



1515 SIXTH STREET • COACHELLA, CA 92236

Fax: (760) 398-8117

Administration	398-8502	Grants	398-5110
Animal Control	398-4978	Housing	398-5110
Building	398-3002	Personnel	398-3502
City Clerk	398-3502	Planning	398-3102
City Council	391-5009	Public Works	398-5744
Code Enforcement	398-4978	Recreation	398-3502
Economic Develop.	398-5110	Riverside Sheriffs Office	863-8990
Engineering	398-5744	Sanitary	391-5008
Finance	398-3502	Senior Svs.	398-0104
Fire	398-8895	Utilities	398-2702

CITY OF COACHELLA PUBLIC WORKS DEPARTMENT

IMPROVEMENT STANDARDS AND SPECIFICATIONS

APRIL 1995

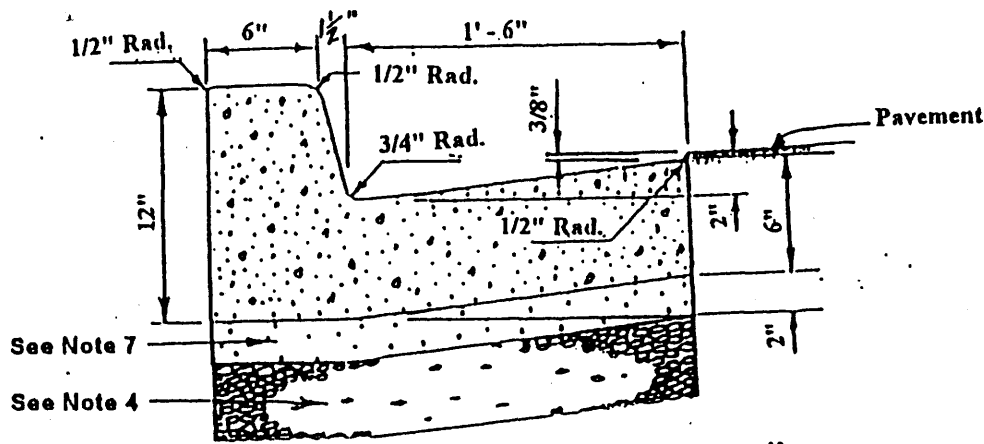
INDEX

STREET IMPROVEMENTS

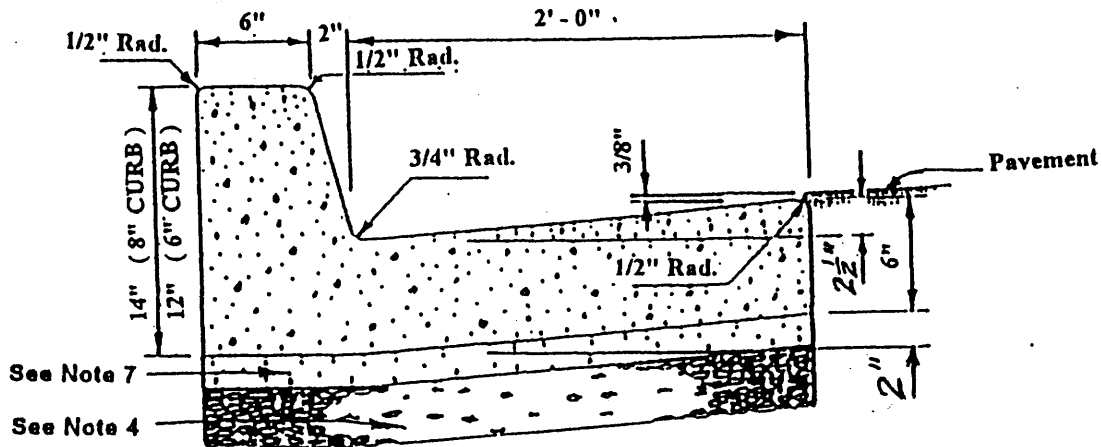
<u>STD.NO.</u>	<u>DESCRIPTIONS</u>	<u>STD.NO.</u>	<u>DESCRIPTION</u>
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S-1B	Standard Curb	S-13	Standard Knuckle
S-1C	Residential "Wedge" Curb	S-14	Sidewalk Transition
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TYPE "A" CURB (6")
 (0.04977 cu. yd. per linear feet)



TYPE "B" CURB (6") (8")

8" = (0.06379 cu. yd. per linear feet)
 6" = (0.06019 cu. yd. per linear feet)

NOTES:

1. Curb & Gutter shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A.
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
5. Expansion Joints shall be constructed in accordance with Std. Dwg. S-9.
6. Finish surface of concrete shall be light broom finish.
7. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

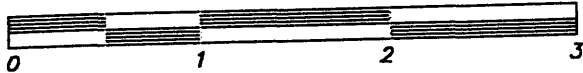
REVISED Date: April 1995

CITY OF COACHELLA
 DEPARTMENT OF PUBLIC WORKS

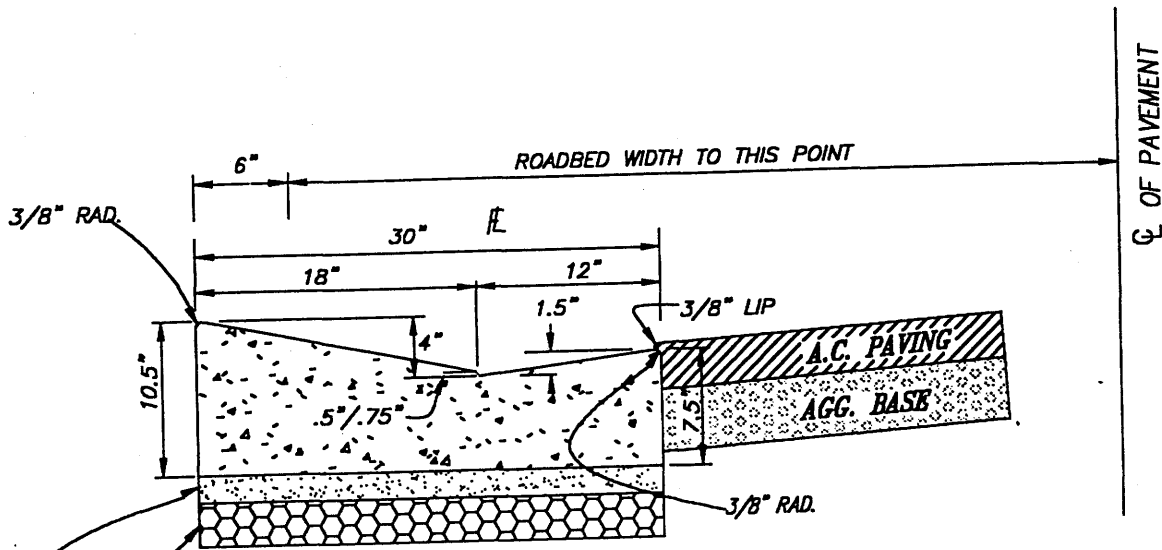
APPROVED BY:
John E. Curtis 4-14-95
 CITY ENGINEER RCE NO. 17822 DATE

STANDARD CURB & GUTTER

STD. DWG. S-1A



SCALE 1"=1'



0.40 FT. OF AGGREGATE BASE SHALL BE USED WHEN SOILS REPORT INDICATES PRESENCE OF EXPANSIVE SOIL OR SOIL WITH R-VALUE LESS THAN 40.

CONCRETE SHALL BE PLACED ON A TWO-INCH LAYER OF DRY WASHED SAND, WHICH SHALL BE PLACED ON TOP OF A TEN (10) MILL THICK WATER PROOF MEMBRANE.

CLASS 520-C-2500 CONCRETE

1.56 C.F./L.F.

1 C.Y. = 17.30 L.F.

MINIMUM PERMISSIBLE GRADE 0.50%

PROVIDE 3/8" LIP AT EDGE OF ASPHALT

MINIMUM SUBGRADE COMPACTION 95% RELATIVE TO MAXIMUM

MAX. GRADE BREAK ON ROADWAYS SHALL NOT EXCEED 0.50%

ALL GUTTER SHOULD BE "FLOW TESTED" DURING FINISHING

NOTE: THIS CURB IS INTENDED FOR PRIVATE RESIDENTIAL USE ONLY, WHERE IT IS DESIRED TO AVOID THE NEED FOR CUTTING DRIVEWAY APPROACHES THROUGH FULL-FACE CURB. NOTE THAT DUE TO REDUCED WATER CARRYING CAPACITY, IT MAY NOT BE AS ABLE TO CARRY THE REQUIRED STORM WATER FLOWS. IT MUST BE PRE-APPROVED BY THE CITY ENGINEER PRIOR TO USE.

CITY OF COACHELLA

STANDARD

REVISIONS

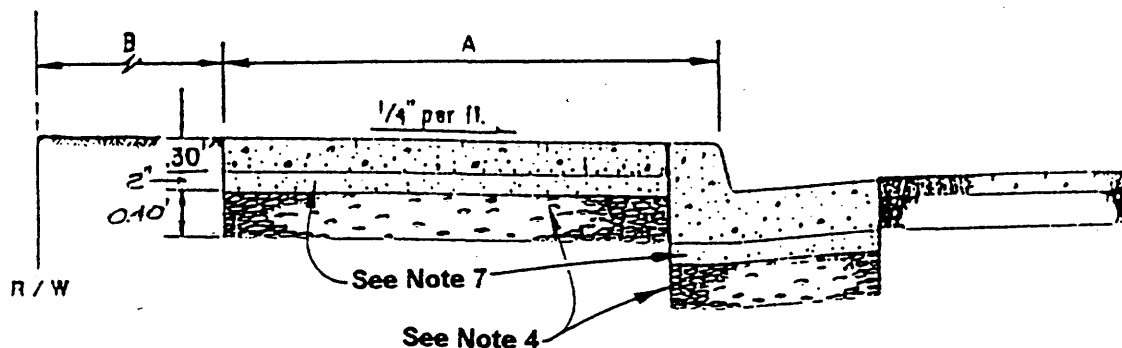
RESIDENTIAL "WEDGE" CURB

DRAWING

S-1C

APPROVED BY: CITY ENGINEER DATE

STREET TYPE	A	B
Cul-de-sac	5'	5'
Local	5'	5'
Minor Collector	5'	7'
Major Collector	6'	6'
Secondary Arterial	6'	6'
Primary Arterial	6'	6'
Major Arterial	6'	4'



NOTES:

1. Sidewalks shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
5. Expansion Joints and Scoring shall be constructed in accordance with Std. Dwg. S-9.
6. Finish surface of concrete shall be light broom finish.
7. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

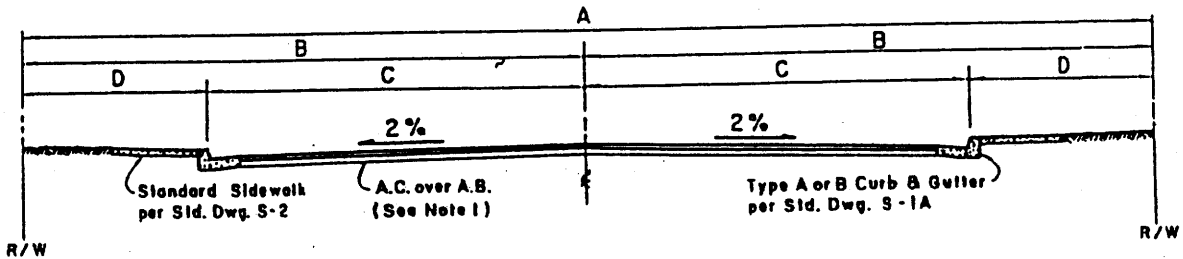
REVISED Date: April 1995

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

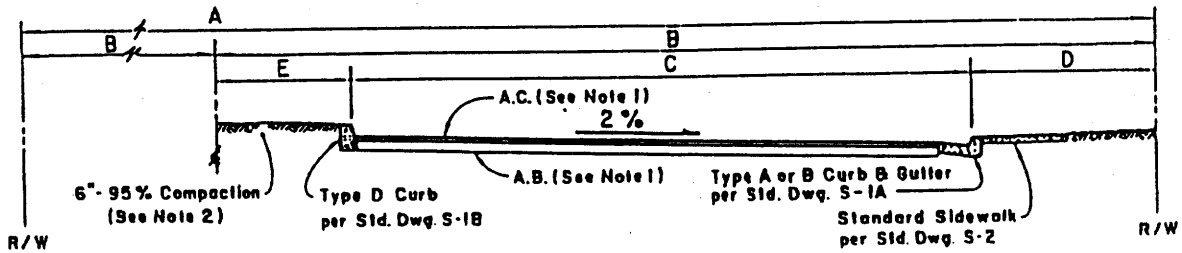
APPROVED BY:
John E. Luntia 4-14-95
CITY ENGINEER RCE NO. 17822 DATE

STANDARD SIDEWALK

STD. DWG. S-2



Cul-De-Sac, Local and Collector Street



**Major Collector & Arterial Streets and State Highways
(ONLY HALF WIDTH SHOWN)**

STREET TYPE	A	B	C	D	E
Cul-de-sac	60'	30'	20'	10'	-
Local	60'	30'	20'	10'	-
Minor Collector	72'	36'	24'	12'	-
	64'	32'	20'	12'	-
Major Collector	88'	44'	32'	12'	6'
Secondary Arterial	100'	50'	32'	12'	6'
Primary Arterial	110'	55'	32'	12'	11'
Major Arterial	120'	60'	39'	10'	11'
State Highway	See CALTRANS				

NOTES:

1. Paving Design shall be in accordance with Section 7-651 of the State Highway Design Manual.
2. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
3. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

REVISED DATE: April 1995

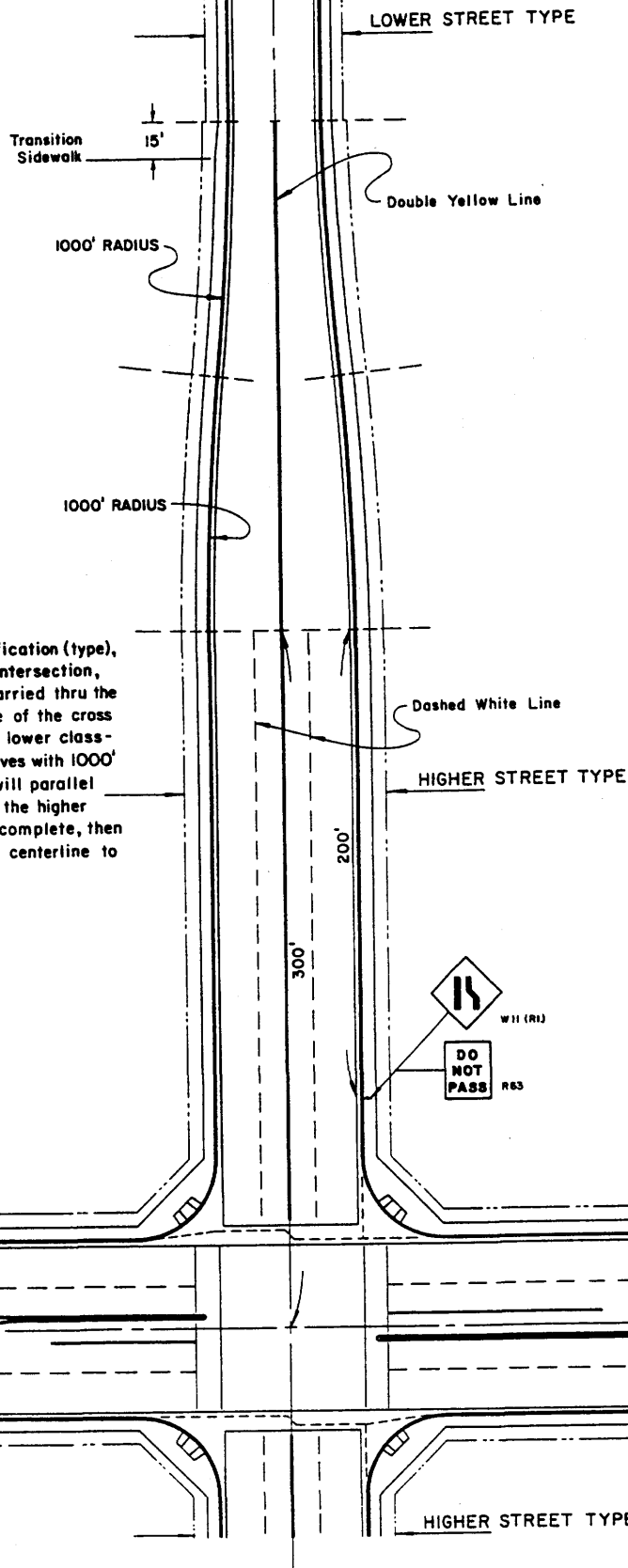
CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

John E. Luntz 4-14-95
CITY ENGINEER RCE NO. 17822 DATE

STREET DIMENSIONS

STD. DWG. S-3



NOTE:

When the street or highway classification (type), See Std. Dwg. S-3, changes at an intersection, the higher classification shall be carried thru the intersection for 300' from centerline of the cross street then transitioned down to the lower classification using tangent reversing curves with 1000' radius as shown. The right-of-way will parallel the curb with the parkway width for the higher classification until the transition is complete, then dropped perpendicular to the street centerline to the lower classification.

CITY OF COACHELLA

DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

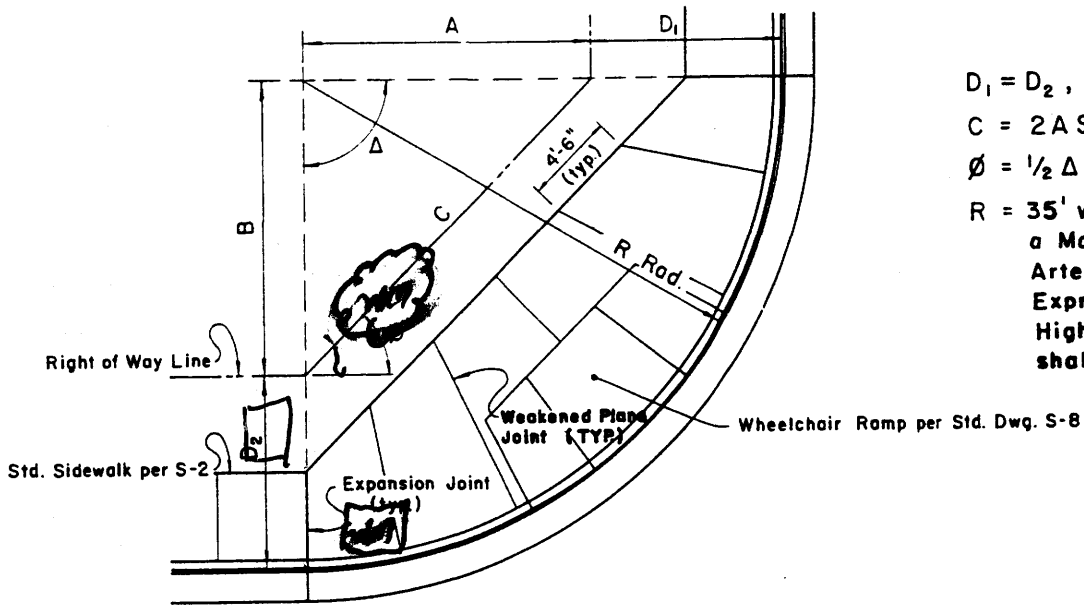
Ronald W. Monte
CITY ENGINEER RCE 14456

3-25-80
DATE

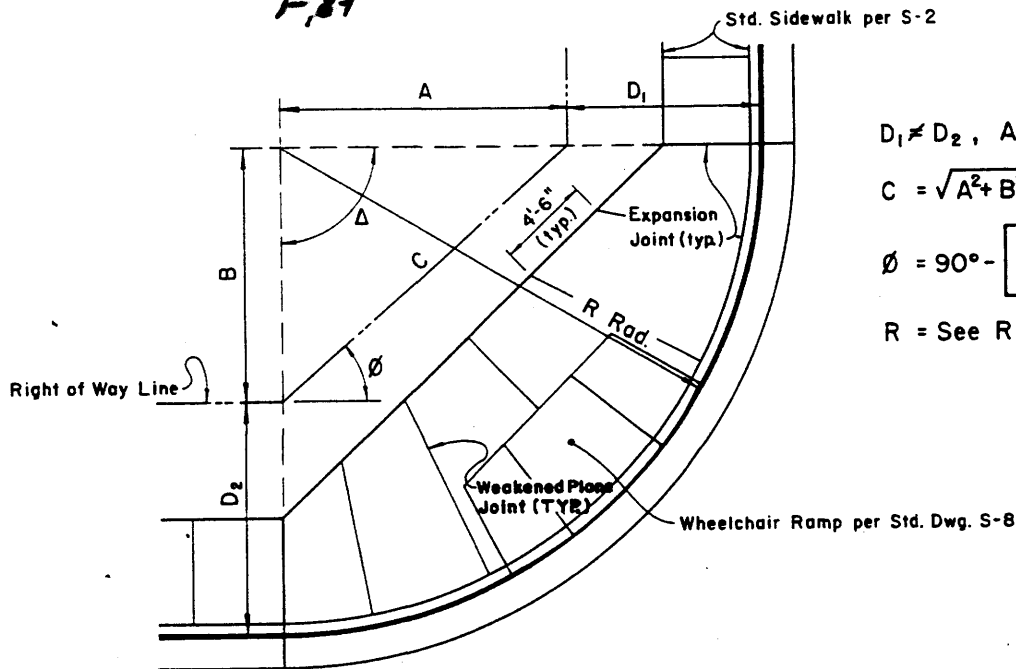
STREET TYPE CHANGES

STD. DWG. S-3B

7 BEHIND F.O.C.



$D_1 = D_2, A = B$
 $C = 2A \sin \frac{1}{2} \Delta$
 $\phi = \frac{1}{2} \Delta$
 $R = 35'$ when one leg is on
 a Major Collector, Minor
 Arterial, Major Arterial,
 Express Way, State
 Highway, All others
 shall be 25'.



$D_1 \neq D_2, A \neq B$
 $C = \sqrt{A^2 + B^2 - 2AB \cos \Delta}$
 $\phi = 90^\circ - \left[\cos^{-1} \left(\frac{B^2 + C^2 - A^2}{2BC} \right) \right]$
 $R = \text{See } R \text{ above}$

NOTES:

1. See Std. Dwg. S-3 for D_1 or D_2 which equals D .
2. Returns shall be constructed in accordance with Section 303-5 of the Standard Specified for Public Works Construction, Current Edition, A.P.W.A..
3. Concrete shall be Class 520-C-2500 Portland Type V Cement, Air Entrained.
4. Expansion Joints shall be Constructed in accordance with Std. Dwg. S-9.

REVISED Date: _____

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

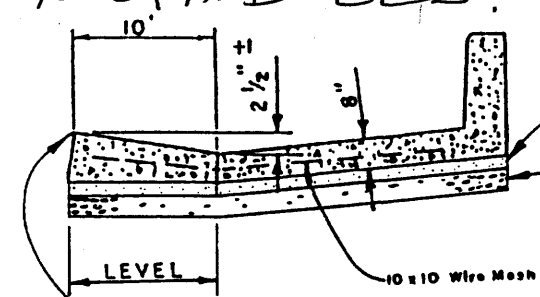
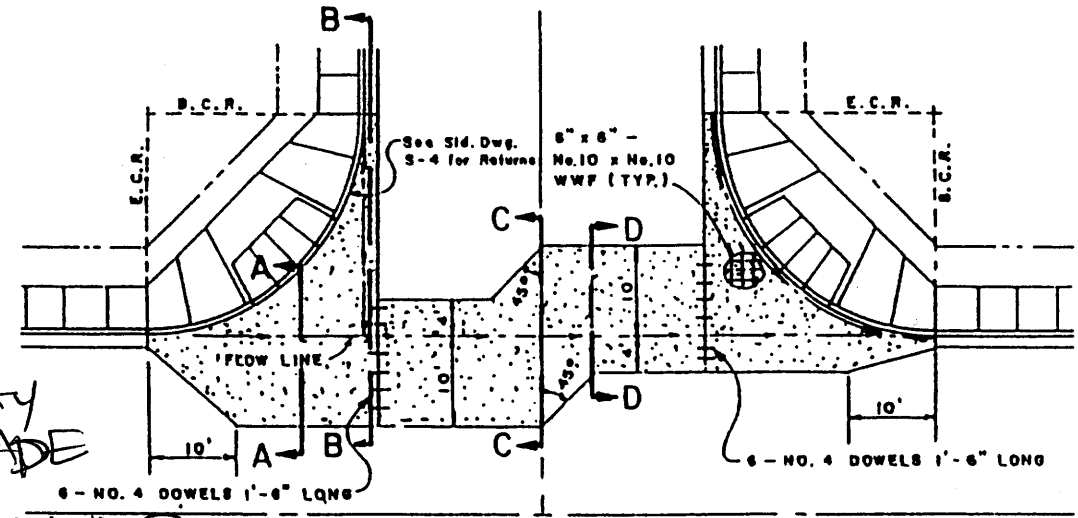
[Signature]
CITY ENGINEER RCE 14456

10-1-77
DATE

STANDARD RETURNS

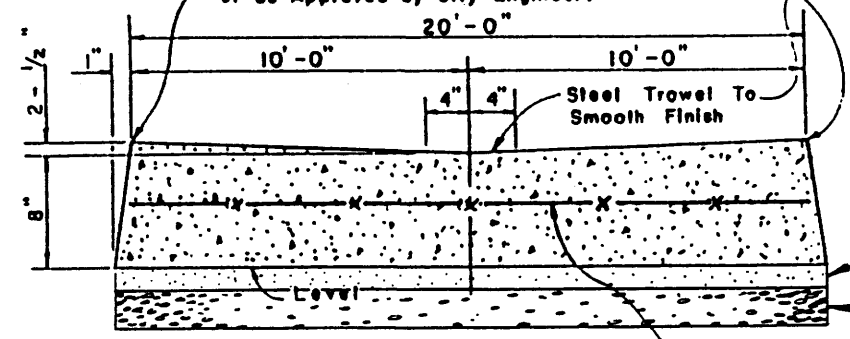
STD. DWG. S-4

IN A
ROADWAY
SUBGRADE
95% SPANDRELS

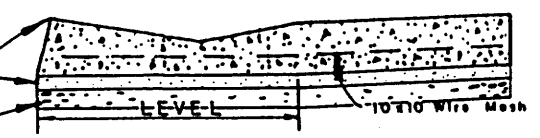


SECTION A-A

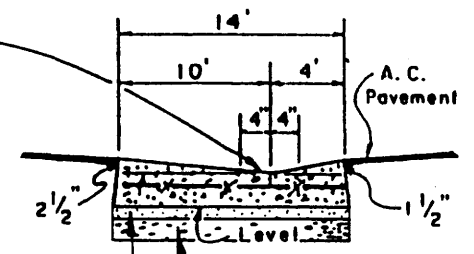
Edge of Concrete to conform to Street Surface or as Approved by City Engineer.



SECTION C-C



SECTION B-B



SECTION D-D

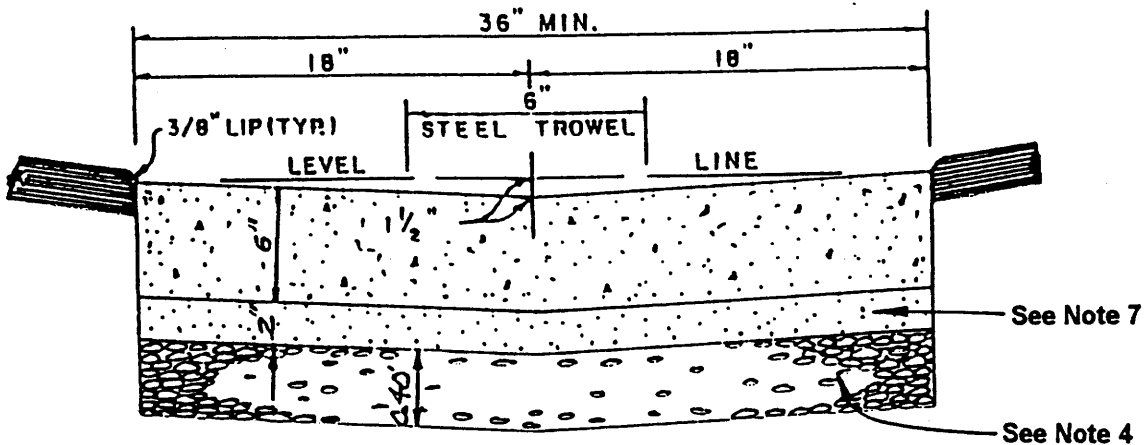
NOTES:

1. Crossgutters shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 10.
5. Finish surface of concrete shall be light broom finish.
6. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

REVISED Date: April 1995

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS
STANDARD X-GUTTER & SPANDREL

APPROVED BY:
John E. Luter 4.14.95
CITY ENGINEER RCE NO. 17822 DATE
STD. DWG. S-5A



P.C.C. GUTTER
CONCRETE RIBBON

NOTES:

1. Gutters shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
5. Expansion Joints shall be constructed in accordance with Std. Dwg. S-9.
6. Finish surface of concrete shall be light broom finish.
7. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

REVISED Date: April 1995

CITY OF COACHELLA

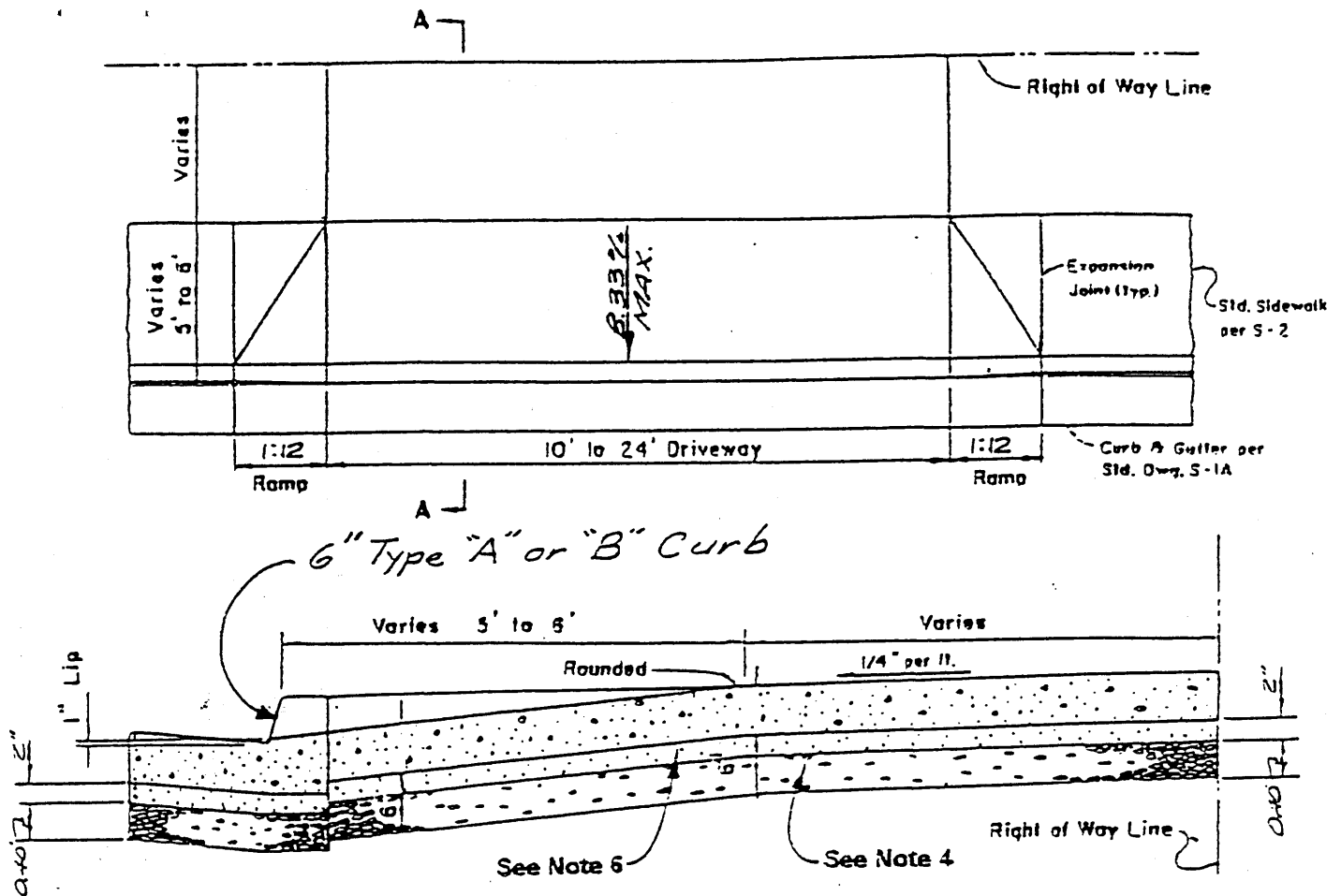
DEPARTMENT OF PUBLIC WORKS

CONCRETE RIBBON

APPROVED BY:

John S. Martin 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

STD. DWG. S-5B



SECTION A - A

NOTES:

1. Driveways shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
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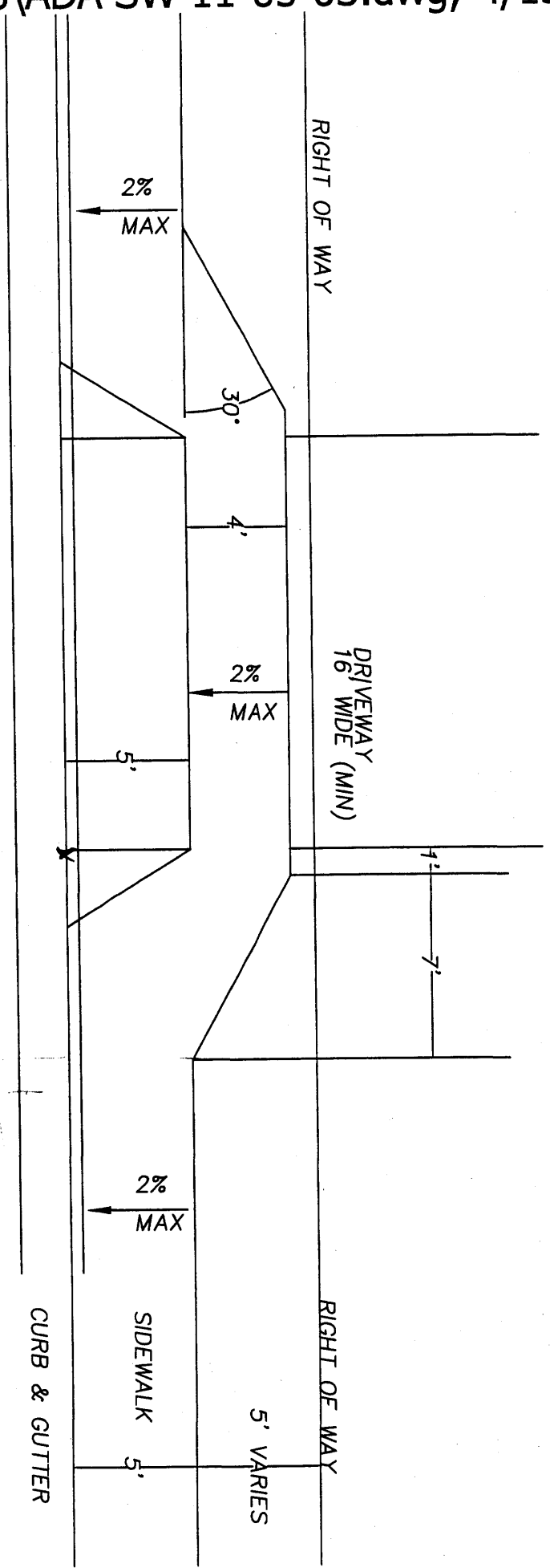
REVISED Date: April 1995

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

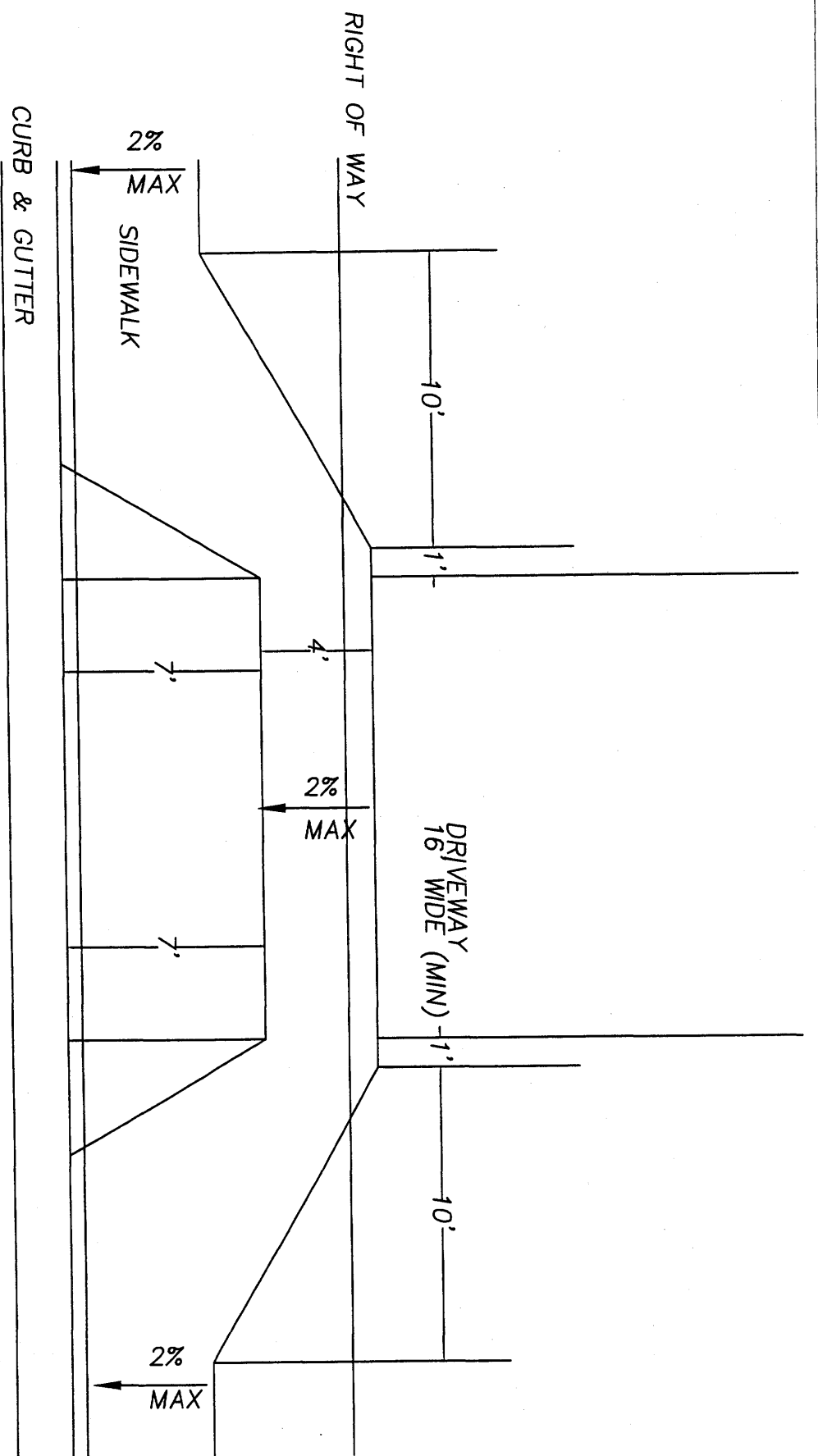
APPROVED BY:
John E. Lueto 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

RESIDENTIAL DRIVEWAY

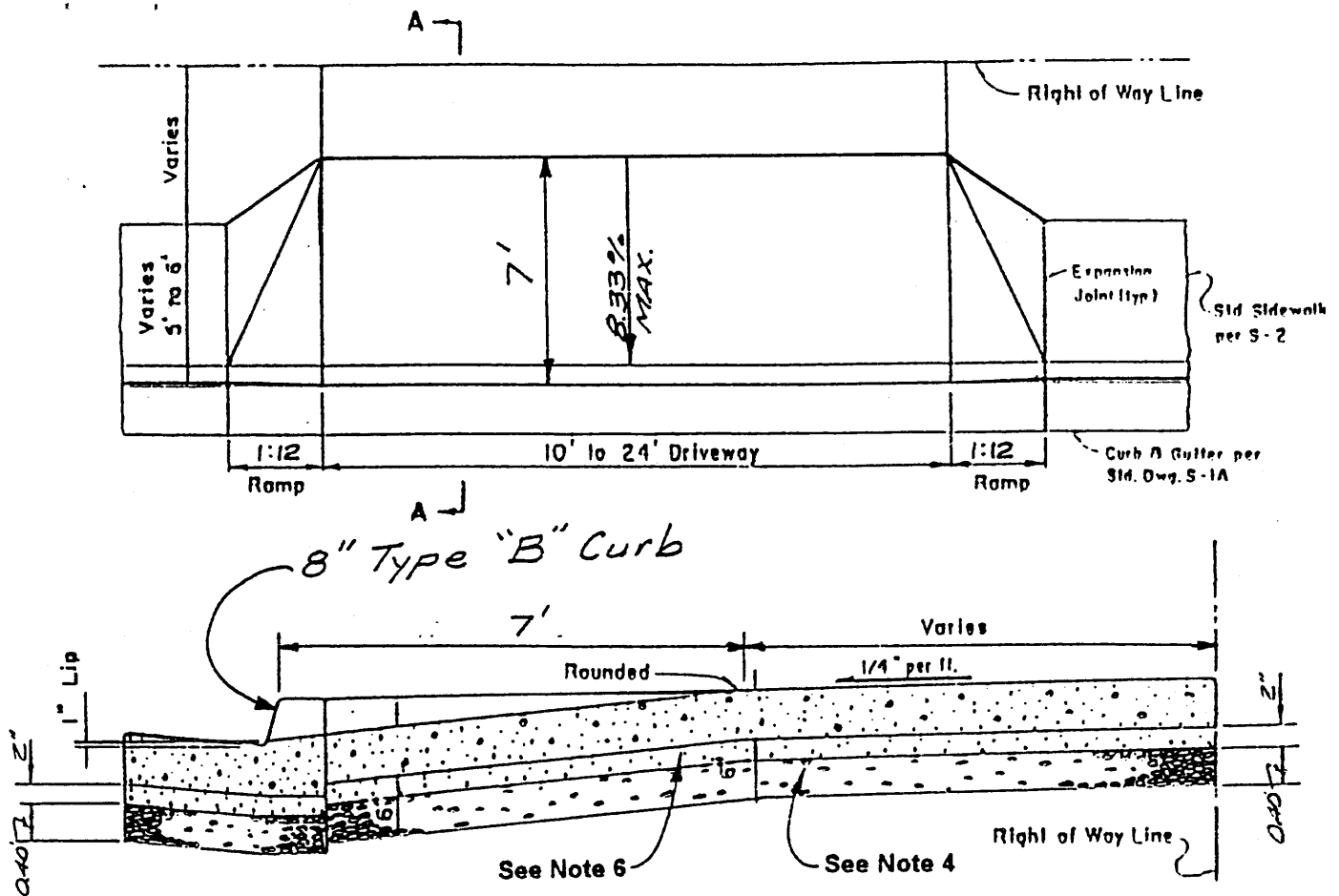
STD. DWG. S-6



ADA COMPATIBLE SIDEWALKS
FOR 6" CURBFACE
AND 16' DRIVEWAY



ADA COMPATIBLE SIDEWALKS
 FOR 8" CURBFACE
 AND 16' DRIVEWAY



SECTION A - A

NOTES:

1. Driveways shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
5. Finish surface of concrete shall be light broom finish.
6. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

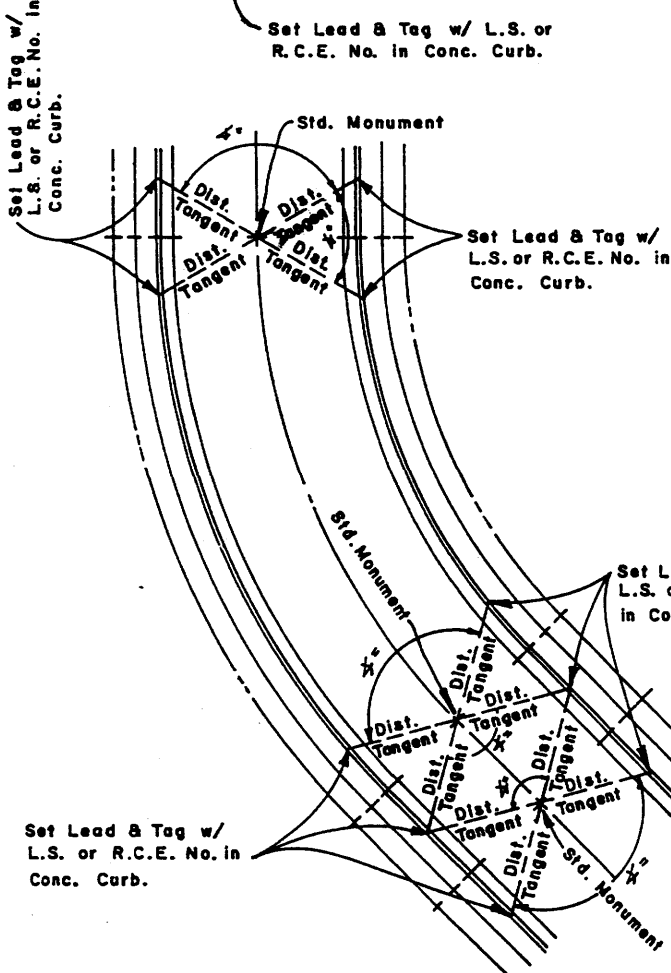
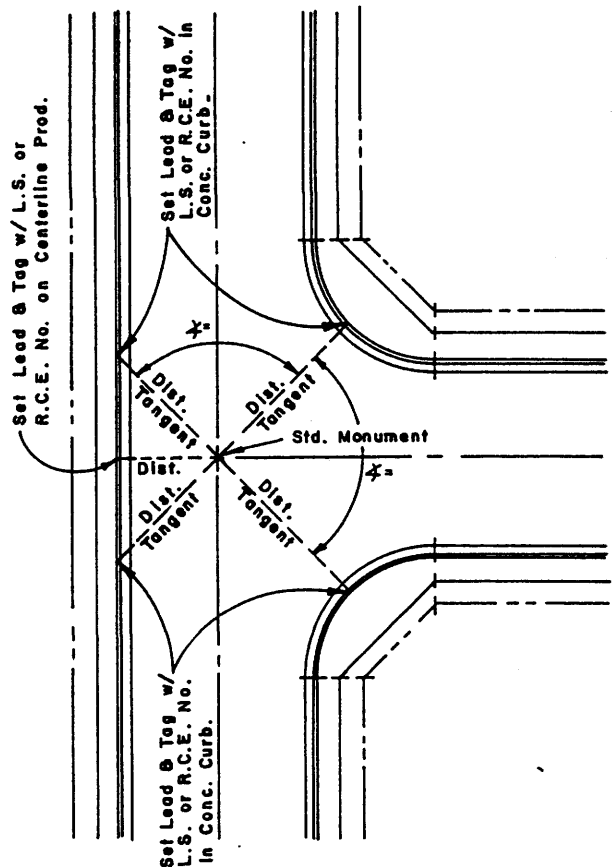
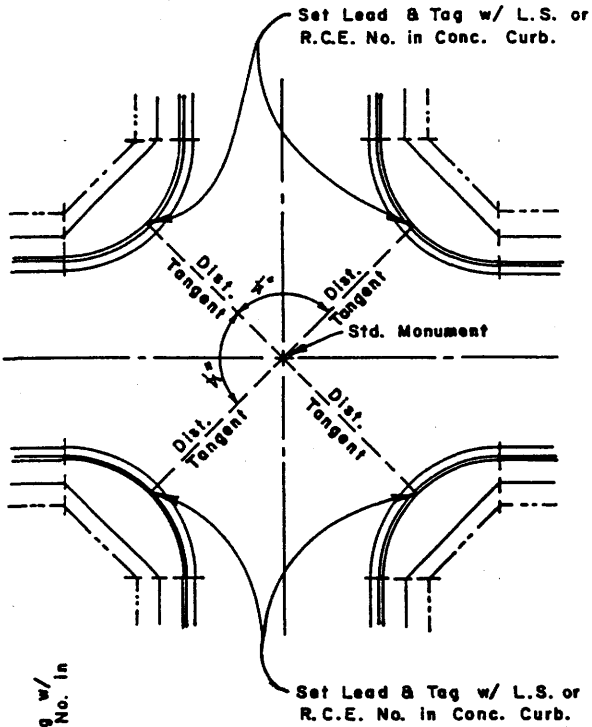
REVISED Date: April 1995

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
John E. Curtis 4.14.95
CITY ENGINEER RCNO. 17822 DATE

RESIDENTIAL DRIVEWAY

STD. DWG. **S-6A**

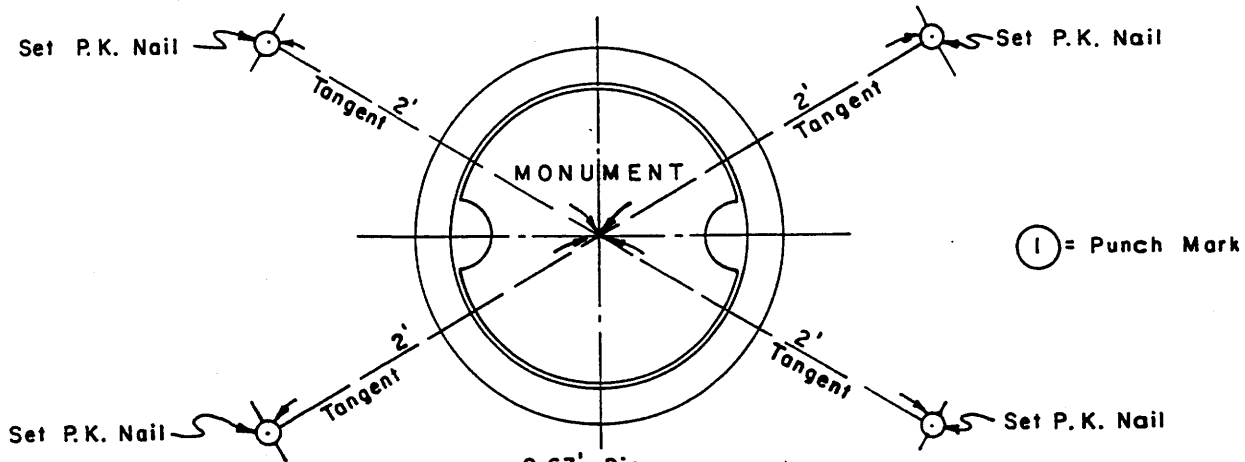


NOTES:

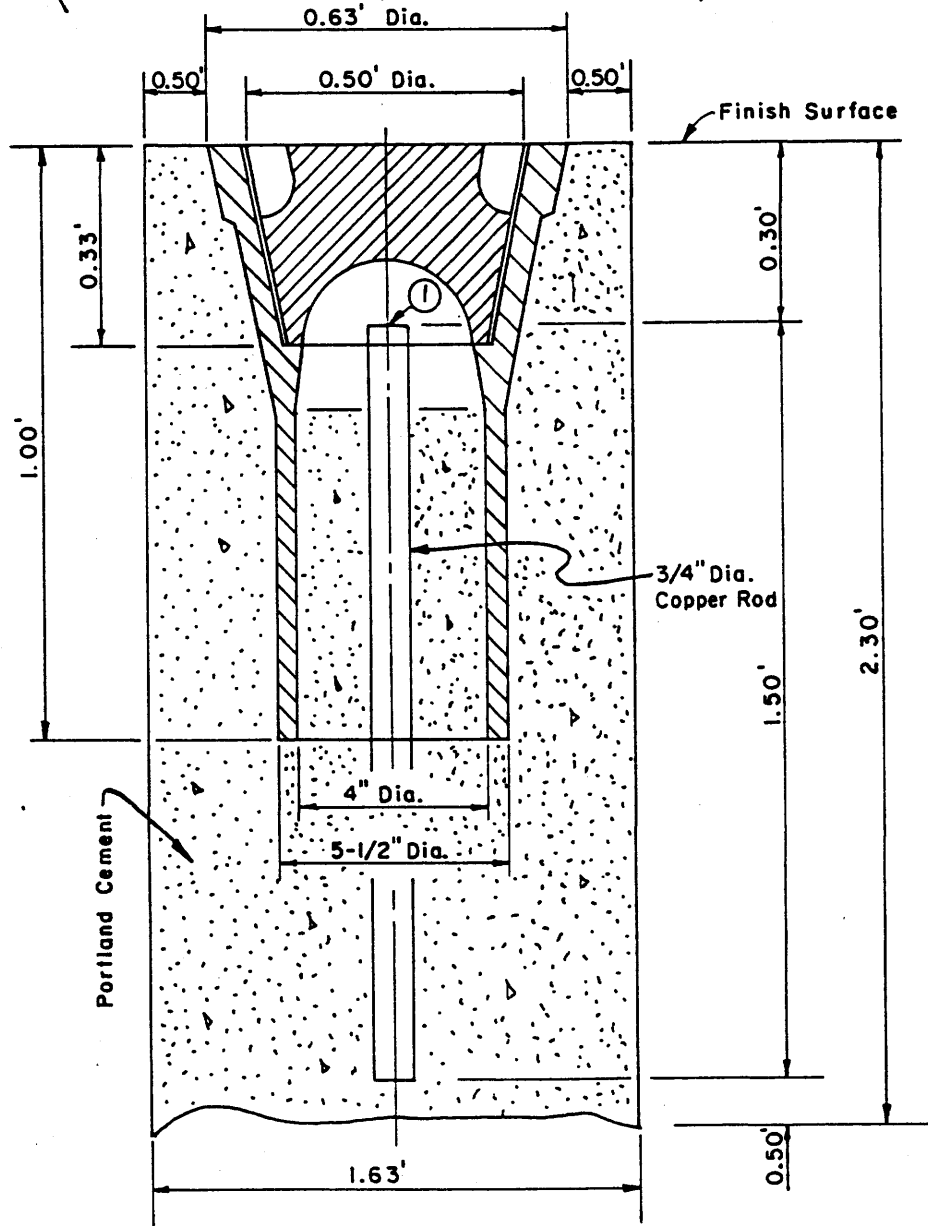
1. Standard Monument shall be Alhambra Foundry No. A-2920 as shown on Std. Dwg. S-7A-2.
2. Std. Mon. shall be placed at all street intersections, B.C.'s, E.C.'s, & tract boundaries at street centerline.
3. Std. Mon. may be omitted at tract boundary with the approval of the City Engineer.
4. Additional Std. Mon. will be required if long chord intersects the curb line.
5. A Map on 8 1/2" x 11" tie sheet shall be submitted to the City showing all street monuments (w/ elevations), R.P.'s, & tie distances.

CITY OF COACHELLA
 DEPARTMENT OF PUBLIC WORKS
STANDARD STREET MONUMENT

APPROVED BY:
D. Perry Hill 8-20-84
 CITY ENGINEER RCE 34786 DATE
STD. DWG. S-7A-1



① = Punch Mark



CITY OF COACHELLA

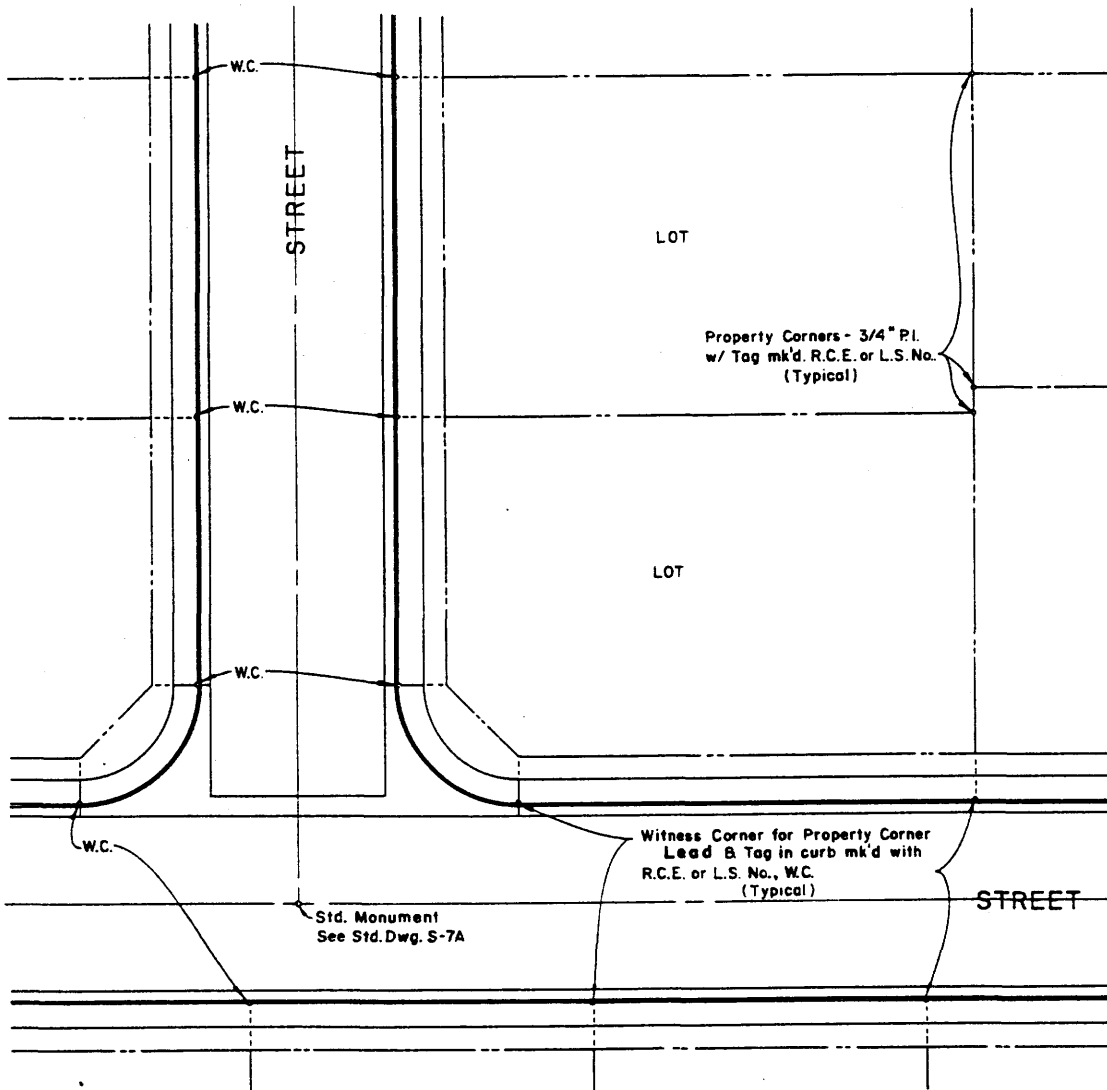
DEPARTMENT OF PUBLIC WORKS

STANDARD STREET MONUMENT

APPROVED BY:

D. Dempsey 8-20-84
CITY ENGINEER RCE 34786 DATE

STD. DWG. S-7A-2



NOTES:

1. All corners set shall be subject to inspection before acceptance of street improvements.

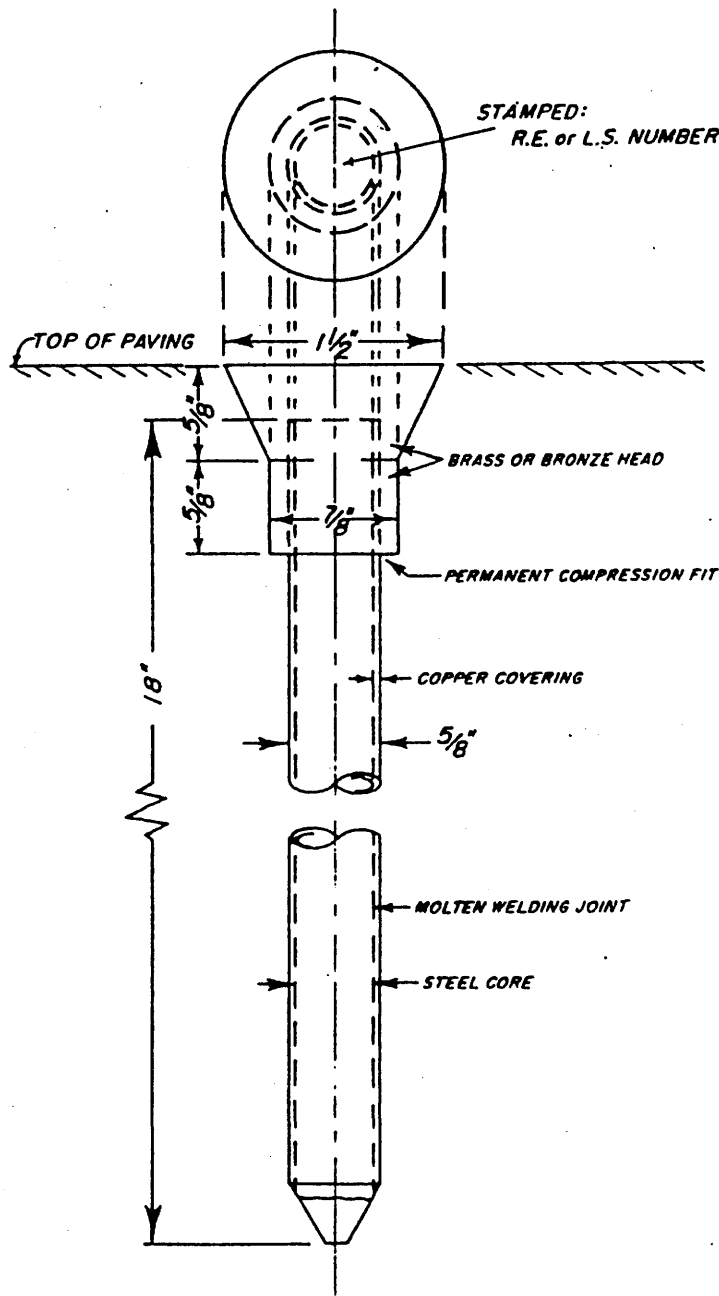
REVISED Date: _____

CITY OF COACHELLA
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
Ronald W. Smith 10-1-79
 CITY ENGINEER RCE 14456 DATE

STANDARD PROPERTY CORNERS

STD. DWG. S-7B



CITY OF COACHELLA
 DEPARTMENT OF PUBLIC WORKS

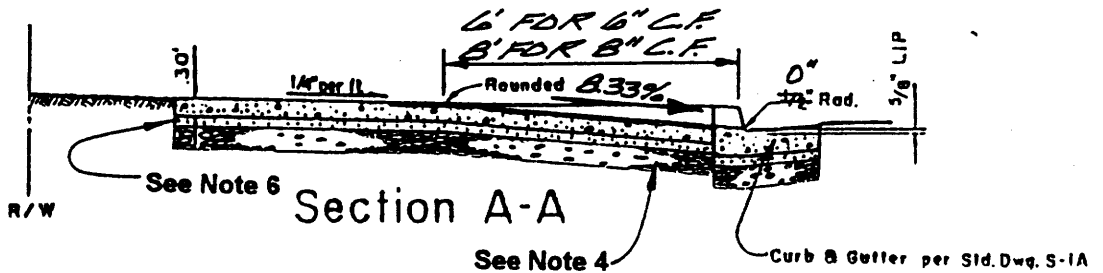
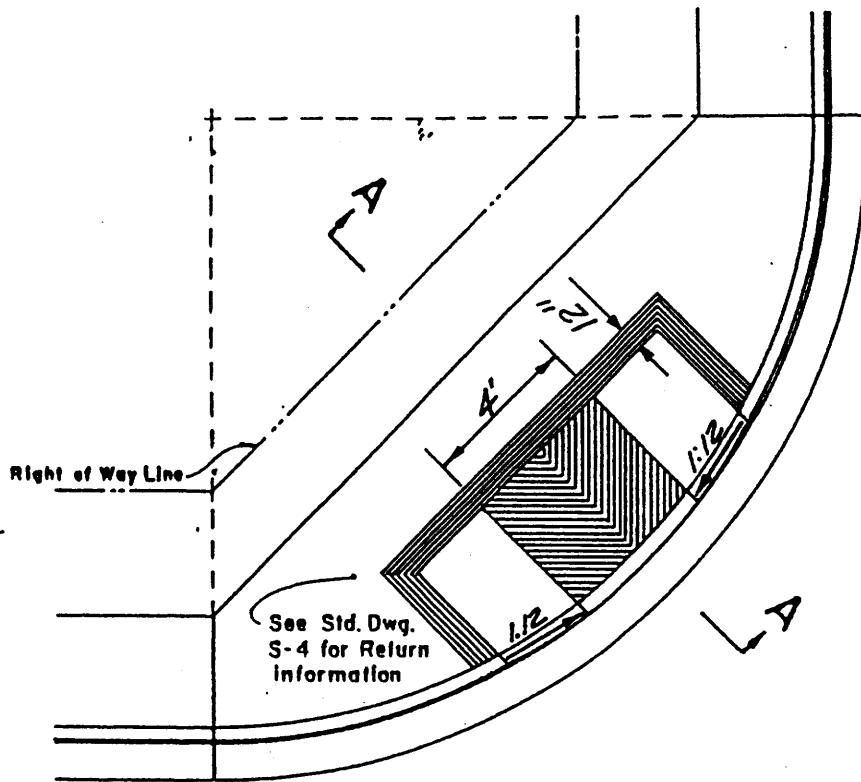
TYPE "B" MONUMENT

APPROVED BY:

John E. Lester
 CITY ENGINEER RCE 17822

5.12.95
 DATE

STD. DWG. S-7C



NOTES:

1. Wheelchair Ramps shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A.. and ADA requirements.
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report Indicate presence of expansive soil or soil with R-Value less than 40.
5. Finish surface of concrete shall be heavy broom finish.
6. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

REVISED Date: *April 1995*

CITY OF COACHELLA

DEPARTMENT OF PUBLIC WORKS

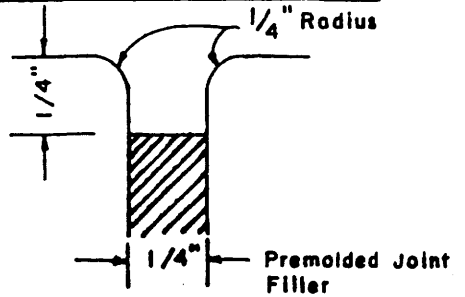
WHEELCHAIR RAMP

APPROVED BY:

John E. Curtis 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

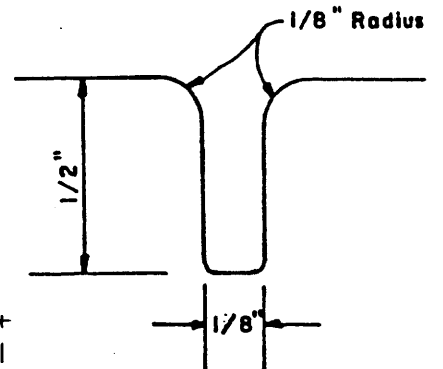
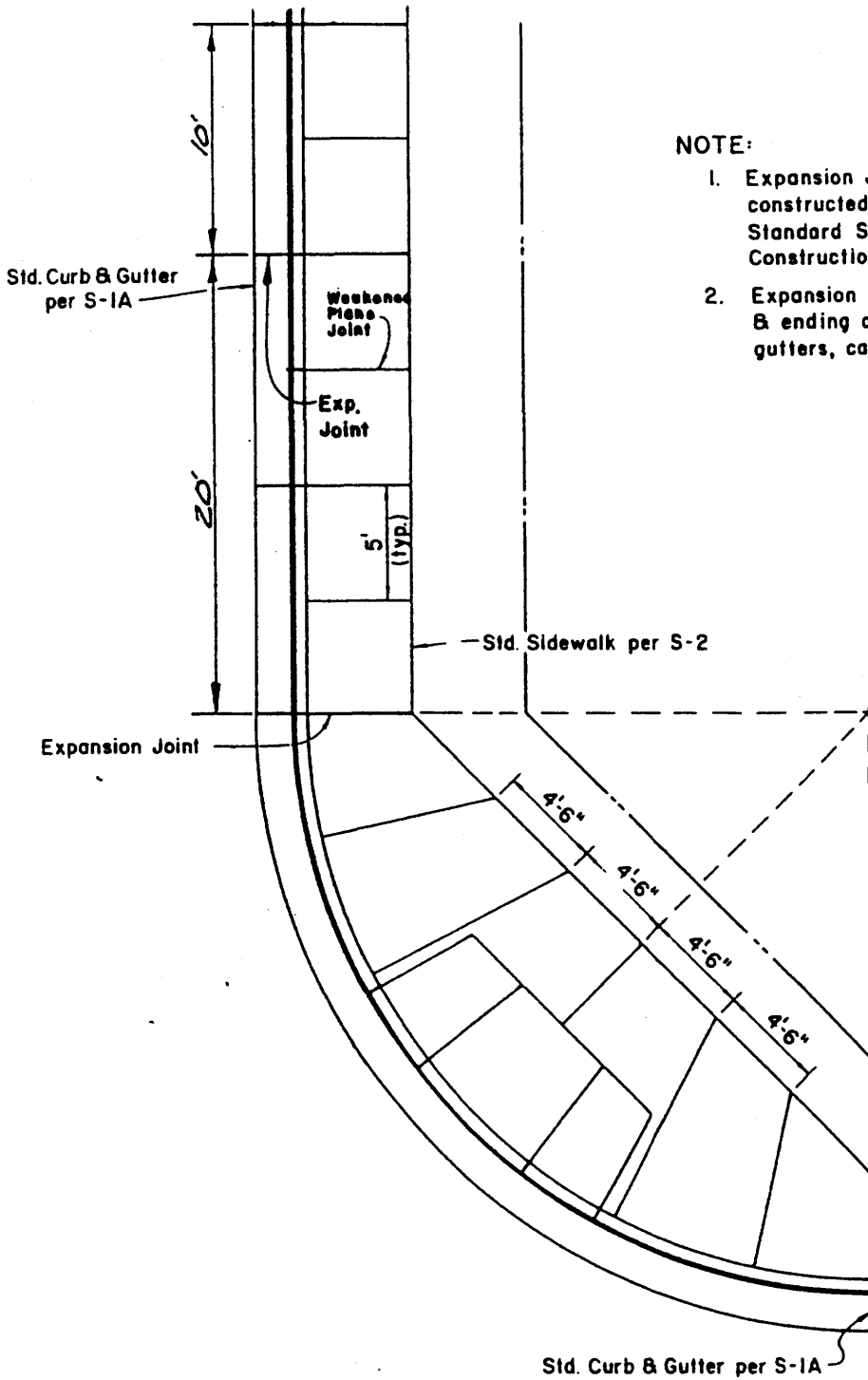
STD. DWG. S-8

EXPANSION JOINT DETAIL

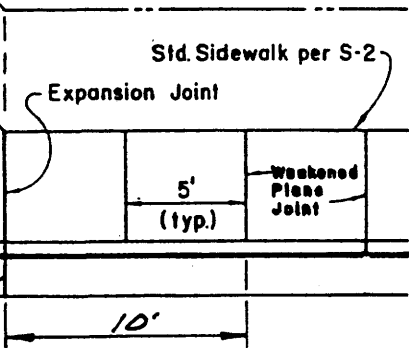


NOTE:

1. Expansion Joints & Weakened Plane Joints shall be constructed in accordance with Section 303-5 of the Standard Specification for Public Works Construction, Current Edition, A.P.W.A..
2. Expansion Joints shall be at the beginning & ending of all returns, driveways, cross-gutters, catch basins, & all other structures.



WEAKENED PLANE JOINT DETAIL



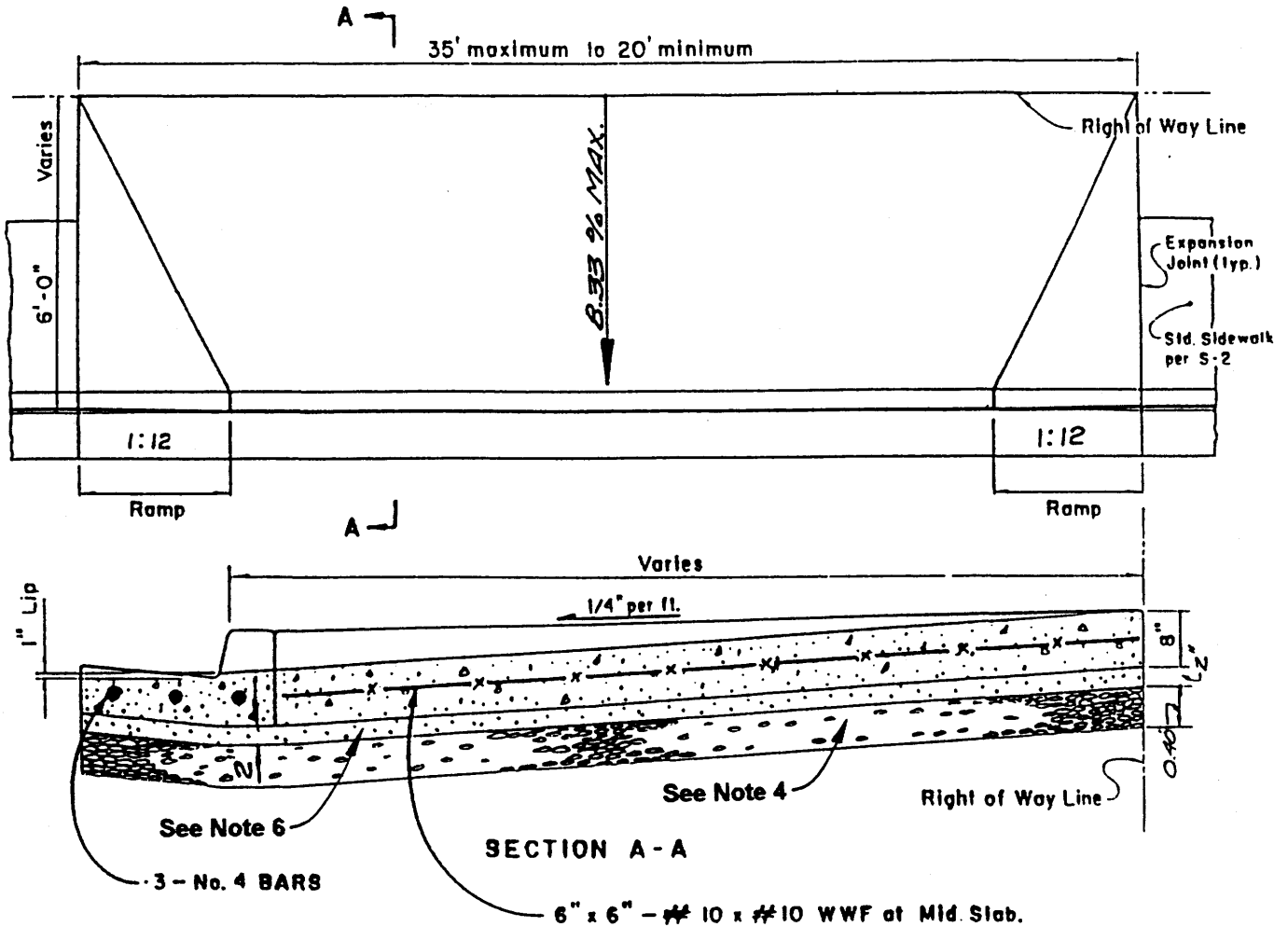
REVISED Date: *April 1995*

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
John E. Curtis 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

EXPANSION JOINTS & SCORING

STD. DWG. S-9



NOTES:

1. Driveways shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
5. Finish surface of concrete shall be light broom finish.
6. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

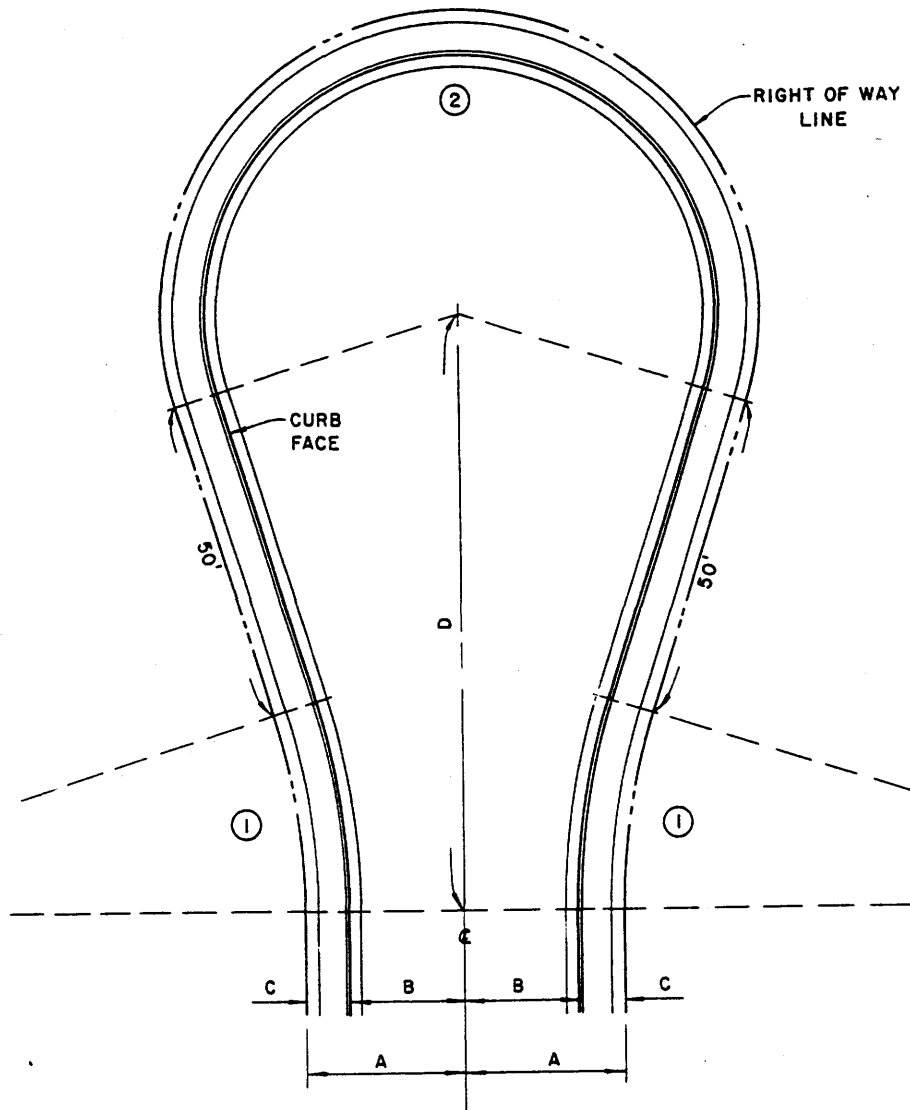
REVISED Date: April 1995

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
John E. Curtis 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

COMMERICAL DRIVEWAY

STD. DWG. S-10



R/W	A	B	C	D	CURVE ①						CURVE ②					
					Δ	CURB			R/W LINE			Δ	CURB		R/W LINE	
						R	L	T	R	L	T		R	L	R	L
50'	25'	18'	7'	92.11'	17°32'06"	107'	32.75'	16.50'	100'	30.60'	15.42'	215°12'04"	40'	150.24'	47'	176.53'
60'	30'	20'	10'	90.00'	16°15'37"	110'	31.22'	15.71'	100'	28.38'	14.29'	212°31'13"	40'	148.37'	50'	185.46'

CITY OF COACHELLA

DEPARTMENT OF PUBLIC WORKS

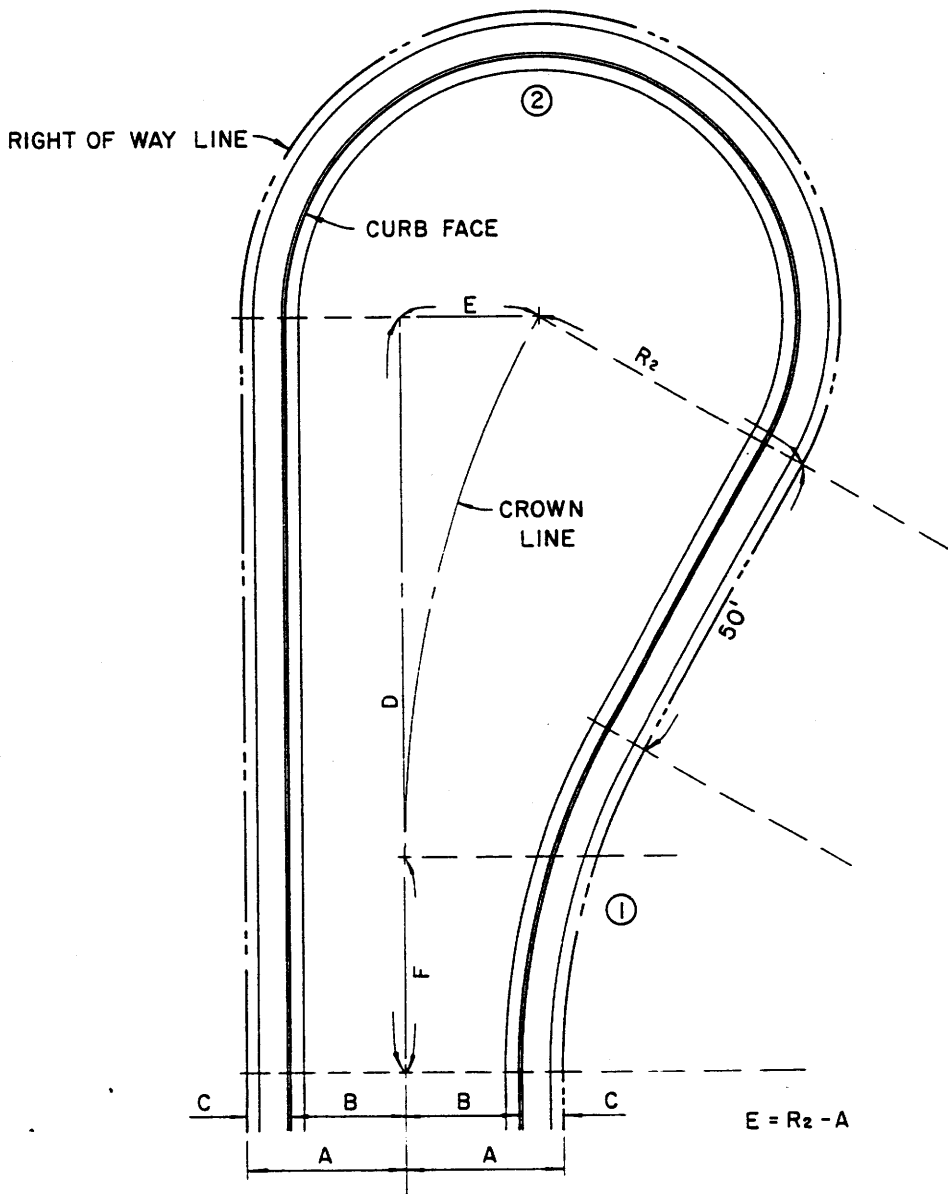
APPROVED BY:

Ronald B. ...
CITY ENGINEER RCE 14456

10-1-79
DATE

STANDARD CUL-DE-SAC

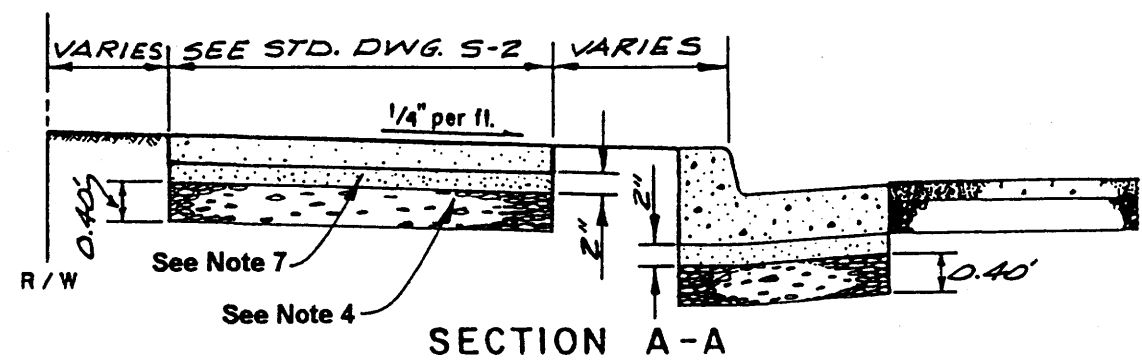
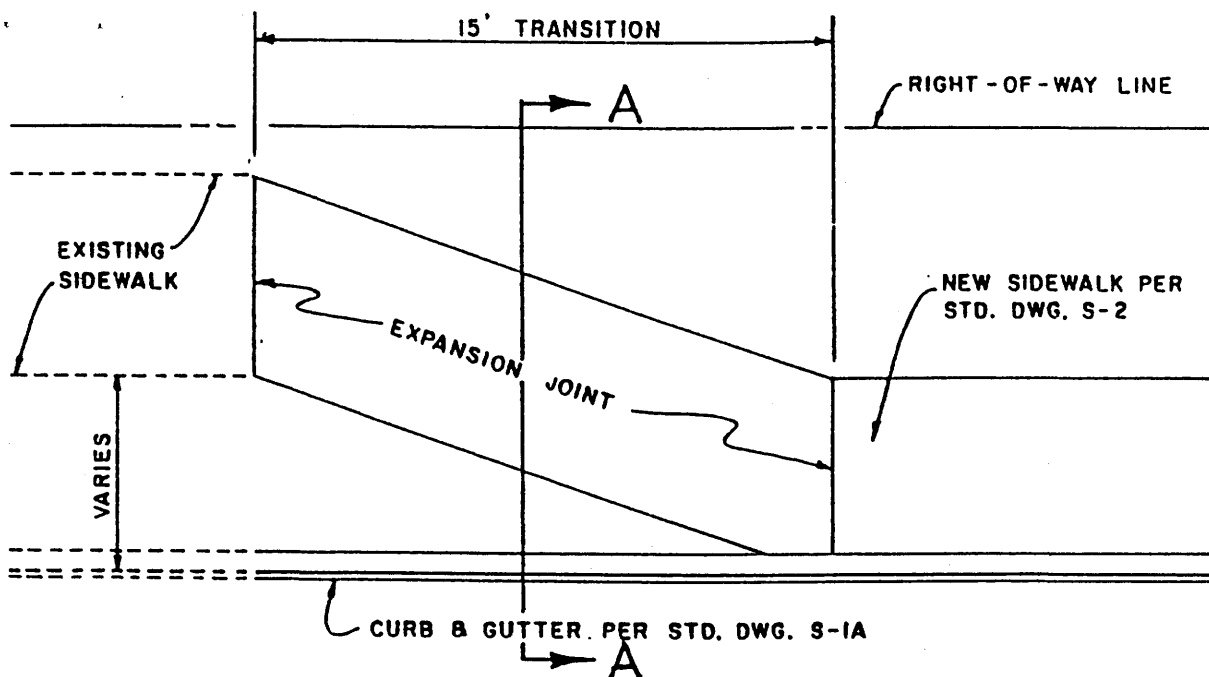
STD. DWG. S-II



R/W	A	B	C	D	CURVE ①				CROWN LINE		CURVE ②				F		
					Δ	CURB		R/W LINE		R	L	Δ	CURB			R/W LINE	
						R	L	R	L				R	L		R ₂	L
50'	25'	18'	7'	116.19'	29°39'31"	107'	55.39'	100'	51.76'	162.33'	84.03'	209°39'31"	40'	146.37'	47'	171.98'	33.10'
60'	30'	20'	10'	113.58'	27°28'55"	110'	52.76'	100'	47.96'	177.24'	85.01'	207°28'55"	40'	144.85'	50'	181.06'	31.79'

CITY OF COACHELLA
 DEPARTMENT OF PUBLIC WORKS
OFFSET CUL-DE-SAC

APPROVED BY:
[Signature]
 CITY ENGINEER RCE 14456
 10-1-79
 DATE
STD. DWG. S-12



NOTES:

1. Sidewalks Transition shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction, Current Edition, A.P.W.A..
2. Concrete shall be Class 520-C-2500, Portland Type V Cement, Air Entrained. (5 1/2 Sacks)
3. Concrete shall be cured with Type 2, White Pigmented, Curing Compound.
4. 0.40 ft. of Aggregate Base shall be used when Soils Report indicate presence of expansive soil or soil with R-Value less than 40.
5. Expansion Joints and Scoring shall be constructed in accordance with Std. Dwg. S-9.
6. Finish surface of concrete shall be light broom finish.
7. Concrete shall be placed on a two-inch layer of dry washed sand, which shall be placed on top of a ten (10) mil thick water proof membrane, unless it is stated in writing by a registered soils engineer that soil conditions do not warrant such protection of the concrete structure.

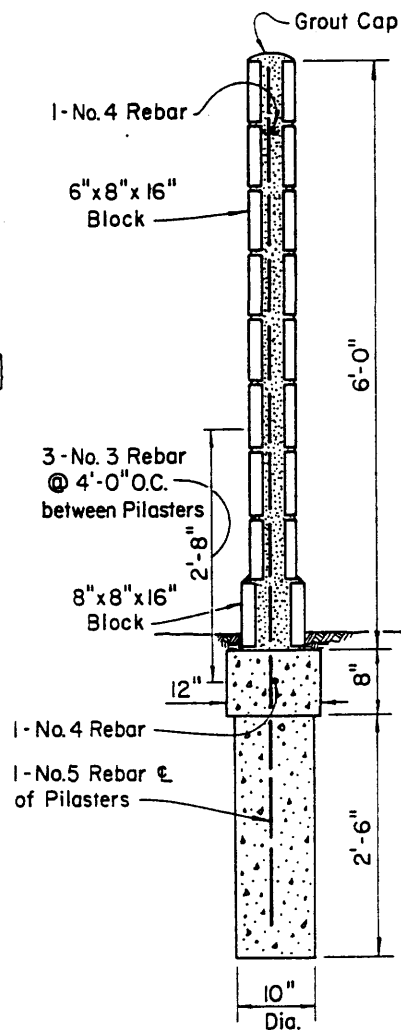
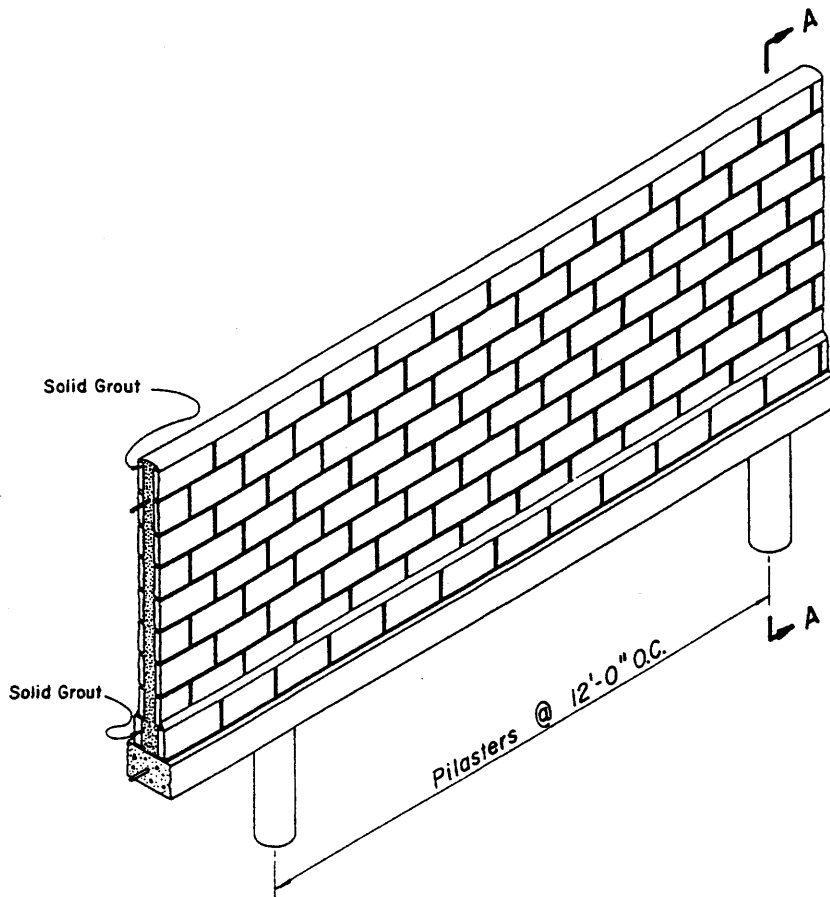
REVISED Date: *April 1995*

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

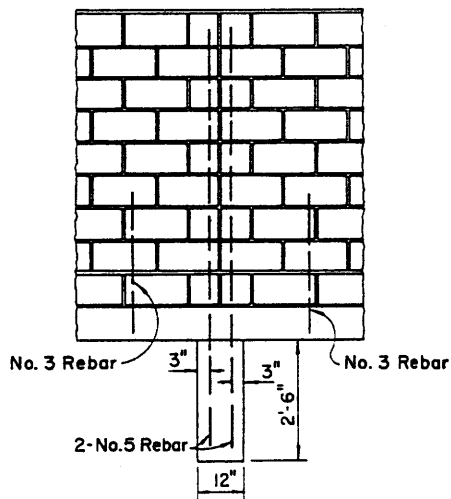
APPROVED BY:
John S. Lester 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

SIDEWALK TRANSITION

STD. DWG. S-14



Section A-A



Expansion Joint Detail

NOTES:

1. Concrete Block Wall shall be constructed in accordance with the Standard Specification for Public Works Construction, 1979 Edition, A.P.W.A..
2. All Concrete shall be Class 660-C-3250, Type V Cement, Air Entrained.
3. Maximum spacing between Expansion Joints is 60 ft.
4. Solid Grouting required in all cells.
5. Mortar shall use Type V Cement and shall be no leaner than 1:3.

REVISION 1 - 3-4-80 372

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

[Signature]
CITY ENGINEER RCE 14456

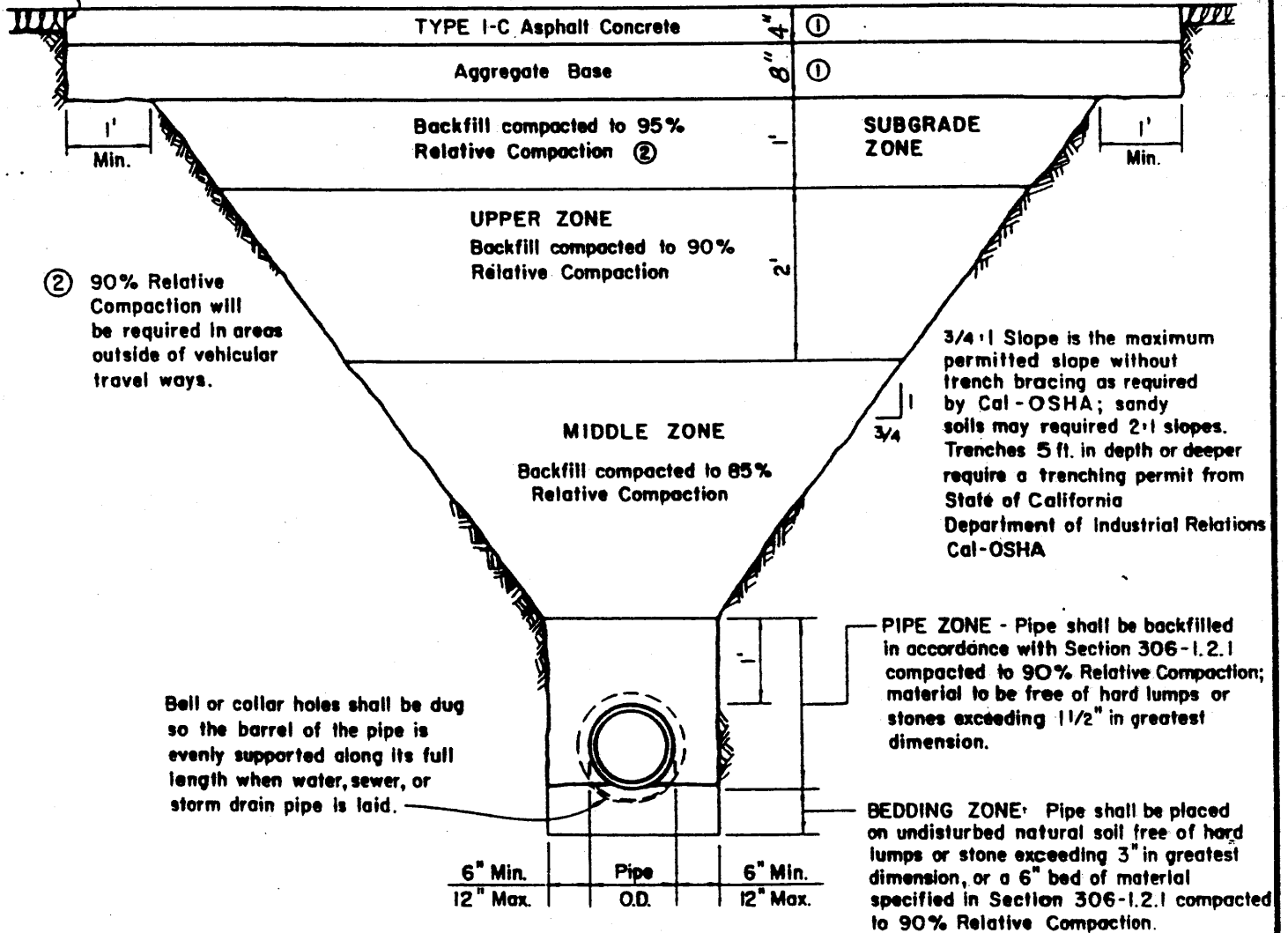
10-1-79
DATE

STANDARD BLOCK WALL

STD. DWG. S-15

- ① Paving Section in new streets or streets which are to be completely repaved shall be determined by R-Value Tests taken after backfilling has been completed. All others as shown below.

Sawcut Existing Paving (typ.)



NOTES:

- All work shall be done in accordance with the applicable section of the Standard Specification for Public Works Construction, Current Edition, A.P.W.A.
- Backfill material shall be free of deleterious material, hard lumps, or stones exceeding 4 inches in greatest dimension and shall be placed in layers, not to exceed 3 feet in depth, with each layer compacted before the next layer is placed.
- Method of Compaction shall be as specified by a soils report prepared by a Registered Geotechnical (Soils) Engineer and approved by the City Engineer.
- Compaction Tests shall be taken within 3 feet of each structure manholes, catch basins, etc.), one (1) test for each 150 feet of trench, and one (1) test in lateral or service trenches for each 150 feet of mainline trench; and, tests will be taken in each zone and compaction approved before the next zone may be placed. Testing shall conform to the ASTM D-1557, 5 Layer Method and Section 211 of the Standard Specifications.
- Testing shall be conducted under the supervision of a Registered Geotechnical (Soils) Engineer with a report submitted to the City Engineer certifying trench compaction and tabulating all tests with their location.
- Backfill to be placed and compacted equally on both side of the pipe so pipe will not be misaligned.

REVISED

Date: *April 1995*

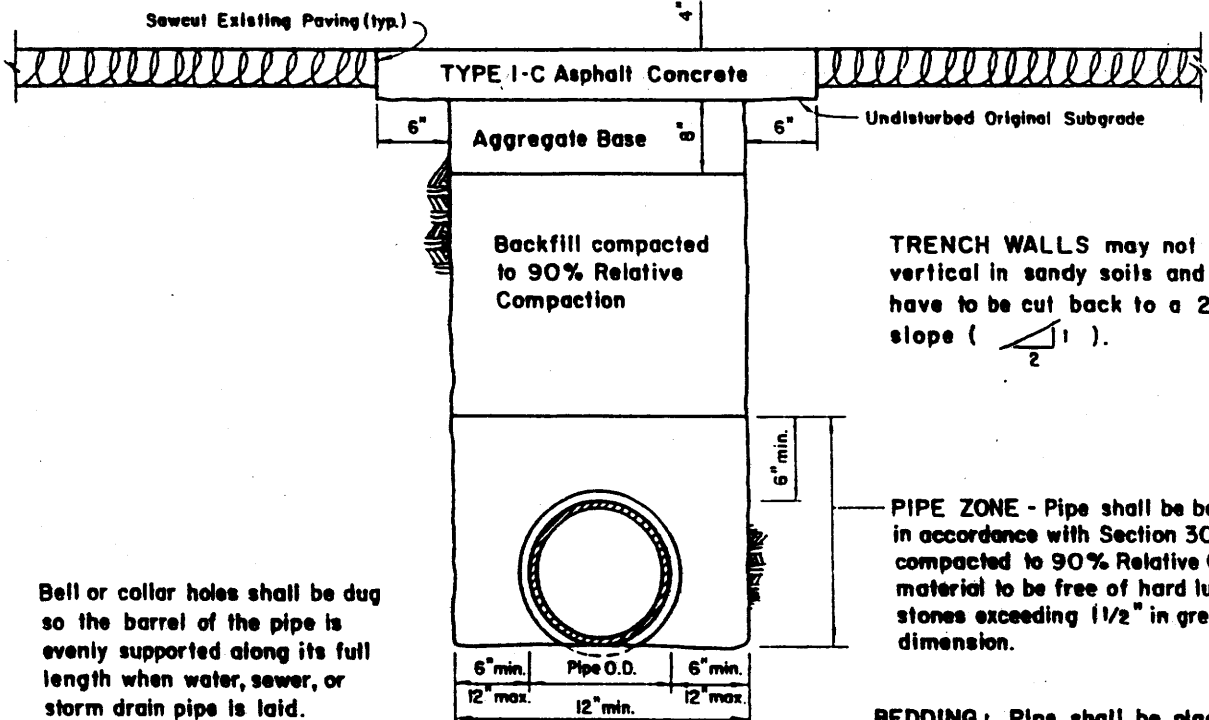
CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

John E. Curtis 4-14-95
CITY ENGINEER RCE NO. 17822 DATE

TRENCHING STANDARD - 5 FT. or DEEPER

STD. DWG. S-16



Bell or collar holes shall be dug so the barrel of the pipe is evenly supported along its full length when water, sewer, or storm drain pipe is laid.

TRENCH WALLS may not stand vertical in sandy soils and might have to be cut back to a 2:1 slope ($\frac{2}{1}$).

PIPE ZONE - Pipe shall be backfilled in accordance with Section 306-1.2.1 compacted to 90% Relative Compaction; material to be free of hard lumps or stones exceeding 1 1/2" in greatest dimension.

BEDDING: Pipe shall be placed on undisturbed natural soil free of hard lumps or stone exceeding 3" in greatest dimension, or a 6" bed of material specified in Section 306-1.2.1 compacted to 90% Relative Compaction.

NOTES:

1. All work shall be done in accordance with the applicable section of the Standard Specification for Public Works Construction, Current Edition, A.P.W.A.
2. Backfill material shall be free of deleterious material, hard lumps, or stones exceeding 4 inches in greatest dimension and shall be placed in layers, not to exceed 3 feet in depth, with each layer compacted before the next layer is placed.
3. Method of Compaction shall be as specified by a soils report prepared by a Registered Geotechnical (Soils) Engineer and approved by the City Engineer.
4. Compaction Tests shall be taken within 3 feet of each structure manholes, catch basins, etc.), one (1) test for each 150 feet of trench, and one (1) test in lateral or service trenches for each 150 feet of mainline trench; and, tests will be taken in each zone and compaction approved before the next zone may be placed. Testing shall conform to the ASTM D-1557, 5 Layer Method and Section 211 of the Standard Specifications.
5. Testing shall be conducted under the supervision of a Registered Geotechnical (Soils) Engineer with a report submitted to the City Engineer certifying trench compaction and tabulating all tests with their location.
6. Backfill to be placed and compacted equally on both side of the pipe so pipe will not be misaligned.

REVISED DATE: April 1995

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
John S. Curtis 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

TRENCHING LESS THAN 5 FT. IN DEPTH

STD. DWG. S-17

City Council Meeting February 8,2006

To: Honorable Mayor and City Council Members

Subject: Street Repair Standard

There are numerous developments within the City of Coachella in various stages of construction. Oftentimes the construction involves the installation of utility lines in public streets. This results in removal of the existing pavement for the purpose of trenching for utility lines.

Contractors are required to repair the pavement and provide a suitable driving surface. As is evident by the large number of resident complaints, some contractors are not adequately repairing the pavement after installing utility lines.

The attached street repair standard is intended to correct this deficiency. The standard requires the compaction of the underlying soil for both temporary and final paving and sets a time limit for completion of the repair work. Exceptions are permitted with the Public Works Director's approval on a case by case basis in order to provide some flexibility for contractors to proceed with their projects while still maintaining a high standard for the repair work.

The standard will be provided to contractors during the project pre-construction meeting and will also be issued and made part of the encroachment permit required for working in public streets.

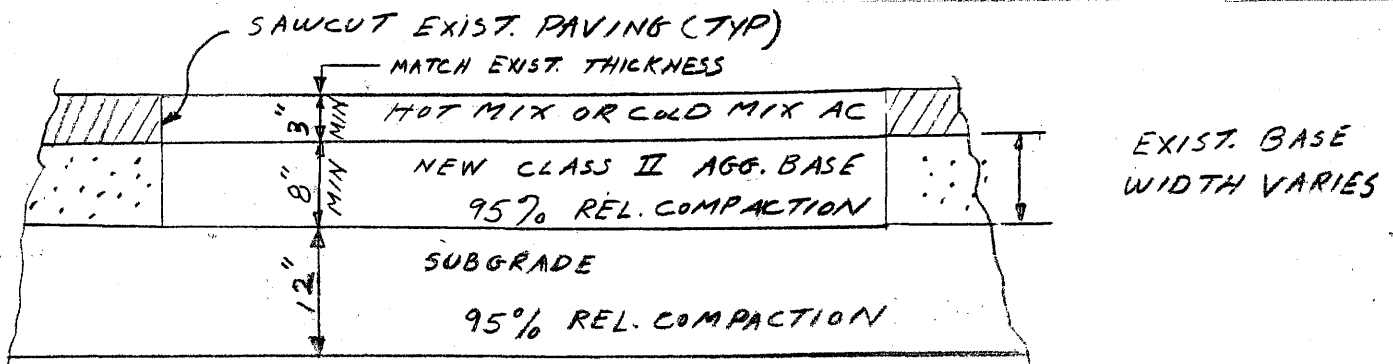
**CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS**

STREET REPAIR

To: General Contractors

Subject: Street Repair

Contractors working in public streets who find it necessary to disturb the existing pavement shall comply with the following minimum requirements for restoring the temporary pavement during construction and before final paving after completing construction activities. The City shall be notified after the subgrade is prepared for paving and before placing any temporary or final pavement.



NOTES:

1. All work shall be done in accordance with the applicable sections of the Standard Specifications for Public Works Construction (Green Book), Current Edition, A.P.W.A.
2. Compaction testing shall be conducted before temporary or final paving. Testing shall conform to the ASTM D-1557, 5 Layer Method and Section 211 of the Standard Specifications.
3. "Cold mix" patching will only be allowed for temporary paving at the end of each work day. The cold mix shall be replaced with the hot mix asphalt concrete by the end of each week and shall be maintained in good condition. If the total disturbed surface area is less than 20 square feet and/or is approved in advance by the City of Coachella, the temporary cold mix can remain until the permanent patch is completed. In no event shall the temporary patch remain more than 30 days. In no case will final street paving utilize "cold mix" asphalt paving.
4. Contractors shall complete final paving of any disturbed public street within 5 days of commencing trenching operations unless approved otherwise by the City of Coachella.
5. Temporary and final street paving shall leave no bumpy surfaces or depressions in the repaired surface.

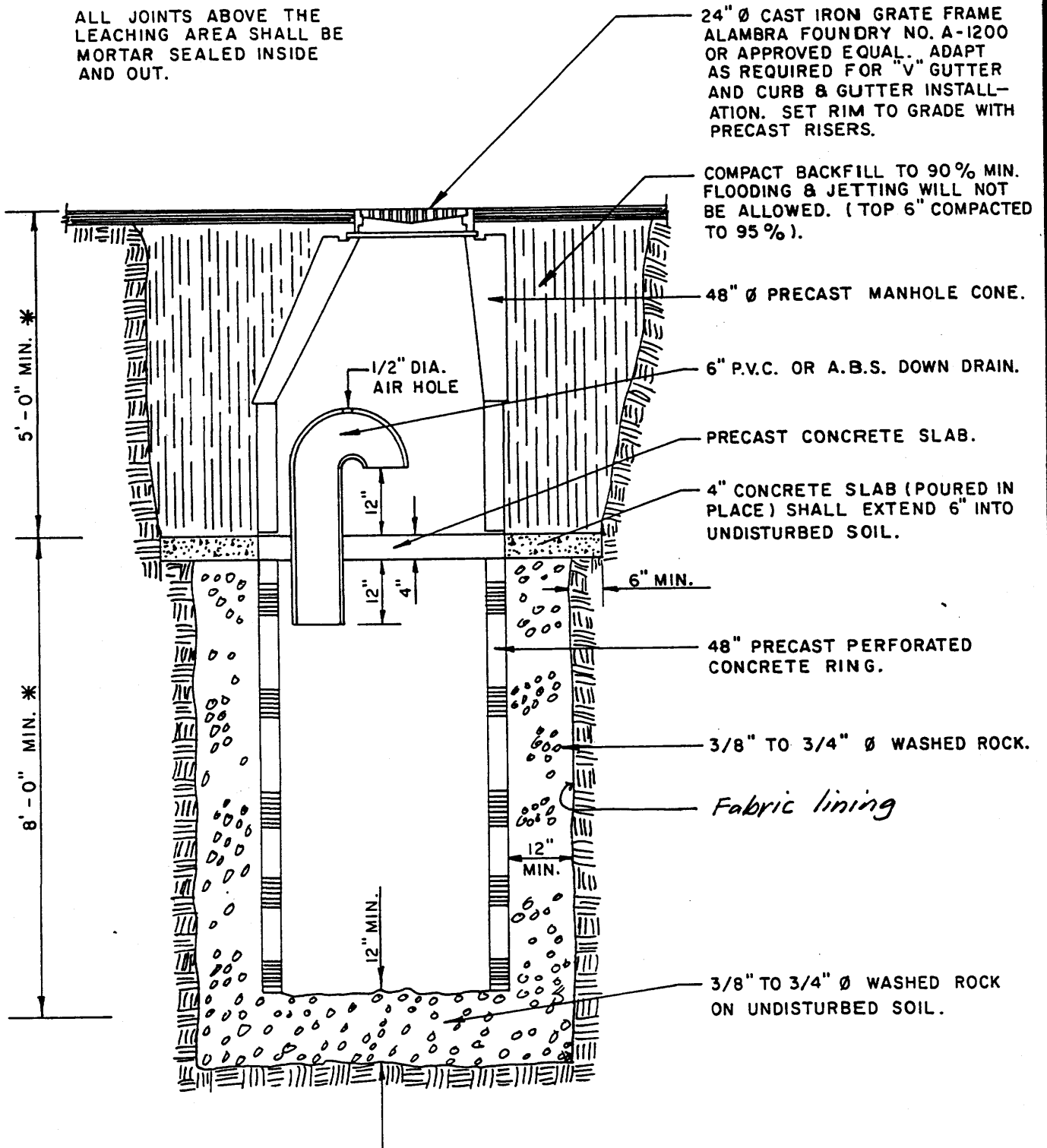
Approved By: _____

Public Works Director

Date: 2-7-06

NOTE:

ALL JOINTS ABOVE THE LEACHING AREA SHALL BE MORTAR SEALED INSIDE AND OUT.



24" Ø CAST IRON GRATE FRAME ALAMBRA FOUNDRY NO. A-1200 OR APPROVED EQUAL. ADAPT AS REQUIRED FOR "V" GUTTER AND CURB & GUTTER INSTALLATION. SET RIM TO GRADE WITH PRECAST RISERS.

COMPACT BACKFILL TO 90% MIN. FLOODING & JETTING WILL NOT BE ALLOWED. (TOP 6" COMPACTED TO 95%).

48" Ø PRECAST MANHOLE CONE.

6" P.V.C. OR A.B.S. DOWN DRAIN.

PRECAST CONCRETE SLAB.

4" CONCRETE SLAB (POURED IN PLACE) SHALL EXTEND 6" INTO UNDISTURBED SOIL.

6" MIN.

48" PRECAST PERFORATED CONCRETE RING.

3/8" TO 3/4" Ø WASHED ROCK.

Fabric lining

12" MIN.

3/8" TO 3/4" Ø WASHED ROCK ON UNDISTURBED SOIL.

5'-0" MIN. *

8'-0" MIN. *

* MAY VARY DUE TO EXISTING SOIL CONDITIONS.

CITY OF COACHELLA

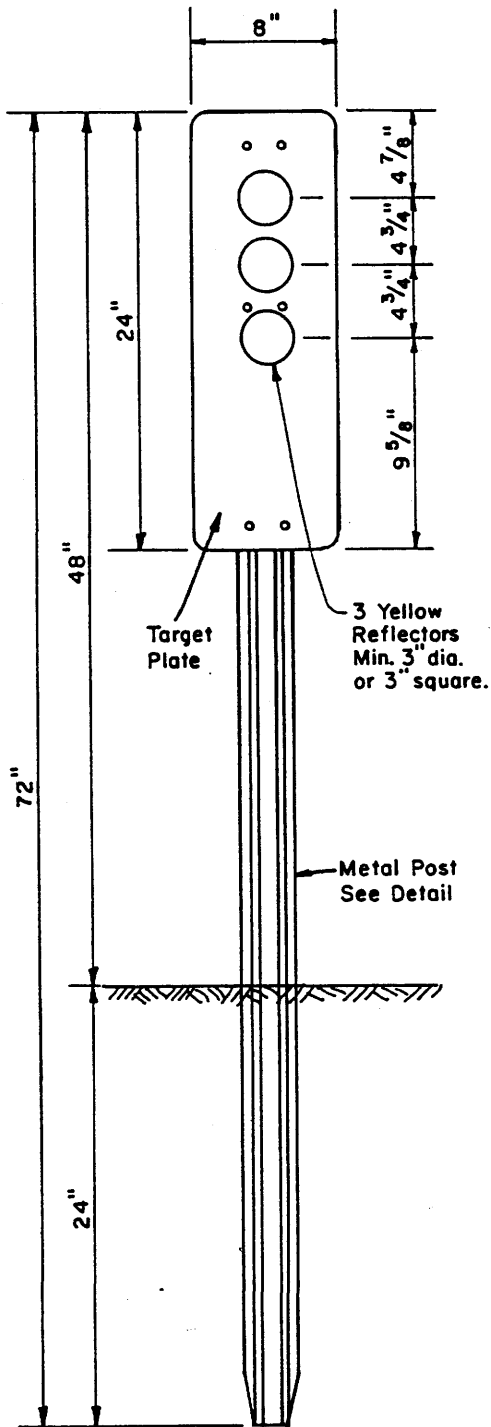
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

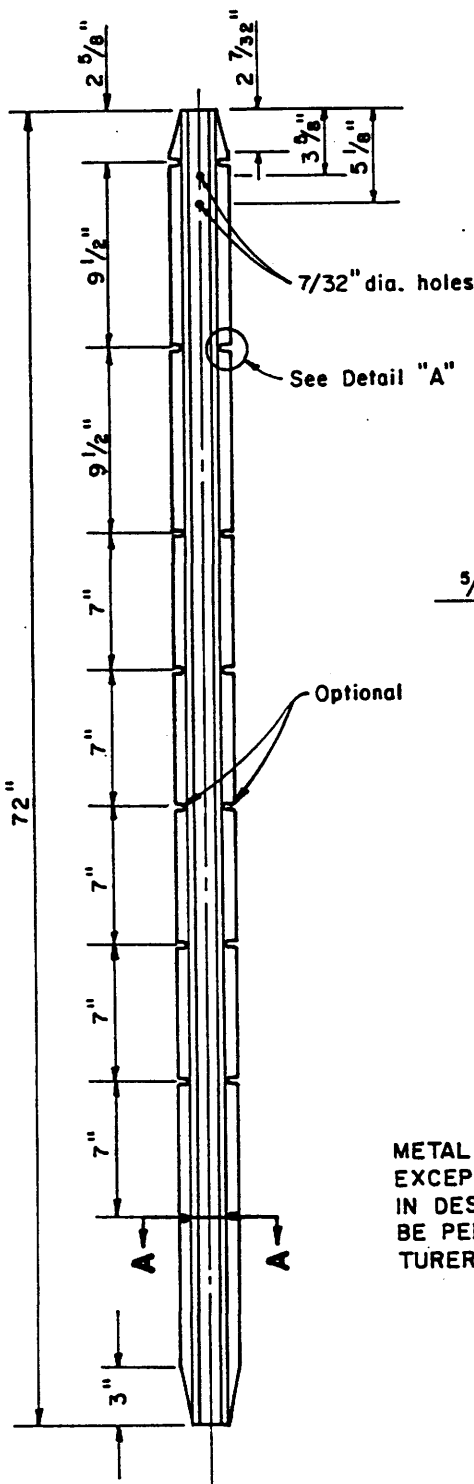
Wm. H. Fitch 9/27/82
CITY ENGINEER RCE 12571 DATE

STANDARD DRYWELL DETAIL

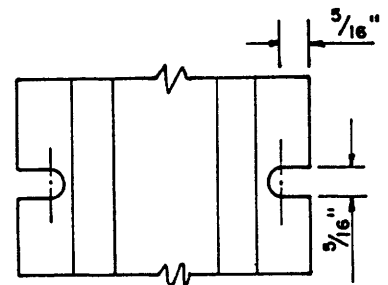
STD. DWG. S-18



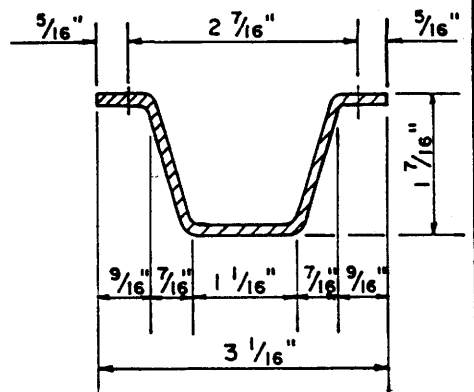
TYPE L
OBJECT MARKER



METAL POST DETAIL



DETAIL "A"



SECTION "A-A"

METAL POST TO BE AS SHOWN EXCEPT THAT MINOR VARIATIONS IN DESIGN AND DIMENSIONS WILL BE PERMITTED TO MEET MANUFACTURER'S STANDARDS.

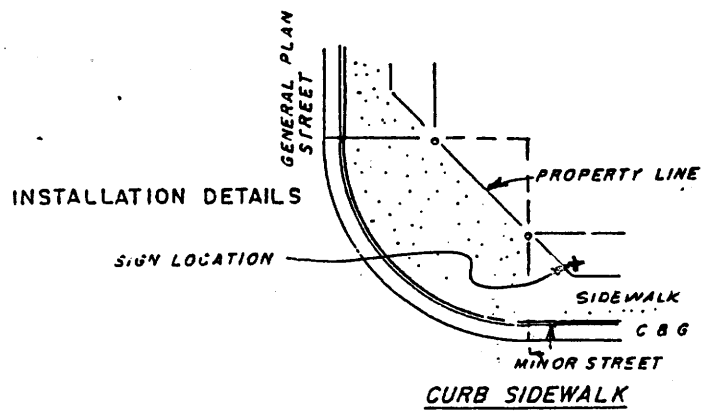
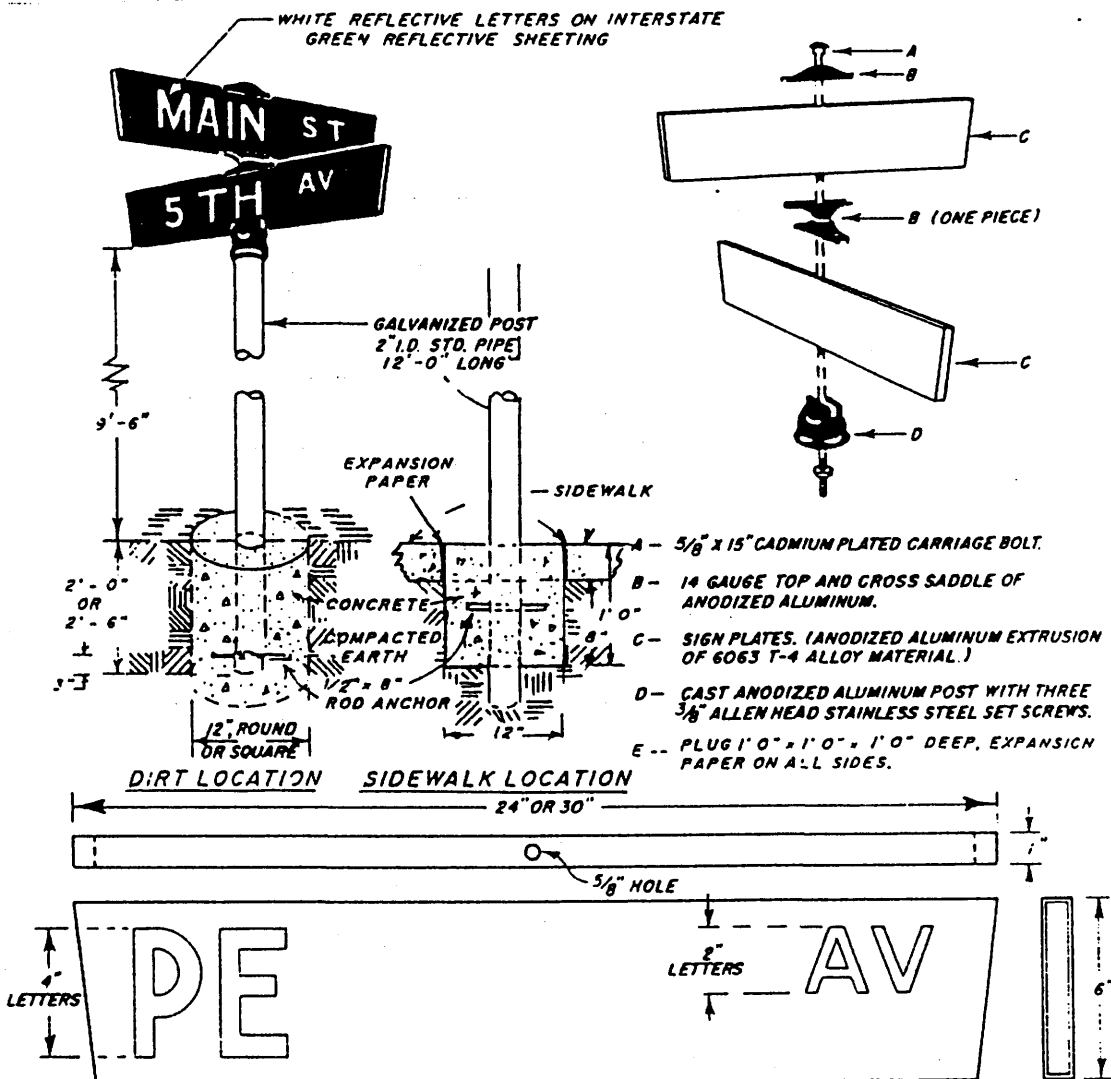
CITY OF COACHELLA

DEPARTMENT OF PUBLIC WORKS

STANDARD TYPE L MARKER

APPROVED BY
D. Dempsey 8-20-84
CITY ENGINEER RCE 34786 DATE

STD. DWG. S-19



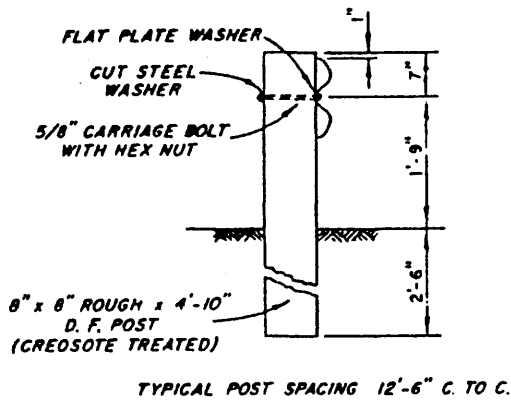
NOTE:
 ONE COMPLETE NAME SIGN UNIT REQUIRED ON EACH INTERSECTION WHEN PAVED WIDTH OR CURBED WIDTH IS 40 FEET OR LESS; TWO COMPLETE NAME SIGN UNITS REQUIRED FOR WIDTH GREATER THAN 40 FEET. WHEN TWO SIGN UNITS ARE PLACED THEY SHALL BE ON DIAGONALLY OPPOSITE CORNERS SO THAT THEY WILL BE ON THE FAR RIGHT-HAND SIDE OF THE INTERSECTION FOR TRAFFIC ON THE MORE IMPORTANT STREET.

CITY OF COACHELLA
 DEPARTMENT OF PUBLIC WORKS

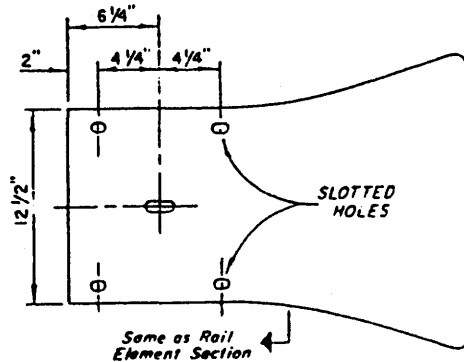
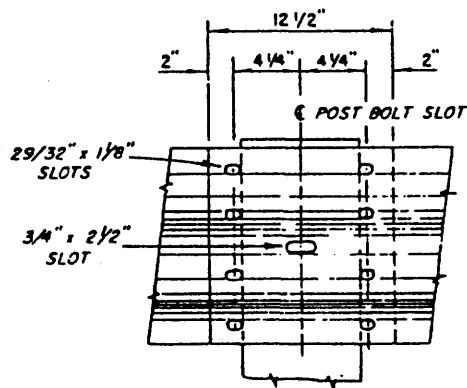
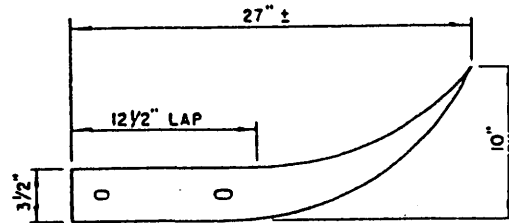
APPROVED BY:
John E. Curtis 5.12.95
 CITY ENGINEER RCE 17822 DATE

STREET NAME SIGN

STD. DWG. S-20



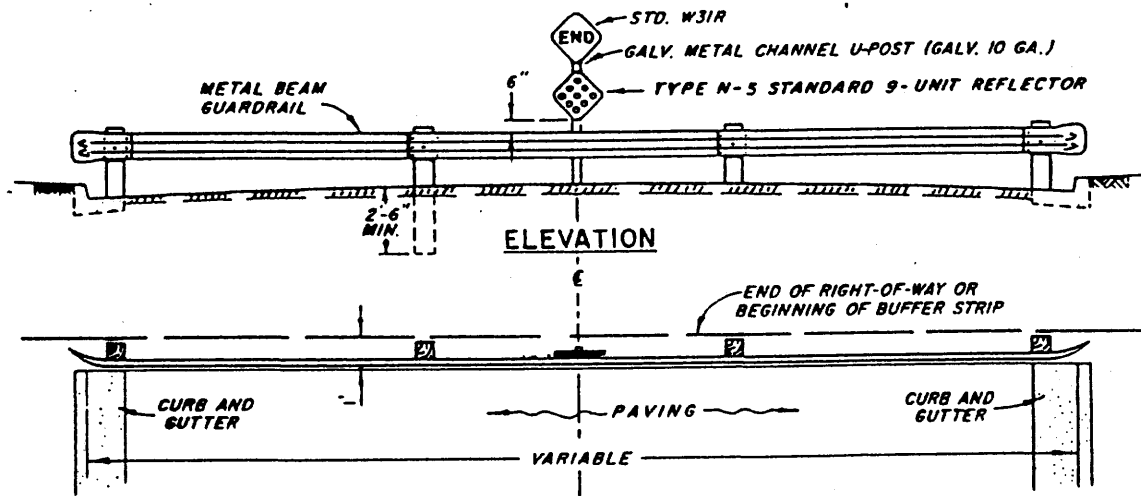
- NOTES:
1. GUARD RAIL ELEMENT MAY BE EITHER STEEL OR ALUMINUM.
 2. STEEL RAIL SHALL BE GALVANIZED PER ASTM DESIGNATION A-123
 3. STEEL RAIL THICKNESS SHALL BE MIN. 12 GAGE.
 4. ALUMINUM RAIL THICKNESS SHALL BE MIN. 0.105 IN.



5/8" x 1 1/4" BUTTON HEAD OVAL SHOULDER BOLTS WITH 1/4" RECESSED HEX. NUTS - TOTAL: 8 PER SPLICE AND 4 PER TERMINAL SECTION.

TERMINAL SECTION

RAIL SPLICE

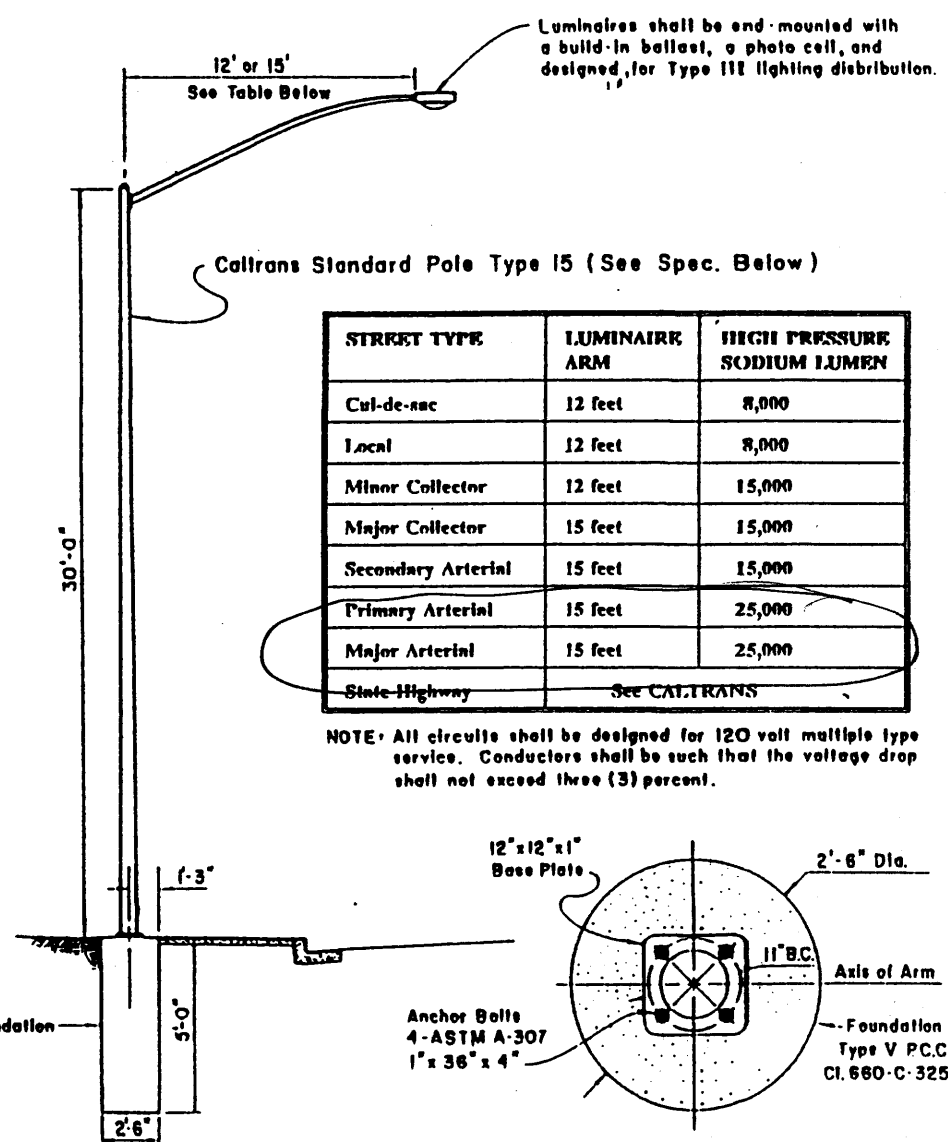


CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
John E. Carter
CITY ENGINEER RCE 17822
51295
DATE

BARRICADE

STD. DWG. S-21



STREET TYPE	LUMINAIRE ARM	HIGH PRESSURE SODIUM LUMEN
Cul-de-sac	12 feet	8,000
Local	12 feet	8,000
Minor Collector	12 feet	15,000
Major Collector	15 feet	15,000
Secondary Arterial	15 feet	15,000
Primary Arterial	15 feet	25,000
Major Arterial	15 feet	25,000
State Highway	See CALTRANS	

NOTE: All circuits shall be designed for 120 volt multiple type service. Conductors shall be such that the voltage drop shall not exceed three (3) percent.

SPECIFICATION:

Pole	Height	Base	Top	Thickness.
Type 15	30'-0"	8"	3 7/8"	0.1196"

Mast Arm Proj. Length	Rise	Base	Thickness	Mounted Height
12'-0"	4'-3"	3 7/8"	0.1196"	33'-9"
15'-0"	4'-9"	4 1/8"	0.1196"	34'-3"

NOTE: See Lighting Standard Details No. 1 & 2 California Standard Plans ES-658T

NOTES:

1. Lighting Standards and lighting system shall be installed in accordance Imperial Irrigation District Specifications, Calltrans Standard Specifications, and Uniform Wiring Code.

REVISED DATE: April 1995

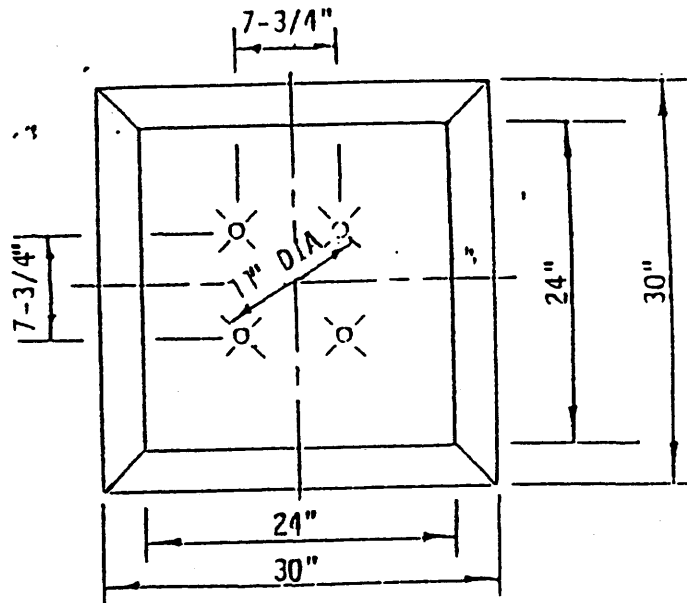
CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
J. E. Curtis 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

STREET LIGHTING STANDARDS

STD. DWG. L-1

USE ANCHOR BOLT PATTERN TO
HOLD ANCHOR RODS FIRMLY IN
PLACE WHILE CONCRETE SETS



GROUT TO BE FILLED IN AFTER
POLE IS SET AND PLUMBED

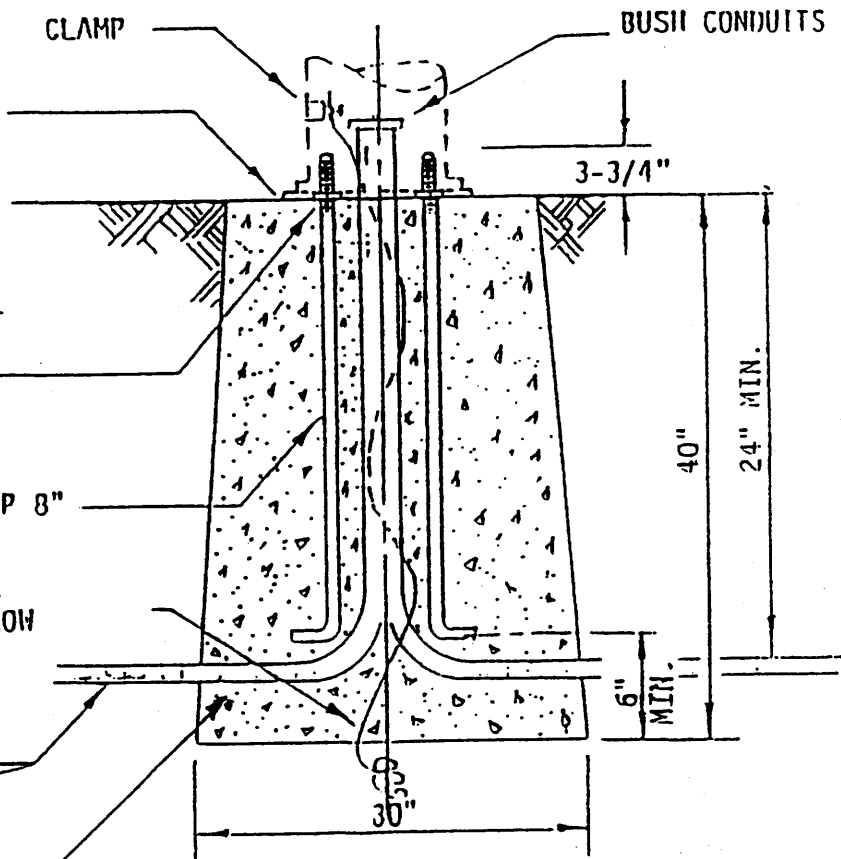
SQUARE NUTS UNDER BASE
TO PLUMB OR RAKE POLE

(4) 1" DIA. ANCHOR RODS
36" LONG. GALVANIZED TOP 8"

GROUND WIRE NO. 4 COPPER
WELL BURIED IN EARTH BELOW
CONCRETE

1" PVC CONDUIT
FACTORY FORMED BENDS

Type V PCC Concrete
Class 660-C-3250



STREET LIGHT BASE

NOTE: Base Plate shall be provided with cover.

REVISED DATE: *April 1995*

CITY OF COACHELLA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:
John E. Curtis 4.14.95
CITY ENGINEER RCE NO. 17822 DATE

STREET LIGHTING STANDARDS

STD. DWG. L-2