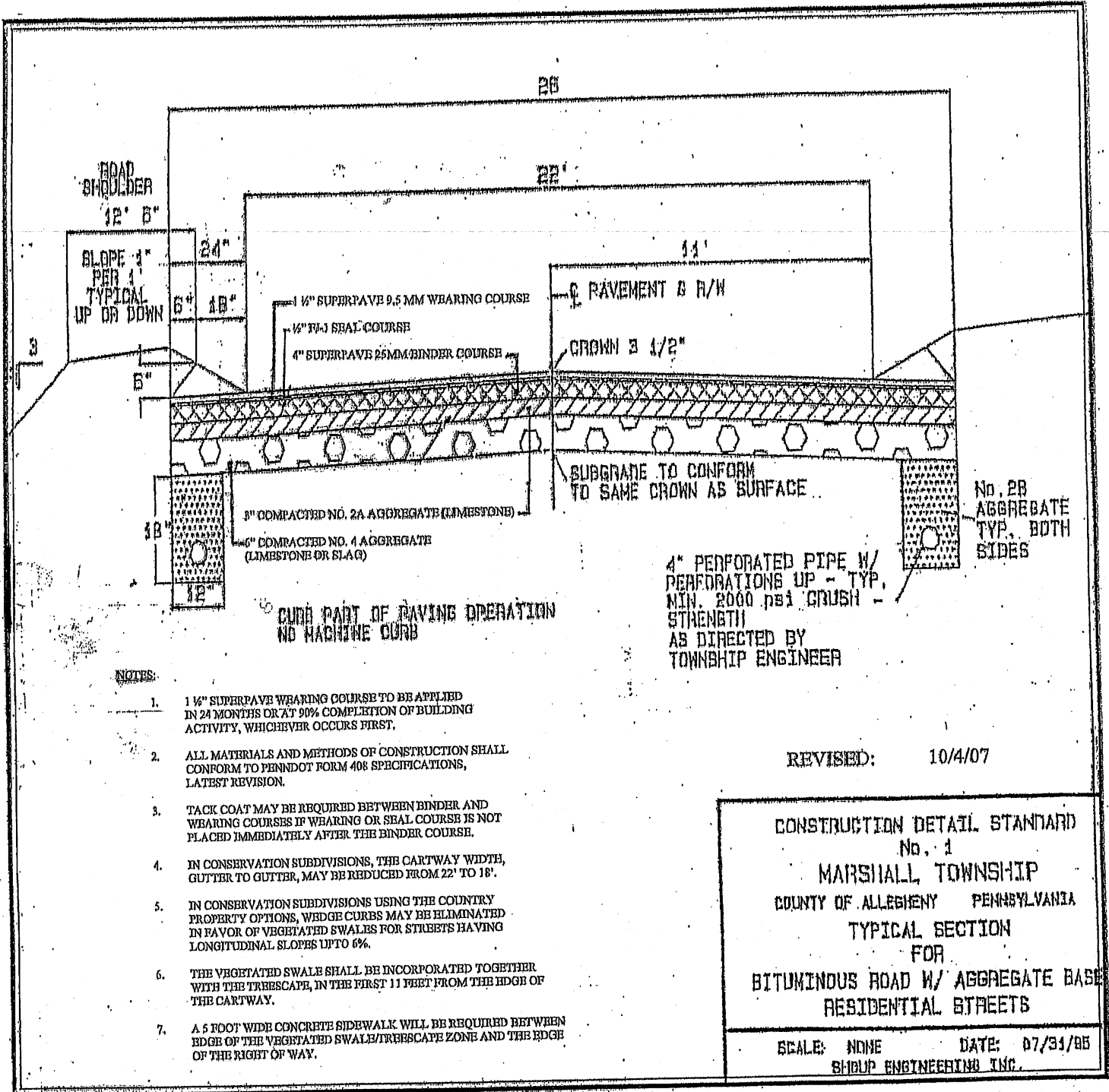


# **Appendix A**

[7-14-2008 by Ord. No. 391  
and on 9-29-2008 by Ord. No. 394]



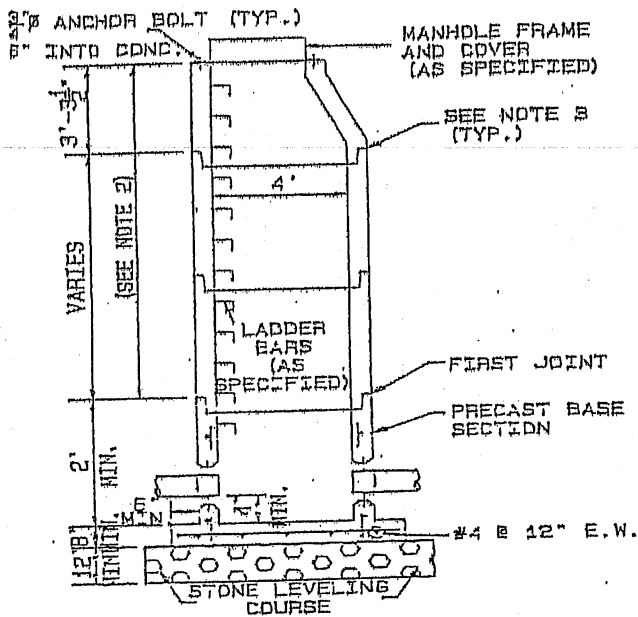
**NOTES:**

1. 1 1/2" SUPERPAVE WEARING COURSE TO BE APPLIED IN 24 MONTHS OR AT 90% COMPLETION OF BUILDING ACTIVITY, WHICHEVER OCCURS FIRST.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO PENNDOT FORM 408 SPECIFICATIONS, LATEST REVISION.
3. TACK COAT MAY BE REQUIRED BETWEEN BINDER AND WEARING COURSES IF WEARING OR SEAL COURSE IS NOT PLACED IMMEDIATELY AFTER THE BINDER COURSE.
4. IN CONSERVATION SUBDIVISIONS, THE CARTWAY WIDTH, GUTTER TO GUTTER, MAY BE REDUCED FROM 22' TO 18'.
5. IN CONSERVATION SUBDIVISIONS USING THE COUNTRY PROPERTY OPTIONS, WEDGE CURBS MAY BE ELIMINATED IN FAVOR OF VEGETATED SWALES FOR STREETS HAVING LONGITUDINAL SLOPES UP TO 6%.
6. THE VEGETATED SWALE SHALL BE INCORPORATED TOGETHER WITH THE TRESCAPE, IN THE FIRST 11 FEET FROM THE EDGE OF THE CARTWAY.
7. A 5 FOOT WIDE CONCRETE SIDEWALK WILL BE REQUIRED BETWEEN EDGE OF THE VEGETATED SWALE/TRESCAPE ZONE AND THE EDGE OF THE RIGHT OF WAY.

REVISED: 10/4/07

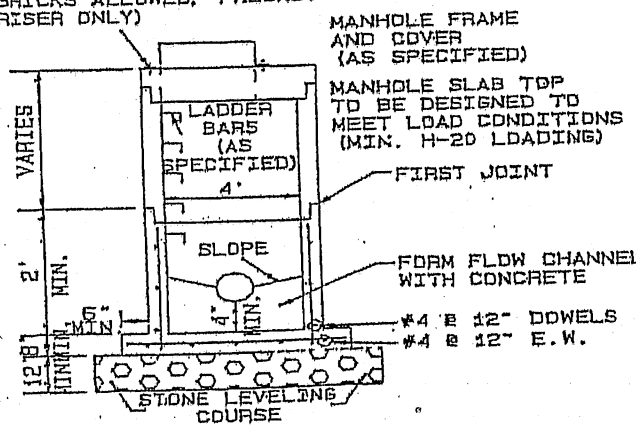
**CONSTRUCTION DETAIL STANDARD**  
 No. 1  
**MARSHALL TOWNSHIP**  
 COUNTY OF ALLEGHENY PENNSYLVANIA  
**TYPICAL SECTION**  
 FOR  
**BITUMINOUS ROAD W/ AGGREGATE BASE**  
**RESIDENTIAL STREETS**

SCALE: NONE      DATE: 07/31/05  
 SHUP ENGINEERING INC.



- NOTES:
1. PRECAST CONCRETE MANDLE SECTIONS SHALL CONFORM TO ASTM C-478, LATEST REVISION.
  2. IF THIS DIMENSION IS LESS THAN 3'-3", USE A PRECAST CONCRETE SLAB TOP AS SHOWN BELOW.
  3. JOINTS SHALL BE EQUIPPED WITH DOUBLE FLEXIBLE BUTYL RUBBER JOINT SEALANT APPROVED BY THE ENGINEER. (BOTH INNER AND OUTER JOINTS)
  4. LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT AND LEFT NEAT AND SMOOTH.
  5. BASE SLAB POURED MONOLITHICALLY WITH WALLS.
  6. LADDER BARS TO BE ON 12" CENTERS (M.A. INDUSTRIES, INC.), MODEL PS1-PF OR EQUAL.
  7. EXISTING MANHOLES ACCOMMODATING NEW SEWERLINES SHALL BE MACHINE CUT (HAMMERS SHALL NOT BE UTILIZED)

1" MAX. ADJUSTMENT TO GRADE WITH PRECAST GRADE RINGS APPROVED BY ENGINEER (NO BRICKS ALLOWED, PRECAST RISER ONLY)



<b>MARSHALL TOWNSHIP</b>	
CONSTRUCTION DETAIL STANDARD No. 3	
PRECAST CONCRETE MANHOLE FOR SEWERS 8" TO 18" PRECAST BASE SECTION	
SCALE: NONE	DATE: 07/31/95
SHOUP ENGINEERING INC.	

MANHOLE FRAME AND COVER (AS SPECIFIED)

4' MAX. ADJUSTMENT TO GRADE WITH PRECAST GRADE RINGS APPROVED BY THE ENGINEER (NO BRICKS ALLOWED, PRECAST RISER ONLY)

3/4" Ø ANCHOR BOLTS 6" INTO CONCRETE

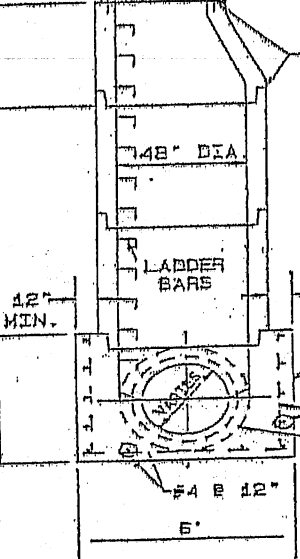
SEE NOTE #2 FOR JOINTS

LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & LEFT SMOOTH

↑ SEE NOTE BELOW

↑ VARIES

↑ VARIES



2- #4 RING BARS

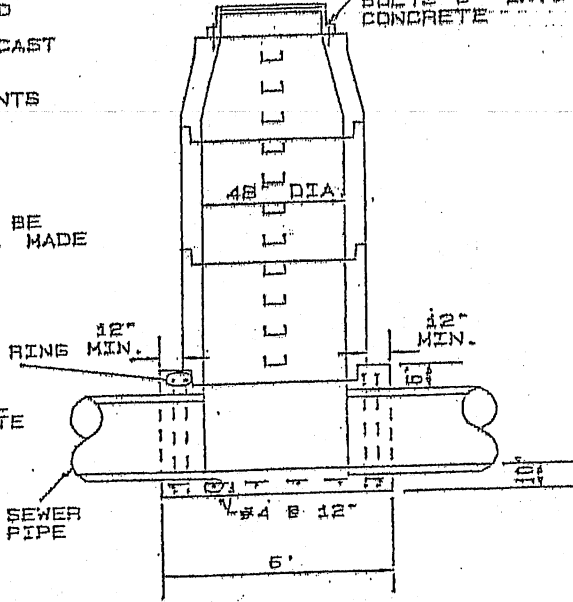
CONCRETE BASE SHALL BE 4000 PSI CONCRETE

#4 @ 12"

2- #4 RING BARS

#4 @ 12"

6"



SEWER PIPE

#4 @ 12"

6"

\*IF THIS DIMENSION IS LESS THAN 3'3" USE A PRECAST CONCRETE SLAB TOP SHOWN BELOW

MANHOLE FRAME (AS SPECIFIED)

MANHOLE SLAB TOP TO BE DESIGNED TO MEET LOAD CONDITIONS

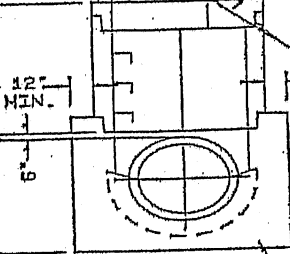
SEE NOTE #2 FOR JOINTS

↑ VARIES

12" MIN.

12" MIN.

6"



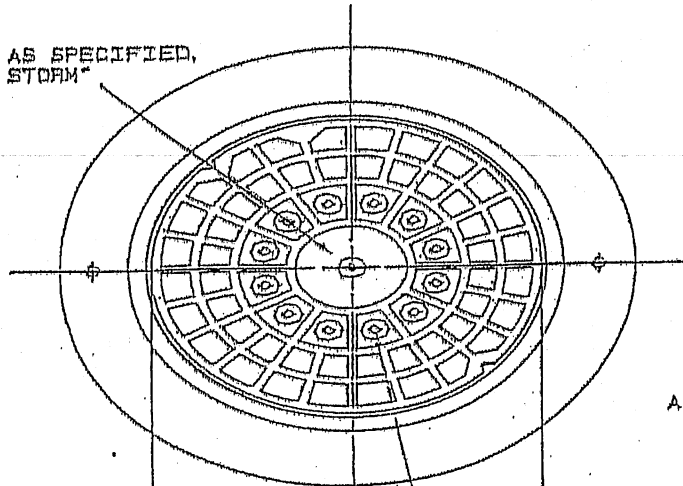
DIMENSIONS AND REINFORCING SHOWN ABOVE

NOTES:

1. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM C-47B, LATEST REVISION.
2. JOINTS SHALL BE EQUIPPED WITH DOUBLE FLEXIBLE BUTYU RUBBER JOINT SEALANT APPROVED BY THE ENGINEER. (BOTH INNER AND OUTER JOINTS)
3. EXISTING MAHOLES ACCOMMODATING NEW SEWERLINES SHALL BE MACHINE CUT (HAMMERS SHALL NOT BE UTILIZED)

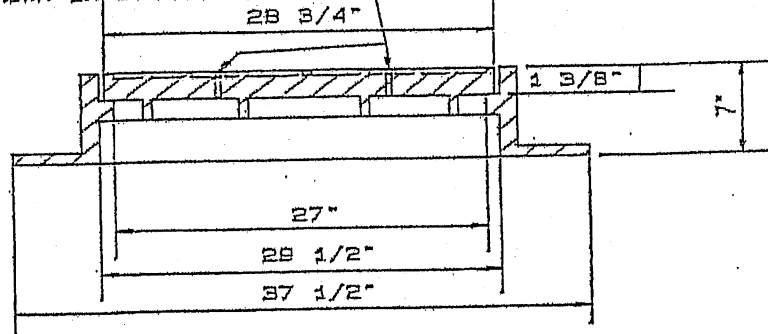
<b>MARSHALL TOWNSHIP</b>	
CONSTRUCTION DETAIL	
STANDARD No. 5	
CAST-IN-PLACE BASE	
PRECAST CONCRETE MANHOLE	
FOR SEWERS 20" TO 33"	
SCALE: NONE	DATE: 07/31/95
GUDR ENGINEERING INC.	

LETTERING AS SPECIFIED,  
"MARSHALL STORM"



ALL MANHOLES MACHINED

WHEN VENTILATED COVERS ARE DESIRED  
12 - 1" HOLES CORED AS SHOWN IN DOTTED LINES



WATER TIGHT MANHOLE, FRAME  
AND COVER WHERE REQUIRED,  
BY ENGINEER, SHALL BE  
ALLEGHENY FOUNDRY CO.  
OR APPROVED EQUAL  
FRAME 109W  
COVER 110  
SEAL P 300

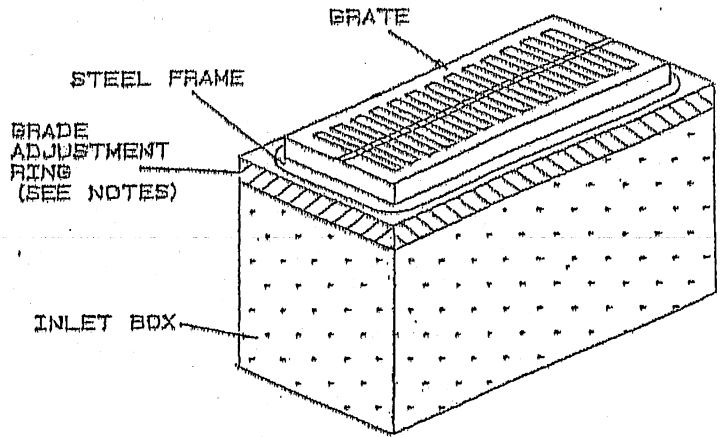
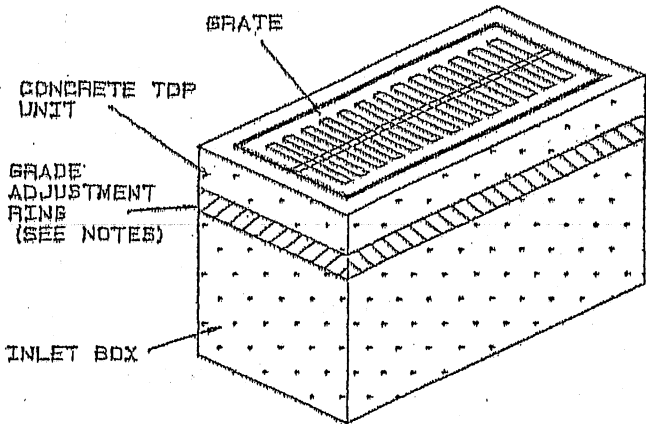
MARSHALL TOWNSHIP

CONSTRUCTION DETAIL  
STANDARD No. 7  
MANHOLE COVER AND FRAME

SCALE: NONE

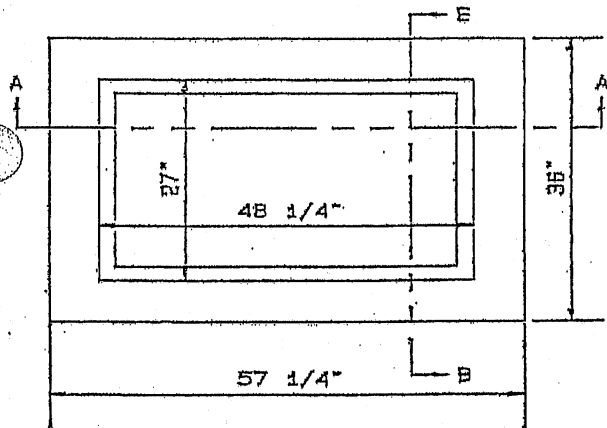
DATE: 07/31/95

GROUP ENGINEERING INC.

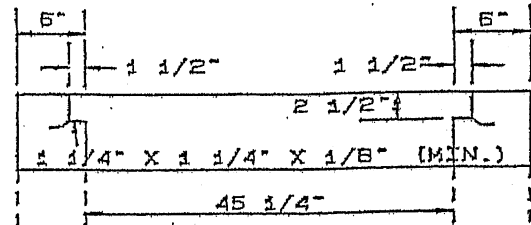


INLET ASSEMBLIES

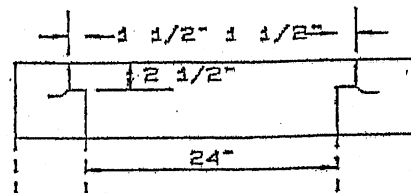
CONCRETE TOP UNITS SHALL BE USED UNLESS PRIOR APPROVAL IS OBTAINED



CONCRETE TOP UNITS



SECTION A-A



SECTION B-B

NOTES:

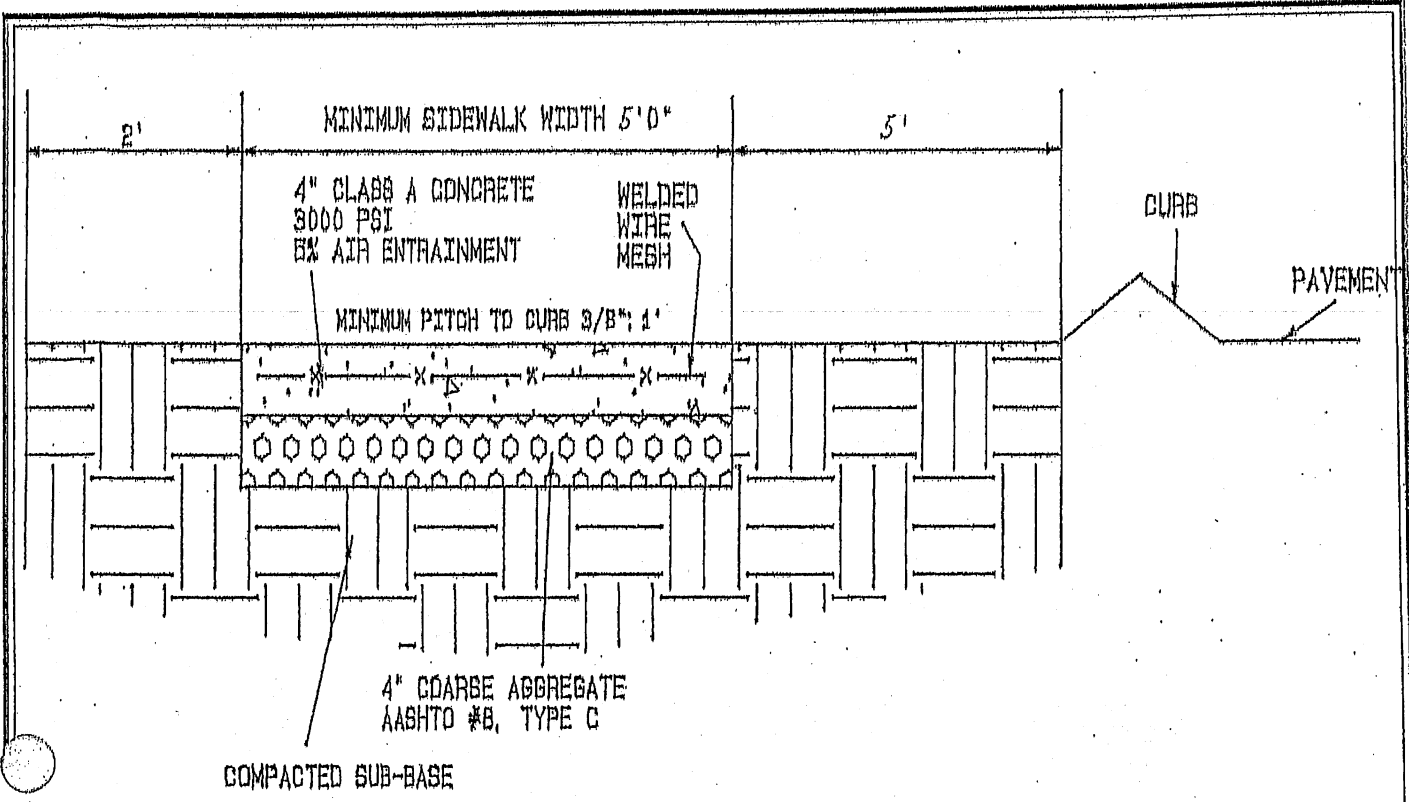
1. CONSTRUCT IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 605, LATEST EDITION, FOR INLET ASSEMBLIES.
2. GRADE ADJUSTMENT RINGS SHALL BE MASONRY OR PRECAST CONCRETE CONSTRUCTION.
3. PROVIDE 1 1/4" X 1 1/4" ANGLES EMBEDDED IN THE CONCRETE AS A BEARING AREA FOR THE GRATE FOR TOP UNITS.

MARSHALL TOWNSHIP

CONSTRUCTION DETAIL  
STANDARD No. 9  
INLETS (TYPE M)  
ASSEMBLIES AND  
CONCRETE TOP UNITS

SCALE: NONE | DATE: 07/31/95

SHUP ENGINEERING INC.



MARSHALL TOWNSHIP	
CONSTRUCTION DETAIL STANDARD No. 13 SIDEWALK SECTION	
SCALE: NONE	DATE: 11/29/95
SHOW ENGINEERING TWP.	

REV. 12/6/95