

KEYNOTES:

- ① PRECAST CONCRETE TOP SLAB SUITABLE FOR HS25 WHEEL LOADING. PUMP HATCH TO BE CAST INTEGRAL WITH COVER. CONTRACTOR SHALL COORDINATE HATCH LOCATION.
- ② REINFORCEMENT STEEL AS RECOMMENDED BY PRECAST MANUFACTURER FOR HS25 WHEEL LOADING.
- ③ ALUMINUM HATCH SUITABLE FOR H20 WHEEL LOADING. CONTRACTOR SHALL PROVIDE FOUR (4) STAINLESS STEEL "J" HOOKS FOR HOLDING PUMP AND CONTROL CABLES. SIZE HATCH IN ACCORDANCE WITH PUMP SELECTION.
- ④ 4" SCH 80 PVC TO VENT PIPE LOCATION
- ⑤ CONCRETE SLAB. SEE DETAIL H/SD/4
- ⑥ TWO ROWS OF KENT SEAL (TYP)
- ⑦ ANGLE SUPPORT ANCHOR FOR TOP SLAB. TYP OF FOUR (4). SEE DETAIL C/SD/4
- ⑧ 2" STAINLESS STEEL GUIDE RAILS. PROVIDE INTERMEDIATE SUPPORTS AS RECOMMENDED BY PUMP MANUFACTURER. CONTRACTOR SHALL COORDINATE LENGTH OF TOP GUIDE SUPPORT. (TYP)
- ⑨ REINFORCEMENT AS REQUIRED FOR LOADING AND BOUYANCY FORCES
- ⑩ PIPE OPENING FOR PIPING AND CONDUITS (TYP). SEE DETAIL D/SD/4
- ⑪ PRECAST MANHOLE MEETING ASTM C478 (72" DIA. MINIMUM)
- ⑫ PROVIDE STAINLESS STEEL PIPE SUPPORTS (TYP)
- ⑬ KSB PUMPS AND DISCHARGE ELBOWS (FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR)
- ⑭ MNDOT 3Y46 CONCRETE FILL FOR GROUT CIRCLE. SHAPE GROUT CIRCLE IN ACCORDANCE WITH PUMP MANUFACTURER'S RECOMMENDATIONS.
- ⑮ REDUCER IF REQUIRED BASED ON PUMP SELECTION AND HYDRAULICS
- ⑯ 3" DIP DRAIN PIPING. EXTEND PIPING TO JUST BELOW THE LOW WATER LEVEL IN WET WELL.
- ⑰ PRECAST CONCRETE TOP SLAB SUITABLE FOR HS25 WHEEL LOADING. HATCH SHALL BE CAST INTEGRAL WITH TOP SLAB AND CENTERED ON TOP SLAB.
- ⑱ ALUMINUM HATCH SUITABLE FOR H20 WHEEL LOADING. SIZE IN ACCORDANCE WITH DISCHARGE PIPING
- ⑲ PRECAST MANHOLE MEETING ASTM C478 (72" DIA. MINIMUM)
- ⑳ FLANGED COUPLING ADAPTOR (TYP)
- ㉑ MAINTENANCE FREE SWING CHECK VALVE (TYP)
- ㉒ 9" LONG (MIN) - FL DIP SPOOL (TYP)
- ㉓ GATE VALVE WITH HANDWHEEL OPERATOR (TYP)
- ㉔ PIPE SUPPORT (TYP). SEE DETAIL A/SD/4
- ㉕ BASE SLAB ANCHORAGE (TYP). SEE DETAIL B/SD/4
- ㉖ PRECAST CONCRETE BASE SLAB. SIZE ACCORDINGLY
- ㉗ GEOTEXTILE FABRIC (MnDOT 3733 TYPE V)
- ㉘ 12" MIN OF MnDOT 3149.2C STABILIZING AGGREGATE
- ㉙ FLOOR DRAIN (ZURN MODEL Z453 OR EQUAL)
- ㉚ ELECTRICAL CONDUITS
- ㉛ RUBBER DUCK BILL CHECK

GENERAL NOTES:

- ALL ANCHOR BOLTS AND FASTENERS SHALL BE STAINLESS STEEL.
- ALL PIPING AND PIPE JOINTS SHALL BE PROPERLY RESTRAINED TO PREVENT EXCESS MOVEMENT IN ANY DIRECTION DURING OPERATION AND TESTING. PIPE SUPPORTS SHALL BE LOCATED IN FIELD.
- PAINT ALL EXPOSED DIP PIPING WITH TWO COATS OF BITUMASTIC PAINT.
- PROVIDE EXTERNAL JOINT SEAL, INFRASHIELD OR EQUAL, ON ALL MANHOLE SECTION JOINTS.
- PLUG ALL LIFTING HOLES WITH NON SHRINK GROUT AND COVER WITH A PIECE OF EXTERNAL JOINT SEAL, INFRARED OR EQUAL.
- LOCATE INLET PIPE(S), VENT PIPE, AND ELECRICAL CONDUITS AS REQUIRED PER SITE CONDITIONS.
- SIZE DISCHARGE PIPING AND FITTINGS ACCORDINGLY PER LIFT STATION FLOW CONDITIONS.
- SIZE WET WELL PER LIFT STATION FLOW CONDITIONS (MINIMUM 72" DIAMETER).
- DRAWING PROVIDED FOR GENERAL LIFT STATION LAYOUT AND COMPONENTS. ADDITIONAL DESIGN CONSIDERATIONS MAY BE REQUIRED FOR VARIED SITE CONDITIONS.



NON-GRINDER LIFT STATION CROSS-SECTION NOTES

PLATE NO. LV-SS-11B

DATE 01/2020