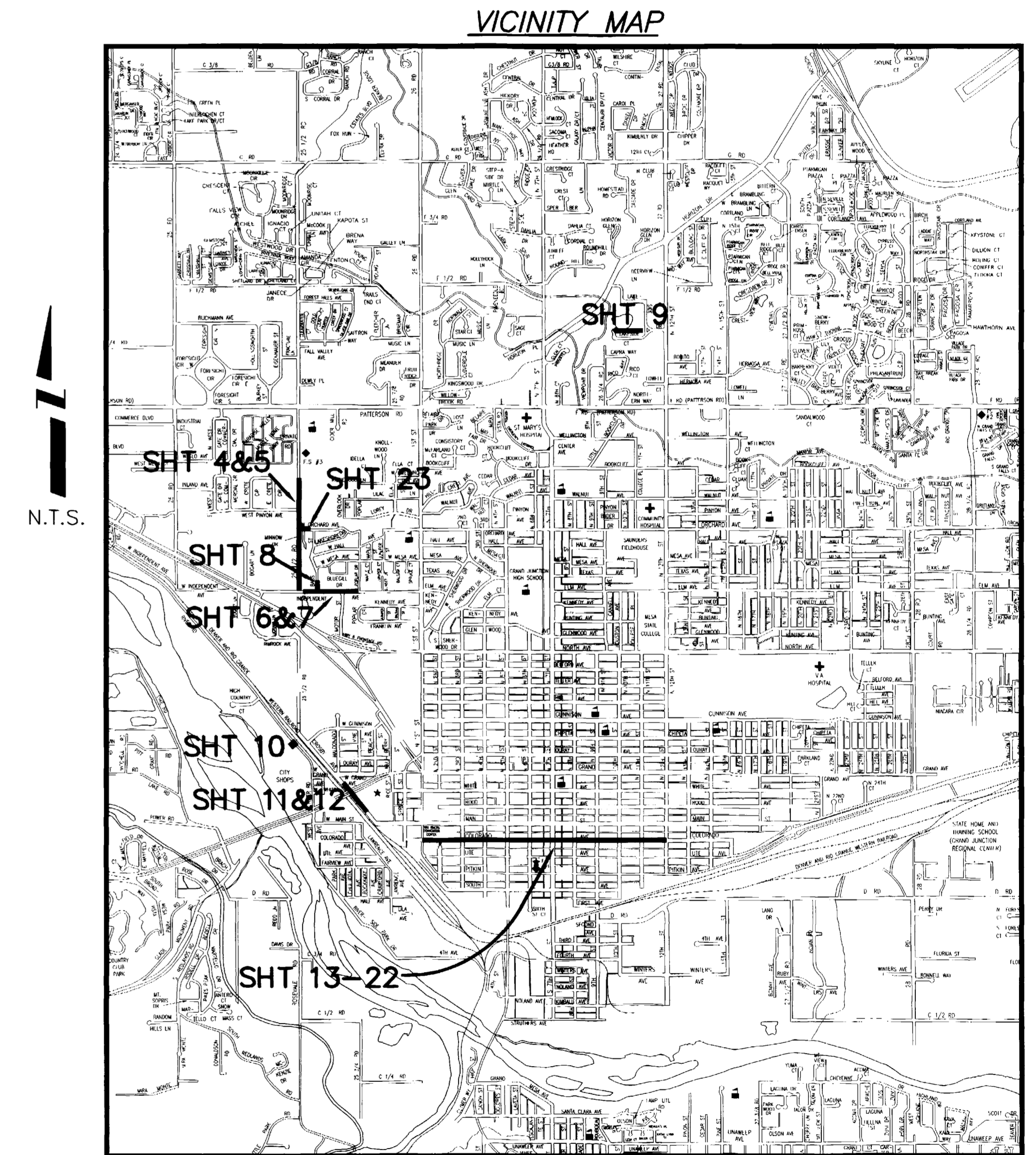


2003 SEWER INTERCEPTOR REHABILITATIONS APRIL, 2003

- 1 ————— Cover Sheet
- 2 ————— Standard Abbreviations, Legend, and Symbols
- 3 ————— Summary of Approximate Quantities
- 4-5 ————— Horizon Drive Interceptor Rehabilitation
in 25 1/2 Road
- 6-7 ————— Independent Ave Sewer Rehabilitation
- 8 ————— Bass Street Sewer Rehabilitation
- 9 ————— Lakeside Court Sewer Rehabilitation
- 10 ————— River Road Sewer Rehabilitation
- 11-12 ————— Crosby Ave Sewer Rehabilitation
- 13-17 ————— Colorado Avenue Interceptor
- 18 ————— West Orchard Avenue Sewer Rehabilitation
- 19 ————— Details



*Department of Public Works & Utilities
Engineering and Technical Services Divisions
City of Grand Junction, Colorado*

DRAWING STATUS:	
○ PROGRESS	
● BID SET	
○ FINAL CONSTRUCTION DRAWINGS	
○ ASBUILT	
APPROVED FOR CONSTRUCTION	
CITY OF GRAND JUNCTION	DATE
ACCEPTED AS CONSTRUCTED	
CITY OF GRAND JUNCTION	DATE

2003 SEWER INTERCEPTOR REHABILITATIONS, APRIL, 2003, Plan Set No.

ABBREVIATIONS	DESCRIPTION
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
C	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
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
POC	POINT ON CURVE
POT	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
SCH	SCHEDULE
SF	SILT FENCE
SL	SECTION LINE
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
VPCC	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

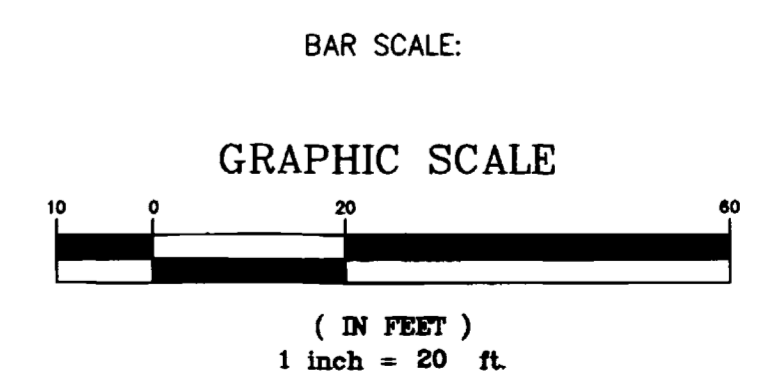
LEGEND

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 (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	
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	4-02	SCALE
REVISION			DESIGNED BY		DATE		PLAN
REVISION			CHECKED BY		DATE		HORIZ. 1"=20' HORIZ.
REVISION			APPROVED BY		DATE		VERT.

**DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO**

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

Item No.	CDOT, City Ref.	Description	Quantity	Units
		Bass Street Collector		
BSC-1	SP	10 inch CIPP inclusive (cleaning, video, cipp, & service connections)	224.	LF
BSC-2	SP	Bypass pumping per City Specifications including traffic control Colorado Avenue Interceptor	0.5	DAY
COI-1	SP	48 inch dia. manhole rehabilitation inclusive (prep. for fiberglass insert, insert, ring & cover adjustment)	99.1	VLF
COI-2	SP	24 inch CIPP inclusive (cleaning, video, cipp, & service connections)	2,311.	LF
COI-3		Manhole step repair (D1-261-006)	1.	LS
COI-4	SP	Bypass pumping per City Specifications including traffic control Crosby Avenue Interceptor	5.	DAY
CRI-1	SP	48 inch dia. manhole rehabilitation inclusive (prep. for fiberglass insert, insert, & ring & cover adjustment)	23.5	VLF
CRI-2	SP	24 inch CIPP inclusive (cleaning, video, cipp, & service connections)	782.	LF
CRI-3	SP	Bypass pumping per City Specifications including traffic control Horizon Drive Interceptor	2.	DAY
HDI-1	SP	48 inch dia. manhole rehabilitation inclusive (prep. for fiberglass insert, insert, & ring & cover adjustment)	28.2	VLF
HDI-2	SP	15 inch CIPP inclusive (cleaning, video, cipp, & service connections)	2,039.	LF
HDI-3	SP	Bypass pumping per City Specifications including traffic control Independent Avenue Collector	2.	DAY
IAC-1	SP	8 inch CIPP inclusive (cleaning, video, cipp, & service connections)	644.	LF
IAC-2	SP	10 inch CIPP inclusive (cleaning, video, cipp, & service connections)	279.	LF

IAC-3	SP	12 inch CIPP inclusive (cleaning, video, cipp, & service connections)	257.	LF
IAC-4	SP	Bypass pumping per City Specifications including traffic control Lakeside Court Collector	2.	DAY
LC-1	SP	6 inch CIPP inclusive (cleaning, video, cipp, & service connections)	623.	LF
LC-2	SP	Bypass pumping per City Specifications including traffic control River Road Interceptor	1.	DAY
RRI-1	202, 304 & 401	Remove and replace asphalt road section; 6-inch thick HBP Grading SX Superpave, 75 GYR, PG64-22AC, compacted in place over 12 inches aggregate base course Class 6	18.	SY
RRI-2	103.16	Earth Backfill Material	600.	TON
RRI-3	102.9	Remove and reset existing chainlink fence as needed	160.	LF
RRI-4	304	6-inch thickness of Class 6 ABC compacted in place	160.	SY
RRI-5	102.9	Plug existing 24 inch RCP sewer at existing manhole flowing from east	1.	EA
RRI-6	SP	Bypass pumping per City Specifications including traffic control	0.5	DAY
RRI-7	102.11	Furnish and install 72-inch dia. concrete manhole with epoxy coating or "T-lock" liner per Section 102.11 of Standard Contract Documents with ring, cover, cone and invert (standard 5 foot height). Cast base over existing line.	1.	EA
RRI-8	102.11	Furnish and install 72-inch dia. concrete manhole barrel sections in excess of the standard 5 foot height	7.	LF
RRI-9	102.11	Furnish and install 60-inch dia. concrete manhole with epoxy coating or "T-lock" liner per Section 102.11 of Standard Contract Documents with ring, cover, cone, and invert (standard 5 foot height). Cast base over existing line and plug existing line to south.	1.	EA

RRI-10	102.11	Furnish and install 60-inch dia. concrete manhole barrel sections in excess of the standard 5 foot height	4.	LF
RRI-11	102.9	Furnish and install 24 inch dia. ASTM D-3034 Type PSM (SDR) 35 pipe including pipe bedding and haunching material and pressure testing (use native material if meets City Specifications for backfill)	150.	LF
RRI-12	103.15	Granular Stabilization Material for unstable subgrade	200.	TON
		West Orchard Avenue Collector		
WC-1	SP	8 inch CIPP inclusive (cleaning, video, cipp, & service connections)	100.	LF
WC-2	SP	Bypass pumping per City Specifications including traffic control Common Items	0.5	DAY
	1	626 Mobilization for Sewer Interceptors	1.	LS
	2	630 Traffic Control inclusive for Sewer Interceptors	1.	LS
	3	626 Mobilization for Sewer Collectors	1.	LS
	4	630 Traffic Control inclusive for Sewer Collectors	1.	LS
	5	G-56 Newsletters	8.	WK

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			DESIGNED BY	DATE
REVISION			CHECKED BY	DATE
REVISION			APPROVED BY	DATE

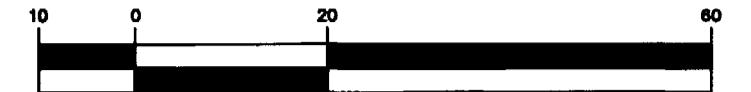
SCALE	
PLAN	PROFILE
HORIZ.	HORIZ.
	VERT.

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
SUMMARY OF APPROXIMATE QUANTITIES



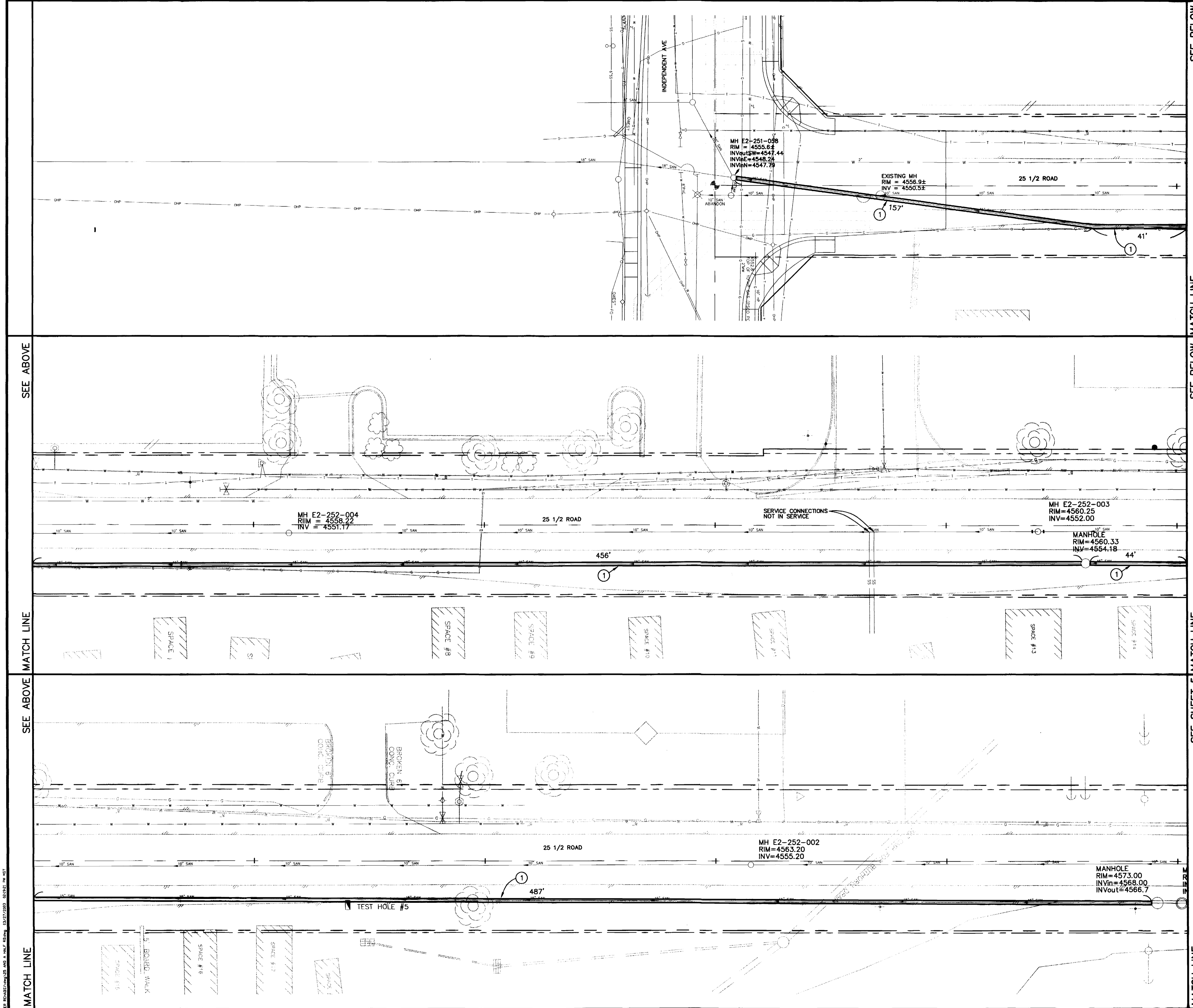
GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

CONSTRUCTION NOTES

- ① SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. EXISTING PIPE IS 15" OR 18" DIA FIBERGLASS PRESSURE PIPE. FIELD VERIFY BEFORE ORDERING LINER.



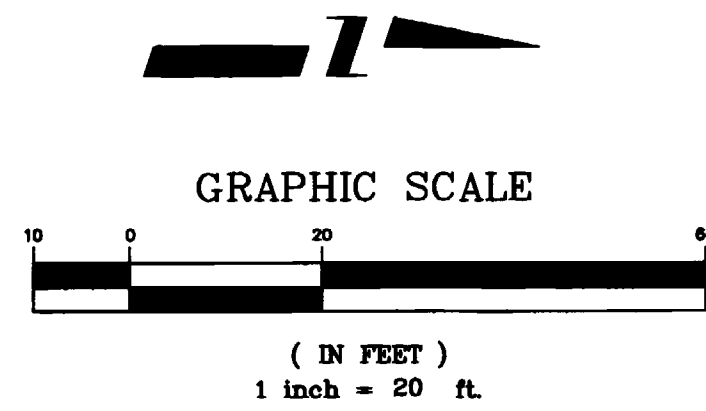
REVISION	DESCRIPTION	DATE

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE	
PLAN	1"=20'
PROFILE	1"=20'
HORIZ.	1"=20'
VERT.	1"=5'

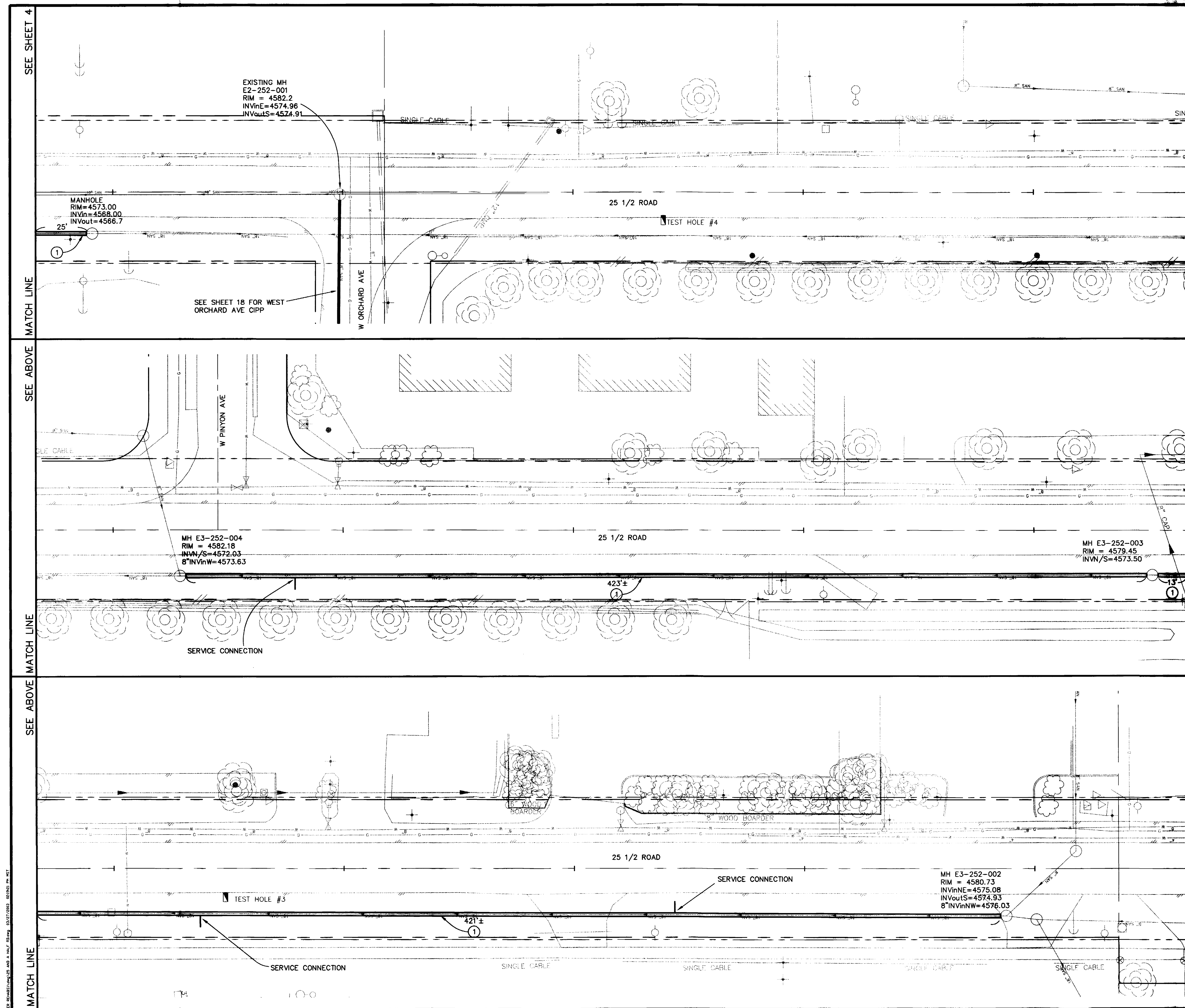
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
SEWER LINE IN 25 1/2 ROAD
FROM MH AT INDEPENDENT TO MH E2-252-01



CONSTRUCTION NOTES

- ① SP DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. EXISTING PIPE IS 15" OR 18" DIA. RCP. FIELD VERIFY BEFORE ORDERING LINER.



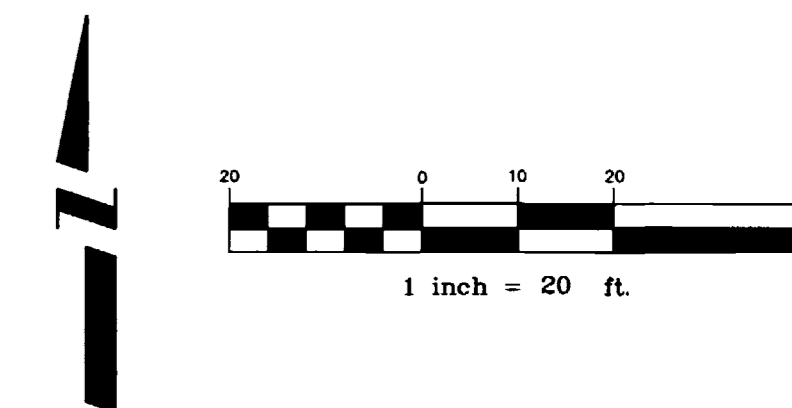
REVISION	DESCRIPTION	DATE
△		
△		
△		

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE	
PLAN	PROFILE
HORIZ. 1"=20'	HORIZ. 1"=20'
	VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

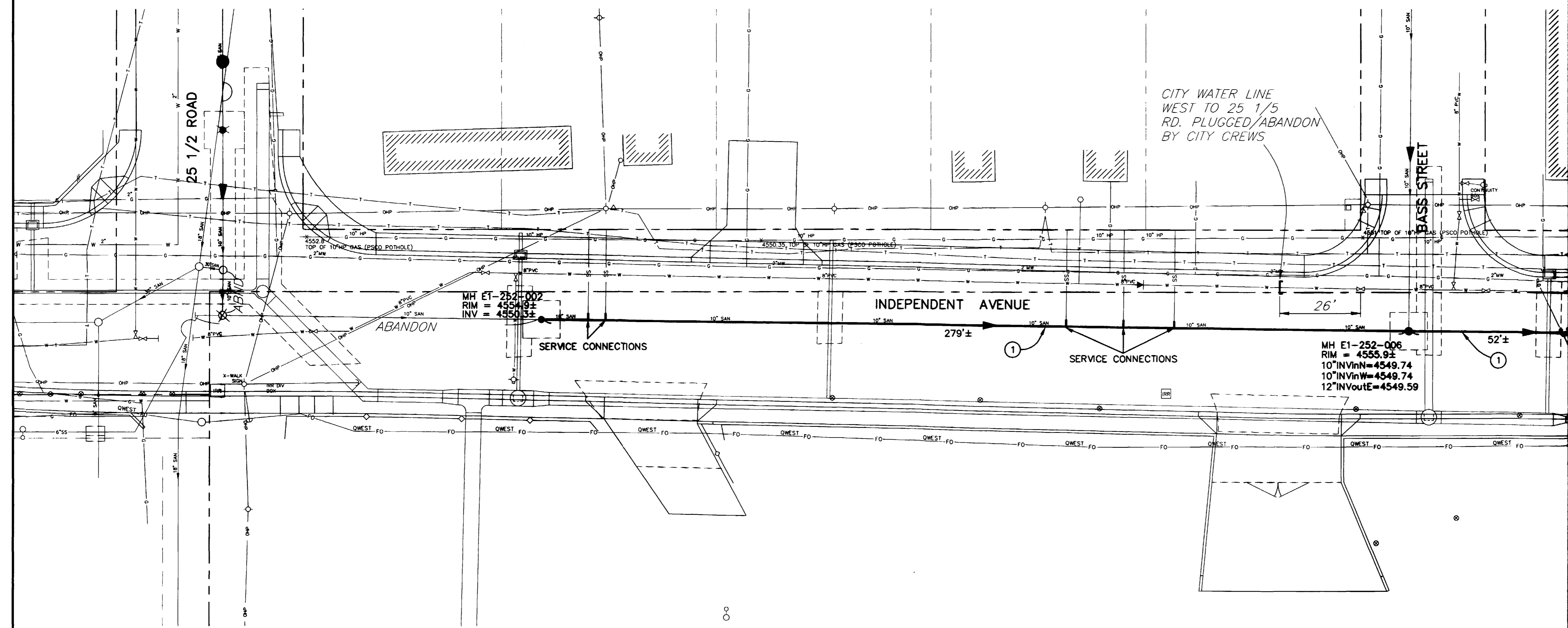
2003 INTERCEPTOR REHABILITATIONS
 HORIZON DR INTERCEPTOR SEWER LINE PLAN IN 25 1/2 RD FROM JUNCTION BELOW W ORCHARD TO MH E3-252-01 5



CONSTRUCTION NOTES

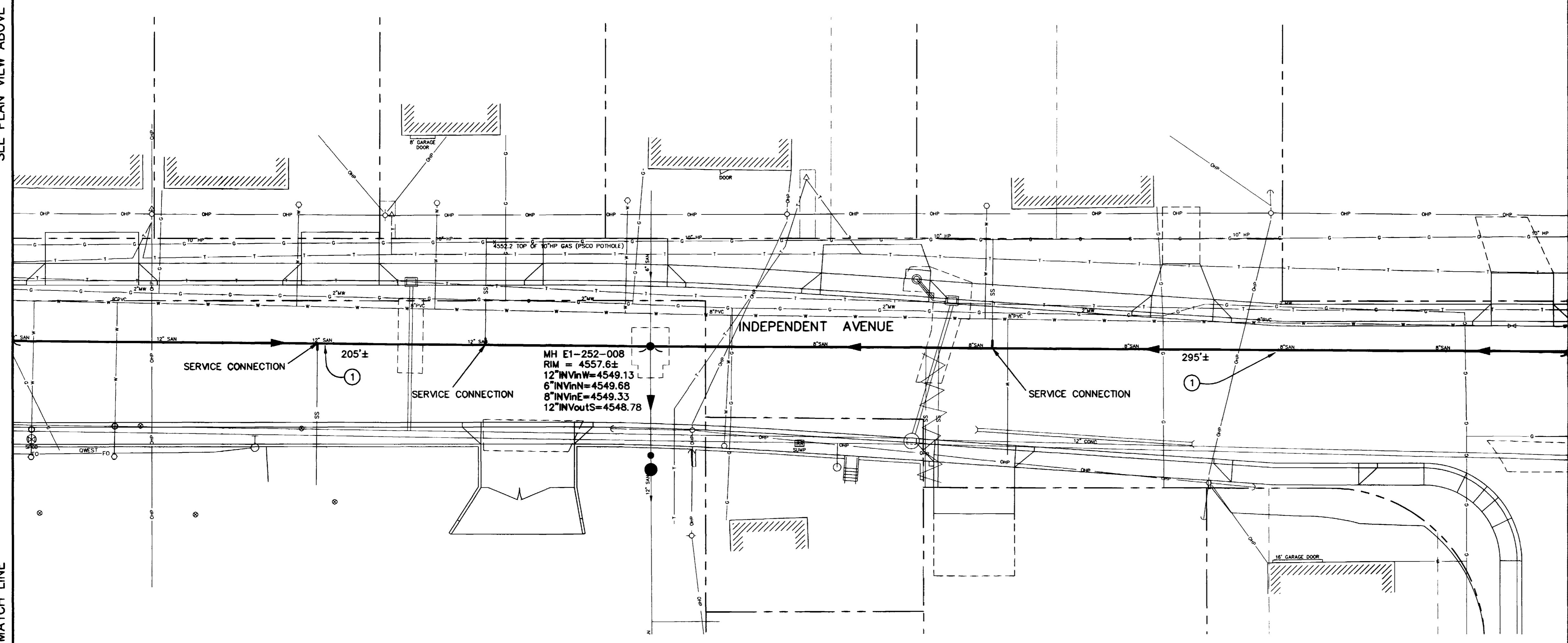
DURING PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.

1 SP



SEE PLAN VIEW BELOW

MATCH LINE



SEE PLAN VIEW ABOVE

SEE SHEET 6

MATCH LINE

MATCH LINE

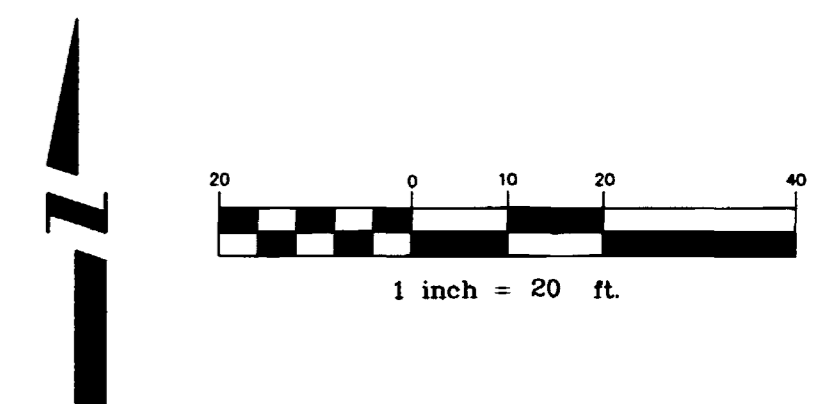
REVISION	DESCRIPTION	DATE

DRAWN BY JCS DATE 2002
 DESIGNED BY JCS DATE 2002
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

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

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

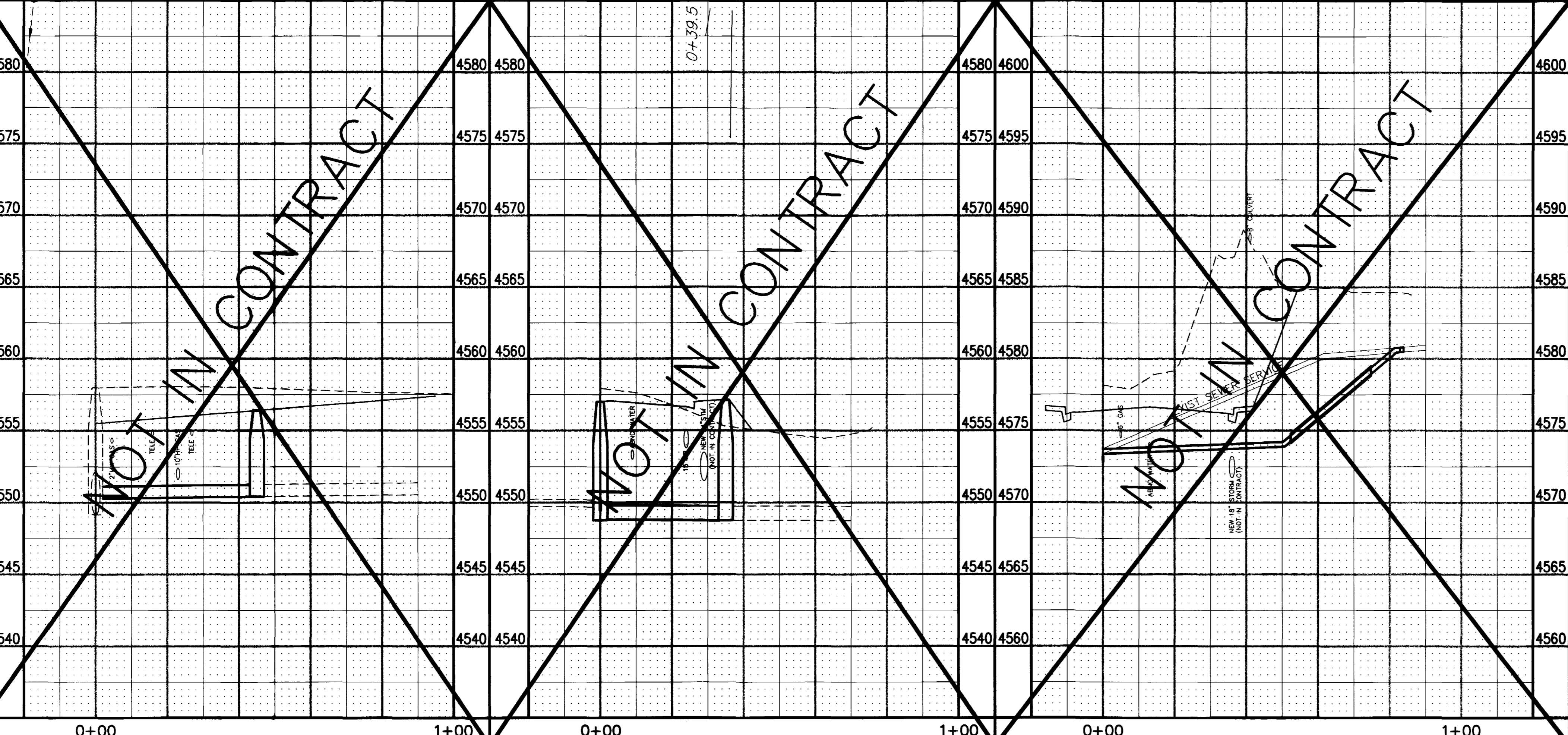
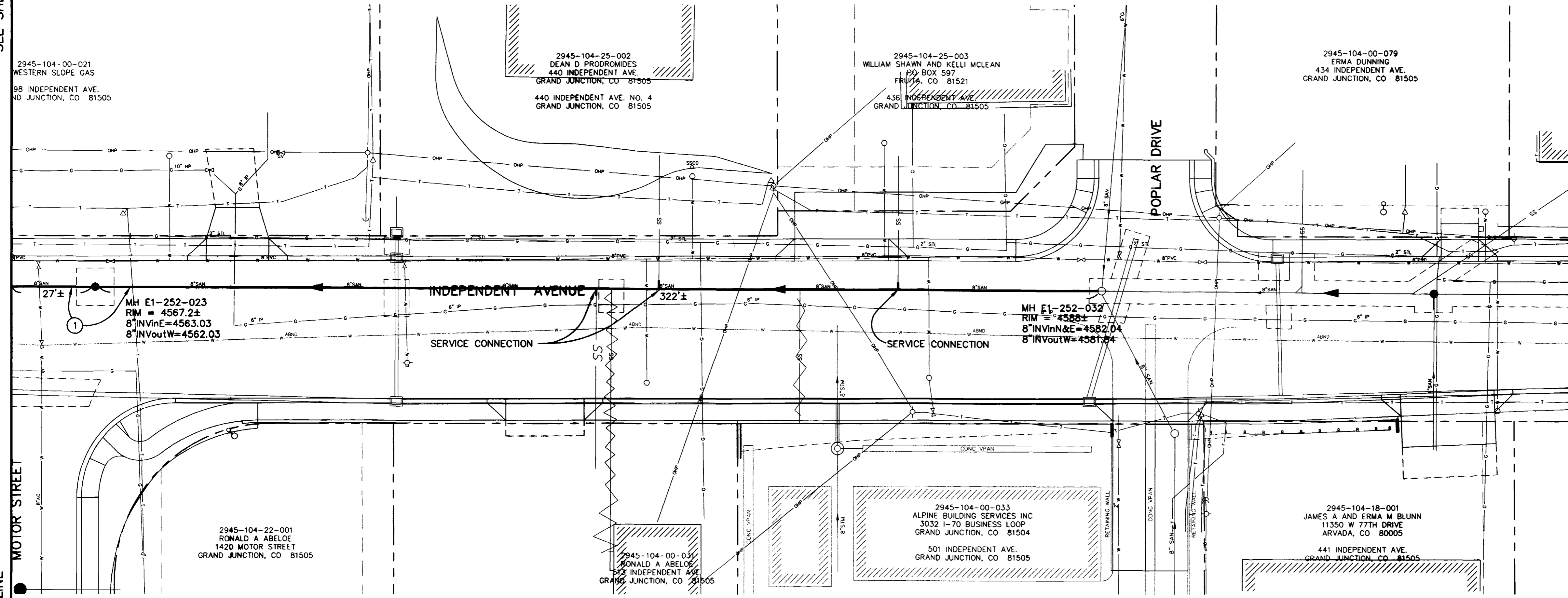
2003 INTERCEPTOR REHABILITATIONS
 INDEPENDENT AVENUE SEWER LINE PLAN
 FROM MH E1-252-002 TO 295' EAST OF MH E1-252-008



CONSTRUCTION NOTES

- ① SP DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.

SEE SHEET 6



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE
Δ			JCS	2002	PLAN 1"=20' PROFILE 1"=5'
			JCS	2002	
Δ			CHECKED BY	DATE	
Δ			APPROVED BY	DATE	

**DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO**

**2003 INTERCEPTOR REHABILITATIONS
INDEPENDENT AVENUE SEWER LINE PLAN
FROM 27' WEST OF MH E1-252-023 TO MH E1-252-032**

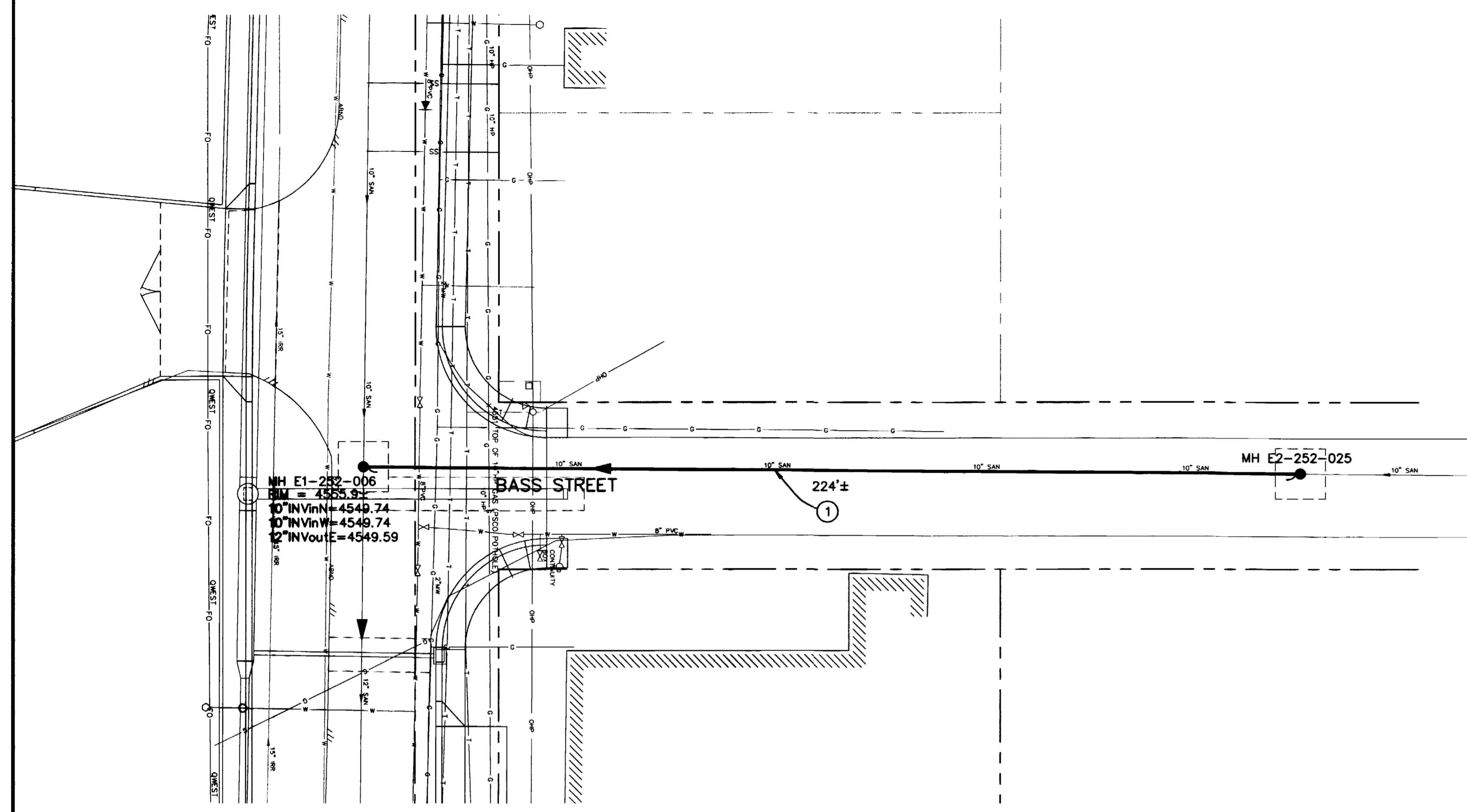


1 inch = 20 ft.

CONSTRUCTION NOTES

DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.

① SP



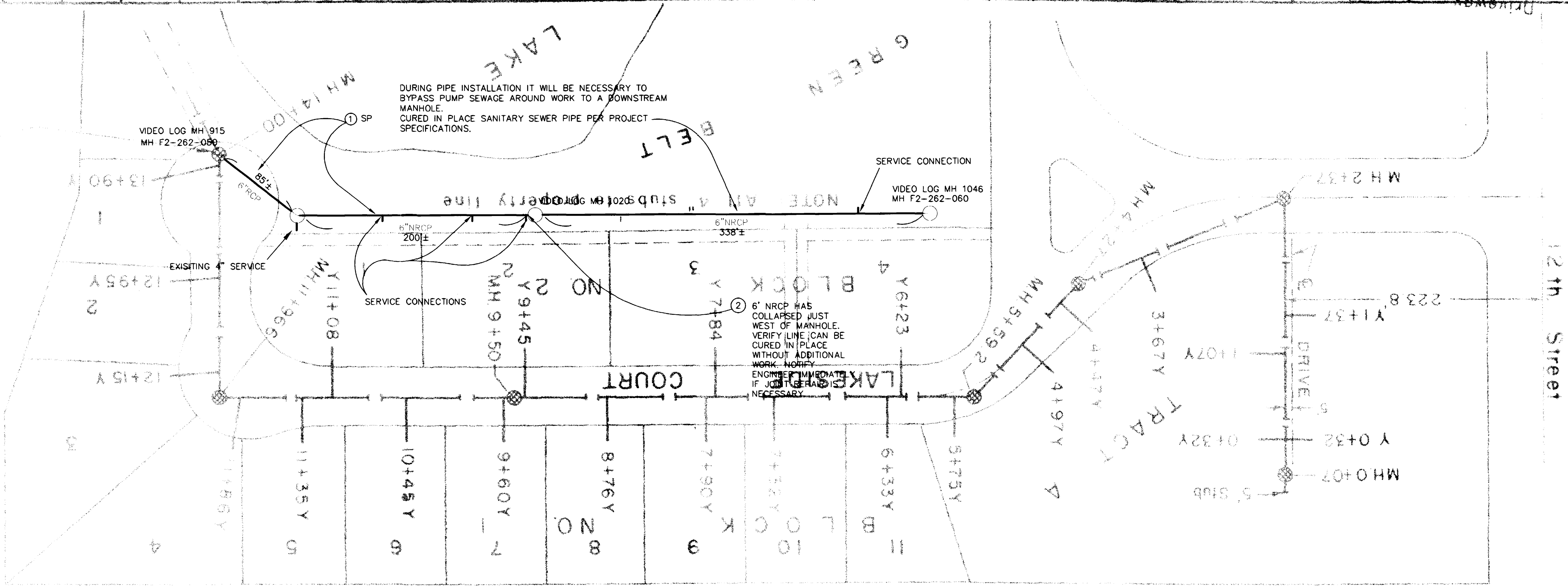
REVISION	DESCRIPTION	DATE

DRAWN BY JCS DATE 2002
 DESIGNED BY JCS DATE 2002
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

SCALE
 PLAN 1"=20'
 PROFILE _____

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 BASS STREET SEWER LINE PLAN
 FROM MH M E1-252-006 TO MH E2-252-025



DURING PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.

6" NRCP HAS COLLAPSED JUST WEST OF MANHOLE. VERIFY LINE CAN BE CURED IN PLACE WITHOUT ADDITIONAL WORK. NOTIFY ENGINEER IMMEDIATELY IF JOINT HEAD IS NECESSARY.



REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

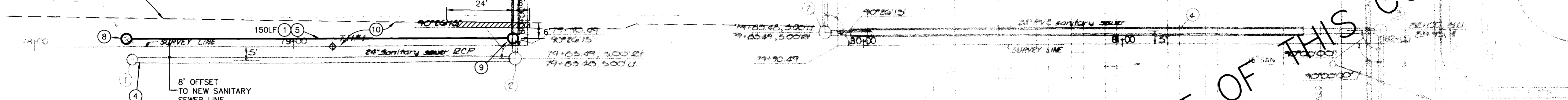
DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE	
PLAN	PROFILE
HORIZ. 1"=50'	HORIZ. _____
VERT. _____	VERT. _____

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 SEWER LINE IN GREENBELT BETWEEN LAKESIDE CT. AND LAKE
 FROM MH F2-262-050 TO MH F2-262-060

EXISTING EDGE OF ASPHALT RIVER ROAD



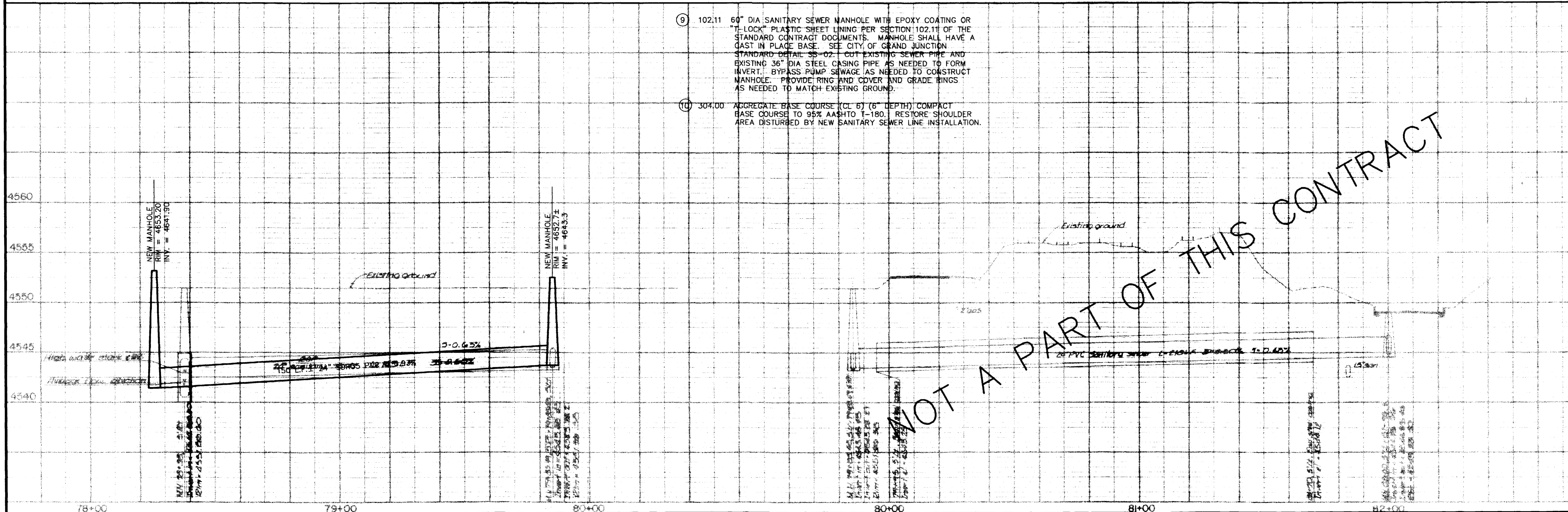
Construction Notes:

- ① 78+85, 5.21 48" diameter manhole. See sheets for details.
- ② 79+05.49, 5.21 60" diameter manhole.
- ③ 81+00, 5.17 60" diameter manhole.
- ④ 79+95, 5.17 to 81+70, 5.17. 36" diameter steel casing jack or bore into place. Length = 175 LF. Slope = 0.50%. Wall thickness = 0.225 inches.
- ⑤ Saw cut concrete curb & gutter 15' ft. of survey line. Shaded area indicates removal & replacement of 2" vertical curb & gutter.

- ① DURING INSTALLATION OF NEW MH IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE.
- ② 102.90 RESET FENCE. FENCE IS NOT SHOWN BUT RUNS ALONG AND ON TOP OF EXISTING SEWER LINE. CONTRACTOR SHALL RESET FENCE OUT OF CONST. AREA AS NEEDED DURING CONSTRUCTION DUE TO SECURITY REASONS AND THEN RESET BACK TO PRECONST. LOCATION AFTER THE COMPLETION OF CONSTRUCTION.
- ③ 202.00 ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN.
- ④ 102.90 PLUG END OF 24" RCP SEWER ENTERING MH FROM EAST WITH CONCRETE.
- ⑤ 102.90 24" DIA PVC PIPE, SDR-35. BACKFILL TRENCH WITH NATIVE MATERIALS MEETING CITY SPECIFICATION 103.16. IMPORT BACKFILL MATERIAL MEETING CITY SPECIFICATION 103.16 AS NEEDED. SANITARY SEWER LINE SHALL BE TESTED IN ACCORDANCE WITH THE SPECIFICATIONS IN THE STANDARD CONTRACT DOCUMENTS AND APPROVED BEFORE BASE COURSE AND ASPHALT ARE INSTALLED. TRENCH BOX AND PUMPING OF GROUND WATER WILL BE NECESSARY.
- ⑥ 304.00 AGGREGATE BASE COURSE (CL 6) (12" DEPTH) COMPACT BASE COURSE TO 95% AASHTO T-180. SUBGRADE SHALL BE COMPACTED TO 95% AASHTO T-99.
- ⑦ 401.00 6" THICK HBP GRADING SX SUPERPAVE, 75 GYR, PG64-22AC COMPACTED IN PLACE.
- ⑧ 102.11 72" DIA SANITARY SEWER MANHOLE WITH EPOXY COATING OR "T-LOCK" PLASTIC SHEET LINING PER SECTION 102.11 OF THE STANDARD CONTRACT DOCUMENTS. MANHOLE SHALL HAVE A CAST IN PLACE BASE. SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02. CUT EXISTING PIPE TO FORM INVERT. BYPASS PUMP SEWAGE AS NEEDED TO CONSTRUCT MANHOLE. PROVIDE RING AND COVER AND GRADE RINGS AS NEEDED TO MATCH EXISTING GROUND.

Bench Mark
 ① Property corner NE corner City Shop property on River Road, West side Elev. = 4552.075

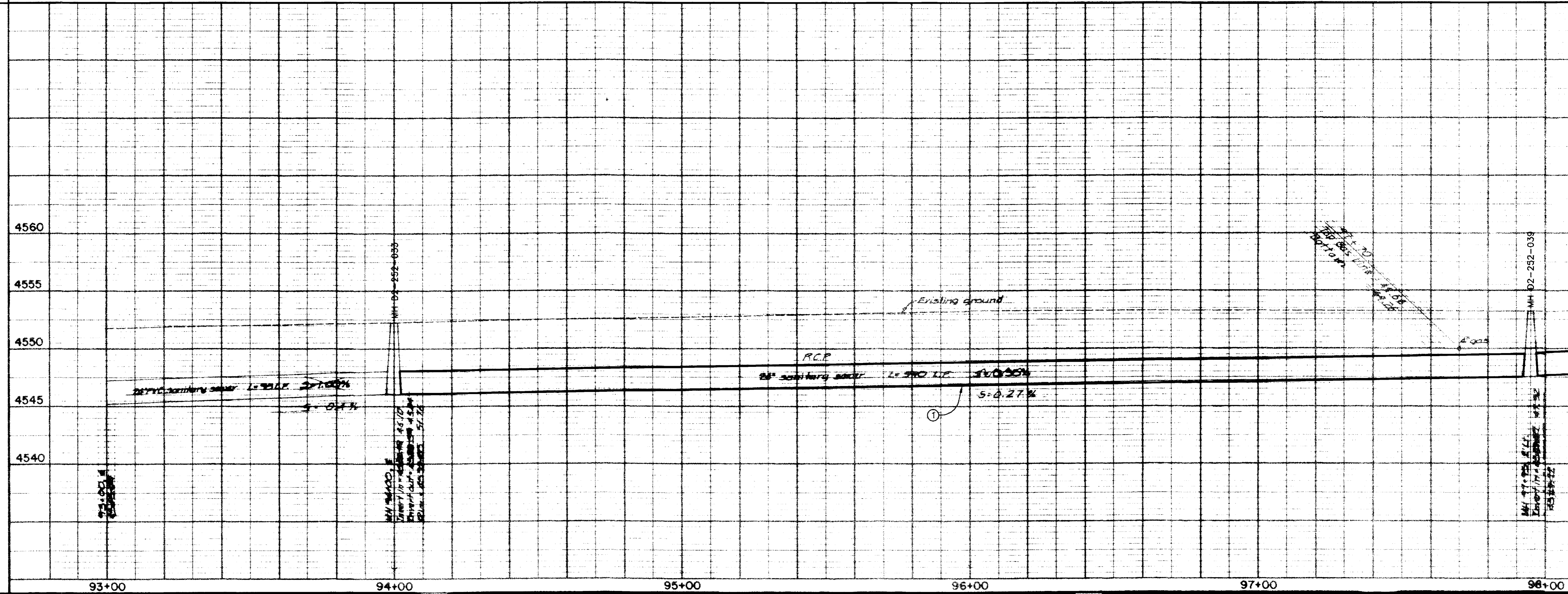
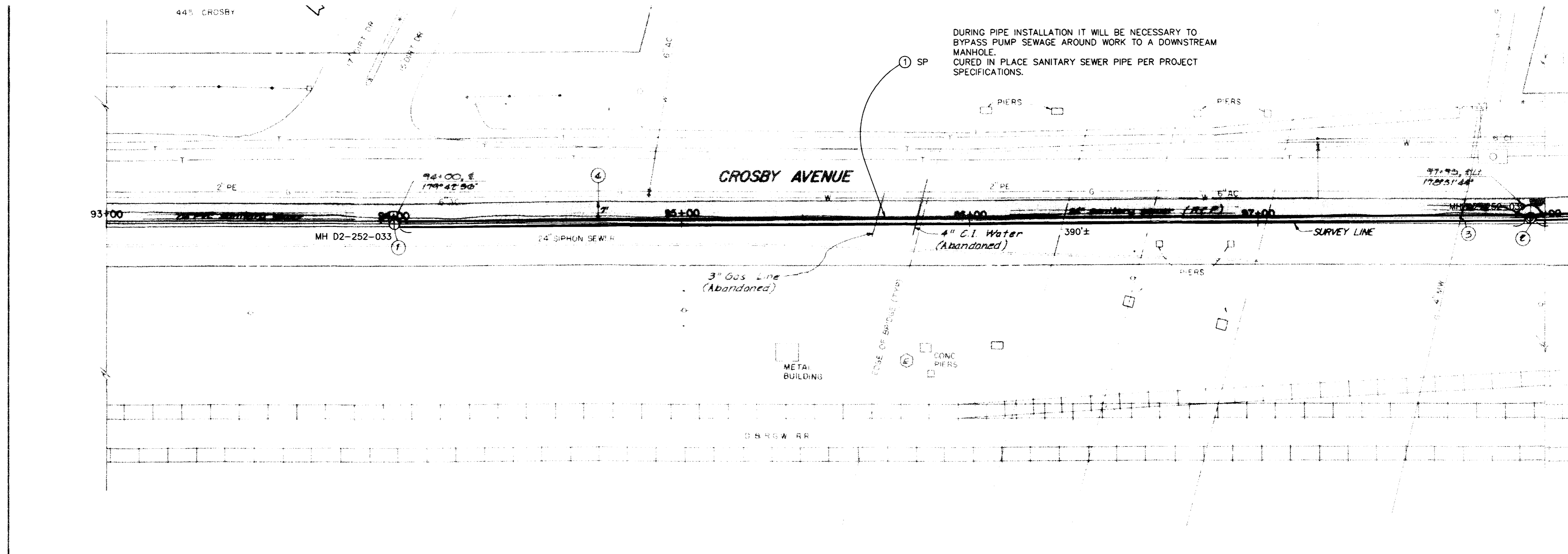
- ⑨ 102.11 60" DIA SANITARY SEWER MANHOLE WITH EPOXY COATING OR "T-LOCK" PLASTIC SHEET LINING PER SECTION 102.11 OF THE STANDARD CONTRACT DOCUMENTS. MANHOLE SHALL HAVE A CAST IN PLACE BASE. SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02. CUT EXISTING SEWER PIPE AND EXISTING 36" DIA STEEL CASING PIPE AS NEEDED TO FORM INVERT. BYPASS PUMP SEWAGE AS NEEDED TO CONSTRUCT MANHOLE. PROVIDE RING AND COVER AND GRADE RINGS AS NEEDED TO MATCH EXISTING GROUND.
- ⑩ 304.00 AGGREGATE BASE COURSE (CL 5) (6" DEPTH) COMPACT BASE COURSE TO 95% AASHTO T-180. RESTORE SHOULDER AREA DISTURBED BY NEW SANITARY SEWER LINE INSTALLATION.



REVISION ▲	DESCRIPTION	DATE	DRAWN BY JCS	DATE 2002	SCALE PLAN 1"=20' HORIZ. 1"=20' VERT. 1"=5'
REVISION ▲			DESIGNED BY JCS	DATE 2002	
REVISION ▲			CHECKED BY	DATE	
REVISION ▲			APPROVED BY	DATE	

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 RIVER ROAD SEWER LINE PLAN
 FROM MH D3-251-012 TO MH D3-251-014



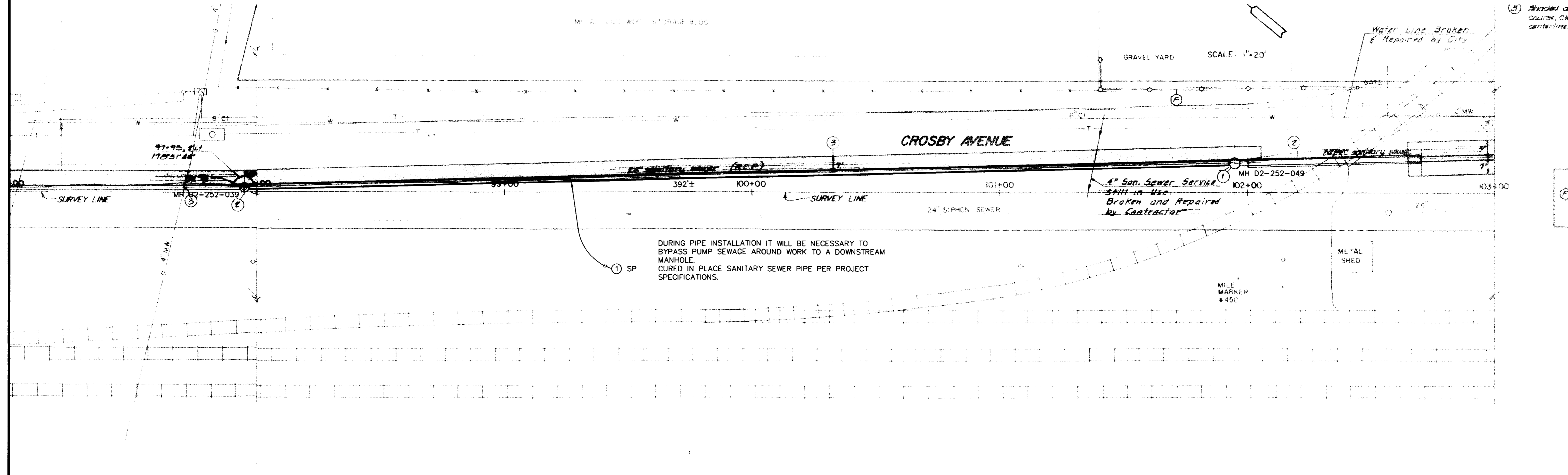
REVISION	DESCRIPTION	DATE

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

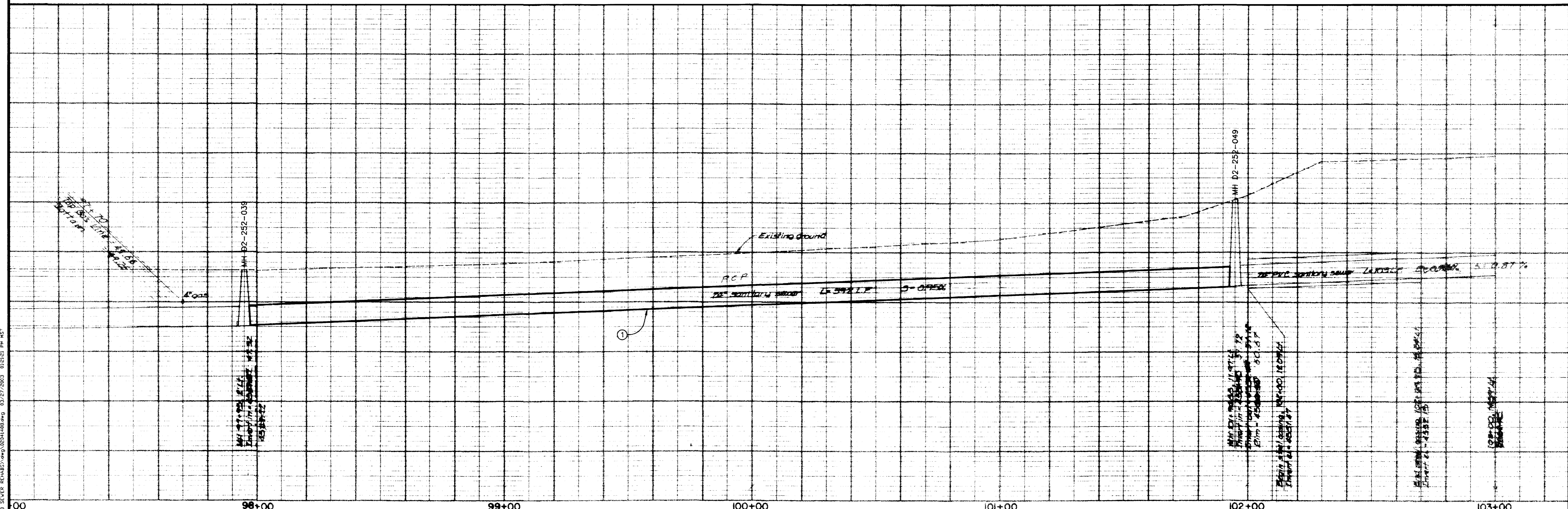
SCALE	
PLAN	PROFILE
HORIZ. 1"=20'	HORIZ. 1"=20'
	VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
CROSBY AVENUE SEWER LINE PLAN
FROM MH D2-252-033 TO MH D2-252-039



① SP
 DURING PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.



REVISION	DESCRIPTION	DATE

DRAWN BY JCS DATE 2002
 DESIGNED BY JCS DATE 2002
 CHECKED BY DATE
 APPROVED BY DATE

SCALE
 PLAN 1"=20'
 PROFILE 1"=20'
 HORIZ. 1"=20'
 VERT. 1"=5'

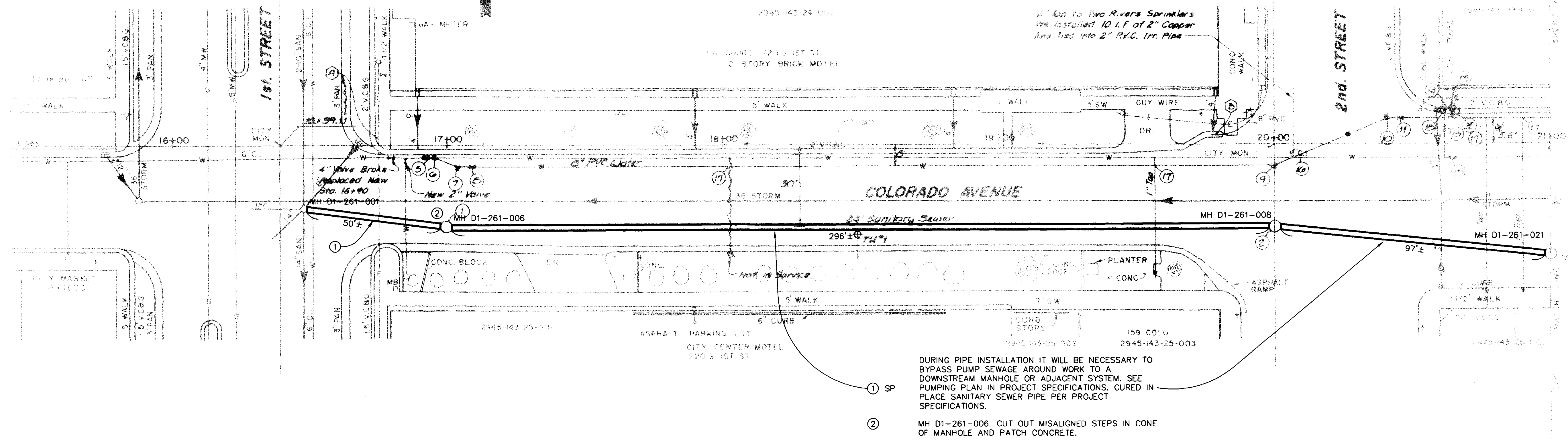
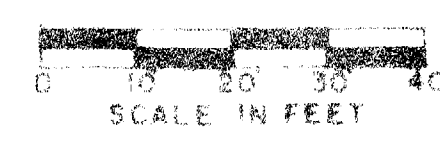
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 CROSBY AVENUE SEWER LINE PLAN
 FROM MH D2-252-039 TO MH D2-252-049

Bench Mark:
 Chis sq TC W CR
 NE cor 1st & Colo
 Elev. 4577.235

Bench Mark:
 Chis sq TC W CR
 NW Cor 2nd & Colo
 Elev. 4577.009

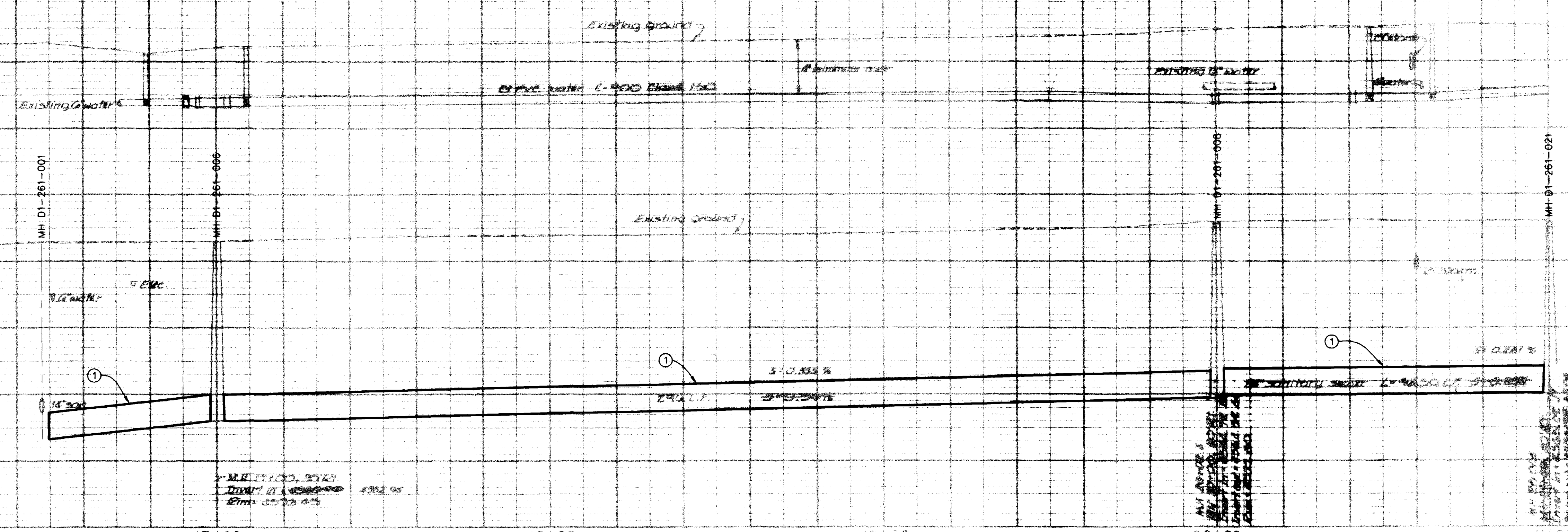
Notes: Concrete Pavement Encountered
 From 1st to 7th Street
 Sewer Pipe - Concrete
 Contractor - Parkerson Construction



- ① SP
- ② MH D1-261-006. CUT OUT MISALIGNED STEPS IN CONE OF MANHOLE AND PATCH CONCRETE.

Construction Notes:

- ① 17+00, 27.00' - 27.00' - 27.00'
- ② 27.00' - 27.00' - 27.00'
- ③ 27.00' - 27.00' - 27.00'
- ④ 27.00' - 27.00' - 27.00'
- ⑤ 27.00' - 27.00' - 27.00'
- ⑥ 27.00' - 27.00' - 27.00'
- ⑦ 27.00' - 27.00' - 27.00'
- ⑧ 27.00' - 27.00' - 27.00'
- ⑨ 27.00' - 27.00' - 27.00'
- ⑩ 27.00' - 27.00' - 27.00'
- ⑪ 27.00' - 27.00' - 27.00'
- ⑫ 27.00' - 27.00' - 27.00'
- ⑬ 27.00' - 27.00' - 27.00'
- ⑭ 27.00' - 27.00' - 27.00'
- ⑮ 27.00' - 27.00' - 27.00'
- ⑯ 27.00' - 27.00' - 27.00'
- ⑰ 27.00' - 27.00' - 27.00'
- ⑱ 27.00' - 27.00' - 27.00'
- ⑲ 27.00' - 27.00' - 27.00'
- ⑳ 27.00' - 27.00' - 27.00'
- ㉑ 27.00' - 27.00' - 27.00'
- ㉒ 27.00' - 27.00' - 27.00'
- ㉓ 27.00' - 27.00' - 27.00'
- ㉔ 27.00' - 27.00' - 27.00'
- ㉕ 27.00' - 27.00' - 27.00'
- ㉖ 27.00' - 27.00' - 27.00'
- ㉗ 27.00' - 27.00' - 27.00'
- ㉘ 27.00' - 27.00' - 27.00'
- ㉙ 27.00' - 27.00' - 27.00'
- ㉚ 27.00' - 27.00' - 27.00'
- ㉛ 27.00' - 27.00' - 27.00'
- ㉜ 27.00' - 27.00' - 27.00'
- ㉝ 27.00' - 27.00' - 27.00'
- ㉞ 27.00' - 27.00' - 27.00'
- ㉟ 27.00' - 27.00' - 27.00'
- ㊱ 27.00' - 27.00' - 27.00'
- ㊲ 27.00' - 27.00' - 27.00'
- ㊳ 27.00' - 27.00' - 27.00'
- ㊴ 27.00' - 27.00' - 27.00'
- ㊵ 27.00' - 27.00' - 27.00'
- ㊶ 27.00' - 27.00' - 27.00'
- ㊷ 27.00' - 27.00' - 27.00'
- ㊸ 27.00' - 27.00' - 27.00'
- ㊹ 27.00' - 27.00' - 27.00'
- ㊺ 27.00' - 27.00' - 27.00'
- ㊻ 27.00' - 27.00' - 27.00'
- ㊼ 27.00' - 27.00' - 27.00'
- ㊽ 27.00' - 27.00' - 27.00'
- ㊾ 27.00' - 27.00' - 27.00'
- ㊿ 27.00' - 27.00' - 27.00'



REVISION	DESCRIPTION	DATE

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE
 PLAN 1"=20'
 PROFILE 1"=5'

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

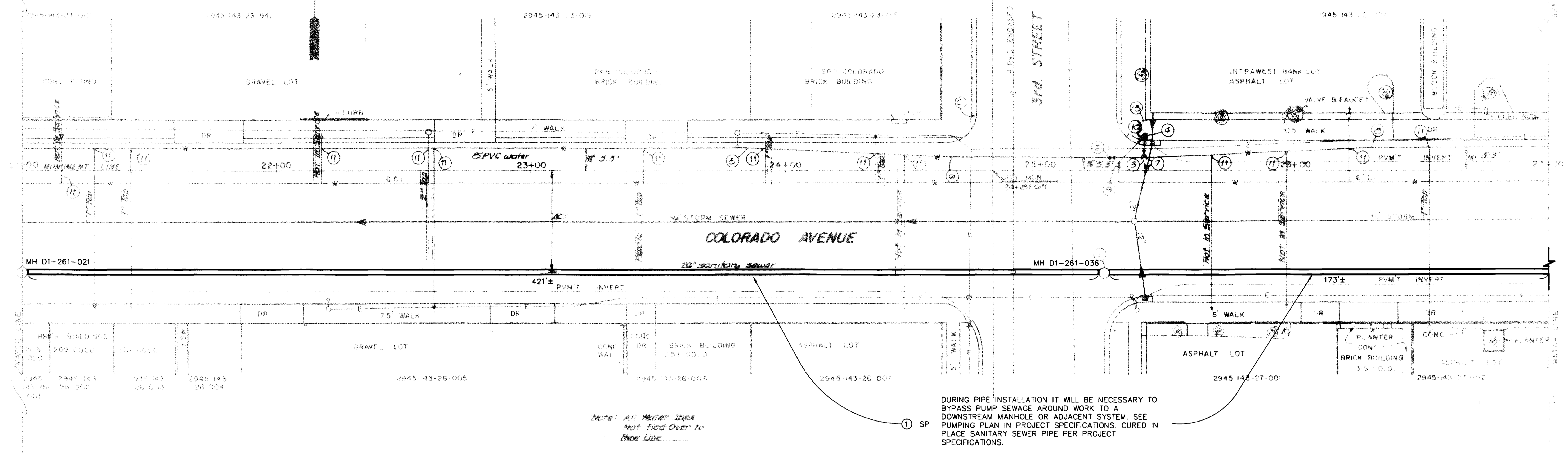
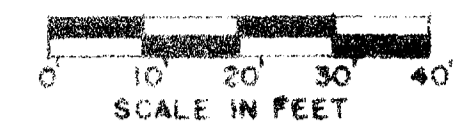
2003 INTERCEPTOR REHABILITATIONS
 COLORADO AVENUE INTERCEPTOR SEWER LINE PLAN 13
 FROM STA 17+00 TO STA 21+00

Bench Marks
 10 Chis. sq. TC W CR
 11 WJ cor. 3rd & Cor
 Elev. 4579.975

- Construction Notes**
- 25+00, 30' dia. manhole
 - 25+00, 30' dia. manhole
 - 25+00, 30' dia. manhole
 - 25+51, 15' dia. manhole

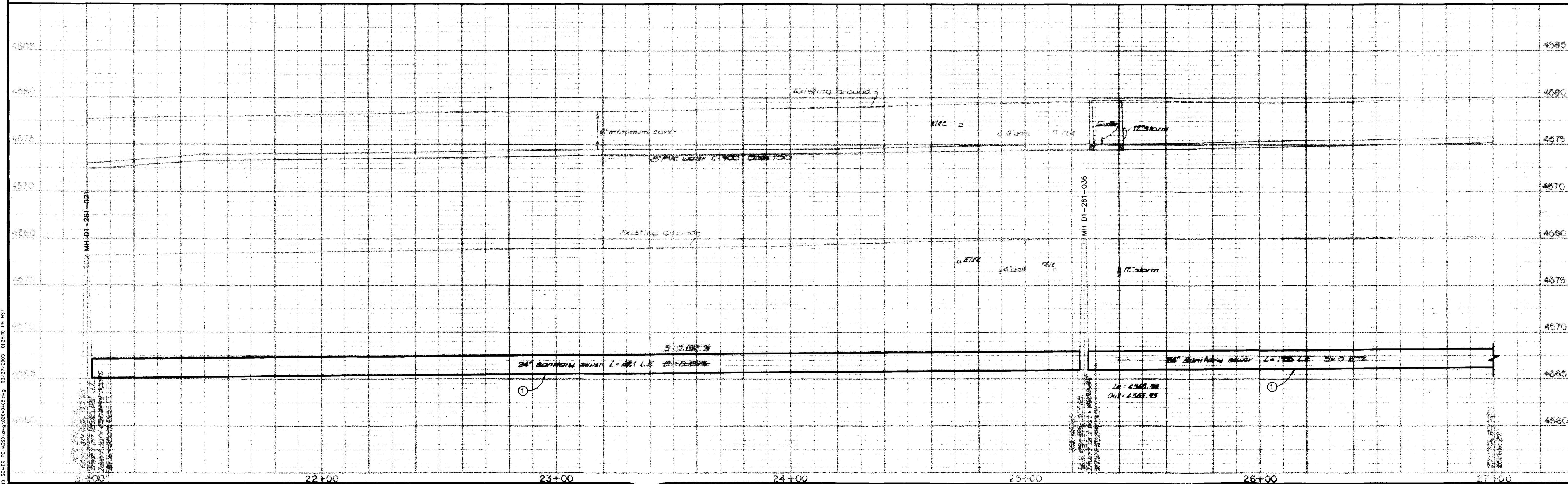
- 23+05, 9' LT
 - 24+05, 5' LT
 - 25+01, 5' LT
 - 26+00, 9' LT
 - Close valve, remove top section of valve box, fill riser with base and catch pavement
 - Remove existing fire hydrant
- Location of waterline deflections
 3" maximum per joint

- 1" lap, 1" copper service, connect to existing service line with necessary fitting
- Abandon this service
- Sawcut, remove / replace concrete curb, quarter of sidewalk, 6' long, 4.4 sq. yd.



Note: All Manhole Issues Not Fixed Over to New Line

DURING PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE OR ADJACENT SYSTEM. SEE PUMPING PLAN IN PROJECT SPECIFICATIONS. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.



REVISION	DESCRIPTION	DATE

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE	
PLAN	1"=20'
PROFILE	1"=20'
	VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 COLORADO AVENUE INTERCEPTOR SEWER LINE PLAN 14
 FROM STA 21+00 TO STA 27+00

03/27/2003 09:59:00 PM MST
 03/27/2003 09:59:00 PM MST
 03/27/2003 09:59:00 PM MST

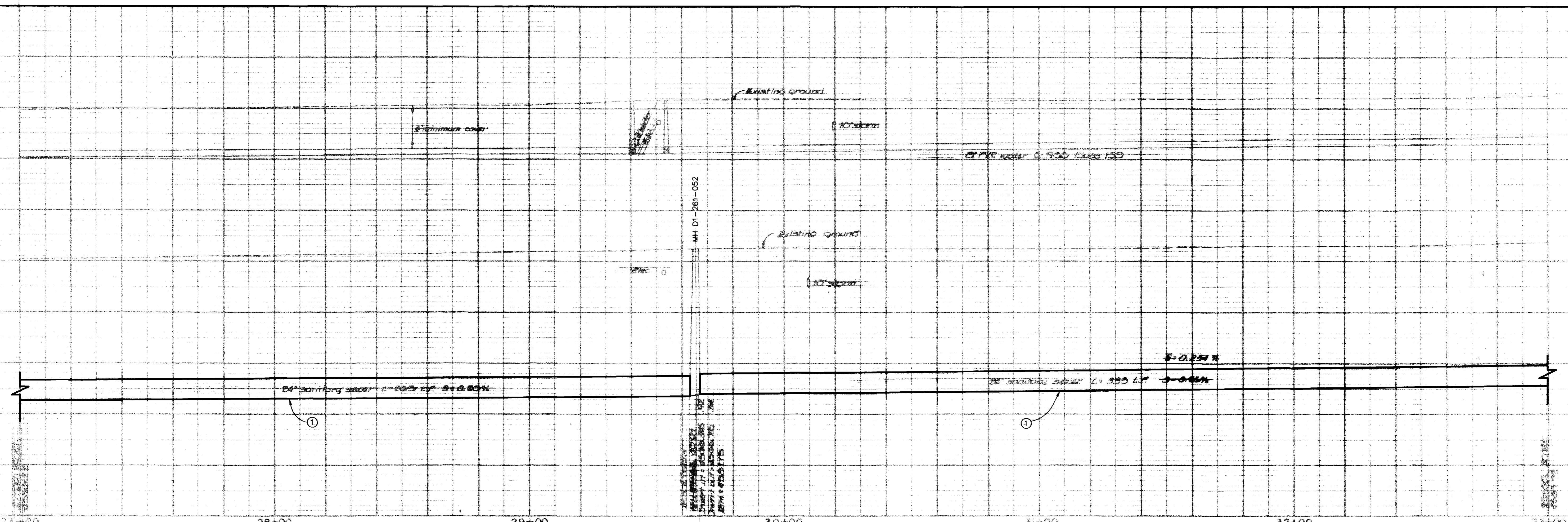
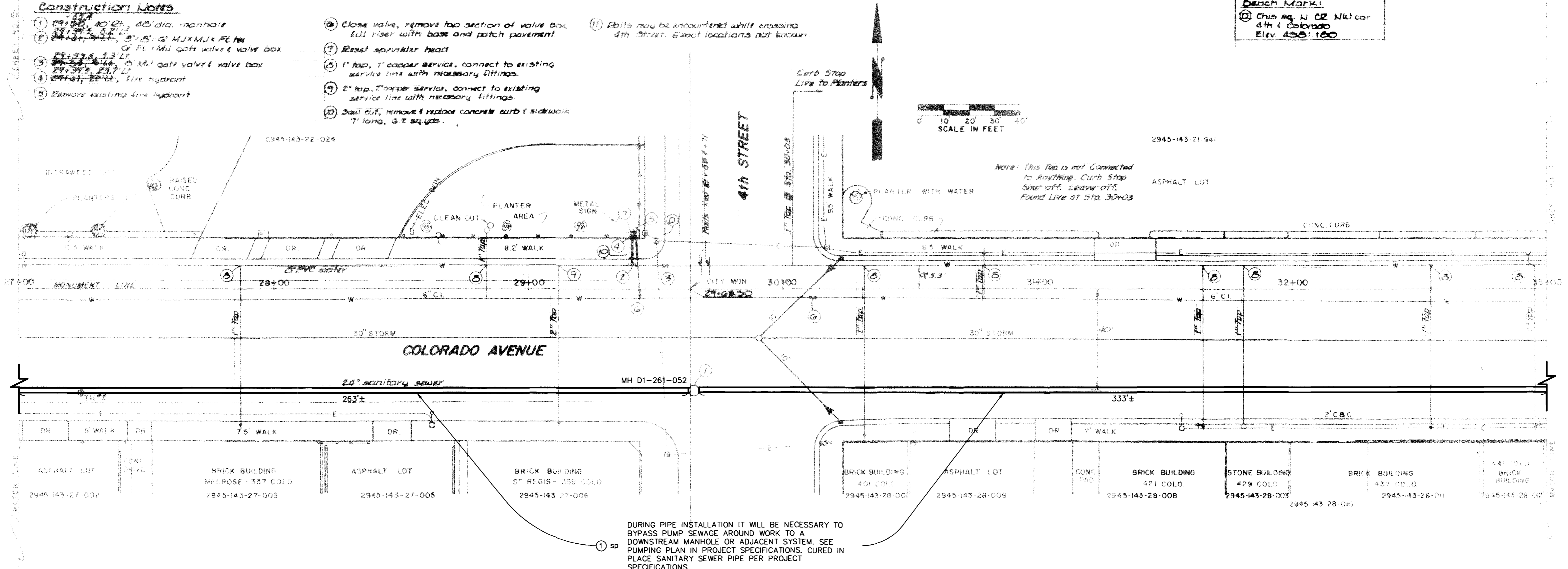
Construction Notes

1. 24" dia. manhole
2. 24" dia. manhole
3. 24" dia. manhole
4. 24" dia. manhole
5. 24" dia. manhole

6. Close valve, remove top section of valve box, fill riser with base and patch pavement.
7. Reset sprinkler head
8. 1" top, 1" copper service, connect to existing service line with necessary fittings.
9. 2" top, 2" copper service, connect to existing service line with necessary fittings.
10. Saw cut, remove & replace concrete curb sidewalk 7' long, 6" sq. yds.

11. Bents may be encountered while crossing 4th Street. Exact locations not known.

Bench Mark:
 ① Chis sq. N. 02 NW cor. 4th & Colorado Elev. 4551.100



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE
1			JCS	2002	PLAN 1"=20'
2			JCS	2002	PROFILE 1"=5'
3					
4					
5					

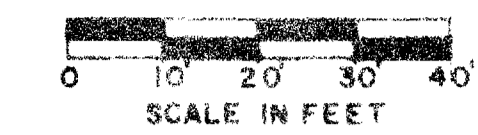
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 COLORADO AVENUE INTERCEPTOR SEWER LINE PLAN 15
 FROM STA 27+00 TO STA 33+00

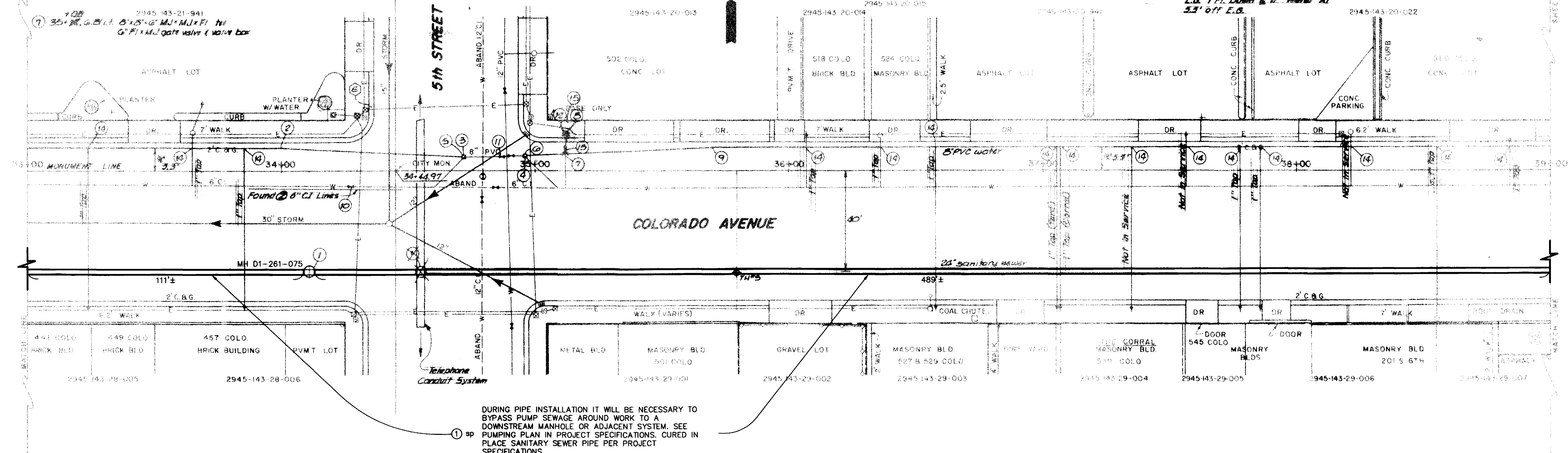
- Construction Notes**
- 34+00, 40' dia., 45" dia. manhole
 - 34+00, 9' L., Begin to deflect waterline, 5" maximum per joint.
 - 34+75, 5.5' L. 0" solid sleeves
 - 34+90, 5.5' L.
 - 34+75, 5.5' L. Remove existing 8"-45" band & plug end of pipe that remains disconnected.
 - 35+70, 18.5' L., fire hydrant.
 - 35+70, 9' L., Begin to deflect waterline, 5" maximum per joint.
 - Valve is closed, DO NOT OPEN, remove top section of valve box, fill riser with base and patch pavement.
 - Valve is closed at this time.
 - Remove existing fire hydrant.
 - Remove valve and valve box. Plug end of pipe.

- 1" top, 1" copper service, connect to existing service line with necessary fittings.
- Downfall, remove and replace concrete curb, gutter and sidewalk, 6' long, 24" gals.

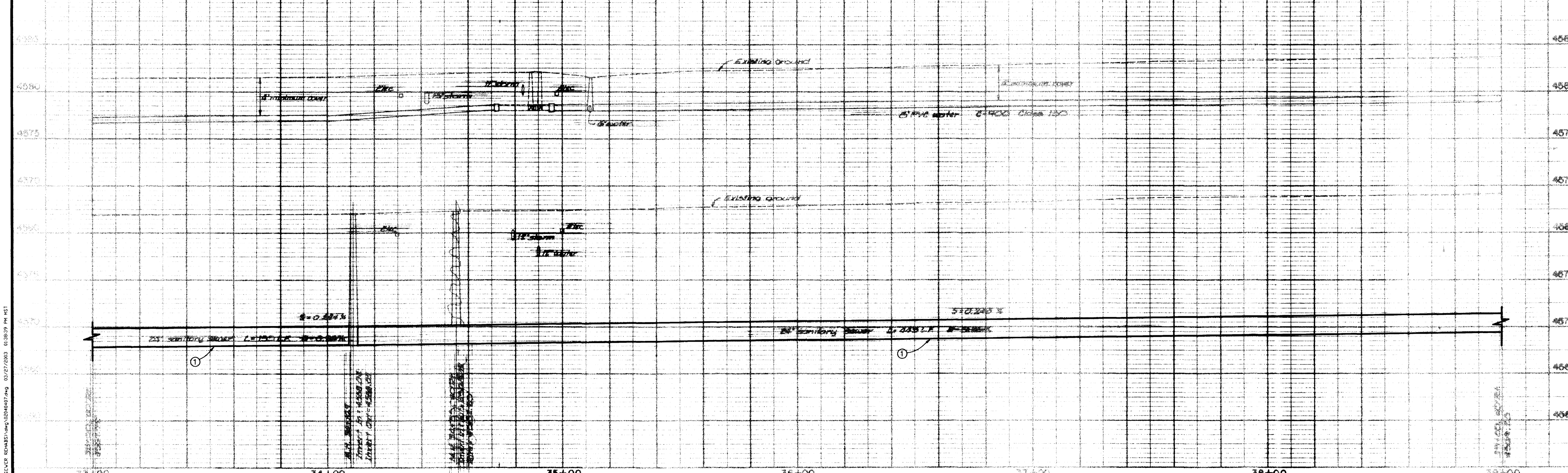
Bench Mark:
 Chis. sq TC N CR
 Max cor. 5th & Colo.
 Elev. 4501.540



Note: Concrete Found At 7.5' off North E.S. 1 Ft. Down & 2" Water At 5.5' off E.S.



DURING PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE OR ADJACENT SYSTEM. SEE PUMPING PLAN IN PROJECT SPECIFICATIONS. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.



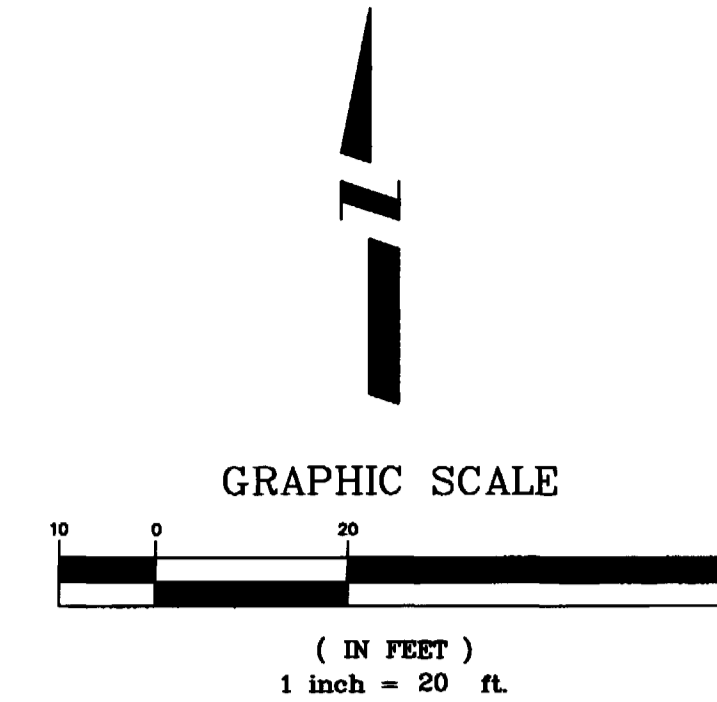
REVISION	DESCRIPTION	DATE

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE	
PLAN	1"=20'
PROFILE	1"=5'
HORIZ.	1"=20'
VERT.	1"=5'

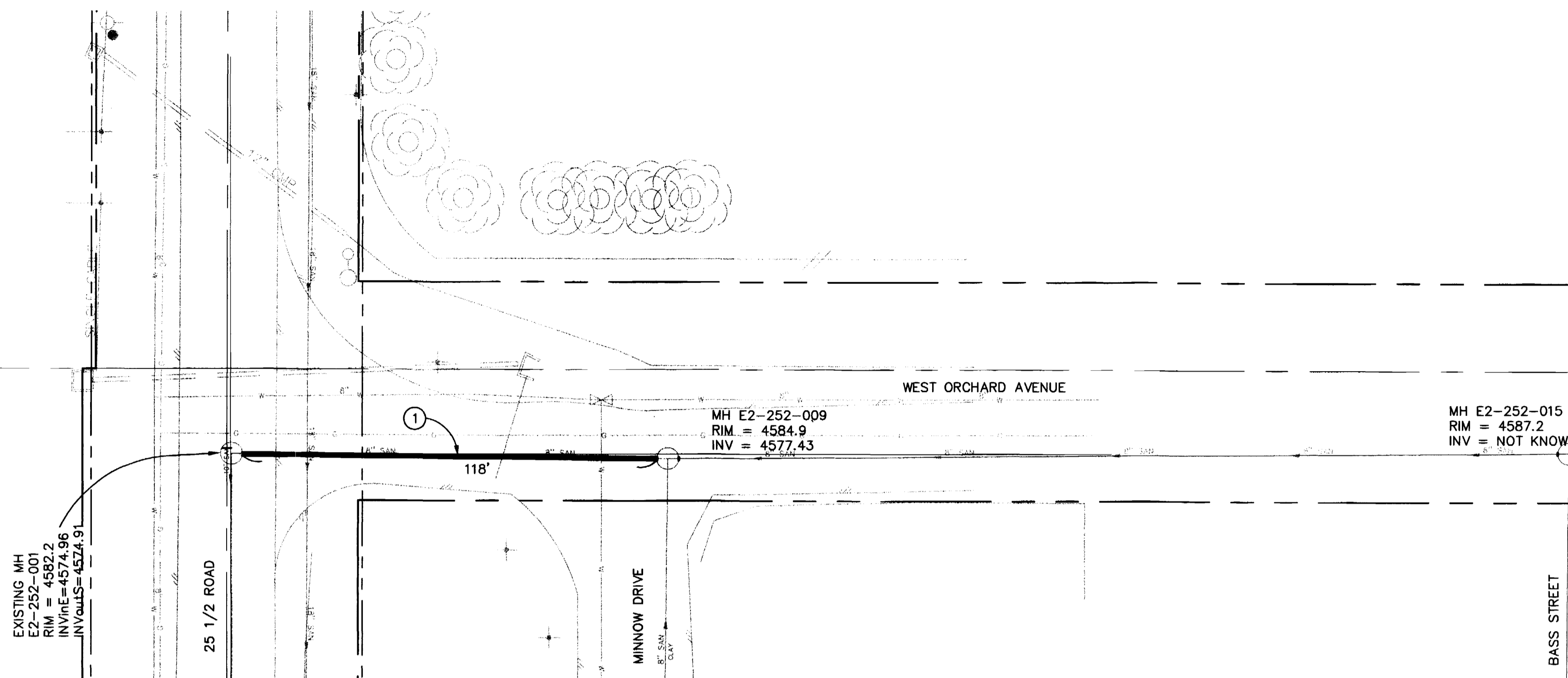
**DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO**

**2003 INTERCEPTOR REHABILITATIONS
 COLORADO AVENUE INTERCEPTOR SEWER LINE PLAN 16
 FROM STA 33+00 TO STA 39+00**



CONSTRUCTION NOTES

- ① SP DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. EXISTING PIPE IS 8" DIA. RCP.



REVISION	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		
REVISION Δ		

DRAWN BY	JCS	DATE	2002
DESIGNED BY	JCS	DATE	2002
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALE	
PLAN	PROFILE
HORIZ. 1"=20'	HORIZ. 1"=20'
	VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
WEST ORCHARD AVENUE SEWER LINE PLAN
FROM MH E2-252-001 TO MH E2-252-015

INSITUFORM PARAMETERS

Minimum Design Thickness																					
Flexural Modulus (psi)																					400,000
Flexural Strength (psi)																					4,500
Soil Density (lbs/cf)																					120
Soil Modulus (psi)																					1,000
Colorado Avenue Interceptor (1st to 6th)-flowing 1/3 full																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
D1-261-001	1st	24	13.0	5.0	5	Yes	clay	FD	2.0	12.4											
D1-261-006		24	11.5	3.5	5	Yes	clay	FD	2.0	11.5											
D1-261-008	2nd	24	11.5	3.5	5	Yes	clay	FD	2.0	11.5											
D1-261-021		24	11.0	3.0	5	Yes	clay	FD	2.0	11.2											
D1-261-036	3rd	24	12.0	4.0	5	Yes	clay	FD	2.0	11.8											
D1-261-052	4th	24	11.3	3.3	5	Yes	clay	FD	2.0	11.4											
D1-261-075	5th	24	12.0	4.0	5	Yes	clay	FD	2.0	11.8											
D1-261-103		24	13.0	5.0	5	Yes	clay	FD	2.0	12.4											
D1-261-117	6th	24	13.0	5.0	5	Yes	clay	FD	2.0	12.4											
Crosby Avenue Interceptor (West Main and Hwy 340 crossing paralleling railroad tracks)-flowing 1/2 full																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
D2-252-033		24	4.2	-0.8	5	Yes	clay	FD	2.0	8.9											
D2-252-039		24	6.5	1.5	5	Yes	clay	FD	2.0	9.4											
D2-252-049		24	6.8	1.8	5	Yes	clay	FD	2.0	9.4											
River Road Interceptor-flowing full																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
D3-252-012		24	9.5	4.5	10	Yes	clay	FD	2.0	15.2											
D3-251-014		24	6.3	1.3	10	Yes	clay	FD	2.0	12.5											
Horizon Drive Interceptor (just south of West Orchard to just north of West Pinyon)-flowing full																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
E3-252-004		15	6.6	-1.4	10	Yes	clay	FD	2.0	8.5											
E3-252-003		15	4.0	-4.0	10	Yes	clay	FD	2.0	8.4											
E3-252-002		15	3.8	-4.2	10	Yes	clay	FD	2.0	8.3											
E2-251-058	Independent Ave.	15 fiberglass	6.3	-1.7	2	Yes	clay	FD	2.0	5.4											
No Number	South of West Orchard Ave.	15 fiberglass	3.5	-4.5	2	Yes	clay	FD	2.0	5.4											
West Orchard Avenue (25 1/2 Road to Bass)																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
E2-252-009	Minnow	8	6.8	1.8	5	Yes	clay	FD	2.0	3.5											
Lakeside Court																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
F2-262-050		6	5.5	-4.5	5	No	clay	FD	2.0	2.6											
A		6	6.8	-3.2	5	No	clay	FD	2.0	2.7											
1020		6	2.5	-7.5	5	No	clay	FD	2.0	3.3											
F2-262-060		6	5.5	-4.5	5	No	clay	FD	2.0	2.6											
Independent Avenue-25 1/2 Road to DOW																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
E1-252-002		10	3.8	-4.2	2	Yes	clay	FD	2.0	3.6											
E1-252-006		10	5.3	-2.7	2	Yes	clay	FD	2.0	3.6											
E1-252-008		12	7.5	-0.5	2	Yes	clay	FD	2.0	4.3											
E1-252-023		8	4.5	-3.5	2	Yes	clay	FD	2.0	2.9											
E1-252-032		8	5.5	-2.5	2	Yes	clay	FD	2.0	2.9											
Bass Street																					
MH No.	Location	Pipe Diameter (inches)	Soil Cover Over Pipe (ft)	Ground Water Over Pipe (ft)	Ovality (%)	H2O Live Load	Soil Type	Pipe Condition	Factor of Safety	Min. Design Thickness (mm)											
E1-252-006		10	5.3	-2.7	2	Yes	clay	FD	2.0	3.6											
E2-252-025		10	6.3	-1.7	2	Yes	clay	FD	2.0	3.6											

Note: CIPP installer shall verify and submit minimum design thickness calculations before ordering material.

MANHOLE CONDITION

Colorado Avenue Interceptor (1st to 6th)-flowing 1/3 full		4.14 cfs	1858.85 gpm																		
MH No.	Location	Diameter	Depth	Condition																	
D1-261-001	1st	48 inch	15.0 ft	Upper good, lower 3 feet exposed aggregate-coat																	
D1-261-006		48 inch	13.5 ft	New, cut two steps out of cone, steps don't line up with barrel steps																	
D1-261-008	2nd	48 inch	13.5 ft	New, good shape, steps ok																	
D1-261-021		48 inch	13.0 ft	New, good shape, steps ok																	
D1-261-036	3rd	48 inch	14.0 ft	Upper good, lower 3 feet exposed aggregate-coat																	
D1-261-052	4th	48 inch	13.3 ft	Upper good, lower 3 feet exposed aggregate-coat																	
D1-261-075	5th	48 inch	14.0 ft	Upper good, lower 3 feet exposed aggregate-coat																	
D1-261-103		48 inch	15.0 ft	Upper good, bench exposed aggregate-coat																	
D1-261-117	6th	48 inch	15.0 ft	Upper good, bench exposed aggregate-coat																	
Crosby Avenue Interceptor (West Main and Hwy 340 crossing paralleling railroad tracks)-flowing 1/2 full		1.73 cfs	778.91 gpm																		
From flow data (gpm) at Spruce and Main:		Average minimum	806	Average	1899	Average Maximum	4216														
MH No.	Location	Diameter	Depth	Condition																	
D2-252-033		48 inch	6.2 ft	Bad-aggregate exposed entire MH-steep slope-coat-1/6 full																	
D2-252-039		48 inch	8.5 ft	Fairly good shape-steep slope-coat																	
D2-252-049		48 inch	8.8 ft	8 inch lateral from Courthouse-east, fairly good shape, some erosion bench-coat																	
River Road Interceptor-flowing full		17.95 cfs	8062.20 gpm																		
MH No.	Location	Diameter	Depth	Condition																	
D3-252-012		48 inch	11.5 ft	Eroded top to bottom-(to be abandoned)																	
D3-251-014		60 inch	8.3 ft	top riser section new-rest of manhole eroded-to be abandoned																	
Horizon Drive Interceptor (just south of West Orchard to just north of West Pinyon)-flowing full																					
From flow data (gpm) at 25 Road and West Ind.:		Average minimum	545	Average	1232	Average Maximum	2055														
MH No.	Location	Diameter	Depth	Condition																	
E3-252-004		48 inch	8.6 ft	Coat, clean, shallow, aggregate exposed																	
E3-252-003		48 inch	6.0 ft	Coat, clean, shallow, aggregate exposed																	
E3-252-002		48 inch	5.8 ft	Coat, clean, shallow, aggregate exposed																	
E2-251-058	Independent Ave.	48 inch	7.8 ft	Coat, clean, cone is new, 18 inch north, 30 inch east and southwest																	
West Orchard Avenue (25 1/2 Road to Bass)																					
MH No.	Location	Diameter	Depth	Condition																	
E2-252-001	25 1/2 Road																				
E2-252-009	Minnow			Good, 8 inch concrete to west and 6 inch clay to south																	
Lakeside Court																					
MH No.	Location	Diameter	Depth	Condition																	
F2-262-050				Good, 8 inch in from south with 4 foot drop, 6 inch in from SE and 6 inch out to North																	
A				Good, shallow, 6 inch east to northwest, 4 inch service south-gravel area																	
1020				Good, shallow, 6 inch east to west, right next to Blue Spruce tree																	
F2-262-060				Good, shallow, 6 inch in north to west																	

ESTIMATED FLOWS

Interceptor Description	Measurement Station Location	Average Minimum Flow (gpm)	Estimated Flow During Manhole Inspections	Average Flow (gpm)	Average Peak Flow (gpm)
Colorado Avenue Interceptor (1st to 6th)			1,860		
Crosby Avenue Interceptor (West Main and Hwy 340 crossing paralleling railroad tracks)	Spruce and Main	806			
River Road Interceptor (behind City Shops)			8,060		
Horizon Drive Interceptor (25 1/2 Road between West Pinyon and West Orchard)	25 Road and West Independent	545		1232	2055

REVISION Δ	DESCRIPTION	DATE	DRAWN BY	JCS	DATE	2002	SCALE	
REVISION Δ			DESIGNED BY	JCS	DATE	2002	PLAN	PROFILE
REVISION Δ			CHECKED BY		DATE		HORIZ.	HORIZ.
REVISION Δ			APPROVED BY		DATE		VERT.	

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
 ENGINEERING AND TECHNICAL SERVICES DIVISIONS
 CITY OF GRAND JUNCTION, COLORADO

2003 INTERCEPTOR REHABILITATIONS
 DETAILS