

# ADDENDUM NUMBER 2

Issued January 9, 2020

To The Bid Documents For

Project ENG16-0021  
8<sup>th</sup> Street Underpass Drainage Improvement Project

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To Plan Holders:

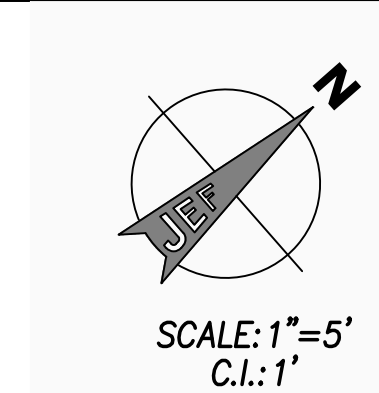
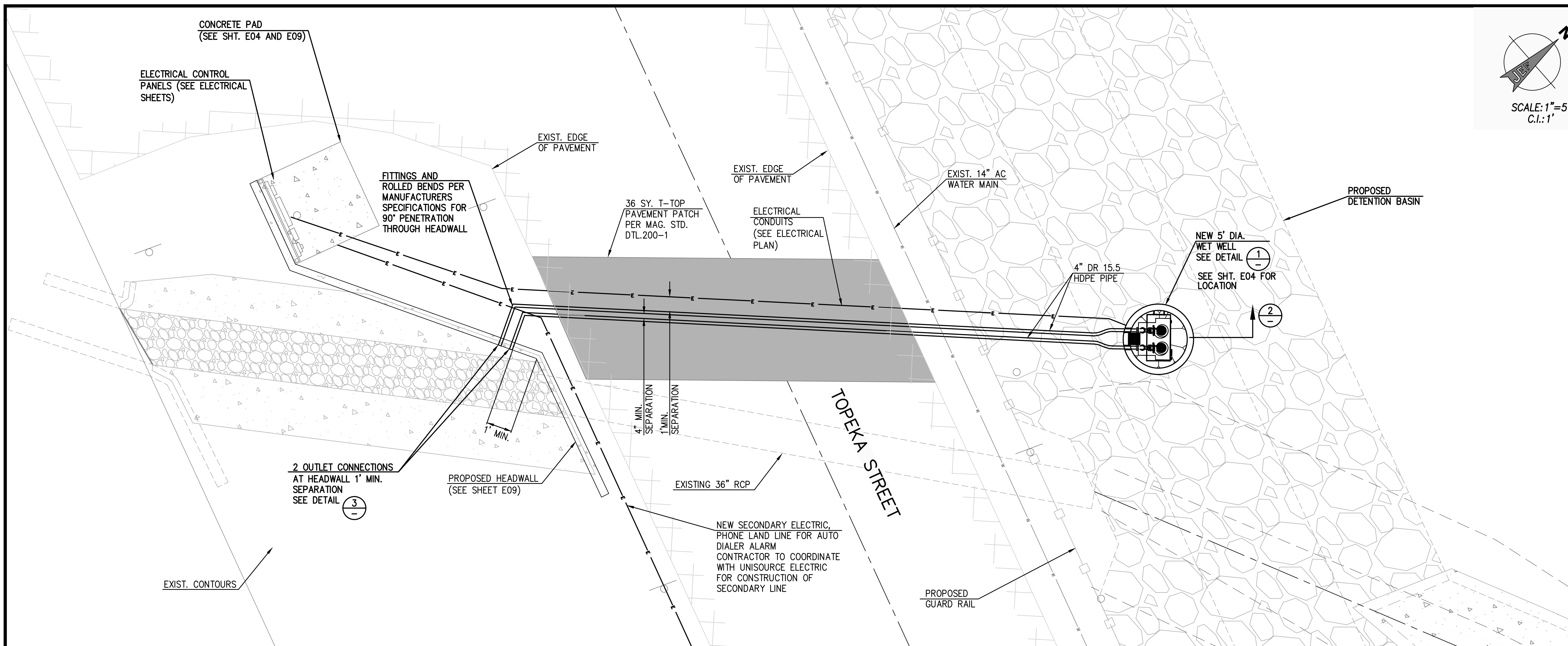
This Addendum Number 2 to the above referenced Project Bid Document is controlling over any other provisions of the Bid Document to the contrary. This addendum shall be considered a material part of the bid Documents.

This addendum includes a revised SPECIFICATION FOR WET WELL CONSTRUCTION- (NOTE C, SHEET E10). 10,000 PSI MIN. PER ASTM-D 6783 COMPRESSIVE STRENGTH IS DELETED AND REPLACED WITH **CONSTRUCTION PER MAG SECTION 742 WITH A MIN. OF 4000 PSI COMPRESSIVE STRENGTH.**

**Bidders must acknowledge receipt of this addendum and the previous Addendum 1 on the BID PROPOSAL.**



Expires 12-31-2021



**WET WELL EQUIPMENT NOTES**

- (A) DUPLEX SUBMERSIBLE SEWAGE PUMPS WITH QUICK DISCONNECT DISCHARGE BOOT CONFORMING TO ASTM C 923. CONTRACTOR TO SUPPLY ELBOWS, GUIDE RAIL AND BRACKETS, POWER CABLES, CONTROL PANEL, AND ALL APPURTENANCES. (DESIGN CAPACITY PER TABLE BELOW.)
- (B) 4" DISCHARGE CONNECTION AND 4" ELBOW.
- (C) WET WELL - SHALL BE PRECAST STRUCTURE PER MAG UNIFORM STANDARD SECTION 742 UNLESS OTHERWISE NOTED. CONSTRUCTION SHALL BE CONCRETE WITH A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. CONCRETE SHALL CONFORM TO ASTM C-478 AND AASHTO M-199. SEE MANUFACTURER NOTES BELOW
- (D) GUIDE RAIL SYSTEM PER PUMP MANUFACTURER'S RECOMMENDATIONS.
- (E) PUMP POWER CABLE (FURNISHED BY MANUFACTURER) SHALL BE CONTINUOUS (NO SPLICES) FROM PUMP TO PULL BOX.
- (F) PUMP LIFTING SLINGS (FURNISHED BY THE MANUFACTURER).
- (G) A MIN. OF 6" OF COMPACTED LEVELING BED OF CRUSHED ROCK (3/4" DIA. SIZE.) MATERIAL SHALL BE COMPACTED WITH A MIN. OF 3 PASSES WITH A CERTIFIED COMPACTOR, OR UNTIL THE ONSITE INSPECTOR HAS DEEMED THE MATERIAL TO BE FIRM AND UNYIELDING, WHICHEVER IS GREATER.
- (H) 316 SS PUMP ANCHOR BOLTS, FOR BASE (SEE MANUFACTURERS SPECIFICATIONS).
- (I) LANE POLYPROPYLENE LADDER, OR APPROVED EQUAL.
- (J) 4' x 2.5' BILCO JD-AL H2O LOCKABLE ALUMINUM ACCESS COVER WITH DUAL DOORS, (OR APPROVED EQUAL) HINGES ON SHORT SIDES. DRAIN TO BE PLUGGED ON SITE.
- (K) UP TO EIGHT (8) 316 STAINLESS STEEL HOOKS FOR INSTRUMENTATION SWITCHES, POWER CABLES AND PUMP CHAINS.(SEE ELECTRICAL PLANS FOR CABLES).
- (L) STAINLESS STEEL PIPE STRAPS AND BOLTS. INSTALLED PER CONCRETE MANUFACTURERS RECOMMENDATIONS. SHOP DRAWINGS REQUIRED.
- (M) LINK SEAL OR APPROVED EQUAL. CONTRACTOR TO SUBMIT ON SIZE AND TYPE OF SEAL FOR EACH PIPE AND CORE SIZE.
- (N) A MIN. OF 8" OF AGGREGATE BASE COURSE COMPACTED TO A MIN. 95% OF OF THE MAX. DRY DENSITY DETERMINED PER ASTM D698 (STANDARD PROCTOR DENSITY) AT OPTIMUM MOISTURE CONTENT ±3%. MATERIAL SHALL COMPLY WITH SECTION 303 OF THE PIMA COUNTY ASSOCIATION OF GOVERNMENTS (PAG) SPECIFICATIONS AND DETAILS FOR PUBLIC IMPROVEMENTS LATEST EDITION.
- (O) 8" INLET PIPE.
- (P) MINIMUM CLEARANCE PER PUMP MANUFACTURER'S SPECIFICATIONS.
- (Q) CONDUIT PENETRATIONS PER ELECTRICAL PLANS.
- (R) 3/4" DIAMETER GRAVEL DRAIN FILL 4" RADIUS AROUND DRAIN PIPE.
- (S) 2" ROUND UPPER GUIDE RAIL BRACKET PER PUMP MANUFACTURERS RECOMMENDATIONS. (2 REQUIRED.)
- (T) OVER EXCAVATE AND RE-COMPACT 8" (MIN.) NATIVE SOIL SURFACE TO A MIN. 95% OF THE MAX. DRY DENSITY DETERMINED PER ASTM D698 (STANDARD PROCTOR DENSITY) AT OPTIMUM MOISTURE CONTENT ±3%.
- (U) METAL DEBRIS CAGE W/MAX 3/4" OPENINGS, BOLTED TO SLAB. MIN. SIZE OF 12"x12"x6" TO REDUCE CHANCE OF CLOGGING.
- (V) 6" ADS CORRUGATED DRAIN PIPE (FOR INJECTION). TO 4' BELOW WET WELL BASE. INCLUDE DEBRIS SCREEN AT TOP AND CAP AT BOTTOM.

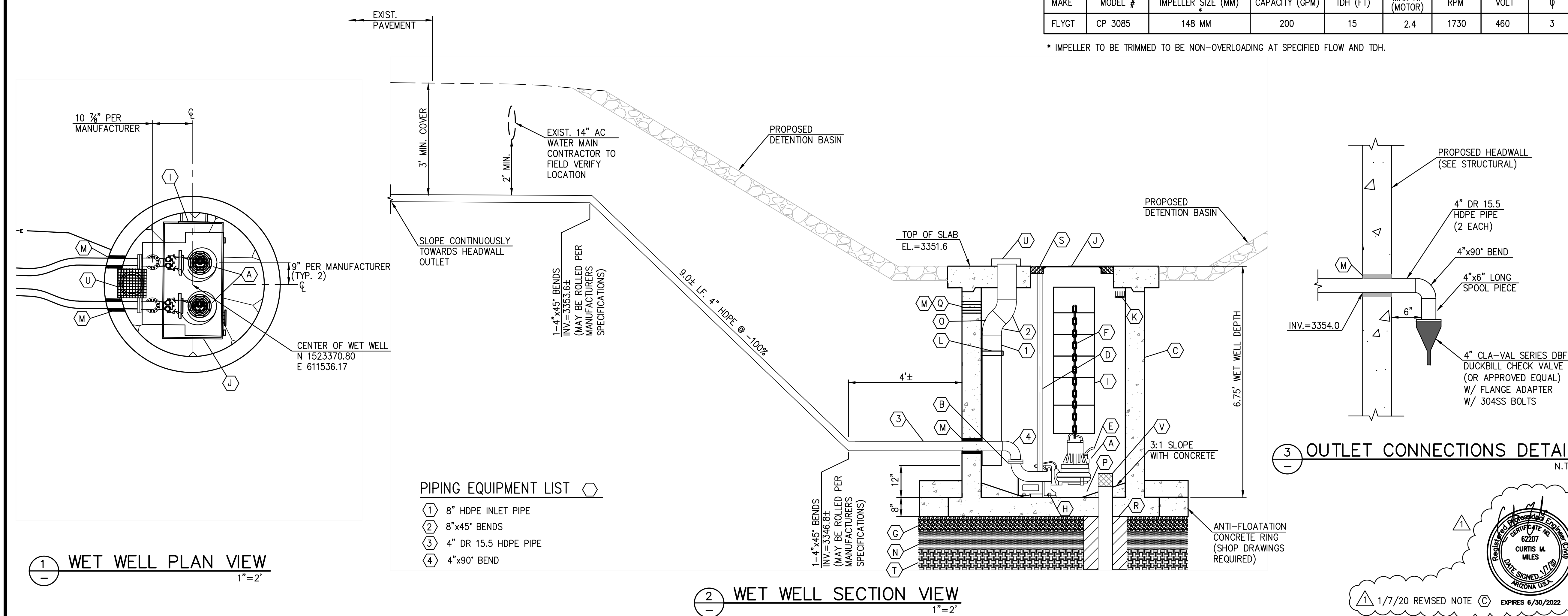
**NOTES:**

1. WET WELL MANUFACTURER TO PROVIDE BOUANCY AND TRAFFIC RATING CALCULATIONS STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ARIZONA.
2. WHERE POSSIBLE ALL METAL WITHIN THE WET WELL SHALL BE TYPE 316 STAINLESS STEEL.
3. ALL CONSTRUCTION TO CONFORM TO LATEST M.A.G. CITY OF KINGMAN, AND MOHAVE.
4. NON-POTABLE WATER SERVICES SHALL BE INSTALLED WITH A MINIMUM OF 36" OF COVER AND 12" MINIMUM OF VERTICAL SEPARATION FROM GAS AND DRY UTILITIES. A HORIZONTAL SEPARATION 6" AND VERTICAL SEPARATION OF 2' SHALL BE MAINTAINED FROM POTABLE WATER AND SANITARY SEWER.
5. NON-POTABLE SERVICES SHALL BE HDPE WITH PURPLE STRIPE OR PURPLE POLYWRAP SLEEVE.

**PUMP SELECTIONS (OR ENGINEER APPROVED EQUAL)**

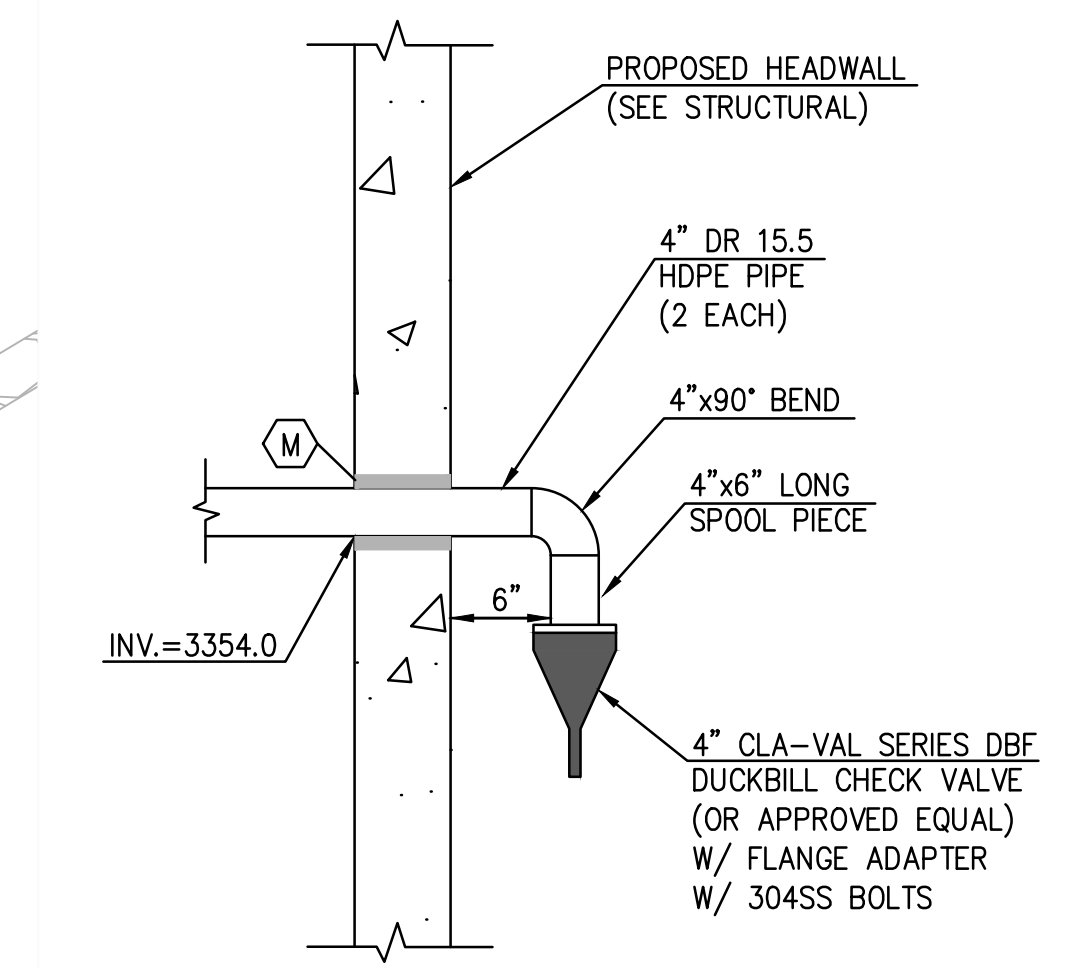
| MAKE  | MODEL # | IMPELLER SIZE (MM) | CAPACITY (GPM) | TDH (FT) | MAX HP (MOTOR) | RPM  | VOLT | φ |
|-------|---------|--------------------|----------------|----------|----------------|------|------|---|
| FLYGT | CP 3085 | 148 MM             | 200            | 15       | 2.4            | 1730 | 460  | 3 |

\* IMPELLER TO BE TRIMMED TO BE NON-OVERLOADING AT SPECIFIED FLOW AND TDH.



**PIPING EQUIPMENT LIST**

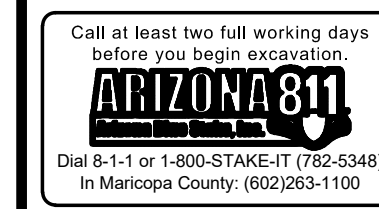
- (1) 8" HDPE INLET PIPE
- (2) 8"x45" BENDS
- (3) 4" DR 15.5 HDPE PIPE
- (4) 4"x90" BEND



**OUTLET CONNECTIONS DETAIL**  
N.T.S.



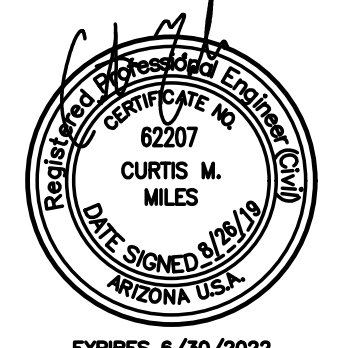
1/7/20 REVISED NOTE C EXPRES 6/30/2022



**WestLand Resources**  
4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

**DRAINAGE IMPROVEMENT PROJECT**  
C.O.K. PROJECT NO. ENG 16-00021  
FILENAME: 730.03 SUMP PLAN-1 8-26-19.dwg

**CITY OF KINGMAN ENGINEERING DEPARTMENT**  
310 NORTH 4TH STREET  
KINGMAN, ARIZONA 86401  
PHONE (928) 753-8122 FAX (928) 753-8118



**8TH ST. UNDERP.**  
100% DESIGN PLANS  
SHEET NO. **E10**  
10 OF 12