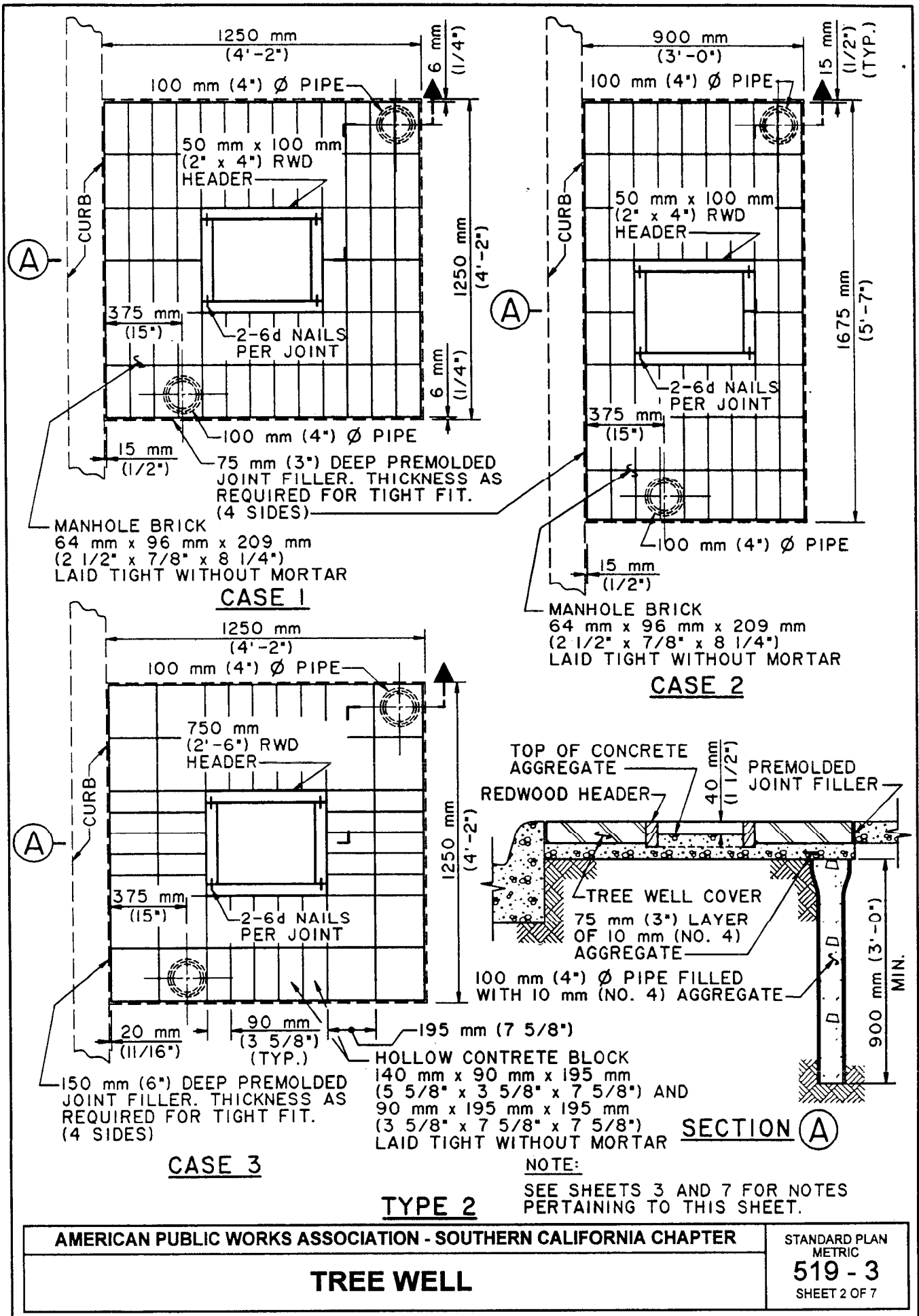


NOTE:
 SEE SHEETS 3 AND 7 FOR NOTES PERTAINING TO THIS SHEET.

TYPE I

AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER		
PROMULGATED BY THE PUBLIC WORKS STANDARDS INC., GREENBOOK COMMITTEE 1984 REV. 1986	<h2 style="margin: 0;">TREE WELL</h2> <p style="margin: 0;">USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION</p>	STANDARD PLAN METRIC <h2 style="margin: 0;">519 - 3</h2> SHEET 1 OF 7

SEE RDMD STANDARD PLAN 519-3-OC FOR CONDITIONS



SEE RDM STANDARD PLAN 519-3-OC FOR CONDITIONS

NOTES FOR TYPE 1 TREE WELL

1. THE COVER SHALL BE MADE OF PERMEABLE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 8.5 MPa (1200 PSI) AND SHALL BE CAST-IN PLACE OR PRECAST "AGRIPERM" OR EQUIVALENT. CAST-IN-PLACE CONCRETE SHALL CONSIST OF ON PART CEMENT TO FOUR PARTS 10 mm (3/8") GRAVEL AND APPROXIMATE FIFTEEN LITERS (FOUR GALLONS) OF WATER PER 42.5 Kg (94 LB.) 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 CREED 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 WATER PROOFING MATERIALS HAVE BEEN ADDED WILL NOT BE PERMITTED.
2. EXISTING SIDE WALKS 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 75 LITERS (20 GALLONS) 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 75 mm (3") 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 CONCRETE-IN-PLACE, THERE SHALL BE A 0.075 mm (3 MIL) PLASTIC LINER BETWEEN WALK AND AGGREGATE

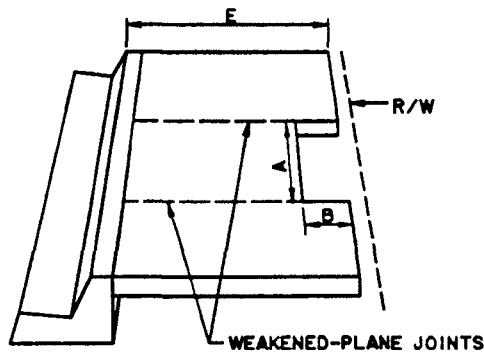
NOTES FOR TYPE 2 TREE WELL

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 DUT, AND IT MAY BE BELL OR PLAIN END.
3. NAILS SHALL BE GALVANIZED STEEL BOX.
4. AFTER ALL OTHER WORK PERTINENT TO PLANTING AHS 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. A 75 mm (3") 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.

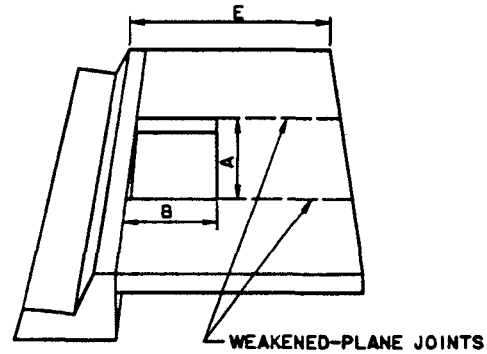
AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER

TREE WELL

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1 COVER REQUIRED



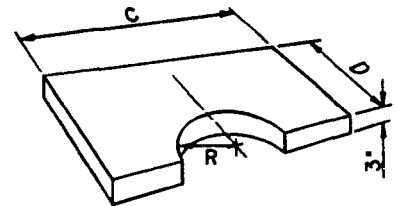
2 COVERS REQUIRED

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

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

TREE WELLS

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



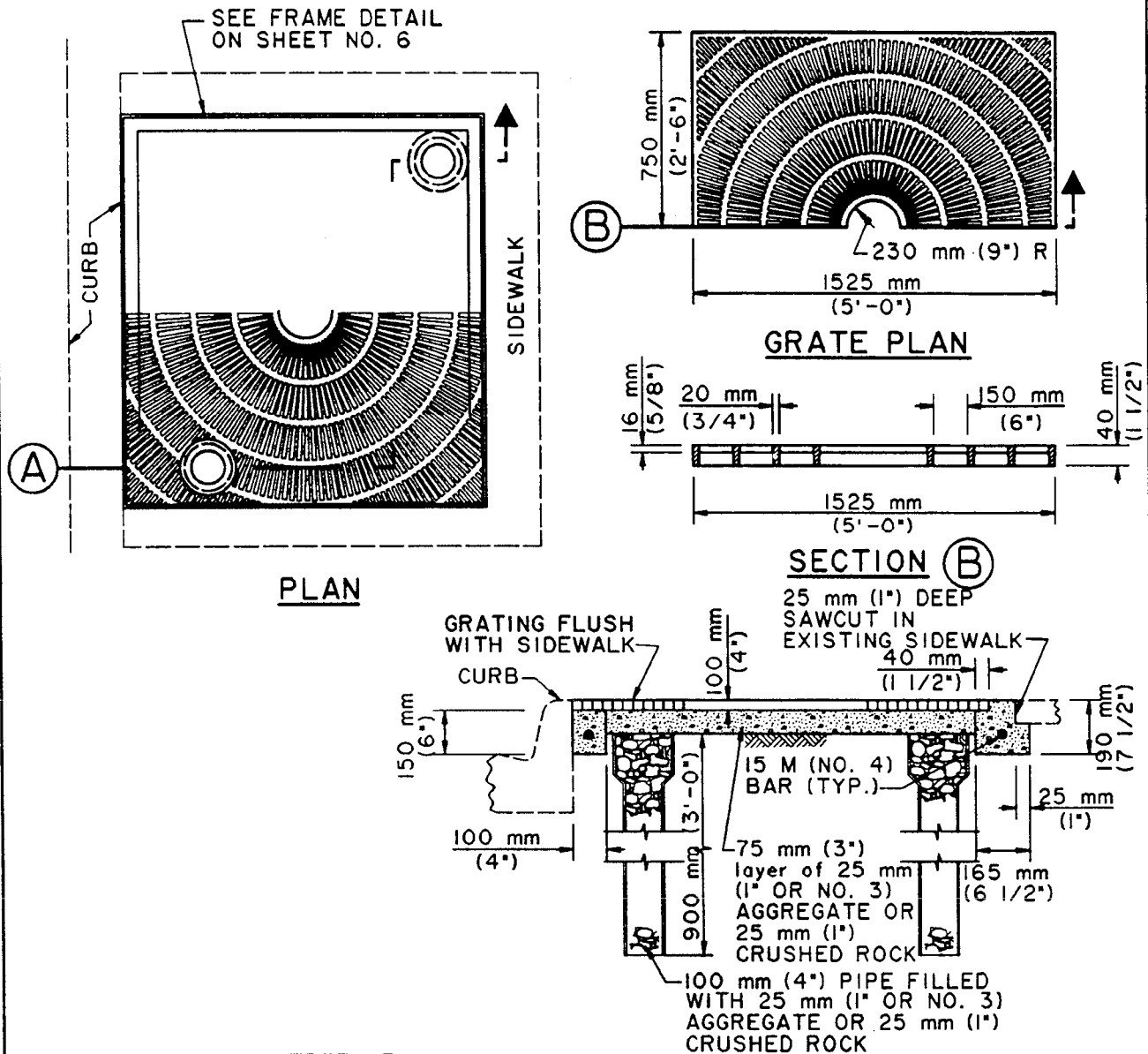
POROUS TREE WELL COVER (SEE NOTE 2)

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 8.5 MPa (1200 PSI) AND SHALL BE PRECAST & REINFORCED WITH 60 mm x 60 mm (2 1/4" X 2 1/4") 16 GAUGE WIRE MESH. CONCRETE SHALL CONSIST OF ONE PART CEMENT TO FOUR PARTS 10 mm (3/8") GRAVEL AND APPROXIMATELY 15 LITERS FOUR GALLONS) 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

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SIDEWALK TREE WELL & COVER	519 - 3
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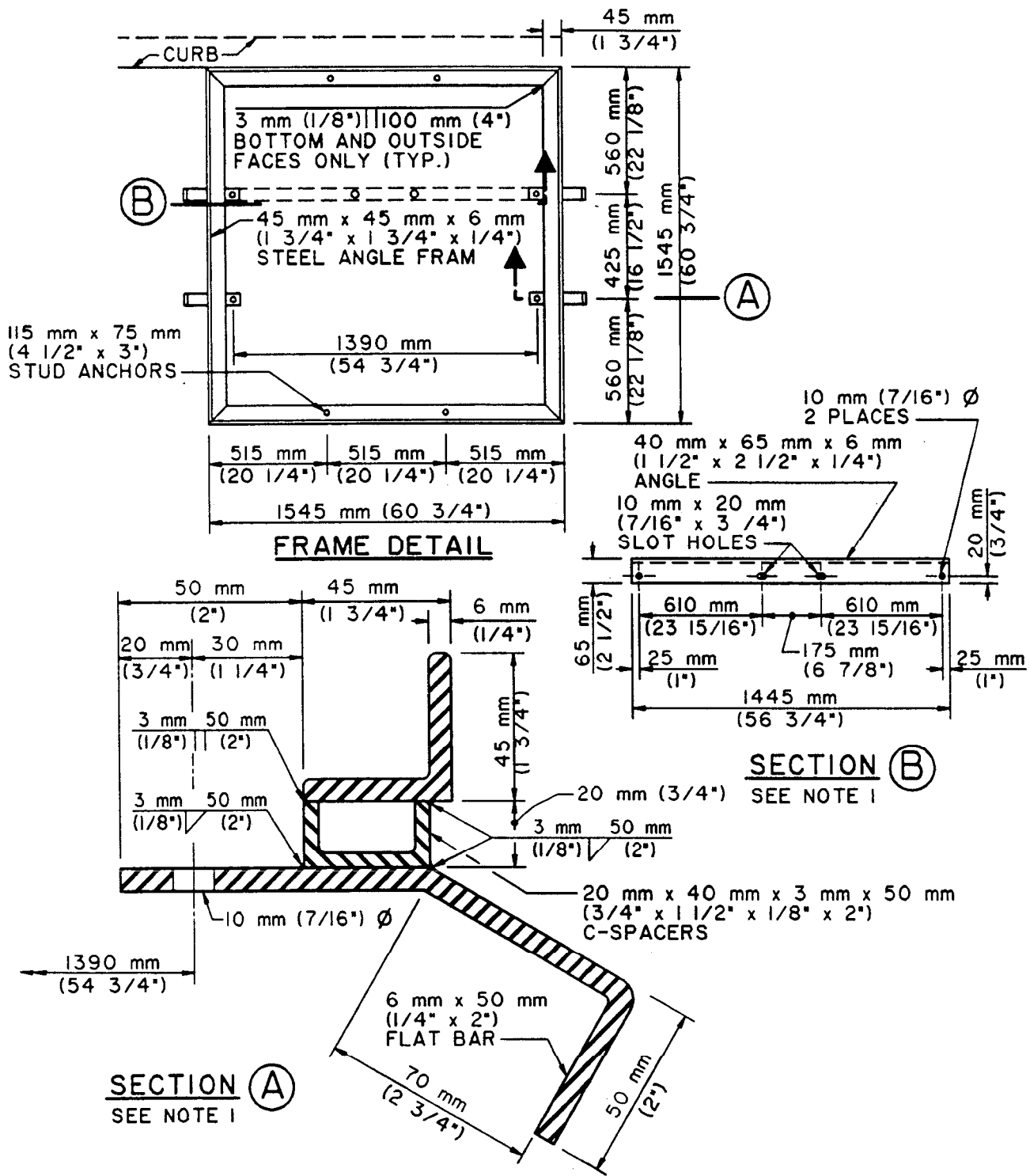
NOTES FOR TYPE 4 TREE WELL

1. GRATE MATERIAL TO BE CAST IRON.
2. GRATE PATTERN AS SPECIFIED ON PROJECT PLANS AND/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 75 mm (3") CONCRETE AGGREGATE SHALL BE PLACED AND GRADED.

TYPE 4

AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER	STANDARD PLAN METRIC
TREE WELL	519 - 3
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SEE RDMD STANDARD PLAN 519-3-OC FOR CONDITIONS



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 STANDARD SPECIFICATIONS AND SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
3. SEE SHEET 7 FOR NOTES PERTAINING TO THIS SHEET.

TYPE 4

AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER

TREE WELL

STANDARD PLAN

METRIC

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SEE RDMD STANDARD PLAN 519-3-OC FOR CONDITIONS

GENERAL NOTES FOR ALL FOUR TYPES OF TREE WELL

1. TREE WELLS SHOULD BE SPACED APPROXIMATELY 15 m (50') APART, BUT NOT LESS THAN ONE PER RESIDENTIAL LOT.
2. LOCATION OF TREE WELLS SUBJECT TO THE FOLLOWING MINIMUM CLEARANCES:
 - A. 15 m (50') FROM BCR ON THE APPROACH TO AN INTERSECTION AND 4.5 m (15') FROM THE ECR ON THE EXIT SIDE.
 - B. 6 m (20') FROM LIGHT STANDARDS.
 - C. 3 m (10') FROM FIRE HYDRANTS AND DRIVEWAYS.
 - D. 1.5 m (5') FROM HOUSE WALKS AND UTILITY METERS.
3. COVERS ARE TO BE COLORED BUFF USING AN ACCEPTABLE COLORING AGENT.
4. TREE WELL IS TO 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 TO BE FLUSH WITH ADJACENT SIDEWALK.
7. LOCATION OF TREE SUBJECT TO CHANGE AT THE DIRECTION OF THE ENGINEER.
8. DIMENSIONS SHOWN ON ALL THE PLAN FOR METRIC AND ENGLISH UNITS ARE NOT EXACT EQUAL VALUES. IF METRIC VALUES ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE METRIC VALUES. IF ENGLISH UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE ENGLISH UNITS.

AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER

TREE WELL

STANDARD PLAN
METRIC

519 - 3
SHEET 7 OF 7

SEE RDMD STANDARD PLAN 519-3-OC FOR CONDITIONS