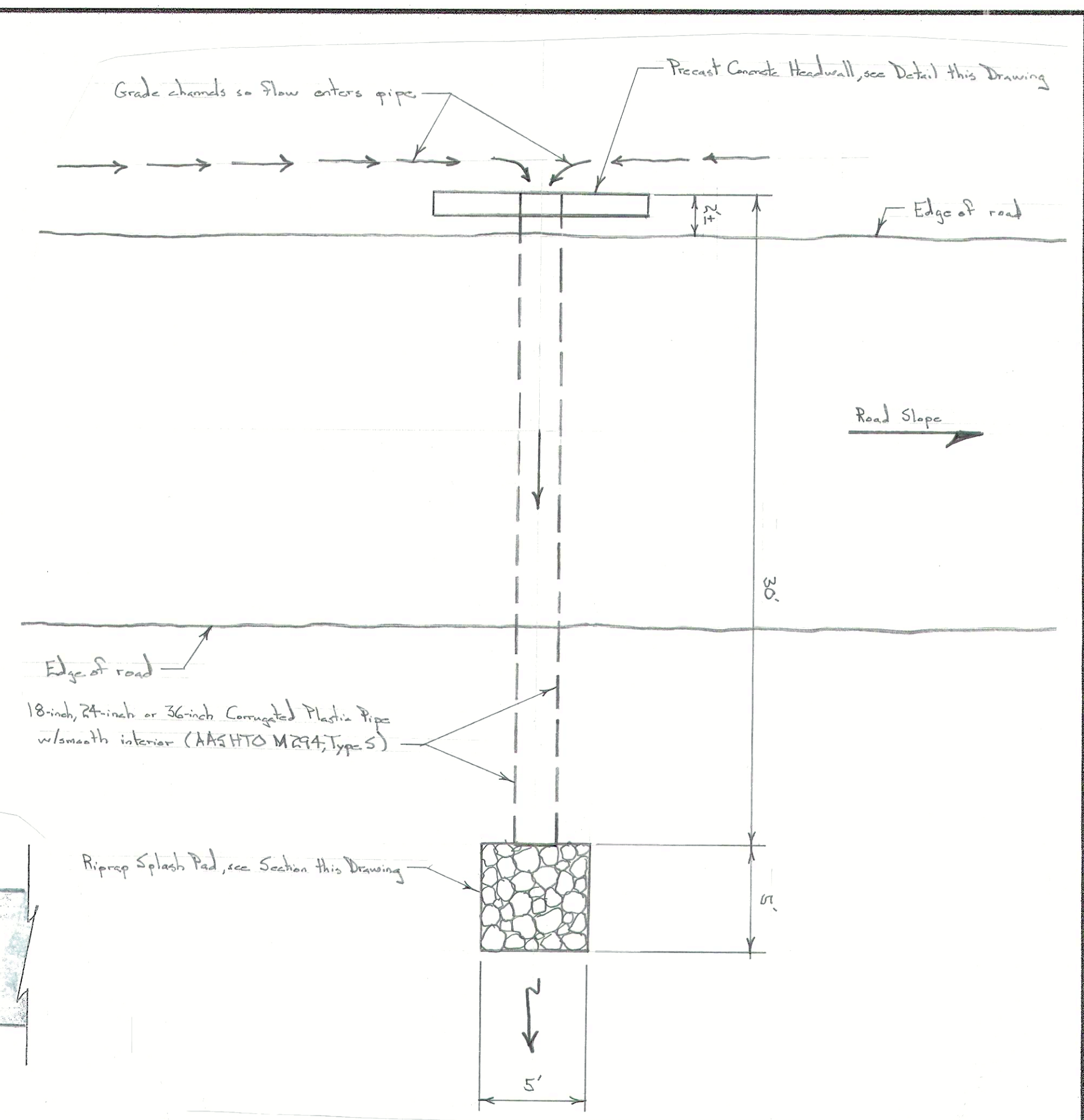


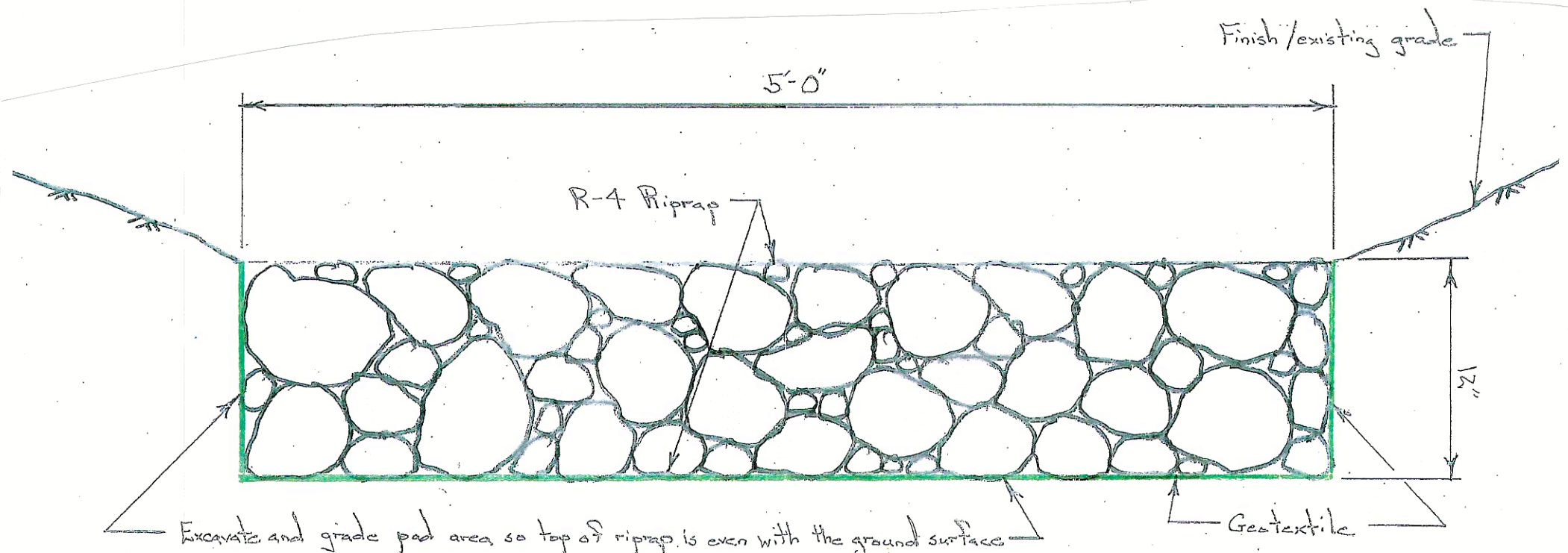
**ANGLED PIPE PLAN**

Scale: 1 in. = 5 ft.



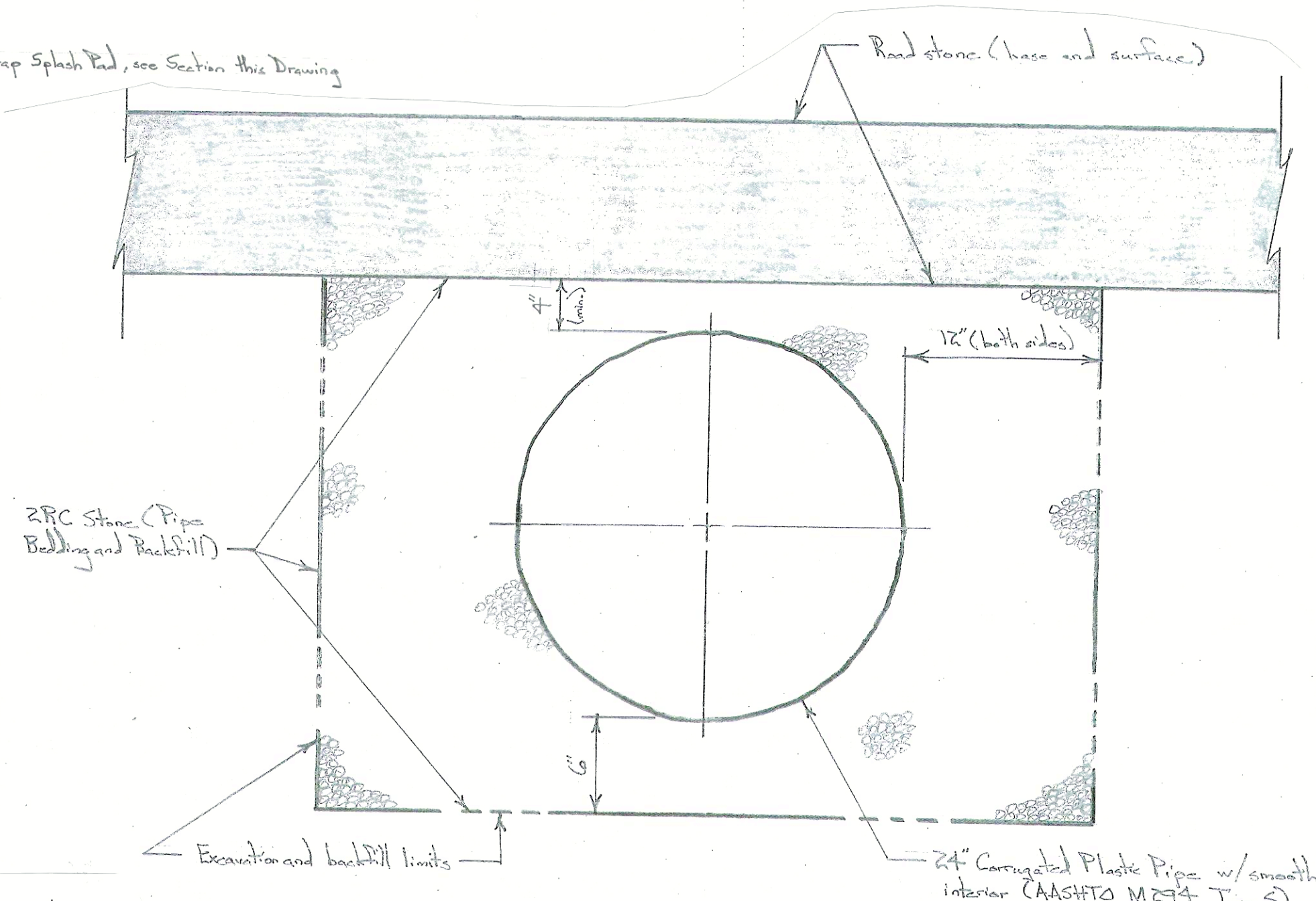
**PERPENDICULAR PIPE PLAN**

Scale: 1 in. = 5 ft.



**RIPRAP SPLASH PAD SECTION**

Scale: 1-1/2 in. = 1 ft.



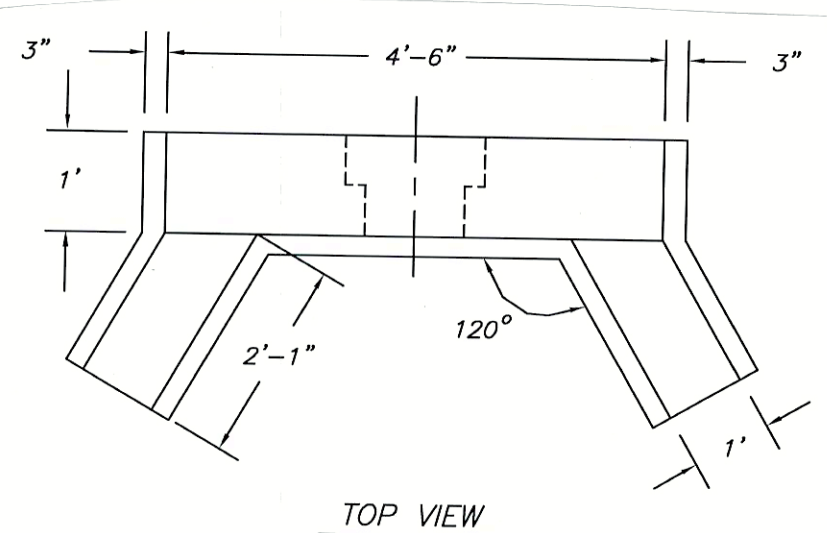
**DRAINAGE PIPE SECTION**

Scale: 1-1/2 in. = 1 ft.

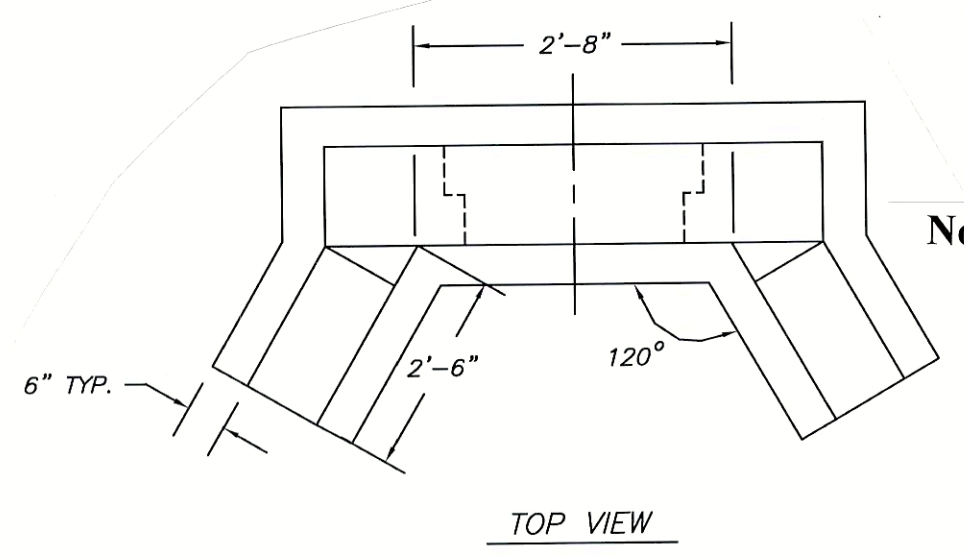
Note: Cross sections for 18-inch and 36-inch diameter pipes have the same bedding and backfill limits.

**DRAINAGE PIPE NOTES**

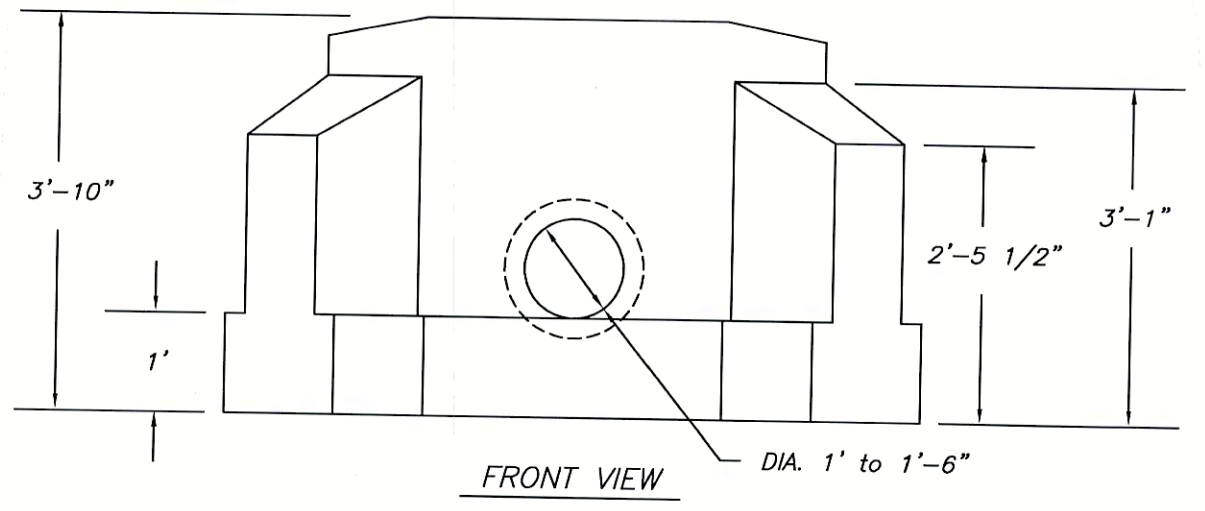
1. All new pipes are 18-inch, 24-inch or 36-inch diameter corrugated plastic with smooth interior.
2. The minimum fall in the new drainage pipes is 3-inches over a 10-foot length (slope of 0.025).
3. Pipes should cross the road to suit field conditions and existing drainage paths. New pipes are 30-feet long or 40-feet long. Pipes that cross the road perpendicularly are 30-feet long. Pipes that cross the road on an angle to suit flow patterns are 40-feet long.
4. Perform minor grading at the inlet and outlet ends of the new drainage pipes so that flow smoothly enters and exits the pipes.
5. Minimum cover over the new drainage pipes is 12-inches.
6. The depth of placement of the new drainage pipes can vary to meet field conditions. The downstream ends of the pipes can be deeper to meet field conditions and slope requirements. Pipes must outlet on to existing ground (no outlets in the air).
7. Place precast concrete headwalls on the upstream ends of the new drainage pipes. Place a riprap splash pad on the downstream end of the new pipes.



TOP VIEW



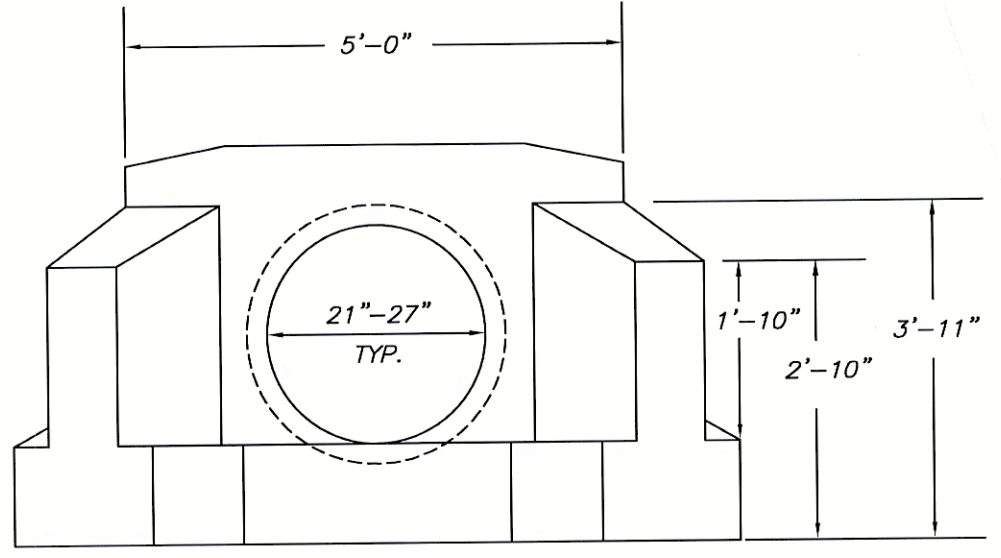
TOP VIEW



FRONT VIEW

**18\"/>**

- NOTES:
1. MINIMUM 4,000 P.S.I. CONCRETE AT 28 DAYS WITH 5.5% A.E.
  2. REINFORCEMENT—A.S.T.M. A615 GRADE 60, MINIMUM 1 1/2" COVER
  3. ALL EXPOSED EDGES ARE CHAMFERED 1"
  4. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN. D.O.T. PUB. 408
  5. APPROX. WEIGHTS: 18" = 4,000 LBS. 24" = 5,200 LBS.

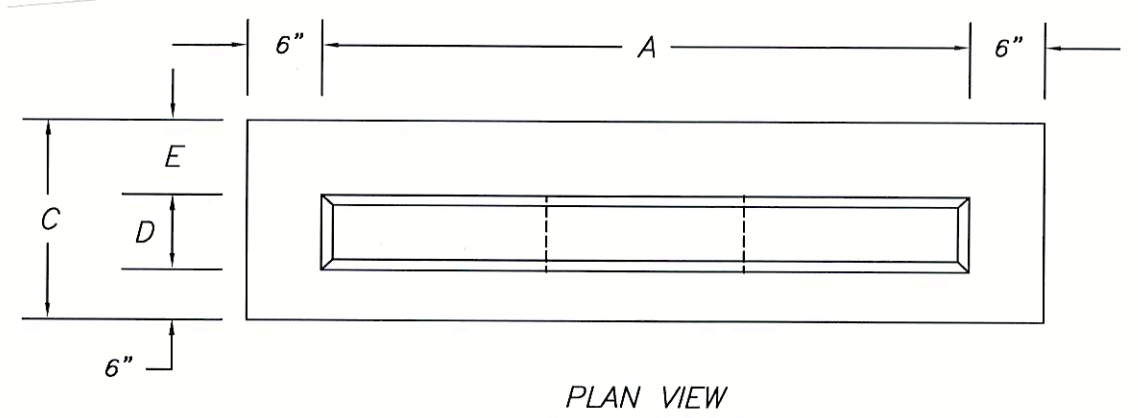


FRONT VIEW

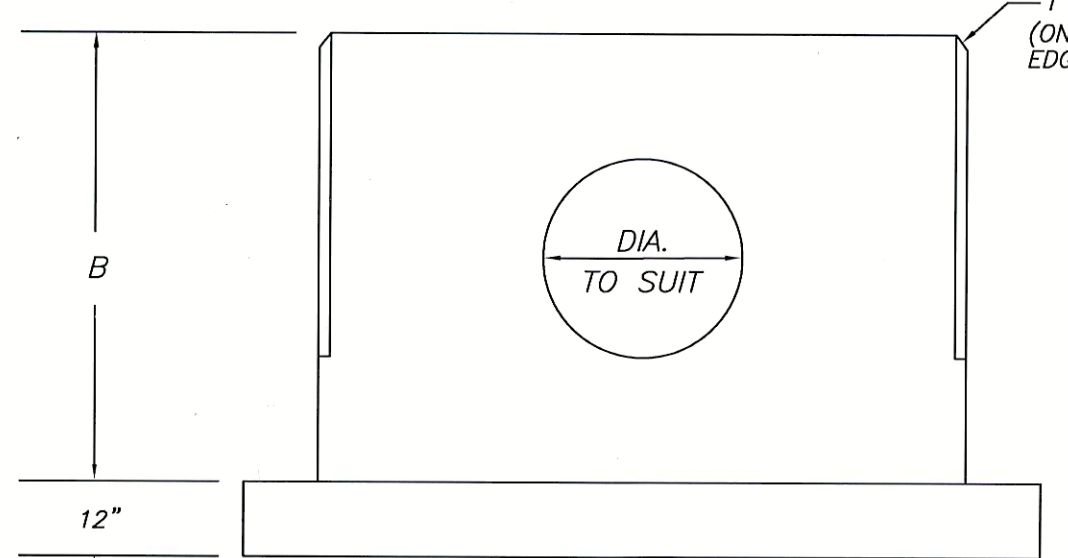
**24\"/>**

**HEADWALL DETAILS**

No Scale



PLAN VIEW

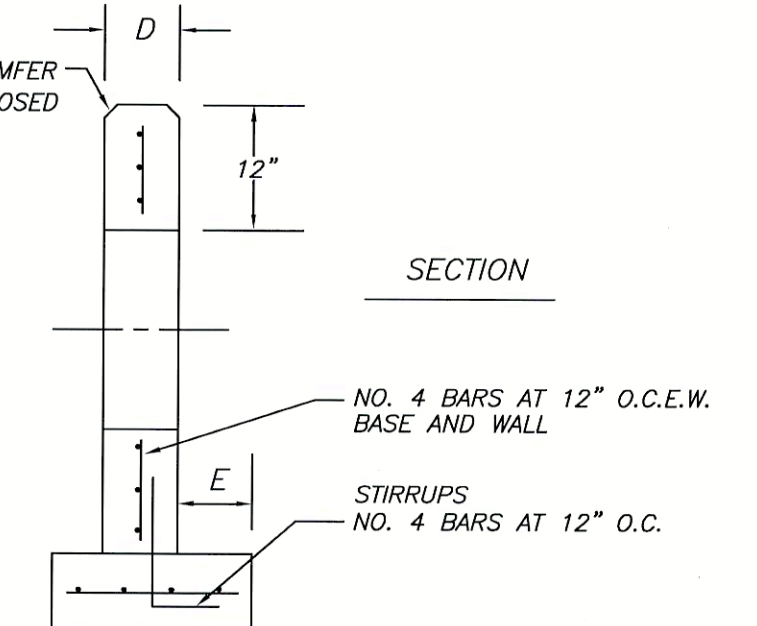


ELEVATION

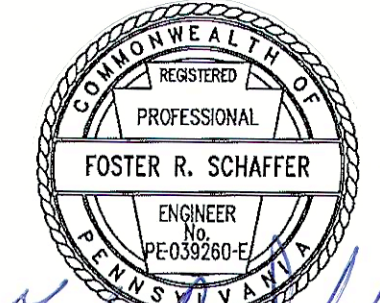
**FLAT HEADWALLS**

PIPE DIA.	WALL OPENING	DIMENSION SCHEDULE				APPROX WEIGHTS
		A	B	C	D	
18"	28"	72"	60"	30"	12"	6,575 LBS.
24"	34"	120"	72"	30"	12"	12,250 LBS.
36"	48"	192"	84"	36"	12"	24,450 LBS.

SPECIAL SIZES NOT LISTED CAN BE MFG. UPON REQUEST



SECTION



3/12/24

**PENNSYLVANIA GAME COMMISSION**

SGL #61 LIBERTY TWP. MCKEAN CO.

SKINNER CREEK ROAD PROJECT

DRAINAGE PIPE DETAILS

REVISIONS	PROJECT NO.	PGC-01-24-01
▲	DRAWN BY:	55
▲	DATE:	3/12/24
▲	SHEET NO.	3 OF 3