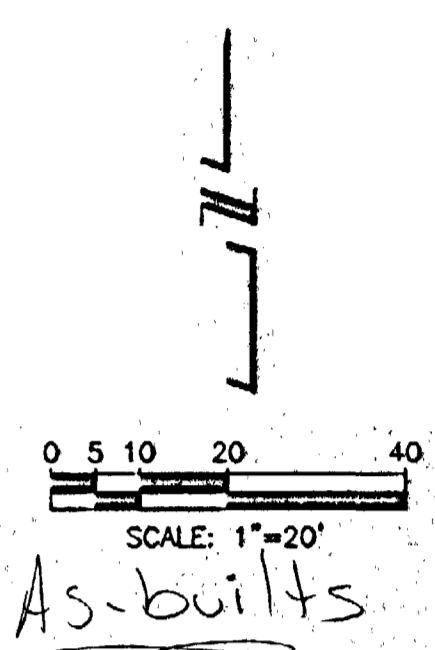


BENCHMARKS:
 (A) CP X 0+00.00 (WEST END C/L CONTROL)
 USGS ELEVATION = 4593.57
 (B) CP PK/E 4+90.79 (EAST END C/L CONTROL)
 USGS ELEVATION = 4598.04

This Sheet only
 # sewer taps = 9
 L.F./4" PVC = 89.5

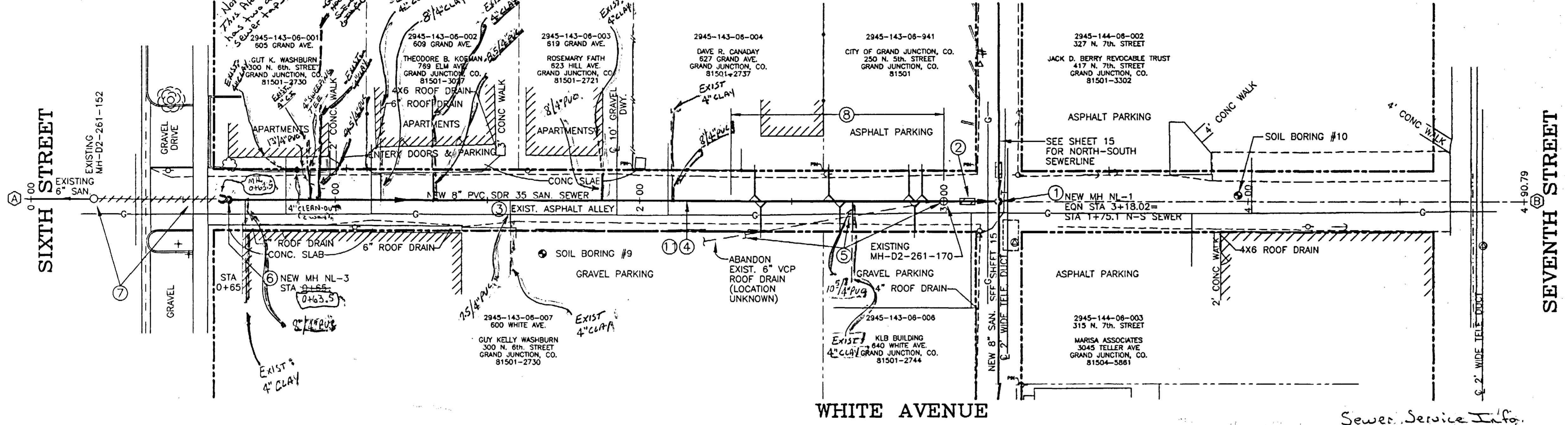


GRAND AVENUE

WHITE AVENUE

SIXTH STREET

SEVENTH STREET

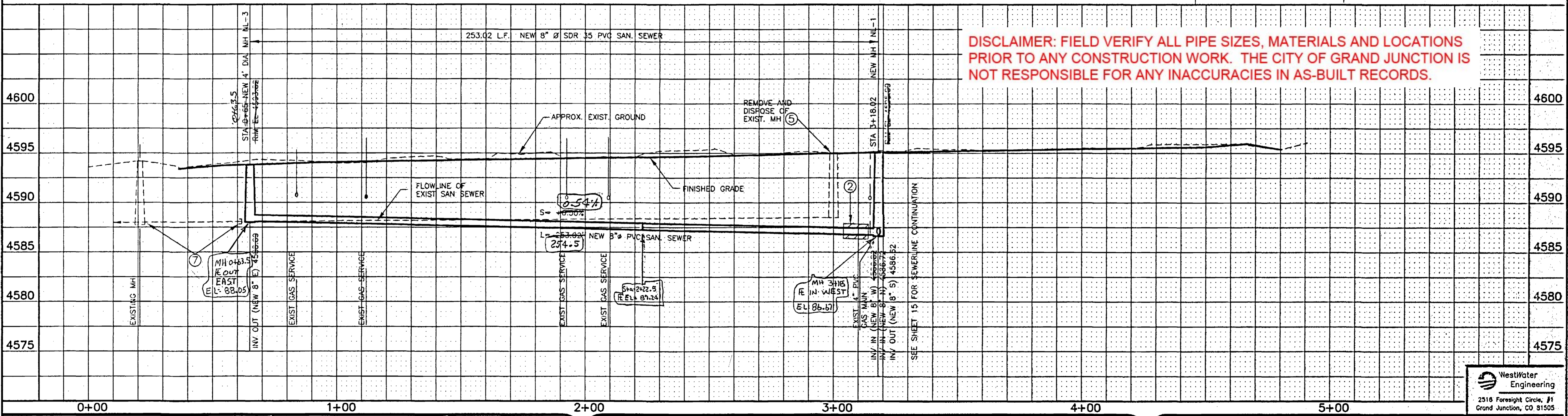


SANITARY SEWER REPLACEMENT NOTES

1. CONNECT TO NEW MANHOLE NL-1. SEE SHEET 15 FOR NORTH-SOUTH SEWERLINE.
2. INSTALL CLAY CUT OFF WALL UPSTREAM FROM MANHOLE PER CITY OF GRAND JUNCTION SPECIFICATIONS.
3. REMOVE EXISTING ASPHALT ALLEY AS NECESSARY FOR SEWERLINE TRENCHING IF NOT PREVIOUSLY REMOVED BY PUBLIC SERVICE DURING GAS LINE RELOCATION AND UPGRADES AND DISPOSE OF SCRAPPED MATERIAL.
4. LOCATIONS OF THE MAJORITY OF EXISTING SEWER SERVICE TAPS ARE UNKNOWN. THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER AT LEAST ONE TAP AND SERVICE LINE FOR EACH PROPERTY, AND MAY ENCOUNTER A NUMBER OF INACTIVE TAPS. VERIFY WHETHER EACH SERVICE TAP ENCOUNTERED IS ACTIVE OR INACTIVE THROUGH THE USE OF DYES OR OTHER APPROVED METHODS. INSTALL 8 X 8 X 4 INCH FULL BODY WYE FITTING, 4 INCH 45 DEGREE BEND AND APPROXIMATELY 10 FEET OF 4 INCH SDR 35 PVC SERVICE LINE TO EXISTING SERVICE LINE WITH APPROPRIATE COUPLING.
5. REMOVE AND DISPOSE OF EXIST. MH-D2-261-170, AND ABANDONED 6-INCH VCP ROOF DRAIN TO THE SOUTH EDGE OF THE RIGHT-OF-WAY. INSTALL TWO O-RING GASKETS AROUND THE EXPOSED PORTION OF ROOF DRAIN AND POUR A WATERTIGHT CONCRETE PLUG AT END OF ABANDONED LINE.
6. INSTALL NEW 4-FOOT DIAMETER CONCRETE MANHOLE IN ACCORDANCE WITH CITY OF GRAND JUNCTION STANDARD SPECIFICATIONS AND SANITARY SEWER DETAILS.
7. ABANDON THE PORTION OF EXISTING SEWERLINE BETWEEN THE NEW MANHOLE NL-3 AND EXISTING MANHOLE D2-261-152 IN 6TH STREET IN PLACE. INSTALL TWO O-RING GASKETS AROUND THE EXPOSED PORTION OF 6-INCH VCP WEST OF NEW MANHOLE NL-3 AND POUR A WATERTIGHT CONCRETE PLUG AT THE END OF THE ABANDONED LINE. PLUG THE ABANDONED PIPE CONNECTION AT THE EXISTING MANHOLE IN 6TH STREET WITH A CONCRETE PLUG, FINISHED FLUSH WITH THE MANHOLE WALL.
8. ONLY THE EAST 70' OF EXIST. SEWERLINE HAS BEEN TV INSPECTED TO LOCATE EXISTING SERVICE TAPS. TAPS IDENTIFIED DURING THE INSPECTION ARE SHOWN AND MAY BE EITHER ACTIVE OR INACTIVE. VERIFY WHETHER SERVICE TAPS ENCOUNTERED ARE ACTIVE OR INACTIVE THROUGH THE USE OF DYES OR OTHER APPROVED METHODS. INSTALL 8 X 8 X 4 INCH FULL BODY WYE FITTING, 45 DEGREE BEND AND APPROX. 10 FEET OF 4 INCH SDR 35 PVC SERVICE LINE TO THE EDGE OF R.O.W. FOR ALL ACTIVE TAPS, OR AS DIRECTED BY THE CITY, AND CONNECT NEW SERVICE LINE TO EXISTING SERVICE WITH APPROPRIATE COUPLING.
9. REFER TO SHEET 6 FOR ALLEY IMPROVEMENTS AND OTHER TRENCH SURFACE RESTORATION REQUIREMENTS. IF THE SCHEDULE FOR ALLEY IMPROVEMENTS IS DELAYED OR OTHERWISE POSTPONED BEYOND THE COMPLETION OF SEWERLINE REPLACEMENT, PROVIDE A TEMPORARY DRIVING SURFACE CONSISTING OF PIT RUN BACKFILL TO THE FINISHED GRADE.
10. REFER TO SHEET 15 FOR CONTINUATION OF SEWERLINE REPLACEMENT NORTH AND SOUTH OF INTERSECTING ALLEYS.
11. THE NEW SEWERLINE FLOWS EAST IN THE OPPOSITE DIRECTION AS THE EXISTING SEWERLINE. ALL TAPS ARE TO BE CONNECTED TO THE MAIN SUCH THAT THE BRANCH OF THE WYE FITTING IS ORIENTED TOWARD THE EAST TO MATCH THE DIRECTION OF FLOW IN THE NEW SEWER MAIN. NOTIFY THE CITY IN THE EVENT EXISTING SERVICE LINES ARE INSTALLED AT AN ANGLE OTHER THAN 90 DEGREES TO THE MAIN.

Sta. Rt/Lt	Address	L.F./new 4" PVC installed	Existing Service line (TYPE)
0+73.5 Rt.	600 white	8	clay
0+92 Lt.	300 N. 6th	22	Clay & Cast
0+93 Lt.	605 Grand	9.5	clay
1+17.5 Lt.	609 Grand	8.0	clay
1+33 Lt.	609 Grand	8.5	clay
1+57.5 Rt.	600 white	7	clay
1+89 Lt.	619 Grand	8	clay
2+10.5 Lt	627 Grand	8	clay
2+70.5 Rt.	640 white	10.5	clay

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE
REVISION			PS	5-98	PLAN PROFILE X-SECT
REVISION			CKK	5-98	HORIZ. 1"=20' 1"=20'
REVISION					VERT. N/A 1"=5'

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

1998 ALLEY IMPROVEMENT DISTRICT - PHASE A
 6TH TO 7TH STS.-BETWEEN WHITE AVE & GRAND AVE
 SANITARY SEWER PLAN & PROFILE

WestWater Engineering
 2318 Foresight Circle, #1
 Grand Junction, CO 81505

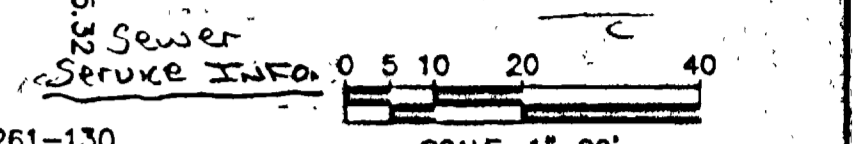
BENCHMARKS:

Ⓐ	CP PK/W 0+00.00 (C/L END CONTROL)	USGS ELEVATION = 4593.85
Ⓑ	CP X/E 4+15.32 (NORTH END C/L CONTROL)	USGS ELEVATION = 4593.27

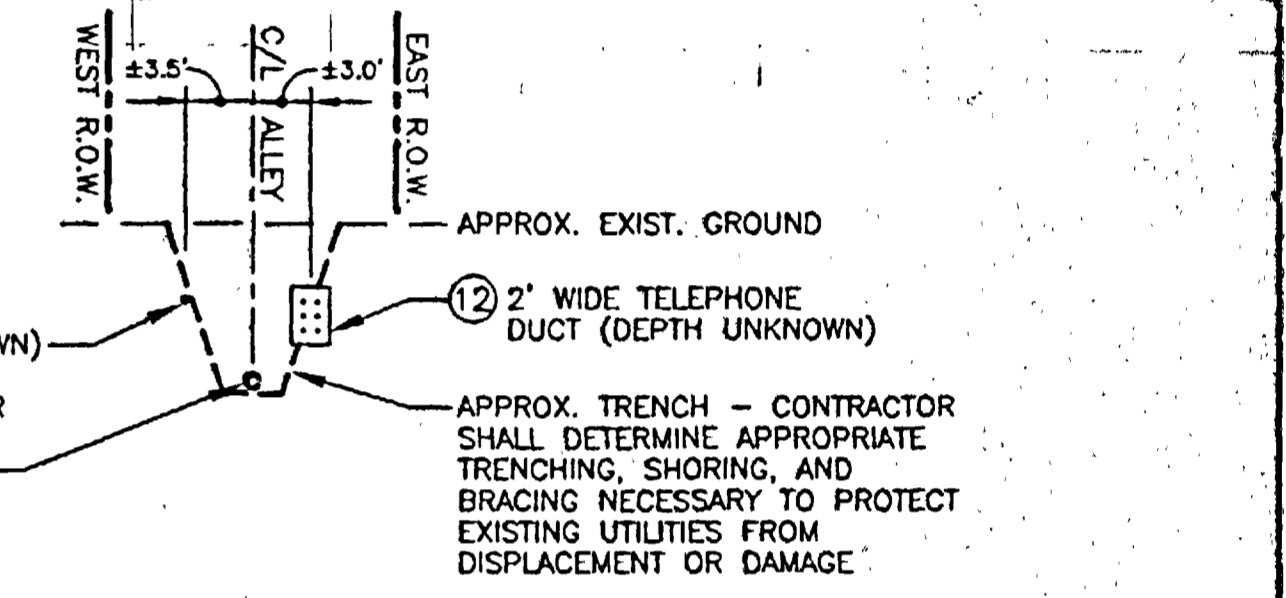
This Sheet only
sewer taps = 5
L/F 4" PVC = 43.5'



AS-BUILTS



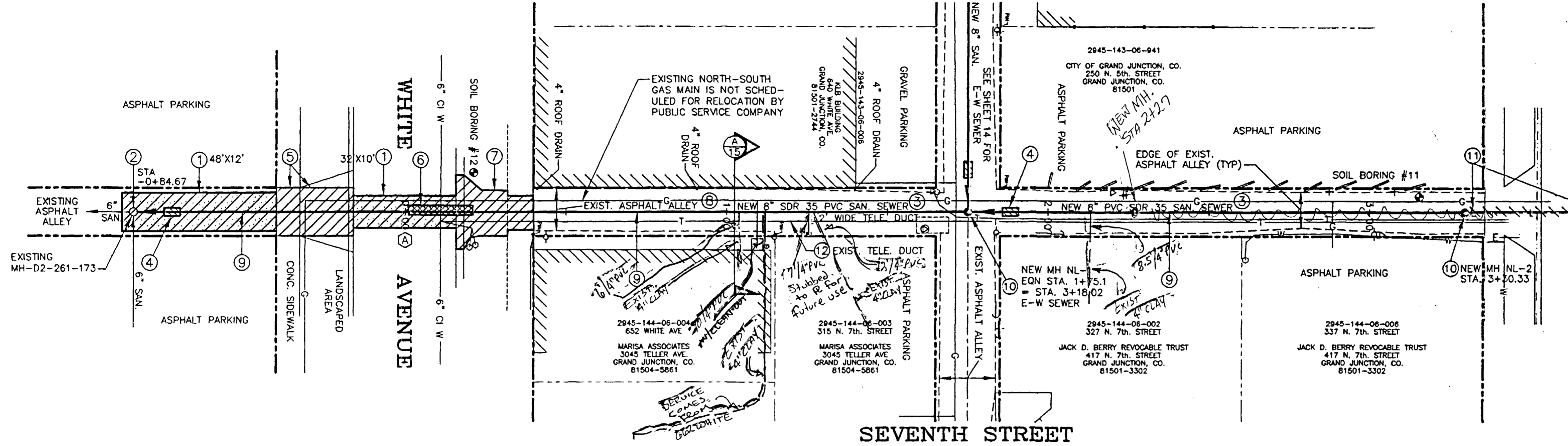
Sta. R/L/T	Address	Lf/new Pvc	Existing Service / type
1404 ft.	652 White	6'	4" clay
1408 ft.	662 White	10'	4" clay (Taps numerous)
1426 ft.	662 White	7'	Stub out to R (Future use)
1427 ft.	315 No. 7th	12'	4" clay
2413 ft.	417 No. 7th	8.5'	4" clay



SECTION A
SCALE: 1"=10'
15

SIXTH STREET

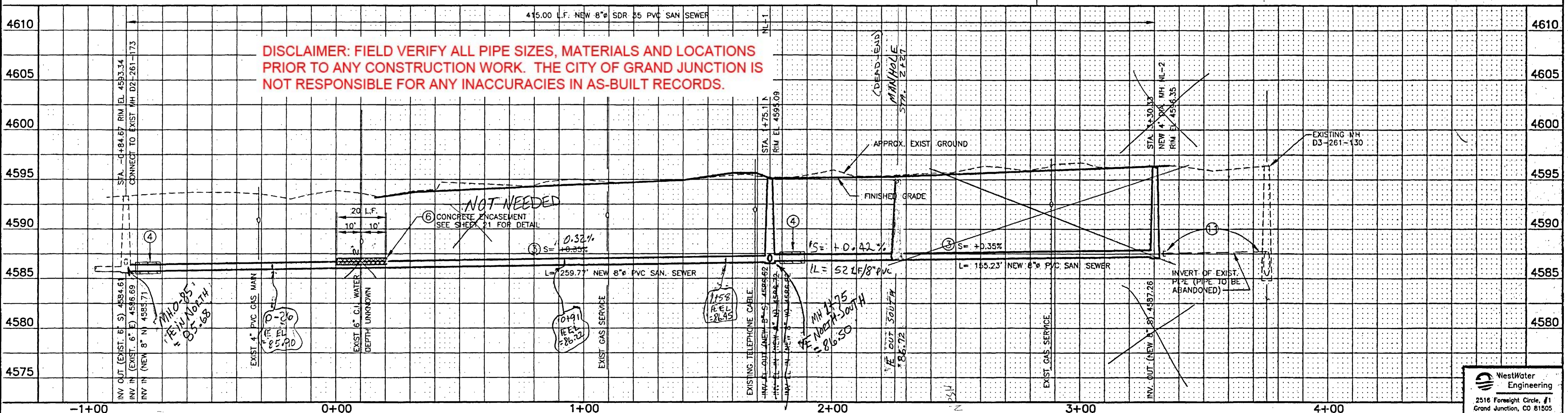
SEVENTH STREET



SANITARY SEWER REPLACEMENT NOTES

- REMOVE AND DISPOSE OF EXISTING ASPHALT. BACKFILL EXCAVATION WITH PIT RUN TO 9 INCHES BELOW FINISHED GRADE. INSTALL 6 INCHES OF COMPACTED CLASS 6 ROAD BASE AND 3 INCHES BITUMINOUS ASPHALT IN MAXIMUM 2-INCH COMPACTED LIFTS. SEAL THE JOINT BETWEEN EXISTING AND NEW ASPHALT WITH HOT POURED CRACK AND JOINT SEALANT.
- REMOVE EXISTING 6-INCH VOP INLET PIPE FROM NORTH WALL OF EXISTING MANHOLE. CORE DRILL WALL OF MANHOLE FOR NEW 8-INCH PVC INLET PIPE AND PSX MANHOLE CONNECTOR. CAREFULLY CHISEL OR JACK HAMMER INVERT FLOW CHANNEL FOR NEW 8-INCH PVC INLET PIPE. FUTURE 8-INCH OUTLET PIPE(S) AND EXISTING 6-INCH SERVICE LINE FROM THE EAST. CUT THE EXISTING 6-INCH C.I. SERVICE LINE FROM THE EAST FLUSH WITH WALL OF MH. POUR NEW CONCRETE FLOW CHANNELS FOR ALL INLET AND OUTLET PIPES WITH BENCH, INCLUDING A STEEP TROUGHED SLIDE ±13" IN HEIGHT FOR 6 INCH SERVICE LINE FROM THE EAST.
- PRIOR TO INSTALLING THE NEW SEWERLINE FROM THE EXISTING MH D2-261-173 TO NEW MANHOLE NL-2, THE CONTRACTOR SHALL VERIFY THE EXISTING SEWERLINE ELEVATION AT EXISTING MANHOLE D2-261-173 AND AT NEW MANHOLES NL-1 AND NL-2 BY POT-HOLING, AND PROVIDE THE INFORMATION TO THE CITY FOR VERIFICATION OF THE DESIGN SLOPE NECESSARY TO CONNECT THE NEW SEWERLINE FROM MH TO MH AT A CONTINUOUS GRADE THAT MATCHES THE EXISTING SEWERLINE.
- INSTALL CLAY CUT OFF WALL UPSTREAM FROM MANHOLE PER CITY OF GRAND JUNCTION SPECIFICATIONS.
- REMOVE EXISTING CONCRETE SIDEWALK, ALLEY APPROACH AND GUTTER TO NEAREST JOINT AND DISPOSE OF SCRAPPED MATERIAL. RECONSTRUCT DRIVE-OVER SIDEWALK, ALLEY APPROACH AND GUTTER WITH 8 INCHES CONCRETE PAVEMENT OVER COMPACTED SUBGRADE PER CITY OF GRAND JUNCTION STANDARD DETAILS.
- IN THE EVENT 18 INCHES CLEAR VERTICAL SEPARATION IS NOT PROVIDED BETWEEN THE EXISTING WATER LINE AND THE NEW SEWERLINE, ENGAGE THE SEWERLINE WITH 20 LINEAL FEET OF CONCRETE, CENTERED ON THE EXISTING WATER LINE.
- REMOVE EXISTING CONCRETE VALLEY PAN, ALLEY APPROACH AND SIDEWALK TO NEAREST JOINT AND DISPOSE OF SCRAPPED MATERIALS. REFER TO SHEET 7 FOR SURFACE RESTORATION AND ALLEY IMPROVEMENTS.
- REMOVE EXISTING ASPHALT ALLEY AS NECESSARY FOR SEWERLINE TRENCHING AND DISPOSE OF SCRAPPED MATERIAL.
- LOCATIONS OF THE MAJORITY OF EXISTING SEWER SERVICE TAPS ARE UNKNOWN. THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER AT LEAST ONE TAP AND SERVICE LINE FOR EACH PROPERTY, AND MAY ENCOUNTER A NUMBER OF INACTIVE TAPS. VERIFY WHETHER EACH SERVICE TAP ENCOUNTERED IS ACTIVE OR INACTIVE THROUGH THE USE OF DYES OR OTHER APPROVED METHODS. INSTALL 8 X 8 X 4 INCH FULL BODY WYE FITTING, 4 INCH 45 DEGREE BEND AND APPROXIMATELY 7.5 FEET OF 4 INCH SDR 35 PVC SERVICE LINE TO THE EDGE OF THE R.O.W. AND CONNECT NEW SERVICE LINE TO EXISTING SERVICE WITH APPROPRIATE COUPLING.
- INSTALL NEW 4-FOOT DIAMETER CONCRETE MANHOLE IN ACCORDANCE WITH CITY OF GRAND JUNCTION STANDARD SPECIFICATIONS AND SANITARY SEWER DETAILS.
- ABANDON THE PORTION OF EXISTING SEWERLINE BETWEEN NEW MANHOLE NL-2 AND EXISTING MANHOLE D3-261-130 IN GRAND AVENUE IN PLACE. THE EXISTING PIPE IS REPORTEDLY 8-INCH PVC STUBBED OUT AS A PART OF THE GRAND AVENUE STREET IMPROVEMENTS PROJECT. INSTALL A SOLVENT WELD CAP ON THE EXPOSED END OF ABANDONED SEWERLINE NORTH OF NEW MANHOLE NL-2 AND PLUG THE ABANDONED PIPE CONNECTION AT THE EXISTING MANHOLE IN GRAND AVENUE WITH A CONCRETE PLUG, FINISHED FLUSH WITH THE MANHOLE WALL.
- SPECIFIC DETAIL ON EXISTING TELEPHONE DUCT IS UNKNOWN. TYPICAL DUCTS INCLUDE A CONCRETE CAP OVER INDIVIDUAL CONDUITS. CONDUITS MAY BE BACKFILLED WITH EITHER SAND OR CONCRETE FLOW FILL. TWO OF THE CONDUITS WITHIN THE DUCT ARE FIBER OPTIC. SEE CROSS SECTION THIS SHEET.
- REFER TO SHEET 7 FOR ALLEY IMPROVEMENTS AND OTHER TRENCH SURFACE RESTORATION REQUIREMENTS. IF THE SCHEDULE FOR ALLEY IMPROVEMENTS IS DELAYED OR OTHERWISE POSTPONED BEYOND THE COMPLETION OF SEWERLINE REPLACEMENT, PROVIDE A TEMPORARY DRIVING SURFACE CONSISTING OF PIT RUN BACKFILL TO THE FINISHED GRADE.
- REFER TO SHEET 14 FOR CONTINUATION OF SEWERLINE REPLACEMENT WEST OF INTERSECTING ALLEYS.

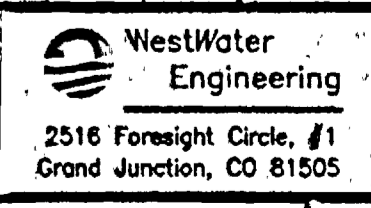
DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE
REVISION Δ			PS	5-98	PLAN PROFILE X-SECT
REVISION Δ			CKK	5-98	HORIZ. 1"=20' 1"=20'
REVISION Δ					VERT. N/A 1"=5'

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

**1998 ALLEY IMPROVEMENT DISTRICT - PHASE A
WHITE AVE TO GRAND AVE.-BETWEEN SIXTH ST AND SEVENTH ST
SANITARY SEWER PLAN & PROFILE**

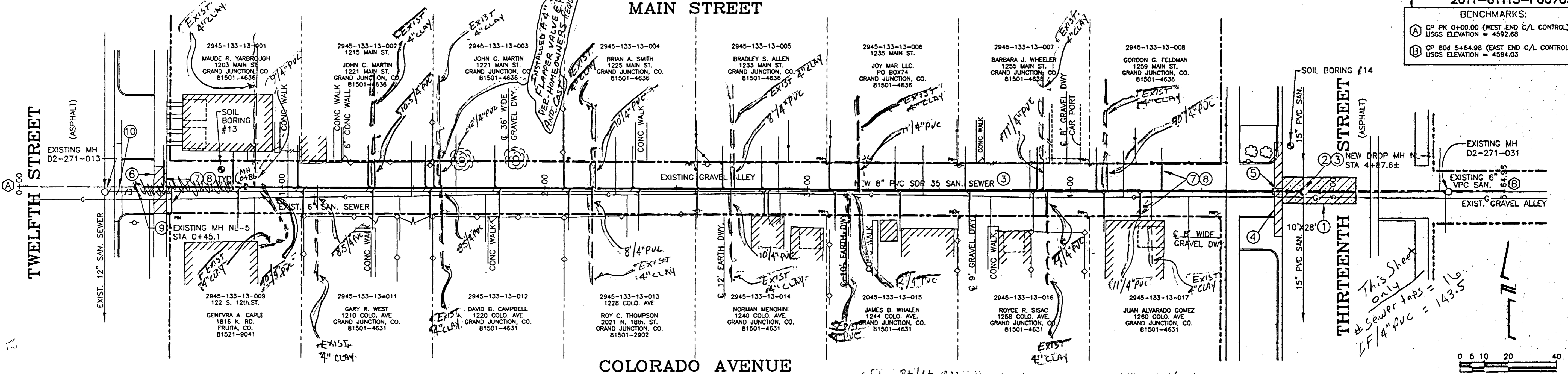


BENCHMARKS:

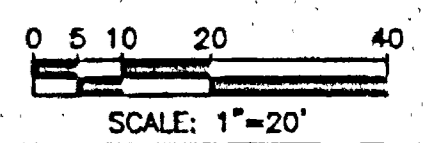
A	CP PK 0+00.00 (WEST END C/L CONTROL)	USGS ELEVATION = 4592.68
B	CP Rod 5+64.88 (EAST END C/L CONTROL)	USGS ELEVATION = 4594.03

MAIN STREET

COLORADO AVENUE



This Sheet Only
Sewer taps = 16
L/F 4" PVC = 143.5



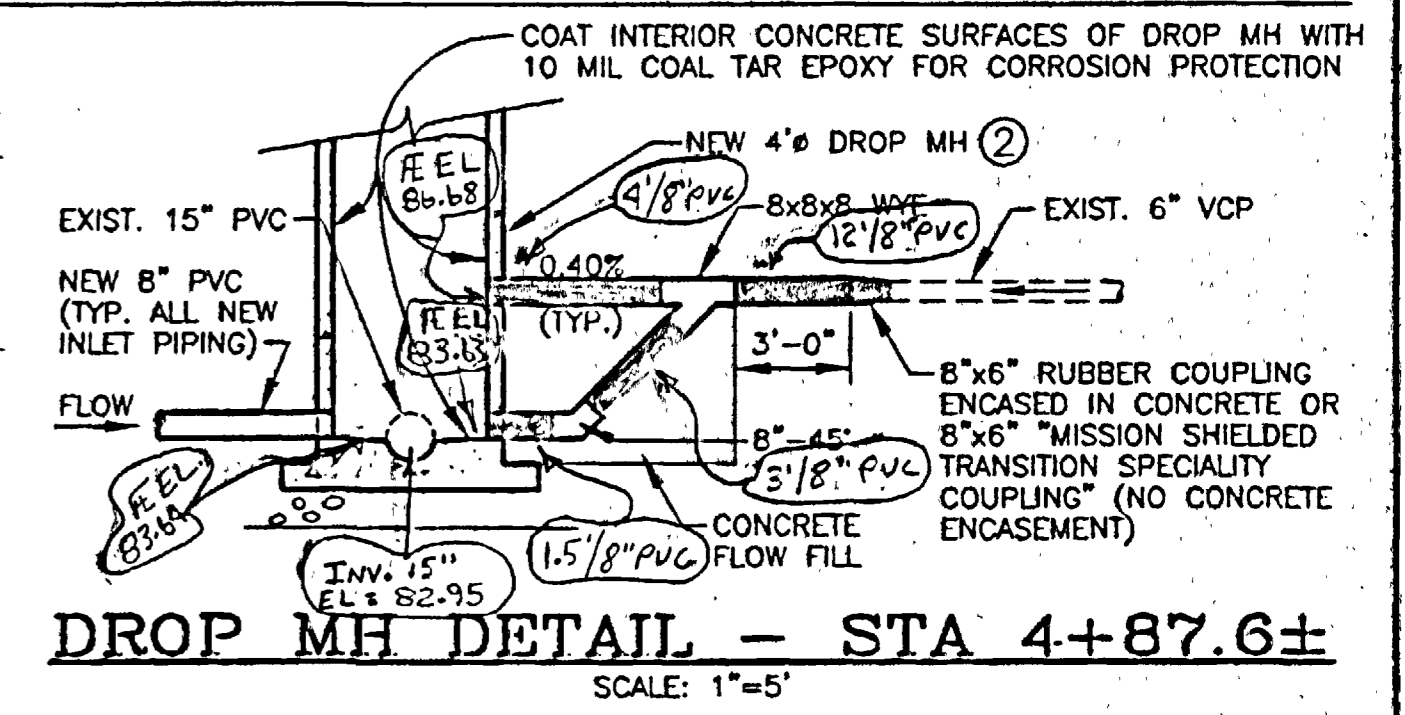
SANITARY SEWER REPLACEMENT NOTES

- REMOVE AND DISPOSE OF EXISTING ASPHALT. BACKFILL EXCAVATION WITH PIT RUN TO 9 INCHES BELOW FINISHED GRADE. INSTALL 6 INCHES OF COMPACTED CLASS 6 ROAD BASE AND 3 INCHES BITUMINOUS ASPHALT IN MAXIMUM 2-INCH COMPACTED LIFTS. SEAL THE JOINT BETWEEN EXISTING AND NEW ASPHALT WITH HOT POURED CRACK AND JOINT SEALANT.
- EXCAVATE TO A DEPTH OF 14 INCHES BELOW THE F/L OF THE EXISTING 15 INCH SEWERLINE AND PROVIDE WEDGES AND SUPPORT FOR THE EXISTING 15 INCH SEWERLINE. AFTER SUPPORTING EXISTING 15 INCH SEWERLINE, THE TOP HALF OF THE PIPE SHALL BE CUT OUT TO SPRINGLINE AND NOTCHED TO ACCOMMODATE THE TWO NEW INVERTS-IN. THE CONTRACTOR MAY ELECT TO POUR THE NEW BASE AND INVERT PRIOR TO CUTTING THE EXISTING SEWERLINE TO ACCOMMODATE THE NEW INVERT. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF LIVE SEWAGE AND NOT ALLOW DEBRIS TO ENTER EXISTING SEWERLINE WHILE WORK IS IN PROGRESS. CONSTRUCT NEW 4-FOOT DIAMETER DROP MANHOLE CENTERED ON EXISTING 15 INCH AND 6 INCH SEWERLINES IN ACCORDANCE WITH CITY OF GRAND JUNCTION SPECIFICATIONS AND STANDARD DETAILS. IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE IN THE EAST-WEST SEWERLINE TO ELIMINATE THE FLOW OF SEWAGE DURING CONSTRUCTION OF THE NEW DROP MANHOLE AND DROP CONNECTIONS.
- PRIOR TO INSTALLING THE NEW SEWERLINE FROM THE EXISTING 15 INCH SEWERLINE IN 13TH STREET TO NEW MANHOLE NL-5 EAST OF 12TH STREET, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATION OF THE EXISTING 15 INCH SEWERLINE IN 13TH STREET, TO PROVIDE THE INFORMATION TO THE CITY FOR VERIFICATION OF THE DESIGN SLOPE NECESSARY TO CONNECT NEW SEWERLINE FROM MANHOLE TO MANHOLE AT A CONTINUOUS GRADE.
- REMOVE 3 FOOT CONCRETE VALLEY PAN TO NEAREST JOINT AND DISPOSE OF SCRAPPED MATERIAL. REFER TO SHEET 8 FOR SURFACE RESTORATION AND ALLEY IMPROVEMENTS.
- INSTALL CLAY CUT OFF WALL UPSTREAM FROM MANHOLE PER CITY OF GRAND JUNCTION SPECIFICATIONS.
- REMOVE 5 FOOT CONCRETE SIDEWALK TO NEAREST JOINT AND DISPOSE OF SCRAPPED MATERIAL. REFER TO SHEET 8 FOR SURFACE RESTORATION AND ALLEY IMPROVEMENTS.
- LOCATIONS OF EXISTING SEWER SERVICE TAPS ARE SHOWN BASED ON TV INSPECTION LOGS THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER AT LEAST ONE TAP AND SERVICE LINE FOR EACH PROPERTY, AND MAY ENCOUNTER A NUMBER OF INACTIVE TAPS. VERIFY WHETHER EACH SERVICE TAP ENCOUNTERED IS ACTIVE OR INACTIVE THROUGH THE USE OF DYES OR OTHER APPROVED METHODS. INSTALL 8 X 8 X 4 INCH FULL BODY WYE FITTING, 4 INCH 45 DEGREE BEND AND APPROX. 10 FEET OF 4 INCH SDR 35 PVC SERVICE LINE TO EXISTING SERVICE LINE WITH APPROPRIATE COUPLING.
- THE NEW SEWERLINE FLOWS EAST IN THE OPPOSITE DIRECTION AS THE EXISTING SEWERLINE. ALL TAPS ARE TO BE CONNECTED TO THE MAIN SUCH THAT THE BRANCH OF THE WYE FITTING IS ORIENTED TOWARD THE EAST TO MATCH THE NEW DIRECTION OF FLOW IN THE NEW SEWER MAIN. NOTIFY THE CITY IN THE EVENT EXISTING SERVICE LINES ARE INSTALLED AT AN ANGLE OTHER THAN 90 DEGREES TO THE MAIN.

- INSTALL NEW 4-FOOT DIAMETER CONCRETE MANHOLE IN ACCORDANCE WITH CITY OF GRAND JUNCTION SPECIFICATIONS AND STANDARD DETAILS.
- ABANDON THE PORTION OF EXISTING SEWERLINE BETWEEN NEW MANHOLE NL-5 AND EXISTING MANHOLE D2-271-013 IN 12TH STREET IN PLACE. INSTALL TWO O-RING GASKETS AROUND THE EXPOSED PORTION OF 8-INCH VCP WEST OF NEW MANHOLE NL-5 AND POUR A WATER TIGHT CONCRETE PLUG AT THE END OF THE ABANDONED LINE. PLUG THE ABANDONED PIPE CONNECTION AT EXISTING MANHOLE D2-271-013 WITH A CONCRETE PLUG, FINISHED FLUSH WITH THE MANHOLE WALL.
- REFER TO SHEET 8 FOR ALLEY IMPROVEMENTS AND OTHER TRENCH SURFACE RESTORATION REQUIREMENTS. IF THE SCHEDULE FOR ALLEY IMPROVEMENTS IS DELAYED OR OTHERWISE POSTPONED BEYOND THE COMPLETION OF SEWERLINE REPLACEMENT, PROVIDE A TEMPORARY DRIVING SURFACE CONSISTING OF PIT RUN BACKFILL TO THE FINISHED GRADE.

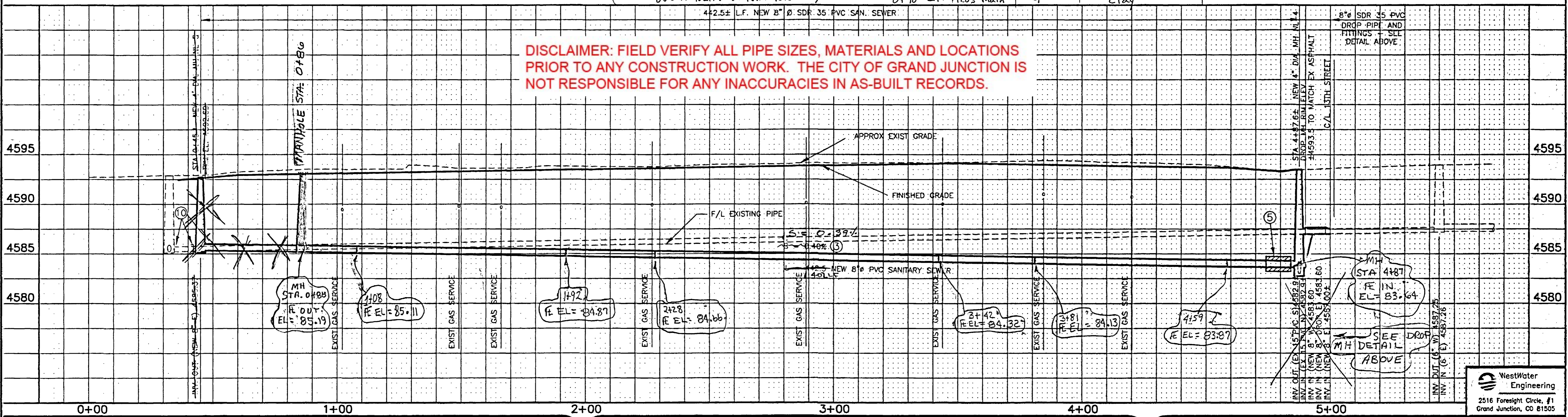
Sta. Rt./Lt. Address L/F New 4" PVC = Existing 4" Service (Type)

4+30 Rt.	1260 Colo.	11	Clay
4+13 Lt.	1259 main	10	Clay
3+90.5 Rt.	1258 Colo.	9	Clay
3+89.5 Lt.	1255 main	11	Clay
3+20 Lt.	1235 main	11	Clay
3+16 Rt.	1244 Colo.	2'	PVC
2+73 Lt.	1233 main	8'	Clay
2+72 Rt.	1240 Colo.	10'	Clay
2+20 Lt.	1225 main	10'	Clay
2+19 Rt.	1228 Colo.	8'	Clay
1+62 Rt.	1220 Colo.	3.5'	Clay (Poor Condition)
1+60.5 Lt.	1221 main	12'	Clay
1+36.5 Lt.	1215 main	10.5'	Clay
1+13 Rt.	1210 Colo.	8.5'	Clay
0+94 Rt.	122 So. 12th	10'	Clay
0+90 Lt.	1203 main	9'	Clay



Note: Could not install new PVC to R due to location of Power Pole

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE
REVISION A			PS	5-98	PLAN PROFILE X-SECT
REVISION B			CKK	5-98	HORIZ. 1"=20' 1"=20'
REVISION C					VERT. N/A 1"=5'

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

1998 ALLEY IMPROVEMENT DISTRICT - PHASE A
12TH TO 13TH STS.-BETWEEN COLORADO AVE & MAIN ST
SANITARY SEWER PLAN & PROFILE

WestWater Engineering
2516 Foresight Circle, #1
Grand Junction, CO 81505

CHIPETA AVENUE

2011-61115-F00703

BENCHMARKS:

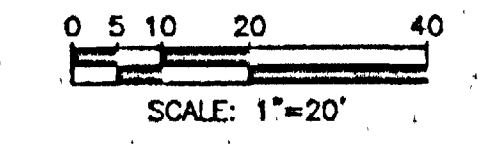
- (A) CP PK/W 0+00.00 (WEST END C/L CONTROL) USGS ELEVATION = 4603.604
- (B) CP PK/W 4+75.36 (EAS. END C/L CONTROL) USGS ELEVATION = 4604.000

TWELFTH STREET

THIRTEENTH STREET

OURAY AVENUE

This Sheet only
Sewer taps = 14
LF / 4" PVC = 105'

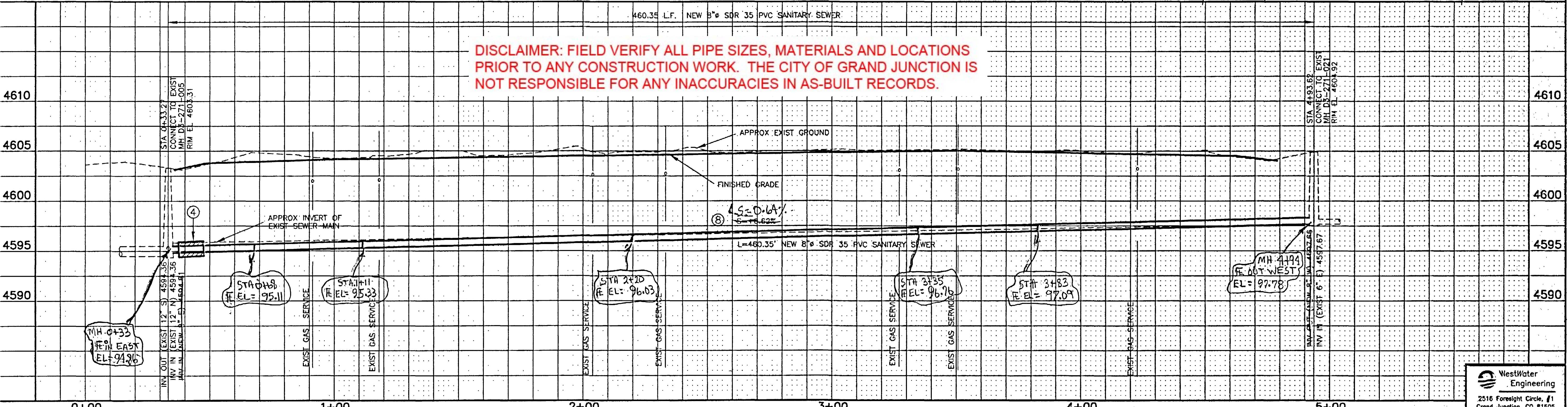


SANITARY SEWER REPLACEMENT NOTES

- REMOVE AND DISPOSE OF EXISTING ASPHALT. BACKFILL EXCAVATION WITH PIT RUN TO THE STREET SUBGRADE. PLACE 6 INCHES OF COMPACTED CLASS 6 ROAD BASE AND 4 INCHES BITUMINOUS ASPHALT IN 12TH STREET AND 3 INCHES BITUMINOUS ASPHALT IN 13TH STREET, IN MAXIMUM 2-INCH COMPACTED LIFTS. SEAL THE JOINT BETWEEN EXISTING AND NEW ASPHALT WITH HOT POURED CRACK AND JOINT SEALANT.
- REMOVE 3 FOOT CONCRETE OR ASPHALT VALLEY PAN TO NEAREST JOINT AND DISPOSE OF SCRAPPED MATERIAL. REFER TO SHEET 9 FOR SURFACE RESTORATION AND ALLEY IMPROVEMENTS. INSTALL PIT RUN BACKFILL TO FINISHED GRADE AS A TEMPORARY DRIVING SURFACE IF ALL ALLEY IMPROVEMENTS IS DELAYED AFTER COMPLETION OF SEWERLINE REPLACEMENT IN ORDER TO OPEN THE ALLEY TO NORMAL TRAFFIC.
- REMOVE EXISTING 6-INCH VCP INLET PIPE FROM EAST WALL OF BRICK AND CONCRETE MANHOLE. CAREFULLY CHISEL OR JACK HAMMER WALL AND INVERT FLOW CHANNEL FOR NEW 8-INCH PVC INLET PIPE. POUR A NEW CONCRETE FLOW CHANNEL FOR THE NEW INLET PIPE TO SMOOTHLY CONVEY FLOW FROM THE NEW INLET TO THE EXISTING OUTLET. INSTALL A WATER TIGHT CONNECTION BETWEEN THE MANHOLE WALL AND NEW 8-INCH SEWERLINE PER DETAILS ON SHEET 21 AND PROVIDE A WATER TIGHT REPAIR OF THE MANHOLE WALL WHERE THE EXISTING SEWER PIPE WAS REMOVED.
- INSTALL CLAY CUT OFF WALL UPSTREAM FROM MANHOLE PER CITY OF GRAND JUNCTION SPECIFICATIONS.
- REMOVE 5 FOOT CONCRETE SIDEWALK TO NEAREST JOINT AND DISPOSE OF SCRAPPED MATERIAL. REFER TO SHEET 9 FOR SURFACE RESTORATION AND ALLEY IMPROVEMENTS.
- REMOVE EXISTING ASPHALT ALLEY AS NECESSARY FOR SEWERLINE TRENCHING IF NOT PREVIOUSLY REMOVED BY PUBLIC SERVICE DURING GAS LINE RELOCATION AND UPGRADES AND DISPOSE OF SCRAPPED MATERIAL.
- LOCATIONS OF THE MAJORITY OF EXISTING SEWER SERVICE TAPS ARE UNKNOWN. THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER AT LEAST ONE TAP AND SERVICE LINE FOR EACH PROPERTY, AND MAY ENCOUNTER A NUMBER OF INACTIVE TAPS. VERIFY WHETHER EACH SERVICE TAP ENCOUNTERED IS ACTIVE OR INACTIVE THROUGH THE USE OF DYES OR OTHER APPROVED METHODS. INSTALL 8 X 8 X 4 INCH FULL BODY WYE FITTING, 4 INCH 45 DEGREE BEND AND APPROXIMATELY 10 FEET OF 4 INCH SDR 35 PVC SERVICE LINE TO EXISTING SERVICE LINE WITH APPROPRIATE COUPLING.
- PRIOR TO INSTALLING THE SEWERLINE FROM EXISTING MANHOLE D3-271-005 IN 12TH STREET TO EXISTING MANHOLE D3-271-021 IN 13TH STREET, THE CONTRACTOR SHALL VERIFY THE INVERT OUT ELEVATION AT THE EXISTING 13TH STREET MANHOLE, AND TO PROVIDE THE INFORMATION TO THE CITY FOR VERIFICATION OF THE DESIGN SLOPE NECESSARY TO CONNECT NEW SEWERLINE FROM MANHOLE TO MANHOLE AT A CONTINUOUS GRADE.
- REMOVE EXISTING 6-INCH VCP OUTLET PIPE FROM WEST WALL OF EXISTING CONC. MH D3-271-021. CORE DRILL WALL FOR NEW 6-INCH PVC OUTLET AND CONNECT NEW PIPE TO MANHOLE WITH PSX POSITIVE SEAL MANHOLE CONNECTOR. CHISEL AND/OR JACK HAMMER EXISTING INVERT FLOW CHANNEL AND PLACE A 4-FOOT LONG (4') SECTION OF 8 INCH PVC PIPE THAT IS CUT IN HALF LONGITUDINALLY IN THE FLOW CHANNEL SECURED IN PLACE WITH (6) CONCRETE ANCHOR BOLTS 3 INCHES ABOVE THE FLOWLINE AND GROUT TO FILL THE VOID BETWEEN EXISTING CONCRETE AND THE NEW PVC INVERT FLOW CHANNEL.
- REFER TO SHEET 9 FOR ALLEY IMPROVEMENTS AND OTHER TRENCH SURFACE RESTORATION REQUIREMENTS. IF THE SCHEDULE FOR ALLEY IMPROVEMENTS IS DELAYED OR OTHERWISE POSTPONED BEYOND THE COMPLETION OF SEWERLINE REPLACEMENT, PROVIDE A TEMPORARY DRIVING SURFACE CONSISTING OF PIT RUN BACKFILL TO THE FINISHED GRADE.

STA RT/LF	ADDRESS	LCF/4" PVC installed	existing Service type
0+82.5 Lt.	1205 Chipeta	3'	4" PVC
0+85 Rt.	1204 Ouray	5.5'	4" clay
1+33 Lt.	1215 Chipeta	3'	4" PVC
1+38 Rt.	1212 Ouray	7'	4" clay
1+61 Rt.	1220 Ouray	7'	4" clay
2+21 Lt.	1225 Chipeta	11'	4" Orange berg
2+63 Lt.	1233 Chipeta	8'	4" clay
2+65 Rt.	1230 Ouray	9'	4" clay
2+88 Rt.	1236 Ouray	8'	4" clay
3+12 Lt.	1245 Chipeta	8'	4" clay
3+52 Rt.	1248 Ouray	8.5'	4" clay
3+77 Lt.	1255 Chipeta	11'	4" PVC
4+01 Lt.	1261 Chipeta	8'	4" CLAY
4+03 Rt.	1260 Ouray	8'	4" clay

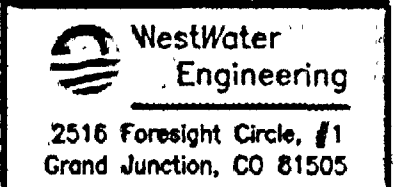
DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE
REVISION Δ			PS	5-98	PLAN PROFILE X-SECT
REVISION Δ			CKK	5-98	HORIZ. 1"=20' 1"=20'
REVISION Δ			CHECKED BY	DATE	VERT. N/A 1"=5'
REVISION Δ			APPROVED BY	DATE	

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

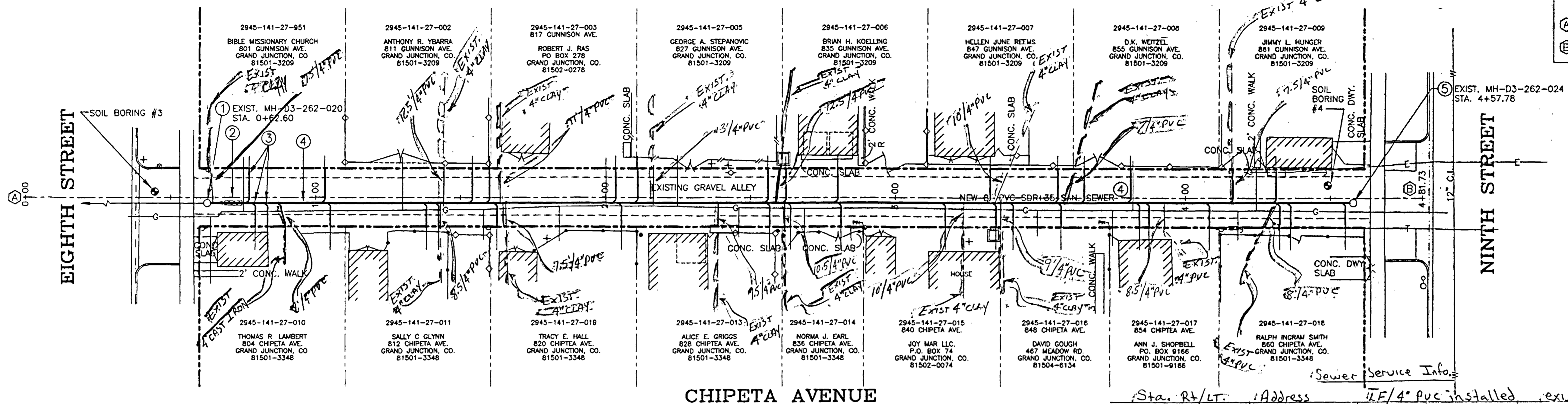
1998 ALLEY IMPROVEMENT DISTRICT - PHASE A
12TH TO 13TH STS.-BETWEEN OURAY AVE & CHIPETA AVE
SANITARY SEWER PLAN & PROFILE



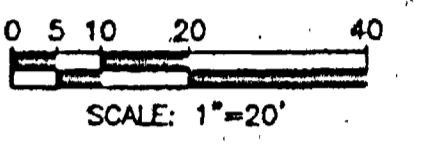
GUNNISON AVENUE

2211-61115-F00703

BENCHMARKS:
 (A) X W 0+00.00 (WEST END C/L CONTROL)
 USGS ELEVATION = 4603.27
 (B) X E 4+57.78 (EAST END C/L CONTROL)
 USGS ELEVATION = 4604.73



This Sheet only
 # Sewer taps = 17
 LF 4" PVC = 158.5'

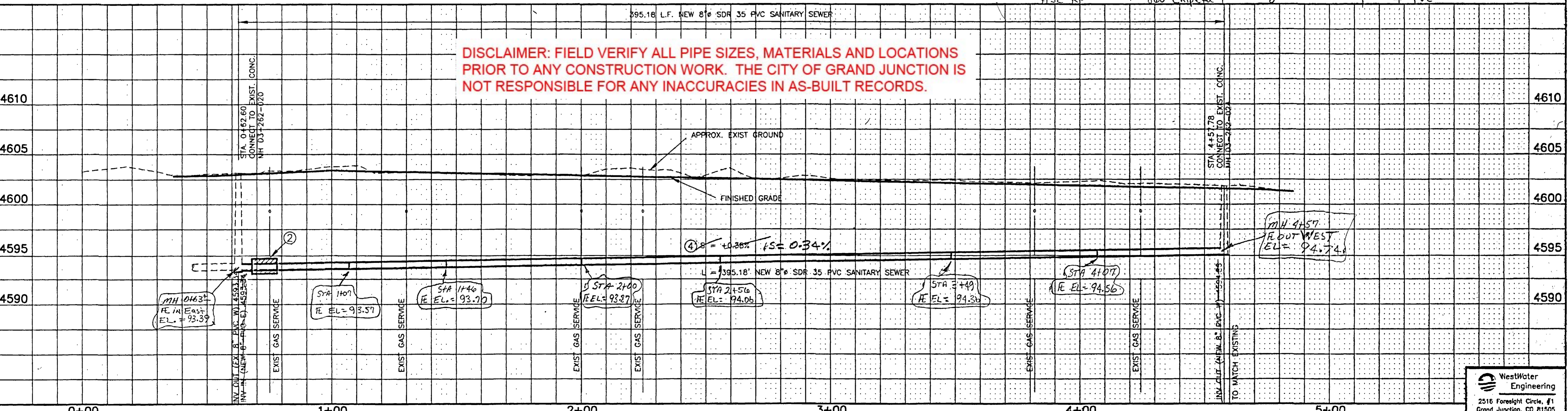


Sta. Rt/Lt.	Address	LF 4" PVC installed	existing Service / type
0+60 RT	801 Gunnison	7.5'	4" clay
0+87.5 RT	804 Chipeta	8'	4" cast iron (Poor Condition)
1+43 Rt.	812 Chipeta	8.5'	4" clay
1+45 Lt.	811 Gunnison	12.5'	4" clay
1+64 Lt.	819 Gunnison	11.0'	4" clay
1+65 Rt.	820 Chipeta	7.5'	4" clay
2+16 Lt.	827 Gunnison	13.0'	4" clay
2+38 Rt.	828 Chipeta	7.5'	4" clay (Full of roots)
2+61 Lt.	835 Gunnison	12.5'	4" clay (Full of roots)
2+64 Rt.	836 Chipeta	10.5'	4" clay
3+24 Rt.	890 Chipeta	10'	4" clay (2 buildings, one tap)
3+34 Lt.	849 Gunnison	10'	4" clay
3+36 Rt.	848 Chipeta	9'	4" clay (Service drains slow)
3+59 Lt.	855 Gunnison	7'	4" clay
3+91 Rt.	854 Chipeta	8.5'	4" PVC
4+16 Lt.	860 Gunnison	7.5'	4" clay
4+32 Rt.	860 Chipeta	8'	4" PVC

SANITARY SEWER REPLACEMENT NOTES

- REMOVE EXISTING 6-INCH VCP INLET PIPE FROM EAST WALL OF CONCRETE MANHOLE. CORE DRILL WALL FOR NEW 8-INCH PVC INLET AND CONNECT NEW PIPE TO MANHOLE WITH PSX POSITIVE SEAL MANHOLE CONNECTOR. CHISEL AND/OR JACK HAMMER EXISTING INVERT FLOW CHANNEL AND PLACE A 4-FOOT LONG (±) SECTION OF 8" PVC PIPE THAT IS CUT IN HALF LONGITUDINALLY IN THE FLOW CHANNEL SECURED IN PLACE WITH (6) CONCRETE ANCHOR BOLTS INSTALLED 3 INCHES ABOVE THE FLOWLINE AND GROUT TO FILL THE VOID BETWEEN EXISTING CONCRETE AND THE NEW PVC MANHOLE INVERT CHANNEL.
- INSTALL CLAY CUT OFF WALL UPSTREAM FROM MANHOLE PER CITY OF GRAND JUNCTION SPECIFICATIONS.
- LOCATIONS OF EXISTING SEWER SERVICE TAPS ARE SHOWN BASED ON TV INSPECTION LOGS THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER AT LEAST ONE TAP AND SERVICE LINE FOR EACH PROPERTY, AND MAY ENCOUNTER A NUMBER OF INACTIVE TAPS. VERIFY WHETHER EACH SERVICE TAP ENCOUNTERED IS ACTIVE OR INACTIVE THROUGH THE USE OF DYES OR OTHER APPROVED METHODS. INSTALL 8 X 8 X 4 INCH FULL BODY WYE FITTING, 4 INCH 45 DEGREE BEND AND APPROX. 10 FEET OF 4 INCH SDR 35 PVC SERVICE LINE TO EXISTING SERVICE LINE WITH APPROPRIATE COUPLING.
- PRIOR TO INSTALLING THE SEGMENT OF NEW SEWERLINE FROM EXISTING MH D3-262-020 NEAR 8TH STREET TO EXISTING MH D3-262-024 NEAR 9TH STREET, THE CONTRACTOR SHALL VERIFY THE INVERT IN ELEVATION AND THE INVERT OUT ELEVATION AT THE EXISTING MANHOLES, RESPECTIVELY, AND TO PROVIDE THE INFORMATION TO THE CITY FOR VERIFICATION OF THE DESIGN SLOPE NECESSARY TO CONNECT NEW SEWERLINE FROM MANHOLE TO MANHOLE AT A CONTINUOUS GRADE.
- REMOVE EXISTING 6-INCH VCP OUTLET PIPE FROM WEST WALL OF EXISTING CONCRETE MANHOLE. CORE DRILL WALL FOR NEW 8-INCH PVC OUTLET AND CONNECT NEW PIPE TO MANHOLE WITH PSX POSITIVE SEAL MANHOLE CONNECTOR. CHISEL AND/OR JACK HAMMER EXISTING INVERT FLOW CHANNEL AND POUR A NEW CONCRETE FLOW CHANNEL FOR NEW 8-INCH OUTLET PIPE.
- REFER TO SHEET 10 FOR ALLEY IMPROVEMENTS AND OTHER TRENCH SURFACE RESTORATION REQUIREMENTS. IF THE SCHEDULE FOR ALLEY IMPROVEMENTS IS DELAYED OR OTHERWISE POSTPONED BEYOND THE COMPLETION OF SEWERLINE REPLACEMENT, PROVIDE A TEMPORARY DRIVING SURFACE CONSISTING OF PIT RUN BACKFILL TO THE FINISHED GRADE.

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1998 ALLEY IMPROVEMENT DISTRICT - PHASE A
 8TH TO 9TH STS.-BETWEEN CHIPETA AVE & GUNNISON AVE
 SANITARY SEWER PLAN & PROFILE

