

B. Section No. 00520: Agreement

1. 1.01.A.1. Article, on page No. 1, change to read: *Sitework including but not limited to excavation and backfill for the new control building, elevated storage tank and miscellaneous structures. Additional sitework includes but is not limited to clearing and grubbing, stockpiling and placement of fill for site grading, access roads, site drainage, site fencing, seeding all disturbed areas, miscellaneous civil structures, stormwater management system and miscellaneous landscaping. Surfacing includes crushed stone access roads, asphalt access roads and parking areas, and concrete flatwork.*
2. 1.01.A.2. Article, on page No. 1, change to read: *Construction of a new single story, wood framed control building with a metal roof. Equipment to include recirculation pump, process piping, valves, monitoring equipment, chemical injection assemblies, electrical equipment, instrumentation, lighting, plumbing and HVAC. Interior rooms provided with hollow metal doors.*
3. 1.01.A.3. Article, on page No. 1-2, change to read: *New elevated multi-column 0.5 million gallon water storage tank including appurtenances, tank mixing system, foundation, tank light aeronautical warning system, overflow manhole, coatings, and lightning protection system and grounding.*
4. 1.01.A. Article, on page No. 1-2, add: *4. Miscellaneous Work: Design and install temporary groundwater dewatering systems.*
5. 4.02.A. Article, on page No. 2, change to read: *The Work will be substantially completed within 335 calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within 365 calendar days after the date when the Contract Times commence to run.*

C. Section No. 00110: Instruction to Bidders

1. 1.21.A, Item, on page No. 11, change to read: *A mandatory pre-bid conference will be held at 365 Palmer Avenue, Bennett, Colorado 80102 at 1:30 pm local time, May 16, 2016. The representatives of Owner and Engineer will be present to answer questions. Any questions which, in the opinion of Engineer, cannot be answered by direct reference to the Bidding Documents will be answered by formal written Addenda after the question is formally submitted by a bidder who has purchased a set of bid documents and as outlined above under Interpretations and Addenda.*

D. Submit Requests for Information (RFI) using the attached RFI Form.

E. Section 00310: Bid Form

1. RFI No. 2: Please give a better description of all bid items (Base Bid, Bid Item No.1, Bid Item No.2, Allowance No.1, Allowance No.2, Bid Alternate A, Bid Alternate B. The description on page 00110-7 & 00110-8 does not give a clear description and does not describe at all Alternates A & B.
RFI No. 2 Response: Delete Bid Alternate A and Bid Alternate B. The description of the remaining bid items appear to be sufficient.

2.2 DIVISION 9—FINISHES

1. RFI No. 3: There is no specifications for the interior coating system, please advise?
RFI No. 3 Response: Section 09900: Protective Coating System D-1 covers interior coating systems.
2. RFI No. 4: The exterior specified coating system is irregular. A standard Tnemec exterior Urethane system would have a zinc primer, epoxy second coat and urethane final coat. I can have a Tnemec rep send you a sample specification for questions 3 & 4?
RFI No. 4 Response: Section 09900 has been reviewed by the local Tnemec rep and is correct for the climate this tank will be constructed in.

2.3 DIVISION 13—SPECIAL CONSTRUCTION

1. RFI No. 5: Section 13210-11, H. Ladders - says that ladders shall comply with section 05590. Section 05590 states ladders, hand rails and safety cages are to be made of aluminum. This creates issues with corrosion due to dissimilar metals and or engineering a way to fasten to the all steel tank. Phoenix's standard for ladders, hand rails and safety cages are all steel construction, is this acceptable?
RFI No. 5 Response: Section 13210: Elevated Multi Column Storage Tank
 - a. *2.3.H.1, Item on page No. 11, replace with: Comply with OSHA standards.*
 - b. *1.6.B. Item on page No. 3-4, add: 17. Ladders, hand rails and safety cages shall be steel.*

2.4 DIVISION 15—MECHANICAL

- A. Section 15100: Valves, Cocks and Hydrants
 1. 2.2.D. Item, on page No. 8: *Delete in its entirety.*

2.5 DIVISION 16—ELECTRICAL

- A. Section 16903: Programmable Logic Controllers
 1. 2.2.A.2. Item, on page No. 5: *Delete in its entirety.*
- B. Section 16905: Control Narratives
 1. 3.1.B.2. Item, on page No. 2, delete: *Altitude Valve AV-1010.*
 2. 3.1.B.3.b). Item, on page No. 2-3: *Delete in its entirety.*
 3. RFI No. 6 - Section 16903 pages 1 thru 8 are listed at the bottom of the pages as section 16075, please confirm this is a typo?
RFI No. 6 Response: Confirmed; this Section is 16903 as identified on the 1st page, the footer number is a typo.

PART 3 PROJECT PLANS

3.1 REVISIONS TO DRAWINGS; REMOVE AND REPLACE

- A. Sheet No. 03 of 44: Design Criteria, Process Flow Diagram & Hydraulic Profile
 - 1. The Town will use tank level and SCADA to control tank fill cycles, so the altitude valve is not needed. Altitude valve removed.
- B. Sheet No. 05 of 44: Water Storage Tank P&ID
 - 1. Altitude valve removed.
- C. Sheet No. 33 of 44: Control Building Plan
 - 1. Altitude valve, upstream and downstream 12-inch gate valves, altitude valve bypass line and 12-inch gate valve removed. Pressure sensing line relocated. Pressure sensing line for future tank removed.
- D. Sheet No. 35 of 44: Control Building Sections
 - 1. Altitude valve, upstream and downstream 12-inch gate valves, altitude valve bypass line and 12-inch gate valve removed. Pressure sensing line relocated. Pressure sensing line for future tank removed.
- E. Sheet No. 40 of 44: Recirculation Pump Schematic & PLC One-Line
 - 1. Altitude valve removed.

END OF ADDENDUM NO. 1

DESIGN SUMMARY

DEMAND

| | |
|------------------------------|-------------------------|
| CURRENT MAX WELL PRODUCTION: | 950 GPM (FIRM CAPACITY) |
| FIRE FLOW: | 3500 GPM |
| MAX FILL RATE: | 4,500 GPM |
| MAX DRAW RATE: | 4,500 GPM |

MAJOR EQUIPMENT AND PROCESS SUMMARY

WATER STORAGE TANK

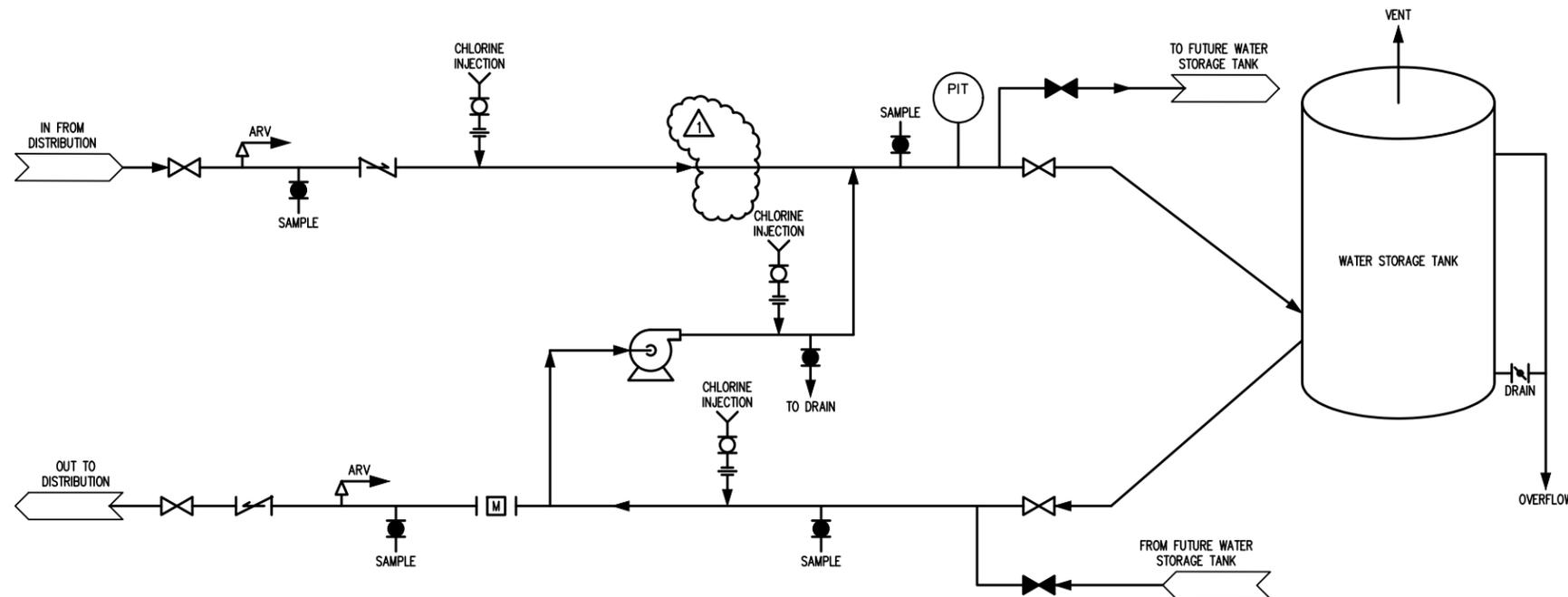
| | |
|-----------------------|-----------------------|
| TYPE: | MULTI COLUMN ELEVATED |
| QUANTITY: | 1 |
| CAPACITY (EACH): | 500,000 GALLON |
| GROUND EL: | 5502 FT |
| HWL: | 185 FT |
| LWL: | 148 FT |
| INLET PIPE SIZE: | 12 IN |
| OUTLET PIPE SIZE: | 16 IN |
| OVERFLOW PIPE SIZE: | 14 IN |
| OVERFLOW WEIR LENGTH: | 9 LF |
| TANK VENT SCREEN: | NO. 24 MESH |
| NET FREE AREA: | 113 SQ-INCHES, MIN. |
| CAPACITY: | SCFM @ 1 PSI |

RECIRC PUMP

| | |
|------------------|-----------------------|
| TYPE: | IN-LINE CENTRIFUGAL |
| QUANTITY: | 1 TOTAL |
| CAPACITY (EACH): | 100 GPM @ 10 FEET TDH |
| MOTOR HP (EACH): | 1 HP |

NEW PRIMARY ELECTRICAL

| | |
|-----------|-----------------------------|
| QUANTITY: | 1 |
| PROVIDER: | IREA |
| SIZE: | 200 AMPS |
| POWER: | 200AMP, 120/240V, 1PH, 60Hz |

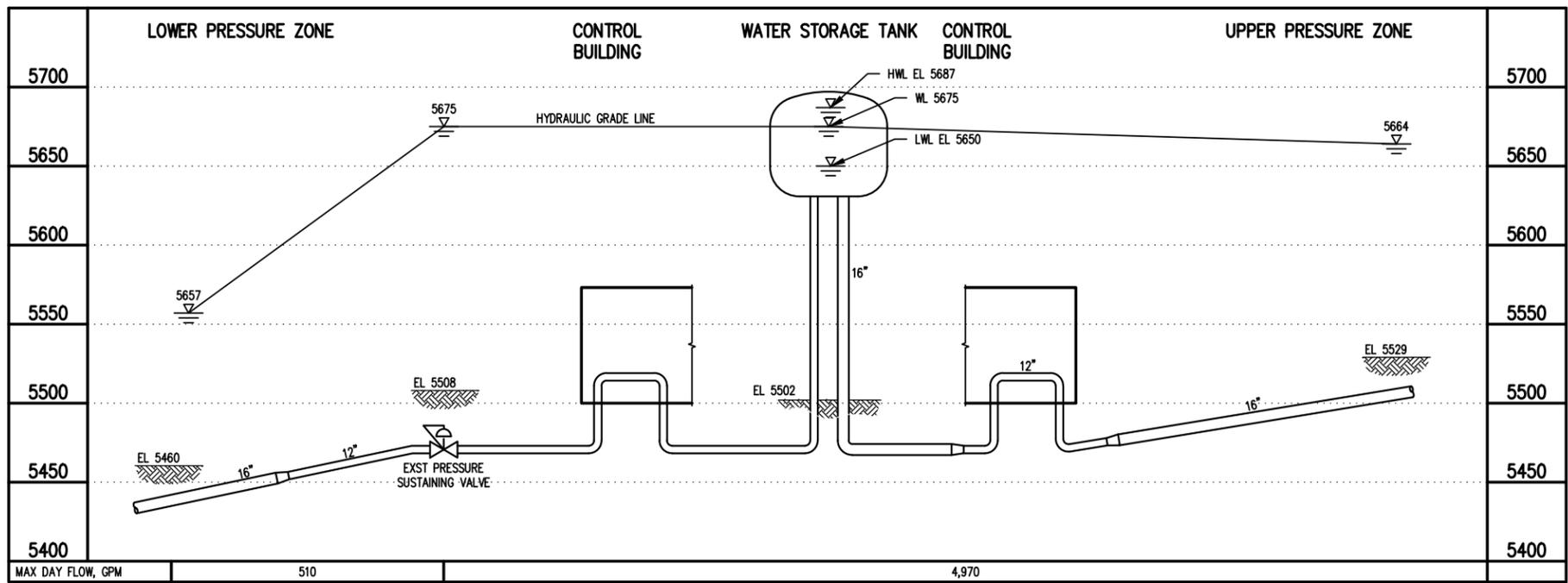


NOTE:
ONLY SELECT VALVES SHOWN ON THE PDF; REFER TO THE P&ID FOR ADDITIONAL INFORMATION.



| REV. No. | DATE | DESCRIPTION |
|----------|--------|-----------------------|
| 1 | 5/2016 | ADDENDUM No. 1 |
| | 3/2016 | BID SET |
| | 2/2016 | 90% DESIGN REVIEW SET |

TOWN OF BENNETT
NEW WATER STORAGE TANK
DESIGN CRITERIA, PROCESS FLOW DIAGRAM & HYDRAULIC PROFILE



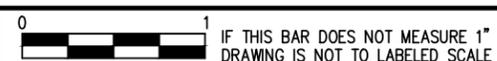
- NOTES:**
- ELEVATIONS ARE ELEVATION EXTREMES FOR EXISTING SERVICE AREA.
 - PER TOWN, EXISTING WELL PUMPS WILL BE CAPABLE OF FILLING NEW TANK OR WILL BE REPLACED; IF NECESSARY.

HYDRAULIC PROFILE
VERT SCALE: 1"=100'

TOWN ENGINEER _____
DATE _____
THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE TOWN OF BENNETT FOR IMPROVEMENTS ONLY

WATER STORAGE UPGRADES SHT 03 OF 44

CONSULTING ENGINEER:
ROBERT FRACHEETI, FEI ENGINEERING, INC.
5325 S. VALENTIA WAY
GREENWOOD VILLAGE, CO 80111
(303) 300-3464

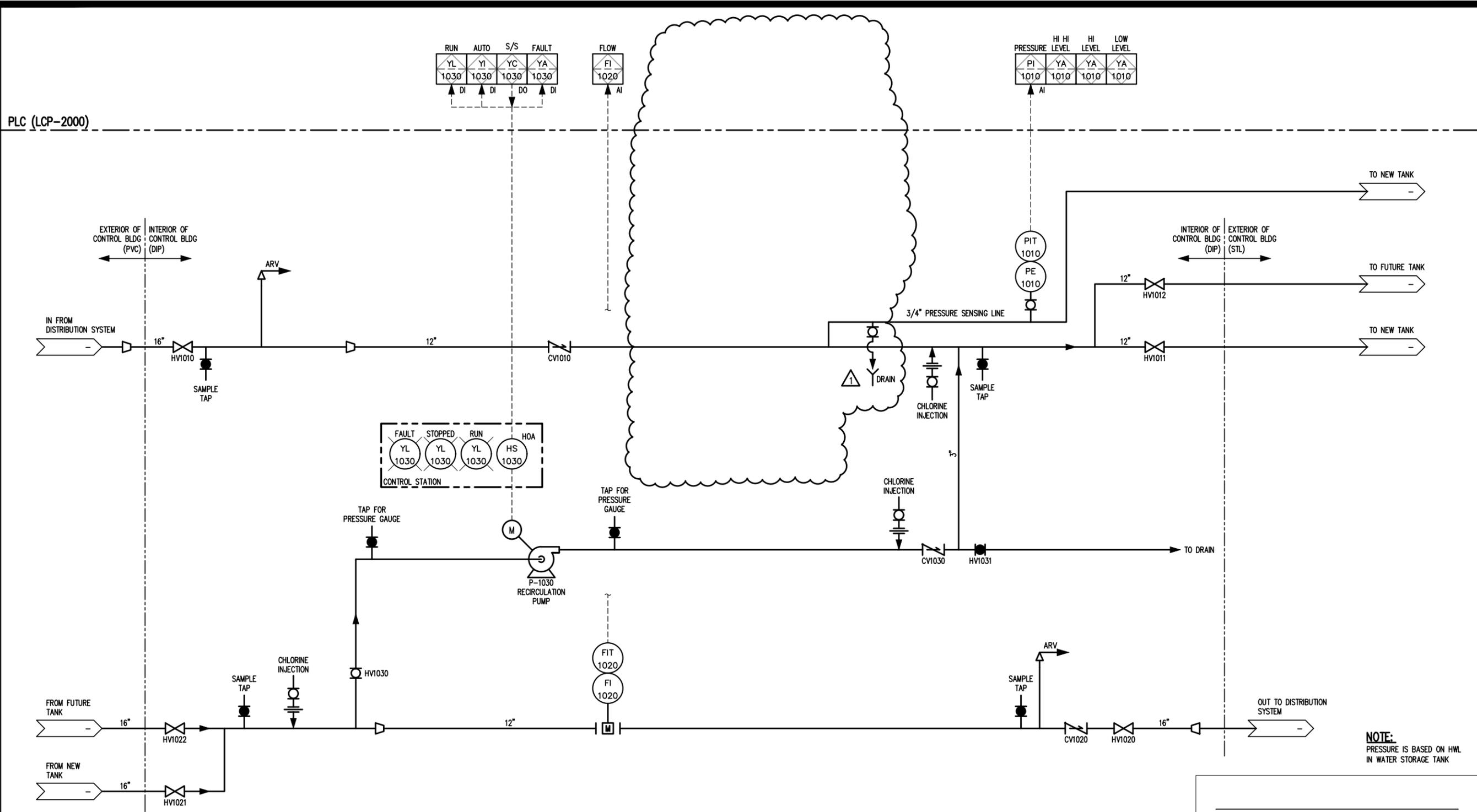


| | |
|--------------|--------------|
| PROJECT No.: | BENN-15-0176 |
| DATE: | 5/5/2016 |
| DESIGNED BY: | PWS |
| DRAWN BY: | SAJ |
| CHECKED BY: | RWF |

GO-03

LOCATION: W:\Bennett, Town of\BENN-15-0176 - WATER STORAGE TANK\GO-03.dwg PLOTTED: 5/9/2016 2:36 PM BY: Keith P. Rindt

LOCATION: W:\Bennett, Town of\BENN-15-0176 - WATER STORAGE TANK\10-02.dwg PLOTTED: 5/9/2016 2:36 PM BY: Keith P. Rinetti



TOWN ENGINEER _____
 DATE _____
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WATER STORAGE UPGRADES **SHT 05 OF 44**
 CONSULTING ENGINEER:
 ROBERT FRACHETTI, FEI ENGINEERING, INC.
 5325 S. VALENTIA WAY
 GREENWOOD VILLAGE, CO 80111
 (303) 300-3464

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| REV. No. | DATE | DESCRIPTION |
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| 1 | 5/2016 | ADDENDUM No. 1 |
| | 3/2016 | BID SET |
| | 2/2016 | 90% DESIGN REVIEW SET |

TOWN OF BENNETT
 NEW WATER STORAGE TANK
 WATER STORAGE TANK P&ID

PROJECT No.: BENN-15-0176
 DATE: 5/9/2016
 DESIGNED BY: NET
 DRAWN BY: KPR
 CHECKED BY: RWF

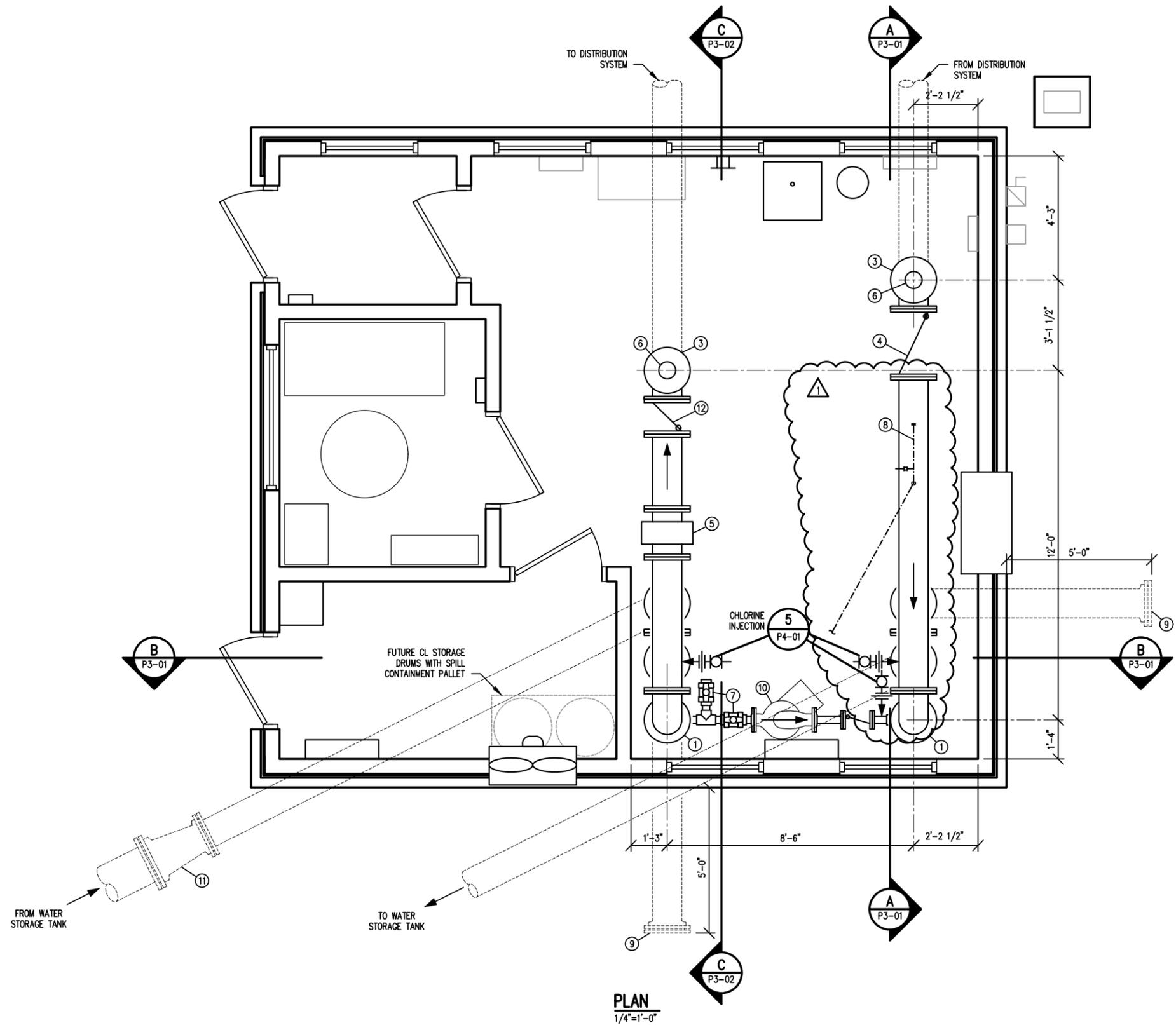
10-02

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EQUIPMENT NOTES:

- ① 12" DIP 90° BEND
- ② 12" DIP GATE VALVE
- ③ 12" DIP TEE
- ④ 12" DIP CHECK VALVE
- ⑤ 12" MAGNETIC FLOW METER
- ⑥ 2" COMBINATION AIR VALVE; SEE 7/P4-01
- ⑦ 3" SST BALL VALVE
- ⑧ INSTRUMENT TAP FOR PIT-1010; SEE 8/P4-01
- ⑨ 12" DIP JOINT AND PLUG; RESTRAIN PER DETAILS 1&2 ON SHEET C4-02
- ⑩ TANK MIX SYSTEM RECIRCULATION PUMP
- ⑪ 16"x12" DIP MJ REDUCER
- ⑫ 12" GLOBE SILENT CHECK VALVE
- ⑬ 3/4" PRESSURE SENSING LINE; FIELD ROUTE TO TANK



PLAN
1/4"=1'-0"

TOWN ENGINEER _____
 DATE _____
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WATER STORAGE UPGRADES SHT 33 OF 44

CONSULTING ENGINEER:
 ROBERT FRACHETTI, FEI ENGINEERING, INC.
 5325 S. VALENTIA WAY
 GREENWOOD VILLAGE, CO 80111
 (303) 300-3464

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| REV. No. | DATE | DESCRIPTION |
|----------|--------|-----------------------|
| | 2/2016 | 90% DESIGN REVIEW SET |
| | 3/2016 | BID SET |
| | 4/2016 | CDPHE RFI |
| 1 | 5/2016 | ADDENDUM No. 1 |

TOWN OF BENNETT
 NEW WATER STORAGE TANK
 CONTROL BUILDING PLAN

PROJECT No.: BENN-15-0176
 DATE: 5/9/2016
 DESIGNED BY: PWS
 DRAWN BY: SAJ
 CHECKED BY: RWF

P1-01

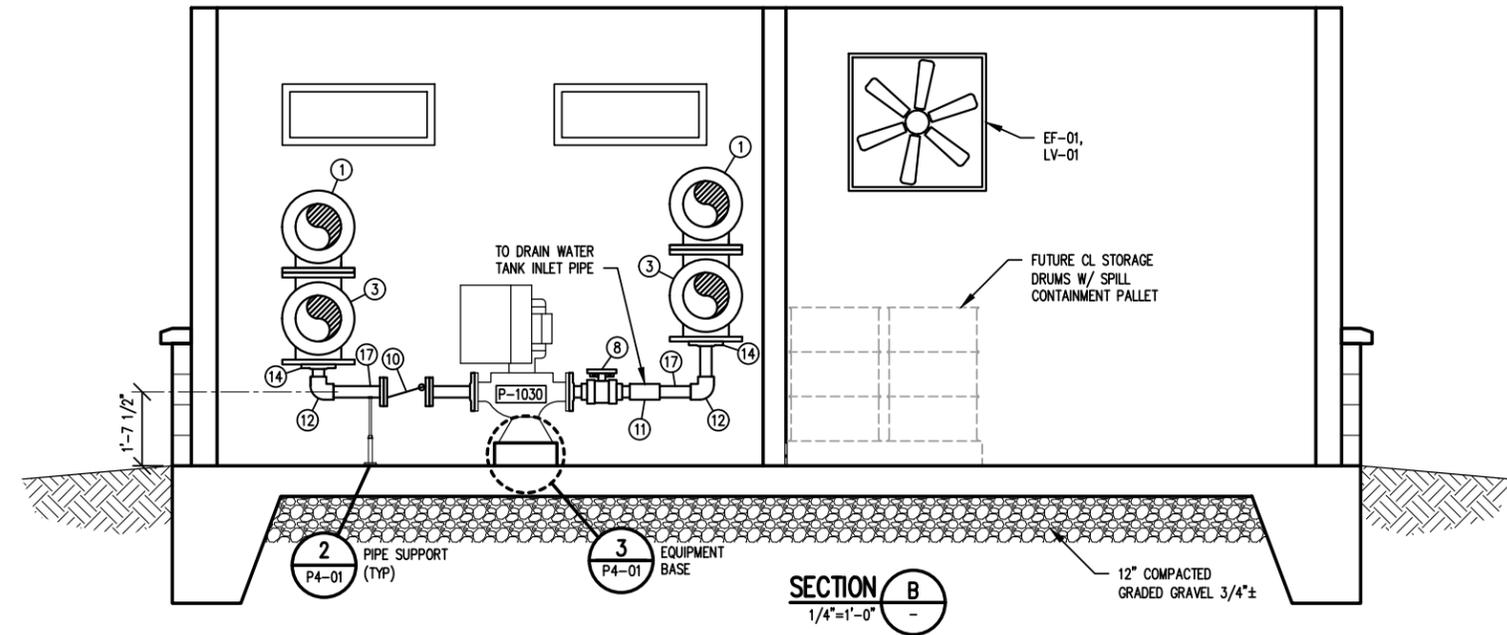
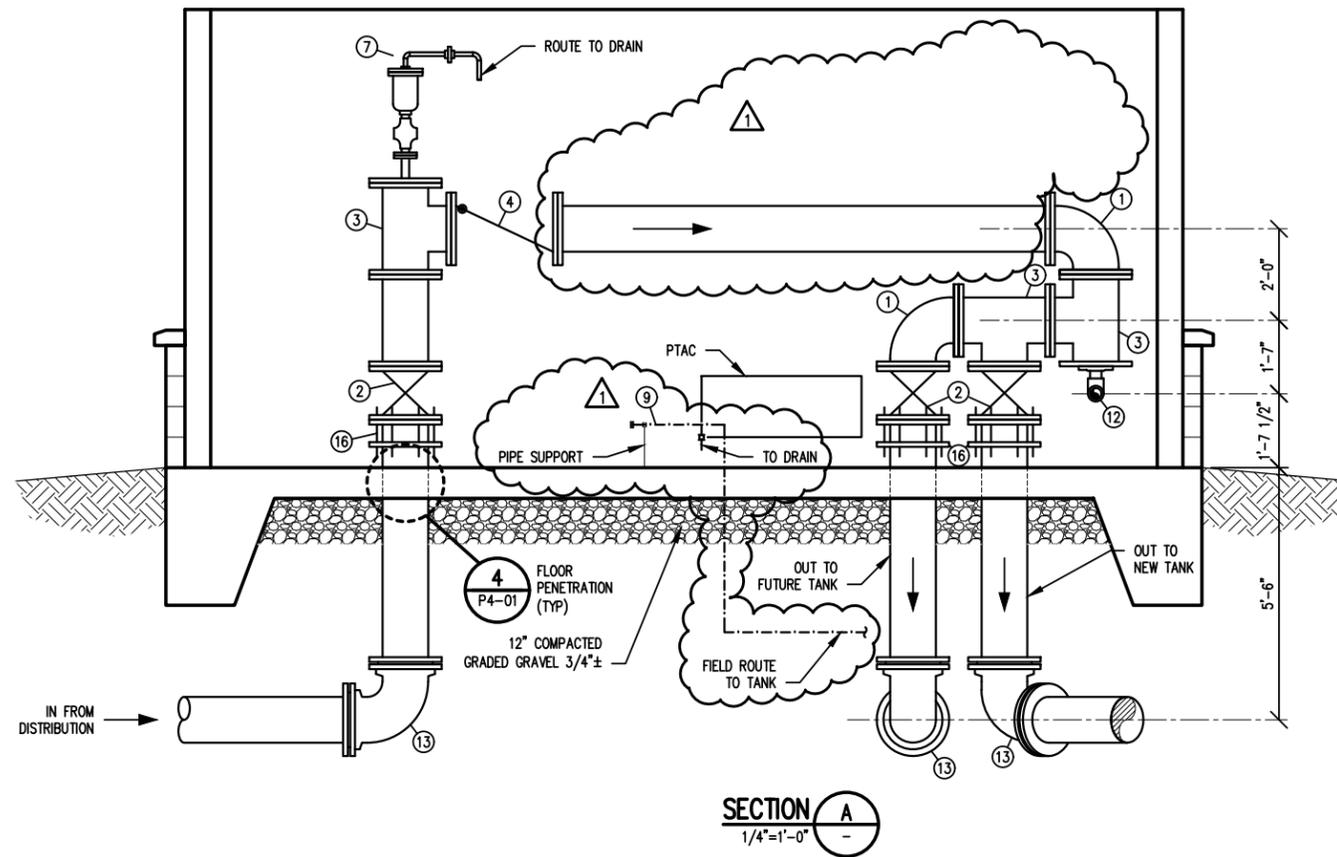
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GENERAL NOTES:

1. ALL SST PIPE AND FITTINGS TO BE THREADED.
2. ALL SST PIPE AND FITTINGS TO BE 304L.

EQUIPMENT NOTES:

- ① 12" DIP 90° BEND
- ② 12" DI GATE VALVE
- ③ 12" DIP TEE
- ④ 12" DI CHECK VALVE
- ⑤ NOT USED
- ⑥ NOT USED
- ⑦ 2" COMBINATION AIR VALVE; SEE 7/P4-01
- ⑧ 3" SST BALL VALVE
- ⑨ INSTRUMENT TAP FOR PIT-1010; SEE 8/P4-01
- ⑩ 3" SST CHECK VALVE W/ VITON DISK; VAL-MATIC SURGE BUSTER OR EQUAL
- ⑪ 3" SST TEE W/ BALL VALVE
- ⑫ 3" SST 90° BEND
- ⑬ 12" DI MJ 90° BEND
- ⑭ 12"x3" COMPANION FLANGE
- ⑮ 3/4" SST TUBING, PRESSURE SENSING LINE; FIELD ROUTE TO TANK
- ⑯ MEGAFLANGE RFCA
- ⑰ TAP FOR PRESSURE GAGE



| REV. No. | DATE | DESCRIPTION |
|----------|--------|-----------------------|
| | 2/2016 | 90% DESIGN REVIEW SET |
| | 3/2016 | BID SET |
| | 4/2016 | COPHE RFI |
| 1 | 5/2016 | ADDENDUM No. 1 |

TOWN OF BENNETT
NEW WATER STORAGE TANK
CONTROL BUILDING
SECTIONS

TOWN ENGINEER _____
DATE _____
THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE TOWN OF BENNETT FOR IMPROVEMENTS ONLY

WATER STORAGE UPGRADES **SHT 35 OF 44**

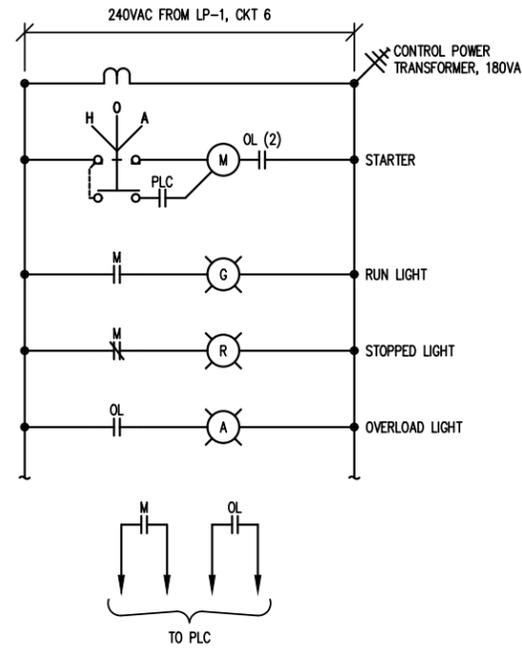
CONSULTING ENGINEER:
ROBERT FRACHETTI, FEI ENGINEERING, INC.
5325 S. VALENTIA WAY
GREENWOOD VILLAGE, CO 80111
(303) 300-3464

| | |
|--------------|--------------|
| PROJECT No.: | BENN-15-0176 |
| DATE: | 5/9/2016 |
| DESIGNED BY: | PWS |
| DRAWN BY: | SAJ |
| CHECKED BY: | RWF |

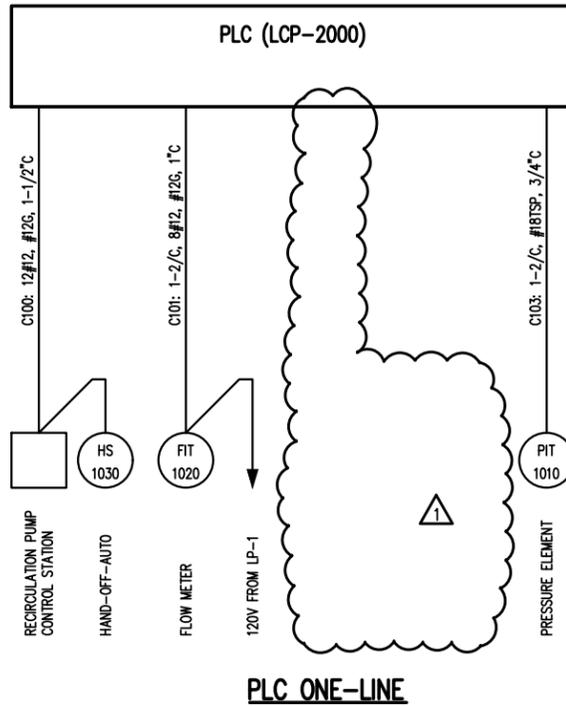


P3-01

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RECURCULATING PUMP SCHEMATIC
(TYP 1)



PLC ONE-LINE



TOWN ENGINEER

DATE

THESE CONSTRUCTION PLANS HAVE BEEN
REVIEWED BY THE TOWN OF BENNETT FOR

IMPROVEMENTS ONLY

WATER STORAGE UPGRADES **SHT 40 OF 44**

CONSULTING ENGINEER:
ROBERT FRACHETTI, FEI ENGINEERING, INC.
5325 S. VALENTIA WAY
GREENWOOD VILLAGE, CO 80111
(303) 300-3464

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| REV. No. | DATE | DESCRIPTION |
|----------|--------|-----------------------|
| | 2/2016 | 90% DESIGN REVIEW SET |
| | 3/2016 | BID SET |
| 1 | 5/2016 | ADDENDUM No. 1 |

TOWN OF BENNETT
NEW WATER STORAGE TANK

**RECIRCULATION PUMP SCHEMATIC
& PLC ONE-LINE**

PROJECT No.: BENN-15-0176
DATE: 5/9/2016
DESIGNED BY: ALK
DRAWN BY: KPR
CHECKED BY: RWF

E2-01



REQUEST FOR INTERPRETATION NO. _____

| | |
|--------------------------------|-----------------------------------|
| OWNER: | PROJECT: |
| CONTRACTOR: | Response Requested (Date): |
| Received by FEI (Date): | Responded by FEI (Date): |
| REFERENCE: | |
| Drawing No.: | Detail No.: |
| Spec. Section: | Page: |
| Location: | Other: |

CONTRACTOR'S REQUEST

By: _____ Date: _____

ENGINEER'S RESPONSE

By: _____ Date: _____