

IMPROVEMENT PLANS

RED ROCK CENTER
LEWISTON, IDAHO 83501

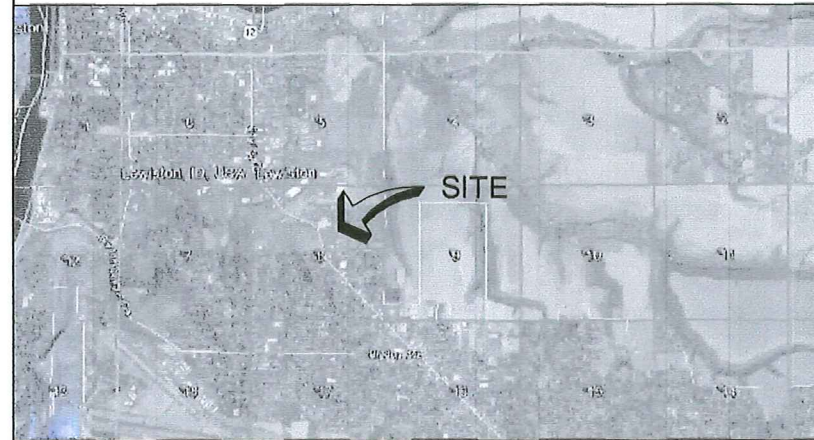
GENERAL NOTES

- 1) THE CONTRACTOR SHALL PAY FOR ALL NECESSARY PERMITS AND FEES.
- 2) THE CONTRACTOR SHALL INVESTIGATE ON SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS OF THE PROJECT AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY IN THE CONTRACT DOCUMENTS REQUIRING MODIFICATION PRIOR TO PROCEEDING.
- 3) THE CONTRACTOR SHALL TAKE ALL NECESSARY PREVENTATIVE MEASURES TO PROTECT THE EXISTING IMPROVEMENTS. ANY DAMAGE SHALL BE REPLACED AT NO COST TO THE OWNER.
- 4) THE CONTRACTOR SHALL COORDINATE THE WORK SCHEDULE SO AS TO HAVE A MINIMUM IMPACT ON THE EXISTING TRAFFIC. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PER WASHINGTON TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS.
- 5) OWNER'S PROPERTY CORNERS SHALL BE PROTECTED AT ALL TIMES, AND THE CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF IDAHO TO REFERENCE ALL CORNERS. UPON COMPLETION OF THE PROJECT, ALL EXISTING CORNERS DAMAGED BY CONSTRUCTION OR OTHER ACTIVITY SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR.
- 6) ALL WORK SHALL CONFORM TO STATE AND LOCAL CODES AND CONFORM TO IDOT STANDARD SPECIFICATIONS, 2008.
- 7) SITE DISTANCES FOR ABUTTING PROPERTIES, DRIVEWAYS, AND INTERSECTIONS MUST BE MAINTAINED.
- 8) EROSION AND DUST CONTROL MEASURES MUST BE USED DURING CONSTRUCTION TO REDUCE OR ELIMINATE BLOWING DUST, EXCESSIVE RUNOFF, AND SOIL EROSION ACROSS PROPERTY LINES AND INTO STREETS AND RIGHT-OF-WAY, AND TO ELIMINATE TRACKING SOIL AND MUD ONTO STREETS FROM CONSTRUCTION EQUIPMENT AND VEHICLE TRAFFIC.
- 9) IMPROVEMENTS CONSTRUCTED ON RIGHT-OF-WAY MUST FOLLOW ASOTIN COUNTY ROAD STANDARDS AND SPECIFICATIONS.
- 10) ALL CONSTRUCTION NOT SPECIFICALLY MENTIONED OR SHOWN SHALL CONFORM TO COUNTY ORDINANCES AND STANDARDS.
- 11) ALL TOPSOIL SHALL BE STRIPPED AND STOCKPILED BEFORE EXCAVATION.
- 12) ALL EXPOSED CUT/FILL SLOPES SHALL BE SEED TO PREVENT EROSION.
- 13) ALL ROADWAY FILL SHALL BE AS A MINIMUM, CLEAN, UNIFORM, GRADED, COMPACTED TO 95% OF THE MAX. DRY DENSITY DETERMINED BY MODIFIED PROCTOR ASTM D 1557. COMPACTION LAYERS SHALL BE 8" DEEP.
- 14) ADD STREET MONUMENTS AND CASES DURING PAVING AT LOCATIONS SHOWN ON THE PLAN IN CONFORMANCE WITH CITY OF LEWISTON ORDINANCES.
- 15) STREET NAME SIGNS ARE TO BE PAID FOR BY THE DEVELOPER AND INSTALLED BY CITY OF LEWISTON.
- 16) ALL CURB AND GUTTER SHALL CONFORM TO CITY OF LEWISTON ROAD STANDARDS.
- 17) SIDEWALKS SHALL CONFORM TO THE CITY OF LEWISTON STANDARDS.
- 18) ALL WATER AND SEWER UTILITIES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH STATE OF IDAHO STANDARDS FOR PUBLIC DRINKING WATER SYSTEMS.
- 19) WATER MAINS SHALL BE INSTALLED BY CONTRACTORS WITH EXPERIENCE INSTALLING PUBLIC WATER MAINS AND APPROVED BY ASOTIN COUNTY.
- 20) WATER MAINS SHALL BE LAID ONLY IN DEDICATED STREETS OR IN EASEMENTS, WHICH HAVE BEEN GRANTED AND ACCEPTED BY ASOTIN COUNTY.
- 21) WATER PIPE SHALL BE PVC CLASS 150 (MINIMUM) CONFORMING TO AWWA STANDARD C900.
- 22) WATER LINE FITTINGS SHALL BE CAST IRON OR DUCTILE IRON CONFORMING TO AWWA STANDARD C153.
- 23) PROPOSED WATER LINES SHALL BE HYDROSTATICALLY TESTED AS PER AWWA C600-93. TESTS SHALL BE 1 1/2 TIMES WORKING PRESSURE, WITH A MINIMUM OF 150 PSI. PRESSURE SHALL BE HELD FOR 2 HOURS WITH NO DROP IN PRESSURE. ENGINEER OF RECORD SHALL WITNESS TEST.
- 24) DISINFECTION OF WATER LINES SHALL BE IN ACCORDANCE WITH AWWA C651-92. ISOLATE NEW PIPE FROM EXISTING SYSTEM TO PREVENT POTENTIAL CROSS-CONNECTION. ENGINEER OF RECORD SHALL WITNESS TEST.
- 25) THE CONTRACTOR SHALL PROVIDE LOCATE TAPE IN PVC WATER MAIN TRENCH.
- 26) THRUST BLOCKS SHALL CONFORM TO COUNTY OF ASOTIN STANDARD DRAWINGS.
- 27) GATE VALVES SHALL CONFORM TO AWWA C509-97 RESILIENT SEATED GATE VALVES FOR WATER AND SEWAGE SYSTEMS AND SHALL BE IRON BODY BRONZE-MOUNTED, DOUBLE DISC WITH BRONZE WEDGING AND O-RING STUFFING BOX.
- 28) THE CONTRACTOR SHALL PROVIDE 4 FT MIN. COVER ON ALL WATER LINES.
- 29) WATER LINE CONNECTIONS TO MAINS AND LATERALS SHALL BE LEFT UNCOVERED UNTIL AFTER THE COUNTY ENGINEER HAS INSPECTED AND APPROVED THE WORK. AFTER APPROVAL OF CONNECTION, THE TRENCH SHALL BE BACKFILLED AS SPECIFIED.
- 30) FIRE HYDRANTS SHALL CONFORM TO AWWA C502 AND SHALL BE OF STANDARD MANUFACTURE AND OF A PATTERN APPROVED AND/OR REQUIRED BY THE CITY OF LEWISTON AND/OR THE CITY OF LEWISTON FIRE DEPARTMENT. HYDRANTS SHALL BE SO CONSTRUCTED THAT THE DIRECTION OF THE PUMPER CONNECTION MAY BE ROTATED TO FACE THE ROADWAY. SIX (6) INCH MECHANICAL JOINTS CONNECTION WITH LUGS AND SHACKLE RODS ARE TO BE USED. A GATE VALVE SHALL BE INSTALLED AT EACH HYDRANT AS SHOWN ON STANDARD DETAILS.
- 31) STORM DRAINS SHALL BE INSTALLED BY CONTRACTORS WITH EXPERIENCE INSTALLING PUBLIC STORM DRAINS AND APPROVED BY THE CITY OF LEWISTON.
- 32) ALL EXISTING LIVE STORM DRAINS SHALL BE KEPT IN SERVICE AT ALL TIMES. PROVISIONS SHALL BE MADE FOR DISPOSAL OF STORM WATER FLOW IF ANY EXISTING STORM DRAINS ARE DAMAGED. DAMAGE TO EXISTING STORM DRAINS SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE COUNTY TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION PRIOR TO BEING DAMAGED.
- 33) STORM WATER MAIN SHALL BE LAID ONLY IN DEDICATED STREETS OR IN EASEMENTS, WHICH HAVE BEEN GRANTED AND ACCEPTED BY THE CITY OF LEWISTON.
- 34) STORM WATER PIPES SHALL BE P.V.C. POLYVINYL CHLORIDE PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D 3034 SDR 35 OR ASTM F 793. JOINTS FOR PVC PIPE SHALL CONFORM TO ASTM D 3212 USING RESTRAINED GASKETS CONFORMING TO ASTM F477. FITTINGS FOR PVC PIPE SHALL BE INJECTION MOLDED TEES OR FACTORY SOLVENT CEMENTED SADDLE TEES.
- 35) STORM WATER LINE CONNECTIONS TO TRUNKS, MAINS, LATERALS, OR SIDE SEWERS SHALL BE LEFT UNCOVERED UNTIL AFTER THE CITY ENGINEER HAS INSPECTED AND APPROVED THE WORK. AFTER APPROVAL OF CONNECTION, THE TRENCH SHALL BE BACKFILLED AS SPECIFIED.
- 36) MANHOLES SHALL BE CONSTRUCTED IN CONFORMANCE WITH STATE OF IDAHO STANDARD DRAWINGS.
- 37) "TIE-INS" TO EXISTING MANHOLES SHALL INCLUDE THE CONSTRUCTION OF NEAT, NEW, WATER-TIGHT INVERTS, AS APPROVED BY THE CITY ENGINEER.
- 38) FINAL ADJUSTMENT AND GROUTING OF THE STORM DRAIN MANHOLE RINGS SHALL BE DONE BY THE PAVING CONTRACTOR.
- 39) SPECIAL INSPECTION IS REQUIRED FOR SOIL COMPACTION, WATER LINE, STORM DRAIN, BASE MATERIAL, AND ASPHALT. UPON COMPLETION, THE ENGINEER SHALL PROVIDE AS-BUILT DRAWINGS, COMPLETE WITH ELEVATIONS, TO THE LEWISTON CITY ENGINEER.
- 40)

LEGEND

PROPOSED	EXISTING
XXX	XXX
PROPOSED CONTOUR	EXISTING CONTOUR
XXX	XXX
PROPOSED GRADE	EXISTING GRADE
PROPOSED MONUMENT	EXISTING MONUMENT
PROPOSED A.C.	EASEMENT
8"	8"
PROPOSED WATER	EXISTING WATER
O/P	O/P
BURIED POWER LINE	OVERHEAD POWER
LOT LINE	LOT LINE
PROPERTY LINE	PROPERTY LINE
CENTER LINE OF STREET	CENTER LINE OF STREET
GAS	FND. 1/2" REBAR LS#14485
SET 5/8" x 30" LONG REBAR W/CAP "LS 10162"	EXISTING STORM DRAIN MANHOLE
PROPOSED STORM DRAIN MANHOLE	EXISTING CATCH BASIN
PROPOSED CATCH BASIN	EXISTING GATE VALVE
PROPOSED GATE VALVE	EXISTING THRUST BLOCK
PROPOSED THRUST BLOCK	EXISTING FIRE HYDRANT
PROPOSED FIRE HYDRANT	EXISTING WATER METER
PROPOSED WATER METER	UTILITY POLE AND ANCHOR
UTILITY POLE AND ANCHOR	
	EXISTING A.C.
PROPOSED A.C.	
WATER LINE FITTINGS	

VICINITY MAP



INSPECTION ITEMS

ITEM	INSPECTOR/CO.	DATE INSPECTED	INITIAL
1. SOILS COMPACTION - TRENCH BACKFILLING - STRUCTURAL FILLS	WW ENGINEERING "		
2. WATER MAINS - ALIGNMENT AND GRADE - JOINTS ALIGNMENT - THRUST BLOCKS - HYDROSTATIC PRESSURE - CHLORINATION/BACTERIA	WW ENGINEERING "		
3. STORM DRAIN MAINS - ALIGNMENT AND GRADE - JOINTS ALIGNMENT - MANHOLES	WW ENGINEERING "		
3. ROAD - SUBGRADE COMPACT - BASE COMPACT - ASPHALT COMPACT	WW ENGINEERING "		

NOTE: SPECIAL INSPECTIONS TO BE COORDINATED BY CONTRACTOR AND PERFORMED BY THE COMPANIES LISTED ABOVE. 24 HOUR NOTICE TO THESE COMPANIES IS REQUIRED PRIOR TO INSPECTION.

AGENCY TELEPHONE NUMBERS

CITY OF LEWISTON ENGINEERING DEPARTMENT CONTACT: SHAWN STUBBERS	(208) 746 1316
CITY OF LEWISTON COMMUNITY DEVELOPMENT CONTACT: JUAN CABALLERO	(208) 746 1319
AVISTA UTILITIES CONTACT: BILL SPEARS	(208)-798-1472
L.O.I.D	(208) 746 8235
QWEST CORPORATION CONTACT: KIM BIGGS	(208) 798-0607
CABLE ONE CONTACT: LESS SHROVER	(208) 746 3325
UNDERGROUND UTILITY LOCATE (CALL 48 HOURS BEFORE YOU DIG)	1-800-342-1585
DEVELOPER: REGAN HANSEN	
CONTACT: REGAN HANSEN	(208) 790 0047

SHEET INDEX

SHEET 1 OF 8	COVER PAGE & NOTES
SHEET 1 OF 8	SITE
SHEET 2 OF 8	PROFILES
SHEET 3 OF 8	TEST SITES
SHEET 4 OF 8	STANDARDS
SHEET 5 OF 8	SEWER DETAILS
SHEET 6 OF 8	WATER DETAILS
SHEET 7 OF 8	EASEMENTS
SHEET 8 OF 8	FIRE COVERAGE

RECEIVED
OCT 09 2013

Building Services



CALL
TWO WORKING DAYS
BEFORE YOU DIG
1 800 424 5555

REV. #	DATE	DESCRIPTION

WATER AND SEWER ADDITIONS

RED ROCK CENTER
2981 THAIN GRADE ROAD

LEWISTON, ID 83501

COVER 2981

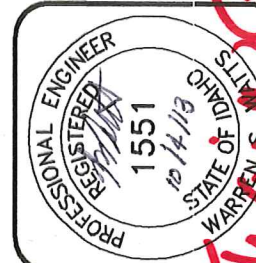
DRAWN BY: WRW	CHECKED BY: WSW
DESIGNED BY: WSW	
DATE: 07/31/2013	
LAST REV: 10/04/2013	
PROJECT NO.: 13-037	
SHEET 1 OF 1	

WW ENGINEERING

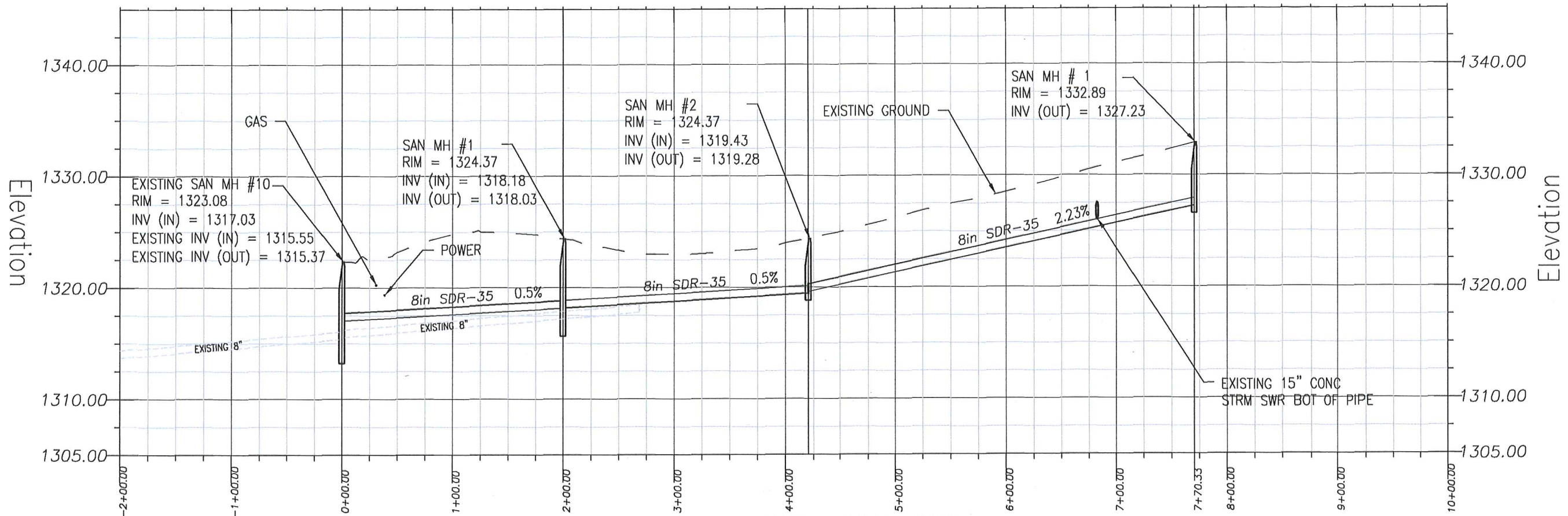
CIVIL ENGINEERING
* PLANNING & DESIGN
* WATER & SEWAGE SYSTEMS
* ENVIRONMENTAL SERVICES

PHONE (208) 780 9725

* ROADS & SUBDIVISIONS
* RESIDENTIAL & COMMERCIAL
* STRUCTURES

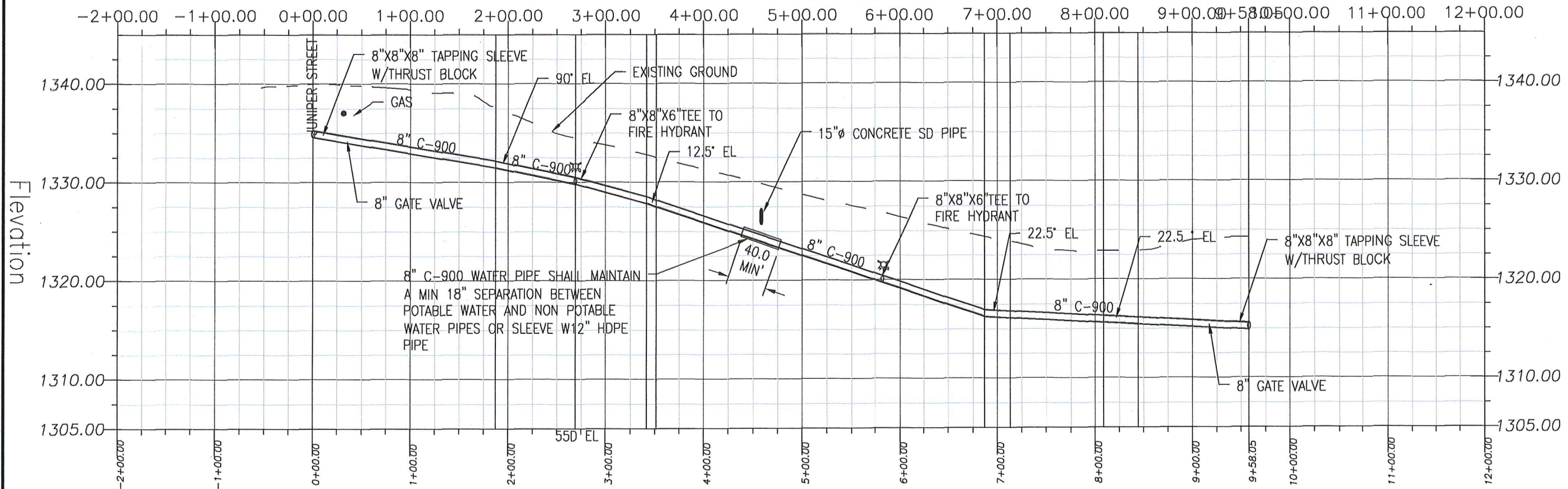


Handwritten notes and signatures in red ink, including 'Resub' and '1888'.



RED ROCK CENTER SEWER PROFILE

SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL



RED ROCK CENTER WATER PROFILE

SCALE: 1" = 110' HORIZONTAL
1" = 9' VERTICAL

WW ENGINEERING

CIVIL ENGINEERING

PHONE (509) 780-9725

* ROADS & SUBDIVISIONS
 * RESIDENTIAL & COMMERCIAL STRUCTURES
 * PLANNING & DESIGN
 * WATER & SEWAGE SYSTEMS
 * ENVIRONMENTAL SERVICES

#13-000005



WATER AND SEWER ADDITIONS

RED ROCK CENTER

2981 THAIN GRADE ROAD

LEWISTON, ID 83501

#13-000005

DRAWN BY: WRW	CHECKED BY: WSW
DESIGNED BY: WSW	
DATE: 07/31/2013	
LAST REV: 10/04/2013	
PROJECT NO.: 13-037	
SHEET 2 OF 8	

VERTICAL REQUIREMENTS:

ZONE 1: POTABLE LINE 18" OVER NON-POTABLE LINE

Potable water and non-potable mains and service lines must be separated by at least 18 inches and

One full, uncut length of non-potable pipe must be centered on the crossing so that the joints are as far as possible from the crossing.

ZONE 2: POTABLE LINE < 18" OVER NON-POTABLE LINE

One full, uncut length of non-potable pipe must be centered on the crossing so that the joints are as far as possible from the non-potable line and either

a) Non-potable line must be constructed to potable water pipe standards and pressure tested for water tightness for a horizontal distance of ten feet on both sides of the crossing.

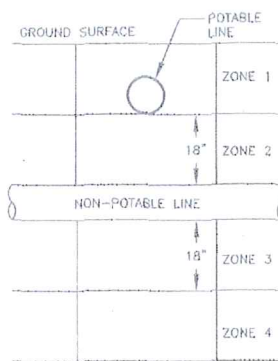
b) Non-potable or potable line must be cased in a larger diameter carrier pipe for a horizontal distance of ten feet on both sides of the crossing, with no joints.

ZONE 3: POTABLE WATER < 18" UNDER NON-POTABLE LINE

Some requirements as Zone 2 except the non-potable line must also be supported above the crossing to prevent settling.

ZONE 4: POTABLE WATER 18" UNDER NON-POTABLE LINE

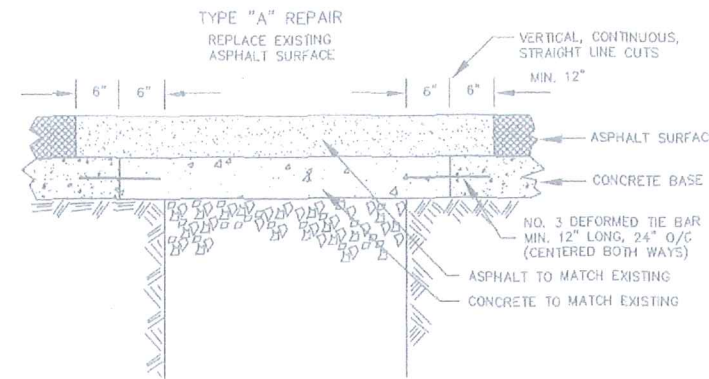
Some requirements as Zone 1 except the non-potable line must also be supported above the crossing to prevent settling.



GENERAL NOTES:

- Sewage force mains shall have at least ten feet of horizontal separation and eighteen inches of clearance from potable water mains. Zone 2 and 3 placements are prohibited.
- Separation requirements also apply to potable and non-potable service lines controlled by the system owner and extending the main line to the property line, service meter, or cleanout.

CITY OF LEWISTON, IDAHO PUBLIC WORKS DEPARTMENT	
POTABLE & NON-POTABLE WATERLINE SEPARATION	
APPROVED FOR PUBLICATION <i>[Signature]</i> City Engineer	DWG. NO. 4-1



NOTE:

- COMPLETED PATCH SHALL BE FLUSH AND SMOOTH WITH EXISTING BITUMINOUS SURFACE.
- CONCRETE PAVEMENT SHALL BE SPECIFIED BY CITY ENGINEER.

CITY OF LEWISTON, IDAHO PUBLIC WORKS DEPARTMENT	
CONCRETE STREET REPAIR DETAIL	
APPROVED FOR PUBLICATION <i>[Signature]</i> City Engineer	DWG. NO. 1-9

Standard Water Comments

Minimum water line size shall be 8". Oversizing of water lines may be required to provide sufficient volumes of water to the system matrix. Materials shall be ductile iron or C-900.

Main water lines must be looped and placement shall avoid easements except when necessitated by land environs. Easements shall be a minimum of 20'. Water lines shall be offset in the easement.

All work shall be performed in accordance with IDAPA and all State codes must be followed coupled with the City of Lewiston Water Standards.

Pressure reducing valves are required on all service lines.

Backflow assemblies are required on all irrigation systems and other identified hazards such as DDCVA. Backflow assemblies shall be installed as per standards and shall be accessible to permit testing.

Hydrants shall be spaced at a maximum of 500' in residential areas and 300' in commercial areas. All hydrants shall have valves on the hydrant branch line. Hydrants shall have two, 2 1/2" ports and one, 4 1/2" steamer port.

Service lines to the meters shall be "K" copper. Developer shall install the service line and meter setting to include all materials except the meter which shall be provided by the City. Meters shall be placed to avoid conflict with other utilities, driveway locations, and shall be in the right-of-way.

All hydrants shall be thrust blocked or retained and all fittings shall be thrust blocked.

Pressure reducing pits may be required due to elevation, different pressure zone tie-ins, etc.

Valves shall be placed on all branches of tees or crosses. A valve is required at a minimum of every 1000' of main water line.

Pressure testing of water lines shall be performed at 1.5 times the highest working pressure but no less than 150 psi in the general area of the new line. The design engineer or other qualified firm shall certify the test. This certification shall be reported to the City Engineer. The City Engineer will inform the water division. The water division will contact the contractor to schedule water main disinfection and bacterial testing. Two consecutive negative bacterial tests 24 hours apart must be completed before the water line can be connected to the city system. This creates a minimum of 48 hours after chlorination before the line can be connected. The Water Division, to maintain the integrity of the system, shall witness the final tie-in. Note: a fire inspector must witness a fire line pressure test. Fire line tests shall be at 200 psi. The City will charge a fee for chlorination and bacterial testing.

The water division will only tap fire line connections and the owner will furnish all materials and labor including thrust blocking. Fire lines will require backflow detector check assemblies.

Revised 1-15-2013

New Water Main Construction Procedures

(Please attach to all new water developments)

New water mains that are installed, whether expanding a distribution system or adding a fire line, must be physically separated from the existing system until satisfactory flushing, pressure testing, disinfection, and bacteriological sampling has been completed. The new water main must be considered contaminated and the chlorine concentration used for disinfection (minimum 25 mg/L) makes the water non-potable.

The City will perform the tap only for these new water main connections at a rate determined on each individual tap. The contractor to complete this work will furnish all materials, labor and supplies.

An approved backflow prevention assembly is required on the supply water line when filling the new water main during disinfection and flushing. This prevents the new main's contaminated water from entering the existing system. The backflow prevention assembly and supply piping must be removed during hydrostatic pressure testing.

After satisfactory bacteriological sample results are obtained from the new water main, a section of connecting pipe must be installed between the new section and the existing system. The contractor will be responsible for this final connection and the City will inspect this work. Before installation, the interiors of all pipes and fittings used to make the connection must be swabbed or sprayed with a 1% hypochlorite solution.

The contractor is responsible for flushing and pressure testing the new water main. Contact the Plumbing Inspector at 208-746-1319 for a pressure test or the Water Division at 208-743-7461. These tests must be completed and approved before the Water Department will begin disinfection procedures.

Upon completion and approval of the pressure test by the project inspector, which shall be a professional engineer inspecting all water main projects and which shall be a fire department inspector and a city plumbing inspector for all fire line connections, the inspector will notify the City engineering division. The engineering division will then notify the City water division to proceed with the coordination for the disinfection and sampling of the new water main. NOTE: No hose or fire hydrant shall be used in collection of samples. A combination blow-off and sampling tap is required. The disinfection and bacteriological testing of the new main shall adhere to AWWA Standards (AWWA C651-99).

The number of water samples taken will depend upon the length and number of branches of the new main but a minimum of two samples must be taken. These samples shall be taken from each end of the new water main. Two consecutive samples at least twenty-four hours apart must be reported and display negative bacteriological results. Results from bacteriological testing will be available approximately 26 hours after the last sample is taken. The City will charge a fee for chlorination and bacterial testing.

Revised 1-15-2013

Wastewater Plan Review Comments

Date:

Permit #:
Job Address:
Project Title:



Wastewater Dept. Comments Issued By:
David M. Six - Water/Wastewater Systems Mgr
P. O. Box 617
Lewiston, ID 83501
Telephone: (208) 743-7461
Fax: 1-208-750-1924
E-mail: dsix@cityoflewisston.org

Industrial Pretreatment Comments Issued By:
Art Ruiz - Environmental Program Supervisor
3106 N & S Highway
Lewiston, ID 83501
Telephone: (208) 750-1195
Fax: 1-208-750-1198
E-mail: aruiz@cityoflewisston.org

Wastewater Department Standard Comments:
The following comments are standard to all reviews and must be conformed to during and after construction:

- All floor drains subject to backflow or backpressure shall be equipped with an approved backwater valve installed in the drains at the property owner's expense. (Refer to City Code, Chapter 36, Art. III. Wastewaters, Division 1, Sec. 36-43 (b)).
- A separate and independent building wastewater line shall be provided for each building for connection with the Public wastewater system, except townhouses or condominium developments, which may connect to the main line with a single 6" service line. No service lines shall connect into manholes. Manholes shall not have rungs.
- No person shall construct, extend, relay, repair or connect a building wastewater line without first obtaining a Permit. Each connection to the City Wastewater System shall be a minimum of a 4" line and shall be inspected and approved by a City inspector. Wastewater mains shall be video inspected and air tested before acceptance.
- No structure shall be constructed on any Public wastewater easement. Wastewater easements shall be constructed and maintained so as to allow permanent access for maintenance equipment to maintain wastewater lines located in said easement. (Twenty (20) feet required)
- Storm water, including roof runoff is prohibited from discharge to the City wastewater system unless specifically authorized in writing by the Water Wastewater Systems Manager.
- IDAPA and State codes must be followed.

Industrial Pretreatment Program Standard Comments:

- Wastewater must be disposed of in accordance with City Code, Division 3: Industrial Pretreatment Regulations For Existing and New Sources of Pollution and the Uniform Plumbing Code requirements.
- The installation of floor drains, trench drains etc. connecting to the Sanitary or Storm Wastewater Lines are prohibited in work, process or parking areas of industrial, commercial or residential shops, pole buildings, garage or storage type facilities where chemicals or other substances prohibited from discharge to the City Wastewater Lines are used, handled, stored, routinely spilled or may be accidentally spilled. Exception: Floor drains may be allowed in cases where it can be demonstrated to the satisfaction of the Industrial Pretreatment Section that such drains are an integral and or necessary part of the manufacturing, process or service operation performed at the facility. Where a floor drain is approved for installation and connection to the Sanitary Wastewater Line, the installation of an appropriate pretreatment device or system may be required.
- Pretreatment Regulations may apply to your facility based on the nature of the wastewater you generate or the facility's potential to spill prohibited substances to the City Wastewater System. If you have any questions, please contact the City's Industrial Pretreatment Section at 208-750-1195.

Standard Wastewater and Pretreatment Comments 1-15-2013.docx

WATER AND SEWER ADDITIONS
RED ROCK CENTER
2981 THAIN GRADE ROAD
LEWISTON, ID 83501
13-00005 SITE 2981

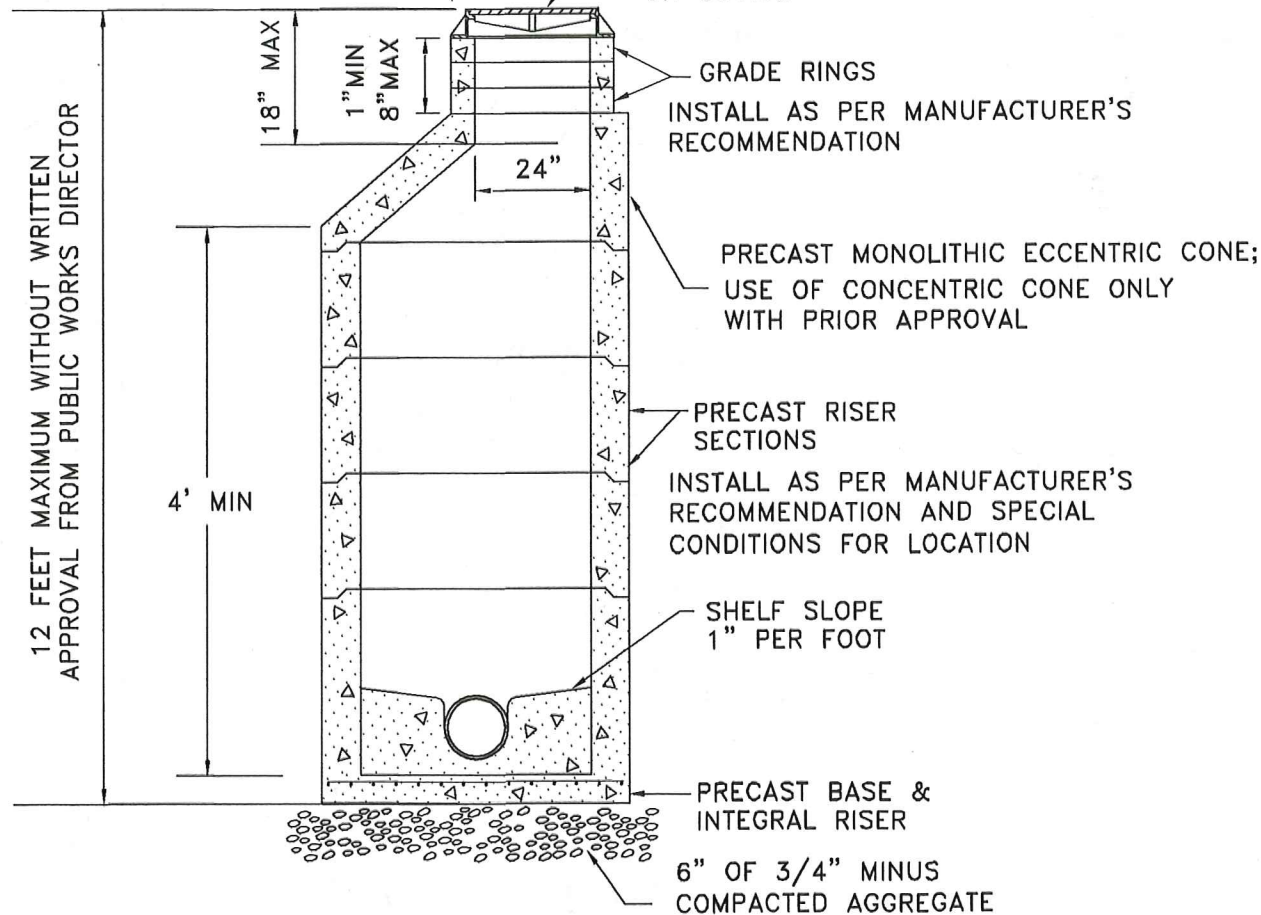
DRAWN BY: WRW	CHECKED BY: WSW
DESIGNED BY: WSW	
DATE: 07/31/2013	
LAST REV: 10/04/2013	
PROJECT NO.:13-00005	
SHEET 4 OF 8	



WW ENGINEERING
PHONE (509) 780 9725
ROADS & SUBDIVISIONS
RESIDENTIAL & COMMERCIAL
STRUCTURES
CIVIL ENGINEERING
PLANNING & DESIGN
WATER & SEWER SYSTEMS
ENVIRONMENTAL SERVICES

SEE CONCRETE MANHOLE COLLAR DETAIL, DWG NO. 5-6

SEE MH FRAME & COVER, DWG NO. 5-7
VERIFY "SEWER" UTILITY LABEL LETTERING ON COVER.



GRADE RINGS
INSTALL AS PER MANUFACTURER'S RECOMMENDATION

PRECAST MONOLITHIC ECCENTRIC CONE;
USE OF CONCENTRIC CONE ONLY WITH PRIOR APPROVAL

PRECAST RISER SECTIONS
INSTALL AS PER MANUFACTURER'S RECOMMENDATION AND SPECIAL CONDITIONS FOR LOCATION

SHELF SLOPE
1" PER FOOT

PRECAST BASE & INTEGRAL RISER

6" OF 3/4" MINUS COMPACTED AGGREGATE

NOTES:

1. ALL UNITS TO MEET OR EXCEED THE REQUIREMENTS OF ASTM C478/AASHTO M199. JOINTS SHALL BE RUBBER GASKET CONFORMING TO ASTM C443 AND SHALL BE GROUTED FROM THE INSIDE. LIFT HOLES SHALL BE GROUTED FROM THE OUTSIDE AND INSIDE OF THE MANHOLE.
2. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM
3. CONNECTION TO MANHOLE SHALL BE MADE USING RESILIENT CONNECTOR CONFORMING TO ASTM C-923 SUCH AS KOR-N-SEAL, A-LOK OR APPROVED EQUAL.
4. RISERS, UNIT SECTIONS AND THE FRAME SHALL NOT BE MORE THAN ONE INCH OUT OF ALIGNMENT WITH THE MANHOLE BASE; PIPES SHALL BE FLUSH WITH INSIDE EDGE OF MANHOLE.
5. PRESSURE TESTING IS REQUIRED FOR ALL INSTALLATIONS.
6. SEE DWG NO 5-6 FOR CONCRETE MANHOLE COLLAR.

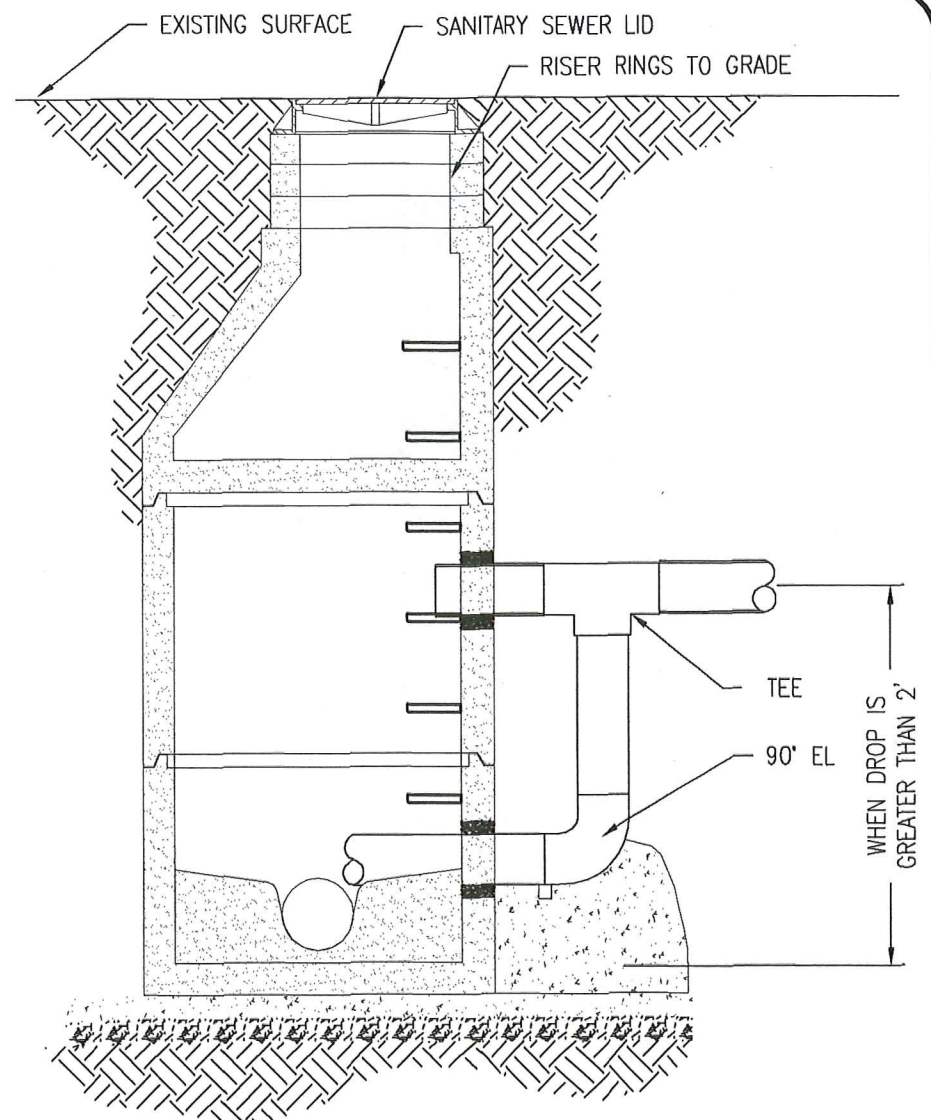
WILBERT PRECAST MANHOLE

N.T.S.

ALL WASTEWATER INSTALLATIONS SHALL CONFORM TO CITY OF LEWISTON STANDARDS S 1-5

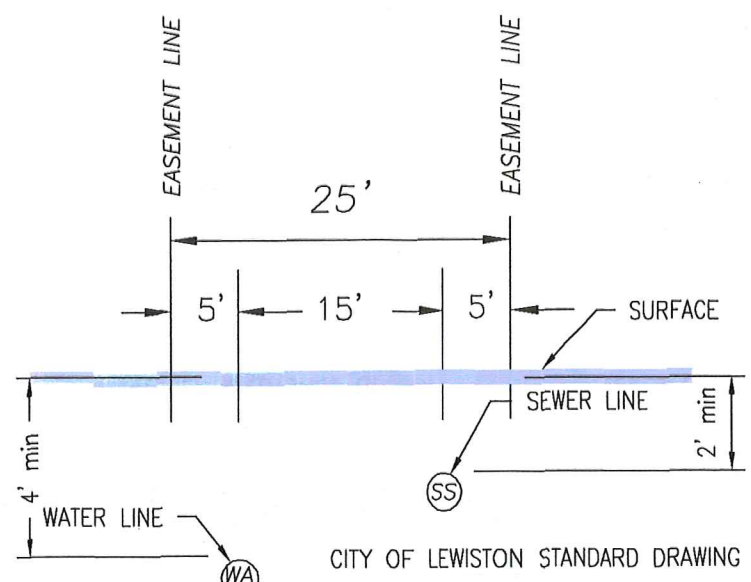
SANITARY SEWER DETAILS

N.T.S.



DROP MANHOLE

N.T.S.



EASEMENT LAYOUT

N.T.S.

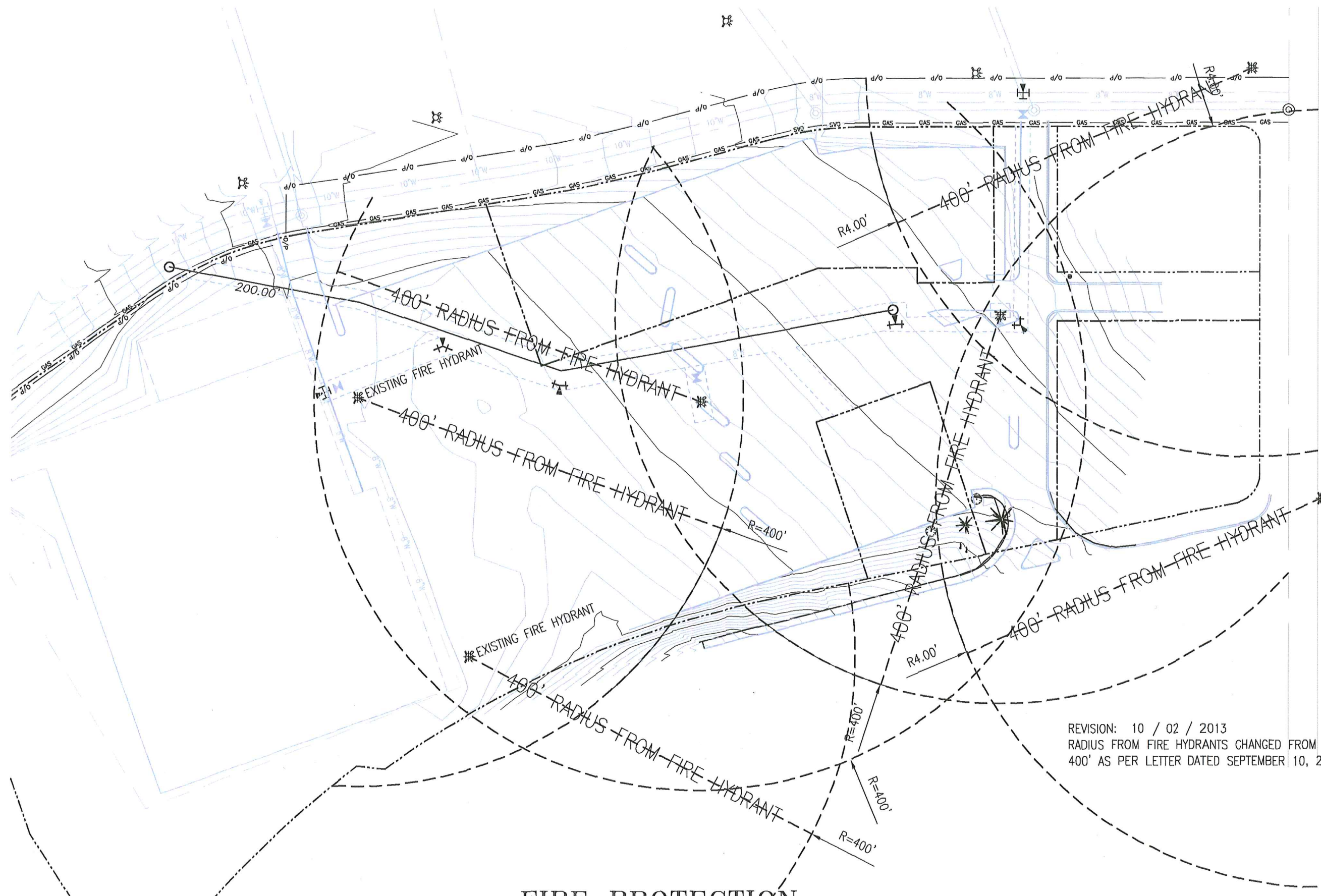
CITY OF LEWISTON STANDARD DRAWING NO. 1-1

WW ENGINEERING
CIVIL ENGINEERING
PHONE (509) 780-9725
ROADS & SUBDIVISIONS
RESIDENTIAL & COMMERCIAL
STRUCTURES
PLANNING & DESIGN
WATER & SEWER SYSTEMS
ENVIRONMENTAL SERVICES

PROFESSIONAL ENGINEER
REGISTERED
1551
STATE OF WASHINGTON
12/4/12
WILBERT

WATER AND SEWER SYSTEMS
RED ROCK CENTER
TEST DRILL RESULTS
LEWISTON, ID 83501
DETAILS
13-00005-2981

DRAWN BY: WRW	CHECKED BY: WSW
DESIGNED BY: WSW	
DATE: 07/31/2013	
LAST REV: 10/04/2013	
PROJECT NO.: 13-037	
SHEET 5 OF 8	



FIRE PROTECTION



WW ENGINEERING
 CIVIL ENGINEERING
 * PLANNING & DESIGN
 * WATER & SEWER SYSTEMS
 * ENVIRONMENTAL SERVICES
 PHONE (509) 780 9725
 #123456
 * ROADS & SUBDIVISIONS
 * RESIDENTIAL & COMMERCIAL
 * STRUCTURES

PROFESSIONAL ENGINEER
 REGISTERED
 1551
 DATE OF EXPIRY
 10/21/13
 STATE OF WASHINGTON
 WARREN S. [Signature]

WATER AND SEWER ADDITIONS
 RED ROCK CENTER
 2981 THAIN GRADE ROAD
 LEWISTON ID 83601
 FIRE HYDRANT LAYOUT
 15-00025-098

DRAWN BY: WRW	CHECKED BY: WSW
DESIGNED BY: WSW	
DATE: 07/31/2013	
LAST REV: 10/02/2013	
PROJECT NO.:	
SHEET	8 OF 8