

- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL)
- 2. SFF 8" EXTRUDED CONCRETE CURB DETAIL.

RESIDENTIAL NEIGHBORHOOD MINOR STREET WITH 8" EXTRUDED CONCRETE CURB (50' R.O.W.)

- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)

-SUBGRADE COMPACTED TO 98% STANDARD PROCTOR DENSITY

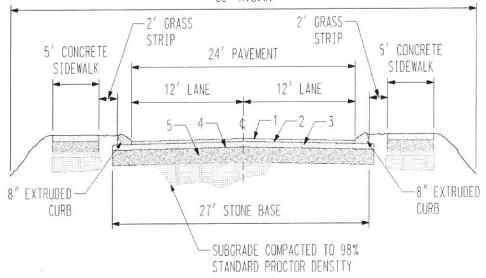
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)
- 6. BASE MATERIAL FOR CURB AND GUTTER SHALL BE NO LESS THAN 4".

NOTES:

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD ROLLOVER CURB AND GUTTER (SEE ROLLOVER CURB WITH GUTTER STANDARD DETAIL).

RESIDENTIAL NEIGHBERHOOD MINOR STREET WITH ROLLOVER CURB AND GUTTER (50' R.O.W.)

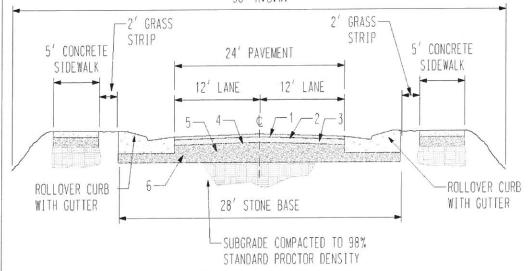
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- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALK REQUIRED ON ONE SIDE OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL)
- 2. SEE 8" EXTRUDED CONCRETE CURB DETAIL.

RESIDENTIAL NEIGHBORHOOD COLLECTOR STREET WITH 8" EXTRUDED CONCRETE CURB (50' R.O.W.)

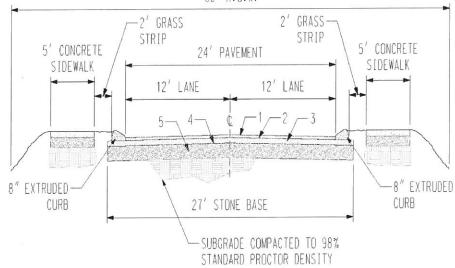


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- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
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- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)
- 6. BASE MATERIAL FOR CURB AND GUTTER SHALL BE NO LESS THAN 4".

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD ROLLOVER CURB AND GUTTER (SEE ROLLOVER CURB WITH GUTTER STANDARD DETAIL).

RESIDENTIAL NEIGHBERHOOD COLLECTOR STREET WITH ROLLOVER CURB AND GUTTER (50' R.O.W.)

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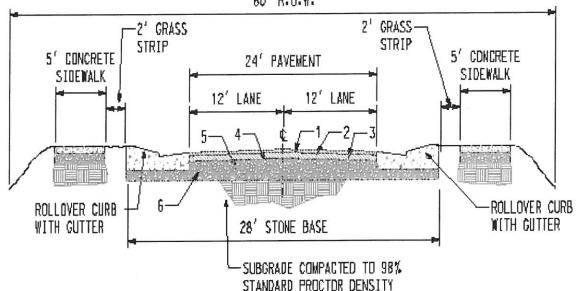


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- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL)
- 2. SEE 8" EXTRUDED CONCRETE CURB DETAIL.

RESIDENTIAL COLLECTOR STREET WITH 8" EXTRUDED CONCRETE CURB (60' R.O.W.)

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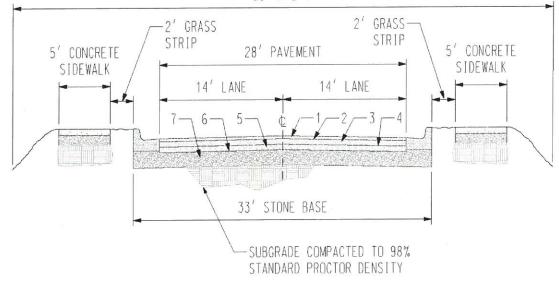


- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)
- 6. BASE MATERIAL FOR CURB AND GUTTER SHALL BE NO LESS THAN 4".

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE RDAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- STANDARD RDLLGVER CURB AND GUTTER (SEE RDLLGVER CURB WITH GUTTER STANDARD DETAIL).

RESIDENTIAL COLLECTOR STREET WITH ROLLOVER CURB AND GUTTER (60 R.O.W.)

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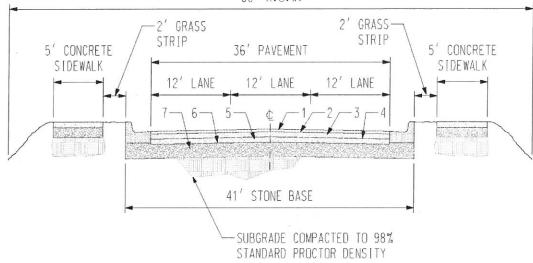


- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

RESIDENTIAL ARTERIAL STREET (2-LANE) (80' R.O.W.)

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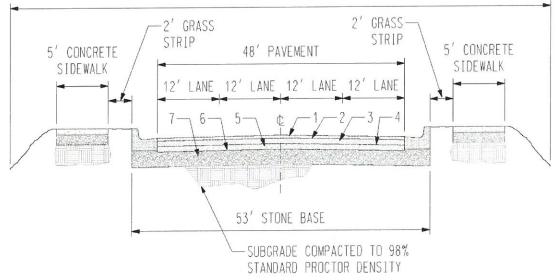


- 1. 1.5" ASPHALTIC CONCRETE SURFACE (411-D)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

RESIDENTIAL ARTERIAL STREET (3-LANE) (80' R.O.W.)

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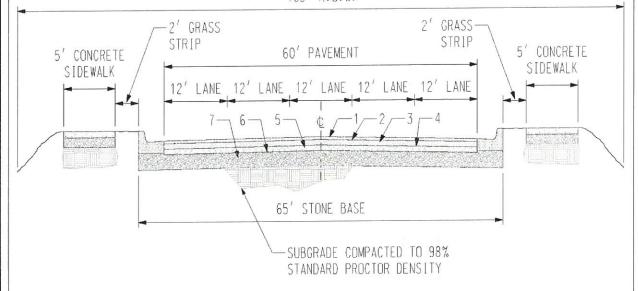


- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
 - 6. PRIME COAT (402) 0.30 GAL/S.Y.
 - 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

RESIDENTIAL ARTERIAL STREET (4-LANE) (90' R.O.W.)

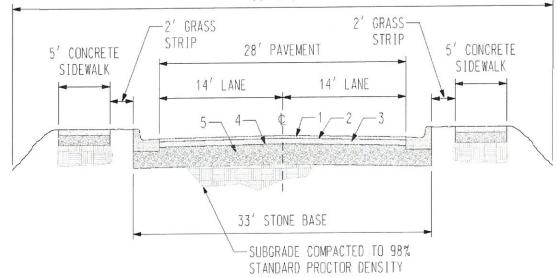
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- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

RESIDENTIAL ARTERIAL STREET (5-LANE) (105' R.O.W.)

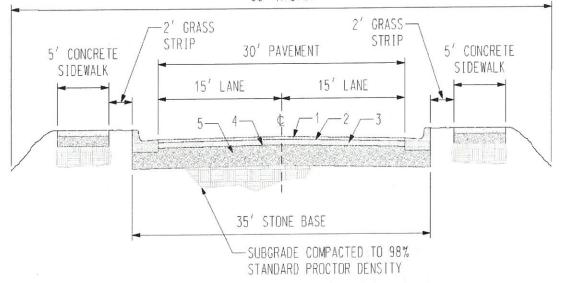


- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

NON-RESIDENTIAL MINOR STREET (50' R.O.W.)

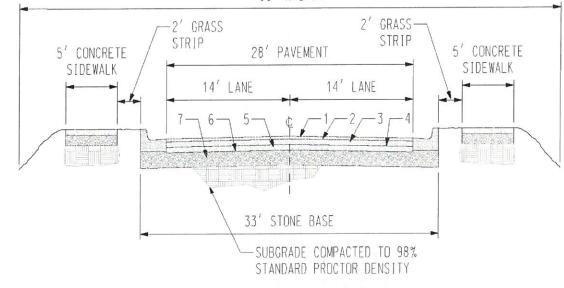
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- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

NON-RESIDENTIAL COLLECTOR STREET (60' R.O.W.)

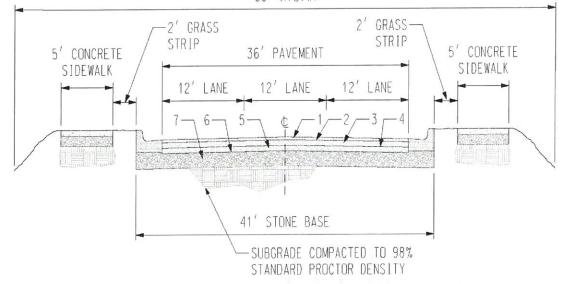


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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

NON-RESIDENTIAL ARTERIAL STREET (2-LANI (80' R.O.W.)

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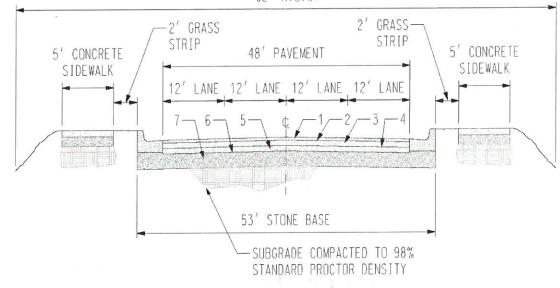


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- 2. TACK COAT (403) 0.10 GAL/S.Y.
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- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

NON-RESIDENTIAL ARTERIAL STREET (3-LANE (80' R.O.W.)

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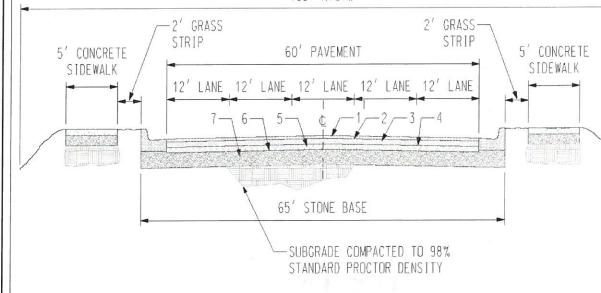


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- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

NON-RESIDENTIAL ARTERIAL STREET (4-LANE (92' R.O.W.)

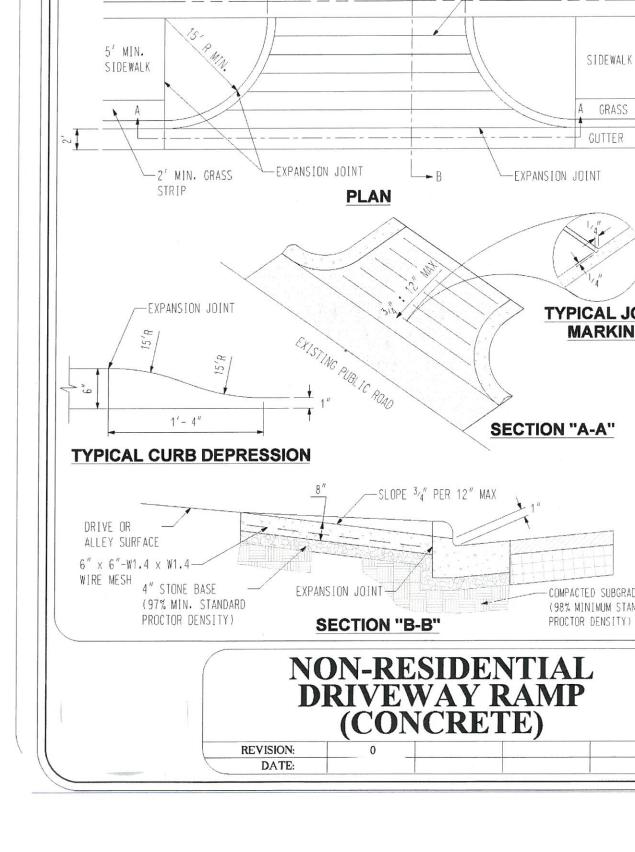
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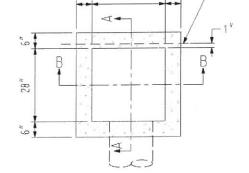


- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENISTY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).

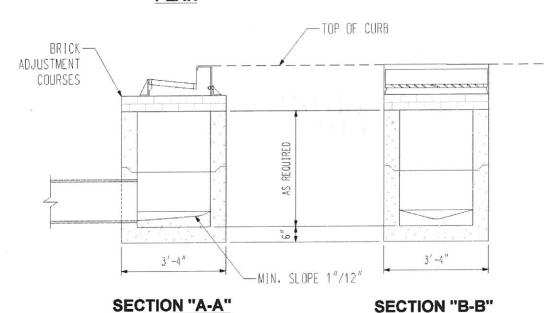
NON-RESIDENTIAL ARTERIAL STREET (5-LANI (105' R.O.W.)





NOTE: CASTING FOR STANDARD CURB AND GUTTER SHOWN (DR-129). ACCEPTABLE SUBSTITUTES WHERE USE IS DIRECTED ARE DR-130, DR-132, DR-133.

PLAN



CONCRETE: 4,000 PSI AT 28 DAYS

CUNCRETE: 4,000 PST AT 28 DAYS
REINFORCED WITH NO. 4 GRADE 60 BARS

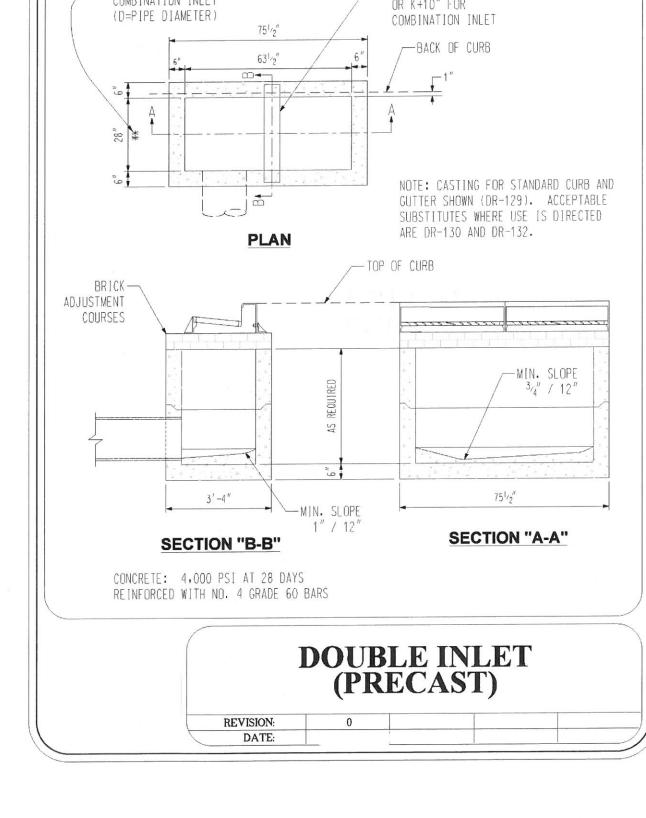
SINGLE INLET (PRECAST)

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- 1. POURED-IN-PLACE CATCH BASINS ARE NOT ALLOWED UNLESS SPECIAL CONDITIONS EXIST WHICH PREVENTS A PRECAST STRUCTURE FROM BEING UTILIZED AND SHALL REQUIRE APPROVAL BY THE PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLTION. IF APPROVED, THE POURED-IN-PLACE CATCH BASIN SHALL BE FORMED WITH STANDARD PLYWOOD FORMING MATERIALS UTILIZING NO. 4 REINFORCEMENT STEEL EVERY 6", 4,000 PSI CONCRETE, AND DIMENSIONS AS INDICATED BY THIS STANDARD DRAWING.
- 2. ADJUSTMENT COURSE BRICK, PIPE CONNECTION, AND CASTING CONNECTION SHALL BE SEALED ENTIRELY WITH NON-SHRINK GROUT.
- 3. ROCKS, WOOD, AND OTHER FOREIGN MATERIAL SHALL NOT BE ALLOWED FOR PIPE CONNECTION OR CASTING CONNECTION AND ADJUSTMENTS.
- 4. ALIGNMENT AND SETTING OF THE CASTING SHALL BE AS INDICATED ON THIS DRAWING AND SHALL BE PLACED ON THE PRECAST STRUCTURE WITH NO NON-BEARING GAPS ALLOWED.
- 5. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.
- 6. ALL STRUCTURES LOCATED IN ROADWAYS SHALL BE BACKFILLED FULL DEPTH WITH TOOT #67 STONE. THE STRUCTURE SHALL SET ON A MINIMUM 6" THICK STONE BEDDING (TDOT #67 STONE).

SINGLE INLET (PRECAST) NOTES

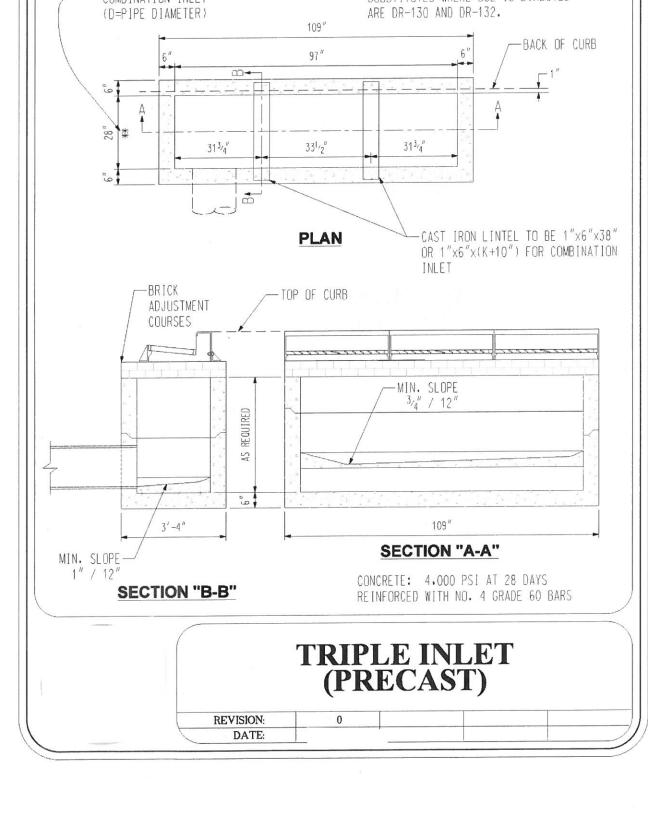
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- 1. POURED-IN-PLACE CATCH BASINS ARE NOT ALLOWED UNLESS SPECIAL CONDITIONS EXIST WHICH PREVENTS A PRECAST STRUCTURE FROM BEING UTILIZED AND SHALL REQUIRE APPROVAL BY THE PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLTION. IF APPROVED, THE POURED-IN-PLACE CATCH BASIN SHALL BE FORMED WITH STANDARD PLYWOOD FORMING MATERIALS UTILIZING NO. 4 REINFORCEMENT STEEL EVERY 6", 4,000 PSI CONCRETE, AND DIMENSIONS AS INDICATED BY THIS STANDARD DRAWING.
- 2. ADJUSTMENT COURSE BRICK, PIPE CONNECTION, AND CASTING CONNECTION SHALL BE SEALED ENTIRELY WITH NON-SHRINK GROUT.
- 3. ROCKS, WOOD, AND OTHER FOREIGN MATERIAL SHALL NOT BE ALLOWED FOR PIPE CONNECTION OR CASTING CONNECTION AND ADJUSTMENTS.
- 4. ALIGNMENT AND SETTING OF THE CASTING SHALL BE AS INDICATED ON THIS DRAWING AND SHALL BE PLACED ON THE PRECAST STRUCTURE WITH NO NON-BEARING GAPS ALLOWED.
- 5. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.
- 6. ALL STRUCTURES LOCATED IN ROADWAYS SHALL BE BACKFILLED FULL DEPTH WITH TDOT #67 STONE. THE STRUCTURE SHALL SET ON A MINIMUM 6" THICK STONE BEDDING (TDOT #67 STONE).

DOUBLE INLET (PRECAST) NOTES

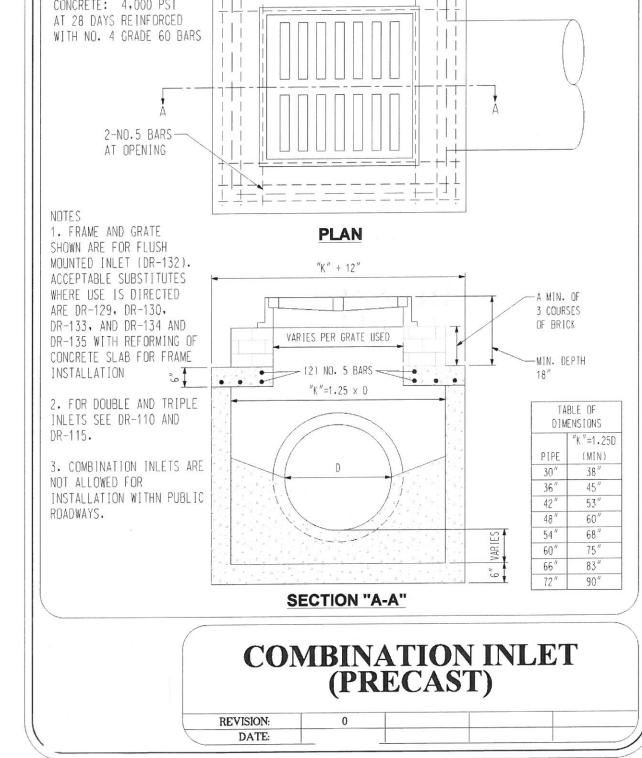
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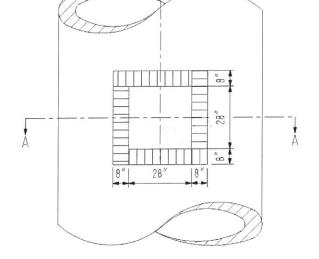


- 1. POURED-IN-PLACE CATCH BASINS ARE NOT ALLOWED UNLESS SPECIAL CONDITIONS EXIST WHICH PREVENTS A PRECAST STRUCTURE FROM BEING UTILIZED AND SHALL REQUIRE APPROVAL BY THE PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLTION. IF APPROVED, THE POURED-IN-PLACE CATCH BASIN SHALL BE FORMED WITH STANDARD PLYWOOD FORMING MATERIALS UTILIZING NO. 4 REINFORCEMENT STEEL EVERY 6", 4,000 PSI CONCRETE, AND DIMENSIONS AS INDICATED BY THIS STANDARD DRAWING.
- 2. ADJUSTMENT COURSE BRICK, PIPE CONNECTION, AND CASTING CONNECTION SHALL BE SEALED ENTIRELY WITH NON-SHRINK GROUT.
- 3. ROCKS, WOOD, AND OTHER FOREIGN MATERIAL SHALL NOT BE ALLOWED FOR PIPE CONNECTION OR CASTING CONNECTION AND ADJUSTMENTS.
- 4. ALIGNMENT AND SETTING OF THE CASTING SHALL BE AS INDICATED ON THIS DRAWING AND SHALL BE PLACED ON THE PRECAST STRUCTURE WITH NO NON-BEARING GAPS ALLOWED.
- 5. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.
- 6. ALL STRUCTURES LOCATED IN ROADWAYS SHALL BE BACKFILLED FULL DEPTH WITH TDOT #67 STONE. THE STRUCTURE SHALL SET ON A MINIMUM 6" THICK STONE BEDDING (TDOT #67 STONE).

TRIPLE INLET (PRECAST) NOTES

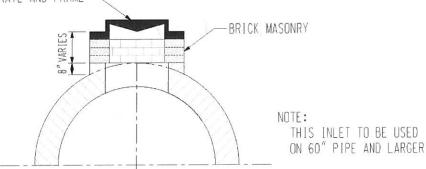
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PLAN





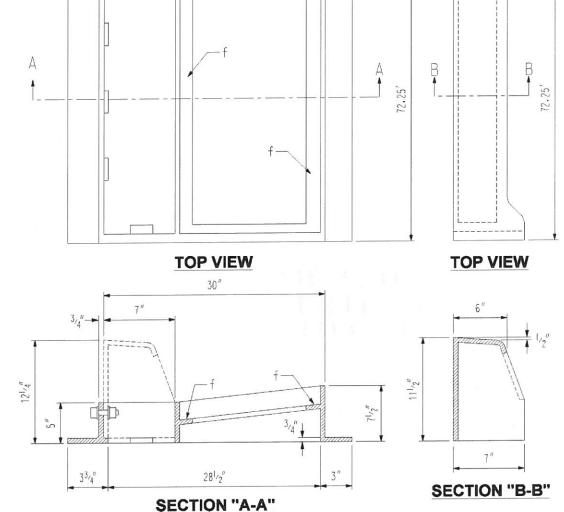
SECTION "A-A"

NOTES:

- 1. FRAME AND GRATE SHOWN ARE FOR FLUSH MOUNTED INLET (DR-132).
 ACCEPTABLE SUBSTITUTES WHERE USE IS DIRECTED ARE DR-129, DR-130,
 DR-133, AND DR-134 AND DR-135 WITH REFORMING OF CONCRETE
 SLAB FOR FRAME INSTALLATION.
- 2. TYPE I INLETS TO BE INSTALLED ON RCP ONLY. INSTALLTION ON OTHER TYPES OF PIPE MATERIALS IS NOT ALLOWED.

TYPE I INLET

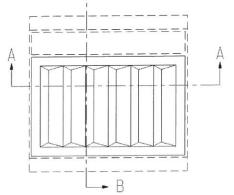
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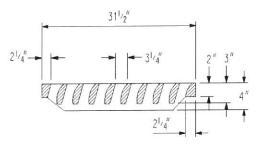
- 1. CONTACT SURFACES OF FRAME MARKED "f" ARE TO BE GROUND.
- 2. FRAME TO BE SIZED FOR MOUNTING EITHER VANE OR SUMP TYPE GRATE (DR-131) WITHIN FRAME DIMENSIONS SHOWN.
- 3. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.

FRAME AND GRATE FOR VERTICAL CURB WITH GUTTER

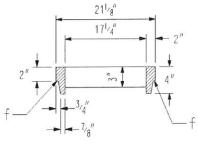
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VANE GRATE TOP VIEW



SECTION "A-A"

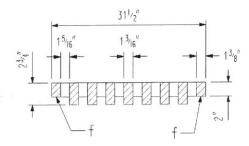


SECTION "B-B"

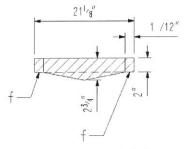
NOTES:

- 1. CONTACT SURFACES OF FRAME MARKED "F" ARE TO BE GROUND.
- 2. VANE AND SUMP GRATES TO BE JOHN BOUCHARD & SONS OR AN APPROVED EQUAL.

SUMP GRATE TOP VIEW



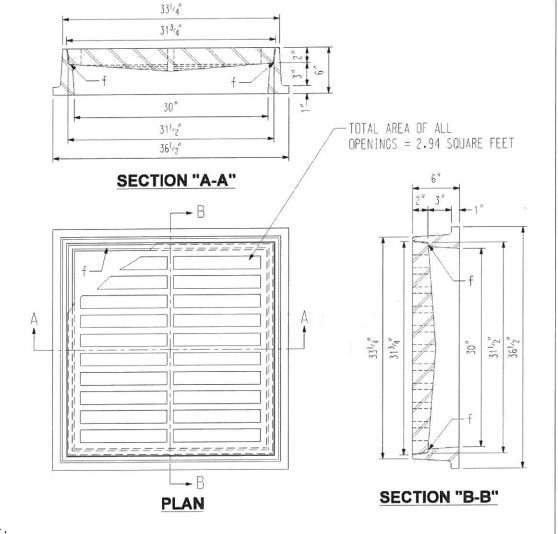
SECTION "A-A"



SECTION "B-B"

VANE AND SUMP GRATES

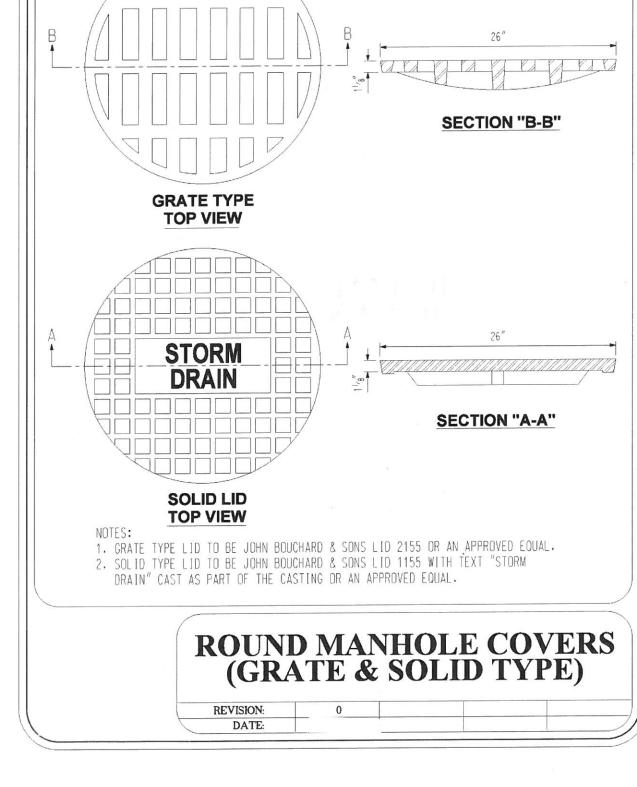
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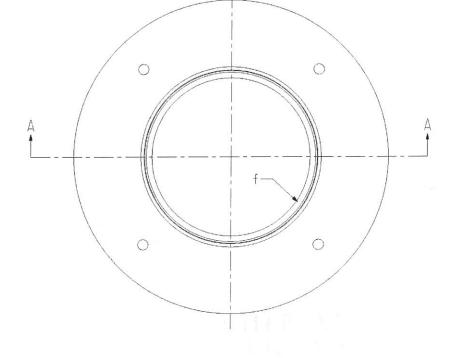


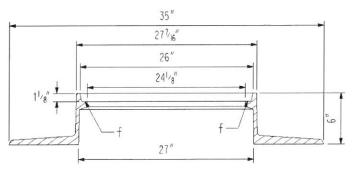
- 1. OMIT BASE FLANGE ON ONE SIDE OF FRAME FOR DOUBLE INSTALLATIONS AND END FRAMES OF OTHER MULTIPLE INSTALLATIONS. OMIT ON (2) TWO SIDES (OPPOSITE) FOR CENTER UNITS OF MULTIPLE INSTALLATIONS. FOR INSTALLATION WITH CURB INLETS, OMIT BASE ON ONE SIDE OF SINGLE, TWO ADJACENT SIDES OF DOUBLE, AND THREE SIDES OF CENTER UNITS OF OTHER MULTIPLE INSTALLATIONS.
- 2. CONTACT SURFACES OF FRAME AND GRATE MARKED "f" ARE TO BE GROUND.

FRAME AND GRATE FOR FLUSH MOUNTED INLETS

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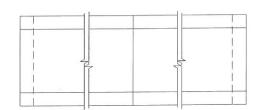


- 1. CONTACT SURFACE OF FRAME MARKED "f" IS TO BE MACHINED.
- 2. FRAMES TO BE JOHN BOUCHARD & SONS FRAME 1155/2155 OR AN APPROVED EQUAL. 3. SEE DETAIL SHEET "ROUND MANHOLE COVERS" FOR REFERENCE OF MANHOLE COVERS AND GRATES.

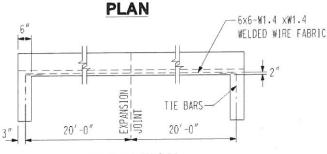
ROUND MANHOLE FRAME

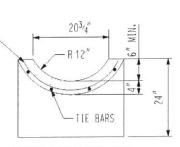
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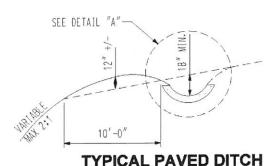
NO. 4 TIE BARS AT 6" O.C.

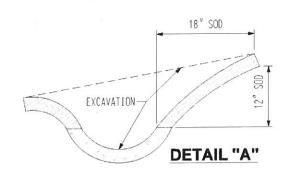




ELEVATION

SECTION "A-A"





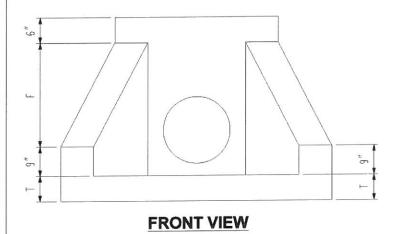
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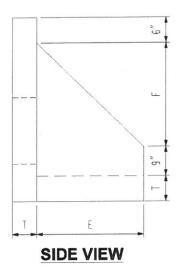
NOTES:

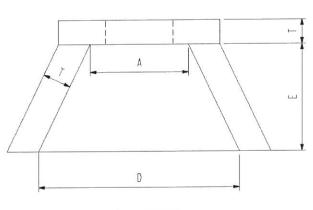
- 1. COMPACTION, FINISHING, AND CURING SHALL BE THE SAME AS REQUIRED FOR CONCRETE SIDEWALK WITH 4" STONE BASE.
- 2. IF CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT IN THE POURING OF THE PAVED DITCH, IT SHALL BE CONSTRUCTED AS DETAILED.
- 3. ANY LENGTH OF LONGITUDINAL REINFORCING STEEL WILL BE PERMITTED PROVIDED A 12" LAP IS USED IN THE SPLICE. ADEQUATE TIES AT THE SPLICE SHALL BE REQUIRED.
- 4. EXPANSION JOINTS REQUIRED ON 20' CENTERS.
- 5. SHOULD THE TERRAIN OF EXISTING GROUND BE SO THAT WATER WOULD DRAIN INTO THE DITCH FROM BOTH SIDES.

 THEN SODDING WILL BE REQUIRED ON BOTH SIDES OF THE DITCH.

DITCH DETAIL (SMALL SECTION)







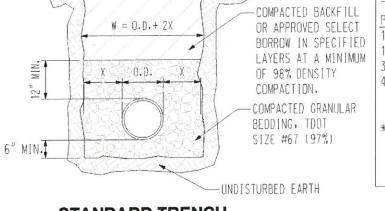
TOP VIEW

	TAI	BLE OF [) [MENS] I	DNS	
PIPE	Д	D	E	F	T
SIZES					(MIN.
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	4'-0"	3'-3"	6"
30"	4'-0"	6'-6"	4'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
54"	7'-0"	9'-5"	4'-6"	5'-9"	6"
60"	7'-0"	9'-5"	4'-6"	5'-9"	6"
66"	8'-6"	11'-0"	5'-6"	6'-11"	6"
72"	8'-6"	11'-0"	5'-6"	6'-11"	6"

NOTES:

- 1. CONCRETE: 4,000 PSI AT 28 DAYS REINFORCED WITH NO. 4 BARS 10" C/C EACH WAY WITH WINGS AND TOE SLAB DOWELED TO HEADWALL WITH NO. 5 BARS.
- 2.3/4" CHAMFER ON ALL EXPOSED EDGES.

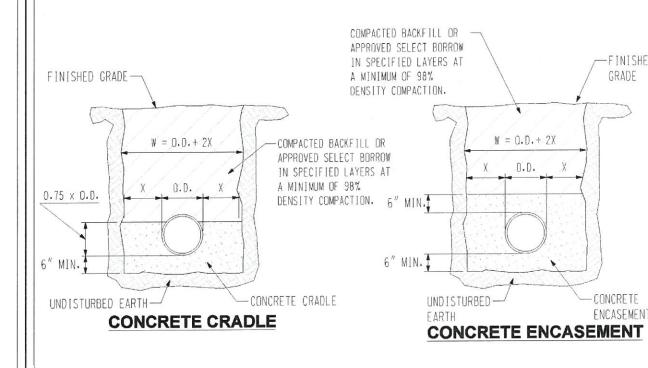
CONCRETE HEADWALL



PIPE SIZE	X
12" & SMALLER	**
12" - 30"	12"
33" - 42"	15"
48" & LARGER	18"

**TRENCH WIDTH (W) SHALL BE 3'-0" MAX.
WIDTH OF TRENCH (W)=0.D. + 2X WHERE
X IS DISTANCE FROM OUTSIDE OF PIPE
TO EDGE OF TRENCH.

STANDARD TRENCH



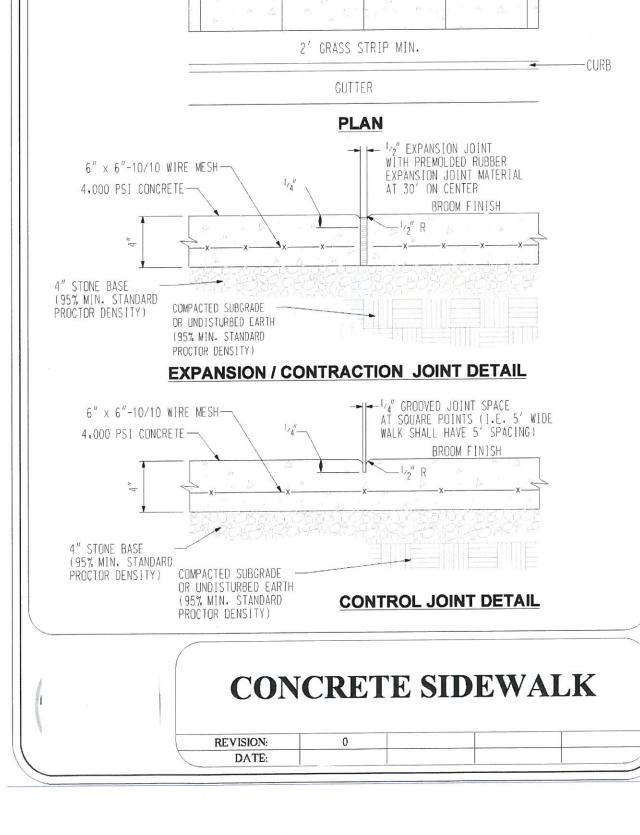
TRENCH BACKFILL

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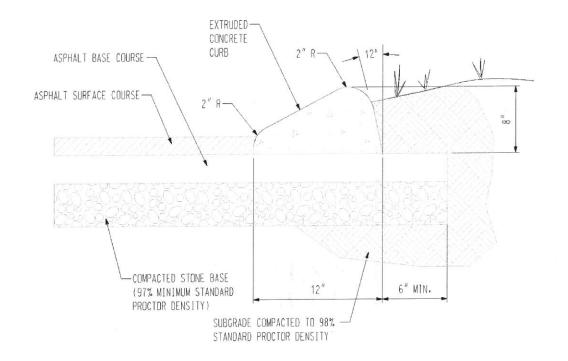
- 1. CONCRETE FOR CRADLES AND ENCASEMENTS TO HAVE f'c=3,000 PSI AT 28 DAYS.
- 2. POUR CONCRETE AGAINST UNDISTURBED EARTH.
- 3. FOR CONTINUOUS CONDUIT IN TRENCH CONDITIONS THE WIDTH OF TRENCH (W) SHALL BE 0.D.+2X MAX.
- 4. THE WIDTH OF TRENCH FOR ALL OTHER PIPE DIAMETERS SHALL BE ACCORDING TO TABLE 3.
- 5. BACKFILL IN NEW AND EXISTING ROADWAYS SHALL BE FULL TRENCH DEPTH GRADING D PUG MILL MIX COMPACTED (MINIMUM 97% STANDARD PROCTOR DENSITY) IN 8" LAYERS UP TO THE BOTTOM OF THE PAVEMENT SECTION.
- 6. AN ALTERNATE BACKFILL SHALL CONSIST OF STONE BEDDING AND COVER AS INDICATED IN THE STANDARD "TRENCH BACKFILL" DETAIL WITH SUITABLE BACKFILL MATERIAL COMPACTED TO 98% DENSITY. THE SUITABLE BACKFILL MATERIAL SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE AND SHALL BE PLACED IN 8" COMPACTED LIFTS.

TRENCH BACKFILL NOTES

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- CONTRACTION JOINTS SHALL BE 1/2" WIDE AND FULL DEPTH. JOINTS SHALL BE PLACED AT A MAXIMUM OF 50 FEET LONGITUDINAL INTERVALS AND AT ALL ABUTTING STRUCTURES, DRIVEWAYS, AND TANGENT POINTS OF RADIUS RETURNS.
- 2. TOOLED CURB CONTROL JOINTS SHAL BE PLACED 1/4" WIDE, 1" DEEP, AND 5 FFFT ON CENTER
- 3. ALL CONCRETE TO COMPLY WITH ACI 318 WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT THE 28 DAYS TEST.
- 4. CONCRETE TO BE AIR-ENTRAINED WITH AN AIR CONTENT OF 4-6%.
- 5. JOINTS TO BE FILLED WITH BITUMINOUS EXPANSION MATERIAL.
- 6. UTILIZE JOHN BOUCHARD AND SONS CASTING NUMBER 3103.

8" EXTRUDED CONCRETE CURB

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