

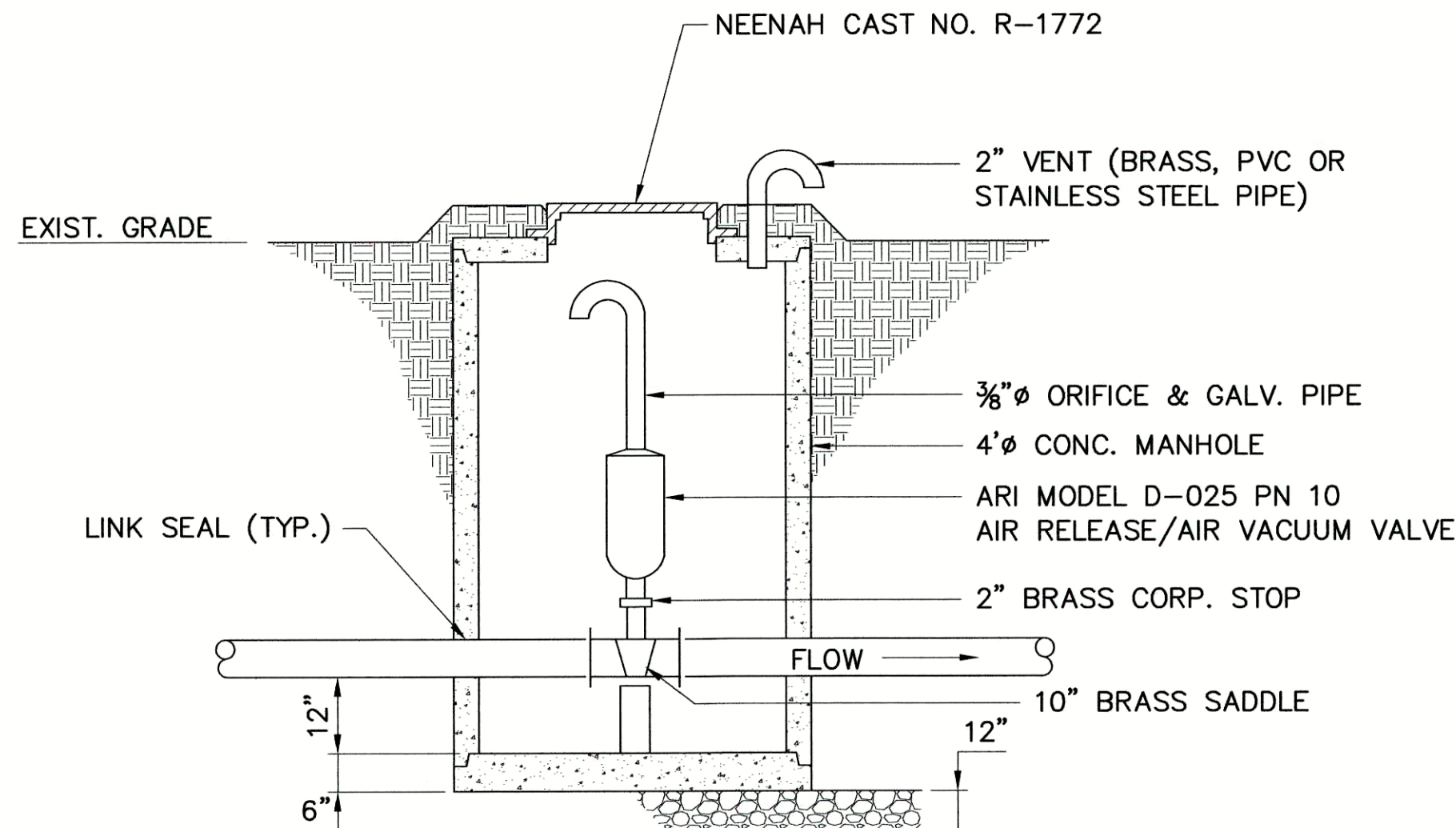
RESTRAINED JOINT NOTES

1. CONTRACTOR SHALL INSTALL RJDI FITTINGS FOR ALL HORIZONTAL BENDS.
2. RESTRAINED LENGTHS WERE CALCULATED ASSUMING A 2.0 FACTOR OF SAFETY, TYPE 3 TRENCH CONDITIONS, "CL" SOIL CLASSIFICATION, AND 100 PSI HYDROSTATIC TEST PRESSURES.
3. ALL SEWER MAIN APPURTENANCES WITHIN RJDI LIMITS MUST BE RESTRAINED AT EACH JOINT.
4. SEE ENGINEER FOR SIZE NOT LISTED

LENGTH IN FT. TO BE REST. ON EACH SIDE OF FITTING FOR 10" PVC PIPE							
TYPE OF BEND	TEE W/ 10" BRANCH	6"x10" REDUCER	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	DEADENDS
HORIZ. BEND	71	30	—	10	5	—	----

LENGTH IN FT. TO BE REST. ON EACH SIDE OF FITTING FOR 10" HDPE PIPE							
TYPE OF BEND	TEE W/ 10" BRANCH	6"x10" REDUCER	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	DEADENDS
HORIZ. BEND	109	48	—	11	5	—	----

RESTRAINED JOINT LIMITS

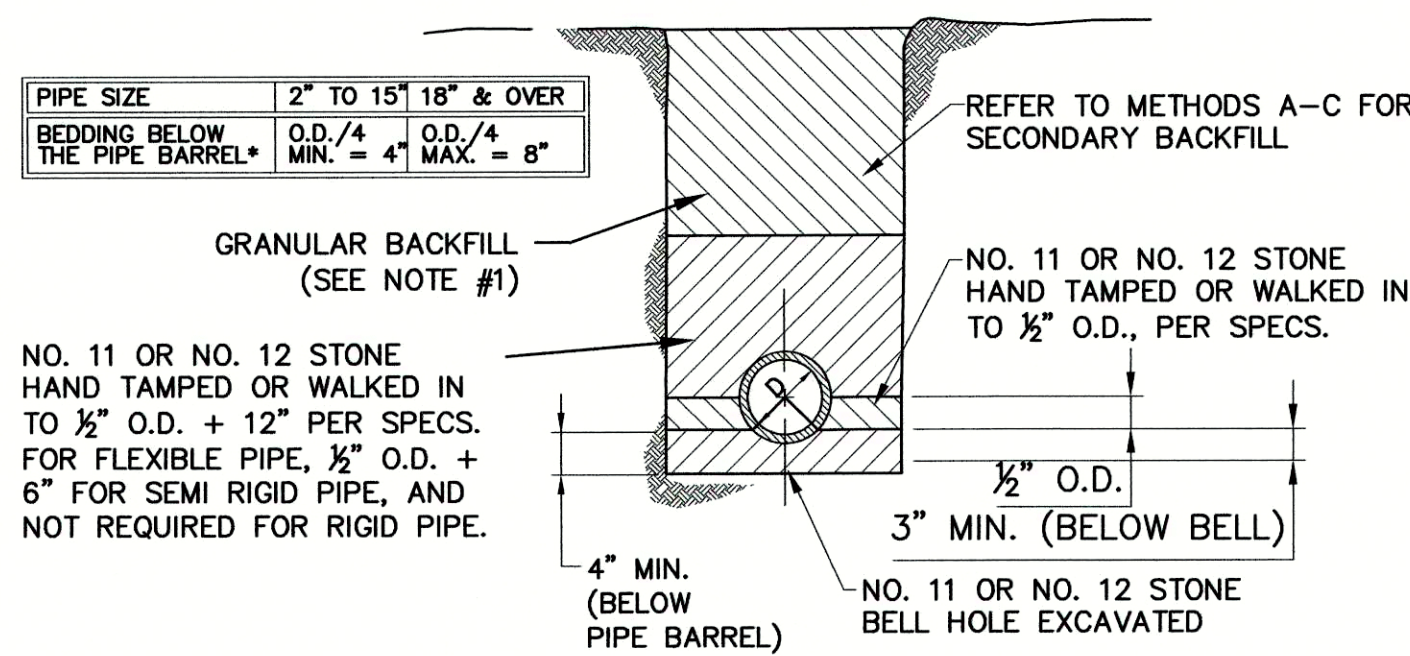


AIR RELEASE VALVE VAULT NOTES:

1. CONTRACTOR SHALL PROVIDE ALL NECESSARY HDPE ADAPTER FITTINGS, SADDLES, ETC. IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS TO CONNECT TO FLG. FITTINGS. CONTRACTOR SHALL SUBMIT HDPE CONNECTION SHOP DRAWINGS FOR ENGINEER'S REVIEW & APPROVAL.
2. CONTRACTOR IS RESPONSIBLE FOR DETERMINING VALVE VAULT OVERALL HEIGHT (MIN. 5'-0" FROM TOP OF FORCEMAIN) WITH RESPECT TO FORCEMAIN CENTERLINE TO FACILITATE COMPLETE EQUIPMENT INSTALLATION.

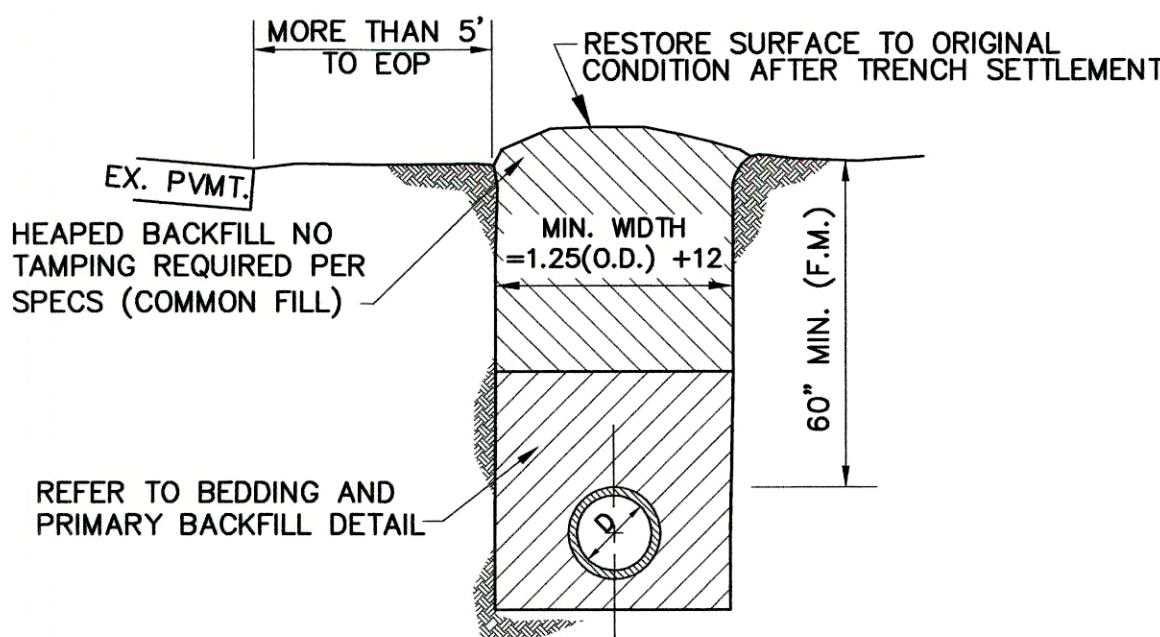
DETAIL - SEWAGE AIR/VACUUM RELEASE VALVE VAULT

SCALE: NONE



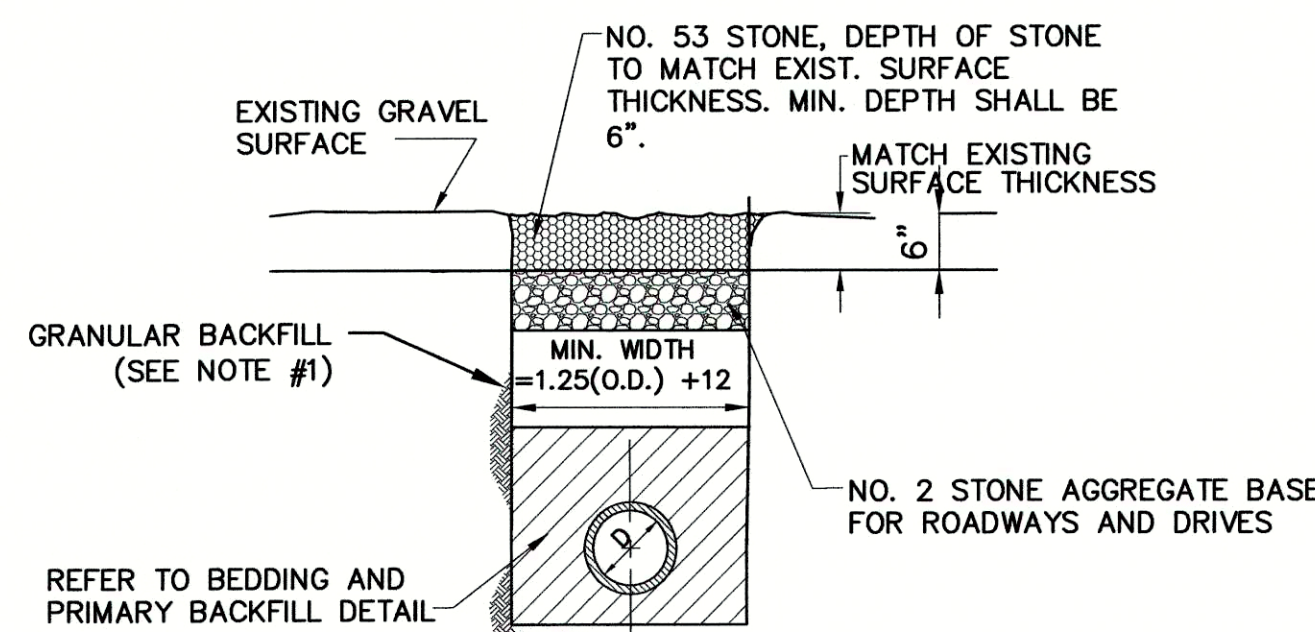
BEDDING AND PRIMARY BACKFILL DETAIL

SCALE: N.T.S.



OPEN TERRAIN - METHOD "A"

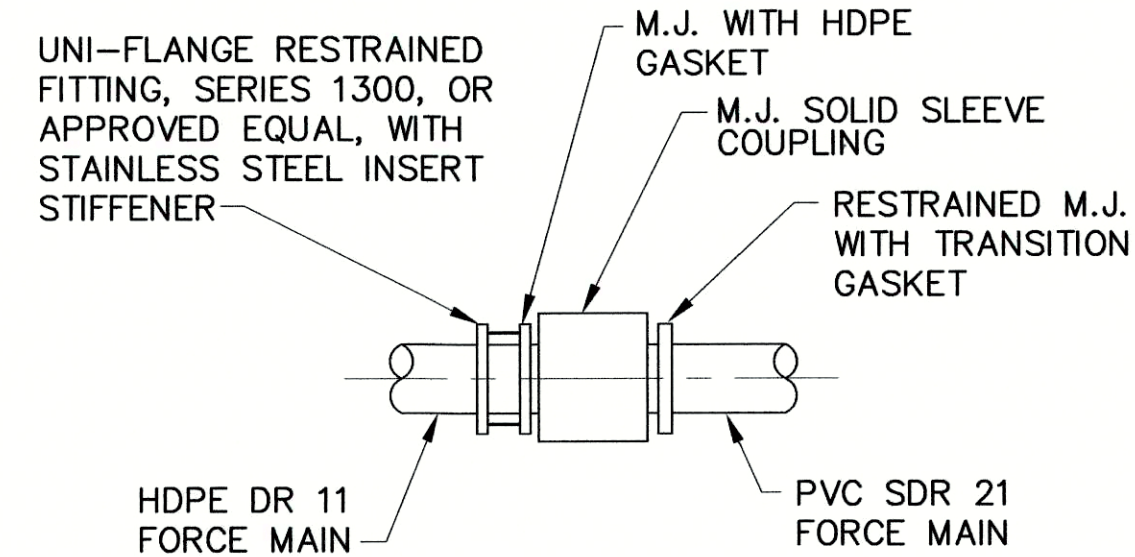
SCALE: N.T.S.



UNPAVED DRIVEWAYS & ACCESS

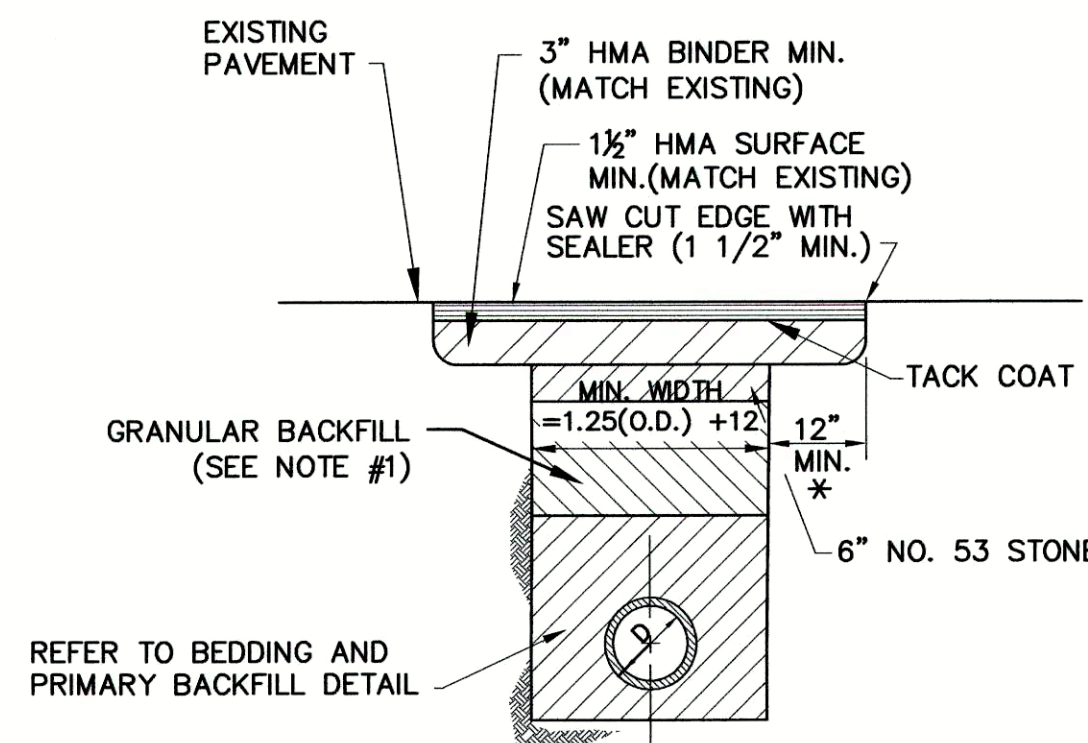
ROADS - METHOD "B"

SCALE: N.T.S.



HDPE/PVC TRANSITION COUPLING

SCALE: N.T.S.



ASPHALT ROADS - METHOD "C"

SCALE: N.T.S.

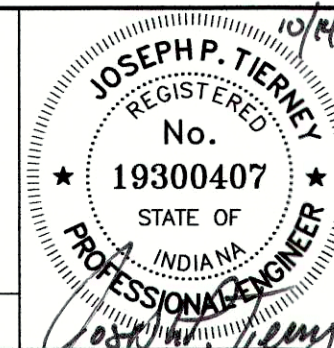
- NOTES:
- 1.) GRANULAR BACKFILL PER REQUIRED INDOT MECHANICAL COMPACTION TO 95% PROCTOR DENSITY UNDER OR WITHIN 5 FEET OF PAVEMENT.

NO.	AS-BUILT REVISION	DATE	BY
1	DESCRIPTION	MAY 2006	SM
REVISIONS			

FALL CREEK REGIONAL WASTE DISTRICT  
PENDLETON, INDIANA  
INGALLS FORCE MAIN REPLACEMENT

DETAIL SHEET

GRW PROJECT NO. 3290-08



**GRW Engineers, Inc.**  
Engineers, Architects, Planners  
INDIANAPOLIS, INDIANA  
LOUISVILLE & LEXINGTON, KENTUCKY  
CINCINNATI, OHIO  
NASHVILLE, TENNESSEE  
ARLINGTON, TEXAS

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APPROVED: JPT	