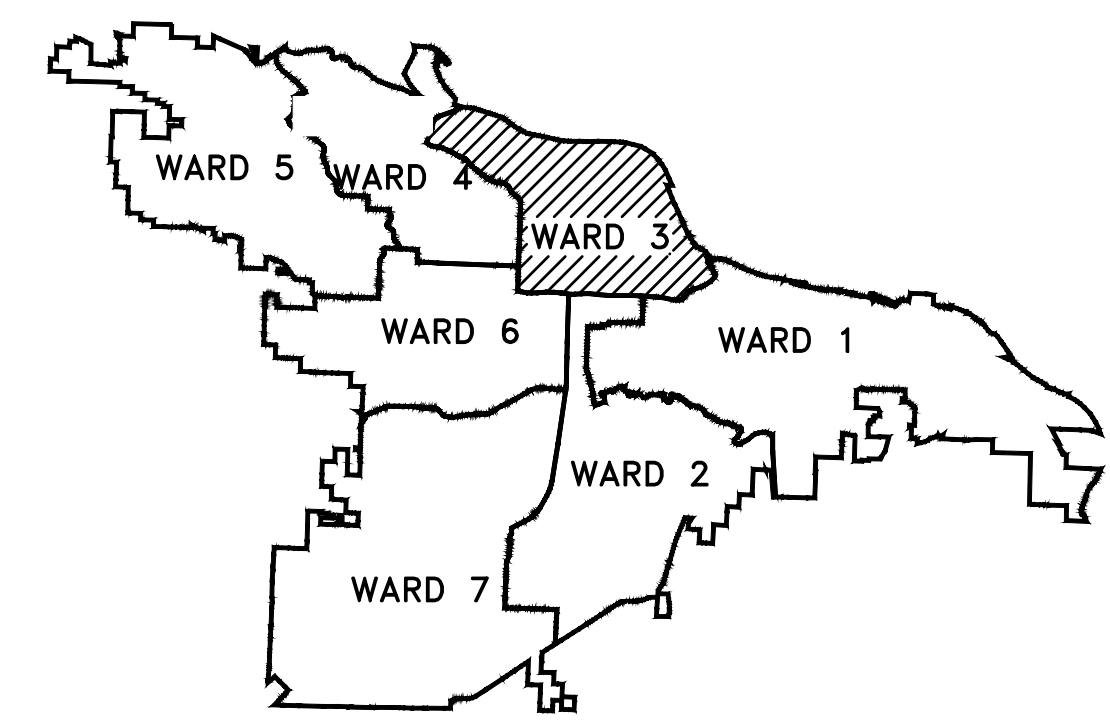
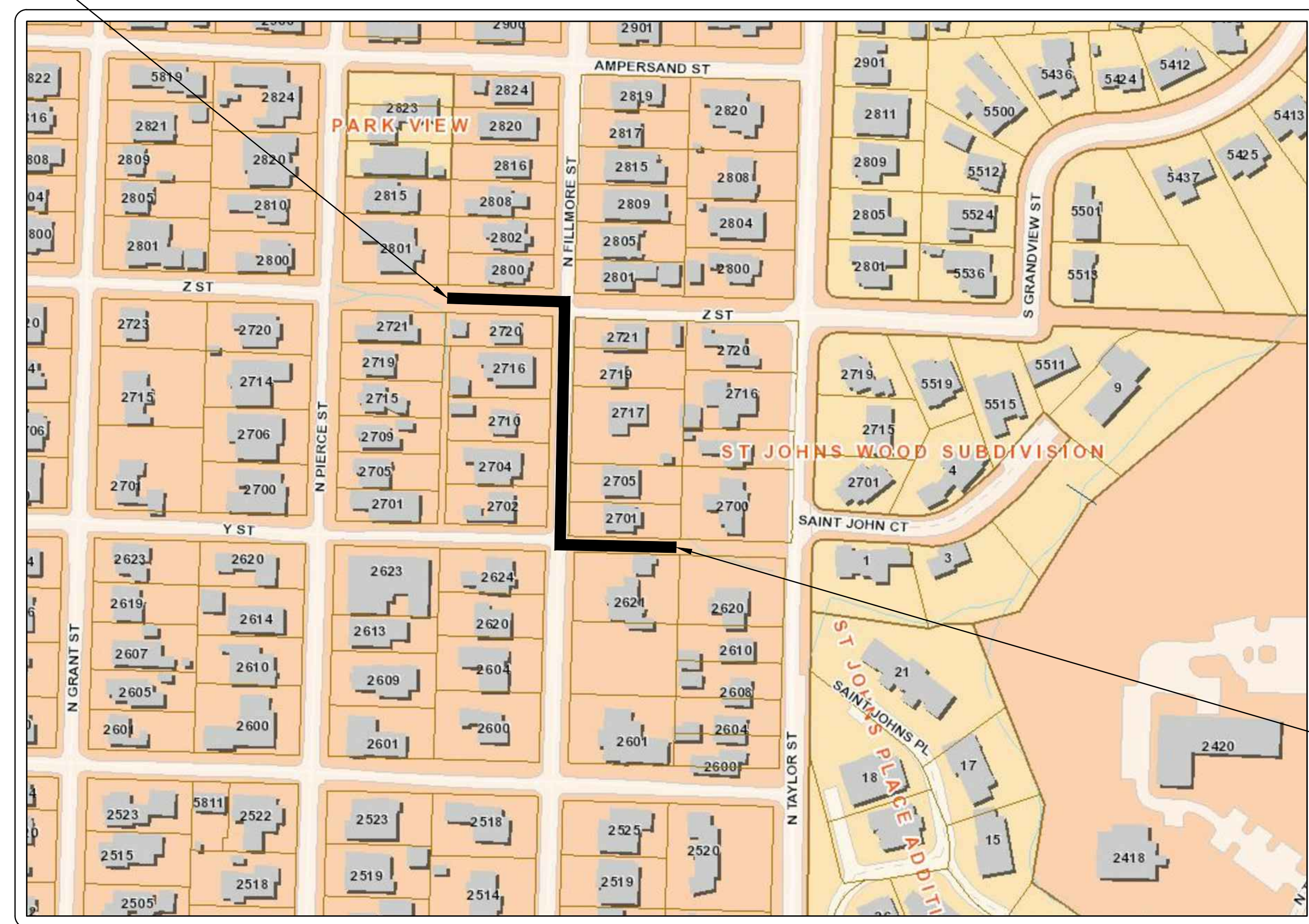
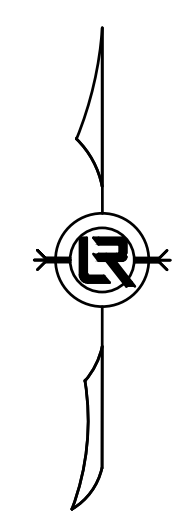


90% SUBMITTAL

# CLR PROJECT 03-16-DR-120 FILLMORE STREET DRAINAGE IMPROVEMENTS (Z STREET TO Y STREET)



PROJECT END  
STATION 17+06



LOCATION

Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	LEGEND, QUANTITIES AND DETAILS
C3	TYP SECTION AND DETAILS
C4	P&P SHEET 1
C5	P&P SHEET 2
C6	SUPPLEMENTAL GRADING DETAILS
C7	EROSION CONTROL PH I
C8	EROSION CONTROL PH II
C9	EROSION CONTROL PH III

PROJECT START  
STATION 10+00

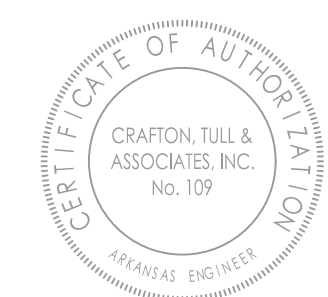


**2019-2021  
BOND PROGRAM**

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 WEST MARKHAM STREET  
LITTLE ROCK, ARKANSAS 72201



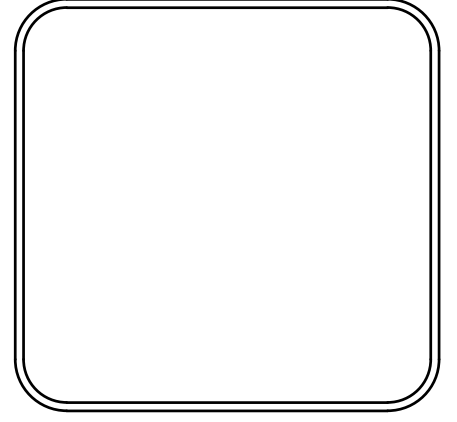
10825 Financial Center Parkway, Suite 300  
Little Rock, Arkansas 72211  
**Crafton Tull**  
engineering | surveying  
501.664.3245 | 501.664.6704 | www.craftontull.com



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
FILLMORE STREET DRAINAGE  
COVER SHEET

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201



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DATE 09-09-2019
SCALE H: 1"=20' V: 1"=5'
PROJECT NO. 13-16-DR-120
SHEET NO. C1

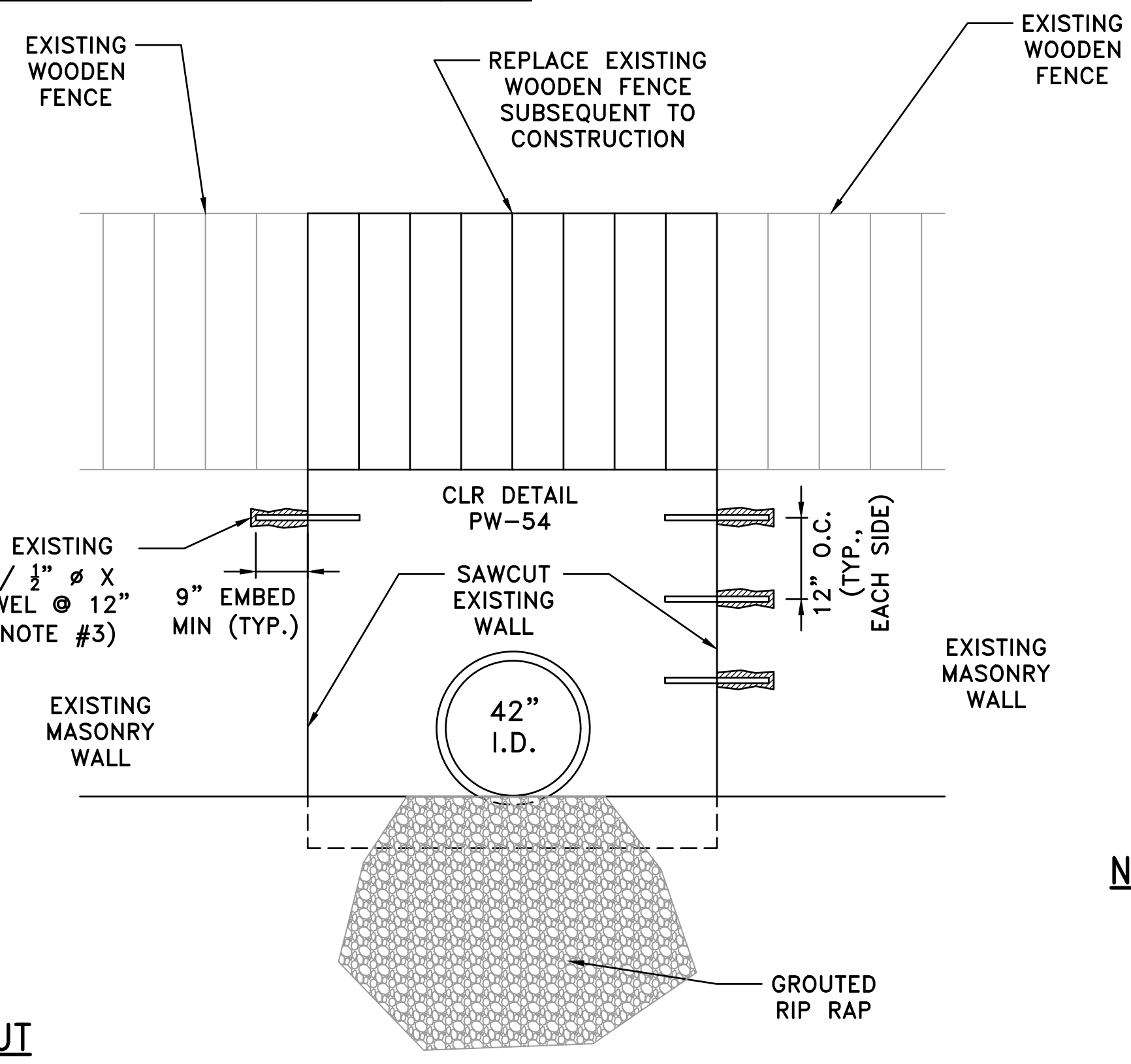
REVISIONS	DATE

CLR PROJECT # 03-16-DR-120			
FILLMORE STREET ROAD & DRAINAGE IMPROVEMENTS			
9/9/2019			
<b>SCHEDULE A</b>			
2.01	SITE PREPARATION	1	L.S.
3.01	UNCLASSIFIED EXCAVATION	60	C.Y.
3.40	TOPSOIL	62	C.Y.
4.01	AGGREGATE BASE COURSE	129	TON
5.01	TACK COAT	53	GAL
6.01	ACHM SURFACE COURSE	116	TON
7.06	CONCRETE DRIVEWAY (6" THICK), STANDARD FINISH	1510	S.F.
7.19	CONCRETE (8" THICK), STREET REPAIR	34	C.Y.
8.03	CONCRETE CURB AND GUTTER (CLASS 3)	336	L.F.
8.16A	DUMPED RIPRAP (GROUTED)	44	C.Y.
10.01	JUNCTION BOX	1	EA.
10.03	CURB INLET - SPECIAL (PW-10)	1	EA.
10.08	REVERSE CURB INLET - 7.33' x 5.5' BOX	5	EA.
10.07	WING 3' EXTENSION	6	EA.
11.06	REINFORCED CONCRETE HEADWALL	7	C.Y.
13.15C	STORM DRAIN PIPE, 15" SIDE DRAIN	22	L.F.
13.15C	STORM DRAIN PIPE, 15" CROSS DRAIN	59	L.F.
13.18C	STORM DRAIN PIPE, 18" CROSS DRAIN	17	L.F.
13.36C	STORM DRAIN PIPE, 36" SIDE DRAIN	385	L.F.
13.42C	STORM DRAIN PIPE, 42" SIDE DRAIN	252	L.F.
14.01	SOLID SODDING (SPECIAL)	547	S.Y.
16.01	MAINTENANCE OF TRAFFIC	1	L.S.
18.01	REMOVE AND REPLACE FENCE	10	L.F.
19.01	CLEAN UP	1	L.S.
24.02	CHECK DAM (CD)	7	C.Y.
24.09	SEDIMENT BARRIER, BLOCK (SD4)	6	EA.
24.11	SILT FENCE - TYPE A (SFA)	350	L.F.
26.10	TRENCH & EXCAVATION SAFETY	1	L.S.
632.02	CONCRETE ARMORED SLOPE	10	S.Y.
<b>SCHEDULE B</b>			
SS-1	8" CLASS 50 DUCTILE IRON PIPE	31	L.F.
SS-2	GRANULAR BACKFILL (CLASS 7)	15	TON
SS-3	CONCRETE (8" THICK), STREET REPAIR	2	C.Y.
SS-4	CONNECT TO EXISTING SEWER LINE	1	L.S.
SS-5	CONNECT TO EXISTING MANHOLE	1	L.S.
SS-6	TESTING	1	L.S.

EXISTING	PROPOSED		
IRON ROD	○ IR	PROPOSED CONTOUR	
PK NAIL	○ PK	PROPOSED SPOT ELEVATION	
R.R. SPIKE	○ RR(Sp)	PROPOSED SPOT CURB ELEVATION	
CONC. MONUMENT	□ CM	STORM SEWER - PIPE	
WATER VALVE	⊗ WV	STORM SEWER - MITERED END SECTION	
WATER METER	⊗ WM	STORM SEWER - GRATE INLET	
FIRE HYDRANT	⊗ FH	STORM SEWER - JUNCTION BOX	
GAS METER	⊗ GM	STORM SEWER - FLARED END SECTION	
GAS VALVE	⊗ GV	STORM SEWER - HEADWALL	
CLEAN-OUT	○ CO	STORM SEWER - SINGLE WING	
GUARD POST (BOLLARD)	● GP	STORM SEWER - DOUBLE WING	
SIGN POST	⊕	STORM SEWER - AREA INLET	
BENCHMARK	⊕	GRADE BREAK LINE	
STORM SEWER MANHOLE	⊙	HIGH POINT	
SANITARY SEWER MANHOLE	⊙	LOW POINT	
TELEPHONE MANHOLE	⊙	CUT LINE	
ELECTRIC MANHOLE	⊙	FILL LINE	
TELEPHONE BOX	⊙	SANITARY SEWER PIPE	
ELECTRIC BOX	⊙	SANITARY SEWER MANHOLE	
CABLE BOX	⊙	PROPOSED CURB	
UTILITY POLE	⊙	PROPOSED CONCRETE	
GUY WIRE	⊙	CONSTRUCTION - ENTRANCE/EXIT	
LIGHT POLE	⊙	CHECK DAM	
POST OR POLE (TYPE AS NOTED)	⊙	DIVERSION BERM	
MAILBOX	⊙	DOWNDRAIN STRUCTURE - TEMPORARY	
DECIDUOUS TREE		ROCK DAM	
EVERGREEN/CONIFEROUS TREE		SEDIMENT BARRIER - SILT FENCE	
BUSH		SEDIMENT BARRIER - GRAVEL RING	
PROPERTY LINE		SEDIMENT BARRIER - BLOCK & GRAVEL	
SETBACK LINE		SEDIMENT BARRIER - BLOCK	
EASEMENT LINE		TEMPORARY SEDIMENT BASIN	
CURB		SILT FENCE - TYPE A	
FENCE		SILT FENCE - TYPE B	
OVERHEAD ELECTRIC		SILT FENCE - TYPE C	
OVERHEAD TELEPHONE		STORM DRAIN OUTLET PROTECTION	
OVERHEAD CABLE		SURFACE ROUGHENING	
UNDERGROUND TELEPHONE		DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION	
UNDERGROUND ELECTRIC		DISTURBED AREA STABILIZATION - TEMPORARY GRASSING	
UNDERGROUND CABLE		DISTURBED AREA STABILIZATION - PERMANENT GRASSING	
WATER LINE		MATTING/BANKETS	
SEWER LINE			
GAS LINE			
STORM SEWER/CULVERT			
EDGE OF WOODS			
CONTOUR LINE			

CITY OF LITTLE ROCK, ARKANSAS  
 FILLMORE STREET DRAINAGE  
 LEGEND, QUANTITIES AND DETAILS

DEPARTMENT OF PUBLIC WORKS  
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 701 W. MARKHAM  
 LITTLE ROCK, ARKANSAS 72201



MASONRY WALL CUT  
 NTS

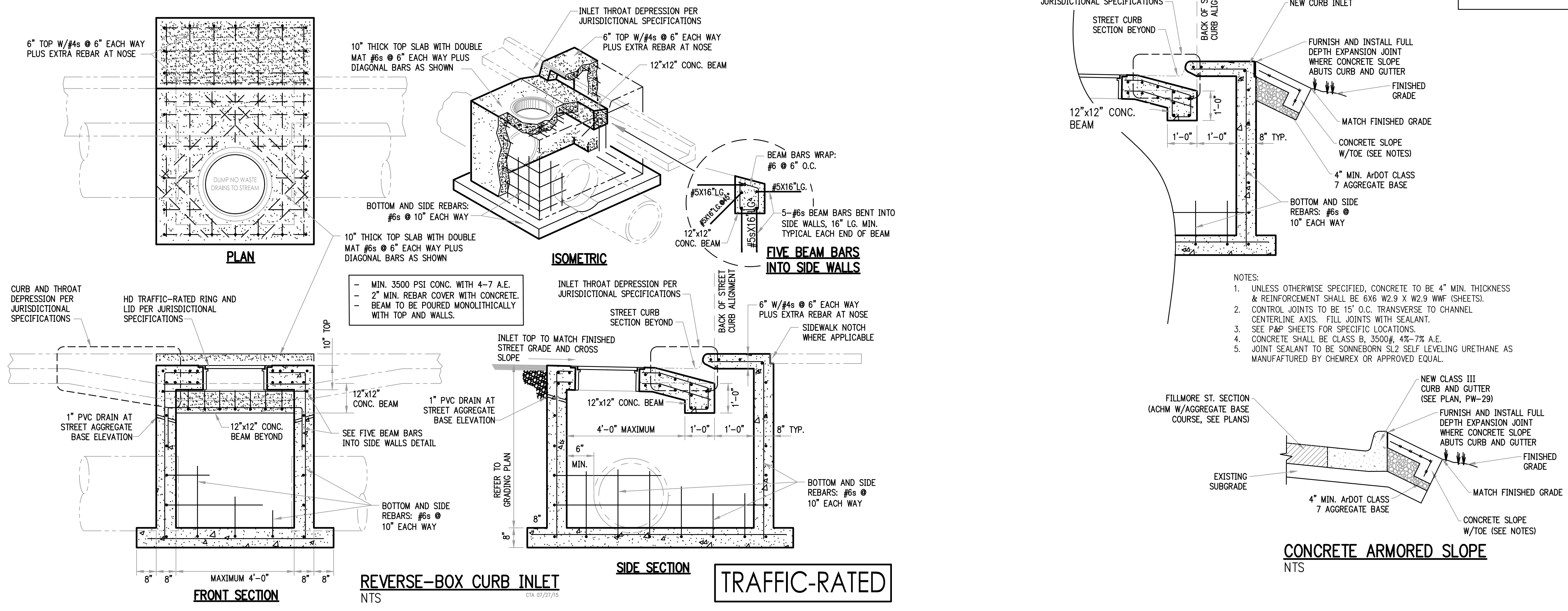
**NOTES:**

1. REFER TO CITY OF LITTLE ROCK PUBLIC WORKS DETAIL PW-54 FOR RETAINING WALL REINFORCING.
2. REFER TO CITY OF LITTLE ROCK PUBLIC WORKS DETAIL PW-60 FOR GROUTED RIP RAP SPECIFICATIONS.
3. EPOXY TO BE MANUFACTURED FOR MASONRY WALL EMBEDMENT BY HILTI OR APPROVED EQUAL.

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DATE	09-09-2019
SCALE	H: 1"=20' V: 1"=5'
PROJECT NO.	13-16-DR-120
SHEET NO.	C2

REVISIONS	DATE

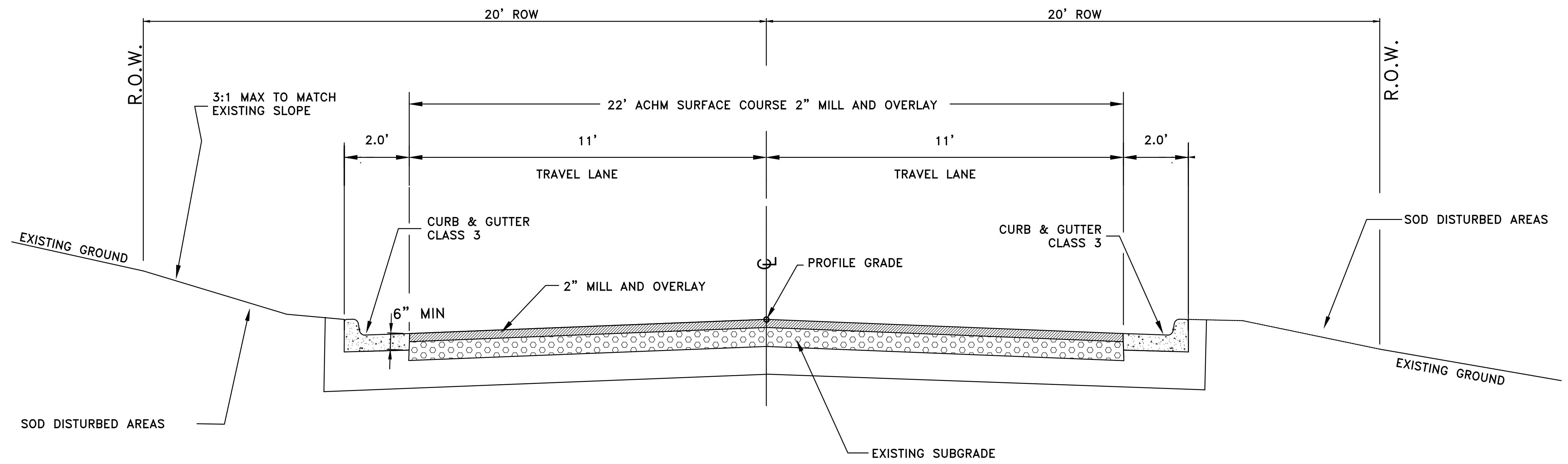
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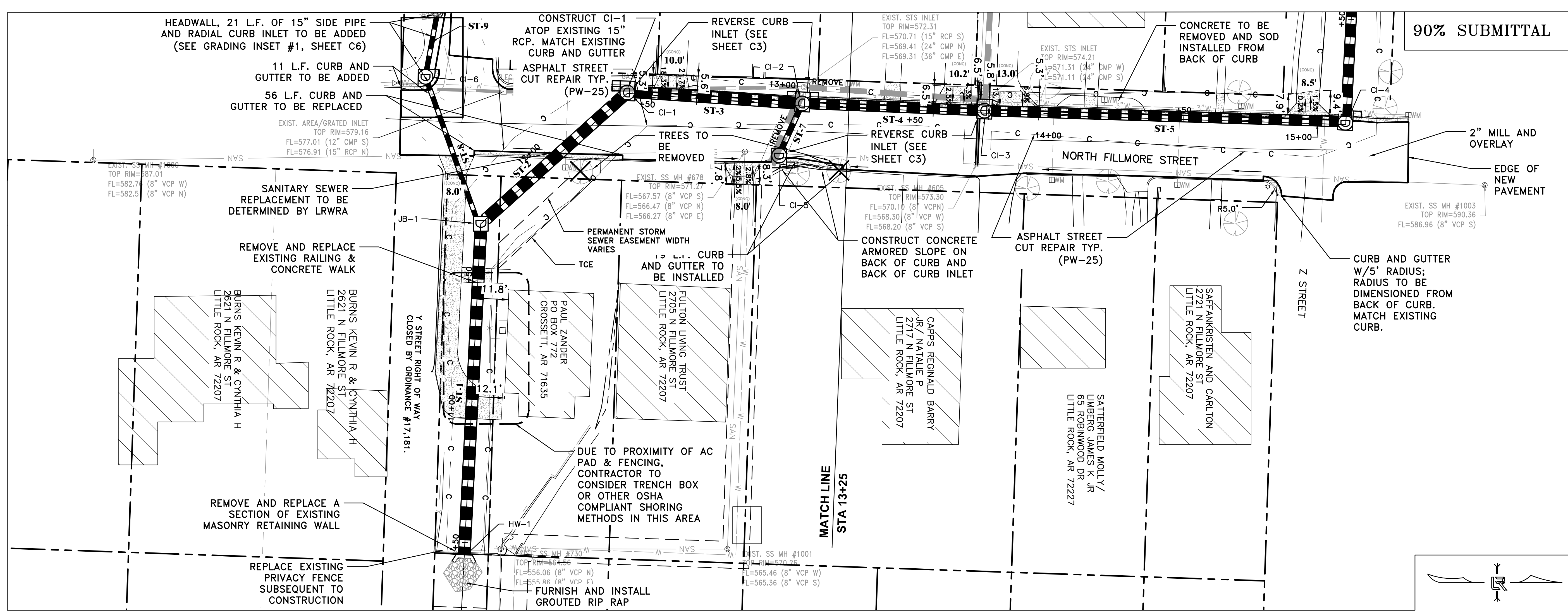
CITY OF LITTLE ROCK, ARKANSAS  
 FILLMORE STREET DRAINAGE  
 TYP SECTION AND DETAILS

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 CIVIL ENGINEERING  
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 DATE 09-09-2019  
 SCALE H: 1"=20'  
 V: 1"=5'  
 PROJECT NO. 13-16-DR-120  
 SHEET NO. C3



TYPICAL SECTION — FILLMORE STREET

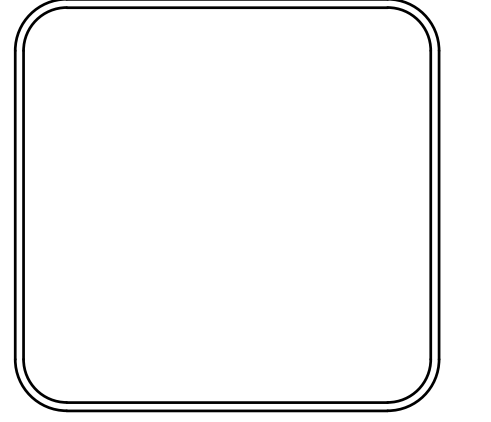


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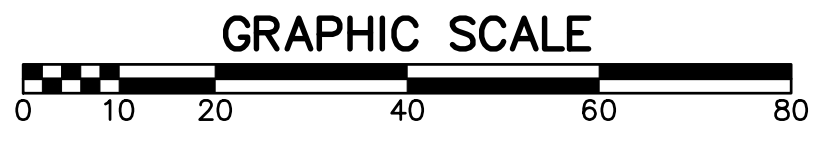
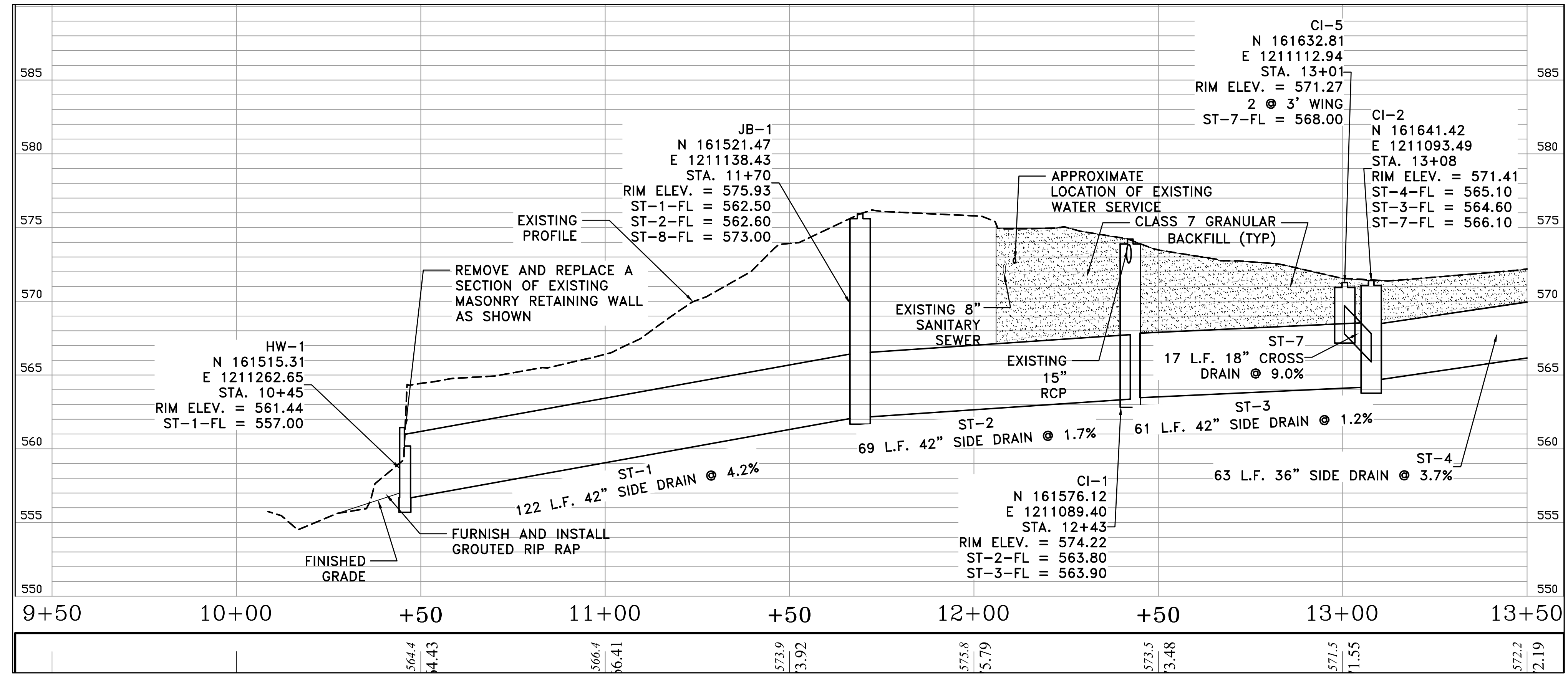
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS  
 FILLMORE STREET DRAINAGE  
 P&P SHEET 1

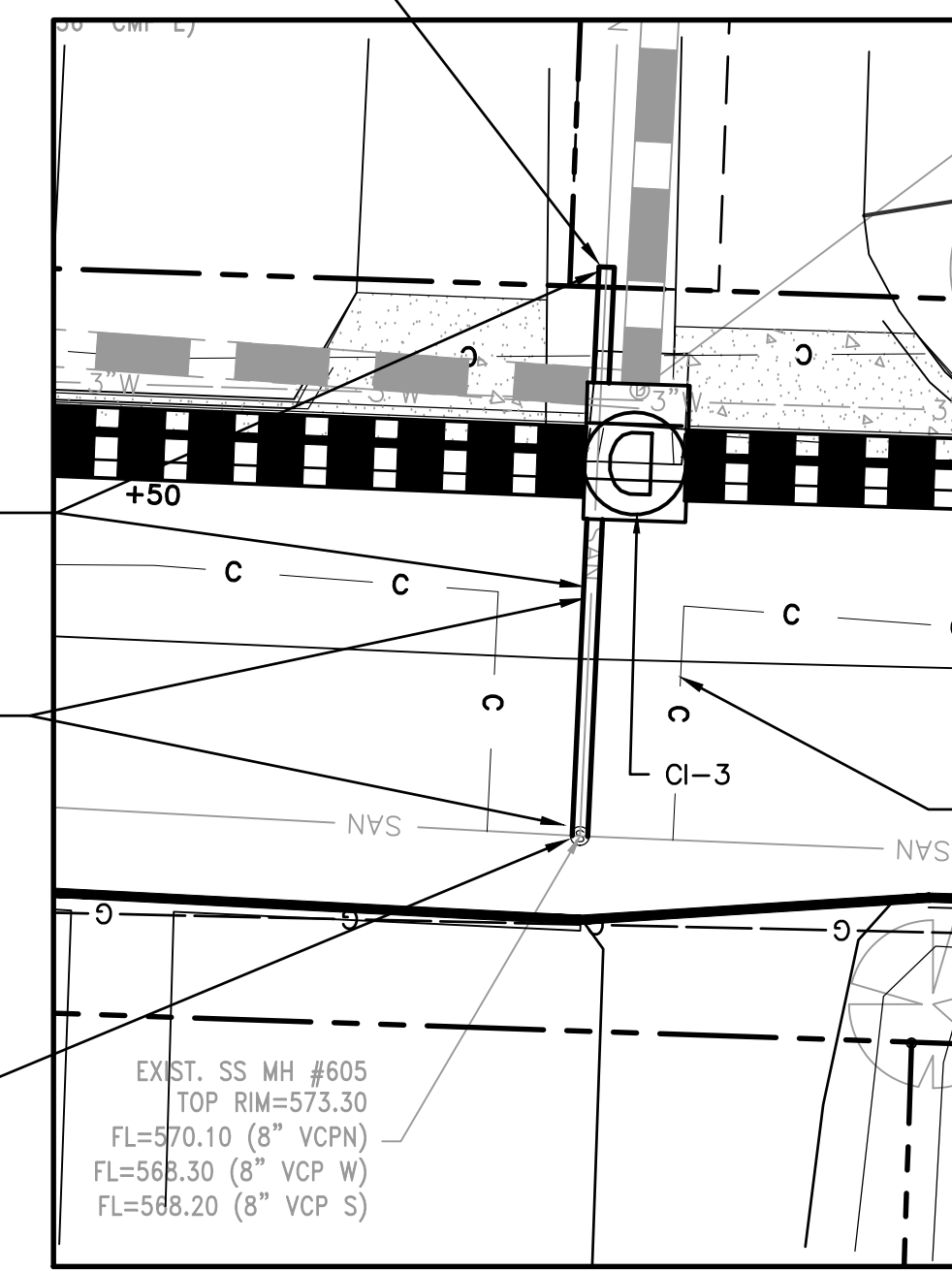
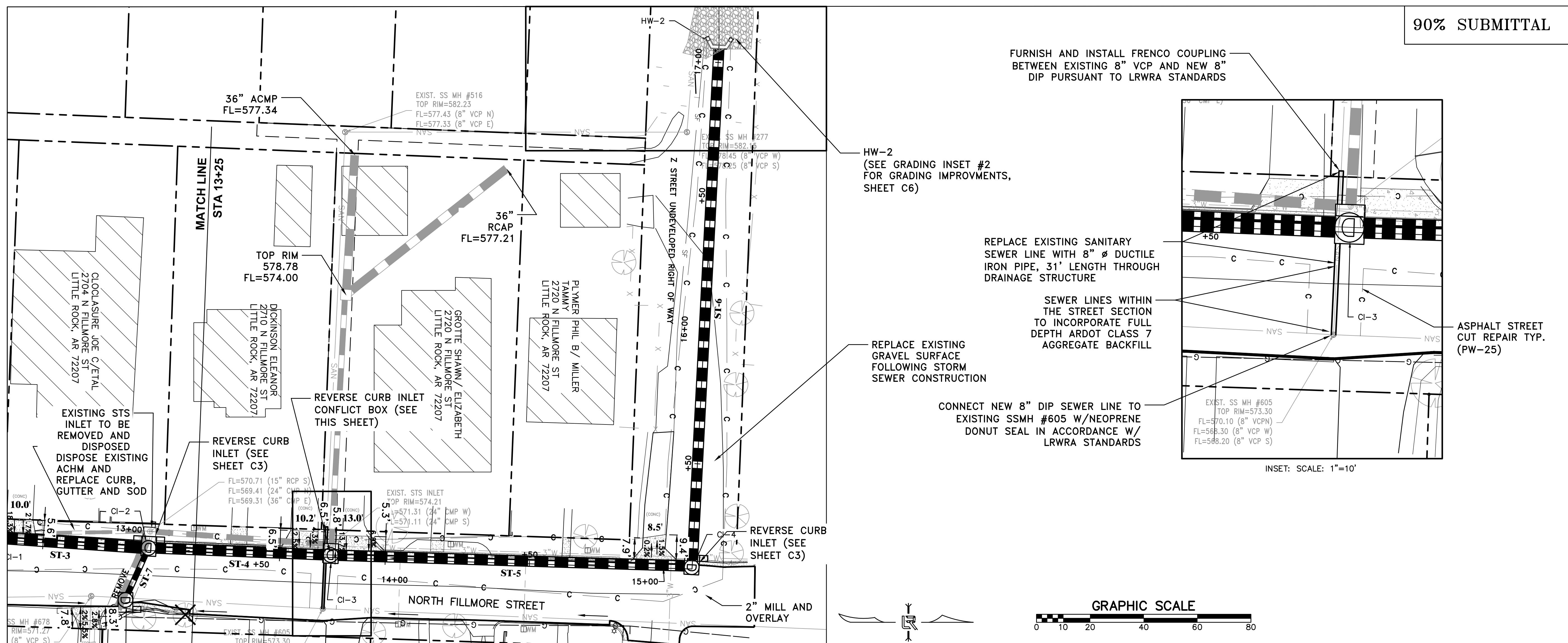
DEPARTMENT OF PUBLIC WORKS  
 CIVIL ENGINEERING  
 701 W. MARKHAM  
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 PROJECT NO.  
 13-16-DR-120  
 SHEET NO.  
 C4



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FURNISH AND INSTALL FRENCO COUPLING BETWEEN EXISTING 8" VCP AND NEW 8" DIP PURSUANT TO LRWRA STANDARDS

HW-2 (SEE GRADING INSET #2 FOR GRADING IMPROVEMENTS, SHEET C6)

REPLACE EXISTING SANITARY SEWER LINE WITH 8" Ø DUCTILE IRON PIPE, 31' LENGTH THROUGH DRAINAGE STRUCTURE

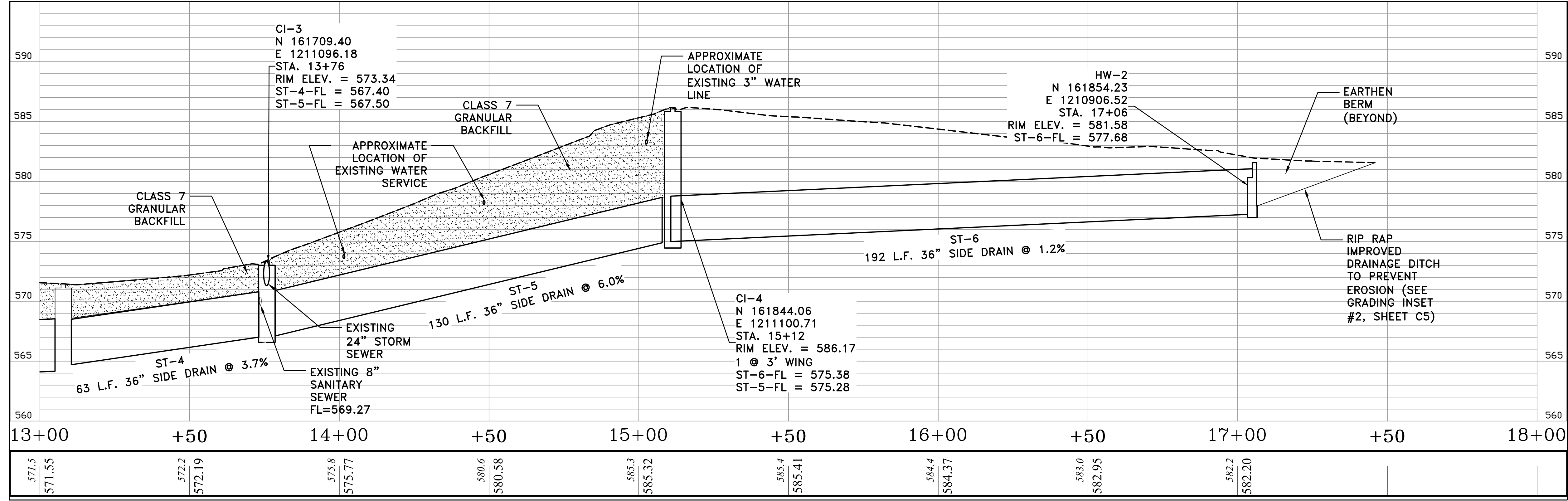
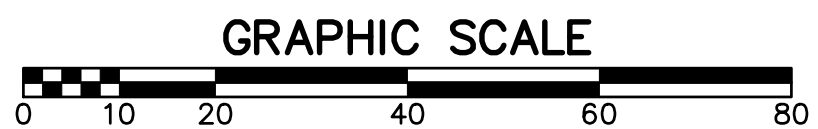
SEWER LINES WITHIN THE STREET SECTION TO INCORPORATE FULL DEPTH ARDOT CLASS 7 AGGREGATE BACKFILL

REPLACE EXISTING GRAVEL SURFACE FOLLOWING STORM SEWER CONSTRUCTION

CONNECT NEW 8" DIP SEWER LINE TO EXISTING SSMH #605 W/NEOPRENE DONUT SEAL IN ACCORDANCE W/ LRWRA STANDARDS

ASPHALT STREET CUT REPAIR TYP. (PW-25)

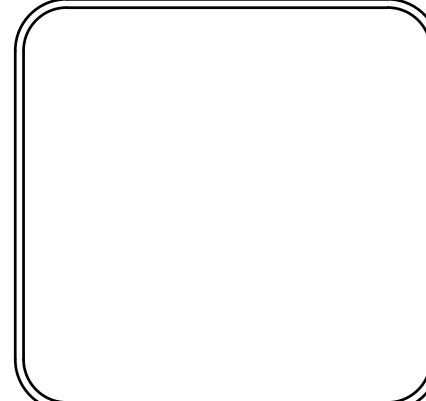
INSET: SCALE: 1"=10'



REVISIONS	DATE

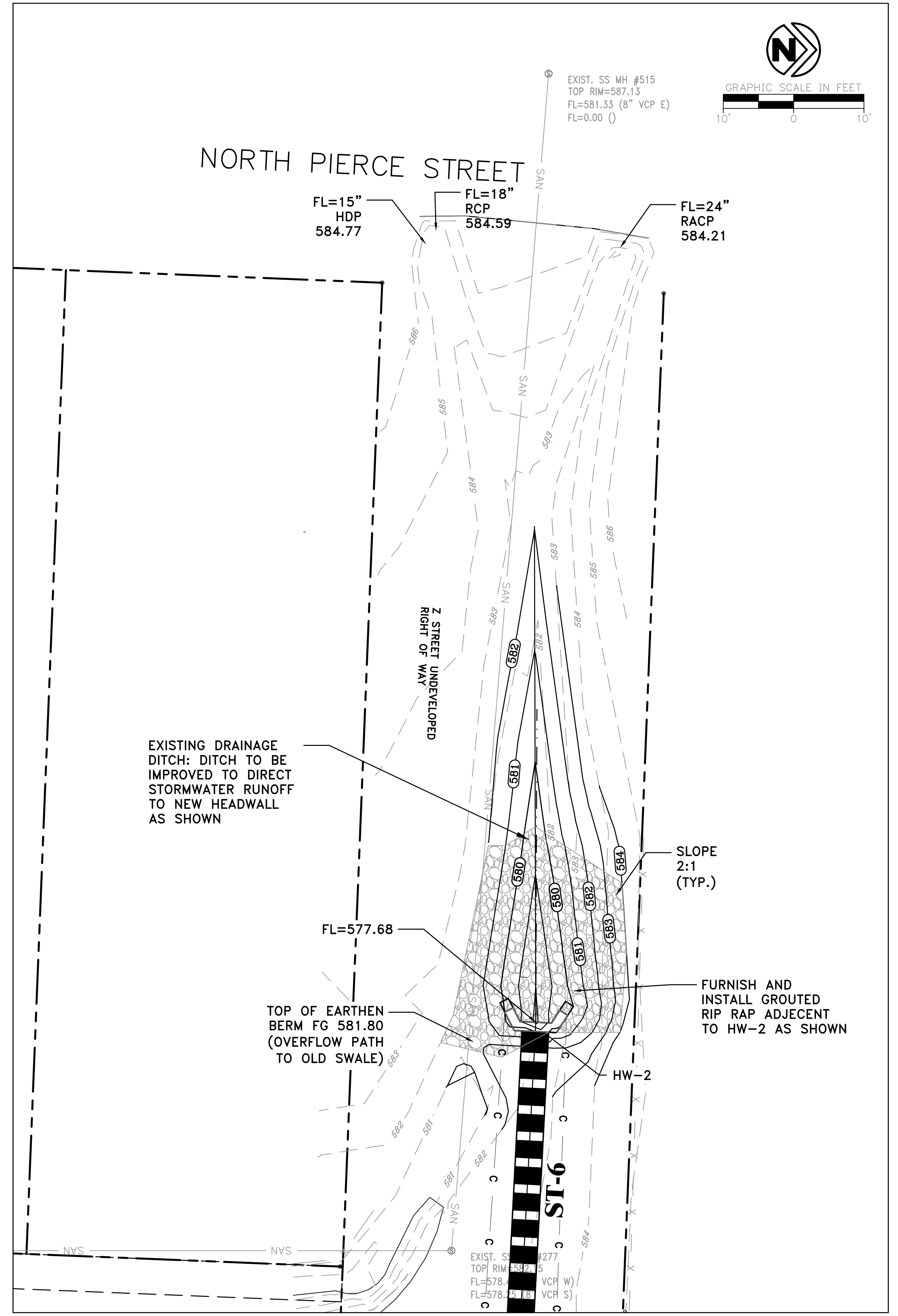
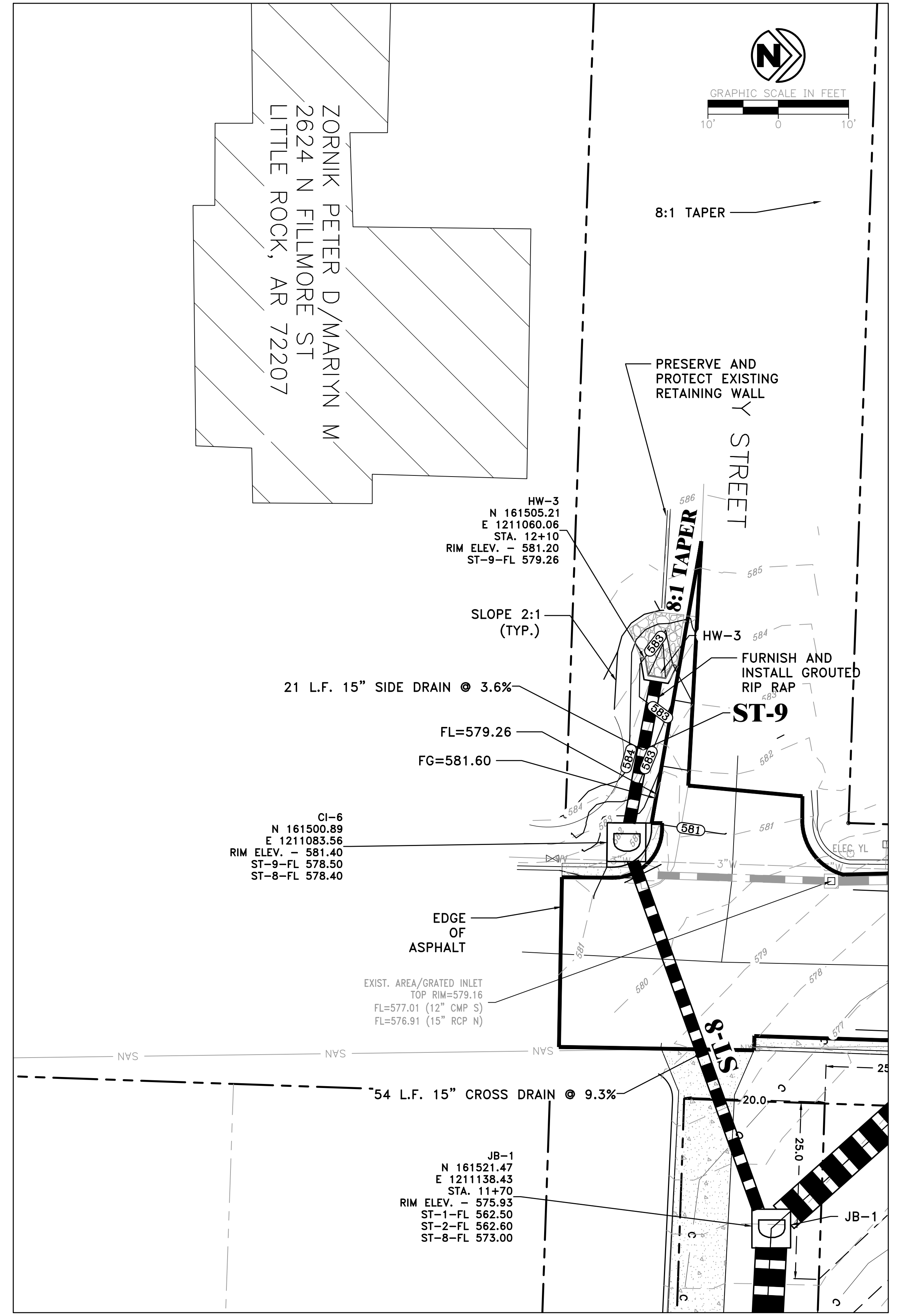
CITY OF LITTLE ROCK, ARKANSAS  
 FILLMORE STREET DRAINAGE  
 P&P SHEET 2

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 CIVIL ENGINEERING  
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 DATE  
 09-09-2019  
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 PROJECT NO.  
 13-16-DR-120  
 SHEET NO.  
 C5

REVISIONS	DATE



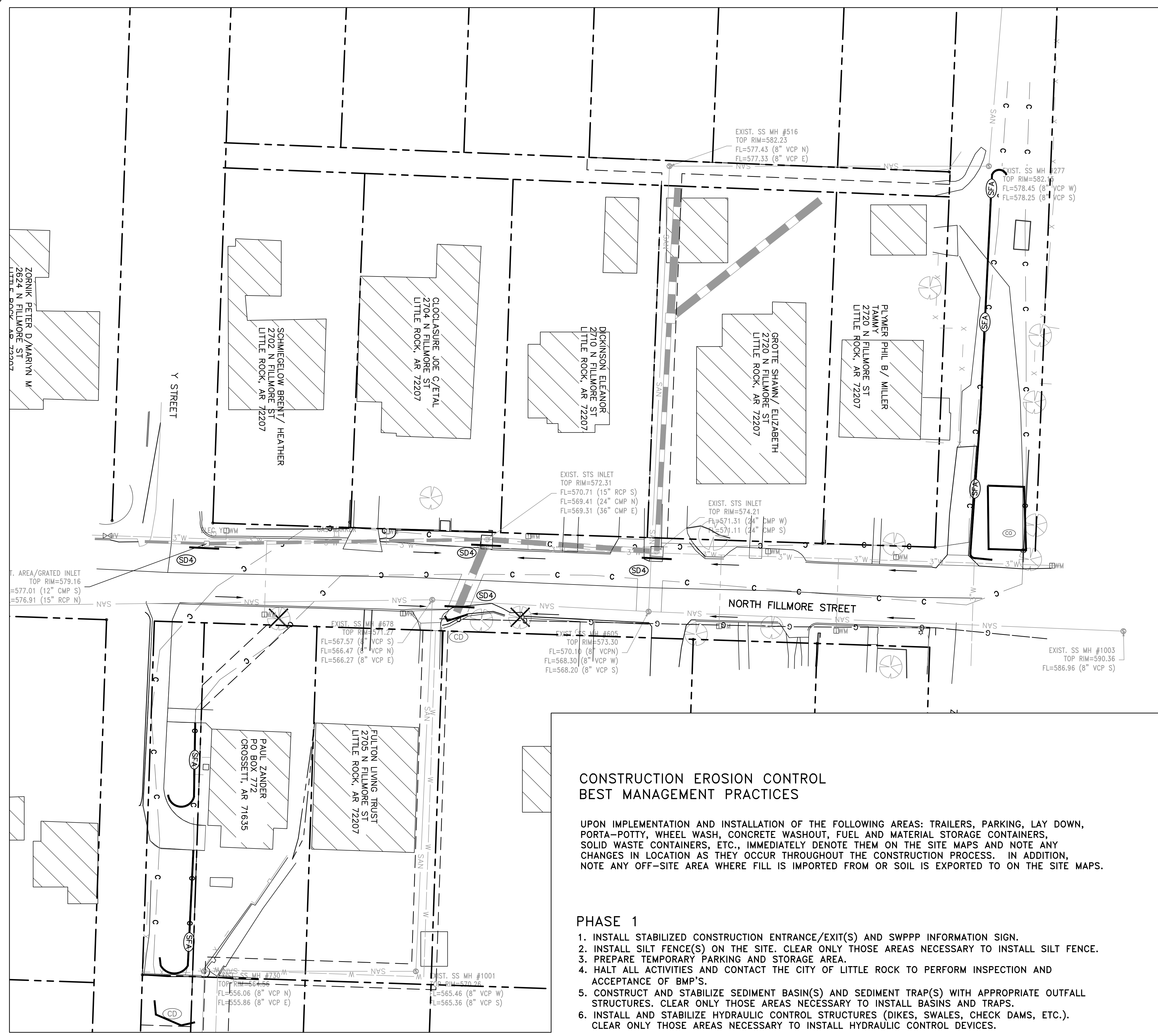
CITY OF LITTLE ROCK, ARKANSAS  
FILLMORE STREET DRAINAGE  
SUPPLEMENTAL GRADING DETAILS

DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

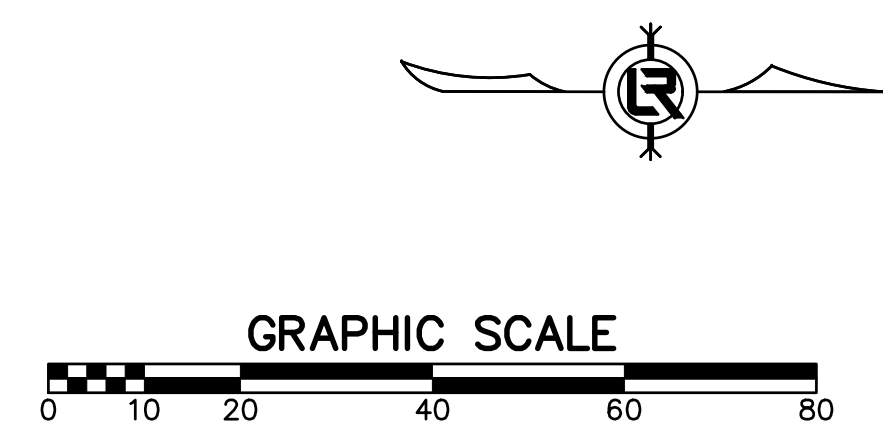
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DATE  
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SCALE  
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V: 1"=5'  
PROJECT NO.  
13-16-DR-120  
SHEET NO.  
C6

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REVISIONS	DATE



CONSTRUCTION - ENTRANCE/EXIT	(CO)
CHECK DAM	(CD)
DIVERSION BERM	(DI)
DOWNDRAIN STRUCTURE - TEMPORARY	(DN)
ROCK DAM	(RD)
SEDIMENT BARRIER - SILT FENCE	(SD1)
SEDIMENT BARRIER - GRAVEL RING	(SD2)
SEDIMENT BARRIER - BLOCK & GRAVEL	(SD3)
SEDIMENT BARRIER - BLOCK	(SD4)
TEMPORARY SEDIMENT BASIN	(SB1)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET PROTECTION	(ST)
SURFACE ROUGHENING	(SU)
DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION	(TS1)
DISTURBED AREA STABILIZATION - TEMPORARY GRASSING	(TS2)
DISTURBED AREA STABILIZATION - PERMANENT GRASSING	(TS3)
MATTING/BLANKETS	(Mb)



**CONSTRUCTION EROSION CONTROL BEST MANAGEMENT PRACTICES**

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

**PHASE 1**

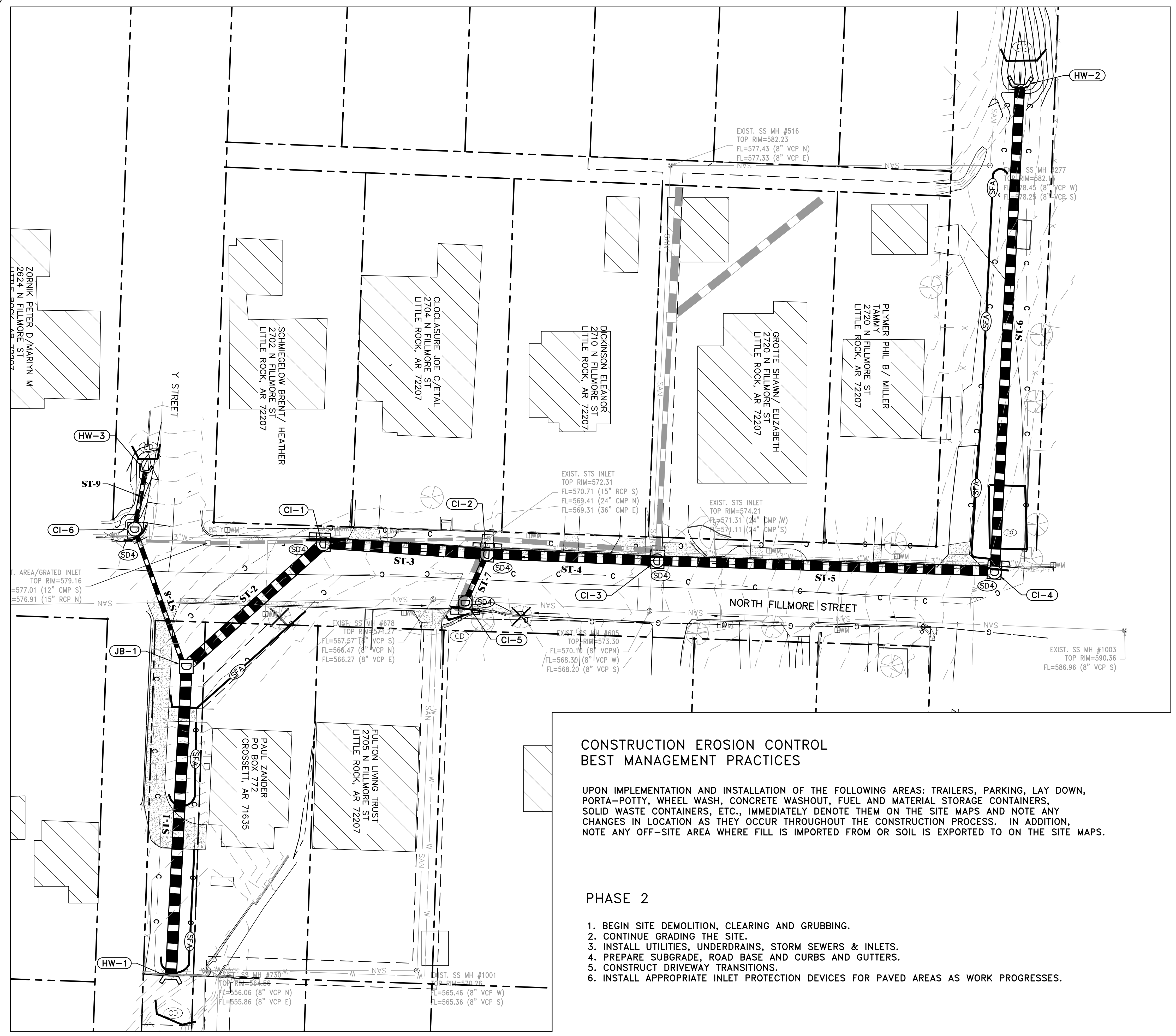
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT(S) AND SWPPP INFORMATION SIGN.
2. INSTALL SILT FENCE(S) ON THE SITE. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. HALT ALL ACTIVITIES AND CONTACT THE CITY OF LITTLE ROCK TO PERFORM INSPECTION AND ACCEPTANCE OF BMP'S.
5. CONSTRUCT AND STABILIZE SEDIMENT BASIN(S) AND SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BASINS AND TRAPS.
6. INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.). CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL HYDRAULIC CONTROL DEVICES.

CITY OF LITTLE ROCK, ARKANSAS  
 FILLMORE STREET DRAINAGE  
 EROSION CONTROL PH I

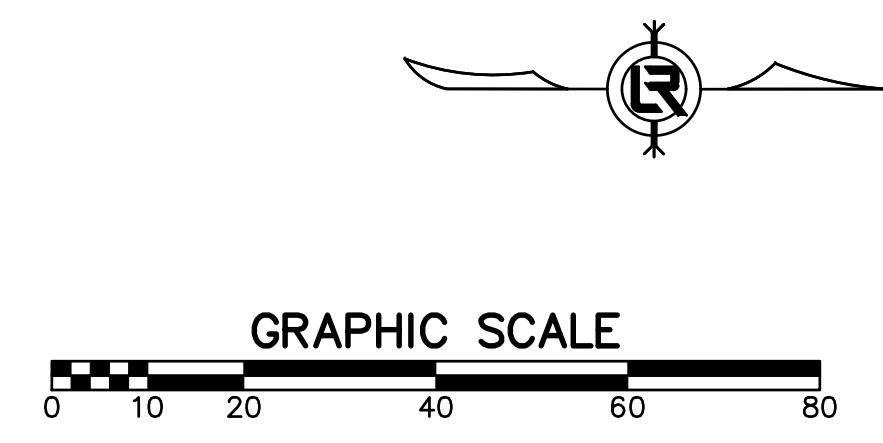
DEPARTMENT OF PUBLIC WORKS  
 CIVIL ENGINEERING  
 701 W. MARKHAM  
 LITTLE ROCK, ARKANSAS 72201

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 CHECKED  
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 DATE  
 09-09-2019  
 SCALE  
 H: 1"=20'  
 V: 1"=5'  
 PROJECT NO.  
 13-16-DR-120  
 SHEET NO.  
 C7

REVISIONS	DATE



CONSTRUCTION - ENTRANCE/EXIT	(CO)
CHECK DAM	(CD)
DIVERSION BERM	(DI)
DOWNDRAIN STRUCTURE - TEMPORARY	(DN)
ROCK DAM	(RD)
SEDIMENT BARRIER - SILT FENCE	(SD1)
SEDIMENT BARRIER - GRAVEL RING	(SD2)
SEDIMENT BARRIER - BLOCK & GRAVEL	(SD3)
SEDIMENT BARRIER - BLOCK	(SD4)
TEMPORARY SEDIMENT BASIN	(SB1)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET PROTECTION	(ST)
SURFACE ROUGHENING	(SU)
DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION	(TS1)
DISTURBED AREA STABILIZATION - TEMPORARY GRASSING	(TS2)
DISTURBED AREA STABILIZATION - PERMANENT GRASSING	(TS3)
MATTING/BLANKETS	(MB)



**CONSTRUCTION EROSION CONTROL  
BEST MANAGEMENT PRACTICES**

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

**PHASE 2**

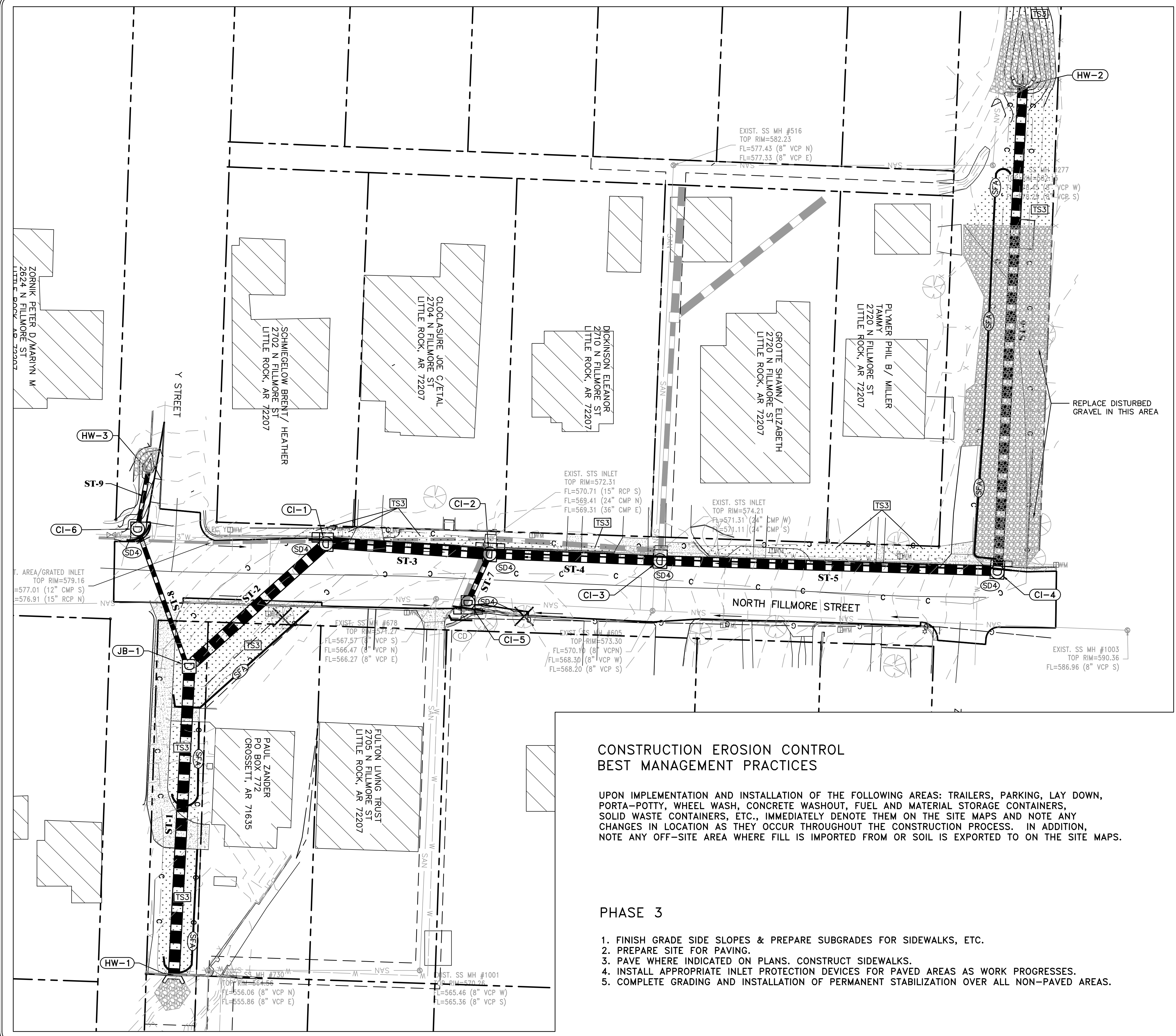
- BEGIN SITE DEMOLITION, CLEARING AND GRUBBING.
- CONTINUE GRADING THE SITE.
- INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS & INLETS.
- PREPARE SUBGRADE, ROAD BASE AND CURBS AND GUTTERS.
- CONSTRUCT DRIVEWAY TRANSITIONS.
- INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.

CITY OF LITTLE ROCK, ARKANSAS  
FILLMORE STREET DRAINAGE  
EROSION CONTROL PH II

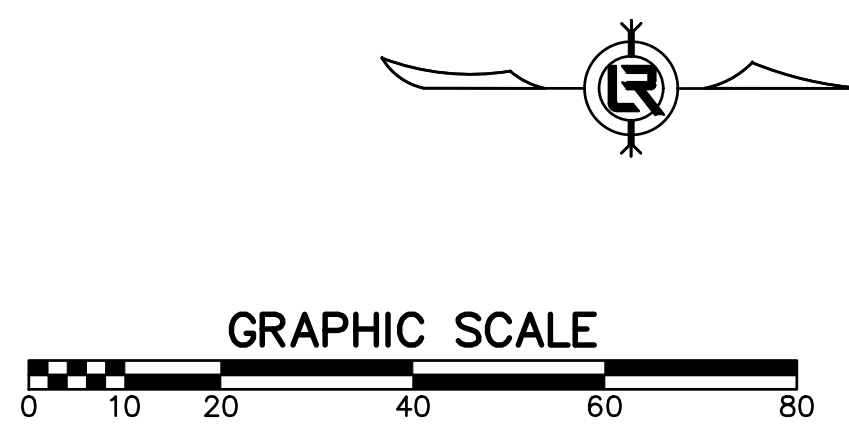
DEPARTMENT OF PUBLIC WORKS  
CIVIL ENGINEERING  
701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

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DESIGNED	MB
CHECKED	BAP
DATE	09-09-2019
SCALE	H: 1"=20' V: 1"=5'
PROJECT NO.	13-16-DR-120
SHEET NO.	C8





CONSTRUCTION - ENTRANCE/EXIT	(CO)
CHECK DAM	(CD)
DIVERSION BERM	(DI)
DOWNDRAIN STRUCTURE - TEMPORARY	(DN)
ROCK DAM	(RD)
SEDIMENT BARRIER - SILT FENCE	(SD1)
SEDIMENT BARRIER - GRAVEL RING	(SD2)
SEDIMENT BARRIER - BLOCK & GRAVEL	(SD3)
SEDIMENT BARRIER - BLOCK	(SD4)
TEMPORARY SEDIMENT BASIN	(SB1)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET PROTECTION	(ST)
SURFACE ROUGHENING	(SU)
DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION	(TS1)
DISTURBED AREA STABILIZATION - TEMPORARY GRASSING	(TS2)
DISTURBED AREA STABILIZATION - PERMANENT GRASSING	(TS3)
MATTING/BLANKETS	(Mb)



**CONSTRUCTION EROSION CONTROL  
BEST MANAGEMENT PRACTICES**

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

**PHASE 3**

1. FINISH GRADE SIDE SLOPES & PREPARE SUBGRADES FOR SIDEWALKS, ETC.
2. PREPARE SITE FOR PAVING.
3. PAVE WHERE INDICATED ON PLANS. CONSTRUCT SIDEWALKS.
4. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
5. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL NON-PAVED AREAS.

CITY OF LITTLE ROCK, ARKANSAS  
FILLMORE STREET DRAINAGE  
EROSION CONTROL PH III

DEPARTMENT OF PUBLIC WORKS  
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701 W. MARKHAM  
LITTLE ROCK, ARKANSAS 72201

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DESIGNED  
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DATE  
09-09-2019  
SCALE  
H: 1"=20'  
V: 1"=5'  
PROJECT NO.  
13-16-DR-120  
SHEET NO.  
C9