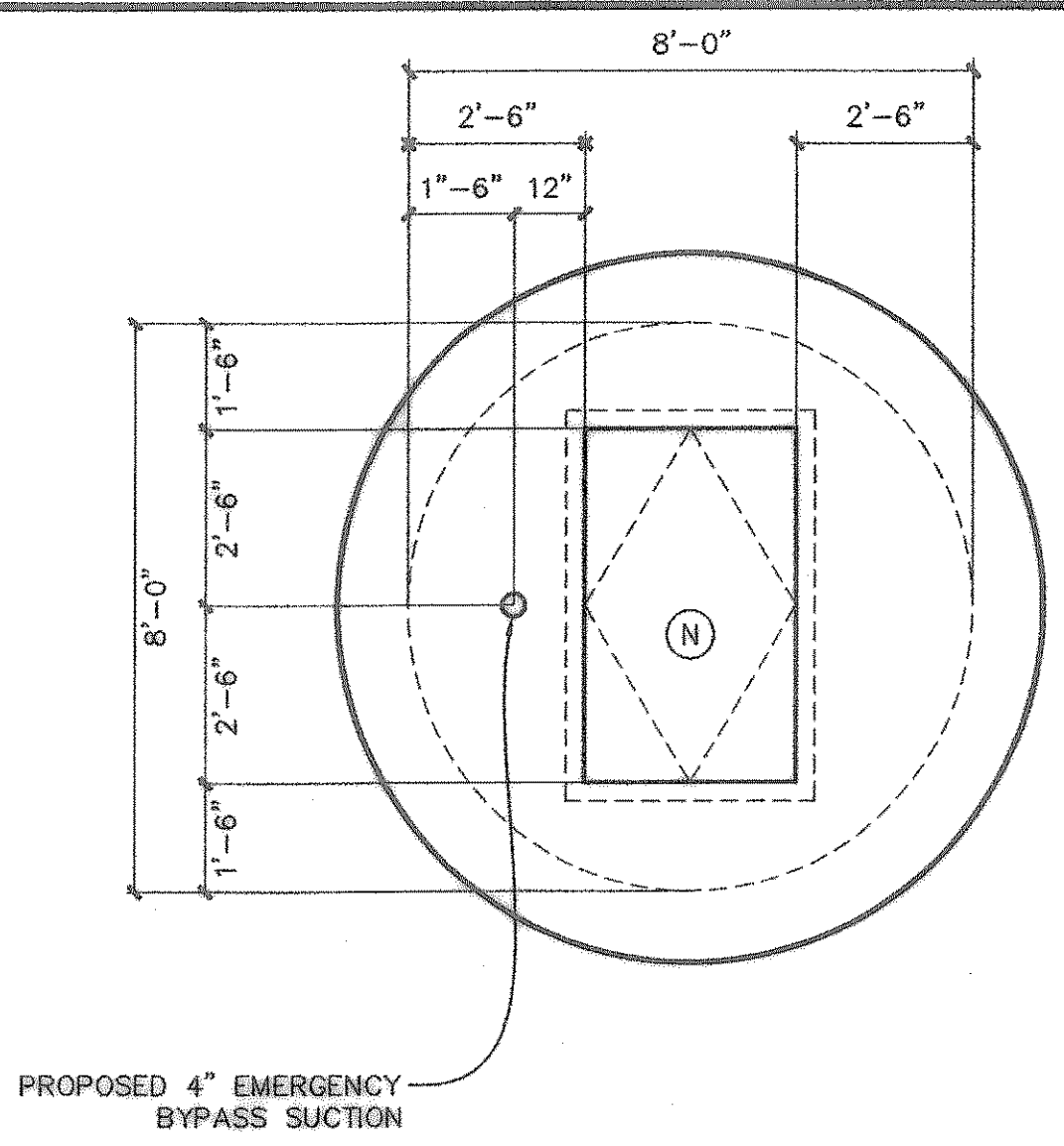


1
LS2
SECTION VIEW
NORTH LAKESHORE VALLEY LIFT STATION
SCALE = 3/8" = 1'-0"

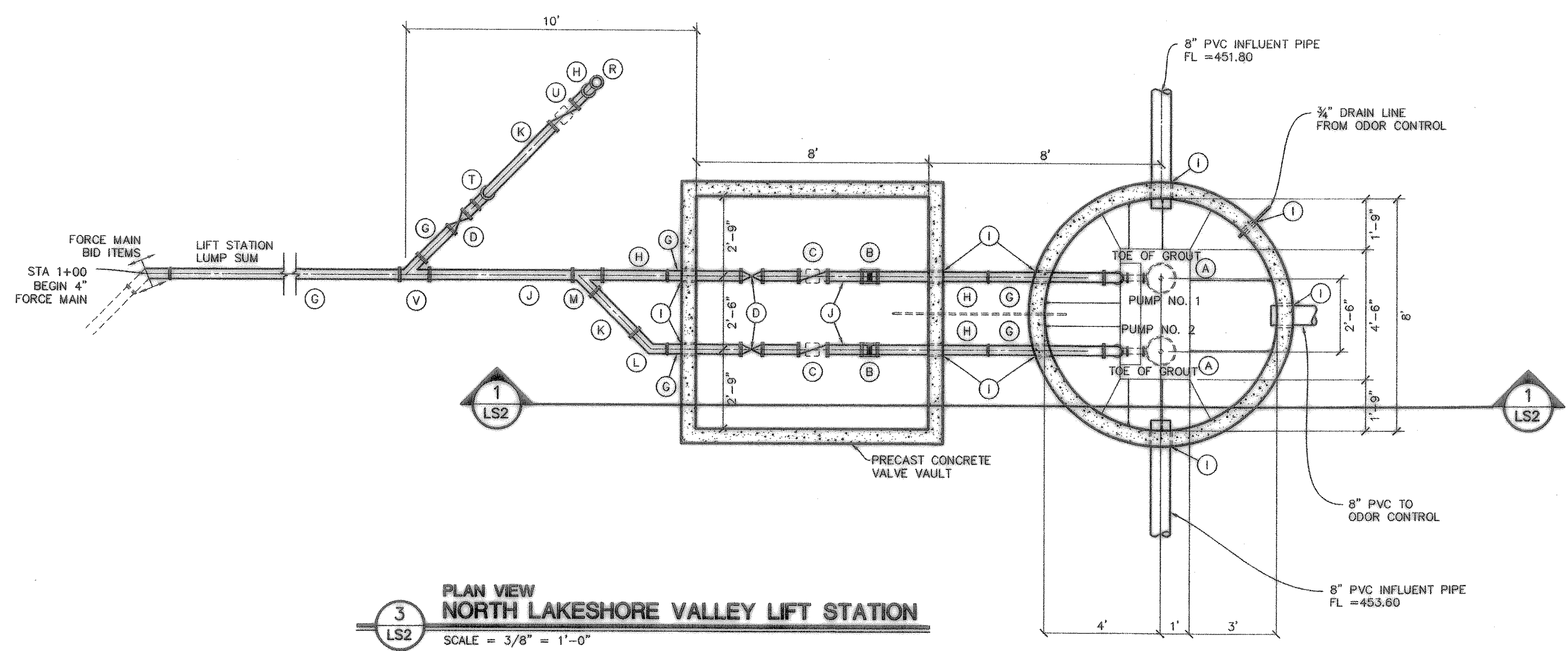


2
LS2
PLAN VIEW - WET WELL ROOF
NORTH LAKESHORE VALLEY LIFT STATION
SCALE = 3/8" = 1'-0"

NOTE:
CONTRACTOR SHALL
COORDINATE ALL ROOF
PIPING PENETRATIONS WITH
PIPING LAYOUT IN DETAILS
1/LS2 AND 3/LS2.

GENERAL NOTES

- GROUT OPENING FOR ACCESS FRAME.
- ACCESS HATCHES SHALL BE FLUSH MOUNTED, ALUMINUM (FLYGT OR EQUAL), H-20 CAPACITY, AND HAVE PADLOCK HASPS, DRAINS, AND HYDRAULIC OPENERS.
- CONFIGURATIONS AND DIMENSIONS SHOWN ARE BASED ON THE EQUIPMENT SPECIFIED. THE CONTRACTOR SHALL VERIFY THE LAYOUT AND ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT, TO THE ENGINEER, SHOP DRAWINGS SHOWING THE FINAL LAYOUT AND DIMENSIONS PRIOR TO CONSTRUCTION.
- REFERENCE SPECIFICATIONS FOR LIFT STATION EQUIPMENT. PUMPS SHALL BE FLYGT MODEL NP 3102.181 SH OR APPROVED EQUAL WITH A PUMP CAPACITY OF 145 GPM AT 55.13 FEET TDH.
- 4" DRAIN PIPE FROM VALVE VAULT TO WET WELL SHALL BE SCHEDULE 40 PVC CONSTRUCTED ON -0.50% SLOPE. FLOOR DRAIN INSIDE VALVE VAULT SHALL BE CENTERED INSIDE THE STRUCTURE AND SHALL BE A NEENAH MODEL R-4937-B GRATE OR APPROVED EQUAL.
- 4" DRAIN FROM VALVE VAULT TO WET WELL SHALL INCLUDE A 4" I.D. FLAP VALVE AT ITS DISCHARGE POINT INSIDE THE WET WELL. FLAP VALVE SHALL BE RODNEY HUNT SERIES FV-SPR OR APPROVED EQUAL.
- ALL COUPLINGS SHALL BE EPOXY COATED STEEL AND SHALL BE DRESSER, SMITH-BLAIR 411, OR EQUAL. COUPLINGS SHALL BE RESTRAINED WITH A THRUST HARNESS DESIGNED IN ACCORDANCE WITH AWWA M-11.
- ALL FLANGES SHALL BE CAPABLE OF A WORKING PRESSURE OF 150 PSI AND A HYDROSTATIC PRESSURE OF 265 PSI.
- ALL RESTRAINING RODS SHALL BE 316 OR 304 STAINLESS STEEL. INSTALL ISOLATION KITS BETWEEN DISSIMILAR METAL PIPING.
- ALL PIPE PENETRATIONS INTO WET WELL SHALL INCLUDE A M&P WALL CASTING.
- ALL OPENINGS AND CONNECTIONS THROUGH THE WALL SHALL BE PREFABRICATED AND SEALED TO PREVENT LEAKAGE AND INFILTRATION.
- ALL DUCTILE IRON PIPING SHALL BE RATED FOR A WORKING PRESSURE OF 150 PSI. ALL DUCTILE IRON PIPING INSTALLED ABOVE GROUND SHALL BE FLANGED.
- ALL EXPOSED METAL WITHIN THE WET WELL SHALL BE TYPE 316L STAINLESS STEEL.
- ALL UNDERGROUND DUCTILE IRON PIPING SHALL BE MECHANICAL JOINT AND POLYWRAPPED. ALL FITTINGS BETWEEN DUCTILE IRON PIPE SHALL BE RESTRAINED WITH MEGALUG FITTINGS AS MANUFACTURED BY EBAA IRON INC. OR APPROVED EQUAL.
- CONTRACTOR SHALL PROVIDE STRUCTURAL DESIGN OF WET WELL AND SUBMIT TO ENGINEER FOR REVIEW.
- WET WELL EXCAVATION METHODS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- CONTRACTOR SHALL SUBMIT DESIGN FOR GROUT CONE UNDER PUMP SUCTIONS, INCLUDING MEANS OF ATTACHMENT, TO THE ENGINEER PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PURCHASE THE DISCHARGE CONNECTIONS DIRECTLY FROM ITT FLYGT. DISCHARGE CONNECTIONS SHALL BE LOCATED AND INSTALLED IN ACCORDANCE WITH RECOMMENDATIONS FROM ITT FLYGT.
- ALL WET WELL CONCRETE JOINTS SHOULD BE LOCATED ABOVE THE OPERATING LEVELS (WET ZONE) IN THE WET WELL. THE BASE SHALL BE INTEGRALLY CAST WITH THE FIRST SECTION OF PIPE. ALL JOINTS SHALL BE SEALED WITH WATERSTOP SEALS, AND THE INTERIOR AND EXTERIOR OF EACH JOINT SHALL BE SEALED WITH NON-SHRINK GROUT. JOINTS IN THE VALVE VAULT SHALL BE TREATED SIMILAR TO THE WET WELL.
- ALL EXPOSED CONCRETE AND GROUT SURFACES INSIDE THE WET WELL SHALL BE COATED WITH A PROTECTIVE COATING SYSTEM TO PREVENT DEGRADATION OF THE CONCRETE AND GROUT SURFACES BY SEWER GASES. THE SURFACES SHALL BE ABRASIVE BLASTED TO SSPC-SP13/NACE 6 PRIOR TO APPLICATION OF THE COATING. THE COATING SYSTEM SHALL CONSIST OF A 1/16" THICK PRIME COAT OF TNEC 218 MORTARCLAD, 125 MIL DFT OF TNEC 434 PERMASHIELD AND A 16 MIL DFT TOPCOAT OF TNEC 435 PERMAGLAZE OR APPROVED EQUAL. COATING SHALL BE APPLIED IN THE FIELD AFTER INSTALLATION OF THESE STRUCTURES. REFER TO TECHNICAL SPECIFICATION SECTION 09910.
- THE EXTERIOR OF ALL EXPOSED DUCTILE IRON PIPING SHALL BE COATED WITH CARBOLINE BITUMASTIC 300M COAL TAR EPOXY OR APPROVED EQUAL. THE INTERIOR OF ALL DUCTILE IRON PIPING SHALL BE COATED WITH CARBOLINE BITUMASTIC 300M COAL TAR EPOXY OR APPROVED EQUAL. REFER TO TECHNICAL SPECIFICATION SECTION 09900.
- CRUSHED ROCK BASE WILL BE IN ACCORDANCE WITH C.O.G. SPECIFICATION 2.1.3(b).



3
LS2
PLAN VIEW
NORTH LAKESHORE VALLEY LIFT STATION
SCALE = 3/8" = 1'-0"

EQUIPMENT/FITTING LIST

MARK	DESCRIPTION	QUANTITY	JOINT
A	SUBMERSIBLE PUMP W/ SEALING FLANGE	2	-
B	ADAPTER AND STAINLESS STEEL LIFTING CABLES	2	-
C	4" RESTRAINED COUPLING	2	-
D	4" SWING CHECK VALVE W/ LEVER AND SPRING	2	FLG.-FLG.
E	4" GATE VALVE	3	FLG.
F	3" - DISCHARGE CONNECTION	2	FLG.-FLG.
G	(ITT FLYGT PART NUMBER 444 68 05)		
H	4" - 90° BEND	2	FLG.-FLG.
I	4" PIPE SPOOL	6	FLG.-P.E.
J	4" PIPE SPOOL	4	M.J.-P.E.
K	CENTURY LINE WALL SLEEVE	10	-
L	4" PIPE SPOOL	3	FLG.-P.E.
M	4" PIPE SPOOL	2	P.E.-P.E.
N	4" -45° BEND	1	M.J.-M.J.
O	4"x4" WYE	1	M.J.-M.J.-FLG.
P	5'x3' DOUBLE LEAF ACCESS HATCH WITH FLYGT TYPE FLED-13HD OR EQUAL	2	-
Q	LATERAL PIPE SUPPORT AT 4' INTERVALS (TYP.)	10	-
R	PVC HATCH DRAIN	2	-
S	ADJUSTABLE PIPE SADDLE SUPPORT (ANVIL INTERNATIONAL INC. FIG. 264 OR APPROVED EQUAL)	4	-
T	4" QUICK CONNECT	2	-
U	4" X 3" ECCENTRIC REDUCER	2	FLG.-FLG.
V	4" - 45° BEND	1	FLG.-M.J.
W	4" SWING CHECK VALVE	1	M.J.-M.J.
X	4" X 4" WYE	1	M.J.-M.J.

*** NOTE
ALL PIPE AND FITTINGS ABOVE GROUND SHALL BE DUCTILE IRON. FITTINGS AND PIPING WITHIN THE WET WELL SHALL BE STAINLESS STEEL. (RE: SPECIFICATIONS)

RECORD DRAWING
THIS RECORD DRAWING HEREIN REFLECTS TO THE BEST OF THE DESIGN ENGINEER'S KNOWLEDGE, THE APPROXIMATE LOCATION OF THE CONSTRUCTED WORK, USING INFORMATION AS PROVIDED BY THE CONTRACTORS.

Kimley-Horn and Associates, Inc.
 1700 Park Central Drive, Suite 1800 Dallas, TX 75261 972-70-0000
 No. _____ Date _____
 Revision _____
 North Lakeshore Valley Lift Station
 Rockwall, TX
 LIFT STATION DETAILS
 DATE: JANUARY 2009
 DESIGN: TJS
 DRAWN: TJS
 CHECKED: MSP
 RHA NO.: 068237002
 SHEET
LS2