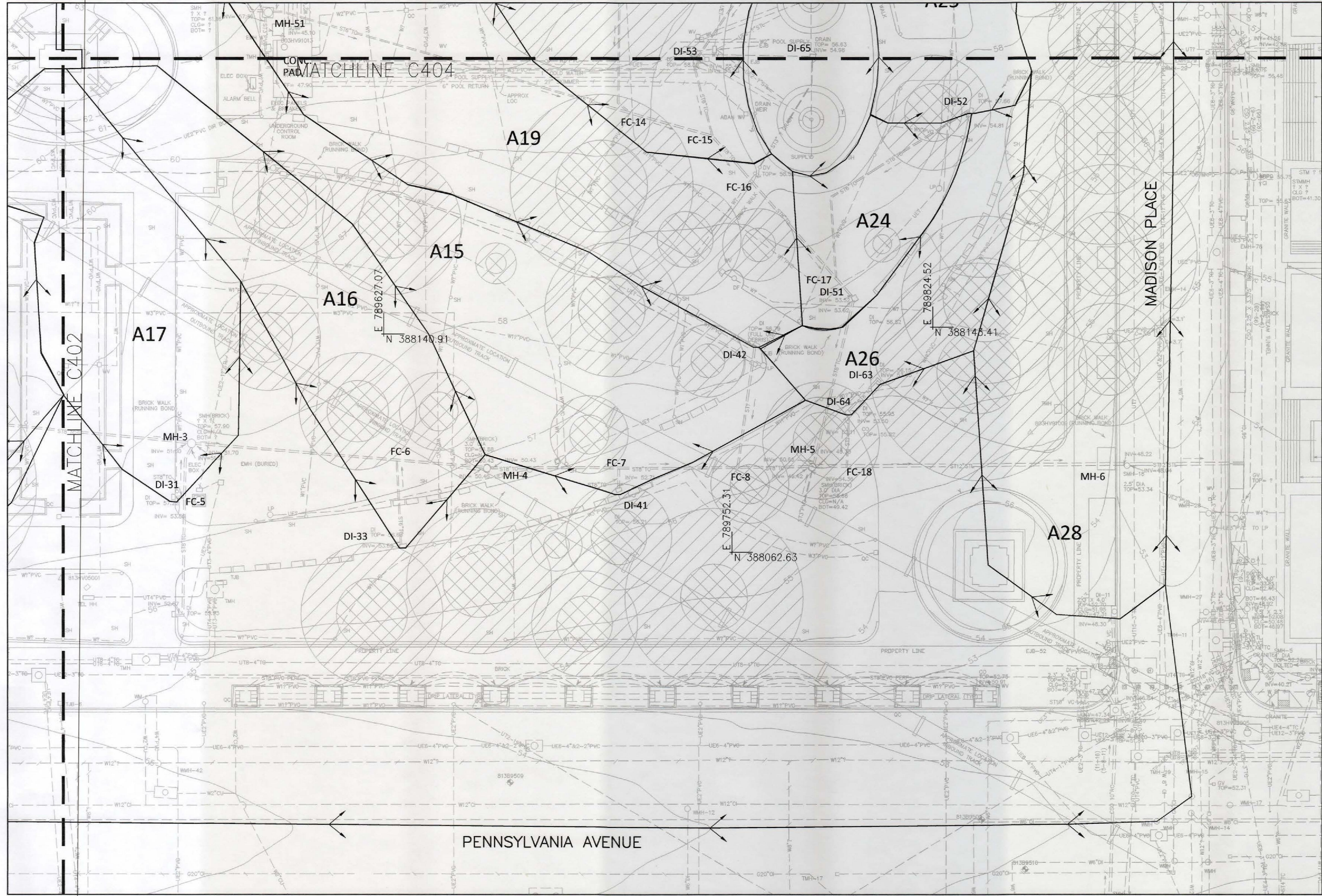
REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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**C401**

PRE-DEVELOPMENT DRAINAGE AREAS

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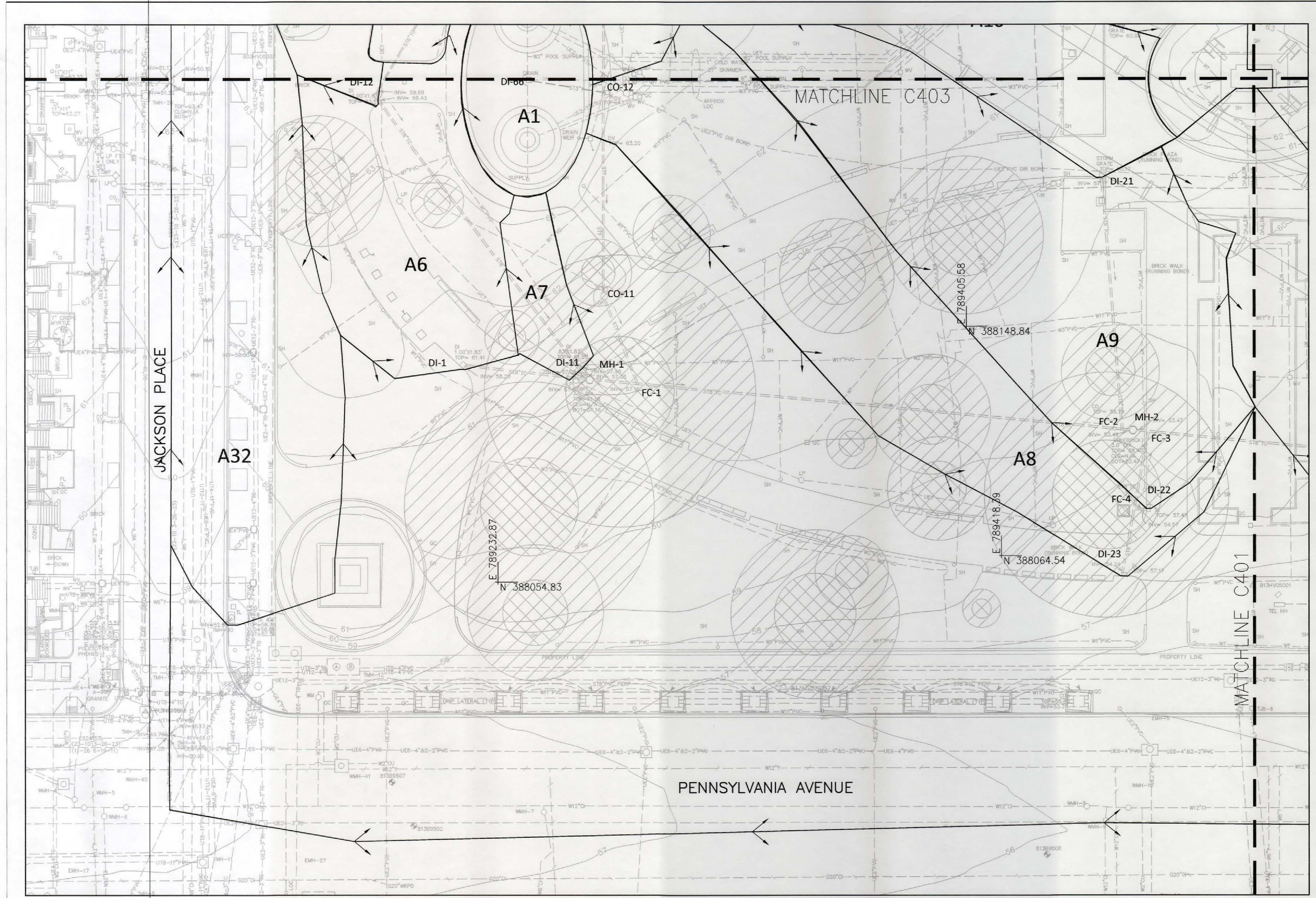
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UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

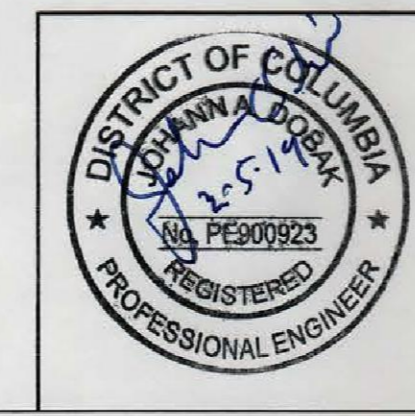
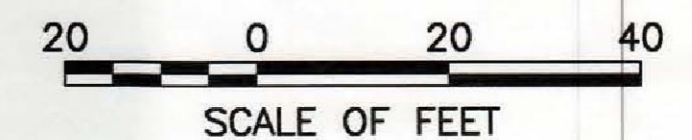
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PRE-DEVELOPMENT DRAINAGE AREAS  
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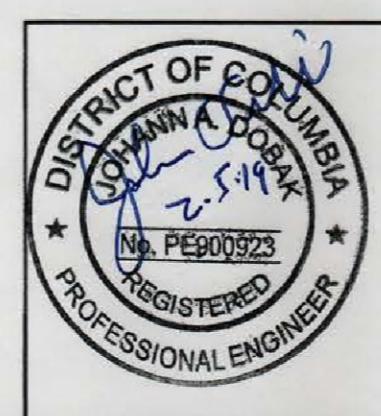
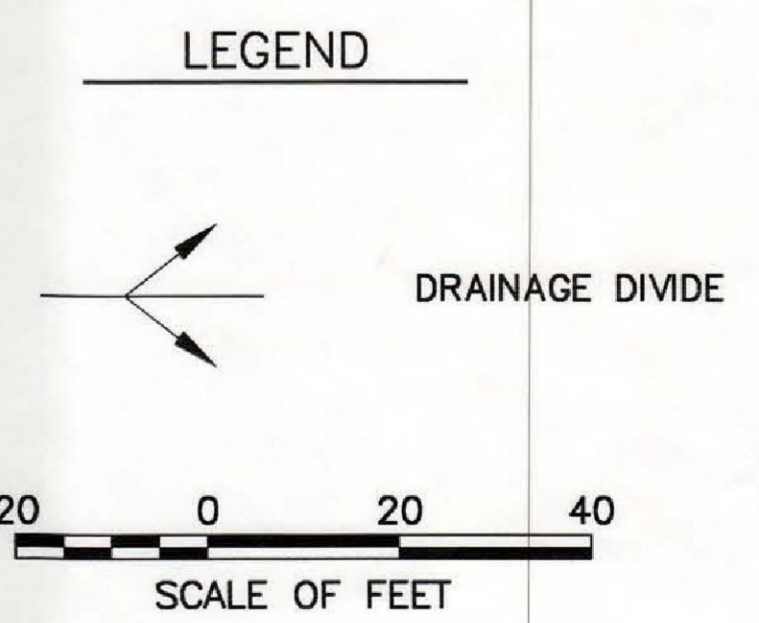
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EXISTING CONDITION DRAINAGE:  
 MAJORITY OF THE STORM INLETS ARE FULL OR PARTIALLY CLOGGED AND FULL OF DEBRIS. THE DRAINAGE AREAS SHOWN FOR PRE-DEVELOPMENT DRAINAGE AREAS ARE BASED ON THE DESIGNED EXISTING STORM INLET AND PIPE NETWORK.



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PRE-DEVELOPMENT DRAINAGE AREAS  
 TITLE OF DRAWING

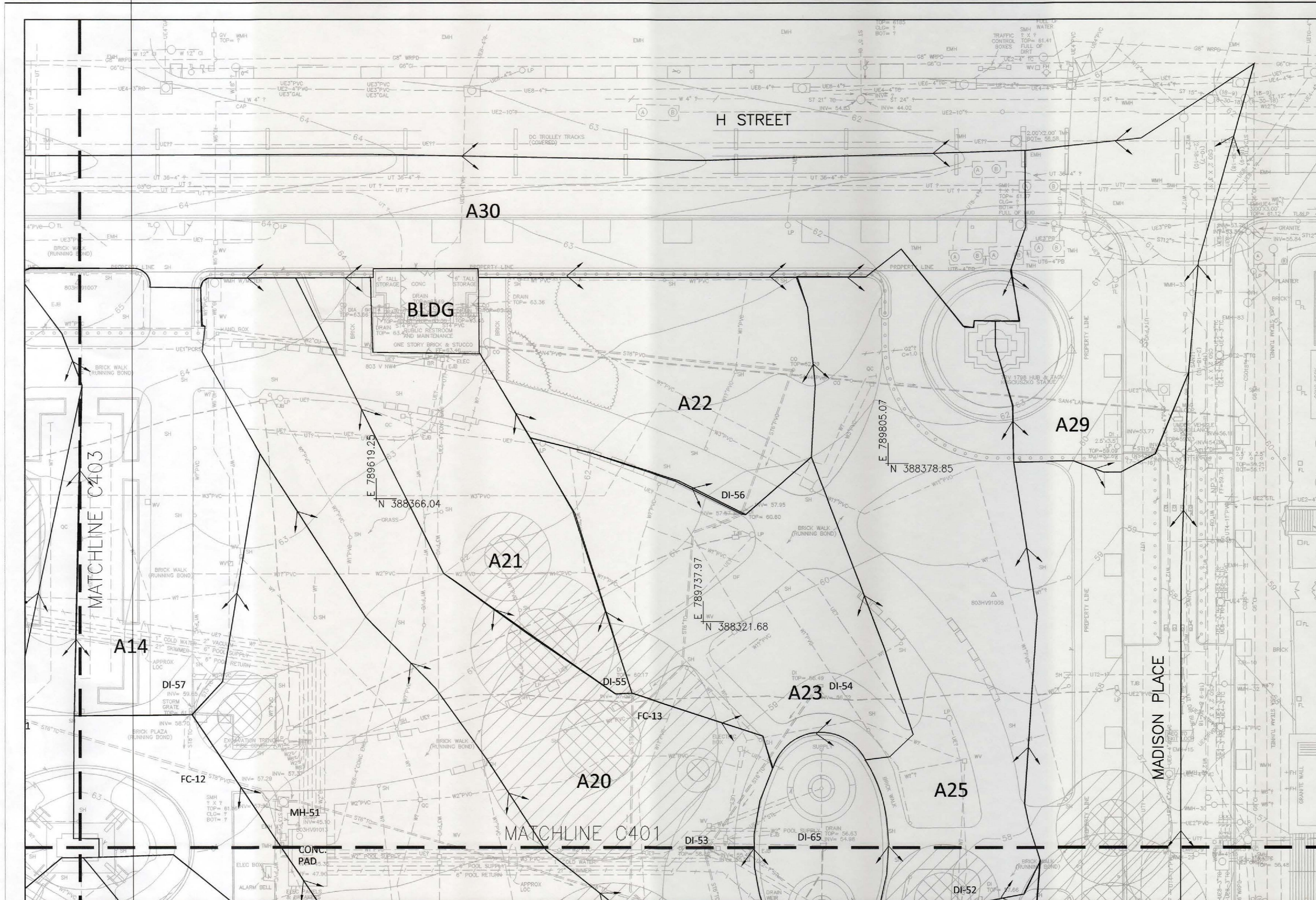
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 DESIGN AND PROJECT MANAGEMENT

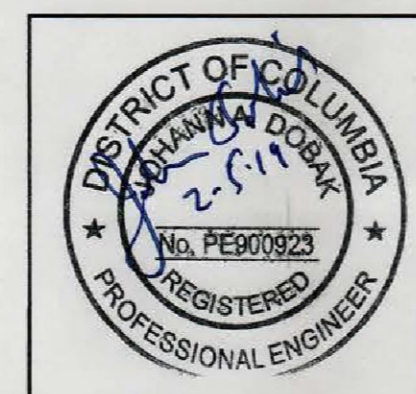
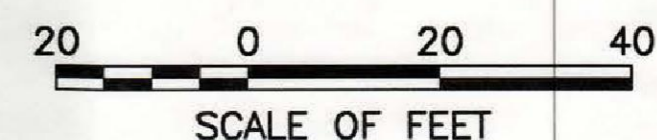
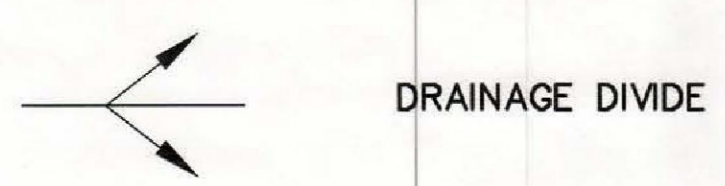
REPLACE STORM WATER DRAIN LINES  
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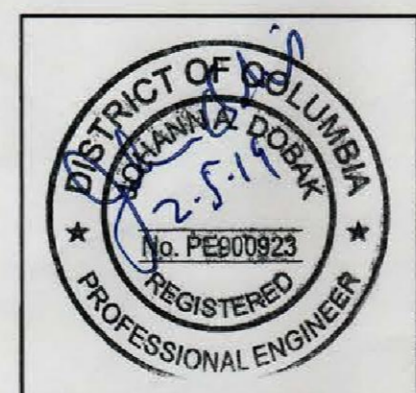
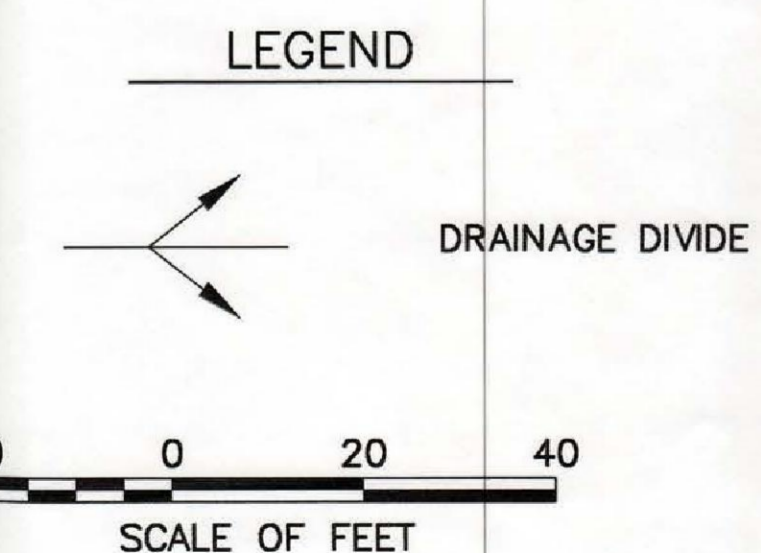
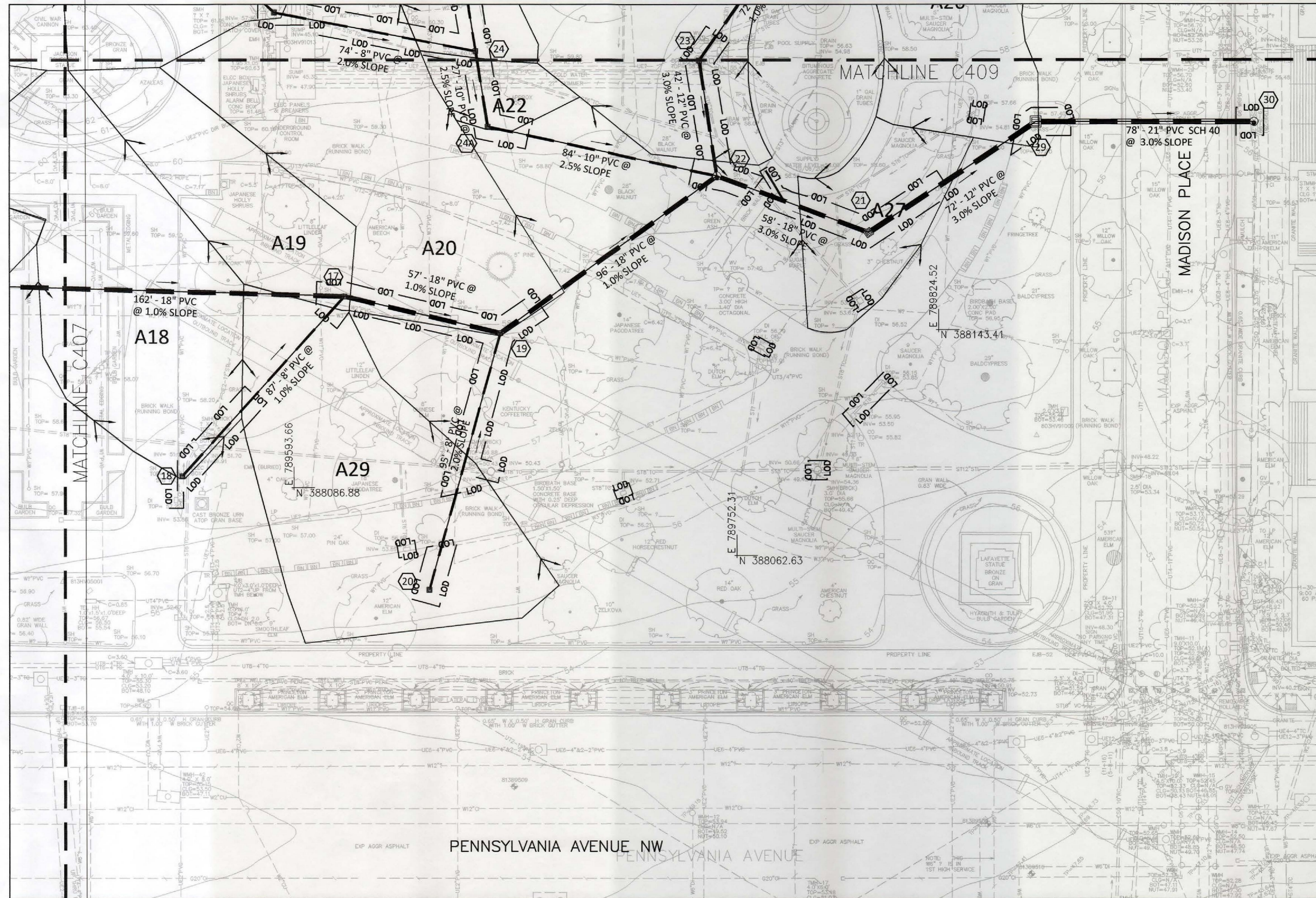
PRE-DEVELOPMENT DRAINAGE AREAS AND STORM PIPING CALCULATIONS

STORM SEWER DESIGN COMPUTATIONS																					
FROM	TO	DRAIN AREA (AC)	RUNOFF COEF (C)	INCREM C x A	ACCUM C x A	Tc TO PIPE (MIN)	TIME IN PIPE (MIN)	ACCUM TIME (MIN)	INTEN (I)	INCR FLOW (CFS)	ACCUM FLOW (CFS)	LENGTH (FT)	PIPE DIA (IN)	SLOP E	MAX Q (CFS)	VEL (FPS)	FLOW DEPTH (IN)	UPPER INVERT	FALL (FT)	LOWER INVERT	TOP ELEV
DI-15	DI-14	0.05	0.41	0.02	0.02	6.00	0.32	6.32	7.56	0.15	0.15	39.00	6	0.016	0.62	2.63	2.04	61.21	0.64	60.57	62.96
DI-14	DI-13	0.18	0.60	0.11	0.13	6.32	0.08	6.40	7.56	0.82	0.97	39.00	8	0.006	0.79	2.78	8.00	60.30	0.22	60.08	62.98
DI-13	DI-12	0.04	0.35	0.01	0.14	6.40	0.12	6.52	7.56	0.11	1.08	40.00	10	0.010	1.85	3.52	5.48	60.07	0.38	59.69	62.88
DI-12	MH-1	0.16	0.54	0.09	0.23	6.52	0.34	6.87	7.56	0.65	1.73	128.00	10	0.017	2.46	4.88	6.19	59.43	2.14	57.29	63.57
DI-11	MH-1	0.03	0.50	0.02	0.02	6.00	0.08	6.08	7.56	0.11	0.11	5.00	6	0.120	1.68	4.88	1.05	57.98	0.60	57.38	61.20
DI-1	MH-1	0.17	0.60	0.10	0.10	6.00	0.16	6.16	7.56	0.77	0.77	45.00	8	0.012	1.14	3.50	4.83	58.20	0.53	57.67	61.41
DI-66	CO-12	0.07	0.90	0.06	0.06	6.00	0.18	6.18	7.56	0.48	0.48	28.00	6	0.058	1.17	5.66	2.66	61.10	1.63	59.47	63.10
CO-13	CO-12	0.01	0.90	0.01	0.01	6.00	0.97	6.97	7.56	0.07	0.07	84.00	3	0.036	0.15	2.92	1.44	62.53	3.06	59.47	64.53
CO-12	FC-1	0.00	0.00	0.00	0.07	6.97	0.52	7.50	7.56	0.00	0.54	110.00	6	0.030	0.84	4.56	3.51	59.46	3.30	56.16	63.10
DI-21	FC-2	0.24	0.52	0.12	0.12	6.00	0.41	6.41	7.56	0.94	0.94	93.00	8	0.040	2.08	5.82	3.78	57.17	3.68	53.49	60.17
MH-1	MH-2	0.00	0.00	0.00	0.54	7.50	0.14	7.64	7.56	0.00	4.10	61.65	10	0.060	4.63	9.59	7.32	57.16	3.67	53.49	61.18
DI-22	FC-4	0.35	0.47	0.16	0.16	6.00	0.03	6.03	7.56	1.24	1.24	5.00	8	0.146	4.00	10.12	3.06	54.57	0.73	53.84	57.47
DI-23	FC-4	0.29	0.42	0.12	0.12	6.00	0.08	6.08	7.56	0.92	0.92	24.00	8	0.017	1.35	4.17	4.84	54.24	0.40	53.84	57.17
FC-4	MH-2	0.00	0.00	0.00	0.29	6.08	0.06	6.15	7.56	0.00	2.16	28.00	10	0.016	2.41	4.99	7.41	53.84	0.45	53.39	58.57
DI-31	FC-5	0.19	0.53	0.10	0.10	6.00	0.04	6.04	7.56	0.76	0.76	5.00	8	0.346	6.16	12.00	1.90	53.86	1.73	52.13	57.22
DI-32	FC-5	0.04	0.62	0.02	0.02	6.00	0.34	6.34	7.56	0.19	0.19	45.00	8	0.012	1.15	2.42	2.19	52.67	0.54	52.13	55.93
FC-5	MH-3	0.00	0.00	0.00	0.13	6.34	0.05	6.40	7.56	0.00	0.95	18.00	8	0.012	1.16	3.70	5.51	52.13	0.22	51.91	57.90
MH-2	MH-3	0.00	0.00	0.00	0.83	7.64	0.14	7.78	7.56	0.00	6.27	88.00	15	0.019	7.71	7.00	10.27	53.47	1.67	51.80	58.40
DI-33	FC-6	0.19	0.44	0.08	0.08	6.00	0.21	6.21	7.56	0.63	0.63	30.00	8	0.092	3.18	7.10	2.42	53.59	2.77	50.82	56.63
MH-3	MH-4	0.00	0.00	0.00	1.04	7.78	0.14	7.92	7.56	0.00	7.85	104.00	18	0.012	9.94	6.23	12.06	51.70	1.24	50.46	57.90
DI-41	FC-7	0.32	0.50	0.16	0.16	6.00	0.04	6.04	7.56	1.21	1.21	7.00	6	0.383	3.01	14.49	2.65	52.71	2.68	50.03	56.21
DI-42	FC-8	0.40	0.50	0.20	0.20	6.00	0.12	6.12	7.56	1.51	1.51	44.00	6	0.094	1.49	7.70	6.00	53.76	4.12	49.64	56.76
MH-4	MH-5	0.00	0.00	0.00	1.40	7.92	0.13	8.05	7.56	0.00	10.57	114.00	21	0.009	12.92	5.99	14.44	50.43	1.01	49.42	55.66
DI-81	MH-52	0.11	0.48	0.05	0.05	6.00	0.59	6.59	7.56	0.40	0.40	125.00	6	0.016	0.62	3.34	3.51	61.91	2.01	59.90	65.18
MH-52	FC-9	0.00	0.00	0.00	0.05	6.59	0.06	6.65	7.56	0.00	0.40	14.00	8	0.005	0.74	2.16	4.18	58.09	0.07	58.02	62.50
DI-62	FC-9	0.09	0.54	0.05	0.05	6.00	0.68	6.68	7.56	0.37	0.37	112.00	6	0.031	0.85	4.18	2.75	61.46	3.44	58.02	64.66
DI-58	FC-10	0.22	0.50	0.11	0.11	6.00	0.04	6.04	7.56	0.83	0.83	8.00	6	0.099	1.53	7.95	3.16	58.71	0.79	57.92	61.91
FC-9	FC-10	0.00	0.00	0.00	0.10	6.65	0.04	6.69	7.56	0.00	0.77	21.00	8	0.005	0.72	2.20	8.00	58.02	0.10	57.92	62.20
DI-59	FC-11	0.47	0.42	0.20	0.20	6.00	0.12	6.12	7.56	1.49	1.49	41.00	8	0.027	1.71	5.51	5.79	58.98	1.09	57.89	60.98
FC-10	FC-11	0.00	0.00	0.00	0.30	6.69	0.01	6.70	7.56	0.00	2.26	5.00	12	0.006	2.39	3.46	9.29	57.92	0.03	57.89	61.93
FC-11	FC-12	0.00	0.00	0.00	0.30	6.70	0.10	6.80	7.56	0.00	2.26	70.00	12	0.005	2.18	2.88	12.00	57.89	0.35	57.54	61.40
DI-57	FC-12	0.21	0.53	0.11	0.11	6.00	0.11	6.11	7.56	0.84	0.84	20.00	6	0.108	1.60	8.24	3.09	59.70	2.16	57.54	61.90
FC-12	MH-51	0.00	0.00	0.00	0.41	6.80	0.06	6.86	7.56	0.00	3.10	35.00	15	0.005	3.90	3.53	10.10	57.54	0.17	57.37	61.40
MH-51	FC-14	0.01	0.90	0.01	0.42	6.86	0.31	7.17	7.56	0.07	3.17	132.00	15	0.016	7.01	5.57	7.07	57.29	2.07	55.22	61.41
BUILDING	DI-56	0.03	0.90	0.03	0.03	6.00	1.38	7.38	7.56	0.20	0.20	180.00	6	0.023	0.73	3.19	2.17	62.00	4.05	57.95	
DI-56	FC-13	0.19	0.47	0.09	0.12	7.38	0.19	7.58	7.56	0.68	0.68	93.00	8	0.007	0.88	2.52	8.00	57.57	0.65	56.92	60.60
DI-55	FC-13	0.15	0.47	0.07	0.07	6.00	0.04	6.04	7.56	0.53	0.53	7.00	8	0.024	1.63	4.18	3.15	57.09	0.17	56.92	60.17
FC-13	FC-14	0.00	0.00	0.00	0.19	7.58	0.20	7.78	7.56	0.00	1.41	68.00	8	0.025	1.66	5.33	5.68	56.92	1.70	55.22	
FC-14	FC-15	0.00	0.00	0.00	0.61	7.78	0.06	7.84	7.56	0.00	4.58	32.00	15	0.016	7.07	6.13	8.79	55.22	0.51	54.71	
DI-54	DI-53	0.20	0.51	0.10	0.10	6.00	0.24	6.24	7.56	0.77	0.77	71.00	8	0.012	1.13	3.47	4.88	56.32	0.82	55.50	58.49
DI-53	FC-15	0.32	0.44	0.14	0.24	6.24	0.06	6.31	7.56	1.06	1.84	25.00	8	0.031	1.84	6.00	6.55	55.48	0.77	54.71	58.30
FC-15	FC-16	0.00	0.00	0.00	0.85	7.84	0.03	7.87	7.56	0.00	6.42	21.00	15	0.016	7.02	6.48	11.28	54.71	0.33	54.38	
DI-65	FC-16	0.07	0.90	0.06	0.06	6.00	0.19	6.19	7.56	0.48	0.48	49.00	6	0.012	0.54	3.09	4.39	54.98	0.60	54.38	56.63
FC-16	FC-17	0.00	0.00	0.00	0.91	7.87	0.08	7.95	7.56	0.00	6.89	49.00	18	0.015	11.11	6.62	10.26	54.38	0.73	53.65	56.63
DI-52	FC-17	0.31	0.59	0.18	0.18	6.00	0.18	6.18	7.56	1.38	1.38	87.00	8	0.013	1.21	3.96	8.00	54.81	1.16	53.65	57.66
FC-17	DI-51	0.00	0.00	0.00	1.09	7.95	0.01	7.95	7.56	0.00	8.28	9.00	18	0.003	5.26	4.68	18.00	53.65	0.03	53.62	
DI-51	MH-5	0.07	0.41	0.03	1.12	7.95	0.10	8.05	7.56	0.22	8.49	60.00	10	0.048	4.15	15.57	10.00	53.52	2.86	50.66	56.52
DI-63	DI-64	0.07	0.41	0.03	0.03	6.00	0.11	6.11	7.56	0.22	0.22	15.00	6	0.023	0.74	3.28	2.22	53.85	0.35	53.50	56.15
DI-64	FC-18	0.02	0.69	0.01	0.04	6.11	0.19	6.31	7.56	0.09	0.31	19.00	6	0.152	1.89	7.12	1.64	52.11	2.86	49.23	55.95
MH-5	FC-18	0.00	0.00	0.00	2.56	8.05	0.02	8.07	7.56	0.00	19.37	11.00	12	0.009	2.94	24.67	12.00	49.33	0.10	49.23	55.66
FC-18	MH-6	0.00	0.00	0.00	2.60	8.07	0.14	8.21	7.56	0.00	19.68	100.00	12	0.010	3.10	25.06	12.00	49.23	1.01	48.22	

\* Calculated Invert Elevations

Drainage Area	Total Area		Impervious Area		Pervious Area		Runoff Coefficient	Q2	Q15	Q100
	SF	Acre	SF	Acre	SF	Acre				
A1- Pond	3072.19	0.07	3072.19	0.07	0.00	0.00	0.90	0.34	0.48	0.56
A2	7048.48	0.16	2497.56	0.06	4550.93	0.10	0.54	0.47	0.67	0.78
A3	7917.07	0.18	3558.60	0.08	4358.46	0.10	0.60	0.57	0.82	0.96
A4	1612.27	0.04	0.00	0.00	1612.27	0.04	0.35	0.07	0.10	0.12
A5	2177.40	0.05	252.41	0.01	1924.99	0.04	0.41	0.11	0.16	0.18
A6	7284.47	0.17	3277.91	0.08	4006.56	0.09	0.60	0.53	0.76	0.89
A7	1366.00	0.03	384.34	0.01	981.67	0.02	0.50	0.08	0.12	0.14
A8	12505.33	0.29	1637.75	0.04	10867.59	0.25	0.42	0.64	0.92	1.08
A9	15408.27	0.35	3355.48	0.08	12052.79	0.28	0.47	0.88	1.26	1.48
A10	10583.40	0.24	3355.48	0.08	7227.92	0.17	0.52	0.67	0.96	1.13
A11	20409.38	0.47	2771.27	0.06	17638.11	0.40	0.42	1.05	1.50	1.77
A12										





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POST-DEVELOPMENT DRAINAGE AREAS  
TITLE OF DRAWING

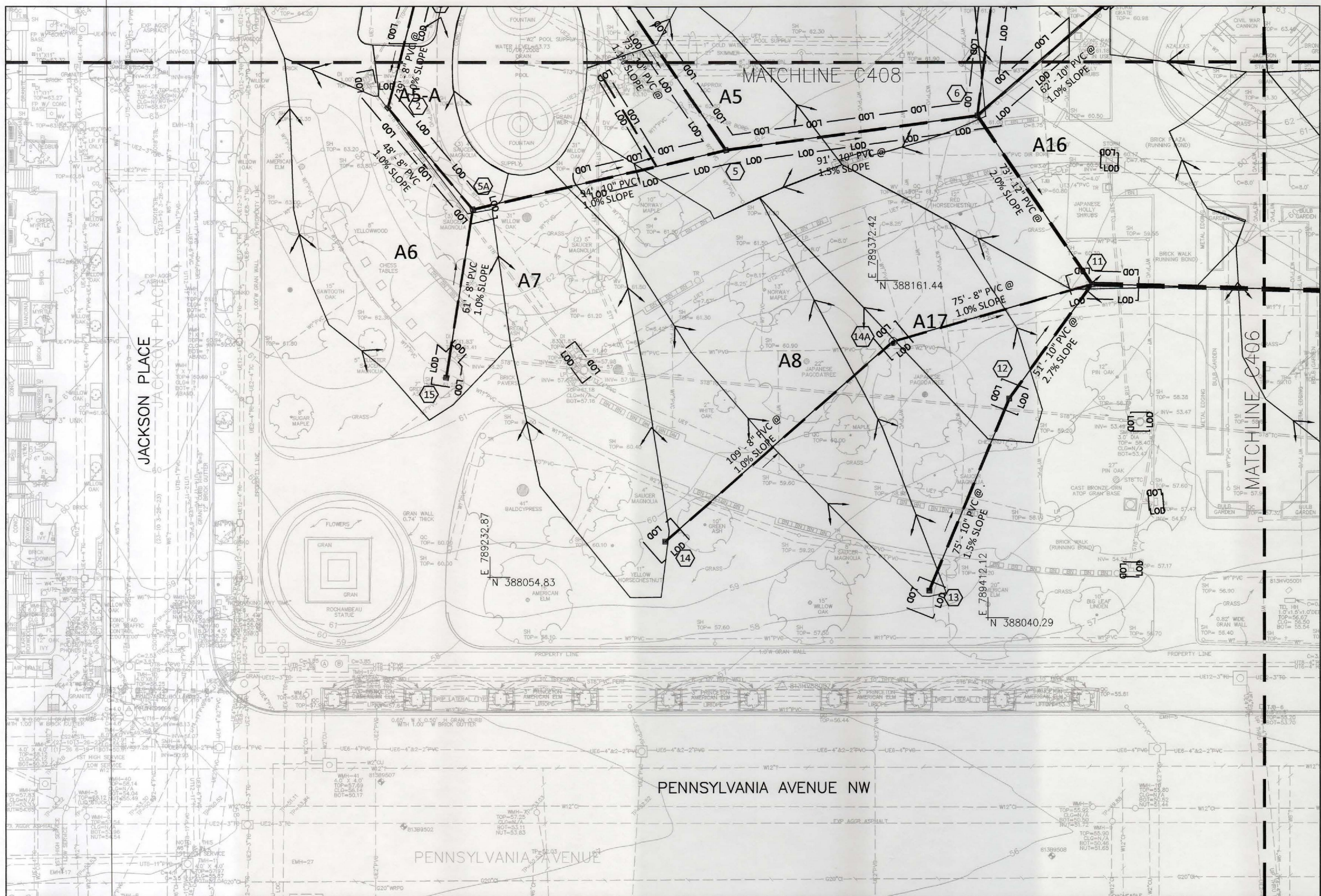
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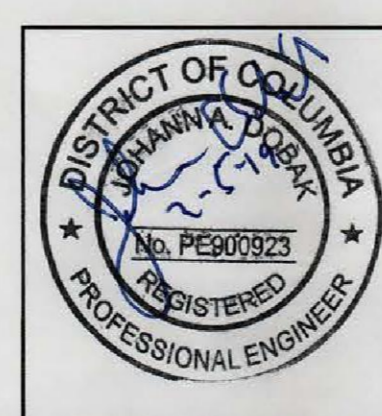
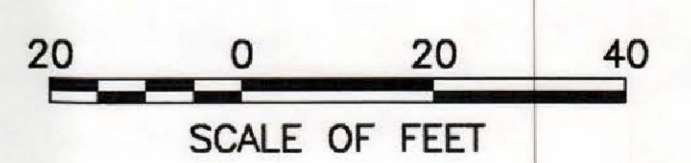
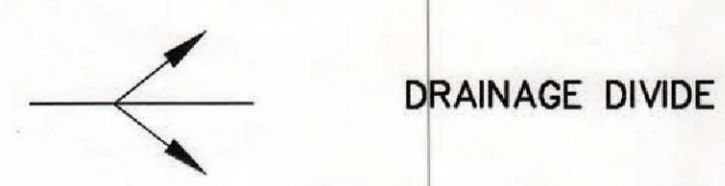
REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

187290B  
 PREP  
 NPT/SRC  
 NPT/SRC  
 PREP  
 NPT/SRC  
 DATE: 02.23.2018  
 SHEET: 28 of 62





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POST-DEVELOPMENT DRAINAGE AREAS  
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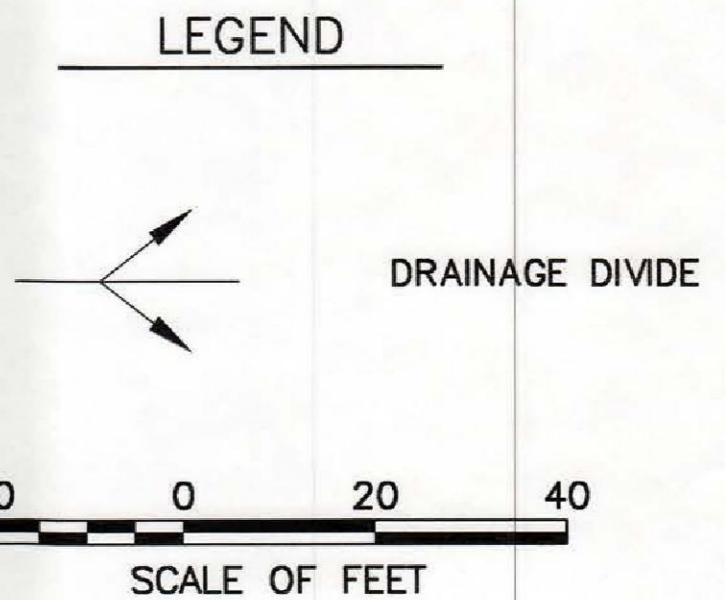
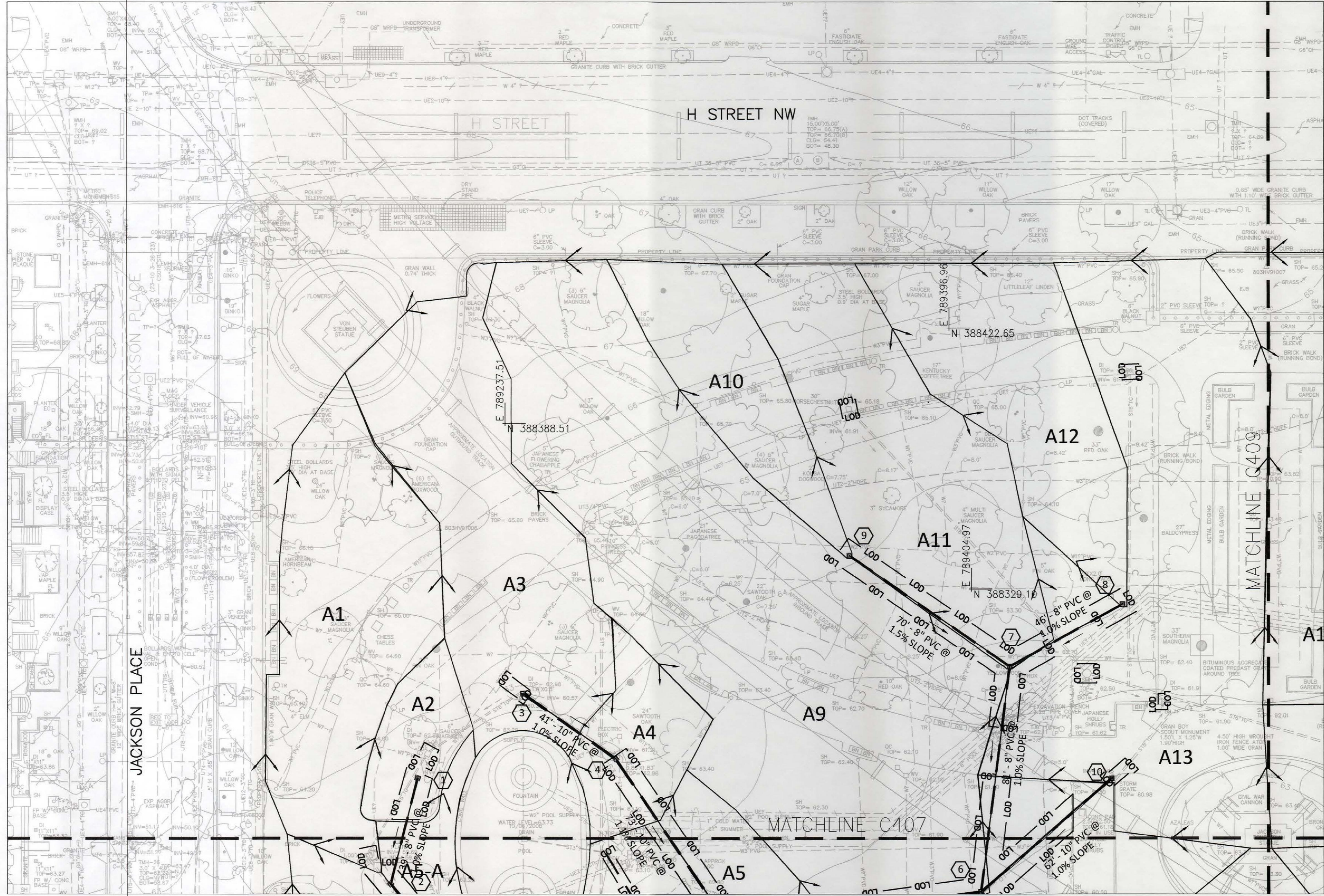
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 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

187290B
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POST-DEVELOPMENT DRAINAGE AREAS  
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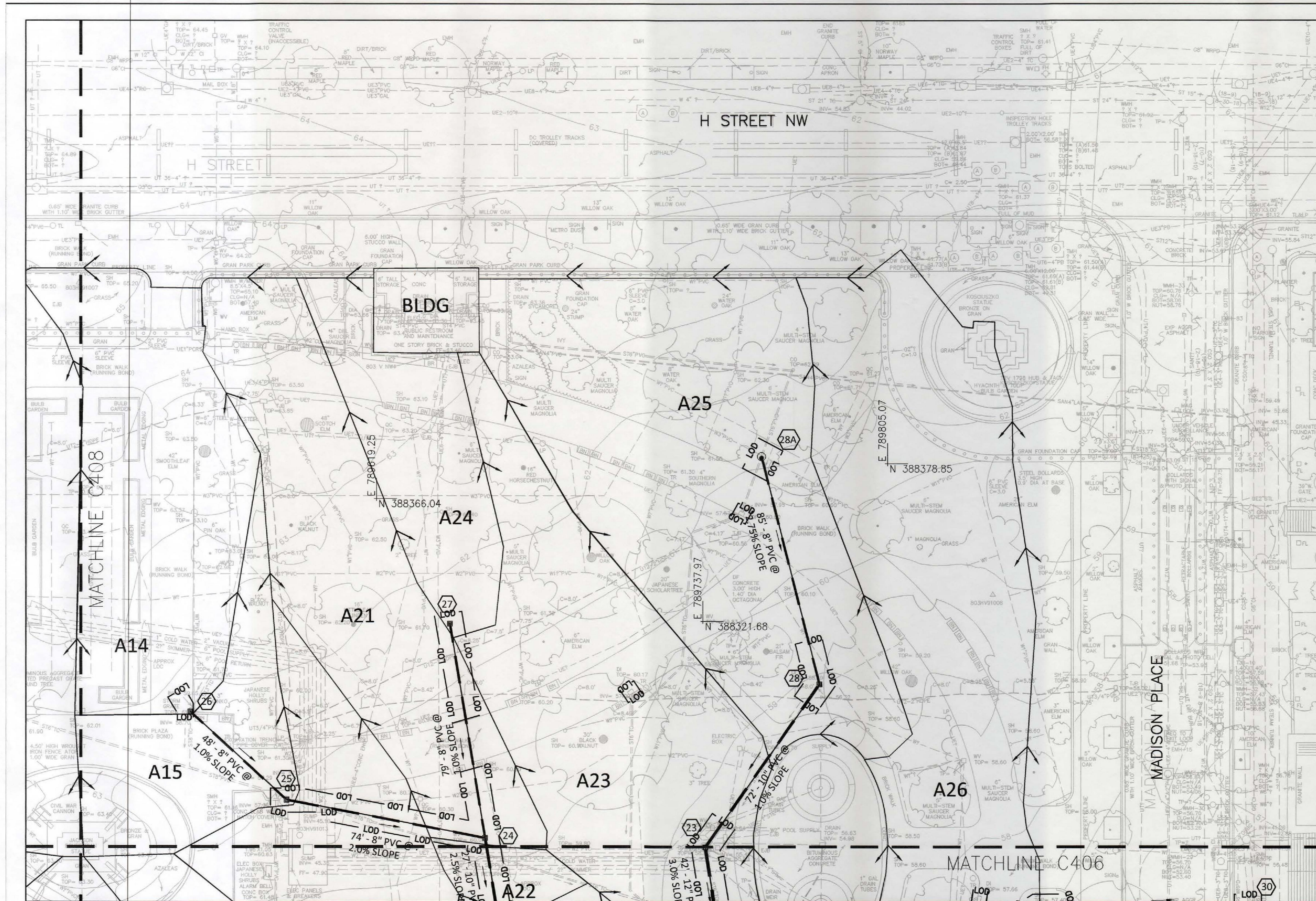
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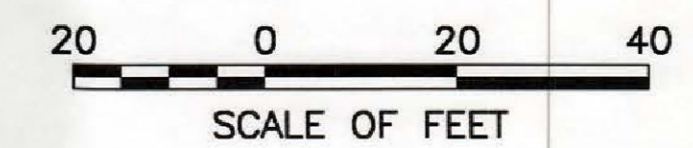
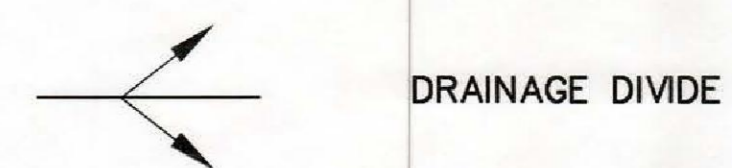
REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

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REPLACE STORM WATER DRAIN LINES  
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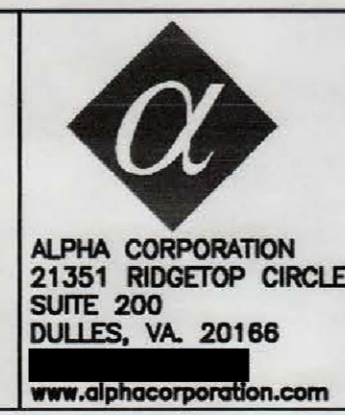
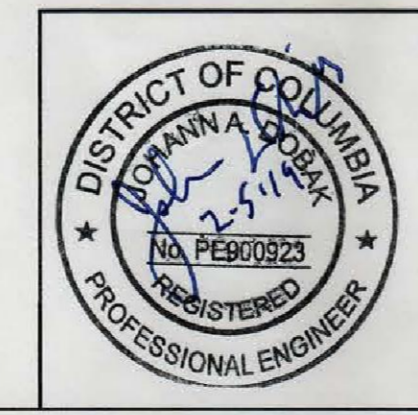
POST-DEVELOPMENT DRAINAGE AREAS AND STORM PIPING CALCULATIONS

STORM SEWER DESIGN COMPUTATIONS																					
FROM	TO	DRAIN AREA (AC)	RUNOFF COEF (C)	INCREM C x A	ACCUM C x A	PIPE (MIN)	TIME (MIN)	ACCUM (MIN)	INTEN (I)	INCR. (CFS)	ACCUM (CFS)	LENGTH (FT)	PIPE (IN)	SLOPE	MAX Q (CFS)	VEL (FPS)	FLOW DEPTH (IN.)	UPPER INVERT (FT)	FALL (FT)	LOWER INVERT (FT)	TOP ELEV
DI-1	DI-2	0.04	0.35	0.01	0.01	6.00	0.44	6.44	7.56	0.11	0.11	39.00	8	0.010	1.43	2.40	1.47	59.15	0.39	58.76	63.11
DI-2	DI-5A	0.16	0.55	0.09	0.10	6.44	0.19	6.63	7.56	0.67	0.77	48.00	8	0.010	1.43	4.17	4.19	58.69	0.48	58.21	63.15
DI-15	DI-5A	0.14	0.56	0.08	0.08	6.00	0.28	6.28	7.56	0.59	0.59	61.00	8	0.010	1.43	3.90	3.59	56.86	0.61	56.25	61.55
DI-5A	DI-5	0.04	0.66	0.03	0.21	6.63	0.23	6.86	7.56	0.20	1.56	94.00	10	0.006	1.96	3.99	6.75	56.15	0.54	55.61	62.88
DI-3	DI-4	0.18	0.59	0.11	0.11	6.00	0.18	6.18	7.56	0.80	0.80	41.00	10	0.010	2.59	4.19	3.82	58.45	0.41	58.04	63.00
DI-4	DI-5	0.05	0.44	0.02	0.13	6.18	0.29	6.47	7.56	0.17	0.97	73.00	10	0.010	2.59	4.40	4.24	57.94	0.73	57.21	63.00
DI-5	DI-6	0.09	0.37	0.03	0.37	6.86	0.20	7.06	7.56	0.25	2.78	91.00	10	0.013	2.94	6.12	7.77	55.51	1.17	54.34	62.10
DI-9	DI-7	0.08	0.44	0.04	0.04	6.00	0.55	6.55	7.56	0.27	0.27	70.00	8	0.015	1.75	3.62	2.11	59.85	1.05	58.80	64.10
DI-8	DI-7	0.13	0.45	0.06	0.06	6.00	0.25	6.25	7.56	0.44	0.44	46.00	8	0.010	1.43	3.61	3.06	59.23	0.46	58.77	63.08
DI-7	DI-6	0.18	0.41	0.07	0.17	6.55	0.30	6.85	7.56	0.56	1.27	81.00	8	0.021	2.08	6.25	4.51	58.67	1.72	56.95	62.67
DI-10	DI-6	0.33	0.57	0.19	0.19	6.00	0.19	6.19	7.56	1.42	1.42	61.00	10	0.010	2.59	4.86	5.29	56.45	0.61	55.84	61.00
DI-14	MH-14A	0.14	0.53	0.07	0.07	6.00	0.52	6.52	7.56	0.56	0.56	109.00	8	0.010	1.43	3.84	3.48	55.22	1.09	54.13	59.72
MH-14A	DI-11	0.00	0.00	0.00	0.07	6.52	0.36	6.88	7.56	0.00	0.56	75.00	8	0.010	1.43	3.84	3.48	54.03	0.75	53.28	60.36
D-13	DI-12	0.16	0.48	0.08	0.08	6.00	0.39	6.39	7.56	0.58	0.58	75.00	10	0.010	2.61	3.85	3.21	53.38	0.76	52.62	58.14
DI-12	DI-11	0.10	0.43	0.04	0.12	6.39	0.21	6.60	7.56	0.33	0.91	51.00	10	0.010	2.61	4.36	4.06	52.52	0.52	52.00	59.00
DI-18	DI-17	0.18	0.53	0.10	0.10	6.00	0.36	6.36	7.56	0.72	0.72	87.00	8	0.010	1.43	4.10	4.02	54.33	0.87	53.46	57.62
DI-20	DI-19	0.20	0.44	0.09	0.09	6.00	0.50	6.50	7.56	0.67	0.67	95.00	8	0.019	1.98	5.12	3.19	52.25	1.83	50.42	55.25
DI-26	DI-25	0.21	0.52	0.11	0.11	6.00	0.18	6.18	7.56	0.83	0.83	48.00	8	0.010	1.43	4.24	4.36	57.58	0.48	57.10	61.98
DI-25	DI-24	0.11	0.60	0.07	0.18	6.18	0.20	6.38	7.56	0.50	1.32	74.00	8	0.010	1.42	4.62	6.13	55.11	0.73	54.38	60.88
DI-27	DI-24	0.10	0.48	0.05	0.05	6.00	0.48	6.48	7.56	0.36	0.36	79.00	8	0.010	1.43	3.42	2.75	57.28	0.79	56.49	61.51
DI-24	DI-24A	0.21	0.44	0.09	0.32	6.38	0.06	6.44	7.56	0.70	2.39	27.00	10	0.010	2.59	5.39	7.57	54.28	0.27	54.01	60.12
DI-24A	MH-22	0.02	0.66	0.01	0.33	6.44	0.18	6.63	7.56	0.10	2.49	84.00	10	0.010	2.64	5.49	7.73	53.91	0.87	53.04	59.31
MH-28A	DI-28	0.03	0.90	0.03	0.03	6.00	0.96	6.96	7.56	0.20	0.20	85.00	10	0.028	4.31	4.05	1.48	56.65	2.35	54.30	58.49
DI-28	DI-23	0.36	0.48	0.17	0.20	6.00	0.22	6.22	7.56	1.31	1.51	72.00	10	0.010	2.59	4.93	5.49	54.20	0.72	53.48	58.49
DI-23	MH-22	0.27	0.45	0.12	0.32	6.22	0.11	6.33	7.56	0.92	2.43	42.00	12	0.010	4.26	5.60	6.49	53.38	0.43	52.95	58.31
DI-6	DI-11	0.46	0.46	0.21	0.94	7.06	0.10	7.16	7.56	1.60	7.07	73.00	12	0.011	4.41	9.00	12.00	55.74	0.80	54.94	61.18
DI-11	DI-17	0.19	0.54	0.10	1.23	7.16	0.23	7.39	7.56	0.78	9.31	162.00	18	0.009	12.02	7.51	11.90	51.16	1.52	49.64	59.84
DI-17	DI-19	0.09	0.51	0.05	1.37	7.39	0.08	7.46	7.56	0.35	10.38	57.00	18	0.010	12.41	7.86	12.59	49.54	0.57	48.97	58.65
DI-19	MH-22	0.23	0.66	0.15	1.61	7.46	0.13	7.60	7.56	1.15	12.20	98.00	21	0.010	18.72	8.29	12.35	48.87	0.98	47.89	57.93
MH-22	DI-21	0.00	0.41	0.00	2.26	7.46	0.06	7.52	7.56	0.00	17.11	55.00	21	0.010	18.72	8.83	15.78	47.79	0.55	47.24	58.30
DI-21	DI-29	0.06	0.41	0.02	2.29	7.60	0.09	7.69	7.56	0.19	17.30	72.00	21	0.016	23.97	10.85	13.21	47.14	1.18	45.96	57.74
DI-29	MH-30 on Ex. CSO	0.32	0.43	0.14	2.43	7.69	0.13	7.82	7.56	1.04	18.34	78.00	21	0.045	39.72	16.18	10.02	45.86	3.51	42.35	57.25

Drainage Area	Total Area		Impervious Area		Pervious Area		Runoff Coefficient	Q2	Q15	Q100
	SF	Acre	SF	Acre	SF	Acre				
A1	7103.52	0.16	2605.48	0.06	4498.04	0.10	0.55	0.48	0.68	0.80
A2	1612.21	0.04	0.00	0.00	1612.21	0.04	0.35	0.07	0.10	0.12
A3	7971.97	0.18	3517.24	0.08	4454.73	0.10	0.59	0.57	0.82	0.96
A4	2177.40	0.05	354.04	0.01	1823.36	0.04	0.44	0.12	0.17	0.20
A5	3988.41	0.09	140.88	0.00	3847.53	0.09	0.37	0.18	0.26	0.30
A5-A	1587.10	0.04	988.70	0.02	598.40	0.02	0.66	0.14	0.20	0.24
A6	6161.72	0.14	2401.97	0.06	3759.75	0.09	0.56	0.42	0.60	0.71
A7	5789.77	0.13	1897.38	0.04	3892.39	0.09	0.53	0.37	0.53	0.63
A8	6792.74	0.16	1598.47	0.04	5194.27	0.12	0.48	0.39	0.57	0.66
A9	19600.20	0.45	3744.12	0.09	15856.08	0.36	0.46	1.08	1.55	1.82
A10	3360.92	0.08	536.40	0.01	2824.52	0.06	0.44	0.18	0.26	0.30
A11	7630.89	0.18	815.07	0.02	6815.82	0.16	0.41	0.38	0.54	0.64
A12	5618.97	0.13	1022.60	0.02	4596.37	0.11	0.45	0.31	0.44	0.52
A13	14292.39	0.33	5758.12	0.13	8534.28	0.20	0.57	0.99	1.42	1.67
A14	9148.90	0.21	2905.56	0.07	6243.34	0.14	0.52	0.58	0.83	0.98
A15	4649.49	0.11	2121.57	0.05	2527.92	0.06	0.60	0.34	0.48	0.57
A16	8276.40	0.19	3050.16	0.07	5226.24	0.12	0.55	0.55	0.79	0.93
A17	4248.44	0.10	615.94	0.01	3632.50	0.08	0.43	0.22	0.32	0.37
A18	7869.85	0.18	2640.01	0.06	5229.84	0.12	0.53	0.51	0.73	0.86
A19	3743.92	0.09	1117.26	0.03	2626.66	0.06	0.51	0.23	0.33	0.39
A20	10018.80	0.23	3431.37	0.08	6587.43	0.15	0.54	0.65	0.94	1.10
A21	9351.53	0.21	1448.32	0.03	7903.20	0.18	0.44	0.49	0.71	0.83
A22	871.20	0.02	0.00	0.00	871.20	0.02	0.35	0.04	0.05	0.06
A23	11822.04	0.27	2055.35	0.05	9766.68	0.22	0.45	0.64	0.91	1.08
A24	4428.21	0.10	1016.85	0.02	3411.36	0.08	0.48	0.26	0.37	0.43
A25	15575.81	0.36	3721.32	0.09	11854.49	0.27	0.48	0.91	1.30	1.53
A26	13977.27	0.32	5820.43	0.13	8156.84	0.19	0.58	0.98	1.40	1.65
A27	2782.49	0.06	293.95	0.01	2488.54	0.06	0.41	0.14	0.20	0.23
A29	9922.13	0.23	1397.64	0.03	8524.49	0.20	0.43	0.51	0.74	0.87
BLDG	1172.02	0.03	1172.02	0.03	0.00	0.00	0.90	0.13	0.18	0.22

WHERE:

I2 =	5.28	in/hr
I15 =	7.56	in/hr
I100 =	8.89	in/hr



Mark	Sheet	REVISION	Date	Initial

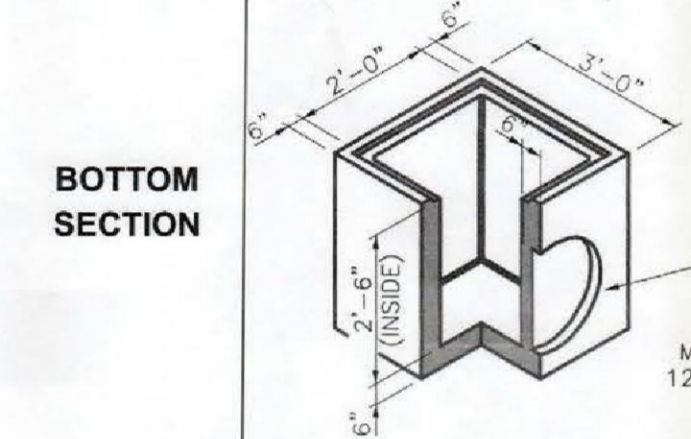
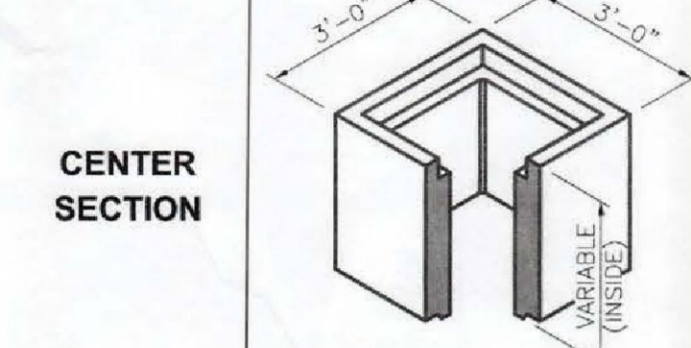
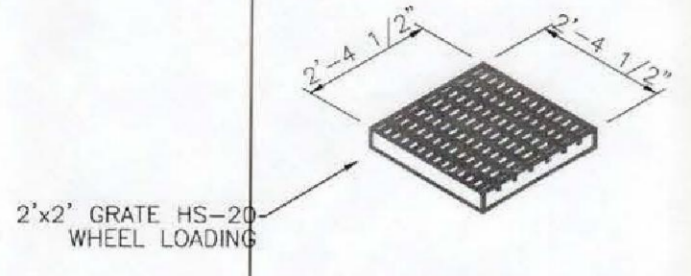
POST-DEVELOPMENT CALCULATIONS  
TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION  
**C410**  
 SUB SHEET NUMBER

UNITED STATES DE



ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4500 psi.  
 REINFORCING STEEL SHALL COMPLY WITH ASTM A615 GRADE 60, A706 GRADE 60 OR A497 GRADE 70. BENDING AND PLACEMENT SHALL COMPLY WITH THE LATEST ACI STANDARDS.  
 STANDARD STRUCTURAL DESIGN IS BASED ON AASHTO HS 20 WHEEL LOADING.  
 WATER TABLE IS AT 3'-0" BELOW GRADE FOR STANDARD STRUCTURAL DESIGN.  
 THE STANDARD DESIGN IS BASED ON THE TOP AT GRADE AND THE BASE AT 8'-0" MAX. BELOW GRADE.  
 THE STRUCTURE SHALL BE PLACED ON A COMPACTED GRANULAR BASE TO INSURE UNIFORM DISTRIBUTION OF SOIL PRESSURES.  
 SPECIAL DESIGNS BASED ON OTHER LOADINGS OR DEEPER INSTALLATION DEPTHS ARE AVAILABLE ON REQUEST.  
 KNOCKOUTS OR PIPE OPENINGS OR CAN BE PROVIDED IN THE SIZE AND LOCATIONS REQUIRED.



APPROXIMATE CENTER SECTION WEIGHTS  
 2'-0" INSIDE 1600 LBS.  
 2'-6" INSIDE 1900 LBS.  
 3'-0" INSIDE 2300 LBS.  
 3'-6" INSIDE 2700 LBS.  
 4'-0" INSIDE 3100 LBS.

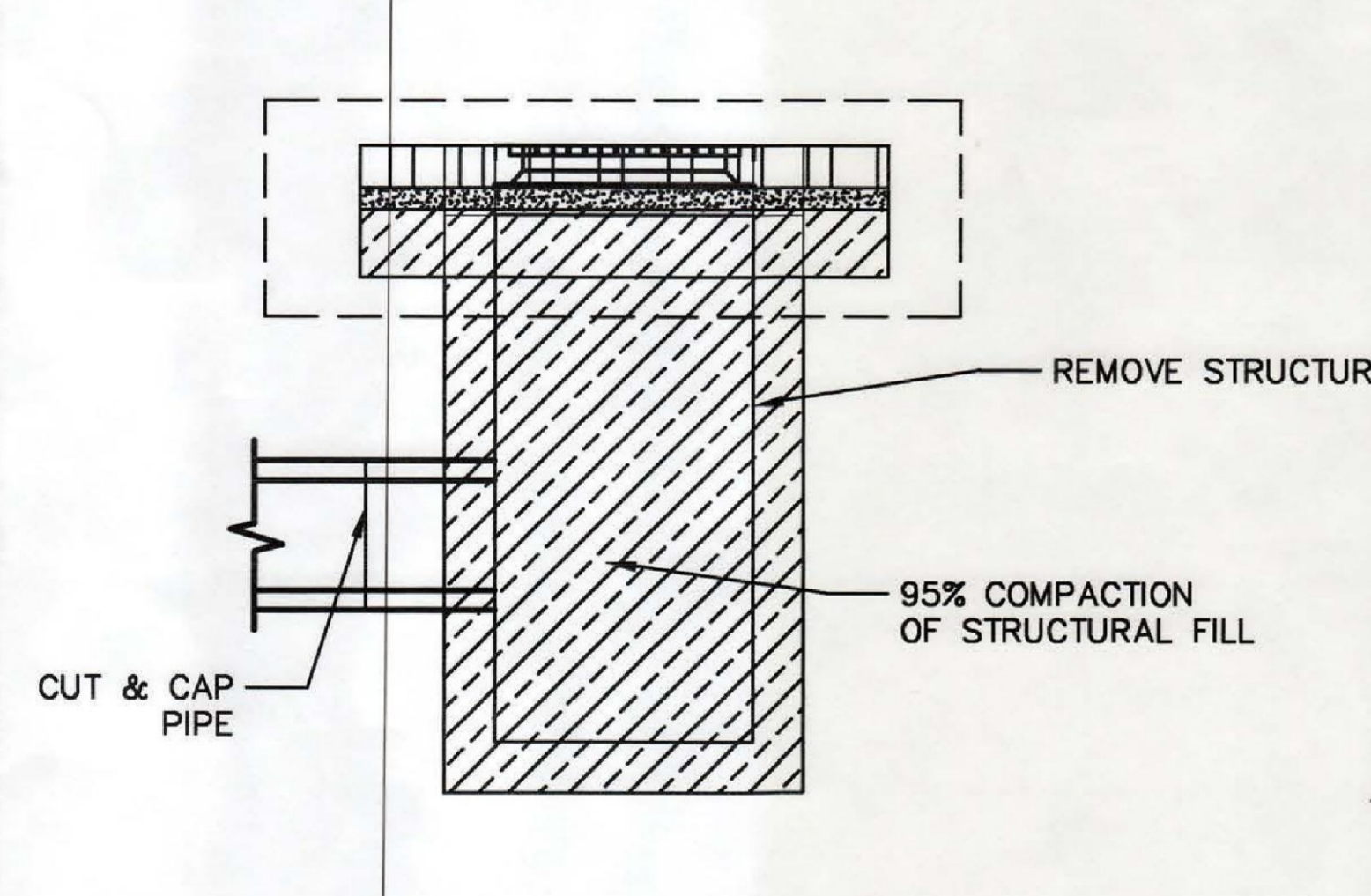
APPROXIMATE BOTTOM SECTION WEIGHTS  
 2'-6" INSIDE 2600 LBS.

MINIMUM EXCAVATION  
 5'-0"x5'-0"  
 THINWALL KNOCKOUTS LOCATION AS REQUIRED.  
 MAXIMUM OPENING WIDTH IS 24" WITH 12" MAXIMUM WIDTH IN ADJACENT WALL.

**Oldcastle Precast** **GI22** **2'-0"x2'-0" GRATE INLET**  
 FILE NAME: 22GI.dwg  
 ISSUE DATE: March, 2005  
 1900 Rilling Road San Antonio, TX 78214  
 Phone: (214) 485-1000 Fax: (214) 485-1001  
 www.oldcastleprecast.com Copyright 2005 Oldcastle Precast All Rights Reserved

**1 PRECAST 24"x24" CATCH BASIN**  
 SCALE: NTS  
 C106,C107,C501  
 C108,C109

NOTE:  
 PRODUCTS SHOWN IN THIS SHEET ARE SELECTED BASED ON BASIS OF DESIGN.  
 CONTRACTOR CAN SELECT EQUIVALENT PRODUCT OR ACCORDING TO THE CONTRACT DOCUMENTS.



**4 STORM INLET REMOVAL & BACKFILL**  
 SCALE: NTS  
 C101,C102,C501  
 C103,C104

**Oldcastle Precast** **CATCH BASINS** **48"x48" Catch Basin**  
 File: 266-48x48-DIC Model: CB-484848

**Dual Heavy Duty Grate:**  
 Weight: 800 Lbs.  
 Open Area 820 Sq. Inches

**6" Trans. Top W/ Frame**  
 Weight: 695 Lbs.

**Risers**  
 Weight: Varies

Riser	Weight (Lbs.)
6"	675
12"	1,350

**Bottom:**  
 Weight: See Chart

Bottom	Weight (Lbs.)
4-Way	4,764

1" Chamfer (TYP. 4 Corners, Top & Bottom)  
 Cast in Frame Optional  
 48" Diameter Thinwall Knockout For 36" R.C.P. or Smaller (Typical All four Walls)

**GENERAL NOTES:**  
 1. Bedding Shall be in Accordance With Job and Plan Specifications.

**2 PRECAST 48"x48" CATCH BASIN**  
 SCALE: NTS  
 C106,C501

**Oldcastle Precast** **Water** **48" Manhole - Type 1**  
 Model: 48 Type 1 MH

**FRAME AND COVER**  
 550 lbs.

**GRADE RING**  
 2" = 50 lbs.  
 4" = 120 lbs.  
 6" = 180 lbs.

**ECCENTRIC CONE**  
 2'-0" = 1,800 lbs.  
 3'-0" = 2,700 lbs.

**SECTION**

SECTION HEIGHT	Weight
1'-0"	870 lbs
2'-0"	1,740 lbs
3'-0"	2,610 lbs
4'-0"	3,480 lbs
5'-0"	4,350 lbs

**BASE**

BASE HEIGHT	Weight
2'-0"	2,850 lbs
3'-0"	3,690 lbs
4'-0"	4,530 lbs
5'-0"	5,370 lbs

**UTILITY VAULT MANHOLES:**  
 - H-20 LOADING  
 - Manhole meets ASTM C478 and all WSDOT/APWA Standard Specifications  
 - Rubber gasket joint meets ASTM C443  
 - Polypropylene steps and ladders meet ASTM C4101  
 - Reinforcement grid meets minimum ASTM C478 requirements  
 - Top: Top = 0.12 in./linear ft. in both directions, with 0.20 in.<sup>2</sup> at 90° around opening  
 - 2" Tall Cores = 2 hoops of 0.250 in. dia. reinforcing bars  
 - 3" Tall Core = 3 hoops of 0.250 in. dia. reinforcing bars  
 - Staves = 0.12 in./vertical ft.  
 - Knockout slots and locations available to meet job requirements  
 - Maximum hole size 3/4"  
 - Minimum distance between holes 8"

**48" FLAT TOP**  
 WITH 24" HOLE  
 1,850 lbs.

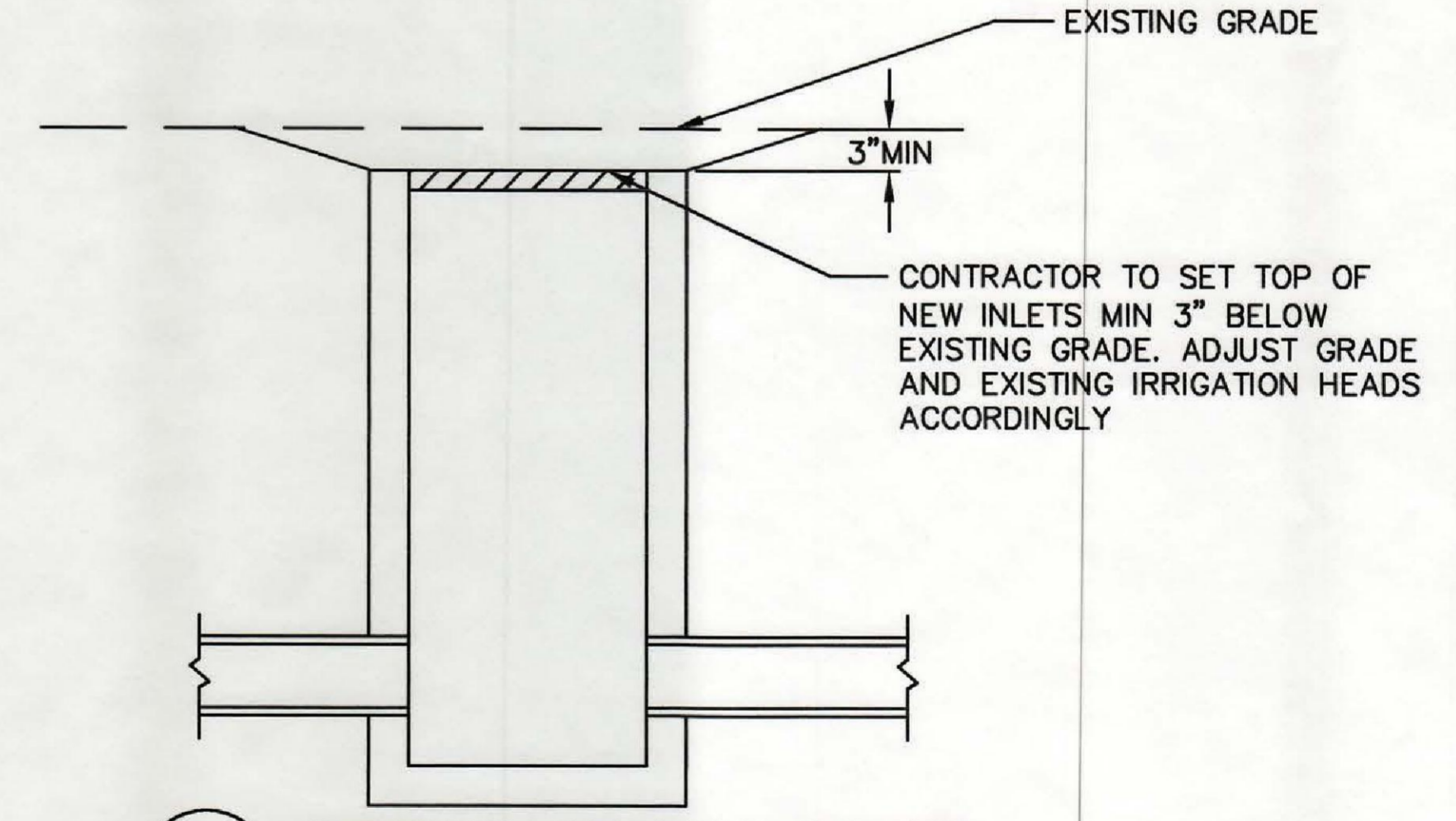
**CONCENTRIC CONE**  
 1,800 lbs.

**JOINT DETAIL**

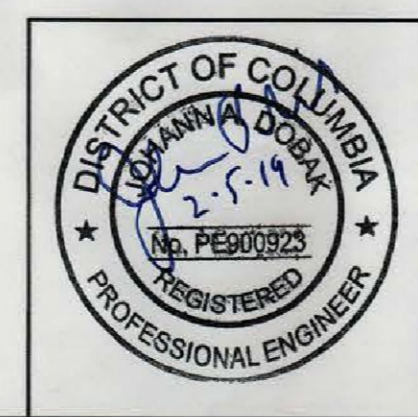
**AVAILABLE OPTIONS:**  
 - Pre-chambering  
 - Coatings  
 - Kerf-in-slab boots  
 - Saddle bases

Washington Region For more information about our products please visit us on the web at: oldcastleprecast.com/washington  
 © 2013 Oldcastle Precast, Inc. WMM-1 888-9 Oldcastle (888-965-3227)

**3 PRECAST MANHOLE**  
 SCALE: NTS  
 C106,C501



**5 SETTING OF NEW INLETS**  
 SCALE: NTS  
 C106,C107,C501  
 C108,C109



**ALPHA CORPORATION**  
 21351 RIDGETOP CIRCLE  
 SUITE 200  
 DULLES, VA, 20166  
 www.alphacorporation.com

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**DETAILS**  
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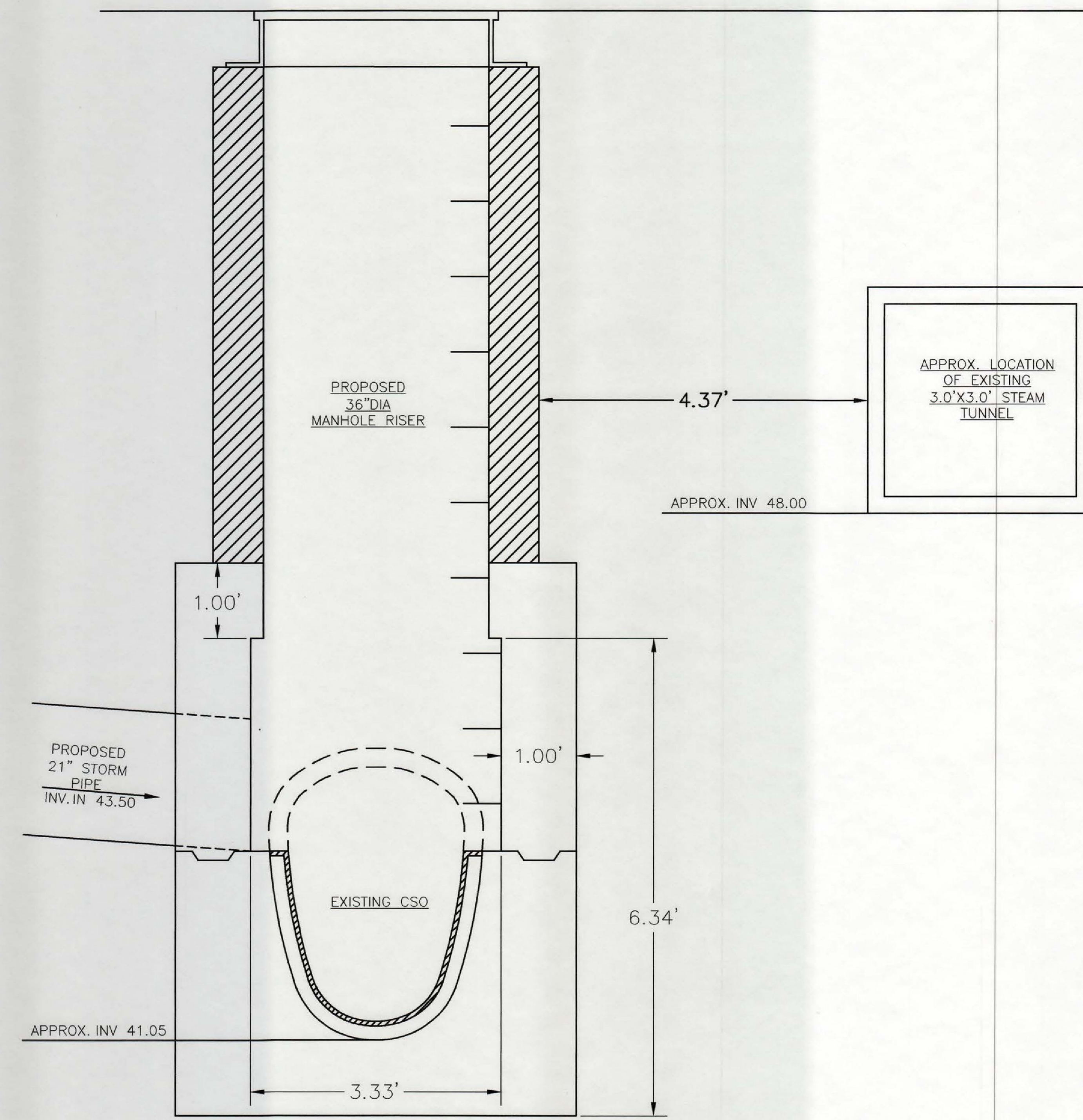
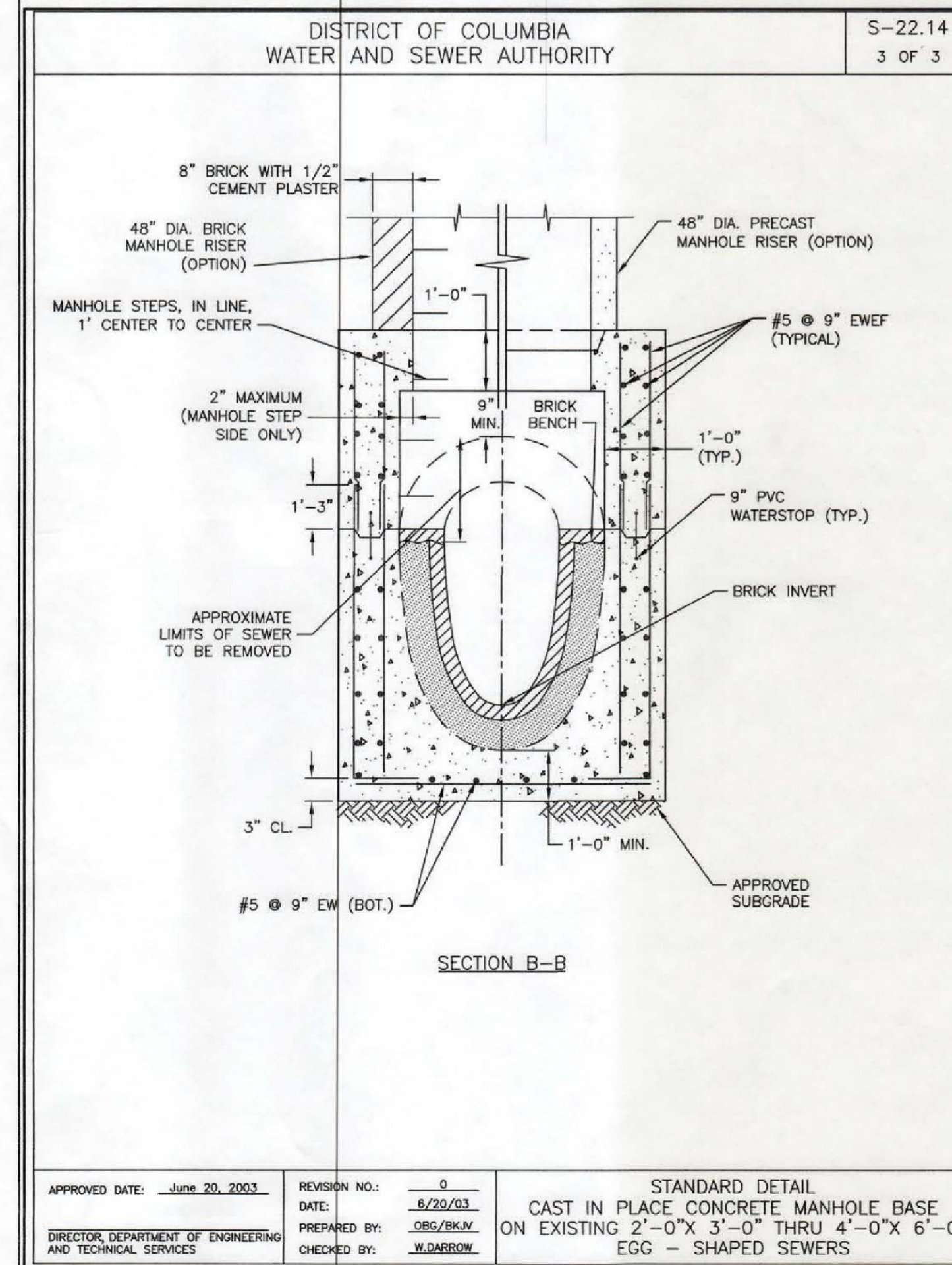
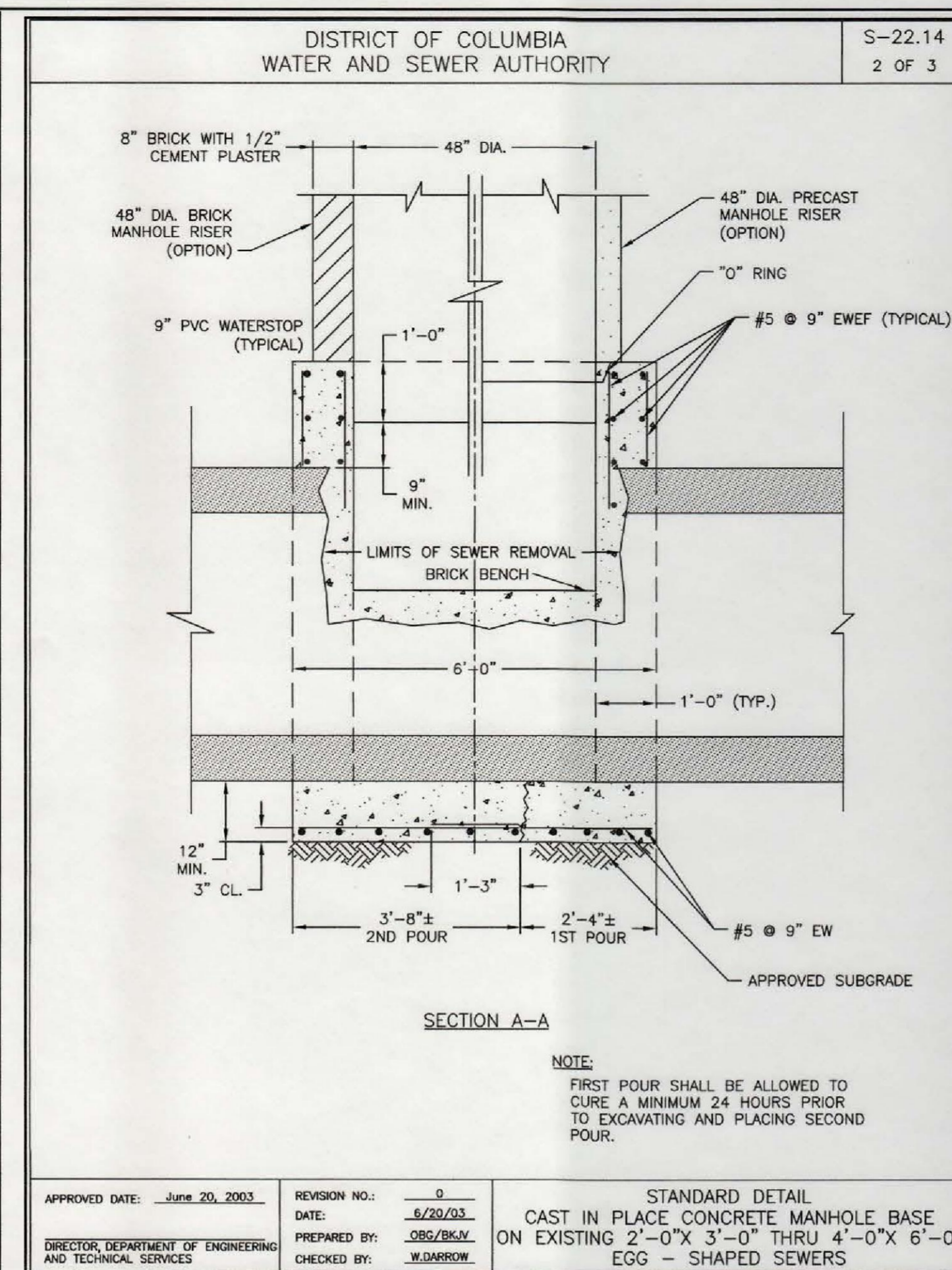
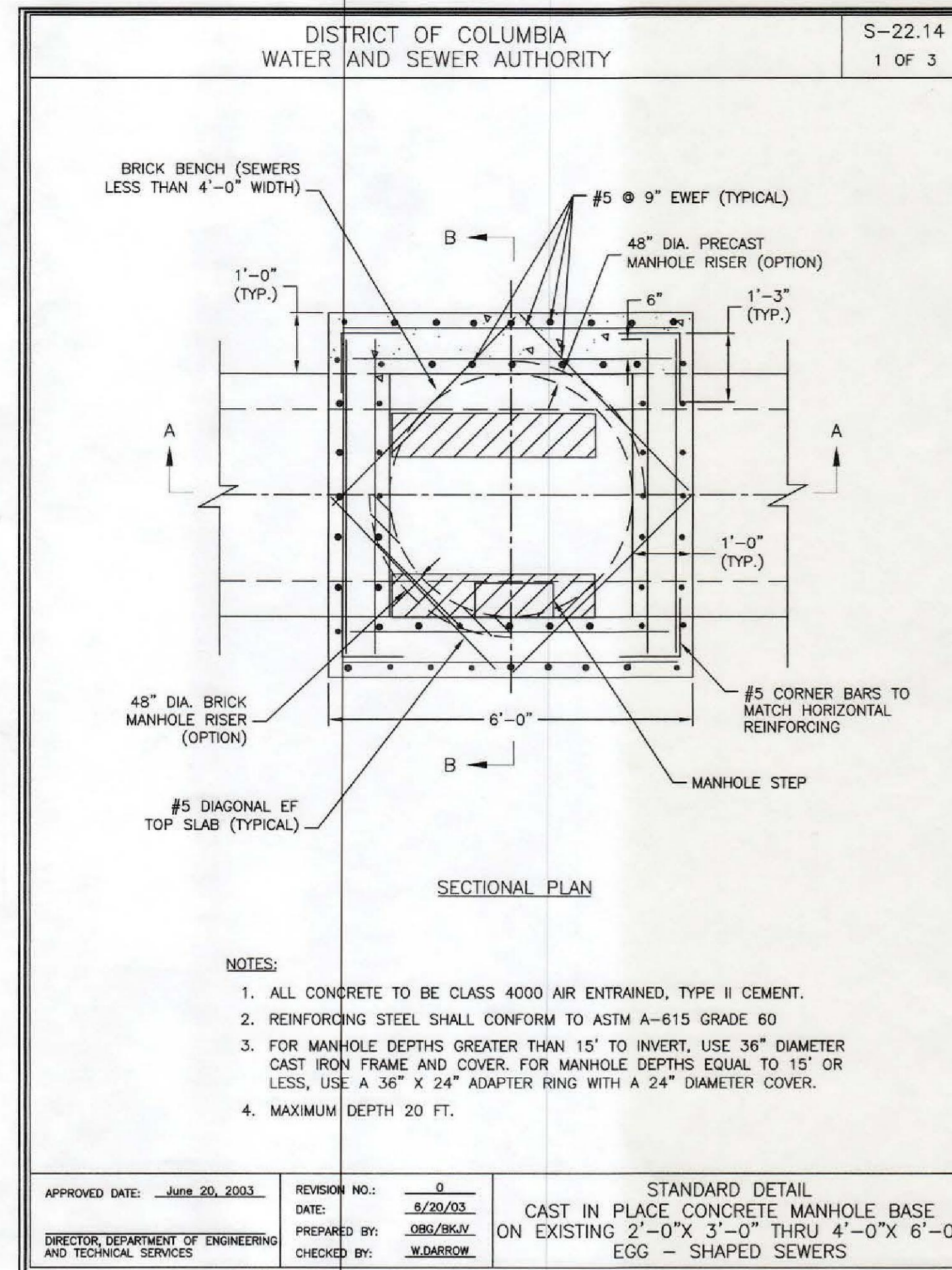
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**C501**  
 SUB SHEET NUMBER

UNITED STATES DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

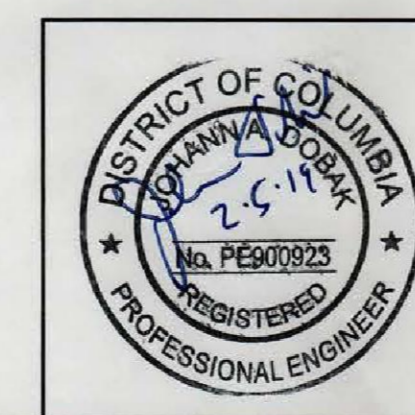
187290B
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DO
803
142683
02.23.2018
33 of 62





1 PROPOSED CSO CONNECTION  
 C106 C502 NOT TO SCALE

APPROVED DATE: June 20, 2003  
 REVISION NO.: 0  
 DATE: 6/20/03  
 PREPARED BY: DBG/BK/V  
 CHECKED BY: W.DARRON  
 STANDARD DETAIL  
 CAST IN PLACE CONCRETE MANHOLE BASE  
 ON EXISTING 2'-0" X 3'-0" THRU 4'-0" X 6'-0"  
 EGG - SHAPED SEWERS



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 TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION  
 C502  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK

187290B FIGURE
NPT/SRC
NPT/SRC
DO CHECKED
803 DATE
02.23.2018 DATE
34 of 62 SHEET





### General Construction Notes

- Contact:** Notify the following DC Water departments prior to the commencement of utility construction:
  - Construction Inspection Section at [REDACTED] at least two weeks prior to the commencement of utility construction to schedule pre-construction meeting.
  - Department of Water Services at [REDACTED] at least one week prior to the commencement of water utility construction.
  - Department of Sewer Services at [REDACTED] or 3873 at least one week prior to the commencement of sewer utility construction.
- Standards:** All construction, materials, and appurtenances shall comply with the latest editions of the DC Water Project Design Manual, Standard Details & Design Guidelines, and Specifications.
- Lead Service Replacement:** If this project includes the replacement of a water main that has existing lead water service laterals, the Contractor is responsible for contacting the DC Water Construction Inspection Section at [REDACTED] at least 90 days prior to construction to allow adequate time to initiate standard lead service replacement protocol. Lateral replacement includes the full length of pipe in public space.
- Owner Responsibility:** The Owner is responsible for all work and costs associated with excavation, installation, and restoration of public space to perform a water/sewer connection/abandonment. Once the Contractor has obtained a Public Space Permit he/she must then contact DC Water prior to performing the excavation to install/inspect the utility work. The Owner shall be held responsible for all damages to existing structures and utilities caused by construction activity.
- DC Water Responsibility:** DC Water is only responsible for installation of small water service taps (2" diameter and less) to the public main, small water service tap removals from the public main, furnishing & installing the meter in public space, and inspection of work performed on the public system.
- Miss Utility:** Contact Miss Utility at [REDACTED] hours before any digging.
- Plan Set:** A set of signed & sealed and DC Water stamped Plans shall be kept at all times at the job site on which all changes or variations in the work, including all existing utilities, are to be recorded and/or corrected daily.
- Abandonments:** The Owner must physically disconnect existing water, sewer, and storm laterals that are to be abandoned at their connection to the public main.
- Unmetered Water:** There shall be no unmetered connections to the City's water system, including connections bypassing meters for testing on-site plumbing or for obtaining construction water.
- Pressure Testing Against Valves:** Pressure testing against valves will not be allowed.
- Water Meter Installation:** To schedule the installation of a domestic water meter contact Permit Operations at [REDACTED]. DC Water will furnish and install the meter after the connection to the main has been made and the meter pit/vault has been installed.

February 2017

Page 1

- Cross Contamination Control:** ASSE 1048 certified backflow prevention assemblies are required on all fire services and are to be located inside the building (unless an external location is necessary or required by DC Water) where it is supplied, owned, operated, and maintained by the Owner. DC Water does not furnish nor install fire double check detector fire protection backflow prevention assemblies.
- Utility Service Disruptions:** Phase all utility work to maintain utility services to the surrounding area during all phases of construction. Limit required utility shut-downs in number and duration. Coordinate these shut downs with DC Water Construction Inspection staff.
- Water Valve Operation:** The Contractor is required to coordinate with DC Water for all necessary water main shut downs with adequate advanced notice. Only DC Water employees may shut down a public water main. A certified plumber is only authorized to turn off valves inside meter pits.
- Water Gate Valve Location:** Locate gate valves for domestic and fire services as close to the public water main tee as possible. However, if necessary adjustments are required due to conflicts, coordinate with a DC Water inspector.
- Material:** The Contractor is responsible for submitting shop cuts to the appropriate DC Water office for approval or obtaining a DC Water approval stamp for all work in public space in advance of installation. Only approved materials may be used.
- Temporary Conditions Minimum Cover:** A nominal four feet of cover is required for all water mains at final grade. Cover of less than four feet requires DC Water approval.
- As-Built:** Developers, contractors and/or plumbers must submit final construction as-built information to the appropriate DC Water inspector(s) for review and approval, upon completion of installation of new services or abandonment of existing services. When the final as-built is approved all deposits will be returned to the applicant. See DC Water as-built requirements for additional information.
- Conflicts:** The Contractor shall field verify the location of existing underground utilities prior to installation of proposed utilities. A minimum of one foot vertical and five feet horizontal clearance shall be maintained from any utilities and public water and sewer mains.
- Fire Hydrant Use:** The use of a fire hydrant as a water source is prohibited unless a permit has been obtained from DC Water for use of a specific hydrant(s). Daily or extended use permits can be obtained from the DC Water Permit Operations Department [REDACTED].
- Fire Hydrant Status:** The Contractor shall notify FEMS at [REDACTED] prior to taking any fire hydrant out of service or rendering any hydrant inaccessible for any reason. FEMS is also to be provided with the location of any new installation of private fire hydrants.
- DC Water Safety Office:** The DC Water Safety Office can be contacted at [REDACTED].
- Sewer Backwater Prevention:** The plumbing system must be in compliance with Section 715 of the 2006 International Plumbing Code which states a backwater is valve is required for all plumbing fixtures below the elevation of the manhole cover of the next upstream manhole in the public sewer.

February 2017

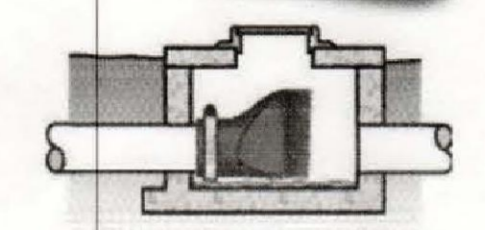
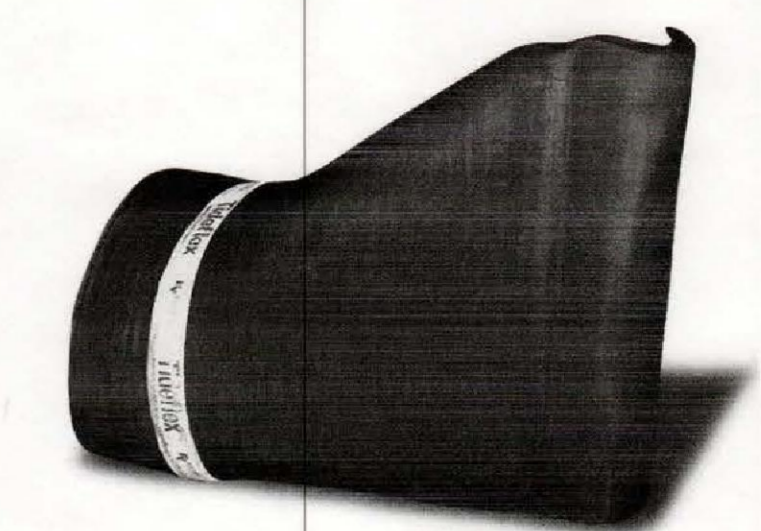
Page 2

## Series TF-1

- Ideal for manhole installations
- Minimal bottom clearance required
- Lightweight, all-elastomer design
- Seals around small solids
- Available in slip-on or flanged design

Materials of Construction  
 Neoprene, Hypalon®, Buna-N, EPDM, Viton®.

Mounting Bands  
 304 or 316 Stainless Steel.



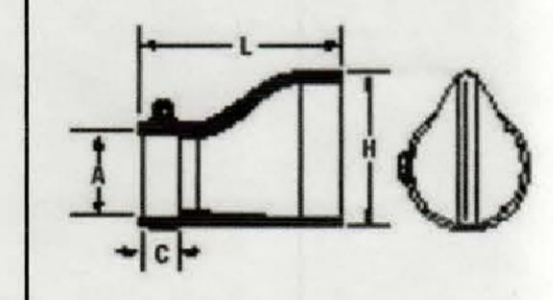
The TF-1 is designed for installation in existing structures such as interceptors, manholes and vaults where the invert of the pipe is close to the floor. The flat-bottom and offset-bill design of the TF-1 allows it to be installed without any modifications to the structure.

The TF-1 offers low cracking pressure to reduce the potential for standing water and very low headloss which is not affected by rust, corrosion or lack of lubrication.

The TF-1 is ideal for sewer systems because it will seal around small debris. The TF-1 design is available with a slip-on or flanged pipe connection. Tidflex® TF-1 valves are constructed with a curved bill as standard.

Pipe O.D.	Length	Bill Height	Cu Length
4	10	8	1.12
5	10	8	1.12
6	16	12	2
8	18	16	2
10	23	19	3
12	27	23	4
14	32	23	4
16	35	30	5
18	36	34	6
20	44	37	8
22	44	37	8
24	48	43	8
26	48	43	8
28	48	43	8
30	56	55	9
32	56	55	9
36	67	69	10
38	67	69	10
40	67	69	10
42	61	71	10
44	61	71	10
48	66	78	10
50	66	78	10
54	66	78	10
58	66	78	10
60	73	91	14
68	73	91	14
72	96	115	16

Numbers indicate maximum dimensions in inches.



Permit Operations  
 202 392 686 8588

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY | 1100 4th STREET, SW | SUITE 310 | WASHINGTON, DC 20024

### Backwater Evaluation Form [per 2006 International Plumbing Code (IPC) Section 715]

Note: User must complete all cells shown blue highlighted.

Next Upstream Manhole Rim Elevation (ft) = 59.49

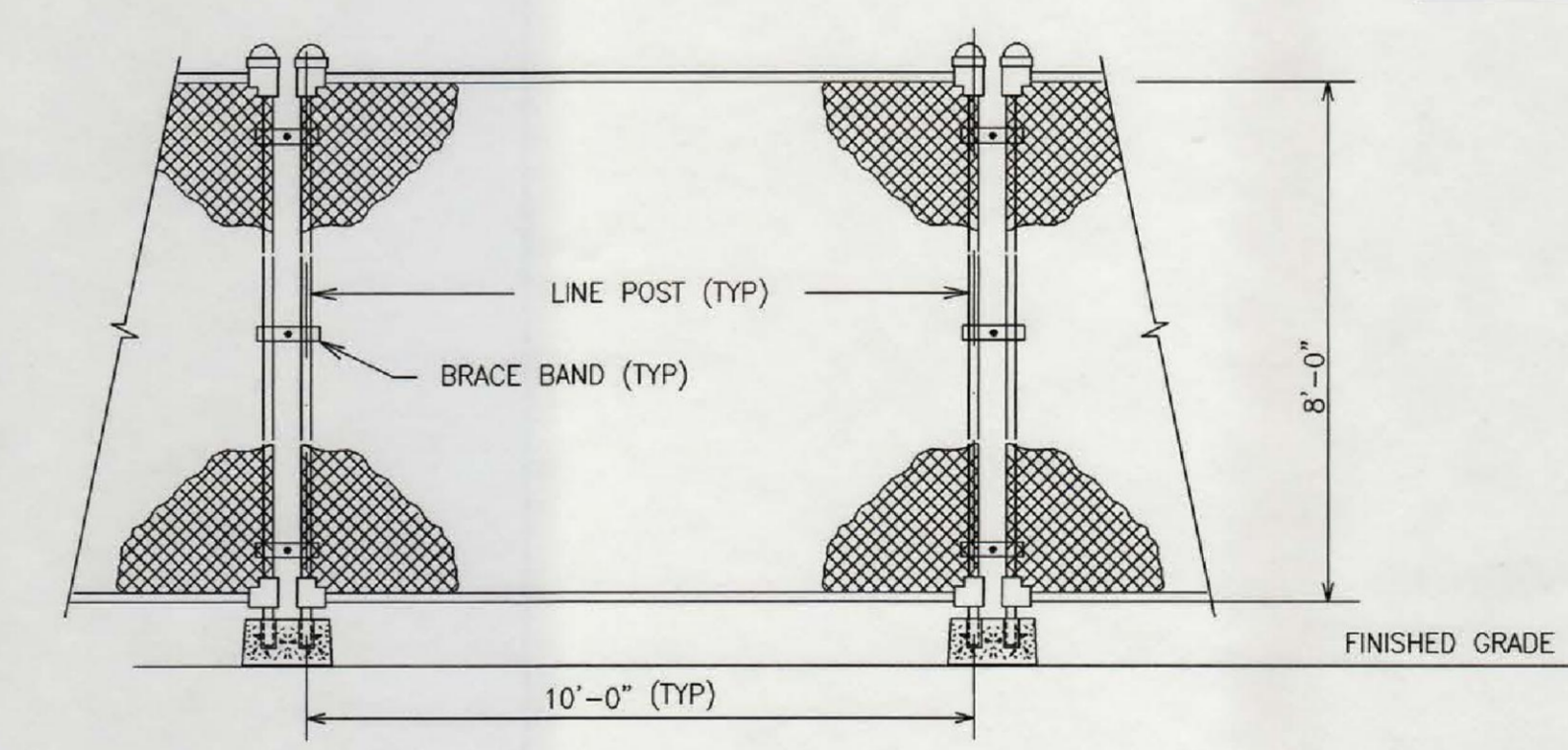
	Sewer Fixture Description	1 Flood Level Rim Elevation (ft)		2 Backwater Valve or Pump Required?
		3	4	
Basement	Bathub	0.00	n/a	n/a
	Bedpan Washer	0.00	n/a	n/a
	Bidet	0.00	n/a	n/a
	Dental Unit	0.00	n/a	n/a
	Drinking Fountain	0.00	n/a	n/a
	Kitchen Sink	0.00	n/a	n/a
	Utility Sink	0.00	n/a	n/a
	Urinal	0.00	n/a	n/a
	Toilet	0.00	n/a	n/a
	Dishwasher	0.00	n/a	n/a
	Clothes Washer	0.00	n/a	n/a
	Floor Drain	0.00	n/a	n/a
Other - describe here		0.00	n/a	n/a
1st Floor	Bathub	0.00	n/a	n/a
	Bedpan Washer	0.00	n/a	n/a
	Bidet	0.00	n/a	n/a
	Dental Unit	0.00	n/a	n/a
	Drinking Fountain	63.46	No	
	Kitchen Sink	0.00	n/a	n/a
	Utility Sink	63.46	No	
	Urinal	63.46	No	
	Toilet	63.46	No	
	Dishwasher	0.00	n/a	n/a
	Clothes Washer	0.00	n/a	n/a
	Floor Drain	0.00	n/a	n/a
Other - describe here		0.00	n/a	n/a

n/a: not applicable

Sewer Lateral Information						
Sewer Lateral Location / Project Address	Lateral Size (in)	Lateral Slope (ft/ft)	Lateral C/O Rim Elev (ft)	Lateral C/O Invert Elev (ft)	Public Sewer Size (in)	Next Upstream MH Rim Ele(ft)
LAFAYETTE PARK / MADISON PLACE	18"	2%	63.04	60.04	18"	59.49

Notes:  
 1 2006 International Plumbing Code (IPC) defines Flood Level Rim as "The edge of the receptacle from which water overflows."  
 2 If the elevation of the flood level rim is lower than the elevation of the next upstream manhole rim, a backwater valve for that fixture may need to be installed per IPC requirements, or the fixture may need to be pumped per IPC requirements.

### BACKWATER EVALUATION FORM

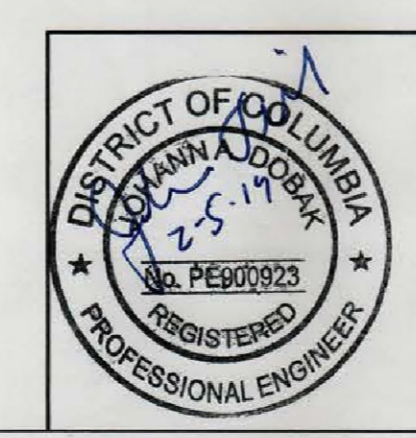


TEMPORARY CONSTRUCTION FENCE MATERIAL SCHEDULE	
STIFFENER PIPE	1.66" OD GALVANIZED STL
FABRIC	11 GA GALVANIZED STL
LINE POST	1.66" OD GALVANIZED STL
BRACES	1.66" OD GALVANIZED STL
ANCHOR	MIN. 60 LB, 3000 PSI CONCRETE

- NOTES:
- EACH SURFACE ANCHOR SHALL WEIGH A MINIMUM OF 60 LBS.
  - FENCE AND HARDWARE SHALL BE APPROVED BY THE COR
  - FENCING SHALL BE IN NEAR NEW CONDITION AND FREE OF SIGNS OR ADVERTISING

### 2 CONSTRUCTION FENCE

C601 C503 SCALE: NTS



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C503

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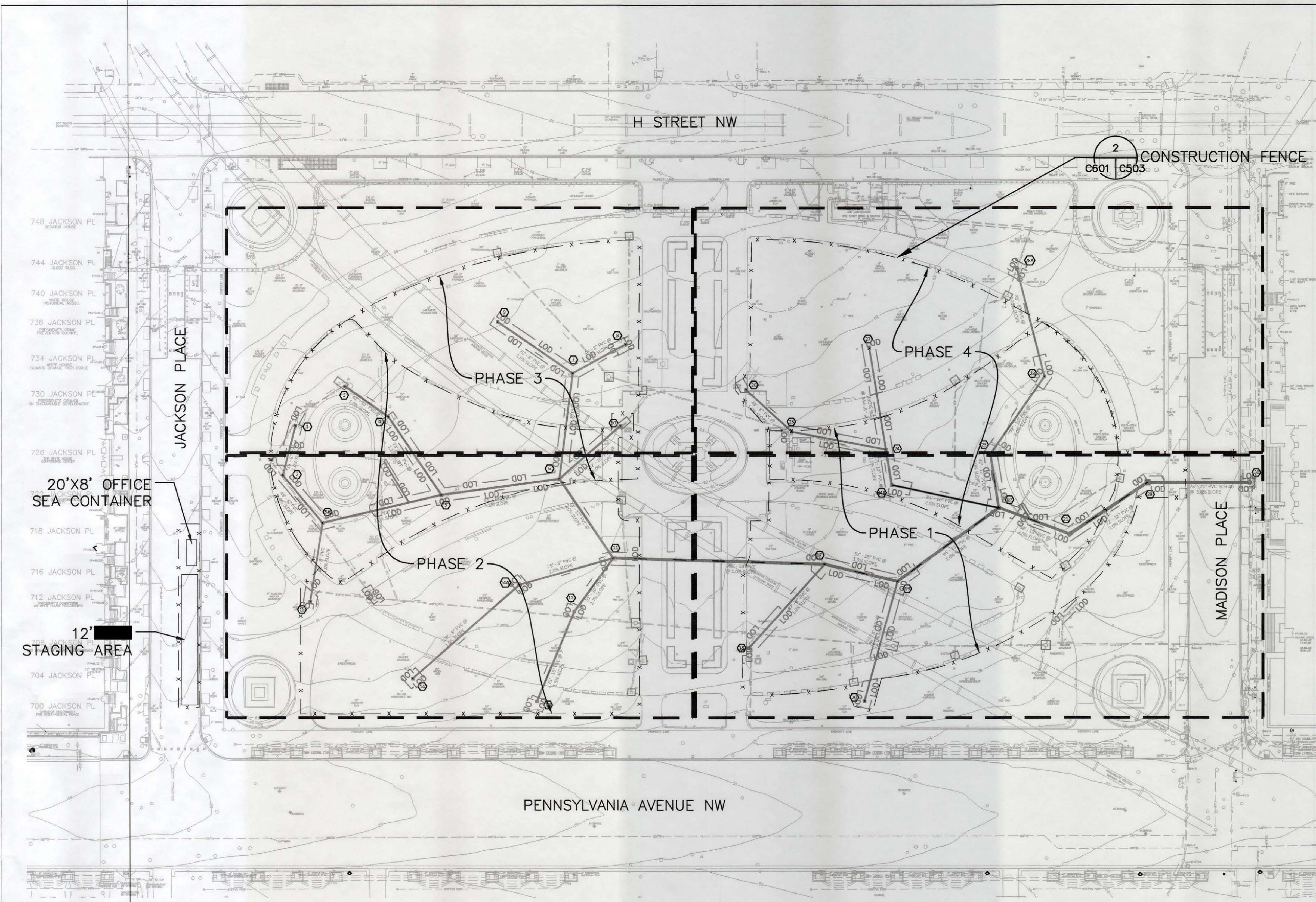
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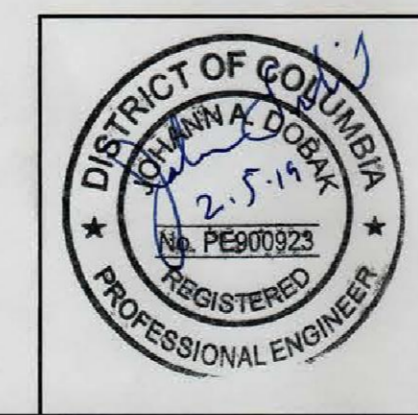
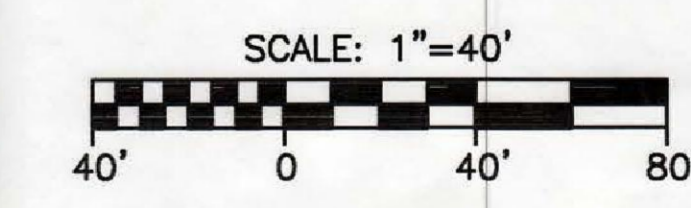
UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
 DESIGN AND PROJECT MANAGEMENT

REPLACE STORM WATER DRAIN LINES  
 TITLE OF PROJECT  
 LAFAYETTE PARK  
 LOCATION WITHIN PARK  
 PRESIDENT'S PARK (WHITE HOUSE)  
 NAME OF PARK





- PHASING NOTES:**
1. THE CONTRACTOR SHALL PROVIDE A WORK PLAN AND SCHEDULE PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES.
  2. THE SCHEDULE WILL IDENTIFY THE WORK PERIODS IN EACH PHASE OF THE PROJECT.
  3. THE CONTRACTOR SHALL NOT PROGRESS TO THE NEXT PHASE WITHOUT CONSENT AND APPROVAL FROM THE COR.
  4. WORK MAY BE INITIATED OUTSIDE THE LIMITS OF EACH PHASE ONLY WITH APPROVAL OF THE COR. ALL WORK OUTSIDE OF THE LIMITS OF THE PHASE SHALL BE PROTECTED AND STABILIZED BY THE CONTRACTOR.
  5. THE AREAS OF PHASING AS SHOWN ON THE PLANS MAY BE AMENDED BY THE CONTRACTOR WITH APPROVAL BY THE COR.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ANY CLOSURE OF PEDESTRIAN ACCESS WITH THE PARK AND THE COR. THE CONTRACTOR SHALL PROVIDE 72-HOUR NOTICE TO THE PARK AND THE COR BEFORE CLOSURE OF ANY PEDESTRIAN CLOSURES.
  7. THE EXISTING STORM DRAIN SYSTEM SHALL REMAIN IN OPERATION FOR EACH PHASE DURING CONSTRUCTION OF THE NEW STORM SEWER SYSTEM.
  8. THE EXISTING SYSTEM IS TO BE ABANDONED ONCE THE NEW STORM SEWER SYSTEM HAS BEEN INSTALLED AND ACCEPTED BY THE PARK AND THE COR.



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Mark	Sheet	REVISION	Date	Initial

**CONSTRUCTION PHASING PLAN**  
 TITLE OF DRAWING

100% CONSTRUCTION DOCUMENT SUBMISSION  
**C601**  
 SUB SHEET NUMBER

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION  
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