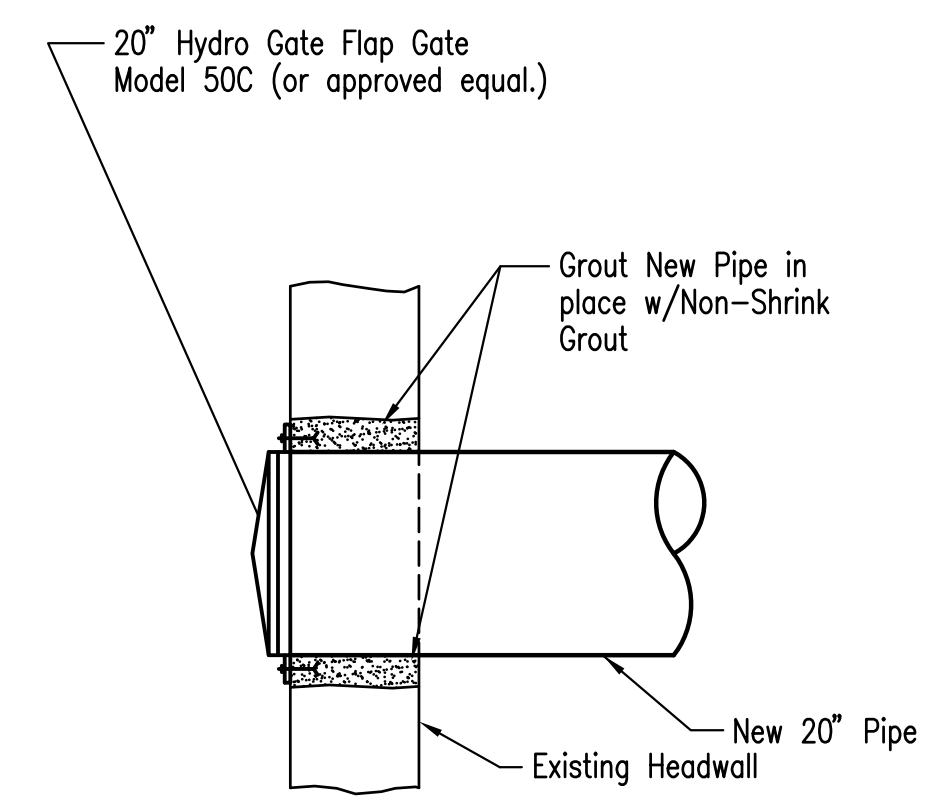


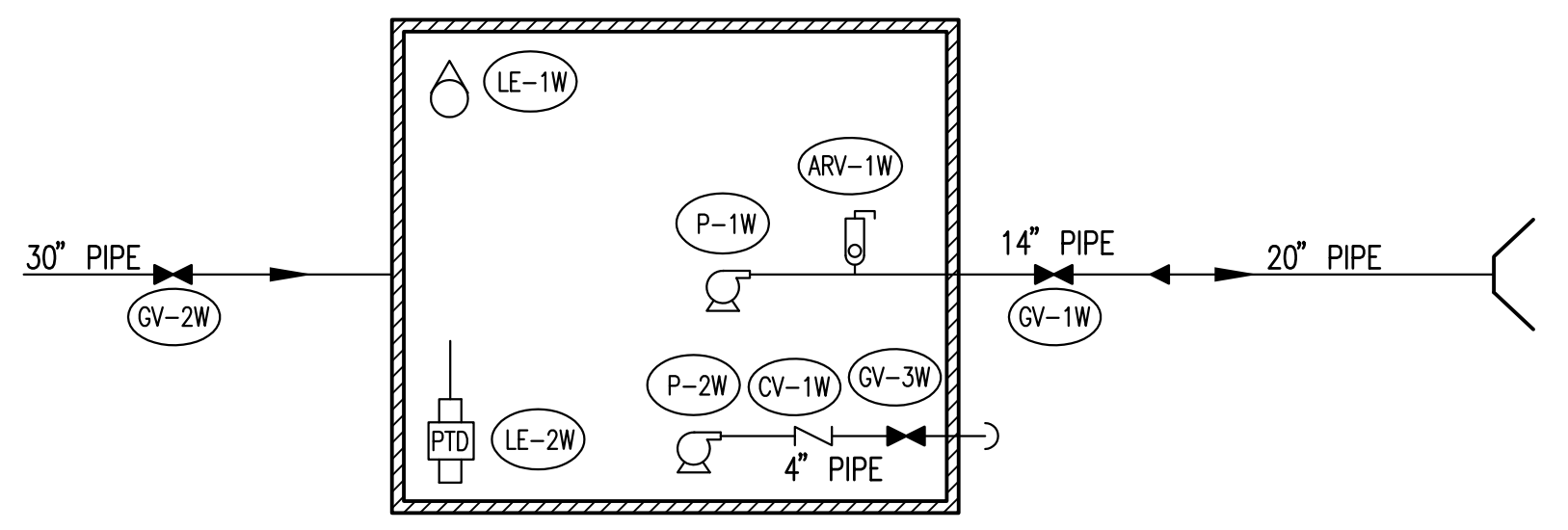
VALVE BOX DETAIL

NOTE: ONE VALVE STEM REQUIRED FOR EACH BURIED VALVE
NO SCALE



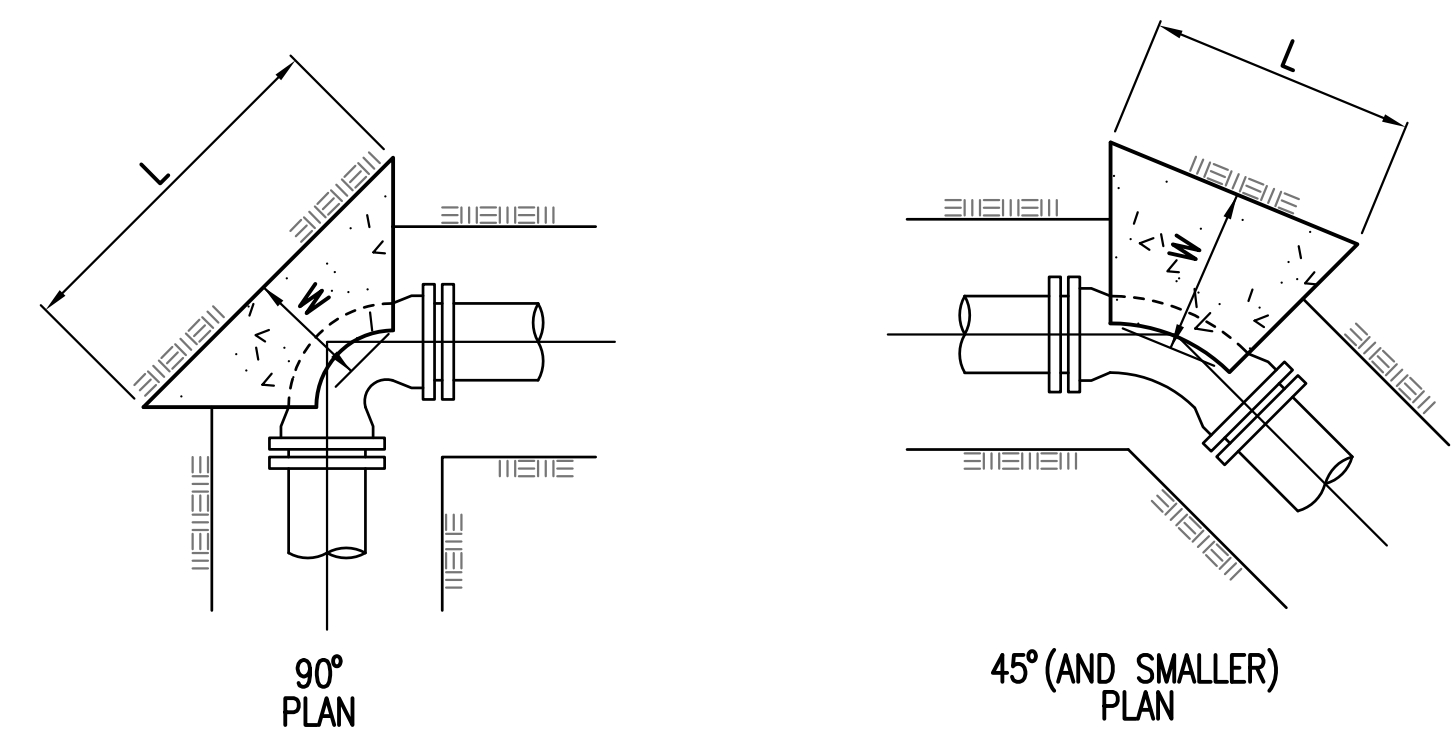
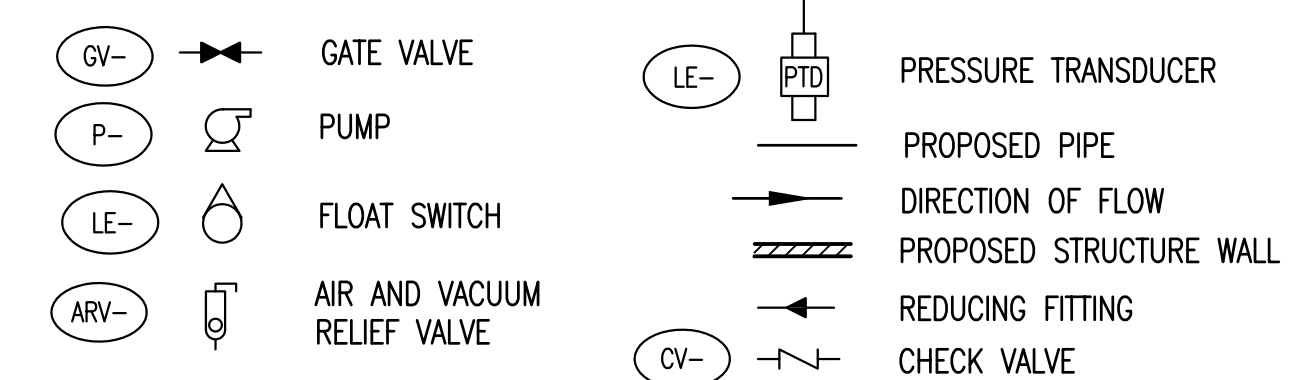
HEADWALL CONNECTION DETAIL

NOTE: Flap Gate shall be fastened to Existing Headwall in accordance w/ Manufacturer's recommendations



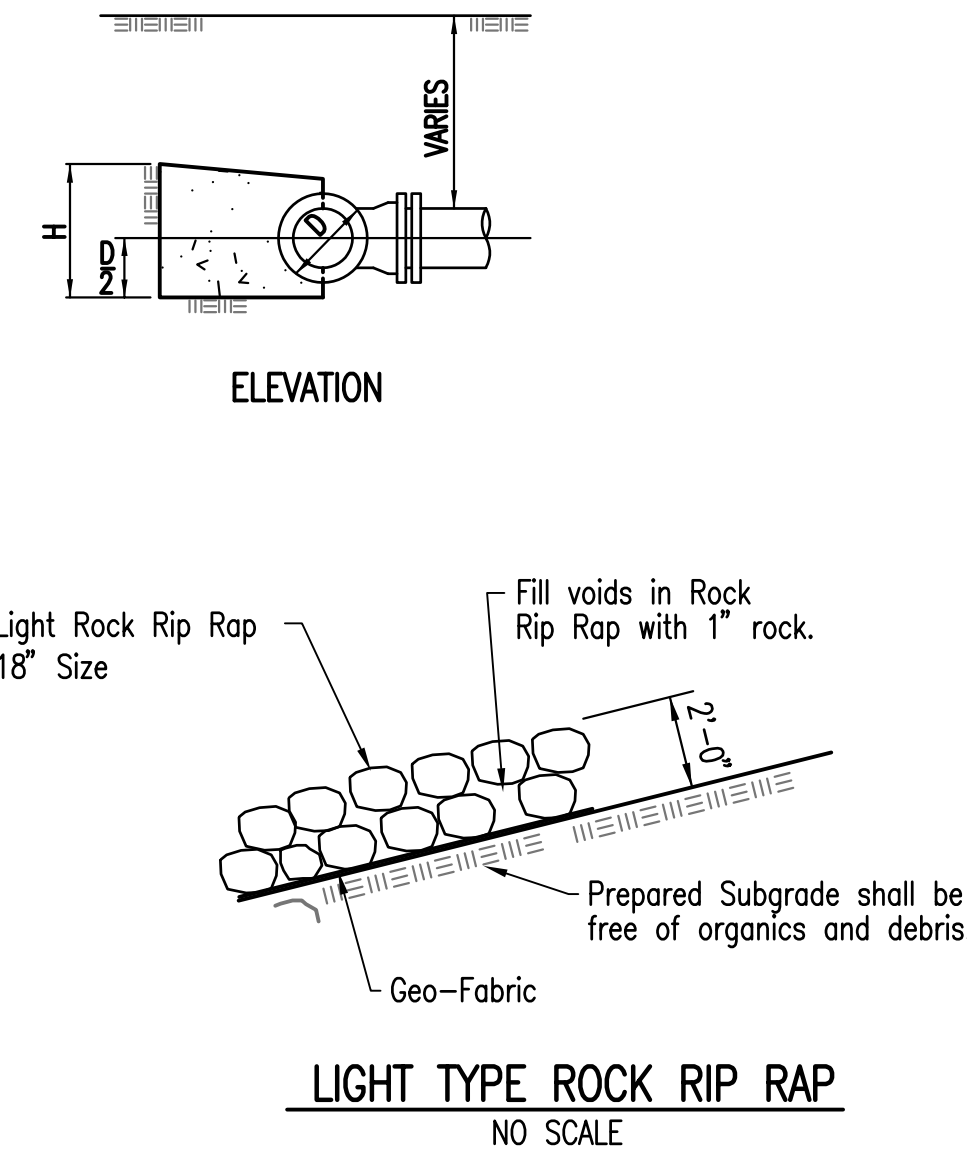
PUMP STATION

PROCESS DIAGRAM
NOT TO SCALE



FORCE MAIN THRUST BLOCK DETAILS

THRUST BLOCK SCHEDULE				
LINE SIZE	FITTINGS & ANGLE	DIM. L	DIM. W	DIM. H
20	22.5°	3'-0"	3'-0"	2'-0"
20	45°	4'-6"	4'-6"	3'-0"
20	90°	6'-0"	6'-0"	4'-0"



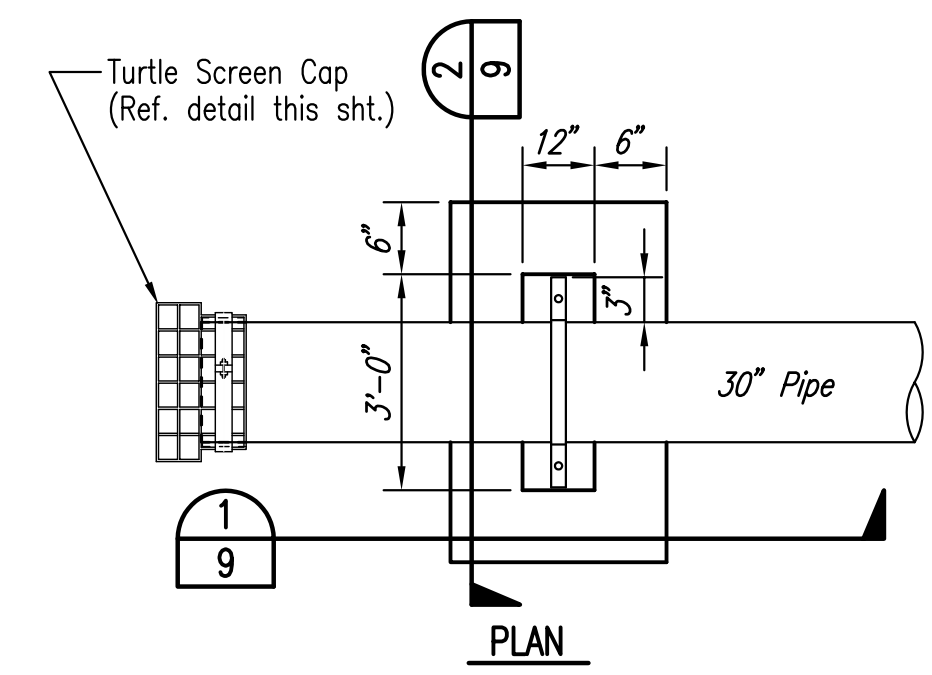
LIGHT TYPE ROCK RIP RAP

NO SCALE

GATE VALVE SCHEDULE						
MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR	SPECIFICATION SECTION
GV-1W	PUMP STATION	NEW	14"	MJ	2" NUT W/ VALVE BOX	17261
GV-2W	PUMP STATION	NEW	30"	MJ	2" NUT W/ VALVE BOX	17261
GV-3W	PUMP STATION	NEW	4"	Flange	2" NUT W/ VALVE BOX	17261

LEVEL ELEMENT SCHEDULE				
MARK	LOCATION	STATUS	TYPE	SPECIFICATION SECTION
LE-1W	PUMP STATION	NEW	FLOAT SWITCH	17585
LE-2W	PUMP STATION	NEW	SUBMERSIBLE PRESSURE TRANSDUCER	17581

AIR RELEASE VALVE SCHEDULE			
MARK	LOCATION	STATUS	SPECIFICATION SECTION
ARV-1W	PUMP STATION	NEW	17324

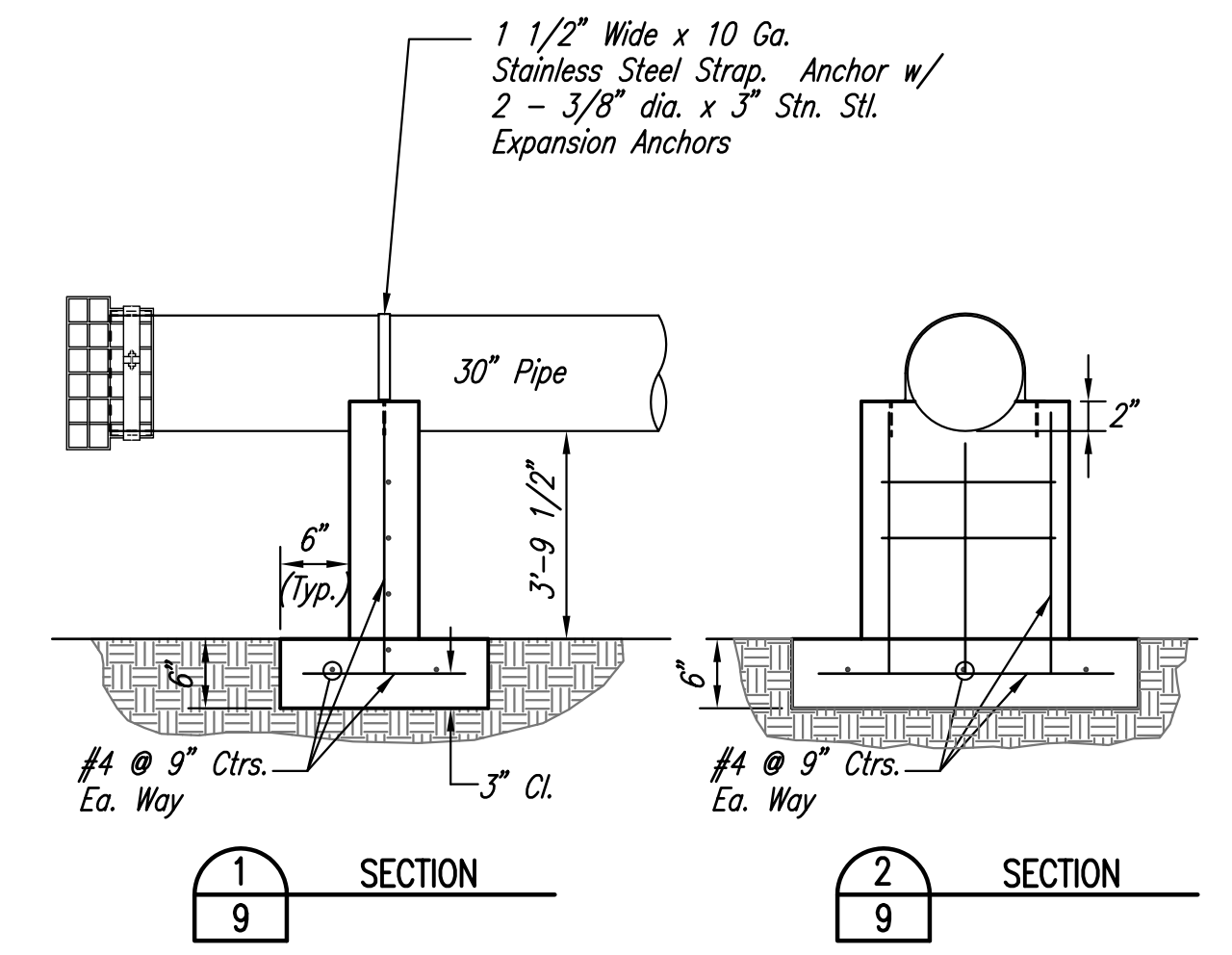


PUMP STATION NOTES

- THE CONTRACTOR SHALL COORDINATE WITH WESTAR TO EXTEND ELECTRICAL SERVICE TO THE LIFT STATION SITE. THE CONTRACTOR SHALL VERIFY THE ELECTRICAL SERVICE REQUIREMENTS WITH WESTAR. THE CONTRACTOR SHALL ALLOW 2 WEEKS FOR WESTAR TO PROVIDE SERVICE. ALL COSTS INCURRED TO EXTEND SERVICES TO THE SITE SHALL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT:
WESTAR
ATTN: CAROLYN PROPHET
P.O. BOX 208
WICHITA, KS. 67201
PH (316) 261-6734
- THE WET WELL SHOWN IS A PRECAST STRUCTURE. ALL PRECAST SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478, AND SUPPLIER SHALL SUBMIT DESIGN CALCULATIONS TO ENGINEER FOR APPROVAL. WALL THICKNESS AND BASE DESIGN PER MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR MAY, AT HIS OPTION, CAST THE STRUCTURE IN PLACE PROVIDED THE CONDITIONS OF THESE PLANS AND SPECIFICATIONS ARE MET AND HE SUBMITS DRAWINGS AND SUPPORTING CALCULATIONS ON STRUCTURE DESIGN, PERFORMED BY A LICENSED ENGINEER AND APPROVED BY THE PROJECT ENGINEER. ALL EXPOSED STRUCTURAL STEEL SHALL RECEIVE 2-5 MIL COATS OF TNEC SERIES 66 OR APPROVED EQUAL.
- IF A PRECAST STRUCTURE IS USED, PIPE PENETRATIONS THRU THE WET WELL SHALL BE GROUTED WATERTIGHT WITH WATER STOP GASKETS AS REQUIRED. IF THE CONTRACTOR ELECTS TO CAST ONE OR BOTH STRUCTURES IN PLACE, WALL PIPES SHALL BE USED FOR THOSE PIPE PENETRATIONS, AND DESIGN OF WALL AND REINFORCING SHALL BE PERFORMED BY A LICENSED ENGINEER AND SUBMITTED TO THE PROJECT ENGINEER FOR APPROVAL.
- CONTRACTOR SHALL SUPPORT ALL PIPING INSIDE THE WET WELL AS REQUIRED.
- ALL HARDWARE WITHIN THE PUMP STATION THAT IS REQUIRED FOR COMPLETE CONSTRUCTION OF THE PUMP STATION (CONNECTION PLATES, BRACKETS, BOLTS, ETC.) SHALL BE STAINLESS STEEL.
- CONTRACTOR SHALL LOCATE LEVEL CONTROL SO FUTURE FLOW INTO THE WET WELL WILL NOT INTERFERE WITH WET WELL OPERATION.
- THE COMPLETED DISCHARGE LINE SHALL BE PRESSURE TESTED IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS FOR WATERLINE CONSTRUCTION AT 100 PSI.
- ALL PIPING, AS REQUIRED SHALL MEET THE REQUIREMENTS OF THE CITY OF WICHITA STANDARD SPECIFICATIONS FOR WATERLINE CONSTRUCTION. ALL EXPOSED D.I. PIPE AND FITTINGS SHALL BE COATED PER SECTION 09960.
- PUMP SHALL BE AS MANUFACTURED BY CASCADE OR APPROVED EQUAL.
- COMPACTION OF EARTHWORK BELOW WET WELL SHALL BE PER CITY OF WICHITA STANDARD SPECIFICATIONS.
- THE "CONFINED SPACE WARNING" SIGN SHALL BE FASTENED TO THE TOP OF ALL VAULTS. THE SIGN MAY BE FASTENED TO THE VAULT LID IF IT DOES NOT IMPEDE ACCESS TO THE HANDLE. ACCEPTABLE MATERIALS: ALUMINUM 73415HH, PLASTIC 73439HH, OR S.A. VINYL 73463HH.

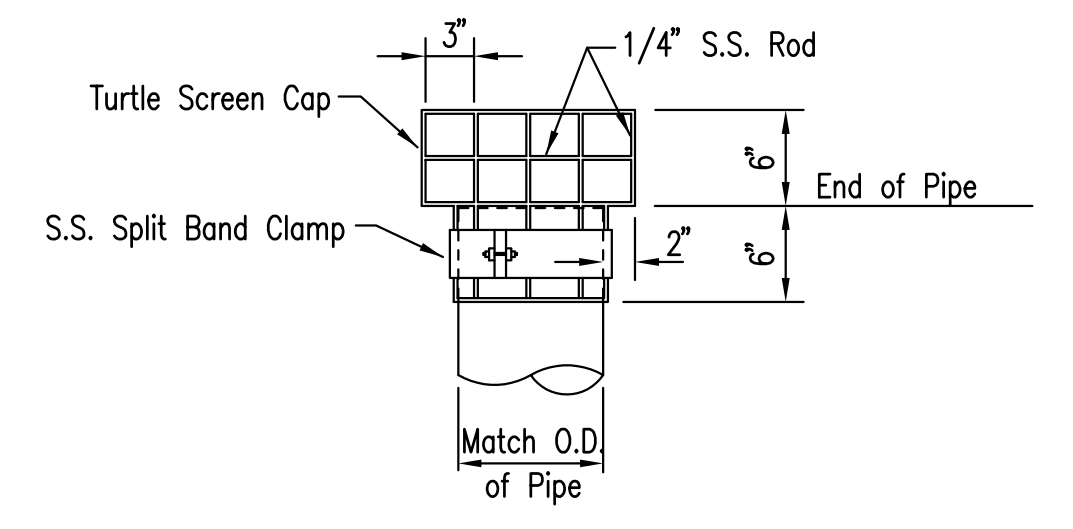
PUMP SCHEDULE						
MARK	TYPE	GPM	FT. HEAD	EFF. %	MAX. HP	RPM
P-1W	MIXED FLOW	5,000	10	80% MIN.	30	1200
P-2W	SUBMERSIBLE	50	22	43.5% MIN.	1	855

- SEQUENCE OF OPERATION (P-1W)
- FLOAT SWITCH INITIATES PUMP START AT STATIC POOL ELEVATION (1342.20).
 - PUMP CONTINUES UNTIL WATER LEVEL REACHES THE OUTFALL ELEVATION OF THE CROSS ROAD PIPE (CRP) AT MAIZE ROAD (1346.67) OR LEVEL IS RETURNED TO STATIC POOL (1342.00).
 - PUMP AGAIN BEGINS OPERATING WHEN WATER LEVEL RETURNS TO 1342.20
 - IF PUMP STOPS AT OUTFALL ELEVATION OF CROSS ROAD PIPE (1346.67) THE PUMP SHALL BE MANUALLY STARTED AND PUMP TO STATIC POOL ELEVATION (1342.00).
 - TIME TO DEWATER FROM MAIZE ROAD CRP TO STATIC POOL IS LESS THAN 4 DAYS.
 - PROVIDE PUMP CONTROLS SUCH THAT THERE CAN BE A FIELD ADJUSTABLE TIME DELAY FOR PUMP START OF 1-10 HOURS.



CONCRETE PIER DETAIL

Contractor shall locate the pipe supports at 10' centers along the pipe
NOT TO SCALE



TURTLE SCREEN CAP DETAIL

NOTE: Turtle Screen Cap shall be fabricated from 1/4" 304L Stainless Steel bent rods welded together to form a mesh 3" apart all around the pipe opening. Provide 3" wide by 1/4" thick Split Band to be tightened over the Cap and Pipe. All metal and fasteners shall be 304L Stainless Steel.

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 CA_2009\04274\004\WESTPUMP\RE-BID\04274-04-C-9-West-Pump Sta Detail

No.	Revision	By	Date
PHASE II - STORM WATER DRAIN #332 WEST PUMP STATION DETAILS JAMES L. ARMOUR, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-84396 Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	EJJ, SCU	Job No.	35-04274-042
Drawn by	CAE	Date	SEPTEMBER 2009
			Sht. 9 of 63