## **CITY OF LOS ALTOS**

## STANDARD DETAILS

May 2010 Edition



## COMMUNITY DEVELOPMENT DEPARTMENT ENGINEERING DIVISION

One North San Antonio Road Los Altos, CA 94022 Phone: 650-947-2780

Fax: 650-947-2732

## **STANDARD DETAILS**

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### **STANDARD DETAILS**

(cont.)

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### **STREET LIGHTING**

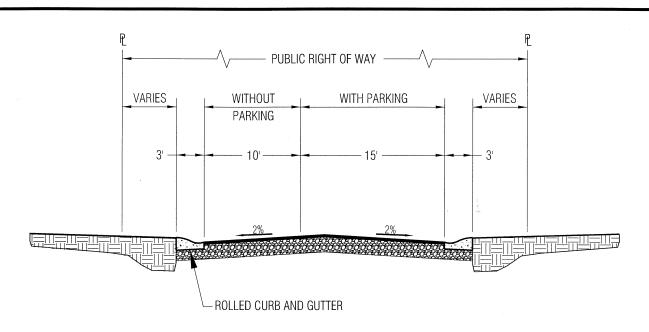
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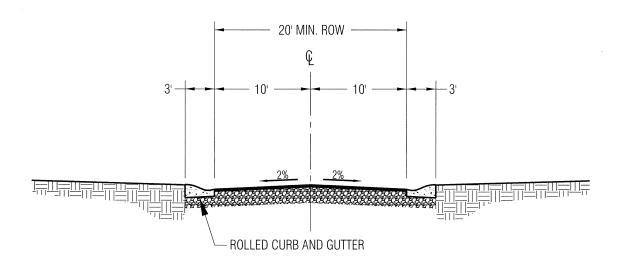
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### **RESIDENTIAL STREET**

SCALE: 1" = 10'

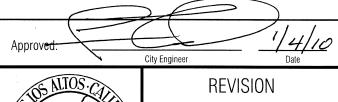


### **PRIVATE STREET**

SCALE: 1" = 10'

NOTES:

1. PRIVATE STREETS ARE ONLY ALLOWED ON CONDOMINIUM, TOWNHOUSE, APARTMENT OR PLANNED UNIT DEVELOPMENTS.

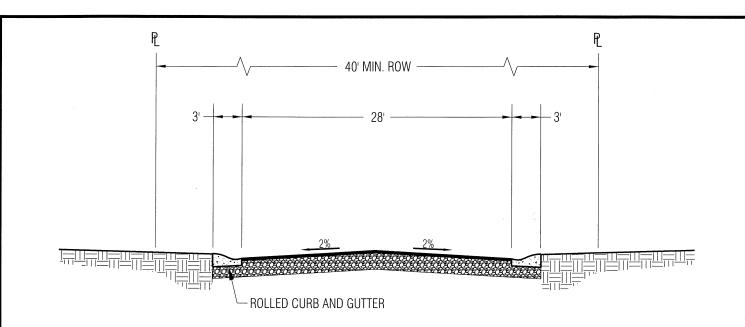


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REVISION	
Description	Date

## **ENGINEERING DIVISION**

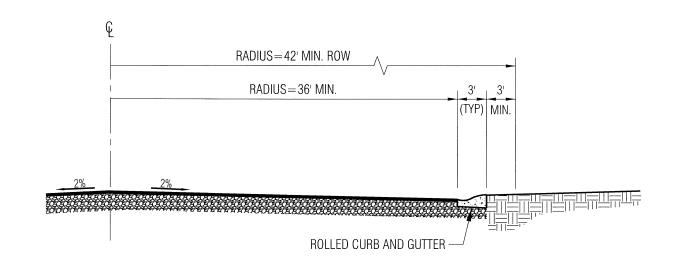
MINIMUM STREET STANDARD FOR RESIDENTIAL AND PRIVATE STREETS



### **PUBLIC CUL-DE-SAC STREET**

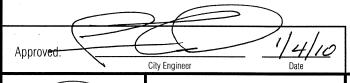
SCALE: 1" = 10'

(TWO 10-FT TRAVEL LANES WITH 8-FT PARKING ON ONE SIDE)



## **PUBLIC CUL-DE-SAC TURNAROUND**

SCALE: 1" = 10'

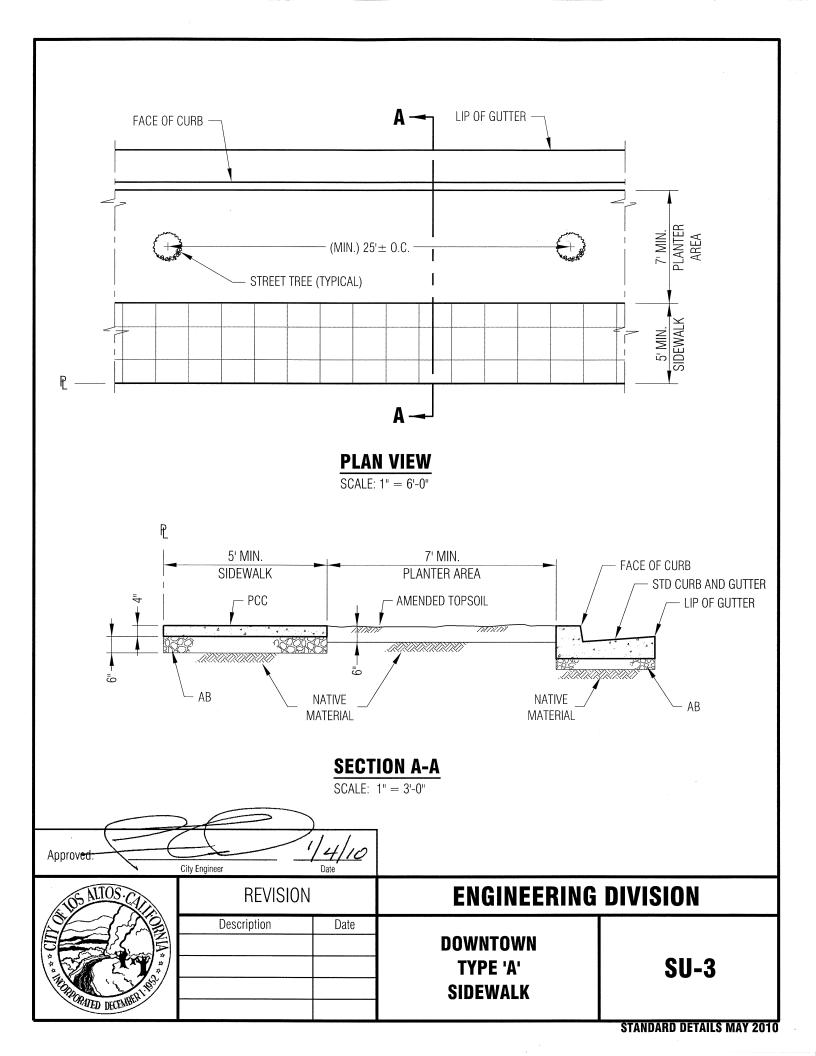


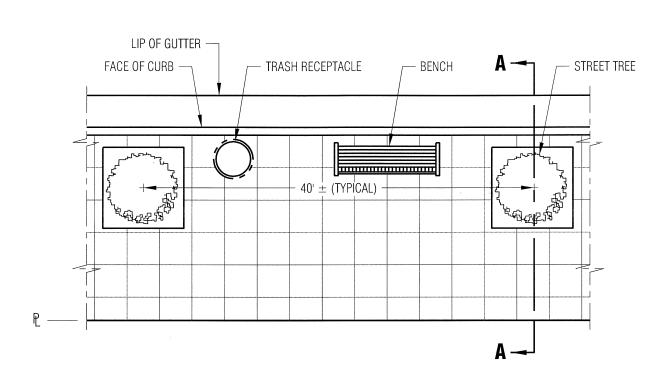
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## **ENGINEERING DIVISION**

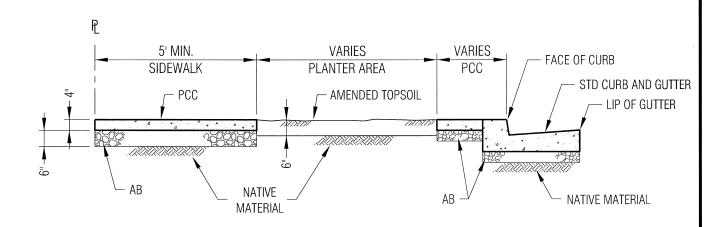
MINIMUM STREET STANDARD FOR PUBLIC CUL-DE-SAC





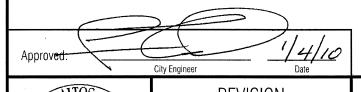
## **PLAN VIEW**

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## **SECTION A-A**

SCALE: 1" = 3'-0"



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REGINDRATED DECEMBER LINES	

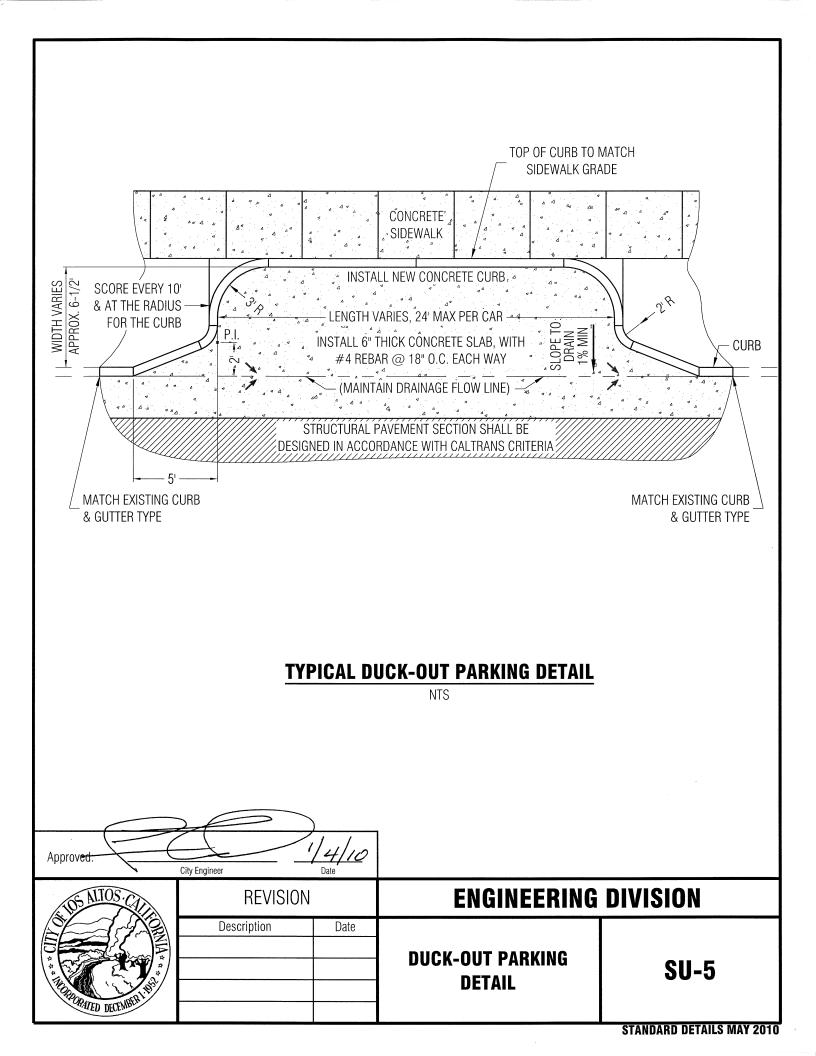
REVISION		
Description	Date	

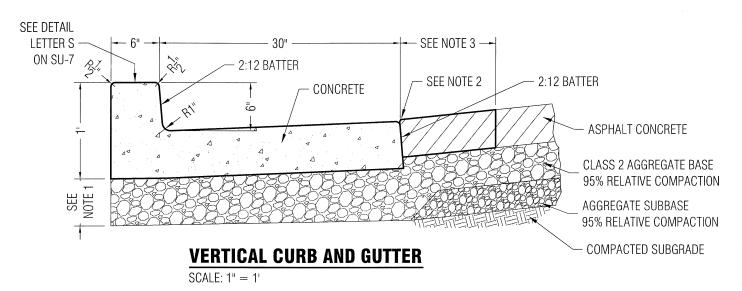
## **ENGINEERING DIVISION**

DOWNTOWN TYPE 'B' SIDEWALK

SU-4

**STANDARD DETAILS MAY 2010** 





SEE DETAIL LETTER S – SEE NOTE 3 — 12" -24" ON SU-7 CONCRETE **CURB GRADE** SEE NOTE 2 2:12 BATTER ASPHALT CONCRETE CLASS 2 AGGREGATE BASE 95% RELATIVE COMPACTION AGGREGATE SUBBASE 95% RELATIVE COMPACTION COMPACTED SUBGRADE **ROLLED CURB AND GUTTER** 

### NOTES:

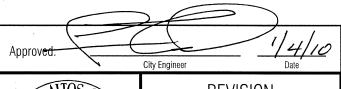
- 1. THICKNESS OF AGGREGATE BASE SHALL BE:
  - \* <u>FOR NEW STREET SECTION:</u> AS DETERMINED BY EXTENSION OF ROADWAY GRADING PLANE (6" MIN.)

SCALE: 1" = 1'

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\* FOR EXISTING STREET SECTION: 6"

- 2. EDGE OF PAVEMENT 1/4" ABOVE LIP (FOR 30" GUTTER, THE LIP SHALL BE 2-1/2" ABOVE FLOWLINE)
- 3. FOR NEW CURB & GUTTER INSTALLED ADJACENT TO EXISTING PAVEMENT, TWELVE INCHES (12") OF THE AC EDGE SHALL BE SAWCUT, REMOVED AND REPLACED WITH NEW AC PAVEMENT



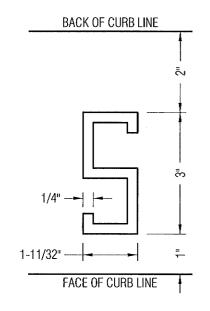
## **ENGINEERING DIVISION**

REVISION

Description

Date

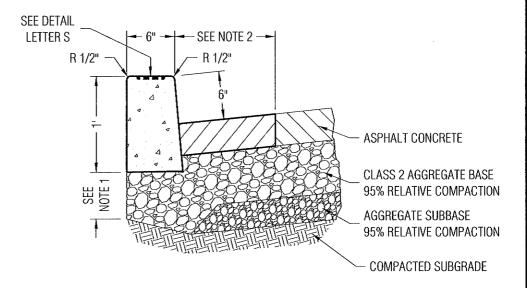
VERTICAL AND ROLLED CURB AND GUTTER



### **LETTER S**

SCALE: NOT TO SCALE

THE LETTER "S" TO BE EMBEDDED 1/4" DEEP ON TOP OF CONCRETE CURB OVER SEWER LATERAL.

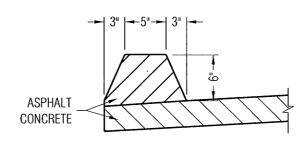


### **VERTICAL CURB**

SCALE: 1" = 1'

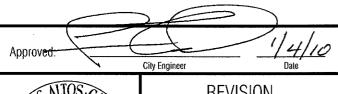
### NOTES:

- 1. THICKNESS OF AGGREGATE BASE SHALL BE:
  - \* FOR NEW STREET SECTION: AS DETERMINED BY EXTENSION OF ROADWAY GRADING PLANE (6" MIN.), -OR-
  - \* FOR EXISTING STREET SECTION: 6"
- 2. FOR NEW CURB INSTALLED
  ADJACENT TO EXISTING PAVEMENT,
  TWELVE INCHES (12") OF THE AC EDGE
  SHALL BE SAWCUT, REMOVED AND
  REPLACED WITH NEW AC PAVEMENT



### **AC CONCRETE BERM**

SCALE: 1" = 1'

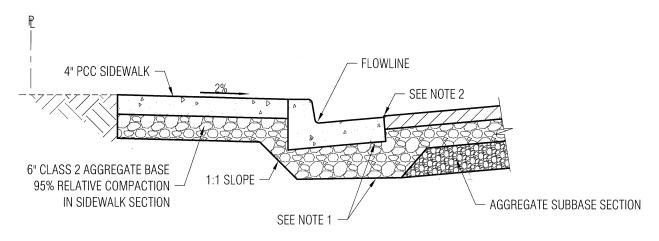


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Description	Date	
Added Height of Curb	02/16/12	

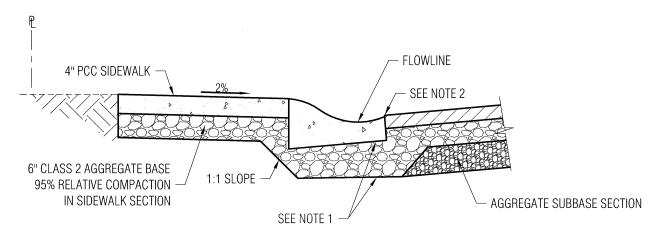
## **ENGINEERING DIVISION**

VERTICAL CURB,
ASPHALT CONCRETE BERM
AND CURB STAMP



### SECTION THROUGH STANDARD SIDEWALK AND VERTICAL CURB

SCALE: NOT TO SCALE



## SECTION THROUGH STANDARD SIDEWALK AND ROLLED CURB

SCALE: NOT TO SCALE

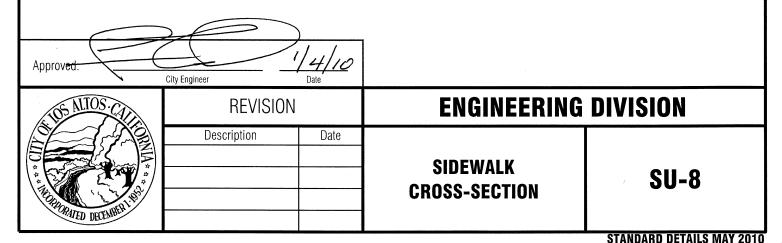
### **STANDARD CROSS SECTIONS**

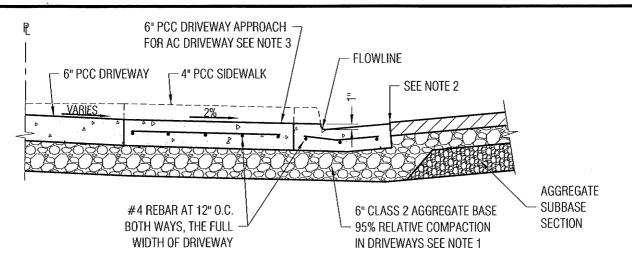
### NOTES:

- 1. THICKNESS OF AGGREGATE BASE UNDER CURB & GUTTER SHALL BE:
  - \* FOR NEW STREET SECTION: AS DETERMINED BY EXTENSION OF ROADWAY GRADING PLANE (6" MIN.)
- 2. SEE VERTICAL CURB AND ROLLED CURB AND GUTTER DETAIL SU-6

OR

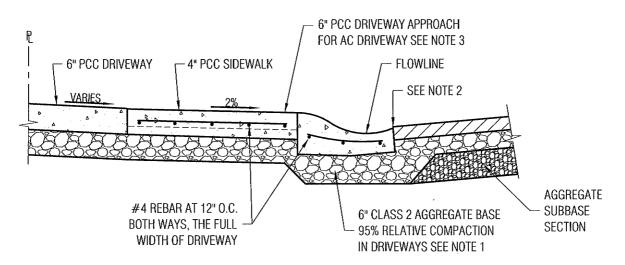
\* FOR EXISTING STREET SECTION: 6"





### SECTION THROUGH STANDARD DRIVEWAY APPROACH WITH VERTICAL CURB

SCALE: NOT TO SCALE



## SECTION THROUGH STANDARD DRIVEWAY APPROACH WITH ROLLED CURB

SCALE: NOT TO SCALE

### STANDARD CROSS SECTIONS

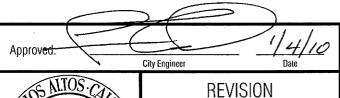
### NOTES:

- 1. THICKNESS OF AGGREGATE BASE UNDER CURB & GUTTER SHALL BE:
  - \* FOR NEW STREET SECTION: AS DETERMINED BY EXTENSION OF ROADWAY GRADING PLANE (6" MIN.)

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\* FOR EXISTING STREET SECTION: 6"

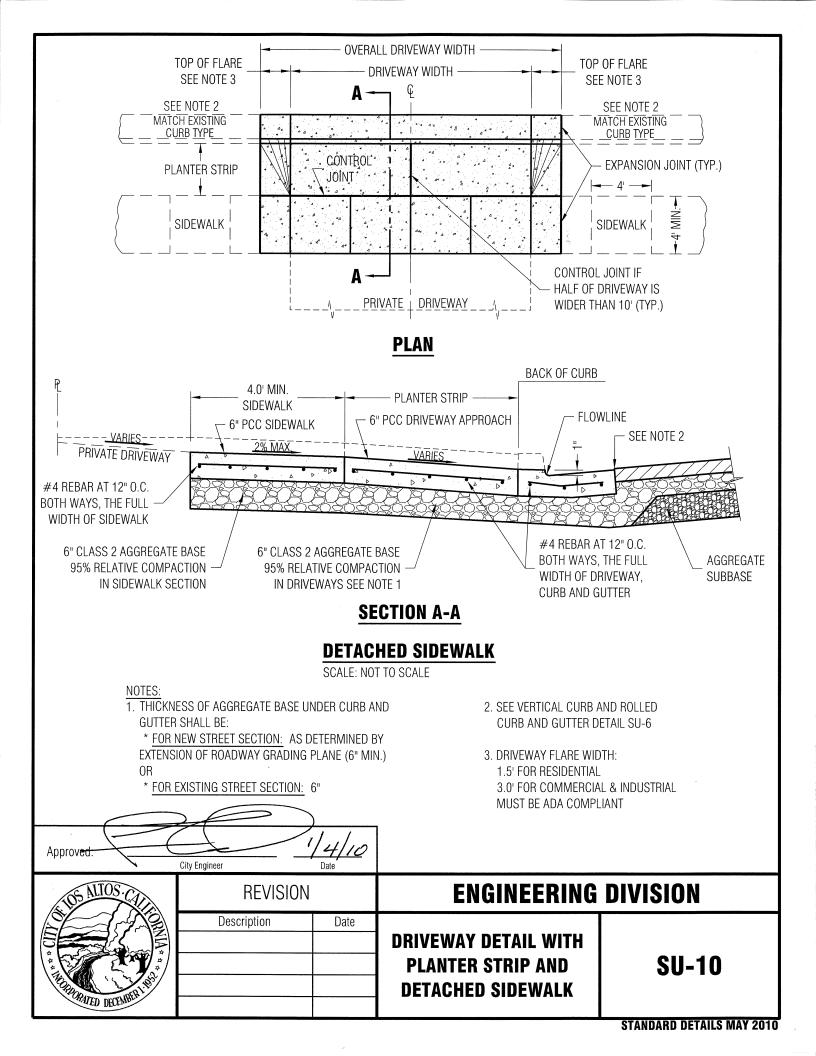
- 2. SEE VERTICAL CURB AND ROLLED CURB AND GUTTER DETAIL SU-6
- 3. 6" CLASS 2 AGGREGATE BASE 95% RELATIVE COMPACTION, AND 2" ASPHALT CONCRETE

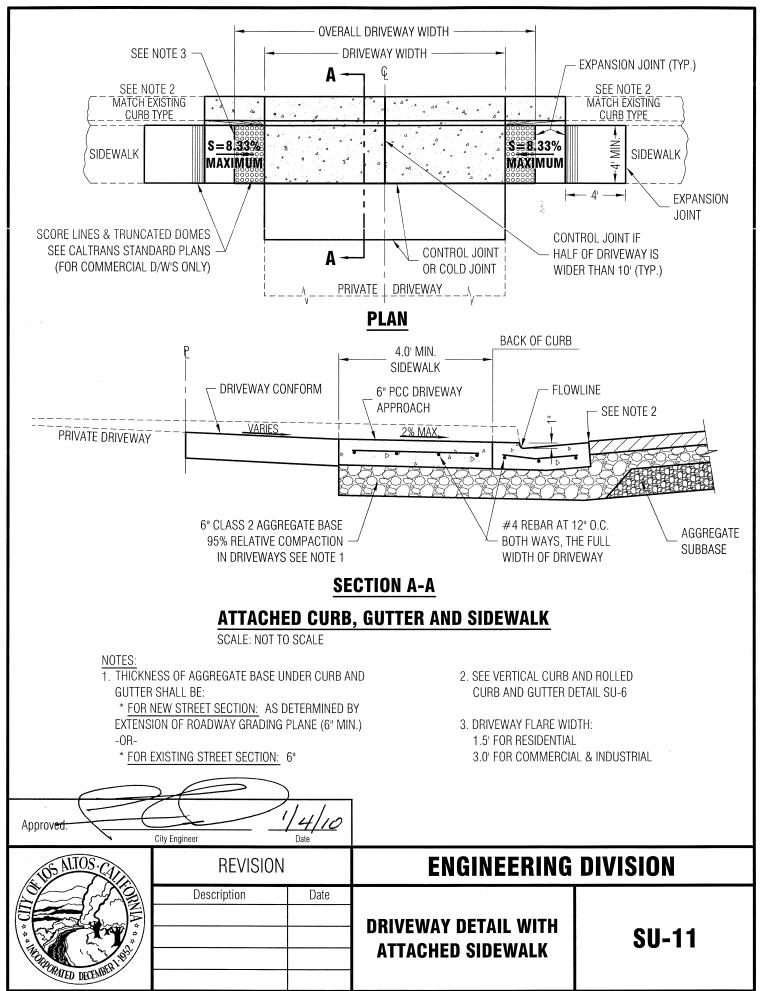


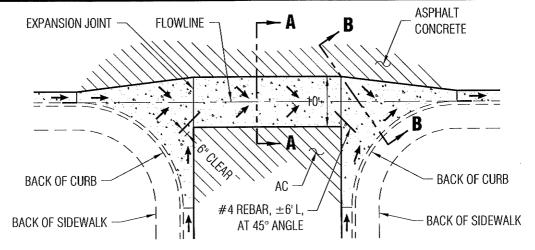
# REVISION Description Date Added Note 3 02/16/12

## **ENGINEERING DIVISION**

DRIVEWAY CROSS-SECTION

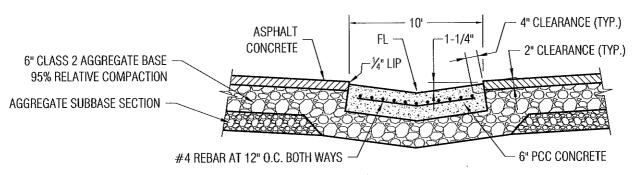






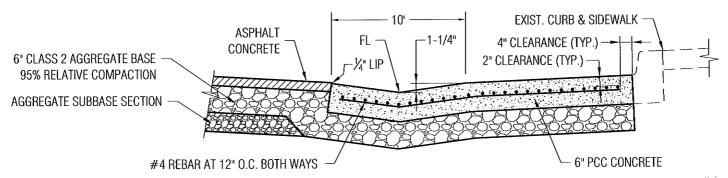
## **CONCRETE APRON AND VALLEY GUTTER**

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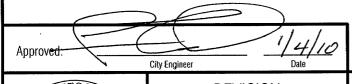
### **SECTION A-A - VALLEY GUTTER**

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### **SECTION B-B - CONCRETE APRON**

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NOTES: 1. THICKNESS OF AGGREGATE BASE UNDER THE GUTTER SHALL BE:

- \* FOR NEW STREET SECTION: AS DETERMINED BY EXTENSION OF ROADWAY GRADING PLANE (6" MIN.), OR
- \* FOR EXISTING STREET SECTION: 6"

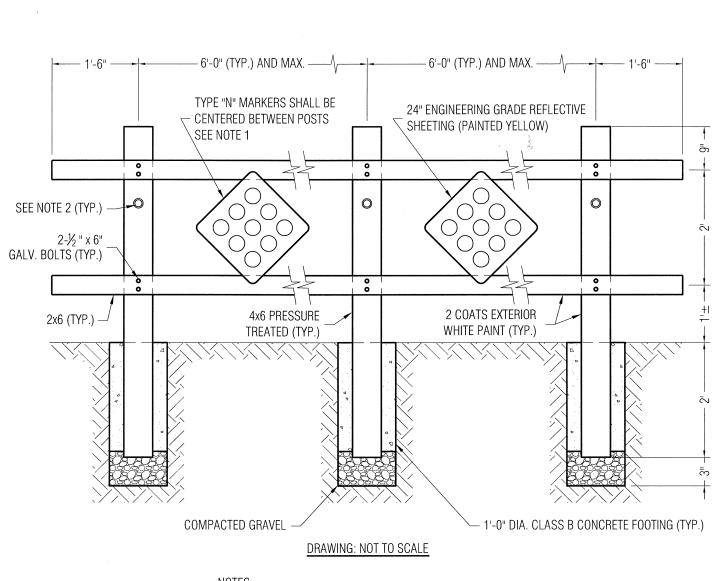
REVISION	
Description	Date
Deleted Driveway Note	02/16/12

## **ENGINEERING DIVISION**

STREET INTERSECTION VALLEY GUTTER AND CONCRETE APRON

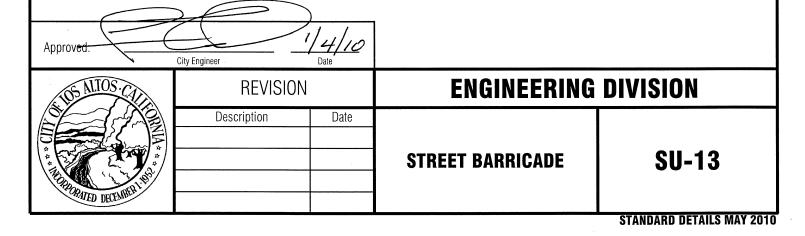
**SU-12** 

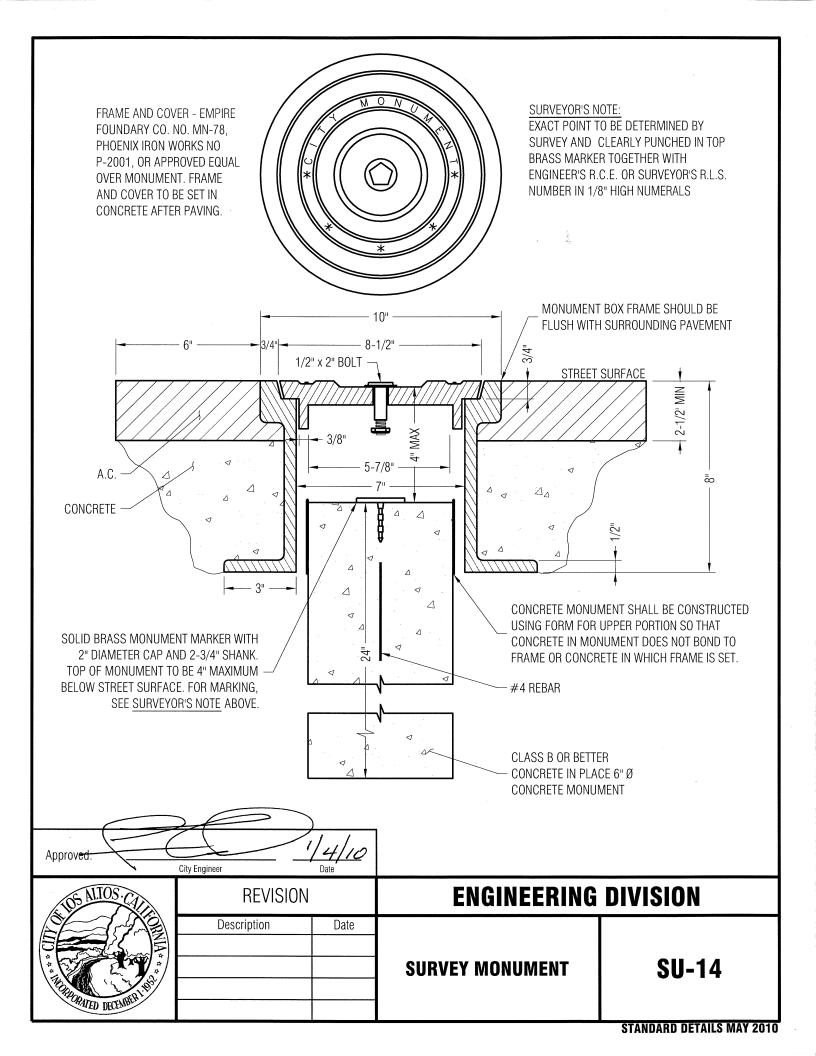
STANDARD DETAILS MAY 2010

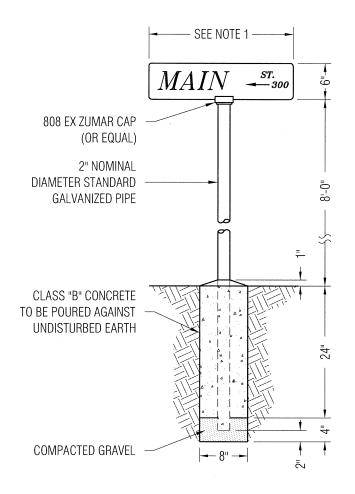


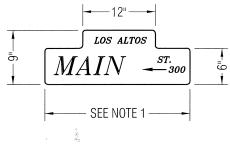
- 1. TYPE N-4 MARKERS (CALTRANS) WITH AMBER PLASTIC REFLECTORS FOR BARRICADE ON THE SIDES OF THE STREET.

  TYPE N-5 MARKERS WITH RED PLASTIC REFLECTORS FOR BARRICADE AT THE DEAD-END OF THE STREET.
- 2. AMBER PLASTIC DISK FOR BARRICADE ON THE SIDES OF THE STREET. RED PLASTIC DISK BARRICADE AT DEAD-END OF STREET.







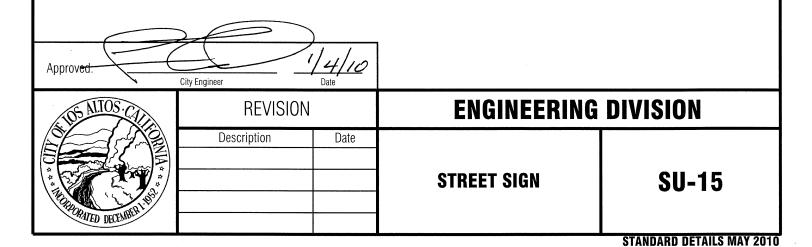


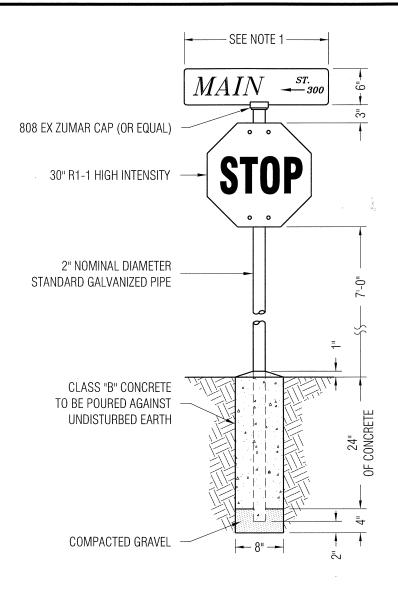
ABOVE PLATE TO BE USED AT CITY LIMITS
WITH "LOS ALTOS" IN 2" LETTERS

## **STANDARD STREET SIGN**

SCALE: NOT TO SCALE

- 1. PLATES TO BE 0.080 GAUGE ALUMINUM, WIDTH VARIES IN 6" INCREMENTS FROM A MINIMUM OF 24" TO A MAXIMUM OF 36" x 6" IN HEIGHT. CORNER RADIUS IS 0.5", WITHOUT HOLES.
- 2. SIGN IS SINGLE PLATE, DOUBLE FACE, WITH 3M WHITE 3290 ENGINEER GRADE REFLECTIVE SHEETING OVERLAYED BY 3M 1179 TRANSPARENT FILM FOR OPAQUE BROWN BACKGROUND. LETTERS ARE 3M 3290 WHITE REFLECTIVE ENGINEER GRADE SHEETING APPLIED OVER THE 1179 FILM.
- 3. LETTER STYLE IS GARAMOND BOLD ITALIC CONDENSED. 4" ALL UPPERCASE FOR STREET NAME; 2" ALL UPPERCASE FOR SUFFIX & BLOCK NUMBER. SUFFIX IS CENTERED OVER "ARROW" AND BLOCK NUMBER WITH 0.75" SPACE BETWEEN LINES.

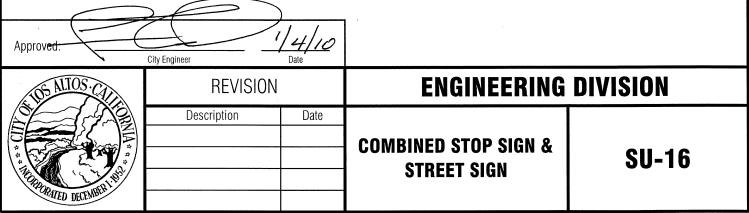


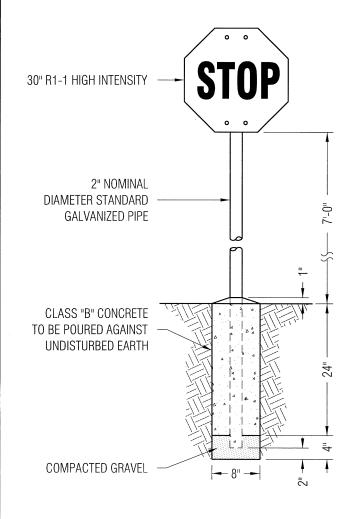


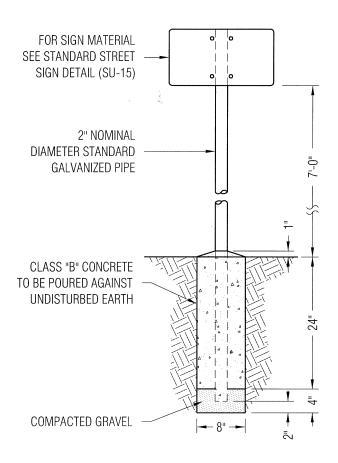
### **COMBINED STOP SIGN & STREET SIGN**

SCALE: NOT TO SCALE

- 1. PLATES TO BE 0.080 GAUGE ALUMINUM, WIDTH VARIES IN 6" INCREMENTS FROM A MINIMUM OF 24" TO A MAXIMUM OF 36" x 6" IN HEIGHT. CORNER RADIUS IS 0.5", WITHOUT HOLES.
- 2. SIGN IS SINGLE PLATE, DOUBLE FACE, WITH 3M WHITE 3290 ENGINEER GRADE REFLECTIVE SHEETING OVERLAYED BY 3M 1179 TRANSPARENT FILM FOR OPAQUE BROWN BACKGROUND. LETTERS ARE 3M 3290 WHITE REFLECTIVE ENGINEER GRADE SHEETING APPLIED OVER THE 1179 FILM.
- 3. LETTER STYLE IS GARAMOND BOLD ITALIC CONDENSED. 4" ALL UPPERCASE FOR STREET NAME; 2" ALL UPPERCASE FOR SUFFIX & BLOCK NUMBER. SUFFIX IS CENTERED OVER "ARROW" AND BLOCK NUMBER WITH 0.75" SPACE BETWEEN LINES.
- 4. STOP SIGN SHALL BE INSTALLED WITH TWO MOUNTING BRACKETS USING U-BOLTS AND THEFT-PROOF BOLTS.







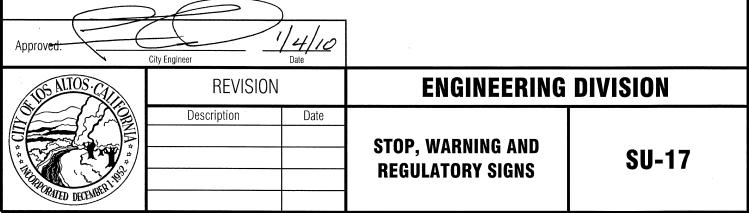
### **STANDARD STOP SIGN**

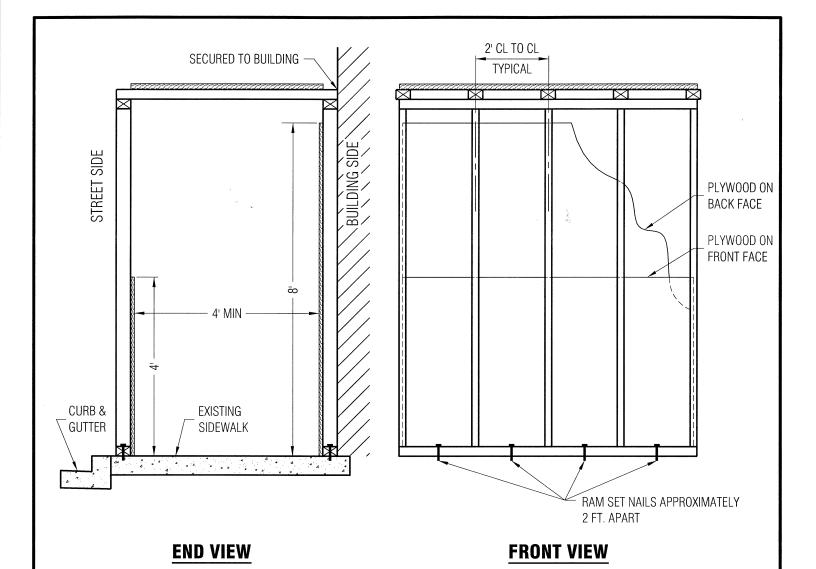
SCALE: NOT TO SCALE

## **WARNING & REGULATORY SIGNS**

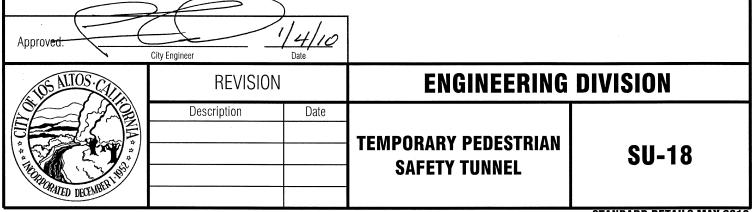
SCALE: NOT TO SCALE

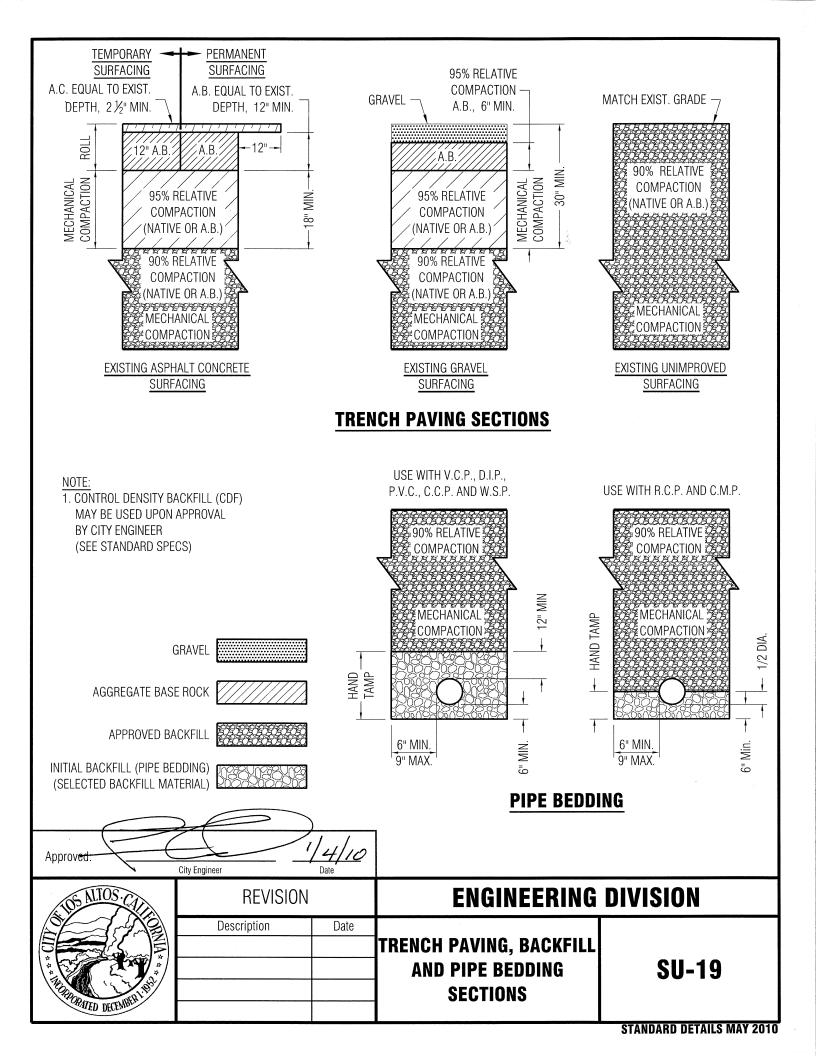
- 1. STOP SIGN SHALL BE 30" R1-1 HIGH INTENSITY.
- 2. SIGNS SHALL BE INSTALLED WITH TWO MOUNTING BRACKETS USING U-BOLTS AND THEFT-PROOF BOLTS.

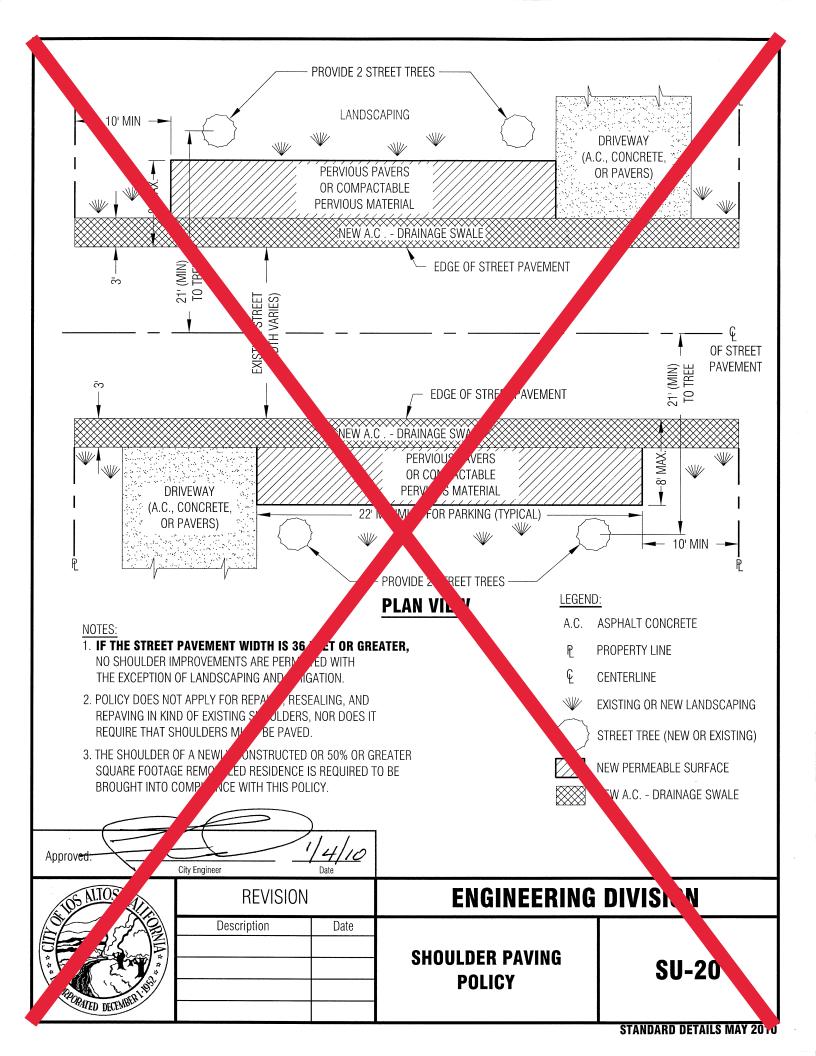


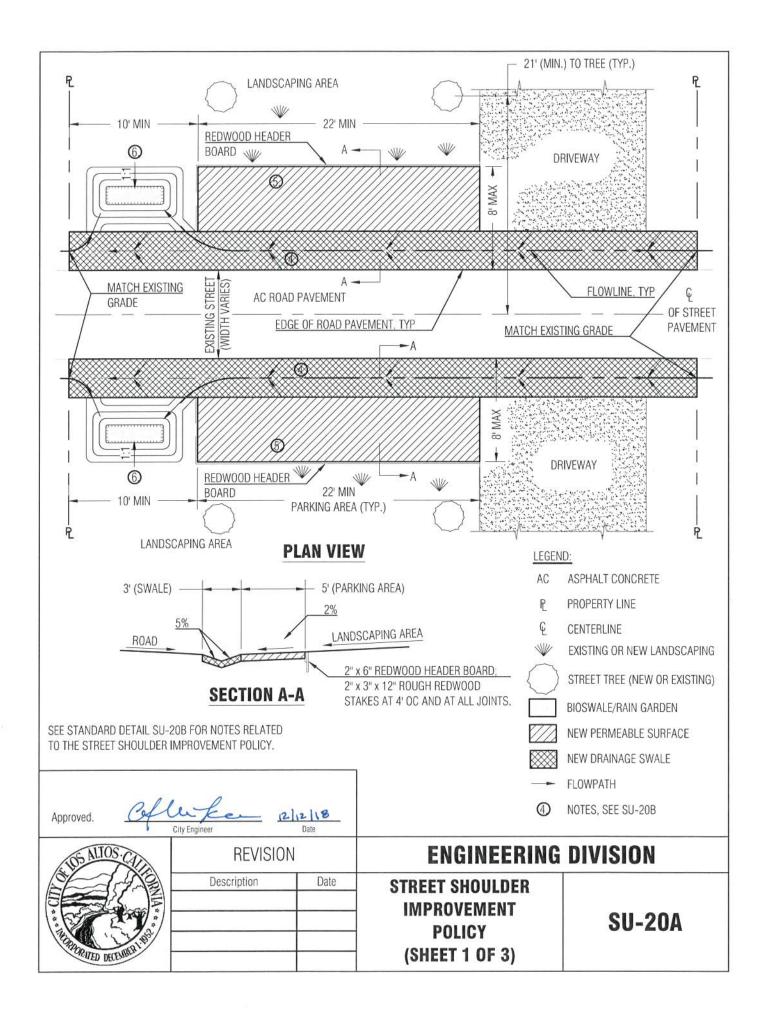


- 1. PEDESTRIAN SAFETY TUNNEL TO BE EXTENDED A MINIMUM OF 8 FT. BEYOND SCAFFOLDING.
- 2. ALL HOLES RESULTING FROM RAM SET NAILS IN EXISTING SIDEWALK MUST BE FILLED TO THE SATISFACTION OF THE CITY ENGINEER.
- 3. PEDESTRIAN TUNNEL TO BE MADE FROM THE FOLLOWING MATERIAL:
  - a. 2x4 DOUGLAS FIR #2 GRADE OR BETTER.
  - b. 4' x 8' x 1/2" CDX PLYWOOD, EXTERIOR GRADE FOR SIDES AND 3/4" FOR TOP.
- 4. CONSTRUCTION OF TUNNEL TO MEET OSHA & ALL OTHER GOVERNING CODES.









#### NOTES:

- IF THE STREET PAVEMENT WIDTH IS 36 FEET OR GREATER, NO SHOULDER IMPROVEMENTS ARE PERMITTED WITH THE EXCEPTION OF LANDSCAPING AND IRRIGATION.
- POLICY DOES NOT APPLY FOR REPAIRS, RESEALING, AND REPAVING IN KIND OF EXISTING SHOULDERS, NOR DOES IT REQUIRE THAT SHOULDERS MUST BE PAVED.
- 3. THE SHOULDER OF A NEWLY CONSTRUCTED OR 50% OR GREATER SQUARE FOOTAGE REMODELED RESIDENCE IS REQUIRED TO BE BROUGHT INTO COMPLIANCE WITH THIS POLICY.
- 4. DRAINAGE SWALE:
  - a. 3' WIDE;
  - b. MAXIMUM CROSS SLOPE 5%;
  - c. DRAINAGE SWALE SHALL BE CONSTRUCTED USING PERMEABLE MATERIALS PER DETAIL SU-20C.
- PARKING AREA SHALL FEATURE ONE OF THE FOLLOWING MATERIALS:
  - PERMEABLE CONCRETE PAVERS AND OPEN CELL CONCRETE BLOCKS:

    CONCRETE PAVER BLOCKS BOTH SOLID AND GRIDDED SYSTEMS (WITH OPEN CELLS FOR AGGREGATE, GRAVEL, OR GRASS) HAVE
    BEEN DEVELOPED IN A LARGE VARIETY OF SHAPES, TEXTURES, PATTERNS, AND COLORS. THE CONCRETE PAVERS AND OPEN CELL
    CONCRETE BLOCKS SHALL BE INSTALLED PER MANUFACTURE'S RECOMMENDATIONS. GAPS OF CONCRETE PAVERS, IF FEATURED
    BY THE TYPE OF PAVER, SHALL BE FILLED WITH SAND. OPEN CELL CONCRETE BLOCKS VARY IN SIZE BASED ON BLOCK TYPE AND
    SHALL BE FILLED IN WITH GRAVEL OR GRASS, ALLOWING WATER TO ENTER THE SUBGRADE. CONCRETE PAVERS AND OPEN CELL
    CONCRETE BLOCKS SHALL BE INSTALLED OVER A SAND BEDDING COURSE (MINIMUM 1" THICK OR PER PAVER MANUFACTURER'S
    RECOMMENDATION). FURTHER WATER RESERVOIR CAPACITY CAN BE ADDED BY INSTALLING OPEN GRADED BASE AND
    STONE SUBBASE WITH AN OPTIONAL UNDERDRAIN (TO BE ROUTED TO THE BIOSWALE/RAIN GARDEN), WITH GEOTEXTILE ON BOTTOM
    AND SIDES. TYPICALLY AN EDGE CONSTRAINT IS INSTALLED AT THE PERIMETER OF THE PAVERS OR LOCATIONS SUBJECT TO
    LATERAL LOADING. SUBGRADE EXCAVATION DEPTH REQUIRED IS 8-12 INCHES, BUT CAN BE GREATER IN DEPTH IF ADDITIONAL
    RESERVOIR CAPACITY IS DESIRED.
  - b. COMPACTED AGGREGATE BASE (AB):
    - 1-1/2 INCH OR 3/4 INCH CLASS 2 AGGREGATE BASE (6 INCHES THICK ON COMPACTED NATIVE SOIL)
  - COMPACTED STABILIZED DECOMPOSED GRANITE (DG):
    SMALL SIZED GRANITE AGGREGATE MIXED WITH A STABILIZING AGENT, COMPACTED AND PLACED OVER EXISTING PERMEABLE
    SURFACES AND 6 INCHES OF AGGREGATE BASE IF SUBGRADE IS LESS SUITABLE. SUBGRADE EXCAVATION REQUIRED IS 8-12
    INCHES, BUT CAN BE GREATER IN DEPTH IF ADDITIONAL RESERVOIR CAPACITY IS CONSIDERED. DG LAYER SHALL BE MINIMUM 4
    INCHES THICK. GRADE TO DRAIN.
- 6. BIOSWALE/RAIN GARDEN IN LANDSCAPE AREA DESIGNED TO RECEIVE RUNOFF FROM DRAINAGE SWALE/PARKING AREA. DESIGN AND SHAPE OF BIOSWALE/RAIN GARDEN BY ARCHITECT OR ENGINEER. MINIMUM DEPTH SHALL BE 2.5'. REFER TO THE C.3 STORMWATER HANDBOOK FOR DESIGN PARAMETERS AND SPECIFICATIONS OF SOILS OR PLANTS. AREA SHALL BE DEPENDING ON LENGTH OF FRONTAGE (DISTANCE MEASURED PARALLEL TO EDGE OF ROAD BETWEEN PROPERTY LINES) AS FOLLOWS:

a. FRONTAGE < 75':

50 SF MINIMUM

b. 75' < FRONTAGE < 100'

100 SF MINIMUM

c. 100' < FRONTAGE < 150'

200 SF MINIMUM

FRONTAGE > 150':

300 SF MINIMUM

 LOTS LOCATED ALONG SUGGESTED ROUTES TO SCHOOL MAY REQUIRE MODIFICATION TO THIS STANDARD DETAIL AS APPROVED BY THE CITY ENGINEER. OTHER MODIFICATIONS MAY BE MADE AS APPROVED BY THE CITY ENGINEER.

Approved.

City Engineer

REVISION

REVISION

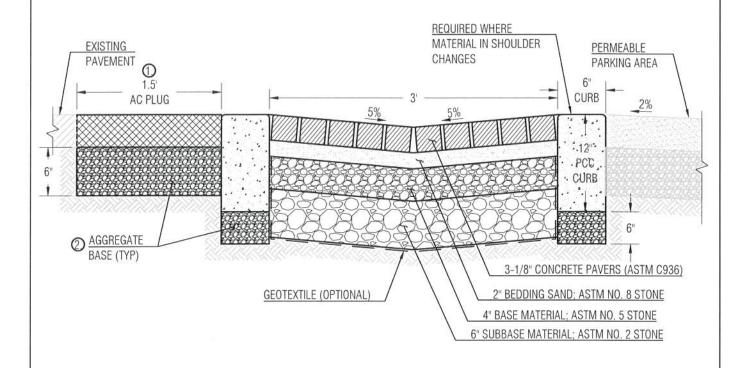
Description

Date

STREET SHOULDER
IMPROVEMENT
POLICY
(SHEET 2 OF 3)

SU-20B

### PERMEABLE DRAINAGE SWALE



#### NOTES:

- AC PLUG SHALL BE 4" THICK OR MATCH EXISTING PAVEMENT THICKNESS, WHICHEVER IS GREATER.
- AGGREGATE BASE SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
- INSTALL PAVERS AND ALL BASE MATERIALS PER MANUFACTURER'S RECOMMENDATIONS.
- ALTERNATE DRAINAGE SWALE MAY BE CONSTRUCTED WITH 1-1/2 INCH OR 3/4 INCH COMPACTED CLASS 2 AB (6 INCH THICK ON COMPACTED NATIVE SOIL).

### LEGEND:

CONCRETE PAVERS, OR
APPROVED PERMEABLE
MATERIAL FROM SU-20B

NOTE 5.a.

BEDDING SAND

BASE MATERIAL

SUBBASE MATERIAL

PCC

AGGREGATE BASE

AC PLUG

EXISTING PAVEMENT

PERMEABLE PARKING AREA

NATIVE MATERIAL

2) NOTES

Approved.



12/12/18

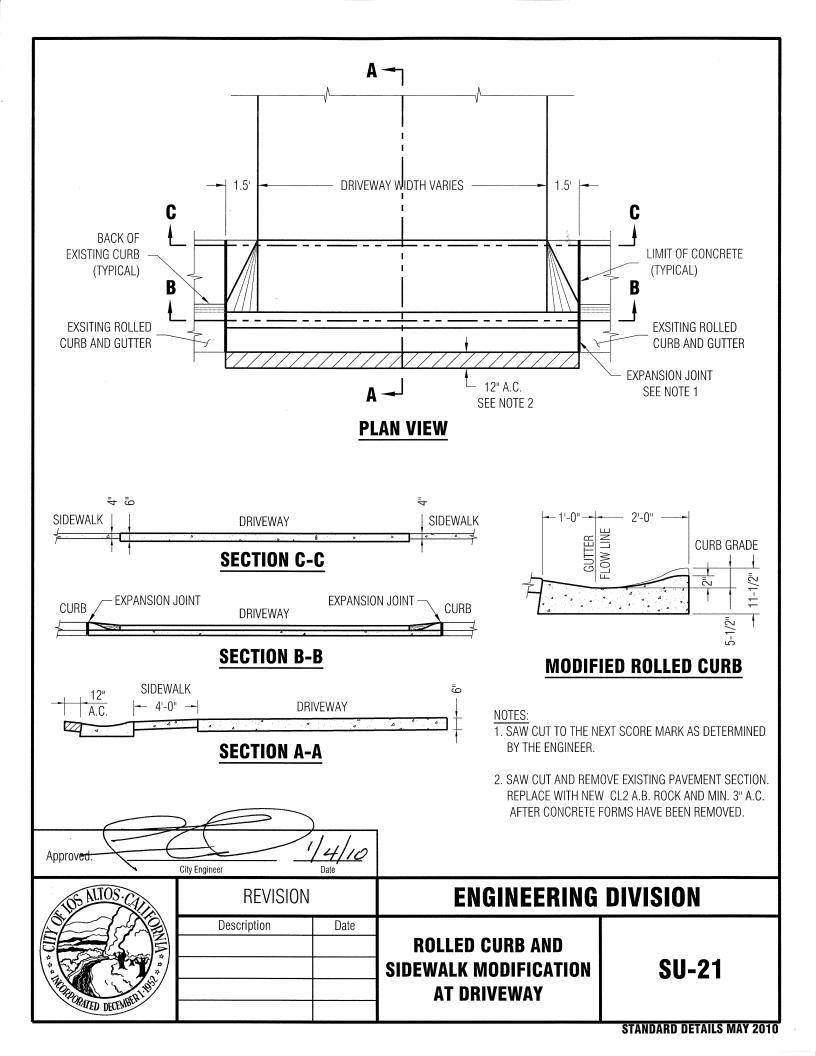
### **REVISION**

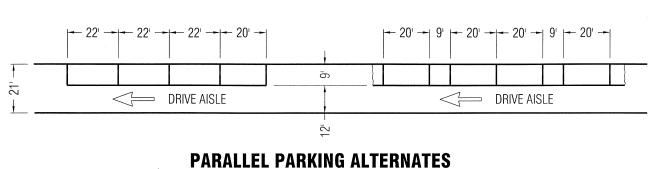
Description	Date

## **ENGINEERING DIVISION**

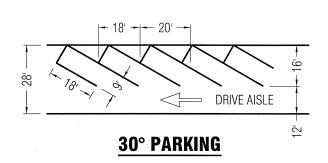
STREET SHOULDER
IMPROVEMENT
POLICY
(SHEET 3 OF 3)

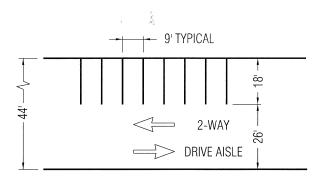
**SU-20C** 



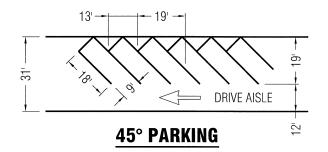


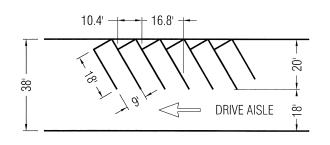
## **PARALLEL PARKING ALTERNATES**



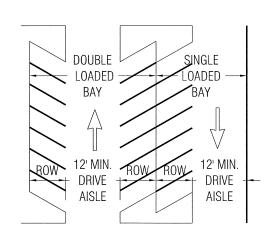


### 90° PARKING





**60° PARKING** 



### **ONE WAY**



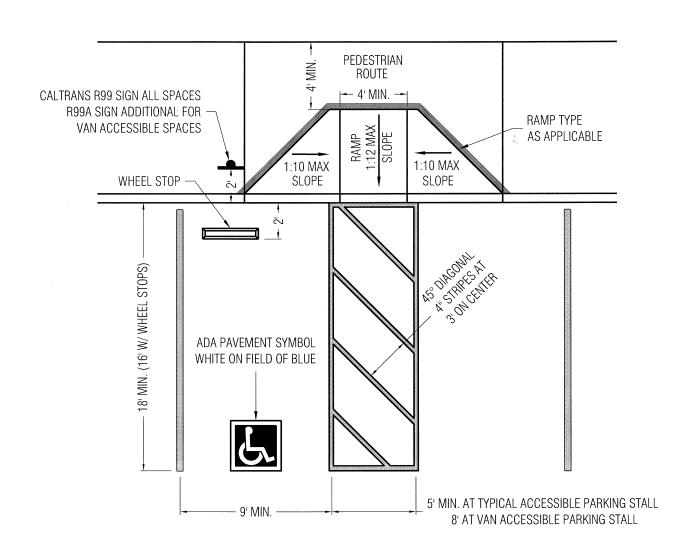
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TO DECEMBER 1883	ŀ

Approved:

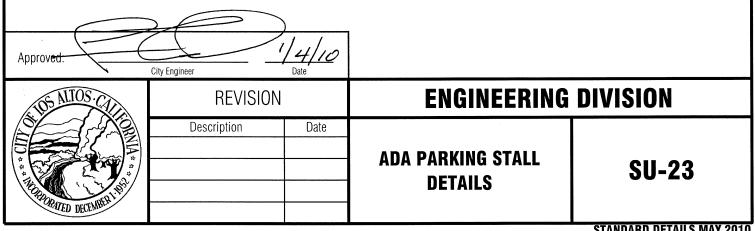
REVISION		
Date		

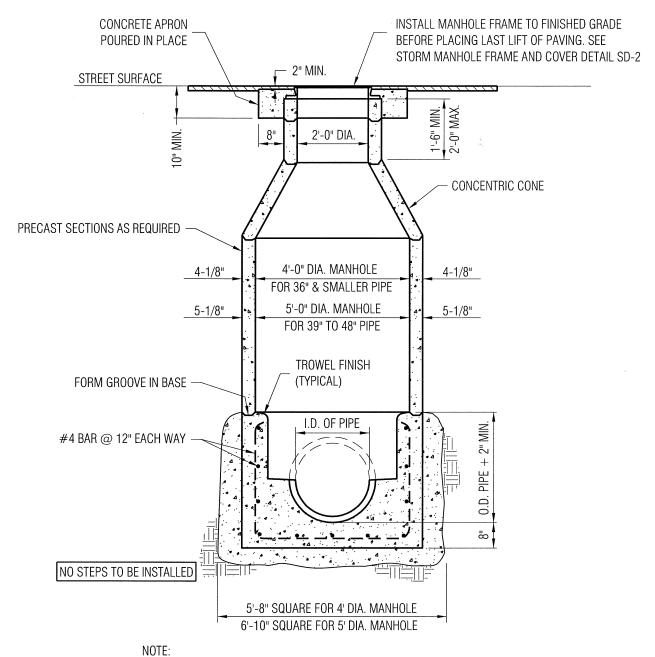
## **ENGINEERING DIVISION**

**PARKING STALL DETAILS** 

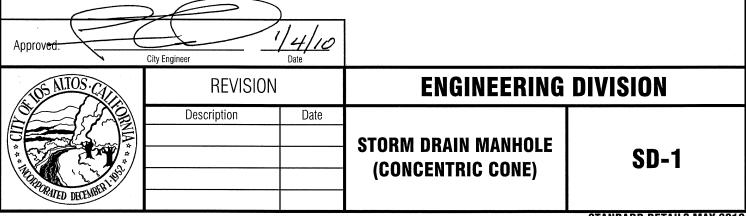


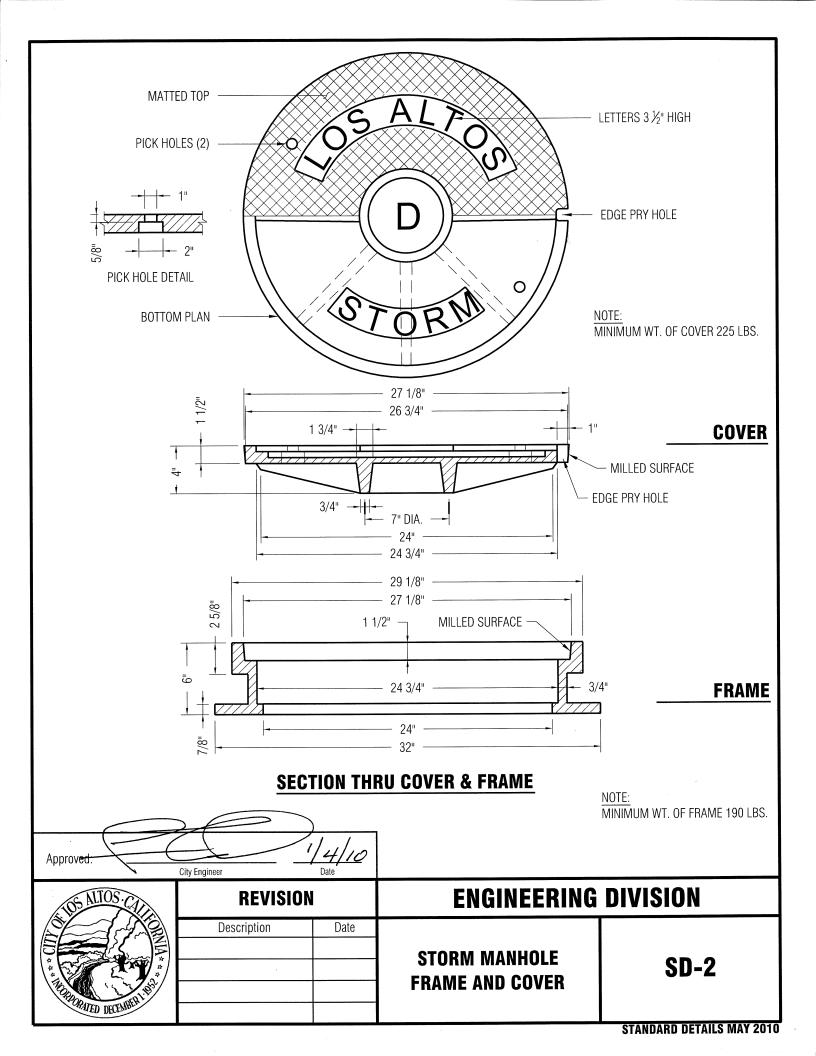
NOTE: REFER TO CALTRANS STANDARD DRAWINGS FOR ALL OTHER ACCESSIBLE PARKING DETAILS.

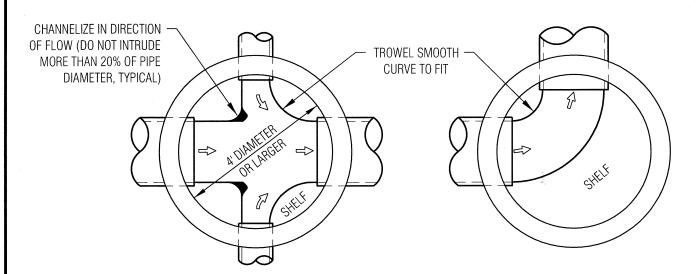




1. LAY PIPE THRU BOTTOM OF MANHOLES. AFTER CONCRETE IN BASE HAS SET, KNOCK OUT PORTION OF PIPE INDICATED WITH DASHED LINES. (FOR BRANCHED BASE SEE SD-3)

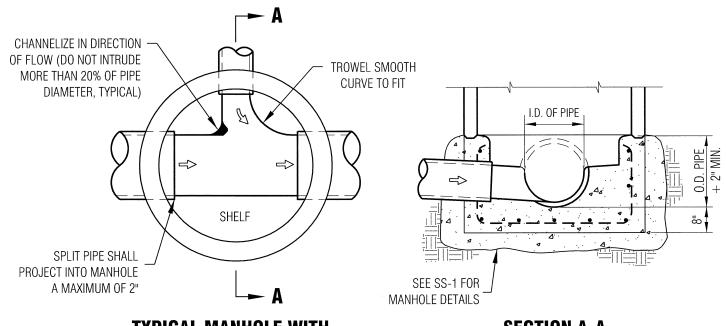






## TYPICAL MANHOLE WITH TWO BRANCHES

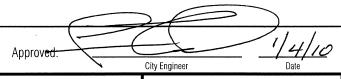
### **TYPICAL CURVED MANHOLE**



# TYPICAL MANHOLE WITH ONE BRANCH

Date

**SECTION A-A** 

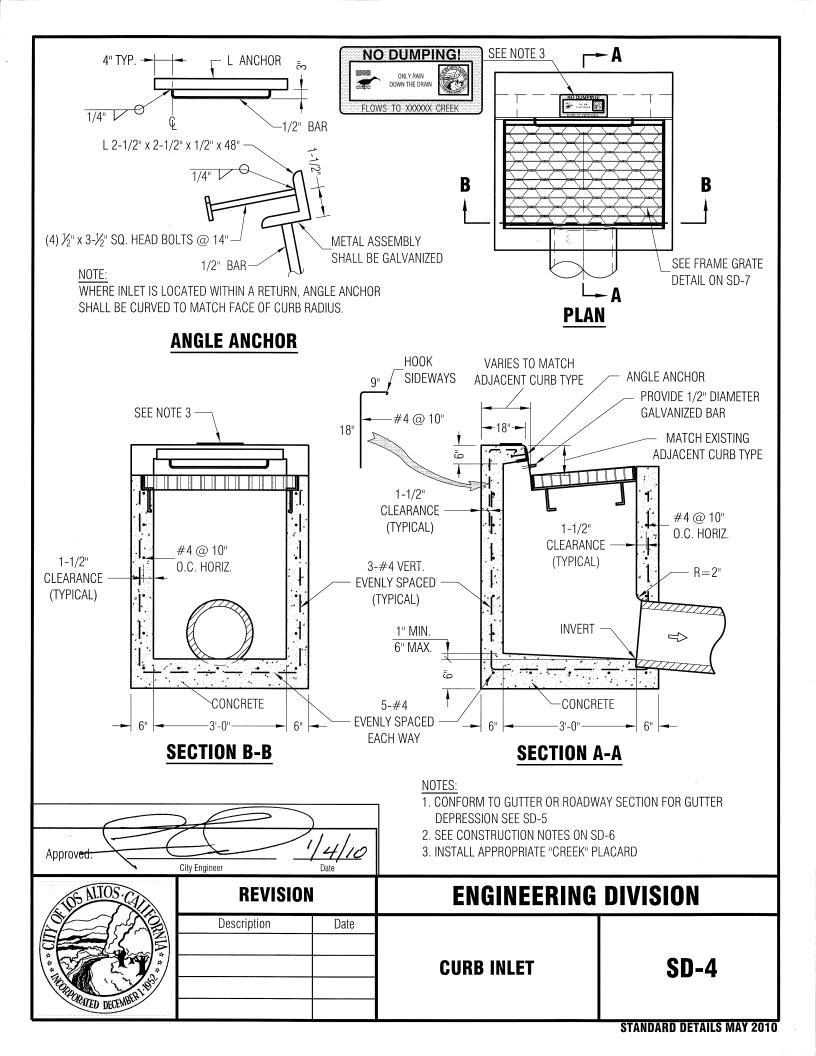


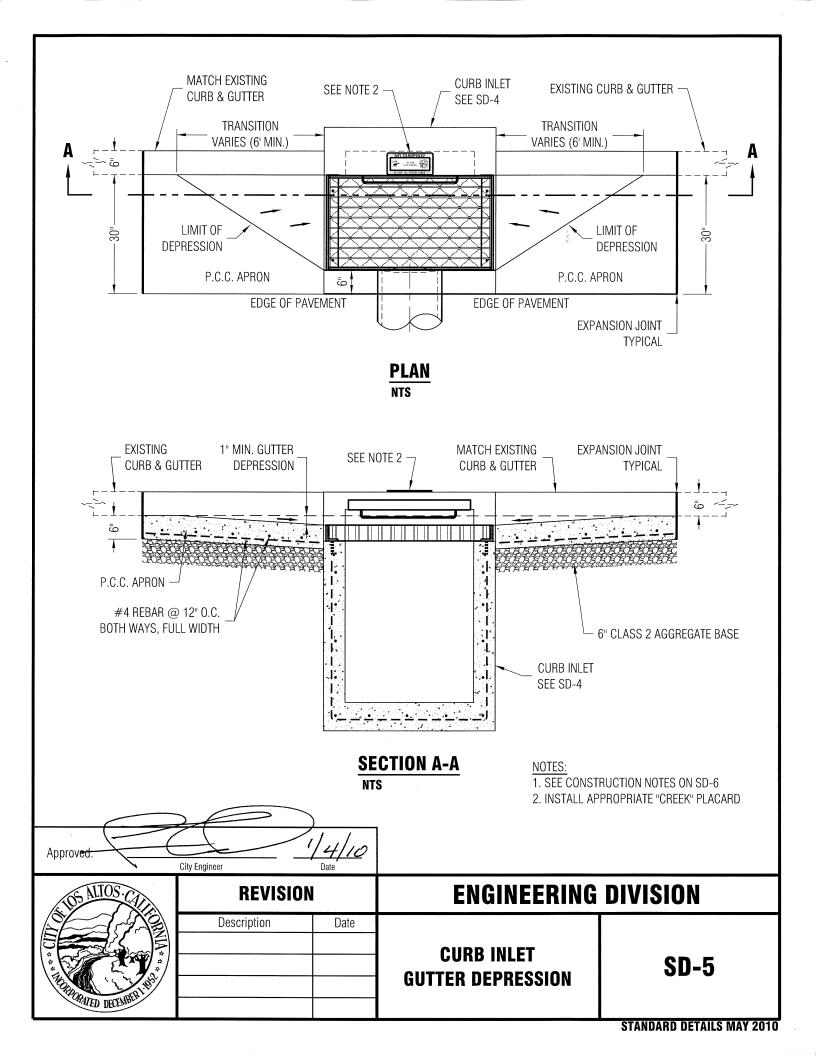
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	Description
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AND ORATED DECEMBER 1:19	

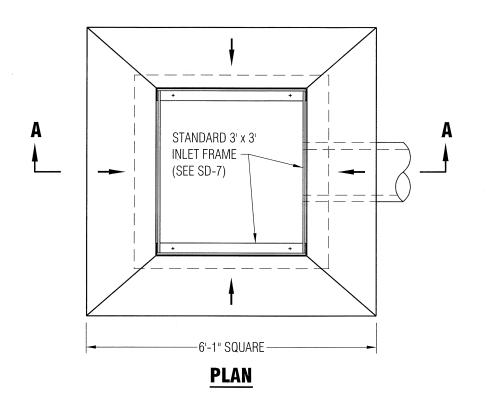
## **ENGINEERING DIVISION**

STORM MANHOLE BASE WITH BRANCHES

SD-3

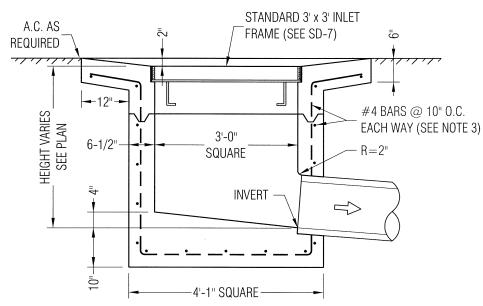




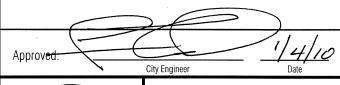


### NOTES:

- 1. INLET BASE TO BE POURED AGAINST UNDISTURBED EARTH. SIDES MAY BE FORMED OR MAY BE POURED AGAINST UNDISTURBED EARTH.
- 2. NO CONCRETE SHALL BE POURED PRIOR TO CHECKING OF FORMS AND STEEL PLACEMENT BY THE ENGINEER.
- 3. ALL REINFORCING STEEL SHALL HAVE A MINIMUM CLEAR DISTANCE OF 3" AND SHALL BE CONTINUOUS AROUND CORNERS OR SHALL BE LAPPED AT LEAST 15" AFTER THE BEND. THE MINIMUM OVERLAP FOR A LAPPED SPLICE SHALL BE 15".
- 4. \rightarrow INDICATES OPTIONAL CONSTRUCTION JOINT.



### **SECTION A-A**



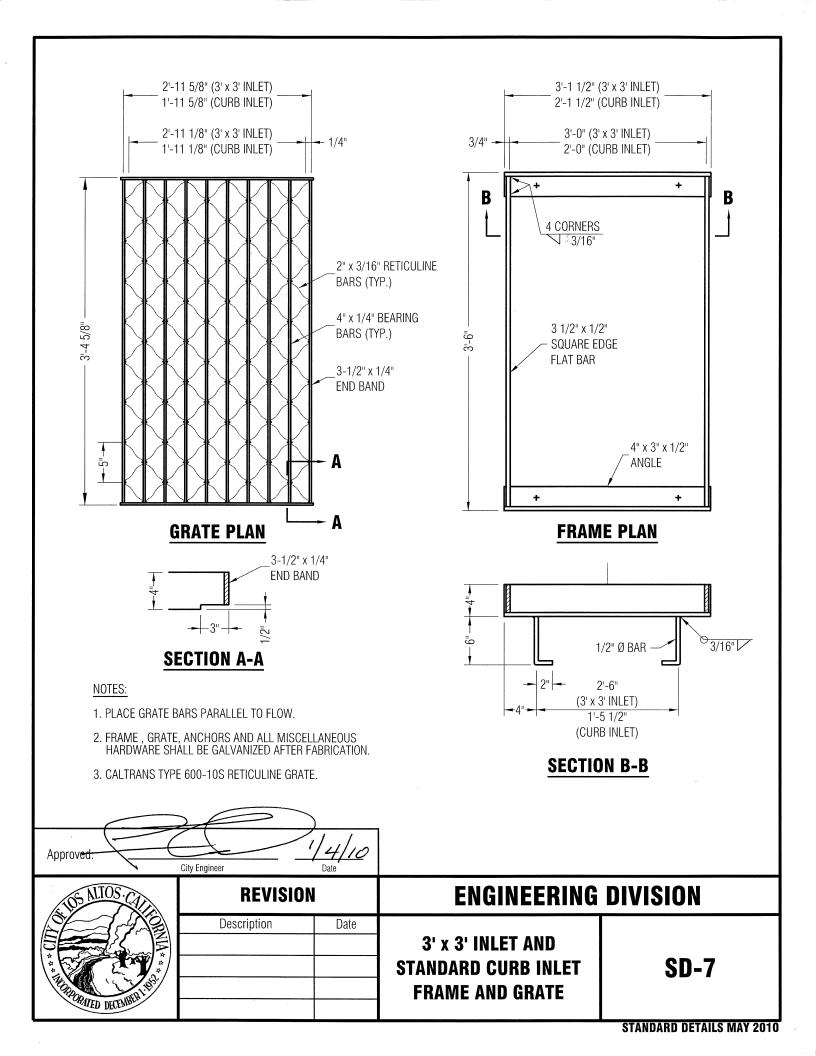
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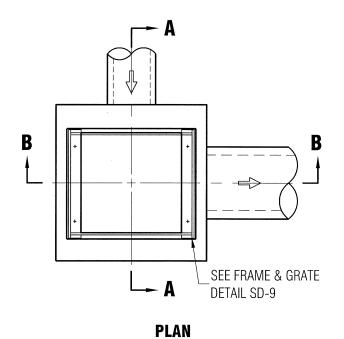
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Description	Date	

## **ENGINEERING DIVISION**

3' x 3' STORM DRAIN INLET

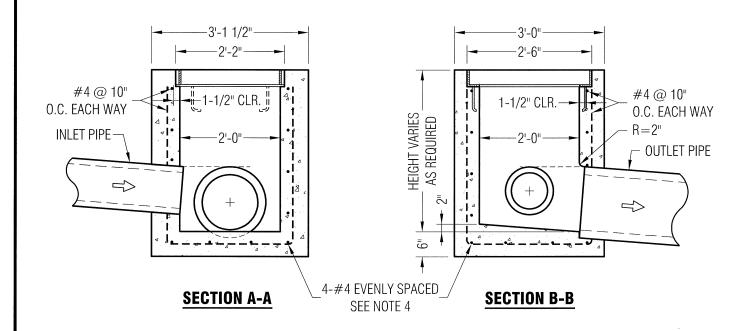
SD-6

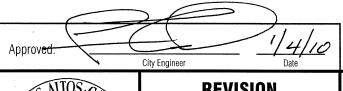




### NOTE:

- 1. OUTLET PIPE SHALL BE MIN. 12" MAX. 18" DIAMETER.
- 2. ALL CONCRETE SHALL BE CLASS "A", 3/4" MAX. AGGREGATE, 3,300 PSI.
- 3. THE CROWN OF THE INLET PIPE SHALL BE SET AT THE SAME ELEVATION OF THE CROWN OF THE OUTLET PIPE.
- 4. REINFORCING STEEL SHALL BE REQUIRED FOR WALLS GREATER THAN 6' IN DEPTH. BOTTOM REBAR MAT IS REQUIRED REGARDLESS OF HEIGHT OF WALLS.
- 5. CHRISTY U23 CATCH BASIN (2' x 2' WITH 6" WALLS) OR AN APPROVED EQUAL.
- 6. SEE NOTES ON SD-6.





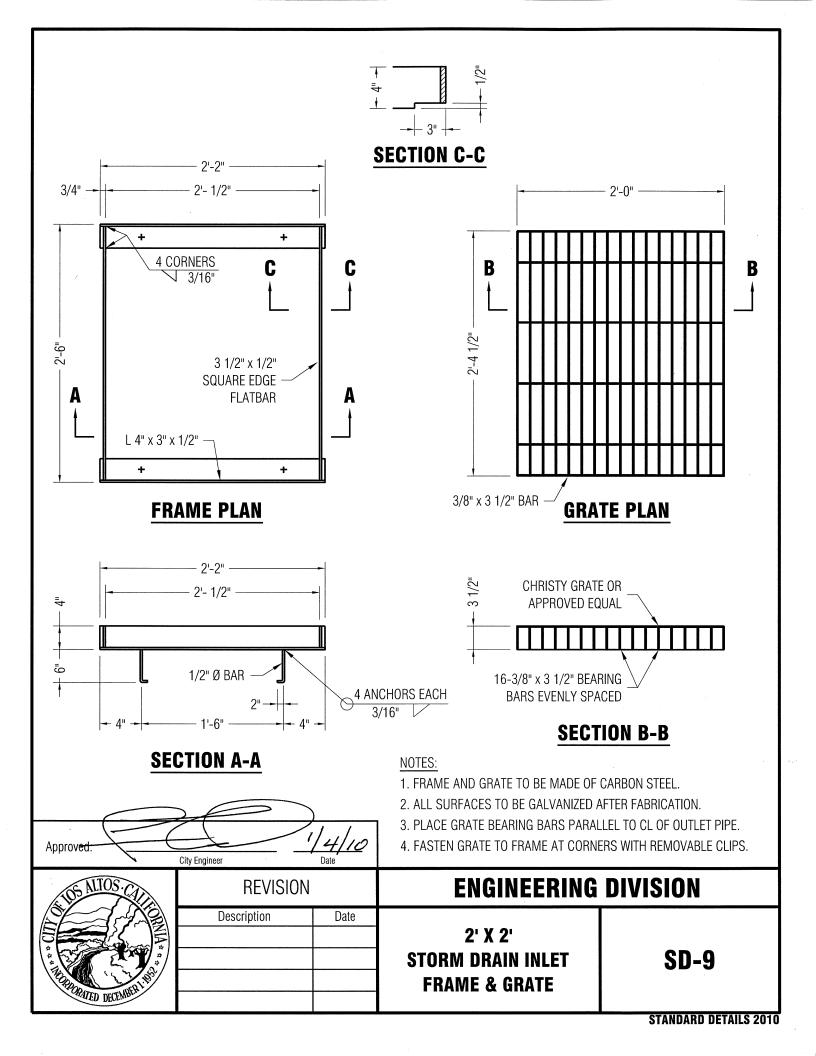
## MIOS COMPANIED DECEMBER 182

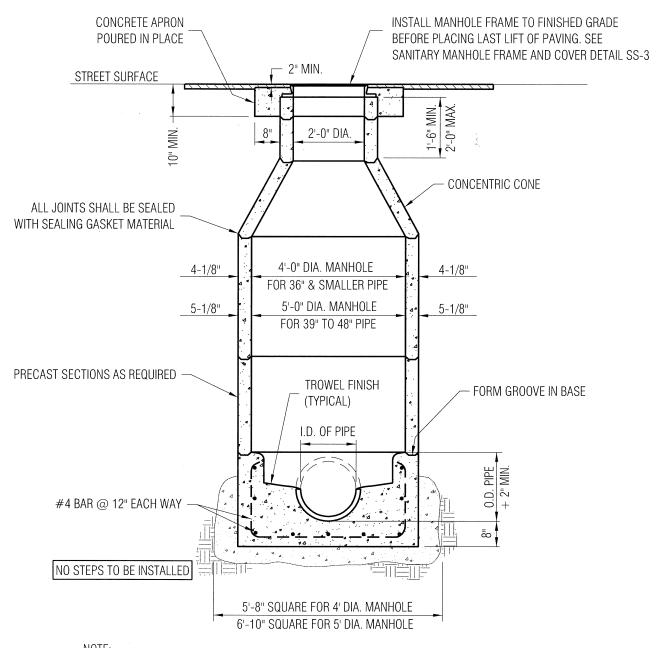
## Description Date

### **ENGINEERING DIVISION**

2' X 2' STORM DRAIN INLET

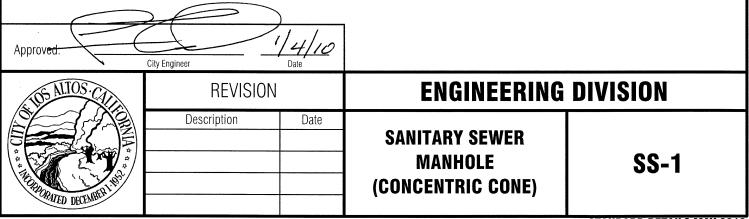
SD-8

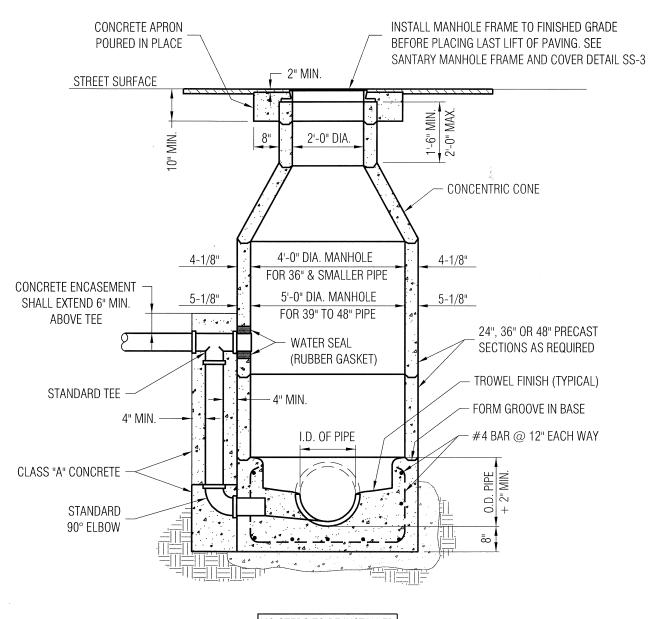




### NOTE:

1. FOR INLINE MANHOLES LAY PIPE THRU BOTTOM OF MANHOLES. AFTER CONCRETE IN BASE HAS SET, KNOCK OUT PORTION OF PIPE INDICATED WITH DASHED LINES. (FOR BRANCHED BASE SEE SS-4)



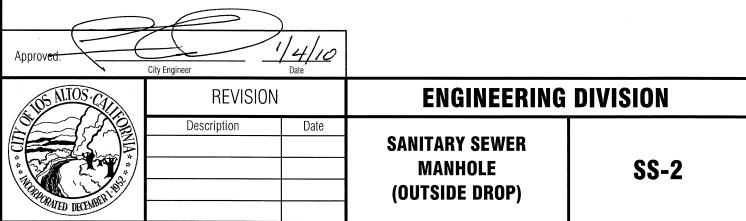


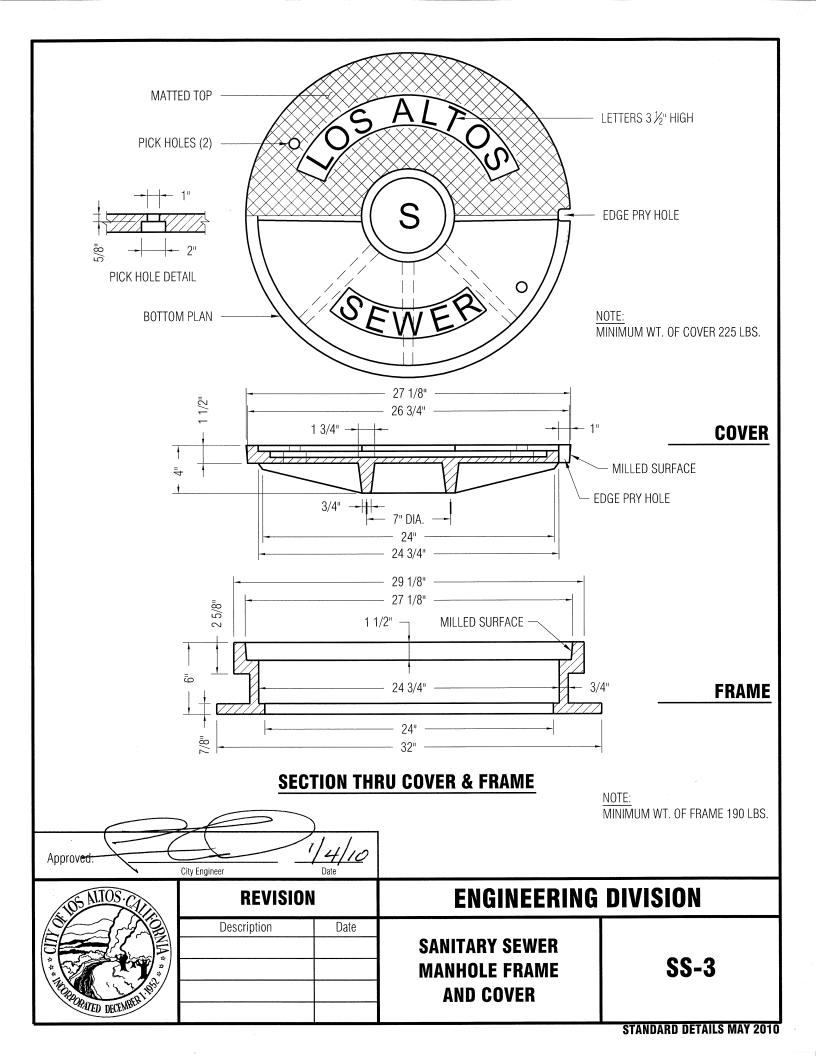
### NO STEPS TO BE INSTALLED

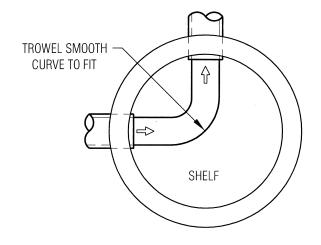
### NOTES:

1. FOR INLINE MANHOLES LAY PIPE THRU BOTTOM OF MANHOLES. AFTER CONCRETE IN BASE HAS SET, KNOCK OUT PORTION OF PIPE INDICATED WITH DASHED LINES. (FOR BRANCHED BASE SEE SS-4)

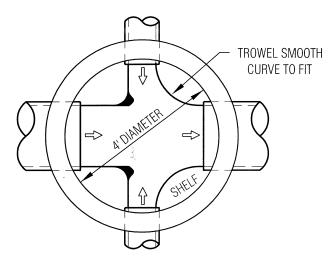
2. A DROP CONNECTION SHALL BE INSTALLED WHEN THE PIPE INVERTS INTO THE MANHOLE ARE 2 FEET OR MORE ABOVE THE OUTFLOW INVERT



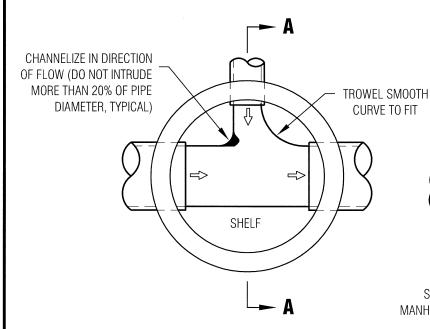




### **TYPICAL CURVED MANHOLE**



### TYPICAL MANHOLE WITH TWO BRANCHES



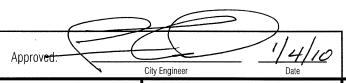


# SEE SS-1 FOR MANHOLE DETAILS

### **SECTION A-A**

### NOTE:

1. LAY PIPE THRU BOTTOM OF MANHOLES. AFTER CONCRETE IN BASE HAS SET. KNOCK OUT PORTION OF PIPE INDICATED WITH DASHED LINES.



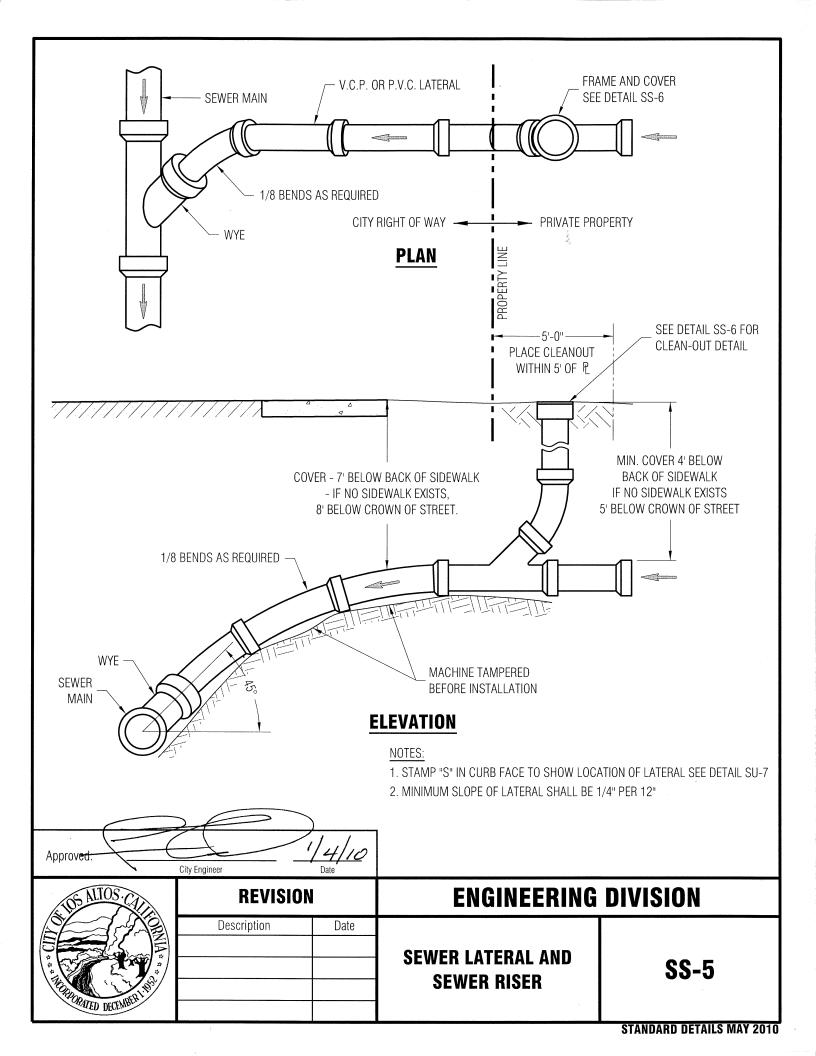
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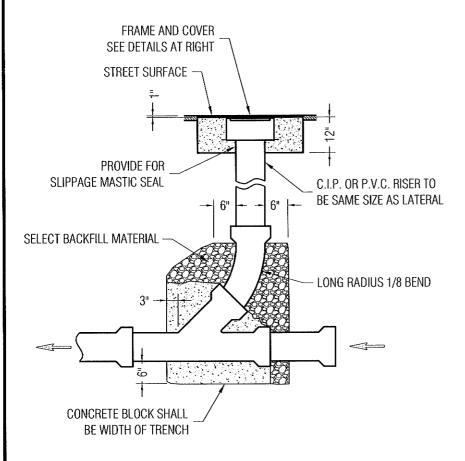
REVISION				
Description	Date			

### **ENGINEERING DIVISION**

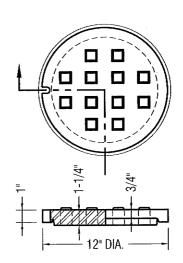
SANITARY SEWER MANHOLE BASE WITH BRANCHES

**SS-4** 

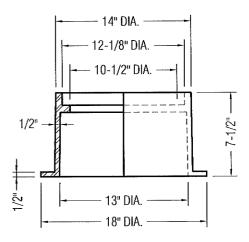




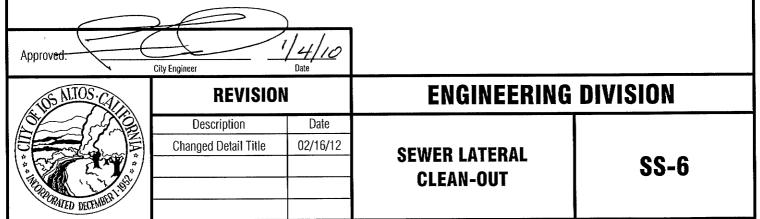
### STANDARD SEWER LATERAL CLEAN-OUT

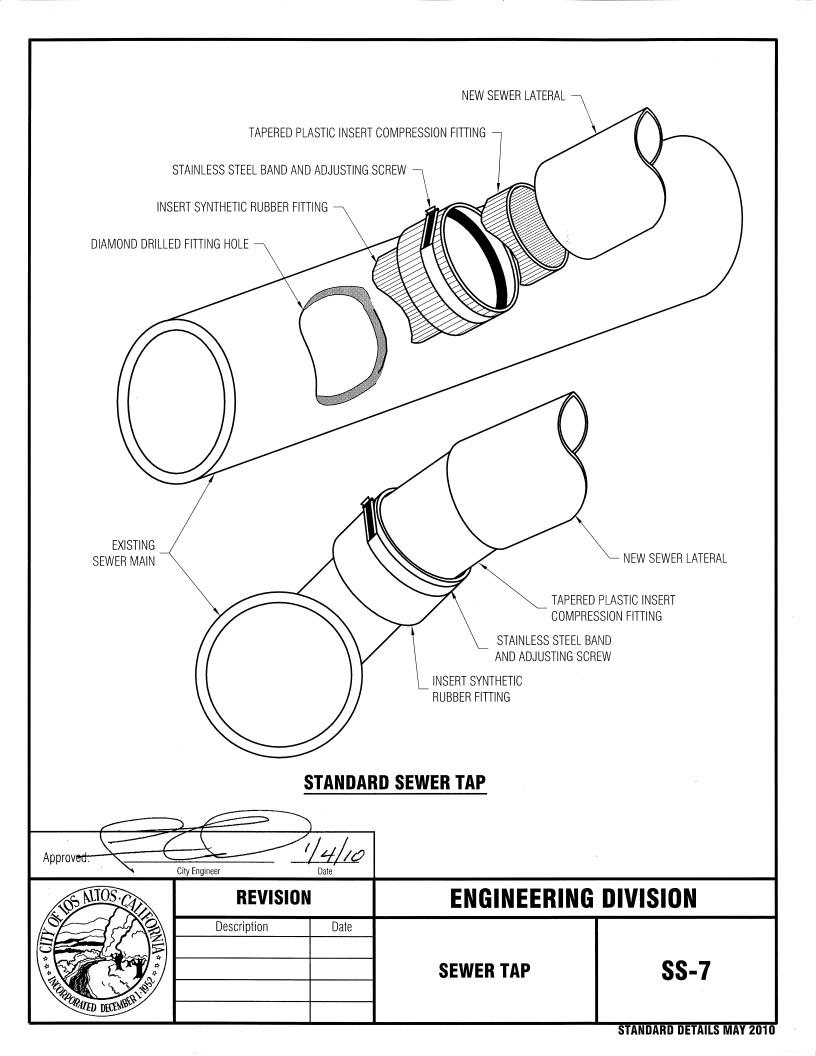


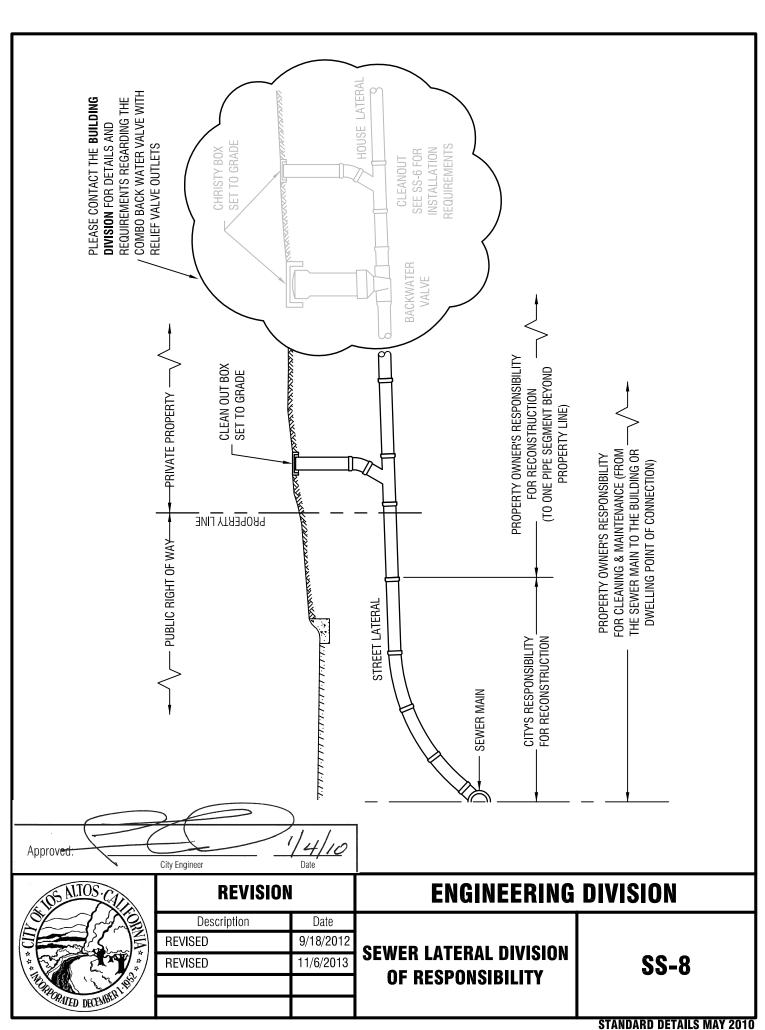
### **COVER DETAIL**

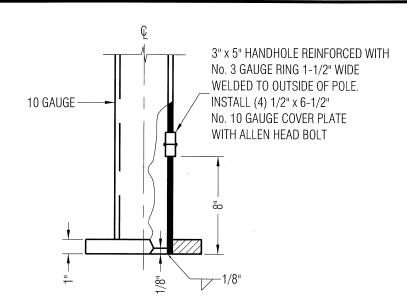


FRAME DETAIL







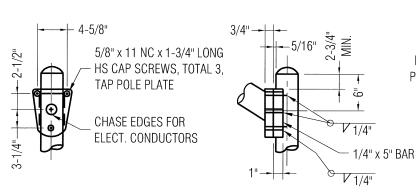


# R=1-1/2" DIA. BOLT HOLE CIRCLE TYPICAL MAST ARM 11" DIA. BOLT HOLE CIRCLE 12" PLAN BASE PLATE

BACK OF FIXTURE

# CONTRACTOR SHALL PROVIDE AND INSTALL POLE IDENTIFICATION PLATE PLATE SHALL FACE TOWARDS STREET BAR POLE FOUNDATION SEE STANDARD SL-2A, 2B

### **ELEVATION**



### **LUMINAIRE ARM CONNECTION**

		Ρ(	OLE D	ATA	
POLE TYPF	HEIGHT	MIN.	0 D	THICKNESS	LUMINAIRE
TYPE	HEIGHI	BASE	TOP	THICKNESS	ARM LENGHT
15	30'-0"	8"	3-7/8"	0.1196"	8'-0"

	LUMIN	NAIRE A	RM DATA	
CLEARANCE HEIGHT	"N" RISE	I 2.2.1 I HIUKNIEGG		PROJECTED LENGTH
32'-0"±	2'-6"±	3-1/2"	0.1196"	8'-0"

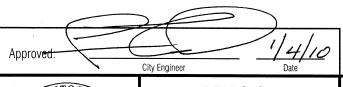
### **ELEVATION-TYPE 15**

### NOTE:

1. ALL POLES LOCATED ON SAN ANTONIO ROAD OR DOWNTOWN AREA SHALL HAVE A BLACK FINISH

POLE BASE DETAILS

2. ARM LENGTH TO BE 8' UNLESS OTHERWISE NOTED ON PLAN

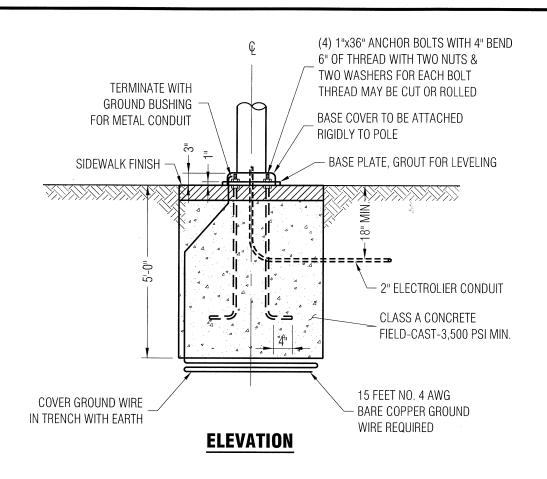


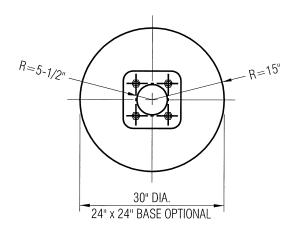
# REVISION Description Date

### **ENGINEERING DIVISION**

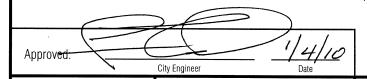
**ELECTROLIER** 

SL-1





### PLAN FOOTING



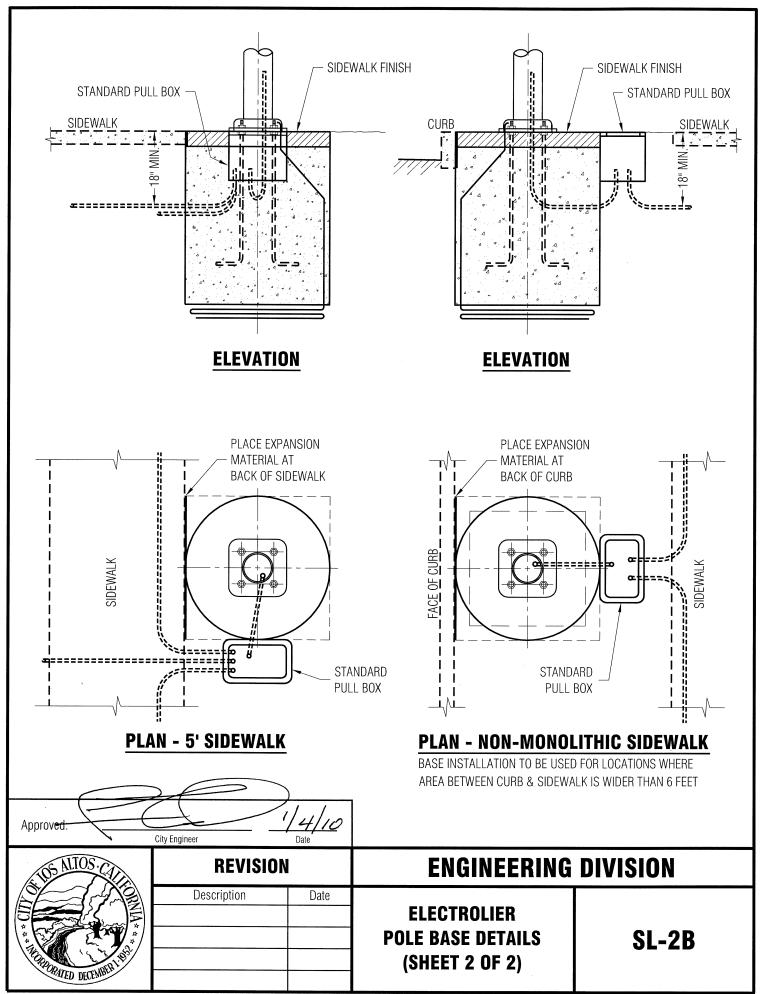
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### REVISION Description Date

### **ENGINEERING DIVISION**

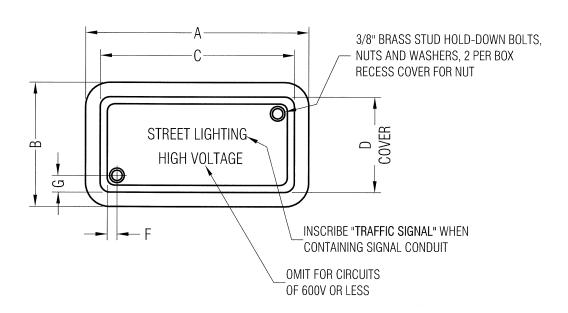
ELECTROLIER
POLE BASE DETAILS
(SHEET 1 OF 2)

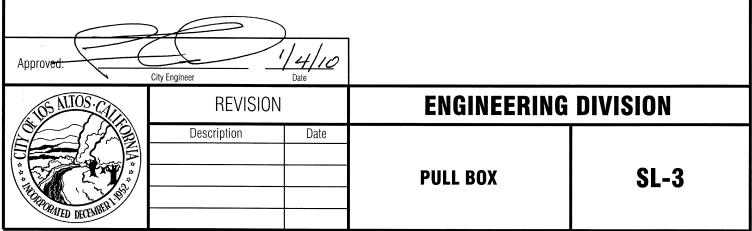
SL-2A

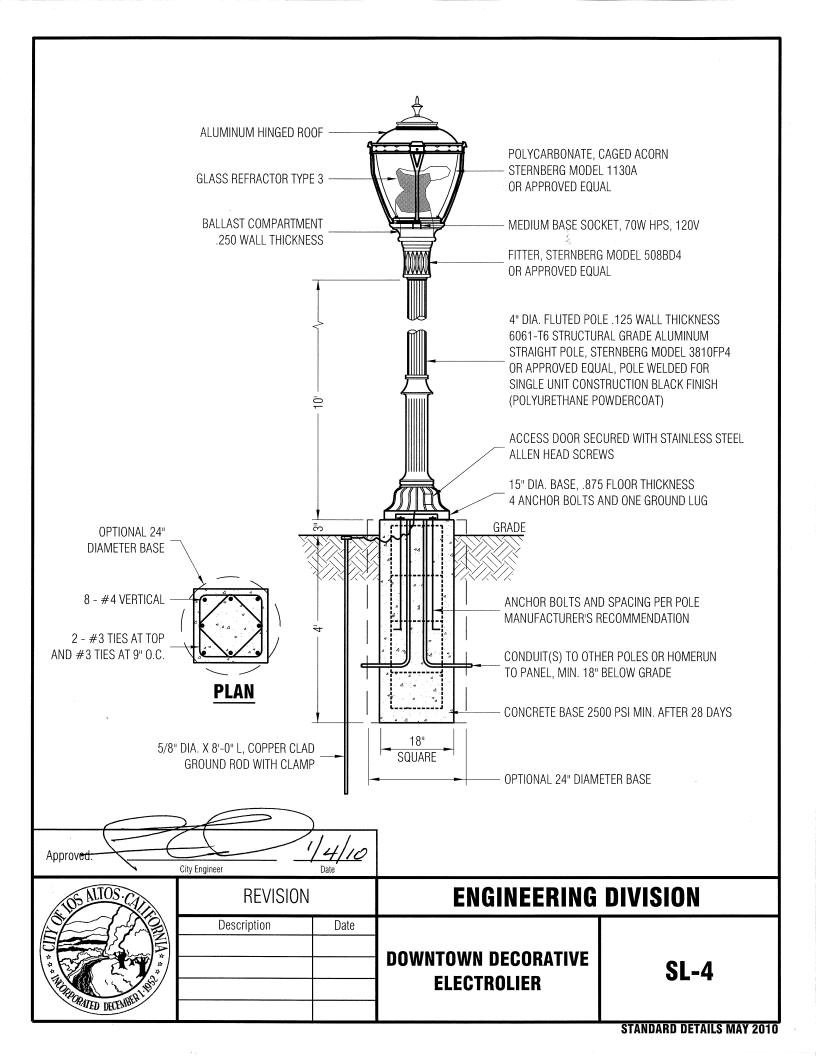


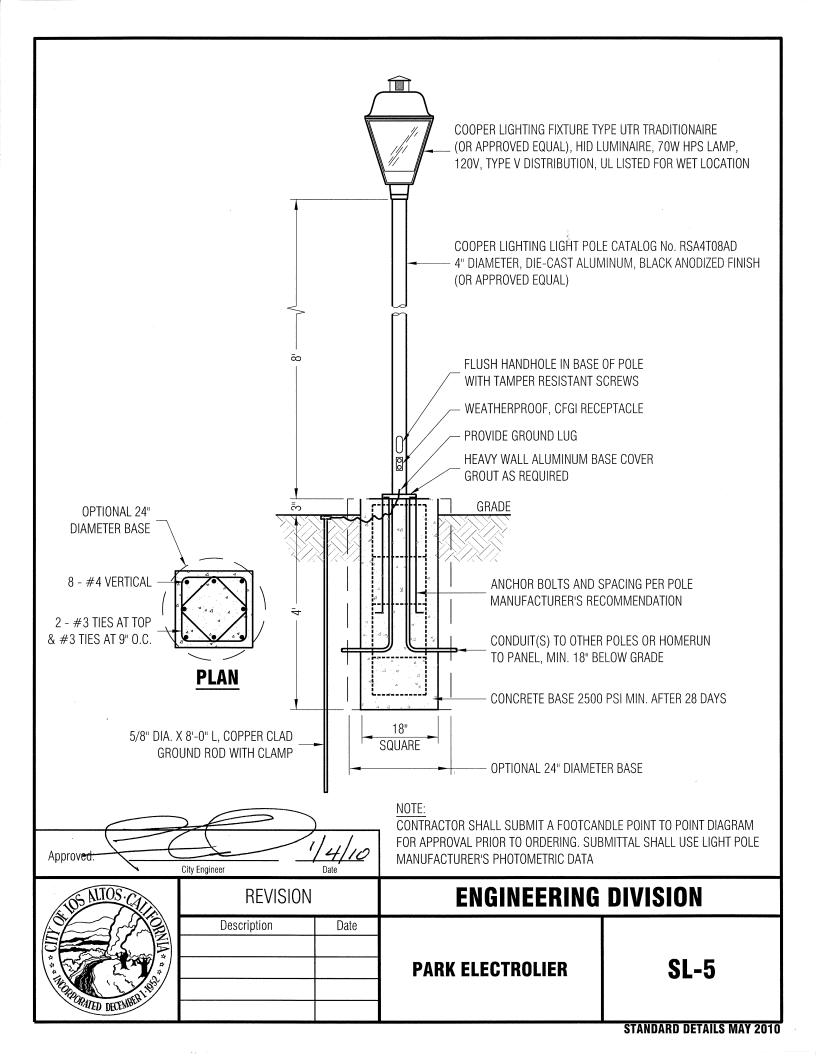
PULL BOX		ВОХ			***************************************	COVER	4.6	
No.	DEPTH	А	В	С	D	E <b>*</b>	F	G
N9	12"	19-3/4"	14-1/4"	15-1/4"	10"	1-3/4"	N/A	N/A
N16	12"	25-1/4"	15-3/4"	20-5/8"	10-1/2"	2"	2-1/2"	1-3/4"

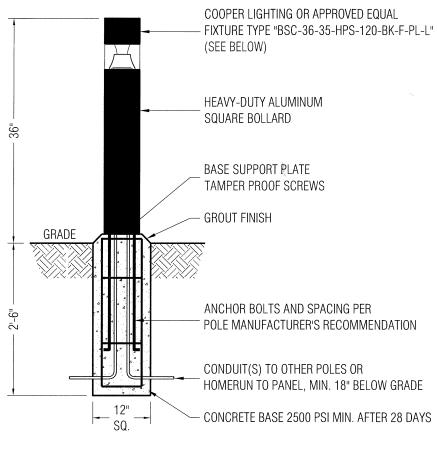
E \*= COVER THICKNESS







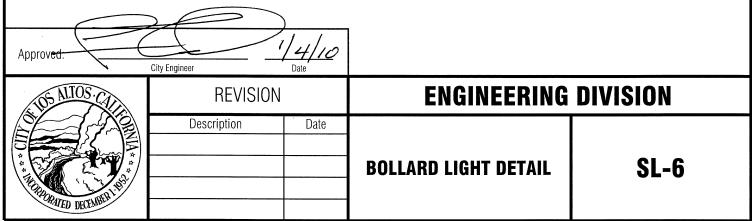


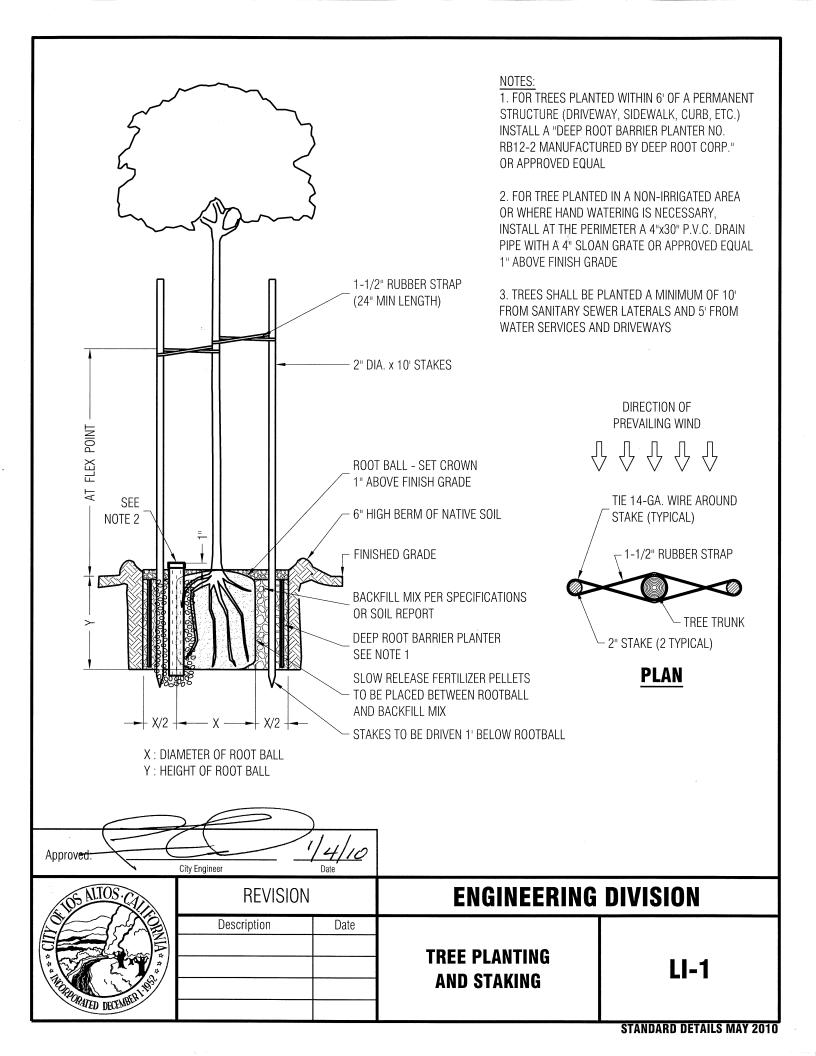


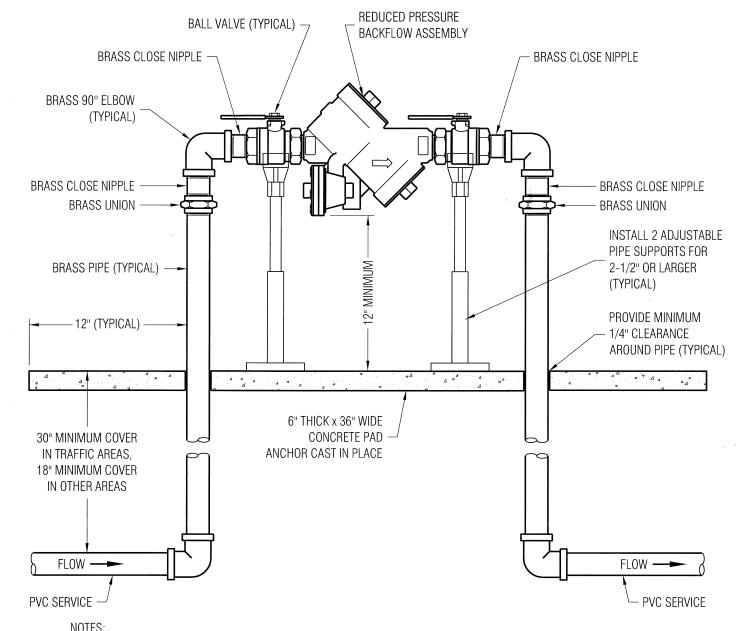
NOTE:
CONTRACTOR SHALL SUBMIT A FOOTCANDLE
POINT TO POINT DIAGRAM FOR APPROVAL
PRIOR TO ORDERING. SUBMITTAL SHALL USE
BOLLARD LIGHT MANUFACTURER'S
PHOTOMETRIC DATA



				LIG	HTING FIXTURE SCHE	DULE		
TYPE	HEIGHT	LAMP WATTS	LAMP TYPE	VOLTAGE	COLOR FINISH	FUSE	LENS	OTHER OPTIONS
BSC	36"	35W	HIGH PRESSURE SODIUM	120V	BLACK POLYESTER POWDER COAT	SINGĻE	POLYCARBONATE	LAMP INCLUDED

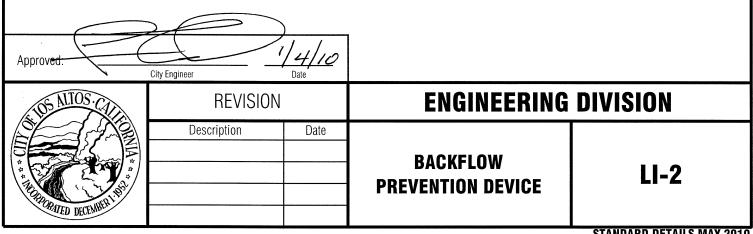


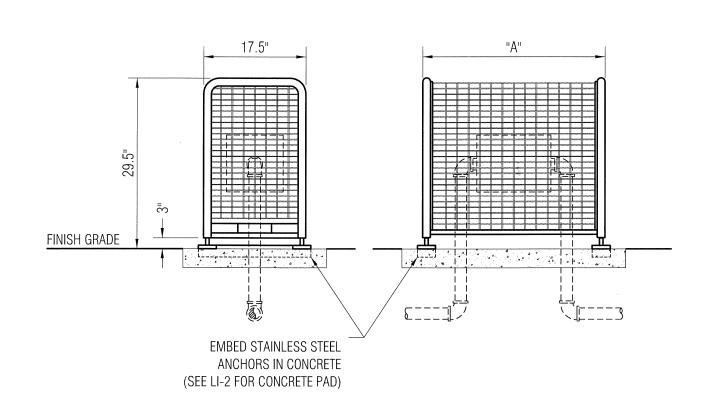




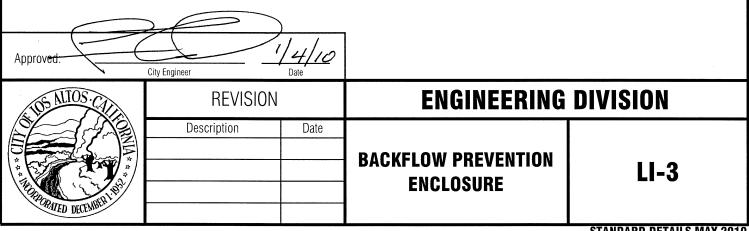
### NOTES:

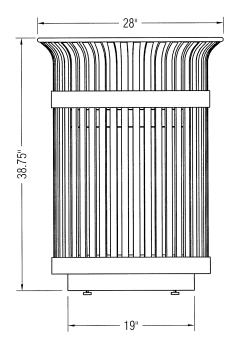
- 1) BACKFLOW UNITS SHALL BE ON THE "APPROVED BACKFLOW PREVENTION DEVICES" LIST BY THE HEALTH SERVICES AGENCY A DEPARTMENT OF THE PUBLIC HEALTH AND ENVIRONMENTAL PROTECTION DIVISION OF THE COUNTY OF SANTA CLARA
- 2) SEAL ALL THREADED JOINTS 2" & SMALLER WITH PIPETHREAD SEALANT. FOR LARGER PIPES USE PIPETHREAD SEALANT & **TEFLON TAPE**
- 3) APPLY "PROTECTO WRAP " #160H MASTIC TO ALL BURIED GALVANIZED PIPE FITTINGS

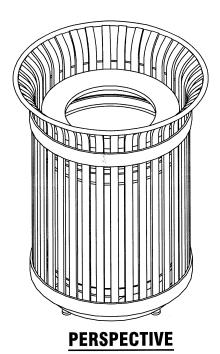


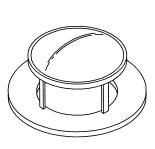


SPECIFICATIONS FOR BA	CKFLOW ENCLOSURE	
DESCRIPTION	MODEL NO.	DIM. A
V.I.T. PRODUCTS, INC. STRONG BOX ENCLOSURE	SBBC-30CR SBBC-45CR SBBC-75CR	30" 45" 75"
EXPANSION MODULE FOR 30" & 45" ENCLOSURES	EXP-15CR	15"







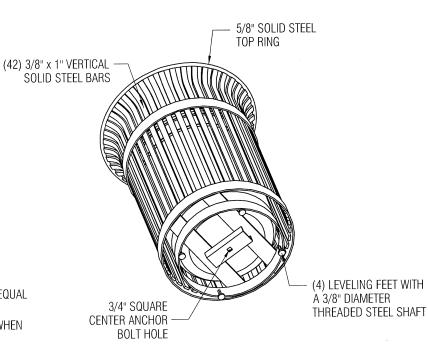


OPTIONAL RAIN BONNET LID

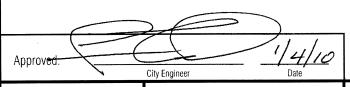
### SEE NOTE 2

### NOTES:

- 1. VICTOR STANLEY S-42 (36 GAL) OR APPROVED EQUAL GLOSSY BLACK FINISH
- 2. OPTIONAL RAIN BONNET LID TO BE INSTALLED WHEN LOCATED IN RAIN EXPOSED AREAS



**UNDER VIEW** 



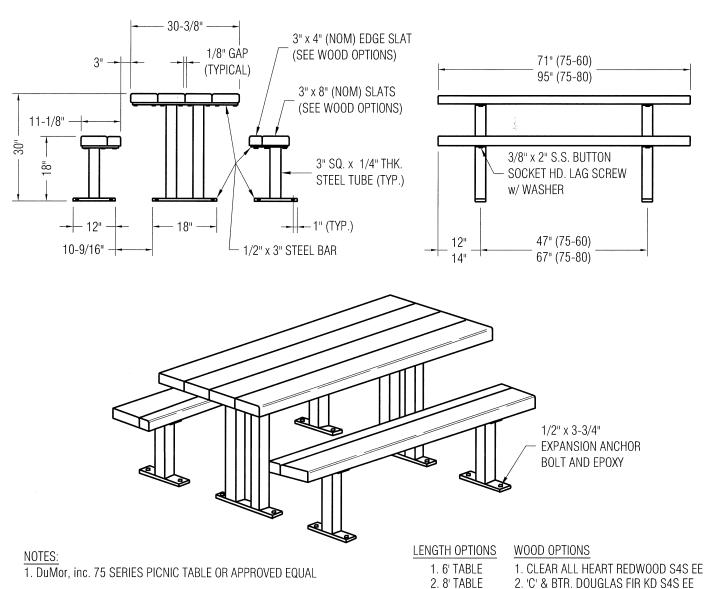
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REVISION	
Description	Date

### **ENGINEERING DIVISION**

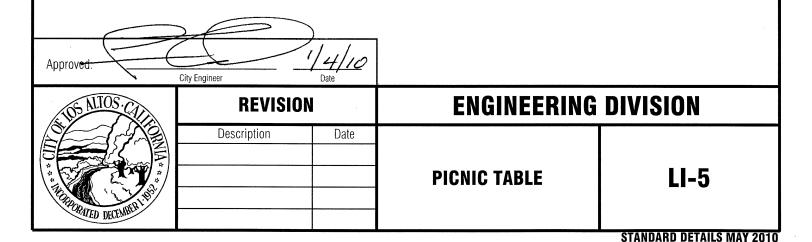
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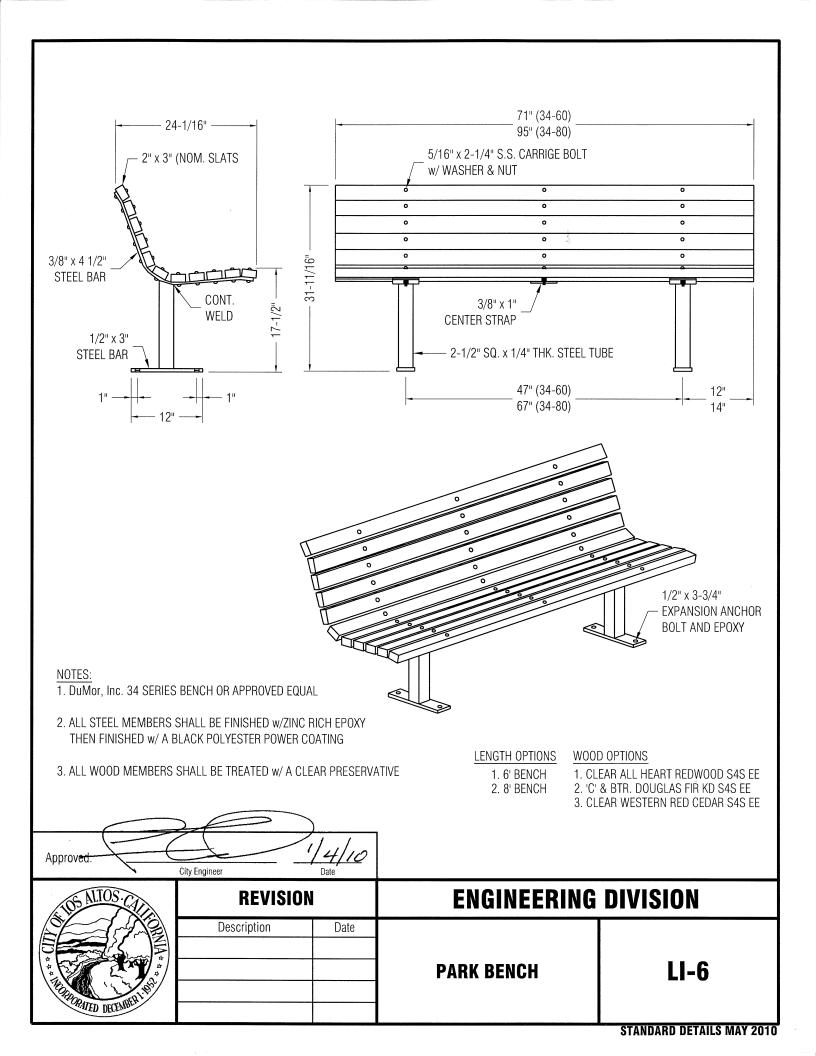
LI-4

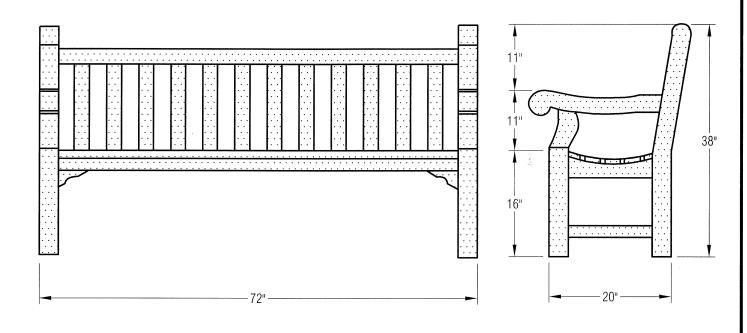


- 2. ALL STEEL MEMBERS COATED w/ZINC RICH EPOXY THEN FINISHED w/ A BLACK POLYESTER POWDER COATING
- 3. ALL WOOD MEMBERS TREATED w/ CLEAR PRESERVATIVE

- - 2. 'C' & BTR. DOUGLAS FIR KD S4S EE
  - 3. CLEAR WESTERN RED CEDAR S4S EE

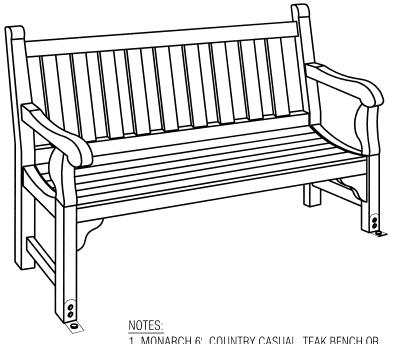






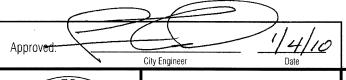
### INSTALLATION NOTES:

- 1. USE 5/8" x 10" ALL-THREAD BOLT INSERTED 6" DEEP INTO CONCRETE WITH EPOXY
- 2. DRILL 4" INTO BOTTOM OF LEG OF BENCH SLIP OVER ALL-THREAD BOLT
- 3. ATTACH "L" BRACKET TO LEG AND ATTACH 3/8" x 2-1/2" EXPANSION ANCHOR BOLT INTO CONCRETE WITH EPOXY



1. MONARCH 6', COUNTRY CASUAL, TEAK BENCH OR APPROVED EQUAL (4' BENCH SIMILAR)

2. ALL WOOD MEMBERS TREATED w/ CLEAR PRESERVATIVE

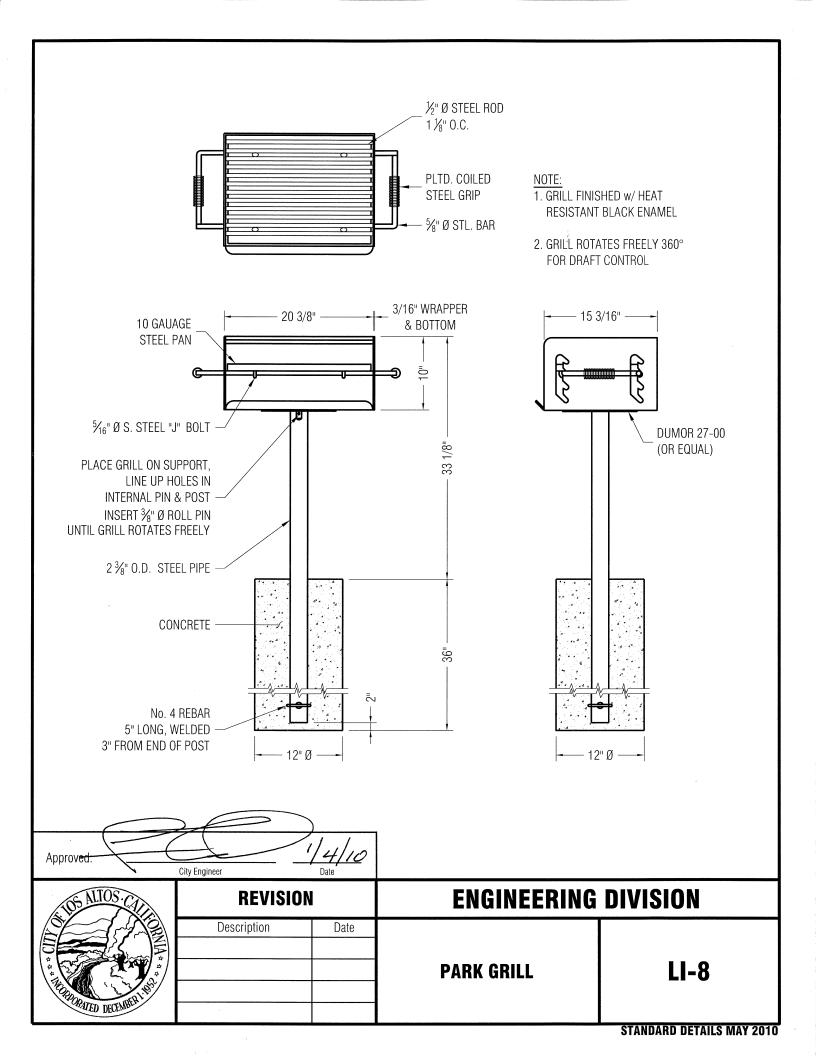


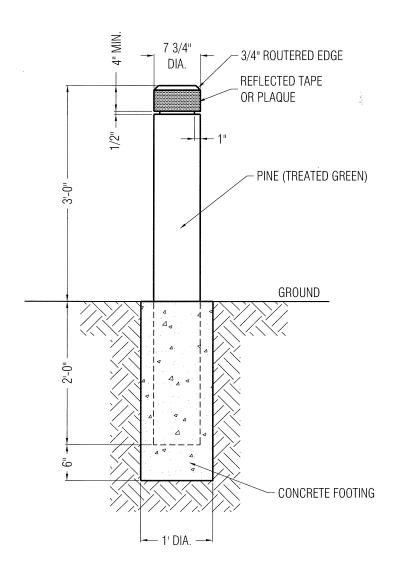
### **ENGINEERING DIVISION**

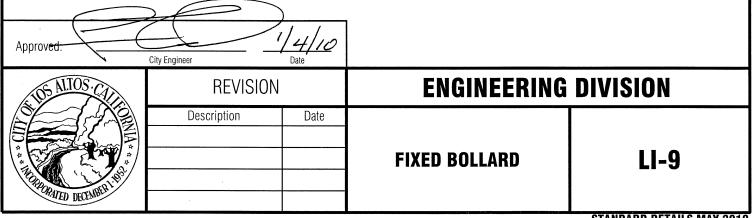
REVISION				
Description	Date			

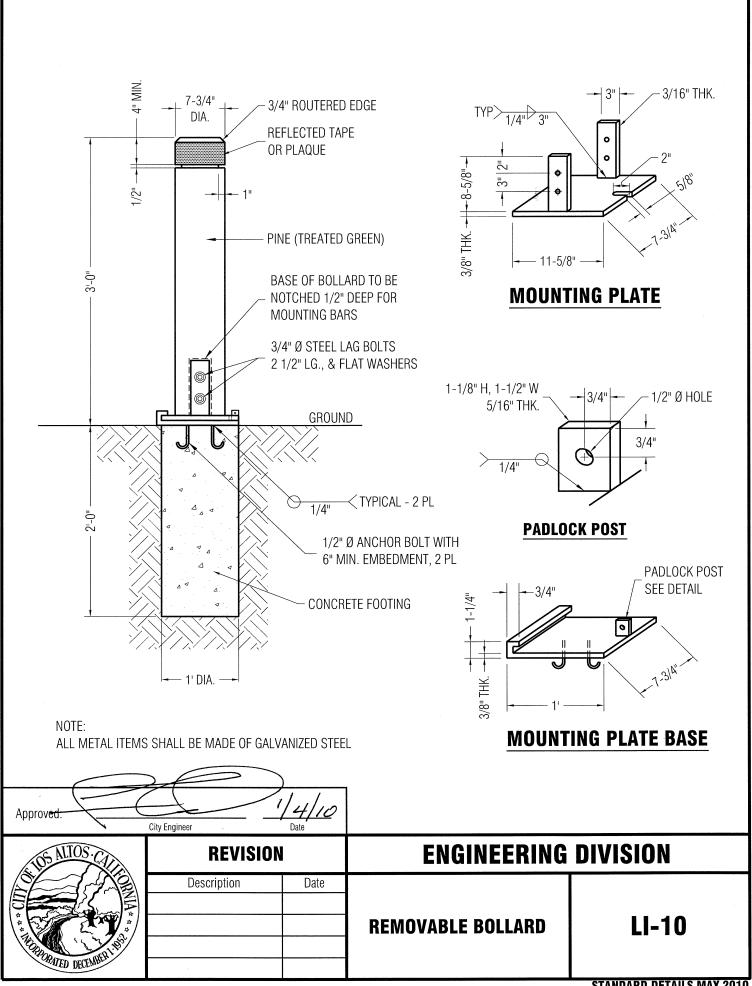
**DOWNTOWN BENCH** 

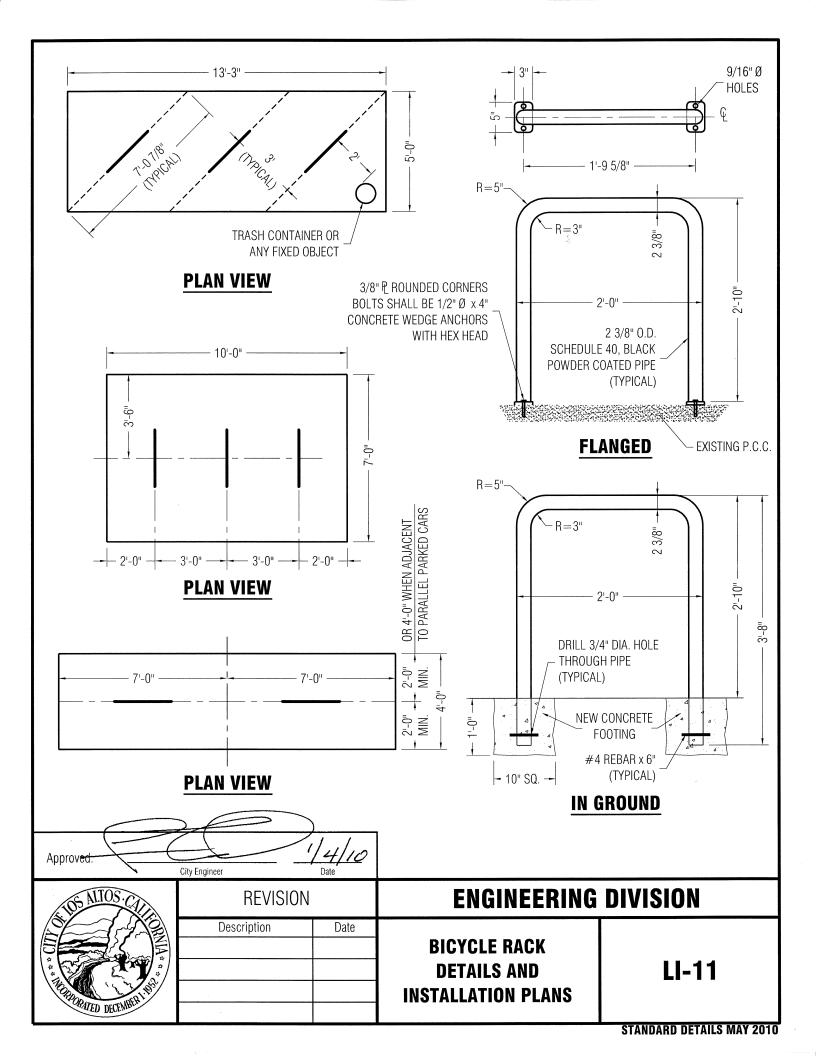
**LI-7** 

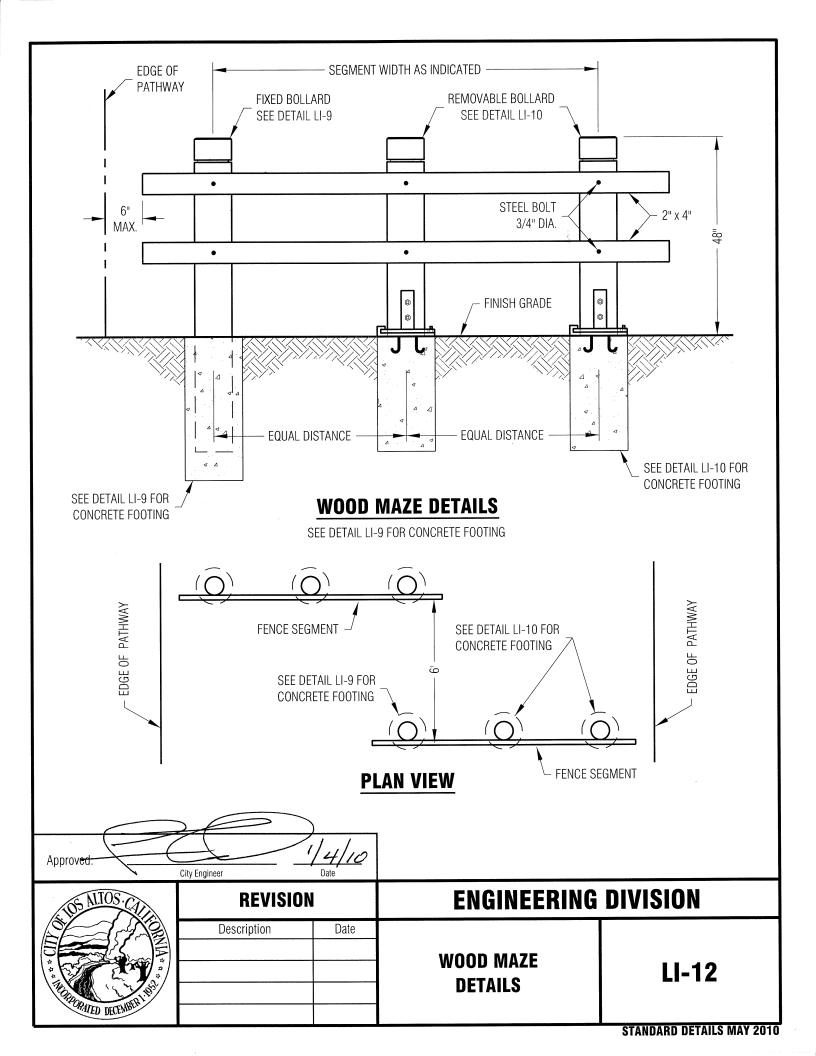


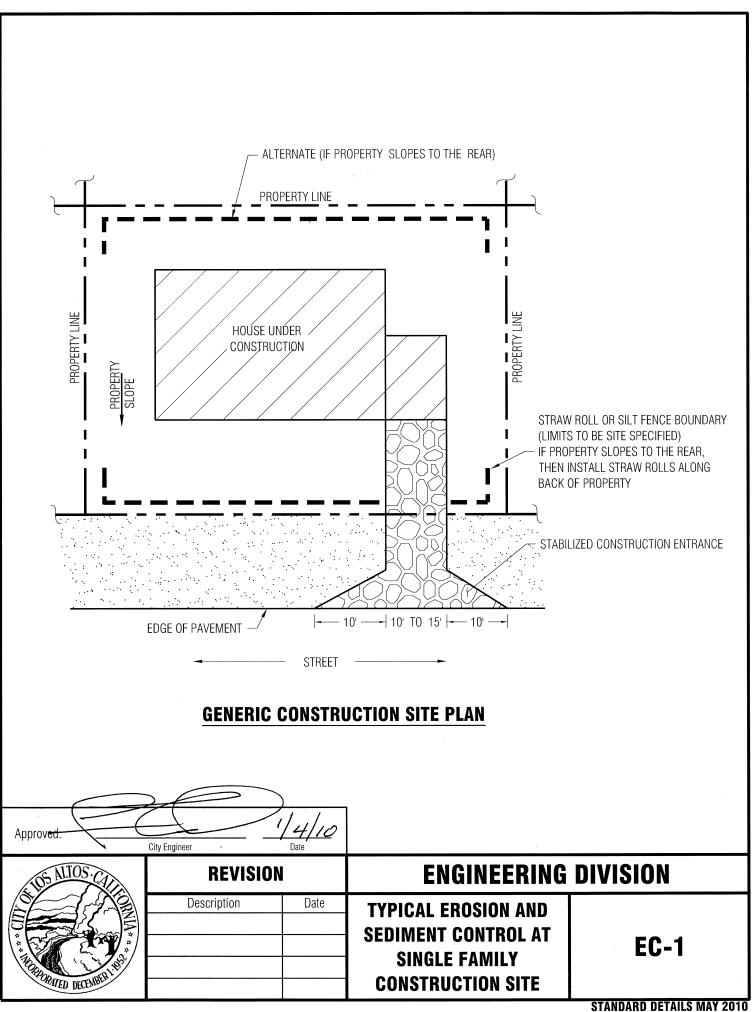


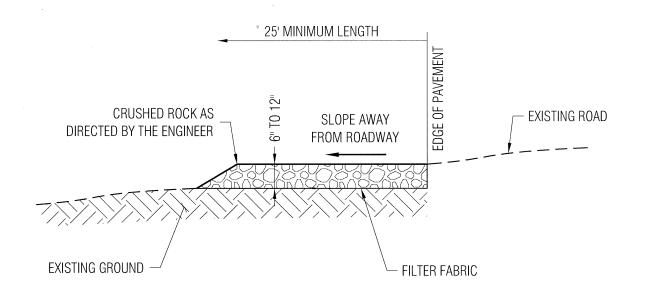






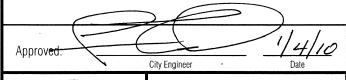






### NOTES:

- 1. PROVIDE A FANNED STABILIZED CONSTRUCTION ENTRANCE TO ACCOMODATE THE TURNING RADIUS OF CONSTRUCTION EQUIPMENT ON AND OFF THE PUBLIC STREET
- 2. INSTALL STABILZED CONSTRUCTION ENTRANCE ALONG NEW DRIVEWAY CORRIDOR FOR THE FULL PROPOSED WIDTH



OS ALIOS CO
THE DECEMBER 1815
DATED DECEMBER

Date

### **ENGINEERING DIVISION**

STABILIZED CONSTRUCTION SITE ENTRANCE

EC-2

