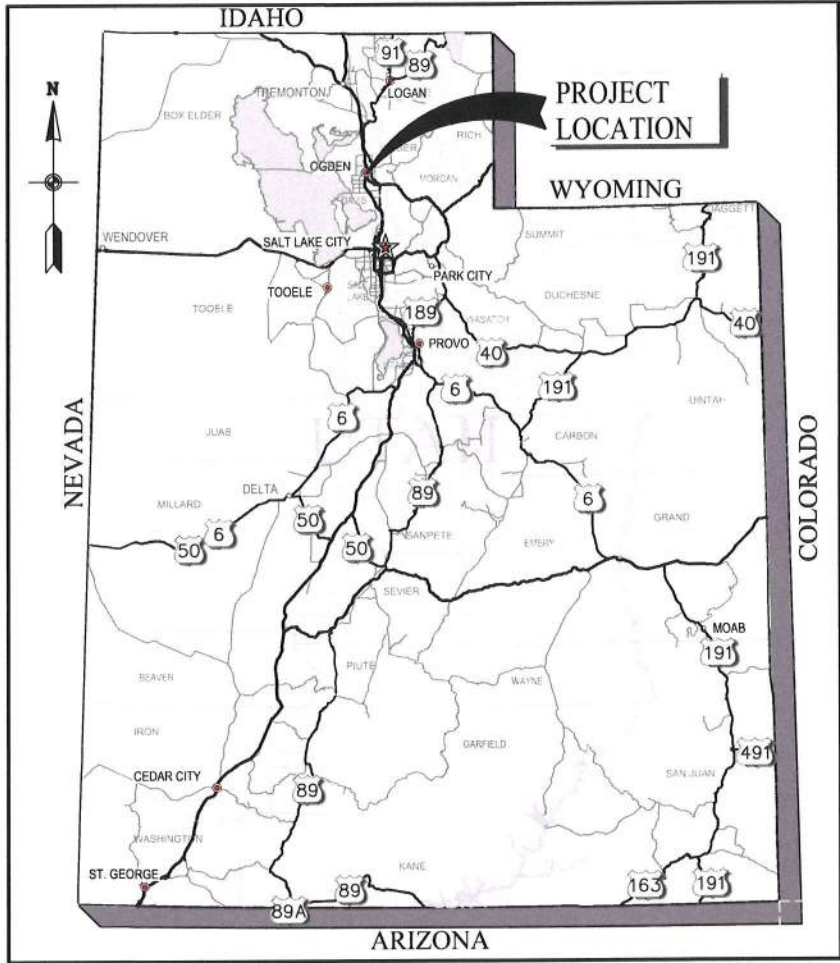
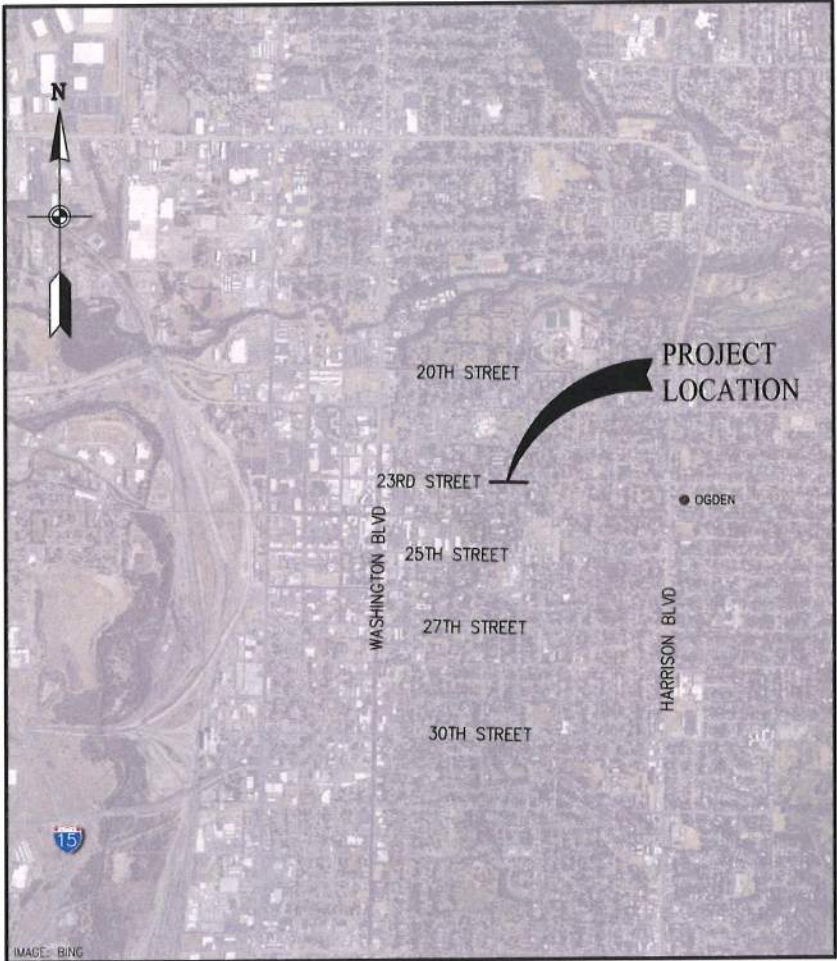


DRAWINGS FOR CONSTRUCTION OF THE
23RD ST STORM DRAIN
OGDEN, UTAH



PROJECT LOCATION MAP

INDEX OF DRAWINGS		
SHT NO	DWG NO	DESCRIPTION
GENERAL		
01	G-01	INDEX OF DRAWINGS, PROJECT LOCATION AND VICINITY MAPS
02	G-02	ABBREVIATIONS
03	G-03	SYMBOLS
04	G-04	GENERAL NOTES
CIVIL		
05	C-01	DEMOLITION PLAN
06	C-02	PLAN AND PROFILE STA 10+00 TO STA 14+00
07	C-03	PLAN AND PROFILE STA 14+00 TO STA 18+50
GENERAL CIVIL DETAILS		
08	GC-01	GENERAL CIVIL DETAILS - 01



PROJECT VICINITY MAP



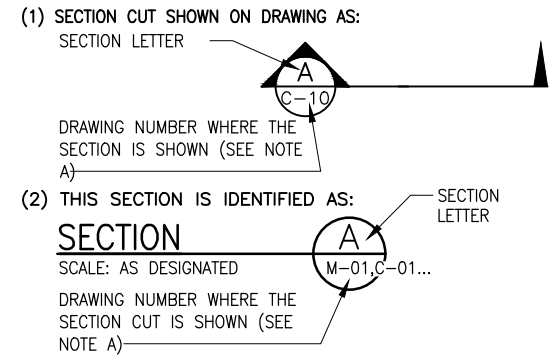
REVISIONS	
NO	DESCRIPTION

OGDEN CITY OGDEN, UTAH	23RD ST STORM DRAIN		VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
	DESIGN DESIGN J. WARD DRAWN M. WASHBURN	REVIEW CHECKED J. WARD APPROVED B. ROMRELL	

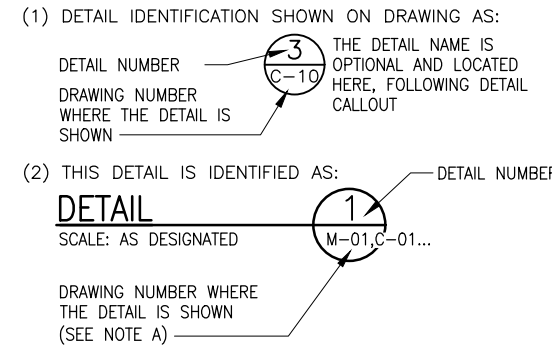
GENERAL INDEX OF DRAWINGS, PROJECT LOCATION AND VICINITY MAPS	PROJECT NUMBER 202-22-01	
	DATE: DECEMBER 2022	
DRAWING NO. G-01		
SHEET 01 OF 08		

[illegible]

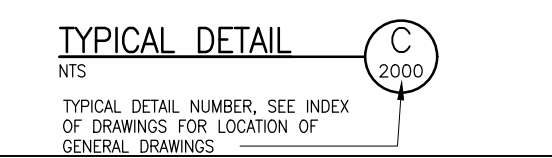
SECTION IDENTIFICATION



DETAIL IDENTIFICATION



TYPICAL DETAIL IDENTIFICATION



DRAWING IDENTIFICATION SYSTEM

LETTER	DISCIPLINE
G	GENERAL
C	CIVIL
CP	CORROSION PROTECTION
L	LANDSCAPE
A	ARCHITECTURAL
S	STRUCTURAL
M	MECHANICAL
E	ELECTRICAL
I	INSTRUMENTATION
GC	GENERAL CIVIL DETAILS
GA	GENERAL ARCHITECTURAL DETAILS
GS	GENERAL STRUCTURAL DETAILS
GM	GENERAL MECHANICAL DETAILS
GE	GENERAL ELECTRICAL DETAILS
GI	GENERAL INSTRUMENTATION DETAILS

S-02

INDIVIDUAL DRAWING NUMBER

DISCIPLINE

- NOTES:
- A. IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A HORIZONTAL LINE.
- B. ELECTRICAL SYMBOLS SHOWN ON ELECTRICAL DRAWINGS. FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS. SEE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.

- 1
- COORDINATE IDENTIFICATION
- ELEVATION INDICATOR
- SECTION CORNER
- BENCH MARK
- MONUMENT INDICATOR
- POT HOLE
- TEST HOLE
- BORING HOLE
- SECTION LINE
- PROPERTY LINE
- EASEMENT
- PARCEL
- R/W RIGHT-OF-WAY
- NEW ASPHALT
- EXISTING ASPHALT
- CENTERLINE
- 4500 CONTOUR LINE, FINISHED GRADE
- 4500 CONTOUR LINE, EXISTING GRADE
- 4500.20 FINISHED ELEVATION
- 4500.20 EXISTING ELEVATION
- TOP CUT OR FILL SLOPE TO BE CONSTRUCTED
- TOE
- SILT FENCE
- X X FENCE
- RAILING
- DITCH
- CULVERT
- RIPRAP
- TREE LINE/VEGETATION
- EXISTING STRUCTURE OR FACILITY
- NEW STRUCTURE OR FACILITY
- FUTURE STRUCTURE OR FACILITY
- NEW PIPELINE (CIVIL SHEETS)
- NEW PIPELINE 10" DIA. AND SMALLER (CIVIL SHEETS)
- EXISTING UTILITY PIPELINE
- ATMS
- CTV CABLE
- C(ug) COMMUNICATION BURIED
- COMM COMMUNICATION OVERHEAD
- P(ug) ELECTRICAL BURIED
- OHP ELECTRICAL OVERHEAD
- FO FIBER OPTICS OVERHEAD
- FO(ug) FIBER OPTICS UNDERGROUND
- G GAS
- IRR IRRIGATION
- PETRO PETROLEUM LINE
- SS SANITARY SEWER
- SD STORM DRAIN
- T(ug) TELEPHONE BURIED
- TEL TELEPHONE OVERHEAD
- W WATERLINE
- CABLE BOX
- CATCH BASIN
- ELECTRICAL BOX
- HYDRANT
- G GAS MANHOLE
- S SEWER MANHOLE
- D STORM DRAIN MANHOLE
- T TELEPHONE MANHOLE
- W WATER MANHOLE
- WM WATER METER

- POWER POLE
- TELEPHONE BOX
- LIGHT POLE ONE LUMINAIRE
- LIGHT POLE TWO LUMINAIRES
- LIGHT POLE
- STREET LIGHT WITH BRACKET
- TO BE REMOVED OR ABANDONED
- MASONRY
- STEEL
- INSULATION
- GRAVEL
- CONCRETE
- EARTH
- SAND
- ALUMINUM OR METAL DECKING
- CHECKERED PLATE
- GRATING
- PLASTIC, RUBBER OR NEOPRENE
- WOOD (ROUGH FRAMING) OR, OPENING OR DEPRESSION IN SLAB OR WALL
- DUCT (FIRST DIMENSION DUCT SIDE SHOWN, SECOND DIMENSION DUCT SIDE NOT SHOWN)
- 24 X 12
- SUPPLY OR OUTSIDE AIR DUCT (FIRST DIMENSION, DUCT WIDTH)
- 24 X 12
- EXHAUST OR RETURN AIR DUCT (FIRST DIMENSION, DUCT WIDTH)
- SIZE CFM
- CEILING SUPPLY DIFFUSER (SIZE IN INCHES)
- SIZE CFM
- CEILING RETURN OR EXHAUST AIR GRILLE OR REGISTER (SIZE IN INCHES, WIDTH X HEIGHT)
- SIZE CFM
- EXHAUST OR RETURN AIR GRILLE OR REGISTER (SIZE IN INCHES, WIDTH X HEIGHT)
- SIZE CFM
- SUPPLY GRILLE OR REGISTER (SIZE IN INCHES, WIDTH X HEIGHT)
- DO DEFLECTING DAMPER
- FHC FIRE HOSE CABINET
- FE FIRE EXTINGUISHER
- UNIT HEATER
- PCOTG PRESSURE CLEANOUT TO GRADE
- WCO WALL CLEANOUT
- FCO FLOOR CLEANOUT
- QCOTG CLEANOUT TO GRADE
- COTG
- BLOW OFF ASSEMBLY
- HUB DRAIN
- FLOOR DRAIN
- FLOOR SINK
- DRAIN TRAP

- CHANGE IN PIPING MATERIAL
- 24" RCP-RW
- PIPE SIZE AND TYPE/FLUID ABBREVIATION (USE FOR EXISTING PIPE CALLOUT)
- 10" PW (2)
- PIPE CALLOUT (SEE PIPING SCHEDULE)
- ME-2
- EQUIPMENT NUMBER (SEE EQUIPMENT SCHEDULE)
- BACKWATER VALVE
- BACKFLOW PREVENTER
- STOP GATE
- SLIDE GATE
- SLUICE GATE
- GATE VALVE, BURIED WITH VALVE BOX
- MUD VALVE
- BUTTERFLY VALVE, BURIED WITH VALVE BOX
- ECCENTRIC PLUG VALVE, BURIED WITH VALVE BOX
- LUBRICATED PLUG VALVE, BURIED WITH VALVE BOX
- KNIFE VALVE
- GATE VALVE
- BUTTERFLY VALVE
- ECCENTRIC PLUG VALVE
- LUBRICATED PLUG VALVE
- GLOBE VALVE
- BALL VALVE
- DIAPHRAGM VALVE
- CHECK VALVE
- PRESSURE REGULATING VALVE
- BACK-PRESSURE VALVE
- MOTOR OPERATOR FOR VALVES (M = ELECTRIC, P = PNEUMATIC, H = HYDRAULIC)
- TEMPERATURE CONTROL VALVE
- SOLENOID SHIELD
- SOLENOID VALVE
- MULTIPORT VALVE - 3 WAY
- MULTIPORT VALVE - 4 WAY
- FLOAT OPERATED VALVE
- NEEDLE VALVE
- PRESSURE RELIEF VALVE
- ANGLE VALVE
- HOSE BIBB (H/B)
- BUBBLER LEVEL CONTROL
- CENTRIFUGAL OR TURBINE PUMP OR FAN
- METERING PUMP
- PROGRESSIVE CAVITY, POSITIVE DISPLACEMENT PUMP
- BLOWER OR COMPRESSOR
- INJECTOR OR EDUCTOR
- FLAME ARRESTER
- AIR VACUUM AND AIR RELEASE ASSEMBLY
- METER

- THERMOMETER
- ROOM THERMOSTAT
- PRESSURE GAUGE
- PRESSURE GAUGE WITH DIAPHRAGM SEAL
- PRESSURE SWITCH
- PRESSURE SWITCH WITH DIAPHRAGM SEAL
- FLANGED FITTING
- WELDED FITTING
- MECHANICAL-TYPE FITTING (GROOVED)
- SCREWED, SOCKET-WELD, BELL AND SPIGOT OR HUBLESS FITTING
- SLEEVE-TYPE COUPLING
- FLANGED ADAPTER COUPLING
- FLANGED ADAPTER - SET SCREW TYPE
- EXPANSION JOINT
- MECHANICAL TYPE COUPLING
- EXPANSION JOINT
- EXPANSION LOOP
- FLEXIBLE COUPLING
- UNION
- QUICK DISCONNECT COUPLER
- CAPPED END OR PLUGGED END
- BLIND FLANGE
- REDUCER OR INCREASER
- ECCENTRIC REDUCER OR INCREASER
- CUT PIPE
- STRAINER
- THERMOSTATIC TRAP
- DRAIN
- FLOW TUBE
- MAGNETIC METER
- DENSITY METER
- PROPELLER METER
- ORIFICE PLATE AND FLANGES
- ROTAMETER
- CONDENSATE TRAP
- PIPE SUPPORT (IN PLAN ONLY)
- PULSATION DAMPENER
- AREA DRAIN
- LIQUID SURFACE EL
- PIPE ANCHOR

- REVISION WORK
- 3
- REFERENCE TO NOTE
- 1
- COLUMN LINE GRID
- A
- WINDOW TYPE
- 05
- DOOR NUMBER
- 05
- ROOM NUMBER

BOWEN COLLINS ASSOCIATES

PROFESSIONAL ENGINEER

BRIAN ROMRELL

5568919

STATE OF UTAH

1/25/23

23RD ST STORM DRAIN

OGDEN CITY

OGDEN, UTAH

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW

CHECKED J. WARD

APPROVED B. ROMRELL

DESIGN

J. WARD

DRAWN M. WASHBURN

SYMBOLS

GENERAL

DATE: DECEMBER 2022

PROJECT NUMBER

202-22-01

DRAWING NO.

G-03

SHEET 03 OF 08

GENERAL NOTES

1.

SYMBOLS FOR STRUCTURES, PIPE AND ETC. USED FOR IDENTIFICATION ARE SHOWN IN LEGENDS AND SHALL BE FOLLOWED THROUGHOUT THE PLANS WHENEVER APPLICABLE. NOT ALL OF THE VARIOUS COMPONENTS SHOWN IN THESE LEGENDS ARE NECESSARILY USED IN THE PROJECT.
2.

SCALE OF THE DRAWINGS OR DETAILS ARE SHOWN IN TITLE BLOCK OR DIRECTLY UNDER THE PLAN OR DETAIL. THE SIZE OF THE ORIGINAL PLOTTED DRAWINGS IS 22"x34". CARE SHOULD BE TAKEN TO VERIFY THE SCALE BAR IN THE TITLE BLOCK AREA TO DETERMINE THE SCALE OF REDUCED REPRODUCTIONS.
3.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PERFORM CONSTRUCTION ACTIVITIES PER THE CONTRACT DOCUMENTS. ANY ADDITIONS, DELETIONS, OR MODIFICATIONS SHALL FIRST MEET WITH THE WRITTEN APPROVAL OF THE ENGINEER AND THE OWNER.
4.

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMIT(S) AND COMPLY WITH ALL REQUIREMENTS OF GOVERNING AGENCIES.
5.

THE CONTRACTOR SHALL PREPARE AND SUBMIT TRAFFIC CONTROL PLANS FOR REVIEW AND APPROVAL BY OGDEN CITY. WORK WILL NOT BEGIN UNTIL THE PLANS HAVE BEEN APPROVED.
6.

THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE ESTABLISHED RIGHTS-OF-WAY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATION, AND EXCAVATED MATERIAL AND BACKFILL STORAGE. IF THE CONTRACTOR REQUIRES ADDITIONAL CONSTRUCTION EASEMENTS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SUCH EASEMENTS FROM INDIVIDUAL PROPERTY OWNERS.
7.

UTILITY LOCATIONS:

•

CONTRACTOR SHALL CONTACT BLUE STAKES TO LOCATE EXISTING UTILITIES.

•

ALL UTILITY LOCATIONS, SHOWN ON DRAWINGS, ARE APPROXIMATE AND ARE NOT INCLUSIVE OF ALL EXISTING UTILITIES.

•

CONTRACTOR TO VERIFY DEPTHS OF UTILITIES IN THE FIELD BY POT HOLING A MINIMUM OF 800- FEET AHEAD OF PIPELINE CONSTRUCTION TO AVOID CONFLICTS WITH DESIGNED PIPELINE GRADE AND ALIGNMENT. IF A CONFLICT ARISES RESULTING FROM THE CONTRACTOR NEGLECTING TO POT HOLE UTILITIES, THE CONTRACTOR TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER.

•

CONTRACTOR SHALL POT HOLE CRITICAL LOCATIONS AND UTILITIES PRIOR TO ORDERING OR OBTAINING MATERIALS. UTILITY SHUT-DOWNS AND OTHER WORK WILL NOT BE SCHEDULED OR ALLOWED UNTIL THIS IS ACCOMPLISHED AND MATERIALS ARE ON SITE AND APPROVED FOR USE BY OGDEN CITY.
8.

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS FROM DAMAGE WHICH ARE TO REMAIN IN PLACE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
9.

THE CONTRACTOR IS RESPONSIBLE FOR LOCATING SERVICE LINES FOR GAS, SEWER, WATER, AND OTHER UTILITIES AND REPAIRING DAMAGE TO SUCH LINES AS A RESULT OF THE CONTRACTOR'S OPERATIONS. SERVICE CONNECTIONS FOR UTILITIES ARE NOT SHOWN ON THE DRAWINGS.
10.

CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMANCE WITH LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF THE PUBLIC AND PROTECTION OF PERSONNEL AND WORKERS.
11.

IF THE CONTRACTOR CHOOSES TO WORK ON THE PROJECT WHEN HOT MIX ASPHALT IS NOT AVAILABLE, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE GOVERNING AGENCY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY ASPHALT SURFACING MATERIAL. WHEN PERMANENT ASPHALT BECOMES AVAILABLE, THE CONTRACTOR SHALL REMOVE THE TEMPORARY ASPHALT, FURNISH AND INSTALL THE PERMANENT ASPHALT AT NO ADDITIONAL COST TO THE OWNER.
12.

CONTRACTOR SHALL NOT DESTROY, REMOVE, OR DISTURB ANY EXISTING SURVEY MONUMENTS WITHOUT AUTHORIZATION OF CONTROLLING AGENCY. NO PAVEMENT CUTTING OR REMOVAL SHALL BEGIN UNTIL ALL SURVEY MARKERS OR MONUMENT POINTS THAT HAVE THE POTENTIAL OF BEING DISTURBED BY THE CONSTRUCTION OPERATIONS HAVE BEEN PROPERLY REFERENCED BY A REGISTERED LAND SURVEYOR. ALL SURVEY MONUMENTS OR POINTS DISTURBED BY THE CONTRACTOR SHALL BE ACCURATELY RESET BY A REGISTERED LAND SURVEYOR AFTER ALL RESTORATION AND RESURFACING HAS BEEN COMPLETED.
13.

TRENCHING OPERATIONS SHALL BE PERFORMED SO AS TO PROTECT THE EXISTING CURB AND GUTTER. DAMAGED CURB AND GUTTER SHALL BE REPLACED TO MATCH EXISTING AT THE CONTRACTOR'S EXPENSE PER OGDEN CITY. TRENCH SUPPORTS AND DEWATERING (NOTE 14) SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR. MAXIMUM OPEN TRENCH DURING WORKING HOURS SHALL BE 300 FEET. ALL TRENCHES SHALL BE BACKFILLED AND/OR PLATED DURING NON-WORKING HOURS, PER EXCAVATION PERMIT REQUIREMENTS.
14.

DEWATERING: GROUND WATER AND SURFACE WATER CONTROL SHALL BE PERFORMED AND RESPONSIBLY HANDLED BY THE CONTRACTOR ACCORDING TO, AND IN COMPLIANCE WITH, ALL LOCAL GOVERNING AUTHORITIES. HEAVY

- GROUND WATER AND/OR SURFACE WATER PUMPING MAY BE REQUIRED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE POTENTIAL PUMPING NEEDS. THE CONTRACTOR SHALL NOT RELY ON OWNER SUPPLIED PROCTOR, GROUND WATER AND/OR SURFACE WATER DATA. CONTRACTOR SHALL OBTAIN DEWATERING PERMIT AS NECESSARY.
15.

AERIAL PHOTOS IN DRAWINGS:

THE AERIAL PHOTOS PROVIDED AS BACKGROUND IN THESE DRAWINGS ARE PROVIDED TO HELP CLARIFY THE WORK SITE. HOWEVER, THE PHOTOS DEPICT CONDITIONS AS THEY EXISTED IN 2020. PRESENT DAY CONDITIONS MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. BID SHALL INCLUDE ALL WORK REQUIRED TO COMPLETE THE PROJECT.
16.

CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF EXCAVATIONS, AND ANY DAMAGE OF UTILITIES RESULTING FROM SETTLEMENT.
17.

CONTRACTOR SHALL PREVENT ANY GROUND WATER OR DEBRIS FROM ENTERING NEW PIPES DURING CONSTRUCTION. THE ENDS OF THE PIPES SHALL BE SEALED AT THE END OF EACH WORKDAY.
18.

PROFILE DRAWINGS ARE HORIZONTAL PROJECTIONS OF THE PIPELINE CENTERLINE, UNLESS OTHERWISE NOTED.
19.

LAY PIPE TO DEPTH AND ALONG HORIZONTAL ALIGNMENT AS DEFINED IN THESE DRAWINGS. CONTRACTOR SHALL NOT DEVIATE FROM PROPOSED ALIGNMENT OR GRADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. AVOID HIGH AND LOW POINTS EXCEPT WHERE DESIGNED.
20.

CONTRACTOR SHALL SALVAGE ALL REMOVED COPPER PIPE AND HYDRANTS AND PROVIDE THEM TO OGDEN CITY, UNLESS NOTED OTHERWISE.
21.

CONTRACTOR SHALL BACKFILL TRENCH AREAS WHERE NEW WATERLINES CROSS UNDER EXISTING BURIED UTILITIES WITH FLOWABLE FILL (SOIL CEMENT BACKFILL) IN ACCORDANCE WITH APWA STANDARDS, WHERE MECHANICAL COMPACTION CANNOT BE ADEQUATE PERFORMED.
22.

ALL BURIED REBAR, FITTINGS, COUPLINGS, VALVES AND MECHANICAL JOINT NUTS AND BOLTS ARE TO BE COATED WITH NON OXIDE GREASE CHEVRON FM 2 OR APPROVED EQUAL, COVERED WITH 8 MIL POLYETHYLENE SHEETING, AND TAPE WRAPPED.
23.

CONTRACTOR SHALL MAINTAIN A 10-FOOT HORIZONTAL AND AN 18-INCH VERTICAL SEPARATION (OUTSIDE OF PIPE TO OUTSIDE OF PIPE/MANHOLE) BETWEEN ALL SEWER AND WATER LINES, UNLESS EXCEPTION IS NOTED.
24.

CONTRACTOR SHALL RESTORE OR REPLACE ANY SPRINKLING SYSTEMS AND LANDSCAPING DAMAGED DURING CONSTRUCTION TO EQUAL OR BETTER CONDITION THAN WHAT EXISTED PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
25.

CONTRACTOR SHALL PROTECT ADJACENT PRESSURE PIPELINES AND PROVIDE TEMPORARY THRUST RESTRAINT AS NECESSARY DURING CONSTRUCTION INCLUDING EXISTING VALVES, TEES, BENDS, ETC.. ALL NEW PRESSURE PIPE AND FITTINGS SHALL HAVE THRUST RESTRAINED JOINTS, THRUST BLOCKS, THRUST TIES OR OTHER APPROVED THRUST RESTRAINT. THRUST PROTECTION SHALL BE ADEQUATE FOR THE TEST PRESSURE SPECIFIED.
26.

CONTRACTOR SHALL PERFORM CHLORINATION TEST, PRESSURE TEST, AND BACTERIA TEST. ALL WATERLINES INSTALLED SHALL BE DISINFECTED IN ACCORDANCE WITH THE "AMERICAN WATER WORKS ASSOCIATION STANDARD FOR DISINFECTING WATER MAINS" (AWWA C651). ALL CHLORINATED WATER SHALL BE DISPOSED OF IN ACCORDANCE WITH THE UTAH DEPT OF ENVIRONMENTAL QUALITY RULES AND REQUIREMENTS FOR SURFACE DISCHARGE AND COORDINATED WITH OGDEN CITY.
27.

ASPHALT SHALL BE IN ACCORDANCE WITH OGDEN CITY STANDARDS. CONTRACTOR SHALL OBTAIN PERMITS FROM OGDEN CITY AND COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.
28.

ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN A WORKMANLIKE AND SAFE MANNER AND IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND JOB-SITE RELATED CONSTRUCTION CONDITIONS AND REQUIREMENTS. OBTAIN PERMITS, INSPECTIONS AND APPROVALS AS REQUIRED BY JURISDICTIONAL AGENCIES AND PAY ALL ASSOCIATED FEES. CONTRACTOR AND INSTALLERS SHALL BE LICENSED AS REQUIRED BY STATE AND LOCAL JURISDICTIONS, AND BONDED AS DETERMINED BY PROJECT REQUIREMENTS.
29.

CONTRACTOR TO PROVIDE AND DISTRIBUTE APPROVED WRITTEN NOTICE OF CONSTRUCTION ACTIVITIES TO ALL RESIDENTS AND BUSINESSES LOCATED IN THE CONSTRUCTION AREA AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. WRITTEN NOTICE SHALL BE APPROVED BY THE ENGINEER PRIOR TO DISTRIBUTION.
30.

CONTRACTOR SHALL PROVIDE AND UPDATE A CONSTRUCTION SCHEDULE FOR WORKING IN THE PUBLIC RIGHT-OF-WAY PRIOR TO CONSTRUCTION.
31.

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTROL OF DRAINAGE AND EROSION DURING CONSTRUCTION AT CONSTRUCTION SITE, STAGING, AND SPOILS AREA. CONTRACTOR SHALL SUBMIT STORM RUNOFF CONTROL PLAN FOR APPROVAL BY ENGINEER AND OBTAIN A SWPPP PERMIT FROM THE UTAH DEPARTMENT OF ENVIRONMENTAL
32.

CONTRACTOR SHALL SAW CUT ASPHALT, SIDEWALK TO THE NEAREST JOINT, AND WHERE REQUIRED CURB AND GUTTER TO THE NEAREST JOINT AT THE LIMITS OF ALL TRENCH EXCAVATION.
33.

CONTRACTOR SHALL PROVIDE SAFE ACCESS ACROSS TRENCH FOR ONE

- VEHICLE AT ALL DRIVEWAY ENTRANCES DURING CONSTRUCTION. EXCEPTIONS TO THIS REQUIREMENT SHALL BE COORDINATED WITH ENGINEER AND DRIVEWAY OWNER. ALL TRENCHES SHALL BE BACKFILLED AND/OR PLATED DURING NON-WORKING HOURS.
34.

WORKING HOURS IN OGDEN CITY SHALL BE 8:00 AM TO 7:00 PM.
35.

INSTALL ALL MATERIALS ACCORDING TO MANUFACTURER RECOMMENDATIONS AND STATE AND LOCAL REQUIREMENTS. USE ONLY NEW AND UNUSED MATERIALS. ALL MATERIALS SHALL BE PROVIDED BY MANUFACTURERS REGULARLY ENGAGED IN PRODUCING SAID ITEMS, AND WHICH SHALL BE FIRST QUALITY, HEAVY DUTY, COMMERCIAL/INDUSTRIAL GRADE, SUITABLE FOR THE INTENDED USE.
36.

CONTRACTOR SHALL RESTORE ALL DAMAGED CURB, GUTTER, SIDEWALK, DRIVEWAY APPROACHES, AND WATER WAYS IN ACCORDANCE WITH OGDEN CITY STANDARDS.
37.

ALL GAS LINES SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12-INCHES ABOVE OR BELOW THE NEW PIPELINE, AND A MINIMUM HORIZONTAL CLEARANCE OF 3 FEET. ALL GAS LINES RELOCATED OR EXPOSED SHALL BE REBURIED PER QUESTAR'S REQUIREMENTS.
38.

CLEANOUT BOX SHALL BE A SPECIALTY PRECAST CONCRETE BOX OF THE SIZE INDICATED MEETING THE FOLLOWING REQUIREMENTS:

A.

BOX MUST MEET HS20 LOADING REQUIREMENTS WITHOUT TRANSFERRING ANY ADDITIONAL LOAD TO THE STORM DRAIN PIPE.

B.

PROVIDE RING AND COVER ALLOWING FOR STANDARD CONCRETE COLLAR WITH MINIMUM DEPTH OF 4 INCHES. RING AND COVER MAY BE RECESSED INTO THE CONCRETE BOX LID SLIGHTLY.

C.

BEFORE ORDERING PRECAST BOXES, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL ALL CLEANOUT BOX DESIGNS AND STACK SHEETS SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER.

D.

CONTRACTOR SHALL FURNISH AND INSTALL NEW 3'x3' CONCRETE BOX CULVERT AS NEEDED TO COMPLETE THE CONNECTION TO THE NEW CLEANOUT BOX. CONNECTION OF NEW BOX CULVERT SHALL INCLUDE A CONCRETE FIELD COLLAR IN ACCORDANCE WITH DETAIL C/2220.

SURVEY CONTROL AND NARRATIVE:

- BASIS OF BEARING AND DATUM

1.

PROJECT COORDINATES ARE BASED ON THE UTAH STATE PLANE COORDINATE SYSTEM, NAD 1983, UTAH NORTH ZONE, US SURVEY FEET AND WERE ESTABLISHED USING THE STATE OF UTAH (TURN) GPS VRS NETWORK.

2.

ELEVATIONS ARE NAVD88. (GEOID18)

- SURVEY CONTROL

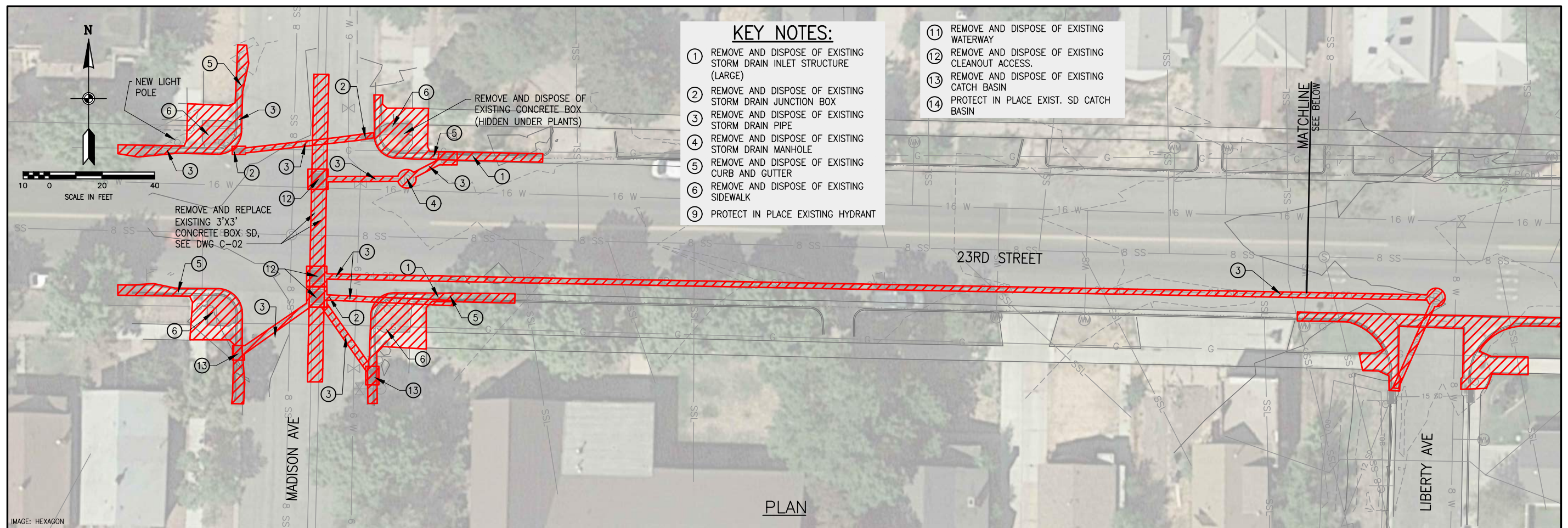
1.

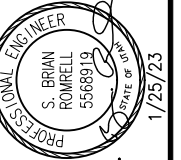
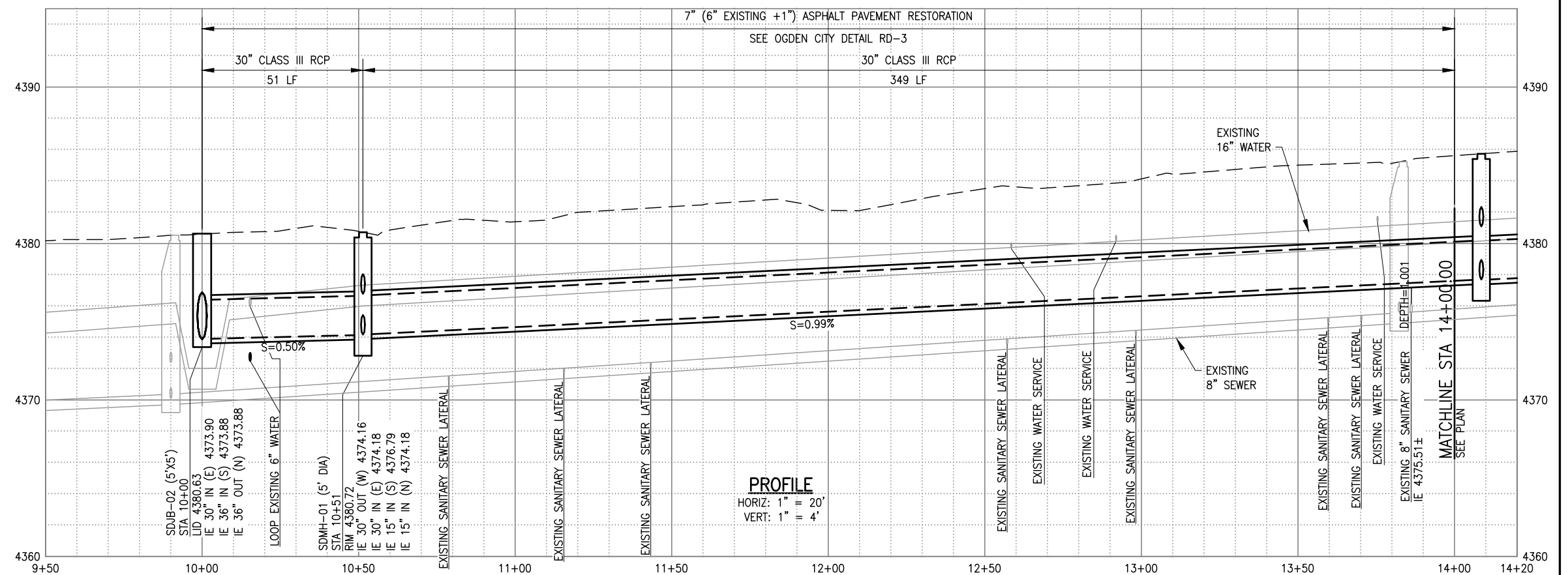
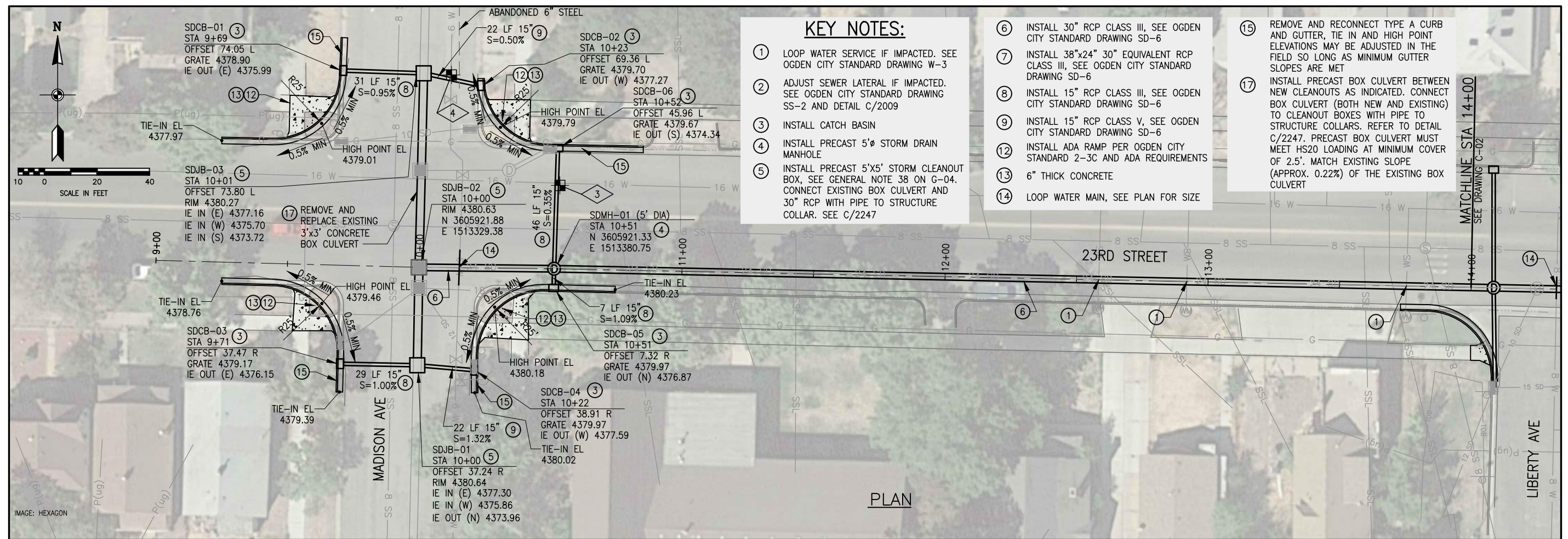
NAD83 UTAH STATE PLANE COORDINATES, NORTH ZONE, US. FEET, CSF 0.99975 OR 1.00025 TO SCALE TO GROUND DISTANCE.

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	3605874.731	1513740.821	4385.79	SET MAG NAIL
2	3605931.732	1513753.381	4385.84	BRASS CAP IN HAND WELL
6	3605924.237	1514095.698	4390.27	BRASS CAP IN HAND WELL
14	3605941.513	1513325.522	4380.58	BRASS CAP IN HAND WELL
445	3605884.651	1513740.746	4385.67	MAG NAIL WITH OGDEN CITY WASHER
476	3605883.998	1513763.647	4385.76	MAG NAIL WITH OGDEN CITY WASHER

POTHOLE DATA:

TEST HOLE #	DATE	SIZE	TYPE	MATR'L	POINT	NORTHING	EASTING	GROUND ELEV	DEPTH (FT)	TOP ELEV	SURFACE TYPE	PAVEMENT DEPTH
1	12/6/2022	12"	WATER	METAL	898	3605935.19	1514165.04	4391.07	2.85	4388.22	ASPHALT	6"
3	12/6/2022	14"	WATER	METAL	894	3605953.08	1513382.94	4381.05	3.65	4377.40	ASPHALT	6"
4	12/6/2022	6"	WATER	METAL	895	3605995.18	1513341.75	4380.25	3.70	4376.55	ASPHALT	6"



[illegible]

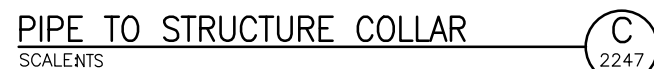
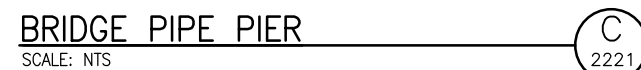
VERIFICATION SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN	REVIEW
DESIGN <u>J. WARD</u>	CHECKED <u>J. WARD</u>
DRAWN <u>M. WASHBURN</u>	APPROVED <u>B. ROMRELL</u>

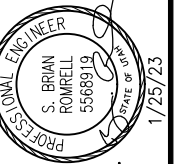
PLAN AND PROFILE STA 10+00 TO STA 14+00	
DATE: DECEMBER 2022	PROJECT NUMBER 202-222-01

1. THE INTENT OF THIS DETAIL IS TO REMOVE AND REPLACE A SECTION OF THE EXISTING SEWER LATERAL AS NEEDED TO ACCOMMODATE THE STORM DRAIN PIPE. THE EXTENT OF SEWER LATERAL REPLACEMENT SHALL BE AS NEEDED TO ACHIEVE CLEARANCE UNDER THE NEW STORM DRAIN PIPE AND AS NEEDED TO MAINTAIN MINIMUM SEWER LATERAL SLOPES. RECONNECTING SEWER LATERAL TO THE MAIN MAY NOT BE REQUIRED BUT SHALL BE INCIDENTAL TO THIS ITEM.
2. DISPOSE OF PIPING AND APPURTENANCES IN ACCORDANCE WITH STATE STANDARDS FOR THE CORRESPONDING PIPE MATERIAL.
3. RESTORE ALL SURFACE IMPROVEMENTS TO AS GOOD AS OR BETTER THAN EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIDEWALK, PARKSTRIP, GRASS, CURB AND GUTTER, PAVEMENT.
4. SEWER LATERAL REPLACEMENT TO BE IN ACCORDANCE WITH OGDEN CITY STANDARD DRAWING SS-2 AND ACCOMPANYING NOTES THEREIN.
5. IF LATERAL ADJUSTMENT OR RELOCATION REQUIRES INSTALLATION OF A NEW CLEANOUT, INSTALL THE CLEANOUT IN ACCORDANCE WITH OGDEN CITY STANDARD DRAWINGS SS-2 AND SS-8.



NOTES:

1. PIPE TO STRUCTURE COLLAR MAY BE APPLIED TO CONNECT BOTH CIRCULAR (PIPES) AND SQUARE/RECTANGULAR CONDUITS (BOX CULVERTS). ENSURE ALL MINIMUM REQUIREMENTS SHOWN ARE MET REGARDLESS OF CONDUIT SHAPE.

[illegible]

VERIFICATION SCALE
 BAR IS ONE INCH ON
 ORIGINAL DRAWING

DESIGN

DESIGN J. WARD

DRAWN M. WASHBURN

REVIEW

CHECKED J. WARD

APPROVED B. ROMRELL

DATE:	DECEMBER 2022	PROJECT NUMBER	202-22-01
-------	---------------	----------------	-----------

DRAWING NO.
GC-01

SHEET 08 OF 08