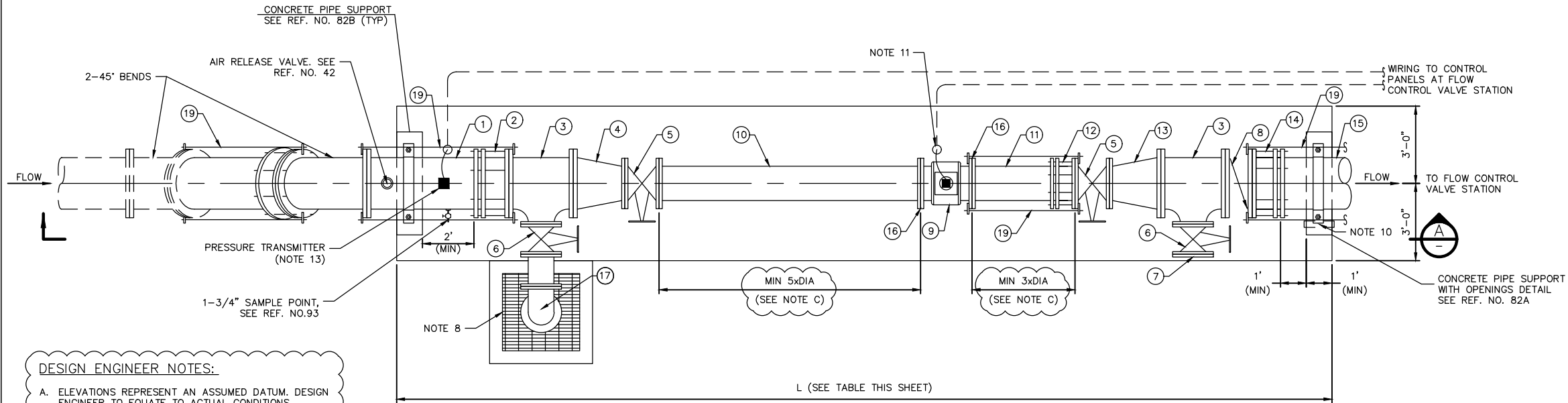


No.	Date	Revisions	App.



#### DESIGN ENGINEER NOTES:

- ELEVATIONS REPRESENT AN ASSUMED DATUM. DESIGN ENGINEER TO EQUATE TO ACTUAL CONDITIONS.
- DESIGN ENGINEER WILL UPDATE DRAWINGS AS NEEDED PER MANUFACTURER RECOMMENDATION.
- IF A DIFFERENT MODEL OR MANUFACTURER OF FLOW METER IS INSTALLED, REQUIRED LENGTH OF STRAIGHT RUN OF PIPE UPSTREAM AND DOWNSTREAM OF PIPE SHALL BE REEVALUATED AND MODIFIED ACCORDINGLY.
- DESIGN ENGINEER RESPONSIBLE FOR STRUCTURAL DESIGN OF CONCRETE SLAB.

### FLOW METER STATION PLAN – SLAB ON GRADE

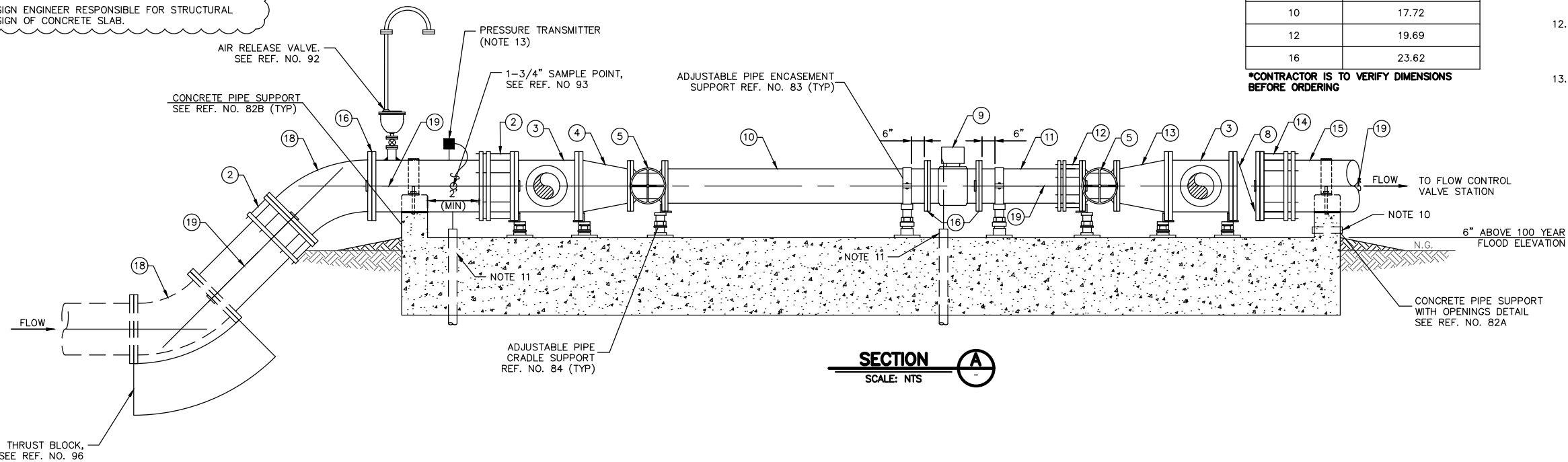
SCALE: NTS

ENDRESS+HAUSER PROMAG W 400 FLOW METER DIMENSIONS*	
DIAMETER (INCHES)	LENGTH – FLANGE TO FLANGE (INCHES)
8	13.78
10	17.72
12	19.69
16	23.62

\*CONTRACTOR IS TO VERIFY DIMENSIONS BEFORE ORDERING

PIPE RUN SIZE DIAMETER TABLE		
METER DIA. (INCHES)	L (MIN) (FEET)	
	STEEL	DI
8	17.3	15.9
10	21.5	21.1
12	25.1	24.9
16	30.8	29.8

\* L (LENGTH) OF METER RUN SLAB IS A MIN. MAY BE INCREASED BASED ON PIPING SHOP DRAWINGS.



#### SECTION A-A

SCALE: NTS

PIPE RUN SIZE = METER NOMINAL INSIDE DIAMETER, DIA. (INCH)=		8 INCH	10 INCH	12 INCH	16 INCH
ITEM	FITTING DESCRIPTION	FITTING SIZE (INCH)	FITTING SIZE (INCH)	FITTING SIZE (INCH)	FITTING SIZE (INCH)
1	PIPE (DIAMETER)	8	12	16	20
2	FLANGED COUPLING ADAPTER WITH RESTRAINTS (DIAMETER) (SEE NOTE 7)	8	12	16	20
3	TEE W/BASE (DIAMETER, RUN X RUN X BRANCH)	8X8X6	10X10X16	12X12X8	16X16X12
4	REDUCER	NONE	12X10	16X12	20X16
5	VALVE, GATE GV-1 (DIAMETER) (SEE NOTE 1)	8	10	12	16
6	VALVE, GATE GV-1 (DIAMETER) (SEE NOTE 1)	6	6	8	12
7	BLIND FLANGE (SIZE) (SEE NOTE 9)	6	6	8	12
8	VALVE, CHECK – DUAL DISC (DIAMETER) (SEE NOTE 3)	8	12	16	16
9	FLOW METER SIZE (MAG METER) (SEE NOTE 2)	8	10	12	16
10	PIPE SPOOL (DIAMETER) LENGTH=(5 x DIA.)(SEE NOTE C)	8	10	12	16

PIPE RUN SIZE = METER NOMINAL INSIDE DIAMETER, DIA. (INCH) =		8 INCH	10 INCH	12 INCH	16 INCH
ITEM	FITTING DESCRIPTION	FITTING SIZE (INCH)	FITTING SIZE (INCH)	FITTING SIZE (INCH)	FITTING SIZE (INCH)
11	PIPE SPOOL (DIAMETER) LENGTH=(3 x DIA.)(SEE NOTE C)	8	10	12	16
12	FLANGED COUPLING ADAPTER WITH RESTRAINTS (DIAMETER) (SEE NOTE 7)	8	10	12	16
13	REDUCER	NONE	12X10	16X12	NONE
14	FLANGED COUPLING ADAPTER WITH RESTRAINTS (DIAMETER) (SEE NOTE 7)	8	10	12	16
15	PIPE (DIAMETER)	8	12	16	16
16	ISOLATION FLANGE, SEE REF. NO. 94	8	12	16	16
17	ELBOW, 90 DEGREE (DIAMETER)	6	6	8	12
18	ELBOW, 45 DEGREE (DIAMETER)	8	12	16	20
19	RESTRAINTS (NOTE 12)	NOTE 12	NOTE 12	NOTE 12	NOTE 12

#### NOTES:

- PROVIDE GATE VALVE PER TECHNICAL SPECIFICATION SECTION 02521– "GATE VALVES."
- PROVIDE ELECTROMAGNETIC FLOW METER PER TECHNICAL SPECIFICATION SECTION 02529– "ELECTROMAGNETIC FLOW METERS" SEE REF. NO. 95. REFER TO "ENDRESS+HAUSER PROMAG W 400 FLOW METER DIMENSIONS" TABLE ON THIS SHEET FOR ADDITIONAL INFORMATION.
- PROVIDE CHECK VALVE PER TECHNICAL SPECIFICATION SECTION 15116– "CHECK VALVE TWIN DISC."
- PROVIDE AND INSTALL INSTRUMENTATION AND CONTROLS PER TECHNICAL SPECIFICATIONS.
- IF THE ENGINEER REQUIRES AN INCREMENTAL PIPE RUN WITH A NOMINAL INSIDE DIAMETER NOT APPEARING IN THESE STANDARD DRAWINGS. THE STRUCTURE, HEREIN DESIGNATED, FOR THE NEXT LARGER NOMINAL DIAMETER SHOULD BE USED.
- REFER TO REF. NO. 69 FOR REINFORCING STEEL DETAILS.
- PROVIDE COUPLINGS PER TECHNICAL SPECIFICATION SECTION 15155– "COUPLINGS AND COUPLING ADAPTERS."
- USE SPLASH BOX DETAIL REF. NO. 100 IF STORMWATER PIPING AVAILABLE ON SITE. USE REF. NO.101 IF SURFACE DRAINAGE IS UTILIZED ON SITE.
- TAP AND PLUG BLIND FLANGE FOR FUTURE PRESSURE GAUGE.
- FUTURE CONDUITS SHALL BE ROUTED THROUGH OPENINGS AT BASE OF CONCRETE PIPE SUPPORT AND FIELD ROUTED PARALLEL AND ADJACENT TO THE WATER LINE TO THE APPROPRIATE LOCATION. THEY SHALL BE SUPPORTED WITH UNISTRUT ON THE CONCRETE SURFACE.
- PROVIDE CONDUIT STUBOUTS AT PROPOSED FLOW METER AND PRESSURE TRANSMITTER LOCATIONS FOR WIRING. CONDUIT STUBOUT FOR FLOW METER SHALL BE MINIMUM 1.25" AND PRESSURE TRANSMITTER STUBOUT SHALL BE MINIMUM 1". BONDING CABLE SHALL BE #10 AND SHALL BE BONDED TO SCADA CABINET BONDING STRIP. FLOW METER SHALL BE PRE-POTTED FROM FACTORY. IN THAT FLOW METER SHALL NOT BE PROCURED UNTIL CORRECT CONDUIT LENGTH IS VERIFIED IN FIELD FROM FLOW TUBE LOCATION TO SCADA CABINET.
- RESTRAINED JOINTS WILL BE INSTALLED AT THE LOCATIONS SHOWN. RESTRAINTS WILL BE INSTALLED PER THE DETAILS AND NOTES FOUND ON REF. NO. 89 & 90. ALL RESTRAINTS INCLUDING ANCHOR PLATES, HEX NUTS, LOCK WASHERS, AND TIE-RODS (ALL-THREAD) TO BE HOT-DIPPED GALVANIZED.
- PROVIDE PRESSURE TRANSMITTER PER TECHNICAL SPECIFICATION SECTION 15130– "PRESSURE GAUGES, TRANSMITTERS, AND ELEMENTS."



### STANDARD FLOW METER STATION– SLAB ON GRADE

APPROVED BY:

*Shanabgini*

DESIGN MANAGER

EFF. DATE:

12/22/2020

REF. NO.

62