CITY OF PALM DESERT STANDARD DETAILS AND DESIGN GUIDELINES

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CITY OF PALM DESERT STANDARD DETAILS AND DESIGN GUIDELINES

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ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
Ac.	Acre	HW	Head Wall
AASHTO	American Association of State Highway	HDM	Highway Design Manual
77131113	and Transportation Officials	HP	High Point
ASTM	American Society for Testing and Materials	Hor.	Horizontal
Area	Area	H.G.L.	Hydraulic Grade Line
A.C.		1.B.M.	
•	Asphalt Concrete		Imported Base Material
Ave.	Avenue	IISNS	Internally Illuminated Street Name Sign
Avg.	Average	Inv.	Invert
B.C.R.	Beginning of Curb Return	I.E.	Invert Elevation
B.C.	Beginning of Curve	LS	Landscape
B.V.C.	Beginning of Vertical Curve	Lat.	Lateral
B.M.	Bench Mark	Lt.	Left
Blvd.	Boulevard	L	Length
Calc.	Calculated	L.F.	Linear Feet
CA MUTCD	California Manual on Uniform Traffic Control Devices	LP	Low Point
C.I.	Cast Iron	L.C.	Lowercase
C.B.	Catch Basin	M.H.	Manhole
C.T.B.	Cement Treated Base	M.B.	Map Book
C	Center	Max.	Maximum
	Centerline	M.O.C.	Middle of Curve
€ C−C	Center to Center	M.O.	Middle Ordinate
Cir.	Circle	Min.	Minimum
C.O.	Cleanout	Mon	Monument
Conc.	Concrete	N.T.S.	Not to Scale
C.P.	Concrete Pipe	N.	North
Cons.	Construct	NE'ly	Northeasterly
Co.	County or Company	NW'ly	Northwesterly
Cor.	Corner	No.	Number
C.M.P.	Corrugated Metal Pipe	0.C.	On Center
C.M.P.A.	Corrugated Metal Pipe Arch	Орр.	Opposite
cu. ft.	Cubic Feet	OG	Original Ground
C.Y.	Cubic Yards	PE	Pad Elevation
Cb.	Curb	P.V.C.	Plastic Pipe (Polyvinyl Chloride)
C&G	Curb & Gutter	P.C.C.	Point of Compound Curvature or
C.F.	Curb Face		Portland Cement Concrete
C.R.	Curb Return	P.C.V.C.	Point of Compound Vertical Curve
D.G.	Decomposed Granite	P.C.	Point of Curvature
DLC	Digital Loop Carrier	P.I.G.	Point of Intersecting Gutters
Dr.	Drive	P.I.	Point of Intersection
_		P.R.C.	Point of Reverse Curvature
Dwy	Driveway Fact		
E.	East	P.R.V.C.	Point of Reverse Vertical Curve
E'ly	Easterly Education Decision	P.T.	Point of Tangency
E.P.	Edge of Existing Paving	P.P.	Power Pole
Elev.	Elevation	P.B.	Pull Box
E.C.R.	End of Curb Return	P_	Property Line
E.C.	End of Curve	Qty	Quantity
E.V.C.	End of Vertical Curve	R	Radius
E.O.R.	Engineer of Record	RPM	Raised Pavement Marker
Est.	Estimate	R.S.	Record of Survey
Exc.	Excavation	R.W. Hdr.	Redwood Header
Exist	Existing	R.E.	Registered Engineer
F.B.	Field Book	R.C.B.	Reinforced Concrete Box
F.G.	Finished Grade	R.C.P.	Reinforced Concrete Pipe
F.F.E.	Finish Floor Elevation	Rt.	Right
F.H.	Fire Hydrant	R/W	Right of Way
F.L.	· · · · ·	_ *	Riverside
	Flow Line	Riv.	
Ft.	Foot	Rd.	Road San Dornardina
Fd.	Found	S.B.	San Bernardino
1.21.1V	Guy Wire of Pole	SBB&M	San Bernardino Base & Meridian
Guy GB	Grade Break	SS	Sanitary Sewer

N.T.S.

CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

ACRONYMS AND ABBREVIATIONS
SHEET 1 OF 2

ABBREVIATION DEFINITION Section Sec. SMH Sewer Manhole S/W Sidewalk SÍC Signal Innerconnect S. South SE'ly SW'ly Southeasterly Southwesterly Specifications Spec. Spk. Spike Sq. SS Square Stainless Steel Stk. Stake Std. Standard Sta. Station Storm Drain S.D. St. Street T.O.E. Thread One End T.C. Top of Curb Top of Footing Top of Pavement TF T.P. Top of Wall TW Tract Tr. TS Traffic Signal Typ. U.C. Typical Uppercase Vert. Vertical V.C. Vertical Curve V.P.I. Vertical Point of Intersection V.C.P. Vitrified Clay Pipe W. W'ly West Westerly XIŃG Crossing X-Walk Crosswalk

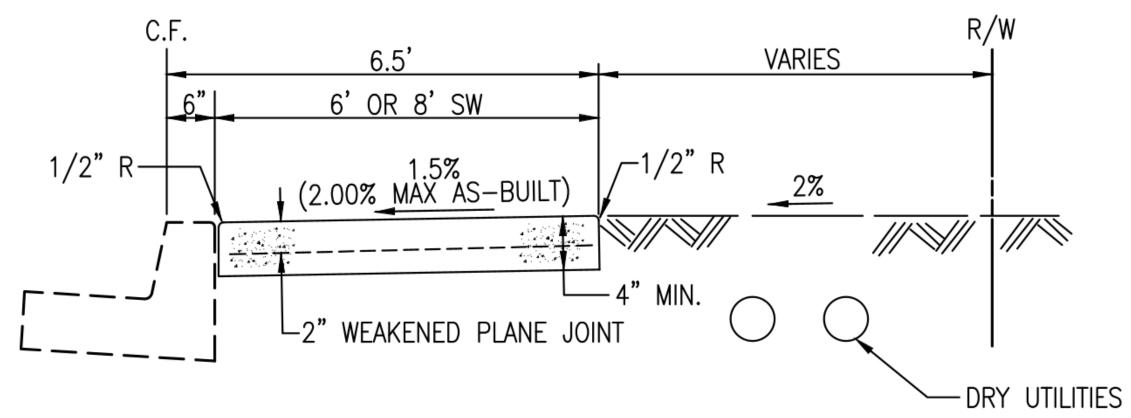
2 Horizontal to 1 Vertical

2:1

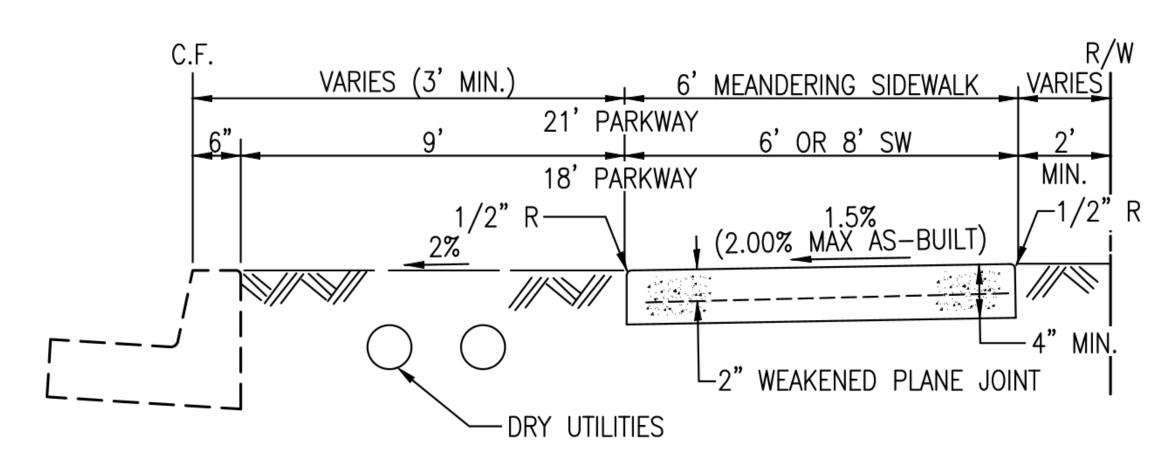
N.T.S.

TYPICAL LEGEND		
EASEMENT ————————————————————————————————————	RIGHT-OF-WA POINT OF INTI LOT LINE EXISTING PROPOSED	
UNDERGROUND UTILITIES		
SANITARY SEWER ———————————————————————————————————	TELEPHONE COND ELECTRICAL COND STREET LIGHTING TRAFFIC SIGNAL CABLE TELEVISION	OUIT — E — — E — — SL — — SIG— — SIG—
TOPOGRAPHY		
BLOCK WALL BOARD FENCE X— X— WIRE FENCE CHAIN LINK FENCE		TOP OF SLOPE TOE OF SLOPE DIRECTION OF FLOW RETAINING WALL
S SANITARY SEWER M.H. D STORM DRAIN M.H. TELEPHONE VAULT WATER METER FIRE HYDRANT POLE & GUY ANCHOR POLE TRAFFIC SIGN	GAS METER RAILROAD THE RAILR	TRACKS SIGNAL IGHT IT IAME SIGN
	CITRUS TREE	EXISTING SOIL
CONCRETE ASPHALT	© DECIDUOUS	
(DIRT) EDGE OF PAVEMENT	PALM TREE	TRAFFIC CONEBARRICADE
BUILDING	TREE STUMP	© DELINEATOR
UNDERGROUND STRUCTURE	THEE STOWN	BIKE LANE SIGN
OVERHANGING STRUCTURE	SHRUBBERY	
		N.T.S.
CITY OF PALM DESERT APPROVED BY:		DEPARTMENT OF PUBLIC WORKS STD NO.
		DRAFTING STANDARDS
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR	DATE	AND TOPOGRAPHY SYMBOLS SHEET 1 OF 2

TRAFFIC, LIGHTIN	G, & STRIPING	G LINE STYLES			
EXISTING LANE PROPOSED LANE EXISTING LEAD—IN	· ————————————————————————————————————	PROPOSED LA EXISTING LANI EXTENSION		<u> </u>	000
PROPOSED LEAD-IN		——————————————————————————————————————	NE	••••	• • •
EXISTING LANE		EXTENSION			
EXTENSION		EXISTING DOU			
PROPOSED LANE EXTENSION		EXISTING PASS	OUBLE CENTER SING ZONF		
EXISTING LANE DROP)	PROPOSED PA			
UTILITY LINE STY	'LES				
TELEVISION				(oh)	
TELEPHONE				- (oh) $-$	
TELECOM				(oh)	
FIBER OPTIC		fo		—— (oh) ——	
ELECTRICAL		——————————————————————————————————————		— — (oh) ——	
SYMBOLS					
PROPOSED	EXISTING				
		LOUVERED VISOR (LEFT-ANGLE S	SHOWN — REVE	RSED FOR RIG	HT ANGLE)
<u>•</u>		TRAFFIC SIGNAL PULLBOX (PB)			
		STREET LIGHTING PULLBOX (SLP	B)		
		CONTROLLER CABINET	_		
		UNDERGROUND SERVICE CABINET	•		
0	\mathcal{O}	TRAFFIC SIGNAL POLE			
	<	VEHICLE SIGNAL HEAD WITH NO			
→	<>+-	VEHICLE SIGNAL HEAD WITH BAC			
—	$\langle 1 \langle 1 \rangle + -$	PROGRAMMED VISIBILITY VEHICLE	•	•	
	<>>+-	SIGNAL VEHICLE HEAD WITH ALL (REVERSE DIRECTION OF ARROW	12" ARROW IN FOR LEFT OR	DICATIONS RIGHT TURNS)	
		PEDESTRIAN SIGNAL HEAD		,	
	\	SIGNAL AND LUMINAIRE MAST AR 3-12" SECTIONS WITH BACK PL	MS WITH VEHIC ATE	LE SIGNAL HEA	ND,
\	√	MAST ARM WITH VEHICLE SIGNAL	HEAD, 3-12"	SECTIONS WITH	H BACK PLATE
	< >+>	TRAFFIC SIGNAL POLE WITH VEHI	CLE SIGNAL AN	D PEDESTRIAN	HEADS
	X	TRAFFIC SIGNAL POLE WITH LUM	INAIRE MAST AR	RM	
		RETRO-REFLECTIVE MAST ARM M	IOUNTED SIGN		
		INTERNALLY ILLUMINATED MAST A	RM MOUNTED S	SIGN	
		INDUCTIVE LOOP DETECTOR			
\bigcirc		BICYCLE LOOP DETECTOR			
	N	VIDEO DETECTION CAMERA			
		VIDEO DETECTION ZONE			
w.c.	< w.c.>—	WIRELESS RADIO ANTENNA			
	グ へ	FLASHING BEACON			N.T.S.
CITY OF PALM DESERT	APPROVED BY:		DEPARTMENT OF	PUBLIC WORKS	STD NO.
			DRAFTING S		101
	MARTIN ALVAREZ	DATE	AND TOP(SYME		$\mid \ \mid \bigcup \mid \ \mid$
	PUBLIC WORKS DIR				SHEET 2 OF 2



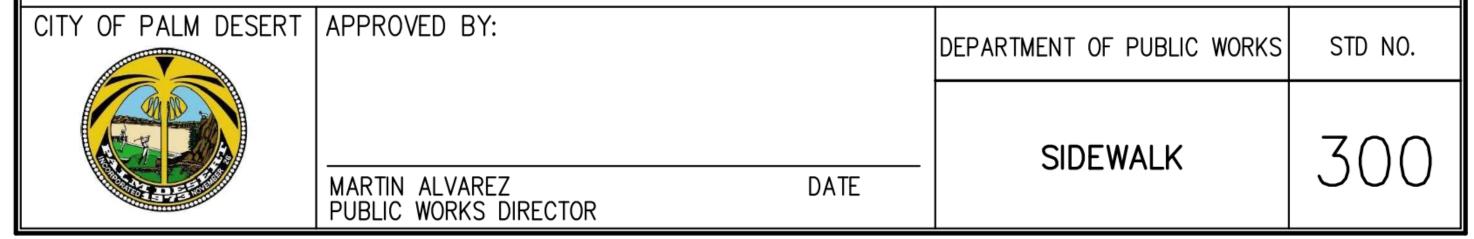
CURB ADJACENT SIDEWALK

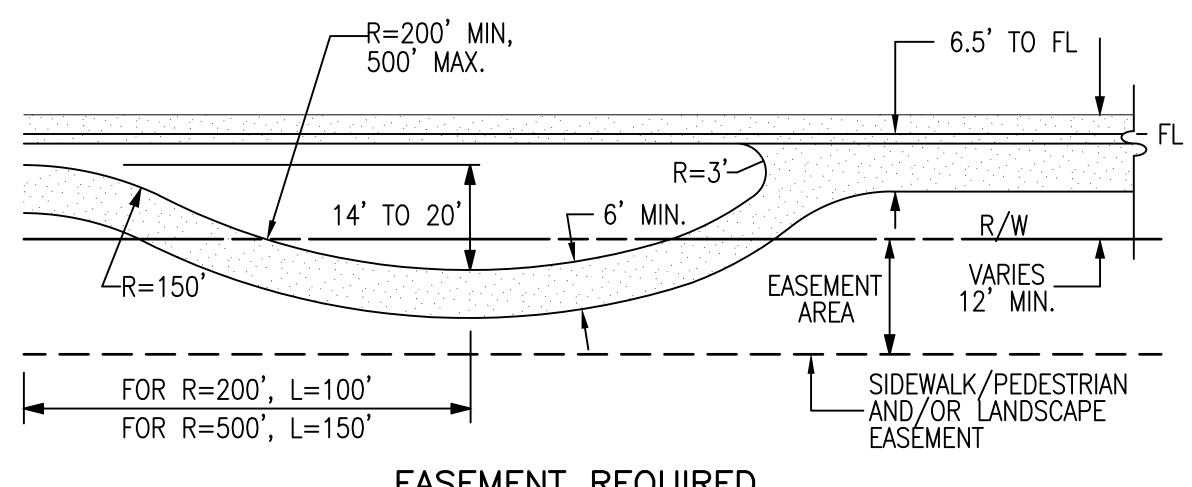


MEANDERING SIDEWALK

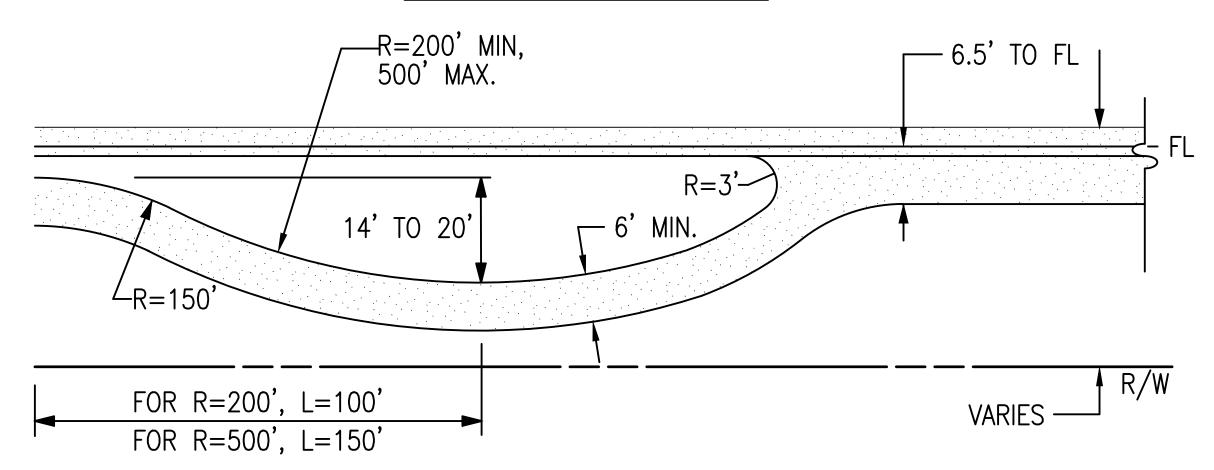
NOTES:

- 1. ALL CONCRETE SHALL BE 560-C-3250 WITH CURING COMPOUND.
- 2. MINIMUM 4-FT CLEARANCE FOR ACCESSIBILITY PATH THROUGHOUT SIDEWALK.
- 3. ALL SIDEWALKS SHALL BE A MINIMUM THICKNESS OF 4".
- 4. SPECIFIC CONSTRUCTION DETAILS SHALL BE PER CURRENT EDITION OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION MANUAL.
- 5. EXPANSION PAPERS & WEAKENED PLANE JOINTS TO MATCH CURB & GUTTER.
- 6. MEET CURRENT ADA STANDARD. CROSS SLOPE OF SIDEWALKS SHALL BE MINIMUM OF 2% OR AS SPECIFIED BY STATE AND FEDERAL ACCESSIBILITY GUIDELINES, WHICHEVER MORE RESTRICTIVE.
- 7. LONGITUDINAL GRADE SHALL MEET CURRENT STATE AND LOCAL ACCESSIBILITY STANDARDS. LONGITUDINAL SLOPES OF MORE THAN 8% ARE SUBJECT TO THE CITY ENGINEER APPROVAL.
- 8. REMOVAL AND REPLACEMENT SHALL BE DONE TO THE NEAREST JOINT.





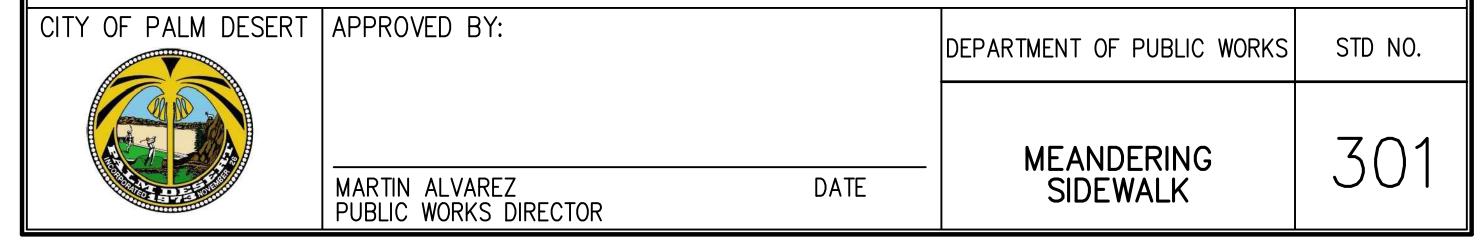
EASEMENT REQUIRED

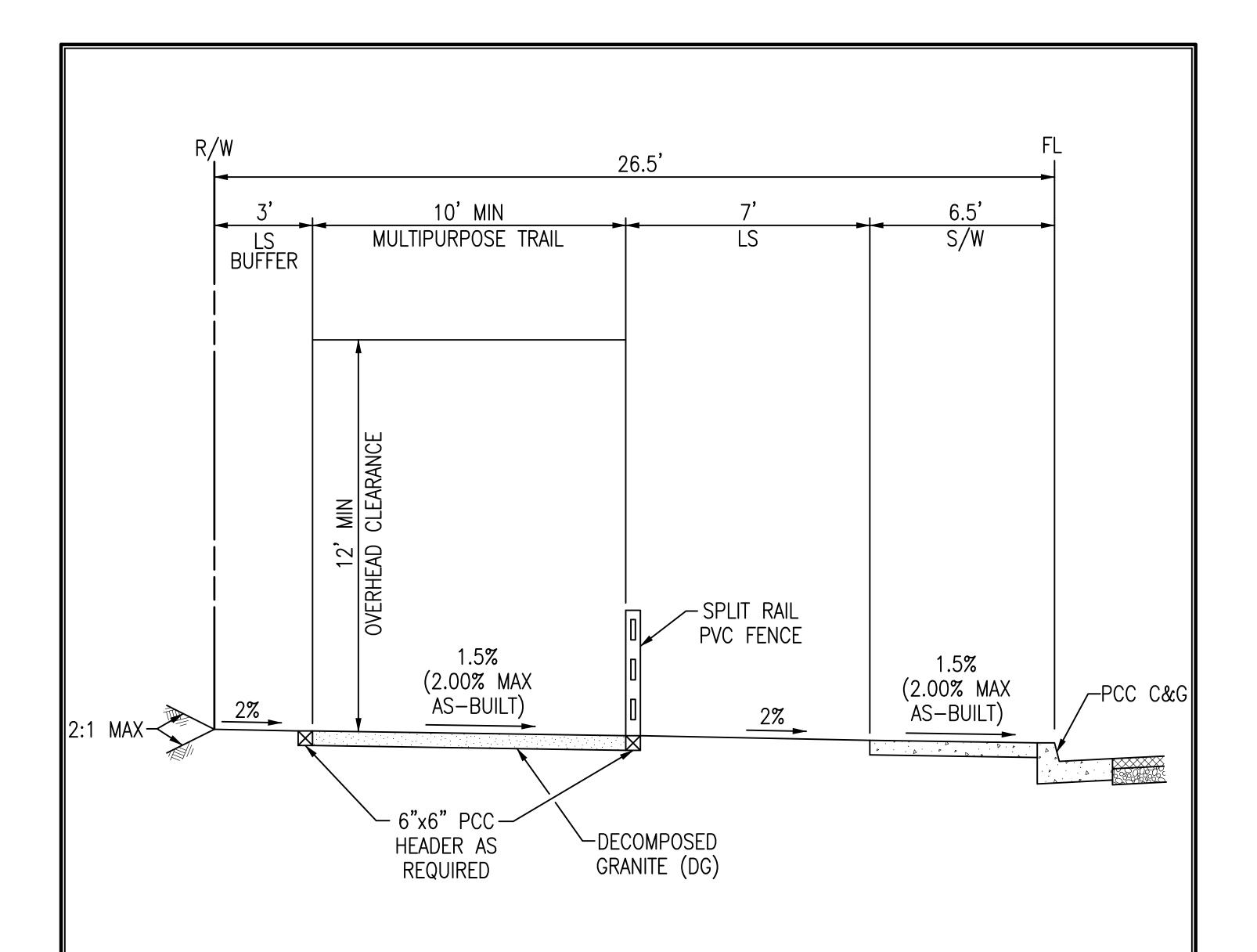


EASEMENT NOT REQUIRED

NOTES:

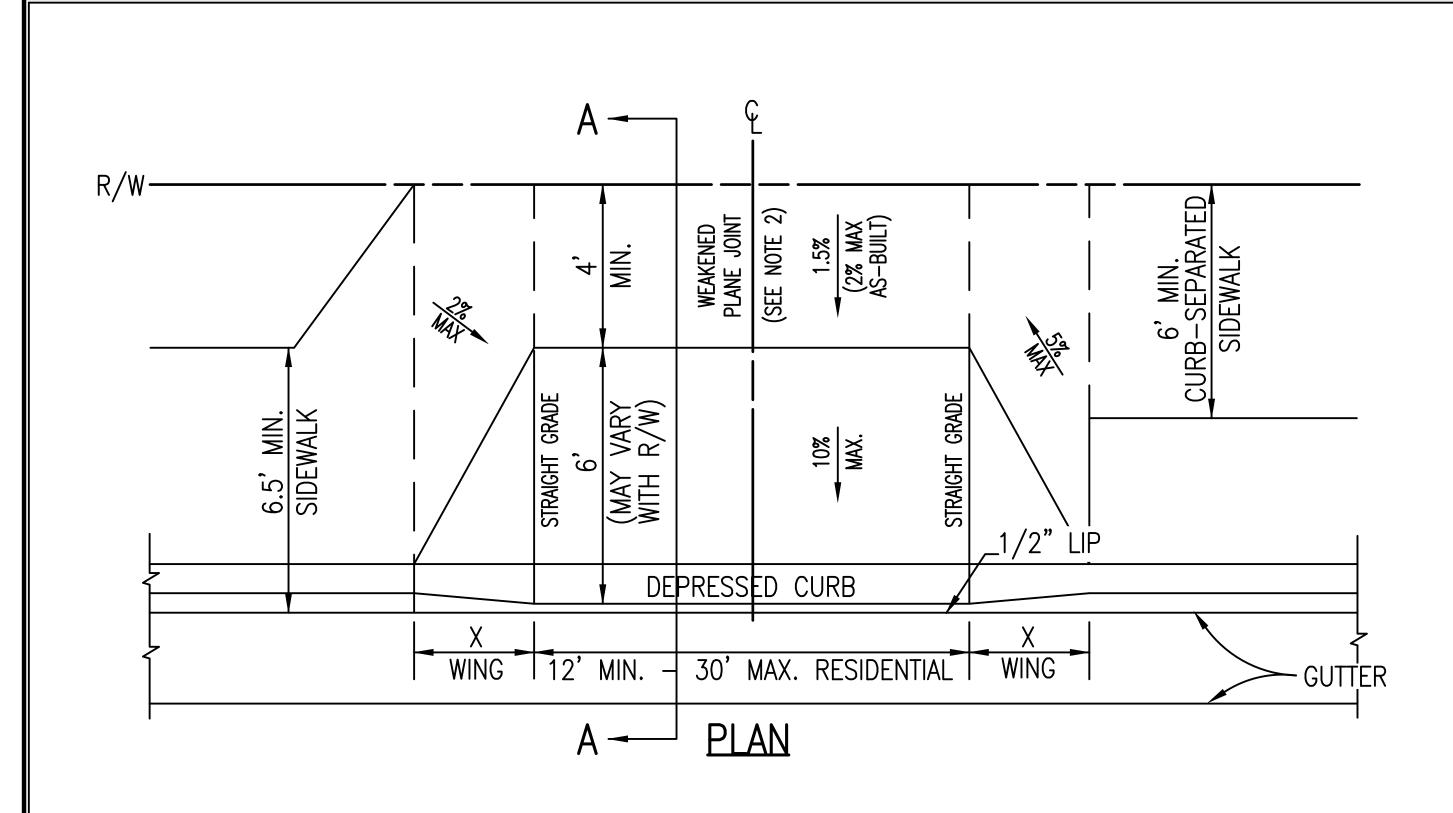
- 1. ALL CONCRETE SHALL BE 560-C-3250 WITH CURING COMPOUND.
- 2. MINIMUM 4-FT CLEARANCE FOR ACCESSIBILITY PATH THROUGHOUT SIDEWALK.
- 3. ALL SIDEWALKS SHALL BE A MINIMUM THICKNESS OF 4".
- 4. DIMENSIONS OF MEANDERING SIDEWALK AS SPECIFIED ON APPROVED IMPROVEMENT PLANS.
- 5. SPECIFIC CONSTRUCTION DETAILS SHALL BE PER CURRENT EDITION OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION MANUAL.
- 6. EXPANSION PAPERS & WEAKENED PLANE JOINTS TO MATCH CURB & GUTTER.
- 7. MEET CURRENT ADA STANDARD. CROSS SLOPE OF SIDEWALKS SHALL BE MINIMUM OF 2% OR AS SPECIFIED BY STATE AND FEDERAL ACCESSIBILITY GUIDELINES, WHICHEVER MORE RESTRICTIVE.
- 8. LONGITUDINAL GRADE SHALL MEET CURRENT STATE AND LOCAL ACCESSIBILITY STANDARDS. LONGITUDINAL SLOPES OF MORE THAN 8% ARE SUBJECT TO THE CITY ENGINEER APPROVAL.
- 9. CURB SHALL BE PER STANDARD DRAWING NO. 400 OR 403. PROVIDE EXPANSION JOINT EVERY 10-FT.
- 10. REMOVAL AND REPLACEMENT SHALL BE DONE TO THE NEAREST JOINT.

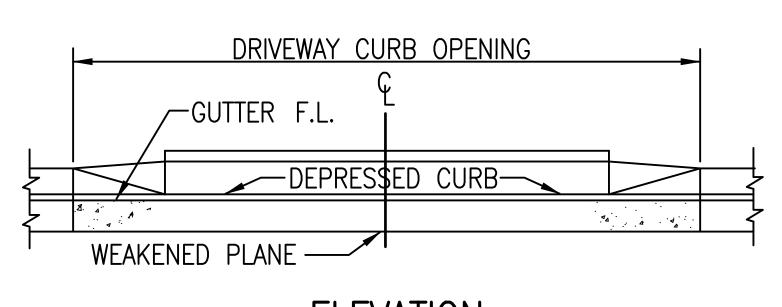


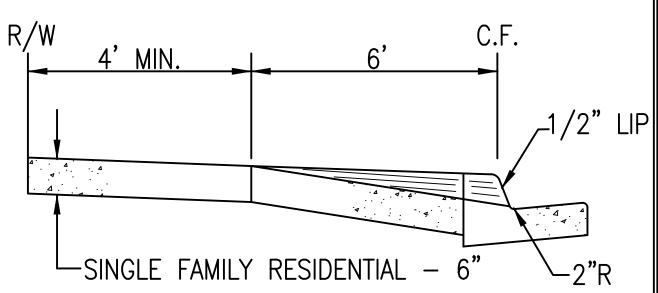


- 1. OMIT FENCE WITHIN SIGHT DISTANCE OF RESTRICTED USE AREAS.
- 2. TRAIL AND FENCE TO BE CONSTRUCTED PER LATEST DETAILS.
- 3. FOR TRAIL AND FENCE DETAILS, REFER TO THE COUNTY OF RIVERSIDE COMPREHENSIVE LANDSCAPE GUIDELINES AND STANDARDS.
- 4. DECOMPOSED GRANITE SHALL BE STABILIZED WITH CEMENT OR OTHER APPROVED METHOD.

				N. I.S.
CITY OF PALM DESERT	APPROVED BY:		DEPARTMENT OF PUBLIC WORKS	STD NO.
	MARTIN ALVAREZ PUBLIC WORKS DIRECTOR	DATE	DG MULTIPURPOSE TRAIL	302







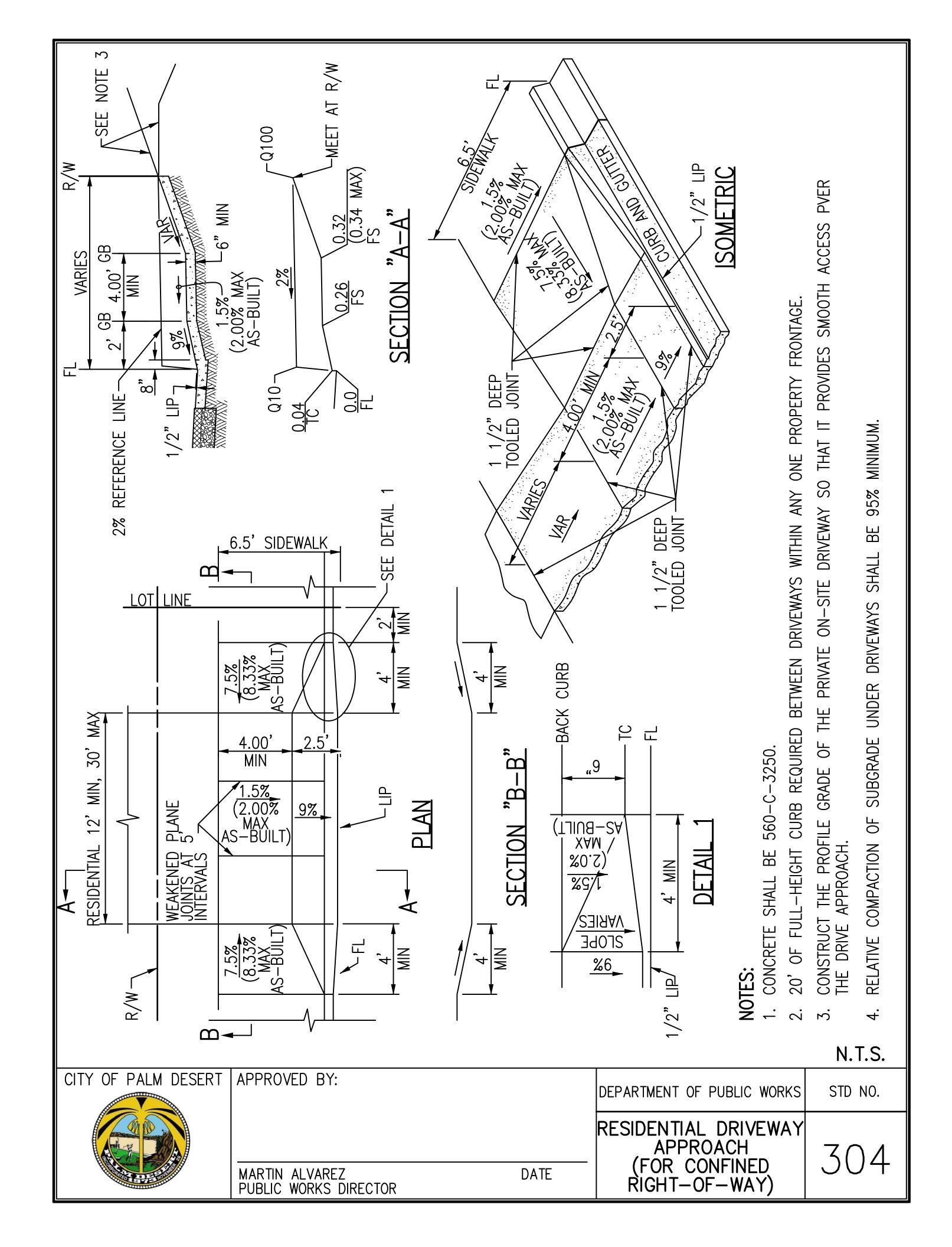
ELEVATION SECTION "A-A"

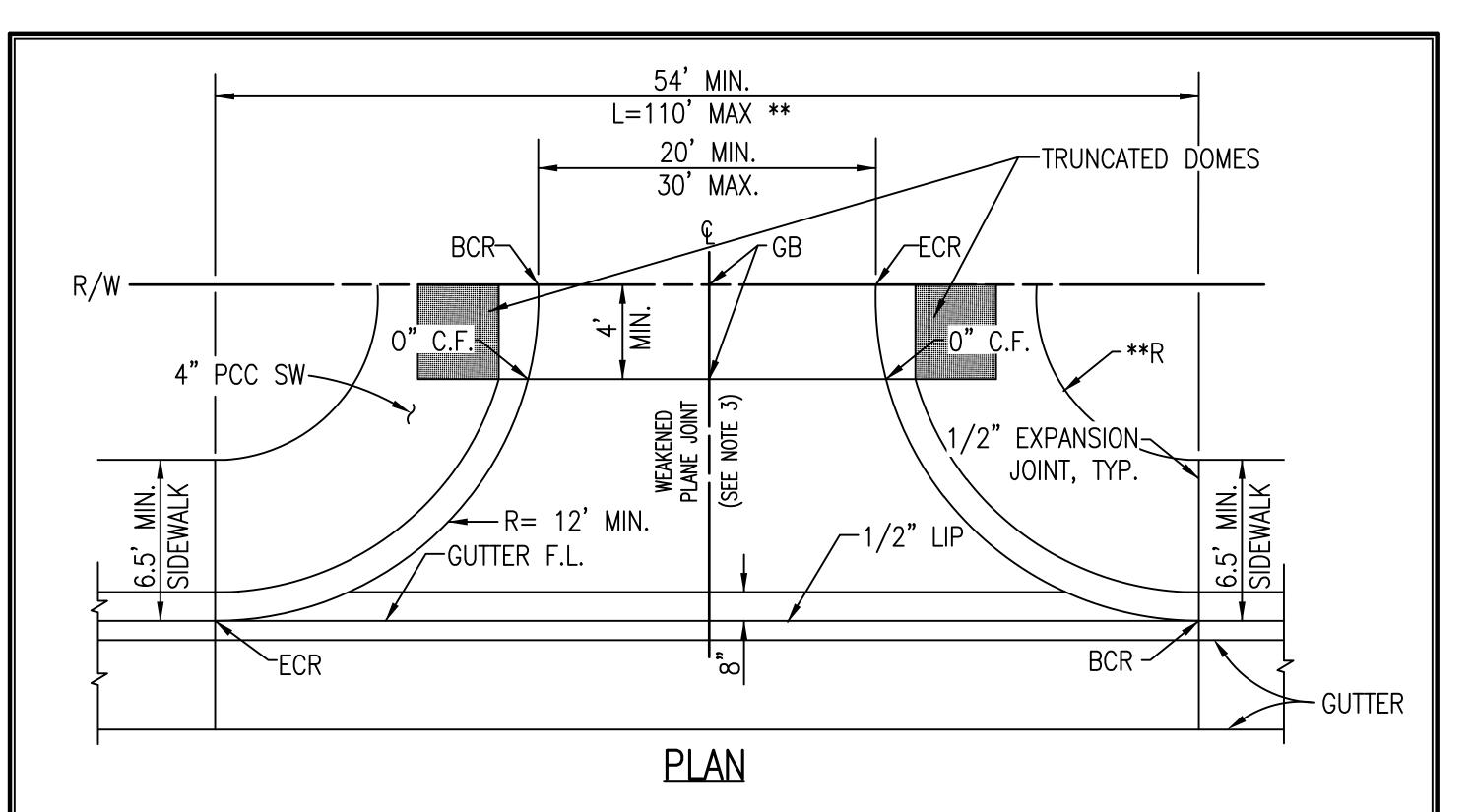
- 1. ALL CONCRETE SHALL BE 560-C-3250 WITH CURING COMPOUND.
- 2. WEAKENED PLANE JOINTS REQUIRED ON DRIVEWAY & FOR DRIVEWAYS 12' TO 20' WIDE, DRIVEWAYS WIDER THAN 20' SHALL HAVE TWO WEAKENED PLANE JOINTS EVENLY SPACED. (OR 10' MIN.)
- 3. GRADE TO CONTROL DRIVEWAY DESIGN (OVER DISTANCE) IN ORDER TO PROVIDE UNINTERRUPTED ADA PATH OF TRAVEL

PUBLIC WORKS DIRECTOR

V	6" C.F.	8" C.F.
^	3'	4'

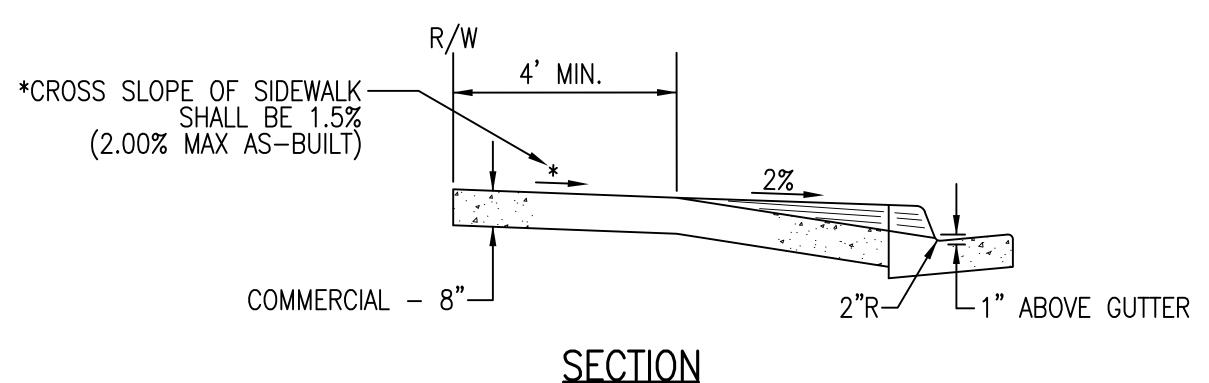
N.T.S. CITY OF PALM DESERT APPROVED BY: STD NO. DEPARTMENT OF PUBLIC WORKS RESIDENTIAL DRIVEWAY (FOR RIGHT-OF-WAY 303 WIDTH BEHIND CURB OF 10' OR MORE) DATE MARTIN ALVAREZ





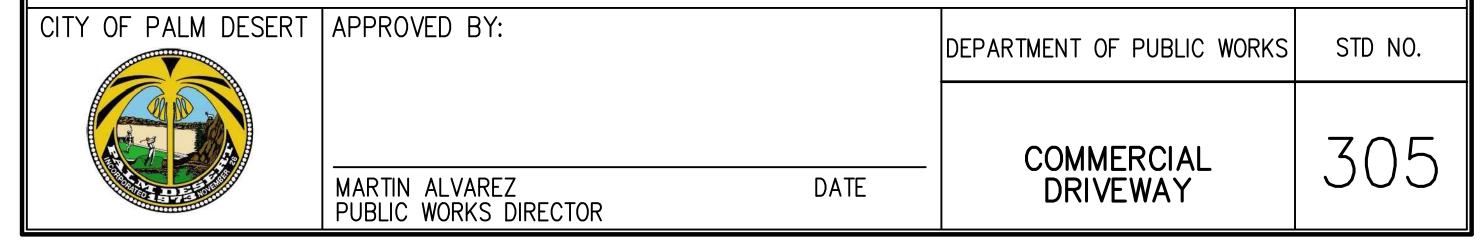
R=15' MIN TO 35' MAX

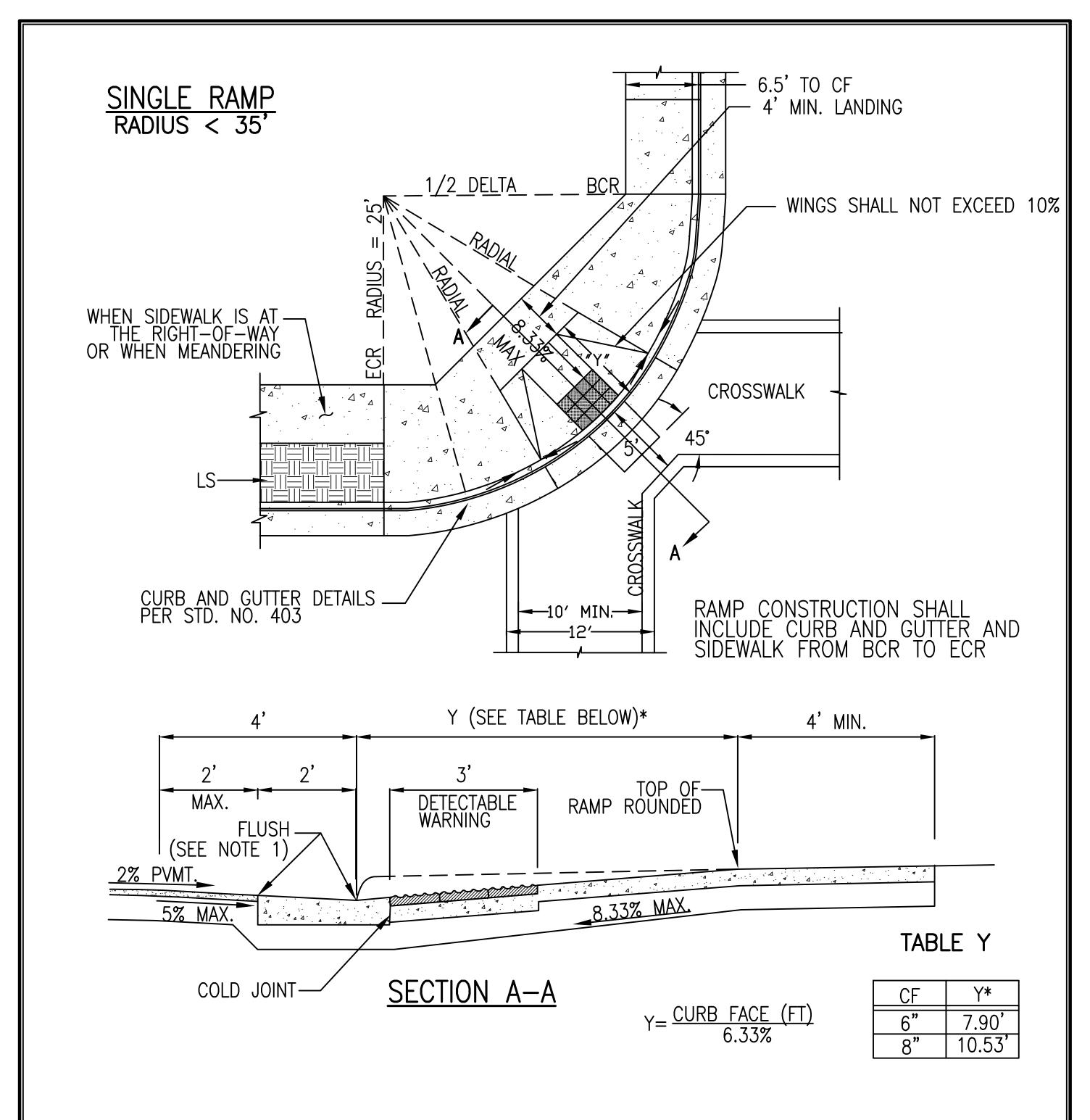
** SERVICE ENTRANCES ONLY; L=140' MAX, R=50' MAX



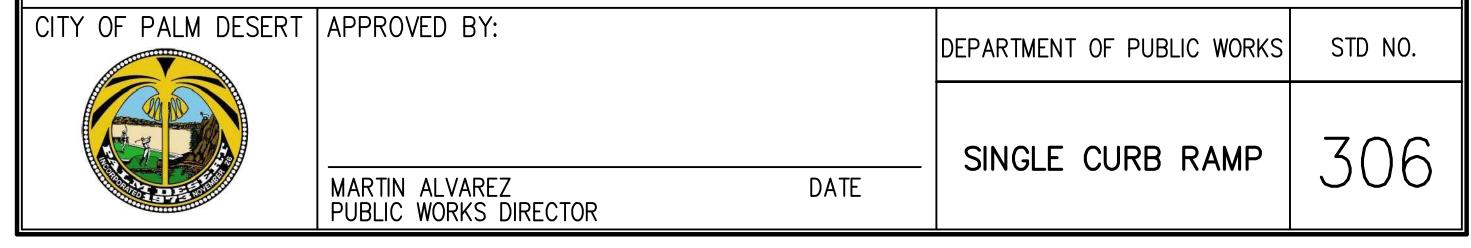
NOTES:

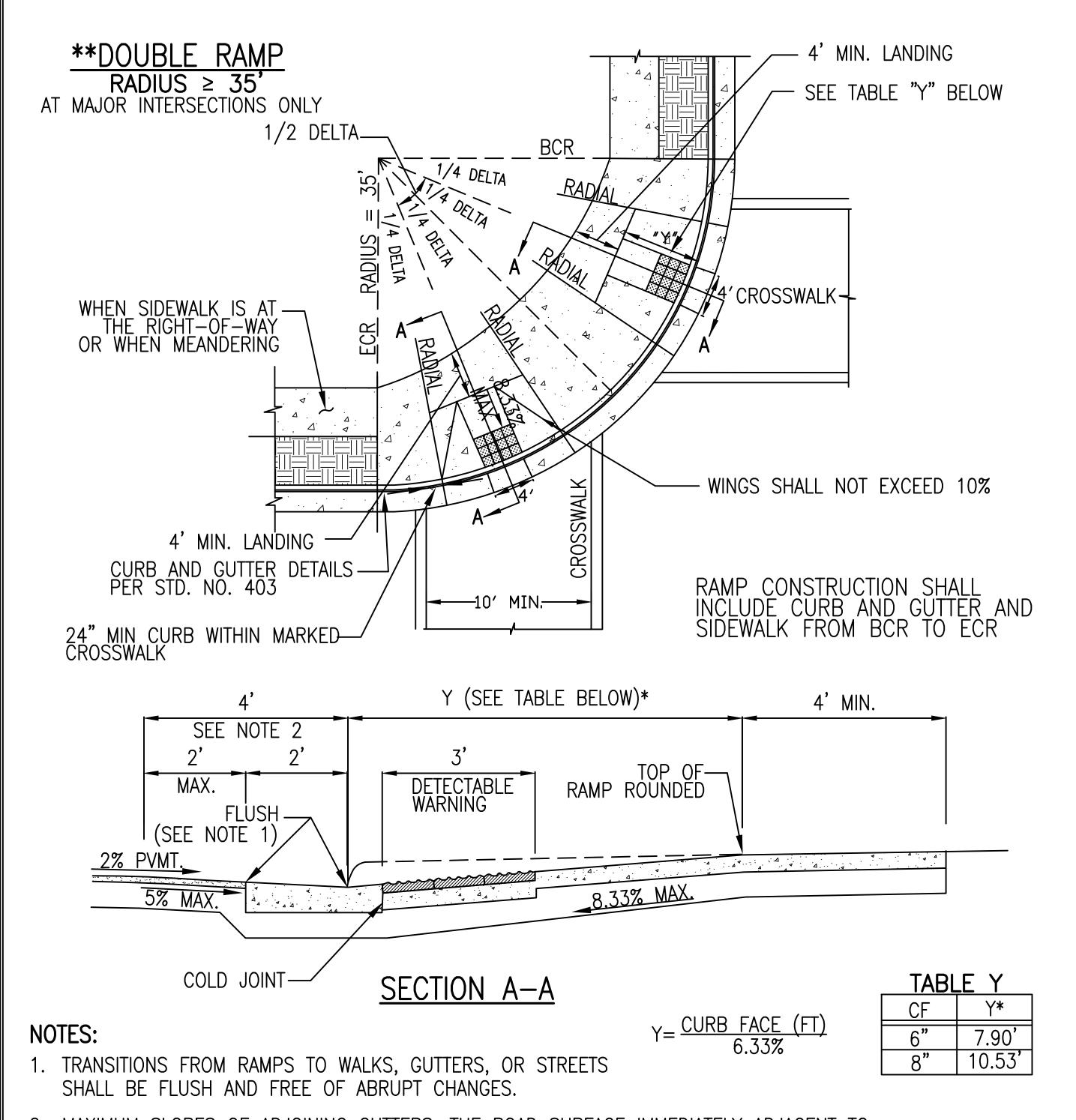
- 1. MINIMUM REQUIRED DISTANCE BETWEEN DRIVEWAYS IN COMMERCIAL ZONE PER CITY OF ENGINEER APPROVAL.
- 2. ALL CONCRETE SHALL BE 560-C-3250.
- 3. WEAKENED PLANE JOINTS REQUIRED ON DRIVEWAY © FOR DRIVEWAYS 12' TO 20' WIDE, DRIVEWAYS WIDER THAN 20' SHALL HAVE TWO WEAKENED PLANE JOINTS EVENLY SPACED. (MIN. 10' APART)
- 4. COMMERCIAL DRIVEWAYS PROPOSING/REQUIRING AN ENTRANCE MEDIAN: MEDIAN SHALL BE LOCATED BEHIND PROPERTY/RIGHT-OF-WAY LINE. DRIVEWAY DESIGN IS SUBJECT TO THE CITY ENGINEER APPROVAL.
- 5. TRUNCATED DOMES SHALL BE CAST-IN-PLACE, REPLACEABLE, FEDERAL YELLOW IN COLOR.





- 1. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
- 2. TRUNCATED DOMES SHALL BE CAST-IN-PLACE, REPLACEABLE, FEDERAL YELLOW IN COLOR.
 - ** 'Y' SHALL NOT EXCEED 10.53', UNLESS APPROVED BY THE CITY ENGINEER

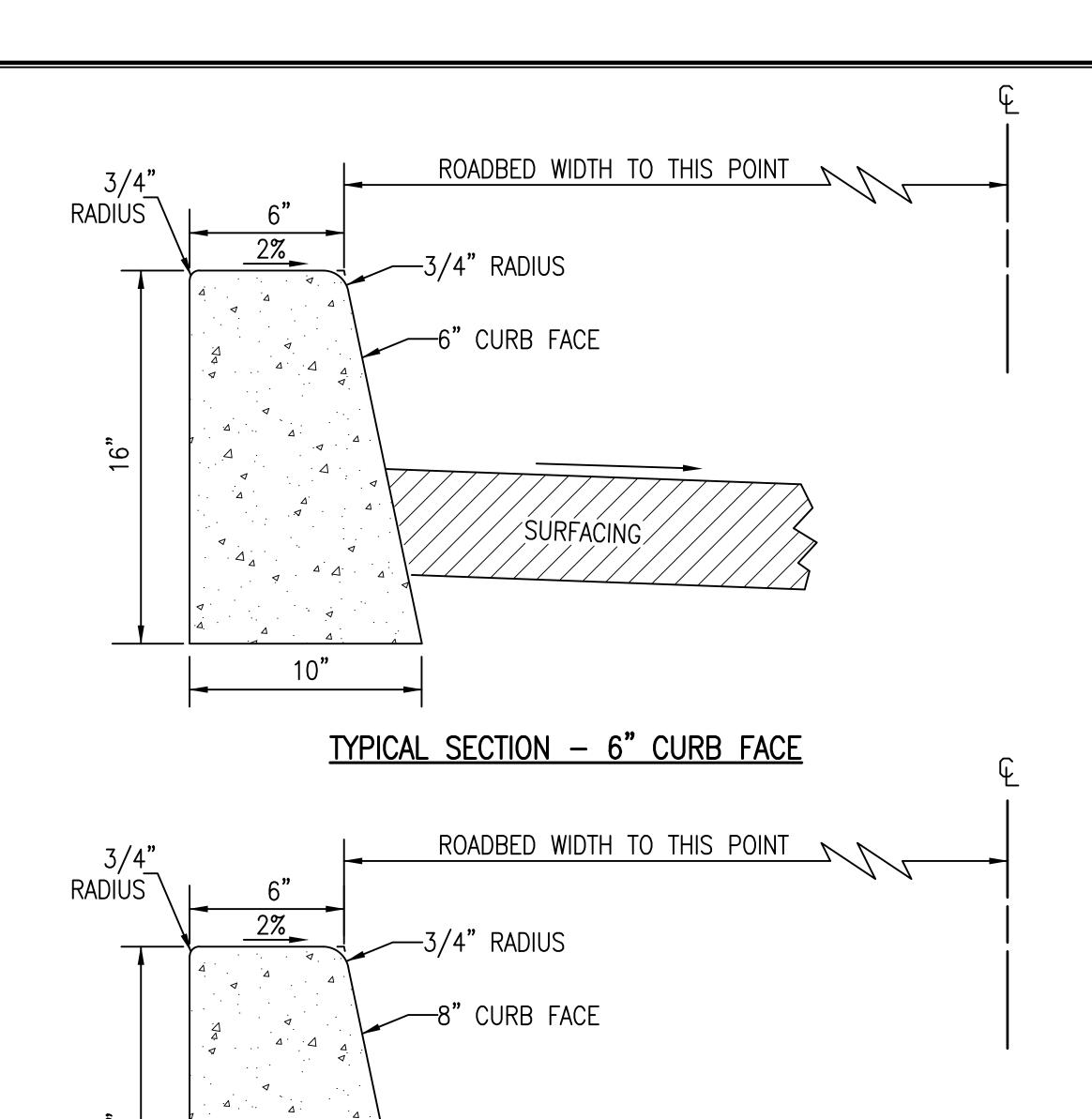




- 2. MAXIMUM SLOPES OF ADJOINING GUTTERS: THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP AND CONTINUOUS PASSAGE TO THE CURB RAMP SHALL NOT EXCEED 5% WITHIN 4 FEET OF THE BOTTOM OF THE CURB RAMP.
- 3. TRUNCATED DOMES SHALL BE CAST-IN-PLACE, REPLACEABLE, FEDERAL YELLOW IN COLOR.
 - * 'Y' SHALL NOT EXCEED 10.53', UNLESS APPROVED BY THE CITY ENGINEER

** ELIMINATE ONE RAMP IF NO FUTURE PATH OF TRAVEL EXISTS

CITY OF PALM DESERT	APPROVED BY:		DEPARTMENT OF PUBLIC WORKS	STD NO.
	MARTIN ALVAREZ	DATE	DUAL CURB RAMP	307
	PUBLIC WORKS DIRECTOR	DATE		



TYPICAL SECTION - 8" CURB FACE

ŚŲRĘĄĆIŃG)

NOTES:

1. ALL CONCRETE SHALL BE 560-C-3250 WITH CURING COMPOUND.

10"

- 2. CU. YD. = 30.41 L.F. 3. 0.888 CU. FT./LF. 8" CURB
- 4. WEAKENED PLANE JOINT EVERY 10' O.C.
- 5. EXPANSION PAPER REQUIRED EVERY 50', AT THE TOPS OF DRIVEWAY X's, AND AT ECR's & BCR's.
- 6. REMOVAL AND REPLACEMENT SHALL BE DONE TO THE NEAREST JOINT.

N.T.S.

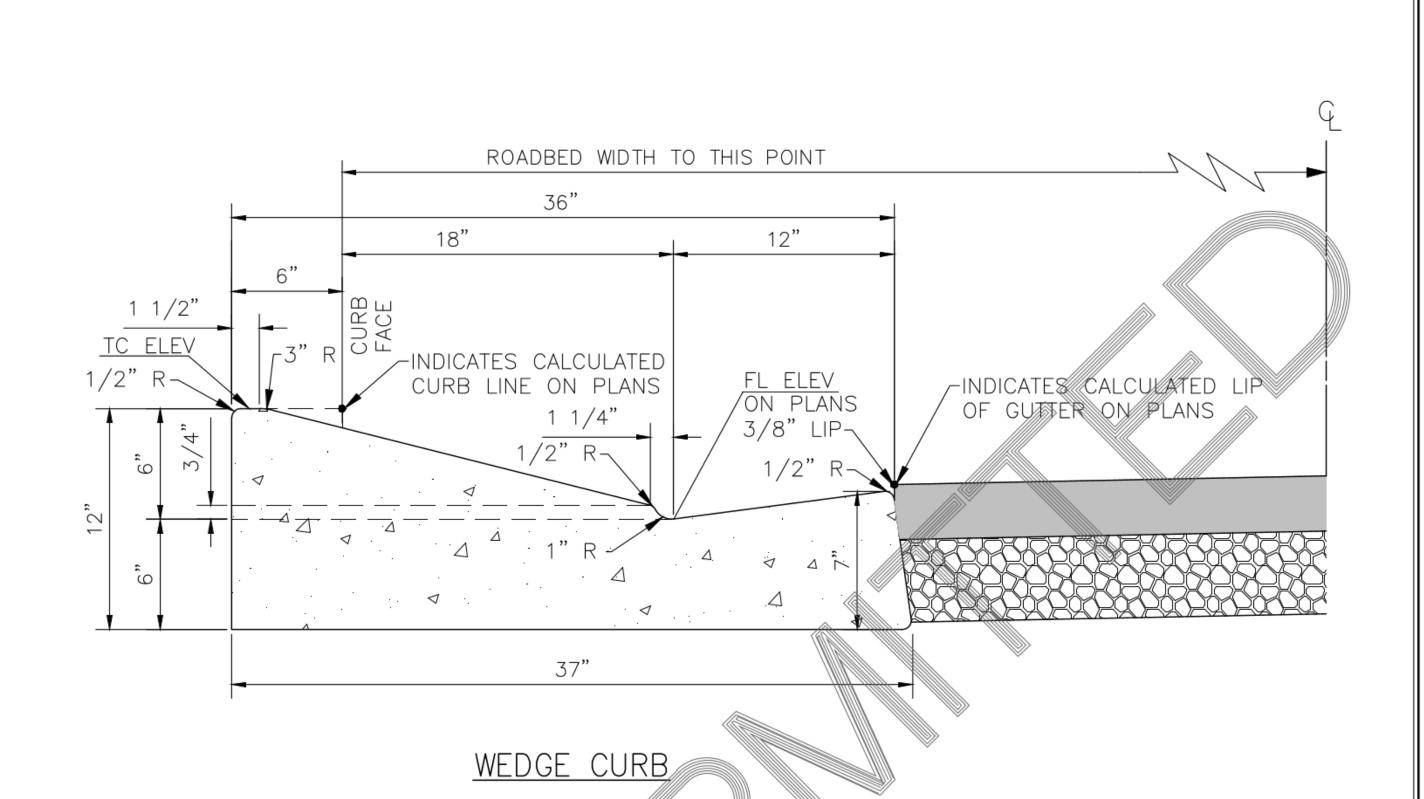
CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

CURB ONLY

APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.



- 1. ALL CONCRETE SHALL BE 560-C-3250 WITH CURING COMPOUND
- 2. CU. XXX. = 16.21 L.F.
- 3. RELATIVE COMPACTION OF SUBGRADE UNDER CURB AND GUTTER SHALL BE 95% MIN.
- 4 WEAKEND PLANE JOINT EVERY 10' O.C.
- 5. EXPANSION PAPER REQUIRED EVERY 50', AND AT ECR'S AND BCR'S.

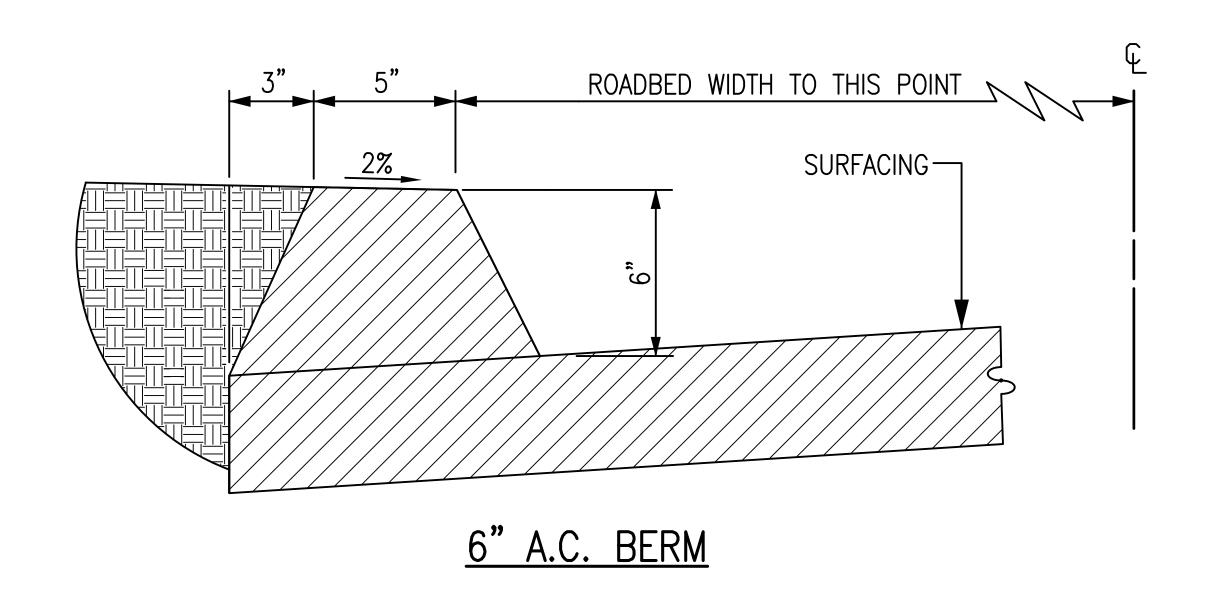
CITY OF PALM DESERT APPROVED BY:

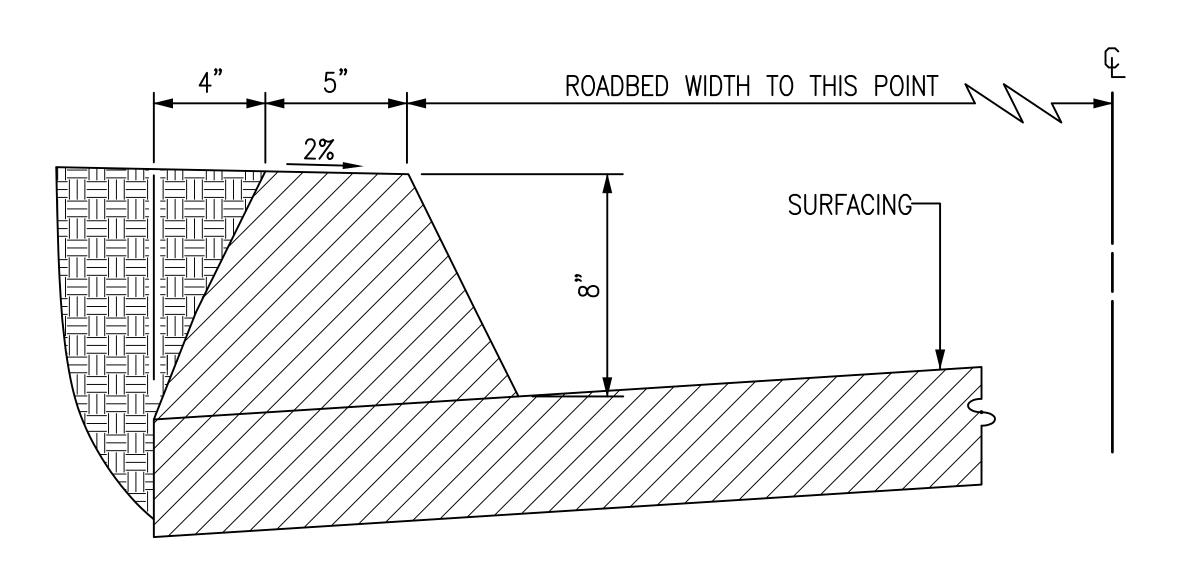
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

N.T.S.

DEPARTMENT OF PUBLIC WORKS STD NO.

WEDGE CURB 401





8" A.C. BERM

1. A.C. BERM REQUIRED WHERE FILL SLOPES ARE STEEPER THAN 4:1, MATERIAL IS SUSCEPTIBLE TO EROSION, OR WHERE ROADWAY GRADIENT EXCEEDS 3%.

CITY OF PALM DESERT APPROVED BY:

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

DATE

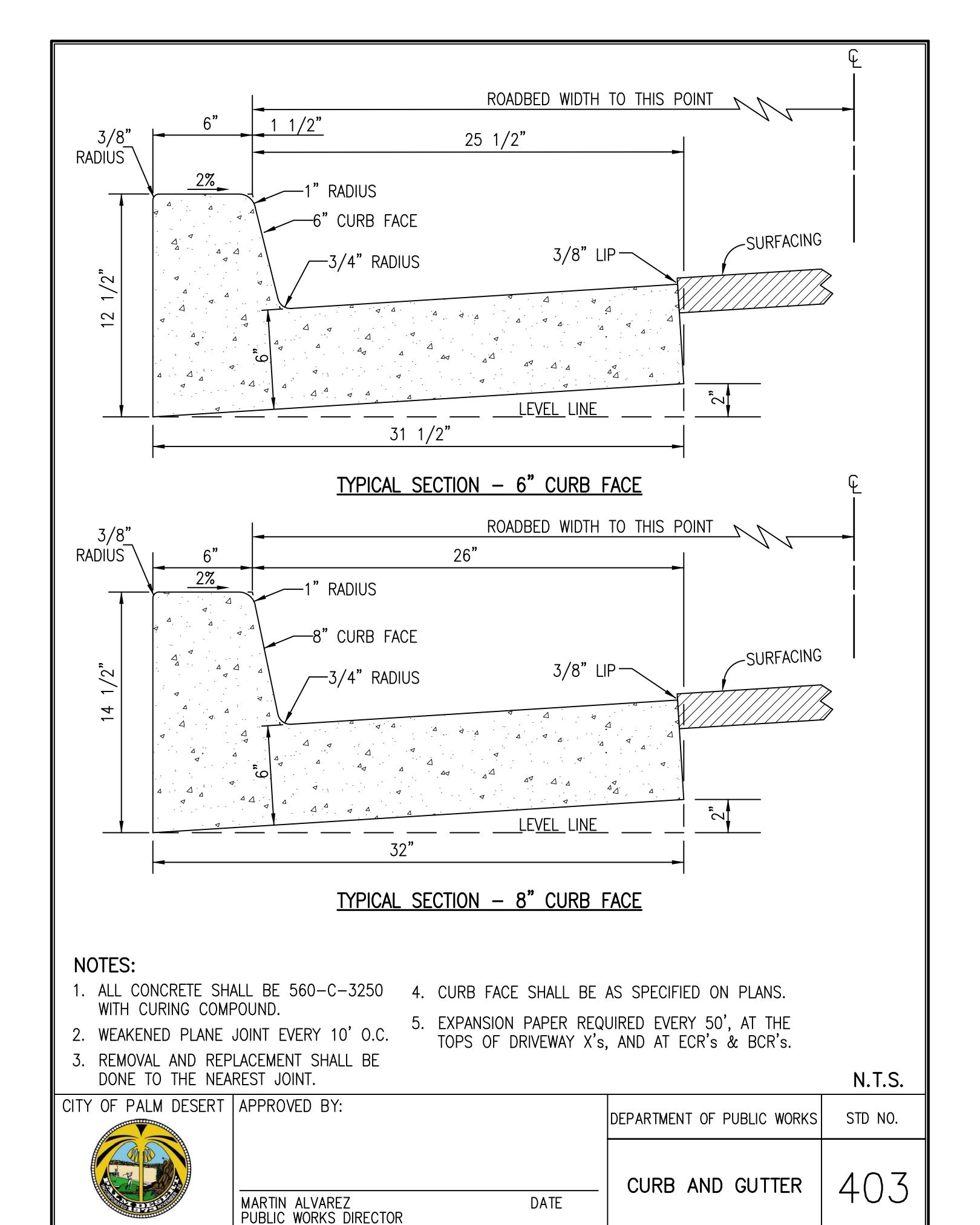
DATE

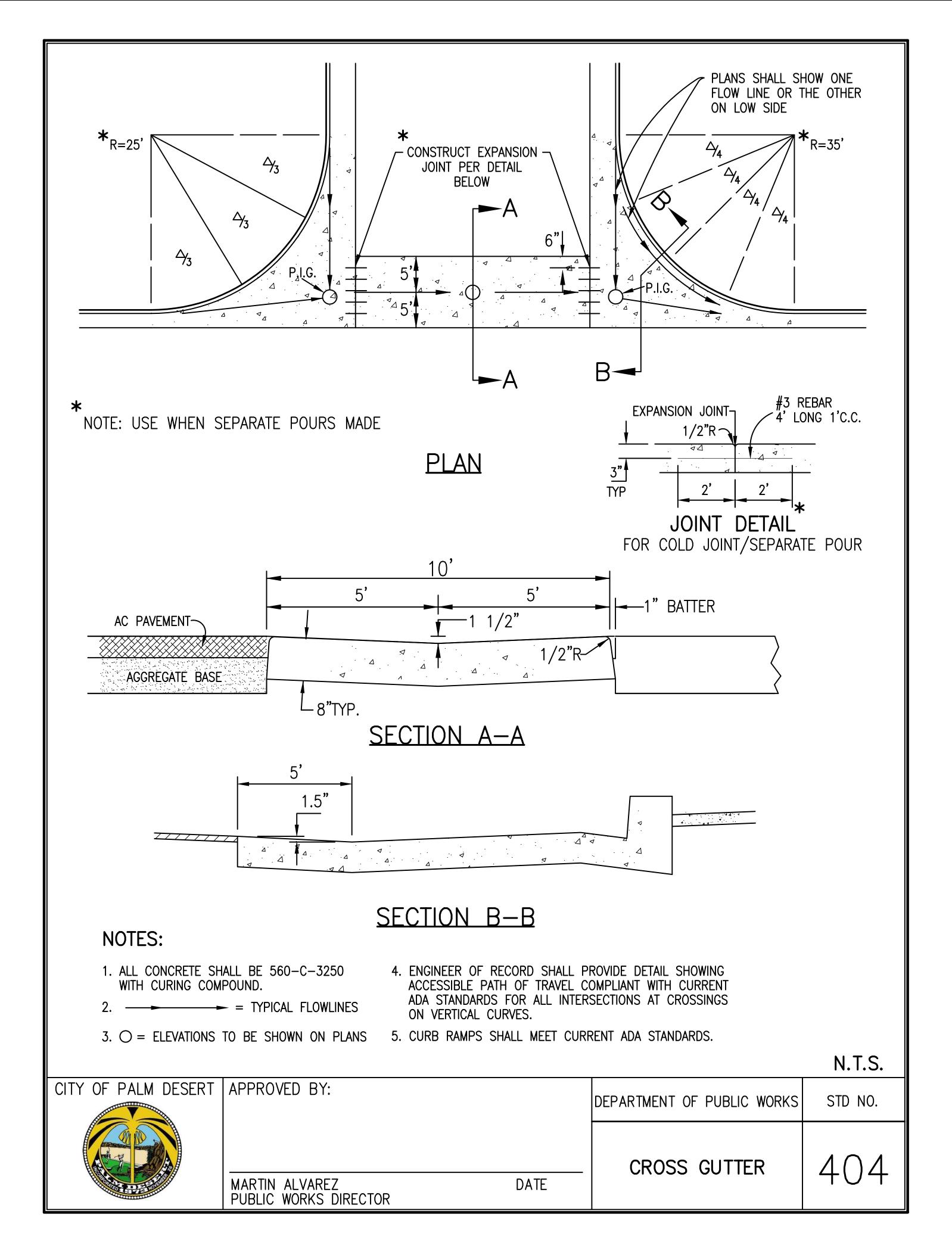
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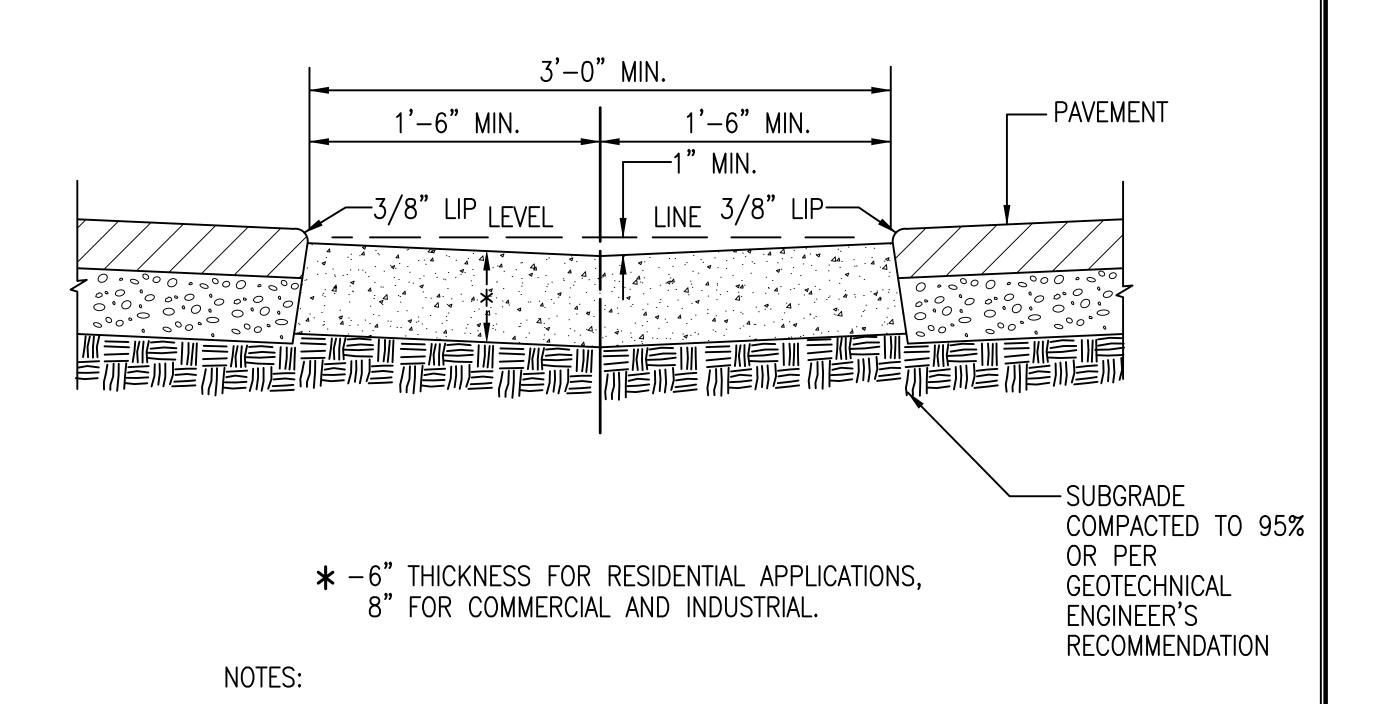
DEPARTMENT OF PUBLIC WORKS STD NO.

ASPHALT CONCRETE BERM

402







1. ALL CONCRETE SHALL BE 560-C-3250 WITH CURING COMPOUND.

DATE

N.T.S.

STD NO.

DEPARTMENT OF PUBLIC WORKS

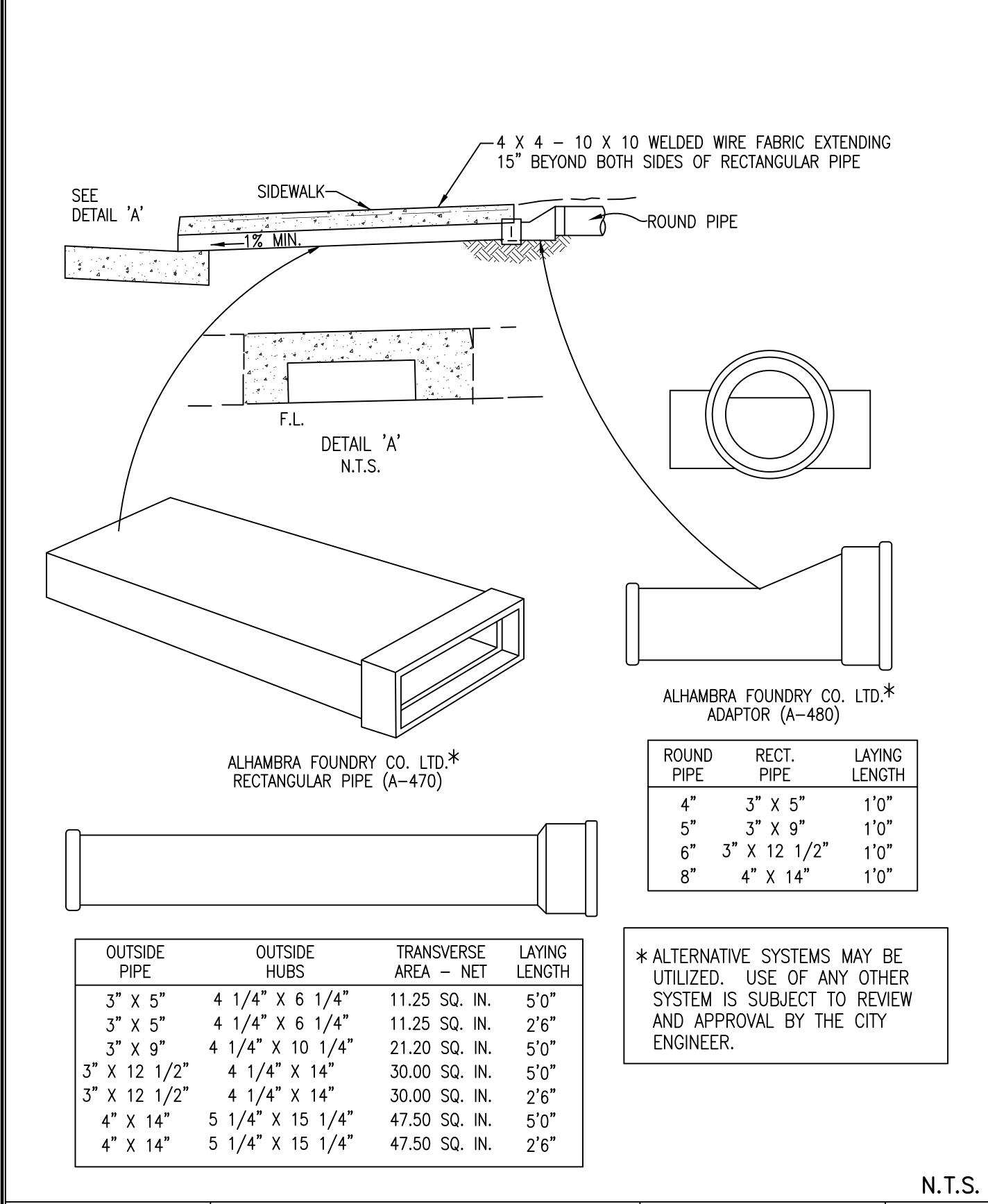
VALLEY GUTTER

2. WEAKENED PLANE JOINTS EVERY 10' O.C.

3. EXPANSION PAPER REQUIRED EVERY 50'.

CITY OF PALM DESERT APPROVED BY:

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR



CITY OF PALM DESERT APPROVED BY:

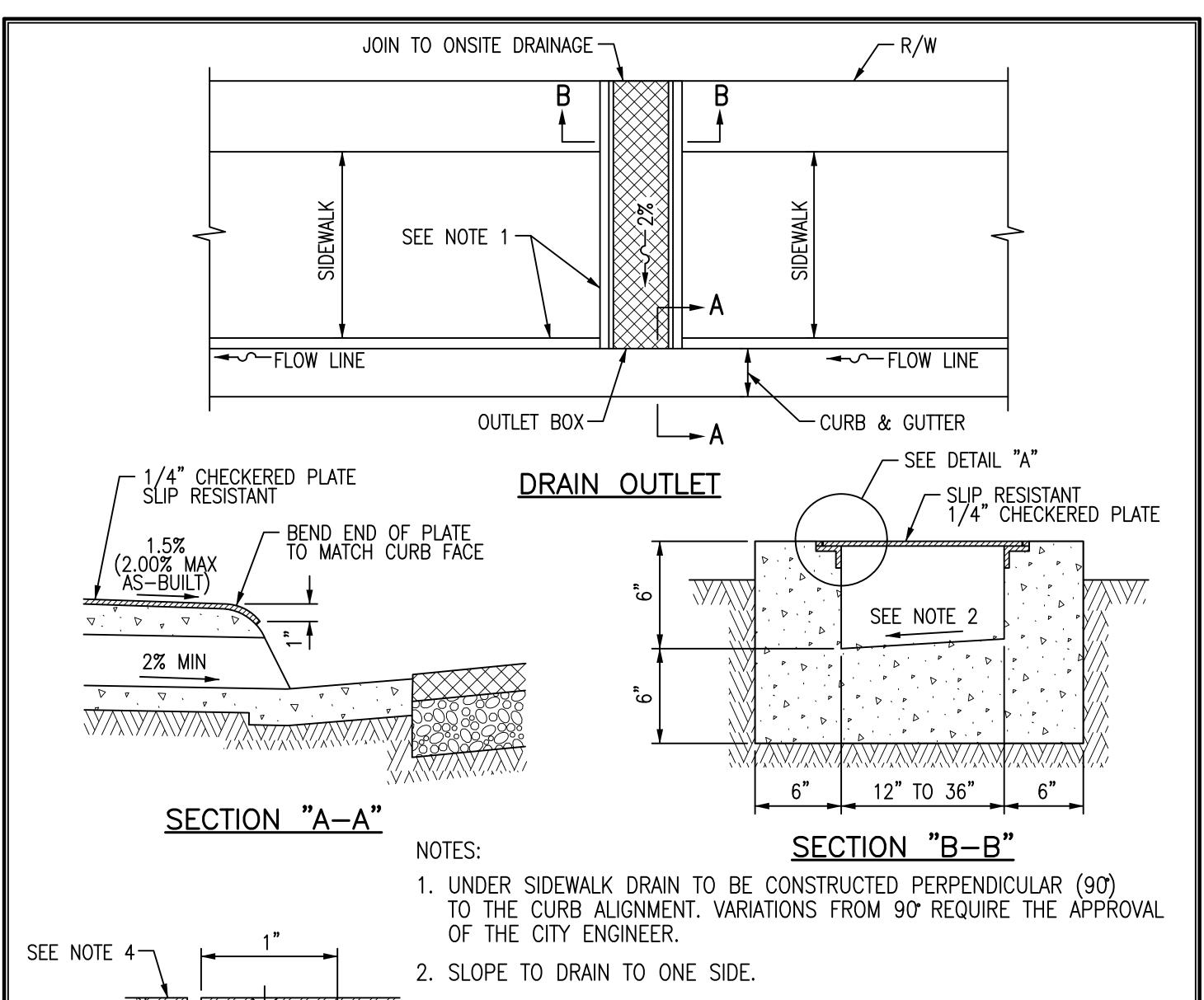
DEPARTMENT OF PUBLIC WORKS STD NO.

WARTIN ALVAREZ
DATE

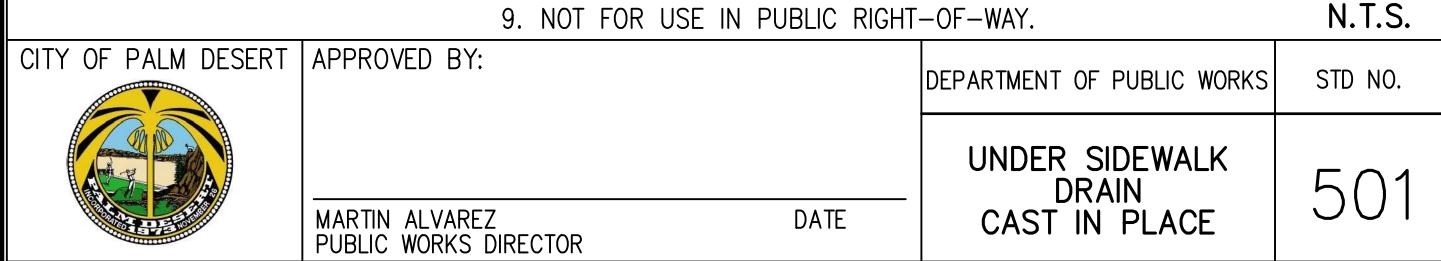
DATE

DEPARTMENT OF PUBLIC WORKS STD NO.

PUBLIC WORKS DIRECTOR



- 3. ALL EXPOSED METAL PARTS TO BE HOT-DIP GALVANIZED AFTER FABRICATION.
- 4. 1 1/2" X 1 1/2" X 1/4" "L" FRAME WITH 3/8" X 1/4" STEEL STRIP WELDED TO FRAME.
- 5. CHECKERED PLATE SHALL BE SLIP RESISTANT HOT-DIP GALVANIZED STEEL MAXIMUM WIDTH 36".
- 6. FASTEN WITH 1/4" COARSE-THREAD COUNTERSINK STAINLESS STEEL SCREWS AT 12" OC.
- 7. WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, USE A MODIFIED CONCRETE MIX AND PLACE 6" MIN CLASS 2 AGGREGATE BASE AND 6 MIL. PLASTIC SHEETING UNDER AND AROUND ALL SIDES OF CONCRETE IMPROVEMENTS. FOR EXPANSIVE SOIL, PLACE 6" MIN CLASS 2 AGGREGATE BASE UNDER CONCRETE IMPROVEMENTS AS DIRECTED BY THE ENGINEER.
- 8. CONCRETE MINIMUM CEMENTITIOUS MATERIAL CONTENT =505LB/CU YD.

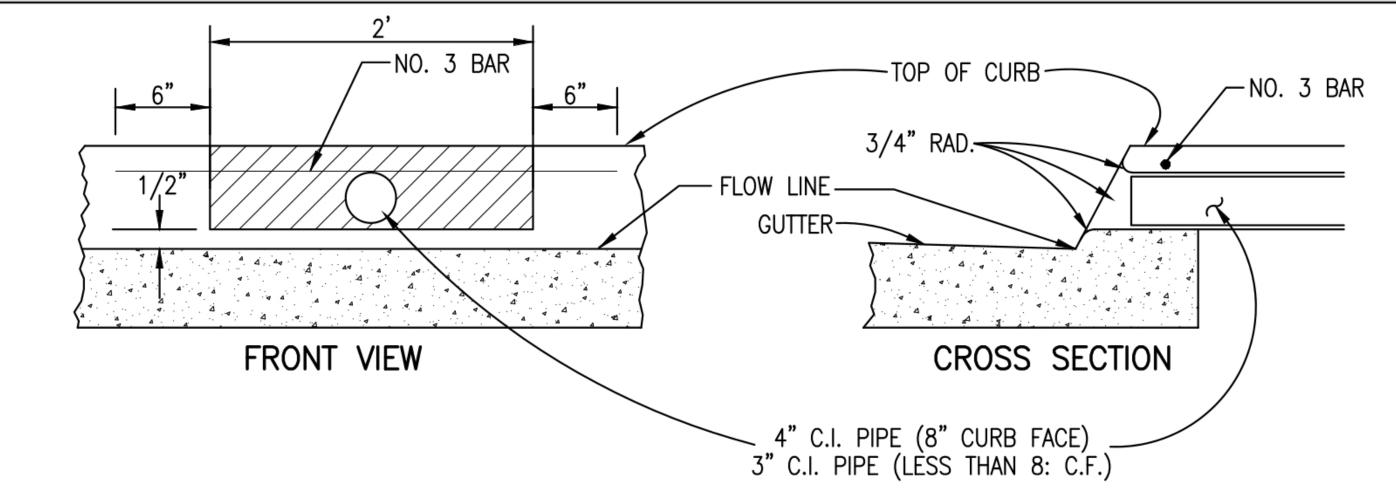


SEE NOTE 6-

3" STUD

ANCHOR @ 14" OC

DETAIL "A"



NOTE 1: SAWCUT AND REMOVE CROSS HATCHED PORTION OF CURB SECTION.

NOTE 2: CLASS 560-C-3250 CONCRETE SHALL BE USED TO RECONSTRUCT THE CURB SECTION.

NOTE 3: WHEN CURB FACE ELEVATION IS LESS THAN 8" HIGH, THE FLOW LINE OF THE PIPE SHALL BE AT LEAST 1/2" ABOVE THE ELEVATION OF THE FLOW LINE OF THE GUTTER, AND THE PIPE SHOULD BE 3" IN DIAMETER.

NOTE 4: A MINIMUM SEPARATION OF TEN FEET (10') IS REQUIRED BETWEEN ADJACENT DRAINS ON THE SAME PROPERTY.

NOTE 5: WHEN GREATER CAPACITY IS REQUIRED, CITY OF PALM DESERT STANDARD 500 SHALL BE CONSTRUCTED.

NOTE 6: DOWEL REBAR 6" INTO ADJACENT CONCRETE. REBAR SHALL OVERLAP 12", SIDE-BY-SIDE.

NOTE 7: IF CURB DRAIN IS INSTALLED UNDER SIDEWALK, THE ENTIRE SIDEWALK PANEL MUST BE REMOVED AND REPLACED.

CASE A - SAW CUT OPTION

CORE DRILLING IN LIEU OF SAW CUT OPTION IS PERMITTED PROVIDED:

- (1) INVERT ELEVATION OF THE CORE SHALL BE AT LEAST 1/2" ABOVE THE FLOW LINE ELEVATION.
- (2) CORE DIAMETER SHALL NOT EXCEED 50% OF THE CURB FACE DIMENSION.
- (3) A MINIMUM SEPARATION OF TEN FEET (10') IS REQUIRED BETWEEN ADJACENT DRAINS ON THE SAME PROPERTY.
- (4) WHEN GREATER CAPACITY IS REQUIRED, CITY OF PALM DESERT STANDARD NUMBER 200 SHALL BE CONSTRUCTED.
- (5) THERE SHALL BE A MINIMUM OF 2" OF CONCRETE OVER THE TOP OF THE PIPE.

CASE B - CORE DRILL OPTION

CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

CURB DRAIN

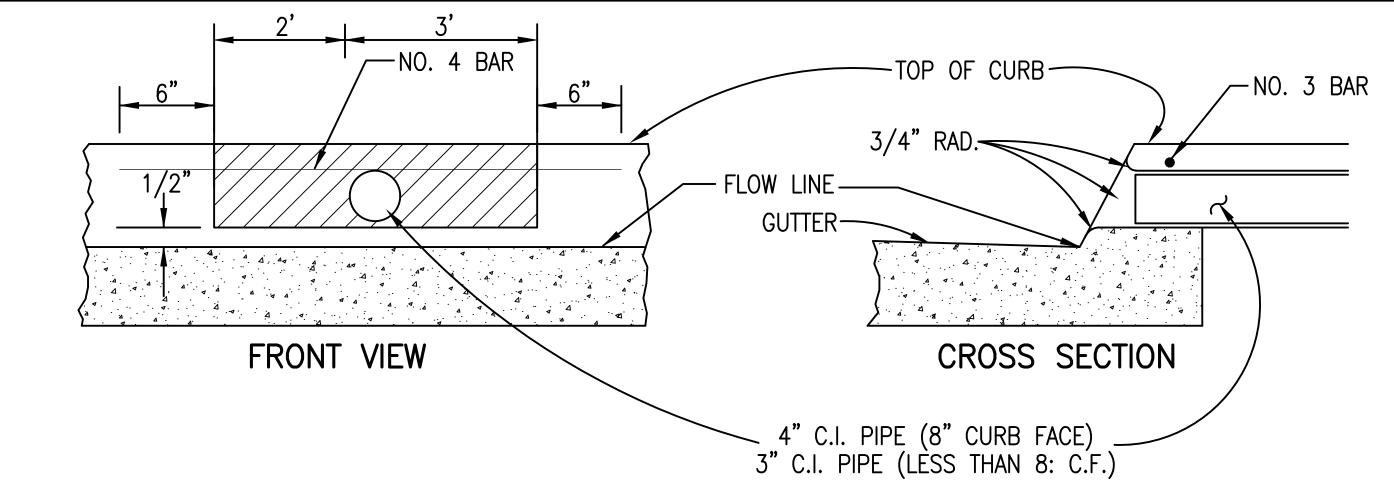
N.T.S.

502

CASE A &

CASE B

MARTIN ALVAREZ
PUBLIC WORKS DIRECTOR



NOTE 1: SAWCUT AND REMOVE CROSS HATCHED PORTION OF CURB SECTION.

NOTE 2: CLASS 560-C-3250 CONCRETE SHALL BE USED TO RECONSTRUCT THE CURB SECTION.

NOTE 3: WHEN CURB FACE ELEVATION IS LESS THAN 8" HIGH, THE FLOW LINE OF THE PIPE SHALL BE AT LEAST 1/2" ABOVE THE ELEVATION OF THE FLOW LINE OF THE GUTTER, AND THE PIPE SHOULD BE 3" IN DIAMETER.

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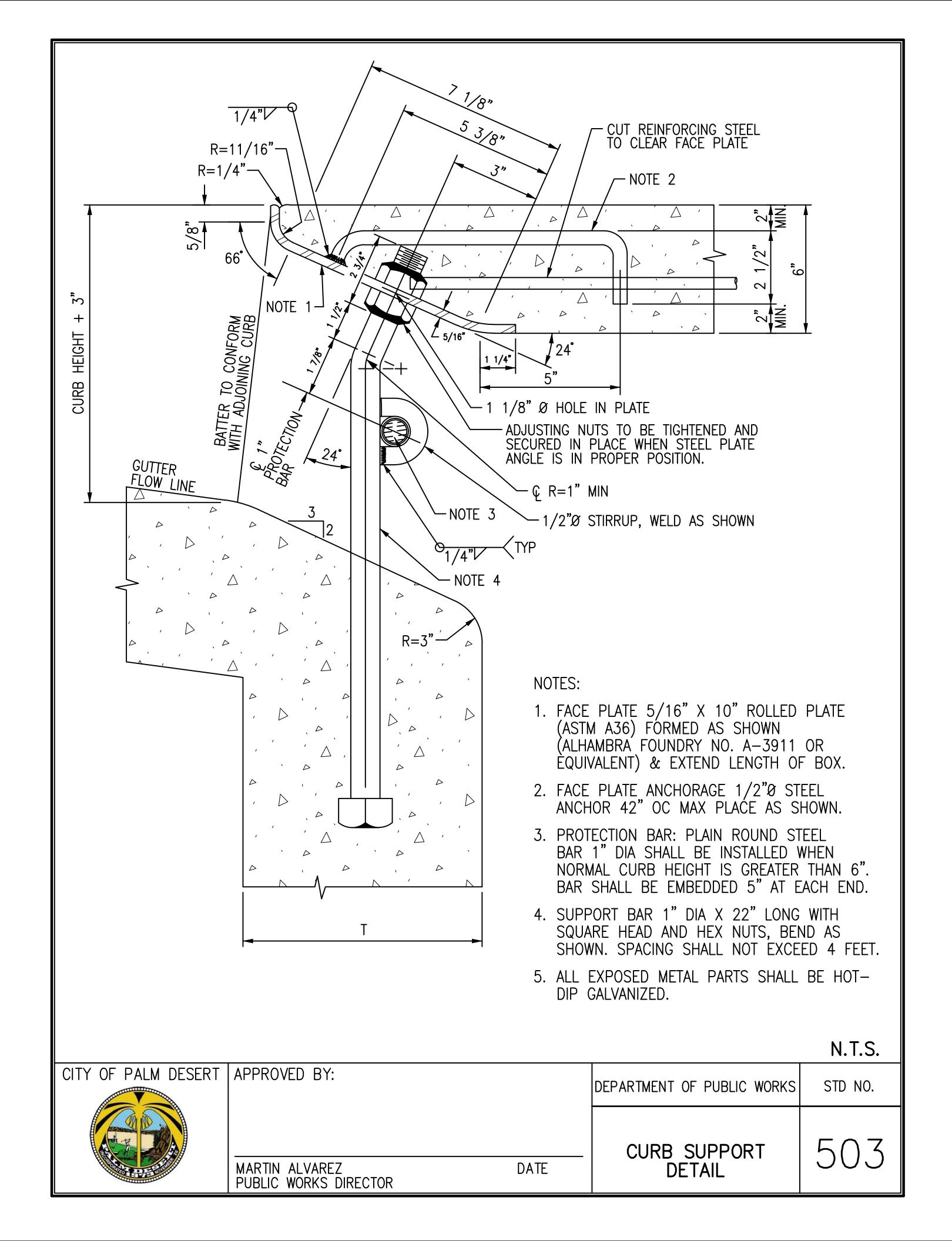
CASE B - CORE DRILL OPTION

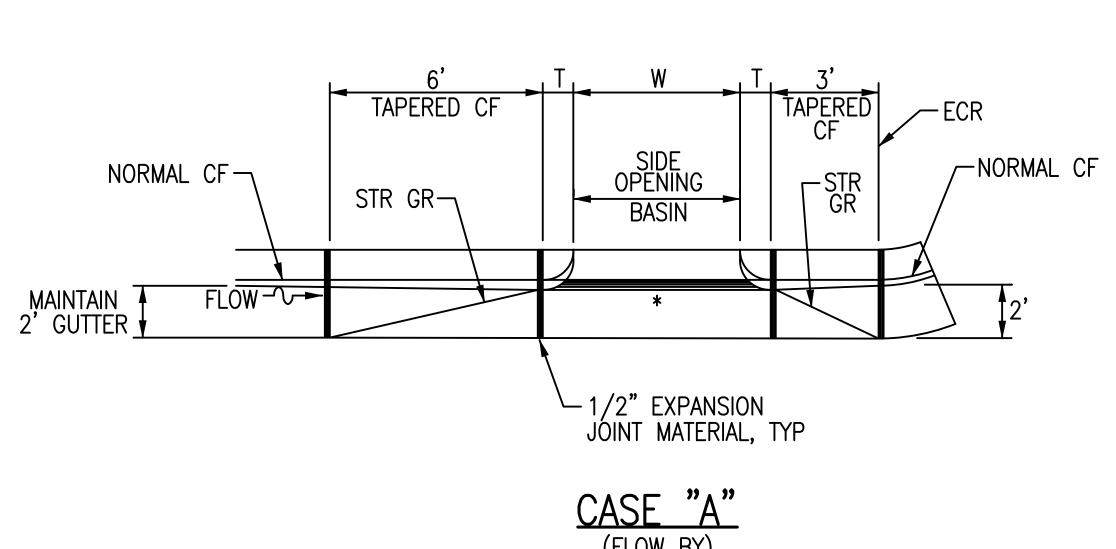
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CITY OF PALM DESERT APPROVED BY:

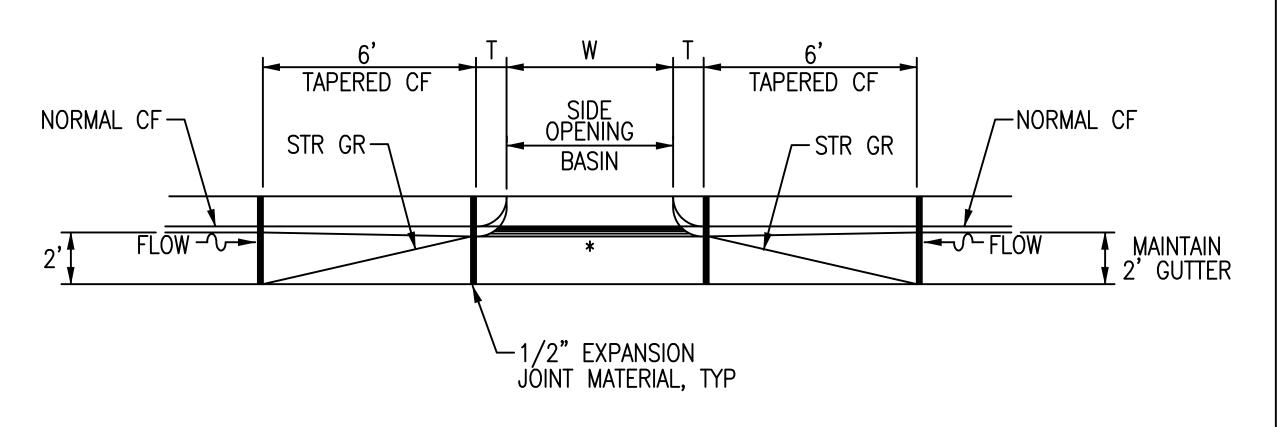
DEPARTMENT OF PUBLIC WORKS STD NO.

CURB DRAIN CASE A & CASE B STD NO.





CASE "A" (FLOW BY)

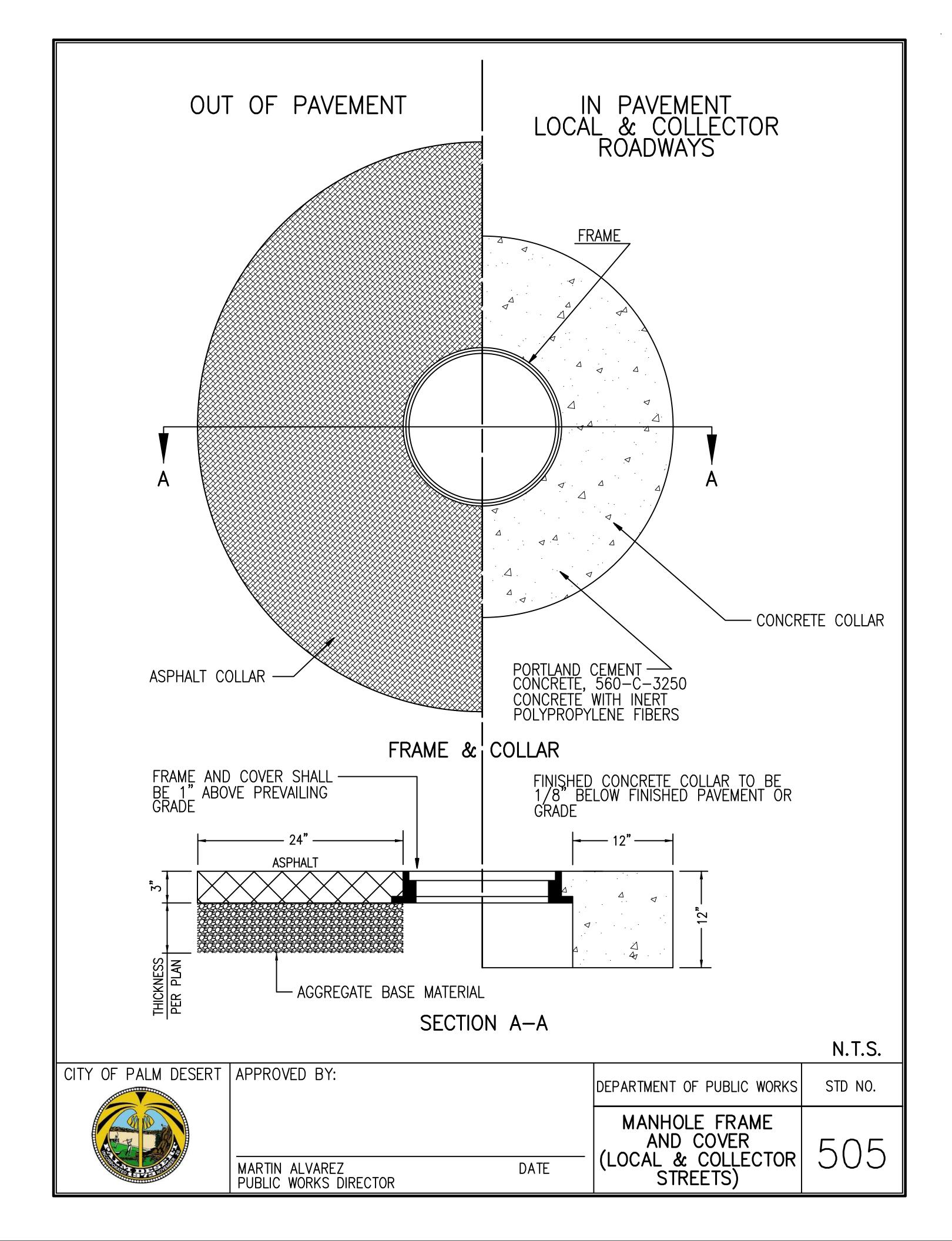


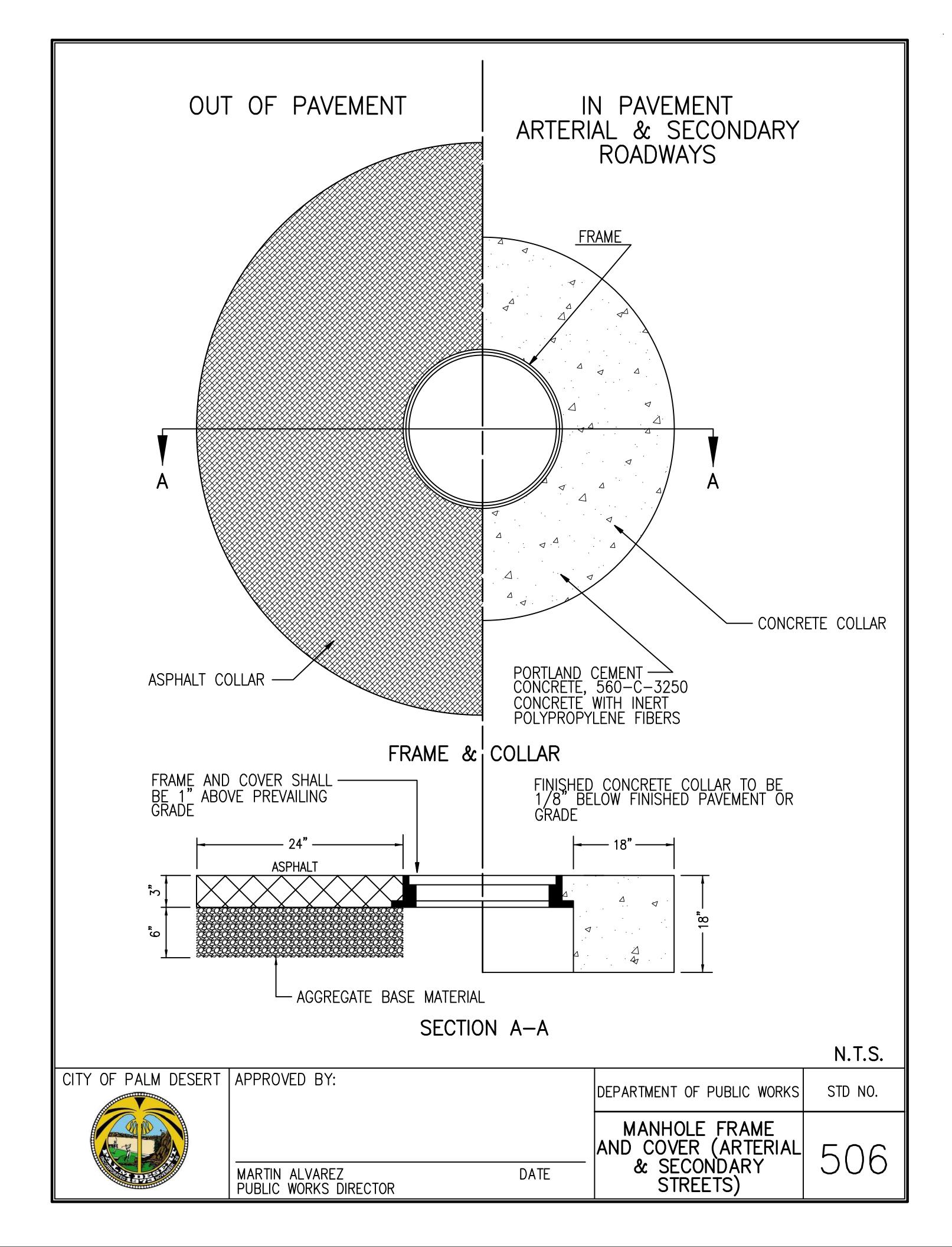
CASE "B" (SUMP)

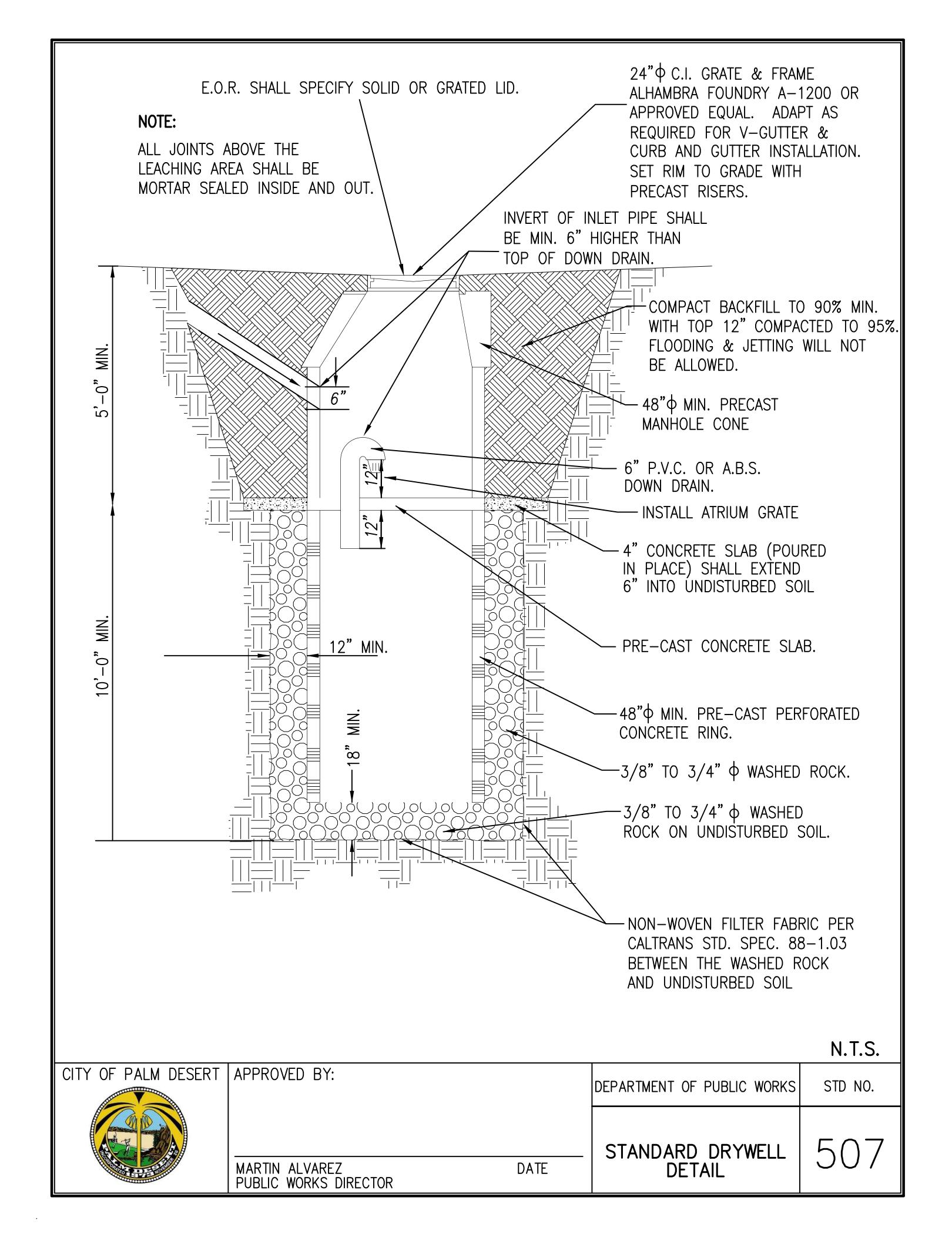
* CATCH BASIN OPENING = NORMAL CURB HEIGHT + 3 INCHES UNLESS OTHERWISE SPECIFIED.

N.T.S.

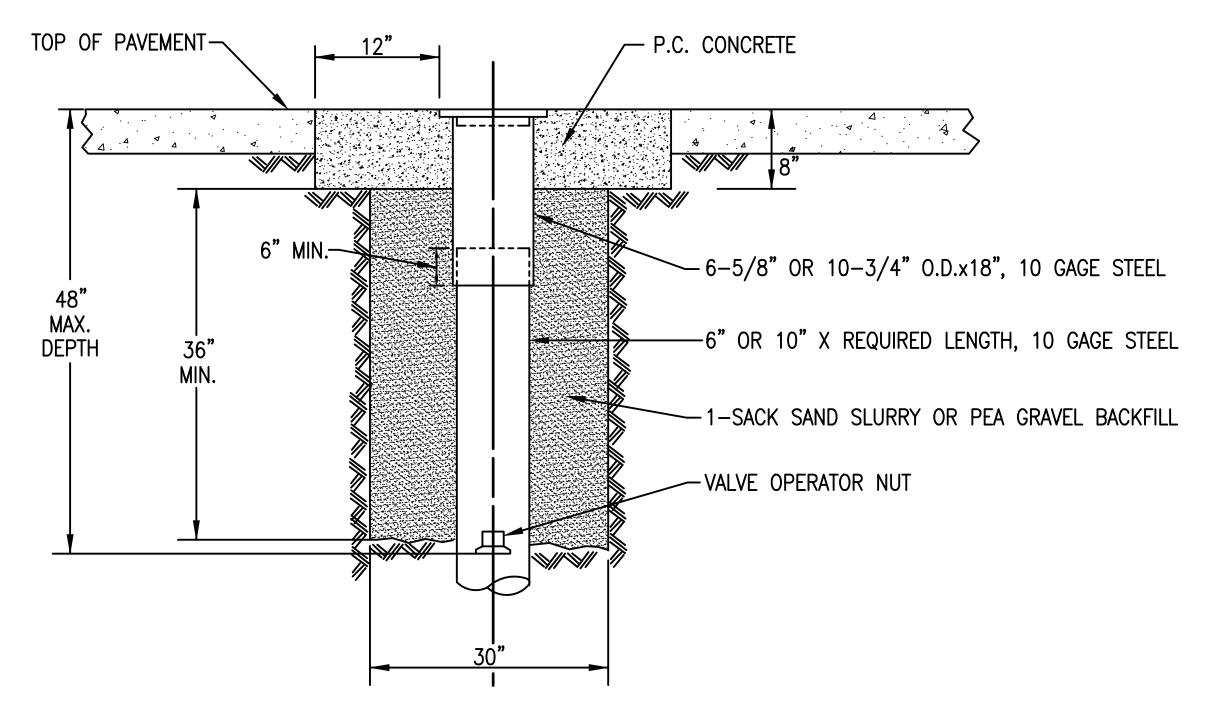
CITY OF PALM DESERT APPROVED BY: STD NO. DEPARTMENT OF PUBLIC WORKS GUTTER DEPRESSION FOR CURB OPENING CATCH BASINS MARTIN ALVAREZ PUBLIC WORKS DIRECTOR DATE



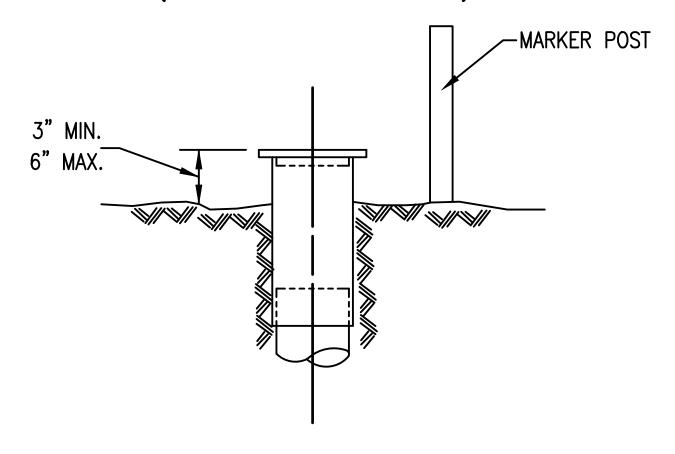




TYPICAL INSTALLATION (STREET OR ALLEY)



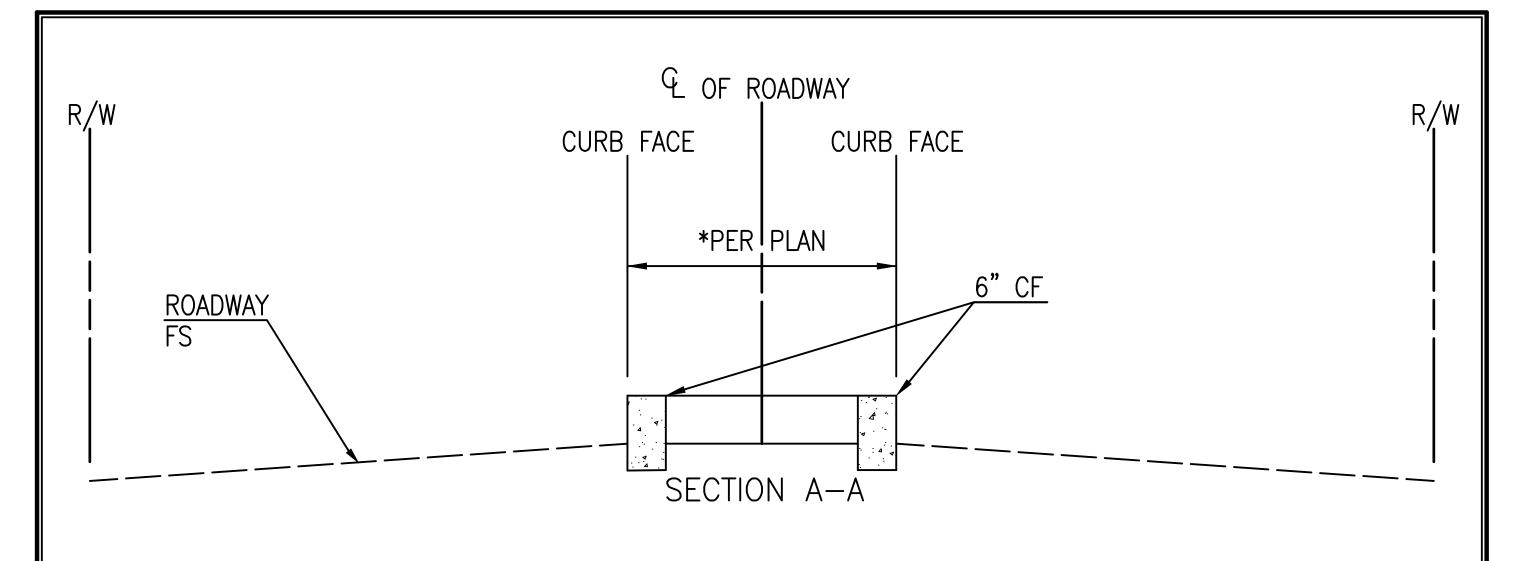
TYPICAL INSTALLATION (UNTRAVELED AREAS)

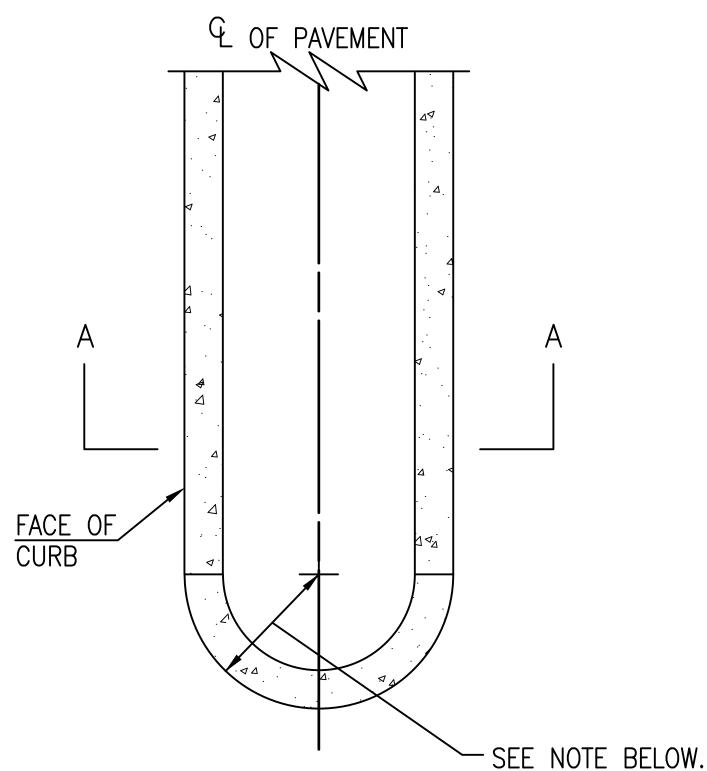


NOTES:

- 1. ALL CONCRETE SHALL BE 560-C-3250
- 2. CONCRETE SURFACE SHALL RECEIVE HEAVY BROOM FINISH.

N.T.S.

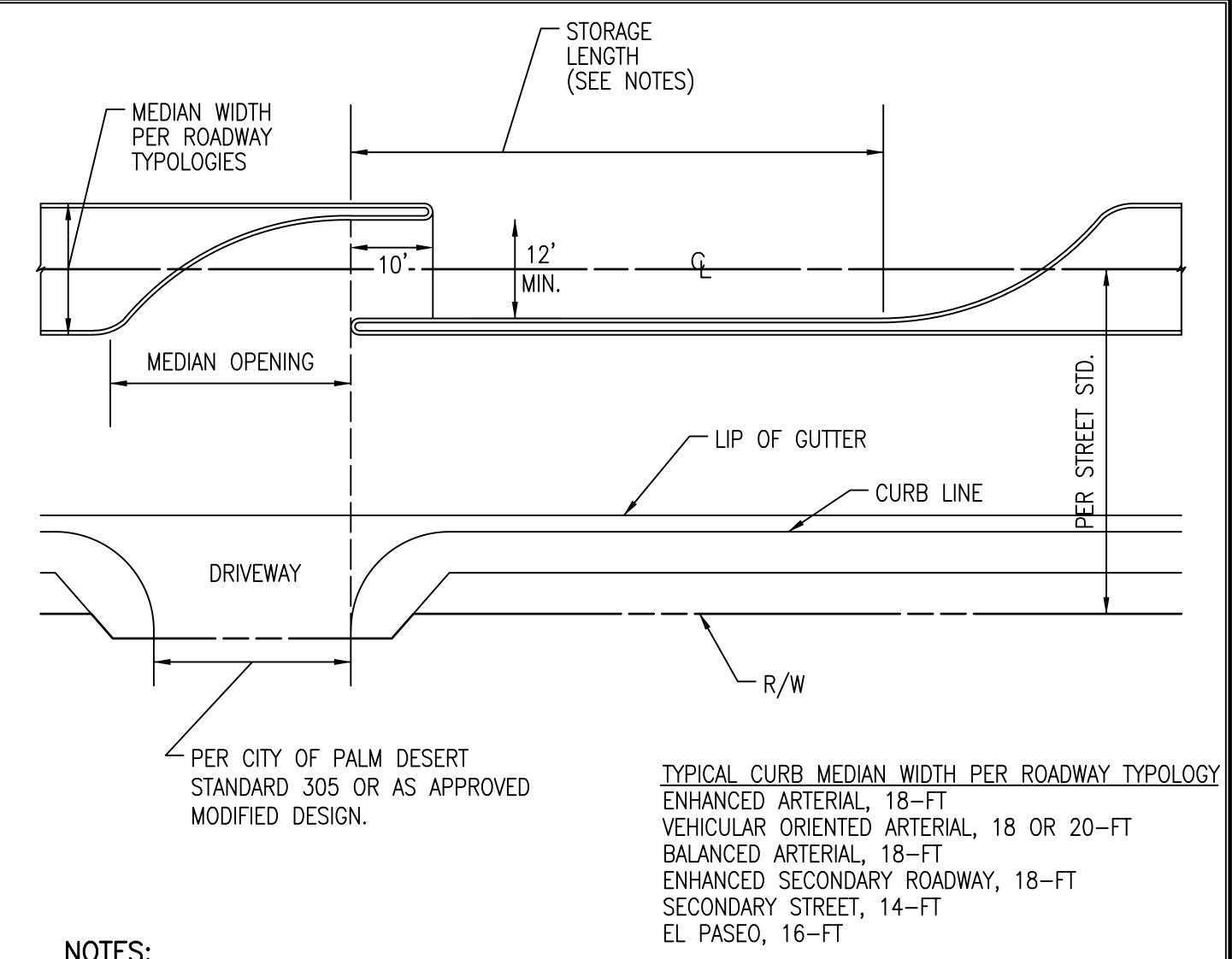




- 1. MEDIAN DESIGN SHALL FOLLOW CALIFORNIA HIGHWAY DESIGN MANUAL.

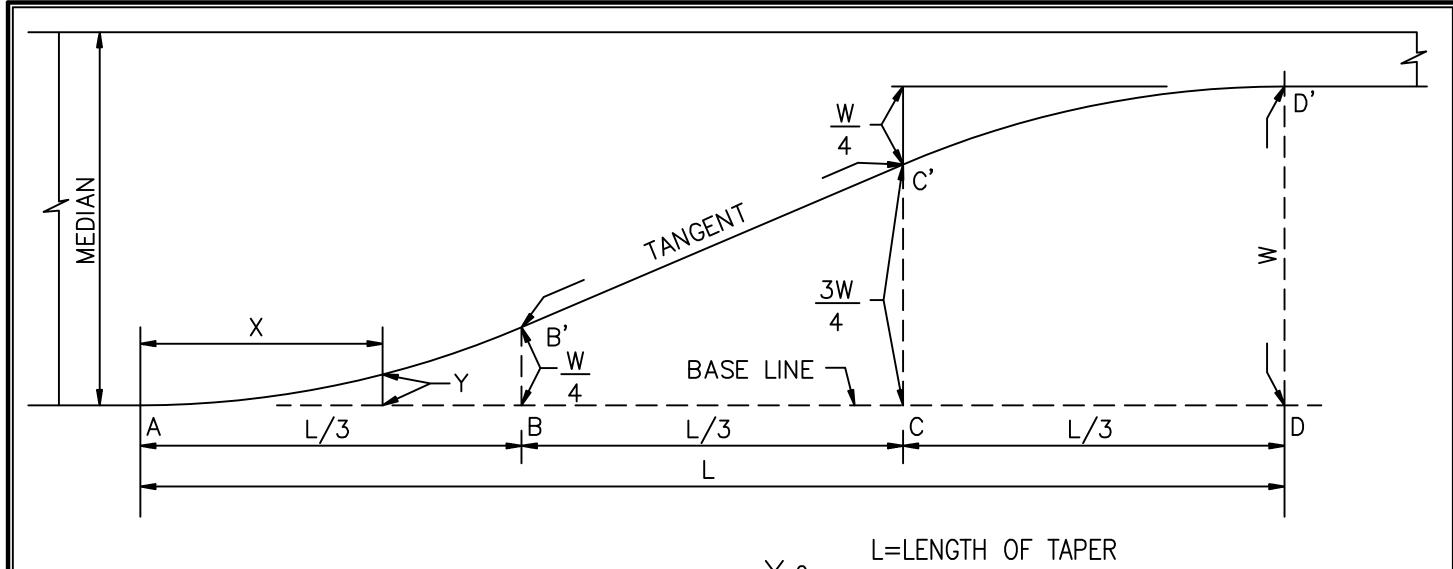
 SEE CITY OF PALM DESERT STANDARD 910 AND 911 FOR SIGNAGE PLACEMENT GUIDANCE.
- 2. RADIUS AT MEDIAN BREAKS SHALL BE MINIMUM OF 10' WHEN MEDIAN TAPERING IS NOT REQUIRED.
- 3. FOR MEDIAN TAPER (BAY TAPER) REFER TO CALIFORNIA HIGHWAY DESIGN MANUAL FOR DESIGN GUIDANCE, SUBJECT TO THE CITY ENGINEER APPROVAL.
- 4. CURB SHALL BE CONSTRUCTED PER CITY OF PALM DESERT STD 400 OR 404, SUBJECT TO APPROVAL BY THE CITY ENGINEER.
- * FOR EL PASEO, 14 FT MEDIAN.

CITY OF PALM DESERT	APPROVED BY:		DEPARTMENT OF PUBLIC WORKS	STD NO.
	MARTIN ALVAREZ PUBLIC WORKS DIRECTOR	DATE	TYPICAL MEDIAN CONSTRUCTION	600



- 1. DIRECTIONAL LEFT TURN MEDIAN BAY SHALL BE DESIGNED PER AASHTO STANDARDS AND IS SUBJECT TO APPROVAL BY THE CITY ENGINEER.
- 2. THE LENGTH OF BAY TAPER SHOULD BE SHORT TO CLEARLY DELINEATE THE LEFT TURN AND TO DISCOURAGE THROUGH TRAFFIC FROM DRIFTING TO THE LEFT TURN LANE. FOR URBAN AREAS, CONSIDER LENGTH OF 60 FEET AND 90 FEET PER CALIFORNIA HIGHWAY DESIGN MANUAL GUIDELINES. FINAL DESIGN IS SUBJECT TO THE CITY ENGINEER APPROVAL.
- 3. STORAGE LENGTH SHALL BE PER THE RECOMMENDATIONS OF A TRAFFIC ENGINEER AND SUBJECT TO THE CITY ENGINEER APPROVAL.
- 4. LENGTH OF MEDIAN OPENING SHALL BE MINIMIZED TO DISCOURAGE VEHICLES TO ENTER FROM OPPOSITE TRAFFIC DIRECTION, BUT AT LEAST THE SAME WIDTH AS THE CORRESPONDING DRIVE/OPENING. TRAFFIC DIRECTION.
- 5. TRUCK TURNING TEMPLATES SHALL BE SUBMITTED TO SHOW NO CONFLICT WITH DRIVEWAY OR MEDIAN STRUCTURES.
- 6. TURNING LANE WIDTH REDUCTION TO A MINIMUM OF 10 FEET WILL BE CONSIDERED FOR PROJECTS WHERE A 12-FOOT DESIGN IS NOT FEASIBLE, SUBJECT TO APPROVAL OF THE CITY ENGINEER.

N.T.S. CITY OF PALM DESERT APPROVED BY: STD NO. DEPARTMENT OF PUBLIC WORKS RESTRICTED 601LEFT TURN MEDIAN MARTIN ALVAREZ DATE **OPENING** PUBLIC WORKS DIRECTOR



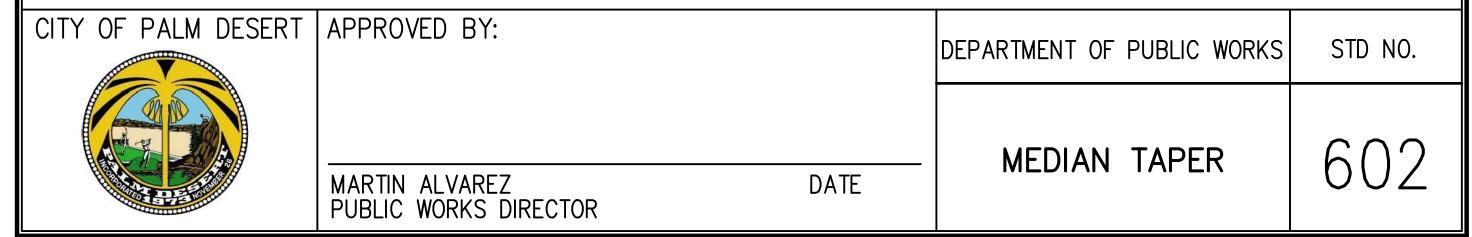
 $Y = 2.25W(\frac{X}{L})^2$

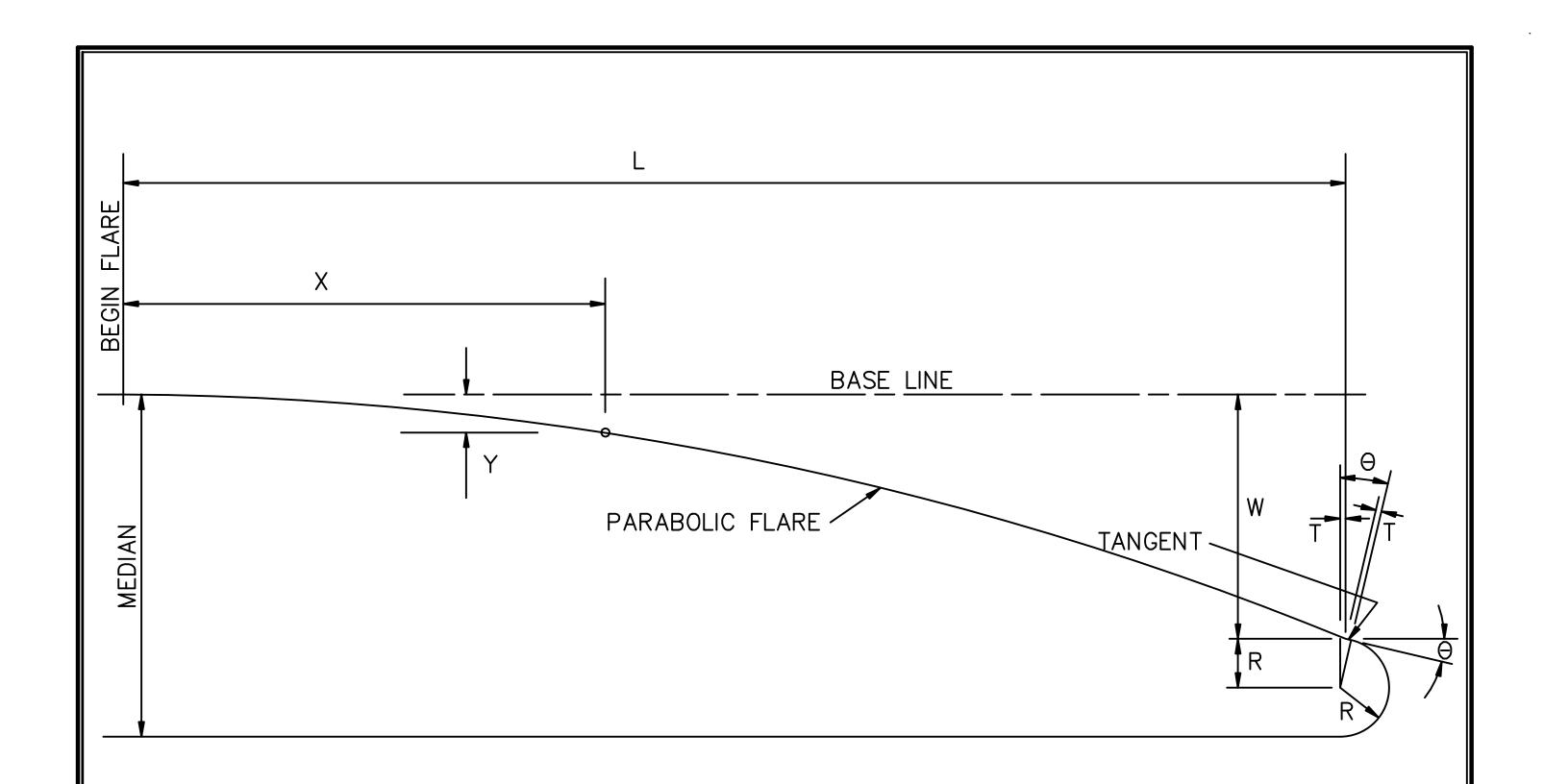
L=LENGTH OF TAPER
W=MAXIMUM OFFSET DISTANCE
X=DISTANCE ALONG BASE LINE
Y=OFFSET FROM BASE LINE

L, ft	DISTANCE X, L/12 INCREMENTS, ft											
60'	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	60'
72'	6'	12'	18'	24'	30'	36'	42'	48'	54'	60'	66'	72'
90'	7.5'	15'	22.5'	30'	37.5'	45'	52.5'	60'	67.5'	75'	82.5'	90'
120'	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'
150'	12.5'	25'	37.5'	50'	62.5'	75'	87.5'	100'	112.5'	125'	137.5'	150'
W, ft	OFFSET Y, ft											
10'	0.16'	0.62	1.41'	2.50'	3.75'	5.00'	6.25'	7.50'	8.59'	9.38'	9.84'	10.00'
11'	0.17'	0.69'	1.55'	2.75'	4.13'	5.50'	6.88'	8.25	9.45'	10.31'	10.83'	11.00'
12'	0.19'	0.75	1.69'	3.00'	4.50'	6.00'	7.50'	9.00'	10.31'	11.25'	11.81'	12.00'
19'	0.30'	1.19'	2.67'	4.75'	7.13'	9.50'	11.88'	14.25'	16.33'	17.81'	18.70'	19.00'
20'	0.31'	1.25'	2.81'	5.00'	7.50'	10.00'	12.50'	15.00'	17.19'	18.75'	19.69'	20.00'
21'	0.33'	1.31'	2.95'	5.25'	7.88'	10.50'	13.13'	15.75'	18.05'	19.69'	20.67	21.00'
22'	0.34'	1.38'	3.09'	5.50'	8.25	11.00'	13.75'	16.50'	18.91'	20.62	21.66'	22.00'

NOTE:

TO DETERMINE OFFSET DISTANCE FOR ANY LENGTH OF TAPER USE THE FORMULA $Y=2.25W(\frac{X}{L})^2$ FOR THE PORTIONS A-B' AND C-D' WHICH ARE PARABOLIC CURVES. THE PORTION B'C' IS A TANGENT. WHEN THE BASE LINE IS CURVED, THE OFFSETS ARE APPLIED TO THE CURVED BASE LINE, AND B'C' IS NO LONGER A TANGENT.





L=LENGTH OF TAPER

W=MAXIMUM OFFSET DISTANCE

X=DISTANCE ALONG BASE LINE

Y=OFFSET FROM BASE LINE

T=TANGENT LENGTH

R=RADIUS OF NOSE

Θ=MAXIMUM FLARE DEFLECTION ANGLE

$$Y = W(\frac{X}{L})^{2}$$

$$TAN \Theta = \frac{2W}{L}$$

$$TAN\Theta = \frac{2W}{I}$$

$$T = R TAN \frac{\Theta}{2}$$

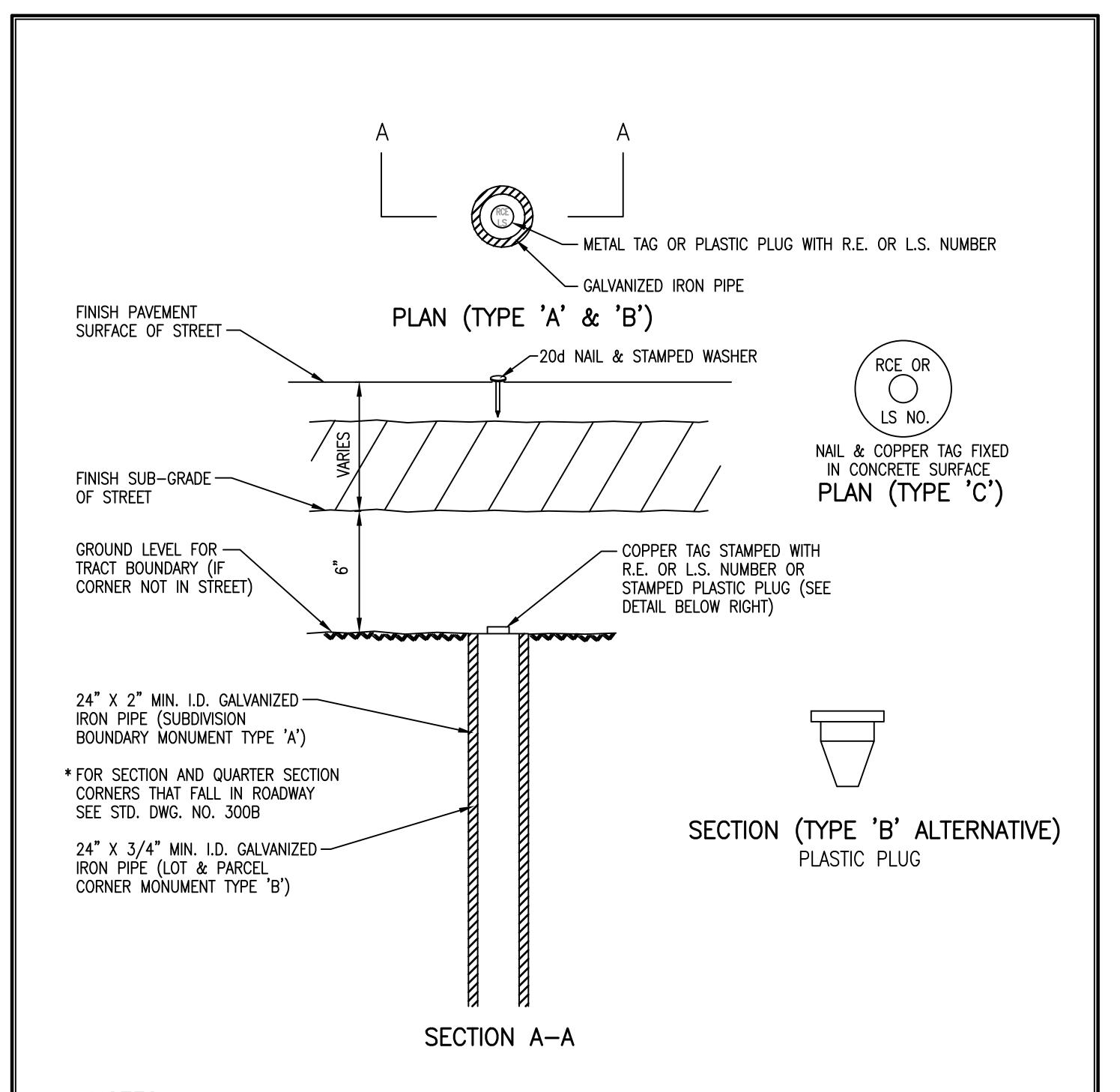
IF STATION OF RADIUS POINT IS NOT GIVEN ON PLAN, TANGENT DISTANCE T MAY BE IGNORED

OFFSET Y, ft

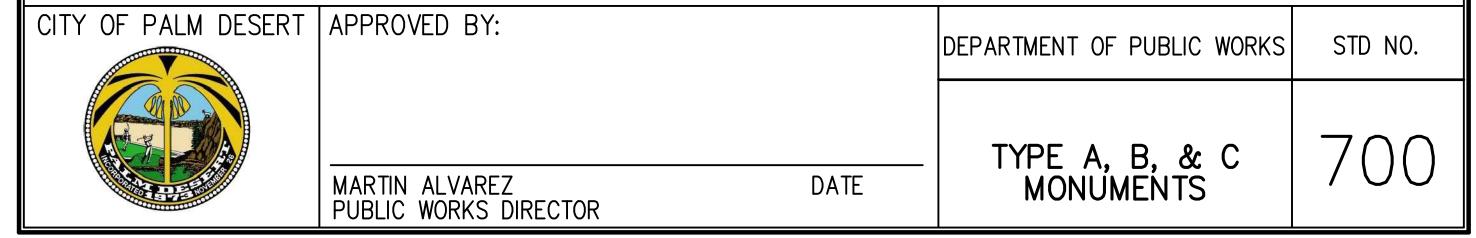
	X, ft														
L, ft	W, ft	10'	15'	20'	25'	30'	40'	45'	50'	60'	70'	75'	80'	90'	100'
	W/L = 1:5														
25'	5'	0.80'	1.80'	3.20'	5.00'										
50'	10'	0.40'	0.90'	1.60'	2.50'	3.60'	6.40'	8.10'	10.00'						
	W/L = 1:10														
50'	5'	0.20'	0.45	0.80'	1.25'	1.80'	3.20'	4.05'	5.00'						
100'	10'	0.10'	0.23'	0.40'	0.63'	0.90'	1.60'	2.03'	2.50'	3.60'	4.90'	5.63'	6.40'	8.10'	10.00'
							W/L =	= 1:15							
45'	3'	0.15	0.33	0.59'	0.93'	1.33'	2.37'	3.00'							
75'	5'	0.09'	0.20'	0.36'	0.56	0.80'	1.42'	1.80'	2.22'	3.20'	4.36'	5.00'			
90'	6'	0.07	0.17'	0.30'	0.46'	0.67	1.19'	1.50'	1.85'	2.67'	3.63'	4.17'	4.74'	6.00'	

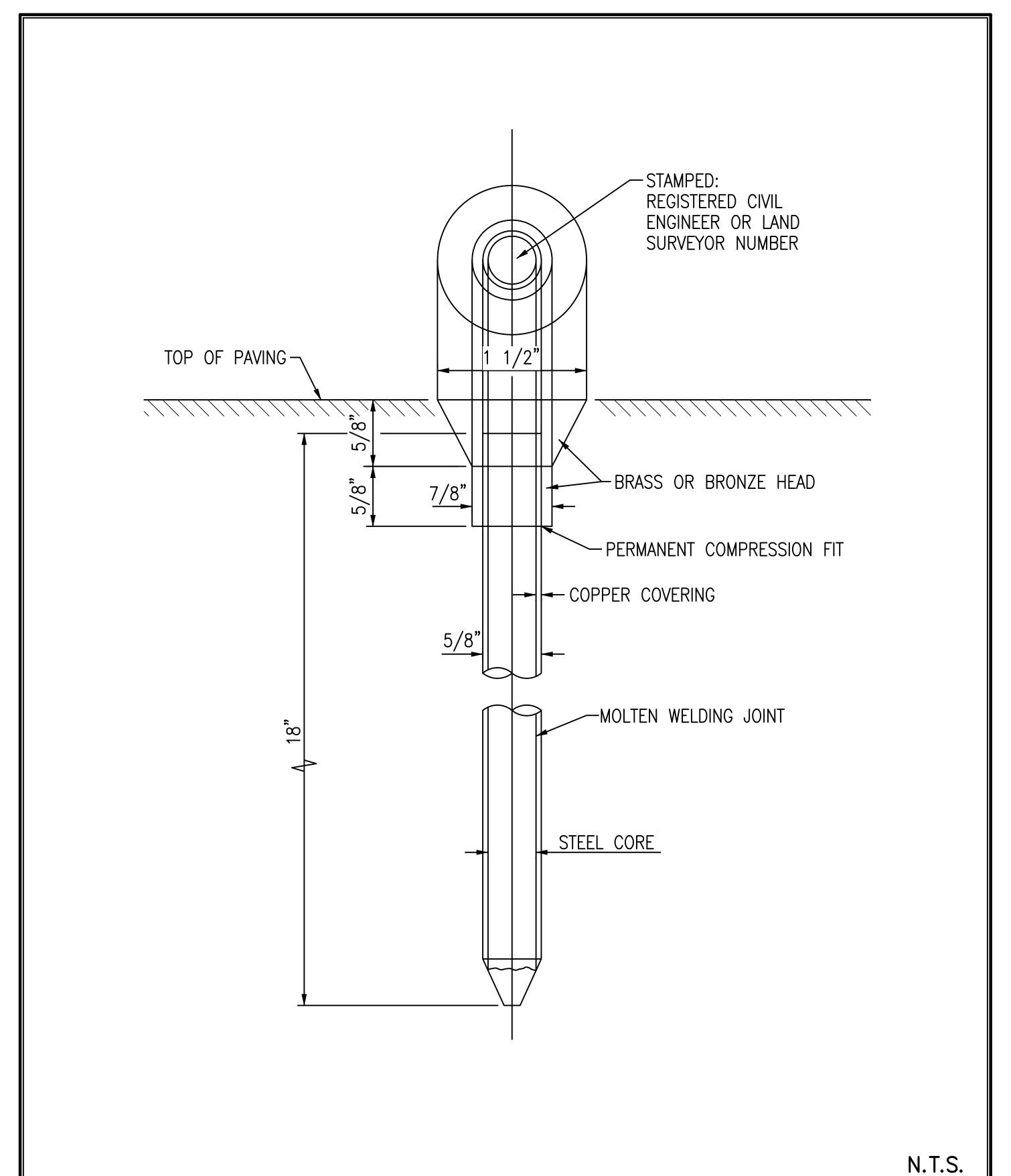
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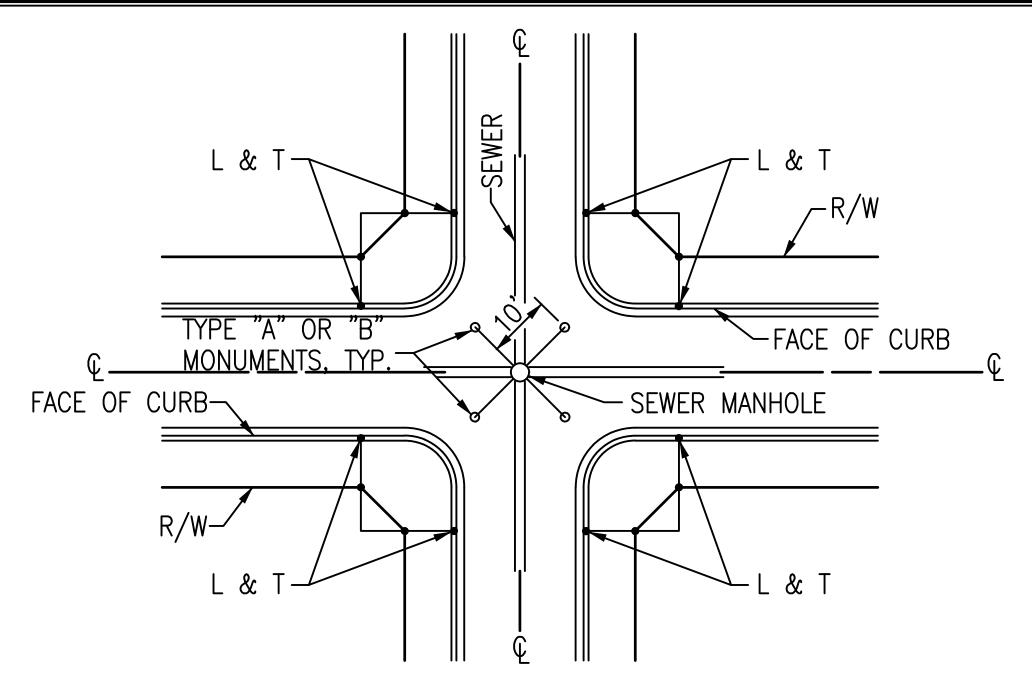
CITY OF PALM DESERT APPROVED BY: DEPARTMENT OF PUBLIC WORKS STD NO. 603 MEDIAN FLARE MARTIN ALVAREZ PUBLIC WORKS DIRECTOR DATE



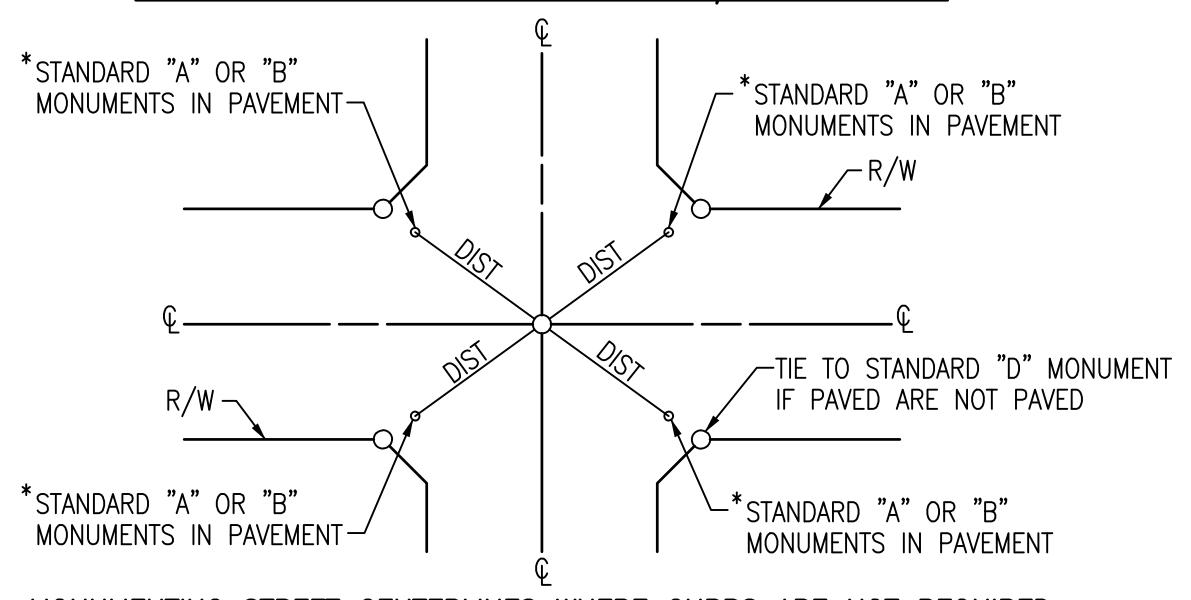
- 1. SUBDIVISION BOUNDARY MONUMENT TYPE 'A' TO BE SET 6" BELOW FINISH SUB-GRADE IN ROADWAY OR FLUSH AT TRACT BOUNDARY CORNERS.
- 2. ALL LOT AND PARCEL CORNERS SHALL USE TYPE 'B' MONUMENTS SET AT PROPER GRADE WITH A COPPER DISC OR PLASTIC PLUG BEARING THE REGISTERED CIVIL ENGINEER OR LAND SURVEYOR NUMBER.
- 3. TYPE 'C' MONUMENT TO CONSIST OF LEAD PLUG OR STEEL PIN WITH COPPER IDENTIFICATION DISC SET IN CONCRETE CURB OR WALL. (SEE DETAIL ABOVE RIGHT.)







MONUMENTING STREET CENTERLINES WHEN SEWERS ARE LOCATED ON CENTERLINE USING 10' CROSS TIES AND/OR SWING TIES



MONUMENTING STREET CENTERLINES WHERE CURBS ARE NOT REQUIRED

* SET TIE IN PAVEMENT IF RAW IS UNAVAILABLE.

NOTES:

- 1. L & T AS SHOWN HEREON INDICATES LEAD AND TACK OR STEEL PIN MONUMENT SET IN CURB.
- 2. LEAD AND TACK OR STEEL PIN MONUMENT WITNESS TO PROPERTY CORNER MAY BE SET, NOT REQUIRED.

N.T.S.

CITY OF PALM DESERT APPROVED BY:

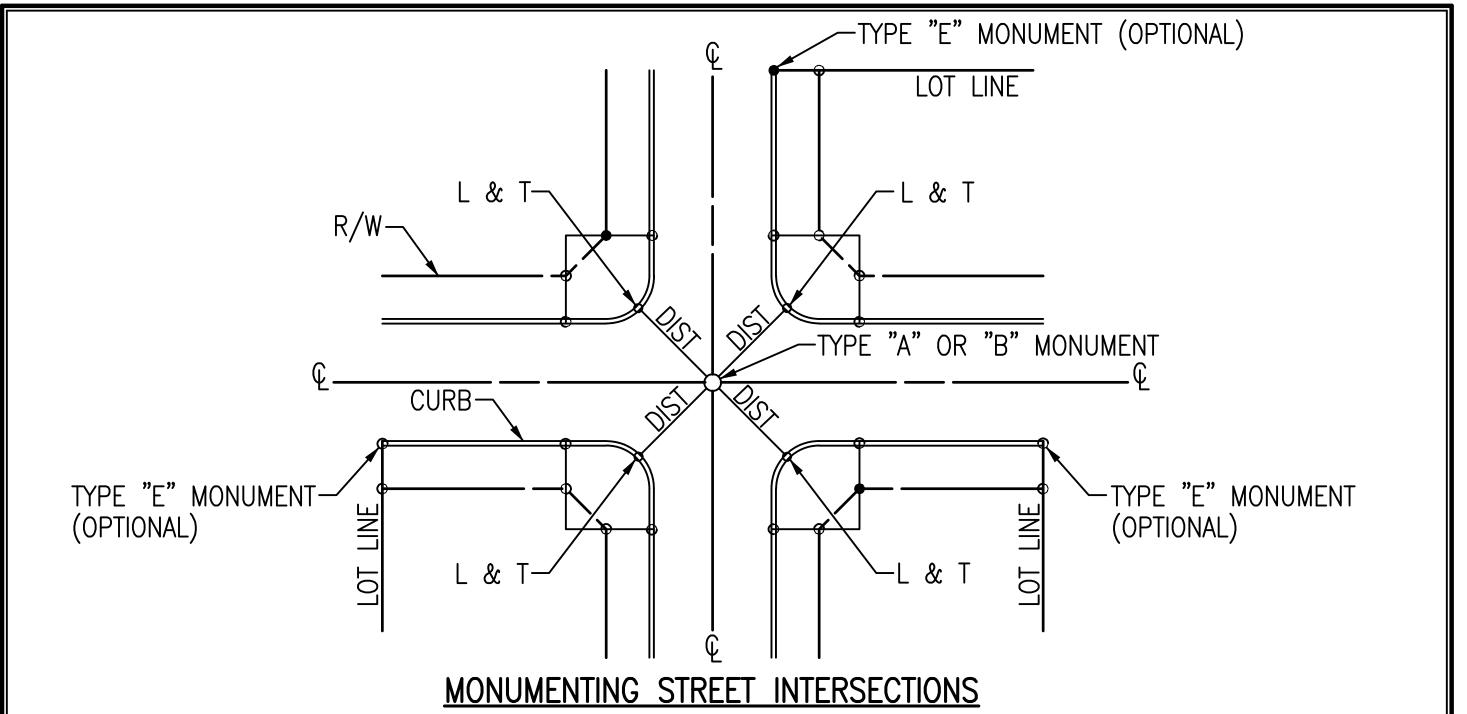
DEPARTMENT OF PUBLIC WORKS STD NO.

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

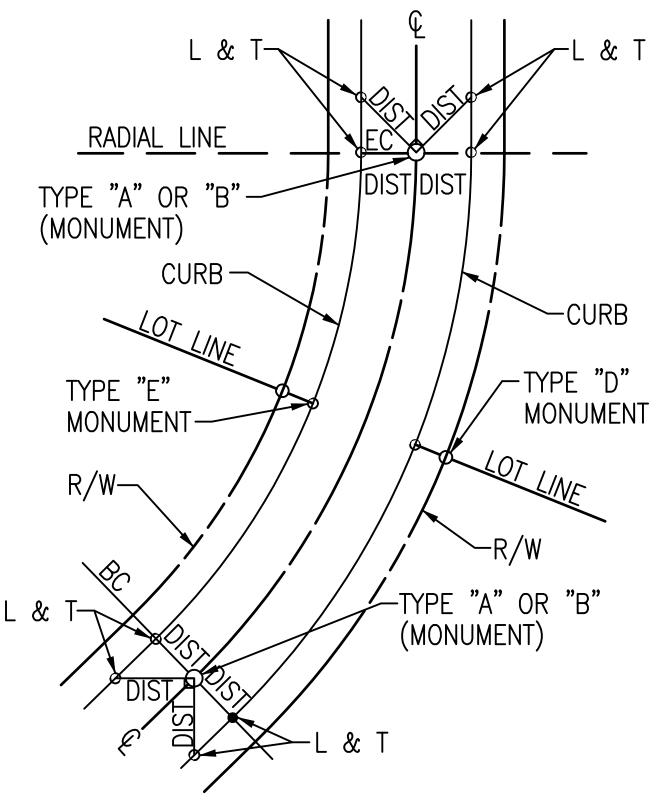
DATE

DATE

DEPARTMENT OF PUBLIC WORKS STD NO.



WHERE CURBS AND GUTTERS ARE INSTALLED



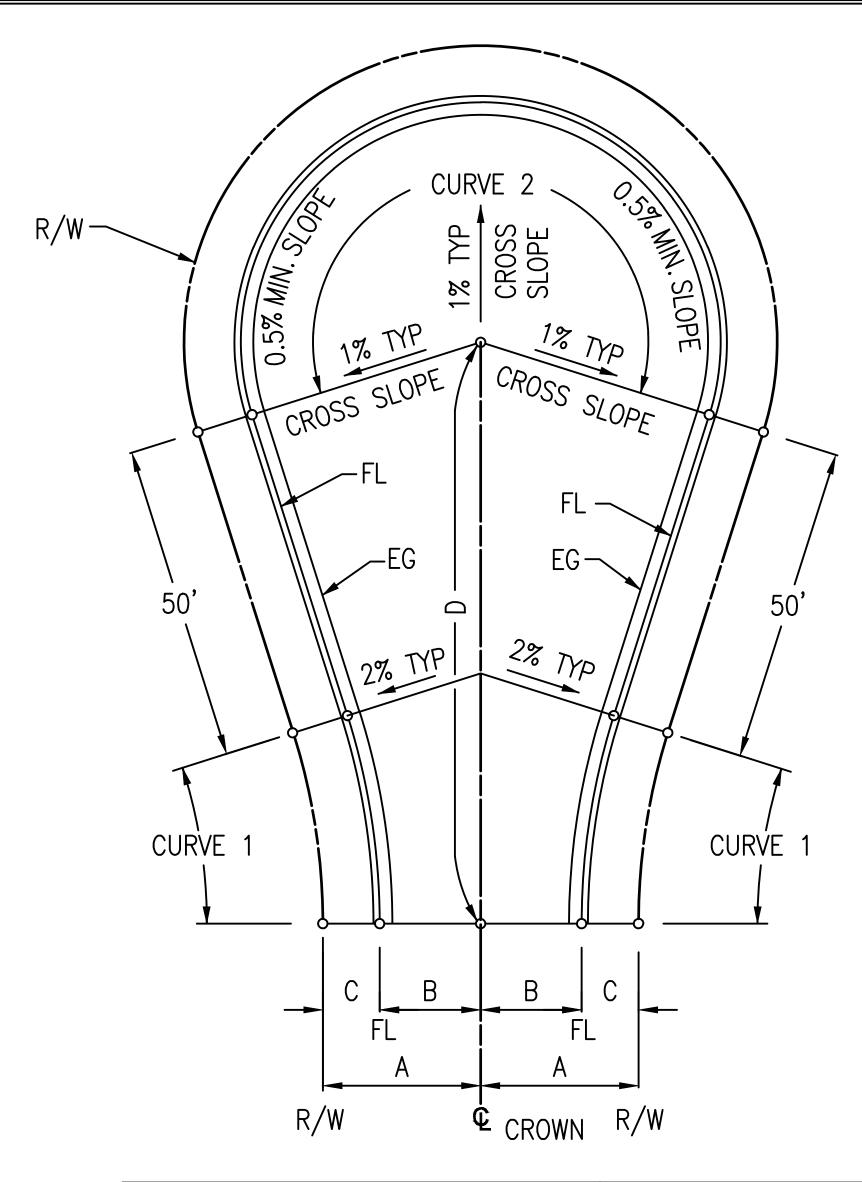
MONUMENTING BEGINNING AND ENDING OF CURVE

NOTES:

- 1. L & T AS SHOWN HEREON INDICATES A LEAD AND TACK OR STEEL PIN MONUMENT SET IN CONCRETE CURB.
- 2. A METAL IDENTIFICATION DISK SET WITH A LEAD AND TAG OR STEEL PIN MONUMENT WITNESS TO PROPERTY CORNER MAY BE SET ("E" MONUMENT), IN LIEU OF SETTING FRONT LOT CORNERS ("D" MONUMENT).
- 3. THE PI OF THE CURVE CENTERLINE OF A STREET MAY BE MONUMENTED IN LIEU OF EC & BC, IF THE PI FALLS WITHIN THE TRAVELED WAY. IT SHALL BE REFERENCED WITH L & T'S IN CURB.
- 4. TYING OUT BC'S AND EC'S WITH 90 DEGREE TIES INTO THE TANGENT.

N.T.S.

CITY OF PALM DESERT APPROVED BY: STD NO. DEPARTMENT OF PUBLIC WORKS 703 STREET CENTERLINE MARTIN ALVAREZ DATE **MONUMENT** PUBLIC WORKS DIRECTOR



					CURVE 1					CURVE 2				
					<u> </u>	FL		R/W		\wedge	FL		R/W	
R/W	Α	В	С	D		R	ا	R	لــ		R	L	R	L
50'	25'	16'	9'	92.11'	17°36'01"	109'	33.48'	100'	30.72'	215°12'02"	38'	142.73	47'	176.53
56'	28'	18'	10'	89.55	16°18'41"	110'	31.31'	100'	28.47	212°37'22"	38'	141.02'	48'	178.12'
60'	30'	20'	10'	86.63'	15°00'38"	110'	28.82'	100'	26.20'	210°01'17"	38'	139.29	48'	175.95
66'	33'	22'	11'	83.74'	13°38'40"	111'	26.44	100'	23.82'	207°17'21"	38'	137.48'	49'	177.28'
74'	37'	22'	15'	84.50'	13°34'05"	115'	27.23	100'	23.68	207°08'10"	38'	137.38'	53'	191.61
78'	39'	28'	11'	95.39'	17°12'31"	111'	33.33'	100'	30.03'	214°25'02"	50'	187.11	61'	228.28'
	SCHEDULE "H"			CURVE 1-EDGE OF AGGREGATE BASE CURVE 2-EI							GE OF AGGREGATE BASE			

N.T.S.

CITY OF PALM DESERT APPROVED BY:



90.00

DEPARTMENT OF PUBLIC WORKS

222°04'59" | 38' | 147.29' |

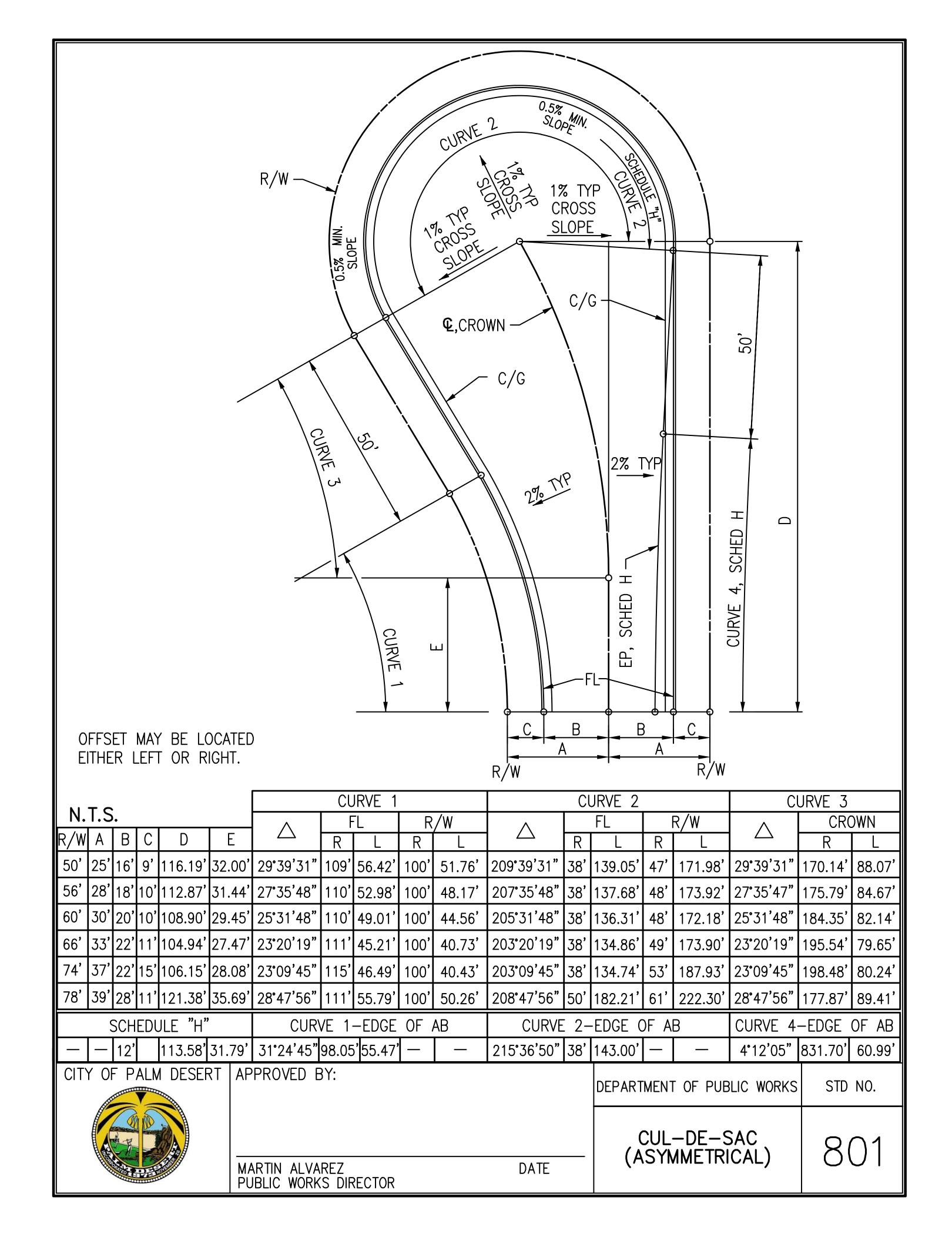
STD NO.

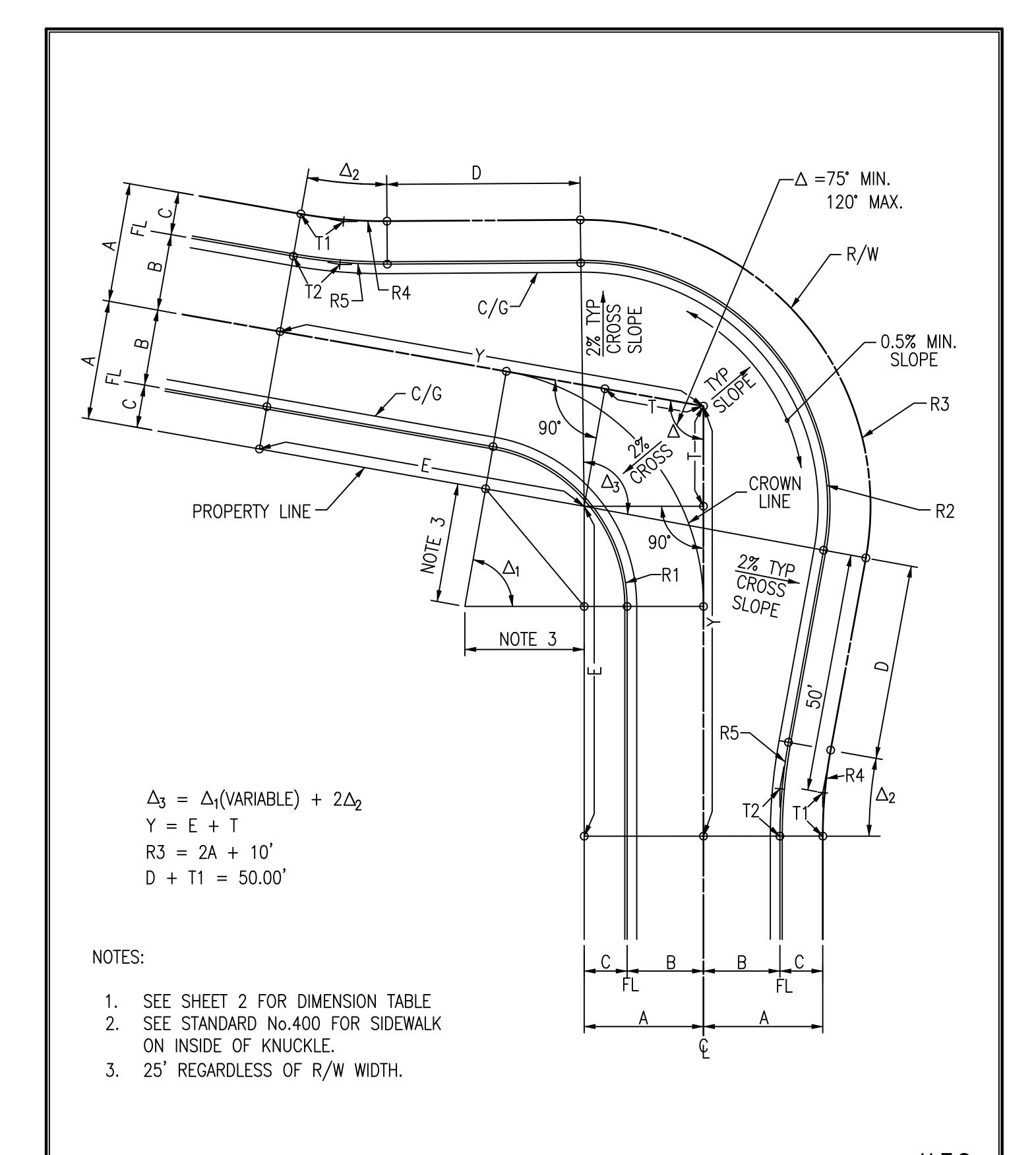
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

21°02'30" | 82.69' | 30.37' |

DATE

CUL-DE-SAC (SYMMETRICAL)





CITY OF PALM DESERT APPROVED BY: MARTIN ALVAREZ PUBLIC WORKS DIRECTOR N.T.S. DEPARTMENT OF PUBLIC WORKS STD NO. KNUCKLE SHEET 1 OF 2

KNUCKLE DIMENSION TABLE

R/W	ROADWAY IMPROVEMENT WIDTH	А	В	С	D	E	R1	R2	R3	Δ_2	R4	T1	R5	T2
50'	32'	25'	16'	9'	40.91	69.09	35'	51'	60'	10°23'19"	100'	9.09'	109'	9.91'
56'	36'	28'	18'	10'	40.99'	70.00'	35'	56'	66'	10°17'48"	100'	9.01'	110'	9.91'
60'	40'	30'	20'	10'	41.04'	70.60'	35'	60'	70'	10°14'12"	100'	8.96	110'	9.85'
66'	44'	33'	22'	11'	41.12'	71.49'	36'	65'	76'	10°08'58"	100'	8.88'	111'	9.86'
74'	44'	37'	22'	15'	41.22'	72.66	40'	69'	84'	10°02'13"	100'	8.88	115'	10.10
78'	56'	39'	28'	11'	41.27	73.23	36'	77'	88'	9°58'58"	100'	8.73'	111'	9.69'

N.T.S.

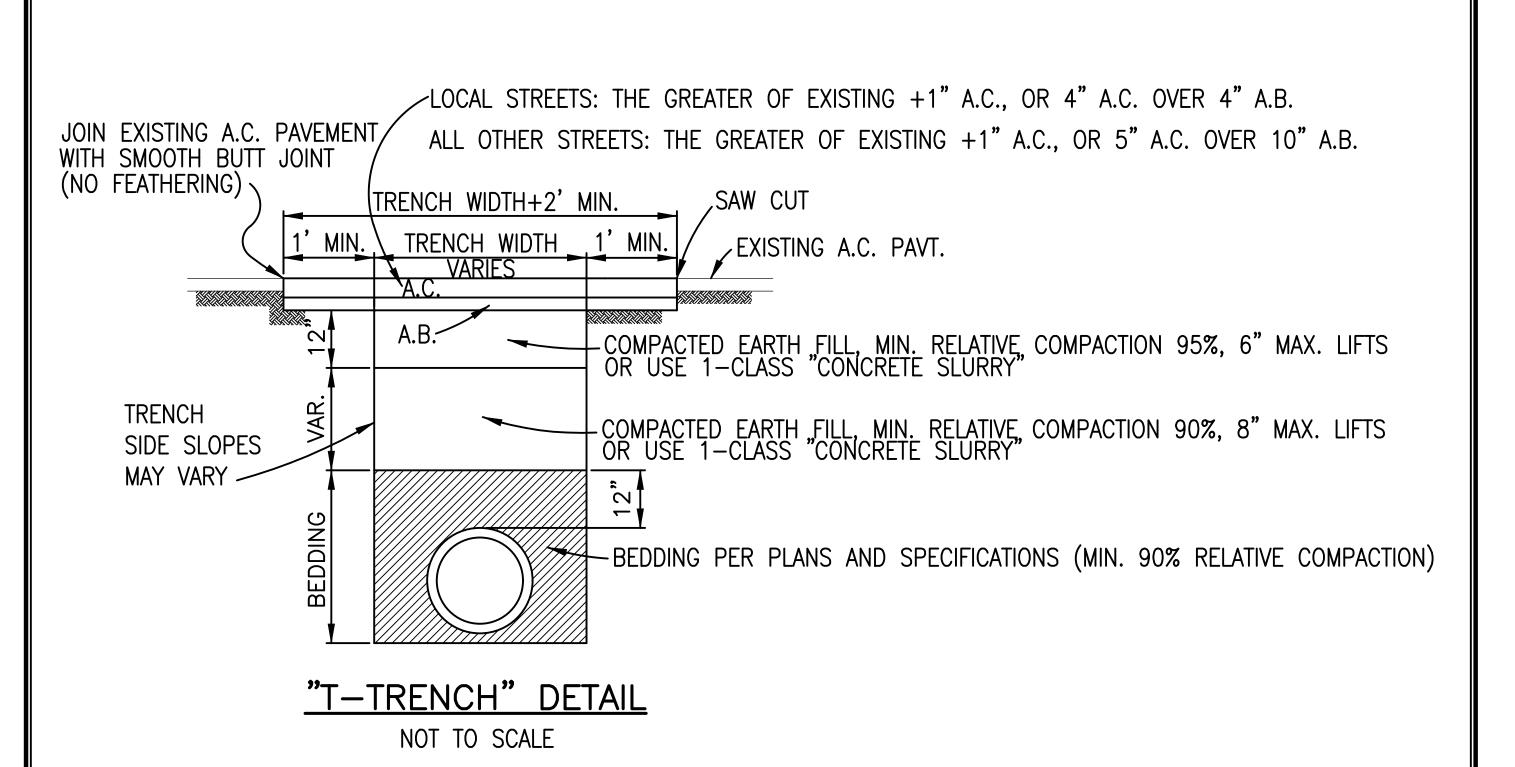
CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

KNUCKLE

MARTIN ALVAREZ
PUBLIC WORKS DIRECTOR

DATE



AN ALTERNATIVE SECTION MAY BE CONSIDERED. PROPOSED DESIGN SHALL BE SIGNED BY A LICENSED ENGINEER AND IS SUBJECT TO APPROVAL OF THE CITY ENGINEER.

TRANSVERSE TRENCH CUTS

0" TO 12" WIDE — REPAIR TRENCH WIDTH ONLY (NO "T-TRENCH")
12" TO 24" WIDE — REPAIR TRENCH WIDTH PLUS ADDITIONAL 1' "T" ON BOTH SIDES
>24" WIDE — REPAIR TRENCH WIDTH PLUS ADDITIONAL 1' "T" ON BOTH SIDES PLUS
GRIND/OVERLAY 0.1' MIN. DEPTH FOR AN ADDITIONAL 3' ON BOTH SIDES

LONGITUDINAL TRENCH CUTS IN DRIVING LANES

0" TO 12" WIDE — REPAIR TRENCH WIDTH ONLY (NO "T-TRENCH") PLUS 0.1' GRIND AND OVERLAY FROM LANE LINE TO LANE LINE

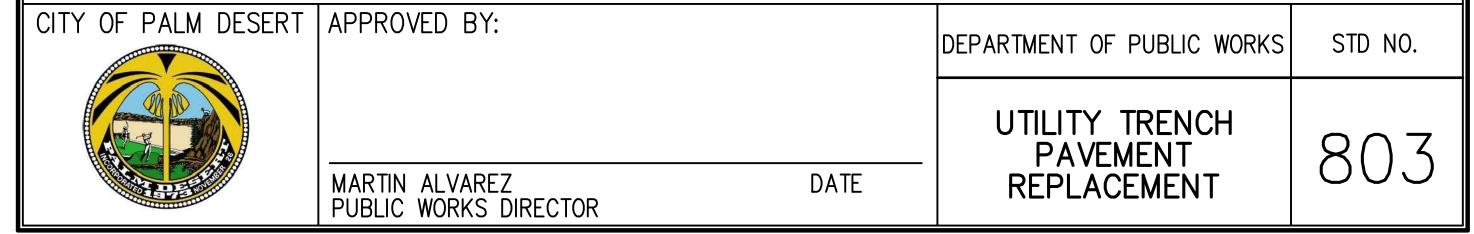
12" TO 24" WIDE — REPAIR TRENCH WIDTH PLUS ADDITIONAL 1' "T" ON BOTH SIDES PLUS 0.1' GRIND/OVERLAY FROM LANE LINE TO LANE LINE

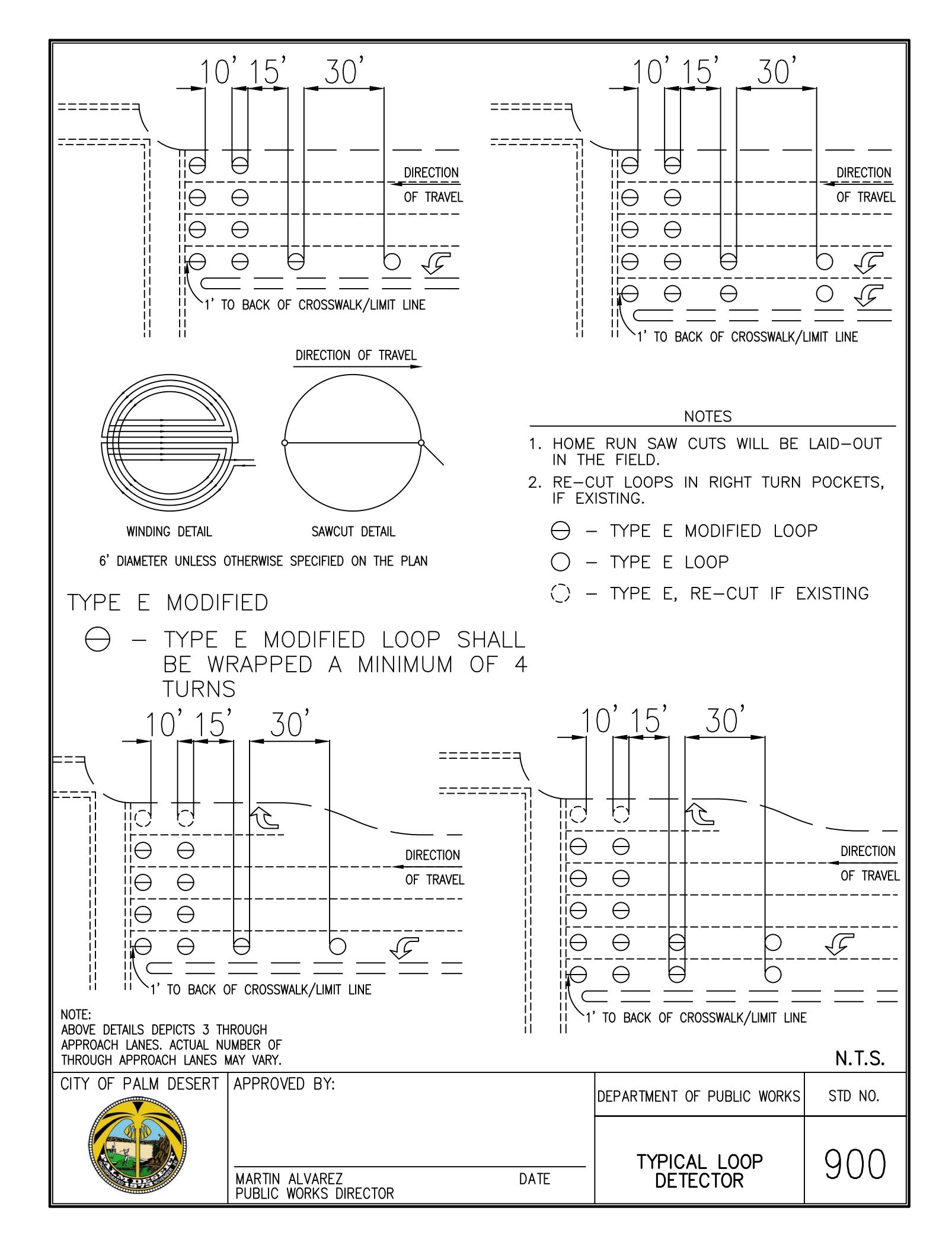
>24" WIDE — REPAIR TRENCH WIDTH PLUS ADDITIONAL 1' "T" ON BOTH SIDES PLUS GRIND/OVERLAY 0.1' MIN. FROM LANE LINE TO LANE LINE

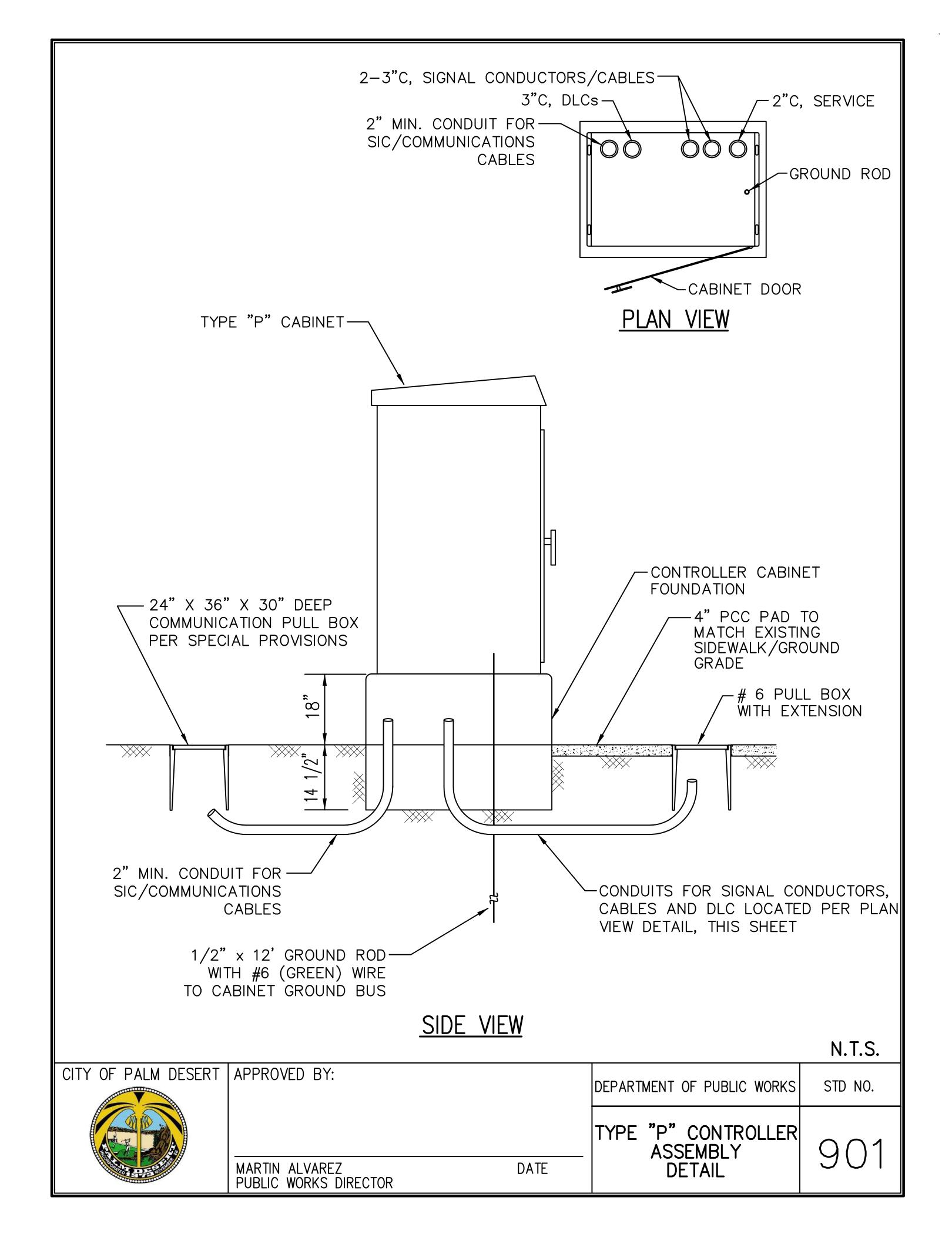
FOR CAP, MILL CL TO LIP OF GUTTER, OR LANE LINE TO LIP OF GUTTER 0.1'

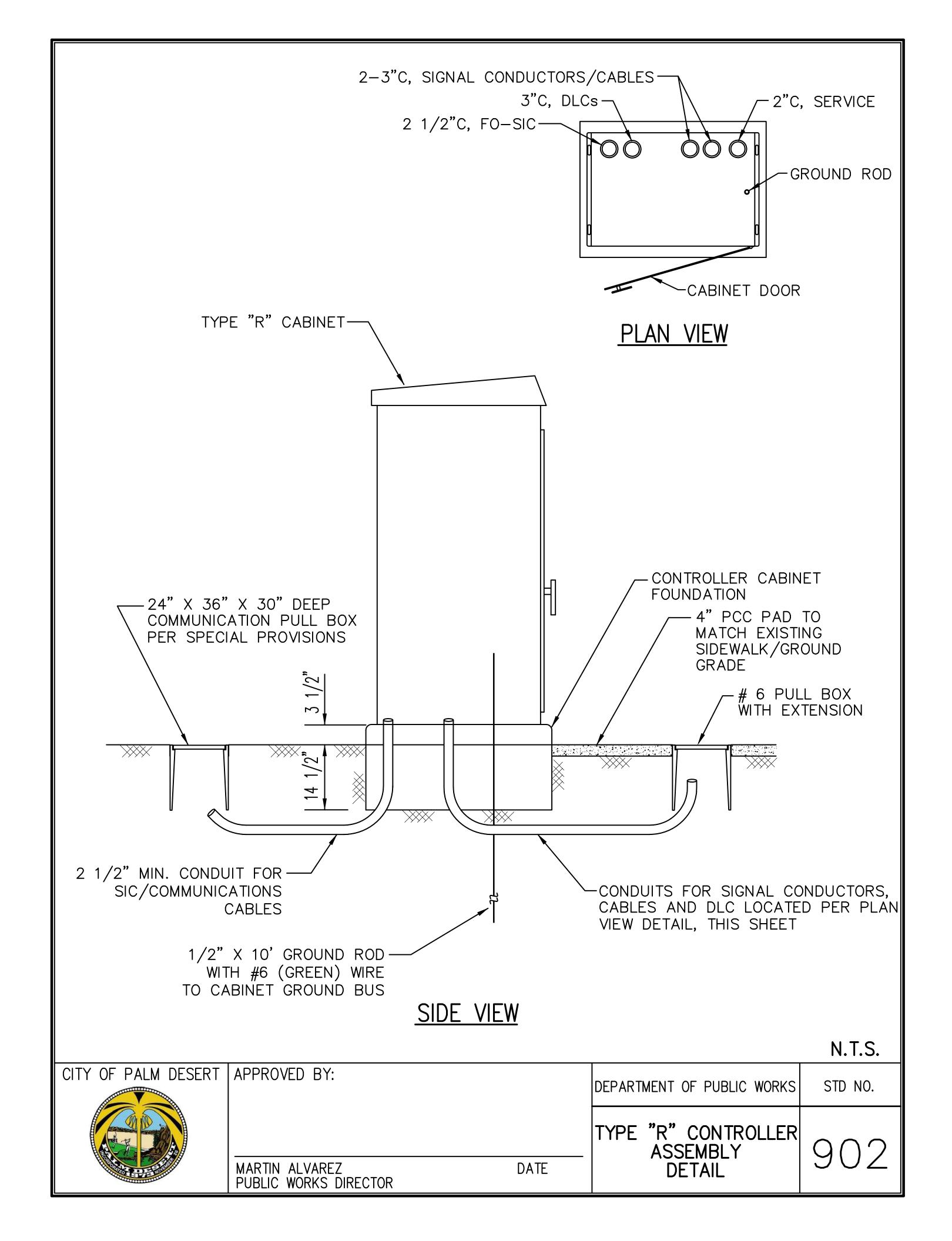
SHOULDER TRENCH CUTS

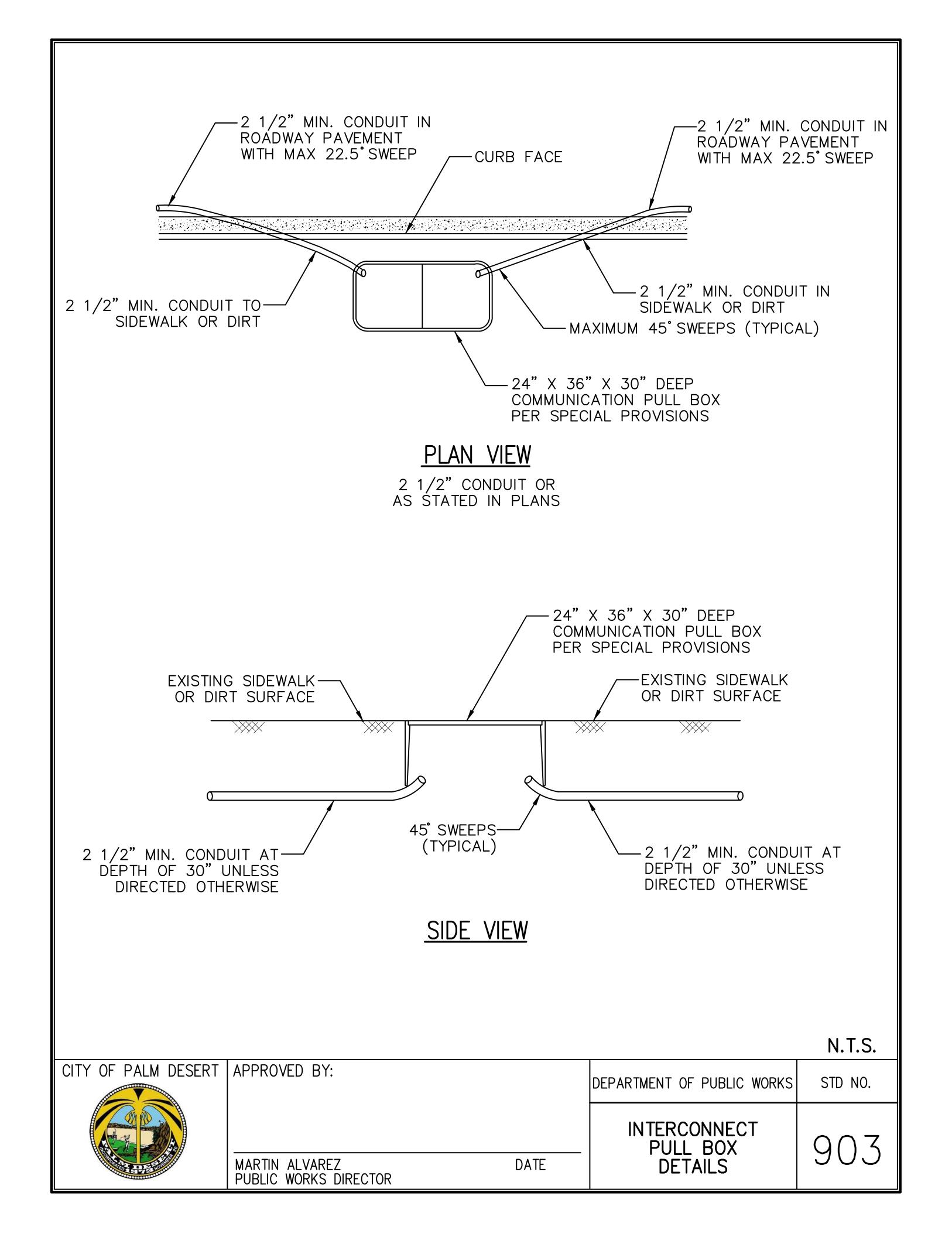
AT EDGE OF GUTTER — REPAIR TRENCH WIDTH ONLY (NO "T-TRENCH")
OFF EDGE OF GUTTER — NO LESS THAN 5' "FLOATER" BETWEEN TRENCH AND GUTTER
SLURRY OR FOG SEAL MAY BE REQUIRED UNLESS THE ROADWAY IS A DESIGNATED
BIKE ROUTE, WHICH WOULD REQUIRE A 0.1' THICK GRIND/OVERLAY
FROM EDGE OF GUTTER TO LANE LINE.

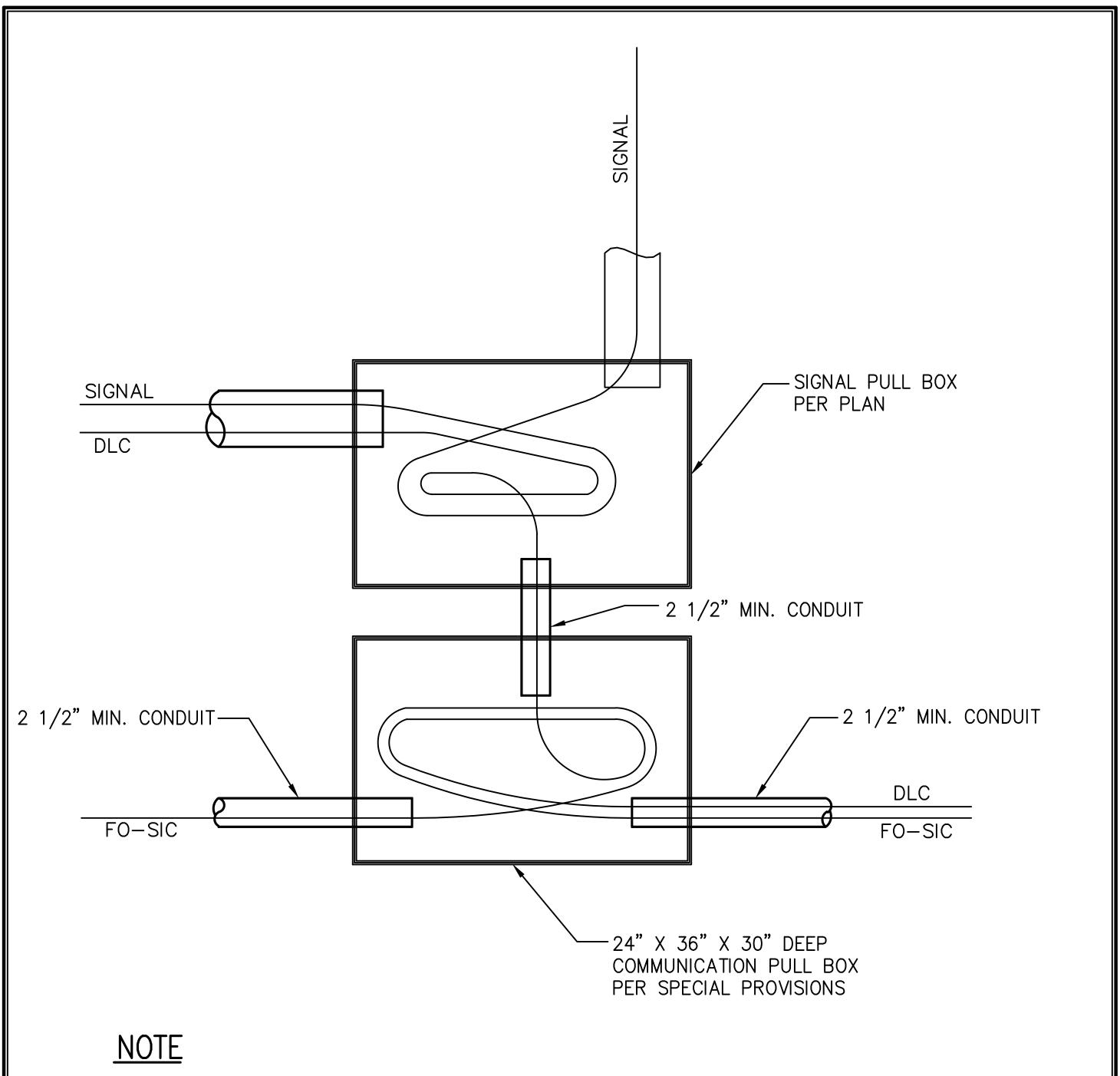






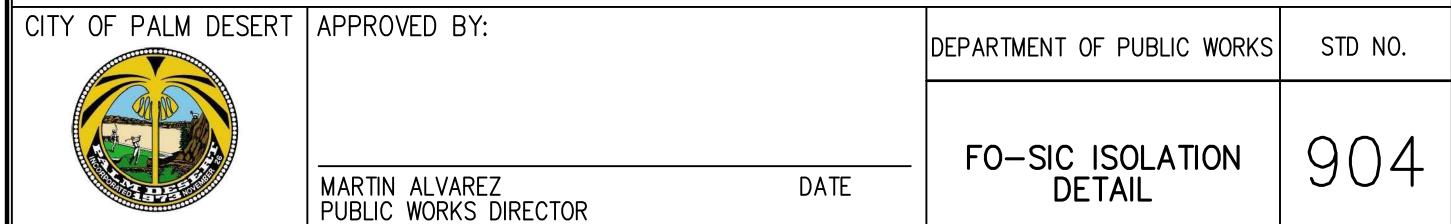


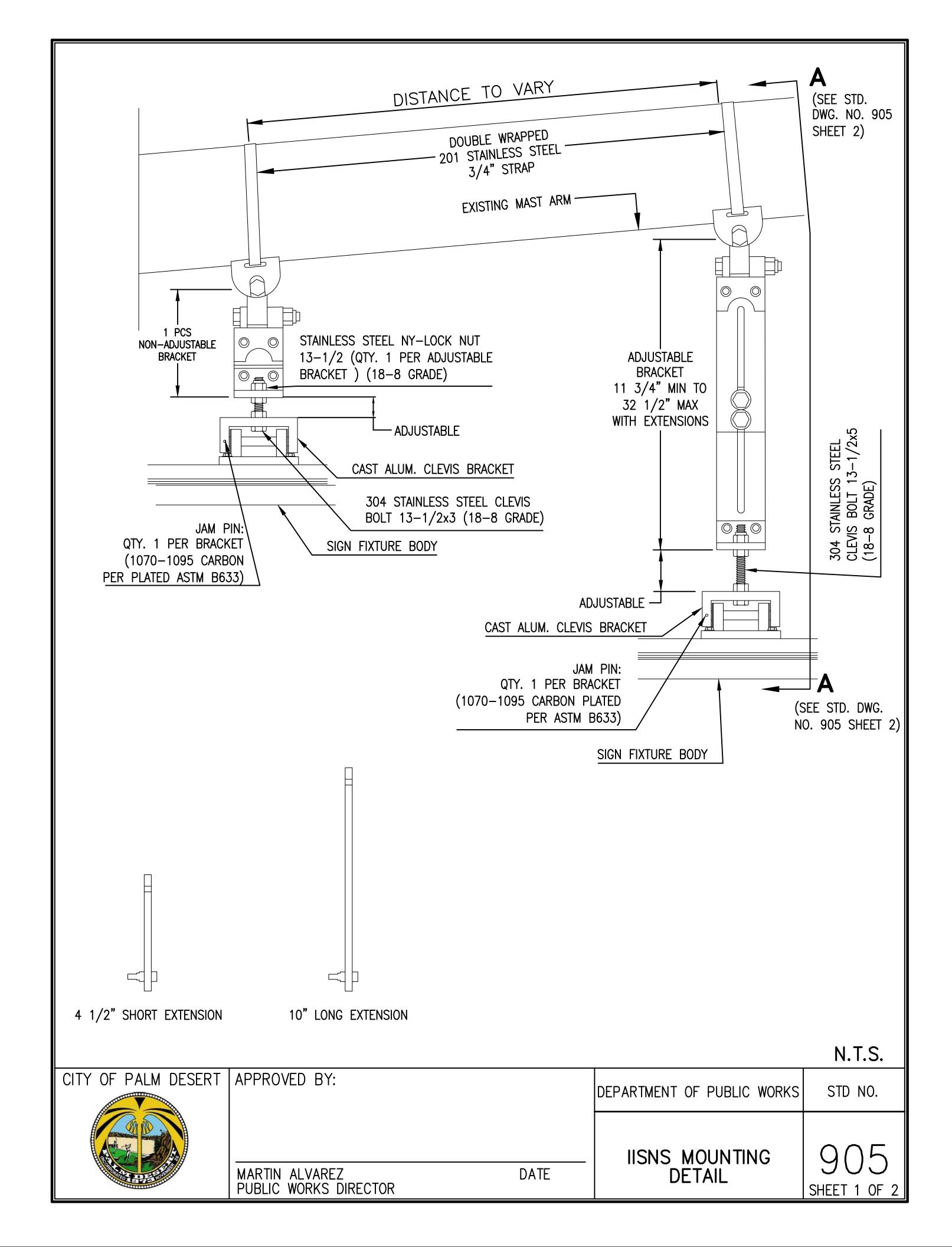


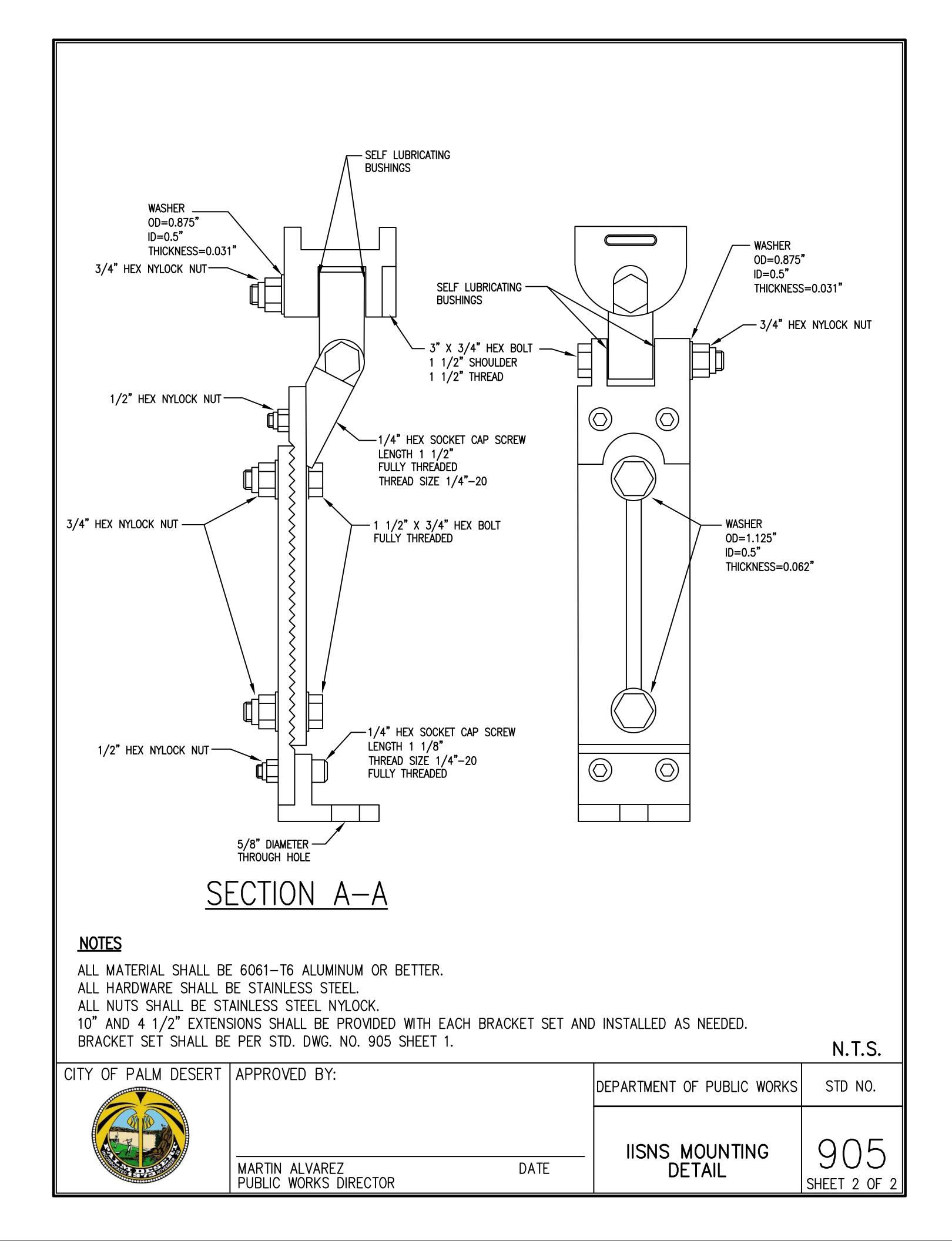


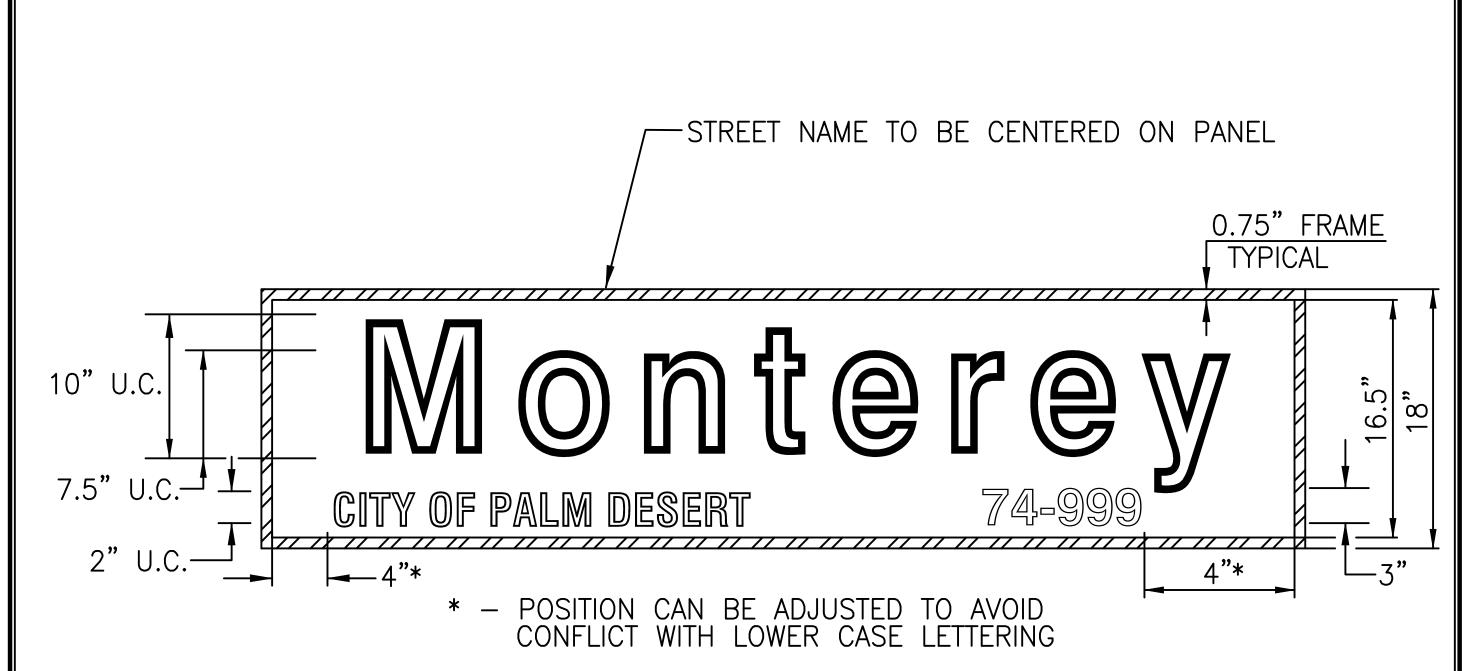
- 1. CONDUIT, CONDUCTORS AND PULLBOXES SHALL BE PER THE PLAN.
- 2. THIS DETAIL IS SCHEMATIC. FIELD CONDITIONS MAY REQUIRE VARIED CONFIGURATIONS.
- 3. SIGNAL AND FO-SIC CONDUCTORS MUST BE ISOLATED FROM EACH OTHER.

FO-SIC - FIBER OPTIC SIGNAL INTERCONNECT.









STANDARD PANEL

NOTES:

1) SIGNS SHALL BE TYPE "A" PER 2010 STATE STANDARD SPECIFICATIONS SECTION 86-6.09 AND 2010 STATE STANDARD PLAN #ES-7P EXCEPT ALL REFERENCE TO FLUORESCENT LAMP AND BALLAST ILLUMINATION IS AMENDED TO READ:

"INTERNAL ILLUMINATION OF SIGN SHALL BE DONE THROUGH ILLUMICOM LED RETROFIT KIT OR NATIONAL SIGNAL MATRIX LED RETROFIT KIT. THE LED LIGHT ENGINE LIFE SHALL BE RATED FOR A MINIMUM OF 50,000 HOURS, WITH SPARE PERIOD OF FIVE YEARS FROM DATE OF PURCHASE. THE EQUIPMENT SHALL HAVE A DATE OF MANUFACTURE AS PART OF THE SERIAL NUMBER. ALL UNITS PROVIDED SHALL HAVE A MANUFACTURE DATE CODE OF NO MORE THAN 6 MONTHS FROM DATE OF DELIVERY. THE LED LIGHT SHALL BE UNIFORMLY DISTRIBUTED ACROSS THE SIGN PANELS. STRIPING OR PIXILATION OF SIGN PANEL SHALL NOT BE VISIBLE. ENERGY SAVINGS SHALL BE AT A MINIMUM OF 60% OF STANDARD T12 FLUORESCENT LIGHTING TYPICALLY FOUND ON IISNS."

- 2) PANELS SHALL BE FOR EITHER 72" OR 96" HOUSING AS REQUIRED.
- 3) SIGN FACE SHALL BE CONSTRUCTED PER 2010 STATE STANDARD SPECIFICATIONS SECTION 86-6.09.
- 4) WHITE LETTERING ON GREEN BACKGROUND. NO BORDER. LETTER AND NUMBER SIZES AS SPECIFIED ABOVE.
- 5) ILLUMINATED STREET NAME SIGNS SHALL NOT DISPLAY A SUFFIX, (I.E.: ST., DR., CIR., ETC.) EXCEPT AS DIRECTED BY THE ENGINEER OR AS NOTED ON THE PLANS.
- 6) HWY. SERIES "E" LETTERING PREFERRED EXCEPT SERIES "C" OR "D" MAY BE USED IF NEEDED. LETTER SPACING MAY BE ADJUSTED TO AVOID LOWER CASE LETTERING CONFLICTS.

REGIONAL

(FOR ARTERIAL & SECONDARY STREETS)

RESIDENTIAL

(FOR RESIDENTIAL, COLLECTOR & LOCAL STREETS)



-3/8" SILVER BORDER

SPECIFICATIONS

DESIGN APPROVAL

Street name sign layout requires Public Works approval prior to fabrication.

BASE METAL

The base metal substrate shall be sheet aluminum alloy Zumar Model 812Ex25Q (or approved equal).

BLADE SIZE

There shall be two sizes of street name signs. Regional and Residential. Regional shall be 12 inches and residential shall be 10 inches. The horizontal length shall be determined by the legend.

REFLECTIVE SHEETING:

Sign shall have 3M Diamond Grade DG reflective sheeting overlay and 3M 1160A Anti Graffiti film overlay.

PROCESSING:

Colors shall be silver copy on green background with 3/8 inch silver border. The sign shall be reversed screened and coated with a clear finish. The Residential sign shall have a 5 inch Palm Desert City Seal logo. The logo shall be reversed silk screened.

MESSAGE LENGTH:

The length of the message will be dependent upon the name length plus its suffix and block numbers, but shall be in multiples of six inches. Regional signs shall have an overall length of not less than 36 inches and not over 54 inches. Residential signs shall have an overall length of not less than 36 inches and not over 48 inches.

LETTER SIZE AND SERIES:

Street name legend and suffix shall be upper and lower case lettering in standard lengths and shall be fabricated using standard FWHA "B" or "C" Series letters for all copy.

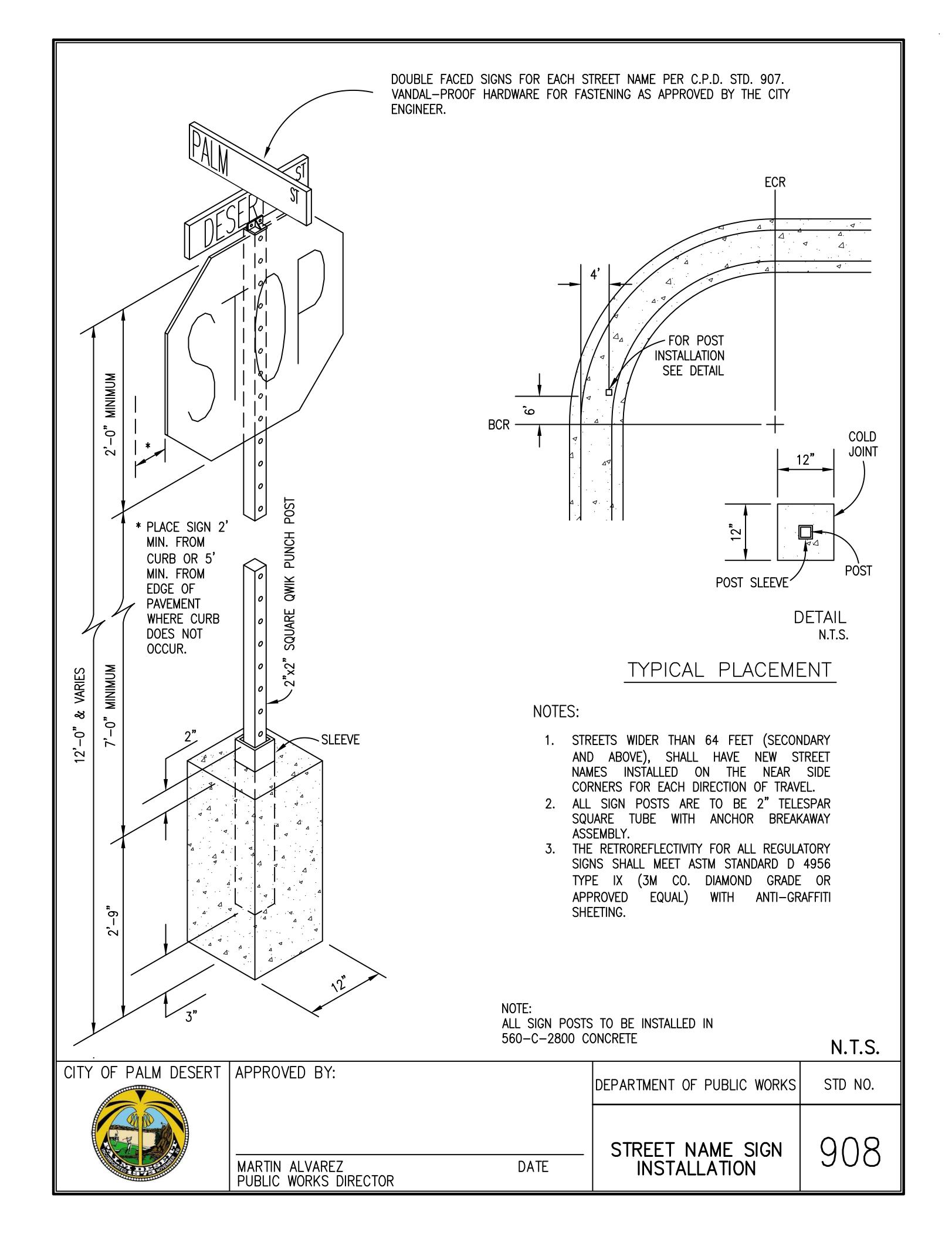
Regional sign shall have 8 inch upper case and 8 inch lower case legend with 3 inch suffix and block number. Residential sign shall 8 inch upper case and 4½ inch lower case legend. The suffix shall be 2 inches and the

block number shall be 2½ inches.

MOUNTING HOLES:

Two 3/8 inch diameter holes shall be drilled on both the top and bottom of the sign to match the metal substance above.

N.T.S.



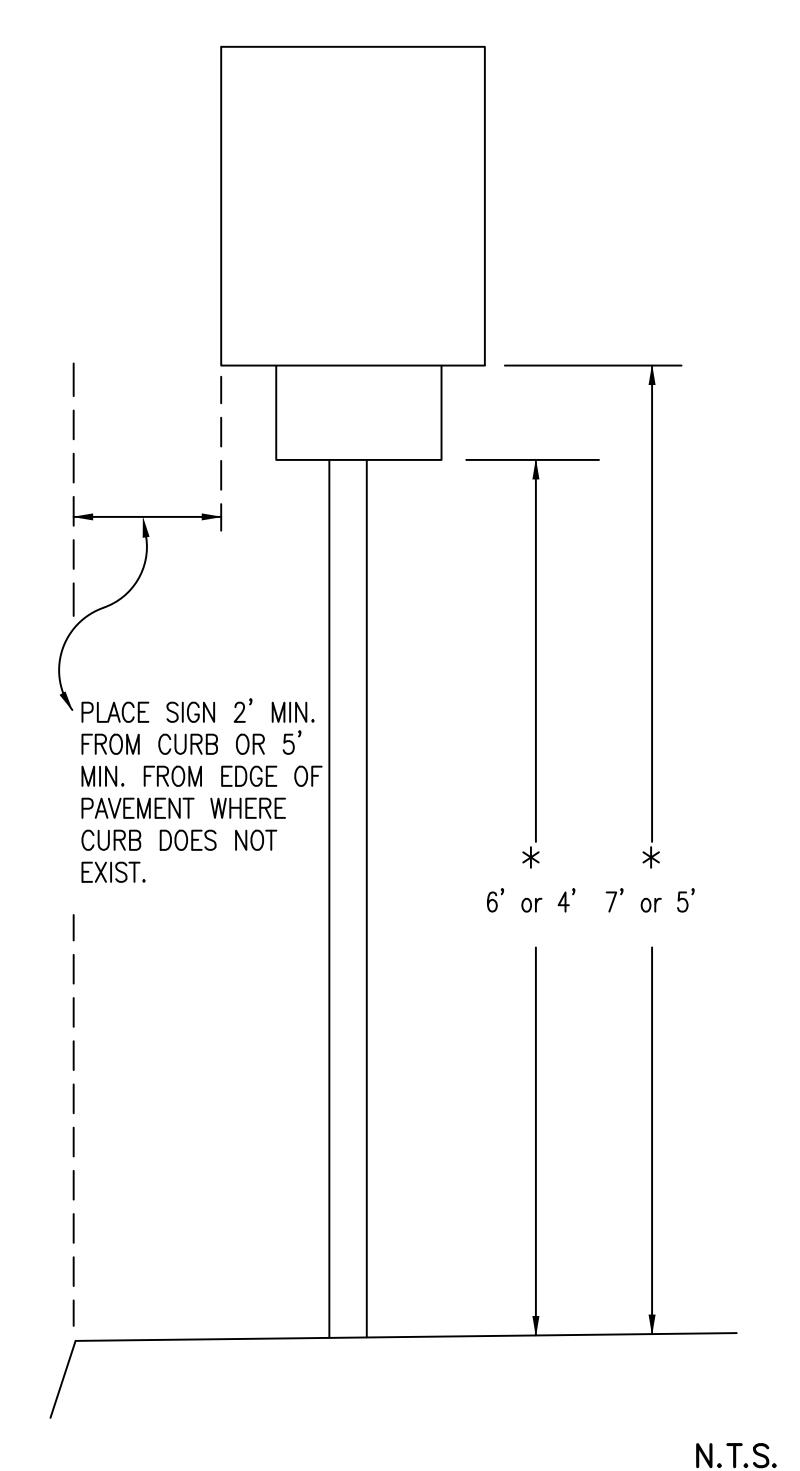
NONE: POST INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING NO. 908

SIGNS HEIGHTS Warning Signs shall be mounted at a height of at least 5 feet, measured from the bottom of the sign to the near edge of the pavement. In business, commercial and residential areas where parking and/or pedestrian movement is likely to occur or where there are other obstructions to view, the clearance to the bottom of the sign shall be at least 7 feet. The height to the bottom of a secondary sign mounted below another sign may be 1 foot less than the appropriate height specified above.

Regulatory Sign

The bottom of the sign shall be 5 feet above the surface of the pavement on conventional highways. In urban areas and where parking is prevalent, the bottom of the sign shall be placed at least 7 feet above the top of the curb.

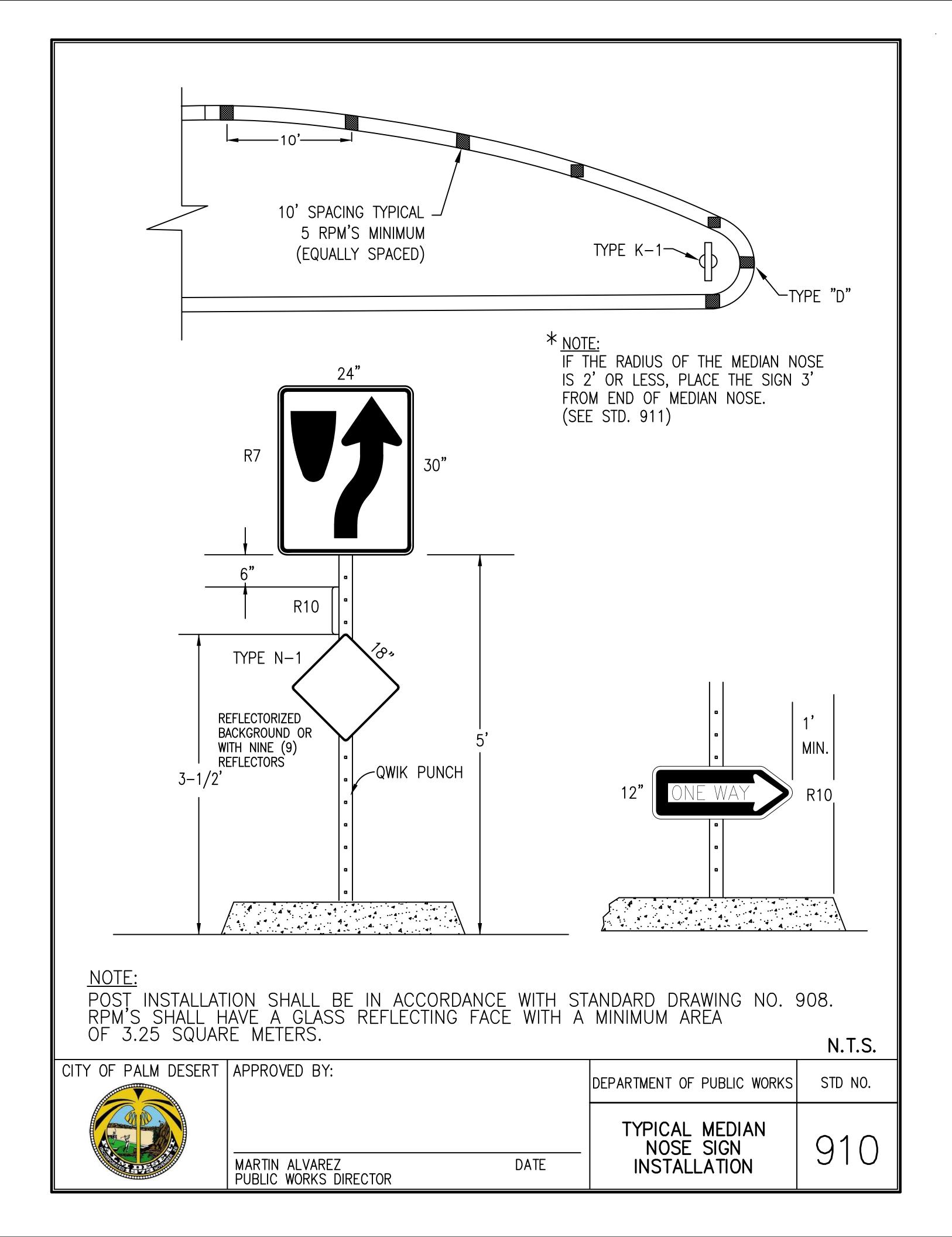
Any Modifications must be per the approval of the City Engineer.

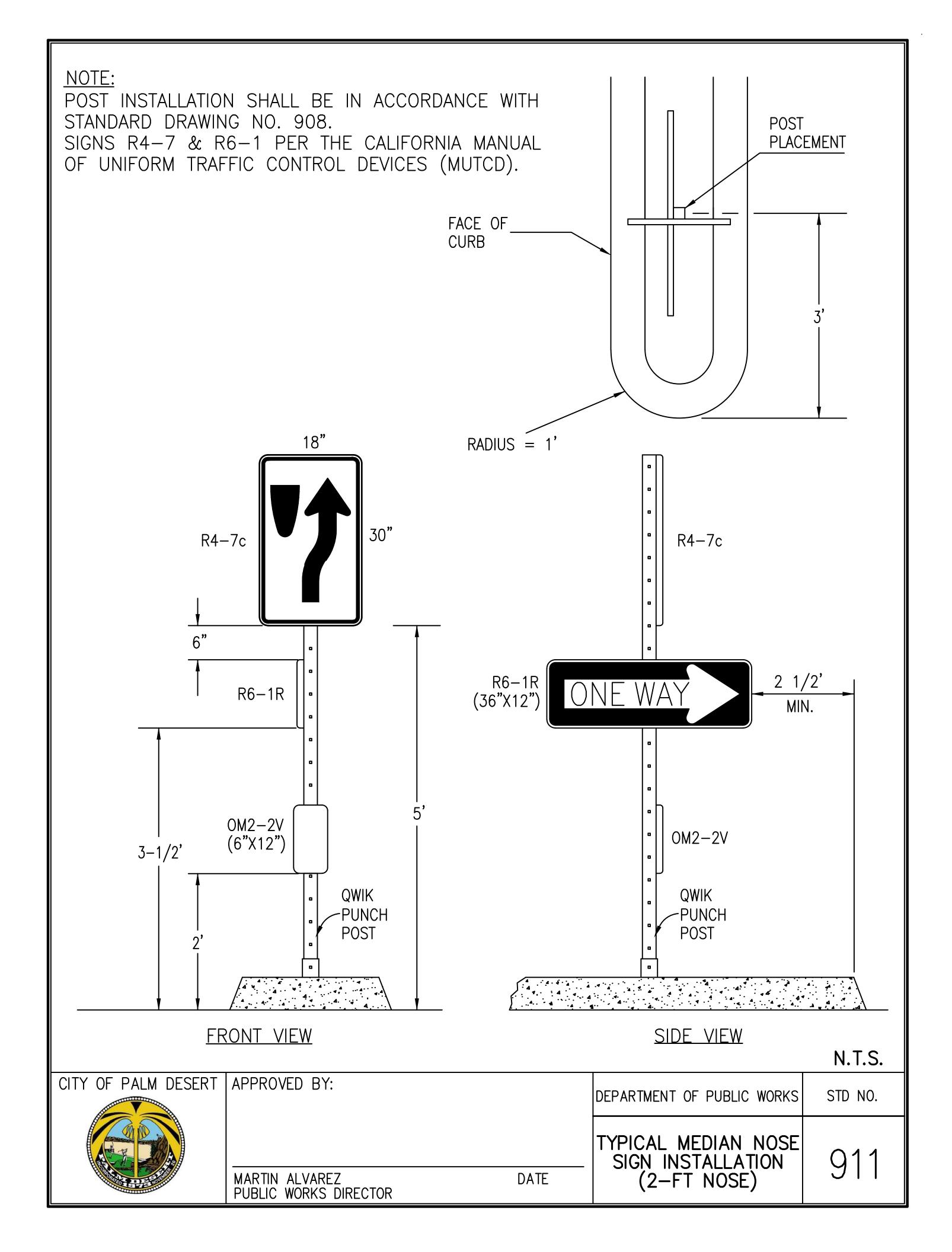


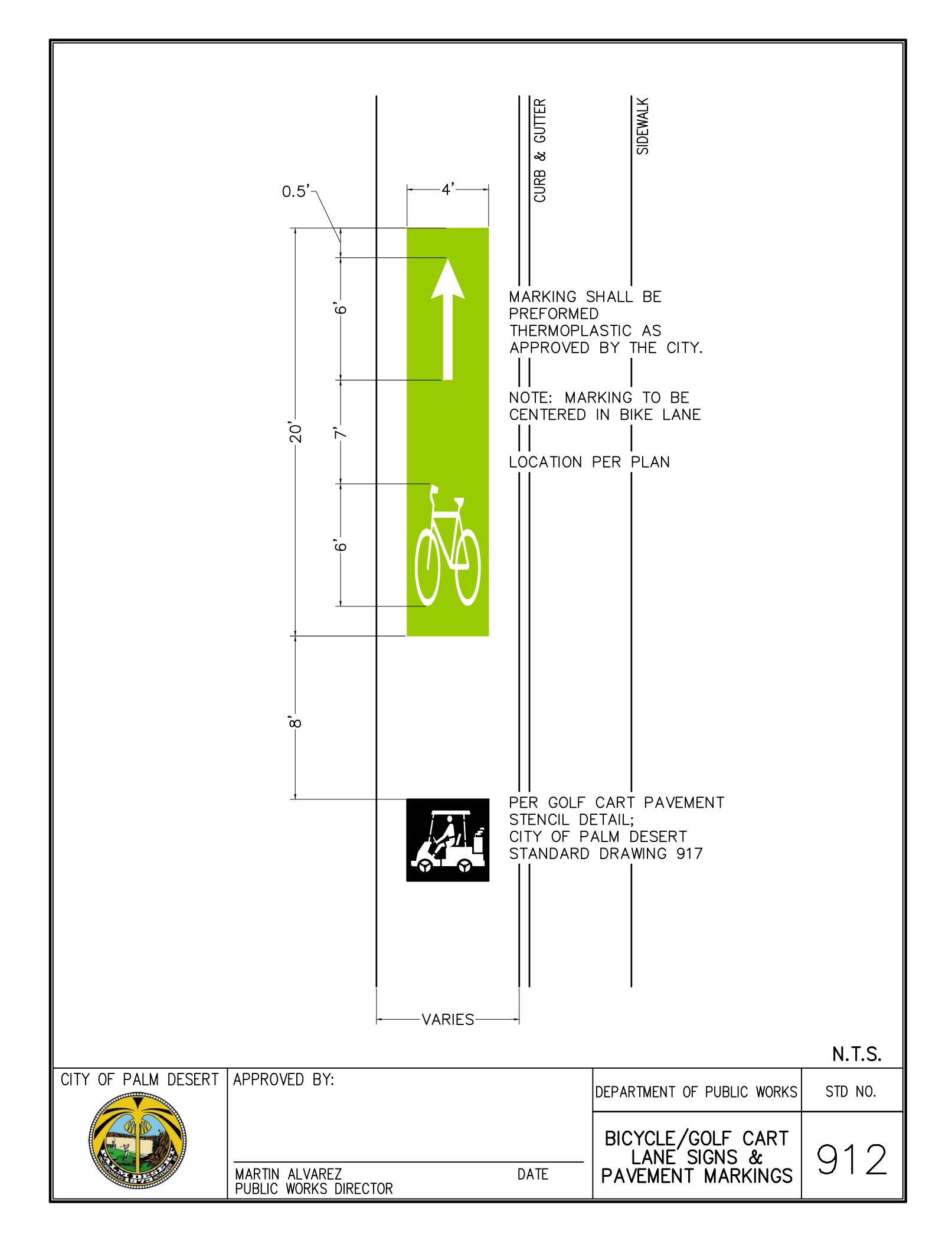
CITY OF PALM DESERT APPROVED BY:

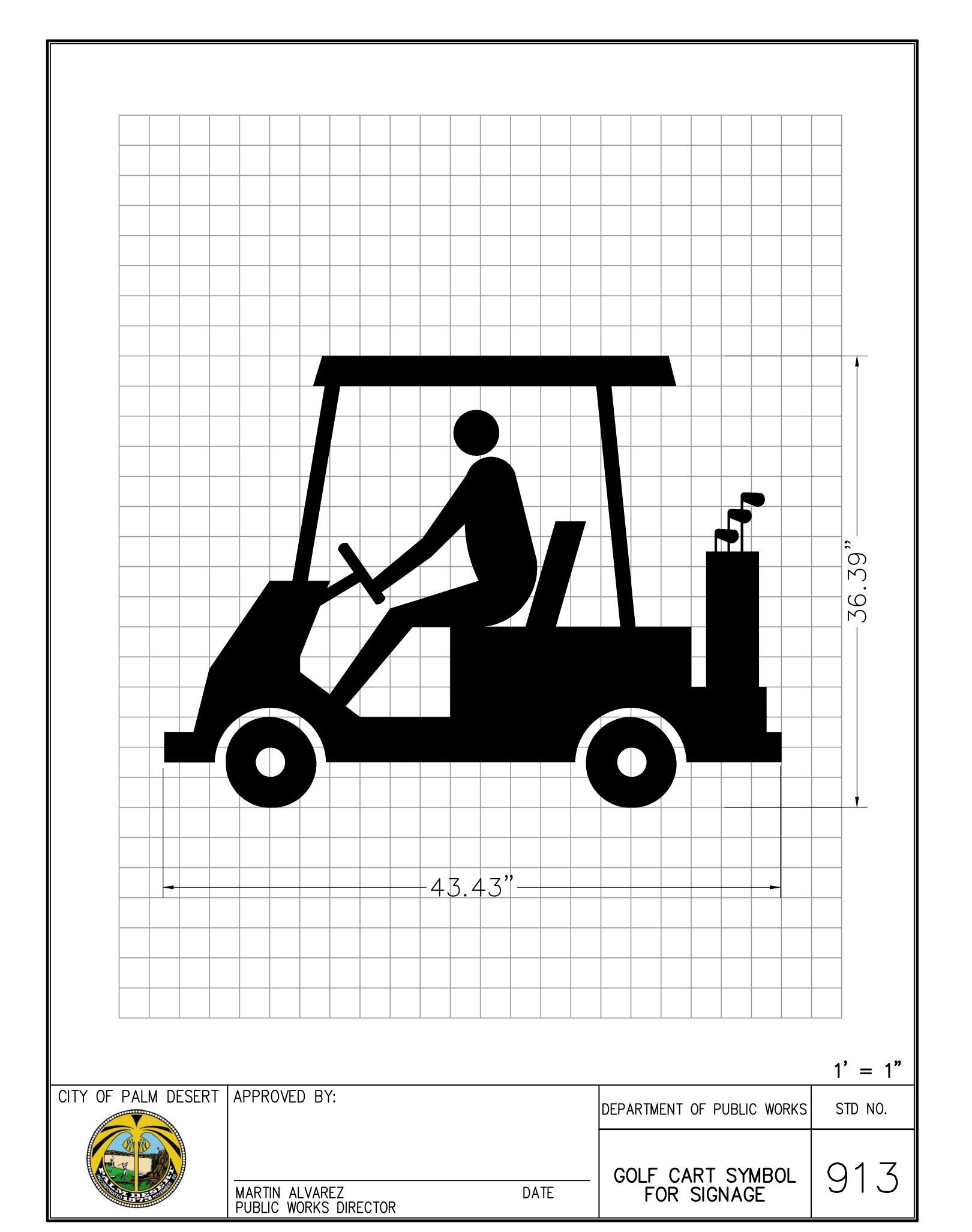
DEPARTMENT OF PUBLIC WORKS STD NO.

TYPICAL SIGN POST 909











COLORS

BORDER AND LEGEND - BLACK (Non-Reflective)
BACKGROUND - WHITE (Reflective)

1" = 1'

CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS S

STD NO.

MARTIN ALVAREZ
PUBLIC WORKS DIRECTOR

DATE

GOLF CART LANE SIGN 914



COLORS BORDER AND LEGEND - WHITE (Non-Reflective) BACKGROUND - GREEN (Reflective)

CITY OF PALM DESERT APPROVED BY:

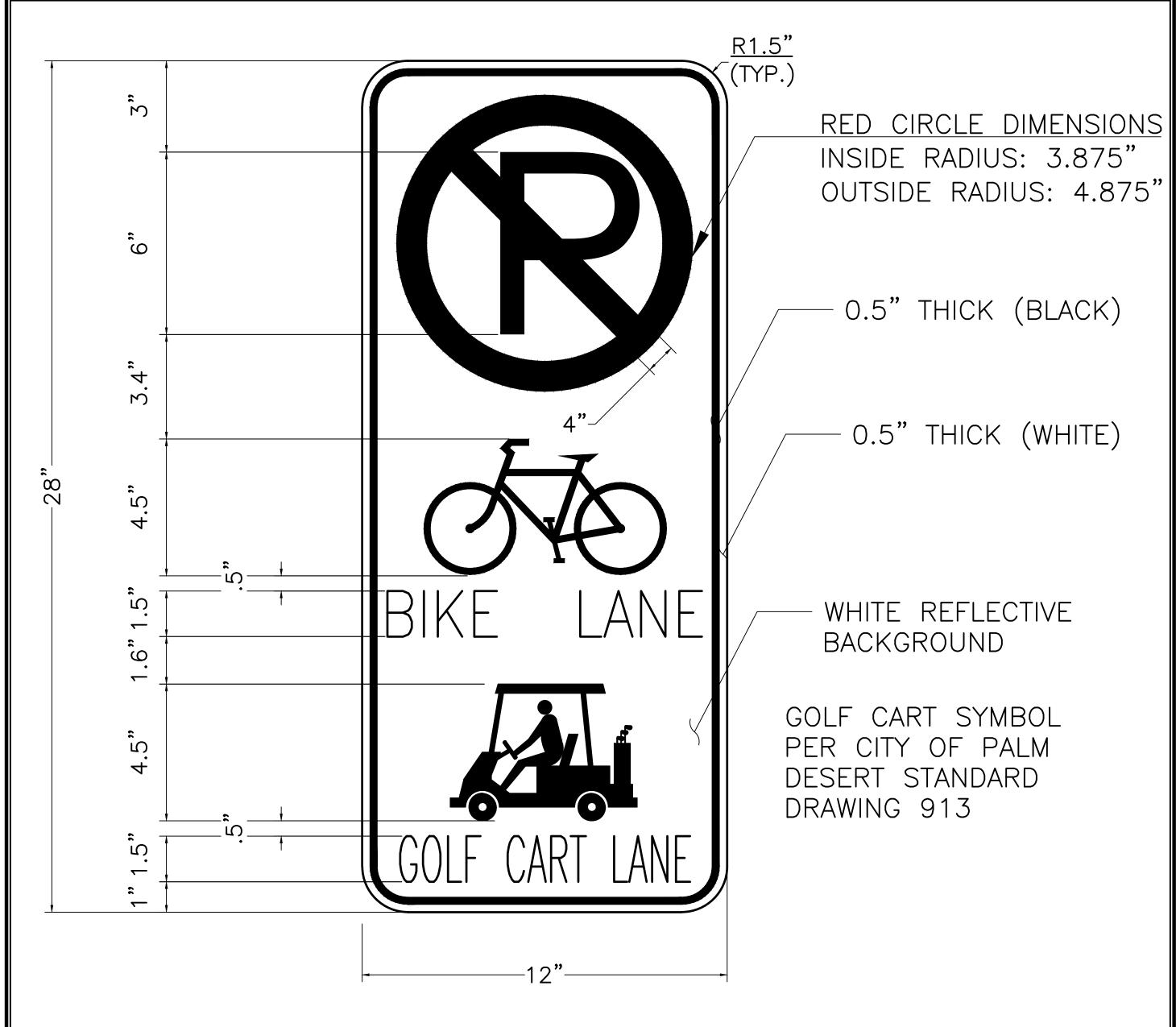
DEPARTMENT OF PUBLIC WORKS STD NO.

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

DATE

GOLF CART ROUTE SIGN

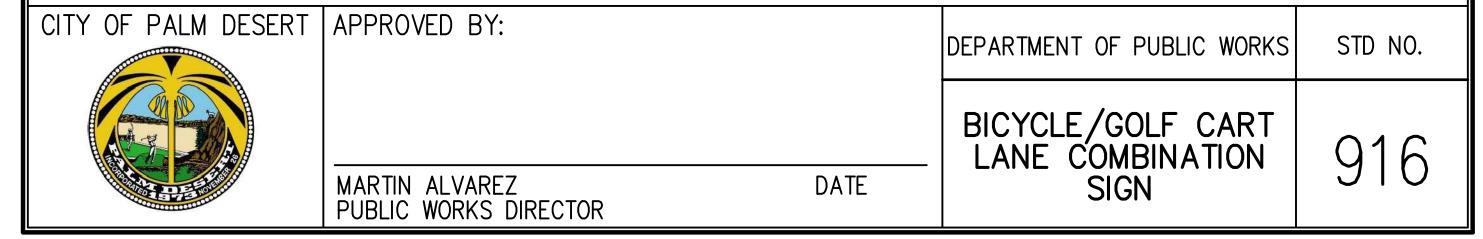
915

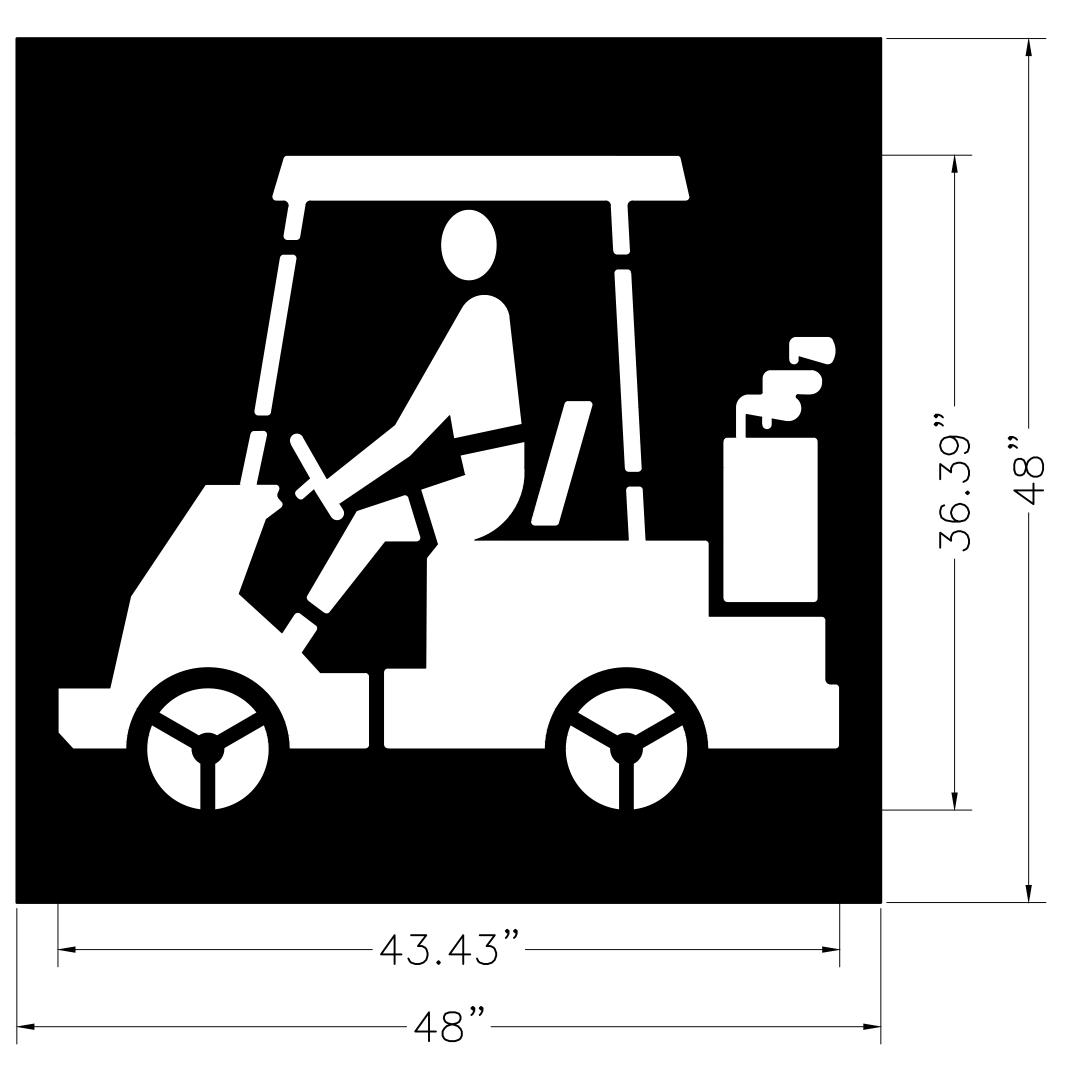


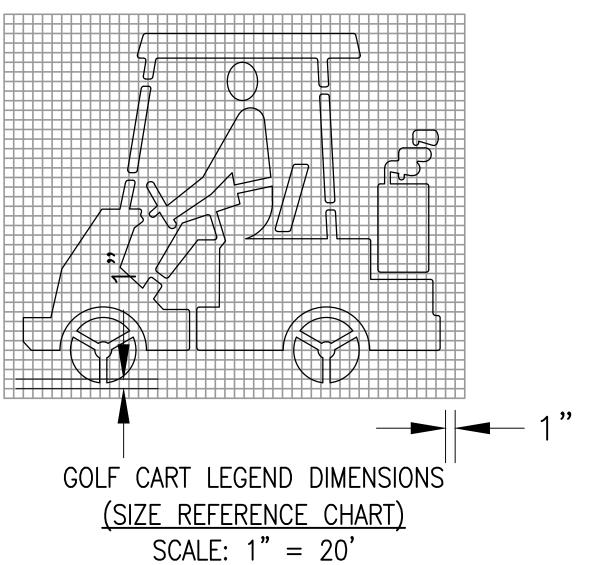
MID-BLOCK BIKE/GOLF CART LANE SIGN

NOTES:

- 1. R81A(CA) "BEGIN" SIGN SHALL BE INSTALLED BELOW MID-BLOCK BIKE/GOLF CART LANE SIGN AT THE START OF EVERY BIKE LANE.
- 2. "MID-BLOCK" SIGN SHALL BE INSTALLED EVERY 500 LINEAR FEET, UNLESS OTHERWISE SPECIFIED BY THE CITY.
- 3. R81B(CA) "END" SIGN SHALL BE INSTALLED BELOW MID-BLOCK BIKE/GOLF CART LANE SIGNAT THE END OF EVERY BIKE LANE.
- 4. FOR BICYCLE FACILITIES SPECIFIC SIGNAGE, REFERENCE THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).





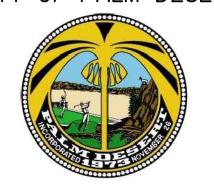


NOTE: MARKING SHALL BE PREFORMED THERMOPLASTIC AS APPROVED BY THE CITY.

N.T.S.

STD NO.

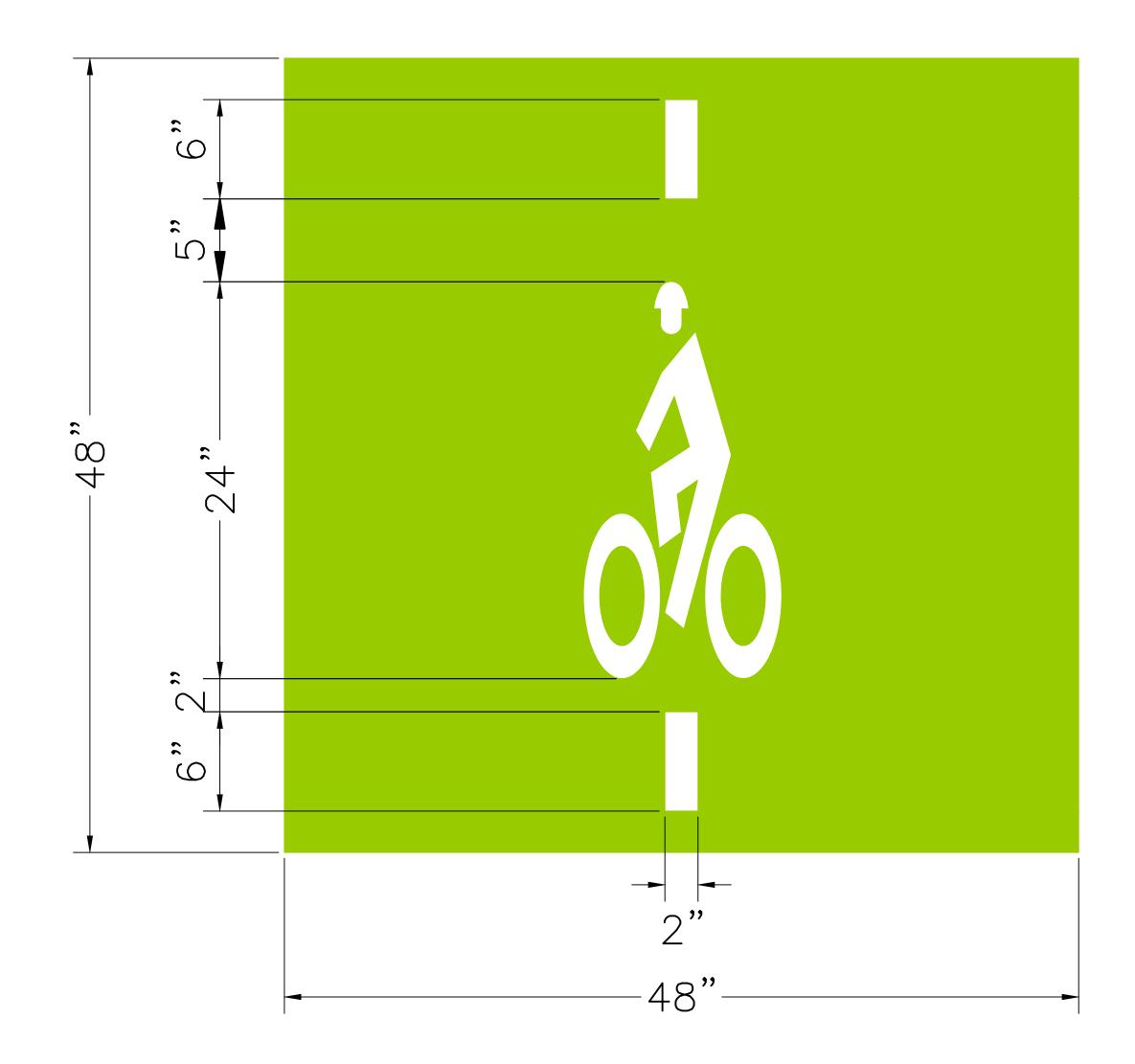
CITY OF PALM DESERT APPROVED BY:



MARTIN ALVAREZ
PUBLIC WORKS DIRECTOR

GOLF CART 917 PAVEMENT LEGEND

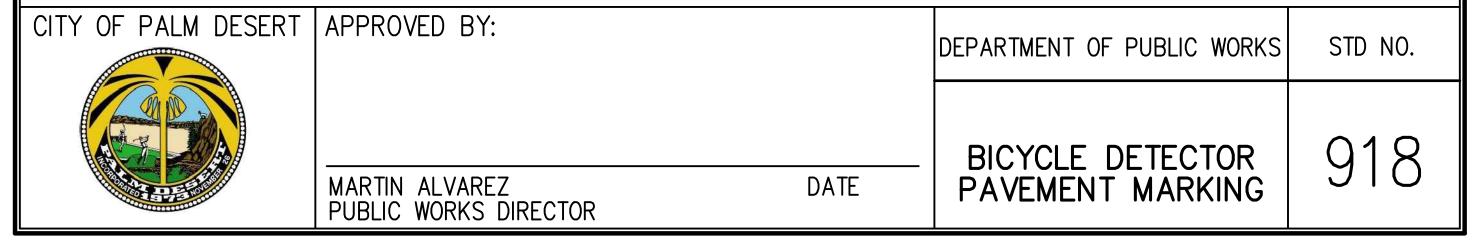
DEPARTMENT OF PUBLIC WORKS

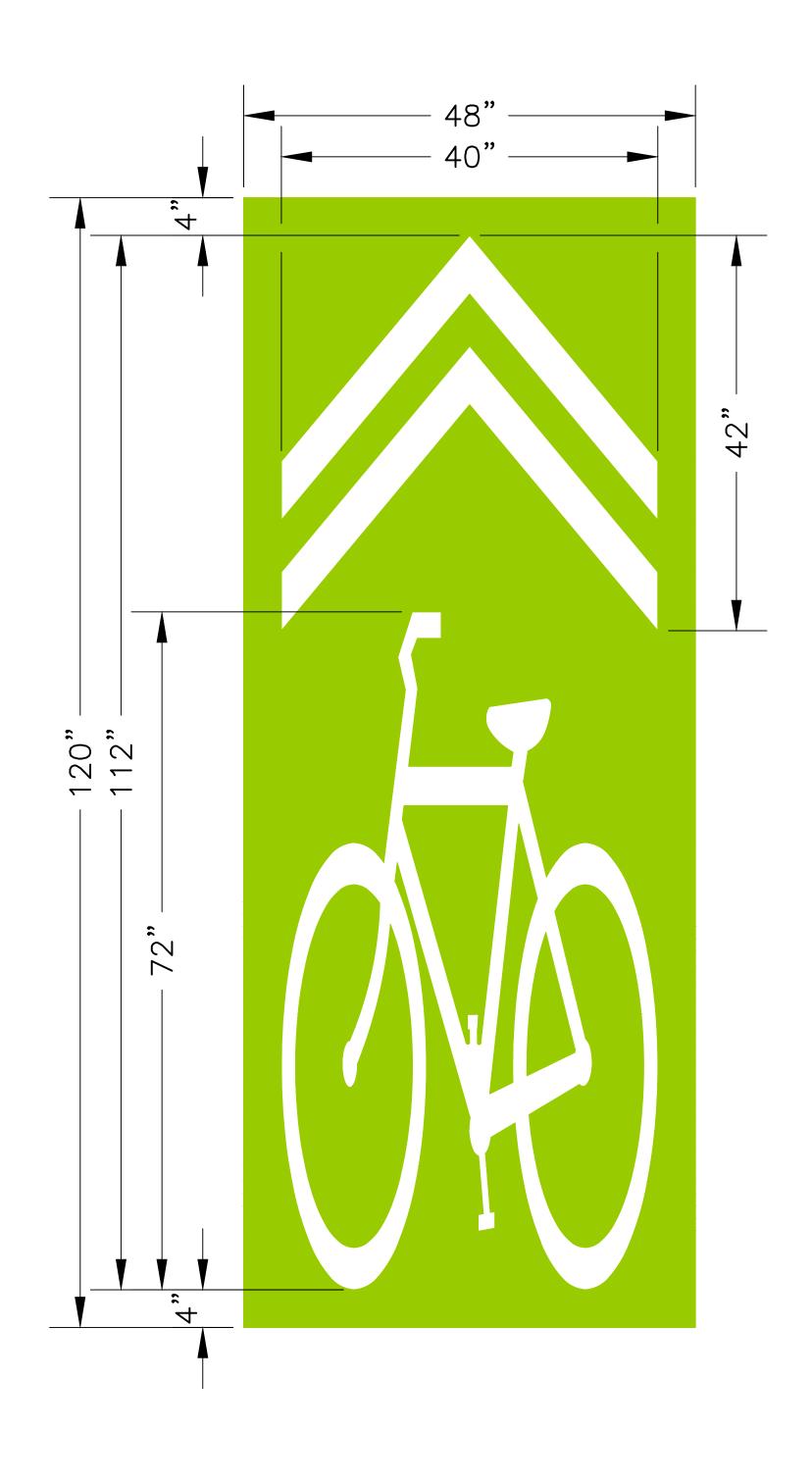


BICYCLE DETECTOR PAVEMENT MARKING

NOTES:

- 1. USE GREEN COLORED PAVEMENT MARKINGS. SEE CVAG ACTIVE TRANSPORTATION DESIGN GUIDELINES AS A GUIDE.
- 2. SYMBOL SHALL BE PLACED OVER BICYCLE DETECTION LOOPS IN PAVEMENT AT SIGNALIZED INTERSECTIONS TO INDICATE THE OPTIMUM POSITION FOR A BICYCLE TO ACTIVATE THE SIGNAL AS DIRECTED BY THE CITY.
- 3. SIGN R10-22 IN THE CALIFORNIA MUTCD (CURRENT EDITION) MAY BE INSTALLED TO SUPPLEMENT THE PAVEMENT MARKINGS AS DIRECTED BY THE CITY.
- 4. MARKINGS SHALL BE PREFORMED THERMOPLASTIC AS APPROVED BY THE CITY.





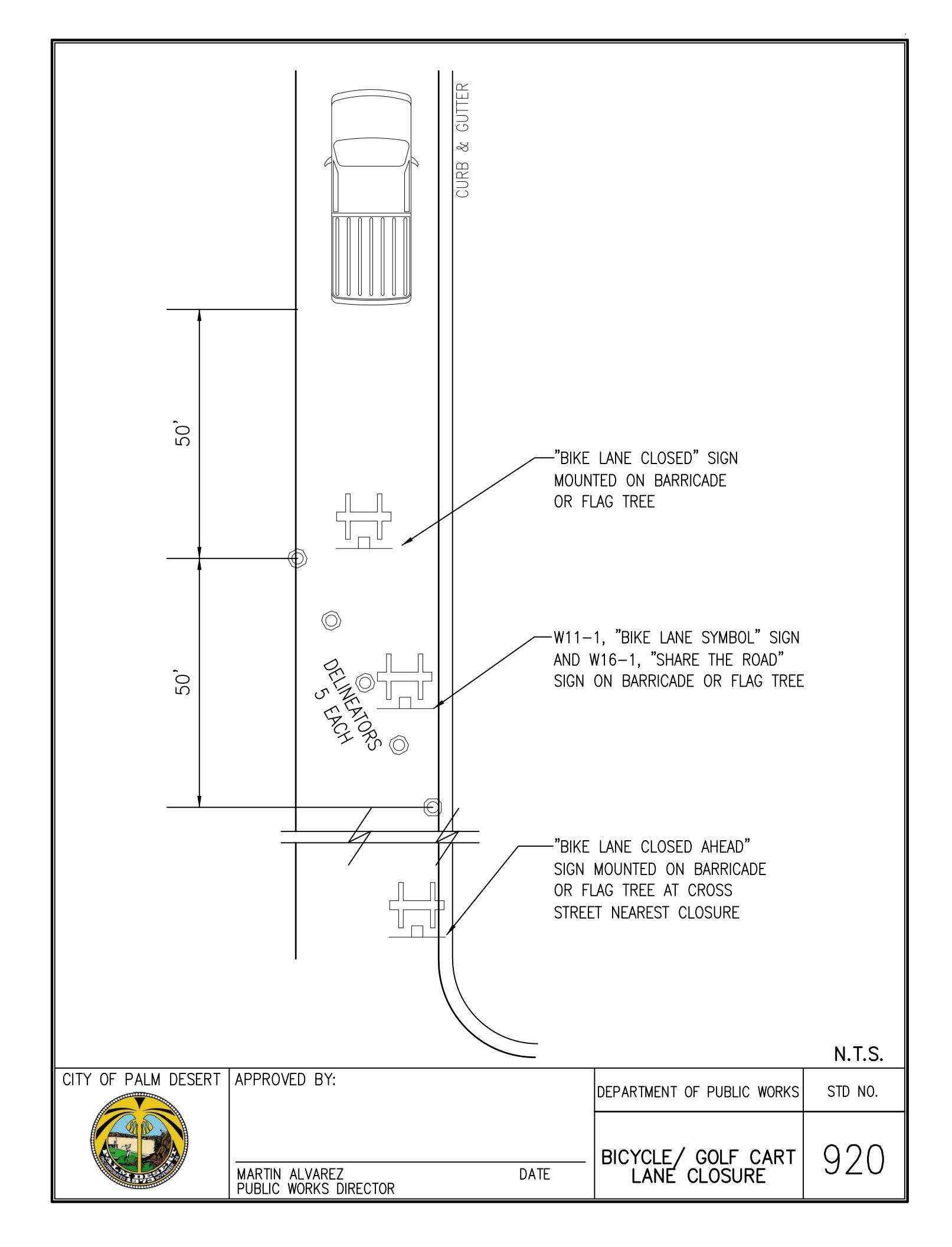
- 1. USE GREEN COLORED PAVEMENT MARKINGS. SEE CVAG ACTIVE TRANSPORTATION DESIGN GUIDELINES AS A GUIDE.
- 2. MARKINGS SHALL BE PREFORMED THERMOPLASTIC AS APPROVED BY THE CITY.

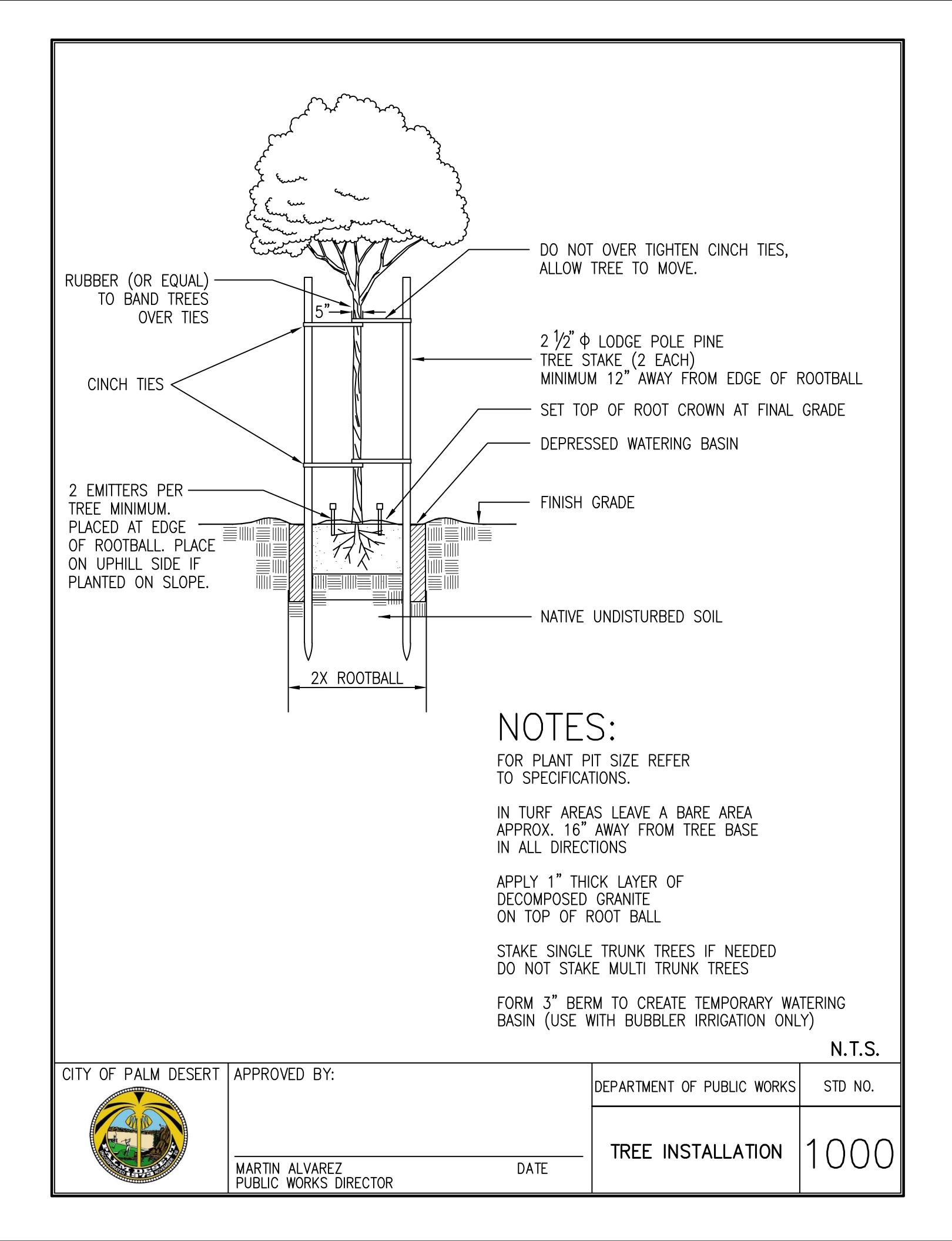
N.T.S.

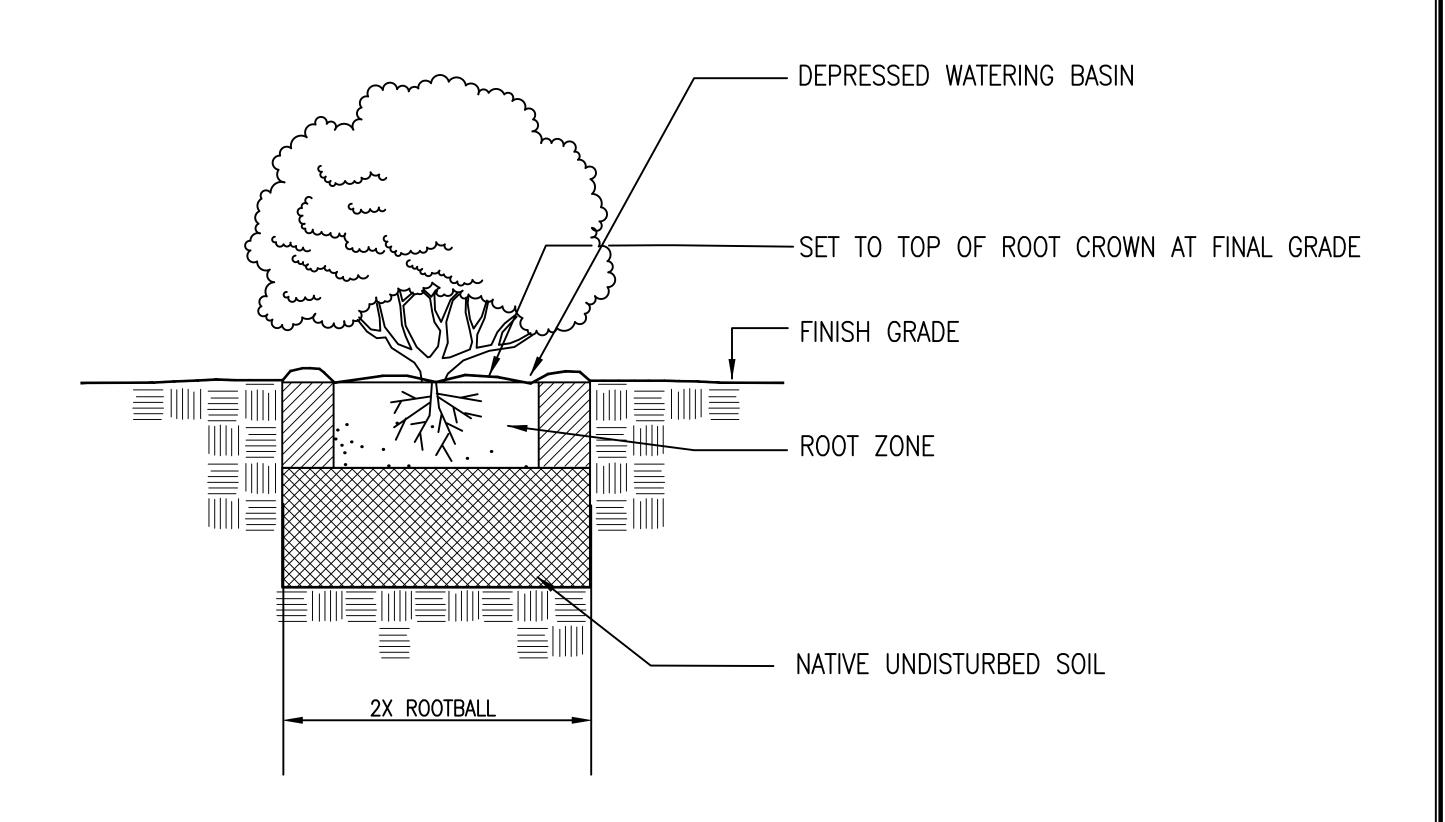
CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

BICYCLE PAVEMENT MARKING 919



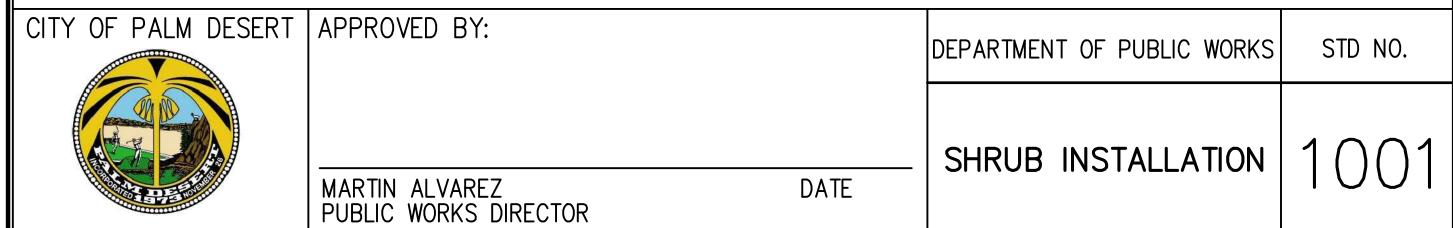


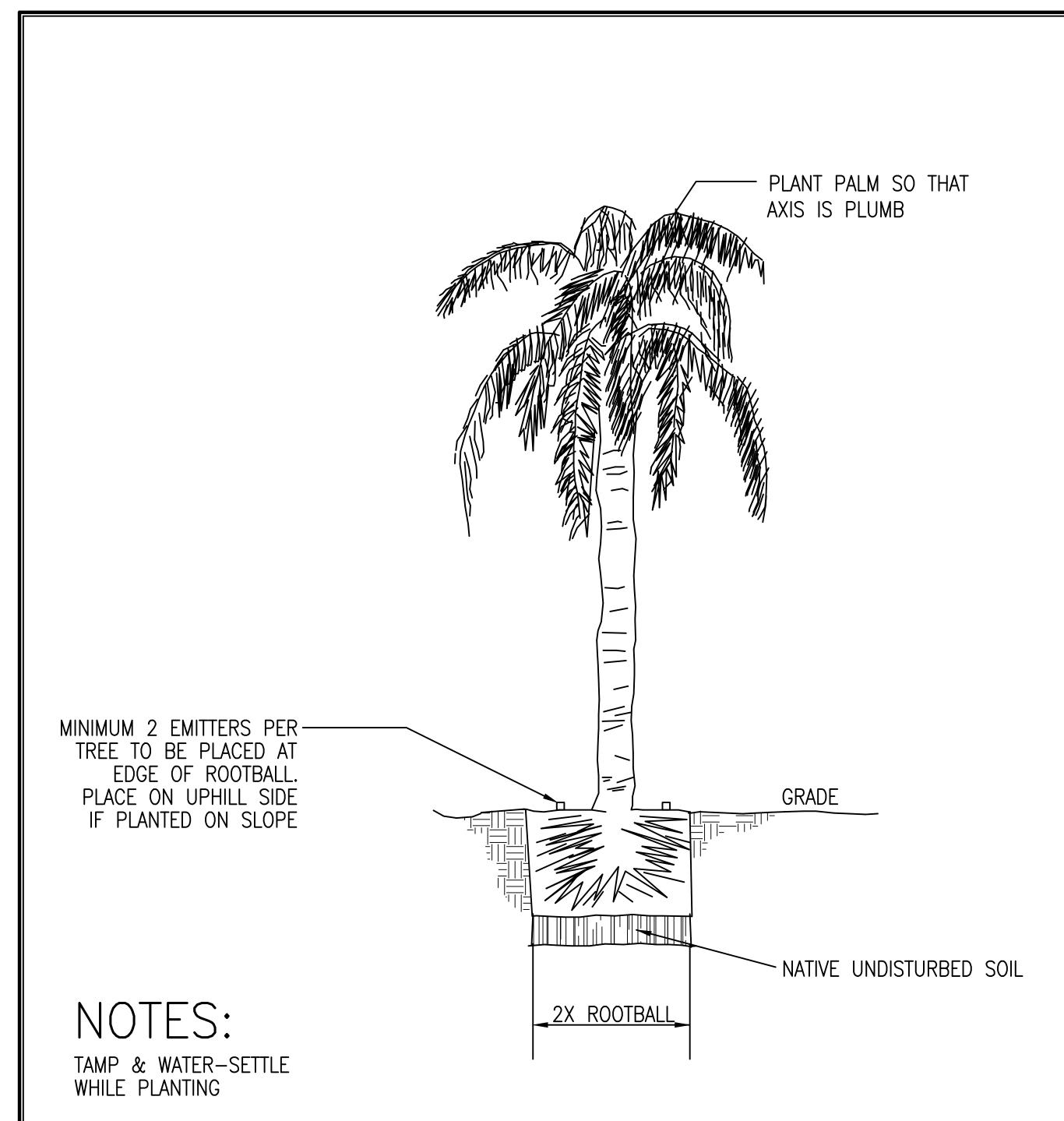


PLANT SHRUBS MINIMUM OF 3' FROM CURB IN MEDIANS, 3' FROM CURB/SIDEWALKS IN PARKWAYS OR AS NOTED ON PLANS

APPLY 1" THICK LAYER OF DECOMPOSED GRANITE ON TOP OF ROOT BALL

FORM 3" BERM TO CREATE TEMPORARY WATERING BASIN (USE WITH ONE BUBBLER EMITTER MINIMUM IRRIGATION ONLY)





TOP OF ROOT BALL NOT TO BE LOWER THAN FINISH GRADE

APPLY 1" THICK LAYER OF DECOMPOSED GRANITE ON TOP OF ROOT BALL

N.T.S.

CITY OF PALM DESERT APPROVED BY:

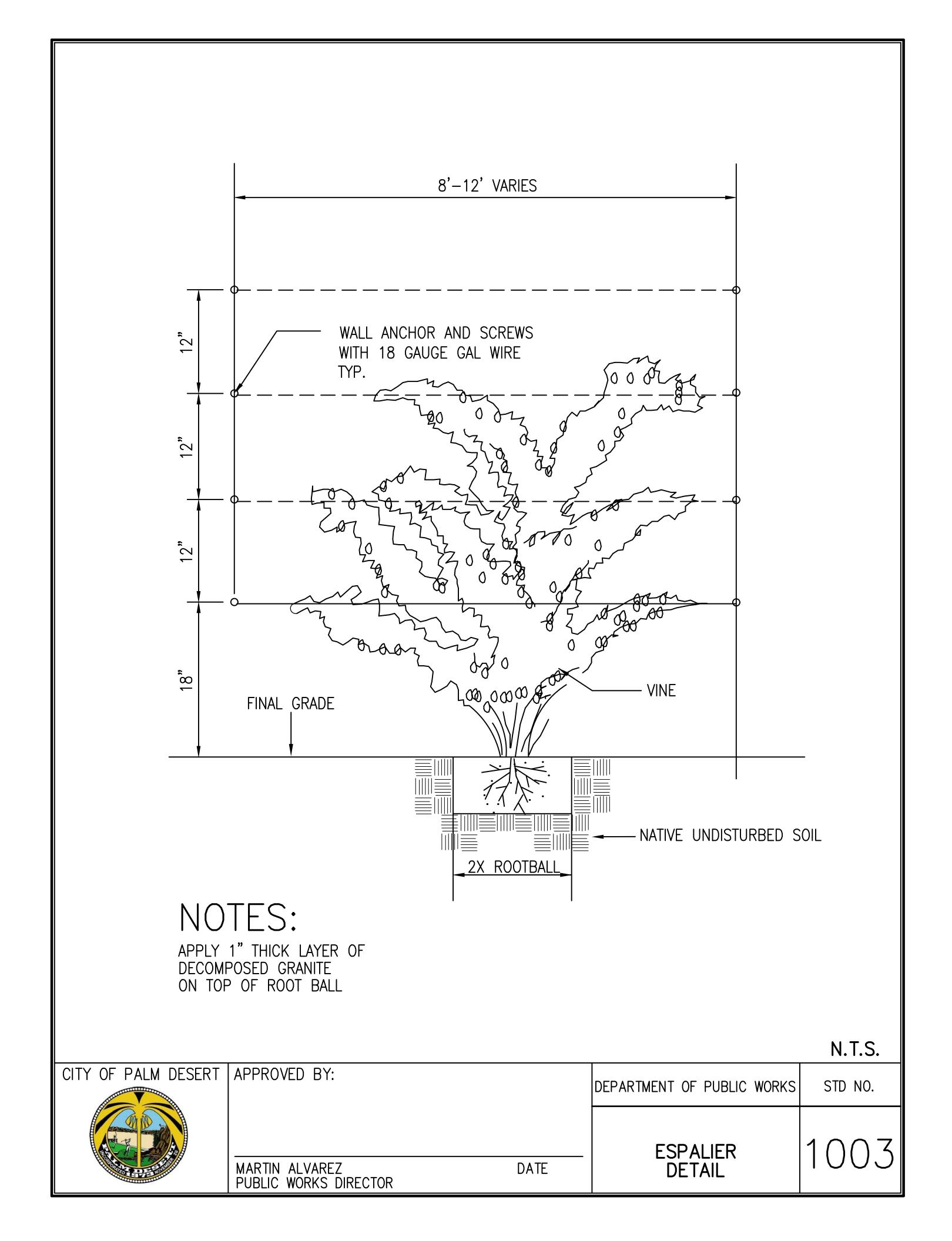
DEPARTMENT OF PUBLIC WORKS STD NO.

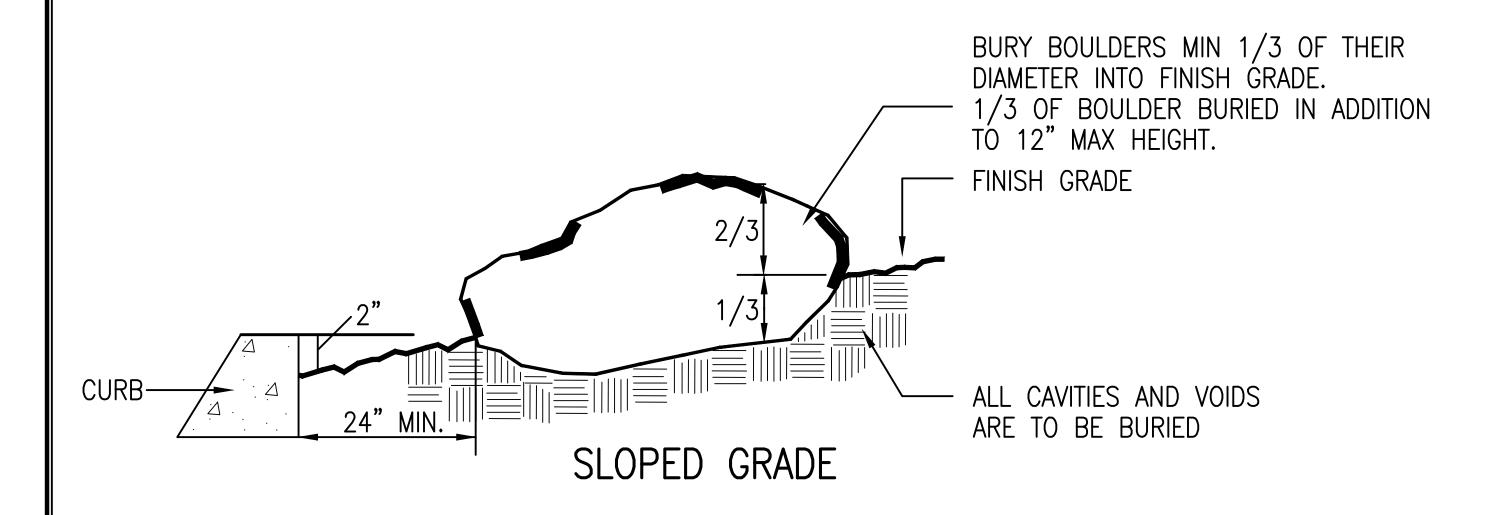
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

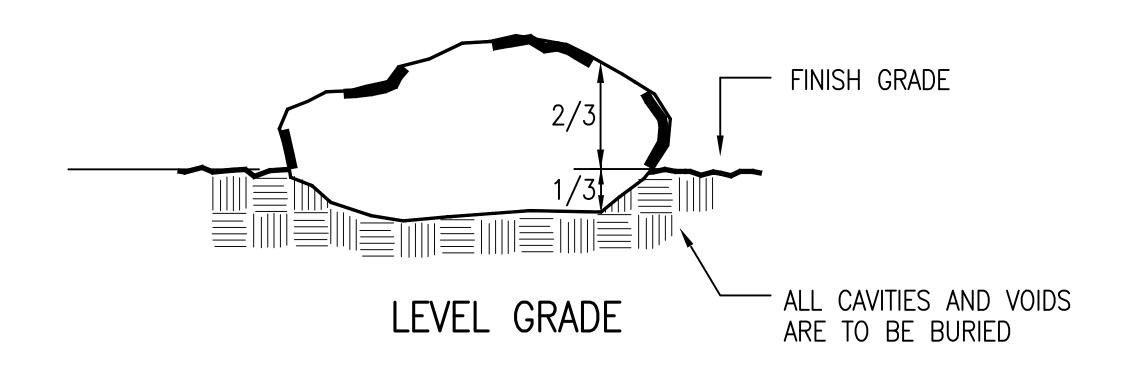
DATE

DATE

DEPARTMENT OF PUBLIC WORKS STD NO.



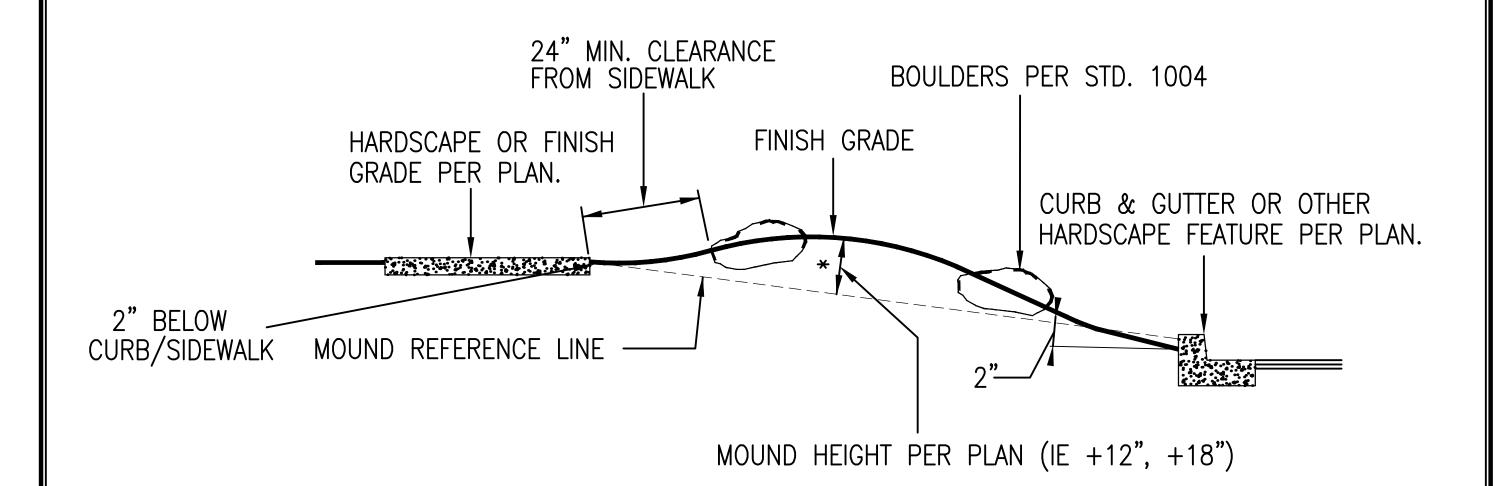




ALL BOULDERS TO BE A MINIMUM 24" FROM CURB/HARDSCAPE UNLESS NOTED ON PLAN

BOULDERS IN CLUSTERS TO BE SET AT VARIOUS HEIGHTS PER CITY APPROVAL

				N. 1. S.
CITY OF PALM DESERT	APPROVED BY:		DEPARTMENT OF PUBLIC WORKS	STD NO.
			BOULDER	1001
	MARTIN ALVAREZ PUBLIC WORKS DIRECTOR	DATE	INSTALLATION	1001



MOUNDS ARE PER DIAGRAM

MOUND SHAPES DO NOT REPRESENT ACTUAL CONTOURS

GRADE TO ACTUAL SITE CONDITIONS OR REFER TO LANDSCAPE PLANS

GIVE PRIORITY TO DRAINAGE OF PLANTED AREAS.

FINISH SURFACE MUST BE 2" BELOW ADJACENT CURB OR SIDEWALK

N.T.S.

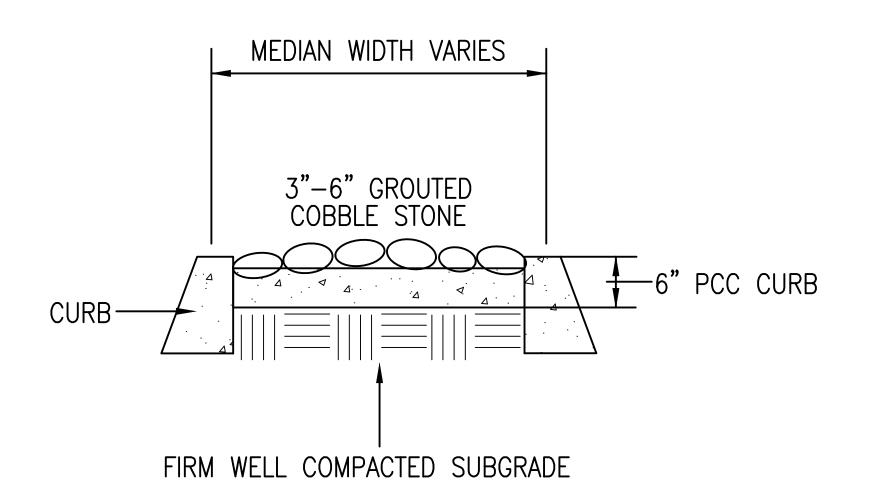
CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

DATE

DEPARTMENT OF PUBLIC WORKS STD NO.



SET COBBLE IN 6" THICK CONCRETE MAINTAIN 1/2" SPACE BETWEEN ROCKS. GROUT ALL JOINTS, REMOVE EXCESS CONCRETE IN JOINTS. TROWEL TO 1/2" DEEP BETWEEN JOINTS.

CONCRETE MIX TO BE: 6 SACKS WITH PEAGRAVEL/SAND SLURRY MIX

COBBLE STONE PATTERN RANDOM PLACED WITH FLAT SIDE UP, 50% BURIED IN CONCRETE

CITY OF PALM DESERT APPROVED BY:

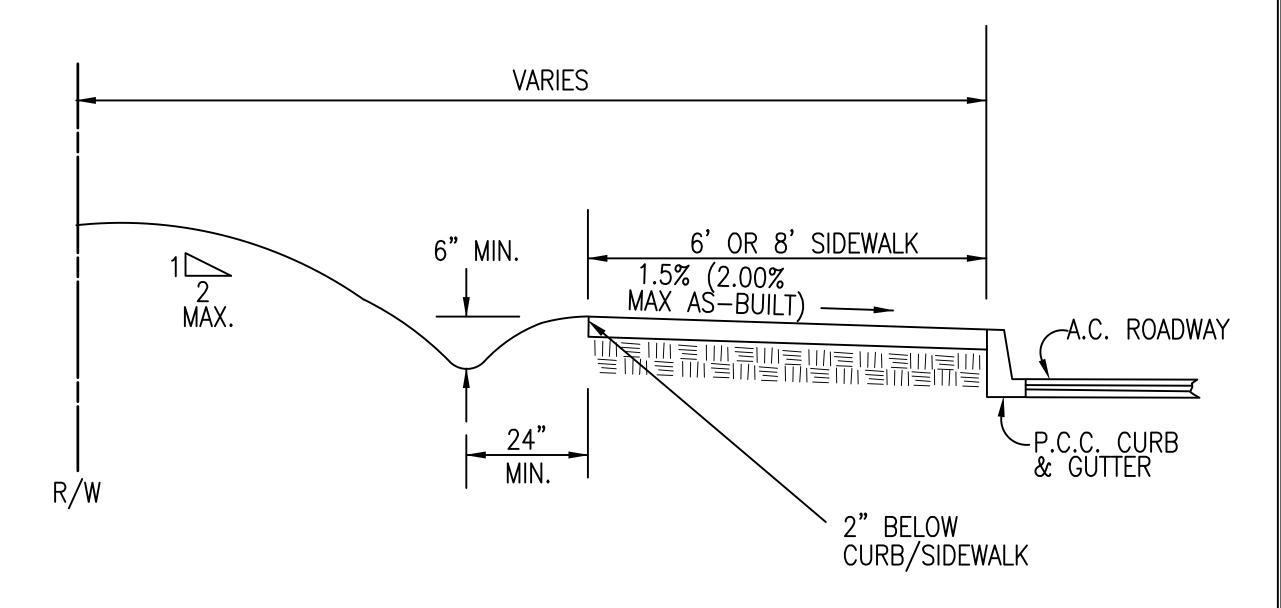
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

N.T.S.

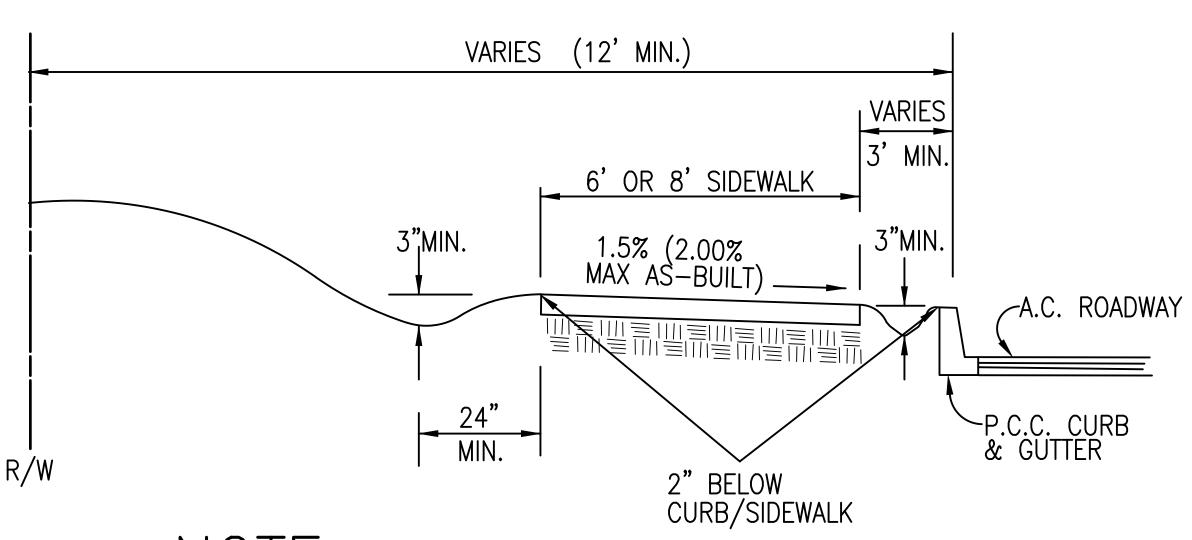
DEPARTMENT OF PUBLIC WORKS STD NO.

GROUTED COBBLESTONE MEDIAN DETAIL

CASE 1 - CURBSIDE SIDEWALK - PARKWAY



CASE II - MEANDERING SIDEWALK - PARKWAY



NOTE:

FINISH SURFACE MUST BE 2" BELOW ADJACENT CURB OR SIDEWALK

N.T.S.

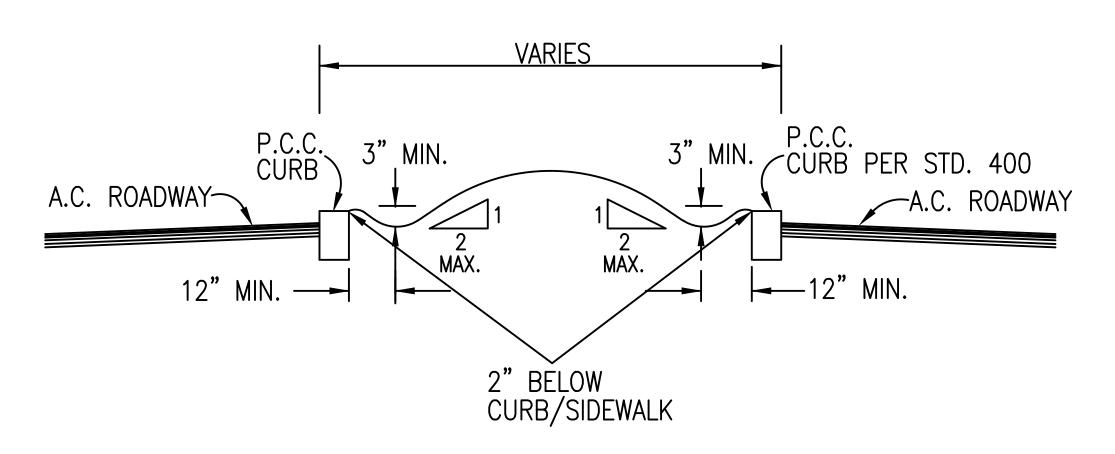
CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

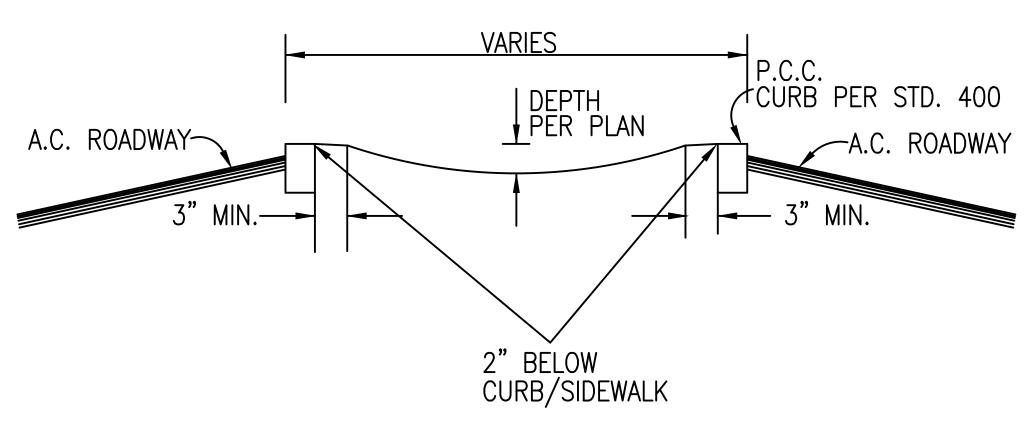
PARKWAY LANDSCAPE MOUNDING

1007

CASE III(A) - RAISED MEDIAN ISLAND



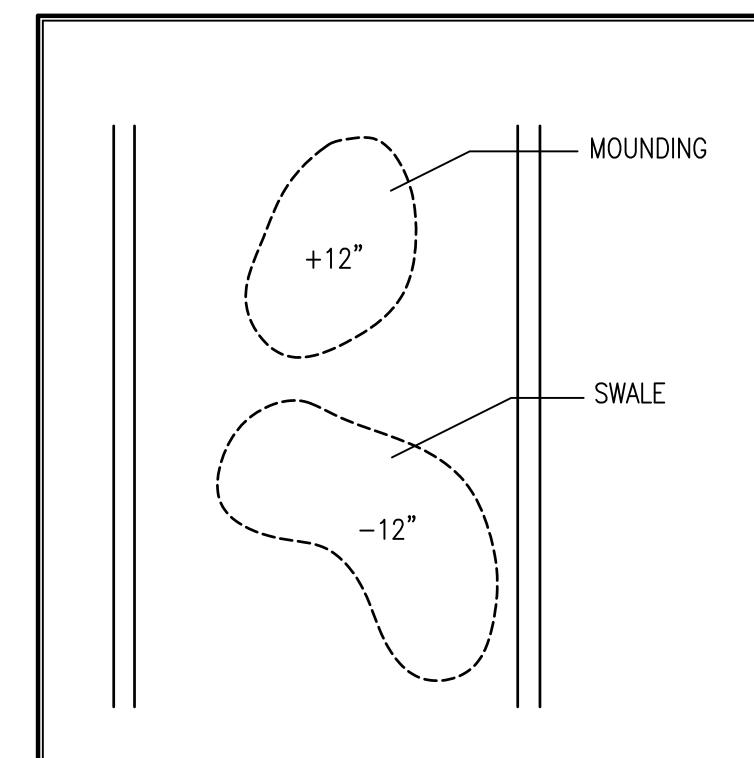
CASE III(B) - DEPRESSED MEDIAN ISLAND

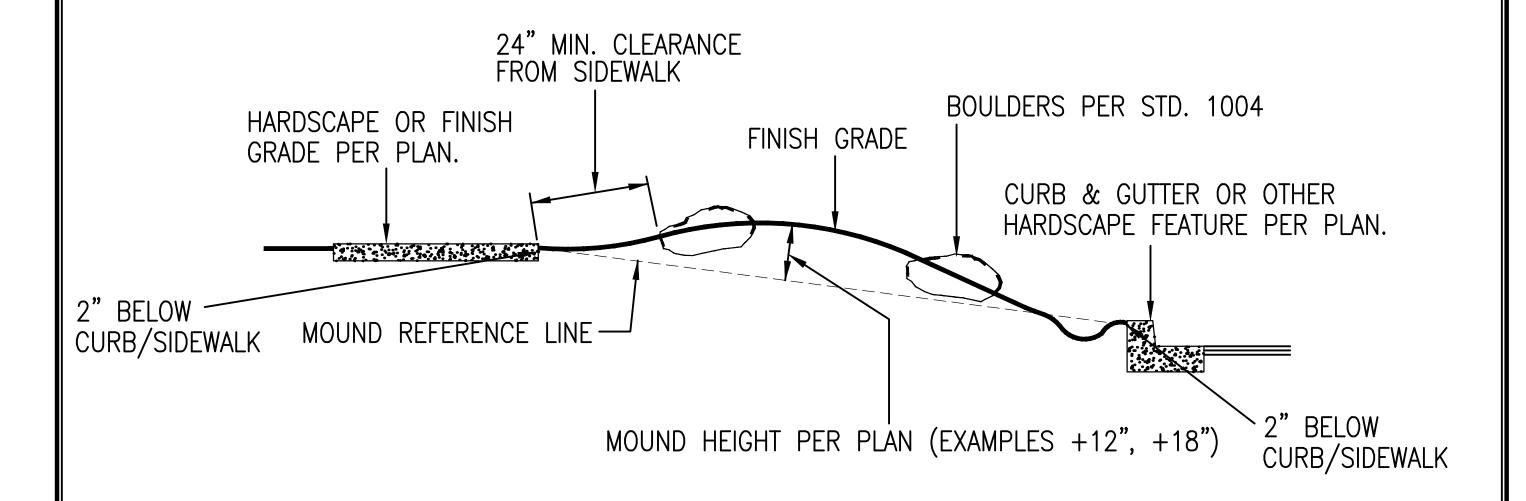


NOTE: FINISH SURFACE MUST BE 2" BELOW ADJACENT CURB OR SIDEWALK

N.T.S.







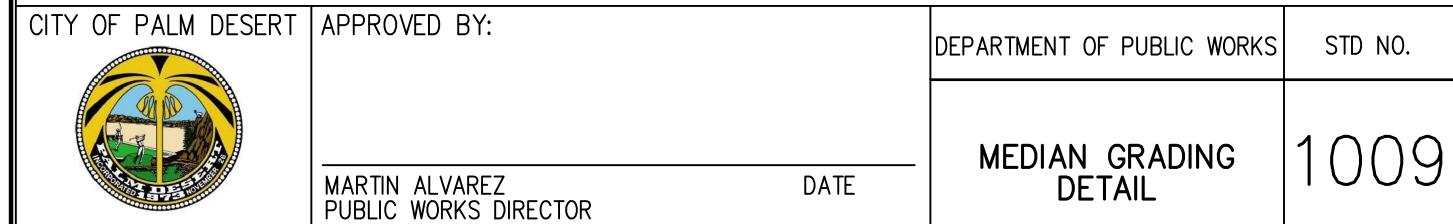
MOUNDS ARE PER DIAGRAM

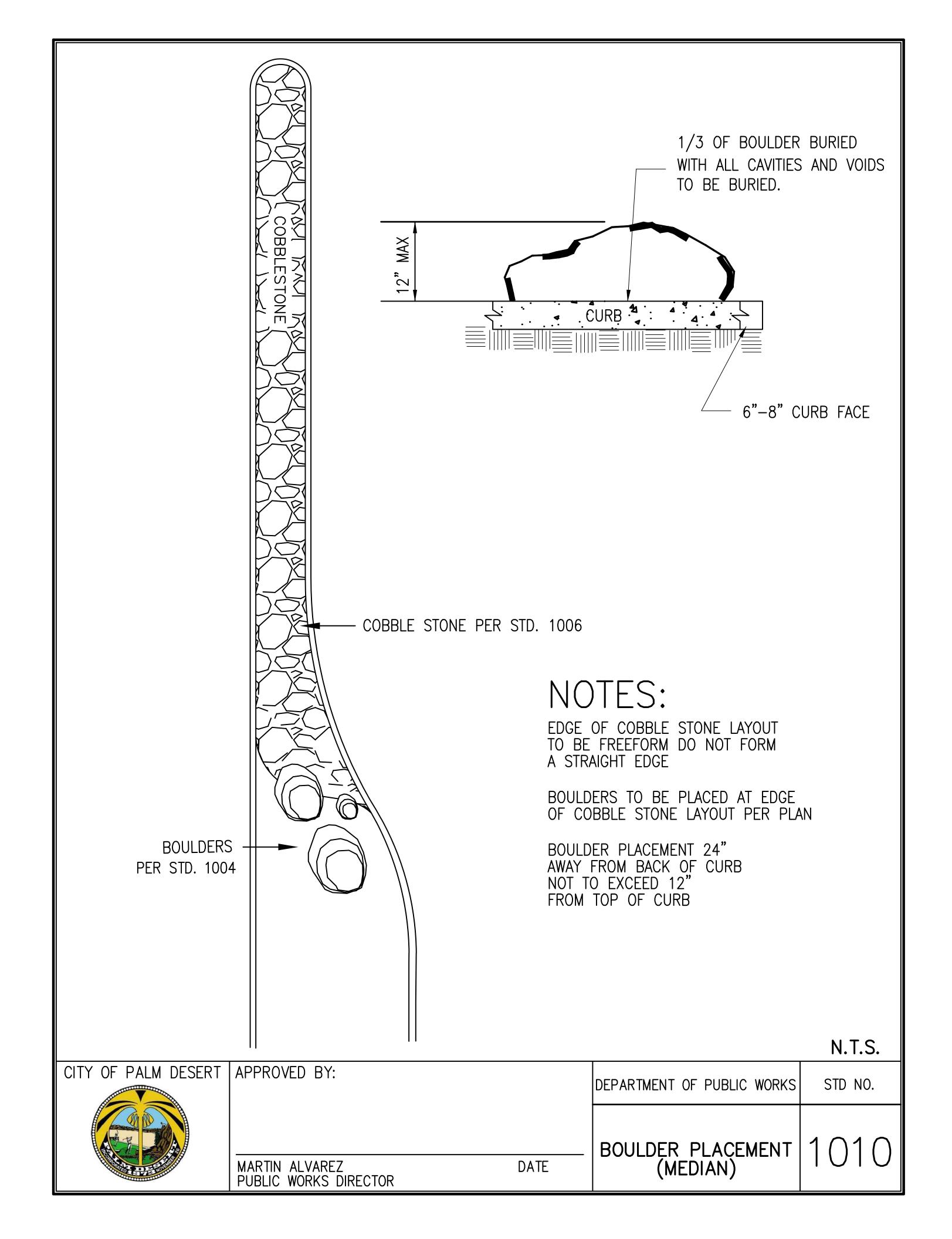
MOUND SHAPES DO NOT REPRESENT ACTUAL CONTOURS

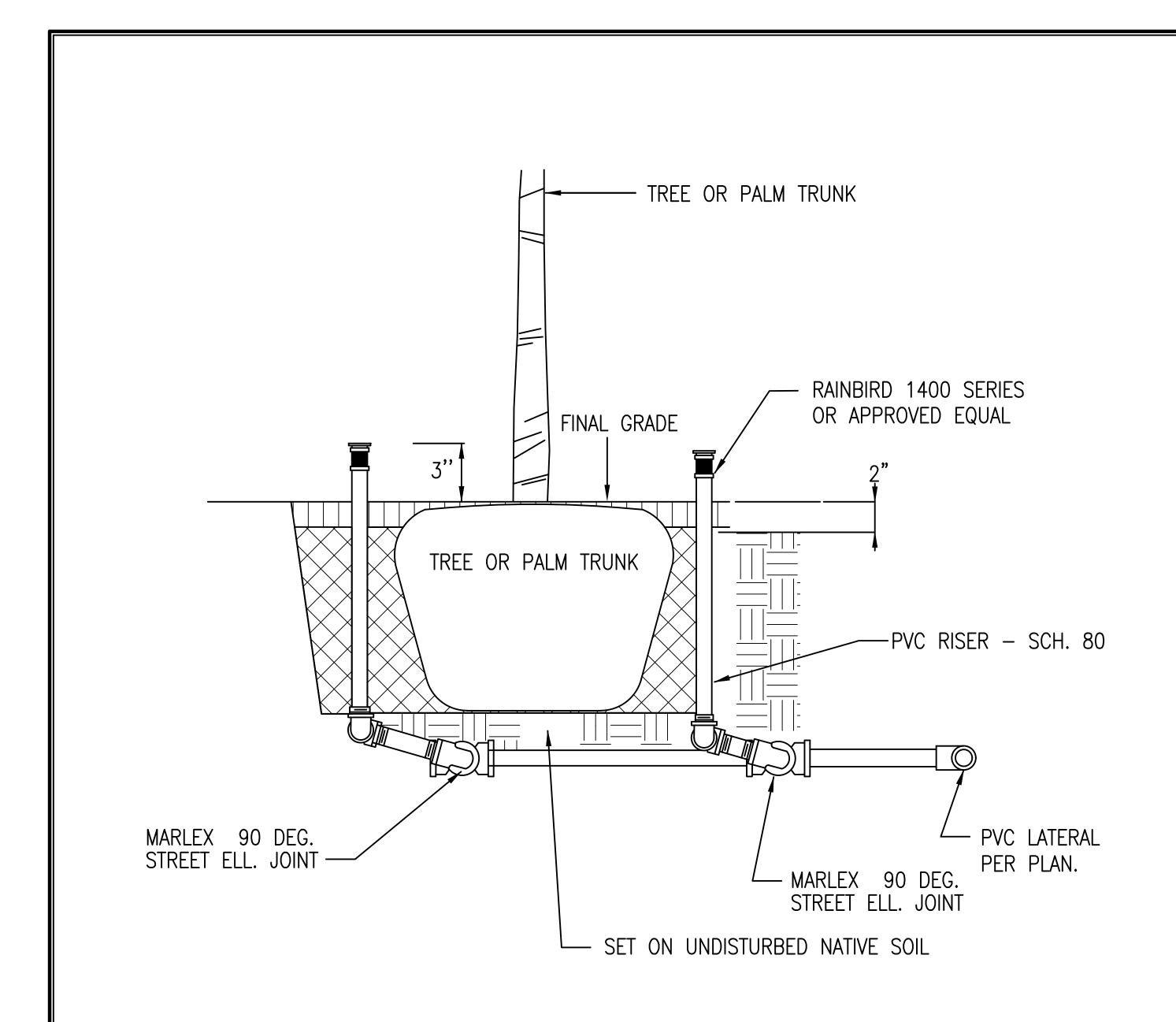
GRADE TO ACTUAL SITE CONDITIONS GIVE PRIORITY TO DRAINAGE OF PLANTED AREAS.

FINISH SURFACE MUST BE 2" BELOW CURB OR SIDEWALK

N.T.S.







SET BUBBLER MINIMUM 12" AWAY FROM ROOT BALL

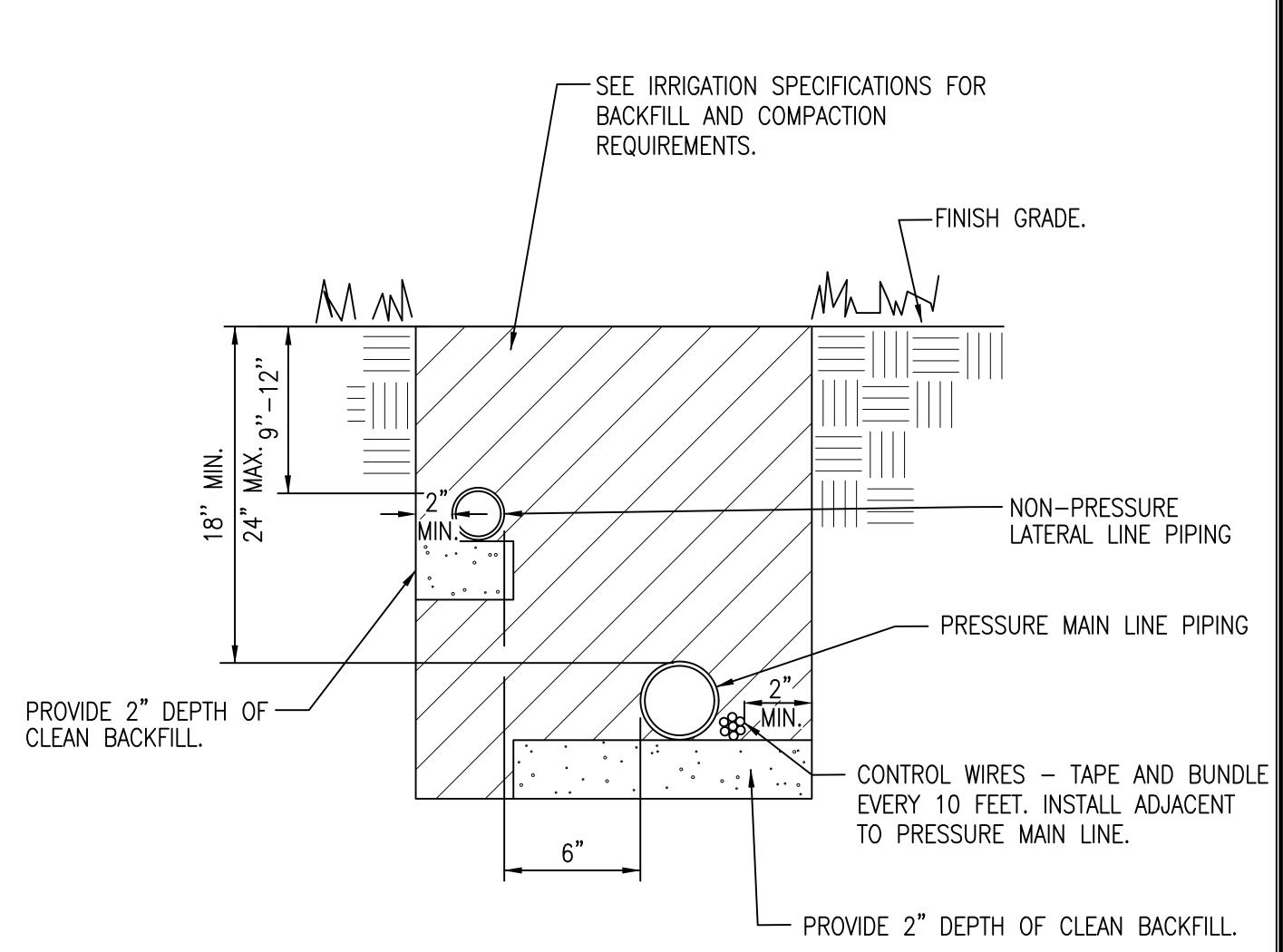
SET PALM/TREE ON NATIVE UNDISTURBED SOIL

PROVIDE MINIMUM 2" DEPTH OF CLEAN BACKFILL UNDER IRRIGATION PIPES
TREE PIT PER PLANTING DETAILS

CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

PALM/TREE IRRIGATION DETAIL 1011



TAPE AND BUNDLE 14g SINGLE STRAND CONTROL WIRE EVERY 10 FT. INSTALL ADJACENT TO PRESSURIZED MAIN LINE.

COIL 24 IN OF WIRE IN ALL CORNERS.

SEE IRRIGATION SPECS. FOR BACKFILL AND COMPACTION REQUIREMENTS.

MINIMUM BACKFILL DEPTHS FROM FINAL GRADE TO TOP OF MAINLINE 18 IN FOR PIPE SIZES 2 1/2 IN AND SMALLER 24 IN FOR PIPE SIZES 3 IN AND LARGER.

PROVIDE MINIMUM 2" DEPTH OF CLEAN BACKFILL UNDER IRRIGATION PIPES.

NO ELECTRICAL CONDUIT TO BE PLACED IN IRRIGATION TRENCH.

CITY OF PALM DESERT APPROVED BY:

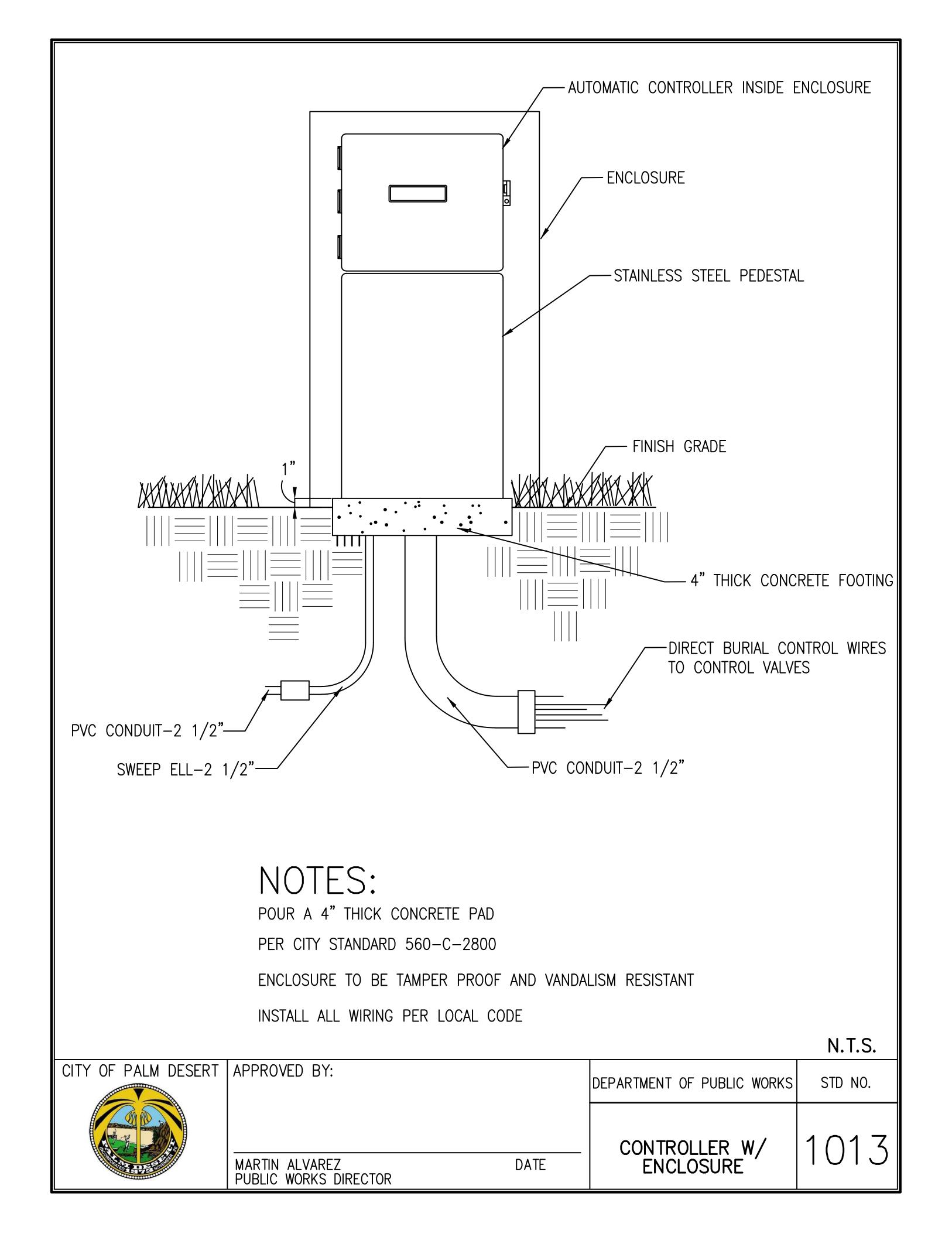
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

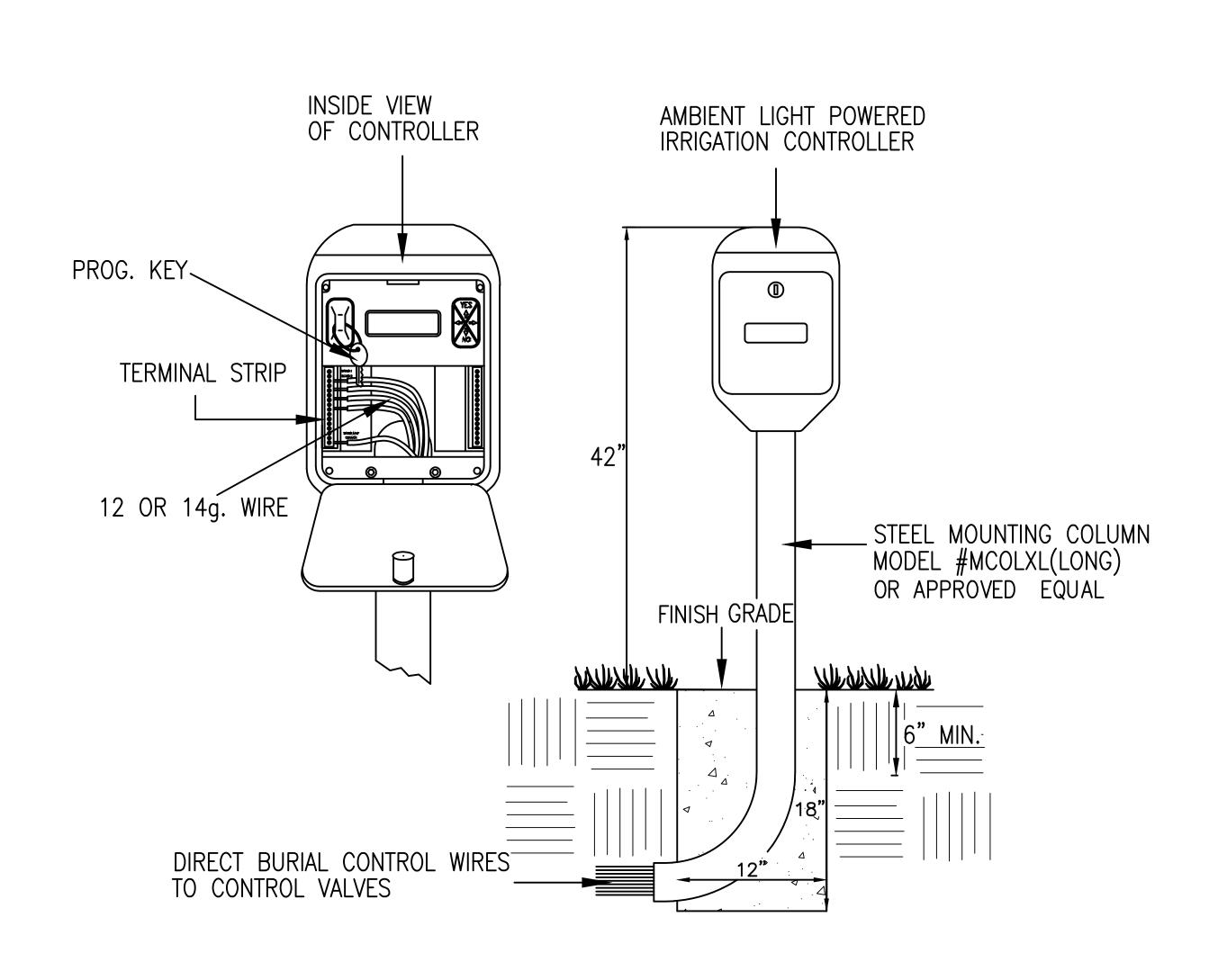
N.T.S.

DEPARTMENT OF PUBLIC WORKS STD NO.

TRENCHING DETAIL

1012





POUR A 1-1/2 CU. FT. CONCRETE BASE PAD PER CITY STANDARD 560-C-3250 OR MANUFACTURER'S RECOMMENDATION

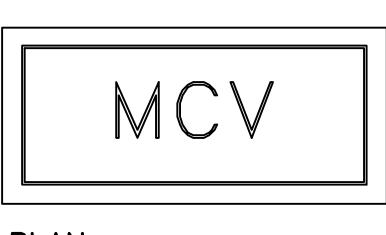
CITY OF PALM DESERT APPROVED BY:

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

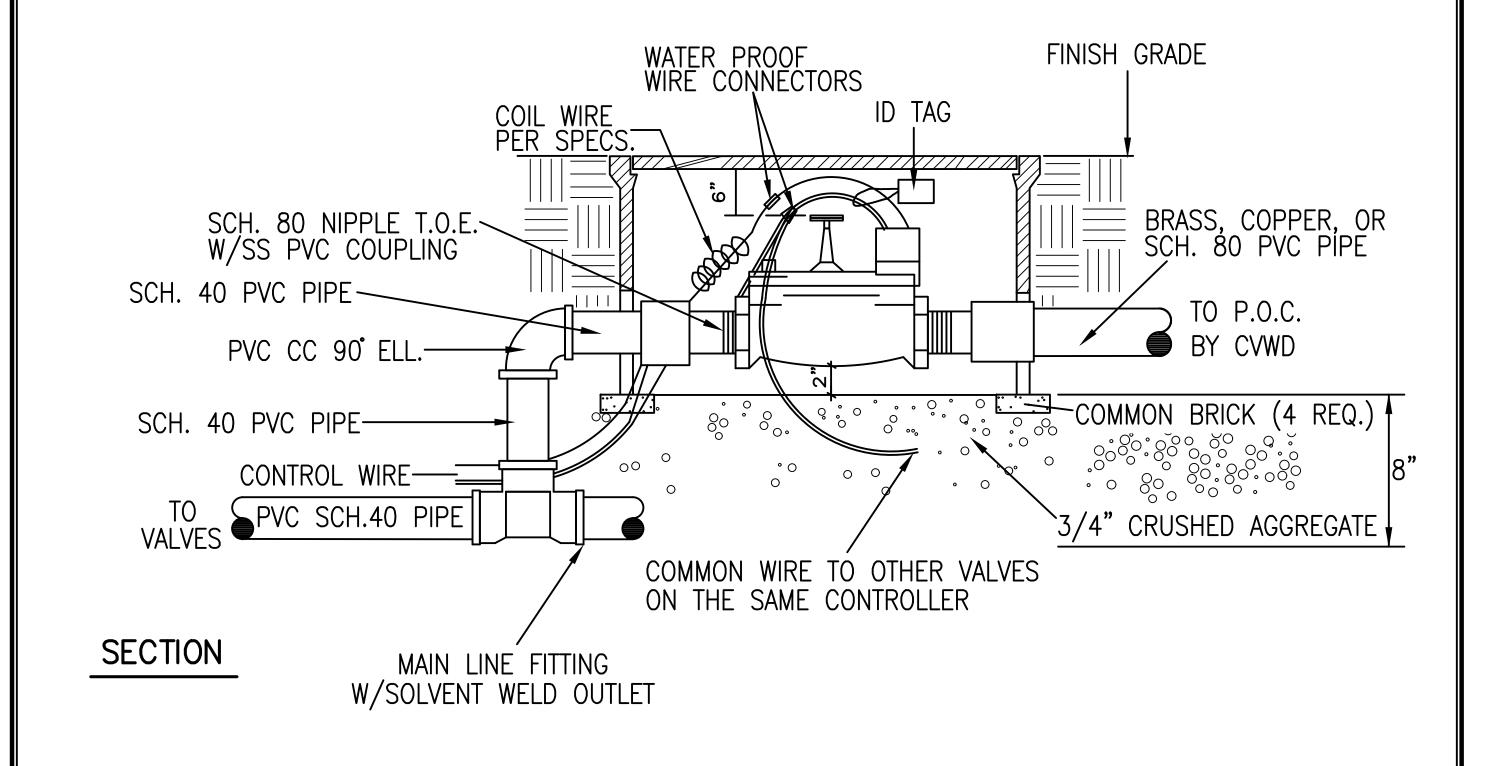
DATE

N.T.S.

DEPARTMENT OF PUBLIC WORKS STD NO.



PLAN



NOTES:

RAIN BIRD BG SERIES ELEC. CONTROL VALVE OR APPROVED EQUAL

RECTANGULAR VALVE BOX W/GREEN BOLT DOWN COVER IN TURF AND TAN IN SHRUB BEDS

HEAT BRAND VALVE STATION NO. ON LID 2" HIGH CHARACTERS

ALL FITTINGS AND PIPE TO BE EITHER BRASS OR COPPER FROM POINT OF CONNECTION TO CONTROL VALVE ASSEMBLY

CONTROL WIRES FROM CONTROLLER TO BE COLOR ORANGE UNLESS OTHERWISE SPECIFIED BY THE CITY OF PALM DESERT

ALL CONNECTORS TO BE WATERPROOF

N.T.S.

CITY OF PALM DESERT APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

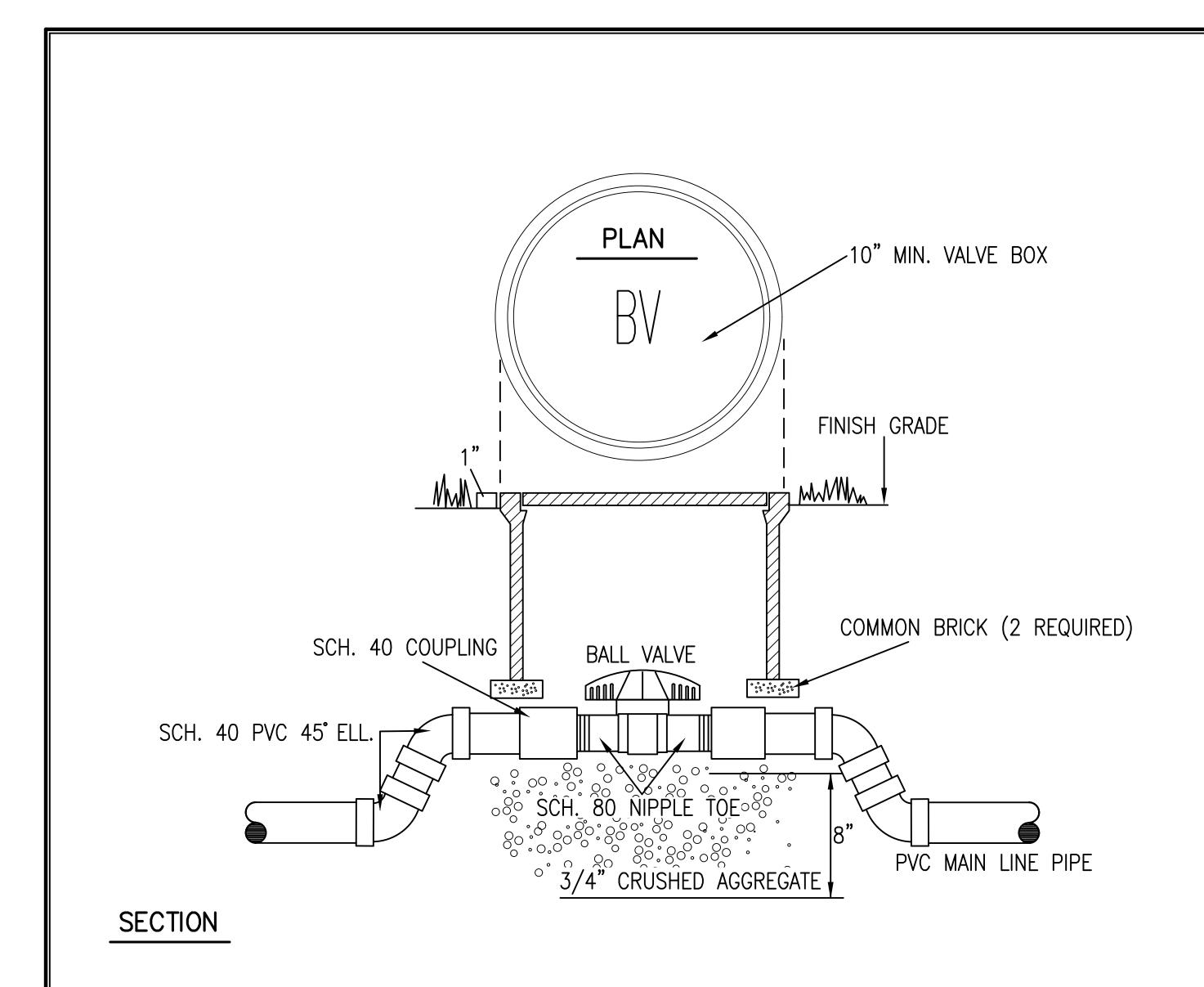
DATE

DATE

DATE

APPROVED BY:

DEPARTMENT OF PUBLIC WORKS STD NO.



VALVE BOX WITH TAN BOLT DOWN COVER — (GREEN IF IN TURF)

HEAT BRAND "BV" ON VALVE BOX COVER IN 2" HIGH LETTERS.

BRASS BODIED BALL VALVE FULL-PORT

SCH. 40 PVC PIPE EXTENSION, DIA. TO ALLOW FOR MOVEMENT OF HANDLE ON VALVE LENGTH AS REQUIRED.

SCH. 80 NIPPLE TOE W/SS PVC COUPLING

CITY OF PALM DESERT APPROVED BY:

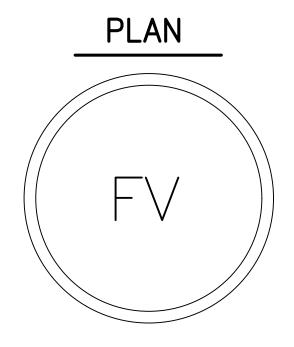
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

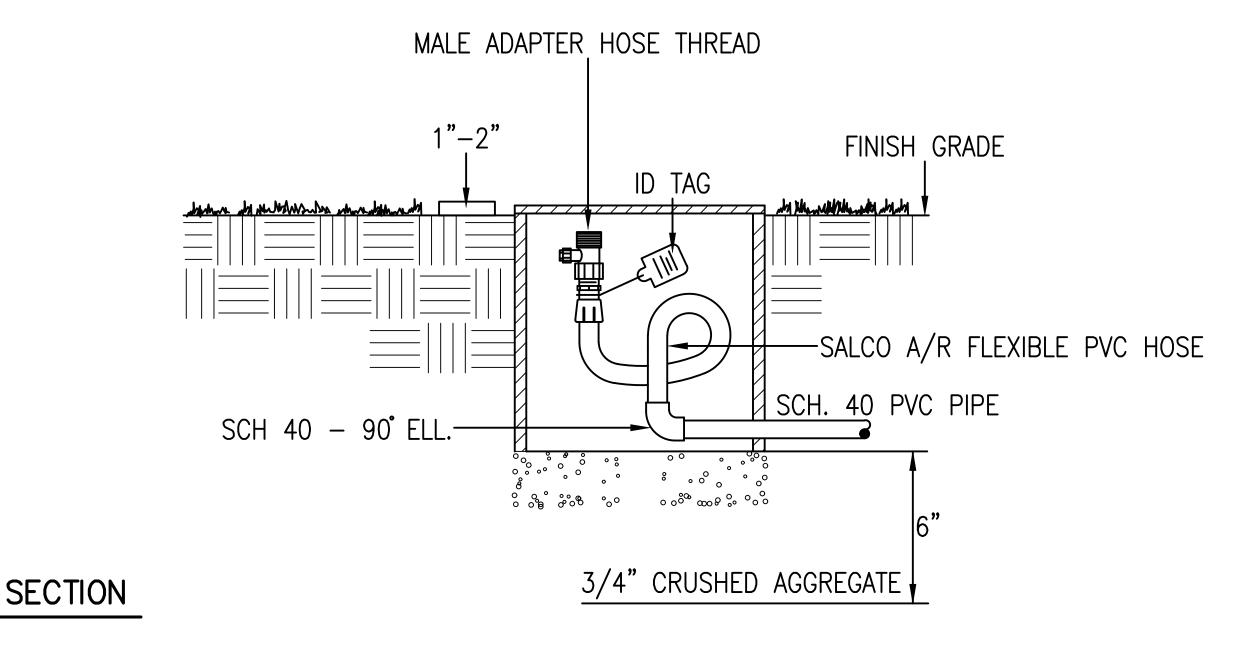
DEPARTMENT OF PUBLIC WORKS

STD NO.

BALL VALVE ASSEMBLY DETAIL

1016





10" ROUND VALVE BOX WITH TAN COVER OR GREEN IN TURF

HEAT BRAND "FV" ON LID IN 2" HIGH CHARACTERS.

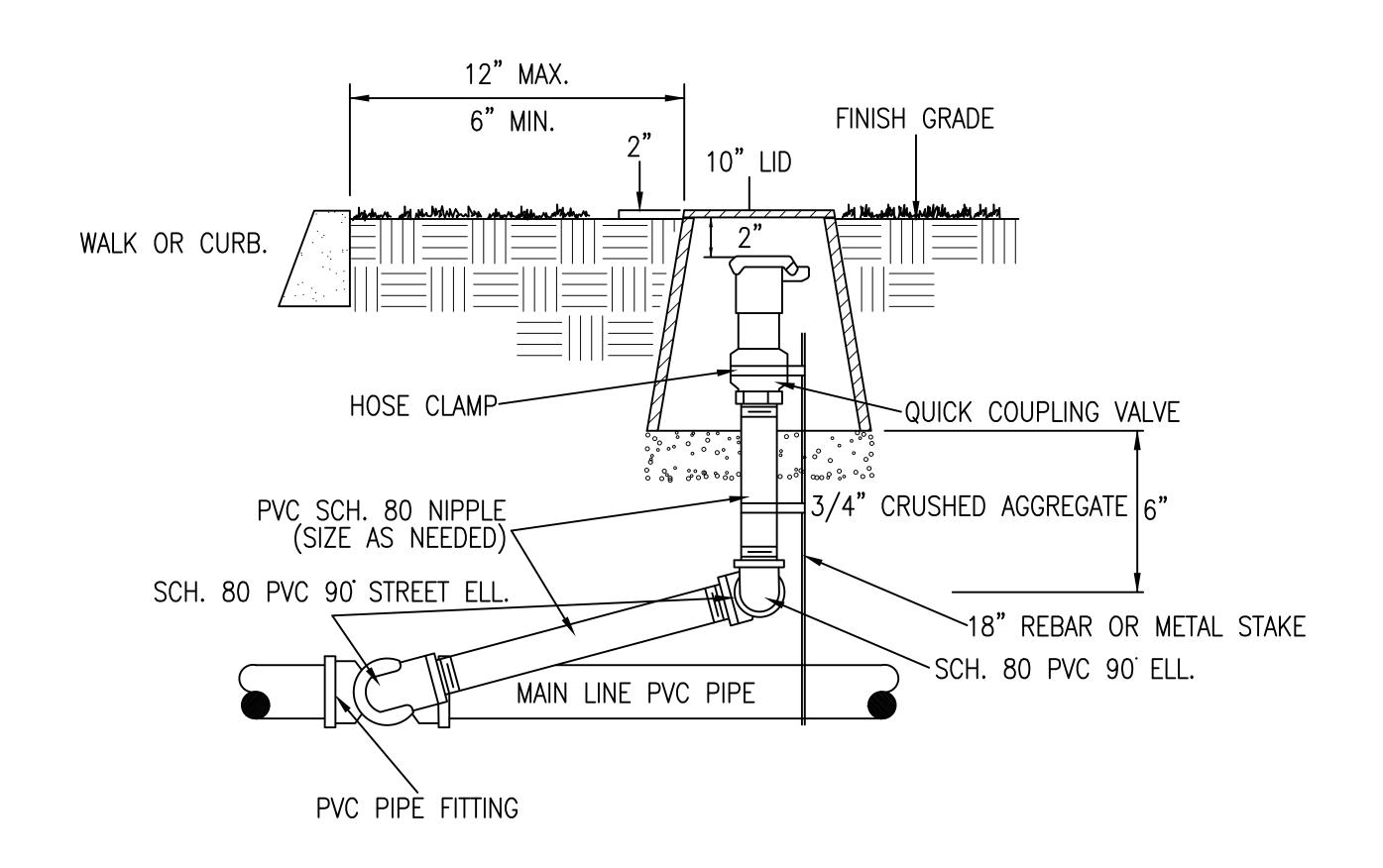
AG PRODUCTS 3/4"-(PLASTIC) BALL VALVE

PVC SCH. 40 MALE ADAPTER HOSE THREAD

SALCO A/R FLEXIBLE PVC HOSE MINIMUM 3 FOOT LENGTH (OR APPROVED EQUAL)

USE TEFLON TAPE ON ALL MALE PIPE THREADS

N.T.S.



VALVE BOX COLOR GREEN IN TURF AREAS TAN IN DECOMPOSED GRANITE PLANTING BEDS

HEAT BRAND "QCV" ON LID IN 2" HIGH CHARACTERS.

USE TEFLON TAPE ON ALL MALE PIPE THREADS

18" REBAR OR METAL STAKE REQUIRED TO ATTACH COUPLING VALVE (TO FIX UPRIGHT)

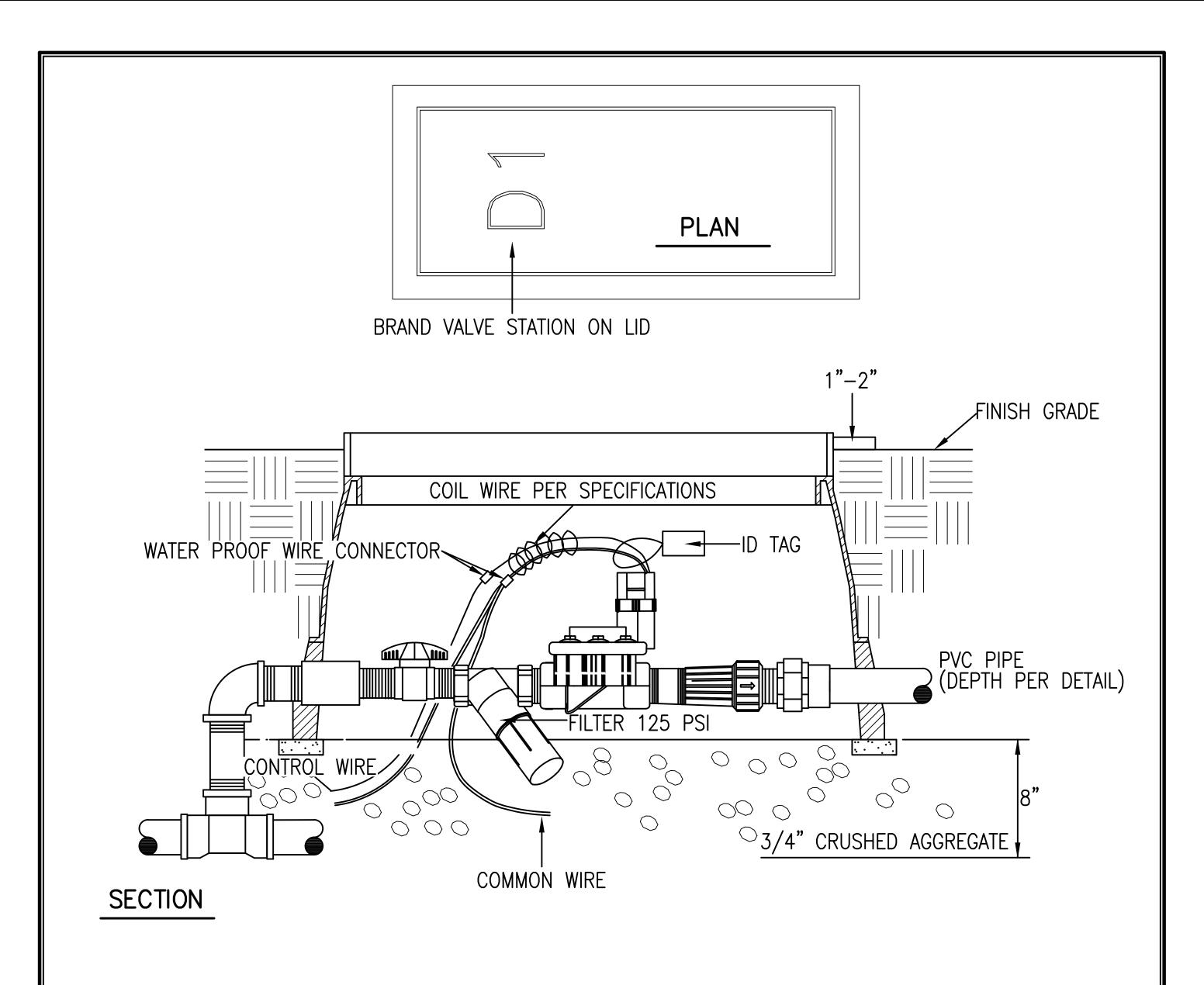
CITY OF PALM DESERT APPROVED BY:

MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

DEPARTMENT OF PUBLIC WORKS
STD NO.

QUICK COUPLING VALVE

1018



RECTANGULAR VALVE BOX W/GREEN BOLT DOWN COVER IN TURF AND TAN IN SHRUB BEDS

BRAND VALVE STATION NO. ON LID IN 2" HIGH CHARACTERS

12" X 18" RECTANGULAR VALVE BOX

FILTER MUST WITHSTAND 125 PSI

IF A SPECIFIC MANUFACTURER'S ASSEMBLY IS SPECIFIED, FOLLOW THAT MANUFACTURER'S SPECIFICATIONS

(2) BRICKS FOR SUPPORT

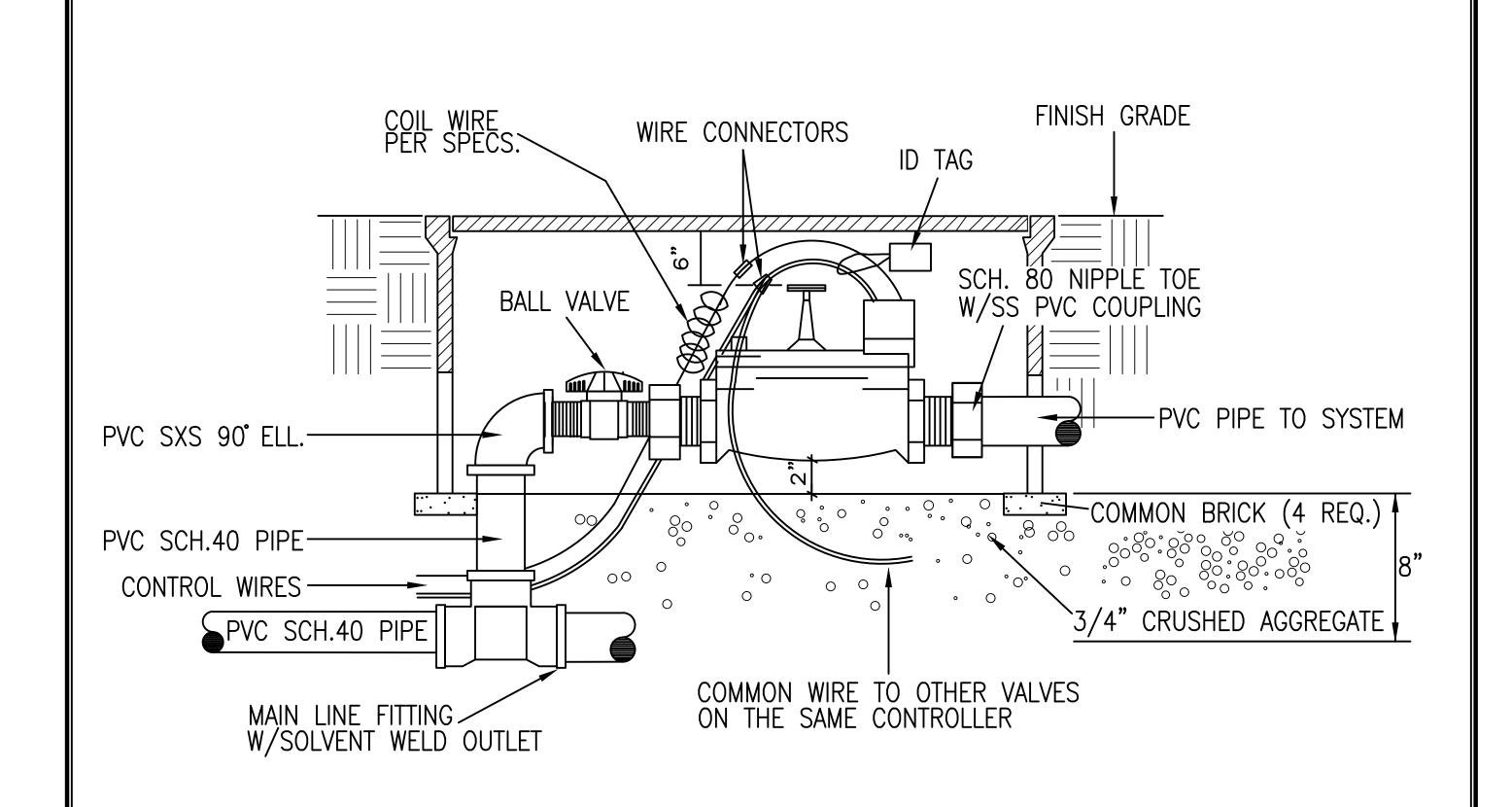
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DEPARTMENT OF PUBLIC WORKS STD NO.

ELECTRIC CONTROL VALVE (DRIP)

1019



RAIN BIRD BG SERIES ELEC. CONTROL VALVE OR APPROVED EQUAL

RECTANGULAR VALVE BOX W/GREEN BOLT DOWN COVER TURF AND TAN IN SHRUB BEDS HEAT VALVE STATION NO. ON LID 2" HIGH CHARACTERS

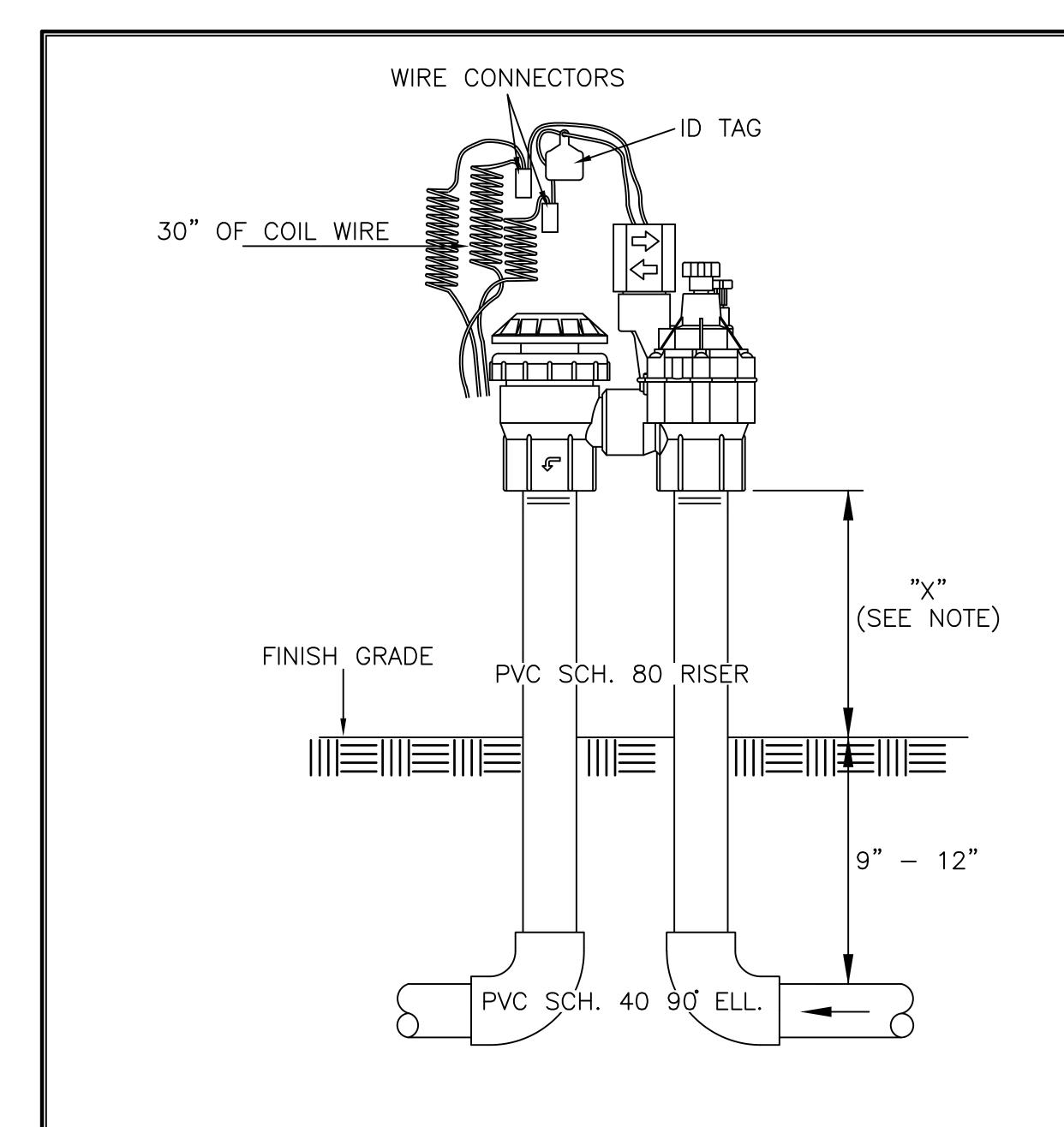
ALL CONNECTORS TO BE WATERPROOF

TOP OF BOX TO BE FLUSH IN TURF AREA 1"-2" ABOVE FG IN SHRUB AREAS

ANGLE PIPE TO SPECIFIED DEPTH W/45° ELLS.

BALL VALVE MUST BE INSIDE BOX
IF BALL VALVE OUTSIDE
IT MUST BE ENCASED IN A SEPARATE BOX

N.T.S.

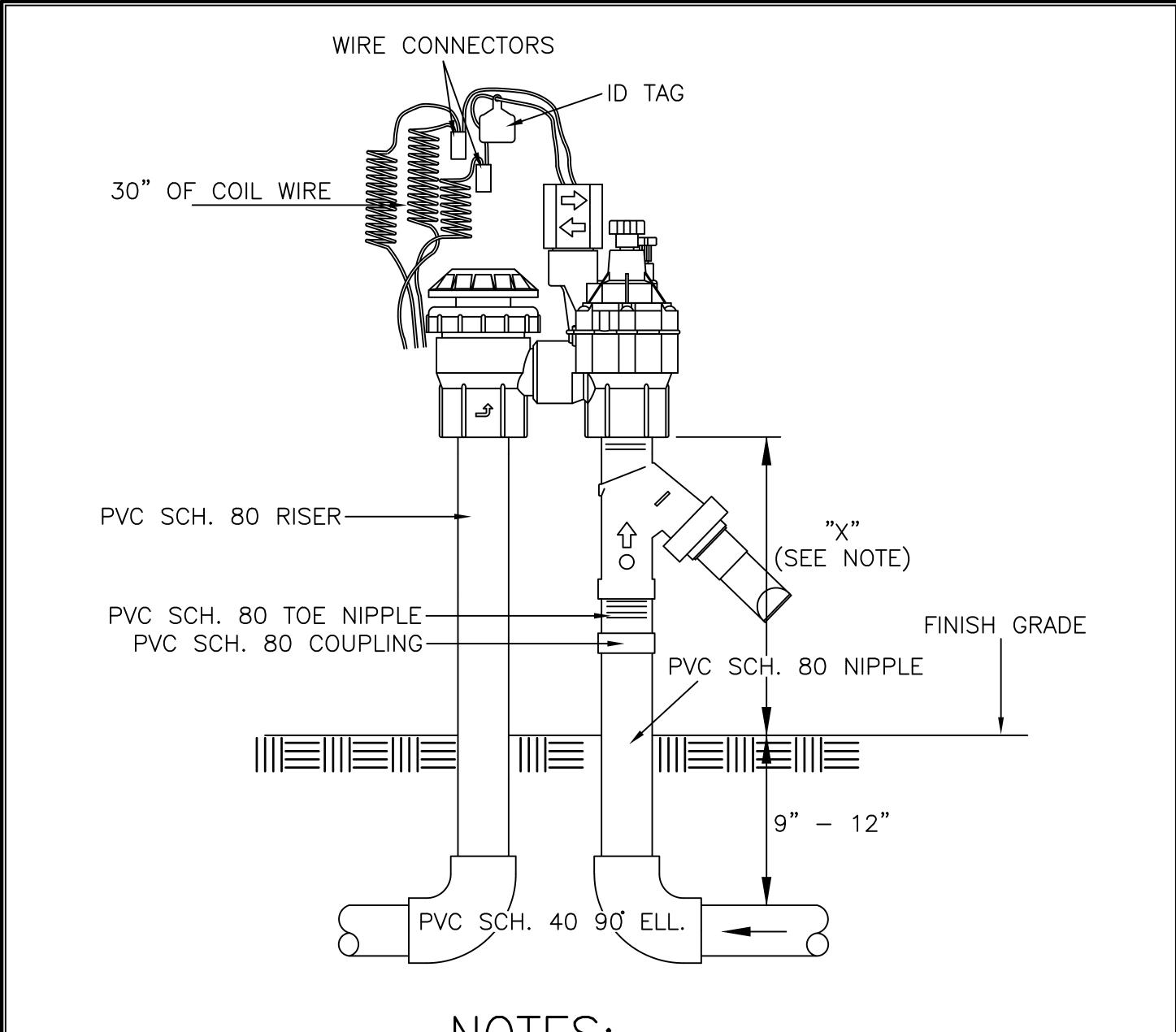


REMOTE CONTROL VALVE

FULL PORT BALL HAVE MUST BE LOCATED AT MANIFOLD IN 10" ROUND VALVE BOX

"X"= BOTTOM OF VALVE MUST BE 12"
HIGHER THAN THE HIGHEST SPRINKLER HEAD

N.T.S.



CONTROL ZONE KIT (INCLUDES LOW FLOW ANTI SIPHON VALVE) BACK FLUSH PRESSURE REGULATING FILTER, FILTER MUST WITHSTAND 125 PSI

FULL PORT BALL VALVE
MUST BE LOCATED AT
MANIFOLD IN 10" ROUND VALVE BOX

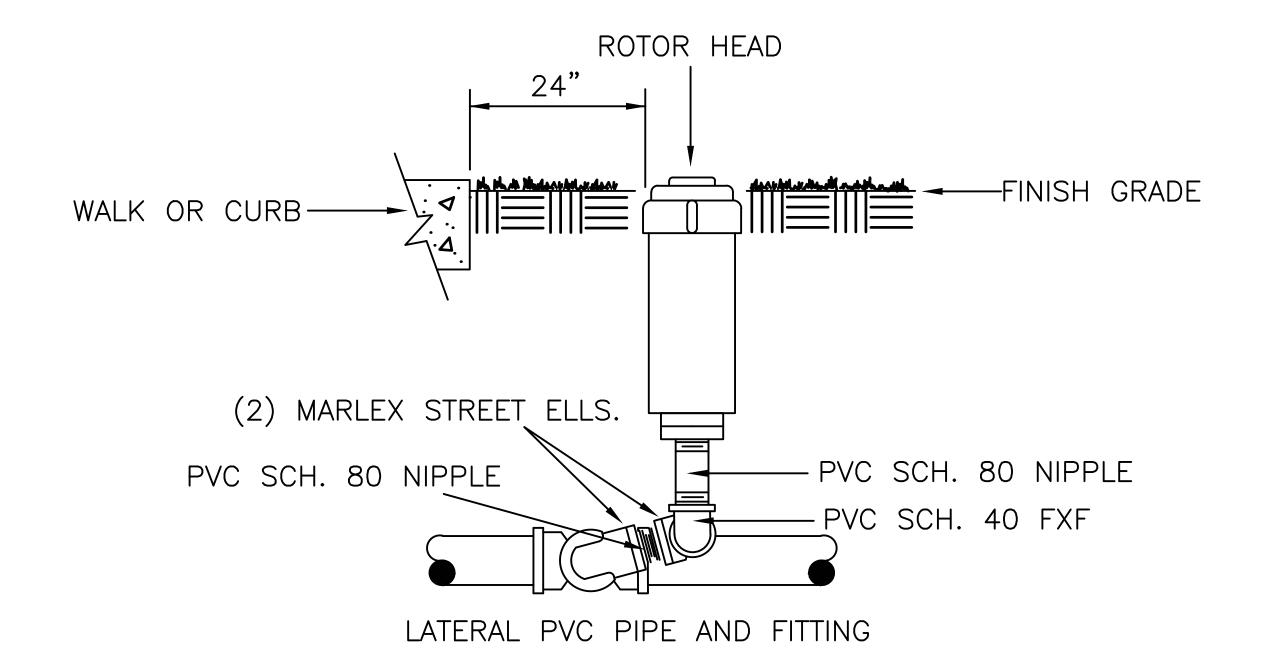
"X"= BOTTOM OF VALVE MUST BE 12"
HIGHER THAN THE HIGHEST SPRINKLER HEAD

N.T.S.

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TYPICAL XERIGATION CONTROL VALVE 1022



SET ROTOR FLUSH WITH FINAL GRADE

PVC SCH. 80 NIPPLE CUT TO LENGTH AS NEEDED

USE TEFLON TAPE ON ALL MALE PIPE THREADS

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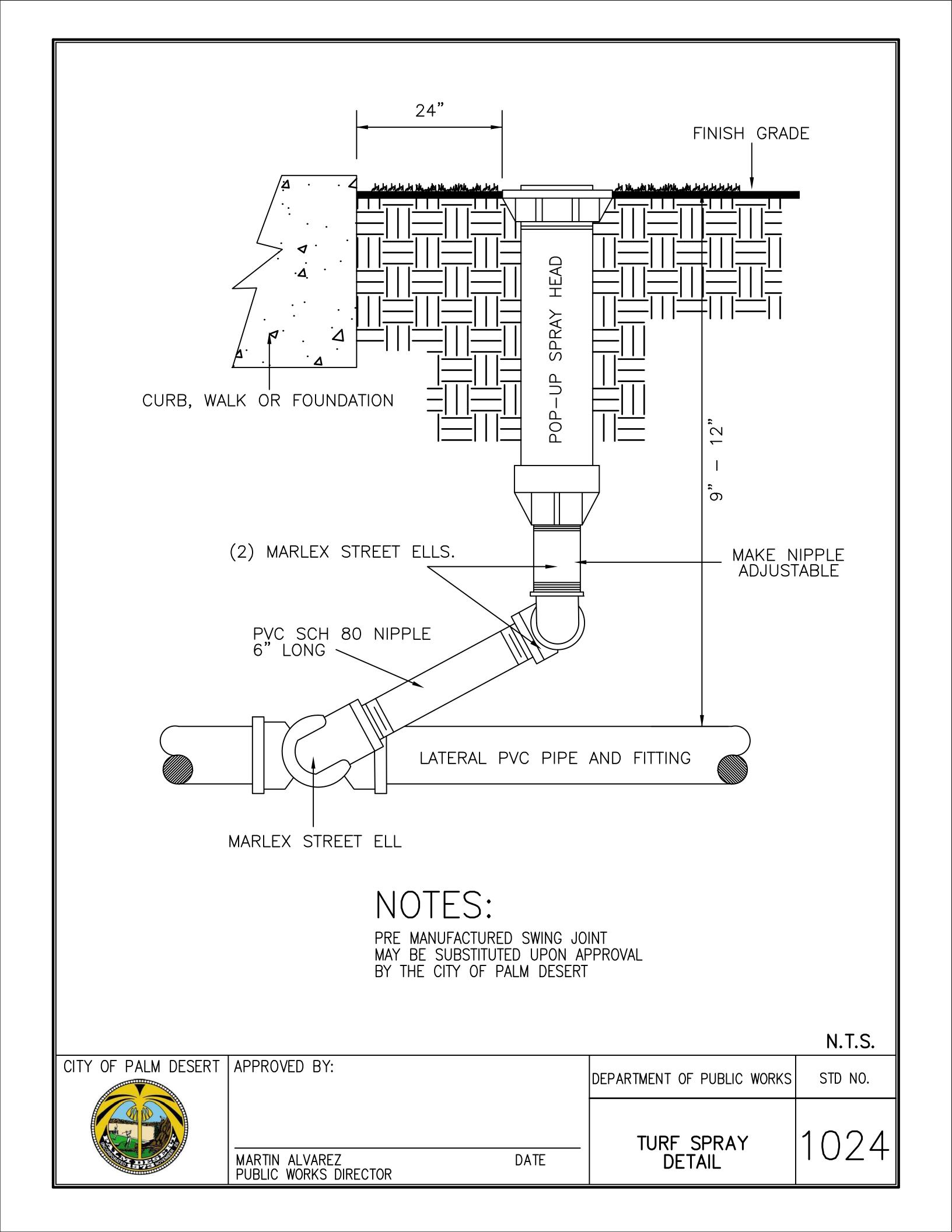
MARTIN ALVAREZ PUBLIC WORKS DIRECTOR

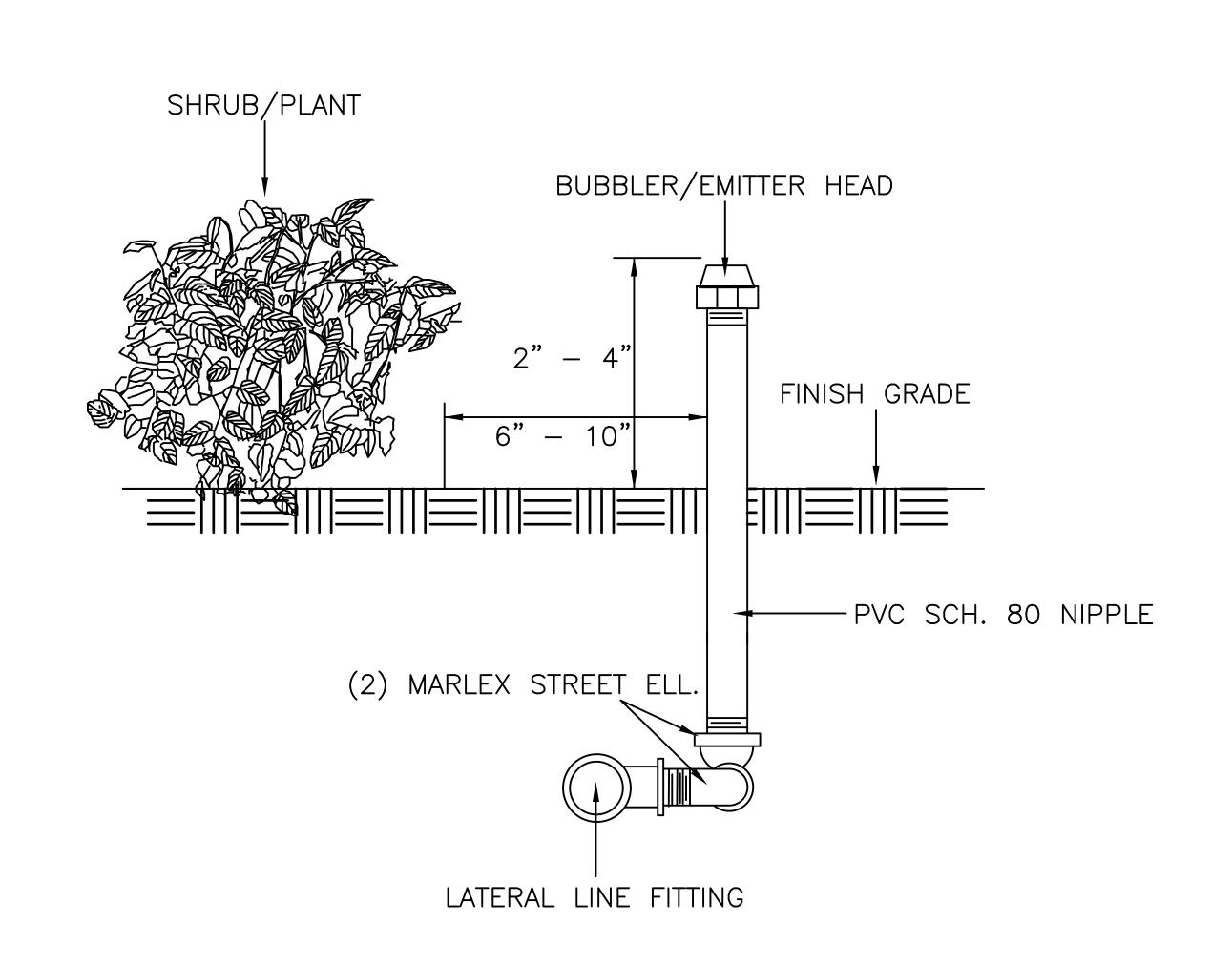
DATE

DATE

N.T.S.

DEPARTMENT OF PUBLIC WORKS STD NO.

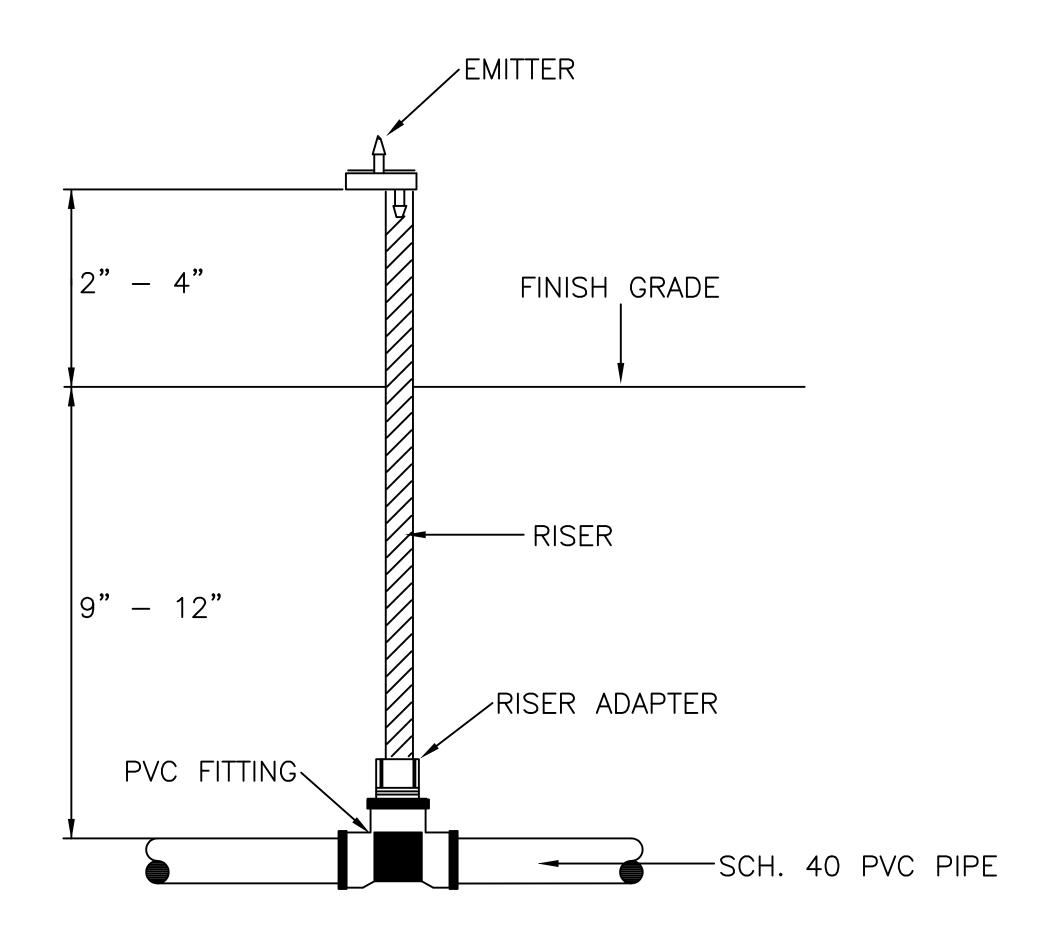




HEADS 2" TO 4" ABOVE FINAL GRADE

EMITTER TO BE 6" TO 10" AWAY FROM EDGE OF ROOTBALL OR PLANTS/SHRUBS ON HIGH SIDE OF PLANT

				N.T.S.
CITY OF PALM DESERT	APPROVED BY:		DEPARTMENT OF PUBLIC WORKS	STD NO.
	MARTIN ALVAREZ PUBLIC WORKS DIRECTOR	DATE	BUBBLER/EMITTER DETAIL	1025



POLY FLEX RISER 1/4"

EMITTER TO HAVE DIFFUSER CAP IF NEEDED OR APPROVED EQUAL W/POLY FLEX RISER ADAPTER

PVC FITTING (S X S X 1/2" FIPT.)

PVC PIPE (DEPTH PER SPECIFICATIONS)

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DATE

DATE

DETAIL

N.T.S.

DEPARTMENT OF PUBLIC WORKS

STD NO.

