

Fruitvale Outfall Line Replacement Project

- Rood Ave. from 14th St. to 21st St.
- 21st Street from Rood Ave. to Grand Ave.
- Grand Ave. from 21st St. to 28 Road

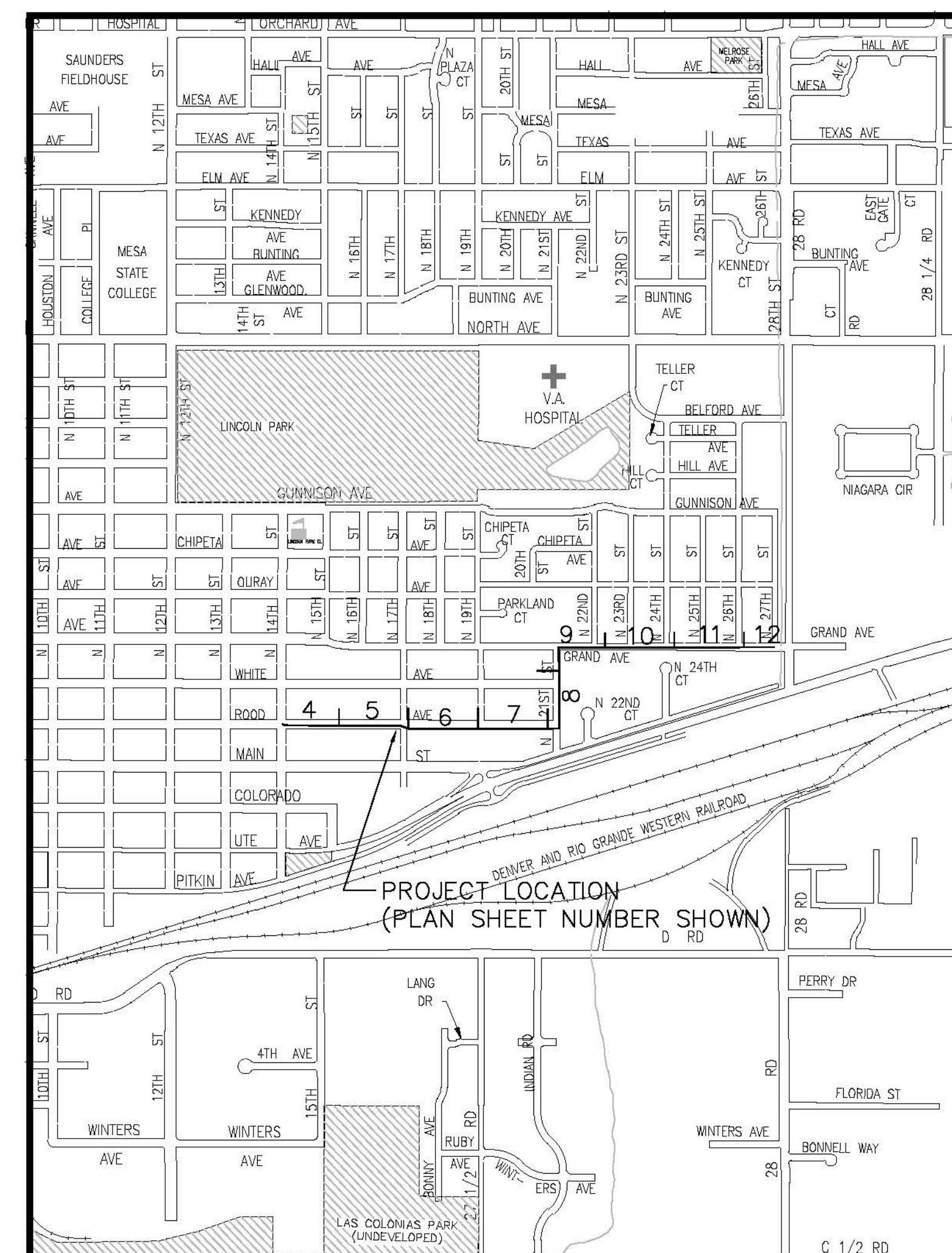
June 2011

- 1 _____ Cover Sheet
- 2 _____ Standard Abbreviations, Legend, and Symbols
- 3 _____ Summary of Approximate Quantities
- 4-12 _____ Sanitary Sewer Plan and Profiles
(Fruitvale Outfall Line)

(See Vicinity Map at Right for Sheet Locations)

**As Built from
High Desert Survey**

VICINITY MAP



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	WATER AND SEWER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244-1590	(970) 256-4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND		IRRIGATION	688 26 ROAD	688 26 ROAD	GRAND JCT., CO 81506	(970) 242-2762	
BRESNAN	JEFF VALDEZ	CONSTRUCTION SUPERVISOR	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245-8750	(970) 245-6803
QWEST	CHRIS JOHNSON	DESIGN ENGINEER	TELEPHONE/FIBER	2524 BLICKMAN ROAD	2524 BLICKMAN ROAD	GRAND JCT., CO 81504	(970) 244-4311	(970) 240-4349
XCEL	STEVE LOPEZ	PROJECT MANAGER	GAS, ELECTRIC	2538 BLICKMAN ROAD	2538 BLICKMAN ROAD	GRAND JCT., CO 81504	(970) 244-2698	(970) 244-2661



*Public Works & Planning
Engineering Division*

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

REVISION	DESCRIPTION	DATE
REVISION ▲	_____	_____
REVISION ▲	_____	_____
REVISION ▲	_____	_____
REVISION ▲	_____	_____

N:\Working\Use - Fruitvale Sewer Replacement\grand sewr.dwg

ABBREVIATIONS

AASTHO	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
F	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
MJ	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
PT	POINT ON TANGENT
PR	PROPOSED
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
UJ	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
WS	WATER SERVICE
Δ	DELTA ANGLE

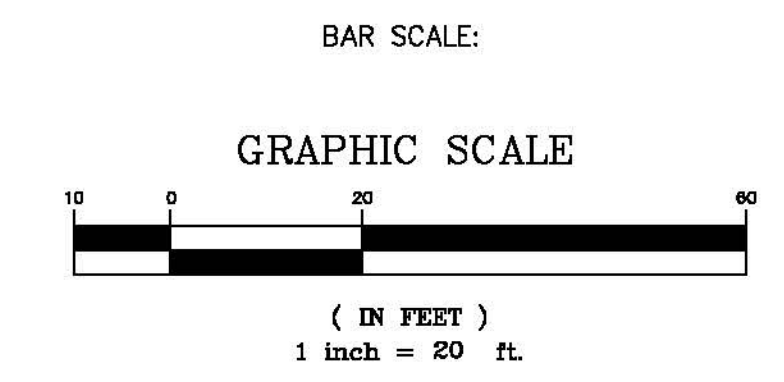
LEGEND

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 (TEMPORARY CONSTRUCTION)	
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)	

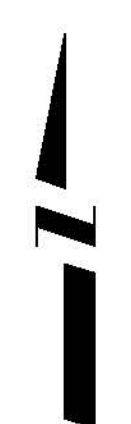
PROPOSED CONCRETE CURB AND GUTTER	
PROPOSED CONCRETE CURB, GUTTER, & SIDEWALK	
PROPOSED CONCRETE SIDEWALK	
PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN)	
ALL PROPOSED FEATURES NOT SHOWN IN LEGEND WILL BE SHOWN THE SAME AS THEIR EXISTING COUNTERPART, BUT INDICATED BY BOLDER LINETYPE	
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	DESCRIPTION	DATE	DRAWN BY	JCS	DATE	4-11
REVISION			DESIGNED BY		DATE	
REVISION			CHECKED BY		DATE	
REVISION			APPROVED BY		DATE	

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



PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

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

Item No.	CDOT, City Ref.	Description	Quantity	Units
1	108.2	6" Water Pipe (C-900 PVC, DR 18) (Waterline Relocation)	45	Lin. Ft.
2	108.2	8" Water Pipe (C-900 PVC, DR 18) (Waterline Relocation)	20	Lin. Ft.
3	108.2	8" Gravity Sewer Pipe (C-900 PVC, DR 18) (Used for conflict manhole)	12	Lin. Ft.
4	108.2	6" Storm Drain Pipe (SDR-35 PVC)	15	Lin. Ft.
5	108.2	15" Storm Drain Pipe (SDR-35 PVC)	40	Lin. Ft.
6	108.2	18" Gravity Sewer Pipe (SDR-35 PVC) (Contractor shall provide only the sewer pipe installation cost. City has already purchased the 18" dia. pipe) (Includes pipe delivery to Project site)	4,950	Lin. Ft.
7	108.2	Imported Trench Backfill (Class 3) (Includes haul and disposal of unsuitable excavated material)	4,950	Lin. Ft.
8	108.3	15" x 6" Gasketed Wye Fitting (SDR-35 PVC)	1	Each
9	108.3	Cast Iron Clean Out (Castings Inc. Model CO-8030 Bolt Down or Engineer Approved Equal)	1	Each
10	108.3	15", 90-degree Elbow (SDR-35 PVC) (Gasketed)	1	Each
11	108.3	6" x 6" Gasketed Wye Fitting (PVC)	1	Each
12	108.3	6" End Cap (PVC) (Clean Out)	1	Each
13	108.3	6" Bell x 6" Spigot 45-Degree Elbow	1	Each
14	108.3	6", Restrained Coupling (PVC to PVC) (Waterline)	4	Each
15	108.3	6" Hymax Coupling or approved equivalent (PVC to AC connection)	1	Each
16	108.3	6", Restrained Coupling (PVC to PVC) (Waterline)	2	Each
17	108.3	6", Coupling (PVC to VCP) (Caldor Style Coupling) (Conflict Manhole)	3	Each
18	108.3	6", 45-Degree Elbow (Restrained) (Waterline)	8	Each
19	108.3	6", 45-Degree Elbow (Restrained) (Waterline)	4	Each
20	108.3	6" Gate Valve (Waterline)	1	Each
21	108.3	8" Gate Valve (Waterline)	1	Each
22	108.5	Sanitary Sewer Basic Manhole (48" I.D.) (Includes Epoxy Coated Invert and Epoxy Corrosion Protection on interior walls per Section 102.11)	16	Each
23	108.5	Conflict Sanitary Sewer Manhole (48" I.D.) (Includes Epoxy Coated Invert and Epoxy Corrosion Protection on interior walls per Section 102.11 and forming the invert and manhole bench per the detail in the plans)	1	Each
24	108.5	Storm Sewer Basic Manhole (48" I.D.)	1	Each
25	108.5	Manhole Barrel Section (D=5) (48" I.D.)	40	Vert. Ft.
26	108.5	Connect to Existing Manhole (15" Pipe)	2	Each
27	108.5	Connect to Existing Manhole (18" Pipe) (Sanitary Sewer Pipe)	1	Each
28	108.7	Granular Stabilization Material (18" Thick Minimum) (Type B) (Includes haul and disposal of unsuitable excavated material) (Assumed Unit Weight = 138 lbs/cu. ft.)	1,510	Ton
29	202	Removal of Asphalt (Planing) (Full Depth) (Refer to geotechnical report in Appendix B for existing asphalt thicknesses)	3,750	Sq. Yd.
30	202	Removal of Pipe (18" PVC Sewer Pipe)	50	Lin. Ft.
31	202	Removal of Miscellaneous Pipe (Pipe size range = 4" to 12" pipe)	125	Lin. Ft.
32	202	Removal of Concrete	20	Sq. Yd.
33	202	Removal of Sanitary Sewer Manhole (Contractor shall salvage ring and cover and deliver to City Shops) (Includes complete removal of entire manhole)	2	Each
34	202	Removal of Sanitary Sewer Manhole (Contractor shall salvage ring and cover and deliver to City Shops) (Includes removal and disposal of manhole grade rings and cone sections)	15	Each

35	202	Removal of Storm Drain Manhole (Contractor shall protect the existing 6" dia. PVC "French Drain" pipe during manhole removal. 6" pipe will be connected to the new 15" storm pipe)	2	Each
36	203	Disposal of Radioactive Material (Mill Tailings) (Includes loading, hauling, and unloading of material at City Shops location)	100	Cu. Yd.
37	206	Structural Backfill (Flow-Fill)	50	Cu. Yd.
38	207	Tops oil (6" Thick)	5	Cu. Yd.
39	208	Storm Drain Inlet Protection (Silt Sacks) (Includes maintenance & removal of inlet protection)	16	Each
40	208	Gravel Wattles (To be used around soil stockpiles as needed)	75	Lin. Ft.
41	208	Street Sweeping (Sediment Removal from streets)	100	Hour
42	208	Concrete Washout Facility	1	Lump Sum
43	210	Reset Sprinkler (As required)	2	Each
44	212	Sod	200	Sq. Ft.
45	304	Aggregate Base Course (Class 6) (14" Thick) (Compact in 7" Lifts)	2,750	Sq. Yd.
46	401	Hot Mix Asphalt (Patching) (Grading SX 75 GYR, PG 64-22) (4" Thick) (Two 2" Lifts) (Per Detail GU-03) (Road Avenue)	1,700	Sq. Yd.
47	401	Hot Mix Asphalt (Patching) (Grading SX 75 GYR, PG 64-22) (6" Thick) (Three 2" Lifts) (21st Street & Grand Avenue) (Per Detail GU-03)	2,350	Sq. Yd.
48	407	Emulsified Asphalt (Tack Coat)	780	Gallon
49	420	Geotextile (Separator) (Class A) (Wrap stabilization material with fabric) (Minimum Overlap = 30")	5,000	Sq. Yd.
50	601	Concrete Plugs (Use for plugging existing sewer pipes at manholes before placement of flow-fill)	1	Lump Sum
51	608	Concrete Cap (Cap Top Half of Sewer Pipe in concrete per City detail GU-04) (20' Long Cap Min.)	3	Each
52	608	Concrete Encasement (Encase Sewer Pipe in concrete per City detail GU-04) (20' Long Cap Min.)	4	Each
53	608	Monolithic Vertical Curb, Gutter, and Sidewalk (Match in Kind) (CDOT Class B Concrete)	6	Sq. Yd.
54	608	Concrete Drainage Pan (Match in Kind) (Includes #5 Tie-bars at 12" spacing) (CDOT Class B Concrete)	12	Sq. Yd.
55	620	Portable Sanitary Facility	1	Lump Sum
56	625	Construction Surveying (Includes As-Built Drawings)	1	Lump Sum
57	626	Mobilization	1	Lump Sum
58	629	Survey Monumentation (Includes referencing existing survey monuments, labor, tools, materials, equipment, and traffic control)	6	Each
59	630	Traffic Control Plans	1	Lump Sum
60	630	Traffic Control (Complete in Place)	1	Lump Sum
61	630	Flagging	160	Hour
62	630	Weekly News letter	13	Week
63	Pump	Bypass Sewage Pumping (14th & Road) (Approx. sewage flows = 2.5 cfs) (Contractor responsible for sizing bypass pump and piping)	1	Lump Sum
64	Pump	Bypass Sewage Pumping (17th & Road) (Manhole Installation) (Contractor responsible for sizing bypass pump and piping) (Unknown flowrate)	1	Lump Sum
65	Pump	Bypass Sewage Pumping (21st & Grand) (Conflict Manhole B Installation) (Contractor responsible for sizing bypass pump and piping) (Unknown flowrate)	1	Lump Sum
66	Pump	Bypass Sewage Pumping (27th & Grand) (Contractor responsible for sizing bypass pump and piping) (Unknown flowrate)	1	Lump Sum
MCR		Minor Contract Revisions	---	---

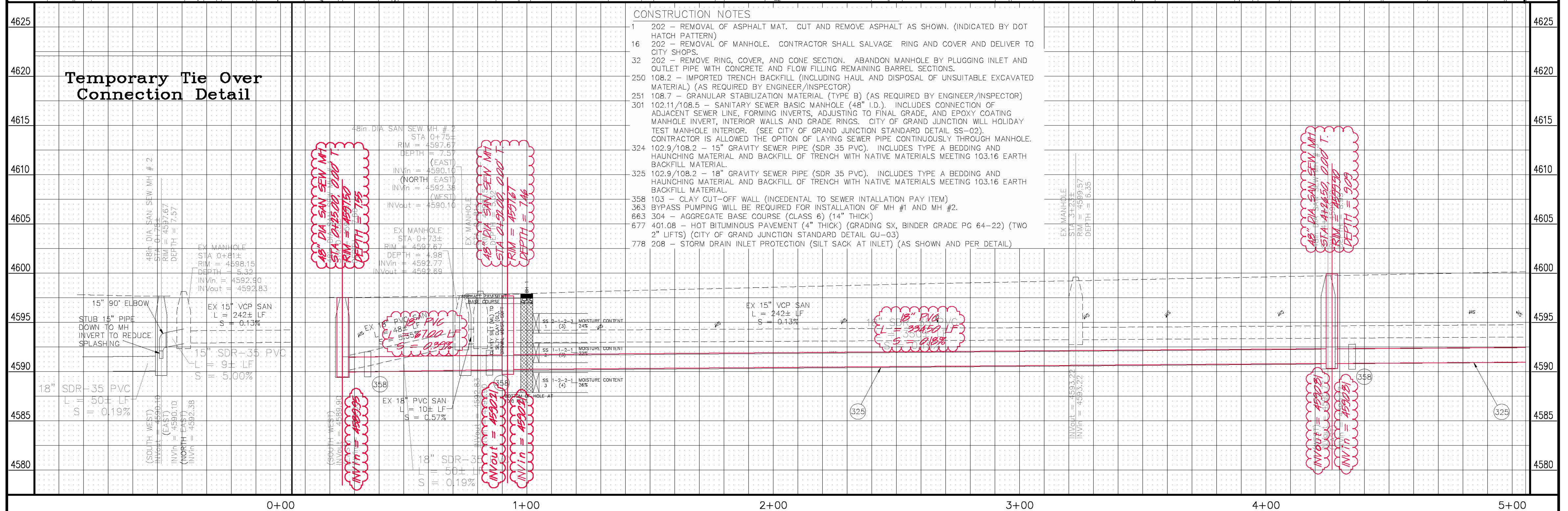
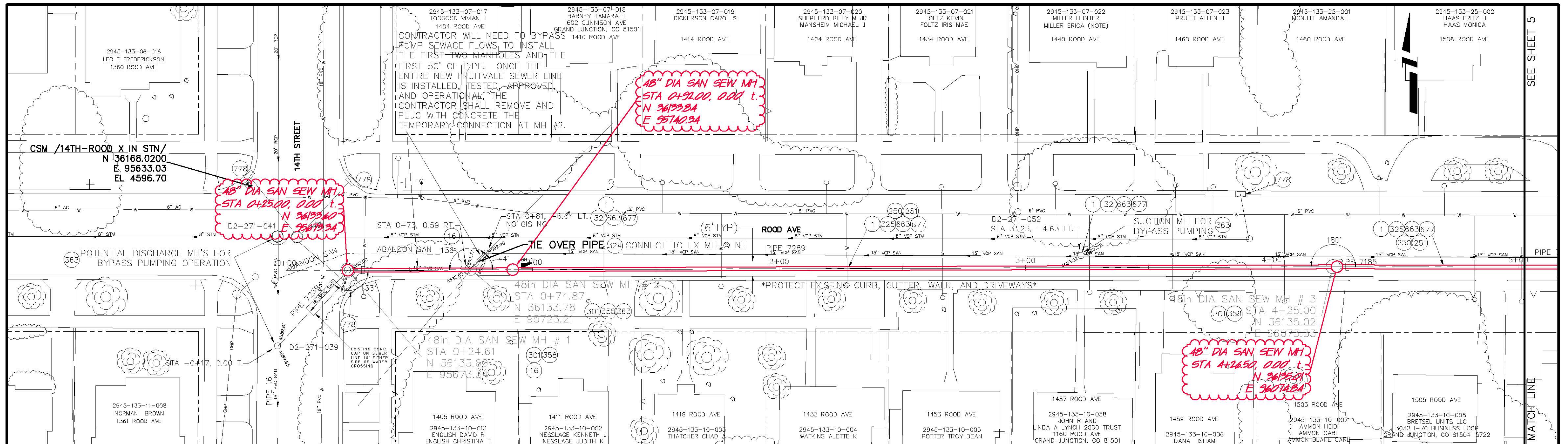
REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	DESIGNED BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
REVISION A			JCS	6/2011	ALC/JCS	6/2011				
REVISION B										
REVISION C										
REVISION D										

SCALE
N.T.S.



PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

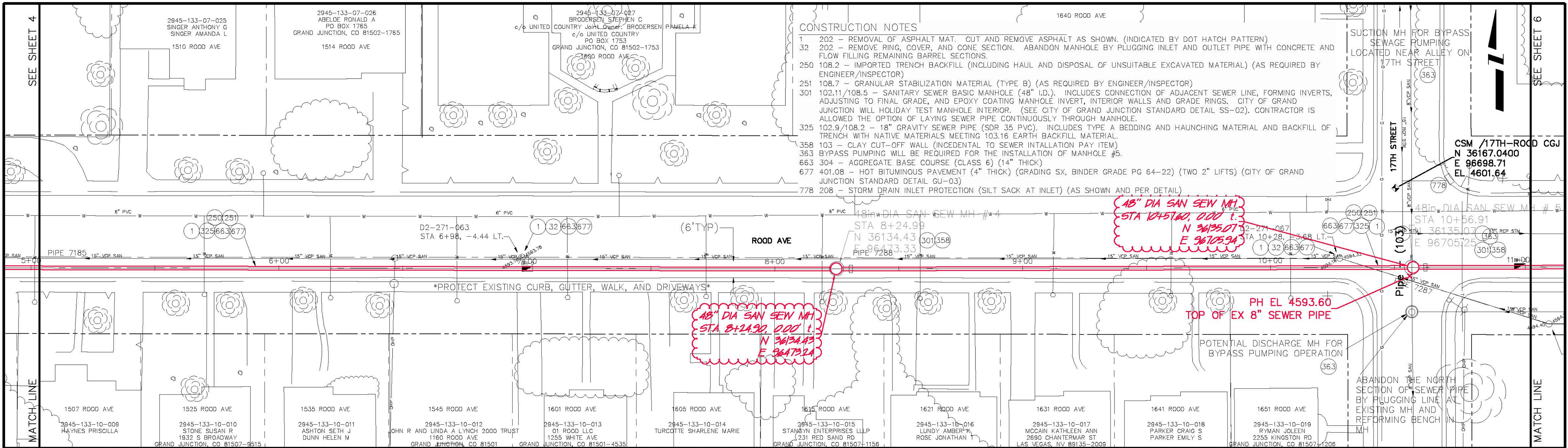
Fruitvale Outfall Line Replacement Project SUMMARY OF APPROXIMATE QUANTITIES



- CONSTRUCTION NOTES**
- 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
 - 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
 - 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY PLUGGING INLET AND OUTLET PIPE WITH CONCRETE AND FLOW FILLING REMAINING BARREL SECTIONS.
 - 108.2 - IMPORTED TRENCH BACKFILL (INCLUDING HAUL AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL) (AS REQUIRED BY ENGINEER/INSPECTOR)
 - 108.7 - GRANULAR STABILIZATION MATERIAL (TYPE B) (AS REQUIRED BY ENGINEER/INSPECTOR)
 - 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, ADJUSTING TO FINAL GRADE, AND EPOXY COATING MANHOLE INVERT, INTERIOR WALLS AND GRADE RINGS. CITY OF GRAND JUNCTION WILL HOLIDAY TEST MANHOLE INTERIOR. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). CONTRACTOR IS ALLOWED THE OPTION OF LAYING SEWER PIPE CONTINUOUSLY THROUGH MANHOLE.
 - 102.9/108.2 - 15" 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.
 - 102.9/108.2 - 18" 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.
 - 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
 - 363 BYPASS PUMPING WILL BE REQUIRED FOR INSTALLATION OF MH #1 AND MH #2.
 - 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
 - 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS) (CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)
 - 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)

Temporary Tie Over Connection Detail

REVISION Δ As Built from High Desert Survey 2-12 REVISION Δ REVISION Δ REVISION Δ	DESCRIPTION _____ DATE _____ DRAWN BY JCS DATE 6/2011 DESIGNED BY ALC/JCS DATE 6/2011 CHECKED BY _____ DATE _____ APPROVED BY _____ DATE _____	SCALES: PLAN 1" = 20' PROFILE 1" = 2'		PUBLIC WORKS AND PLANNING ENGINEERING DIVISION	Fruitvale Outfall Line Replacement Project Road Avenue Sanitary Sewer Alignment	4
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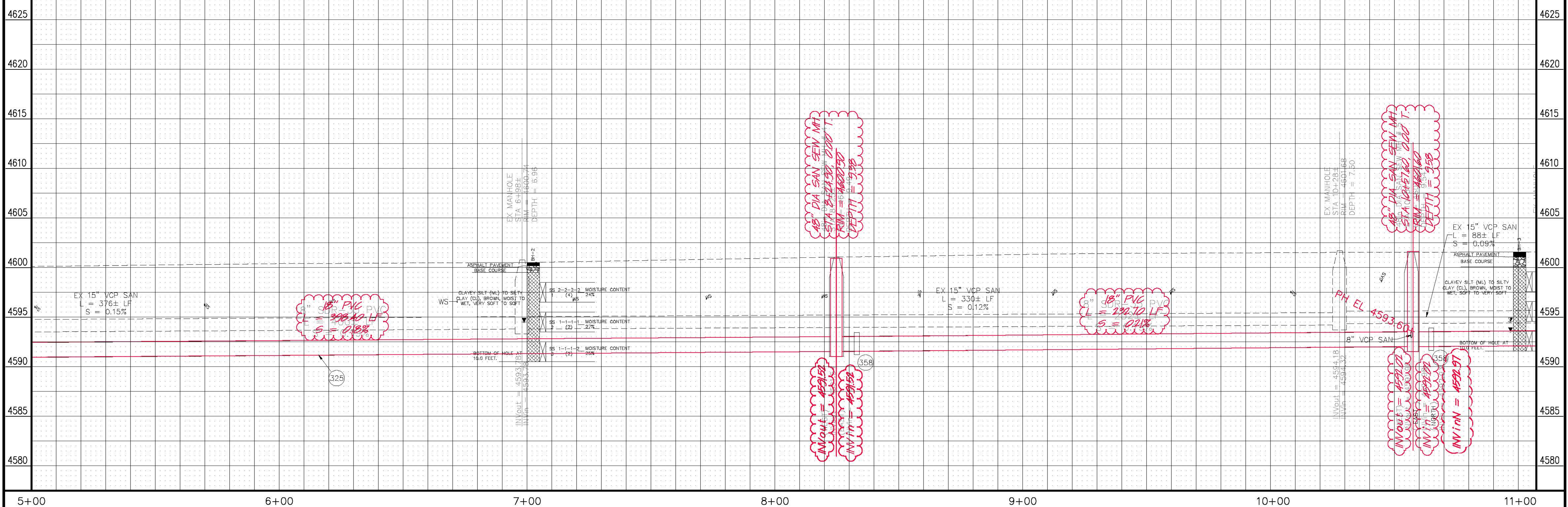
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 32 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY PLUGGING INLET AND OUTLET PIPE WITH CONCRETE AND FLOW FILLING REMAINING BARREL SECTIONS.
- 250 108.2 - IMPORTED TRENCH BACKFILL (INCLUDING HAUL AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL) (AS REQUIRED BY ENGINEER/INSPECTOR)
- 251 108.7 - GRANULAR STABILIZATION MATERIAL (TYPE B) (AS REQUIRED BY ENGINEER/INSPECTOR)
- 301 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, ADJUSTING TO FINAL GRADE, AND EPOXY COATING MANHOLE INVERT, INTERIOR WALLS AND GRADE RINGS. CITY OF GRAND JUNCTION WILL HOLIDAY TEST MANHOLE INTERIOR. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). CONTRACTOR IS ALLOWED THE OPTION OF LAYING SEWER PIPE CONTINUOUSLY THROUGH MANHOLE.
- 325 102.9/108.2 - 18" 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.
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING WILL BE REQUIRED FOR THE INSTALLATION OF MANHOLE #5.
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS) (CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)
- 778 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)

*18" DIA SAN SEW MH
STA 10+56.91
N 36135.07
E 96705.25*

*18" DIA SAN SEW MH
STA 8+24.99
N 36134.43
E 96703.33*

*PH EL 4593.60
TOP OF EX 8" SEWER PIPE*



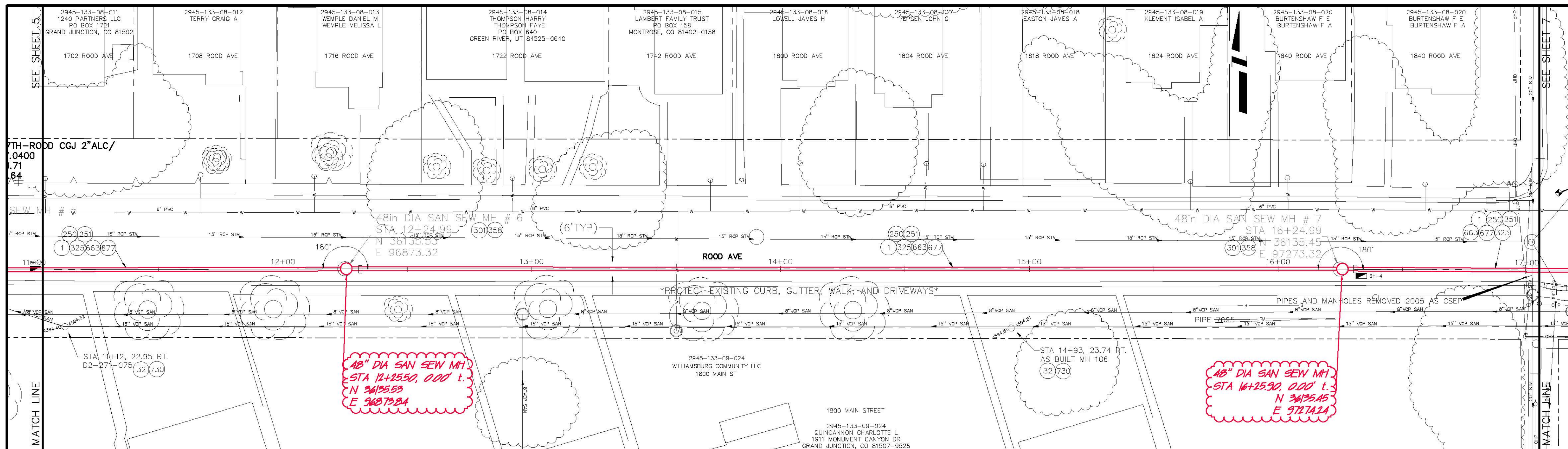
REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
1	As Built from High Desert Survey	2-12	JCS	6/2011
2			ALC/JCS	6/2011
3				
4				

SCALE	PLAN	PROFILE
1" = 20'	1" = 20'	1" = 2'



PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

**Fruitvale Outfall Line Replacement Project
Rood Avenue Sanitary Sewer Alignment**



CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 32 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY PLUGGING INLET AND OUTLET PIPE WITH CONCRETE AND FLOW FILLING REMAINING BARREL SECTIONS.
- 250 108.2 - IMPORTED TRENCH BACKFILL (INCLUDING HAUL AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL) (AS REQUIRED BY ENGINEER/INSPECTOR)
- 251 108.7 - GRANULAR STABILIZATION MATERIAL (TYPE B) (AS REQUIRED BY ENGINEER/INSPECTOR)
- 301 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, ADJUSTING TO FINAL GRADE, AND EPOXY COATING MANHOLE INVERT, INTERIOR WALLS AND GRADE RINGS. CITY OF GRAND JUNCTION WILL HOLIDAY TEST MANHOLE INTERIOR. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). CONTRACTOR IS ALLOWED THE OPTION OF LAYING SEWER PIPE CONTINUOUSLY THROUGH MANHOLE.
- 325 102.9/108.2 - 18" 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.
- 358 103 - CLAY CUT-OFF WALL (INCEDENTAL TO SEWER INTALLATION PAY ITEM)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS) (CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)
- 730 212 - RESOD AREA AS SHOWN, AND TOPSOIL (6" THICK MINIMUM)
- 778 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)

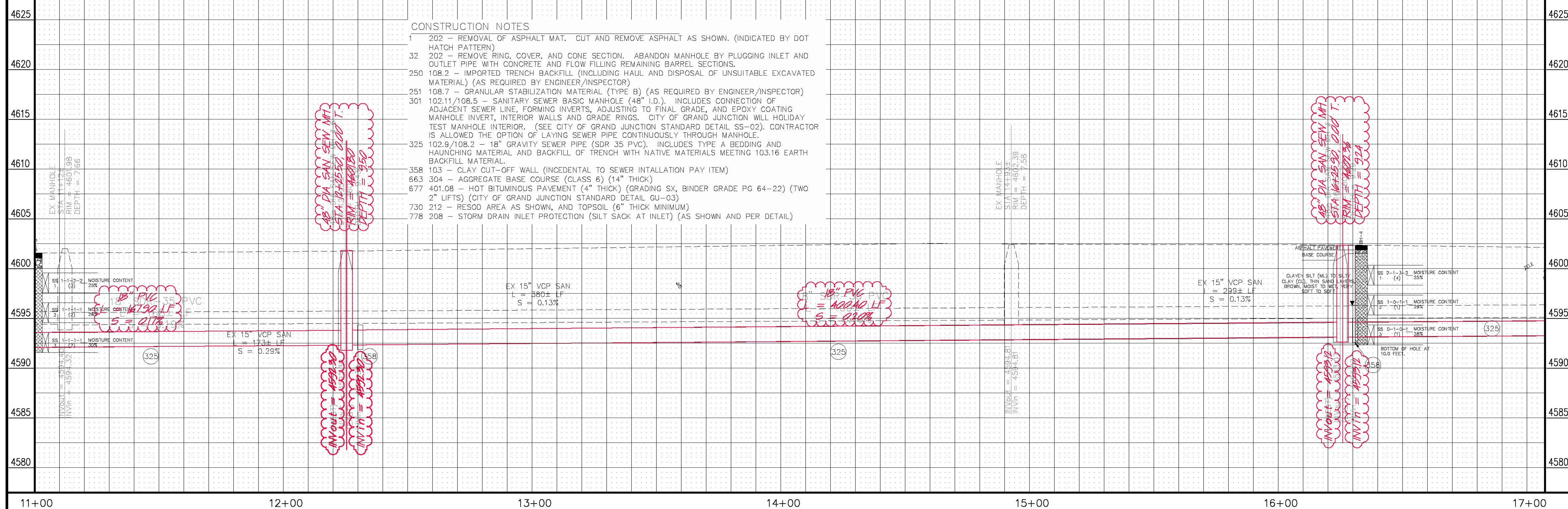
48" DIA SAN SEW MH
STA 12+25.50, 0.00' t.
N 36195.53
E 96873.32

48" DIA SAN SEW MH
STA 16+25.50, 0.00' t.
N 36195.45
E 97273.32

18" PVC
L = 100.00 LF
S = 0.13%

48" DIA SAN SEW MH
STA 16+25.50, 0.00' t.
N 36195.45
E 97273.32

INVERT = 4592.81
RIM = 4594.81



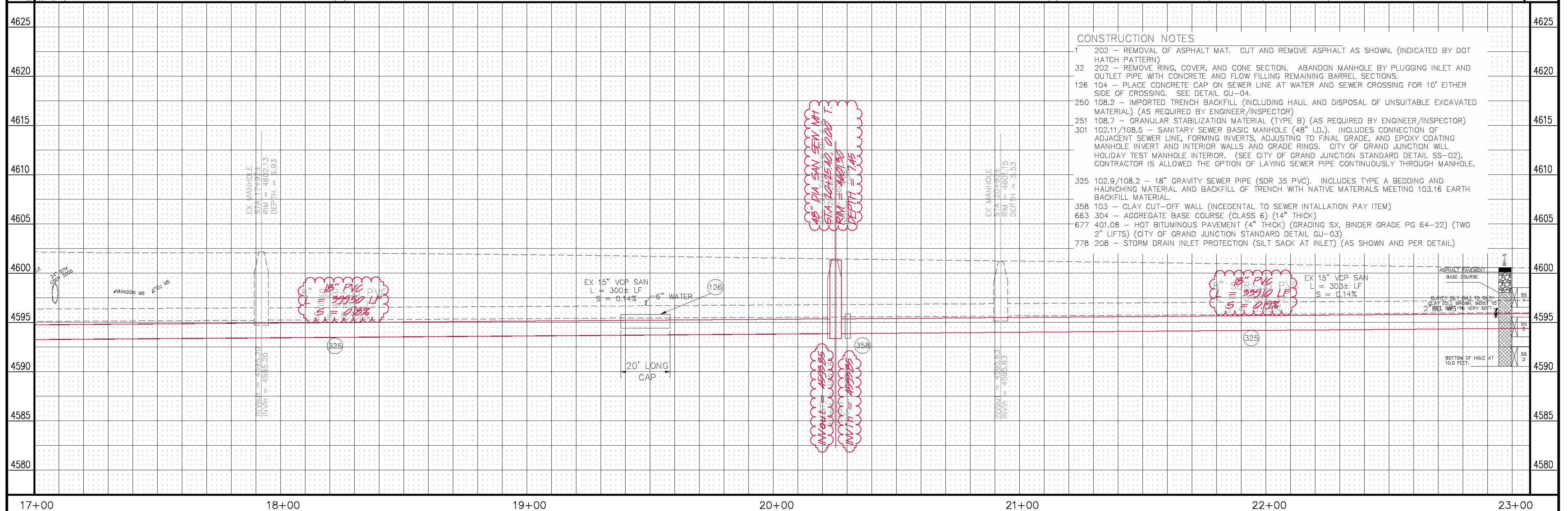
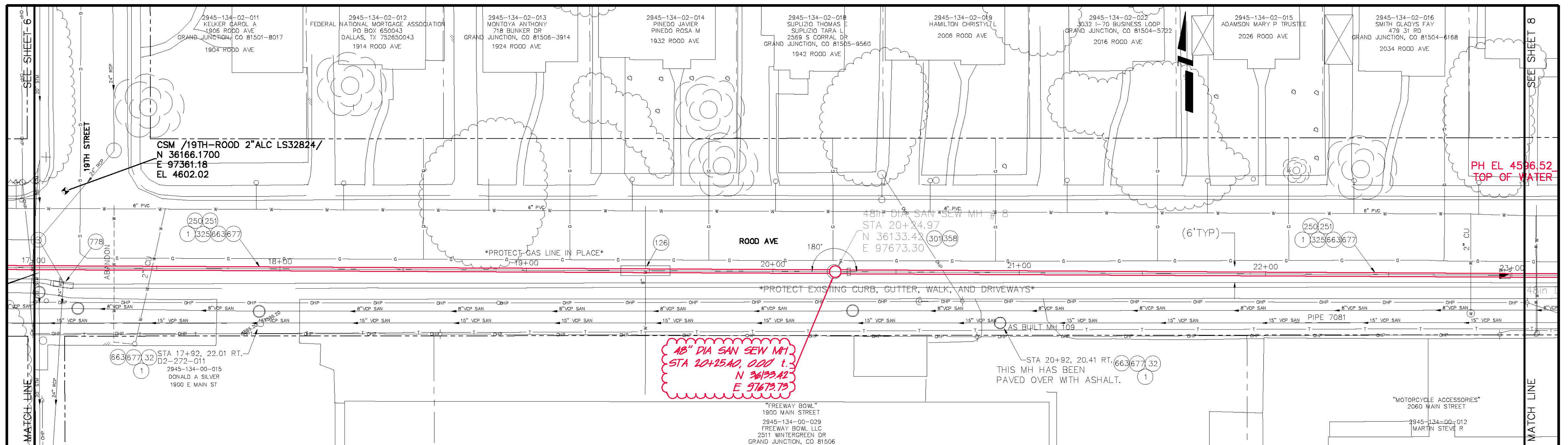
REVISION	DESCRIPTION	DATE	DRAWN BY	JCS	DATE	6/2011
REVISION A	As Built from High Desert Survey	2-12	DESIGNED BY	ALC/JCS	DATE	6/2011
REVISION B			CHECKED BY		DATE	
REVISION C			APPROVED BY		DATE	

SCALES:

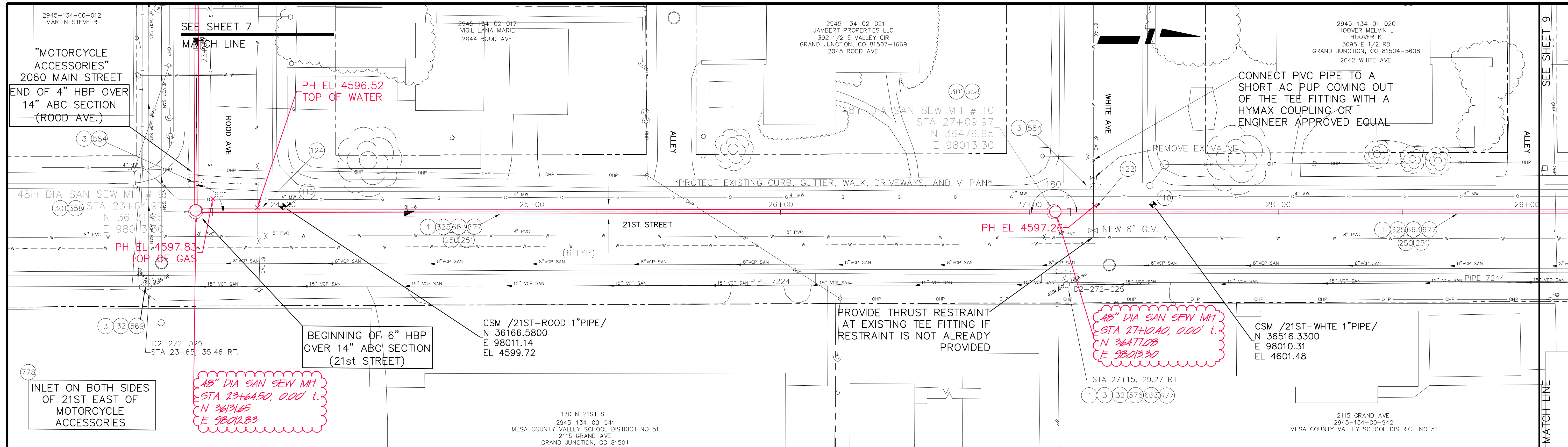
PLAN	1" = 20'
HORIZONTAL	1" = 20'
VERTICAL	1" = 2'

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

**Fruitvale Outfall Line Replacement Project
Rood Avenue Sanitary Sewer Alignment**



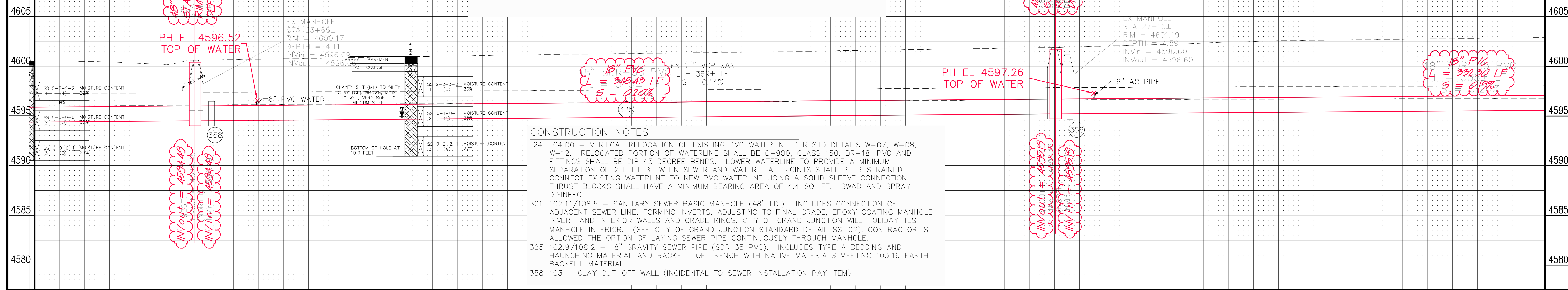
- CONSTRUCTION NOTES**
- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
 - 32 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY PLUGGING INLET AND OUTLET PIPE WITH CONCRETE AND FLOW FILLING REMAINING BARREL SECTIONS.
 - 126 104 - PLACE CONCRETE CAP ON SEWER LINE AT WATER AND SEWER CROSSING FOR 10' EITHER SIDE OF CROSSING. SEE DETAIL GU-04.
 - 250 108.2 - IMPORTED TRENCH BACKFILL (INCLUDING HAUL AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL) (AS REQUIRED BY ENGINEER/INSPECTOR)
 - 251 108.7 - GRANULAR STABILIZATION MATERIAL (TYPE B) (AS REQUIRED BY ENGINEER/INSPECTOR)
 - 301 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, ADJUSTING TO FINAL GRADE, AND EPOXY COATING MANHOLE INVERT AND INTERIOR WALLS AND GRADE RINGS. CITY OF GRAND JUNCTION WILL HOLIDAY TEST MANHOLE INTERIOR. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). CONTRACTOR IS ALLOWED THE OPTION OF LAYING SEWER PIPE CONTINUOUSLY THROUGH MANHOLE.
 - 325 102.9/108.2 - 18" 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.
 - 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INTALLATION PAY ITEM)
 - 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
 - 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS) (CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)
 - 778 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)



4625
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- CONSTRUCTION NOTES**
- 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
 - 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.
 - 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY FLOW FILLING REMAINING BARREL SECTIONS.
 - 629 - REFERENCE AND RESET SURVEY MONUMENT. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR'S SURVEYOR MUST SUBMIT FIELD NOTES DETAILING THE PERMANENT REFERENCES PLACED FOR EACH MONUMENT IN DANGER OF LOSS DUE TO CONSTRUCTION. THE METHOD OF REFERENCING MUST BE APPROVED BY THE CITY SURVEYOR PRIOR TO ANY CONSTRUCTION. AFTER CONSTRUCTION, THE SURVEYOR MUST FILE A NEW MONUMENT RECORD FOR EACH POINT THAT WAS REPLACED.
 - 104.00 - VERTICAL RELOCATION OF EXISTING AC WATERLINE PER STD DETAILS W-07, W-08, W-12. RELOCATED PORTION OF WATERLINE SHALL BE C-900, CLASS 150, DR-18, PVC AND FITTINGS SHALL BE DIP 45 DEGREE BENDS. LOWER WATERLINE TO PROVIDE A MINIMUM SEPARATION OF 2 FEET BETWEEN SEWER AND WATER. ALL JOINTS SHALL BE RESTRAINED. CONNECT EXISTING AC WATERLINE TO NEW PVC WATERLINE USING DRESSER COUPLINGS (HYMAX). THRUST BLOCKS SHALL HAVE A MINIMUM BEARING AREA OF 4.4 SQ. FT. SWAB AND SPRAY DISINFECT.

- CONSTRUCTION NOTES**
- 569 608.06 - MONOLITHIC VERTICAL CURB, GUTTER AND SIDEWALK (MATCH EXISTING)
 - 576 608.06 - CONCRETE DRIVEWAY SECTION (8" THICK) (COMMERCIAL)
 - 584 608.06 - CONCRETE DRAINAGE PAN (MATCH EXISTING) (INCLUDES #5 TIE BARS)
 - 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
 - 677 401.08 - HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING 5X, BINDER GRADE PG 64-22) (Three 2" LIFTS)
 - 778 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)
 - 250 108.2 - IMPORTED TRENCH BACKFILL (INCLUDING HAUL AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL) (AS REQUIRED BY ENGINEER/INSPECTOR)
 - 251 108.7 - GRANULAR STABILIZATION MATERIAL (TYPE B) (AS REQUIRED BY ENGINEER/INSPECTOR)



23+00 24+00 25+00 26+00 27+00 28+00 29+00

REVISION	DESCRIPTION	DATE
REVISION Δ	As Built from High Desert Survey	2-12
REVISION Δ		
REVISION Δ		
REVISION Δ		

DRAWN BY	JCS	DATE	6/2011
DESIGNED BY	ALC/JCS	DATE	6/2011
CHECKED BY		DATE	
APPROVED BY		DATE	

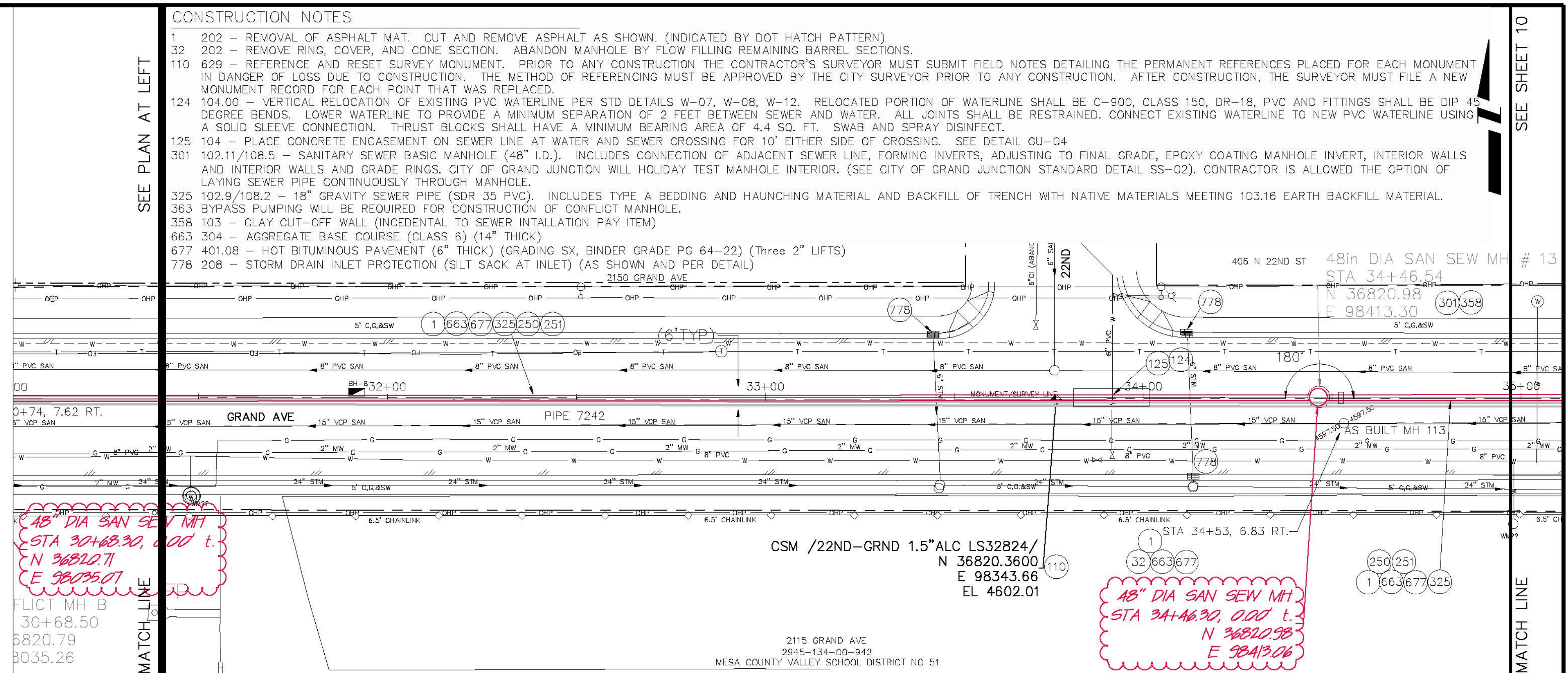
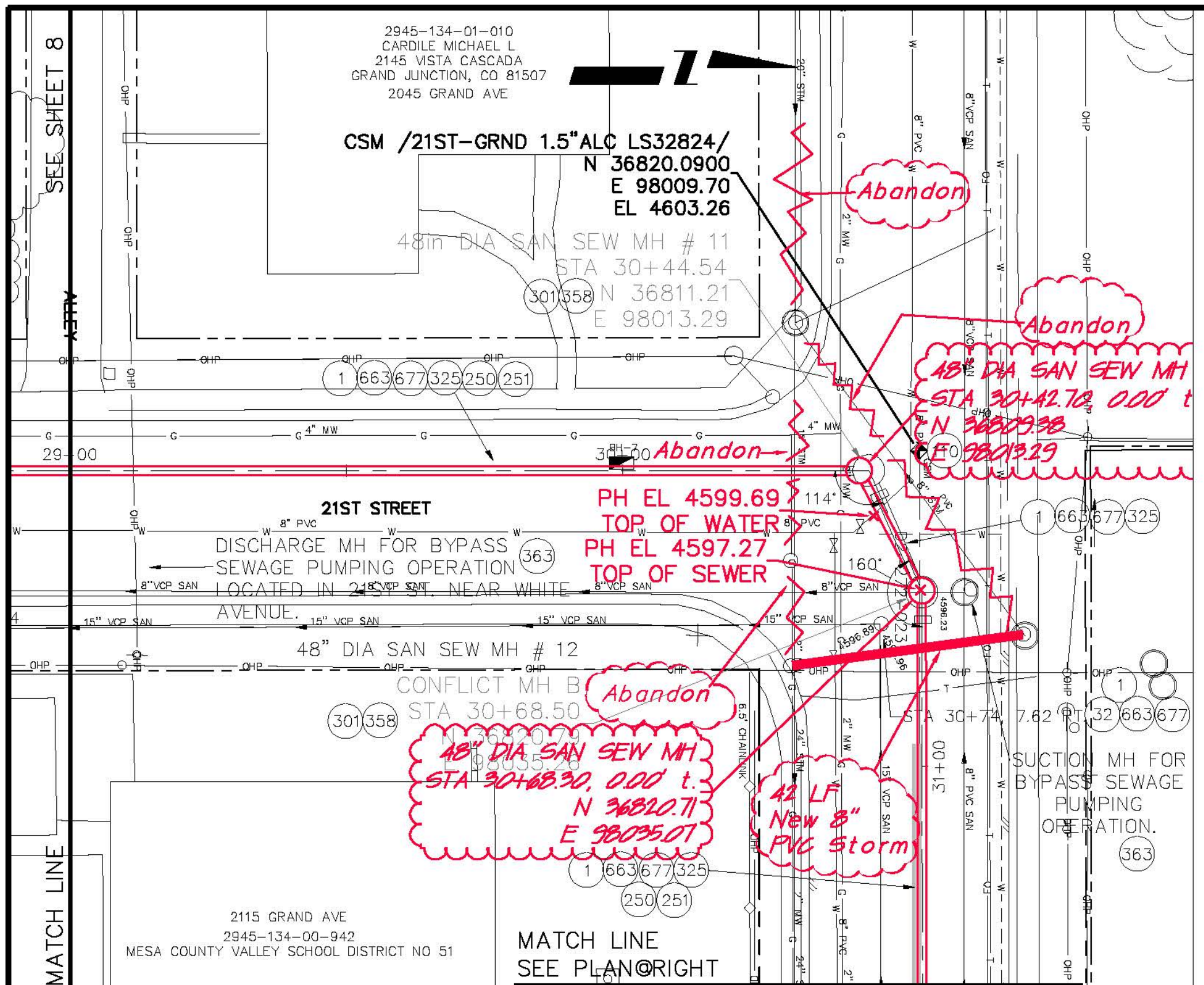
SCALES:

PLAN	1" = 20'
HORIZONTAL	1" = 20'
VERTICAL	1" = 2'



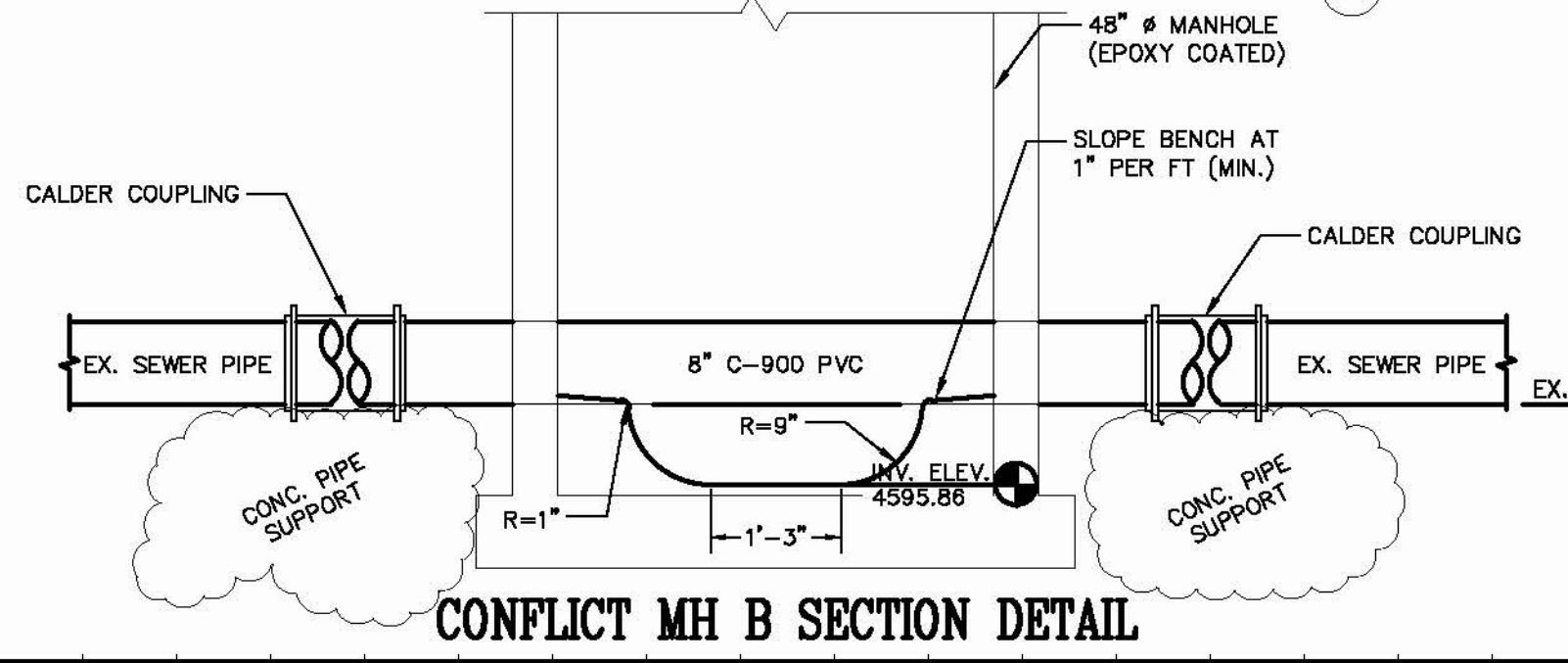
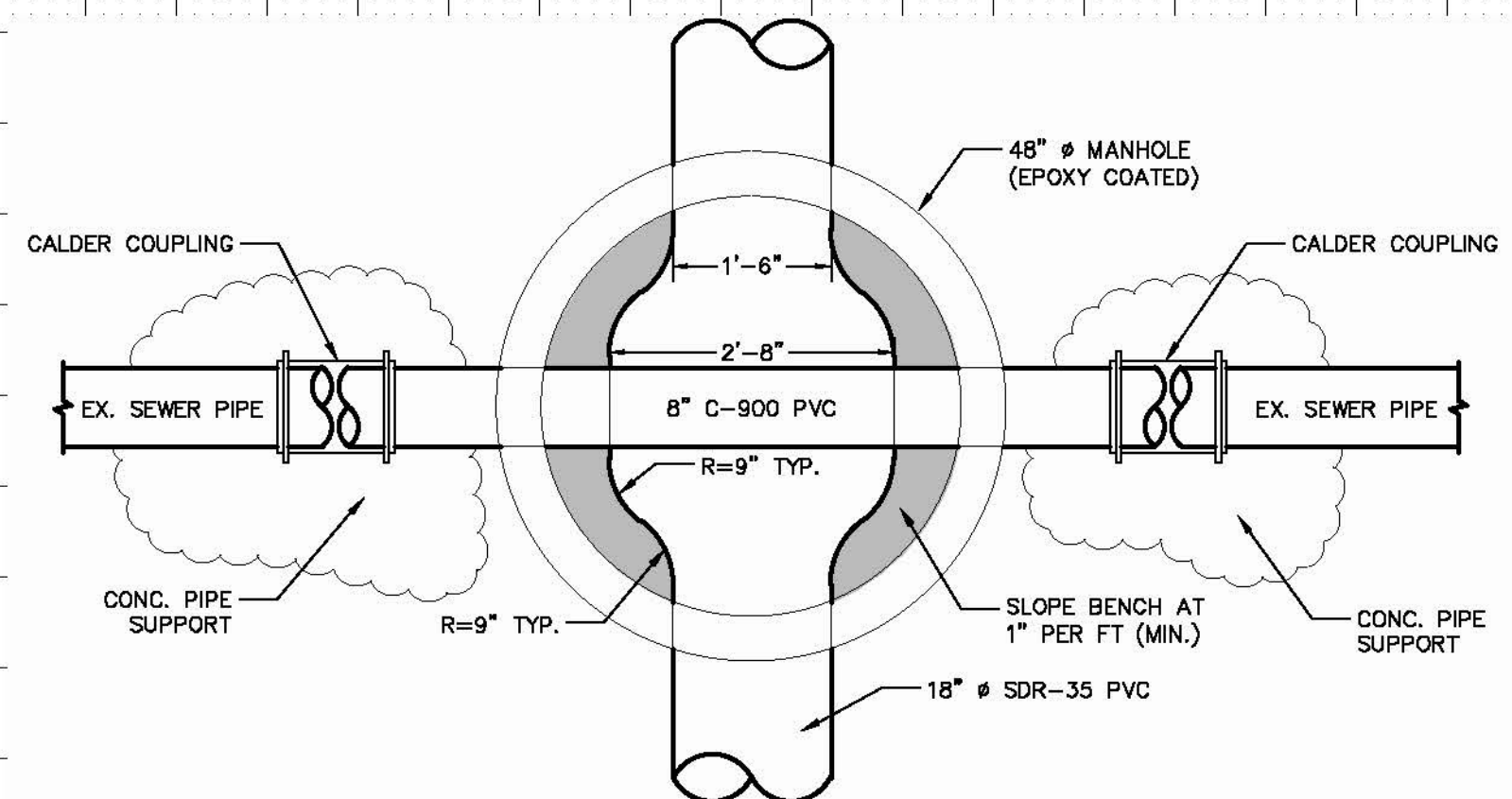
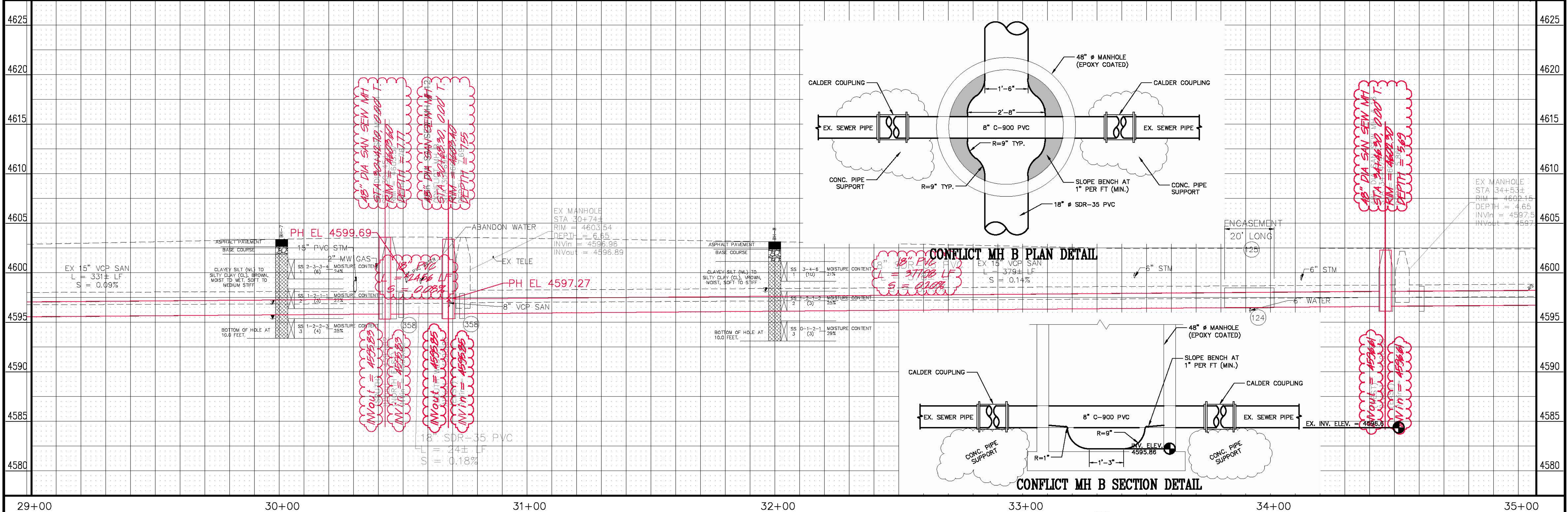
**PUBLIC WORKS
AND PLANNING
ENGINEERING DIVISION**

**Fruitvale Outfall Line Replacement Project
Rood Ave. & 21st Street Sanitary Sewer Alignment**



CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 32 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY FLOW FILLING REMAINING BARREL SECTIONS.
- 110 629 - REFERENCE AND RESET SURVEY MONUMENT. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR'S SURVEYOR MUST SUBMIT FIELD NOTES DETAILING THE PERMANENT REFERENCES PLACED FOR EACH MONUMENT IN DANGER OF LOSS DUE TO CONSTRUCTION. THE METHOD OF REFERENCING MUST BE APPROVED BY THE CITY SURVEYOR PRIOR TO ANY CONSTRUCTION. AFTER CONSTRUCTION, THE SURVEYOR MUST FILE A NEW MONUMENT RECORD FOR EACH POINT THAT WAS REPLACED.
- 124 104.00 - VERTICAL RELOCATION OF EXISTING PVC WATERLINE PER STD DETAILS W-07, W-08, W-12. RELOCATED PORTION OF WATERLINE SHALL BE C-900, CLASS 150, DR-18, PVC AND FITTINGS SHALL BE DIP 45 DEGREE BENDS. LOWER WATERLINE TO PROVIDE A MINIMUM SEPARATION OF 2 FEET BETWEEN SEWER AND WATER. ALL JOINTS SHALL BE RESTRAINED. CONNECT EXISTING WATERLINE TO NEW PVC WATERLINE USING A SOLID SLEEVE CONNECTION. THRUST BLOCKS SHALL HAVE A MINIMUM BEARING AREA OF 4.4 SQ. FT. SWAB AND SPRAY DISINFECT.
- 125 104 - PLACE CONCRETE ENCASUREMENT ON SEWER LINE AT WATER AND SEWER CROSSING FOR 10' EITHER SIDE OF CROSSING. SEE DETAIL GU-04
- 301 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, ADJUSTING TO FINAL GRADE, EPOXY COATING MANHOLE INVERT, INTERIOR WALLS AND INTERIOR WALLS AND GRADE RINGS. CITY OF GRAND JUNCTION WILL HOLIDAY TEST MANHOLE INTERIOR. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). CONTRACTOR IS ALLOWED THE OPTION OF LAYING SEWER PIPE CONTINUOUSLY THROUGH MANHOLE.
- 325 102.9/108.2 - 18" 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.
- 363 BYPASS PUMPING WILL BE REQUIRED FOR CONSTRUCTION OF CONFLICT MANHOLE.
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING SX, BINDER GRADE PG 64-22) (Three 2" LIFTS)
- 778 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)



REVISION	DESCRIPTION	DATE
1	As Built from High Desert Survey	2-12
2		
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4		

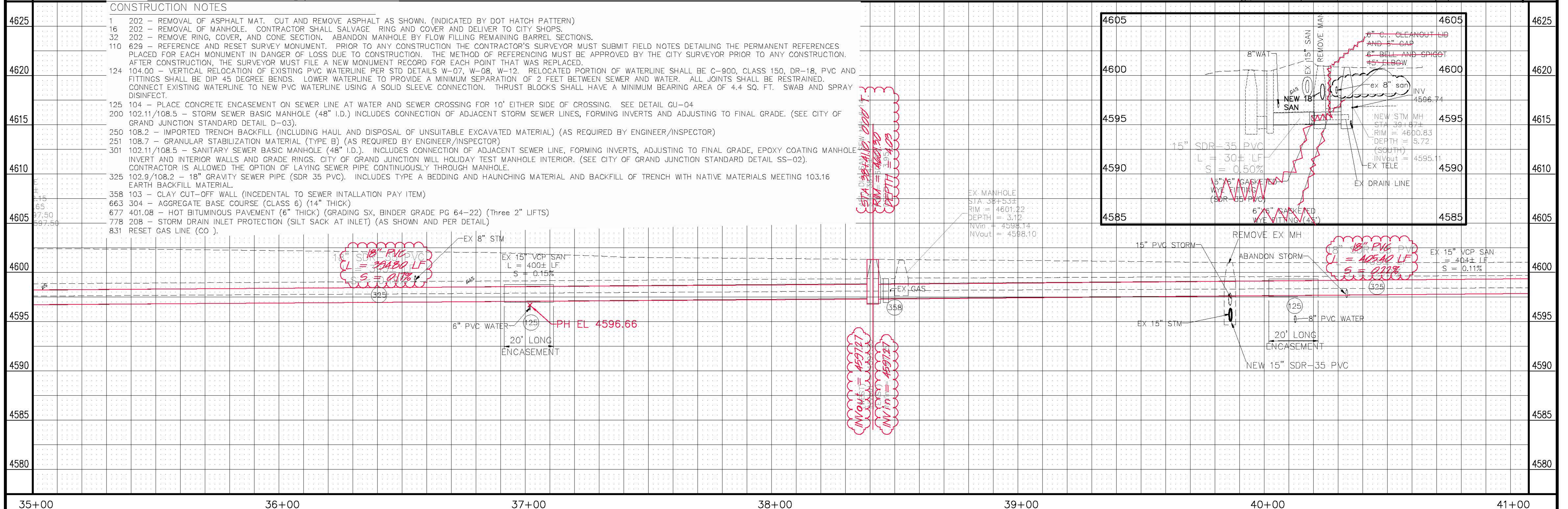
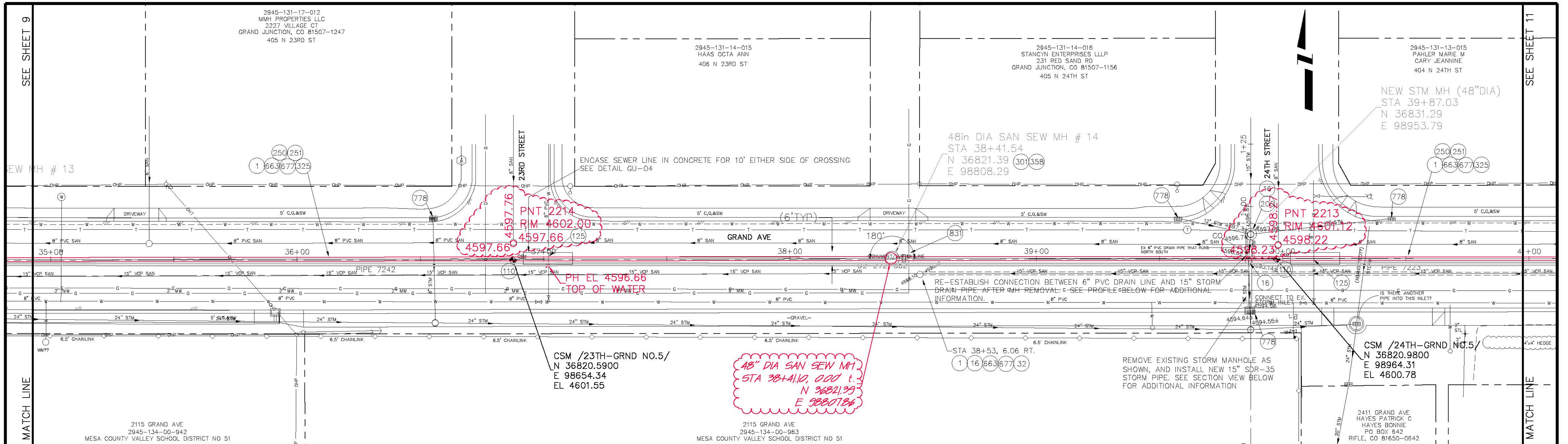
DRAWN BY	JCS	DATE	6/2011
DESIGNED BY	ALC/JCS	DATE	6/2011
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALES:	
PLAN	1" = 20'
PROFILE	1" = 2'



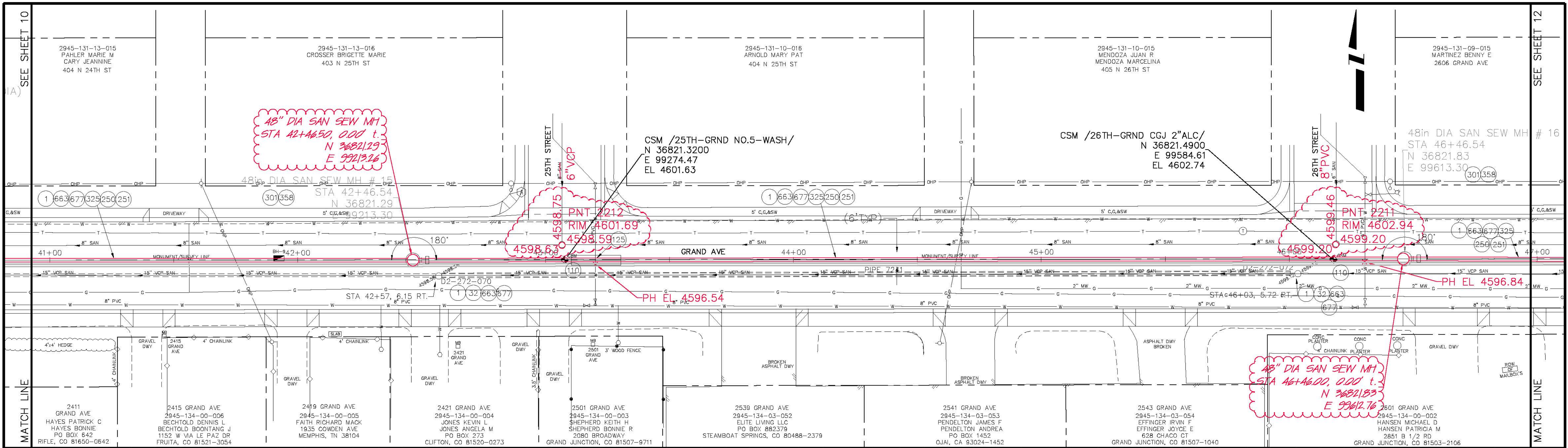
PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

**Fruitvale Outfall Line Replacement Project
21st Street & Grand Ave. Sanitary Sewer Alignment**



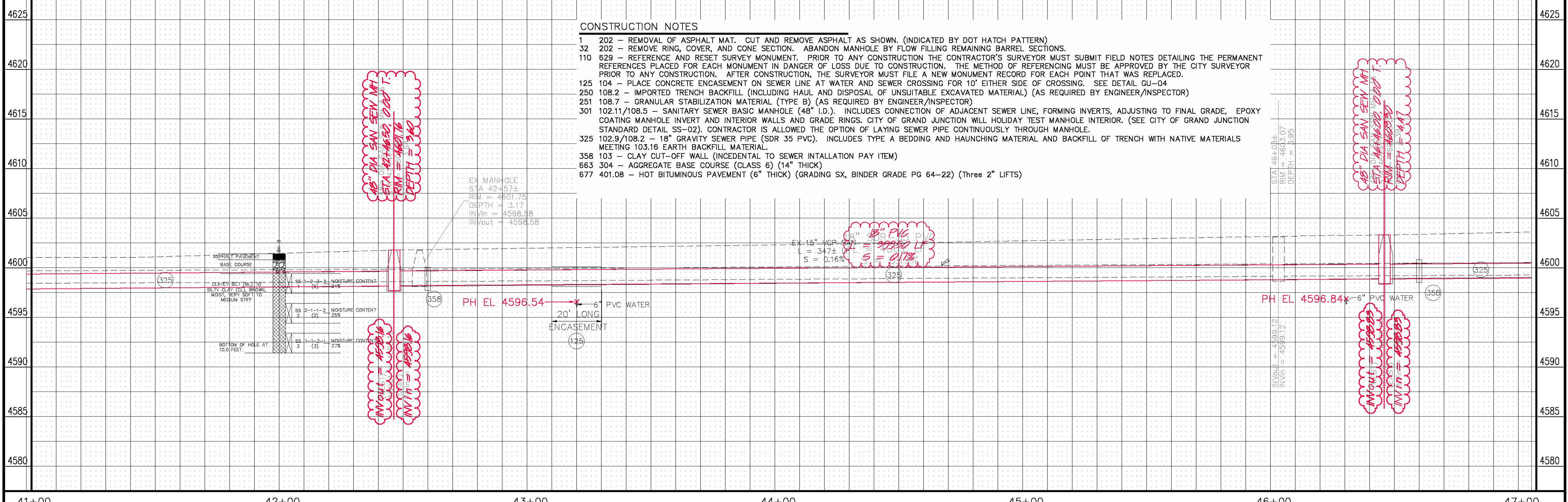
- CONSTRUCTION NOTES**
- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
 - 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
 - 32 202 - REMOVE RING, COVER, AND CONE SECTION. ABANDON MANHOLE BY FLOW FILLING REMAINING BARREL SECTIONS.
 - 110 629 - REFERENCE AND RESET SURVEY MONUMENT. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR'S SURVEYOR MUST SUBMIT FIELD NOTES DETAILING THE PERMANENT REFERENCES PLACED FOR EACH MONUMENT IN DANGER OF LOSS DUE TO CONSTRUCTION. THE METHOD OF REFERENCING MUST BE APPROVED BY THE CITY SURVEYOR PRIOR TO ANY CONSTRUCTION. AFTER CONSTRUCTION, THE SURVEYOR MUST FILE A NEW MONUMENT RECORD FOR EACH POINT THAT WAS REPLACED.
 - 124 104.00 - VERTICAL RELOCATION OF EXISTING PVC WATERLINE PER STD DETAILS W-07, W-08, W-12. RELOCATED PORTION OF WATERLINE SHALL BE C-900, CLASS 150, DR-18, PVC AND FITTINGS SHALL BE DIP 45 DEGREE BENDS. LOWER WATERLINE TO PROVIDE A MINIMUM SEPARATION OF 2 FEET BETWEEN SEWER AND WATER. ALL JOINTS SHALL BE RESTRAINED. CONNECT EXISTING WATERLINE TO NEW PVC WATERLINE USING A SOLID SLEEVE CONNECTION. THRUST BLOCKS SHALL HAVE A MINIMUM BEARING AREA OF 4.4 SQ. FT. SWAB AND SPRAY DISINFECT.
 - 125 104 - PLACE CONCRETE ENCASEMENT ON SEWER LINE AT WATER AND SEWER CROSSING FOR 10' EITHER SIDE OF CROSSING. SEE DETAIL GU-04
 - 200 102.11/108.5 - 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).
 - 250 108.2 - IMPORTED TRENCH BACKFILL (INCLUDING HAUL AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL) (AS REQUIRED BY ENGINEER/INSPECTOR)
 - 251 108.7 - GRANULAR STABILIZATION MATERIAL (TYPE B) (AS REQUIRED BY ENGINEER/INSPECTOR)
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 - 325 102.9/108.2 - 18" 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.
 - 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
 - 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
 - 677 401.08 - HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING SX, BINDER GRADE PG 64-22) (Three 2" LIFTS)
 - 778 208 - STORM DRAIN INLET PROTECTION (SILT SACK AT INLET) (AS SHOWN AND PER DETAIL)
 - 831 RESET GAS LINE (CO).

REVISION Δ As Built from High Desert Survey - 2-12 REVISION Δ REVISION Δ REVISION Δ	DESCRIPTION DATE DATE DATE DATE	DRAWN BY JCS DATE 6/2011 DESIGNED BY ALC/JCS DATE 6/2011 CHECKED BY DATE APPROVED BY DATE	SCALES: PLAN HORIZONTAL 1" = 20' PROFILE HORIZONTAL 1" = 20' VERTICAL 1" = 5'		PUBLIC WORKS AND PLANNING ENGINEERING DIVISION	Fruitvale Outfall Line Replacement Project Grand Avenue Sanitary Sewer Alignment	10
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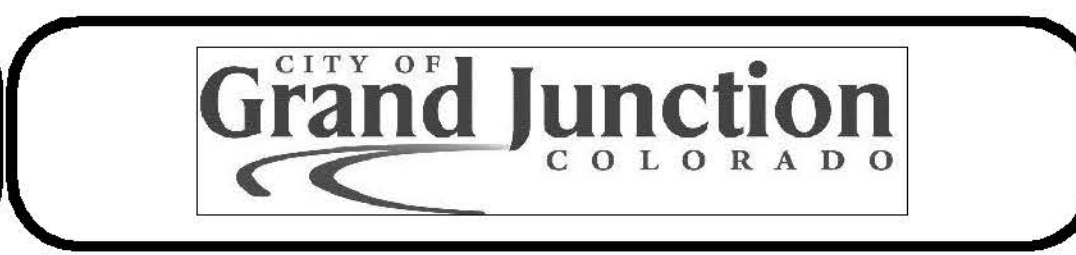
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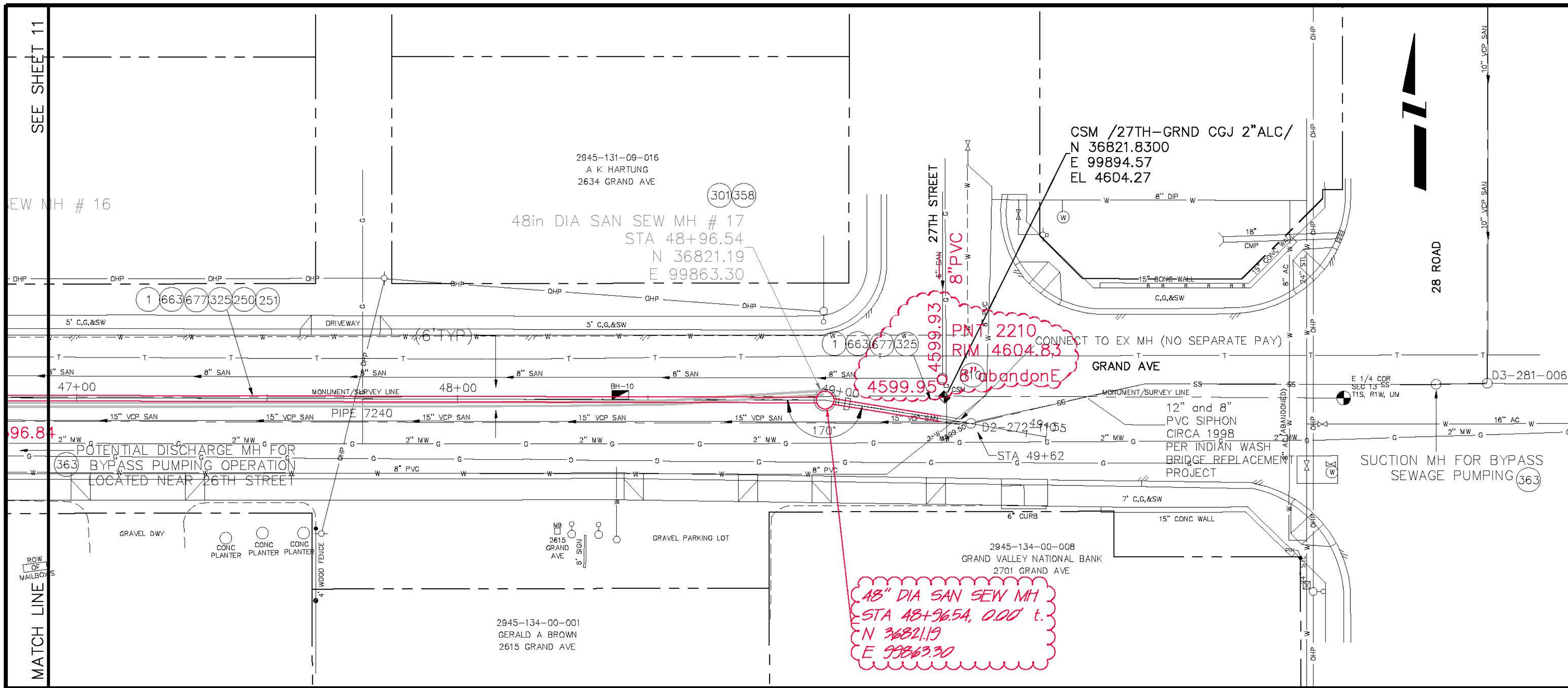
REVISION	DESCRIPTION	DATE	DRAWN BY	JCS	DATE
REVISION A					6/2011
REVISION B					6/2011
REVISION C					
REVISION D					

SCALES:	
PLAN	HORIZONTAL
1" = 20'	
PROFILE	HORIZONTAL
1" = 10'	
	VERTICAL
1" = 2'	



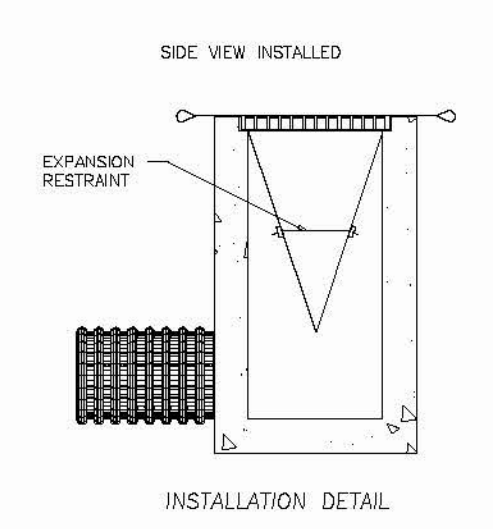
PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

**Fruitvale Outfall Line Replacement Project
Grand Avenue Sanitary Sewer Alignment**

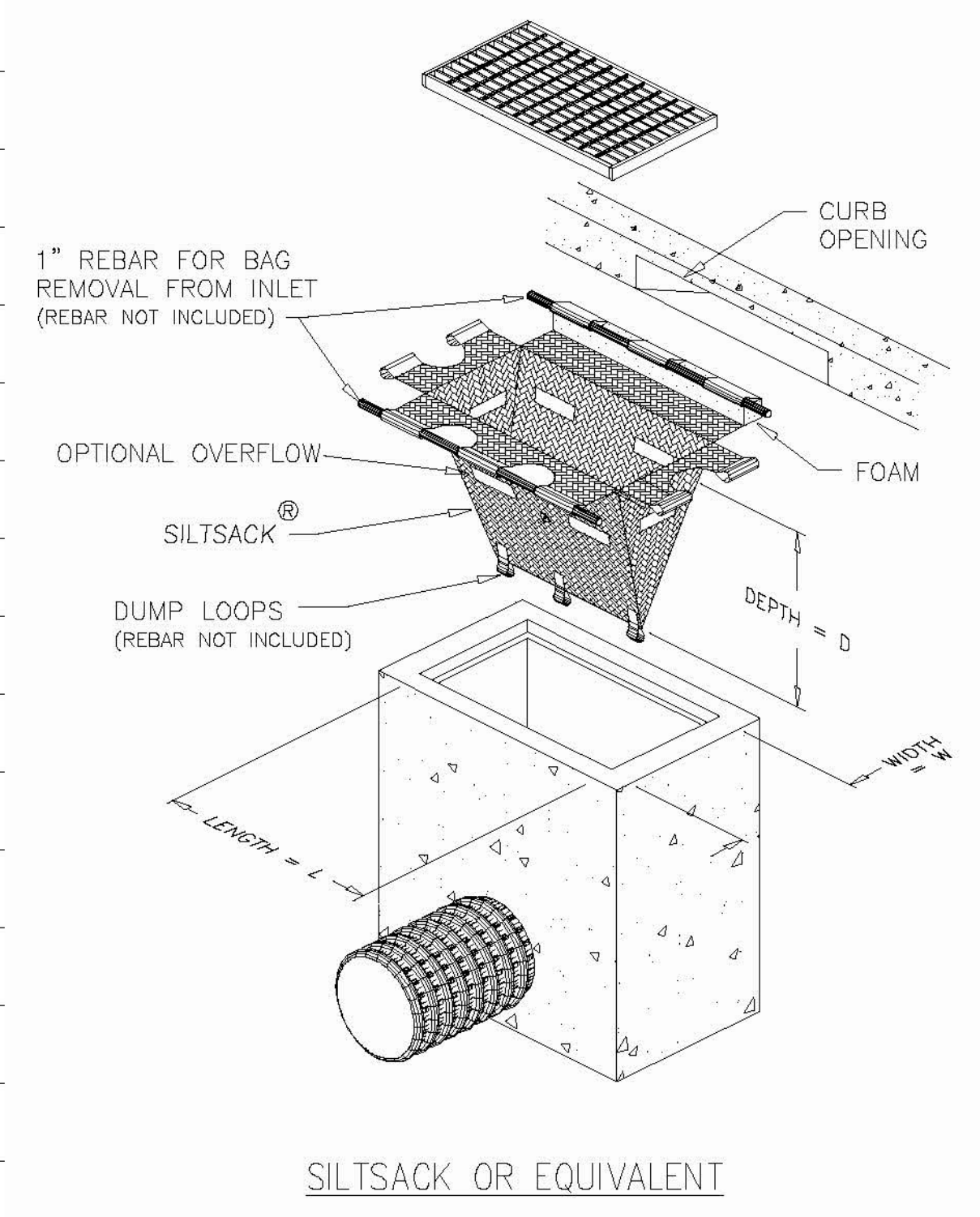


CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 110 629 - REFERENCE AND RESET SURVEY MONUMENT. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR'S SURVEYOR MUST SUBMIT FIELD NOTES DETAILING THE PERMANENT REFERENCES PLACED FOR EACH MONUMENT IN DANGER OF LOSS DUE TO CONSTRUCTION. THE METHOD OF REFERENCING MUST BE APPROVED BY THE CITY SURVEYOR PRIOR TO ANY CONSTRUCTION. AFTER CONSTRUCTION, THE SURVEYOR MUST FILE A NEW MONUMENT RECORD FOR EACH POINT THAT WAS REPLACED.
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- 301 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS, ADJUSTING TO FINAL GRADE, EPOXY COATING MANHOLE INVERT AND INTERIOR WALLS AND GRADE RINGS. CITY OF GRAND JUNCTION WILL HOLD DAY TEST MANHOLE INTERIOR. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
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- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING WILL BE REQUIRED FOR THE SEWER CONNECTION INTO THE EXISTING MANHOLE.
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (14" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING SX, BINDER GRADE PG 64-22) (Three 2" LIFTS)



4625		4625
4620		4620
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4590		4590
4585		4585
4580		4580
47+00 48+00 49+00 50+00		



REVISION	DESCRIPTION	DATE	DRAWN BY	JCS	DATE
REVISION A	As Built from High Desert Survey	2-12	ALC/JCS		6/2011
REVISION B					
REVISION C					
REVISION D					

SCALES:	
PLAN	PROFILE
HORIZONTAL 0 5 10 20	HORIZONTAL 0 5 10 20
	VERTICAL 0 5 10

