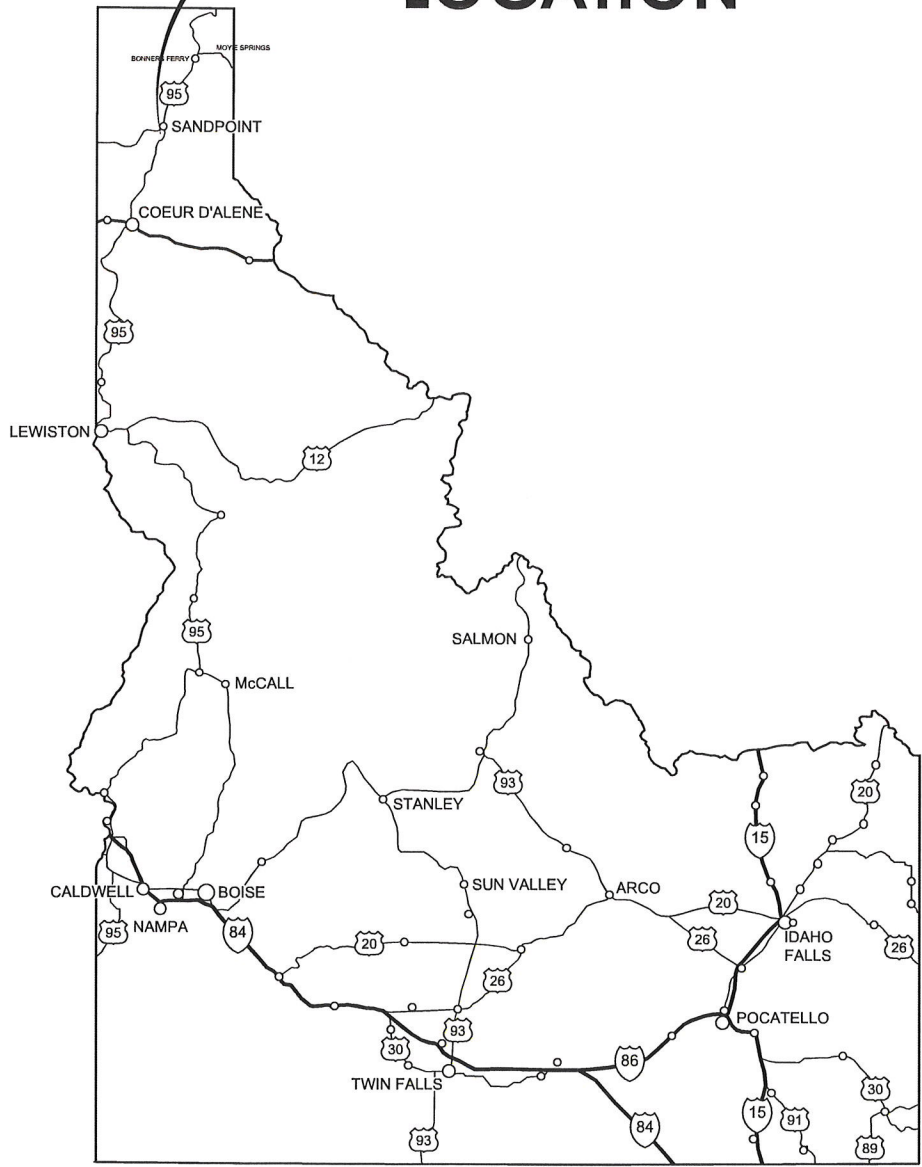


SOUTHSIDE WATER AND SEWER DISTRICT

NEW TANK AND WATERLINE PROJECT

PRELIMINARY ENGINEERING REPORT DRAWINGS

PROJECT LOCATION



APRIL 2024

OWNER
SOUTHSIDE WATER AND SEWER DISTRICT
P.O. BOX D
SANDPOINT, ID 83864
CONTACT: BRAD WHITE
PHONE: 208.255-1041

CIVIL ENGINEER
KELLER ASSOCIATES, INC.
601 SHERMAN AVENUE, SUITE 1
COEUR D'ALENE, ID 83814
CONTACT: KYLE MESCHKO, P.E.
PHONE: 208.758.8601
EMAIL: kmeschko@kellerassociates.com



Know what's below.
Call before you dig.
800.342.1585



KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 758-8601

PRELIMINARY
Not For
Construction

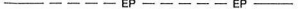
NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied or in any form without the written authorization of Keller Associates, Inc.		

SOUTHSIDE WATER
AND SEWER DISTRICT

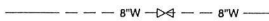
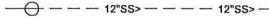
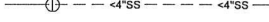
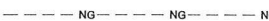
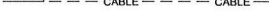
WATER SYSTEM IMPROVEMENTS
TITLE SHEET

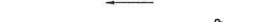
DRAWN: —	CHECK: —
VERIFY SCALE: Scales based on 22"x34" prints. 1-1/2 Inches	
PROJECT NO. 221081-004	PAGE
SHEET NO. G-001	

J:\221081 SOUTHSIDE WATER & SEWER DISTRICT\TO 4 - WATER SYSTEM IMPROVEMENTS\SC_DESN\CAD3_DESIGN\DWG_1000_GENERAL\UC-001.DWG LAST SAVED: 4/18/2024 11:42 AM PRINTED: 4/25/2024 2:53 PM

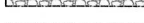
EXISTING TOPOGRAPHY	
	TOPOGRAPHIC CONTOUR
	EDGE OF GRAVEL
	EDGE OF PAVEMENT
	CURB & GUTTER, SIDEWALK & DROP INLET
	FENCE (BARBED WIRE OR OTHER WITH GATES)
	FENCE (CHAINLINK WITH GATE)
	DITCH FLOWLINE
	TEST PIT
	SIGN
	BUILDING OR STRUCTURE

PROPERTY & CONTROL	
	CP #203 SURVEY CONTROL POINT
	BM-#1 BENCHMARK
	FOUND BRASS CAP
	FOUND ALUMINUM CAP
	FOUND 5/8" STEEL PIN
	SET 5/8" STEEL PIN W/CAP
	FOUND 1/2" STEEL PIN
	SET 1/2" STEEL PIN W/CAP
	FOUND PK NAIL
	SET PK NAIL
	CALCULATED POINT
	WC WITNESS CORNER
	EASEMENT - UTILITY
	EASEMENT - TEMPORARY
	EASEMENT - SETBACK
	PROJECT BOUNDARY
	P/L PROPERTY LINES
	SECTION LINES
	R/W PRESCRIPTIVE RIGHT OF WAY
	ROW DEDICATED RIGHT OF WAY
	() DATA OF RECORD
	QUARTER SECTION - NOT FOUND
	5 CENTER SECTION
	5 6 SECTION CORNER - FOUND 7 8

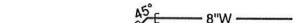
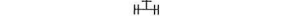
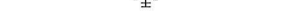
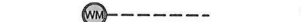
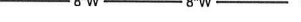
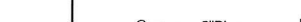
EXISTING UTILITY	
	8"W 8"W WATERLINE & VALVE
	12"SS 12"SS SANITARY SEWER LINE & MANHOLE
	4"SS 4"SS SANITARY SEWER SERVICE & CLEANOUT
	PS PS PRESSURE SEWER LINE & VALVE VAULT
	10"SD 10"SD STORM DRAIN LINE & MANHOLE
	8"PI 8"PI PRESSURE IRRIGATION & VALVE
	GI GI GRAVITY IRRIGATION & MANHOLE
	PP OHP OHP OVERHEAD POWER LINE & POWER POLE
	UGP UGP UNDERGROUND POWER LINE
	SIGNAL POLE
	LIGHT POLE
	NG NG NATURAL GAS LINE
	FO FO FIBER OPTIC LINE
	TR T TELEPHONE LINE & RISER
	TV CABLE CABLE LINE & RISER

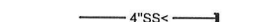
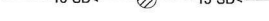
PROPOSED GRADING	
	2457 TOPOGRAPHIC CONTOUR
	RIDGELINE
	1.50% DRAINAGE ARROW & SLOPE
	51.73 SPOT ELEVATION
	SWALE FLOWLINE
	DAYLIGHT - CUT LINE
	DAYLIGHT - FILL LINE

PROPOSED DEMOLITION, ABANDONMENT, REMOVAL	
	DEMOLITION & REMOVAL
	ABANDON IN PLACE
	REMOVE SURFACE FEATURE
	CLEARING AND GRUBBING

PROPOSED SITE	
	BUILDING OR STRUCTURE
	CONCRETE
	ASPHALT
	GRAVEL SURFACE
	GRAVEL SECTION
	LANDSCAPE ROCK

PROPOSED SITE (CONT.)	
	GENERIC GATE
	SWING GATE
	FENCE (BARBED WIRE OR OTHER WITH GATES)
	SLIDER GATE
	FENCE (CHAINLINK WITH GATE)
	EP EP EDGE OF PAVEMENT
	EG EG EDGE OF GRAVEL
	SIGN
	6" VERTICAL CURB, GUTTER, SIDEWALK & INLET
	6" VERTICAL CUT CURB & GUTTER
	6" REVERSE CURB & GUTTER
	6" REVERSE CUT CURB & GUTTER
	IMBEDDED CURB

PROPOSED UTILITY	
	FLANGED FITTING TYPES
	MECHANICAL JOINT
	8"W 8"W BEND
	8"W 8"W REDUCING TEE
	TEE
	REDUCER
	FLANGE TO MECHANICAL JOINT COUPLING
	CROSS
	CAP W/BLIND FLANGE
	CHECK VALVE
	GATE VALVE
	BUTTERFLY VALVE
	BLOW-OFF VALVE
	RESTRAINED FITTING
	WM WATER SERVICE LINE & METER
	FIRE HYDRANT
	8" FIRE 8" FIRE FIRE LINE
	8"W 8"W WATERLINE
	MONITORING WELL
	LOCATION WIRE BOX
	NON-FREEZE YARD HYDRANT
	8"PI 8"PI PRESSURE IRRIGATION, TEE & GATE VALVE
	2"PI 2"PI PRESSURE IRRIGATION SERVICE
	8"GI 8"GI GRAVITY IRRIGATION & STRUCTURE

PROPOSED UTILITY (CONT.)	
	8"SS 8"SS SANITARY SEWER & MANHOLE
	4"SS 4"SS SANITARY SEWER SERVICE & CAP
	4"SS 4"SS SANITARY SEWER SERVICE & CLEANOUT
	8"PS 8"PS PRESSURE SEWER & VALVE VAULT
	18"SD 15"SD STORM DRAIN LINE, INLET & CATCH BASIN
	12"SD 12"SD STORM DRAIN LINE & MANHOLE W/ VENTED LID
	JOINT TRENCH IN PROFILE
	CABLE & TELEPHONE RISERS
	JT JT JOINT TRENCH & DEVICE
	JUNCTION BOX & DUCT BANK
	NG NG NATURAL GAS LINE & METER
	NG NG NATURAL GAS LINE & RISER
	NG NG NATURAL GAS LINE & VALVE
	UGP UGP UNDERGROUND POWER
	OHP PP OHP OVERHEAD POWER & POLE
	LIGHT POLE
	T TR TELEPHONE LINE & RISER
	T FO FO FIBER OPTIC LINE & VAULT
	T/D T/D TELEPHONE DATA LINE
	TV CABLE CABLE & TV RISER



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 758-8601

PRELIMINARY
Not For
Construction

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

SOUTHSIDE WATER
AND SEWER DISTRICT

WATER SYSTEM IMPROVEMENTS

CIVIL SYMBOLS & LINE LEGEND

DRAWN: — CHECK: —

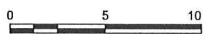
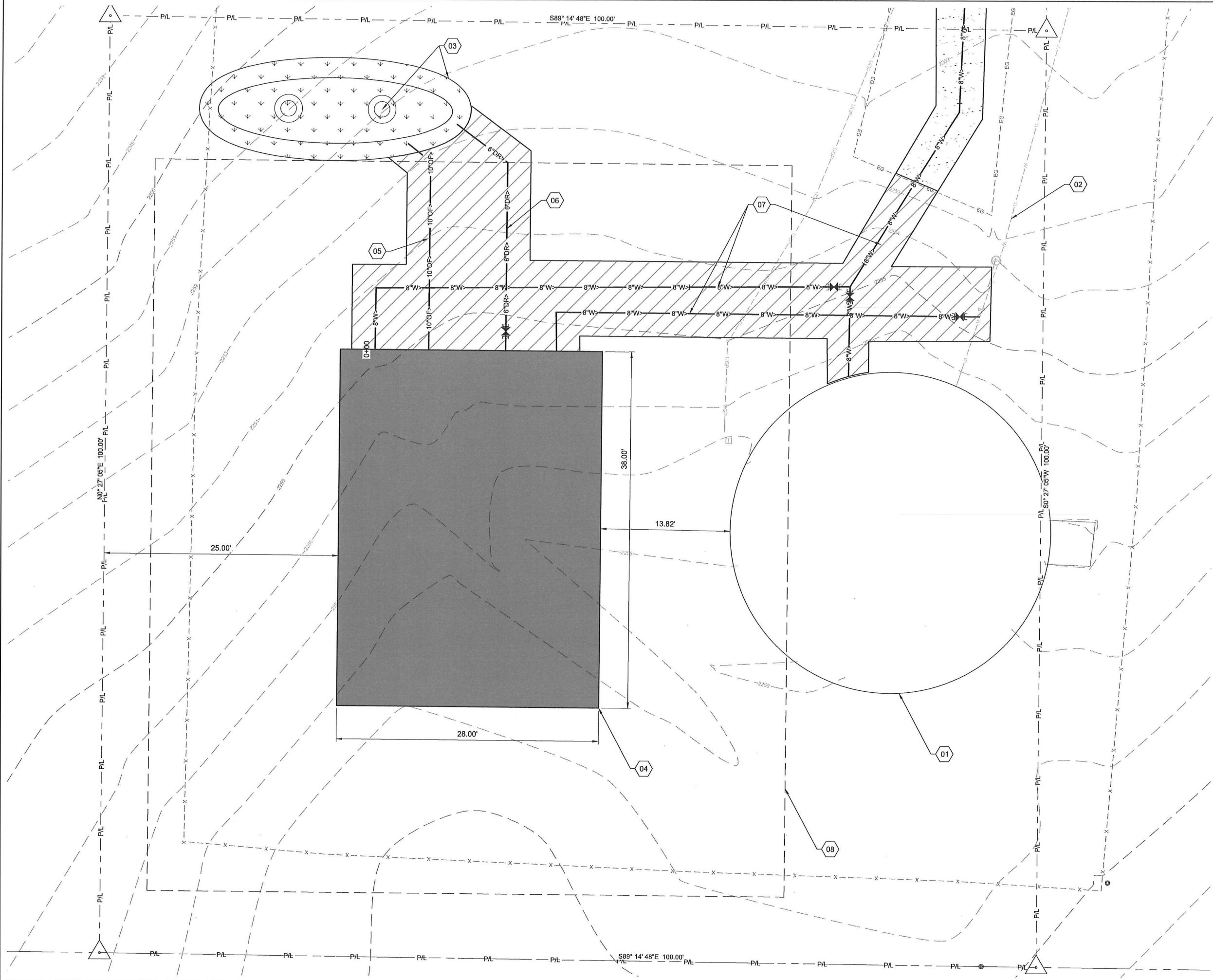
VERIFY SCALE: Scales
based on 22"x34" prints.

1-1/2 Inches

PROJECT NO.
221081-004

PAGE

SHEET NO.
C-001



GENERAL SHEET NOTES

- EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE LOCATION, CONTRACTOR TO VERIFY EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. SEE UTILITY PLANS FOR MORE INFORMATION.
- FURNISH MATERIALS WHERE "INSTALL", "PLACE" OR "CONSTRUCT" IS REQUIRED UNLESS NOTED OTHERWISE.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITIONS FOUND PRIOR TO CONSTRUCTION. THIS COST SHALL BE INCIDENTAL TO THE CONTRACT.

SHEET KEYNOTES

- EXISTING CONCRETE WATER TANK 100,000 GAL OVERFLOW EL. 2,269' TANK TOP OF FLOOR EL. 2,253'
- EXISTING 8" WATERLINE
- OVERFLOW AND DRAIN SWALE WITH DRYWELLS
- NEW CONCRETE WATER TANK 100,000 GAL AT GRADE OVERFLOW EL. 2,269' TOP OF FLOOR EL. 2,253'
- OVERFLOW PIPE - 10" C 900 PVC
- DRAIN PIPE - 6" C 900 PVC
- NEW WATERLINE - 8" C 900 PVC
- 20' IDEQ TANK SETBACK



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 758-8601

PRELIMINARY
Not For
Construction

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall remain the property of Keller Associates, Inc. without written authorization of Keller Associates, Inc.

WATER SYSTEM IMPROVEMENTS

EXISTING SITE PLAN CONDITIONS

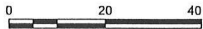
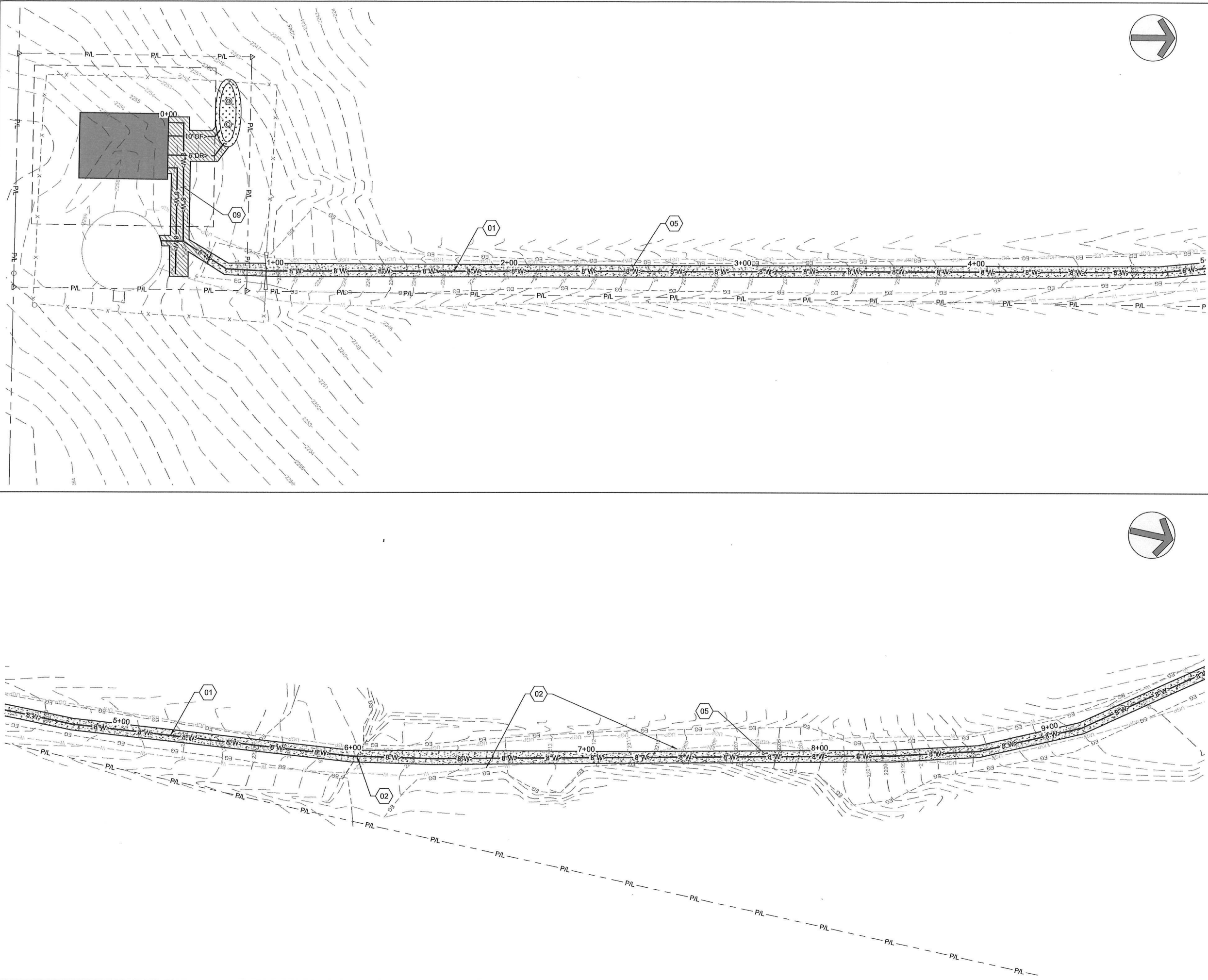
DRAWN: — CHECK: —

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO. 221081-004 PAGE

SHEET NO. C-120-A



GENERAL SHEET NOTES

SHEET KEYNOTES

- 01 INSTALL PIPE - 8" WATER MAIN, C 900 PVC
- 02 RETAIN AND PROTECT EXISTING UTILITIES
- 05 GRAVEL SURFACE REPAIR
- 09 MISCELLANEOUS SURFACE REPAIR RETURN TO EXISTING CONDITION

WATER SYSTEM IMPROVEMENTS

8 INCH WATERLINE

SOUTHSIDE WATER
AND SEWER DISTRICT

PRELIMINARY
Not For
Construction

KELLER
ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 758-8601

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

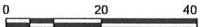
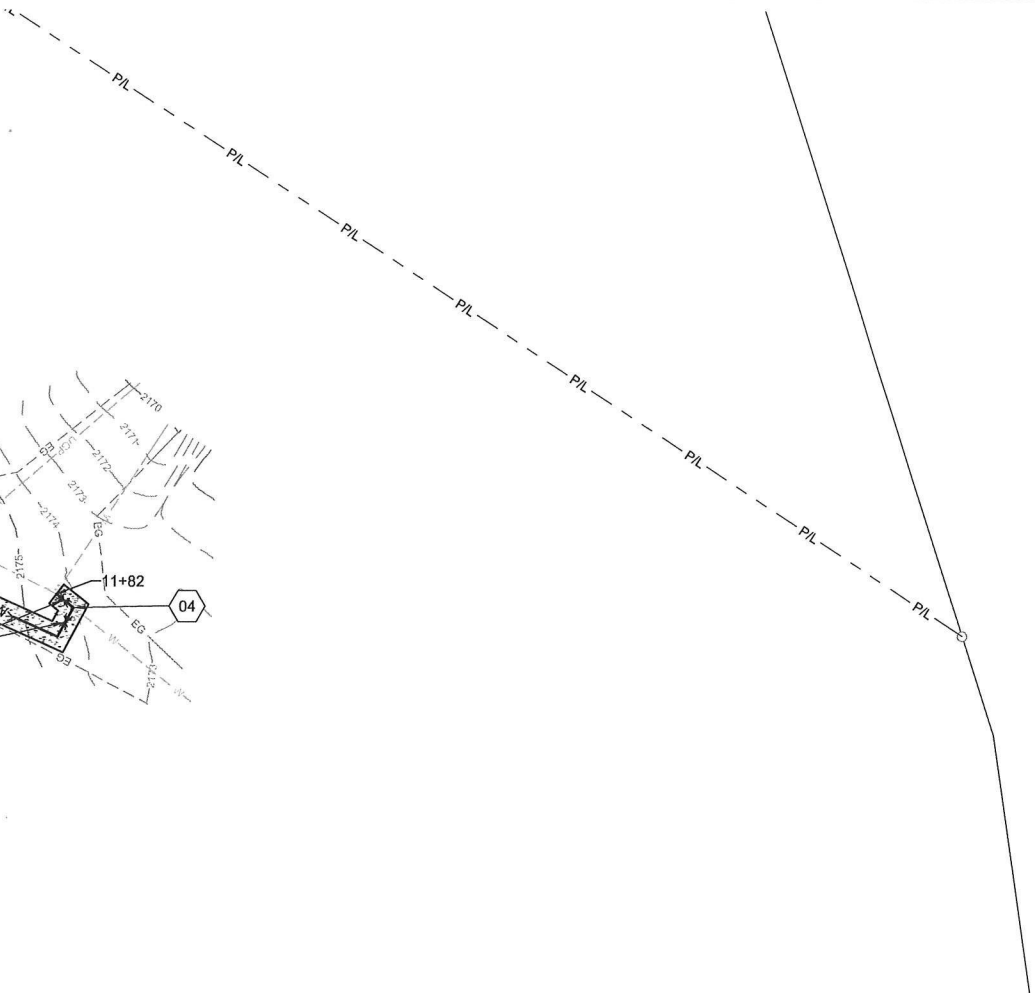
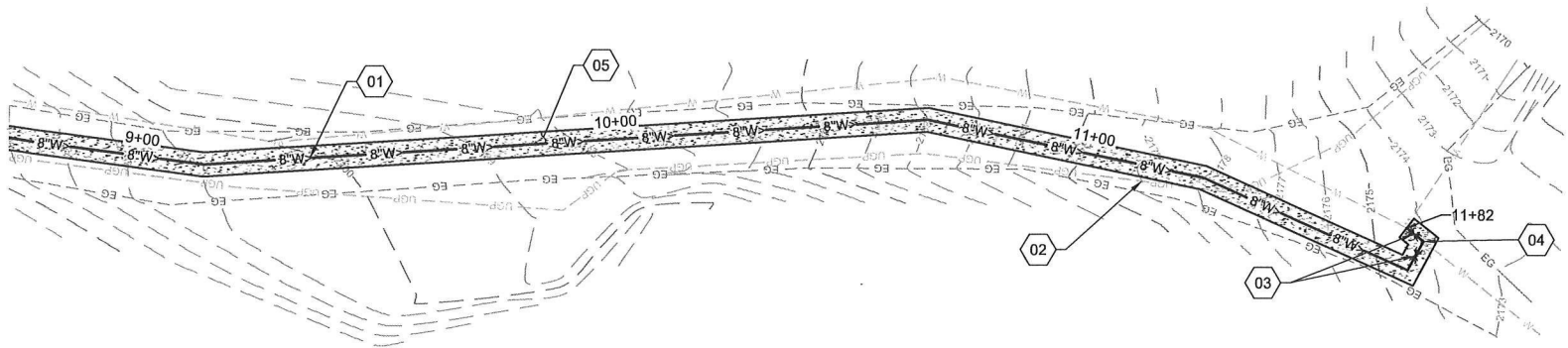
DRAWN: — CHECK: —

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO. 221081-004 PAGE

SHEET NO. C-401



GENERAL SHEET NOTES

 SHEET KEYNOTES

- 01 INSTALL PIPE - 8" WATER MAIN, C 900 PVC
- 02 RETAIN AND PROTECT EXISTING UTILITIES
- 03 INSTALL VALVE - 8" GATE VALVE
- 04 CONNECT TO EXISTING WATERLINE WITH 8" X 8" X 8" TEE
- 05 GRAVEL SURFACE REPAIR



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 758-8601

PRELIMINARY
Not For
Construction

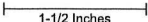
NO.	REVISIONS	DATE

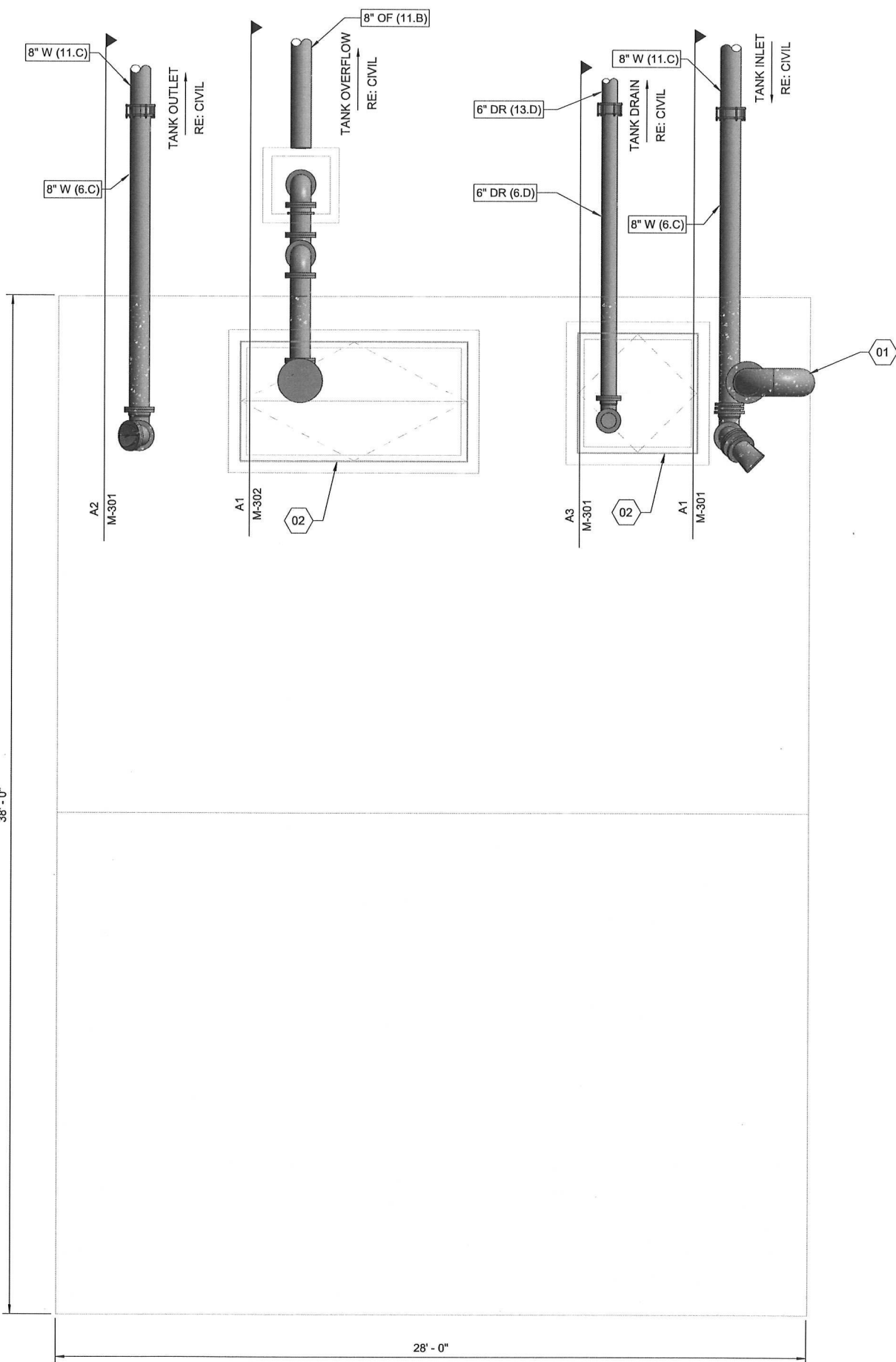
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

SOUTHSIDE WATER
AND SEWER DISTRICT

WATER SYSTEM IMPROVEMENTS

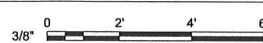
8 INCH WATERLINE

DRAWN: —	CHECK: —
VERIFY SCALE: Scales based on 22"x34" prints.	
	
PROJECT NO. 221081-004	PAGE
SHEET NO. C-402	



A1 MECHANICAL PLAN

3/8" = 1'-0"



- GENERAL SHEET NOTES**
- REFERENCE STANDARD MECHANICAL NOTES, SHEET M-001, FOR ADDITIONAL REQUIREMENTS.
 - ALL PIPE SUPPORTS ARE NOT SHOWN. CONTRACTOR SHALL SUPPORT PIPING AND VALVES IN ACCORDANCE WITH SPECIFICATION SECTION 40 05 07 AND RE: M-500 SERIES SHEETS.
 - PIPING, VALVES AND EQUIPMENT SHALL BE COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 90 00.
 - REFERENCE PIPE SCHEDULE, SHEET G-005, FOR PIPING MATERIALS AND TEST PRESSURES.
 - ALL PIPING ABOVE GRADE SHALL BE FLANGED; ALL BURIED FITTINGS SHALL BE MECHANICAL JOINT AND RESTRAINED WITH RETAINER GLANDS OR THRUST BLOCKS AS PER THE SPECIFICATIONS AND DRAWINGS.
 - PIPING LOCATED BELOW THE STRUCTURE, EXCEPT PLUMBING, SHALL BE CONCRETE ENCASED TO FIVE FEET OUTSIDE OF THE BUILDING FOUNDATION. RE: M457 & M458.

- SHEET KEYNOTES**
- | | |
|----|------------------------------|
| 01 | 12" SS GOOSENECK VENT PIPE |
| 02 | ACCESS HATCH; RE: STRUCTURAL |

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coer d'Alene, Idaho 83814
(208) 756-6601

30% Design
Review
Not For
Construction

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

**SOUTHSIDE WATER
AND SEWER DISTRICT**

WATER SYSTEM IMPROVEMENTS

SOUTHSIDE TANK - MECHANICAL PLAN

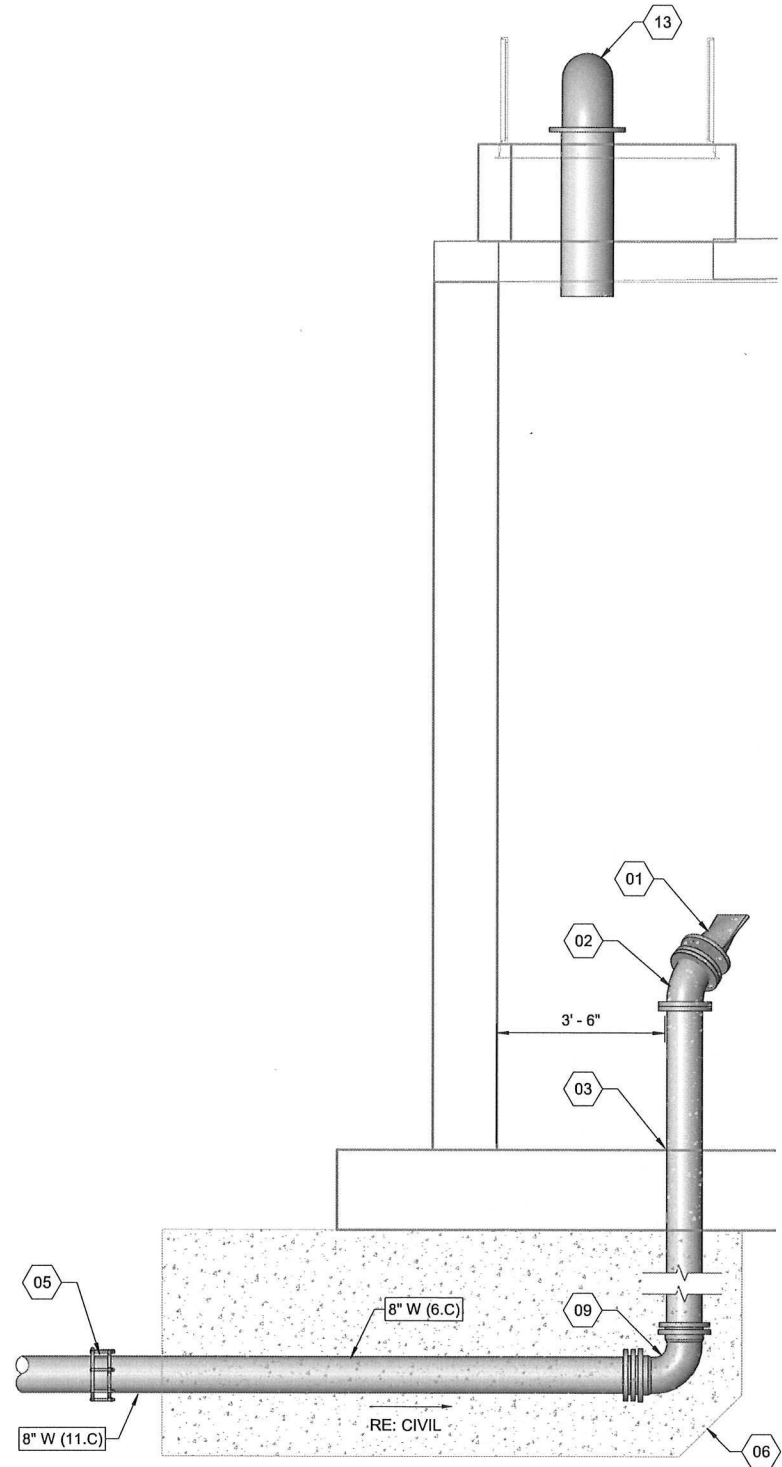
DRAWN: DAC | CHECK: -

VERIFY SCALE: Scales based on 22"x34" prints.

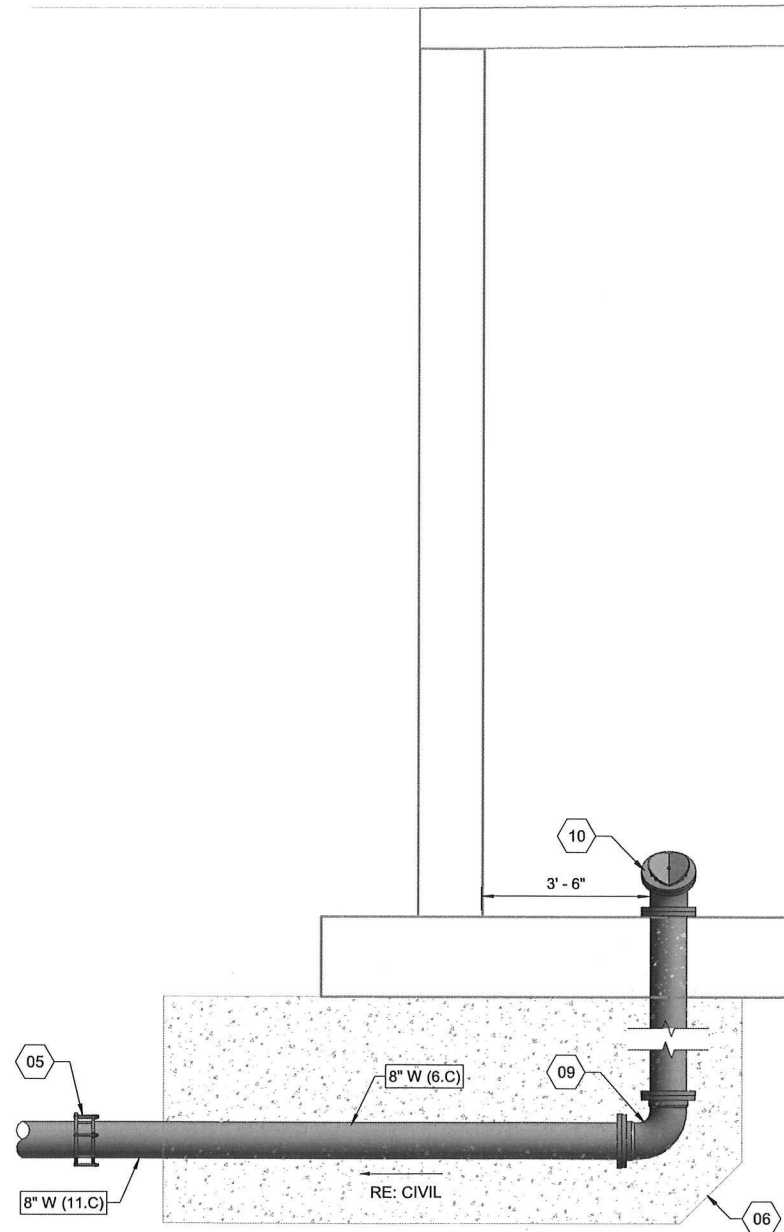
PROJECT NO. 221081-004 | PAGE

SHEET NO. **M-101**

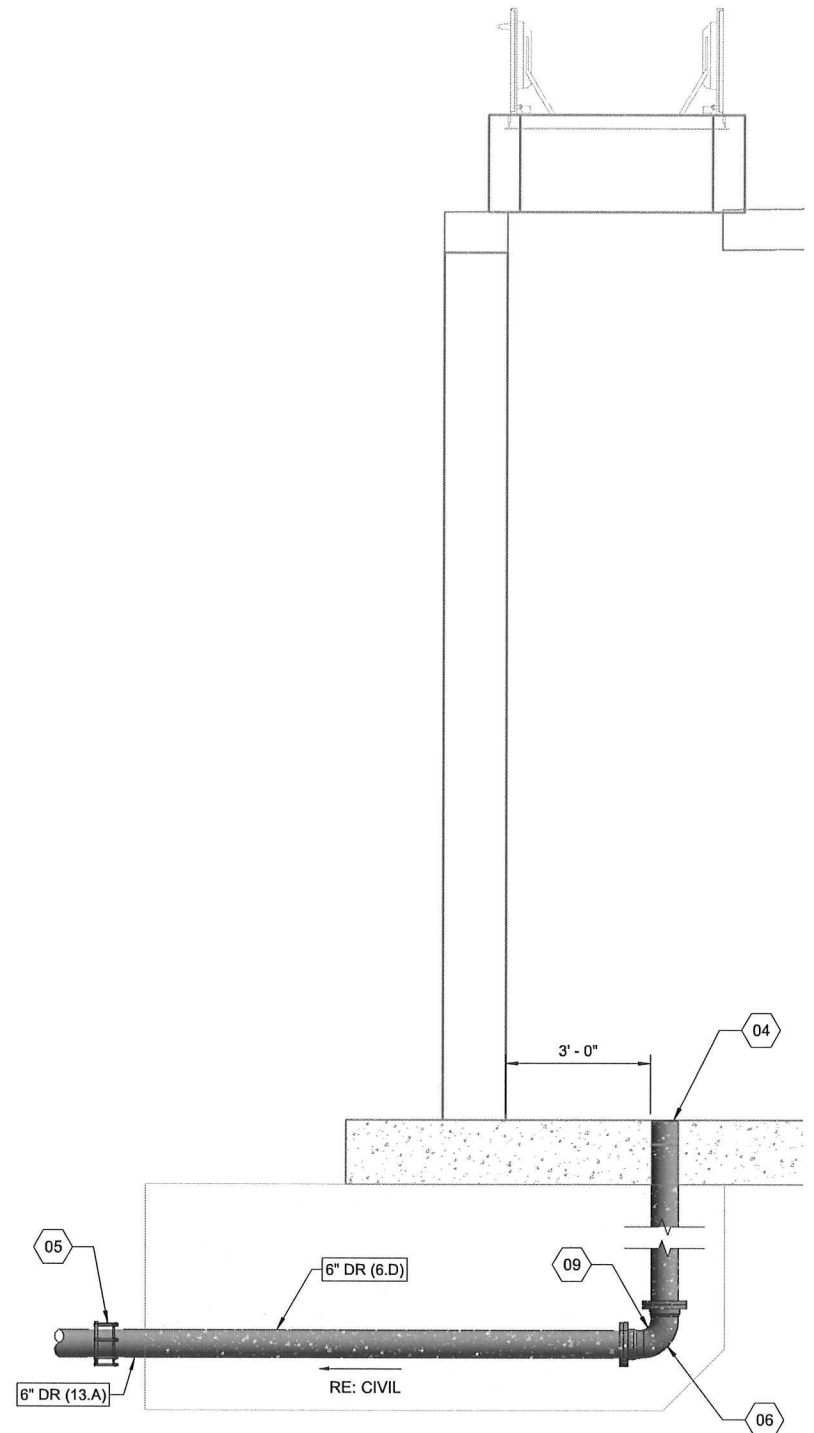
C:\Users\ldaine\Documents\SOUTHSIDE TANK R24 MECH.drain\086.rvt 9/3/2024 8:18:44 AM



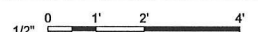
A1 INLET - SECTION
1/2" = 1'-0"



A2 OUTLET SECTION
1/2" = 1'-0"



A3 DRAIN SECTION
1/2" = 1'-0"



SHEET KEYNOTES

- 01 TIDEFLEX SERIES 35-1 DUCK BILL CHECK VALVE RE: SPECS
- 02 45 DEG ELBOW RE: SPECS
- 03 FLOOR PENETRATION
- 04 INSTALL REMOVEABLE SILT RING
- 05 FLEXIBLE COUPLING RE: SPECS
- 06 CONCRETE ENCASE PIPES UNDER STRUCTURE
- 09 INSTALL 90 DEG ELBOW RE: SPECS
- 10 INSTALL TIDEFLEX WATERFLEX CHECK VALVE RE: SPECS
- 13 12" SS GOOSENECK VENT PIPE

GENERAL SHEET NOTES

1. REFERENCE STANDARD MECHANICAL NOTES, SHEET M-001, FOR ADDITIONAL REQUIREMENTS.
2. ALL PIPE SUPPORTS ARE NOT SHOWN. CONTRACTOR SHALL SUPPORT PIPING AND VALVES IN ACCORDANCE WITH SPECIFICATION SECTION 40 05 07 AND RE: M-500 SERIES SHEETS.
3. PIPING, VALVES AND EQUIPMENT SHALL BE COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 90 00.
4. REFERENCE PIPE SCHEDULE, SHEET G-005, FOR PIPING MATERIALS AND TEST PRESSURES.
5. ALL PIPING ABOVE GRADE SHALL BE FLANGED; ALL BURIED FITTINGS SHALL BE MECHANICAL JOINT AND RESTRAINED WITH RETAINER GLANDS OR THRUST BLOCKS AS PER THE SPECIFICATIONS AND DRAWINGS.
6. PIPING LOCATED BELOW THE STRUCTURE, EXCEPT PLUMBING, SHALL BE CONCRETE ENCASED TO FIVE FEET OUTSIDE OF THE BUILDING FOUNDATION. RE: M457 & M458.

KELLER
ASSOCIATES

601 Sherman Avenue, Suite 1
Coer d'Alene, Idaho 83814
(208) 756-6601

30% Design
Review
Not For
Construction

NO. REVISIONS DATE
This document or any part thereof in detail or design
concept is the personal property of Keller Associates,
Inc. and shall not be copied in any form without the
written authorization of Keller Associates, Inc.

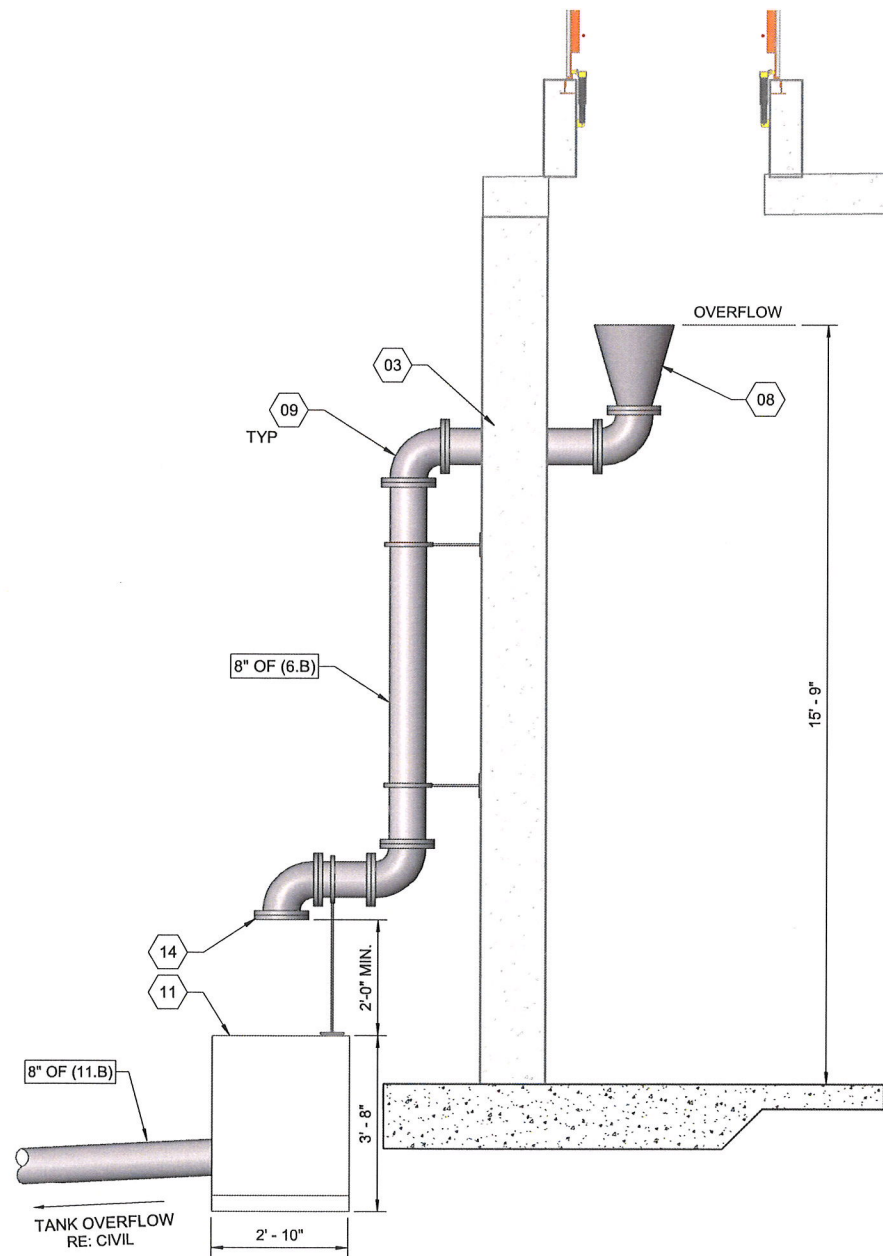
SOUTHSIDE WATER
AND SEWER DISTRICT

WATER SYSTEM IMPROVEMENTS

SOUTHSIDE TANK - SECTIONS

DRAWN: DAC CHECK: -
VERIFY SCALE: Scales
based on 22"x34" prints.
1-1/2 Inches
PROJECT NO. 221081-004
SHEET NO. M-301

5/3/2024 8:19:46 AM C:\Users\ldain\Documents\SOUTHSIDE TANK R24 MECH_drain7086.rvt



A1 OVERFLOW - SECTION

1/2" = 1'-0"

1/2" 0 1' 2' 4'

SHEET KEYNOTES	GENERAL SHEET NOTES
03 WALL PENETRATION 08 8"x 14" FLARE FITTING RE: SPECS 09 INSTALL 90 DEG ELBOW RE: SPECS 11 TYPE 1 CATCH BASIN RE: SPECS 14 INSTALL #24 MESH SCREEN SANDWICHED BETWEEN FLANGES RE: SPECS	1. REFERENCE STANDARD MECHANICAL NOTES, SHEET M-001, FOR ADDITIONAL REQUIREMENTS. 2. ALL PIPE SUPPORTS ARE NOT SHOWN. CONTRACTOR SHALL SUPPORT PIPING AND VALVES IN ACCORDANCE WITH SPECIFICATION SECTION 40 05 07 AND RE: M-500 SERIES SHEETS. 3. PIPING, VALVES AND EQUIPMENT SHALL BE COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 90 00. 4. REFERENCE PIPE SCHEDULE, SHEET G-005, FOR PIPING MATERIALS AND TEST PRESSURES. 5. ALL PIPING ABOVE GRADE SHALL BE FLANGED; ALL BURIED FITTINGS SHALL BE MECHANICAL JOINT AND RESTRAINED WITH RETAINER GLANDS OR THRUST BLOCKS AS PER THE SPECIFICATIONS AND DRAWINGS. 6. PIPING LOCATED BELOW THE STRUCTURE, EXCEPT PLUMBING, SHALL BE CONCRETE ENCASED TO FIVE FEET OUTSIDE OF THE BUILDING FOUNDATION. RE: M457 & M458.



KELLER
ASSOCIATES

601 Sherman Avenue, Suite 1
Coer d'Alene, Idaho 83814
(208) 758-8601

30% Design
Review
Not For
Construction

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

SOUTHSIDE WATER
AND SEWER DISTRICT

WATER SYSTEM IMPROVEMENTS
SOUTHSIDE TANK - SECTIONS

DRAWN: DAC CHECK: LM

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO. 221081-004 PAGE

SHEET NO. M-302