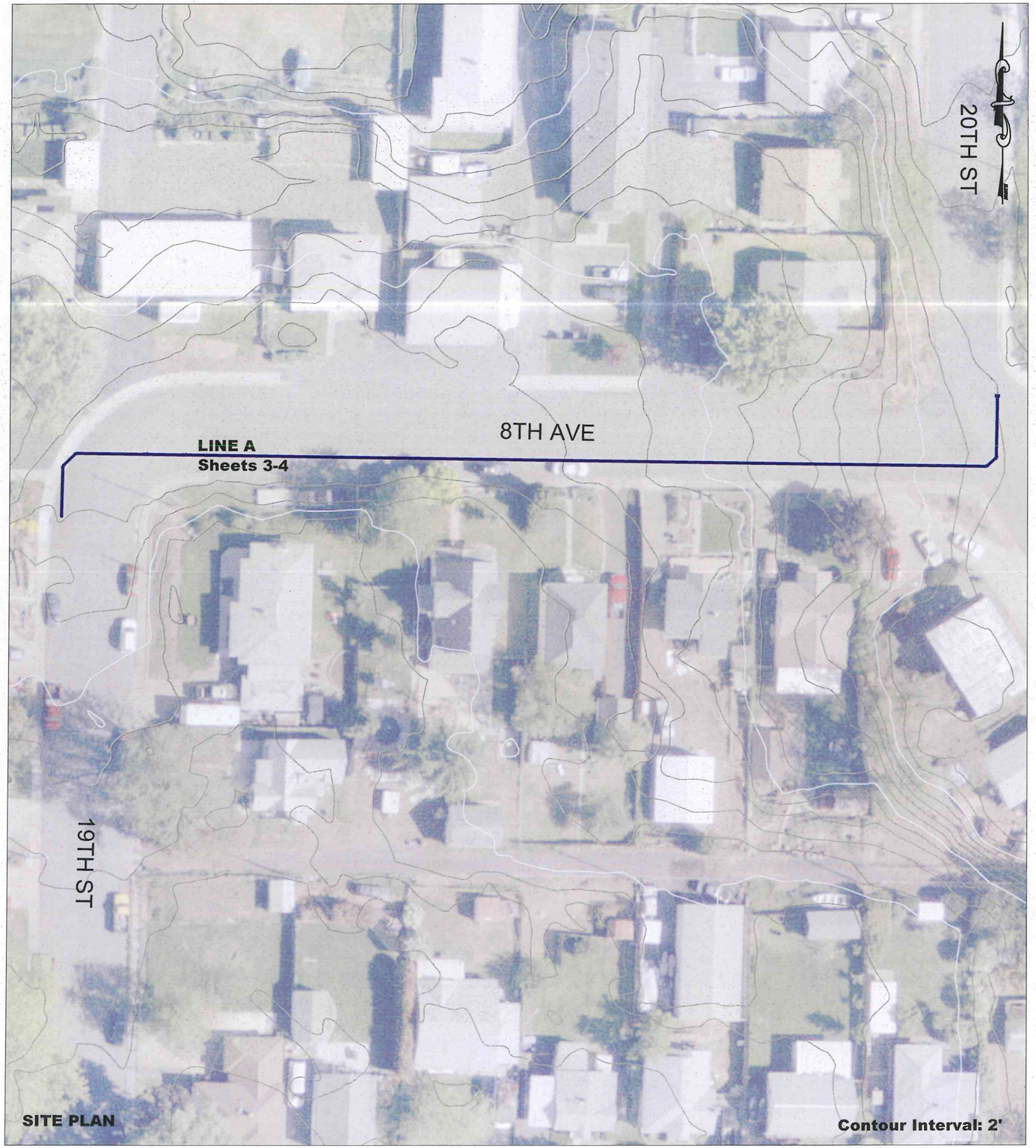
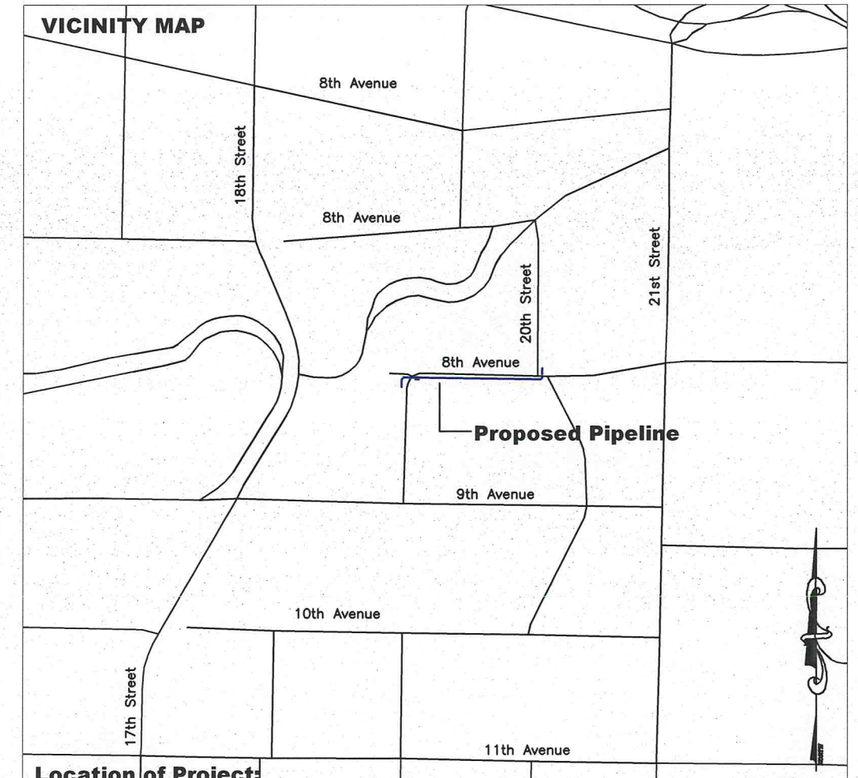


SITE PLAN

Contour Interval: 2'

VICINITY MAP



Location of Project:
Lewiston, Idaho

NO SCALE

SHEET INDEX

1. Site Plan & Vicinity Map
2. Legend & Construction Notes
3. Plan & Profile - Line A
4. Plan & Profile - Line A
5. Phasing Plan

Approved
City of Lewiston
Engineering - Public Works Dept.
By [signature]
Date 5/8/14
as QLPE

PROFESSIONAL ENGINEER
REGISTERED
10971
4/28/14
STATE OF IDAHO
SCOTT MACEY

NO.	DATE	FILENAME	DESCRIPTION	BY
1	5/1		DELETE VALVE	SM

REVISIONS

DESIGNED BY: S.M.	SCALE: 1"=50' (11x17)		
DRAWN BY: S.M.	DATE: April 2014		
CHECKED BY: D.S.	DRAWING NO.: siteplan.dwg		
JOB NO.:	SHEET 1 OF 5		

WATER DEPARTMENT

SITE PLAN & VICINITY MAP

8th Avenue

Water Main Replacement

CITY OF LEWISTON 1861

CITY OF LEWISTON
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
215 D STREET LEWISTON, ID 83501
(208) 746-1316

LEGEND

EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM
		Deciduous Tree	— P —		Power
		Shrub	— T —		Telephone
		Traffic Sign	— SD —		Storm Drain
T		Telephone Riser	— SS —		Sanitary Sewer
		Utility Pole			Survey Control Point
		Utility Pole Anchor			Monument
SV		Gas Meter or Gas Valve	— x —		Wire Fence
		Catch Basin			Right-of-Way or Property Line
		Storm Drain Manhole			
		Sanitary Sewer Manhole			Edge of Pavement
		Water Meter Setting			Curb & Gutter
		Water Valve			
		Fire Hydrant			
	PRV	Pressure Reducing Valve (PRV) Station			
		Remove & Replace (Fire Hydrant, Water Meter Setting, or Valve)			
		Remove (Fire Hydrant, Water Meter Setting, or Valve)		A 1	Detail or Section Designation Sheet Number on Which Detail Appears
— W —		Water			
— GAS —		Gas		XX	Component Location Reference
— CTV —		Cable TV		XX	Thrust Block Bearing Area

CONSTRUCTION NOTES

1. UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS IN FIELD PRIOR TO EXCAVATION. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR OR UTILITY COMPANY, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE UTILITY COMPANY. CONTRACTORS SHALL BE RESPONSIBLE TO CONTACT THE LOCAL ONE-CALL SYSTEM AT 811 AT LEAST TWO DAYS PRIOR TO ANY DIGGING.

2. UTILITY FORCES MAY ENGAGE IN MOVING, RECONSTRUCTING OR INSTALLING, OR MAINTAINING UTILITY FACILITIES, AND THE CONTRACTOR SHALL COOPERATE WITH THESE FORCES AND CONDUCT OPERATIONS IN SUCH A MANNER AS TO AVOID ANY DELAY TO WORK BEING PERFORMED BY OTHER FORCES. THE CONTRACTOR SHALL JOIN HIS WORK WITH THE WORK OF THE OTHERS AND PERFORM THE WORK IN PROPER SEQUENCE AND WITH JUDICIOUS HANDLING OF FORCES AND EQUIPMENT.

3. SURVEYING AND CONSTRUCTION STAKING FOR SEWER AND WATER MAIN CONSTRUCTION WILL BE PERFORMED BY THE CITY OF LEWISTON. CONTRACTOR SHALL RETAIN AND PROTECT CONSTRUCTION STAKING, AND SHALL NOTIFY THE ENGINEER OF ANY ERRORS.

4. THE NEW WATER MAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND THE CITY OF LEWISTON STANDARD DRAWINGS. ALL WORK SHALL ALSO BE ACCORDANCE WITH THE SPECIFICATIONS OF THE 2012 IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION. ALL WORK SHALL BE SUBJECT TO ACCEPTANCE BY THE CITY OF LEWISTON PURSUANT TO THE ENGINEERING DEPARTMENT'S CURRENT INSPECTION CHECKLIST.

5. THE NEW WATER MAIN SHALL BE CONSTRUCTED IN THE SEQUENCE INDICATED BY THE PHASING PLAN, UNLESS OTHERWISE DIRECTED.

6. ALL TRENCHES AND EXCAVATED AREAS SHALL BE BACKFILLED TO FINISH GRADE WITH CRUSHED AGGREGATE BACKFILL IN ACCORDANCE WITH CITY OF LEWISTON STANDARD DRAWING 1-7. EXCESS AGGREGATE SHALL BE REMOVED PRIOR TO PAVEMENT REPLACEMENT.

7. ALL WATER MAINS SHALL BE INSTALLED WITH MINIMUM HORIZONTAL SEPARATION OF 10' BETWEEN THE WATER AND THE SANITARY OR STORM SEWER MAINS AND IN COMPLIANCE WITH CITY OF LEWISTON STANDARD DRAWING 4-1.

8. THRUST BLOCKS SHALL BE INSTALLED AT ALL FITTING LOCATIONS SPECIFIED BY CITY STANDARD DRAWING 4-4. THRUST BLOCKS SHALL BE CONSTRUCTED TO SIZES BASED ON ALLOWABLE SOIL STRESS OF 2000 PSI. ALL MECHANICAL JOINTS 10" AND SMALLER SHALL BE EQUIPPED WITH RING-TYPE GRIP RESTRAINT DEVICES.

9. THE CONTRACTOR SHALL PRESSURE TEST THE NEW WATER MAIN IN ACCORDANCE WITH THE SPECIFICATIONS AND AWWA C600.

10. EXCEPT AS REQUIRED IN THE SPECIFICATIONS, THE CONTRACTOR WILL NOT BE REQUIRED TO DISINFECT NEW WATER MAINS; THE CONTRACTOR SHALL INSTALL FITTINGS AND APPURTENANCES AS REQUIRED BY THE OWNER FOR DISINFECTION. THE CITY OF LEWISTON WATER DEPARTMENT WILL THEN PERFORM SYSTEM DISINFECTION AND ALL THE BACTERIOLOGICAL TESTING AS INDICATED BY THE PHASING PLAN.

11. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. ALL RESTORATION OF PAVEMENT, SIDEWALK, CURB, AND GUTTER SHALL BE IN CONFORMANCE WITH THE CITY OF LEWISTON STANDARD DRAWINGS AND THE SPECIFICATIONS OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION. ALL RESTORATION SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

Approved
City of Lewiston
Engineering - Public Works Dept.
By Shawn Stubbers
Date 5/8/14
As QLPE

PROFESSIONAL ENGINEER
SCOTT MACEY
STATE OF IDAHO
4/28/14

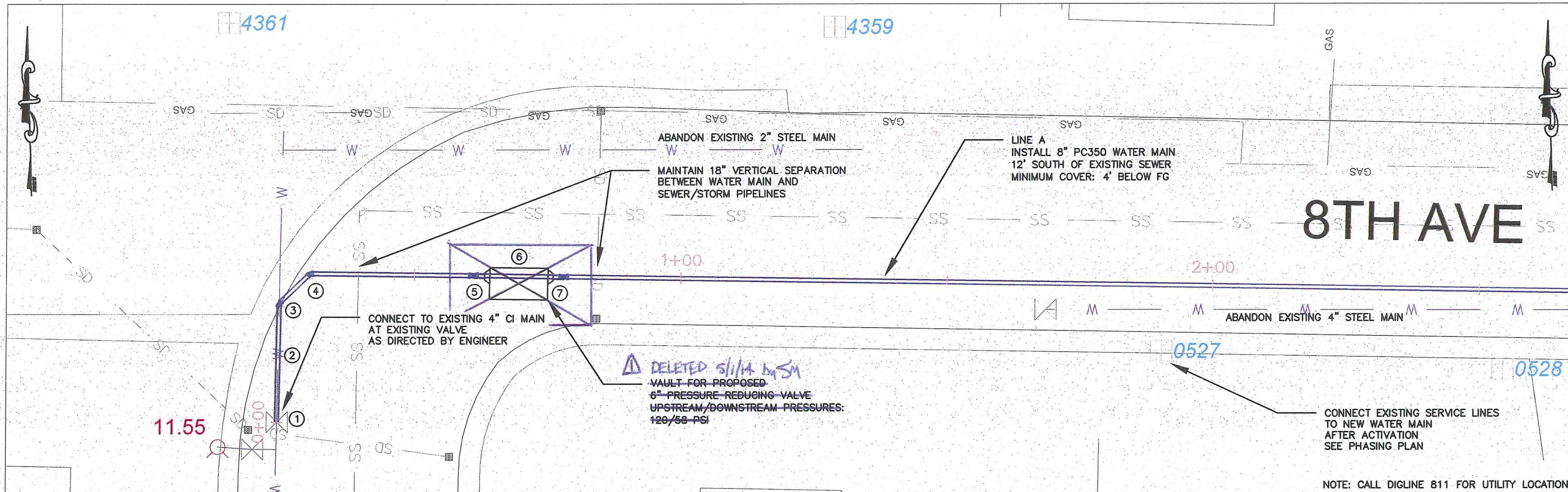
SCALE:	None
DATE:	April 2014
DRAWING NO.:	siteplan.dwg
SHEET	2 OF 5
DESIGNED BY:	S.M.
DRAWN BY:	S.M.
CHECKED BY:	D.S.
JOB NO.:	

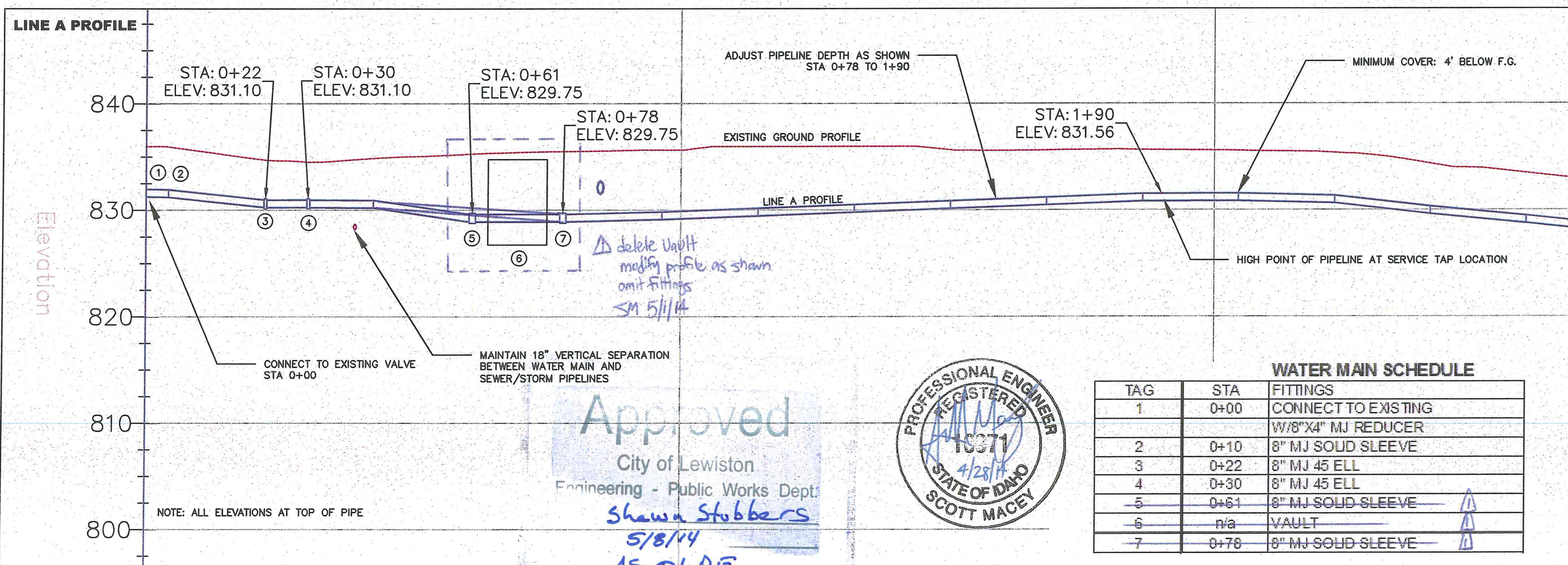
REVISIONS

NO.	DATE	FILENAME	DESCRIPTION	BY

WATER DEPARTMENT
LEGEND & CONSTRUCTION NOTES
8th Avenue
Water Main Replacement

CITY OF LEWISTON
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
215 D STREET LEWISTON, ID 83501
(208) 746-6198





Approved
City of Lewiston
Engineering - Public Works Dept.
Shawn Stubbers
5/8/14
AS QLPE

PROFESSIONAL ENGINEER
REGISTERED
16371
4/28/14
STATE OF IDAHO
SCOTT MACEY

WATER MAIN SCHEDULE

TAG	STA	FITTINGS
1	0+00	CONNECT TO EXISTING
		W/8"X4" MJ REDUCER
2	0+10	8" MJ SOLID SLEEVE
3	0+22	8" MJ 45 ELL
4	0+30	8" MJ 45 ELL
~~5~~	~~0+61~~	~~8" MJ SOLID SLEEVE~~
~~6~~	~~n/a~~	~~VAULT~~
~~7~~	~~0+78~~	~~8" MJ SOLID SLEEVE~~

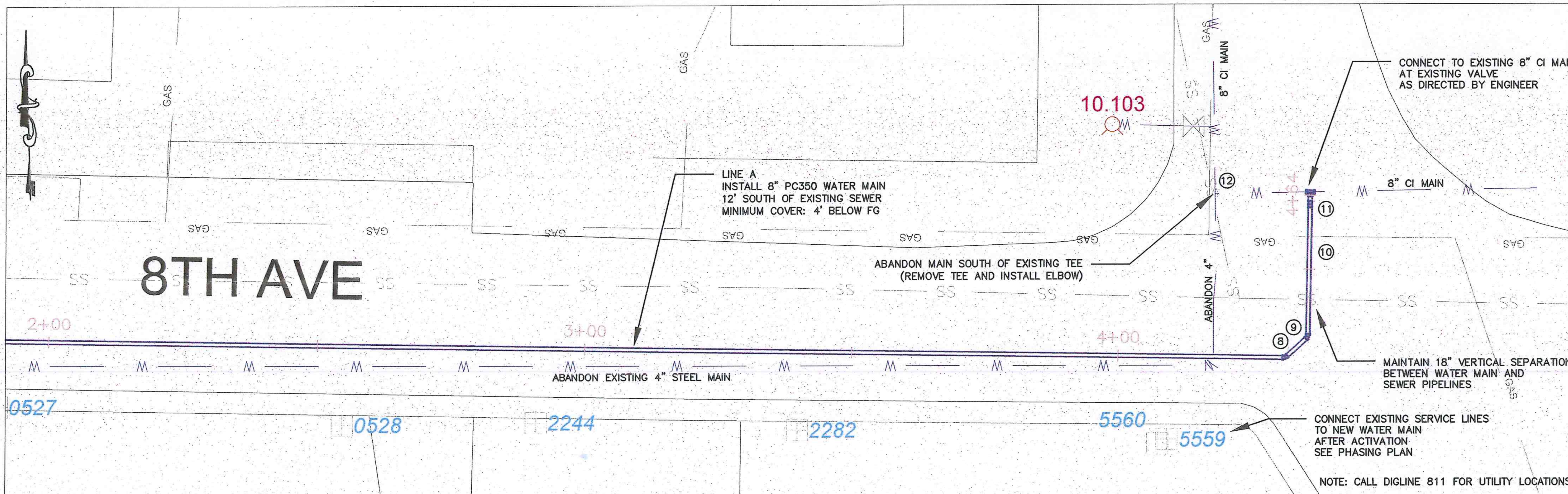
SCALE: 1" = 20'
DATE: April 2014
DRAWING NO.:
SHEET 3 OF 5
DESIGNED BY:
DRAWN BY: SM
CHECKED BY:
JOB NO.:

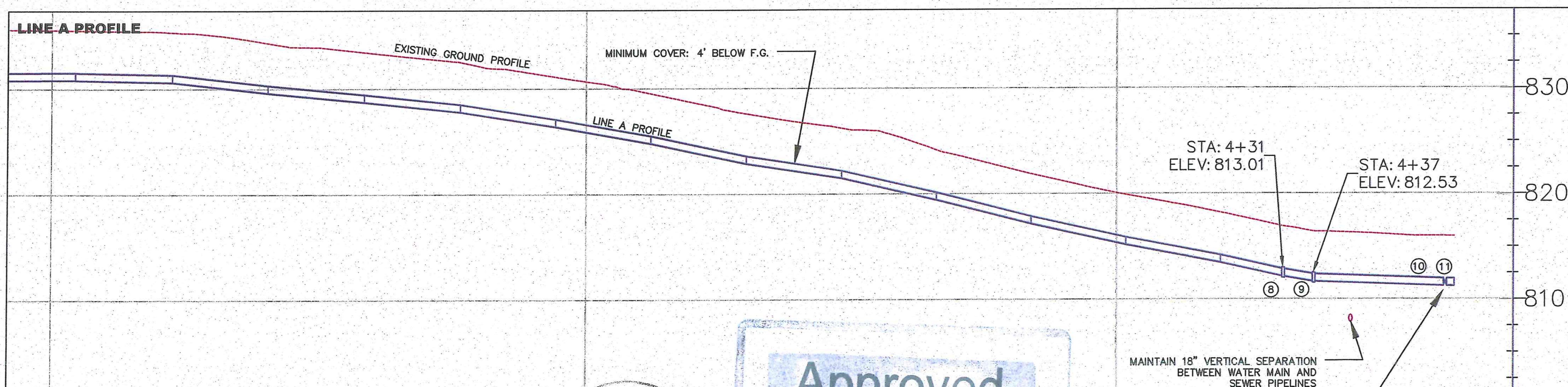
NO.	DATE	FILENAME	DESCRIPTION	BY
1	5/1		DELETE VAULT	SM

PLAN
PLAN & PROFILE
8th Avenue
Water Main Replacement

CITY OF LEWISTON 1861

CITY OF LEWISTON
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
215 "D" STREET LEWISTON, ID 83501
(208) 746-1316 FAX (208) 746-8634





WATER MAIN SCHEDULE

TAG	STA	FITTINGS
8	4+31	8" MJ 45 ELL
9	4+37	8" MJ 45 ELL
10	4+54	8" MJ SOLID SLEEVE
11	4+64	CONNECT TO EXISTING
12	n/a	REMOVE EXISTING TEE
		& INSTALL ELBOW

PROFESSIONAL ENGINEER REGISTERED 10371 4/28/14 STATE OF IDAHO SCOTT MACEY

Approved
City of Lewiston
Engineering - Public Works Dept.
By Shawn Stubbers
Date 5/8/14
AS QLPE

REVISIONS

NO.	DATE	FILENAME	DESCRIPTION	BY

DESIGNED BY: | DRAWN BY: SM | CHECKED BY: | JOB NO.: JOB#

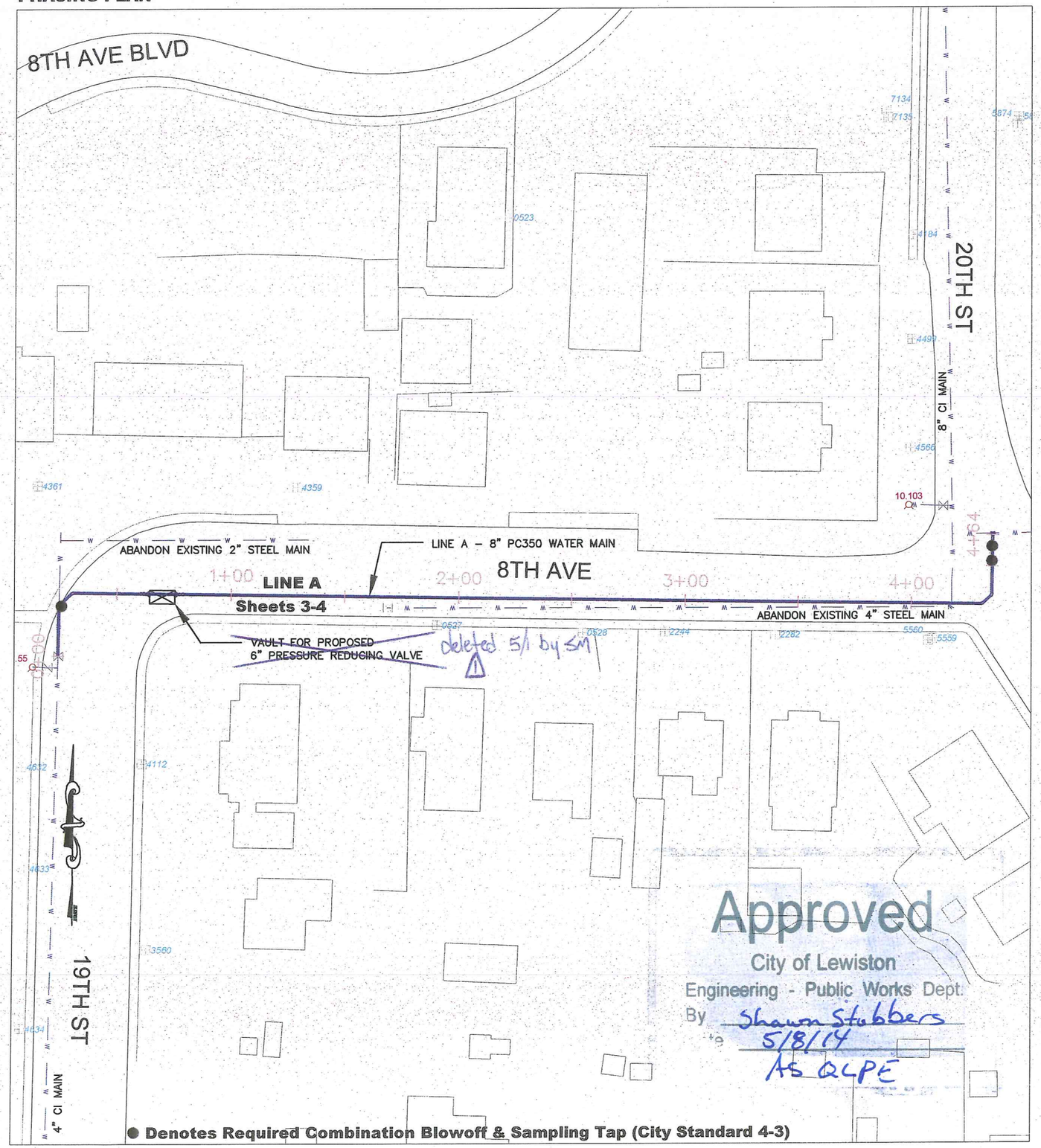
SCALE: 1" = 20' | DATE: April 2014 | DRAWING NO.: | SHEET 4 OF 5

PLAN
PLAN & PROFILE
8th Avenue
Water Main Replacement

CITY OF LEWISTON 1861

CITY OF LEWISTON
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
215 "D" STREET LEWISTON, ID 83501
(208) 746-1316 FAX (208) 357-8634

PHASING PLAN



SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION APPEARING IN THE CONTRACT PLANS SHOWS THE ANTICIPATED METHOD OF CONSTRUCTING THE PLANNED PROJECT WITH THE FEWEST SERVICE INTERRUPTIONS AND PUBLIC INCONVENIENCE. THE CONTRACTOR SHALL CONDUCT THE PROJECT IN THE MANNER PRESENTED UNLESS OTHERWISE AUTHORIZED. IF THE CONTRACTOR'S PROPOSED METHODS DIFFER FROM THE PLANNED SEQUENCE OF CONSTRUCTION, THE CONTRACTOR MUST SUBMIT THE PROPOSED MODIFICATION OF THE PROJECT SEQUENCE TO THE ENGINEER AT LEAST TEN CALENDAR DAYS IN ADVANCE OF THE REQUESTED CHANGE. THE CONTRACTOR SHALL ALSO PRESENT THE REQUIRED CHANGES IN THE PROJECT'S TRAFFIC CONTROL PLANS BY SHOWING THE NECESSARY CONSTRUCTION SIGNS, FLAGGERS, AND OTHER TRAFFIC CONTROL DEVICES REQUIRED FOR THE CHANGE.

HYDROSTATIC TEST

MAKE PRESSURE AND LEAKAGE TESTS ON ALL NEWLY LAID PIPE AND VALVED SECTIONS OF IT. FURNISH ALL NECESSARY EQUIPMENT AND MATERIAL, MAKE ALL TAPS, AND FURNISH ALL CLOSURE PIECES IN THE PIPE AS REQUIRED. THE CITY WILL MONITOR AND APPROVE A SATISFACTORY TEST. PRESSURE TEST PROCEDURES SHALL CONFORM TO AWWA C600 AS HEREINAFTER MODIFIED OR EXPANDED, AND THE REQUIREMENTS OF ANY GOVERNING AGENCY HAVING JURISDICTION. CONDUCT TESTS AFTER THE TRENCH HAS BEEN PARTIALLY BACK–FILLED WITH THE JOINTS LEFT EXPOSED FOR INSPECTION, OR WHEN COMPLETELY BACK–FILLED, AS PERMITTED BY THE CITY. WHERE ANY SECTION OF PIPE IS PROVIDED WITH CONCRETE THRUST BLOCKING, DO NOT CONDUCT PRESSURE TEST UNTIL AT LEAST 2 DAYS HAVE ELAPSED AFTER THE CONCRETE THRUST BLOCKING WAS INSTALLED. IF HIGH–EARLY CEMENT IS USED FOR THE CONCRETE THRUST BLOCKING, THE TIME MAY BE REDUCED TO 1 DAY. AFTER THE PIPE HAS BEEN BACK–FILLED OR PARTIALLY BACK–FILLED, AS HEREIN SPECIFIED, FILL THE PIPE WITH WATER, EXPELLING AIR DURING FILLING, AND PERMIT IT TO STAND FOR A 24–HOUR PERIOD TO ALLOW NATURAL ABSORPTION TO TAKE PLACE. THE PRESSURE TO BE USED IN THE TEST SHALL BE THE GREATER OF 1.5 TIMES THE WORKING PRESSURE OR 150 PSI. BEFORE DISINFECTING, FLUSH ALL FOREIGN MATTER FROM THE PIPELINE. PROVIDE HOSES, PUMPS, TEMPORARY PIPES, DITCHES, ETC., AS REQUIRED TO DISPOSE OF FLUSHING WATER WITHOUT DAMAGE TO ADJACENT PROPERTIES. FLUSHING VELOCITIES SHALL BE AT LEAST 2.5 FPS. FOR LARGE DIAMETER PIPE WHERE IT IS IMPRACTICAL OR IMPOSSIBLE TO FLUSH THE PIPE AT 2.5 FPS VELOCITY, CLEAN THE PIPELINE IN PLACE FROM THE INSIDE BY BRUSHING AND SWEEPING, THEN FLUSH THE LINE AT A LOWER VELOCITY.

DISINFECTION

PIPELINES INTENDED TO CARRY POTABLE WATER SHALL BE DISINFECTED AND TESTED BY THE CITY BEFORE PLACING IN SERVICE. DISINFECTION PROCEDURES SHALL CONFORM TO AWWA C651 AS HEREINAFTER MODIFIED OR EXPANDED, AND THE REQUIREMENTS OF ANY GOVERNING AGENCY HAVING JURISDICTION. TREATED WATER SHALL BE RETAINED IN THE PIPELINE LONG ENOUGH TO DESTROY ALL NONSPORE–FORMING BACTERIA, OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE TO OPERATE ALL NEW VALVES, HYDRANTS AND OTHER APPURTENANCES DURING DISINFECTION TO ASSURE THAT THE DISINFECTING MIXTURE IS DISPERSED INTO ALL PARTS OF THE LINE, INCLUDING DEAD ENDS, NEW SERVICES AND SIMILAR AREAS THAT OTHERWISE MAY NOT RECEIVE THE TREATED WATER. AFTER THE APPLICABLE RETENTION PERIOD, HEAVILY CHLORINATED WATER WILL BE FLUSHED FROM THE NEW WATER MAIN. AFTER FINAL FLUSHING AND BEFORE THE NEW MAIN IS CONNECTED TO THE DISTRIBUTION SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HOURS APART, SHALL BE COLLECTED FROM THE NEW MAIN.

THE CONTRACTOR SHALL PROVIDE TESTING LOCATIONS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. A COMBINATION BLOWOFF AND SAMPLING TAP IS RECOMMENDED, BUT SAMPLES MAY BE TAKEN AT TAPPED SADDLE LOCATIONS PROVIDED THAT THE SADDLE IS USED FOR A SERVICE CONNECTION AT THE COMPLETION OF THE PROJECT. NO HOSE OR FIRE HYDRANT MAY BE USED IN THE COLLECTION OF SAMPLES. ALL SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS. EACH TEST REQUIRES A MINIMUM 24 HOUR PERIOD FOR RESULTS.

PHASE 1

INSTALL BLOWOFF TAP AT VALVE @ 4+64
CONSTRUCT LINE A 4+54 TO 0+22
LEAK TEST AND DISINFECT LINES (1 DAY MIN)
BACTERIOLOGICAL TEST (2 DAYS MIN)
ACTIVATE LINE A @ 4+64
TRANSFER EXISTING SERVICES TO NEW MAIN
CONNECT LINE A @ 0+00
ABANDON DEAD-END LINES AS DIRECTED

PROFESSIONAL ENGINEER REGISTERED 11/21/14 STATE OF IDAHO SCOTT MACEY

NO.	DATE	FILENAME	DESCRIPTION	BY
1	5/1		DEPT VALVE	SM

DESIGNED BY:	S.M.
DRAWN BY:	S.M.
CHECKED BY:	D.S.
JOB NO.:	
SCALE:	1"=100' (11x17)
DATE:	April 2014
DRAWING NO.:	siteplan.dwg
SHEET	5 OF 5

WATER DEPARTMENT
PHASING PLAN
8th Avenue
Water Main Replacement

CITY OF LEWISTON 1861

CITY OF LEWISTON
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
215 D STREET LEWISTON, ID 83501
(208) 746-3616