

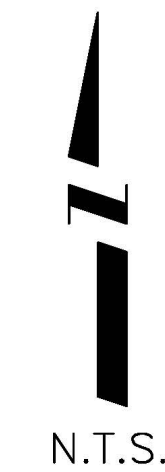
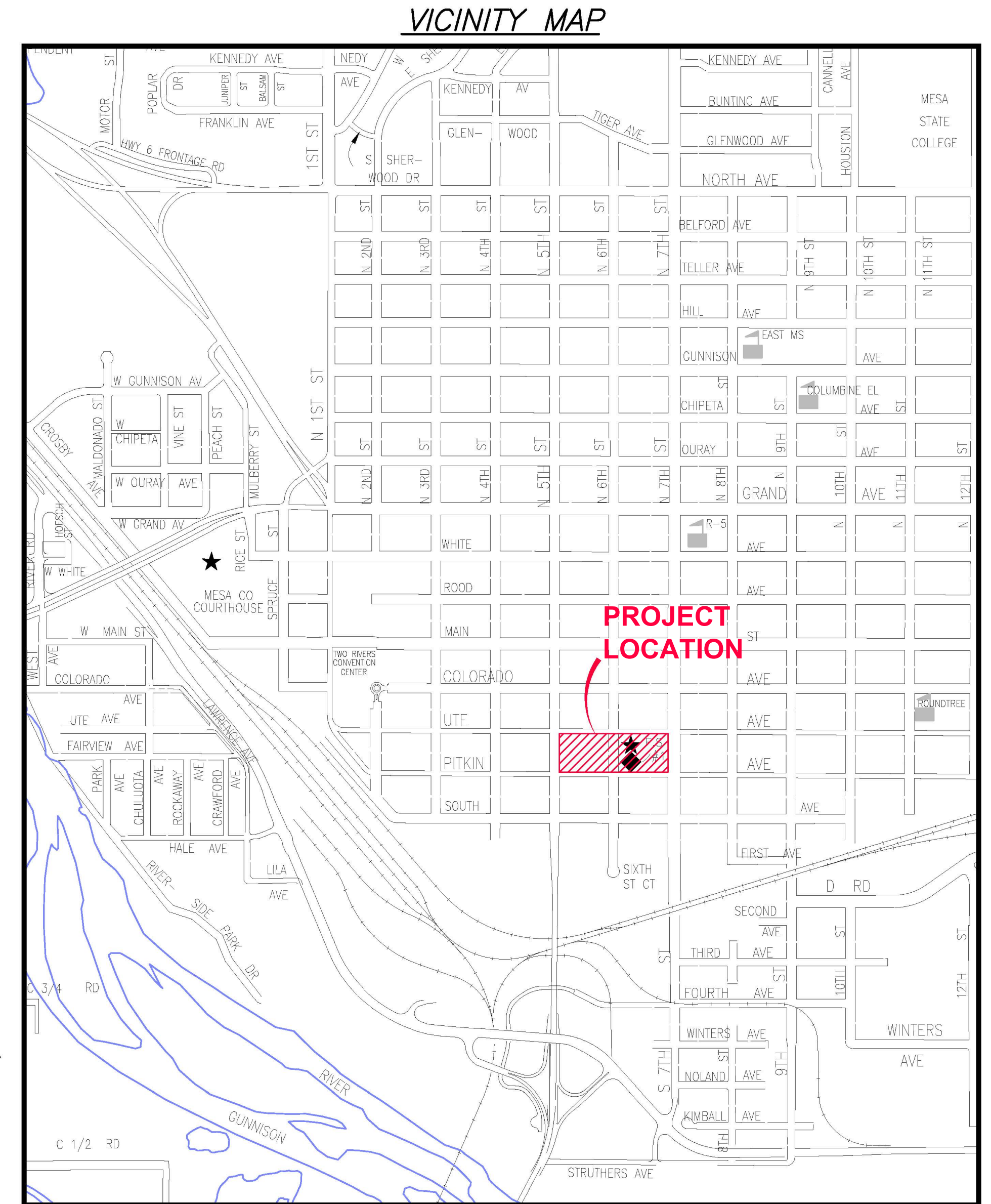
CITY OF GRAND JUNCTION

911-POLICE-FIRE UTILITY IMPROVEMENT PROJECT

JANUARY, 2011

- 1 — Cover Sheet
- 2 — Standard Abbreviations, Legend, and Symbols
- 3 — Summary of Approximate Quantities
- 4 — Project Control Map
- 5 — Storm Sewer Plan & Profile and Water Service Locations
- 6-7 — Sanitary Sewer Plan & Profile

AS-BUILT 04/26/2011



UTILITIES AND AGENCIES								
AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK	FAX
GRAND JUNCTION, CITY OF	LEE COOPER	PROJECT ENGINEER	PROJECT ENGINEER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 256-4155	(970) 256-4022
GRAND JUNCTION, CITY OF	BRET GUILLORY	UTILITY ENGINEER	SANITARY SEWER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244-1590	(970) 256-4022
BRESNAN	JEFF VALDEZ	MANAGER	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245-8750	(970) 245-6803
QWEST COMMUNICATIONS	CHRIS JOHNSON	ENGINEER	TELEPHONE	2524 BLICHMANN AVE	2524 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244-4311	(970) 240-4349
XCEL	DAN STEINKIRCHNER	UNIT MANAGER	GAS, ELECTRIC	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244-2656	(970) 244-2661



Public Works & Planning
Engineering Division



NOTE: NOTIFY AFFECTED UTILITY VENDOR 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY LINES. THE COVER SHEET WILL HAVE A LISTING OF UTILITY VENDORS AND TELEPHONE NUMBERS.

REVISION	DESCRIPTION	DATE	REVISED SHEETS
REVISION Δ	APPENDUM NO. 3	1/26/11	1, (NEW SHEETS 3, 5, 6, & 7)
REVISION Δ	DRAWING REVISIONS EFFECTIVE IMMED.	2/17/11	1, 5, & 6
REVISION Δ			
REVISION Δ			

DRAWING STATUS:	
○	PROGRESS
○	FINAL CONSTRUCTION DRAWINGS
●	ASBUILT
DESIGNED BY:	
A. LEE COOPER, PROJECT ENGINEER	DATE
REVIEWED BY:	
BRET GUILLORY, UTILITY ENGINEER	DATE
AUTHORIZED FOR CONSTRUCTION	
TRENTON C. PRALL, CITY ENGINEER	DATE
ACCEPTED AS CONSTRUCTED	
A. LEE COOPER, PROJECT ENGINEER	DATE

ABBREVIATIONS

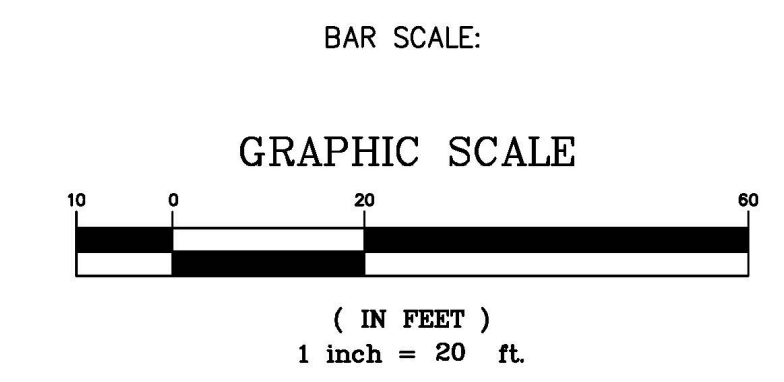
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ASBESTOS CEMENT
AP	ANGLE POINT
ASB	ANCHORED STRAW BALES
ASP	ALUMINIZED STEEL PIPE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BUTTERFLY VALVE
BOW	BACK OF WALK
BCR	BEGIN CURB RETURN
BOT	BOTTOM
BSWMP	BETTER STORM WATER MANAGEMENT PRACTICES
CH	CHORD
CAP	CORRUGATED ALUMINUM PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CI	CAST IRON
C,G,& SW	CURB, GUTTER & SIDEWALK
CL	CENTER LINE
CL	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMB	COMBINATION (AS IN STORM SEWER AND SANITARY SEWER)
CONC	CONCRETE
CSM	CITY SURVEY MONUMENT
CSP	CORRUGATED STEEL PIPE
CU	COPPER
DI	DUCTILE IRON
DWY	DRIVEWAY
E	ELECTRIC
ECR	END CURB RETURN
EG	EDGE OF GUTTER
EL	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
FB	FULL BODY
FC	FACE OF CURB
FG	FINISHED GRADE
E	FLOW LINE
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FS	FAR SIDE
FTG	FOOTING
G	GAS
GB	GRADE BREAK
GM	GAS METER
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRR	IRRIGATION
L	LENGTH OF ARC
LC	LONG CHORD
LF	LINEAR FEET
LL	LONG ARC
LS	SHORT ARC
LT	LEFT
MB	MAILBOX
MCSM	MESA COUNTY SURVEY MONUMENT
MH	MANHOLE
MJ	MECHANICAL JOINT
MW	MILL WRAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOP	NO ONE PERSON
NRCP	NON-REINFORCED CONCRETE PIPE
NS	NEAR SIDE
NTS	NOT TO SCALE
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
POT	POINT ON CURVE
PR	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RG	RESTRAINED GLANDS
RL	LONG RADIUS
ROW	RIGHT OF WAY
RP	RADIUS POINT
RR	RAIL ROAD
RS	SHORT RADIUS
RT	RIGHT
S	SLOPE
SAN	SANITARY
SC	SHORT CHORD
SCD	STANDARD CONTRACT DOCUMENTS
SCH	SCHEDULE
SF	SILT FENCE
SL	SECTION LINE
SSRB	STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
SSUU	STANDARD SPECIFICATIONS FOR CONSTRUCTION OF UNDERGROUND UTILITIES
STA	STATION
STL	STEEL
STM	STORM
T	TELEPHONE
TAN	LENGTH OF TANGENT
TC	TOP OF CURB
TH	TEST HOLE
TV	TELEVISION
(TYP)	TYPICAL
UU	UNDERGROUND UTILITIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPC	VERTICAL POINT OF COMPOUND CURVATURE
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WATER
Δ	DELTA ANGLE

LEGEND

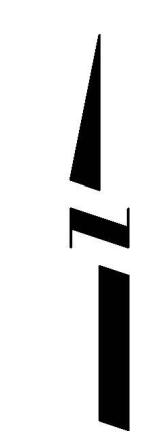
BSWMP DRAINAGE BASIN BOUNDARY	
BSWMP ANCHORED STRAW BALES	
BSWMP SILT FENCE	
BUILDING	
CONCRETE CURB AND GUTTER	
CONCRETE CURB, GUTTER, & SIDEWALK	
CONCRETE DITCH	
CONCRETE SIDEWALK	
CULVERT	
EARTH DITCH	
EDGE OF GRAVEL	
EDGE OF PAVEMENT	
FENCE (BARBED WIRE)	
FENCE (CHAIN LINK)	
FENCE (IRON)	
FENCE (PLASTIC)	
FENCE (WOOD)	
FENCE (WOVEN WIRE)	
GUARD RAIL	
HATCHING: INDICATES ASPHALT REMOVAL	
HATCHING: INDICATES CONCRETE REMOVAL	
HATCHING: INDICATES STAGING AREA	
LINE (CENTER OF IMPROVEMENTS)	
LINE (CITY LIMITS)	
LINE (CONTROL)	
LINE (EASEMENT)	
LINE (MONUMENT/SECTION)	
LINE (PROPERTY)	
LINE (RIGHT OF WAY)	
MATCH LINE MATCH LINE SEE SHEET NO ?	
PIPE (IRRIGATION)	
PIPE (SIPHON)	
PROPOSED CONCRETE CURB AND GUTTER	
PROPOSED CONCRETE CURB, GUTTER, & SIDEWALK	
PROPOSED CONCRETE SIDEWALK	
PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN)	
RAIL ROAD	
RETAINING WALL	
STRIPING (CONTINUOUS WHITE)	
STRIPING (DASHED WHITE)	
STRIPING (CONTINUOUS YELLOW)	
STRIPING (DASHED YELLOW)	
TOP OF SLOPE	
CONTOUR LINES (SHOWN BETWEEN TOP & TOE)	
TOE OF SLOPE	
TRAFFIC DETECTOR LOOP	
UTILITY LINE (ABANDON) (THIS CASE A WATER LINE)	
UTILITY LINE (CABLE TV)	
UTILITY LINE (ELECTRIC)	
UTILITY LINE (FIBER OPTIC)	
UTILITY LINE (GAS)	
UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER)	
UTILITY LINE (OVERHEAD POWER)	
UTILITY LINE (OVERHEAD TELEPHONE)	
UTILITY LINE (SANITARY SEWER)	
UTILITY LINE (SANITARY SEWER FORCE MAIN)	
UTILITY LINE (SANITARY SEWER SERVICE)	
UTILITY LINE (STORM SEWER)	
UTILITY LINE (STORM SEWER, PERFORATED)	
UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION)	
UTILITY LINE (TELEPHONE)	
UTILITY LINE (WATER)	

SYMBOLS

BENCH MARK	
CATCH BASIN	
CLEAN OUT	
CURB STOP	
FIRE HYDRANT	
GUY WIRE ANCHOR	
HEADGATE	
IRRIGATION PUMP	
MAILBOX	
MANHOLE (ELECTRIC)	
MANHOLE (GAS)	
MANHOLE (SANITARY/STORM)	
MANHOLE (TELEPHONE)	
MANHOLE (TV)	
MANHOLE (WATER)	
METER (GAS)	
METER (WATER)	
PEDESTAL (TELEPHONE)	
PEDESTAL (TV)	
PROPERTY PIN	
PULL BOX	
REDUCER FITTING	
SIGN OR POST (SIGN TYPE NOTED)	
SPRINKLER HEAD	
STREET LIGHT	
SURVEY MONUMENT (CITY)	
SURVEY MONUMENT (TYPE NOTED)	
TEST HOLE	
TRAFFIC PAINT MARKING	
TRAFFIC SIGNAL POLE AND MAST ARM	
UTILITY POLE	
VALVE (GAS)	
VALVE (IRRIGATION)	
VALVE (WATER)	
VEGETATION (HEDGE OR BUSH)	
VEGETATION (TREE STUMP)	
VEGETATION (TREE) (CALIPER SIZE NOTED)	
WATER HYDRANT	
WEIR	
YARD LIGHT	

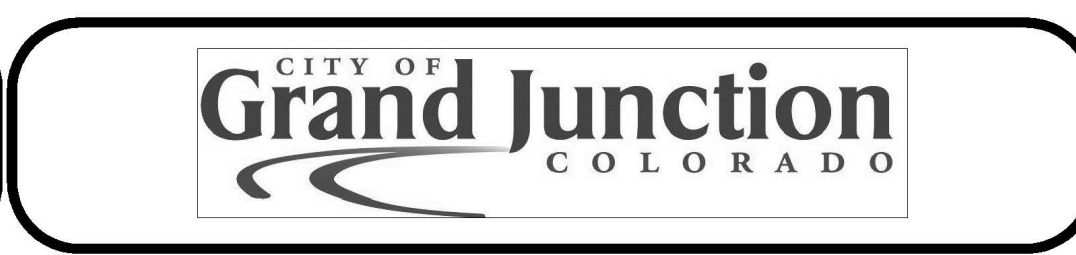


NORTH ARROW:



REVISION Δ	DESCRIPTION	DATE	DRAWN BY JCS	DATE 4-02
REVISION Δ			DESIGNED BY	DATE
REVISION Δ			CHECKED BY	DATE
REVISION Δ			APPROVED BY	DATE

SCALE	
PLAN	PROFILE
HORIZ. 1"=20'	HORIZ.
	VERT.



PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

CITY OF GRAND JUNCTION STANDARD ABBREVIATIONS, LEGEND, AND SYMBOLS SHEET

**Bid Schedule: 911-Police-Fire Utility Improvement Project
Addendum #3**

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	Water Main (4") (C-900 PVC, DR 18)	20	Lin. Ft.	;	;
2	108.2	Water Main (6") (C-900 PVC, DR 18)	60	Lin. Ft.	;	;
3	108.2	Water Main (8") (C-900 PVC, DR 18)	40	Lin. Ft.	;	;
4	108.3	8", 45-Degree Elbow (Restrained)	4	Each	;	;
5	108.3	8", Restrained Coupling (HDPE to PVC Adaptor) (Includes stainless steel stiffeners)	2	Each	;	;
6	108.4	60" I.D. Meter Vault (Concrete) (Furnish & Install) (Includes pre-cast vault, pre-cast concrete lid, 30" dia. access ring and cover)	1	Each	;	;
7	108.2	18" Storm Drain Pipe (Class II RCP)	45	Lin. Ft.	;	;
8	108.2	24" Storm Drain Pipe (Class II RCP)	330	Lin. Ft.	;	;
9	108.2	4" Gravity Sewer Pipe (SDR 35 PVC)	20	Lin. Ft.	;	;
10	108.2	8" Gravity Sewer Pipe (SDR 35 PVC)	650	Lin. Ft.	;	;
11	108.2	12" Gravity Sewer Pipe (SDR 35 PVC)	20	Lin. Ft.	;	;
12	108.3	8" x 4" Sewer Service Tap	1	Each	;	;
13	108.3	Fire Hydrant	1	Each	;	;
14	108.5	Sanitary Sewer Basic Manhole (48" I.D.) (Includes Epoxy Coat Invert, Concrete Collar)	4	Each	;	;
15	108.5	Storm Sewer Basic Manhole (72" I.D.) (Includes materials necessary for connecting to existing 8" dia. lateral storm pipes)	2	Each	;	;
16	108.5	Manhole Barrel Section (D>5') (72" I.D.)	5	Lin. Ft.	;	;
17	108.5	Manhole Barrel Section (D>5') (48" I.D.)	20	Lin. Ft.	;	;
18	108.6	Single Storm Drain Inlet (Vertical Curb)	2	Each	;	;
19	108.2	Imported Trench Backfill (Class 3 aggregate base course) (including haul and disposal of unsuitable excavated material)	350	Ton	;	;
20	108.7	Granular Stabilization Material (Type B)	275	Ton	;	;

BF-2 (1 of 3)

**Bid Schedule: 911-Police-Fire Utility Improvement Project
Addendum #3**

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
21	202	Removal of Pipe (8" VCP) (Storm Pipe)	355	Lin. Ft.	;	;
22	202	Removal of Pipe (12" VCP) (Sewer Pipe)	30	Lin. Ft.	;	;
23	202	Removal of Asphalt Mat	530	Sq. Yd.	;	;
24	202	Removal of Concrete	25	Sq. Yd.	;	;
25	202	Removal of Sanitary Sewer Manhole and Storm Drain Manhole (Contractor shall salvage ring and cover and deliver to City Shops) (Includes removal and disposal of manhole barrel sections and backfill with pit-run and compaction where necessary)	3	Each	;	;
26	203	Disposal of Radioactive Material (Includes loading, hauling and unloading of material at City Shops location)	100	Cu. Yd.	;	;
27	206	Structure Backfill (Flow-Fill)	160	Cu. Yd.	;	;
28	208	Storm Drain Inlet Protection (Silt-Sack) (Includes Maintenance & Removal of Inlet Protection)	10	Each	;	;
29	209	Dust Abatement	25	Day	;	;
30	304	Aggregate Base Course (Class 6) (8" Thick)	350	Sq. Yd.	;	;
31	401	Hot Bituminous Pavement (Patching) (3" Thick) (Grading SX, 75 GYR., PG 64-22) (One 3" Lift) (6th Street)	345	Sq. Yd.	;	;
32	401	Hot Bituminous Pavement (Patching) (4" Thick) (Grading SX, 75 GYR., PG 64-22) (Two 2" Lifts) (2-ft T-Top) (Only within CDOT Right-of-Way)	240	Sq. Yd.	;	;
33	401	Cold Mix Asphalt (2" Thick Minimum) (Temporary Patching, as needed)	200	Sq. Yd.	;	;
34	407	Emulsified Asphalt (Tack Coat)	60	Gallon	;	;
35	601	Fly Ash Slurry	450	Lin. Ft.	;	;
36	608	Concrete Curb and Gutter (Match In Kind)	60	Lin. Ft.	;	;

BF-2 (2 of 3)

**Bid Schedule: 911-Police-Fire Utility Improvement Project
Addendum #3**

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
37	620	Portable Sanitary Facility	1	Lump Sum	;	;
38	625	Construction Surveying (Includes As-Built Drawings)	1	Lump Sum	;	;
39	626	Mobilization	1	Lump Sum	;	;
40	630	Traffic Control (Complete in Place)	1	Lump Sum	;	;
41	630	Flagging	40	Hour	;	;
42	Pump	Bypass Sewage Pumping	1	Lump Sum	;	;
MCR		Minor Contract Revisions	---	---	---	\$ 25,000.00

Bid Amount: \$ _____

Bid Amount: _____ dollars

BF-2 (3 of 3)

AS-BUILT 04/26/2011

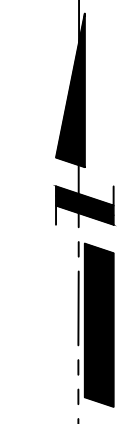
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REVISION Δ			DESIGNED BY		DATE	
REVISION Δ			CHECKED BY		DATE	
REVISION Δ			APPROVED BY		DATE	

SCALE
N.T.S.



**PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION**

**CITY OF GRAND JUNCTION PUBLIC SAFETY FACILITY
SUMMARY OF APPROXIMATE QUANTITIES**



Control Point-1
N: 35101.92
E: 91258.07
CSM #5 RB 5TH/UTE

Control Point-2
N: 35101.66
E: 91739.78
CSM #5RB BENT 6TH/UTE

Control Point-3
N: 35100.56
E: 92230.66
CSM 2.5"BC LS36569

UTE AVENUE

UTE AVENUE

BENCHMARK C
ELEV: 4583.640
SW BOLT ON TRAFFIC
SIGNAL POLE BASE AT SW
CORNER OF 6th ST. AND
UTE AVE.

BENCHMARK A
ELEV: 4582.267
SE BOLT ON TRAFFIC
SIGNAL POLE BASE AT SW
CORNER OF 7th ST. AND
UTE AVE.

BENCHMARK D
ELEV: 4580.707
PK NAIL WITH WASHER AT
NE CORNER OF 5th ST. AND
PITKIN AVE.

BENCHMARK B
ELEV: 4572.880 **4579.88**
NW BOLT ON TRAFFIC
SIGNAL POLE BASE AT NE
CORNER OF 6th ST. AND
PITKIN AVE.

S. 5th STREET

S. 6th STREET

S. 7th STREET

Control Point-4
N: 34749.21
E: 91258.01
CSM #5RB BENT 5TH/PIT

Control Point-5
N: 34748.01
E: 91739.50
CSM #5RB BENT 6TH/PI

Control Point-6
N: 34746.52
E: 92230.51
CSM RR SPIKE 7TH/PIT

PITKIN AVENUE

PITKIN AVENUE

AS-BUILT 04/26/2011

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			JAH	1/2011
REVISION				
REVISION				
REVISION				

DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

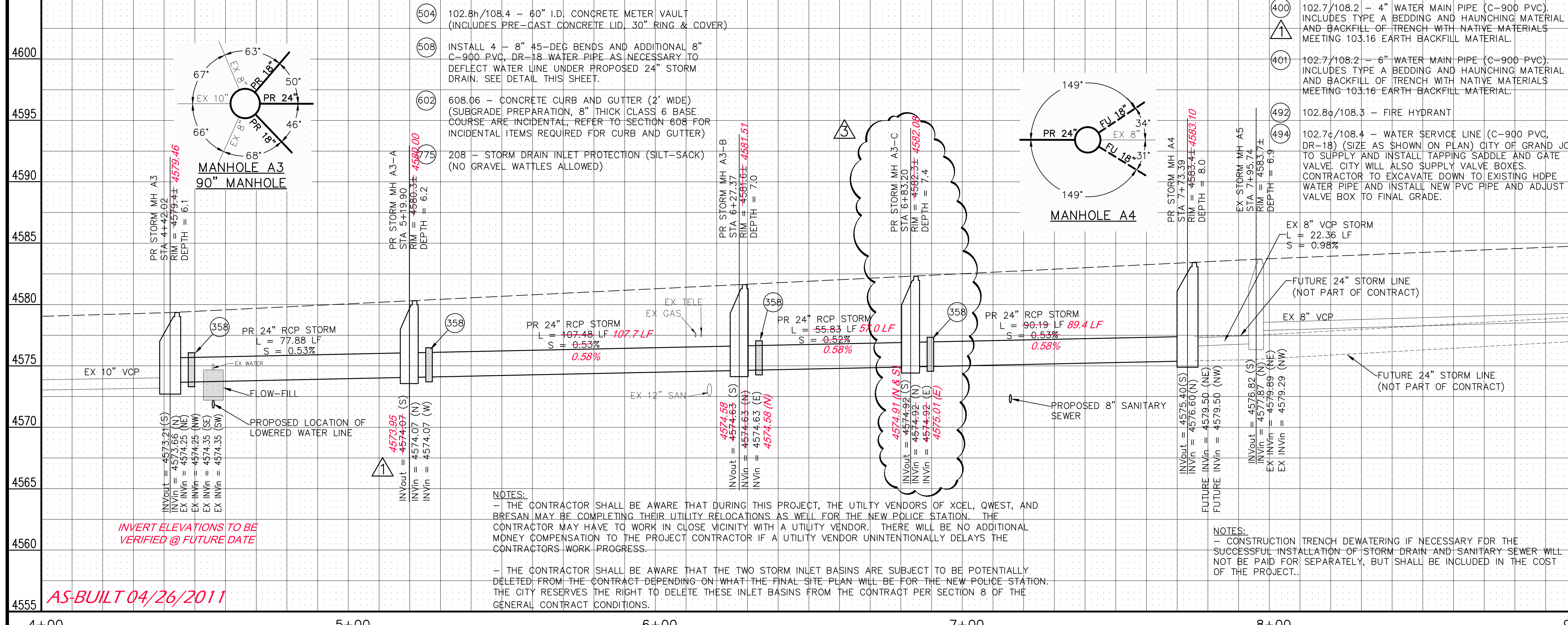
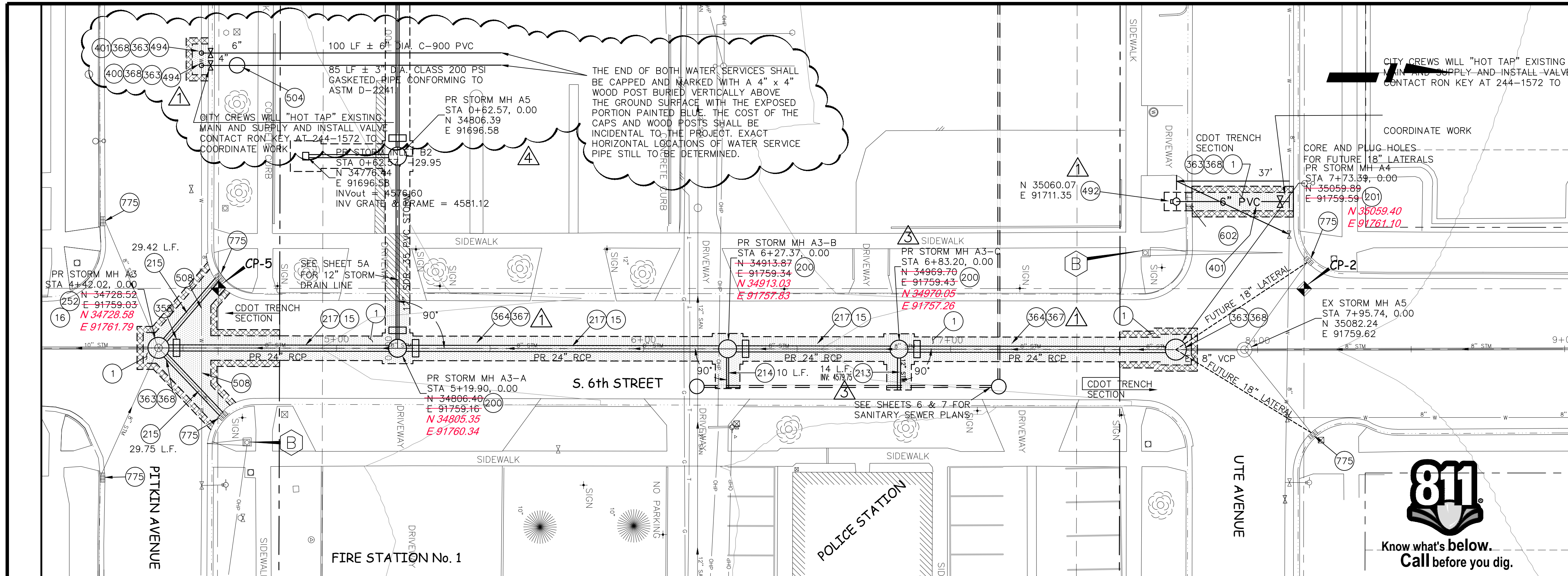
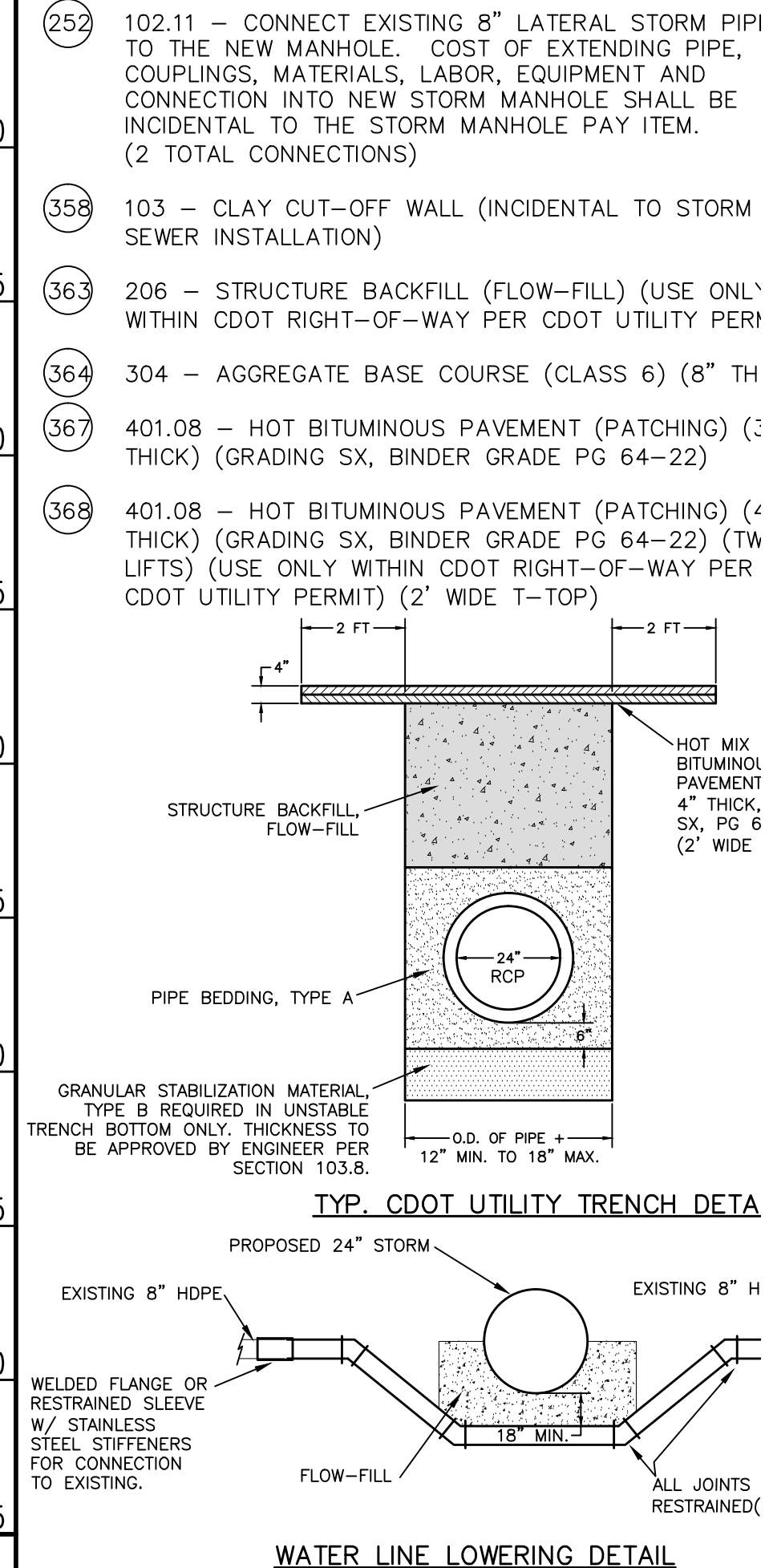
SCALE
N.T.S.

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

CITY OF GRAND JUNCTION PUBLIC SAFETY FACILITY
PROJECT CONTROL MAP

CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND RECONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, CUT SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 15 202 - REMOVAL OF PIPE AS SHOWN (SIZE AND TYPE SHOWN ON PLAN)
- 16 202 - REMOVAL OF STORM DRAIN MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 200 102.11/108.5 - STORM SEWER BASIC MANHOLE (60 I.D.) INCLUDES CONNECTION OF ADJACENT STORM SEWER LINES, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL D-03).
- 201 102.11/108.5 - STORM SEWER BASIC MANHOLE (72 I.D.) INCLUDES CONNECTION OF ADJACENT STORM SEWER LINES, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL D-03).
- 213 102.10/108.2 - 12" STORM DRAIN PIPE (SDR-35 PVC) INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 214 102.10/108.2 - 8" STORM DRAIN PIPE (SDR-35 PVC) INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 215 102.10/108.2 - 18" STORM DRAIN PIPE (RCP). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 217 102.10/108.2 - 24" STORM DRAIN PIPE (RCP). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 252 102.11 - CONNECT EXISTING 8" LATERAL STORM PIPE TO THE NEW MANHOLE. COST OF EXTENDING PIPE, COUPLINGS, MATERIALS, LABOR, EQUIPMENT AND CONNECTION INTO NEW STORM MANHOLE SHALL BE INCIDENTAL TO THE STORM MANHOLE PAY ITEM. (2 TOTAL CONNECTIONS)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO STORM SEWER INSTALLATION)
- 363 206 - STRUCTURE BACKFILL (FLOW-FILL) (USE ONLY WITHIN CDOT RIGHT-OF-WAY PER CDOT UTILITY PERM)
- 364 304 - AGGREGATE BASE COURSE (CLASS 6) (8" THICK) (GRADING SX, BINDER GRADE PG 64-22)
- 367 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22)
- 368 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (2' WIDE) (USE ONLY WITHIN CDOT RIGHT-OF-WAY PER CDOT UTILITY PERMIT) (2' WIDE T-TOP)



NOTES:

- THE CONTRACTOR SHALL BE AWARE THAT DURING THIS PROJECT, THE UTILITY VENDORS OF XCEL, QWEST, AND BRESAN MAY BE COMPLETING THEIR UTILITY RELOCATIONS AS WELL FOR THE NEW POLICE STATION. THE CONTRACTOR MAY HAVE TO WORK IN CLOSE VICINITY WITH A UTILITY VENDOR. THERE WILL BE NO ADDITIONAL MONEY COMPENSATION TO THE PROJECT CONTRACTOR IF A UTILITY VENDOR UNINTENTIONALLY DELAYS THE CONTRACTORS WORK PROGRESS.

- THE CONTRACTOR SHALL BE AWARE THAT THE TWO STORM INLET BASINS ARE SUBJECT TO BE POTENTIALLY DELETED FROM THE CONTRACT DEPENDING ON WHAT THE FINAL SITE PLAN WILL BE FOR THE NEW POLICE STATION. THE CITY RESERVES THE RIGHT TO DELETE THESE INLET BASINS FROM THE CONTRACT PER SECTION 8 OF THE GENERAL CONTRACT CONDITIONS.

AS-BUILT 04/26/2011

REVISION	DESCRIPTION	DATE
REVISION 1	ADDENDUM # 3	1/26/11
REVISION 2	CHANGES PER LEE C.	2/28/2011
REVISION 3	ADDITION OF STORM MH A3-C AND 14 LF 12" PIPE	3/10/2011
REVISION 4	MOVED WATER SERVICES 2' WEST	3/17/2011

DRAWN BY	JAH	DATE	12/2010
DESIGNED BY	ALC	DATE	12/2010
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALES:	
PLAN	1" = 40'
PROFILE	1" = 4'



PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

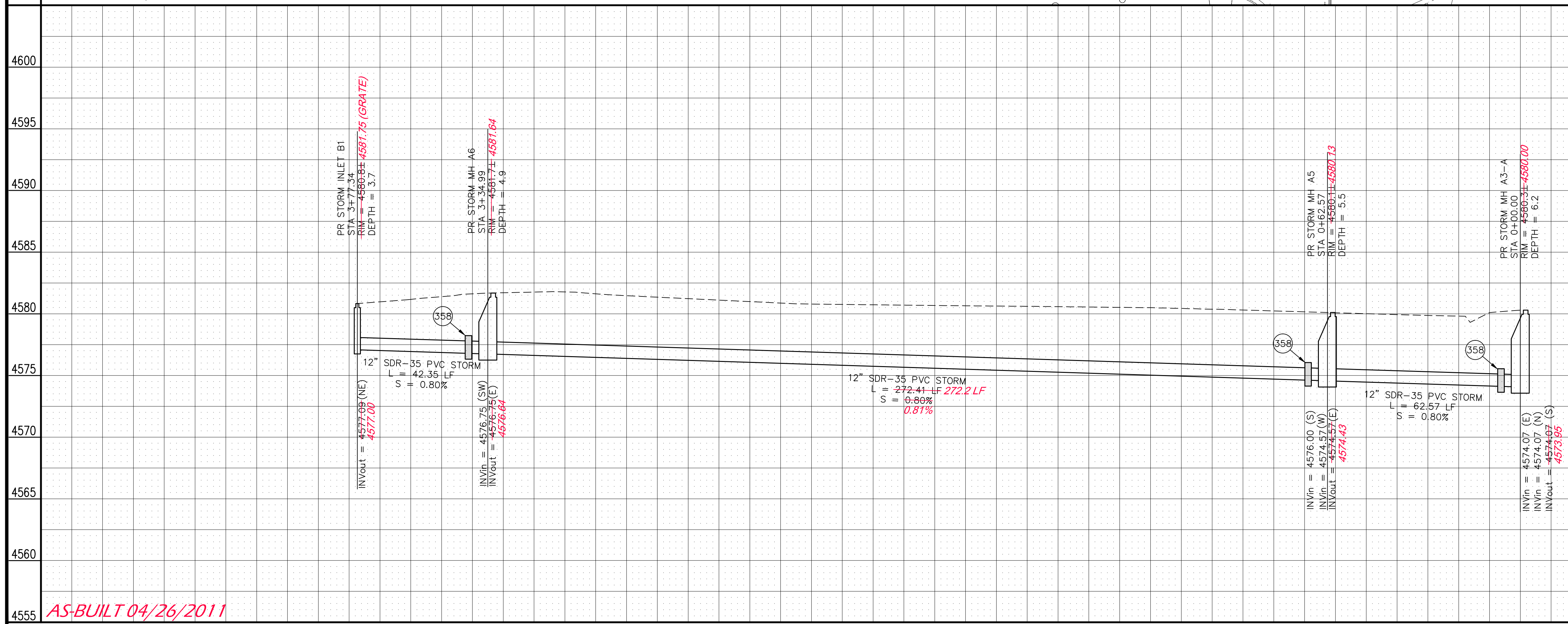
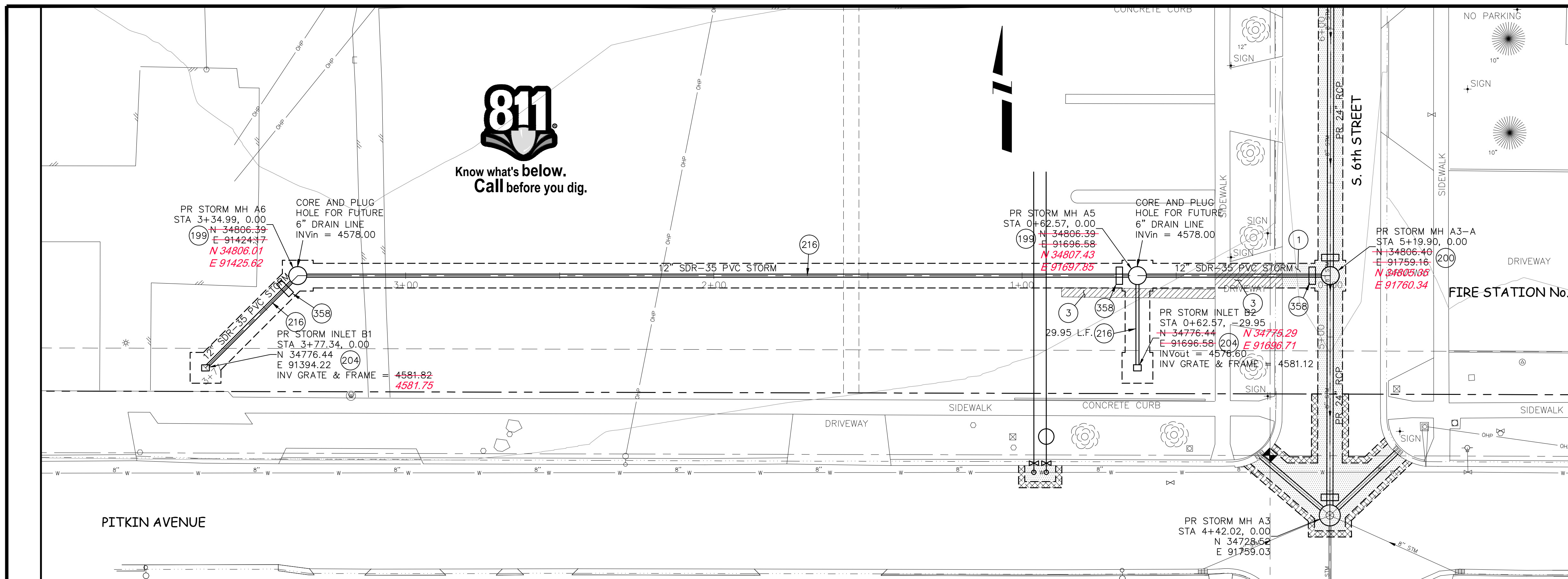
CITY OF GRAND JUNCTION PUBLIC SAFETY FACILITY STORM DRAIN PLAN AND PROFILE STA 4+00 TO STA 8+00

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- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 199 102.11/108.5 - STORM SEWER BASIC MANHOLE (48" I.D.) INCLUDES CONNECTION OF ADJACENT STORM SEWER LINES, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL D-03).
- 200 102.11/108.5 - STORM SEWER BASIC MANHOLE (60" I.D.) INCLUDES CONNECTION OF ADJACENT STORM SEWER LINES, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL D-03).
- 204 102.13/108.6 - SINGLE STORM DRAIN INLET (VERTICAL CURB) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL D-07).
- 216 102.10/108.2 - 12" STORM DRAIN PIPE (SDR-35 PVC) INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO STORM SEWER INSTALLATION)

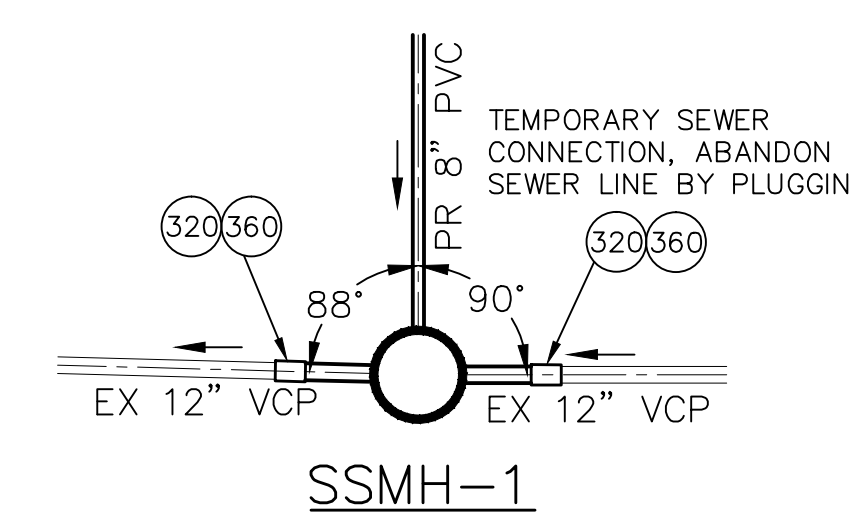
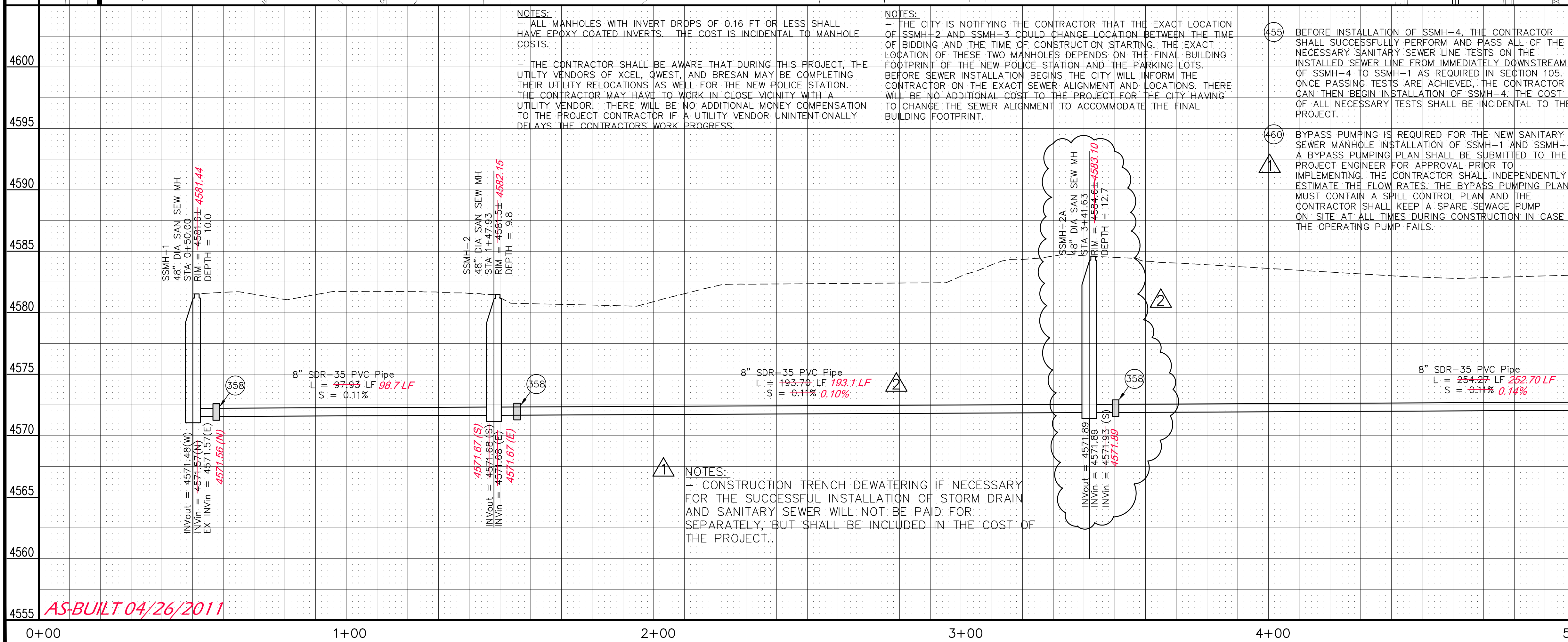
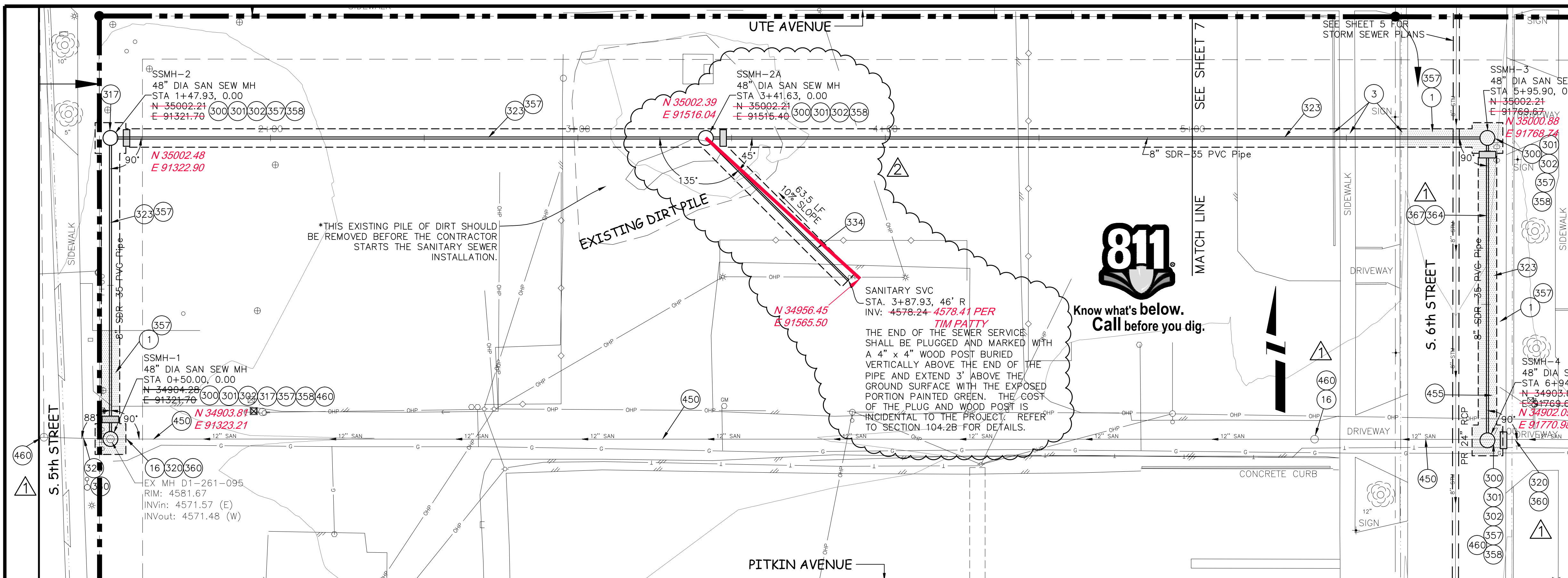
NOTES:
 - THE CONTRACTOR SHALL BE AWARE THAT DURING THIS PROJECT, THE UTILITY VENDORS OF XCEL, QWEST, AND BRESAN MAY BE COMPLETING THEIR UTILITY RELOCATIONS AS WELL FOR THE NEW POLICE STATION. THE CONTRACTOR MAY HAVE TO WORK IN CLOSE VICINITY WITH A UTILITY VENDOR. THERE WILL BE NO ADDITIONAL MONEY COMPENSATION TO THE PROJECT CONTRACTOR IF A UTILITY VENDOR UNINTENTIONALLY DELAYS THE CONTRACTORS WORK PROGRESS.
 - THE CONTRACTOR SHALL BE AWARE THAT THE TWO STORM INLET BASINS ARE SUBJECT TO BE POTENTIALLY DELETED FROM THE CONTRACT DEPENDING ON WHAT THE FINAL SITE PLAN WILL BE FOR THE NEW POLICE STATION. THE CITY RESERVES THE RIGHT TO DELETE THESE INLET BASINS FROM THE CONTRACT PER SECTION 8 OF THE GENERAL CONTRACT CONDITIONS.

NOTES:
 - CONSTRUCTION TRENCH DEWATERING IF NECESSARY FOR THE SUCCESSFUL INSTALLATION OF STORM DRAIN AND SANITARY SEWER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT.



REVISION Δ _____ REVISION Δ _____ REVISION Δ _____ REVISION Δ _____	DESCRIPTION _____ DATE _____	DRAWN BY JAH DATE 12/2010 DESIGNED BY ALC DATE 12/2010 CHECKED BY _____ DATE _____ APPROVED BY _____ DATE _____	SCALES: PLAN: 1" = 20' PROFILE: 1" = 20' (HORIZONTAL), 1" = 5' (VERTICAL)		PUBLIC WORKS AND PLANNING ENGINEERING DIVISION	CITY OF GRAND JUNCTION PUBLIC SAFETY FACILITY STORM DRAIN PLAN AND PROFILE STA 0+00 TO STA 3+77.34
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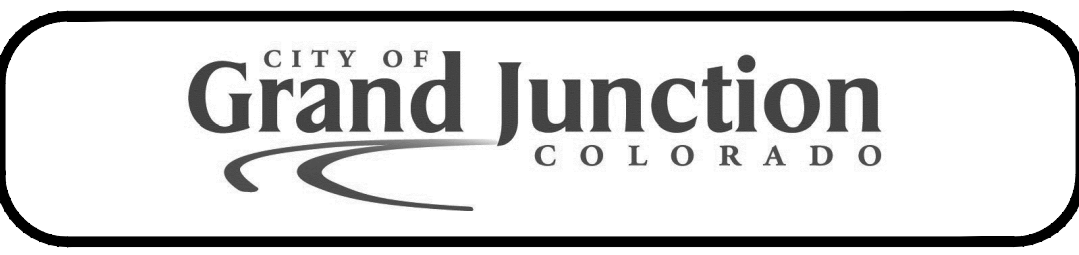
- ① 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- ③ 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- ⑩ 202 - REMOVAL OF SANITARY SEWER MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS. INCLUDES REMOVAL AND DISPOSAL OF ALL BARREL SECTIONS (AFTER FLY ASH FILLS EXISTING PIPE) AND BACKFILL WITH PIT-RUN AND COMPACTION.
- ⑩ 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, EPOXY GEL PER SECTION 102.11, AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- ⑩ EPOXY COAT MANHOLE INVERT. COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- ⑩ 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.)
- ⑩ 104.20 - INSTALL CONCRETE COLLAR W/ #4 REBAR HOOP AS PER STD. DETAIL SS-02. INCIDENTAL TO MANHOLE PAY ITEM.
- ⑩ 102.11 - CONNECT EXISTING 12" SANITARY SEWER TO NEW MANHOLE. THE CONTRACTOR SHALL USE A PIPE COUPLING TO CONNECT A 5' MIN. SECTION OF NEW 12" DIA. SDR 35 PVC TO THE EXISTING 12" DIA. VCP SEWER PIPE. THE NEW SECTION OF 12" PVC SHALL BE CONNECTED TO THE NEW MANHOLE IN A WAY TO ENSURE A WATERTIGHT CONNECTION.
- ⑩ 102.9/108.2 - 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES EXCAVATION, TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- ⑩ 102.9/108.2 - 6" SEWER SERVICE PIPE (SDR 35 PVC). INCLUDES EXCAVATION, TYPE A BEDDING AND HAUNCHING MATERIAL, BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- ⑩ 102/103/104 - CONTRACTOR SHALL FIELD VERIFY EXISTING SEWER SERVICE LOCATIONS AND INSTALL NEW 4" SEWER SERVICE TAP AND NEW 4" SDR 35 PVC PIPE, INCLUDING ALL BENDS AND FITTINGS, AND CONNECT TO EXISTING SURFACE. (SEE STANDARD DETAIL SS-06).
- ⑩ 103.6 - TYPICAL WIDTH TO INSTALL MANHOLES SHALL BE 10' CENTERED ON THE MANHOLE AND SQUARED OFF AS SHOWN. WIDTH FOR MAIN LINES SHALL BE 6' WIDE MAXIMUM AND CENTERED ON THE PIPE.
- ⑩ 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- ⑩ CONNECT TO EXISTING SEWER PIPE. THE CONTRACT UNIT PRICE FOR NEW SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO THE EXISTING SEWER PIPE.
- ⑩ 304 - AGGREGATE BASE COURSE (CLASS 6) (8" THICK)
- ⑩ 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22) (ONE LIFT)
- ⑩ 601 - FLY ASH SLURRY (ABANDON EXISTING 12" DIA. VCP SEWER PIPELINE (450 LF) BY COMPLETELY FILLING UP THE ABANDONED 12" VCP SEWER PIPE. THE FLY ASH SLURRY MIX DESIGN SHALL HAVE A MAXIMUM COMPRESSIVE STRENGTH OF 100 PSI @ 28 DAYS.) PRIOR TO FLY ASH INSTALLATION, THE CONTRACTOR SHALL PLUG WITH CONCRETE THE EAST SEWER LINE IN MANHOLE SSMH-1



REVISION	DESCRIPTION	DATE
1	ADDED DROP MANHOLE AS PER LEE C.	2/16/2011

DRAWN BY	JAH	DATE	12/2010
DESIGNED BY	ALC	DATE	12/2010
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALES:	
PLAN	PROFILE
HORIZONTAL 1" = 20'	HORIZONTAL 1" = 20'
VERTICAL 1" = 5'	VERTICAL 1" = 5'

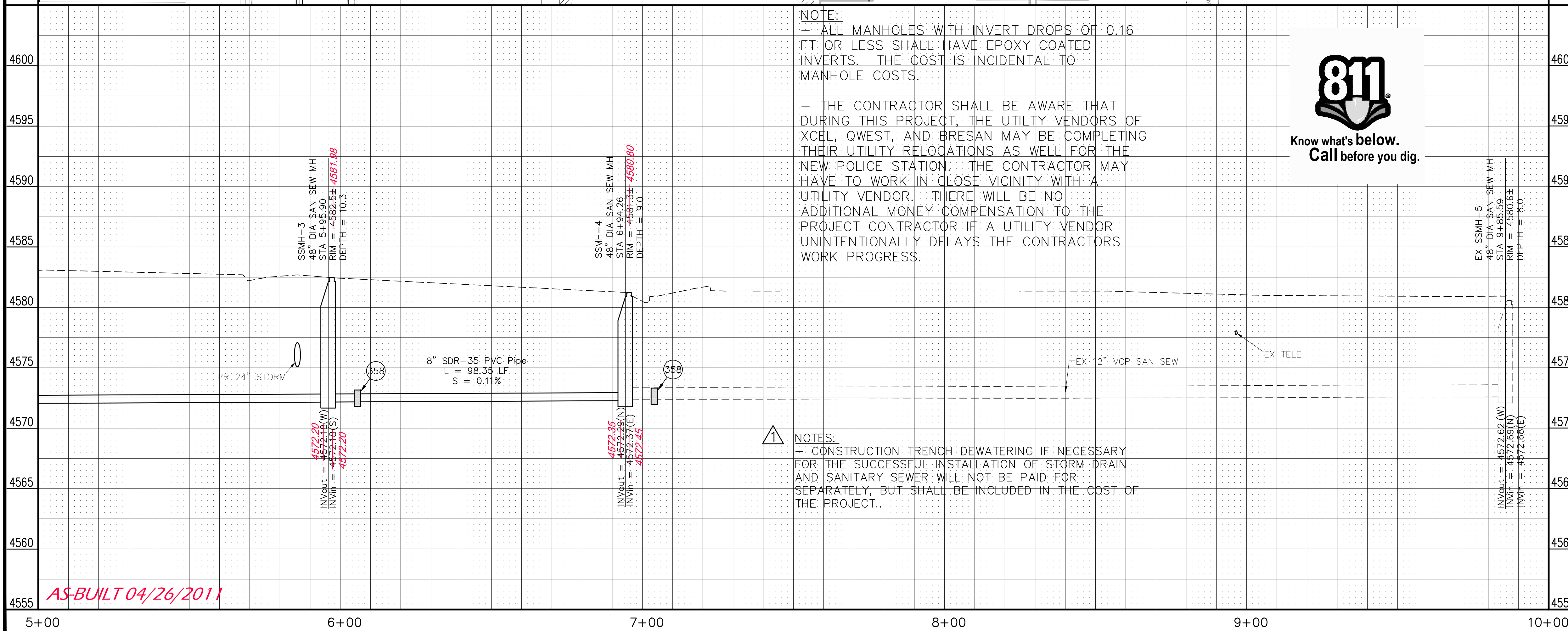
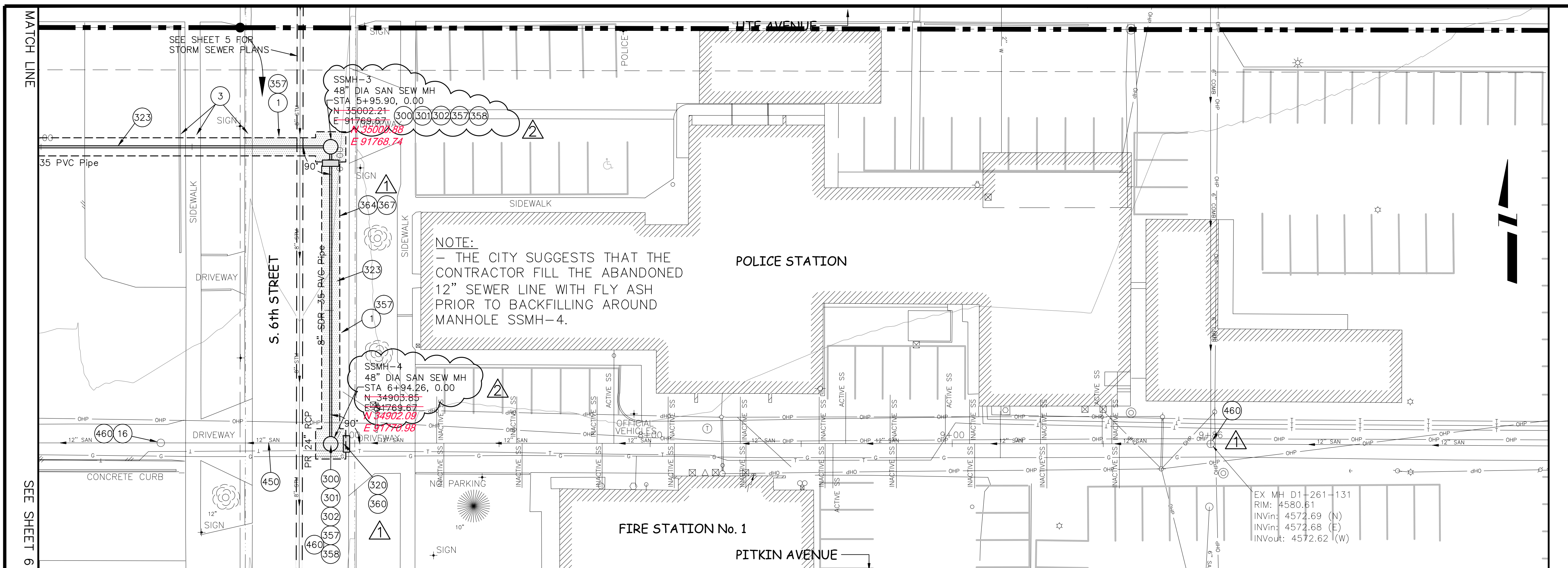


PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

CITY OF GRAND JUNCTION PUBLIC SAFETY FACILITY
SANITARY SEWER PLAN AND PROFILE
STA 0+00 TO STA 5+00

CONSTRUCTION NOTES

- ① 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- ③ 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- ⑮ 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)
- ⑯ 202 - REMOVAL OF SANITARY SEWER MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS. INCLUDES REMOVAL AND DISPOSAL OF ALL BARREL SECTIONS (AFTER FLY ASH FILLS EXISTING PIPE) AND BACKFILL WITH PIT-RUN AND COMPACTION.
- ③00 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, EPOXY GEL PER SECTION 102.11, AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- ③01 EPOXY COAT MANHOLE INVERT. COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- ③02 102.11/108.5 - MANHOLE BARREL SECTION (D>5') (48" I.D.)
- ③20 102.11 - CONNECT EXISTING 12" SANITARY SEWER TO NEW MANHOLE. THE CONTRACTOR SHALL USE A PIPE COUPLING TO CONNECT A 5' MIN. SECTION OF NEW 12" DIA. SDR 35 PVC TO THE EXISTING 12" DIA. VCP SEWER PIPE. THE NEW SECTION OF 12" PVC SHALL BE CONNECTED TO THE NEW MANHOLE IN A WAY TO ENSURE A WATERTIGHT CONNECTION.
- ③23 102.9/108.2 - 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- ③57 103.6 - TYPICAL WIDTH TO INSTALL MANHOLES SHALL BE 10' CENTERED ON THE MANHOLE AND SQUARED OFF AS SHOWN. WIDTH FOR MAIN LINES SHALL BE 6' WIDE MAXIMUM AND CENTERED ON THE PIPE.
- ③58 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- ③60 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT UNIT PRICE FOR NEW SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO THE EXISTING SEWER PIPE.
- ③64 304 - AGGREGATE BASE COURSE (CLASS 6) (8" THICK)
- ③67 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22)
- ④50 601 - FLY ASH SLURRY (ABANDON EXISTING 12" DIA. VCP SEWER PIPELINE (450 LF) BY COMPLETELY FILLING UP THE ABANDONED 12" VCP SEWER PIPE. THE FLY ASH SLURRY MIX DESIGN SHALL HAVE A MAXIMUM COMPRESSIVE STRENGTH OF 100 PSI @ 28 DAYS.)
- ④60 BYPASS PUMPING IS REQUIRED FOR THE NEW SANITARY SEWER MANHOLE INSTALLATION OF SSMH-1 AND SSMH-4. A BYPASS PUMPING PLAN SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING. THE CONTRACTOR SHALL INDEPENDENTLY ESTIMATE THE FLOW RATES. THE BYPASS PUMPING PLAN MUST CONTAIN A SPILL CONTROL PLAN AND THE CONTRACTOR SHALL KEEP A SPARE SEWAGE PUMP ON-SITE AT ALL TIMES DURING CONSTRUCTION IN CASE THE OPERATING PUMP FAILS.



<p>DESCRIPTION</p> <p>REVISION Δ ADDENDUM # 3</p> <p>REVISION Δ SHIFTED LINE IN 6th STREET 2' WEST</p> <p>REVISION Δ</p> <p>REVISION Δ</p>	<p>DATE</p> <p>1/26/11</p> <p>2/22/11</p> <p></p> <p></p>	<p>DRAWN BY JAH</p> <p>DESIGNED BY ALC</p> <p>CHECKED BY</p> <p>APPROVED BY</p>	<p>DATE 12/2010</p> <p>DATE 12/2010</p> <p>DATE</p> <p>DATE</p>	<p>SCALES:</p> <p>PLAN</p> <p>HORIZONTAL 1" = 20'</p> <p>PROFILE</p> <p>HORIZONTAL 1" = 20'</p> <p>VERTICAL 1" = 5'</p>	<p>CITY OF Grand Junction COLORADO</p>	<p>PUBLIC WORKS AND PLANNING ENGINEERING DIVISION</p>	<p>CITY OF GRAND JUNCTION PUBLIC SAFETY FACILITY SANITARY SEWER PLAN AND PROFILE STA 5+00 TO STA 10+00</p>
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