

# CITY OF GRAND JUNCTION

## 12TH ST AND WELLINGTON AVE SEWER REPLACEMENT

### GRAND JUNCTION, CO

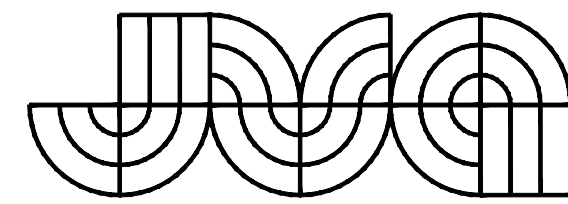
#### BID SET

**CONTACTS**

<b>OWNER:</b>	CITY OF GRAND JUNCTION 333 WEST AVENUE, BUILDING C GRAND JUNCTION, CO 81501	TOBY THIEMAN (970) 244-1559 TOBYT@GJCITY.ORG
<b>ENVIRONMENTAL ENGINEER:</b>	JVA, INC 817 COLORADO AVENUE, SUITE 301 GLENWOOD SPRINGS, CO 81601	COOPER BEST, P.E. (970) 404-3003 CBEST@JVAJVA.COM
<b>SURVEYOR:</b>	CITY OF GRAND JUNCTION ENGINEERING AND TRANSPORTATION DEPARTMENT 244 NORTH 7TH STREET GRAND JUNCTION, CO 81501	RENEE PARENT, P.E., P.L.S. (970) 256-4003 RENEEP@GJCITY.ORG

**DRAWING INDEX**

SHEET NO.	TITLE
G0.0	COVER PAGE
G0.1	LEGEND, NOTES AND ABBREVIATIONS
C1.0	OVERALL UTILITY PLAN
C2.0	SANITARY SEWER PLAN AND PROFILE
C2.1	SANITARY SEWER PLAN AND PROFILE

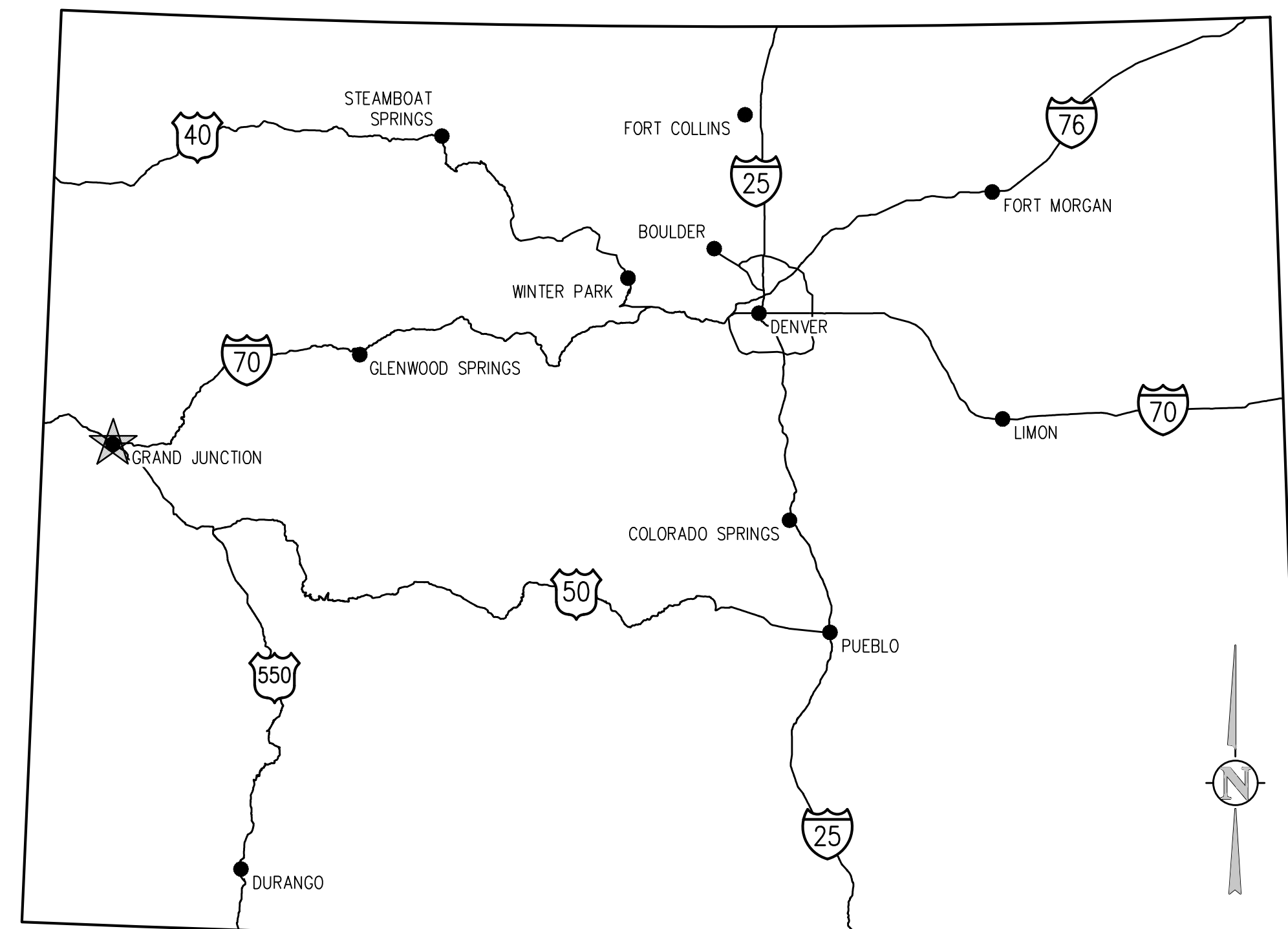


**CONSULTING ENGINEERS**  
**JVA, Inc.** 817 Colorado Ave., Suite 301  
 Glenwood Springs, CO Zip 81601  
 970.404.3100  
 www.jvajva.com  
 Boulder • Fort Collins • Winter Park  
 Glenwood Springs • Denver

JUNE 2024

PREPARED UNDER THE SUPERVISION OF

\_\_\_\_\_  
 JVA, Inc.



**VICINITY MAP**  
NTS

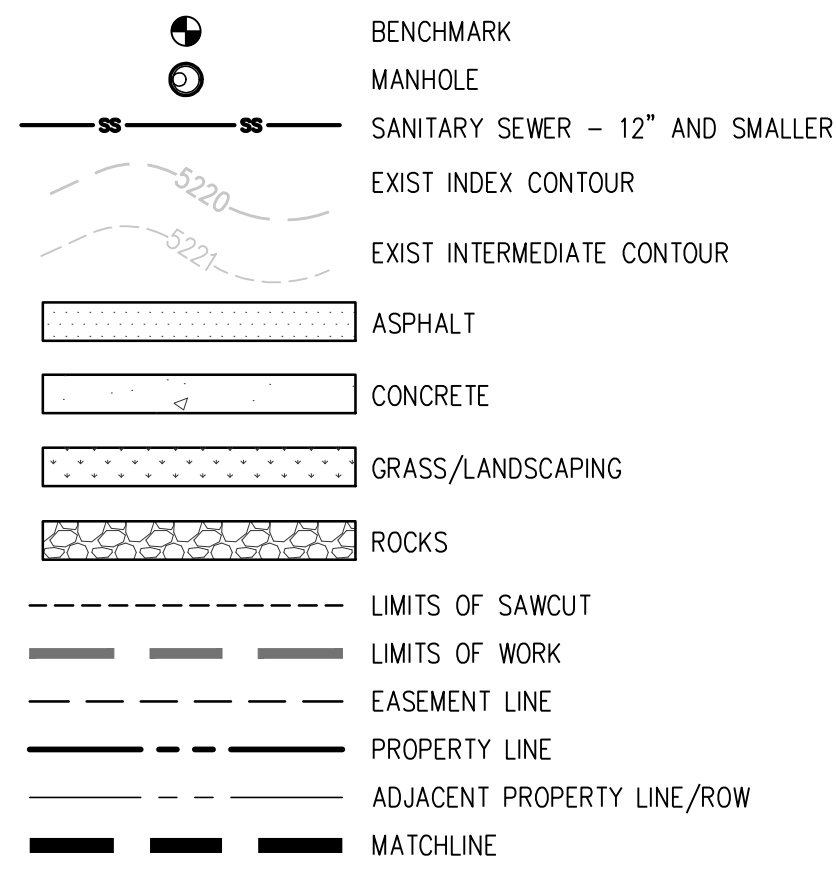


**PROJECT LOCATION MAP**  
NTS

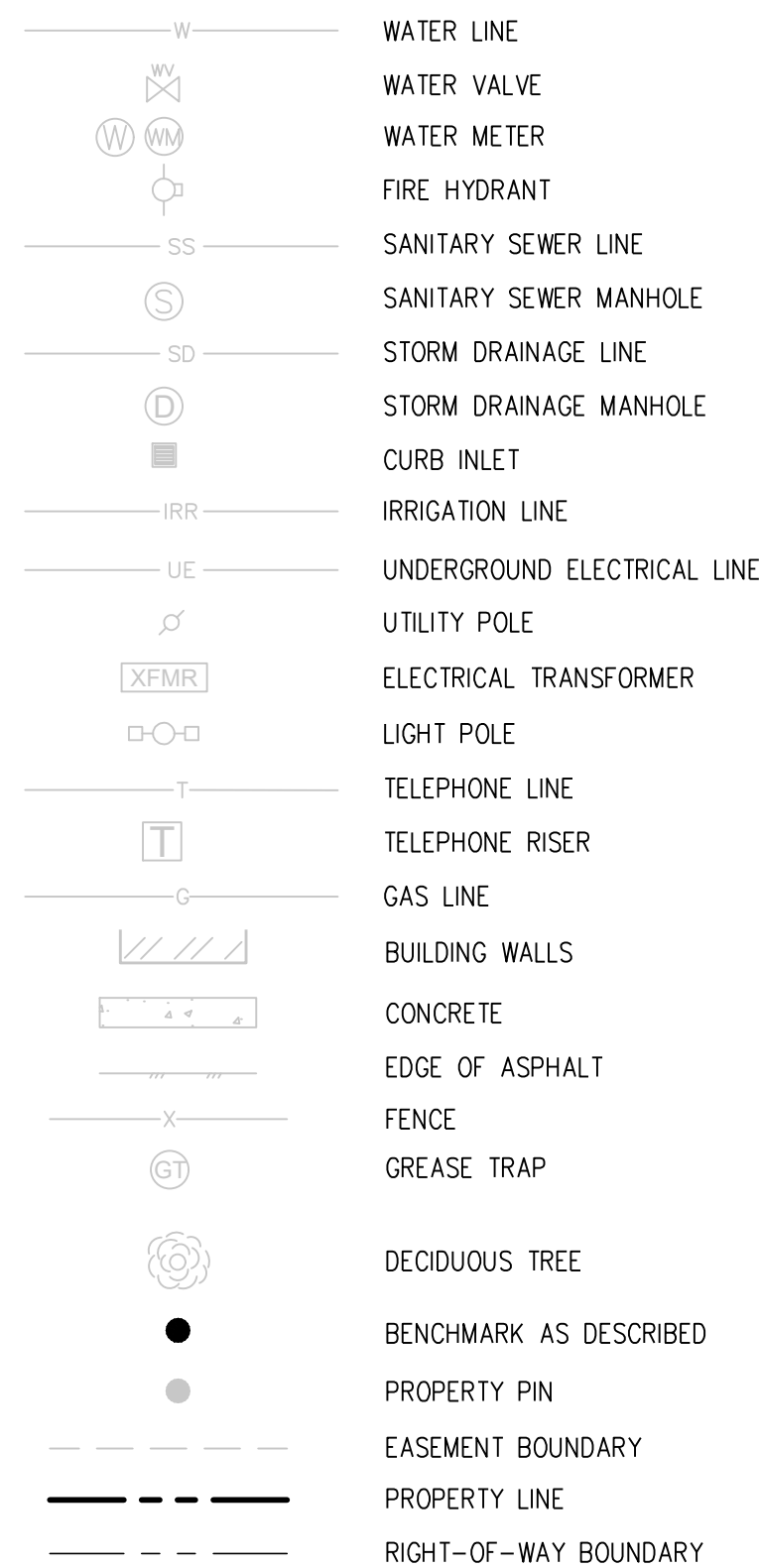
**ABBREVIATIONS**

AASHTO	AMERICAN ASSOC. OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	G	GAS	QTY	QUANTITY
ABAN	ABANDON	GA	GAUGE	R	RIGHT
AC	ASPHALTIC CONCRETE PAVING	GAL	GALLON	RAD	RADIUS
ADDL	ADDITIONAL	GALV	GALVANIZED	RCP	REINFORCED CONCRETE PIPE
ADDM	ADDENDUM	GCO	GRADE CLEANOUT	RD	ROOF DRAIN
ADJ	ADJUSTABLE	GIP	GALVANIZED IRON PIPE	RE	REFERENCE
AL	ALUMINUM	GND	GROUND	RECT	RECTANGULAR
ALT	ALTERNATE	GPD	GALLONS PER DAY	RENF	REINFORCE (D) (ING) (MENT)
AMT	AMOUNT	GPM	GALLONS PER MINUTE	REOD	REQUIRED
APPROX	APPROXIMATE	GR	GRATE	ROW	RIGHT OF WAY
ARCH	ARCHITECT(URAL)	GRTG	GRATING	SAN	SANITARY
ARV	AIR RELIEF VALVE	GSP	GALVANIZED STEEL PIPE	SAWCUT	SAWCUT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GV	GATE VALVE	SD	STORM DRAIN
ASPH	ASPHALT	H	HIGH	SECT	SECTION
ASSY	ASSEMBLY	HB	HOSE BIB	SPD	STANDARD PROCTOR DENSITY
ASYM	ASYMMETRICAL	HE	HORIZONTAL ELLIPTICAL	SPEC	SPECIFICATION
AUTO	AUTOMATIC	HDWL	HEADWALL	SO	SQUARE
AVG	AVERAGE	HNDRL	HAND RAIL	SO IN	SQUARE INCH
AWWA	AMERICAN WATER WORKS ASSOC.	HORIZ	HORIZONTAL	SO FT	SQUARE FOOT
		HP	HIGH POINT	SO YD	SQUARE YARD
		HR	HOUR	SS	SANITARY SEWER
BC	BACK OF CURB	HVAC	HEATING, VENTILATION, AIR CONDITIONING	SST	STAINLESS STEEL
BFV	BUTTERFLY VALVE	HWY	HIGHWAY	STA	STATION
BDG	FINISHED GRADE ADJACENT TO BOTTOM OF WALL	HWL	HIGH WATER LINE	STD	STANDARD
BLK	BUILDING	HYD	HYDRANT	STL	STEEL
BLK	BLOCK			STRUCT	STRUCTURAL
BM	BENCH MARK	INCL	INCLUDED	SVC	SERVICE
BMP	BEST MANAGEMENT PRACTICE	ID	INSIDE DIAMETER	SWMP	STORMWATER MANAGEMENT PLAN
BS	BACKSIGHT	IN	INLET	SYM	SYMMETRICAL
BOS	BOTTOM OF STEP	INSUL	INSULATION	TB	THRUST BLOCK
BOT	BOTTOM	INVT	INVERT	TBC	TOP BACK OF CURB
BSMT	BASEMENT	IRR	IRRIGATION	TBM	TEMPORARY BENCH MARK
BVCE	BEGIN VERTICAL CURVE ELEVATION	JTS	JOINTS	TEMP	TEMPORARY
BVCS	BEGIN VERTICAL CURVE STATION			TC	FINISHED GRADE ADJACENT TO TOP OF WALL
BW	BOTTOM OF WALL	KO	KNOCKOUT	THK	THICK
		KPL	KICK PLATE	TOB	TOP OF BANK
CB	CATCH BASIN	KWY	KEYWAY	TOC	TOP OF CONCRETE OR TOP OF CURB
CCW	COUNTER CLOCKWISE			TOS	TOP OF STEP
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	L	LEFT OR LITER	TOT	TOTAL
CIP	CAST IRON PIPE	LSCAPE	LANDSCAPE(ING)	TW	TOP OF WALL OR CAP OF WALL
CJ	CONSTRUCTION JOINT	LF	LINEAR FOOT	TYP	TYPICAL
CL	CENTER LINE OR CHAIN LINK	LP	LOW POINT OR LIGHT POLE		
CLR	CLEAR	LT	LIGHT	UBC	UNIFORM BUILDING CODE
CMP	CORRUGATED METAL PIPE	LWL	LOW WATER LEVEL	UCE	UNDERGROUND ELECTRIC
CMU	CONCRETE MASONRY UNIT			UTIL	UTILITY
CO	CLEANOUT	MAINT	MAINTENANCE	VERT	VERTICAL
CONC	CONCRETE	MAN	MANHOLE	VC	POINT OF VERTICAL CURVATURE
CONST	CONSTRUCTION	MATL	MATERIAL	VCP	VITRIFIED CLAY PIPE
CONT	CONTINUOUS(ATION)	MAX	MAXIMUM	W	WIDE OR WIDTH
COR	CORNER	ME	MATCH EXISTING	W/	WITH
CR	CONCENTRIC REDUCER	MECH	MECHANICAL	W/O	WITHOUT
CTR	CENTER	MEP	MECHANICAL, ELECTRICAL, PLUMBING (ARCH)	WOCV	WATER QUALITY CONTROL VOLUME
CY	CUBIC YARDS	MFR	MANUFACTURER	WSE	WATER SURFACE ELEVATION
DEMO	DEMOLITION	MH	MANHOLE	WW	WASTEWATER
DET	DETAIL	MIN	MINIMUM	X	SECT CROSS SECTION
DIA	DIAMETER	MISC	MISCELLANEOUS	XFMR	ELECTRICAL TRANSFORMER
DIAG	DIAGONAL	MJ	MECHANICAL JOINT		
DIP	DUCTILE IRON PIPE	N	NORTH	YH	YARD HYDRANT
DOM	DOMESTIC	NA	NOT APPLICABLE		
DN	DOWN	NIC	NOT IN CONTRACT		
DR	DRAIN	NPT	NATIONAL PIPE THREAD		
DWG	DRAWING	NTS	NOT TO SCALE		
DWL	DOWEL	OS	OFFSET		
E	EAST	OC	ON CENTER		
EAC	EACH	OD	OUTSIDE DIAMETER		
EA	ECCENTRIC	OPP	OPPOSITE		
EJ	EXPANSION JT	OPT	OPTIONAL		
EL	ELEVATION	PC	POINT OF CURVATURE		
ELB	ELBOW	PCO	PRESSURE CLEAN OUT		
ELEC	ELECTRICAL	PCR	POINT OF CURVE RETURN		
ENGR	ENGINEER	PI	POINT OF INTERSECTION		
EOP	EDGE OF PAVEMENT	PVI	POINT OF VERTICAL INTERSECTION		
EQ	EQUAL	PL	PROPERTY LINE		
EQUIP	EQUIPMENT	PE	POLYETHYLENE		
EQUIV	EQUIVALENT	PREFAB	PREFABRICATED		
ESMT	EASEMENT	PRELIM	PRELIMINARY		
EST	ESTIMATE	PREP	PREPARATION		
EVCE	END VERTICAL CURVE ELEVATION	PROP	PROPOSED		
EVCS	END VERTICAL CURVE STATION	PRV	PRESSURE REDUCING VALVE OR PRESSURE RELIEF VALVE		
EW	EACH WAY	PSF	POUNDS PER SQUARE FOOT		
EXP	EXPANSION JOINT	PSI	POUNDS PER SQUARE INCH		
EXIST	EXISTING	PT	POINT OF TANGENCY		
		PV	PLUG VALVE		
FND	FOUNDATION	PVC	POLYVINYL CHLORIDE OR POINT OF VERTICAL CURVATURE		
FES	FLARED END SECTION	PVMT	PAVEMENT		
FF	FINISH FLOOR				
FG	FINISH GRADE				
FH	FIRE HYDRANT				
FL	FLOW LINE				
FN	FENCE				
FOC	FACE OF CONCRETE				
FPM	FEET PER MINUTE				
FPS	FEET PER SECOND				
FT	FEET				
FTG	FOOTING OR FITTING				

**DESIGN LEGEND**



**SURVEY LEGEND**



NOTE: SHADED ITEMS REPRESENT EXIST FEATURES

**GENERAL NOTES**

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF GRAND JUNCTION, COLORADO DEPARTMENT OF TRANSPORTATION, GRAND JUNCTION FIRE PROTECTION REQUIREMENTS, AND APPLICABLE STATE AND LOCAL STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL HAVE IN POSSESSION AT THE JOB SITE AT ALL TIMES ONE (1) SIGNED COPY OF APPROVED PLANS, STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EMERGENCY ACCESS ROUTES TO THE SITE AND STRUCTURE AT ALL TIMES PER THE APPLICABLE GRAND JUNCTION FIRE PROTECTION DISTRICT REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY VARIANCE TO THE ABOVE DOCUMENTS. NOTIFY ENGINEER OF ANY CONFLICTING STANDARDS OR SPECIFICATIONS. IN THE EVENT OF ANY CONFLICTING STANDARD OR SPECIFICATION, THE MORE STRINGENT OR HIGHER QUALITY STANDARD, DETAIL OR SPECIFICATION SHALL APPLY.
- THE CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARD SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, INCLUDING, BUT NOT LIMITED TO A LOCAL AND STATE GROUNDWATER DISCHARGE AND COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT (CDPHE) STORMWATER DISCHARGE PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE REQUIRED PARTY OWNER AND ENGINEER AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION, PRIOR TO BACKFILLING, AND AS REQUIRED BY JURISDICTIONAL AUTHORITY AND/OR PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL CONTINUE WITH NOTIFICATIONS THROUGHOUT THE PROJECT AS REQUIRED BY THE STANDARDS AND SPECIFICATIONS.
- THE LOCATIONS OF EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION BASED ON INFORMATION BY OTHERS. NOT ALL UTILITIES MAY BE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT SIZE, LOCATION AND TYPE OF ALL EXISTING UTILITIES WHETHER SHOWN OR NOT BEFORE COMMENCING WORK. THE ENGINEER AND/OR OWNER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS SHOWN ON PLANS. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO PROCEEDING WITH GRADING AND CONSTRUCTION. ALL WORK PERFORMED IN THE AREA OF UTILITIES SHALL BE PERFORMED AND INSPECTED ACCORDING TO THE REQUIREMENTS OF THE UTILITY OWNER. LIKEWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MAPPING ANY EXISTING UTILITY (INCLUDING DEPTH) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION, AND FOR RELOCATING ENCOUNTERED UTILITIES AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL CONTACT AND RECEIVE APPROVAL FROM UTILITY OWNER AND ENGINEER BEFORE RELOCATING ANY ENCOUNTERED UTILITIES. CONTRACTOR RESPONSIBLE FOR SERVICE CONNECTIONS, AND RELOCATING AND RECONNECTING AFFECTED UTILITIES AS COORDINATED WITH UTILITY OWNER AND/OR ENGINEER, INCLUDING NON-MUNICIPAL UTILITIES (TELEPHONE, GAS, CABLE, ETC.), WHICH SHALL BE COORDINATED WITH THE UTILITY OWNER). THE CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER UPON DISCOVERY OF A UTILITY DISCREPANCY OR CONFLICT. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY NOTIFICATION CENTER OF COLORADO (1-800-922-1987, WWW.UNCC.ORG). SEE SURVEY UTILITY LOCATION INFORMATION BELOW.
- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR OWNER AND/OR CITY APPROVAL AND PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FENCING, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR AGREES TO COMPLY WITH THE PROVISIONS OF THE TRAFFIC CONTROL PLAN AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," PART VI, FOR CONSTRUCTION SIGNAGE AND TRAFFIC CONTROL. ALL TEMPORARY AND PERMANENT TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REGARD TO SIGN SHAPE, COLOR, SIZE, LETTERING, ETC. UNLESS OTHERWISE SPECIFIED. IF APPLICABLE, PART NUMBERS ON SIGNAGE DETAILS RELY TO MUTCD SIGN NUMBERS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR ENROUSION ON ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. GROUNDWATER TO BE PUMPED SHALL BE TESTED, PERMITTED, AND PUMPED PER THE STATE OF COLORADO AND LOCAL GROUNDWATER DISCHARGING PERMIT REQUIREMENTS.
- RIM AND GRATE ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL ADJUST RIMS AND OTHER IMPROVEMENTS TO MATCH FINAL PAVEMENT AND FINISHED GRADE ELEVATIONS.
- THE EXISTING AND PROPOSED ELEVATIONS OF FLATWORK, SIDEWALKS, CURBS, THRESHOLDS, PAVING, ETC. AS SHOWN HEREON ARE BASED ON EXTRAPOLATION OF FIELD SURVEY DATA, EXISTING CONDITIONS, AND DATA PROVIDED BY OTHERS. AT CRITICAL AREAS HYDRANT LATERALS AND SITE FEATURES, CONTRACTOR SHALL HAVE FORMWORK INSPECTED AND APPROVED BY OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER PRIOR TO PLACING CONCRETE. MINOR ADJUSTMENTS, AS APPROVED, TO PROPOSED GRADES, INVERTS, ETC. MAY BE NECESSARY TO PREVENT POONDING OR DISCREPANCIES WHICH PREVENT TYPICAL REQUIRED GRADES FROM BEING ACHIEVED. ALL FLATWORK MUST PREVENT POONDING AND PROVIDE POSITIVE DRAINAGE AWAY FROM EXISTING AND PROPOSED BUILDINGS, WALLS, ROOF DRAIN OUTFALLS, ACROSS DRIVES AND WALKS, ETC., TOWARDS THE PROPOSED INTENDED DRAINAGE FEATURES AND CONVEYANCES.
- FINAL LIMITS OF REQUIRED ASPHALT SAWCUTTING AND PATCHING MAY VARY FROM LIMITS SHOWN ON PLANS. CONTRACTOR TO PROVIDE SAWCUT AND PATCH WORK TO ACHIEVE POSITIVE DRAINAGE AND A SMOOTH TRANSITION TO EXISTING ASPHALT WITHIN SLOPES ACCEPTABLE TO THE ENGINEER AND WITHIN MUNICIPAL STANDARDS. CONTRACTOR SHALL PROVIDE ADDITIONAL SAWCUTTING AND PATCHING AT UTILITY WORK, CONNECTION POINTS TO EXISTING PAVEMENT AND FEATURES, ETC. THAT MAY NOT BE DELINEATED ON PLANS.
- ANY EXISTING MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC. TO BE PROTECTED AND TO REMAIN IN SERVICE. IF FEATURES EXIST, EXTEND OR LOWER TO FINAL SURFACE WITH LIKE KIND CAP WITH STANDARD CAST ACCESS LID WITH SAME MARKINGS. IN LANDSCAPED AREAS PROVIDE A CONCRETE COLLAR (18"x18"x6" THICK) AT ALL EXISTING AND PROPOSED MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC.
- OWNER TO APPROVE ALL PRIVATE CONCRETE FINISHING, JOINT PATTERNS AND COLORING REQUIREMENTS PRIOR TO CONSTRUCTION. SUBMIT JOINT LAYOUT PLAN TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- PIPE LENGTHS AND HORIZONTAL CONTROL POINTS SHOWN ARE FROM CENTER OF STRUCTURES, END OF FLARED END SECTIONS, ETC. SEE STRUCTURE DETAILS FOR EXACT HORIZONTAL CONTROL LOCATION. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ACTUAL PIPE LENGTHS TO ACCOUNT FOR STRUCTURES AND LENGTH OF FLARED END SECTIONS.
- ALL SURPLUS MATERIALS, TOOLS, AND TEMPORARY STRUCTURES, FURNISHED BY THE CONTRACTOR, SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR. ALL DEBRIS AND RUBBISH CAUSED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE REMOVED, AND THE AREA OCCUPIED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL CONDITION, WITHIN 48 HOURS OF PROJECT COMPLETION, UNLESS OTHERWISE DIRECTED BY THE MUNICIPALITY OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL JURISDICTION, THE STATE OF COLORADO, MILE HIGH FLOOD DISTRICT "URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3", THE M-STANDARD PLANS OF THE COLORADO DEPARTMENT OF TRANSPORTATION, AND THE APPROVED EROSION CONTROL PLAN. JURISDICTIONAL AUTHORITY MAY REQUIRE THE CONTRACTOR TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES AT THE CONTRACTOR'S EXPENSE DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE PLANS DO NOT FUNCTION AS INTENDED. THE CONTRACTOR IS RESPONSIBLE FOR PROHIBITING SILT AND DEBRIS LADEN RUNOFF FROM LEAVING THE SITE, AND FOR KEEPING ALL PUBLIC AREAS FREE OF MUD AND DEBRIS. THE CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING FINAL GRADES AND FOR REMOVING ACCUMULATED SEDIMENTATION FROM ALL AREAS INCLUDING SWALES AND DETENTION/WATER QUALITY AREAS. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AND REPAIR AREAS AS REQUIRED AFTER VEGETATION IS ESTABLISHED AND ACCEPTED BY OWNER AND MUNICIPALITY.
- ADA COMPLIANCE: THE CROSS-SLOPE OF ALL WALKS MUST BE LESS THAN 1:48 (2.0%) PERPENDICULAR TO DIRECTION OF TRAVEL. RUNNING SLOPE OF ACCESSIBLE WALKS MUST BE NOT STEEPER THAN 1:20 (5.0%) IN DIRECTION OF TRAVEL. MAXIMUM GRADE OF ACCESSIBLE CURB RAMPS AND RAMPS IS 1:12 (8.3%). CURB RAMPS SHALL PROVIDE A LANDING AT THE TOP AND RAMP RUNS PROVIDE LANDINGS AT THE BOTTOM AND TOP OF EACH RAMP RUN AT A SLOPE NOT TO EXCEED 1:48. RAMPS RUNS EXCEEDING SIX INCHES SHALL INCLUDE HANDRAILS. ACCESSIBLE PARKING SPACES AND ACCESS ISLES SHALL NOT EXCEED 1:48 IN ALL DIRECTIONS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO PLACEMENT OF FLATWORK OF SITE CONDITIONS OR DISCREPANCIES WHICH PREVENT TYPICAL REQUIRED GRADES FROM BEING ACHIEVED. ALL RAMPS, STAIRS, EDGE PROTECTION, AND RAILINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA STANDARDS. ACCESSIBLE CURB RAMPS SHALL CONFORM TO THE CDOT M-STANDARDS (SEE DETAIL M-608-1, ETC.). ACCESSIBLE FEATURE WITHIN THE PUBLIC RIGHTS-OF-WAY SHALL BE CONSTRUCTED TO CONFORM TO THE LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- PROTECT ALL TREES AND VEGETATION. PLACE CONSTRUCTION FENCING AT DRIP LINE OF TREES AND PLANTS NEAR THE WORK ZONE. DEEP WATER TREES WEEKLY. HAND EXCAVATION REQUIRED AT ROOT ZONES WHERE PROPOSED PAVING OR UTILITY WORK IS WITHIN DRIPLINE OF TREES.
- LOCATIONS OF CLEANOUTS, LIGHTS, SIGNAGE, JUNCTION BOXES, AND OTHER SIGNIFICANT SITE FEATURES TO BE STAKED FOR ENGINEER AND OR OWNER APPROVAL PRIOR TO WORK. CLEANOUTS, JUNCTION BOXES, AND ADJACENT GRADES TO BE RAISED ONE-HALF INCH AT ASPHALT/CONCRETE (OR 1" AT LANDSCAPING) TO PROVIDE POSITIVE DRAINAGE AWAY FROM FEATURES.
- SURVEY INFORMATION:  
BENCHMARK INFORMATION: TOPOGRAPHIC INFORMATION WAS PROVIDED BY THE CITY OF GRAND JUNCTION. SEE EXISTING CONDITIONS SURVEY 2023 SEWER LINE CONSTRUCTION DATED 1/10/2024. CONTROL POINTS SHOWN ON PLANS, THE FIELD SURVEYS AND PROCESSING OF DATA WAS MADE IN THE MESA COUNTY LOCAL COORDINATE SYSTEM (MCLCS) GRAND VALLEY AREA (GVA) ZONE AND NAVD88 VERTICAL DATUM WITH GEOID 12A MODEL TO CONVERT ELLIPSOID HEIGHTS TO ORTHOMETRIC ELEVATIONS. THE MCLCS USED THE IN THE SAID MHS SURVEY ARE BASED UPON REFERENCE FROM:  
**BENCHMARK**  
NORTHING 44412.354  
EASTING 94661.540  
NAVD 88, G12A ELEVATION: 4661.300 FT  
COMMENT: 2" ALUMINUM CAP (LS#20617)
- BEARINGS ARE BASED ON THE NORTH LINE OF LOT 2, VILLAGE FAIR SUBDIVISION, S89°57'04"E, BASED ON THE MESA COUNTY LOCAL COORDINATE SYSTEM (MCLCS). COORDINATE AND VERIFY ALL VERTICAL AND HORIZONTAL DATA SHOWN IN SURVEY AND REPORT ANY IRREGULARITIES OR DISCREPANCIES TO ENGINEER PRIOR TO CONSTRUCTION.
- HORIZONTAL CONTROL INFORMATION: HORIZONTAL CONTROL COORDINATES ARE BASED ON THE REFERENCED SURVEY AND ARE PROVIDED ON SHEET C2.0 OF THE PLANS.
- SURVEY UTILITY LOCATION INFORMATION PER THE SURVEYOR: SUBSURFACE UTILITIES ARE SHOWN IN APPROXIMATE HORIZONTAL AND VERTICAL LOCATIONS CONSISTENT WITH ASCE 38-02 QUALITY LEVEL "B" (INFORMATION OBTAINED BY THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF VIRTUALLY ALL UTILITIES WITHIN THE PROJECT LIMITS. THE INFORMATION OBTAINED IN THIS MANNER IS SURVEYED TO PROJECT CONTROL.) AND QUALITY LEVEL "C" (INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D; INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS), AND BASED ON FIELD MEASUREMENTS PROVIDED BY THE OWNER AND THE CONTRACTOR. SUBSURFACE UTILITIES ARE NOT DEPICTED TO THE EXTENT SET FORTH IN ASCE 38-02 QUALITY LEVELS "A" (INFORMATION OBTAINED THROUGH THE NONDESTRUCTIVE EXPOSURE OF UNDERGROUND UTILITIES, AND ALSO PROVIDES THE TYPE, SIZE, CONDITION, MATERIAL AND OTHER CHARACTERISTICS OF UNDERGROUND FEATURES), TO THE EXTENT DETERMINED NECESSARY FOR THE PROTECTION OF PERSONS AND PROPERTY, POT-HOLING OR OTHER PRECISE MAPPING MAY BE COMPLETED TO CONFIRM THE EXACT LOCATION OF ANY SUBSURFACE UTILITIES. NOTIFY OWNER AND ENGINEER WITH ALL UTILITY INFORMATION PRIOR TO CONSTRUCTION. VISIT [HTTPS://WWW.FHWA.DOT.GOV/PROGRAMADMIN/SJINDEX.CFM](https://www.fhwa.dot.gov/PROGRAMADMIN/SJINDEX.CFM) FOR MORE INFORMATION.
- SERVICE TAP LOCATIONS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND RESTORING ALL SERVICE CONNECTIONS.
- THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE SHALL FURNISH THE OWNER AND ENGINEER OF RECORD A COMPLETE SET OF CONSTRUCTION RECORD DRAWINGS ("AS-BUILTS") FOR THE CONSTRUCTED IMPROVEMENTS. THE AS-BUILT SET SHALL SHOW SUFFICIENT DIMENSION TIES TO PERMANENT SURFACE FEATURES OR NORTHING/EASTING POINTS FOR ALL BURIED FACILITIES TO ALLOW FOR FUTURE LOCATING. THE AS-BUILT SET SHALL SHOW AS-BUILT CONTOURS AND ELEVATIONS OF ASPHALT AND CONCRETE FLATWORK, FLOWLINES, GRADE BREAKS, STAIRS, CROSS-SLOPES, HIGH AND LOW POINTS, AND ADDITIONAL ELEVATIONS TO DEMONSTRATE IMPROVEMENTS WERE CONSTRUCTED PER PLANS. THE AS-BUILT SET SHALL SHOW ELEVATIONS OF ALL DETENTION/WATER QUALITY FACILITIES, INCLUDING BUT NOT LIMITED TO BERMS, SPILLWAYS, BASIN BOTTOM, PIPE INVERTS, AND CONTROL STRUCTURE FEATURES (AS SURVEYED AND STAMPED BY A CERTIFIED P.L.S.). THE AS-BUILT SET SHALL ALSO INCLUDE ELEVATIONS OF MANHOLES, PIPES, INLETS, GRATES, AND SIZES OF ALL UTILITIES. THE AS-BUILT SET SHALL SHOW ANY AND ALL VARIATIONS FROM THE APPROVED PLAN. ENGINEER WILL PRODUCE FINAL RECORD DRAWINGS.

N:\240394\ENV - City of Grand Junction 12th St Wellington Ave Sewer Replacement\Drawings\240394-ENV-02-CR-NLM-06.dwg, 6/27/2024, 11:21 AM, NLM

REVISION	DESCRIPTION	DATE

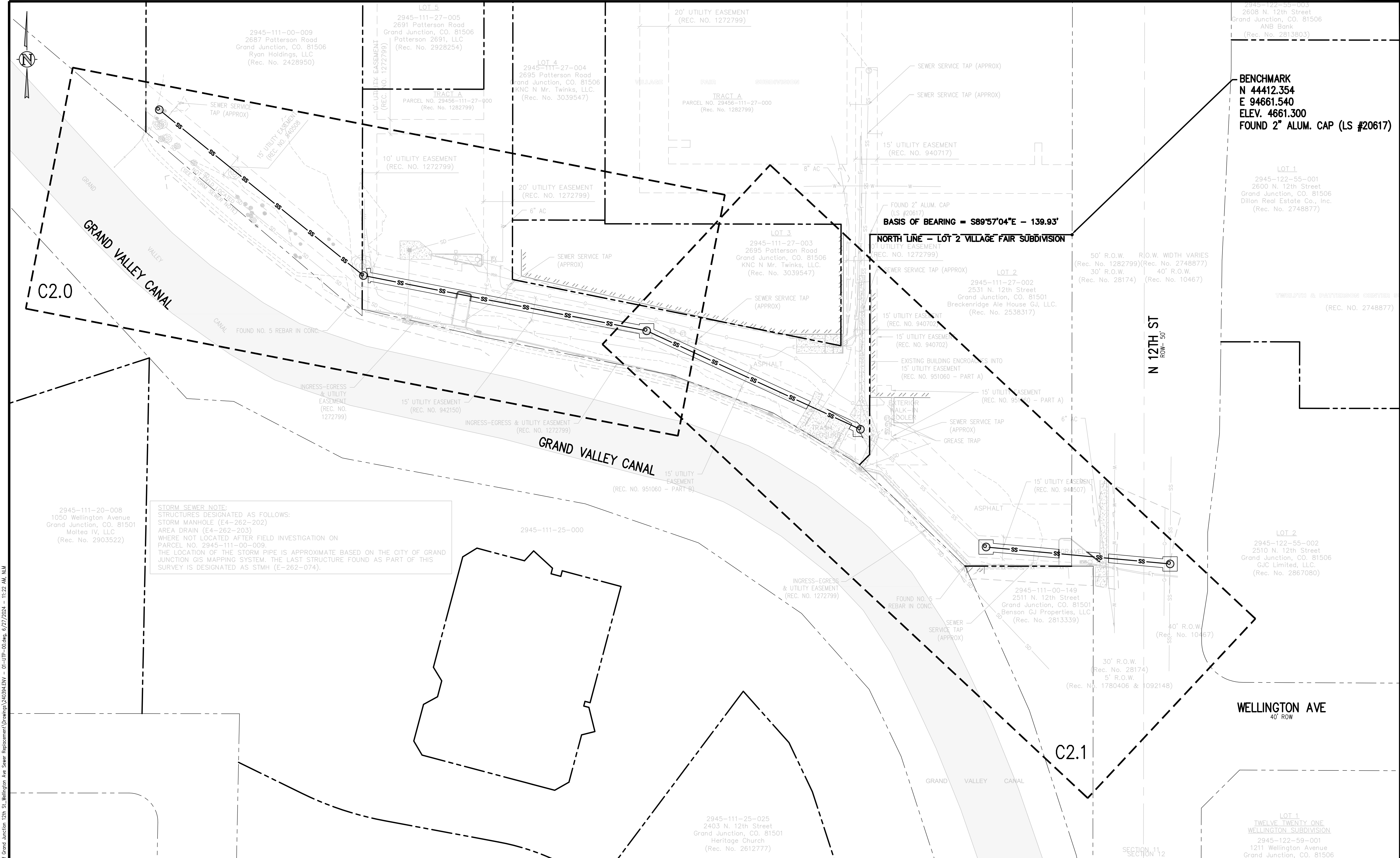
DRAWN BY	ZCF/NLM	DATE	
DESIGNED BY	ZCF/AMF	DATE	
CHECKED BY	JJM	DATE	
APPROVED BY		DATE	

SCALES:	PLAN & PROFILE
---------	----------------



**12TH AND WELLINGTON AVE  
SEWER REPLACEMENT**  
LEGEND, NOTES AND ABBREVIATIONS

GO.1

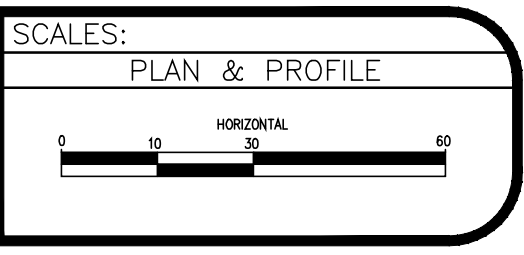


**STORM SEWER NOTE:**  
 STRUCTURES DESIGNATED AS FOLLOWS:  
 STORM MANHOLE (E4-262-202)  
 AREA DRAIN (E4-262-203)  
 WHERE NOT LOCATED AFTER FIELD INVESTIGATION ON  
 PARCEL NO. 2945-111-00-009.  
 THE LOCATION OF THE STORM PIPE IS APPROXIMATE BASED ON THE CITY OF GRAND  
 JUNCTION GIS MAPPING SYSTEM. THE LAST STRUCTURE FOUND AS PART OF THIS  
 SURVEY IS DESIGNATED AS STMH (E-262-074).

N:\240394.ENV - City of Grand Junction 12th St Wellington Ave Sewer Replacement\Drawings\240394.ENV - 01-UTP-00.dwg, 6/27/2024 - 11:22 AM, NLM

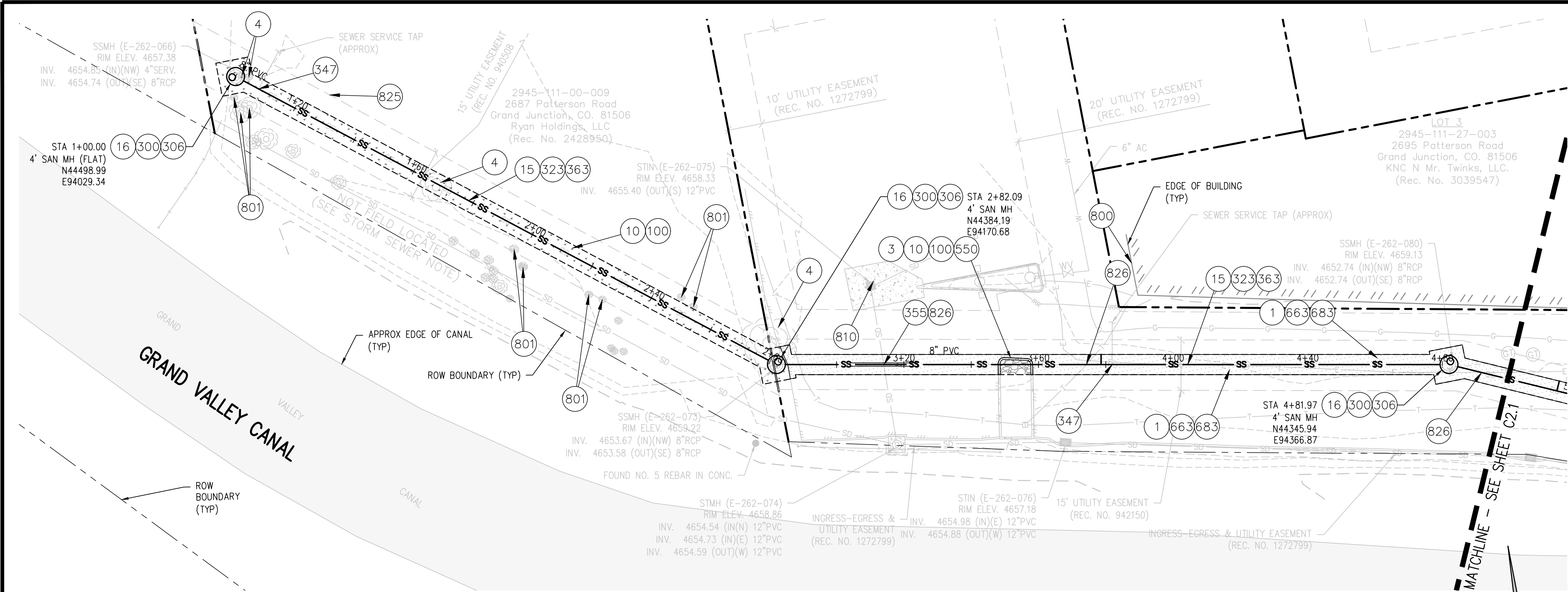
REVISION	DESCRIPTION	DATE
REVISION A		
REVISION B		
REVISION C		
REVISION D		

DRAWN BY	ZCF/NLM	DATE	
DESIGNED BY	ZCF/AMF	DATE	
CHECKED BY	JJM	DATE	
APPROVED BY		DATE	

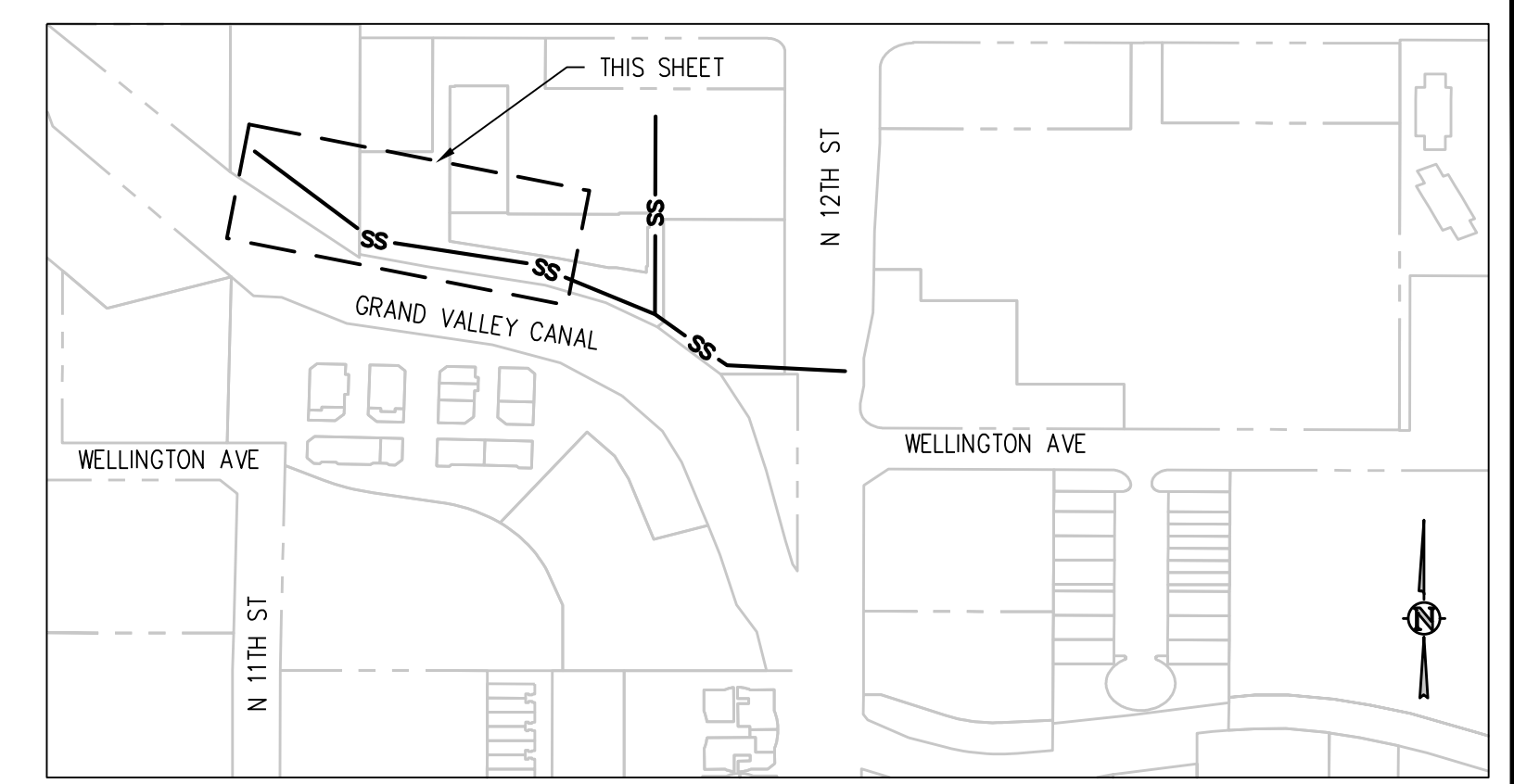


**12TH AND WELLINGTON AVE  
 SEWER REPLACEMENT  
 OVERALL UTILITY PLAN**

C1.0



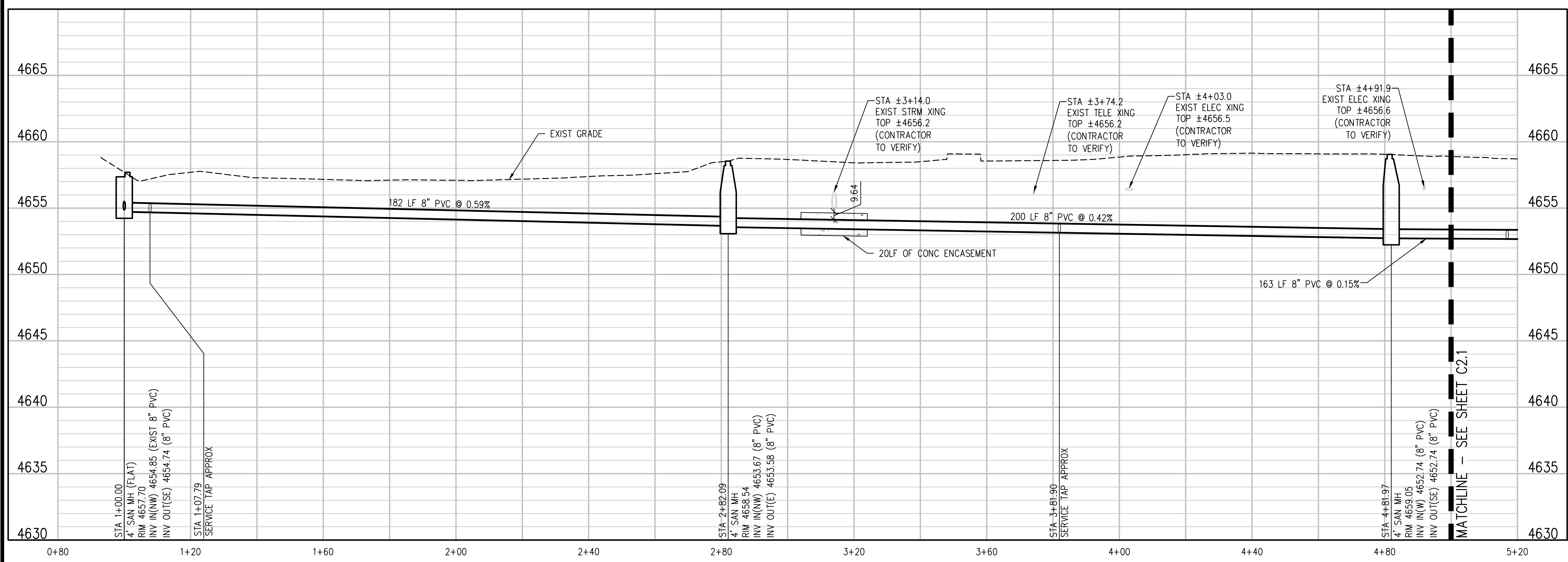
12TH AND WELLINGTON SANITARY SEWER PLAN  
SCALE: 1" = 20'



KEY MAP  
NTS

CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN (INDICATED BY CROSS HATCH PATTERN). INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 4 202 - REMOVAL OF TREE (SIZE AS SHOWN ON PLAN)
- 10 202 - REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 100 210 - RESET LANDSCAPE GROUND COVER. CONTRACTOR SHALL REMOVE GROUND COVER AND ANY UNDERLYING WEED BARRIER AS NEEDED AND STOCKPILE MATERIALS. CONTRACTOR SHALL RESET THESE MATERIALS AND PROVIDE ADDITIONAL MATERIALS AS NEEDED TO RESTORE LANDSCAPING.
- 300 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). FIELD COAT MANHOLE INTERIOR WITH SYSTEM NO. 30 PER SECTION 09900 OF THE PROJECT MANUAL.
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.)
- 323 102.9/108.2 - 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 347 102.9/108.3 - 8" X 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAIL SS-06).
- 355 104.40 - CAP TOP HALF OF SEWER IN CONCRETE PER STD. DETAIL GU-04. (WATER LINE LESS THAN 18" ABOVE SEWER LINE)
- 363 BYPASS PUMPING WILL BE REQUIRED FOR CONSTRUCTION.
- 550 608.06 - CONCRETE CURB (6" WIDE, 6" HIGH)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 683 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (6" THICK) (GRADING SX, BINDER GRADE PG 64-22) (THREE 2" LIFTS)
- 800 PROTECT CONCRETE FEATURE IN PLACE AS SHOWN.
- 801 PROTECT TREE.
- 810 PROTECT STORM DRAIN INLET.
- 825 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- 826 PROTECT EXISTING UTILITY LINE IN PLACE.
- 827 PROTECT EXISTING GAS.



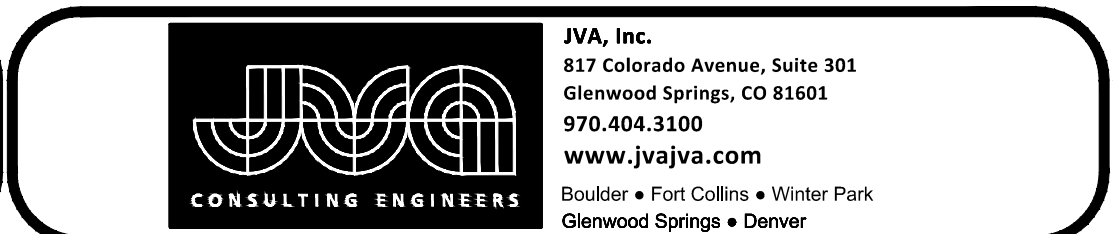
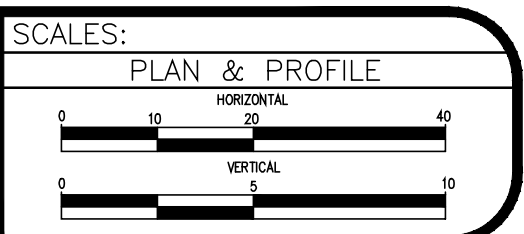
UTILITY NOTES:

- SEWER SERVICE LOCATIONS ARE ESTIMATED BASED ON VIDEO INSPECTION RECORDS. CONTRACTOR TO VERIFY SERVICE LOCATION PRIOR TO CONSTRUCTION. VIDEO INSPECTION RECORDS PROVIDED UPON REQUEST BY THE CITY OF GRAND JUNCTION.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. REFER TO GENERAL NOTES FOR UTILITY LOCATION AND PROTECTION.
- ALL DRY UTILITY AND ELECTRIC DESIGNS ARE PROVIDED BY OTHERS AND SHOWN FOR REFERENCE ONLY. SEE MEP PLANS AND SPECIFICATIONS AND COORDINATE WITH ALL UTILITY OWNERS AS NEEDED.
- CONTRACTOR TO MARK ALL UTILITY STUBS WITH MARKERS.

N:\240394.EIN - City of Grand Junction 12th St Sewer Replacement\Drawings\240394.EIN - 01-PROP-01.dwg, 6/27/2024 - 11:23 AM, zcf

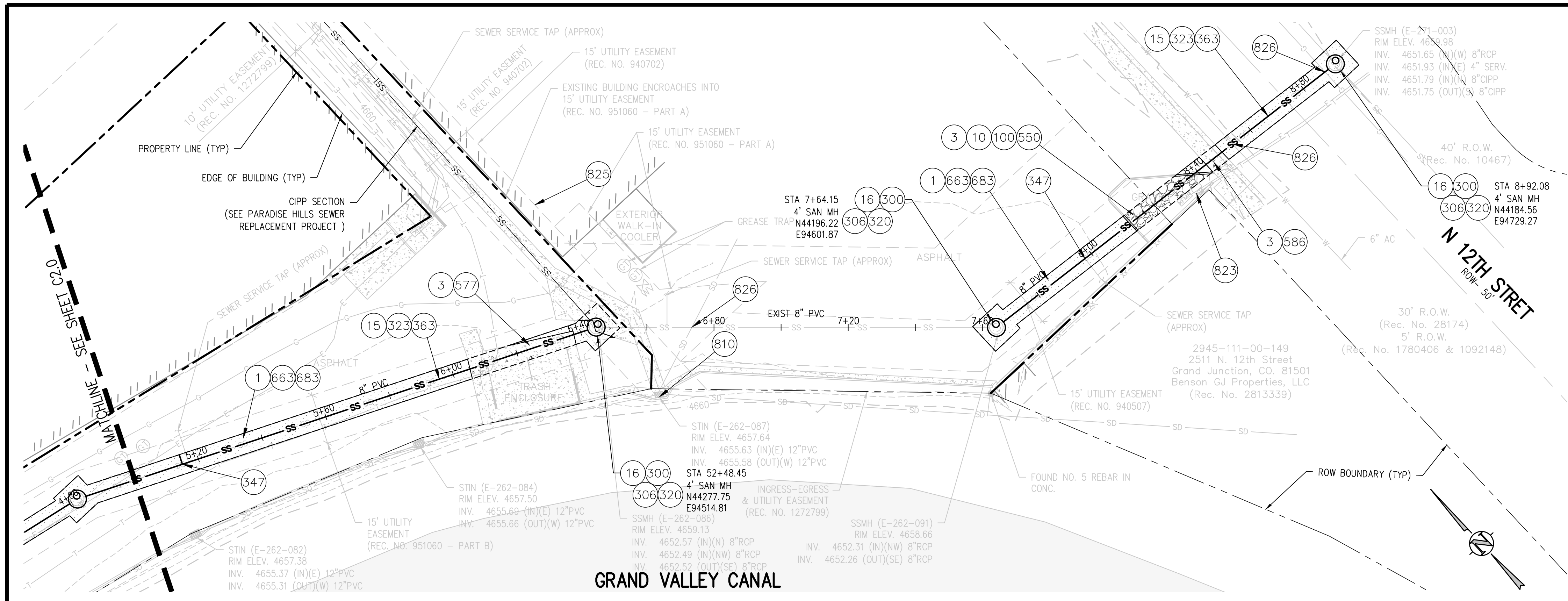
REVISION	DESCRIPTION	DATE

DRAWN BY	ZCF/NLM	DATE	
DESIGNED BY	ZCF/AMF	DATE	
CHECKED BY	JJM	DATE	
APPROVED BY		DATE	

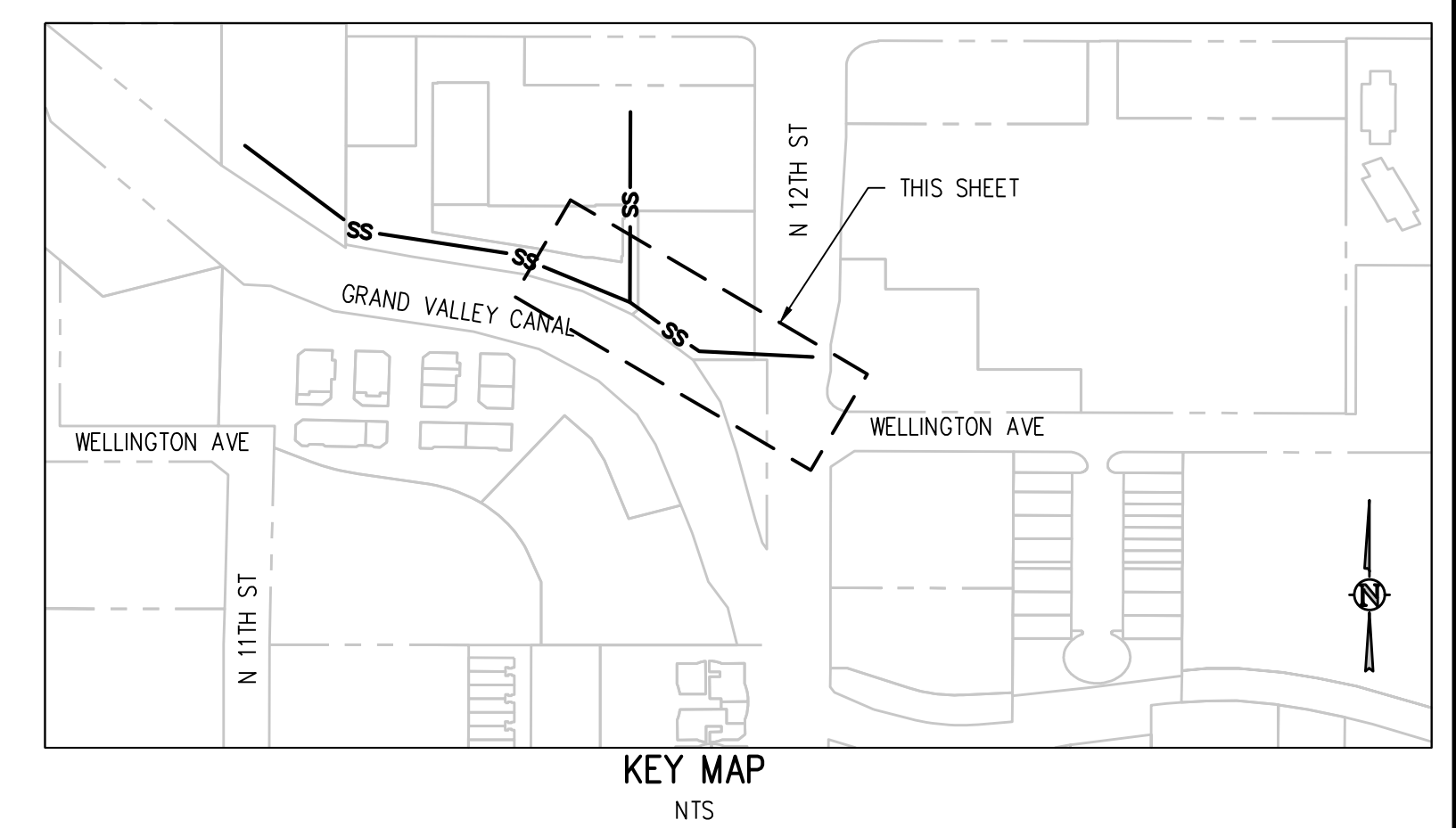


12TH AND WELLINGTON AVE  
SEWER REPLACEMENT  
SANITARY SEWER PLAN AND PROFILE

C2.0



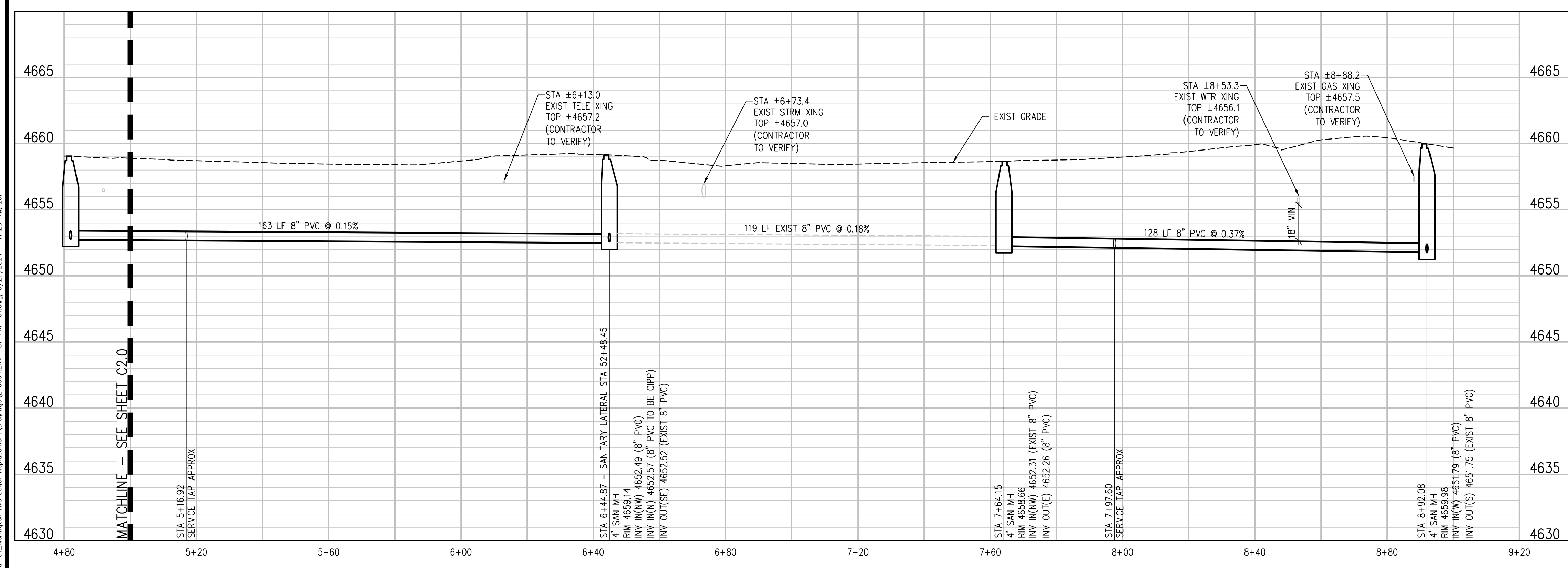
**GRAND VALLEY CANAL**  
**12TH AND WELLINGTON SANITARY SEWER PLAN**  
 SCALE: 1" = 20'



**KEY MAP**  
 NTS

**CONSTRUCTION NOTES**

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN (INDICATED BY CROSS HATCH PATTERN). INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 10 202 - REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 100 210 - RESET LANDSCAPE GROUND COVER. CONTRACTOR SHALL REMOVE GROUND COVER AND ANY UNDERLYING WEED BARRIER AS NEEDED AND STOCKPILE MATERIALS. CONTRACTOR SHALL RESET THESE MATERIALS AND PROVIDE ADDITIONAL MATERIALS AS NEEDED TO RESTORE LANDSCAPING.
- 300 102.11/108.5 - SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). FIELD COAT MANHOLE INTERIOR WITH SYSTEM NO. 30 PER SECTION 09900 OF THE PROJECT MANUAL.
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.)
- 320 102.11 - CONNECT MANHOLE TO EXISTING SANITARY SEWER (8" PIPE). CONTRACTOR SHALL USE A CAST-IN-PLACE BASE TO FORM INVERT AROUND THE EXISTING PIPE. "O" RING GASKETS OR OTHER WATER STOPS ARE TO BE PLACED AROUND THE INLET AND OUTLET PIPES TO ENSURE A WATER TIGHT SEAL IS PROVIDED AT THE MH BASE. CARE SHOULD BE TAKEN SO THAT THE EXISTING LINE DOES NOT SAG OR FLOAT DURING CONSTRUCTION OF THE BASE. THE TOP OF THE EXISTING PIPE SHALL BE CUT AND REMOVED TO PROVIDE FOR THE NEW INVERT IN. CONTRACTOR SHALL CONTROL SEWER FLOW AND NOT ALLOW DEBRIS TO ENTER THE PIPE.
- 323 102.9/108.2 - 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 347 102.9/108.3 - 8" X 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAIL SS-06).
- 363 BYPASS PUMPING WILL BE REQUIRED FOR CONSTRUCTION.
- 550 608.06 - CONCRETE CURB (6" WIDE, 6" HIGH)
- 577 608.06 - CONCRETE DRIVEWAY SECTION (8" THICK) (COMMERCIAL)
- 586 608.06 - CONCRETE CURB RAMP
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 683 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (6" THICK) (GRADING SX, BINDER GRADE PG 64-22) (THREE 2" LIFTS)
- 810 PROTECT STORM DRAIN INLET.
- 823 PROTECT UTILITY POLE
- 825 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS
- 826 PROTECT EXISTING UTILITY LINE IN PLACE.



**UTILITY NOTES:**

- SEWER SERVICE LOCATIONS ARE ESTIMATED BASED ON VIDEO INSPECTION RECORDS. CONTRACTOR TO VERIFY SERVICE LOCATION PRIOR TO CONSTRUCTION. VIDEO INSPECTION RECORDS PROVIDED UPON REQUEST BY THE CITY OF GRAND JUNCTION.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. REFER TO GENERAL NOTES FOR UTILITY LOCATION AND PROTECTION.
- ALL DRY UTILITY AND ELECTRIC DESIGNS ARE PROVIDED BY OTHERS AND SHOWN FOR REFERENCE ONLY. SEE MEP PLANS AND SPECIFICATIONS AND COORDINATE WITH ALL UTILITY OWNERS AS NEEDED.
- CONTRACTOR TO MARK ALL UTILITY STUBS WITH MARKERS.

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	DESIGNED BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
REVISION			ZCF/NLM		ZCF/AMF		JJM			
REVISION										
REVISION										
REVISION										



**12TH AND WELLINGTON AVE**  
**SEWER REPLACEMENT**  
**SANITARY SEWER PLAN AND PROFILE**

C2.1

N:\240394.EIN - City of Grand Junction 12th St Sewer Replacement\Drawings\240394.EIN - 01 - RFP-01.dwg, 6/27/2024 - 11:23 AM, zcf