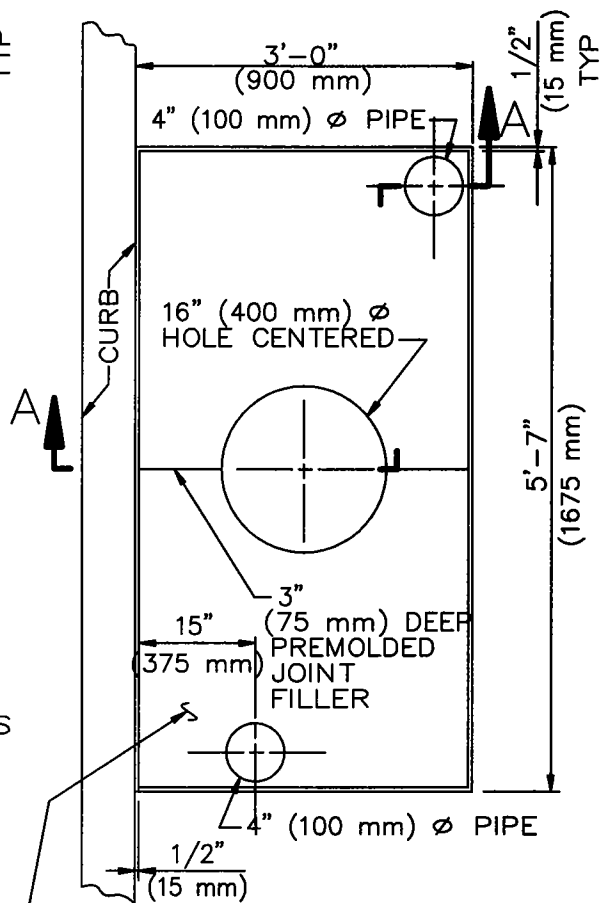


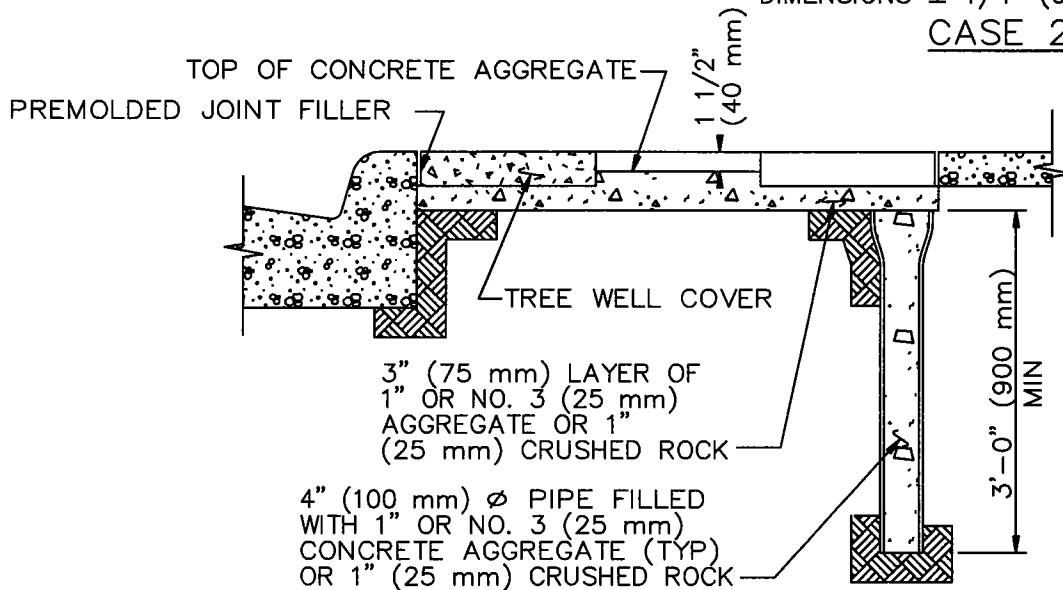
4'-1" x 4'-1" x 3"
(1225 mm x 1225 mm x 75 mm)
NATURAL COLOR PERMEABLE
CONCRETE TREE WELL COVER
DIMENSIONS ± 1/4" (6 mm)

CASE 1



2'-11" x 5'-6" x 3"
(875 mm x 1650 mm x 75 mm)
NATURAL COLOR PERMEABLE
CONCRETE TREE WELL COVER
DIMENSIONS ± 1/4" (6 mm)

CASE 2



SECTION A-A

NOTE:

SEE SHEETS 3 AND 7 FOR NOTES PERTAINING TO THIS SHEET.

TYPE 1

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1984
REV. 1996, 2005, 2009

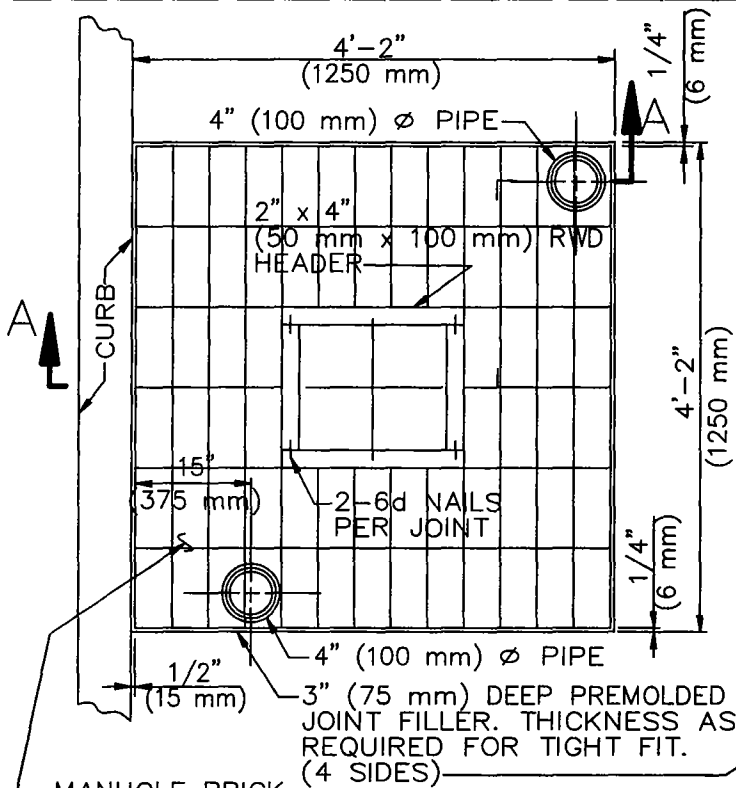
TREE WELL

STANDARD PLAN

519-3

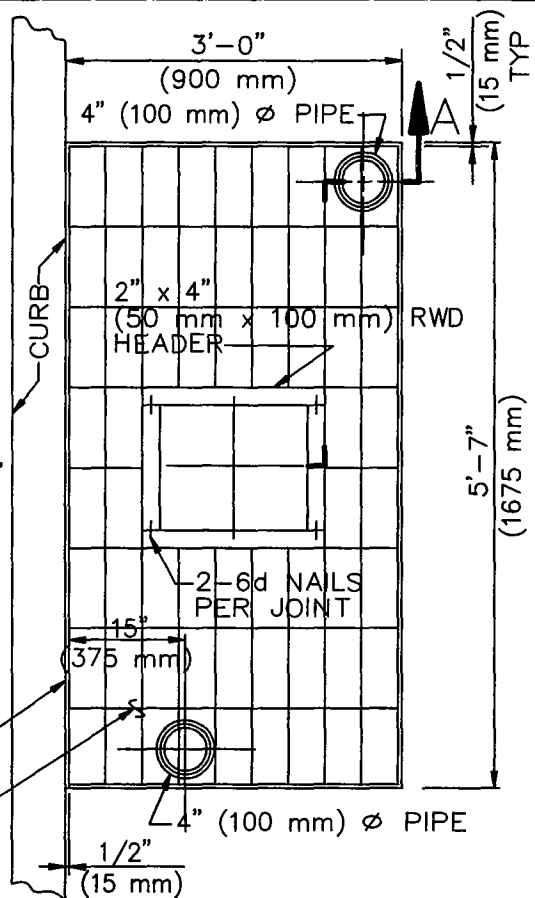
USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

SHEET 1 OF 7



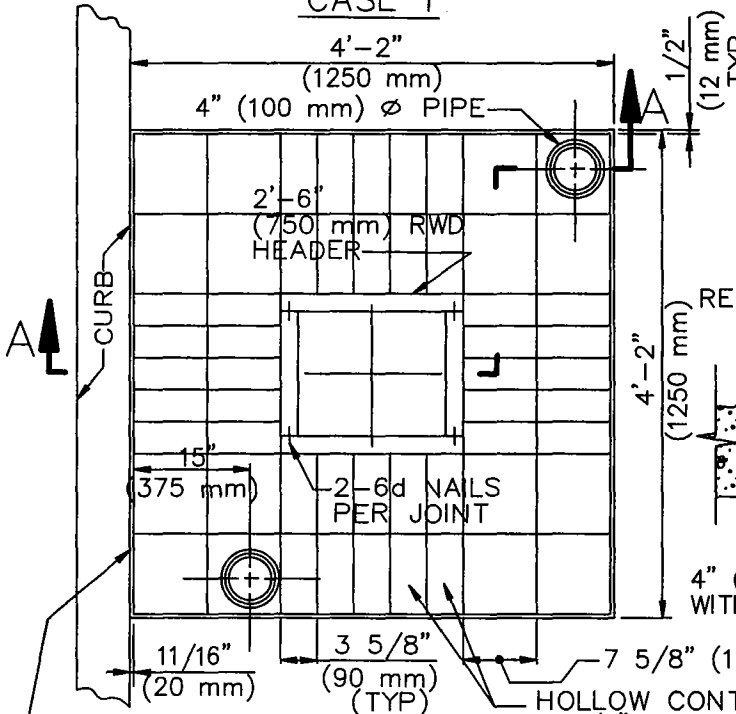
MANHOLE BRICK
 2 1/2" x 7/8" x 8 1/4"
 (64 mm x 96 mm x 209 mm)
 LAID TIGHT WITHOUT MORTAR

CASE 1



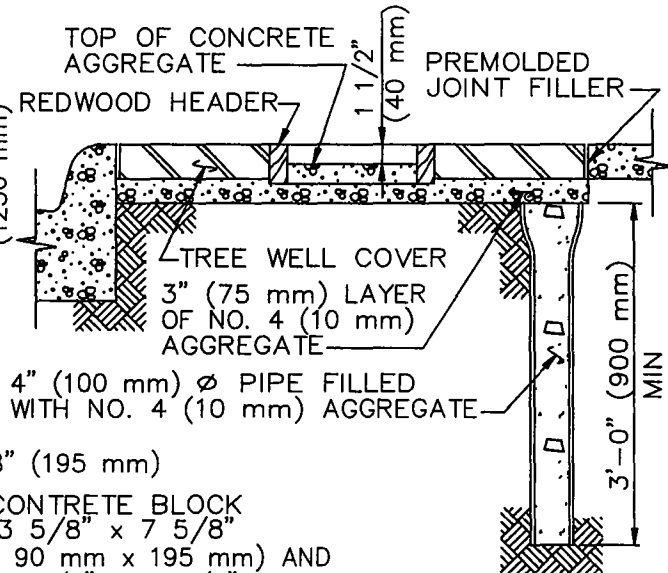
MANHOLE BRICK
 2 1/2" x 7/8" x 8 1/4"
 (64 mm x 96 mm x 209 mm)
 LAID TIGHT WITHOUT MORTAR

CASE 2



6" (150 mm) DEEP PREMOLDED
 JOINT FILLER. THICKNESS AS
 REQUIRED FOR TIGHT FIT.
 (4 SIDES)

CASE 3



HOLLOW CONCRETE BLOCK
 5 5/8" x 3 5/8" x 7 5/8"
 (140 mm x 90 mm x 195 mm) AND
 3 5/8" x 7 5/8" x 7 5/8"
 (90 mm x 195 mm x 195 mm)
 LAID TIGHT WITHOUT MORTAR

SECTION A-A

NOTE:

SEE SHEETS 3 AND 7 FOR NOTES
 PERTAINING TO THIS SHEET.

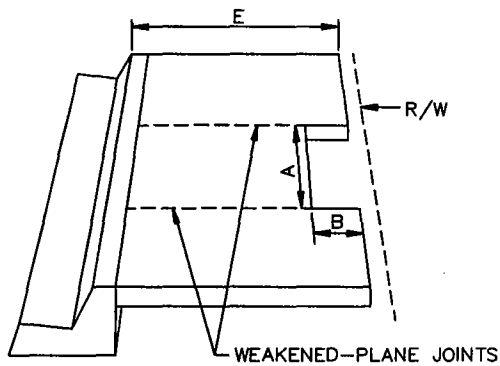
TYPE 2

NOTES FOR TYPE 1 TREE WELL

1. THE COVER SHALL BE MADE OF PERMEABLE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 1200 PSI (8.5 MPa) AND SHALL BE CAST-IN PLACE OR PRECAST "AGRIPERM" OR EQUIVALENT. CAST-IN-PLACE CONCRETE SHALL CONSIST OF ONE PART CEMENT TO FOUR PARTS 3/8" (10 mm) GRAVEL AND APPROXIMATE 4 GALLONS (15 LITERS) OF WATER PER 94 LB (42.5 kg) OF CEMENT. THE GRAVEL SHALL BE CLEAN WITH FINES REMOVED. THE CONCRETE MIXTURE SHALL BE DEPOSITED AS NEAR AS POSSIBLE TO ITS FINAL LOCATION. THE EXCESS CONCRETE SHALL BE RODDED OFF IN A SAWING MOTION. A SURPLUS OF CONCRETE SHOULD BE MAINTAINED AGAINST THE FRONT SURFACE OF THE SCREED IN ORDER THAT LOW AREAS WILL BE FILLED AS THE SCREED PASSES OVER. RODDING SHALL BE HELD TO A MINIMUM. AFTER THE SURFACE IS FLAT NO OTHER FINISHING WILL BE REQUIRED. CURING COMPOUND TO WHICH WATERPROOFING MATERIALS HAVE BEEN ADDED WILL NOT BE PERMITTED.
2. EXISTING SIDEWALKS SHALL BE CAREFULLY SAWCUT PREPARATORY TO INSTALLATION OF TREE WELL COVERS. SAWCUT OVER-RUNS SHALL BE CLEANED AND FILLED WITH EPOXY APPROVED BY THE ENGINEER AND FINISHED TO SIDEWALK GRADE.
3. THE PIPE MAY BE CIP, ACP, VCP, ABS, PVC, GALV STL OR ASPHALT IMPREGNATED FIBER DUCT AND IT MAY BE BELL OR PLAIN END.
4. AFTER ALL OTHER WORK PERTINENT TO PLANTING HAS BEEN COMPLETED, EACH TREE SHALL BE WATERED IMMEDIATELY WITH A MINIMUM OF 20 GALLONS (75 LITERS) OF WATER, AND REPEATED 2 TIMES IN THE NEXT 3 DAYS, AFTER THE TREE HAS BEEN WATERED AND THE SOIL IS SUFFICIENTLY DRY, THE SOIL SHALL BE GRADED AND TAMPED. THE 3" (75 mm) LAYER OF AGGREGATE SHALL BE PLACED AND GRADED TO ACCEPT THE TREE WELL COVER FIRMLY, WITHOUT ROCKING, AND FLUSH WITH THE TOP SURFACE OF THE SIDEWALK. THE PREMOLDED JOINT FILLER SHALL BE CAREFULLY PLACED TO INSURE A TIGHT FIT WITH THE TOP OF THE JOINT FILLER FLUSH WITH THE ADJACENT SIDEWALK.
5. IF CAST-IN-PLACE, THERE SHALL BE A 3 MIL (0.075 mm) PLASTIC LINER BETWEEN WALK AND AGGREGATE

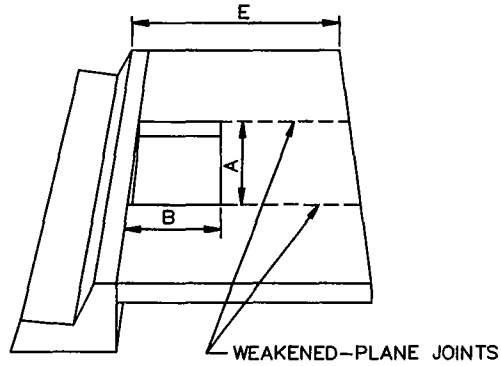
NOTES FOR TYPE 2 TREE WELL

1. EXISTING SIDEWALK SHALL BE CAREFULLY SAWCUT PREPARATORY TO LAYING OF CONCRETE BLOCKS OR BRICK. SAWCUT OVER-RUNS SHALL BE CLEANED AND FILLED WITH EPOXY APPROVED BY THE ENGINEER AND FINISHED TO SIDEWALK GRADE.
2. THE PIPE MAY BE CIP, ACP, VCP, ABS, PVC, GALV STL OR ASPHALT IMPREGNATED FIBER DUCT, AND IT MAY BE BELL OR PLAIN END.
3. NAILS SHALL BE GALVANIZED STEEL BOX.
4. AFTER ALL OTHER WORK PERTINENT TO PLANTING HAS BEEN COMPLETED, EACH TREE SHALL BE WATERED IMMEDIATELY WITH A MINIMUM OF 20 GALLONS (75 LITERS) OF WATER AND REPEATED 2 TIMES IN THE NEXT 3 DAYS. AFTER THE WATER HAS SETTLED AND THE SOIL IS SUFFICIENTLY DRY, THE SOIL SHALL BE GRADED AND TAMPED. A 3" (75 mm) LAYER OF AGGREGATE SHALL BE PLACED AND GRADED TO ACCEPT BRICKS FLUSH WITH THE TOP SURFACE OF THE SIDEWALK. THE PREMOLDED JOINT FILLER AND HEADERS SHALL BE CAREFULLY PLACED TO INSURE A TIGHT FIT WITH THE TOP OF THE JOINT FILLER FLUSH WITH THE ADJACENT SIDEWALK.



1 COVER REQUIRED

CASE 1: 3' x 18" (900 mm x 450 mm) TREE WELL
 CASE 2: 4' x 24" (1200 mm x 600 mm) TREE WELL

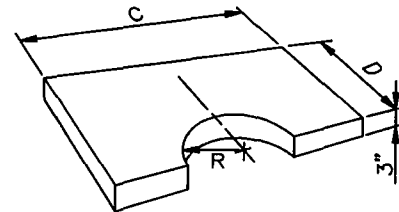


2 COVERS REQUIRED

CASE 3: 3' x 3' (900 mm x 900 mm) TREE WELL
 CASE 4: 4' x 4' (1200 mm x 1200 mm) TREE WELL

TREE WELLS

CASE	A	B	C	D	E	R
1	3'-0" (900 mm)	18" (450 mm)	2'-11" (975 mm)	17 1/2" (450 mm)	5'-0" (1500 mm) MIN	9" (225 mm)
2	4'-0" (1200 mm)	24" (600 mm)	3'-11" (1175 mm)	23 1/2" (600 mm)	5'-6" (1650 mm) MIN	15" (375 mm)
3	3'-0" (900 mm)	3'-0" (900 mm)	2'-11" (975 mm)	17 1/2" (450 mm)	6'-6" (1950 mm) MIN	9" (225 mm)
4	4'-0" (1200 mm)	4'-0" (1200 mm)	3'-11" (1175 mm)	23 1/2" (600 mm)	7'-6" (2250 mm) MIN	15" (375 mm)

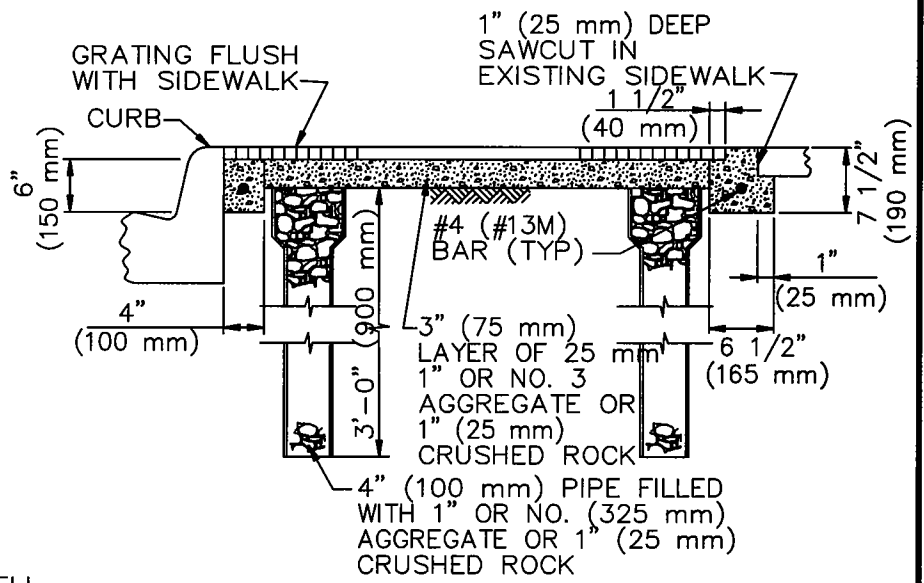
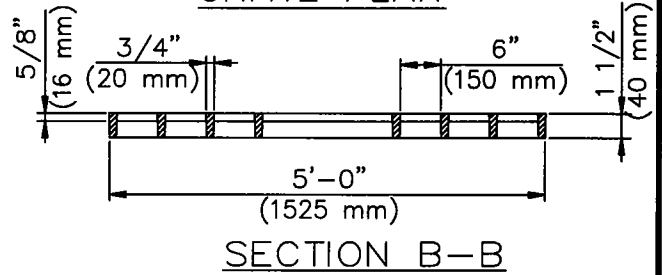
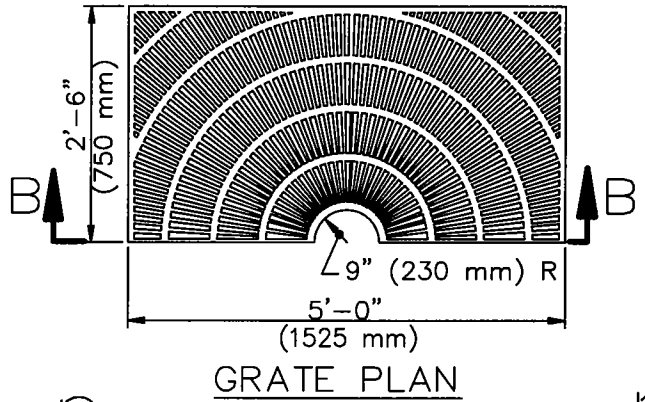
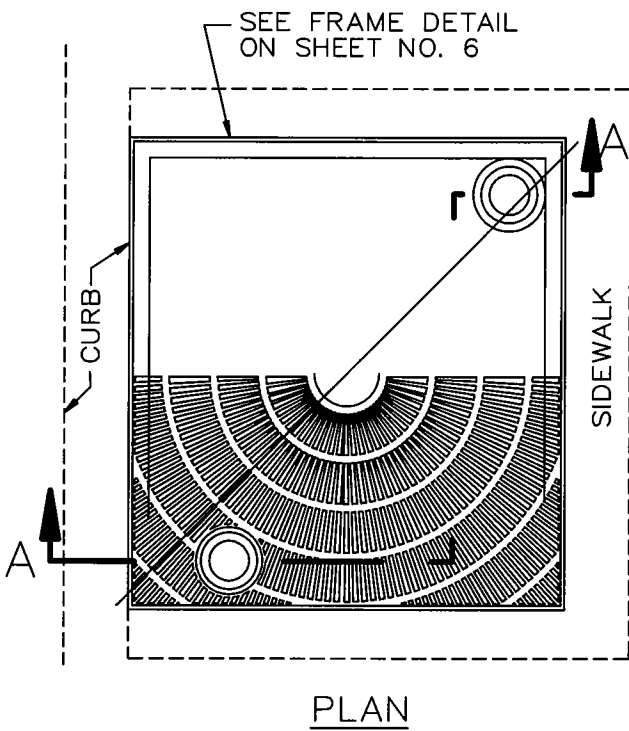


POROUS TREE WELL COVER (SEE NOTE 2)

NOTES FOR TYPE 3 TREE WELL

- SEE SHEET 7 FOR NOTES PERTAINING TO THE SHEET.
- PERMEABLE (POROUS) CONCRETE TREE WELL COVER:
 THE COVER SHALL BE MADE OF PERMEABLE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 1200 PSI (8.5 MPa) AND SHALL BE PRECAST & REINFORCED WITH 2 1/4" X 2 1/4" (60 mm x 60 mm) 16 GAUGE WIRE MESH. CONCRETE SHALL CONSIST OF ONE PART CEMENT TO FOUR PARTS 3/8" (10 mm) GRAVEL AND APPROXIMATELY FOUR GALLONS (15 LITERS) OF WATER PER SACK OF CEMENT. THE GRAVEL SHALL BE CLEAN WITH FINES REMOVED. CURING COMPOUND TO WHICH WATER-PROOFING MATERIALS HAVE BEEN ADDED WILL NOT BE PERMITTED.

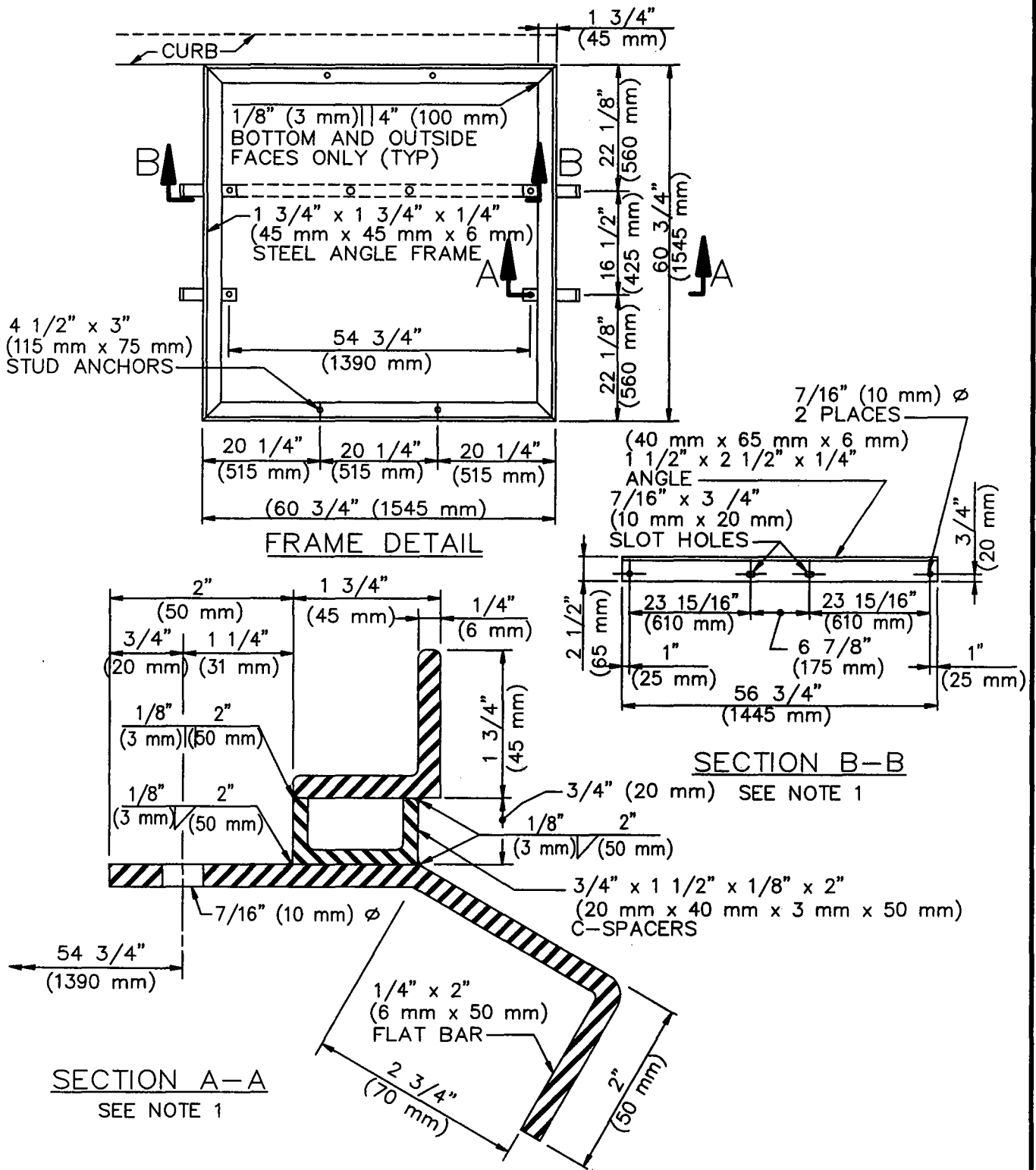
TYPE 3



NOTES FOR TYPE 4 TREE WELL

1. GRATE MATERIAL TO BE CAST IRON.
2. GRATE PATTERN AS SPECIFIED ON PLANS OR IN SPECIFICATIONS.
3. EXISTING SIDEWALK SHALL BE CAREFULLY SAWCUT PREPARATORY TO LAYING OF FRAME. SAWCUT OVER-RUNS SHALL BE CLEANED AND FILLED WITH EPOXY APPROVED BY THE ENGINEER AND FINISHED TO SIDEWALK GRADE.
4. THE PIPE MAY BE CIP, ACP, VCP, ABS, PVC, GALV STL OR ASPHALT IMPREGNATED FIBER DUCT, AND IT MAY BE BELL OR PLAIN END.
5. AFTER ALL OTHER WORK PERTINENT TO PLANTING HAS BEEN COMPLETED. EACH TREE SHALL BE WATERED IMMEDIATELY WITH A MINIMUM OF 75 LITERS (20 GALLONS) OF WATER AND REPEATED 2 TIMES IN THE NEXT 3 DAYS. AFTER THE WATER HAS SETTLED AND THE SOIL IS SUFFICIENTLY DRY, THE SOIL SHALL BE GRADED AND TAMPED AND 3" (75 mm) CONCRETE AGGREGATE SHALL BE PLACED AND GRADED.

TYPE 4



NOTES FOR TYPE 4 TREE WELL

1. SECTION A AND B REQUIRED ONLY WHEN TREE GUARD IS REQUIRED.
2. ALL METAL PARTS AND FRAME SHALL CONFORM TO THE SSPWC AND SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
3. SEE SHEET 7 FOR NOTES PERTAINING TO THIS SHEET.

TYPE 4

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION	STANDARD PLAN
TREE WELL	519-3
	SHEET 6 OF 7

GENERAL NOTES FOR ALL FOUR TYPES OF TREE WELL

1. TREE WELLS SHOULD BE SPACED APPROXIMATELY 50' (15 m) APART, BUT NOT LESS THAN ONE PER RESIDENTIAL LOT.
2. LOCATION OF TREE WELLS SUBJECT TO THE FOLLOWING MINIMUM CLEARANCES:
 - A. 50' (15 m) FROM BCR ON THE APPROACH TO AN INTERSECTION AND 15' (4.5 m) FROM THE ECR ON THE EXIT SIDE.
 - B. 20' (6 m) FROM LIGHT STANDARDS.
 - C. 10' (3 m) FROM FIRE HYDRANTS AND DRIVEWAYS.
 - D. 5' (1.5 m) FROM HOUSE WALKS AND UTILITY METERS.
3. COVERS SHALL BE COLORED BUFF USING AN ACCEPTABLE COLORING AGENT.
4. TREE WELL SHALL BE BACKFILLED WITH CLEAN DIRT FLUSH WITH ADJACENT WALK UNTIL TREE IS PLANTED.
5. DO NOT USE CASE 1 OR CASE 2 TREE WELL WHERE THERE IS AN EXISTING FENCE OR WALL AT THE R/W LINE.
6. TOP OF TREE WELL COVER SHALL BE FLUSH WITH ADJACENT SIDEWALK.
7. LOCATION OF TREE SUBJECT TO CHANGE AT THE DIRECTION OF THE ENGINEER.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN

TREE WELL

519-3

SHEET 7 OF 7