

# CONSTRUCTION PLANS

FOR THE

# PHASE 2 RECYCLED WATER EAST RESERVOIR

PREPARED FOR  
TOWN OF BENNETT

SEPTEMBER 2022



LOCATION MAP  
NOT TO SCALE

### DRAWING INDEX

SHEET	DWG NO.	DESCRIPTION
1	G01	COVER SHEET AND NOTES
2	C01	SITE AND GRADING PLAN
3	C02	DETAILS

**OWNER**  
TOWN OF BENNETT  
207 MUEGGE WAY  
BENNETT, CO 80102  
303-644-3249  
ATTN: ROBIN PRICE, PUBLIC WORKS DIRECTOR

**SURVEY**  
DALEY LAND SURVEYING, INC.

**SURVEY INFORMATION**  
COORDINATE SYSTEM IS MODIFIED STATE PLANE ZONE 502 REFERENCED TO NAVD88  
NGS BENCHMARK D259, PUBLISHED ELEVATION 5458.57 FEET.

- TOWN OF BENNETT STANDARD NOTES:**
- All construction shall conform to the Town of Bennett's Design and Construction Standards.
  - All materials and workmanship shall be subject to inspection by the Town's Public Works and Engineering Division. The Town reserves the right to accept or reject any such materials and workmanship that does not conform to its Standards and Specifications.
  - Contractor shall notify the Engineering Division or the Department of Public Works a minimum of 48 hours and a maximum of 96 hours prior to starting construction.
  - Location of existing utilities shall be verified by the Contractor prior to actual construction.
  - The Contractor shall have one (1) signed copy of the plans and (1) copy of the Design and Construction Standards at the job site at all times.
  - A plan for traffic control during construction shall be submitted to the Town for acceptance with the permit application. An excavation public improvements construction permit will not be issued without an approved traffic control plan for traffic control during construction.

- ADDITIONAL PROJECT NOTES:**
- REFER TO THE TOWN OF BENNETT STANDARDS (LATEST VERSION) FOR UTILITY CONSTRUCTION INFORMATION AND DETAILS.
  - CONTRACTOR SHALL CALL FOR UTILITY LOCATES AND POTHOLE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
  - THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING EROSION CONTROL PLANS TO THE TOWN FOR APPROVAL PRIOR TO CONSTRUCTION.
  - SITE RESTORATION SHALL CONFORM TO TOWN STANDARDS.
  - EXCESS SOIL SHALL BE HAULED TO THE TOWN'S PROPERTY APPROXIMATELY 500 FEET SOUTH OF THE PROJECT SITE.

MSK Consulting, LLC  
7157 S. Andes Circle  
Centennial, CO 80016  
303-903-0918

W2 Engineers, LLC  
19255 W. 84th Place  
Arvada, CO 80007  
720-331-2332

LINE IS ONE INCH  
ON ORIGINAL DRAWING  
IF NOT ONE INCH,  
ADJUST ACCORDINGLY

REVISIONS	NO.	DESCRIPTION	DATE				

MSK PROJECT NO:  
38-002-02

DRAWN BY: DLT  
DESIGNED BY: DLT  
CHECKED BY: WR  
DATE: 9/28/22  
SCALE: 1"=50'

TOWN OF BENNETT

PHASE 2 RECYCLED WATER EAST RESERVOIR

BID DRAWING  
NOT FOR  
CONSTRUCTION

COVER SHEET  
AND NOTES

G01  
SHEET 1 OF 3



FILL LINE (FROM WRRF)

Item	Location	Dia.	Northing	Easting	Inv Elev
A1	CAP	12	1,159,861.4763	3,301,811.9918	5,454.67
A2	DISCHARGE	12	1,159,817.7705	3,301,853.0990	5,454.00

SUCTION LINE (TO WET WELL)

Item	Location	Dia.	Northing	Easting	Inv Elev
B1	Intake	12	1,159,540.9450	3,301,919.3869	5,443.00
B2	Plug Valve	12	1,159,470.9450	3,301,919.3869	5,442.07
B3	Wet Well	12	1,159,465.9450	3,301,919.3869	5,442.00

SOUTH DISCHARGE LINE (FROM WET WELL)

Item	Location	Dia.	Northing	Easting	Inv Elev
C1	Wet Well	6	1,159,456.9450	3,301,919.3869	5,459.50
C2	Valve and Cap	6	1,159,438.9450	3,301,919.3869	5,453.50

WEST DISCHARGE LINE (FROM WET WELL)

Item	Location	Dia.	Northing	Easting	Inv Elev
D1	Wet Well	6	1,159,461.4450	3,301,914.8869	5,459.50
D2	Valve and Cap	6	1,159,461.4450	3,301,896.8869	5,453.50

**LEGEND**

- EXISTING CONTOUR
- ===== PROPOSED CONTOUR
- UW — UW — EXISTING BURIED RECYCLED WATER LINE
- VL — VL — EXISTING BURIED POTABLE WATER LINE

**EXISTING WEST LAGOON**

**NOTES:**

1. PIPE MATERIAL SHALL BE C900 DR25 PVC.
2. ALL FITTINGS AND VALVES ARE TO BE RESTRAINED PER TOWN STANDARDS.
3. CONTRACTOR TO POTHOLE EX 45° BEND TO VERIFY DEPTH PRIOR TO INSTALLING 12" LINE.
4. CONTRACTOR TO FIELD VERIFY ALL HORIZONTAL AND VERTICAL DIMENSIONS.
5. LENGTHS OF PIPES ARE FROM CENTER OF FITTING/VALVE.
6. ALL GRAVITY AND PRESSURE PIPE SHALL BE TESTED PER TOWN STANDARDS.
7. INSTALL MARKERS AT ALL VALVES AND CAPS. TEXT ON MARKERS SHALL IDENTIFY THE OBJECT AND DISTANCE FROM MARKER. MARKER COLOR SHALL BE PURPLE.
8. RESERVOIR LINER SHALL BE 45 MIL RLLDPE (N45B) BY RAVEN OR APPROVED EQUAL.
9. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING EROSION CONTROL PLANS TO THE TOWN FOR APPROVAL PRIOR TO CONSTRUCTION.
10. SITE RESTORATION SHALL CONFORM TO TOWN STANDARDS.
11. EXCESS SOIL SHALL BE HAULED TO THE TOWN'S PROPERTY APPROXIMATELY 500 FEET SOUTH OF THE PROJECT SITE.

EX 12" C900 PVC  
INV=5455.55  
(SEE NOTE 4)

FILL LINE (60 LF)  
(SEE NOTE 3)

REMOVE EX  
CONCRETE

REMOVE EX PIPE  
PLUG EX PIPE  
ON EAST SIDE

DISCHARGE  
INTO EAST  
RESERVOIR

EAST RESERVOIR  
TOP ELEV=5460.0

EAST RESERVOIR  
HWL=5458.0

EX ELEC  
CABINET

EX CONTROL  
PANELS

REMOVE EX  
CONCRETE

REMOVE EX  
CONCRETE

**PROPOSED EAST RESERVOIR**

EAST RESERVOIR  
BOTTOM ELEV=5442.0

EX FENCE

EX ELEC  
CABINETS

EX ELEC  
CABINET

EX OHE

EX ELEC  
CABINETS

REMOVE  
EX CONCRETE  
INLET

EX METAL  
BLDG

REMOVE EX CONCRETE INLET.  
CAP PIPE TO THE WEST, REMOVE  
PIPE TO THE EAST

EX METAL  
BLDG

WET WELL SUCTION  
LINE (80 LF)

REMOVE EX  
CONCRETE

WEST DISCHARGE  
LINE (18 LF)

REMOVE EX  
CONCRETE

EX RECYCLED WATER  
PUMP STATION

PUMP STATION  
FF=5464.50

WET WELL (SEE  
SHEET C02)

SOUTH DISCHARGE  
LINE (18 LF)

EX FENCE

LINE IS ONE INCH  
ON ORIGINAL DRAWING

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ADJUST ACCORDINGLY

NO.	DESCRIPTION	DATE

MSK PROJECT NO: 38-002-02

DRAWN BY: DLT

DESIGNED BY: DLT

CHECKED BY: WR

DATE: 9/28/22

SCALE: 1"=50'

**TOWN OF BENNETT**

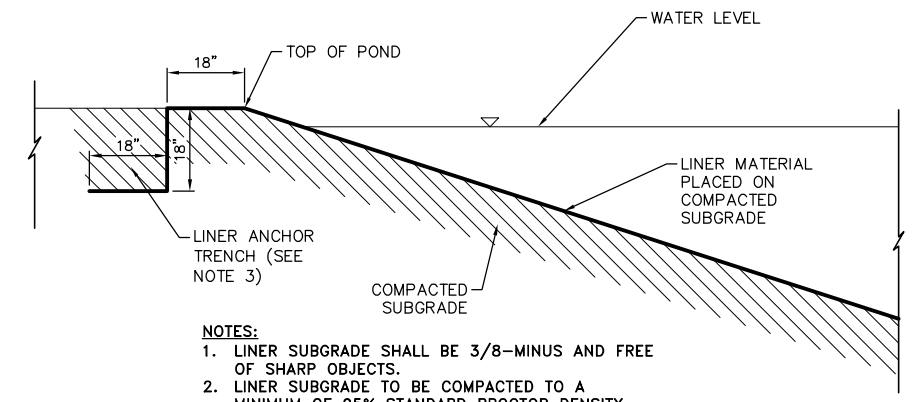
**PHASE 2 RECYCLED WATER EAST RESERVOIR**

**BID DRAWING NOT FOR CONSTRUCTION**

**SITE & GRADING PLAN**

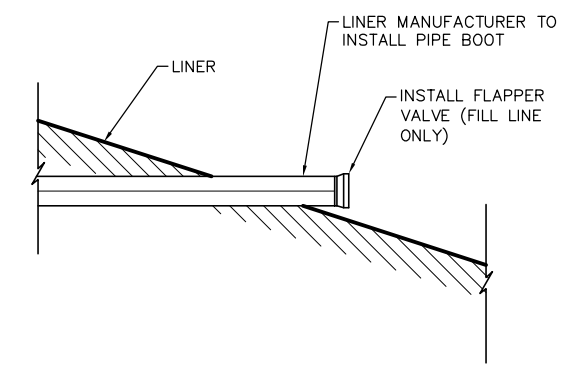
**C01**



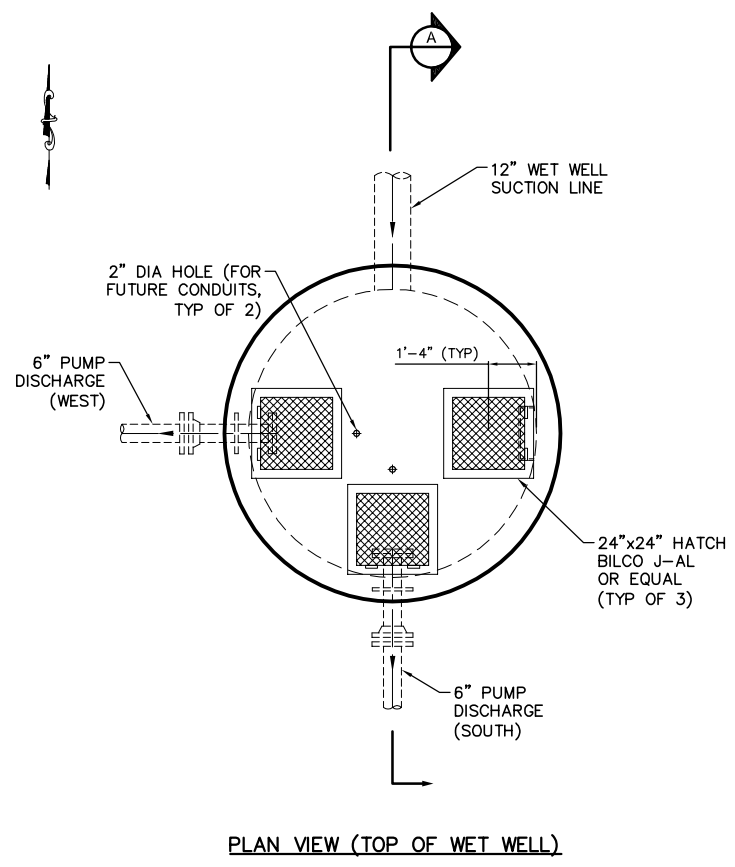


- NOTES:**
1. LINER SUBGRADE SHALL BE 3/8-MINUS AND FREE OF SHARP OBJECTS.
  2. LINER SUBGRADE TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
  3. TERMINATE LINER ON FLOOR OF ANCHOR TRENCH. DO NOT RUN LINER UP THE BACKSIDE OF THE ANCHOR TRENCH.

120 LINER ANCHOR TRENCH DETAIL  
N.T.S.

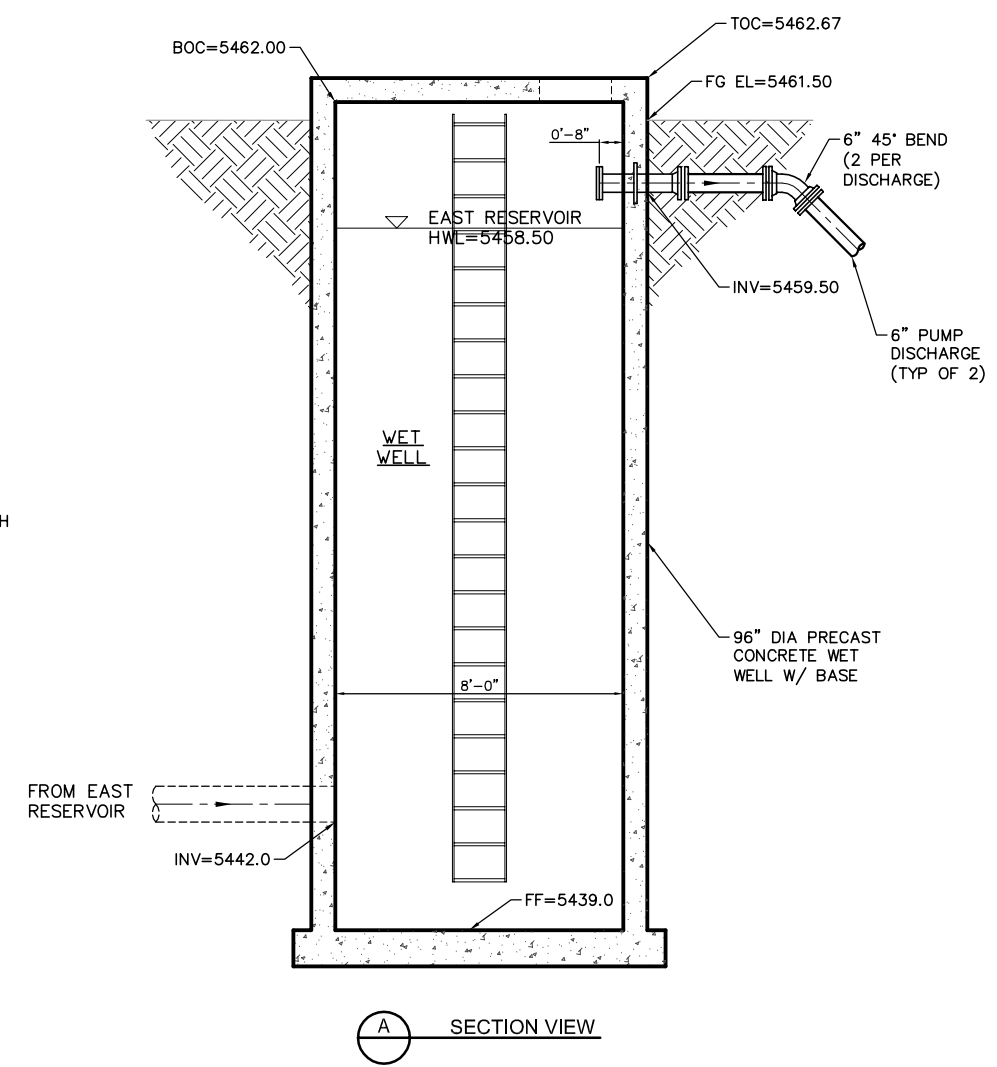


121 PIPE PENETRATION DETAIL  
N.T.S.



PLAN VIEW (TOP OF WET WELL)

110 WET WELL DETAIL  
N.T.S.



A SECTION VIEW

LINE IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH, ADJUST ACCORDINGLY

NO.	DESCRIPTION	DATE	REVISIONS			
			1	2	3	4

MSK PROJECT NO: 38-002-02  
DRAWN BY: DLT  
DESIGNED BY: DLT  
CHECKED BY: WR  
DATE: 9/28/22  
SCALE: NO SCALE

TOWN OF BENNETT

PHASE 2 RECYCLED WATER EAST RESERVOIR

**BID DRAWING NOT FOR CONSTRUCTION**

DETAILS

C02

SHEET 3 OF 3

