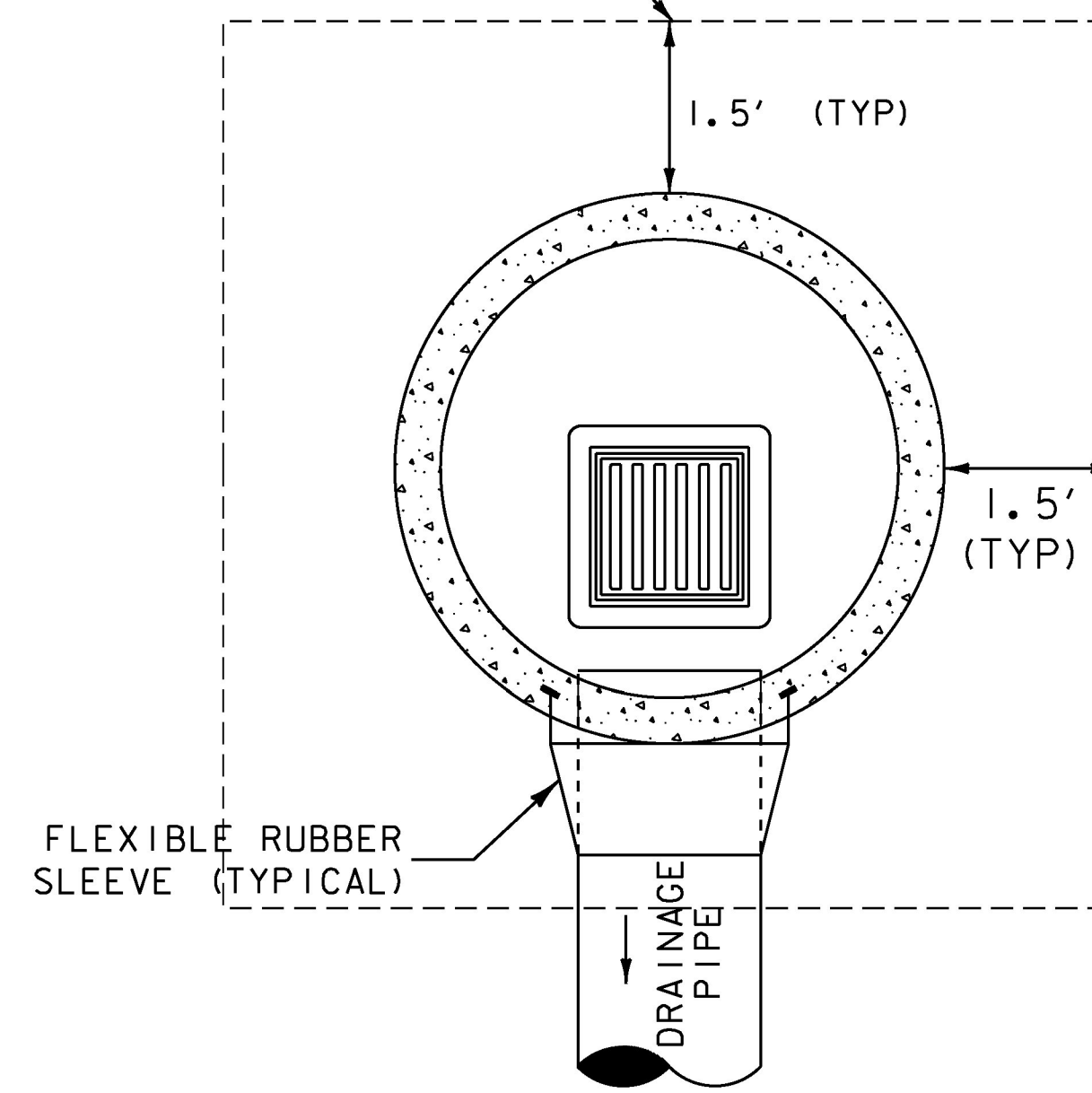


LIMITS FOR TRENCH EXCAVATION  
GRANULAR BACKFILL FOR STRUCTURES



SINGLE GRATE DROP INLET  
PLAN VIEW

\* PAVEMENT LIFTS  
2-1.5" TYPE I VS OVER  
3-3.0" TYPE I IS

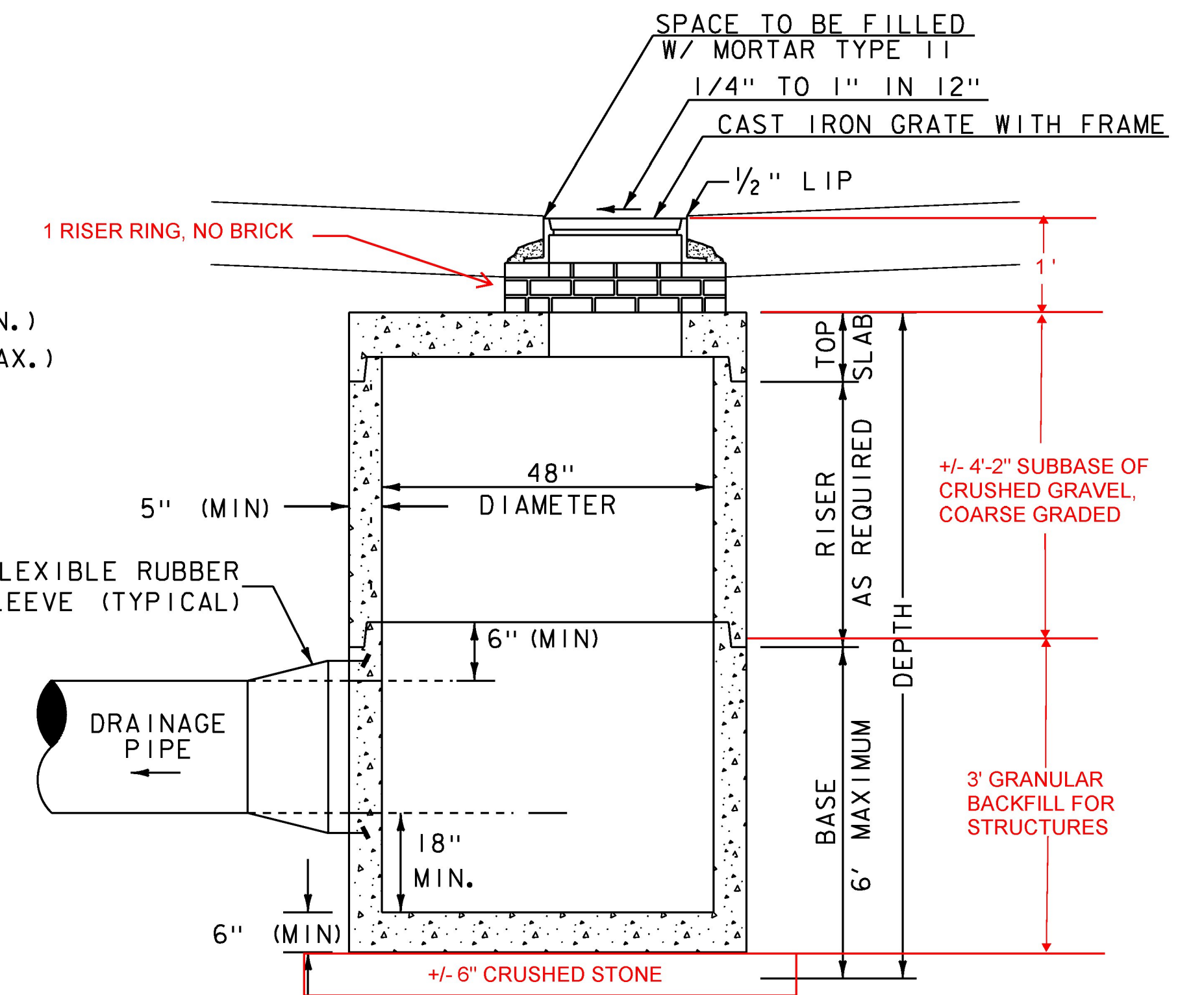
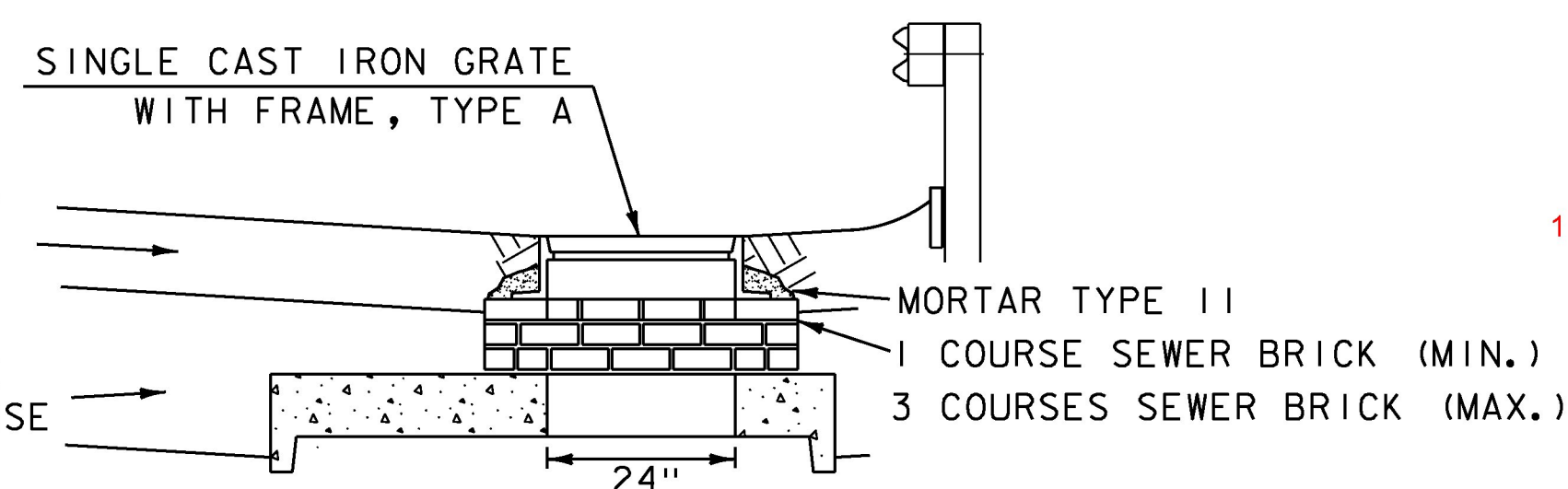
PAVEMENT LIFTS  
1-2" TYPE I VS  
1-2" TYPE I IS

\*APPROXIMATE ±2" 4"  
BITUMINOUS CONCRETE  
PAVEMENT (TYP.)

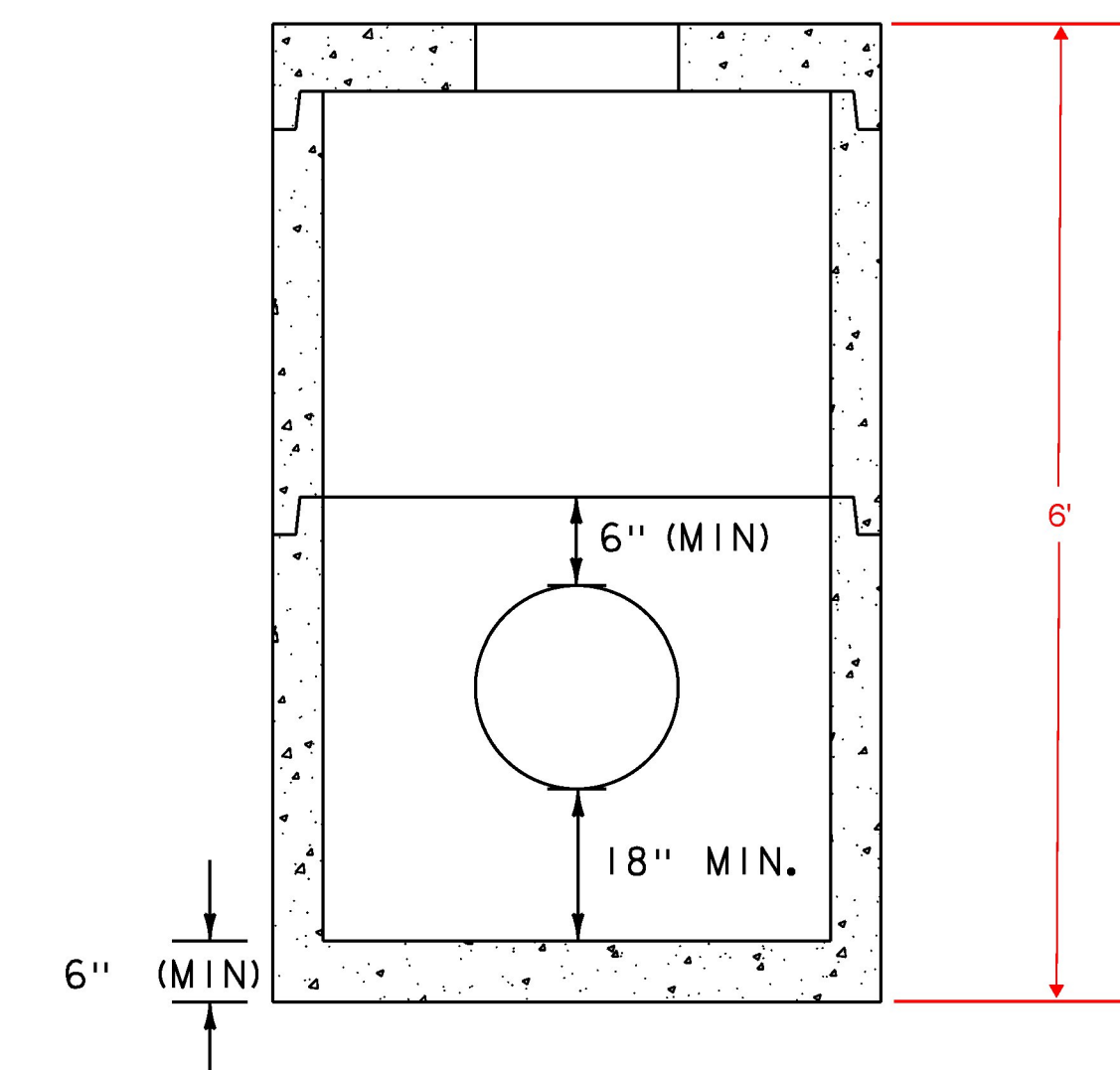
APPROXIMATE 24" SUBBASE  
OF CRUSHED GRAVEL, COARSE  
GRADED (TYP.)

SINGLE CAST IRON GRATE  
WITH FRAME, TYPE A

TYPICAL ELEVATION OF GRATE INSTALLATION



ELEVATION VIEW



SIDE VIEW

TYPICAL PRECAST REINFORCED DROP INLET  
WITH CAST IRON GRATE

PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE:

1. PRECAST CONCRETE SECTIONS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND ASTM C-478.
2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 5,000 PSI AT 28-DAYS
3. STEEL REINFORCING SHALL CONFORM TO ASTM A185 OR A82 FOR HS-25 LOADING.
4. FACE OF PIPE SHALL NOT PROJECT MORE THAN TWO INCHES OR LESS THAN ONE INCH FROM INSIDE WALL OF STRUCTURE.
5. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF OUTSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN THREE INCHES TO JOINTS.
6. FITTING FRAME TO FINAL GRADE MAY BE DONE WITH BRICK OR PRECAST CONCRETE GRADE RINGS OF APPROPRIATE THICKNESS (THREE COURSES MAX) WILL BE CONSIDERED INCIDENTAL TO ITEM 604.18 PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE.
7. FLAT SLAB TOPS SHALL BE USED FOR ALL CATCH BASINS UNLESS OTHERWISE PERMITTED BY THE ENGINEER. ALL PIPE INVERTS AND PENETRATION ANGLES SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
8. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT AND BE ASSEMBLED USING A BUTYL RUBBER OR EQUAL SEALANT, AS APPROVED BY THE ENGINEER.
9. PROVIDE FLEXIBLE RUBBER SLEEVES CONFORMING TO ASTM C-923, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO STRUCTURE. SLEEVES SHALL EITHER BE SNAP IN-PLACE BOOTS PROVIDED BY THE MANUFACTURER OR CAST INTO PRECAST STRUCTURE BY THE FABRICATOR FOR ALL PIPE PENETRATIONS.
10. PAYMENT FOR INSTALLATION OF THE CATCH BASINS SHALL BE MADE UNDER ITEM 604.18 PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE.
11. PAY LIMITS DEPICTED ABOVE MAY BE REDUCED AT THE REQUEST OF THE ENGINEER TO MINIMIZE IMPACT ON THE TRAVEL LANE OF 1-189.
12. PAVEMENT AND SUBBASE MATERIAL THICKNESS MAY BE ADJUSTED AT THE REQUEST OF THE ENGINEER TO CLOSER MATCH EXISTING CONDITIONS OF THE AREA.

SHEET NOT TO SCALE

PROJECT NAME: CABOT - DANVILLE  
PROJECT NUMBER: FECC F 028-3(26) C/2

FILE NAME: d78d347frm.dgn  
PROJECT LEADER: K. UPMAL  
DESIGNED BY: C. LEACH  
DETAILS SHEET 2

PLOT DATE: 27-APR-2017  
DRAWN BY: C. LEACH  
CHECKED BY: M. BOOKER  
SHEET 6 OF 30