

CITY OF UPLAND

Standard Drawings



City of Upland
Index to Standard Drawings

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INSERT	INSERT - TREE STAKING & PLANTING DETAIL
INSERT	TREE PRUNING INFO
INSERT	TREE WELLS DETAIL
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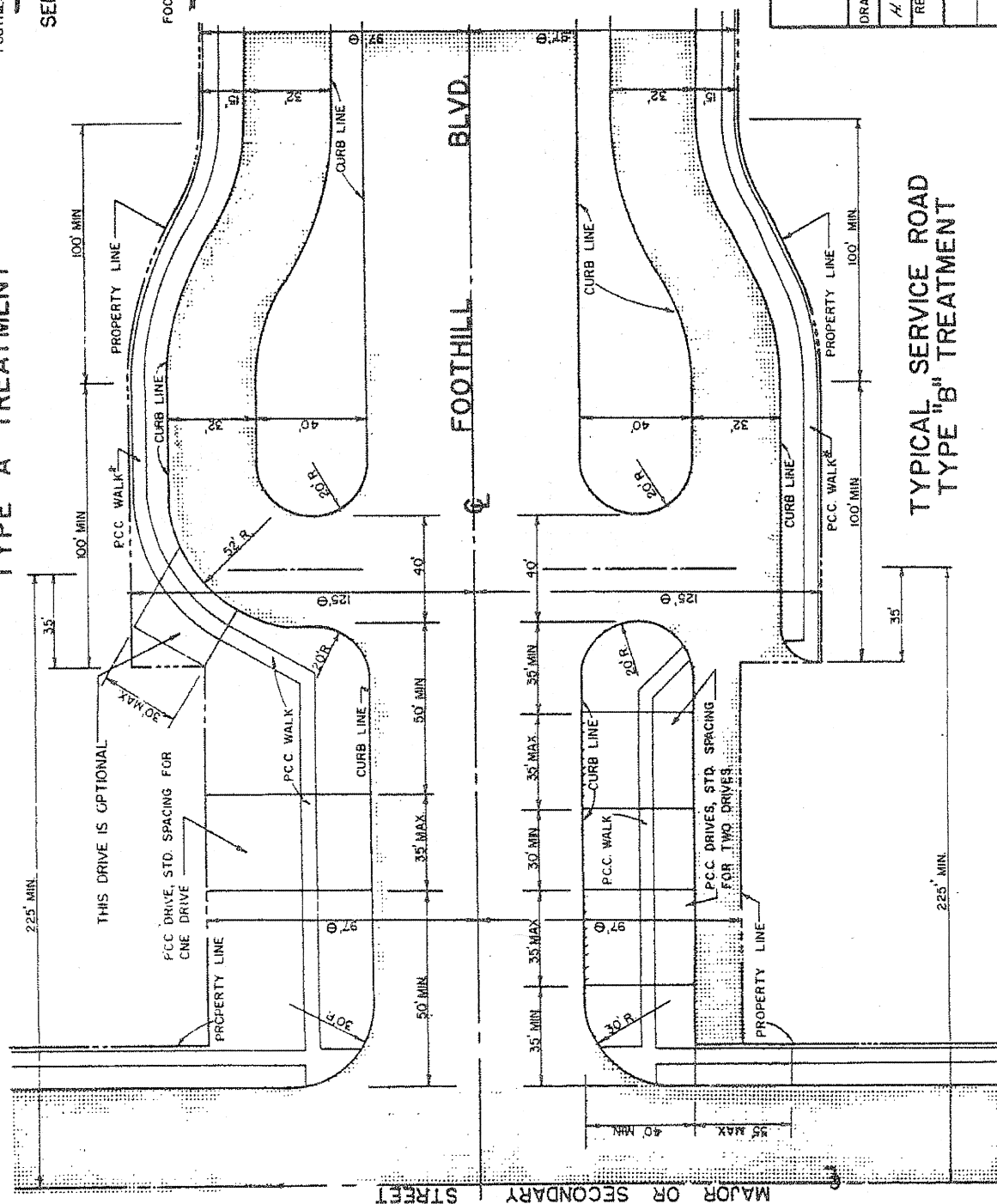
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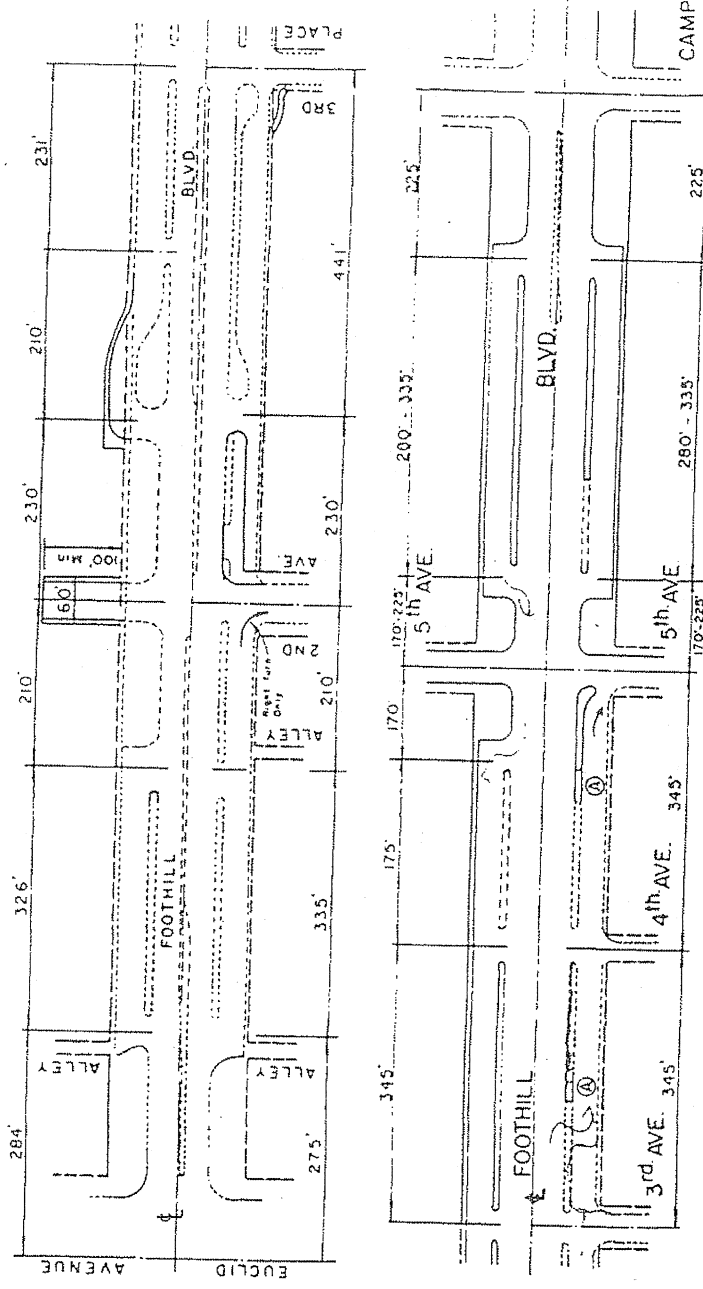
SANITARY SEWER

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CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	PRECISE PLAN NO. 5 FOOTHILL BOULEVARD SERVICE ROAD DETAILS	APPROVED BY <i>Fred C. Blanchard</i> CITY ENGINEER	DRAWING NUMBER CU-A-2
HTC	11-18-64			
REVISION BY	DATE			

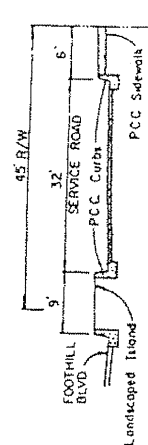
TYPICAL SERVICE ROAD
TYPE "B" TREATMENT



P.P.L.	6-5-67

CITY OF UPLAND STANDARD DRAWING

Drawn By	Date	PRECISE PLAN
JCH	8-25-65	NO. 7
Revision By	Date	FOOTHILL BLVD SERVICE RDS EUCLID AVE TO CAMPUS AVE.
WCH	1-6-66	Approved By
PPA #2	3-22-67	CITY ENGINEER
PPA #1	5-17-67	DRAWING NUMBER CU-A-3



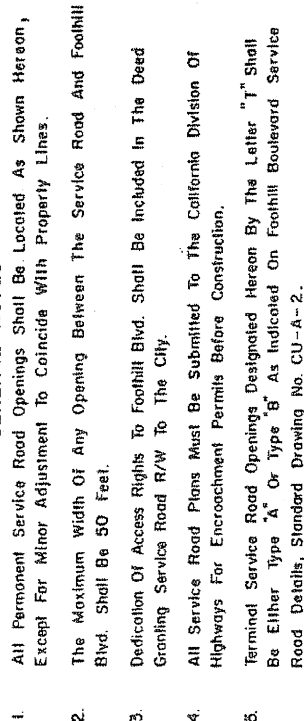
TYPICAL SECTION

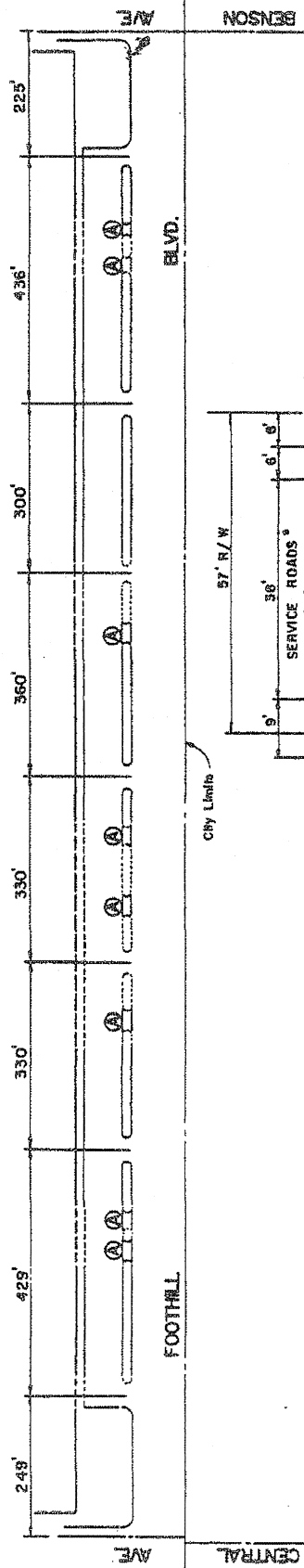
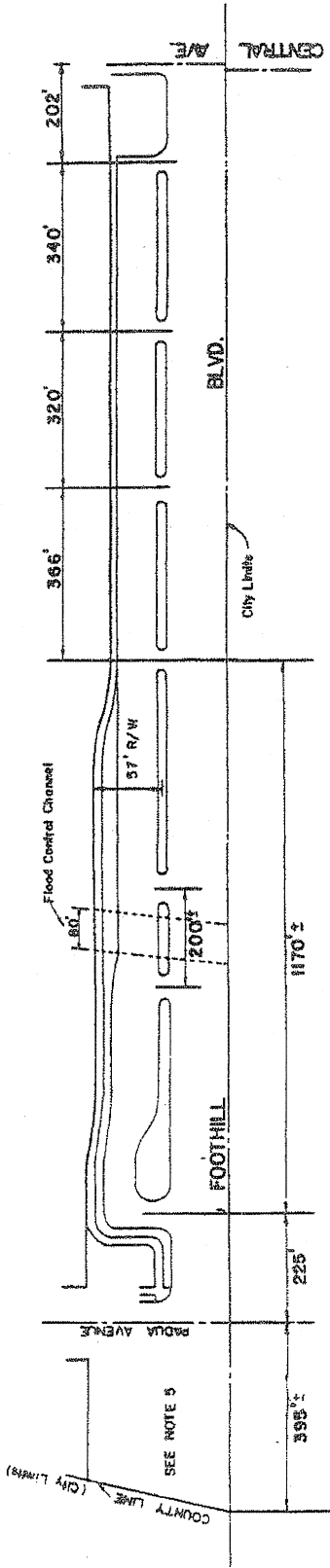
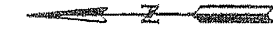
LEGEND

- Existing Curb
- Existing R/W
- Proposed Curb
- Proposed R/W
- Existing Opening
- Existing Opening To Be Closed (A)
- Opening To Be Created In Existing Curb (B)

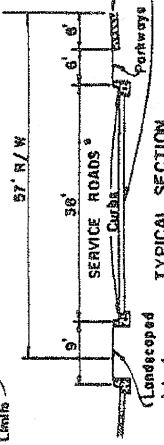
GENERAL NOTES

1. All Permanent Service Road Openings Shall Be Located As Shown Hereon, Except For Minor Adjustments To Coincide With Properly Lines.
2. The Maximum Width Of Any Opening Between The Service Road And Foothill Blvd. Shall Be 50 Feet.
3. Dedication Of Access Rights To Foothill Blvd. Shall Be Included In The Deed Granting Service Road R/W To The City.
4. All Service Road Plans Must Be Submitted To The California Division Of Highways For Encroachment Permits Before Construction

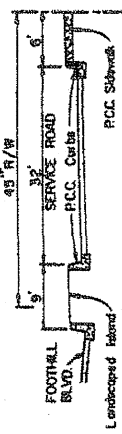




TYPICAL SECTION
WEST OF FLOOD CONTROL CHANNEL



TYPICAL SECTION
EAST OF FLOOD CONTROL CHANNEL



LEGEND

- Existing Curb
- Existing R/W
- Proposed Curb
- Proposed R/W
- Existing Opening To Be Closed
- Existing Opening To Be Closed

GENERAL NOTES

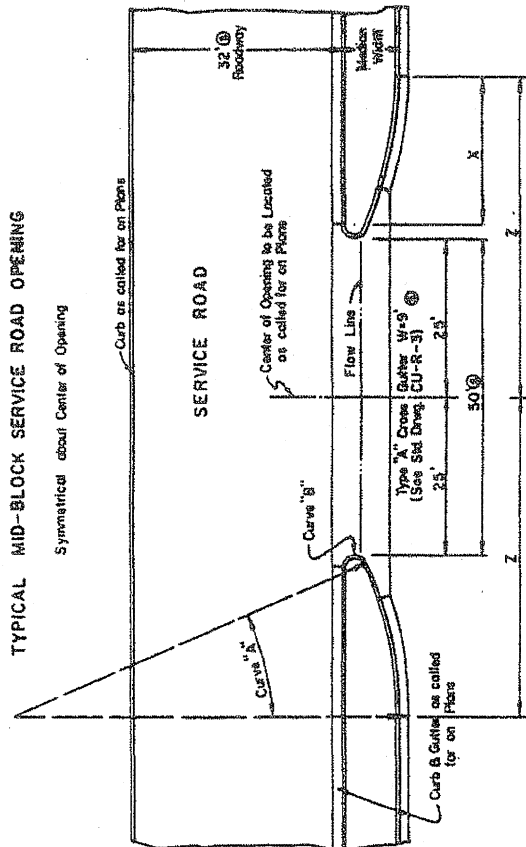
1. All Permanent Service Road Openings Shall Be Located As Shown Hereon, Except For Minor Adjustment To Coincide With Property Lines.
2. The Minimum Width Of Any Opening Between The Service Road And Foothill Blvd. Shall Be 50 Feet.
3. Dedication Of Access Rights To Foothill Blvd. Shall Be Included In The Deed Granting Service Road R/W To The City.
4. All Service Road Plans Must Be Submitted To The California Division Of Highways For Encroachment Permits Before Construction.
5. Actual Design Of Service Road Facilities Within Right Of Way West Of Padua Avenue To Be Coordinated With City Of Claremont Before Construction.

CITY OF UPLAND
STANDARD DRAWING

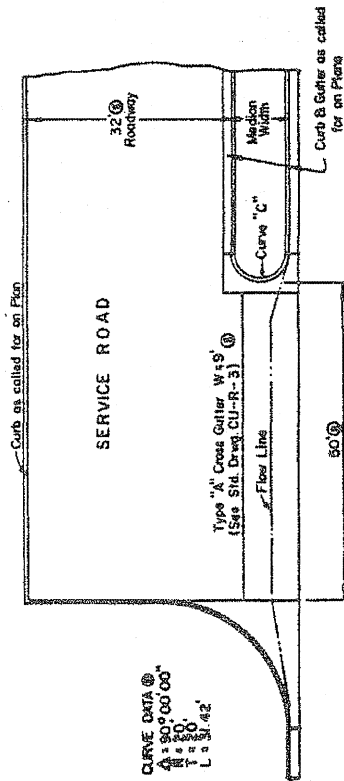
Drawn By	Date	Precise Plan
W. B. H.	12-29-65	NO. 8A
Revision By	Date	
B. G.	4-16-73	FOOTHILL BLVD SERVICE ROADS COUNTY LINE TO BENSON AVE.
Approved By <i>Paul C. Blanchard</i> CITY ENGINEER		
DRAWING NUMBER CU-A-5		

TYPICAL MID-BLOCK SERVICE ROAD OPENING

Symmetrical about Center of Opening



TYPICAL TERMINAL SERVICE ROAD OPENING



FOOTHILL

BOULEVARD

CURVE DATA

Median Width	CURVE "A"				CURVE "B"				CURVE "C"			
	X	Z	Δ	L	T	Δ	L	R	Δ	L	R	L
8'	23.36'	50.56'	23°-57'-54"	25.10'	12.73'	156°-02'-06"	5.45'	4.5'	14.14'			
11'	27.62'	54.64'	28°-26'-27"	29.76'	15.20'	151°-33'-33"	5.29'	5.5'	17.28'			
12'	29.39'	56.39'	30°-27'-01"	31.89'	16.33'	149°-32'-59"	5.22'	6'	18.85'			
40'								20'	62.83'			

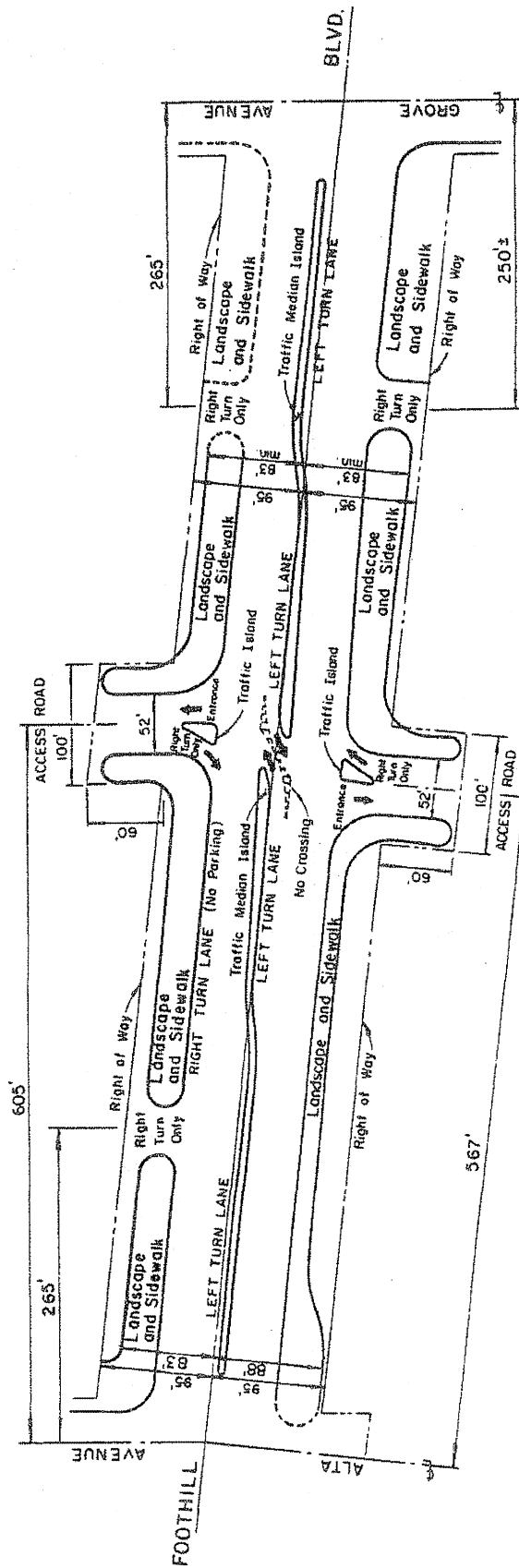
GENERAL NOTES

1. Terminal Service Road Openings Designated by the Letter "T" on Drawings Number CU-A-1 and Number CU-A-4 shall be 40 Feet Wide and Curve "C" shall have a Radius of 20 Feet.
2. Flow Line Elevations Across Service Road Openings are to be indicated on the Profile Portion of the Plan.

① STANDARD UNLESS OTHERWISE NOTED ON PLANS.

CITY OF UPLAND STANDARD DRAWING

Drawn By	Check By	Date
Woh		1-7-66
Revision By	Check By	Date
Approved By		
<i>Frank C. Blandford</i>		
CITY ENGINEER		
Drawing Number CU-A-6		

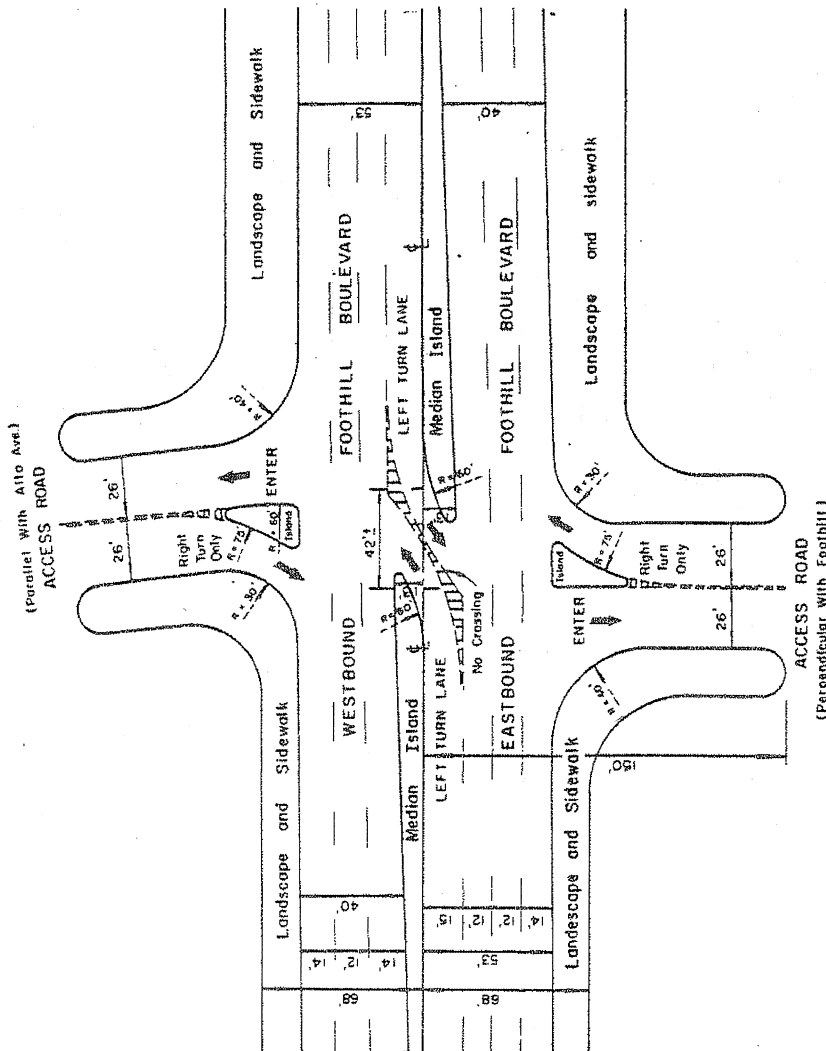


GENERAL NOTES:

1. See Drawg. CU-A-8 For Additional Dimensions For Access Road Openings At Mid-Block.
2. This Plan Is An Alternate To A Portion Of The Plan Shown On Drawing No. CU-A-4; The General Notes Listed Thereon Shall Be Considered A Part Of This Plan And Apply To The Plan, Wherever Applicable.
3. Left Turn Storage Islands On Foothill Blvd. To Serve The Adjacent Properties Shall Be Fully Constructed By The Developers Of Said Properties.
4. Traffic Median Island In The Center Of Foothill Blvd. Shall Be Constructed Prior To The Opening Of The "Right Turn Only" Entrance Located 265' East Of Alta Avenue To Insure Against Left Turn Movement's Into Said "Right Turn Only" Entrance.

CITY OF UPLAND
STANDARD DRAWING

Drawn By	Date	PRECISE PLAN AMENDMENT No. 4 & 5	
Lwd	5-26-70	Alternate Plan To	P.P. No. 7
REVISIONS	DATE	Foothill Blvd. Service Roads	
BY		Alta Ave. to Grove Ave.	
W.A.B.	5/3/71	APPROVED BY	
		<i>Frank C. Phorcy</i>	
		CITY ENGINEER	
		DRAWING NO. CU-A-7	

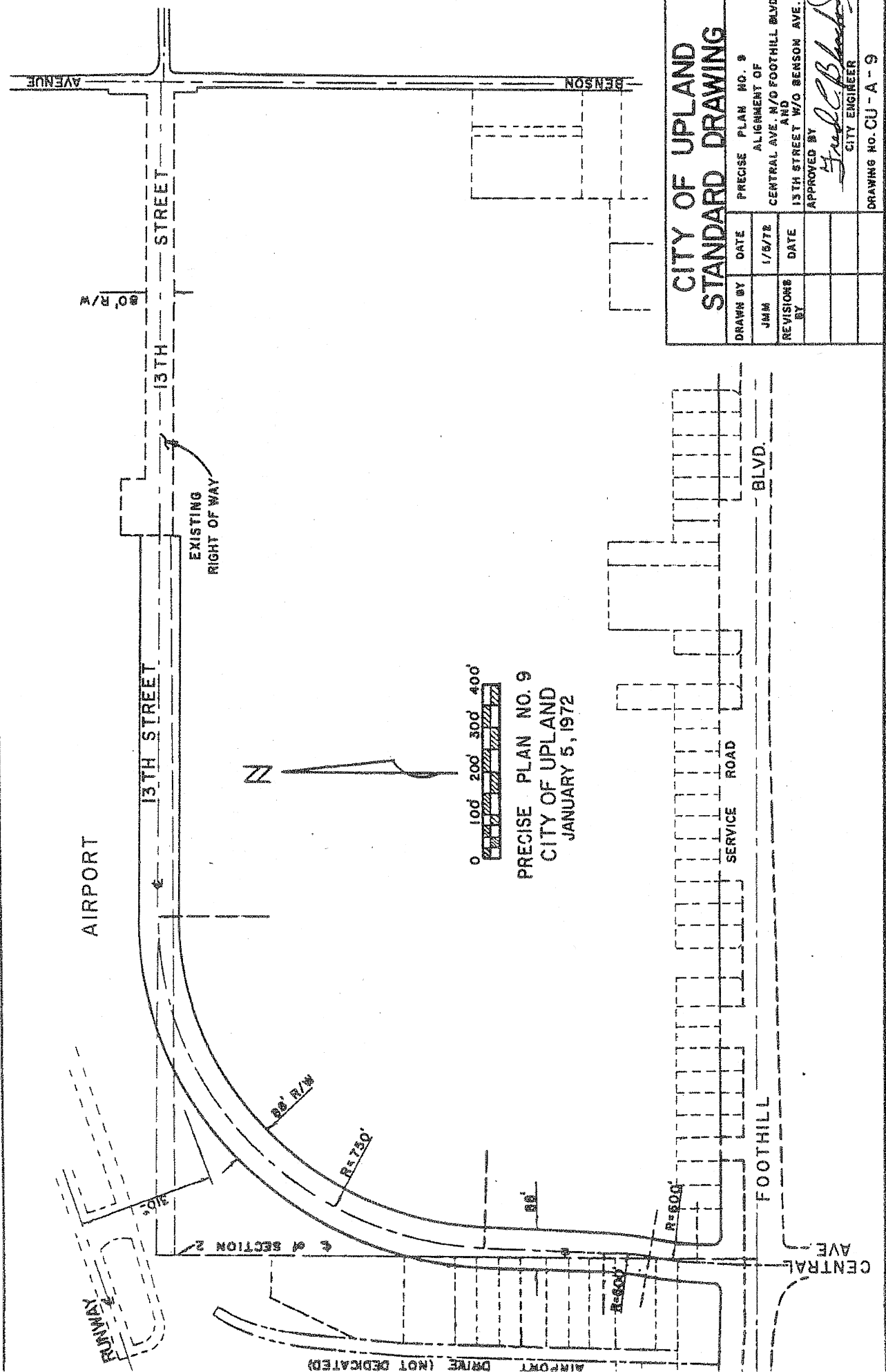


NOTE
See Drawing No. CU-A-7 For Overall
Plan Between Alta Avenue and Grove
Avenue.



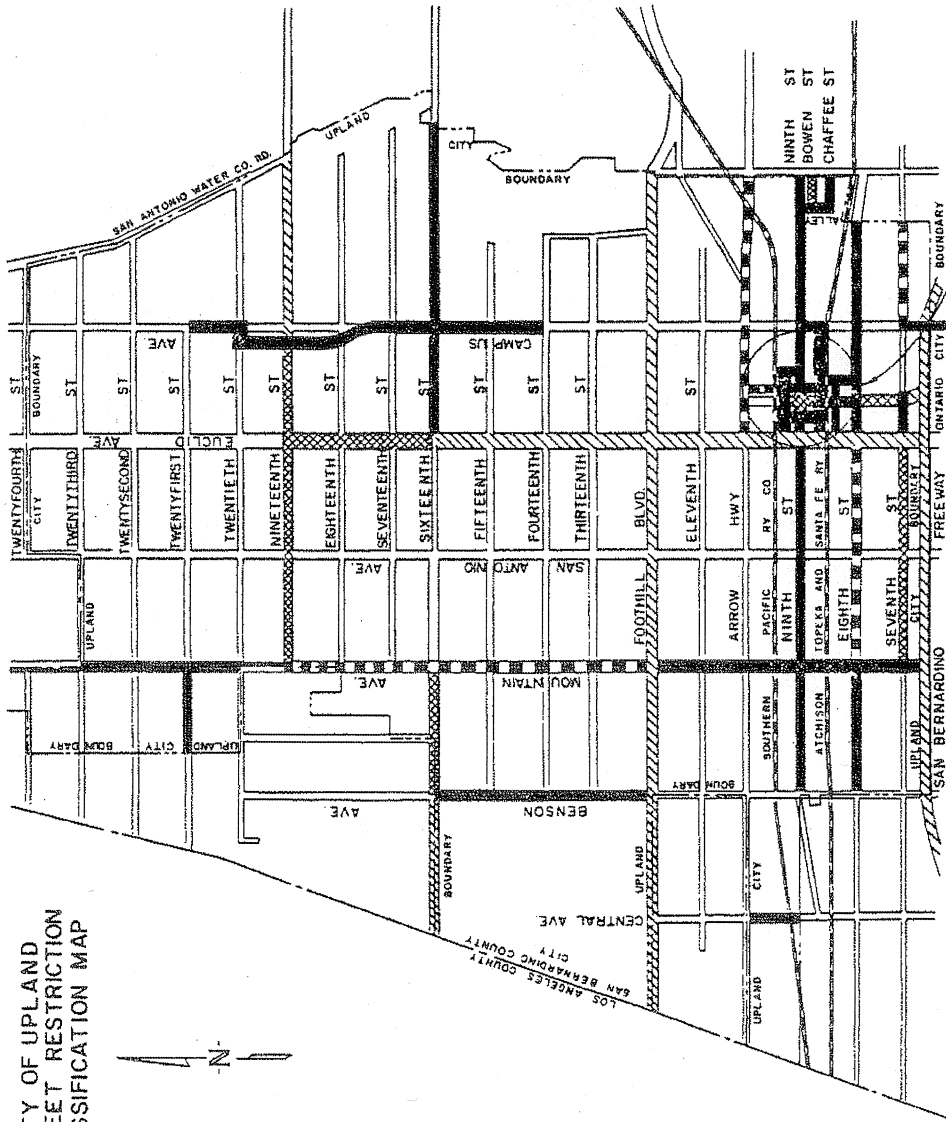
CITY OF UPLAND STANDARD DRAWING

DRAWN	DATE	PRECISE PLAN AMENDMENT
Luo	5-28-70	NO. 4
ALTERNATE PLAN TO P.P. No. 7 Detail of Access Road Openings on H & S Sides of Foothill Blvd. Midway between Alta Avenue and Grove Avenue APPROVED BY <i>Frank B. Blum</i> CITY ENGINEER		
DRAWING NO. CU-A-8		

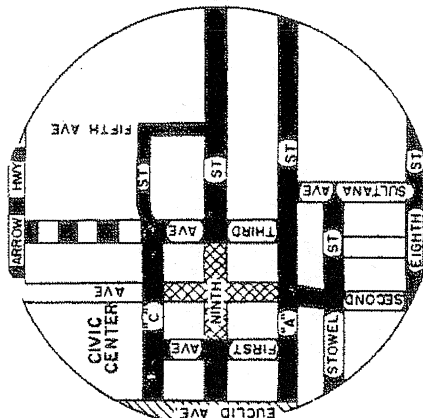


CITY OF UPLAND STANDARD DRAWING			
DRAWN BY	DATE	PRECISE PLAN NO. 9	
JMM	1/5/72	ALIGNMENT OF	
REVISIONS BY	DATE	CENTRAL AVE. N/O FOOTHILL BLVD	
		AND	
		13TH STREET W/O BENSON AVE.	
		APPROVED BY	
		<i>Fred C. Black</i>	
		CITY ENGINEER	
		DRAWING NO. CU - A - 9	

CITY OF UPLAND STREET RESTRICTION CLASSIFICATION MAP



SEE
CIVIC CENTER
INSERT



CIVIC CENTER INSERT

LEGEND

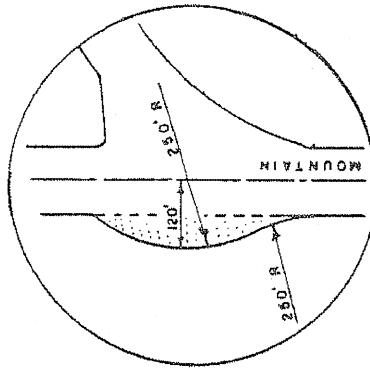
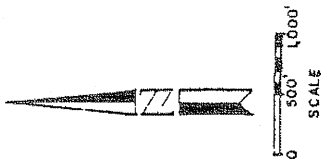
- STATE HWY. (indicated by a thick solid line)
- UNRESTRICTED (indicated by a thin solid line)
- INTERMEDIATE LOAD (indicated by a line with diagonal hatching)
- SPECIALLY IDENTIFIED (indicated by a line with cross-hatching)
- ALL OTHER STREETS ARE RESTRICTED (indicated by a line with a dotted pattern)

LOAD LIMITS

UNRESTRICTED: ACCORDING TO STATE LAW
INTERMEDIATE LOAD: 36,000 LBS. MAX.
SPECIALLY IDENTIFIED: SEE SECT. 3311 OF
MUNICIPAL CODE
ALL OTHERS, RESTRICTED TO 10,000 LBS. MAX.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	RESTRICTED USE OF CERTAIN CITY STREETS
J.E.K.	5-18-72	CLASSIFICATION AND DESIGNATED STREETS
REVISIONS BY	DATE	PER SECTION 3311 MUNICIPAL CODE
		APPROVED BY
		<i>Paul C. Blundell</i> CITY ENGINEER
		DRAWING NO. CU-A-10



INSERT A

STREET LEGEND

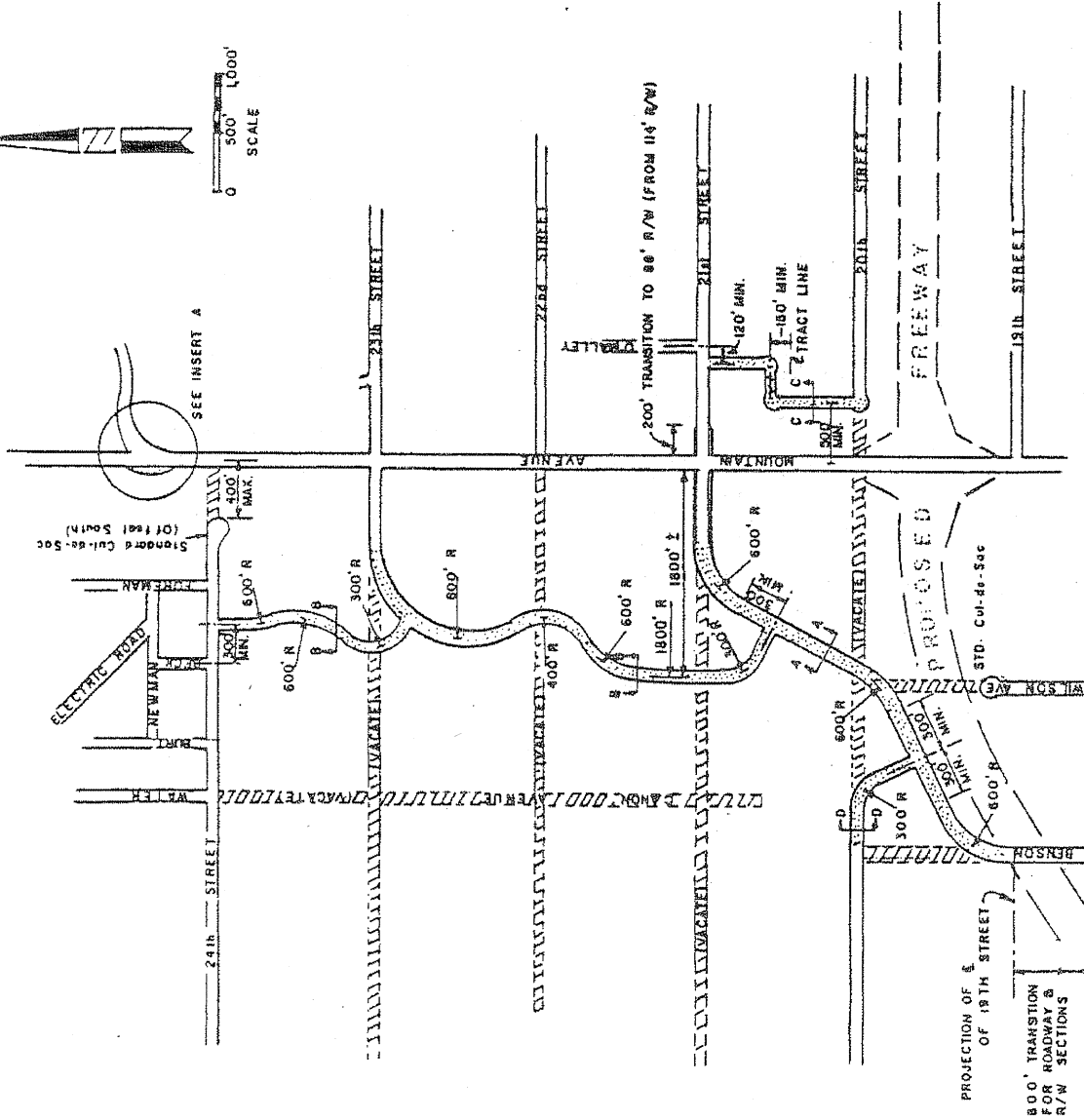
- EXISTING STREET TO REMAIN
- NEW RIGHT OF WAY
- EXISTING TO BE VACATED
- PROPOSED FREEWAY

GENERAL NOTES

1. Refer to City of Upland Standard Drawing No. CU-L-2 for all Cul-de-Sac and Knuckle (Right Angle Turns).
2. All Radii may be increased up to 25% or decreased up to 10%.
3. See Standard Drawing No. CU-A-12 for typical sections.

**CITY OF UPLAND
STANDARD DRAWING**

DRAWN BY	DATE	PRECISE PLAN NO. 12
LAL	10-3-77	CIRCULATION ELEMENT
REVISION	DATE	NORTHWEST SECTOR
BY		OF THE GENERAL PLAN
APPROVED BY		
		CITY ENGINEER
		DRAWING NO. CU-A-11



800' TRANSITION
FOR ROADWAY &
R/W SECTIONS

PROJECTION OF
OF 19TH STREET

PROPOSED

FREEWAY

24TH STREET

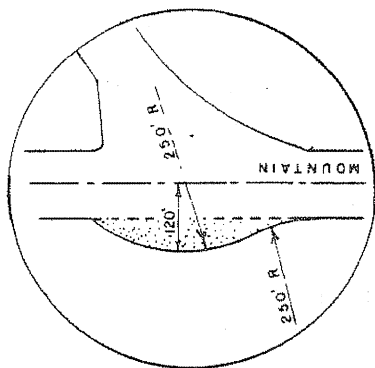
21ST STREET

22ND STREET

23RD STREET

24TH STREET

25TH STREET



02-16-98

EXISTING STREET

NEW RIGHT OF WAY

EXISTING TO BE VACATED

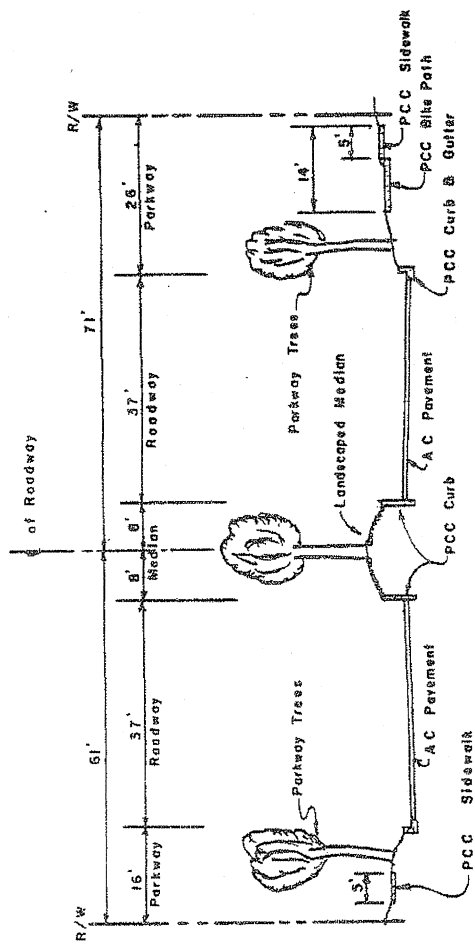
PROPOSED FREEWAY

GENERAL NOTES

1. Refer to City of Upland Standard Drawing No. CU-L-2 for all Cul-de-Sac and Knuckles (Right Angle Turns).
2. This drawing is a supplement to drawing CU-A-11 (Precise Plan No.12), showing accomplished street changes.
3. See Standard Drawing No. CU-A-12 for typical sections.

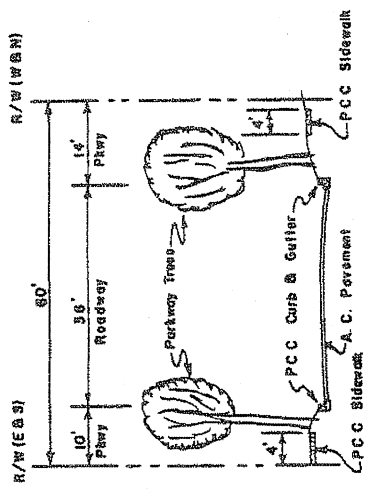
CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	PRECISE PLAN NO. 12 IMPLEMENTATION	APPROVED BY <i>Freddie Blandford</i> CITY ENGINEER	DRAWING NO. CU-A-5
LN REVISION BY	1-30-85 DATE			



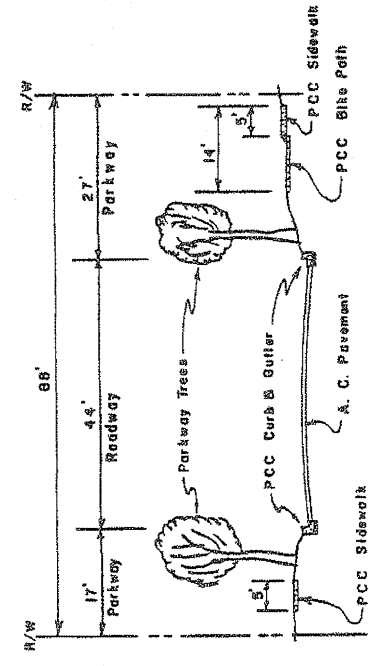
SECTION A-A

BENSON AVENUE NORTH OF 19th STREET
21st STREET WEST OF MOUNTAIN AVENUE



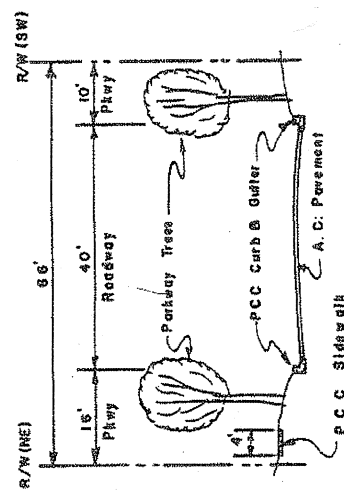
SECTION C-C

NORTH-SOUTH ALIGNMENT CONNECTING 20th STREET
TO 21st STREET EAST OF MOUNTAIN AVENUE



SECTION B-B

23rd STREET WEST OF MOUNTAIN AVENUE
AND
NORTH-SOUTH ALIGNMENTS CONNECTING
BENSON AVENUE TO 23rd STREET AND 24th
STREET



SECTION D-D

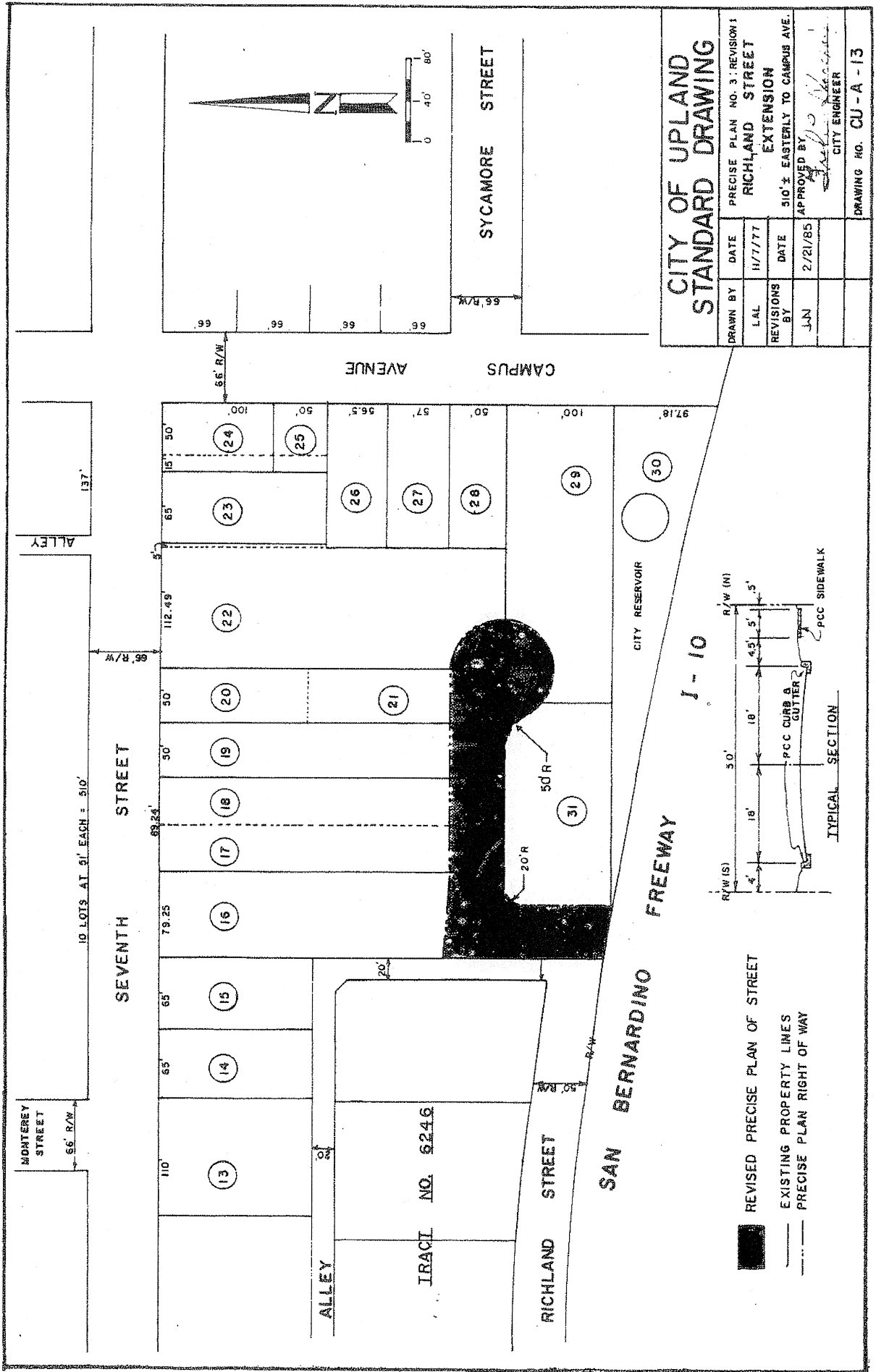
20th STREET NORTHWEST
OF BENSON AVENUE

GENERAL NOTE

1. See Standard Drawing CU-A-II for plan and other details.

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	PRECISE PLAN NO. 12
L.A.L.	10-3-77	CIRCULATION ELEMENT
REVISION BY	DATE	SECTION OF THE GENERAL PLAN
		SECTION DETAILS
		APPROVED BY <i>[Signature]</i>
		CITY ENGINEER
		DRAWING NO. CU-A-12



CITY OF UPLAND STANDARD DRAWING			
DRAWN BY	DATE	PRECISE PLAN NO. 3: REVISION 1	
LAL	11/7/77	RICHLAND STREET	
REVISIONS BY	DATE	EXTENSION	
JAN	2/21/85	510' ± EASTERLY TO CAMPUS AVE.	
		APPROVED BY	
		CITY ENGINEER	
		DRAWING NO.	CU-A-13

- REVISED PRECISE PLAN OF STREET
- EXISTING PROPERTY LINES
- PRECISE PLAN RIGHT OF WAY

PLAN SYMBOLS

	Center Line
	Point Of Intersection
	Right Of Way Line
	Property Line
	Existing Curb
	New Curb
	Existing Curb And Gutter
	New Curb And Gutter
	Existing Sidewalk
	New Concrete Sidewalk
	New Concrete Driveway
	New Pavement
	New Pavement To Be Overlaid Over Existing Pavement
	Existing Reinforced Concrete Culvert Or Storm Drain
	Existing Corrugated Metal Culvert Or Storm Drain
	Existing Curb Inlet
	Existing Inlet With Grating
	New Storm Drain, Curb Inlet And Gutter Depression
	Existing Concrete Irrigation Line
	Existing Steel Irrigation Line
	Existing Irrigation Standpipe
	New Steel Irrigation Line
	Existing Water Line
	Water Meter
	Water Valve
	Fire Hydrant
	Existing Sprinkler Or Bubbler Head
	Existing Gas Line
	Gas Meter
	Gas Valve
	Existing Telephone Conduit
	Existing Electric Conduit
	Telephone Pole

	Power Pole
	Pole Anchor
	Guy Pole
	Telephone & Power On Same Pole
	Existing Street Lighting Conduit
	Existing Street Light
	New Street Light
	Existing Traffic Signal Conduit
	Existing Traffic Signal
	Existing Traffic Signal Detector
	Existing Traffic Signal Controller
	Pull Box
	New Stop Sign
	New Yield Sign
	New Informational Sign
	Existing Street Name Sign
	New Street Name Sign
	Railroad Tracks
	Existing Railroad Crossing Sign
	Existing Railroad Crossing Signal
	Existing Chain Link Fence
	Existing Wire Fence
	Existing Wood Fence
	Existing Masonry Wall
	Existing Hedge
	Shrub
	Existing Tree
	Proposed Tree
	Palm Tree

	Diameter Of Tree Outlines In Feet Should Be Approximately Equal To Trunk Size In Inches
	Building
	Monument
	Existing Natural Flow Line
	Existing Top Of Slope
	Existing Toe Of Slope

PROFILE SYMBOLS

	Existing Pavement Profile
	Existing Curb Profile
	Existing Sidewalk Profile
	Existing Ground Profile
	Finished & Grade
	Top Of Curb Grade
	Back Of Sidewalk Grade
	Point Of Intersection
	New Culvert Or Storm Drain And Curb Inlet
	Existing Sanitary Sewer, Manhole & Cleanout
	New Sanitary Sewer, Manhole & Cleanout

CITY OF UPLAND STANDARD DRAWING

Drawn By	Date
Jch	7-28-65
Revision By	Date
APPROVED BY <i>Jack L. Wenzel</i> CITY ENGINEER	
DRAWING NUMBER CU-D-1	

PLAN & PROFILE SYMBOLS

GENERAL NOTES

- All work called for on the Plans shall be in compliance with current City of Upland Standard Specifications, adopted by City Council, unless otherwise noted on the Plans or in the Special Provisions for the subject Project.
- The Contractor, before undertaking any grading or construction work of any type within the public right of way, must first obtain a Construction Permit from the City Engineering Dept.
- A Temporary Street Closure Permit is required in all cases where work will in any way interfere with either vehicular or pedestrian traffic. The Contractor is advised that City Council Resolution No. 1656, dealing with prompt restoration of city streets torn up during construction, will be enforced in all cases where the provisions thereof are applicable.
- Inspection by the City of the work called for on the Plans shall not, in any way, relieve the Contractor and/or the Developer of their obligation to perform the work in compliance with the Plans and Specifications.
- Any alterations or variances from the Plans, except minor adjustments in the field to meet existing conditions, shall be requested in writing and may not be instituted until approved by the City Engineer or his representatives acting specifically upon his instructions.
- All elevations shown on the Plans are established from City of Upland datum plane.
- Quantities, as shown on the plans, are estimated, and the Contractor is advised that final quantities of material and work in place may be somewhat greater or less than those indicated on the Plans.
- Concrete gutters, alley approaches, driveways or other concrete items, which will be subject to vehicular traffic, shall be barricaded, and no vehicular traffic permitted thereon, for a period of at least seven days following the placing of said concrete item. When the general provisions call for use of a concrete item by vehicular traffic sooner than seven days after placing, or when the Contractor for convenience of operation so desires, concrete containing eight sacks of cement per cubic yard may, and shall if so directed by the Engineer, be used, and traffic will be permitted thereon seventy-two hours after the placing of said eight sack concrete.
- Irrigation lines within any City right of way shall have a twenty-four inch minimum cover from finish surface, unless said irrigation line is encased in concrete or bedded in a special concrete cradle.
- The Contractor shall operate in a manner compliant with all applicable sections of the Municipal Code and compliant with all applicable City Council Resolutions.

- The location of underground utility or irrigation lines, as shown on the Plans, is approximate, and since the actual location may be somewhat different from that shown, the Contractor is required to contact the interested utility or water company before excavating in the vicinity of any such lines.
- Parkway trees, installed by the developer, shall be planted and maintained in accordance with City of Upland Standard Drawing No. CU-P-6.
- All street name and traffic regulatory signs indicated on the Plans will be installed by the developer in accordance with City of Upland Std. Drawg. Nos. CU-G-2, CU-G-3, CU-G-4.
- All street lights indicated on the Plans shall be installed by the Southern California Edison Company. The Developer shall pay the City, in advance, for the installation of lights to be served from overhead systems, and the City will, in turn, arrange for their installation. The Developer shall work directly with the Edison Company when the lights are to be served from an underground system.
- An approved weed killer shall be applied to the prepared base prior to asphalt paving in all areas where there is any evidence of humus or organic material present in the base (either native or imported) material. All weed killers used shall be applied in strict accordance with the manufacturers specifications and instructions.

ABBREVIATIONS

A.C.	Asphaltic Concrete	A.C.P.	Asbestos Pipe
▲	at		
▲	Avenue		
B.C.	Begin Curve		
BCR	Begin Curb Return		
Bit	Bituminous		
Bldg.	Building	Bk	Book
Blvd.	Boulevard	B.M	Bench Mark
BVC	Begin Vertical Curve		
B/W	Back of Sidewalk		
C	Correction at center of Vertical Curve		
cc	Center to Center		
CI	Cast Iron		
▲	Center Line		
CMP	Corrugated Metal Pipe		
Conc.	Concrete	CO	Cleanout
CUP	Conditional Use Permit	Constr	Construct
Dia.	Diameter	D.A.	Drive Approach
D.M.H.	Drop Manhole		
Drwg.	Drawing	Dwy	Driveway
E.	East		
E.C.	End Curve		
ECR	End Curb Return		

EI	Elevation		
EVC	End Vertical Curve		
Exist.	Existing		
FB	Field Book		
FH	Fire Hydrant		
FL	Flow Line	FS	Finished Surface
GP	Grading Plan	G.L.	Ground Line
GT-P	Gas Tax Project	Gr.	Grade
I	Central Angle or Delta		
L	Length or Length of Arc		
LI	Left		
MH	Manhole	M.B.	Map Book
N	North	Mon.	Monument
No	Number		
%	per cent		
PCC	Point of Compound Curve or Put-and Cont.		
PL	Property Line		
PRC	Point of Reverse Curve		
Proj	Project	P1	Point of Intersection
PVI	Point of Vertical Intersection	PP	Power Pole
R	Radius	RC.P	Reinforced Concrete Pipe
Rd.	Road	Pvmt.	Pvmt. Pavement
RR	Railroad	Rdwy	Roadway
R/S	Record of Survey		
RI	Right		
R/W	Right of Way		
S	South		
Sect.	Section		
SI	Slope		
SP	Site Plan	Sp MH	Special Manhole
Spec.	Specification	SS	Sanitary Sewer
St.	Street	Std	Standard
Sta.	Station	SW	Sidewalk
T	Tangent		
Tr	Tract		
V.C.P	Verified Clay Pipe	V.C.	Vertical Curve
W	West or Width		
2:1	Slope of one foot measured vertically for every two feet measured horizontally		

CITY OF UPLAND STANDARD DRAWING

GENERAL NOTES AND ABBREVIATIONS	
Drawn By	Date
ich	7-29-65
Revised By	Date
L.W.O	10-24-66
L.G.P	12-15-66
L.W.O	5-13-70
DRAWING NUMBER CU-D-2	

APPROVED BY
Frederick J. Blanchard
CITY ENGINEER

GENERAL NOTES

The following general note shall be included on the first sheet of every set of plans. [The following City of Upland Standard Drawings apply to this project and shall be considered as a part of these Plans:] This note is to be followed by a list of all applicable Std. Drawings. The General Notes listed on Std. Drawing CU-D-2 need not be repeated on the plans; reference to Drawing CU-D-2 will be acceptable. Any additional general notes should be listed on the first sheet of the plans.

ESTIMATED QUANTITIES

- List estimated quantities in table form on first sheet of plans.
- List estimated asphalt paving quantities in both square feet and in tons.
- List roadway excavation and embankment in cubic yards.
- List all removal items as well as new construction.
- List all manholes and water valves to be adjusted to grade.

INDEX MAP

An index map should be located at the right side of the first sheet. The normal scale for index maps is 1"=200'.

TYPICAL SECTIONS

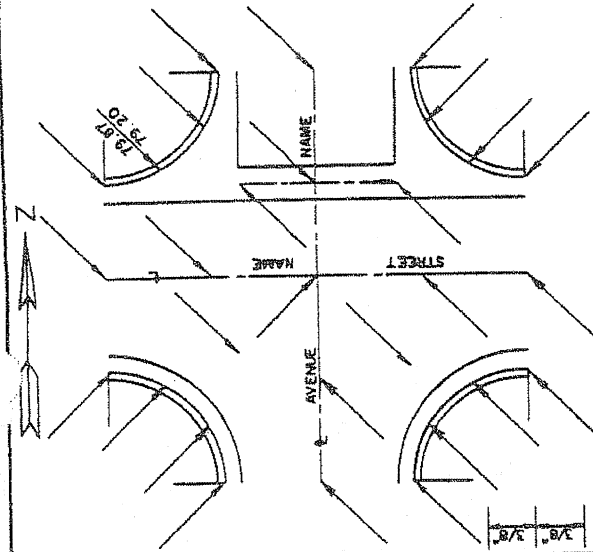
Show typical sections on the plan and profile sheets to which they apply wherever possible.

TYPICAL INTERSECTION DETAILS

Show typical intersection details for all intersections. Whenever possible intersection details should be included on the plan and profile sheet to which they apply. Otherwise they may be shown on either the first sheet or on a special detail sheet.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	IMPROVEMENT
WCH	8/5/85	PLAN SHEETS
REVISIONS BY	DATE	GENERAL INFORMATION
		APPROVED BY
		<i>Julie B. Bickford</i>
		CITY ENGINEER
		DRAWING NO. CU-D-3



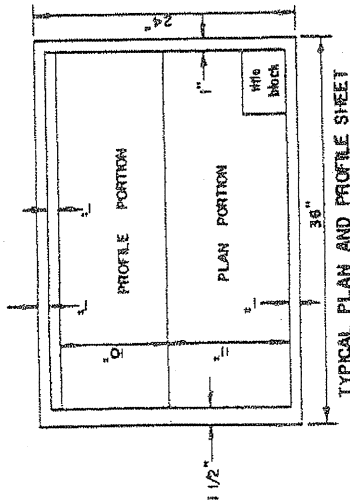
TYPICAL INTERSECTION DETAIL

Scale: Use 1"=10'

ELEVATIONS TO BE SHOWN

Show finish elevations at points as indicated in this example, and of all other points needed to grade intersection correctly. For curb grades, list top of curb over flow line elevations. Elevations for curb returns should normally be given at third points.

See 10-10-85
See 10-10-85



TYPICAL PLAN AND PROFILE SHEET

Description of Revision	Date	Initials

REVISION BLOCK

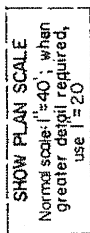
TITLE BLOCK

CITY OF UPLAND

PLAN AND PROFILE BLANK AVENUE

SEVENTEENTH ST. TO TRACT ST.
TRACT NO. 9000

CITY ENGINEER	R.E. NO. 15033
DESIGN	DATE
DRAWN	SHEET 3 OF 5
CHECKED	DRWG. NO. 1-25-6
	R.E. NO. 0000
	DATE
	FILE NO.
1 1/2"	3"
1 1/2"	6"

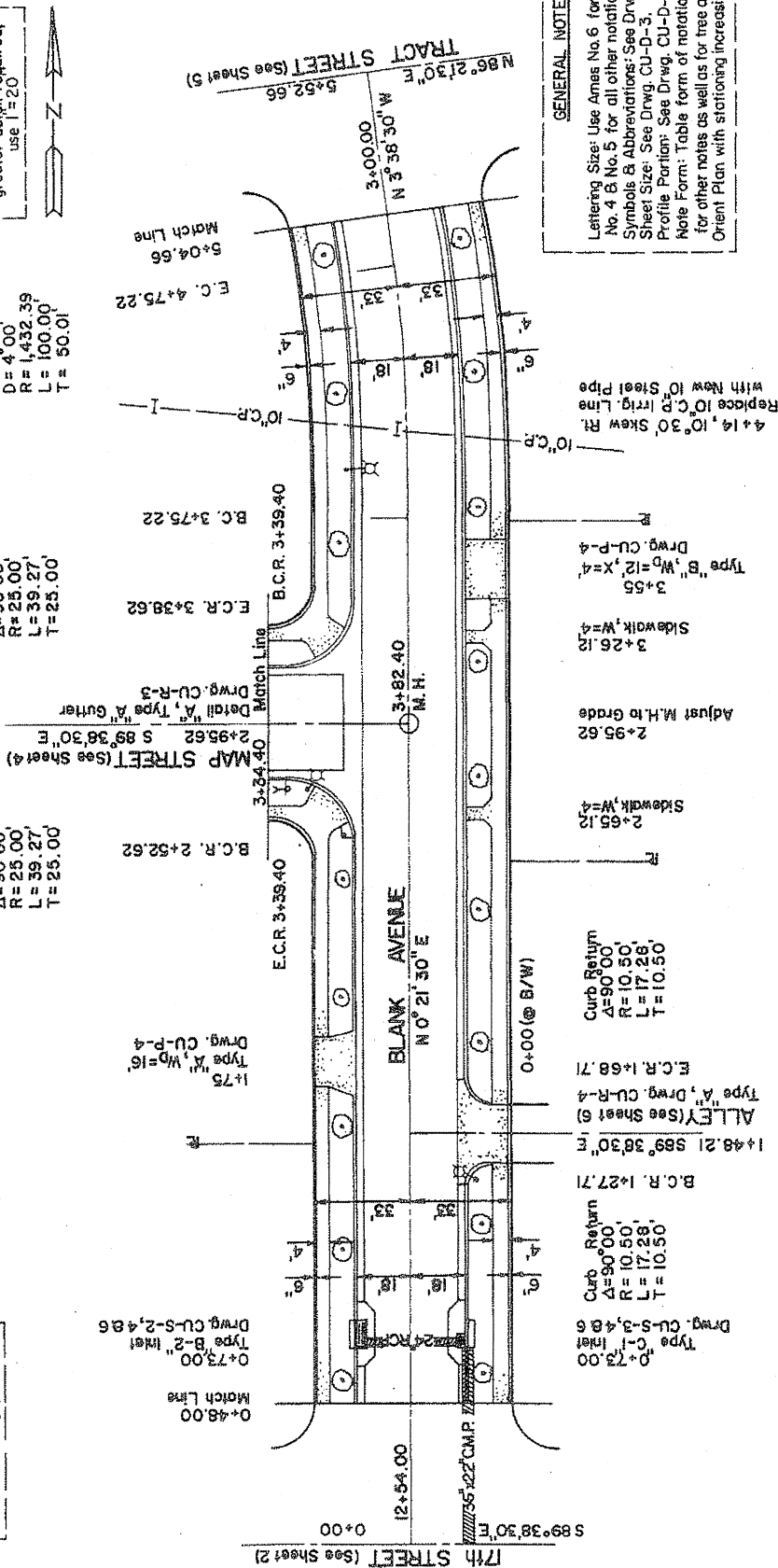
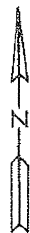


6. DATA
I = 4°00'00" LI.
D = 4°00'
R = 1,432.39
L = 100.00'
T = 50.01'

Curb Return
 $\Delta = 90.00'$
 $R = 25.00'$
 $L = 39.27'$
 $T = 25.00'$

Comb Return
 $\Delta = 90.00'$
 $R = 25.00'$
 $L = 39.27'$
 $T = 25.00'$

Pole numbers shall be given for all utility poles.

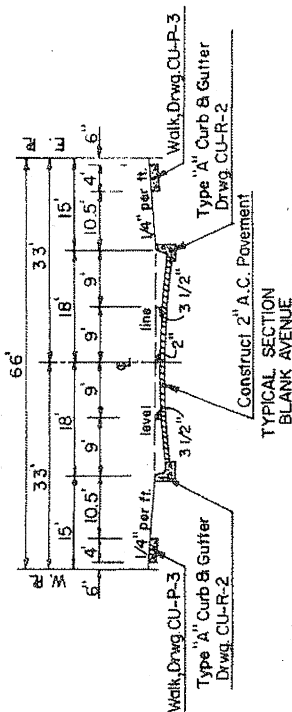


GENERAL NOTES

Lettering Size: Use Anas No.6 for street names;
No.4 & No.5 for all other notations.
Symbols & Abbreviations: See Drwg. CU-D-1&2.
Sheet Size: See Drwg. CU-D-3.
Profile Portion: See Drwg. CU-D-5.
Note Form: Table form of notations may be used
for other notes as well as for tree and light locations.
Orient: Plan with stationing increasing to the right.

NEW TREES & STREET LIGHTS

LEFT	PARKWAY	RIGHT	PARKWAY
Sta.	Item	Sta.	Item
0+55	Magnolia Tree	0+55	Magnolia Tree
1+00	" "	1+10	" "
1+45	" "	1+33	"R-1" Light
2+00	" "	1+85	Magnolia Tree
2+40	" "	2+30	" "
2+72	"R-1" Light	2+75	" "
3+55	Magnolia Tree	3+15	" "
3+95	"R-1" Light	3+80	" "
4+35	Magnolia Tree	4+30	" "
4+90	" "	4+80	" "

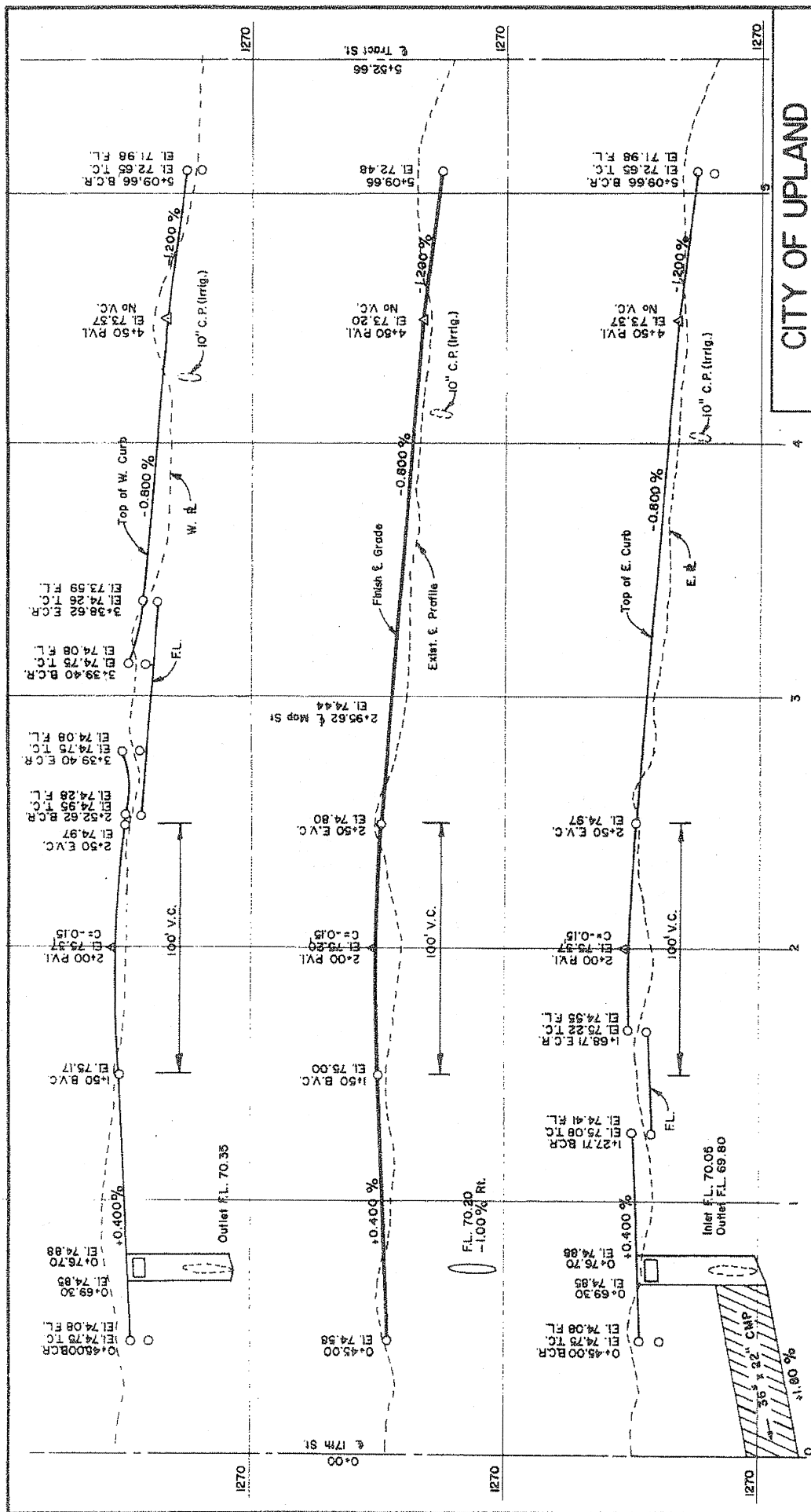


Draw Typical Section to 1"=10' Horiz. Scale & 1"=4' Vert. Scale

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	TYPICAL STREET IMPROVEMENT PLAN	
Wah	7/30/68		
REVISION	DATE	APPROVED BY <i>W. J. [Signature]</i> CITY ENGINEER	
		DRAWING NO. CU-D-4	

DRAWING NO. CU-D-4



GENERAL NOTES

THE FOLLOWING GENERAL NOTES SHALL BE INCLUDED ON THE FIRST SHEET OF EVERY SET OF PLANS:

The following City of Upland Standard Drawings apply to this project and shall be considered as a part of these plans: (This note is to be followed by a list of all applicable Standard Drawings).

Any additional general notes special to this project.

ESTIMATED QUANTITIES

List estimated quantities in table form on the first sheet of the plans.

List all removal items as well as new construction.

List sewer main and service laterals in linear feet of each.

List standard manholes and cleanouts in number of each.

List water main in linear feet.

List all valves, flanges, fire hydrant assemblies, and

water service laterals in number of each.

List all manholes and valves to be adjusted to grade in number of each.

INDEX MAP

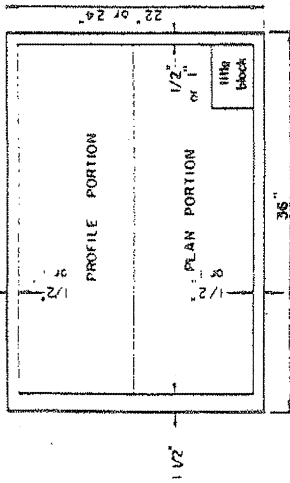
An index map should be located at the right side of the first sheet. The normal scale for index maps is 1"=200'.

GENERAL INFORMATION

Water mains in the City of Upland are normally located 6 feet west of the east curb on north & south streets and 6 feet north of the south curb on east & west streets.

Sewer mains are normally located in the center of the street.

See Standard Drawing No. CU-D-8 For Standard Utility Locations.



TYPICAL PLAN AND PROFILE SHEET

3/4"	2 1/4"	3/4"	3/4"	3/4"	3/4"
MARK	DESCRIPTION OF REVISION	DATE	REVISED BY	APPROVED BY	DATE

REVISION BLOCK

TITLE BLOCK

CITY OF UPLAND		3 1/2"	
PLAN AND PROFILE OF SEWER & WATER		3/8"	
BLANK AVENUE		1 1/4"	
SEVENTEENTH STREET TO TRACT STREET		3/8"	
TRACT NO. 9000		3/8"	
APPROVED BY: CITY ENGINEER	R.C.E. NO. 15033	DATE	3 1/2"
DESIGN: WATER UTILITY DIRECTOR	RHODES & STREET ENGR. CO.	DATE	3/8"
DRAWN: 1000 MAIN STREET	SHEET	WATER DRWG. NO.	3/8"
CHECKED: ANY TOWN, CALIF.	FILE NO.	SEWER DRWG. NO.	3/8"
DATE	RE NO. 00000		3/8"
1 1/2"	5"	1 1/2"	5"

Handwritten signature and date: 10-1-75

CITY OF UPLAND		SEWER & WATER	
STANDARD DRAWING		IMPROVEMENT	
DRAWN BY: S.K.	DATE: 9-1-75	PLAN SHEETS	
REVISIONS BY:	DATE:	GENERAL INFORMATION	
APPROVED BY: <i>Handwritten signature</i>		CITY ENGINEER	
DRAWING NO. CU-D-8			

GENERAL NOTES

FOR SEWER AND WATER IMPROVEMENTS WHICH ARE TO BE INCORPORATED INTO THE CONSTRUCTION PLANS BY REFERENCE TO THIS STANDARD DRAWING

1. All work and material shall conform to the higher standard in either "Standard Specifications for the Construction of Water Mains and Appurtenances, July 1972," on file at the City Water Department, City of Upland, OR "Standard Specifications for Public Works Construction," latest issue and amendments, known as the "Green Book."
2. The contractor shall be fully responsible for locating and protecting from damage all existing facilities and improvements whether or not shown on these plans. The facilities and improvements are believed to be correctly shown but the sewer contractor is required to satisfy himself as to the completeness and accuracy of the locations.
3. San Antonio Water Company, 139 N. Euclid Avenue, Upland, 982-4107, may have water lines in this area. Contact them for location, size and depth of lines, and other pertinent information.
4. Quantities shown on the plans are estimated. The contractor shall satisfy himself as to the accuracy of quantities before bidding on any item.
5. The contractor shall obtain a permit from the State of California, Department of Industrial Relations, Division of Industrial Safety, before starting the excavation of any trench five feet or more in depth. Shoring, bracing, sloping and all other provisions for worker protection shall conform to the provisions contained in Article 6 of the State of California, Department of Industrial Relations Construction Safety Orders, effective August 8, 1965 and as amended July 27, 1973. If a variation from these standards is desired, a detailed plan shall be prepared by a registered civil engineer and submitted to the City Engineer for approval.
6. All water and sewer mains shall meet the State of California, Department of Health, requirements for the separation between water mains and sanitary sewer.
7. The contractor is required to repair the existing pavement which is removed or damaged by his operations in accordance with Standard Drawing CU-2-3 unless arrangements are made which coordinate street paving in a manner acceptable to and approved by the City Engineer.
8. Before connecting to the City water system, the developer must meet the requirements of Section 7720.12(a) of the Upland Municipal Code relating to the transfer of water stock to the City of Upland.
9. Service laterals are to be placed at the center third of the lot unless otherwise approved by City.
10. Service laterals are to be installed per Standard Drawing W6-6, on file at the City of Upland Water Department.
11. Fire hydrants shall be installed per Standard Drawing W6-4 and W6-5, on file at the City of Upland Water Department.

12. Connection to existing water mains shall be by "Hot Tap."

13. Minimum cover of water lines shall be as follows:

Diameter of pipe	Minimum cover
2"	24"
4"	30"
6"	36"
8"	42"
10"	48"
12"	48"
14"	52"

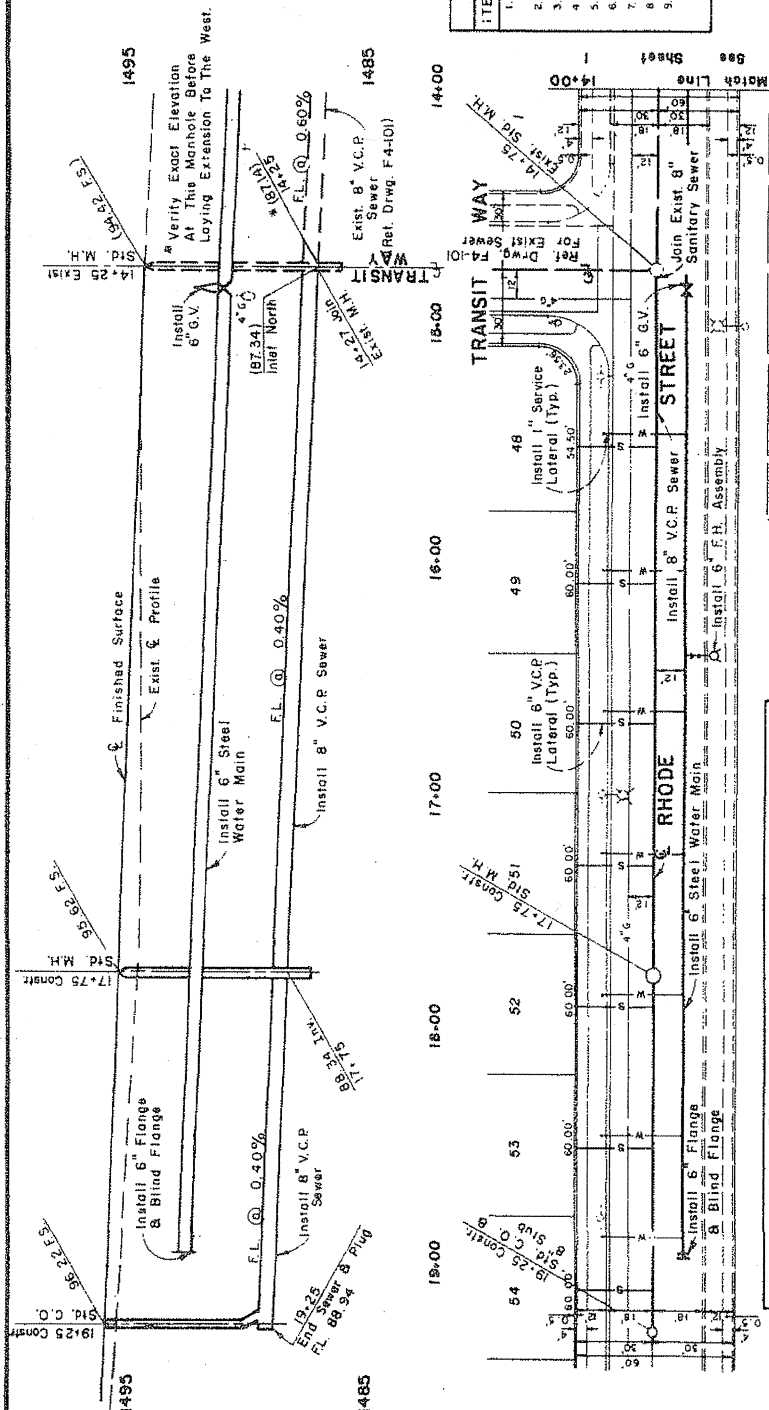
14. Saddle connections are not permitted to the sewer main. New connections require a "Tee" or "Wye" section to be placed in the main line.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	SEWER & WATER IMPROVEMENT
S.K.	9-1-75	GENERAL NOTES
REVISIONS BY	DATE	
		APPROVED BY <i>Frederic C. Blanchard</i>
		CITY ENGINEER
		DRAWING NO. CU-D-7

GENERAL NOTES

- The following City of Upland Standard Drawings apply to this project and shall be considered as a part of these plans:
CU-D-1, 2, 7, CU-2-1 thru 4.



ITEM	DESCRIPTION	QUANTITY	UNIT	REMARKS
1.	8" V.C.P. Sewer (Inc. Tees & Plugs)		LF	Excuses Length Thru Manhole
2.	6" V.C.P. Lateral		EA	
3.	Sid. Manhole		EA	
4.	Sid. Cleanout		LF	
5.	6" Street Water Main		EA	
6.	1" Service Lateral		EA	
7.	6" Fire Hydrant Assy.		EA	
8.	6" Gate Valve		EA	
9.	6" Flange & Blind Flange		EA	

CITY OF UPLAND STANDARD DRAWING

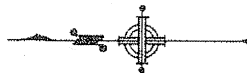
DRAWN BY	DATE	TYPICAL
S.K.	9-1-75	SEWER & WATER IMPROVEMENT PLAN
REVISION BY	DATE	APPROVED BY
		<i>Frederic Blandford</i> CITY ENGINEER
		DRAWING NO. CU-D-8

PLAN SCALE: Normal Scale is 1" = 40'; When Greater Detail is Required, Use 1" = 20'.

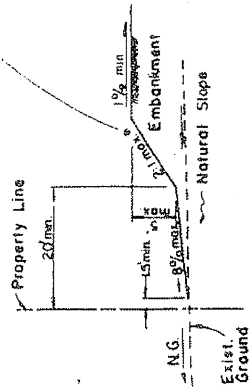
PROFILE SCALE: The Horizontal Scale Used On The Profile Portion Shall Be The Same As The Plan Scale. The Vertical Scale Shall Be Ten Times The Horizontal Scale.

VERTICAL CONTROL: Reference To City Of Upland Bench Marks Used To Establish Control Elevations Should Be Given On The Profile Portion Of The Plan.

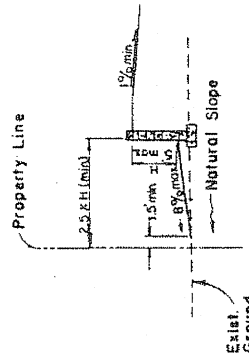
HOUSE LATERAL LOCATIONS		
SEWER	WATER	
Lot No	Design Location	"As Built"
48	15+52.75	15+56.75
49	16+03.50	16+03.50
50	17+33.50	17+33.50
51	17+87.50	17+87.50
52	18+47.50	18+47.50
53	18+47.50	18+47.50
54	19+07.50	19+07.50



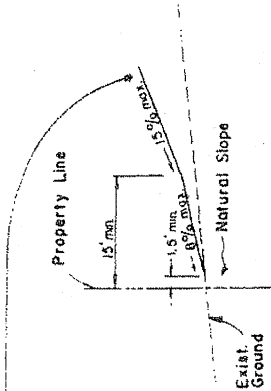
NOTE: Provide Erosion Control For All Slopes In Excess Of 10%.



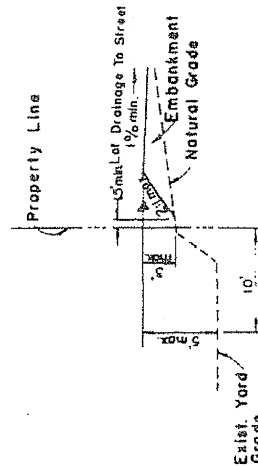
EMBANKMENT LIMITS
USING TERRACING
TYPE "A"



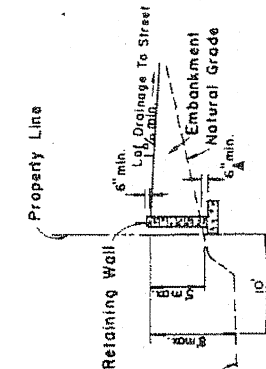
EMBANKMENT LIMITS
USING TERRACING
WITH RETAINING WALL
TYPE "B"



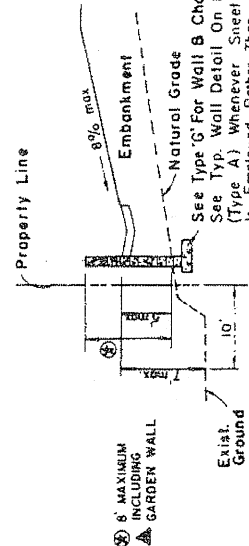
EMBANKMENT LIMITS
MAXIMUM SLOPES
WITHOUT TERRACING
TYPE "C"



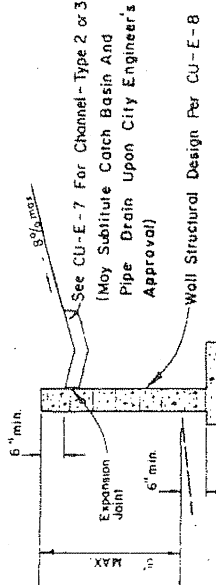
MAXIMUM LIMITS FOR EMBANKMENT
WITH DRAINAGE TO STREET AND
WITHOUT RETAINING WALLS
TYPE "D"



MAXIMUM LIMITS FOR EMBANKMENT
WITH DRAINAGE TO STREET AND
WITH RETAINING WALLS
TYPE "E"



LIMITS AND REQUIREMENTS FOR
LOTS DRAINING TO REAR LINE
TYPE "F"



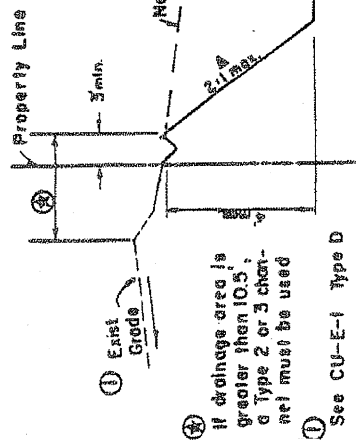
TYPICAL DETAIL FOR
RETAINING WALL & CHANNEL
TYPE "G"

GENERAL NOTES

- Notes Regarding Type "C" Embankments
 - Use P.C.C. Channel at Bottom Of Slope If Adjoining Property Has Retaining Wall Or Cut Slopes Within 10 Feet Of Property Line
 - Not Permitted If Existing Ground Of Adjoining Property Slopes Toward The Property Line.
- See Section 811.0 Of The Municipal Code For General Requirements Of The City Grading Ordinance.
- Interior Lot Line Provisions, Per Std. Drwg. CU-E-4, May Be Used For Exterior Lots If There Is A Signed Agreement From Adjoining Property Owners.
- Full Lot Drainage To The Rear At Exterior Boundaries Will Be Permitted Subject To The Following Provisions:
 - Runoff Shall Be Sheet Flow Only.
 - Engineering Calculations Shall Be Performed Showing That Runoff Quantity Will Not Be Increased;
- Wherever There Is Either An Existing Wall That Does Not Have Provisions For The Passage Of Runoff Or Some Other Blockage Of Sheet Flow That Has Existed Along The Development Boundary For A Period Of Time, Or An Existing Cut Slope Adjacent To The New Boundary, All Roof Water And Front Yard Drainage Shall Be Carried To The Street.
- The Mark "A" By Any Limit Shown Hereon Indicates An Absolute Limit. All Other Limits Must Also Be Followed Unless A Variance Has Been Approved By The Administrative Comm.
- See Gen. Note No. 3, CU-E-2.

CITY OF UPLAND STANDARD DRAWING

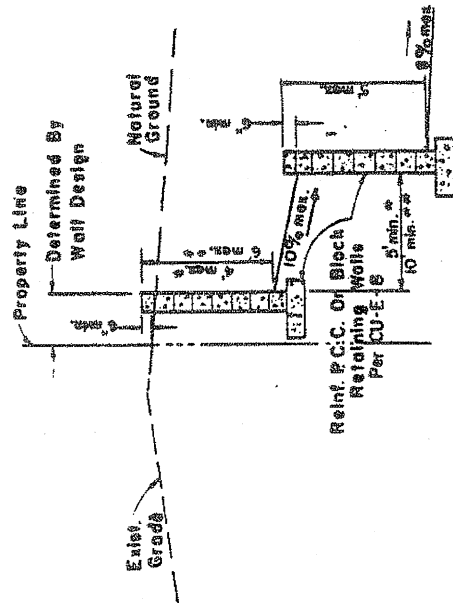
DRAWN BY	DATE	LOT GRADING LIMITS
WAH	10/5/65	REAR YARD EMBANKMENTS AT EXTERIOR LOT LINES
REVISION BY	DATE	
ECB	5/16/75	APPROVED BY
JJJ	7-3-80	DEPUTY CITY ENGINEER
		DRAWING NO. CU-E-1



GRADING

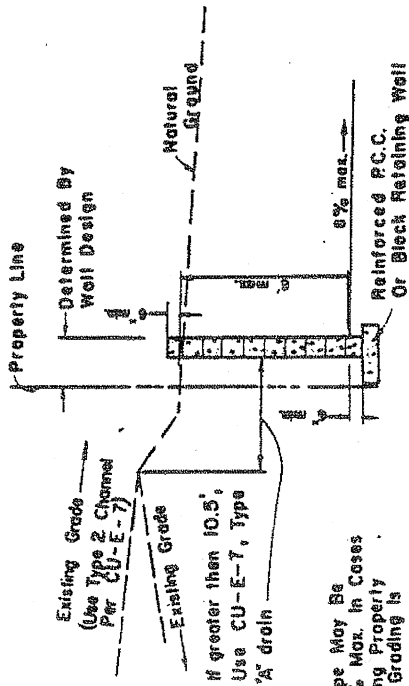
WITHOUT RETAINING WALL
MAXIMUM HEIGHT WHEN SLOPE
EXCEEDS 15%

TYPE "J"



GRADING

WITH DOUBLE RETAINING WALLS
TYPE "M"

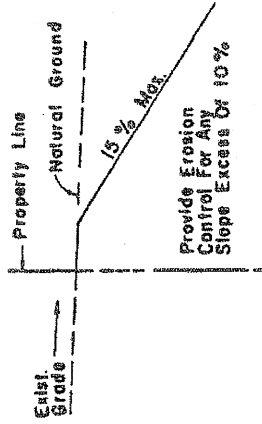


GRADING

WITH RETAINING WALL
MAXIMUM SLOPE WITHOUT HEIGHT LIMITATION
TYPE "K"

GRADING WITHOUT RETAINING WALL

MAXIMUM SLOPE WITHOUT HEIGHT LIMITATION
TYPE "L"



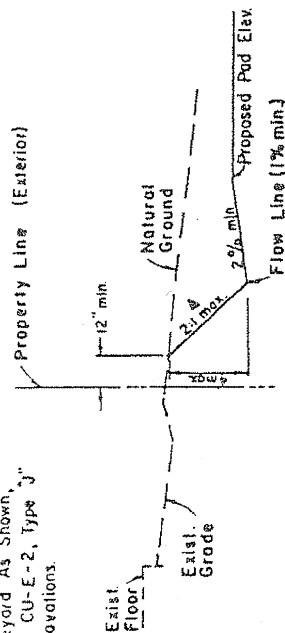
NOTES

1. See Section 8110 Of The Municipal Code For General Requirements Of The City Grading Ordinance.
2. The Mark "A" By Any Limit Shown Hereon Indicates An Absolute Limit. All Other Limits Must Also Be Followed Unless A Variance Has Been Approved By The Administrative Committee.
3. All Slope Banks Exceeding 3' In Height And Visible From Main Thoroughfares (2 Lanes Each Way) Are Subject To Architectural Commission Review.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	LOT GRADING LIMITS NEAR YARD EXCAVATIONS AT EXTERIOR LOT LINES
W.A.H.	10/3/65	
REVISION BY	DATE	TYPICAL GRADING AT RESIDENCES
F.C.B.	5/16/79	APPROVED BY
J.W.	9-3-80	DEPUTY CITY ENGINEER
		DRAWING NO. CU-E-2

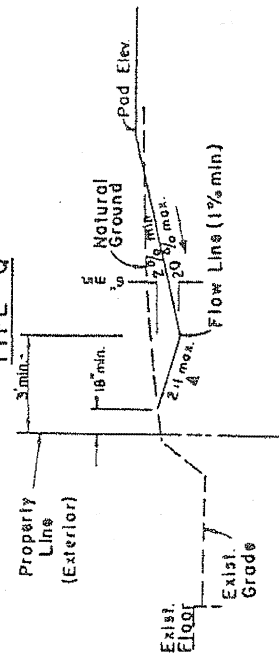
For Other Than Typical
Sidewalk As Shown,
See CU-E-2, Type "J"
Excavations.



PROPOSED PAD BELOW NATURAL GROUND LINE

(WITHOUT RETAINING WALL)

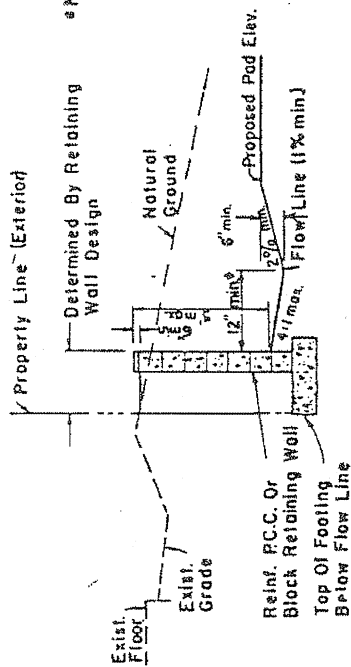
TYPE "Q"



PROPOSED PAD ABOVE NATURAL GROUND LINE

(WITHOUT RETAINING WALL)

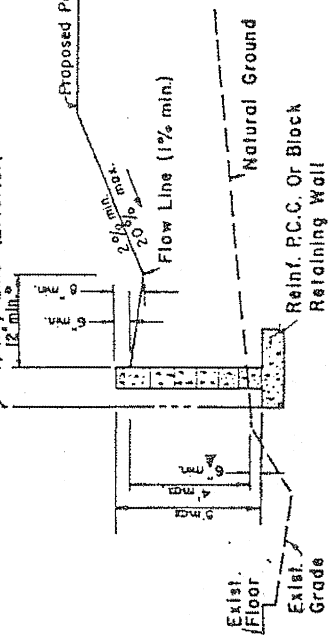
TYPE "S"



PROPOSED PAD BELOW NATURAL GROUND LINE

(WITH RETAINING WALL)

TYPE "R"



PROPOSED PAD ABOVE NATURAL GROUND LINE

(WITH RETAINING WALL)

TYPE "T"

NOTE:

Flow Line May Be Located At Face
Of Wall, Dependent On Overall Lot
Drainage Design, Subject To
Approval By City Engineer

NOTES

1. All Lots Shall Have Vehicular Access To The Rear Yard.
If The Side Yard Is Used For Access It Shall Have
A Cross Slope Less Than 8% Average In A 10' Width.
See CU-E-10 For Details.
2. All Slope Banks Exceeding 3' Height And
Visible From Main Thoroughfares Are
Subject To Architectural Commission Review.
3. The Mark "X" By Any Limit Shown Hereon
Indicates An Absolute Limit. All Other Limits
Must Also Be Followed Unless A Variance
Has Been Approved By The Admin. Comm.
4. See Section 81.10 Of The Municipal Code
For General Requirements Of The City
Grading Ordinance.

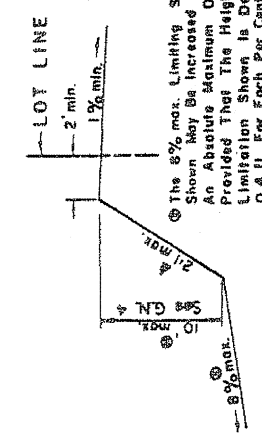
CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	LOT GRADING LIMITS
W.A.H.	10/5/63	EXTERIOR
REVISION BY	DATE	SIDE YARD GRADING LIMITS
EC.B.	5/16/75	
B.F.	10/29/76	
J.J.W.	9-3-80	

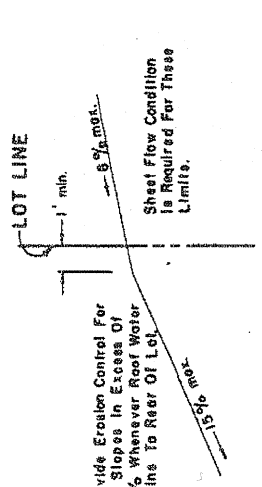
APPROVED BY

DEPUTY CITY ENGINEER

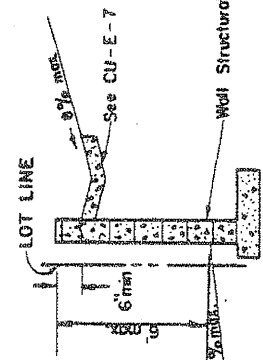
DRAWING NO. CU-E-3



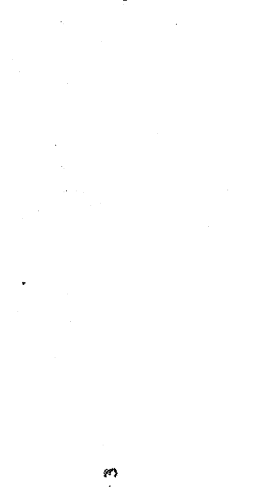
DRAINAGE TO STREET
GRADING WITHOUT RETAINING WALL
TYPE 'V'



DRAINAGE OF HIGH LOTS TO REAR
MAXIMUM SLOPES WITHOUT HEIGHT LIMITATION
TYPE 'W'



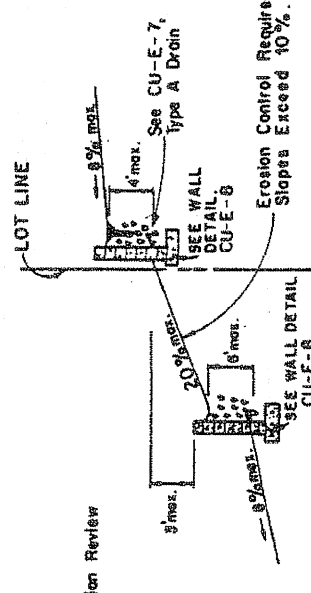
DRAINAGE OF HIGH LOT TO REAR
MAXIMUM HEIGHT WHEN SLOPE EXCEEDS 15%
TYPE 'X' See G.N. 5



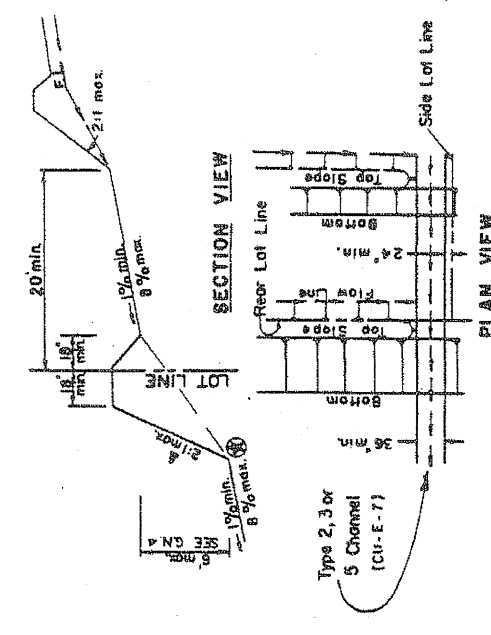
DRAINAGE OF HIGH LOT TO REAR
MAXIMUM HEIGHT WHEN SLOPE EXCEEDS 15%
TYPE 'X' See G.N. 5

GENERAL NOTES

1. See Section 811.0 Of The Municipal Code For General Requirements Of The City Grading Ordinance.
2. All Slope Banks Exceeding 3' In Height, And Visible From Main Thoroughfares Are Subject To Architectural Commission Review
3. The Mark "A" By Any Limit Shown Hereon Indicates An Absolute Limit. All Other Limits Must Also Be Followed Unless A Variance Has Been Approved By The Administrative Committee.
4. This Maximum Height May Be Increased By Three Feet For Each Per Cent That The Natural Ground Slope Exceeds Four Percent (4%). (Natural Slope As Shown Here Shall Be The Average Grade Between The Tract Or Site Boundaries, Where Adjacent To Public R/W The E Is Considered As Boundary Line).
5. Use Only Where A Maximum Of 2 Upstream Lots Are Tributary To One Downstream Lot.



DRAINAGE OF HIGH LOT TO REAR
MAXIMUM HEIGHT WHEN SLOPE EXCEEDS 15%
TYPE 'Z'



DRAINAGE OF HIGH LOT TO REAR
MAXIMUM HEIGHT WHEN SLOPE EXCEEDS 15%
TYPE 'X' See G.N. 5

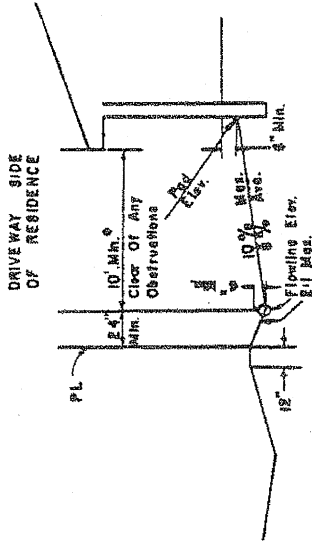
③ If Slope Is Less Than 3% Carry Channel 3' Beyond The Bottom Of Slope, And Place An Energy Dissipator At The Channel Terminus. When Slopes Exceed 3% Carry All Drainage To The Street In A Channel (Type 1-5) Or In A Pipe (6 min.).

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	LOT GRADING LIMITS
REVISION BY	DATE	INTERIOR LOTS
JJW	9-30-00	REAR YARD GRADING LIMITS
APPROVED BY	DATE	APPROVED BY
DEPUTY CITY ENGINEER		
DRAWING NO.		CU-E-4

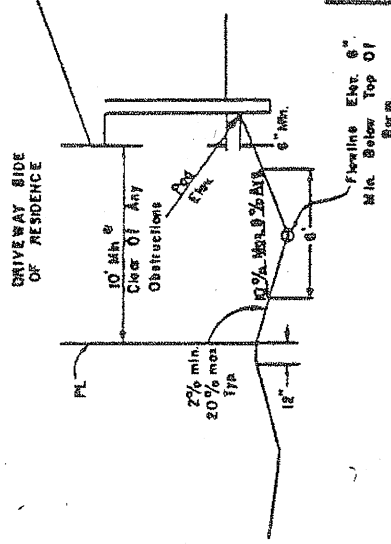
GENERAL NOTES

1. See Section 811.0 Of The Municipal Code For General Requirements Of The City Grading Ordinances.
2. All Lots Shall Have Vehicular Access To The Rear Yard. If The Side Yard Is Used For Access It Shall Have A Cross Slope Less Than 8% Average In A 10' Width.
3. All Slope Banks Exceeding 3' In Height And Visible From Main Thoroughfares (2 Lanes Each Way) Are Subject To Architectural Commission Review.
4. The Mark "A" By Any Limit Shown Hereon Indicates An Absolute Limit. All Other Limits Must Be Followed Unless A Variance Has Been Approved By The Administrative Comm.
5. Sideyard Vehicle Access Is Not Required When Lots Have Access From The Rear (i.e. Alley, etc.) Or In The Case Of A Corner Lot. The Vehicle Access In These Cases Cannot Have A Grade Exceeding 14%.

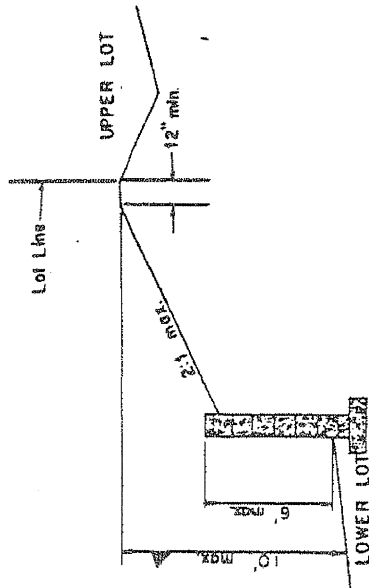


REQUIRED VEHICULAR ACCESS TO REAR YARD

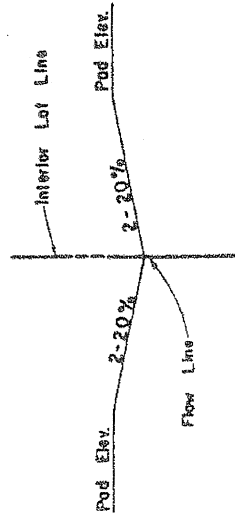
4 May Be Measured To Wall Only When Eave Height Exceeds 12'



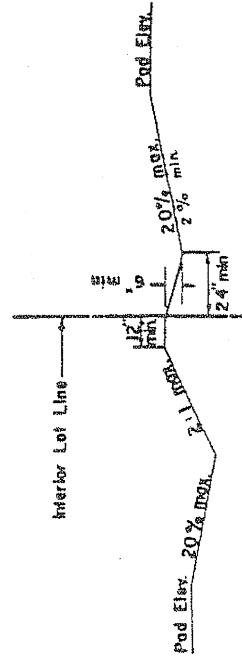
REQUIRED VEHICLE ACCESS TO REAR YARD (ALTERNATE)



TYPICAL SIDEYARD COMBINATION SLOPE AND RETAINING WALL



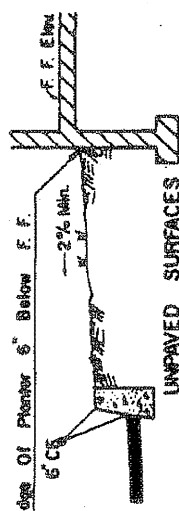
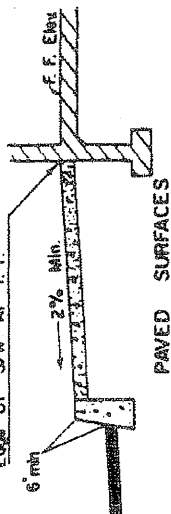
COMMON FLOWLINE



TYPICAL SIDEYARD LIMITS

CITY OF UPLAND STANDARD DRAWING

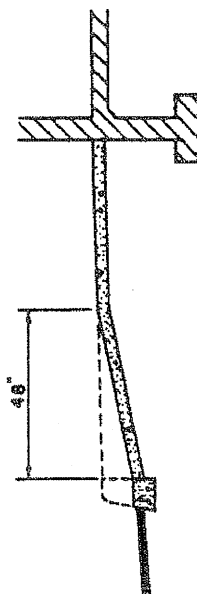
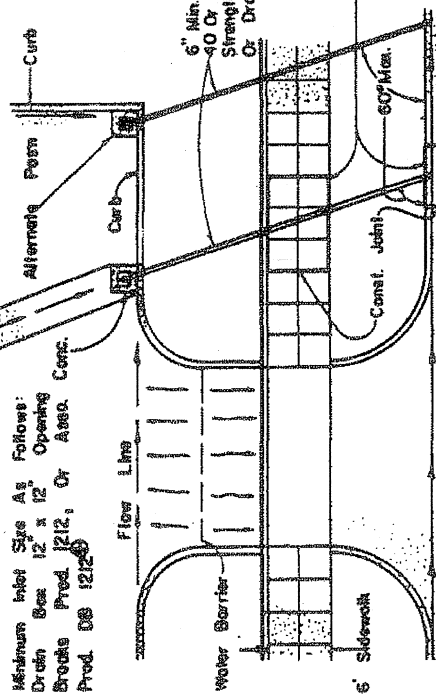
DRAWN BY	DATE	LOT GRADING LIMITS	
		INTERIOR LOT	SIDEYARD GRADING LIMITS
REVISIONS BY	DATE		
JUN	9-3-80		
		APPROVED BY	
		DEPUTY CITY ENGINEER	
		DRAWING NO. CU-E-5	



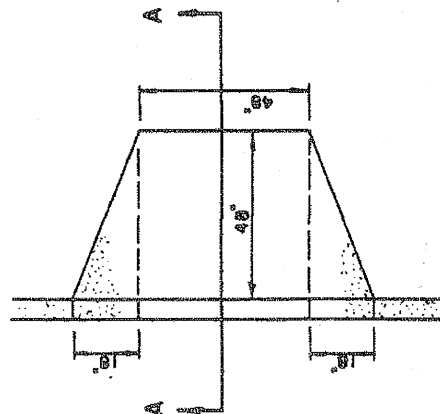
FINISHED SURFACES AROUND BUILDINGS

Ribbon	Gutter	Per	CU-R-3,
Type	"A,"	W-3	Required
Flow	Line	is	When
		1000	Thous
		1%	

Minimum Inlet Size As Follows:
 Dr. Box 12" x 12" Opening
 Breaks Prod. 12 1/2", Or Asso. Conc.
 Prod. Or 12 1/2"

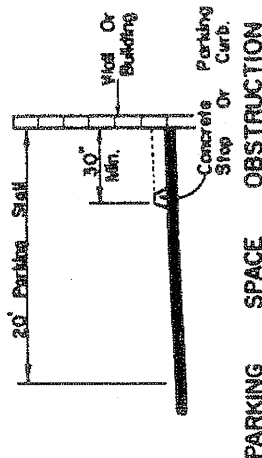


SECTION A-A



PLAN VIEW

ALTERNATE. WHERE CURB OPENING IS PROVIDED IN LIEU OF INLET STRUCTURE THERE SHALL BE PROVIDED A P.C.C. APRON STRUCTURE HAVING 20 SQ. FT. IN AREA AND WITH NO GREATER SLOPES THAN 8%.



GENERAL VOTES

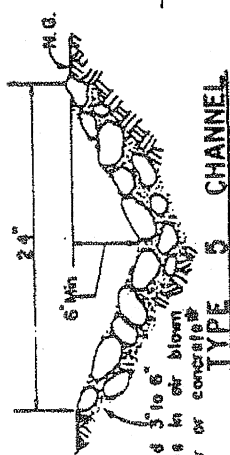
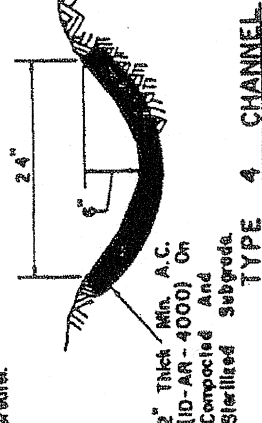
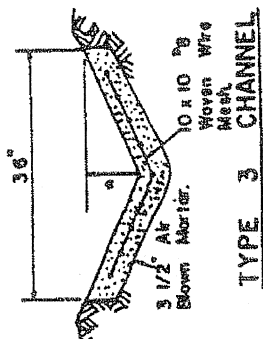
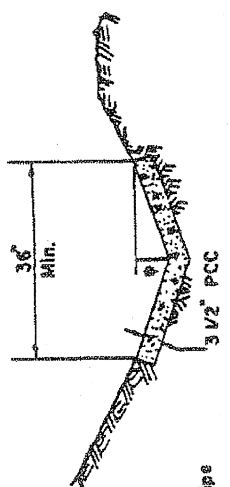
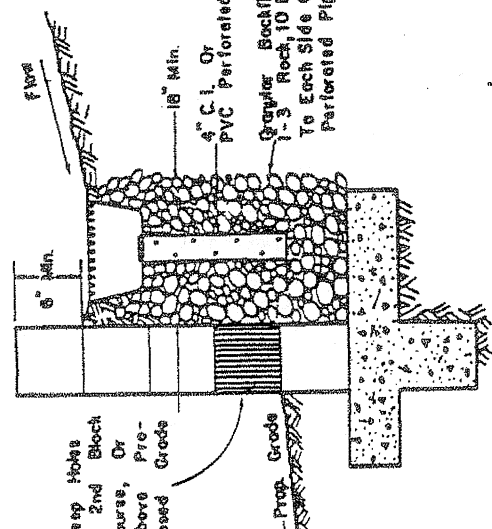
1. See Section 8110 Of The Municipal Code For General Requirement Of The City Grading Ordinances.
2. In Addition To The Other Applicable Grading Limits Shown, These Standard Drawings Shall Also Be Applied To All Commercial Or Industrial Developments Or Multiple Family Apartment Complexes, Unless Otherwise Approved By The Administrative Committee.
3. All Paved Parking And Drivng Areas Shall Have A Minimum Of 20' Depth A.C.
4. SITE DRAINAGE SHALL NOT BE ALLOWED TO FLOW ACROSS PUBLIC SIDEWALKS.

[illegible]

GENERAL NOTES

- See Section 0110 Of The Municipal Code For General Requirements Of The City Grading Ordinances.
- Type 7 Drain May Be Used As An Interim Solution Or As A Temporary Drain. Its Use Must Be Approved By The ADMINISTRATIVE COMMITTEE.
- MINIMUM FLOWLINE GRADES:
Type 1, 2, 3 .5%
Type 4, 5, 6, 7 1.0%
- The Engineer Shall Perform Hydraulic Calculations To Verify Adequacy Of Channel Size. Freeboard Requirement Can Be Eliminated If City's Current Comprehensive Storm Drain Report (Moffet & Nichols, 1966) Shows Q < 1 CFS / Ac For Residential Areas Or 1.5 CFS / Ac For Commercial & Industrial Areas.

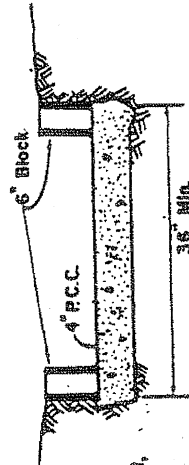
Receiv. Drain (AFC No. A-344, With 10" x 10" Gate) Or Equal Maximum Spacing 40 Feet, For Lot Widths Greater Than 60 Feet. Minimum Of One Drain Is Required For Each Lot With Tributary Area Up To 8000 S.F.



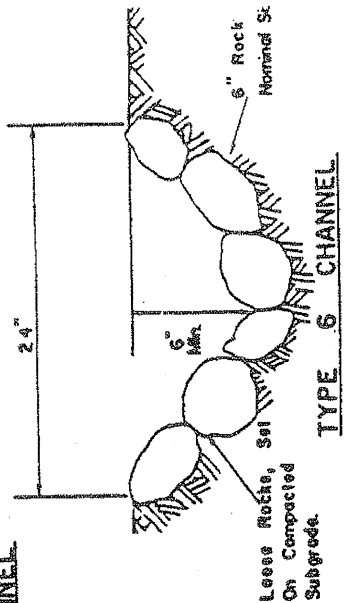
TYPE A DRAIN

TYPE 5 CHANNEL

A Dry Mixture Of Cement, Sand And Rock May Be Substituted 3.5 Sacks Cement Per Cu. Yd. Min. Wet In Place.



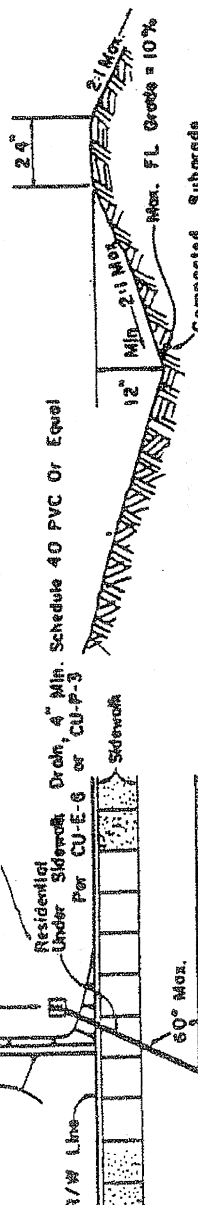
TYPE 1 CHANNEL



TYPE 6 CHANNEL



TYPE B DRAIN



TYPE 7 CHANNEL

Required Yard Drain When Street Grade Exceeds 5%.

See General Notes For Restrictions On Usage.

CITY OF UPLAND STANDARD DRAWING			
DRAWN BY	DATE	DRAINAGE CHANNEL	MISC. LOT DRAINS
JVN	9-3-80		
REVISION BY	DATE		
APPROVED BY		CITY ENGINEER	
		DRAWING NO. CU-E-7	

GARDEN WALLS

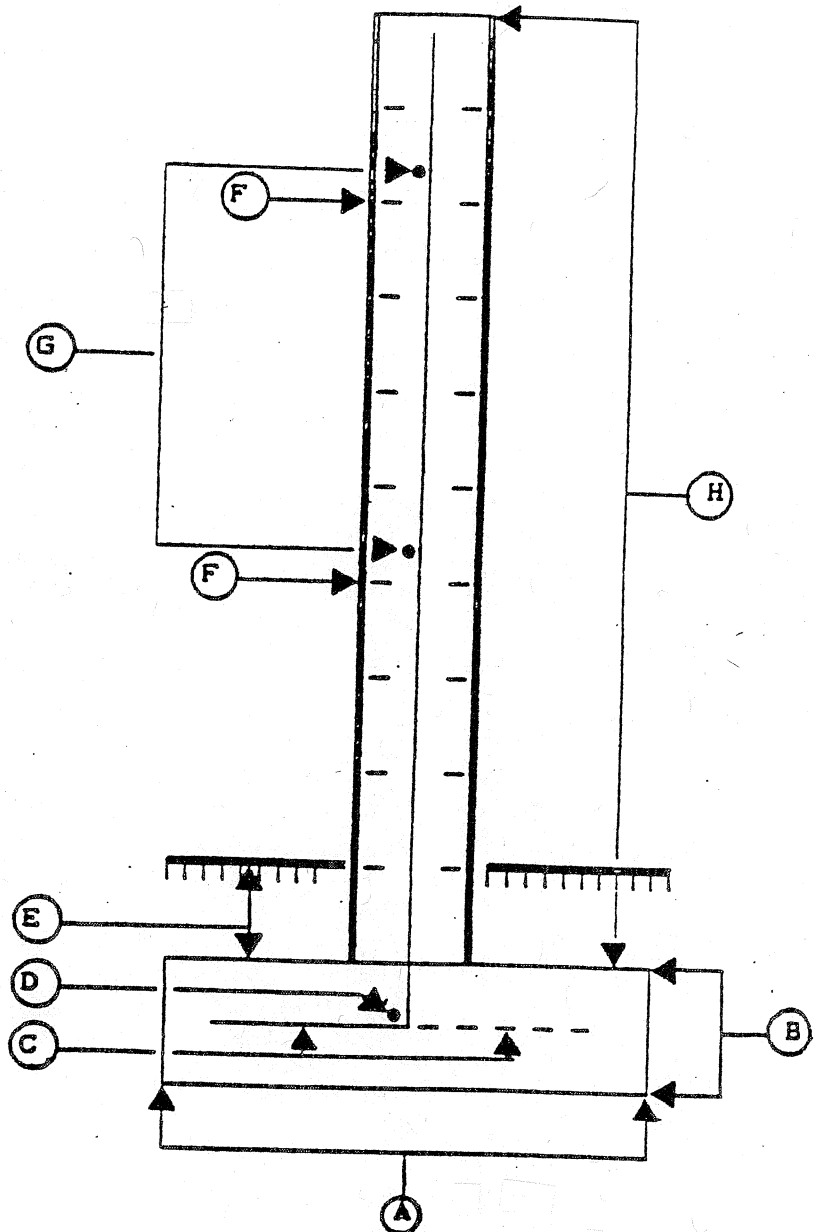
ED. 101

- (A) SEE CHART
- (B) SEE CHART
- (C) SEE CHART
- (D) #4 HORIZONTAL REINFORCEMENT IN FOOTING
- (E) 8" MINIMUM EARTH COVER
- (F) WEB LOCATION FOR GROUTING BOND BEAMS
- (G) MID-HEIGHT REINFORCEMENT REQUIRED IN ALL WALLS OVER 4 FEET IN HEIGHT. TOP REINFORCEMENT REQUIRED IN ALL WALLS.
- (H) SEE CHART

H	A	B	C
2'	24"	8"	#4 @24"O.C.
3'	24"	8"	#4 @24"O.C.
4'	24"	8"	#4 @24"O.C.
5'	24"	8"	#4 @24"O.C.
6'	24"	8"	#4 @24"O.C.

WALLS SHALL BE AS DEFINED IN SEC. 2-2415 OF THE STATE MASONRY CODES AND SPECIFICATIONS. CLEANOUTS SHALL BE AS PER STATE CODE REQUIREMENTS. CONCRETE & GROUT-2000PSI@28DAYS

6" SLUMPSTONE WALLS MUST BE INSPECTED AND GROUTED IN 2' LIFTS. (LOW LIFT GROUTING)



CITY OF UPLAND - - STANDARD DRAWING

WALL DETAILS - - - - - CU - E - 8 PAGE 1

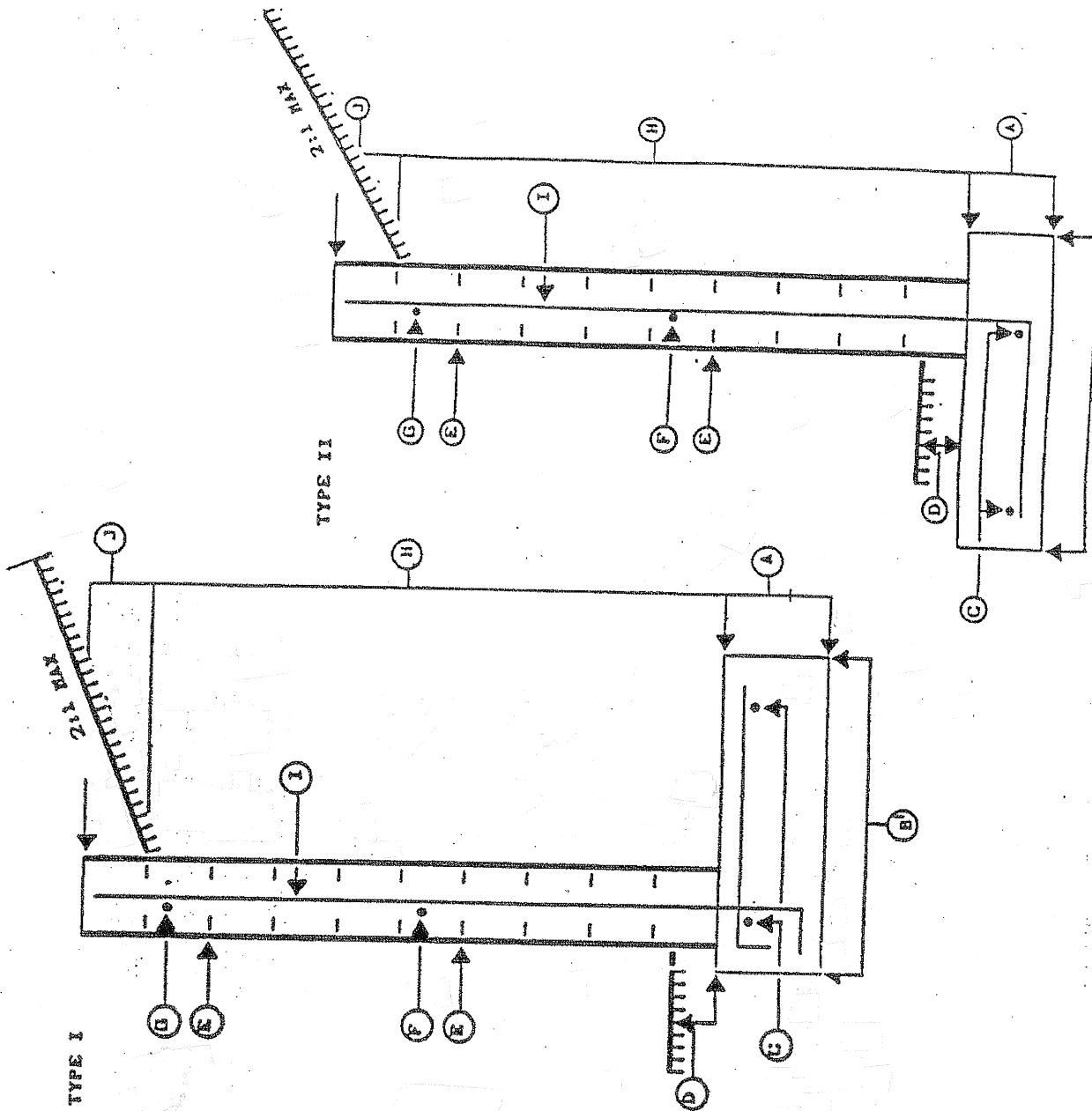
CITY OF UPLAND - STANDARD DRAWING

WALL DETAILS - - - CU - E - B PAGE 2

- (A) SEE CHART
 (B) SEE CHART
 (C) #4 HORIZONTAL REINFORCEMENT
 (D) 6" MINIMUM EARTH COVER
 (E) WEB LOCATION
 (F) 4" 0" AND HIGHER WALLS REQUIRE
 MED-HEIGHT HORIZONTAL REINFORCEMENT
 (G) UPPER HORIZONTAL REINFORCEMENT-1 #4
 (H) SEE CHART
 (I) SEE CHART
 (J) 6" MINIMUM ABOVE EARTH RETENTION

H	K	A	B	B'	I
2'	0"	12"	2'3"	2'9"	#3 @24"O.C.
3'	0"	12"	2'3"	2'9"	#3 @24"O.C.
4'	0"	12"	3'0"	3'6"	#4 @24"O.C.
5'	0"	12"	3'6"	4'0"	#5 @16"O.C.
6'	0"	12"	4'0"	4'9"	#5 @16"O.C.

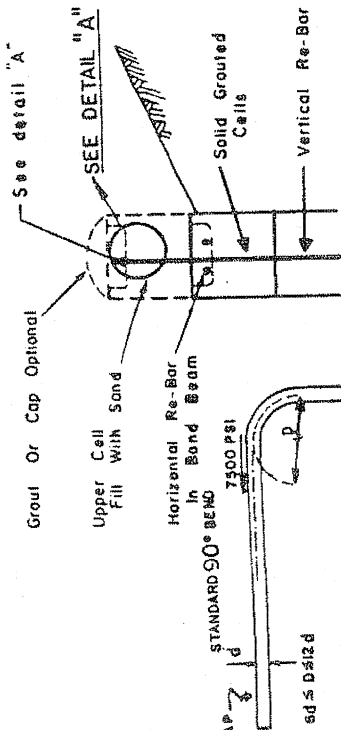
WALLS SHALL BE AS DEFINED IN SEC. 2-2415
 OF THE STATE MASONRY CODES AND
 SPECIFICATIONS.



GENERAL NOTES

- See Section 8110 Of The Municipal Code For General Requirements Of The City Grading Ordinance
- Special Wall Conditions - See City Planning Department Exhibit "Wall Settings In R-I Zones With And Without Alley Location Requirements". Where Wall Is Built Less Than 18 Inches From A.C. Or P.C.C. Surfacing. The Intervening Area Shall Be Surfaced To Match Existing Surfacing.
- Construct Expansion Joints Into All Garden Walls At A 100 Foot Maximum Spacing. The Use Of Type I Or Type II Is Optional With Builder Unless One Is Specified By The City Administrative Committee.
- Retaining Walls As Shown Upon CU-E-8 May Have An Additional Garden Wall Built Upon Them Only If They Have Been Provided With Extension Of Rebar. See Applicable Grading Limits Within The CU-E-Series For Height Limitations When Using Combination Retaining And Garden Walls.

THIS BAR OVERLAP



LOOP DETAIL FOR EXTENDABLE RETAINING WALLS

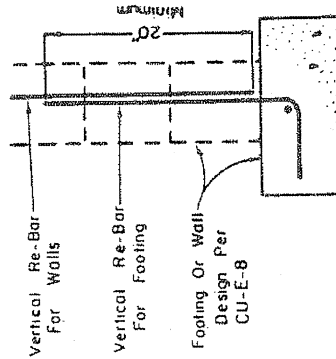
See General Note 4.

PLAN VIEW

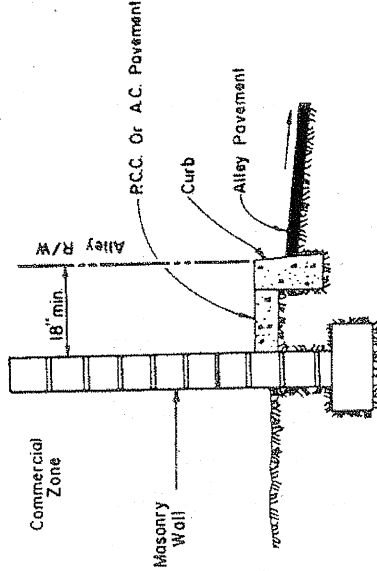
TYPE II

GARDEN WALL EXPANSION JOINT DETAILS

See General Note 3.



FOOTING TO WALL SPLICE RE-BAR DETAIL



WALL PROTECTION DETAIL

CITY OF UPLAND STANDARD DRAWING

WALL DETAILS

DRAWN BY DATE

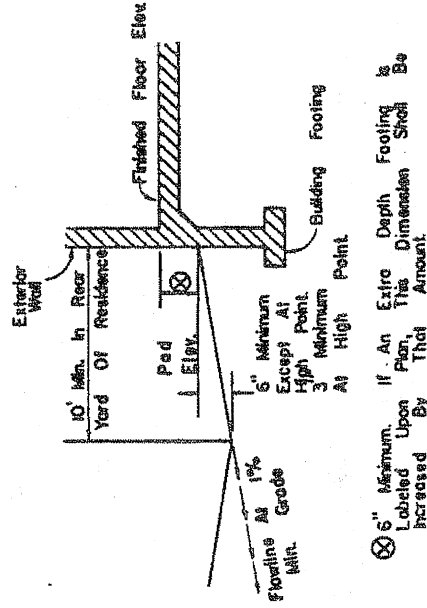
REVISION BY DATE

APPROVED BY
[Signature]
CHIEF BUILDING OFFICIAL
1-4-84

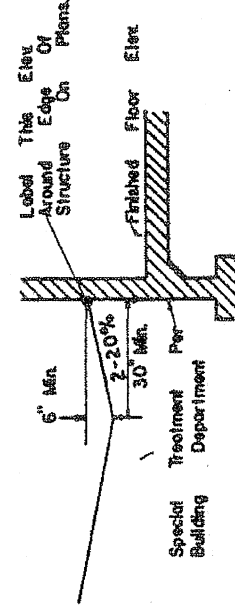
DRAWING NO. CU-E-9

GENERAL NOTES

1. See Section 8110 Of The Municipal Code For General Requirements Of The City Grading Ordinances.
2. All Slope Banks Exceeding 3' In Height And Visible From Main Thoroughfares (2 Lanes Each Way) Are Subject To Architectural Commission Review.
3. The Mark "A" By Any Limit Shown Hereon Indicates An Absolute Limit. All Other Limits Must Be Followed Unless A Variance Has Been Approved By The Administrative Comm.



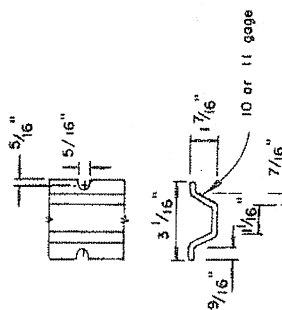
TYPICAL FLOWLINE GRADING LIMITS



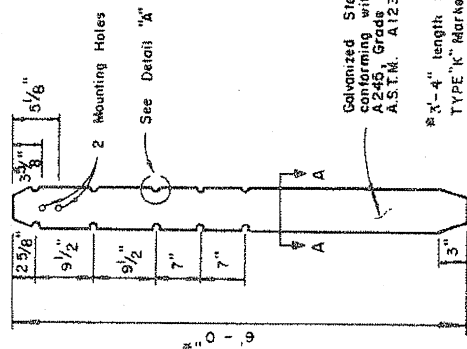
EXTRA STEM HEIGHT WALL

CITY OF UPLAND STANDARD DRAWING	
DRAWN BY	DATE
JJW	9-5-85
REVISION BY	DATE
GRADING DETAILS FOR EXTENDED DEPTH FOOTINGS	
APPROVED BY	
DEPUTY CITY ENGINEER	
DRAWING NO. CU-E-10	

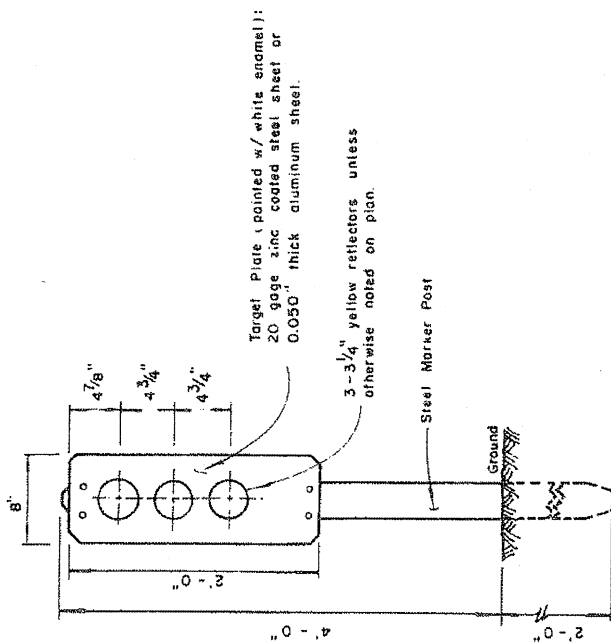
DETAIL "A"



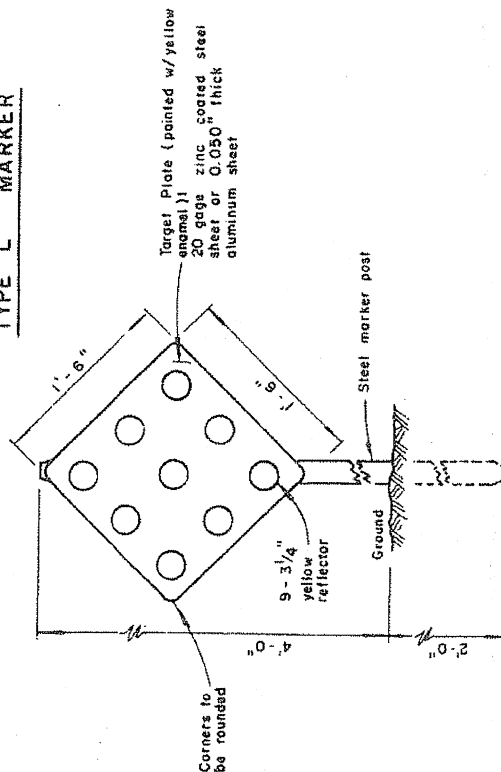
SECTION A-A



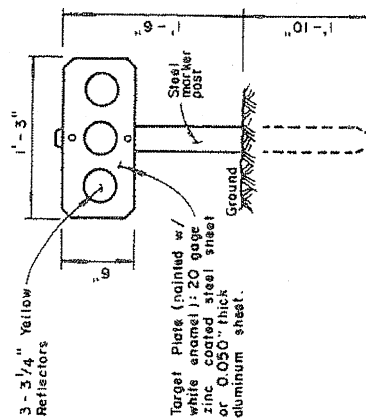
STEEL MARKER POST



TYPE "L" MARKER



TYPE "M" MARKER



TYPE "K" MARKER

CITY OF UPLAND STANDARD DRAWING

STEEL
GUIDE
MARKERS

Drawn By LWA
Date 5-8-70

Revisions By B.G.
Date 1-24-74

Approved By
Frank C. Blum
City Engineer

DRAWING NO. CU-G-1

NOTES:

- (1) Unless otherwise noted on plans.
- (2) "Manual on Uniform Traffic Control Devices".
- (3) State of California "Traffic Manual".
- (4) For Street Corner Location See Standard Drawing No. CU-G-4
- (5) Cap to be located 1" above top of Regulatory Sign.
- (6) If only the street name sign is to be mounted on the pole: The bottom of the sign should be placed 9' above the edge of the pavement.
- (7) To be mounted 1" below Regulatory Sign.
- (8) The Stop and Yield sign shall be erected at the point where the vehicle is to stop or as near thereto as possible. See detail on Standard Drawing No. CU-G-3
- (9) Mounting Hardware: (3/4" stainless steel strap Western Highway Products Co. No. H13-032 or equivalent) Strap-on Bracket (Western Highway Products Co. No. H1-SL or equivalent) Seal-rite Bolt (Western Highway Products Co. No. H6 or equivalent)

Notes Continued On STANDARD DRAWING NO. CU-G-3

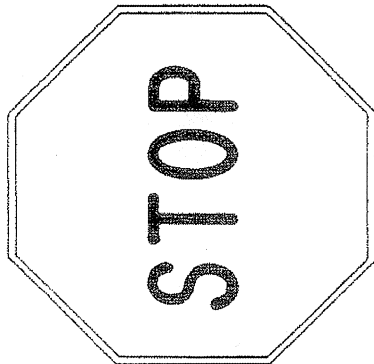
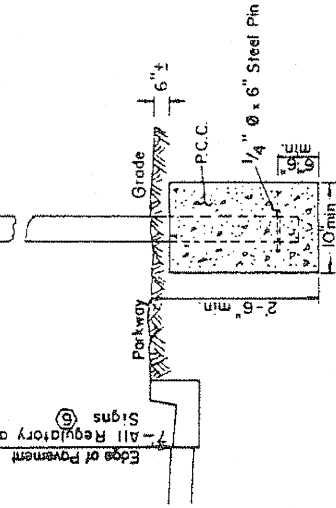
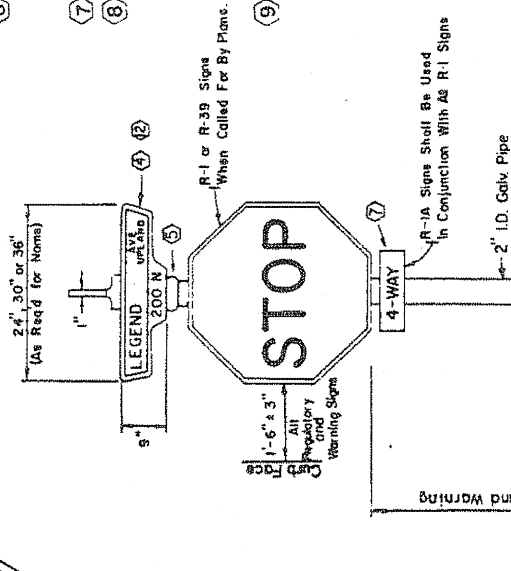
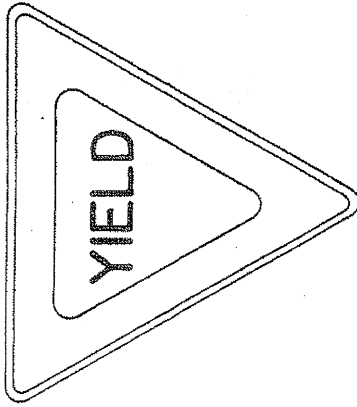
CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	SIGN	POST and SIGNS:
DVH B B G	5/13/75	STOP (R-1)	24-4-WAY (R-1-A)
REVISION BY	DATE	YIELD (R-39)	STREET NAME
		APPROVED BY	
		CITY ENGINEER	
		DRAWING NO. CU-G-2	

R-39

SPECIFICATIONS: (2)(3)

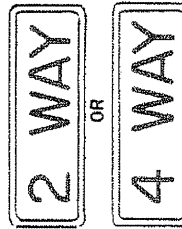
- (a) 36" Tri Aluminum Sign (1)
- (b) ReflectORIZED Porcelain Finish
- (c) Location (8) (4) (See CU-G-3)
- (d) Mounting Hardware (9) (2 Straps)



R-1

SPECIFICATIONS: (2)(3)

- (a) 30" x 30" Octagonal Aluminum Sign (1)
- (b) ReflectORIZED Porcelain Finish
- (c) Location (8) (4) (See CU-G-3)
- (d) Mounting Hardware (9) (2 Straps)
- (e) Stop Line And "STOP" Pavement Marking (1) (See CU-G-3)
- (f) "STOP AHEAD" Pavement Markings (2) (See CU-G-3)



R-1 A

SPECIFICATIONS: (2)(3)

- (a) 12" x 6" Rectangular Aluminum Sign (1)
- (b) ReflectORIZED Porcelain Finish
- (c) Mounting Hardware (9) (2 Straps)

NOTES : (Continued From Drawing No. CU-G-2)

- (K) STOP LINES And "STOP" Pavement Markings Are Required To Be Used In Conjunction With All Stop Signs.
The STOP LINE Shall Be:

White In Color,
12" Wide, And Placed Across
All Approach Lanes At The
Same Location As The Stop
Sign.

The "STOP" Pavement Marking Shall Be:
White In Color, And Shall Be
Located 10' ± Ahead Of The
Stop Line.

- (II) "STOP AHEAD" Pavement Markings Shall Be Used As Required By The Improvement Plans. In No Case Shall The "STOP AHEAD" Be Placed Closer Than 200' Ahead Of The Stop Line. The "STOP AHEAD" Shall Be White In Color.

- (12) STREET NAME SIGN SPECIFICATIONS
Western Highway Products, Inc.
No. P9 or Equivalent
Porcelain on Steel #4 Green
Background With White Porcelain
Beaded Legend, Border, Block Number,
City Name and Suffix.
Legend = 4" High Letters
Block Number = 2" High Letters
Suffix = 2" High Letters
City Name = 1" High Letters

* Specifications For The Letters Used in Pavement Marking May be Obtained From The Engineering Department.

CITY OF UPLAND STANDARD DRAWING			
DRAWN BY	DATE	SIGN	POST AND SIGNS:
D. V. H	5/13/75		STOP (R-1) 20' 4-WAY (RI-A) YIELD (R-39) STREET NAME
REVISION BY	DATE		
APPROVED BY			CITY ENGINEER
			DRAWING NO. CU-G-3

SELECT SYSTEM STREETS

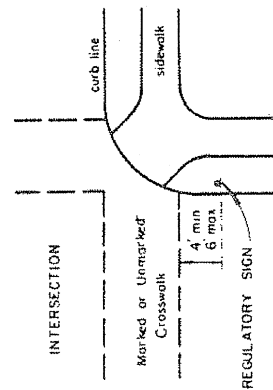
7 TH STREET (C)
 8 TH STREET (A)
 9 TH STREET (C)
 ARROW HIGHWAY (C)
 11 TH STREET (C)
 (West of Campus Ave.)
 13 TH STREET (C)
 14 TH STREET (C)
 15 TH STREET (C)
 16 TH STREET (A)
 17 TH STREET (C)
 18 TH STREET (C)
 20 TH STREET (C)
 21 ST STREET (C)
 22ND STREET (C)
 23RD STREET (C)
 24TH STREET (C)
 2ND AVENUE: (C)
 (7th St to 19th St)
 3RD AVENUE: (C)
 (South of 7th St)
 MOUNTAIN AVENUE (A)
 SAN ANTONIO AVENUE (C)
 EUCLID AVENUE: (C)
 (19th St. to 24th St.)
 CAMPUS AVENUE (C)
 GROVE AVENUE (C)
 SAN BERNARDINO ROAD (C)
 CENTRAL AVENUE (A)
 BENSON AVENUE (C)
 Arterial Streets
 Collector Streets

STATE HIGHWAYS

FOOTHILL BLVD. (Rt 66)
 EUCLID AVENUE:
 San Bernardino Freeway to 19th Street (Rt. 83)
 NINETEENTH ST (Rt. 30)
 MOUNTAIN AVENUE:
 16th Street to 19th Street (Rt. 30)
 SIXTEENTH ST.:
 County Line to Mountain Avenue (Rt 30)
 SAN BERNARDINO FREEWAY (Interstate 10)

LOCAL STREETS

All other streets not listed as being "Select" or "State".

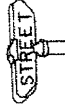


TYPICAL LOCATION FOR "STOP" & "YIELD" SIGNS
 See Note (8) Standard Drawing No CU-G-2



STOP SIGNS REQUIRED. Stop signs are required for traffic control on all streets intersecting with any of the following traffic arterials (except where control is by a traffic signal system):

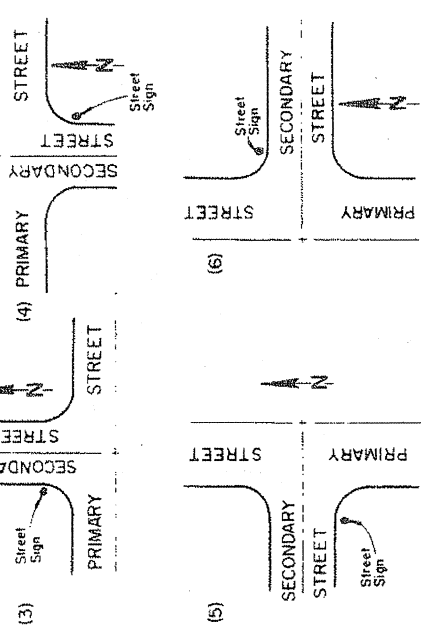
NAME OF ARTERY	LIMITS
7 TH STREET	ENTIRE LENGTH
8 TH STREET	"
9 TH STREET	"
11 TH STREET	"
13 TH STREET	BENSON TO CAMPUS
14 TH STREET	MOUNTAIN TO CAMPUS
15 TH STREET	BENSON TO CAMPUS
16 TH STREET	ENTIRE LENGTH
17 TH STREET	MOUNTAIN TO CAMPUS
18 TH STREET	BENSON TO CAMPUS
19 TH STREET	ENTIRE LENGTH
20TH STREET	MOUNTAIN TO EUCLID
21 ST STREET	"
22ND STREET	"
23RD STREET	"
24TH STREET	ENTIRE LENGTH
ARROW HIGHWAY	"
SAN BERNARDINO ROAD	"
FOOTHILL BOULEVARD	"
CENTRAL AVENUE	"
BENSON AVENUE	"
MOUNTAIN AVENUE	"
SAN ANTONIO AVENUE	"
CAMPUS AVENUE	"
GROVE AVENUE	"
EUCLID AVENUE	"



STREET NAME SIGNS REQUIRED

- (1) At any corner that is the first or only corner developed.
- (2) At any existing intersection with a PARTIAL STREET that is now being fully developed, the existing street name sign shall be relocated to the correct corner, if it was not originally placed at the "standard" location.

STANDARD LOCATIONS



Examples (3), (4), (5) & (6) are considered "Standard Locations" and the terms PRIMARY and SECONDARY are intended to denote which street is the more important: e.g.

PRIMARY	SECONDARY
Arterial	Collector
Select	Local
Thru Street	Cul-de-sac

- (7) On all 4-corners at the intersection of 2 Arterial Streets.
- (8) At the intersection of 2 Local Streets, the street considered to be the thru street will be based on examination of neighborhood street patterns.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	LOCATION OF REGULATORY AND STREET NAME SIGNS
B.G.	5/21/75	
REVISION BY	DATE	
B.F.	4/1/76	
		APPROVED BY <i>Edward P. R. [Signature]</i> CITY ENGINEER
		DRAWING NO. CU-G-4

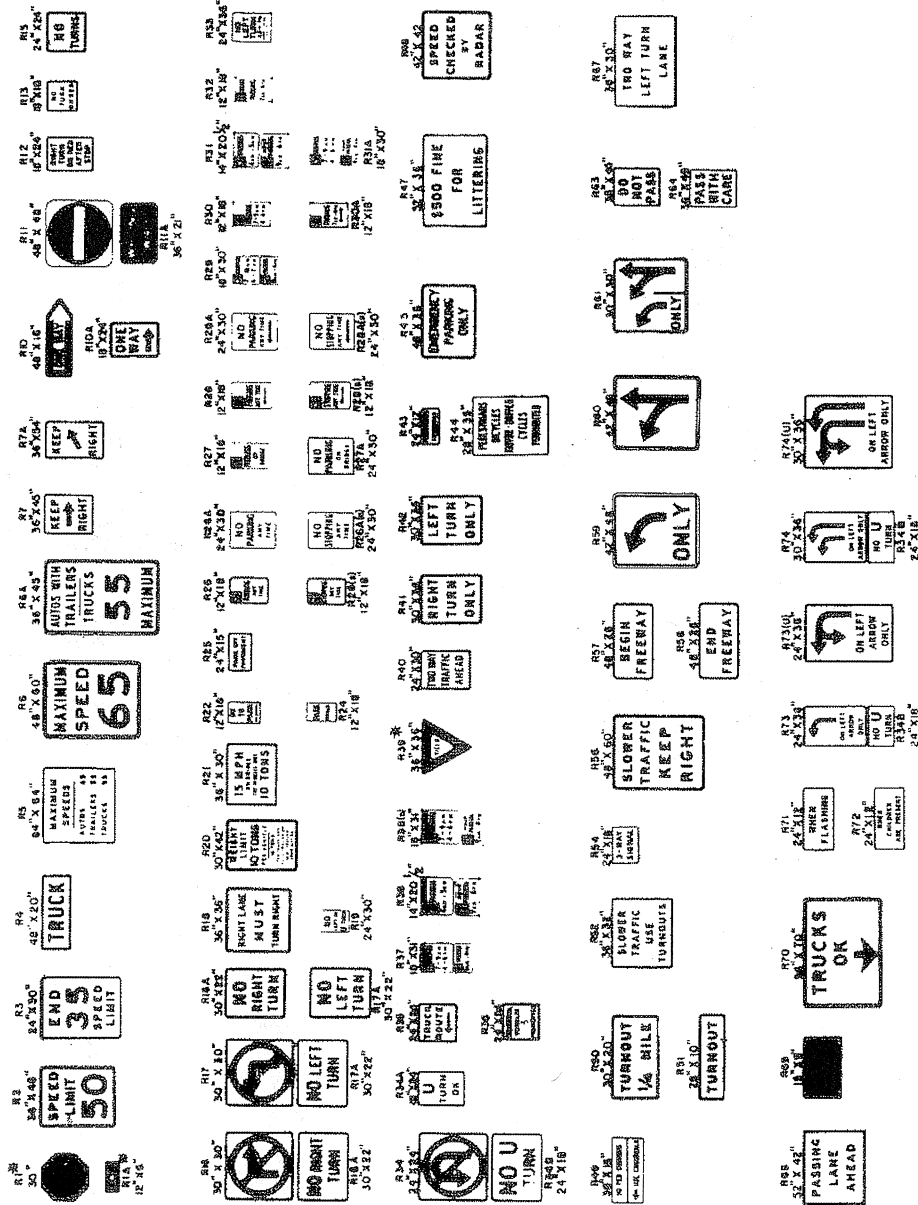
NOTES:

- SPECIFICATIONS PER "MANUAL ON UNIFORM TRAFFIC CONTROL" AND STATE OF CALIFORNIA "TRAFFIC MANUAL".
 - SIZE SHOWN WITH EACH SIGN.
 - REFLECTORIZED-PORCELAIN.
- LOCATION PER APPROVED IMPROVEMENT PLANS.
- POST AND POST HOLE PER STANDARD DRAWING NO. CU-G-2.
- MOUNTING HARDWARE (2 STRAPS) 3/4" STAINLESS STEEL STRAP WESTERN HIGHWAY PRODUCTS CO. NO. H13-032 OR EQUIVALENT.

STRAP-ON BRACKET WESTERN HIGHWAY PRODUCTS CO. NO. H1-SL OR EQUIVALENT.

SEAL-TITE BOLT WESTERN HIGHWAY PRODUCTS CO. NO. H6 OR EQUIVALENT.

REGULATORY SIGNS

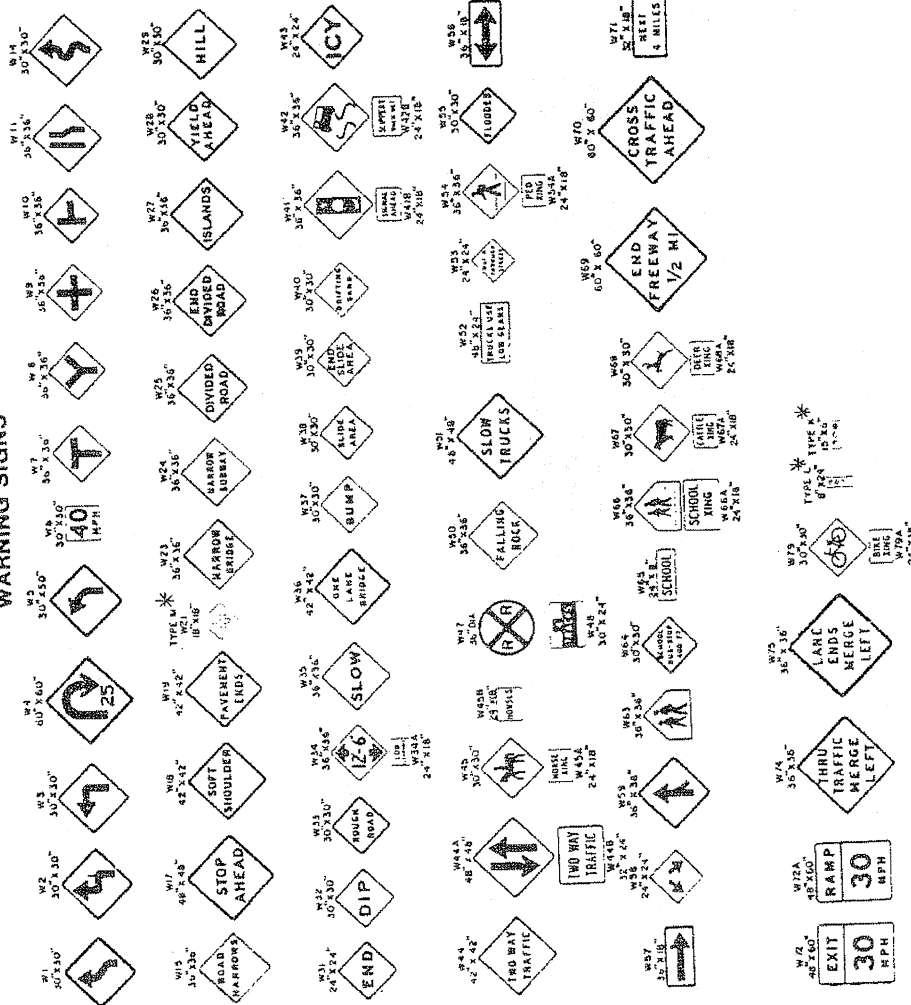


* SEE STANDARD
DRAWING NO. CU-G-2

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	REGULATORY	SIGNS
	5/21/75		SPECIFICATIONS
REVISION BY	DATE		
		APPROVED BY	<i>Paul C. Blum</i> CITY ENGINEER
			DRAWING NO. CU-G-3

WARNING SIGNS



CITY ENGINEER

DRAWING NO. CU-G-6

1. SPECIFICATIONS PER "MANUAL ON UNIFORM TRAFFIC CONTROL" AND STATE OF CALIFORNIA "TRAFFIC MANUAL".
2. LOCATIONS PER APPROVED IMPROVEMENT PLANS.
3. POST AND POST HOLE PER STANDARD DRAWING NO. CU-G-2.
4. MOUNTING HARDWARE (2 STRAPS) 3/4" STAINLESS STEEL STRAP WESTERN HIGHWAY PRODUCTS CO. NO. H13-O32 OR EQUIVALENT.
- STRAP-ON BRACKET WESTERN HIGHWAY PRODUCTS CO. NO. H1-SL OR EQUIVALENT.
- SEAL-TITE BOLT WESTERN HIGHWAY PRODUCTS CO. NO. H6 OR EQUIVALENT.

CITY OF UPLAND STANDARD DRAWING		WARNING SIGNS SPECIFICATIONS	APPROVED BY <i>Frank C. Blank</i>	CITY ENGINEER	DRAWING NO. CU G-6
DRAWN BY	DATE				
REVISION BY	5/21/75	DATE			

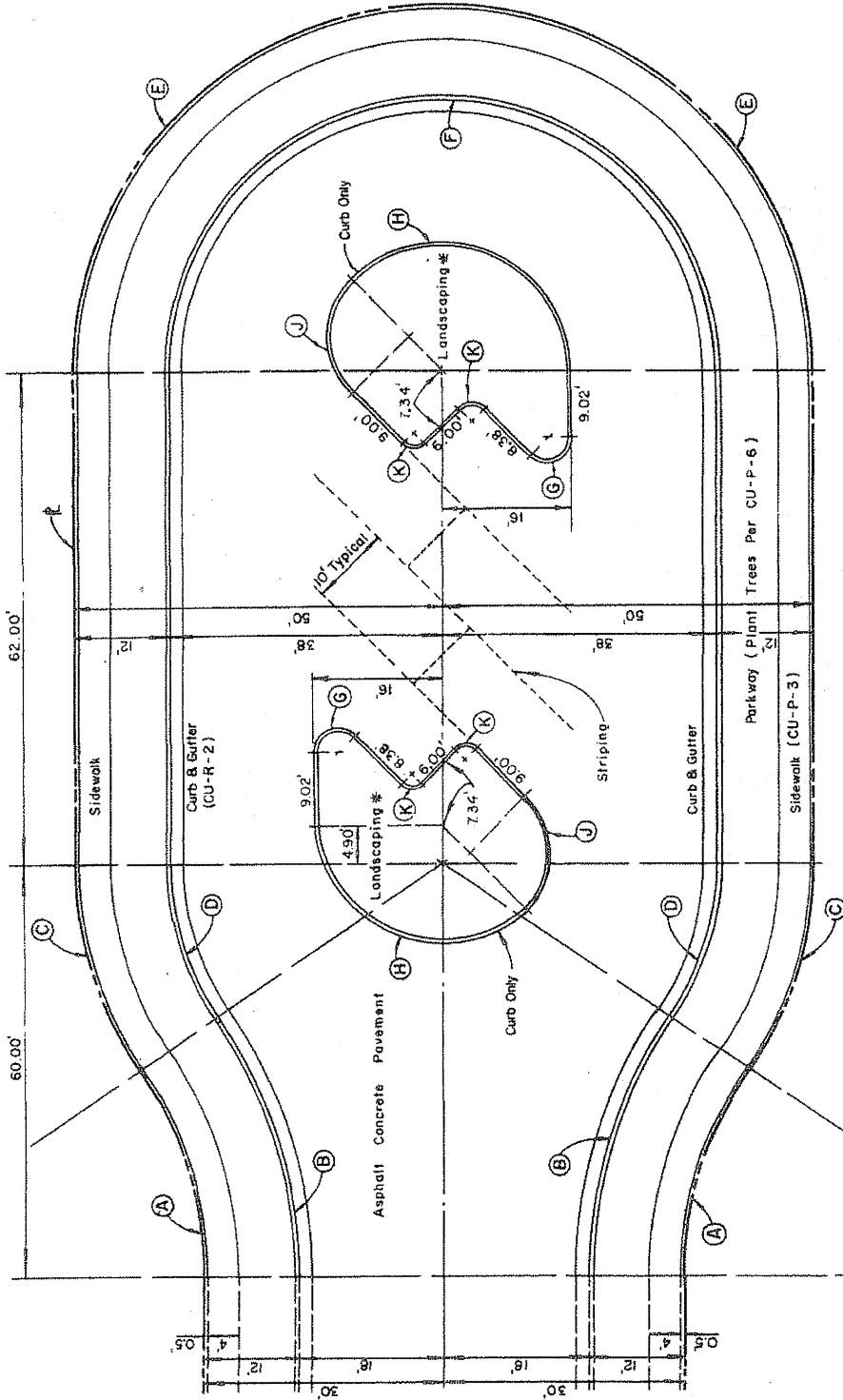
[illegible]

1. SPECIFICATIONS PER "MANUAL ON UNIFORM TRAFFIC CONTROL" AND STATE OF CALIFORNIA "TRAFFIC MANUAL".
 - (a) SIZE SHOWN WITH EACH SIGN.
 - (b) REFLECTORIZED-PORCELAIN.
2. LOCATION PER APPROVED IMPROVEMENT PLANS.
3. POST AND POST HOLE PER STANDARD DRAWING NO. CU-G-2.
4. MOUNTING HARDWARE (2 STRAPS)
 - 3/4" STAINLESS STEEL STRAP
 - WESTERN HIGHWAY PRODUCTS CO.
 - NO. H13-032 OR EQUIVALENT.
5. STRAP-ON BRACKET
 - WESTERN HIGHWAY PRODUCTS CO.
 - NO. H1-SL OR EQUIVALENT.
6. SEAL-TITE BOLT
 - WESTERN HIGHWAY PRODUCTS CO.
 - NO. H8 OR EQUIVALENT.

CITY OF UPLAND STANDARD DRAWING		CONSTRUCTION SIGNS SPECIFICATIONS		APPROVED BY <i>Frank C. Blanchard</i> CITY ENGINEER	DRAWING NO. CU-G-7
		DRAWN BY	DATE 5/4/75		
		REVISION BY	DATE		

CURVE DATA			
Curve	Radius	Delta	Length
A	50.00'	36°-52'-12"	32.18'
B	62.00'	36°-52'-12"	39.90'
C	50.00'	36°-52'-12"	32.18'
D	38.00'	36°-52'-12"	24.45'
E	50.00'	180°-00'-00"	157.08'
F	38.00'	180°-00'-00"	119.36'
G	3.00'	135°-00'-00"	7.07'
H	16.00'	135°-00'-00"	37.70'
J	10.00'	90°-00'-00"	15.71'
K	2.00'	90°-00'-00"	3.14'

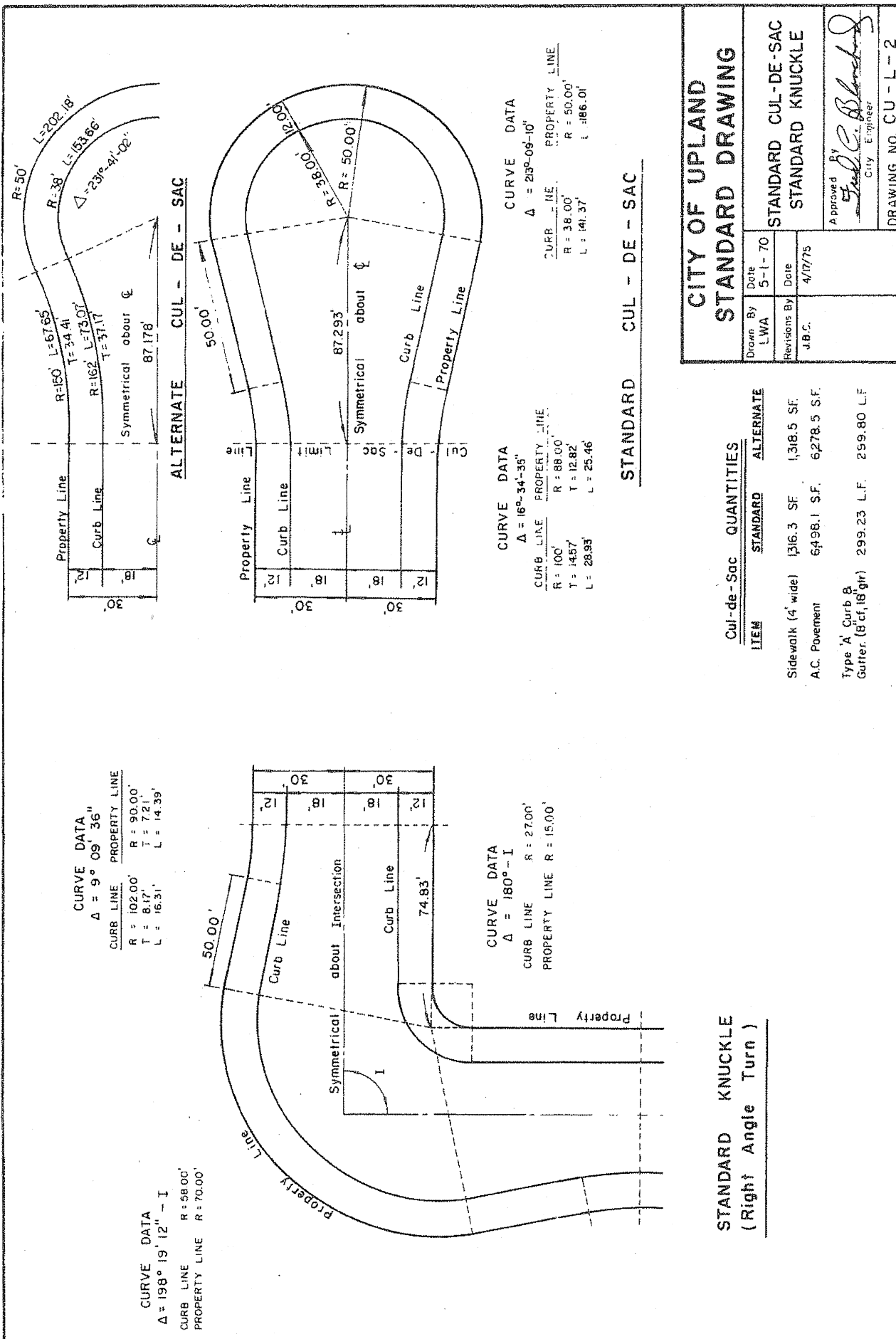
QUANTITIES	
Curb Only	198 L. F.
Curb & Gutter	37208 L. F.
Sidewalk	1607.7 S. F.
Island Landscaping	1168 S. F.
Pavement	8352 S. F.



* LANDSCAPING ISLANDS:
THE CENTER ISLANDS SHALL BE LANDSCAPED WITH GRASS COVER
AND TREES OF A TYPE REQUIRING A MINIMUM AMOUNT OF MAINTENANCE.
A CLOCK CONTROLLED AUTOMATIC SPRINKLER SYSTEM, CONNECTED TO
THE CITY WATER SUPPLY SHALL BE PROVIDED. LANDSCAPING PLANS
WILL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	OPTIONAL PLAN	
WH - LA	9-5-68	for	
REVISION BY	DATE	CUL - DE - SACS	
J.B.C.	4/16/75	APPROVED BY	
		<i>Fred C. Blomberg</i>	
		CITY ENGINEER	
		DRAWING NUMBER CU-L-1	



**STANDARD KNUCKLE
(Right Angle Turn)**

Cul-de-Sac QUANTITIES		
ITEM	STANDARD	ALTERNATE
Sidewalk (4' wide)	1316.3 SF	1318.5 SF
A.C. Pavement	6498.1 SF	6278.5 SF
Type 'A' Curb & Gutter (8' cf, 18" gr)	299.23 L.F.	259.80 L.F.

**CITY OF UPLAND
STANDARD DRAWING**

Drawn By LWA	Date 5-1-70
Revisions By J.B.C.	Date 4/17/75
Approved By <i>Frank C. Blanchard</i> City Engineer	
STANDARD CUL-DE-SAC STANDARD KNUCKLE	
DRAWING NO. CU-L-2	

NOTE:
Monumentation of Curve P.I.s in place
of Ends of Curves may be used when
approved by the City Engineer.

REQUIRED EXTERIOR BOUNDARY AND RELATED PERIMETER STREET MONUMENTATION

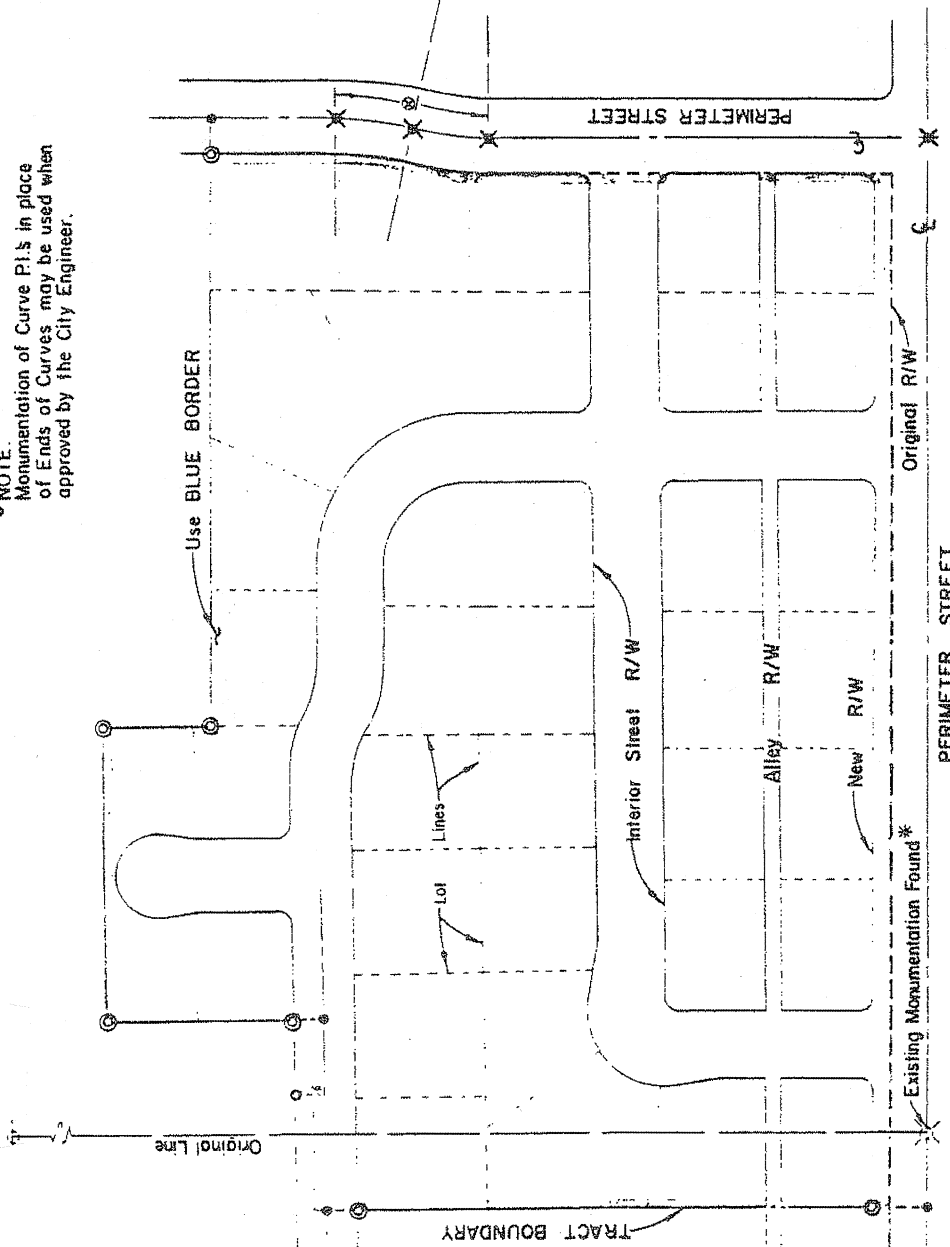
LEGEND

- INDICATES SET 1" IRON PIPE WITH
BRASS NAIL TAGGED WITH LS OR
RCE TAG.
- ⊙ INDICATES SET 2" IRON PIPE WITH
BRASS NAIL TAGGED WITH LS OR
RCE TAG.
- INDICATES SET 6" BOAT SPIKE OR
EQUIVALENT WITH CROSS OR
PUNCH MARK.
- ✕ INDICATES SET 6" BOAT SPIKE OR
EQUIVALENT WITH CROSS OR
PUNCH MARK. (TIES REQUIRED)

GENERAL NOTES

See Standard Drawing No. CU-L-4 for
Required Monumentation for Interior Streets
and Alleys.

See Standard Drawing No. CU-L-5 for
Street Tie Requirements.

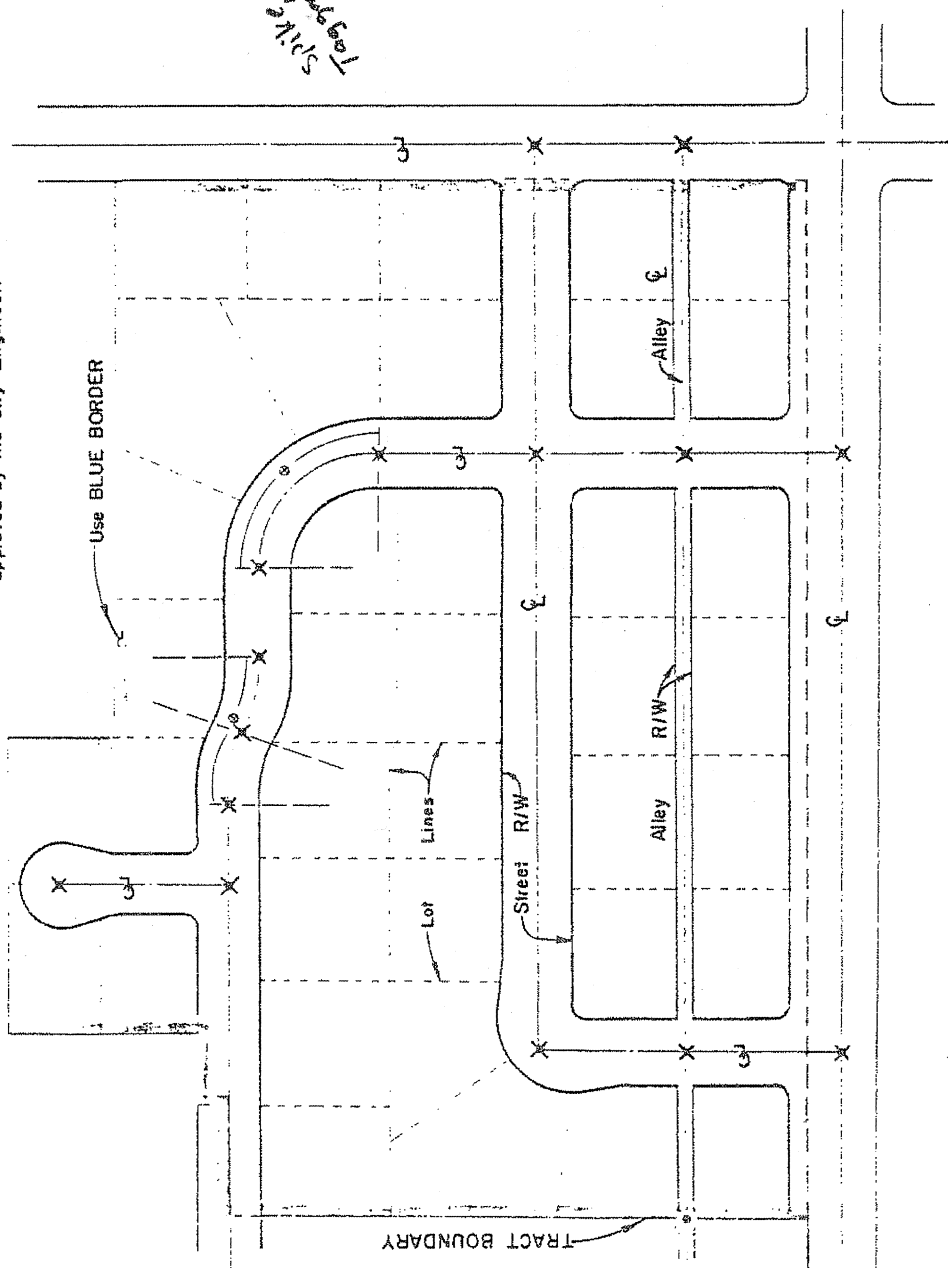


* NOTE:
Whenever existing monumentation is located within
the subdivision boundary or on the centerline of a
perimeter street, ties shall be established and
record per Standard Drawing No. CU-L-5, and said
point shall be preserved or reset.

CITY OF UPLAND STANDARD DRAWING

Drawn By	Date	EXTERIOR BOUNDARY & RELATED PERIMETER STREET MONUMENTATION
M a s.	7-28-72	
Revision By	Date	Approved By
		<i>Frank B. Black</i> CITY ENGINEER
		DRAWING NUMBER CU-L-3

NOTE:
Monumentation of Curve P.I.'s in place
of Ends of Curves may be used when
approved by the City Engineer.



REQUIRED MONUMENTATION FOR INTERIOR STREETS AND ALLEYS

LEGEND

- INDICATES SET 1" IRON PIPE WITH
BRASS NAIL TAGGED WITH LS OR
RCE TAG.
- INDICATES SET 6" BOAT SPIKE OR
EQUIVALENT WITH CROSS OR
PUNCH MARK.
- ✕----- INDICATES SET 6" BOAT SPIKE OR
EQUIVALENT WITH CROSS OR
PUNCH MARK. (TIES REQUIRED)

GENERAL NOTES

See Standard Drawing CU-L-3 for
Required Exterior Boundary and Related
Perimeter Street Monumentation.

CITY OF UPLAND STANDARD DRAWING

Drawn By	Date	MONUMENTATION FOR
M.A.S.	7-29-72	INTERIOR STREETS
Revision By	Date	AND ALLEYS

Approved By
Frank E. Blum
CITY ENGINEER

DRAWING NUMBER: CU-L-4

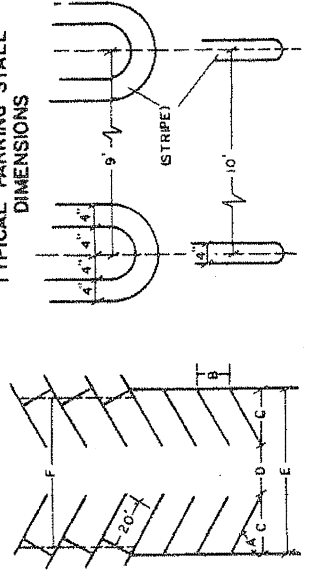
9' DOUBLE STRIPED SPACE

ANGLE	CURB LENGTH	STALL LENGTH	ASILE	BAY WIDTH	INTERLOCKING BAY WIDTH
30°	18'	17' 10"	12' 6"	48' 2"	39' 6"
40°	14'	19' 9"	13' 6"	53'	46' 1"
45°	12' 9"	20' 6"	14' 6"	55' 6"	49' 2"
50°	11' 9"	21' 1"	15' 6"	57' 8"	51' 11"
60°	10' 5"	21' 10"	19'	62' 8"	58' 2"
90°	9'	20'	26'	66'	66'
A	B	C	D	E	F

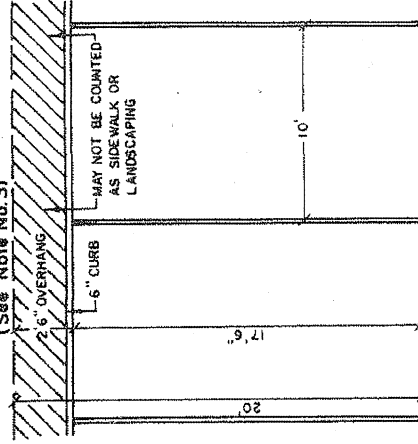
10' STANDARD SINGLE STRIPED SPACE

ANGLE	CURB LENGTH	STALL LENGTH	ASILE	BAY WIDTH	INTERLOCKING BAY WIDTH
30°	20'	10' 8"	12'	49' 4"	40' 8"
40°	15' 8"	20' 6"	12' 6"	53' 6"	45' 11"
45°	14' 2"	21' 3"	14'	56' 6"	49' 5"
50°	13' 2"	21' 9"	15'	58' 6"	51' 1"
60°	11' 6"	22' 4"	18'	62' 8"	57' 8"
90°	10'	20'	26'	66'	66'
A	B	C	D	E	F

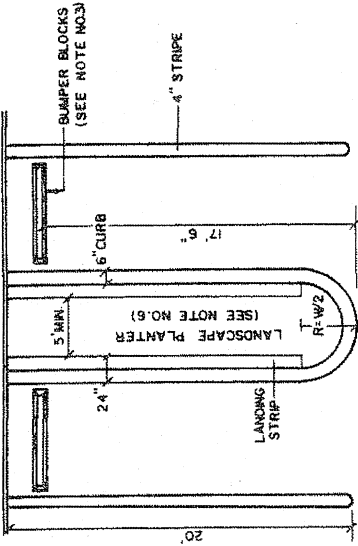
TYPICAL PARKING STALL DIMENSIONS



DEVELOPER OPTION BUMPER BLOCK (See Note No. 3)



LANDING STRIP REQUIREMENT



WHEREVER A PARKING STALL ADJUTS A LANDSCAPED PLANTER AREA, EITHER IN THE PARKING LOT OR ADJACENT TO A BUILDING, A 24" LANDING STRIP MUST BE PROVIDED.

THIS OPTION MAY BE APPLIED TO EITHER THE TEN FOOT STALL OR THE 9' DOUBLE STRIPED PARKING STALLS.

GENERAL NOTES:

1. FIRE DEPARTMENT REQUIREMENTS:
ANY PARKING AISLE THAT IS DESIGNATED BY THE FIRE DEPARTMENT AS A FIRE LANE IS A MINIMUM OF TWENTY-FOUR (24) FEET IN WIDTH.
FIRE EQUIPMENT TURNING RADIUS SHALL BE DESIGNED TO THE SATISFACTION OF THE FIRE DEPARTMENT WITH A MINIMUM INSIDE TURNING RADIUS OF 20' AND A MINIMUM OUTSIDE TURNING RADIUS OF 45'.
2. COMPACT CAR SPACES ARE NOT COUNTED AS BEING PART OF THE PARKING SPACES THAT ARE REQUIRED ON-SITE. FOR COMPACT CAR SPACES REFER TO DRAWING NO. CU-L-6 FOR DIMENSIONS.
3. BUMPER BLOCKS ARE REQUIRED TO BE PROVIDED ON ALL PARKING STALLS FRONTING A PROPERTY LINE, BUILDING, GARDEN WALL OR FENCE IN LIEU OF PROVIDING BUMPER BLOCKS, THE DEVELOPER MAY UTILIZE THE "DEVELOPER OPTION BUMPER BLOCK" DETAIL ILLUSTRATED HEREIN ABOVE.
4. DIMENSIONS OF SPECIAL TYPES OF PARKING STALL:
-- PARALLEL PARKING STALL: 10' X 23'
-- LOADING SPACE: 10' X 20' WITH 14' VERTICAL CLEARANCE
-- HANDICAPPED STALL: 14' X 20'
-- STALLS ADJACENT TO WALL OR RAISED PLANTER OVER 18" IN HEIGHT: 12' X 20'
5. VEHICLES SHALL NOT EXTEND OVER THE PUBLIC SIDEWALK OR PROPERTY LINES NOR SHALL PARKING STALLS BE LOCATED WHERE IT WOULD BE NECESSARY FOR THE DRIVER TO BACK UP ACROSS A PUBLIC SIDEWALK.
6. LANDSCAPING: LANDSCAPING SHALL BE PROVIDED AS REQUIRED BY THE UMC (5% MINIMUM OF THE PAVED PARKING AREA), & SHALL COMPLY WITH THE FOLLOWING CRITERIA:
-- MINIMUM INSIDE PLANTER WIDTH SHALL BE 5' & MINIMUM PLANTER AREA SHALL BE 40 SQ FT IN ORDER TO MEET THE 5% LANDSCAPING REQUIREMENTS
-- THE LANDSCAPED AREA OVERHUNG BY A PARKED VEHICLE SHALL NOT BE INCLUDED IN MEETING THE 5% LANDSCAPING REQUIREMENT

CITY OF UPLAND
STANDARD DRAWING

PARKING LOT
DESIGN STANDARD

DRAWN BY
P. O.

DATE
9-27-82

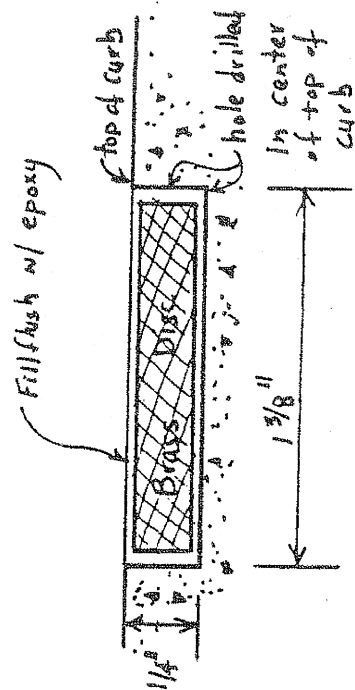
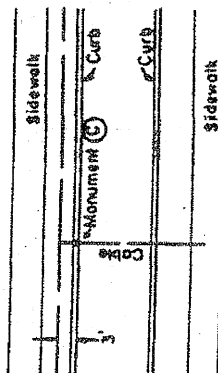
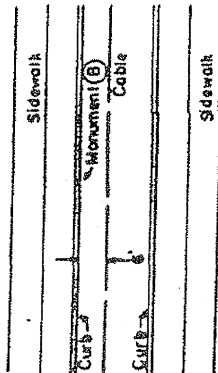
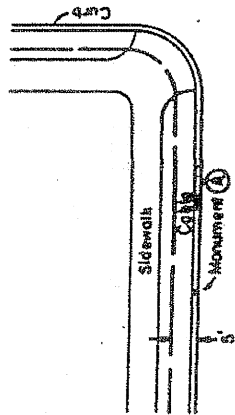
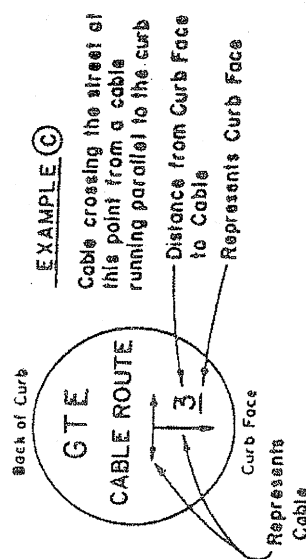
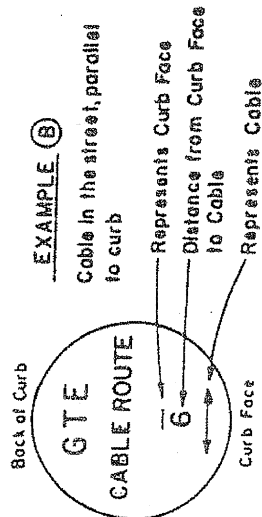
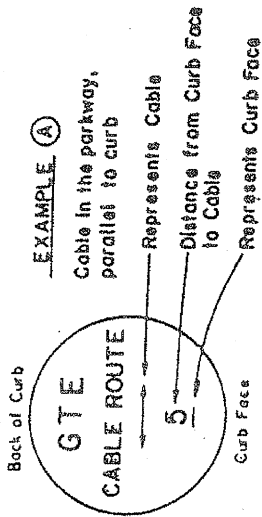
REVISION
BY

DATE

APPROVED BY

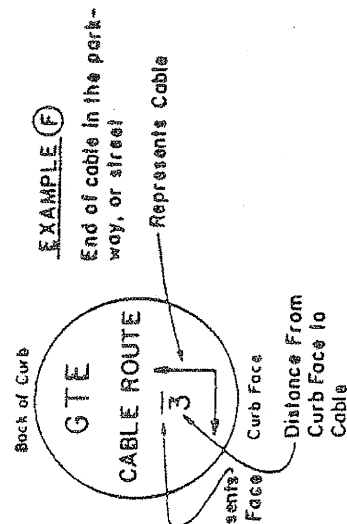
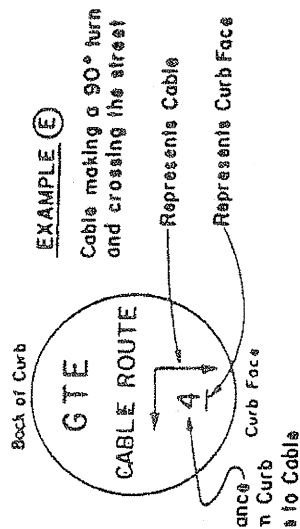
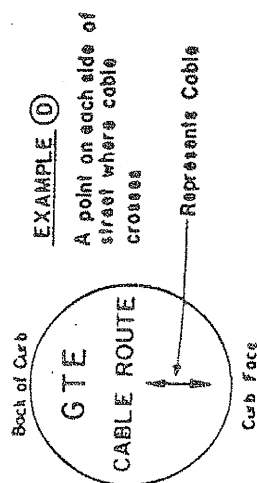
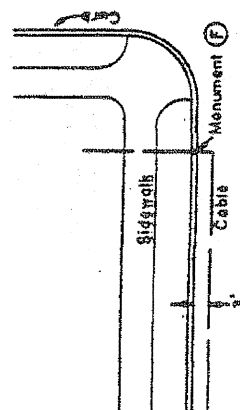
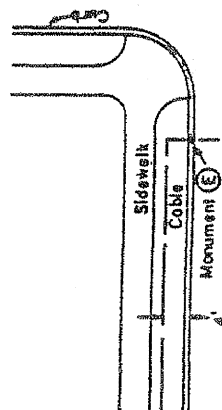
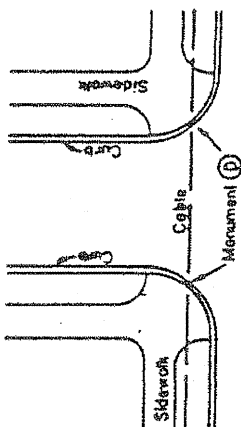
DEPUTY CITY ENGINEER

DRAWING NO. CU-L-5



Installation Detail
(no scale)

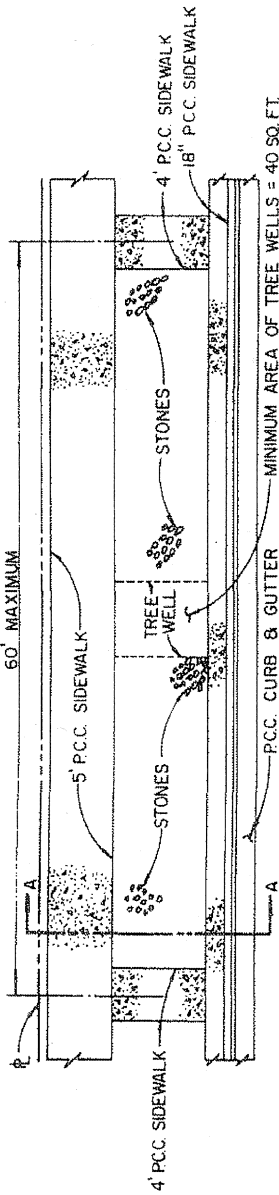
CITY OF UPLAND STANDARD DRAWING			
DRAWN BY	DATE	Utility Line Markers	
JJW	9/85	REVISION	DATE
BY		APPROVED BY	
		DATE	
		CITY ENGINEER	
		DRAWING NO.	CU-L-6



CITY OF UPLAND STANDARD DRAWING	Utility Line Markers		APPROVED BY <i>[Signature]</i> DEPT. CITY ENGINEER	DRAWING NO. C.U.-1-7
DRAWN BY JWW	DATE 9/85			
REVISION BY	DATE			

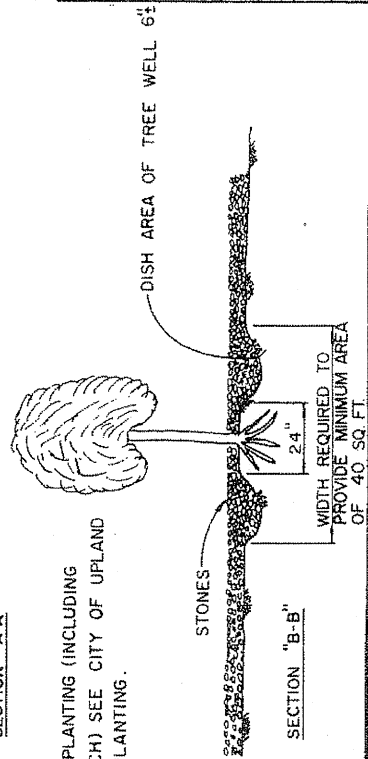
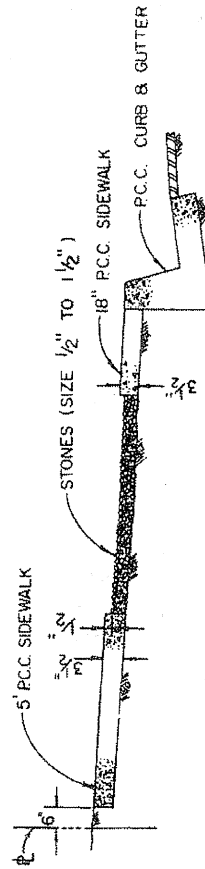
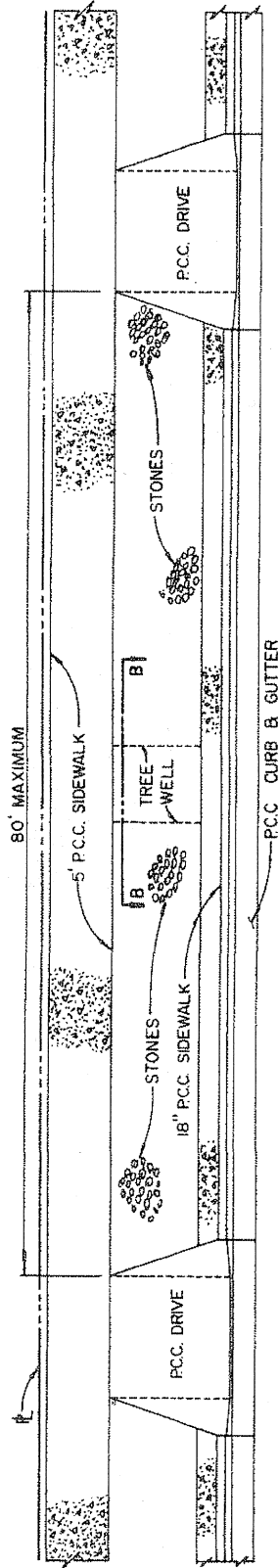
SPACING FOR 4' WALKS TO CURB

60' MAXIMUM



NO WALKS TO CURB REQUIRED

80' MAXIMUM

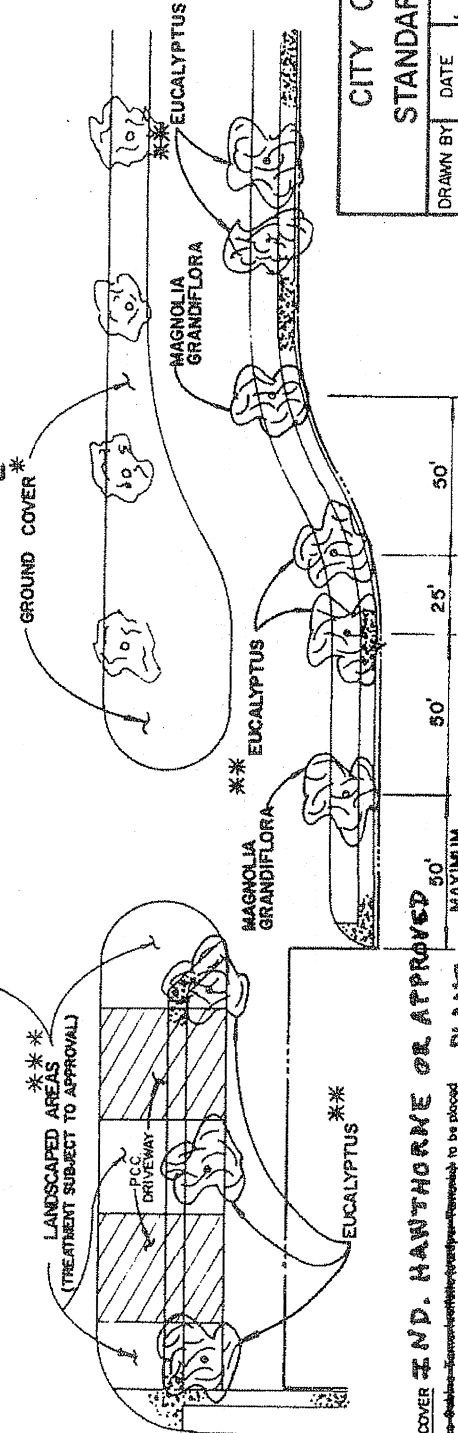


NOTE: FOR DETAILS ON TREE PLANTING (INCLUDING STAKES, TIES AND MULCH) SEE CITY OF UPLAND STANDARD FOR TREE PLANTING.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	STANDARD DETAIL FOR USE OF CRUSHED ROCK IN COMMERCIAL PARKWAYS
J.C.H.	11-10-64	
REVISION BY	DATE	
H.G.	5-11-66	APPROVED BY: <i>Frank E. Blomberg</i> CITY ENGINEER
L.G.K.	12-15-66	DRAWING NUMBER: CU-P-1

Tree spacing on indicated horizon is the desirable spacing; adjustments may be necessary to coordinate with drives, street lights, etc. . Trees located in the island between Foothill Blvd. and the Service Road should have varied spacing, and seed spacing should be coordinated with the location of trees in the parkway area along sections requiring parkway trees.



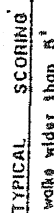
* GROUND COVER 2ND. HANTHORNE OR APPR PLANT
Asplenium adnigrum - Asplenium adnigrum - Asplenium to be placed
 throughout with transverses & 4/5 around the edges and

subsystems should be constructed to be placed throughout with creosote a 4' c.c. around the edges and N-groove a 4' c.c. in center areas. Sprinkler systems are required for all landscaped areas: islands, parkways, etc.

* EUCALYPTUS SPEROXYLON ROSEA (min. height 8')
required for all landscaped areas: islands, partways, etc.
Landscaped areas must be equipped with a sprinkler system designed to provide adequate irrigation to all plants and trees. See City of Upland Standard Drawing #6-10. Sprinkler system to be clock controlled, and connected to City water system.

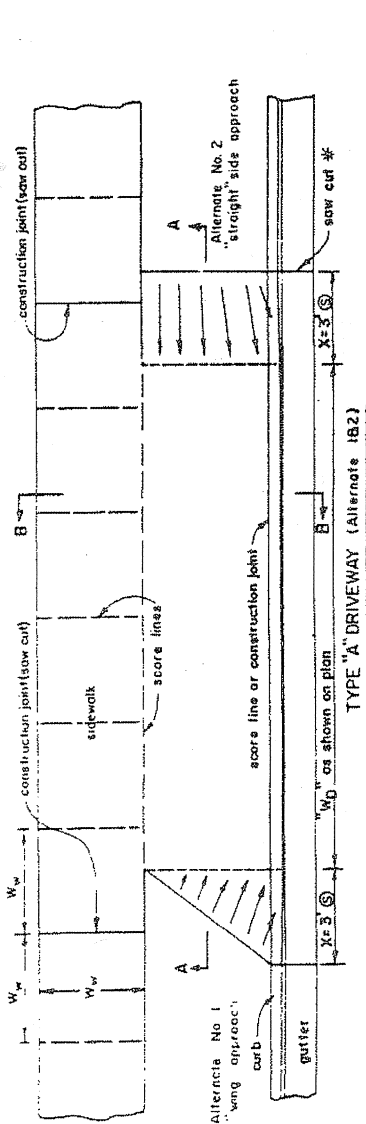
*** * * Corner Landscaped Areas shall include Junipers and Eucalyptus predominantly but may also include other planting for accent purposes**

CITY OF UPLAND		LANDSCAPE PLAN FOR		APPROVED BY <i>W. J. G. K.</i>	CITY ENGINEER	DRAWING NUMBER: CU-P-2
STANDARD DRAWING		FOOTHILL BOULEVARD				
DRAWN BY	DATE	REVISION		DATE		
J. C. H.	3-8-65					
		BY				
		W. J. G. K.		11-18-65		
		J. G. K.		6-2-67		
		LWG		5-15-70		

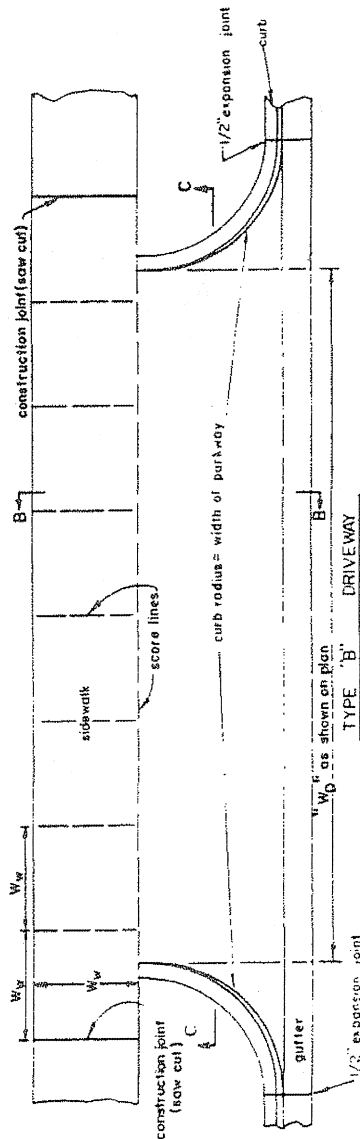


Alternate No. 1

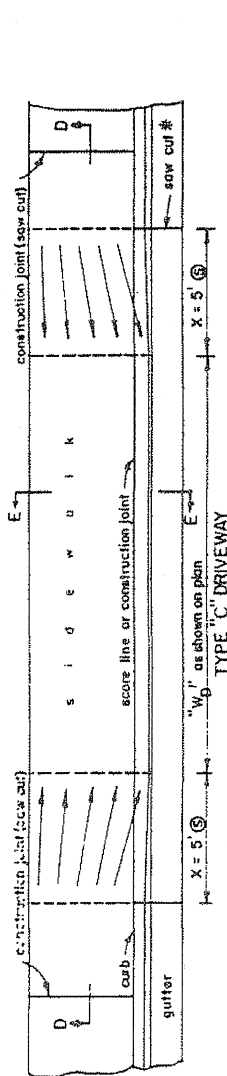
Alternate No. 2



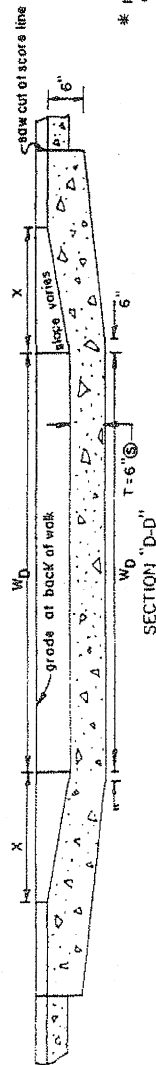
TYPE "A" DRIVEWAY (Alternate 1B2)



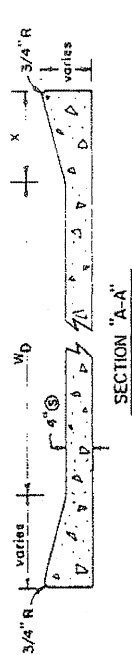
TYPE "B" DRIVEWAY



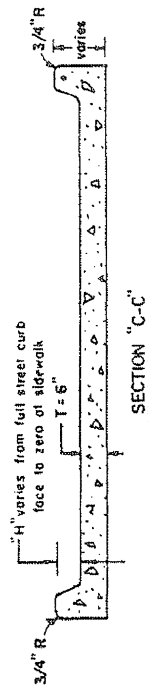
TYPE "C" DRIVEWAY



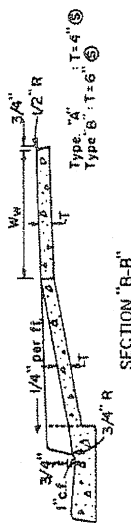
SECTION "D-D"



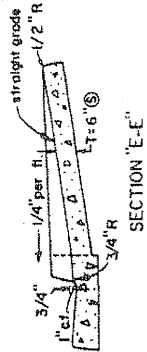
SECTION "A-A"



SECTION "C-C"



SECTION "B-B"



SECTION "E-E"

GENERAL NOTES

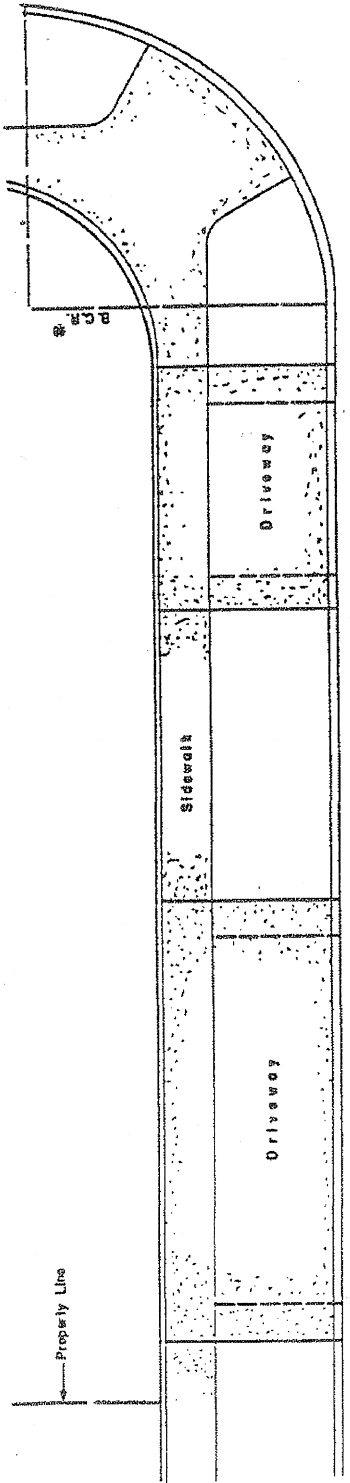
1. Type "A" (Alternate 1B2) are residential driveways only
- Type "B", "C" are commercial driveways

⑤ STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN.

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	DRIVEWAYS
Wah	7/20/65	
REVISIONS BY	DATE	
BQ	8-25-75	
APPROVED BY		
<i>Fred C. Blomberg</i>		CITY ENGINEER
DRAWING NO. CU-P-4		

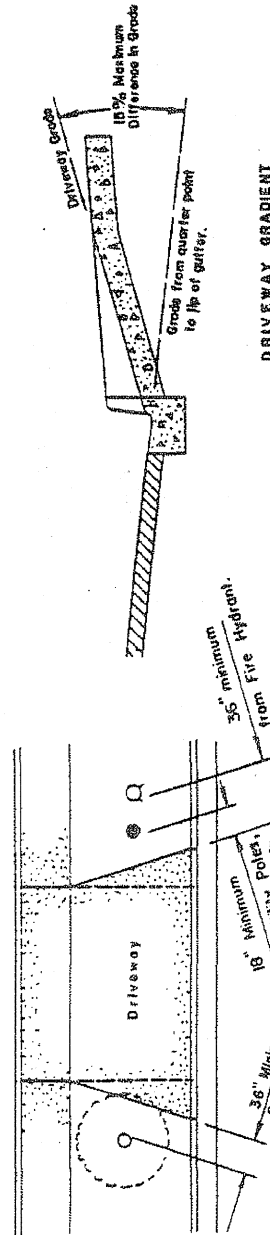
* If new curb cut falls within 5 ft. of expansion joint, remove curb to joint



STANDARD DRIVEWAY SPACING

GENERAL NOTES

- The maximum total width of driveways, including the 'X' dimensions, to be allowed for a residential lot shall be 40% of the lot frontage.
- The maximum total width of driveways, including the 'X' dimensions, to be allowed for a commercial lot shall be 50% of the property frontage.
- Exceptions to these maximum and minimum dimensions may be granted by the City Engineer under special conditions.
- * Curb return for either Street or Alley.



CITY OF UPLAND STANDARD DRAWING

DRIVEWAY CLEARANCES

36" Minimum
See Std. Drawg.
No CU-P-5 for
existing drive
approach and
new trees.

18" Minimum
from Utility Poles,
Light Standards.

36" Minimum
from Fire Hydrant.

DRIVEWAY GRADIENT

Grade from quarter point to 1/4 of gutter.

Driveway Grade

18% Maximum
Difference in Grade

DRIVEWAY LOCATIONS

DATE

8/6/65

DATE

12-13-73

APPROVED BY

City Engineer

DRAWING NO. CU-P-5

See approved
57. Tree List

ALBIZIA julibrissin. SILK TREE - Deciduous
 ARCHONTOPHOENIX cunninghamiana (Seaforthia elegans). KING PALM. Evergreen
 BAUHINIA variegata. PURPLE ORCHID TREE. Deciduous
 BAUHINIA variegata 'Candida'. WHITE ORCHID TREE. Deciduous
 BETULA pendula. EUROPEAN WHITE BIRCH. Deciduous
 BRACHYCHITON acerifolia (Sterculias acerifolia). FLAME TREE, AUSTRALIA, FLAME TREE. Deciduous
 BRACHYCHITON populneus (Sterculia diversifolia). BOTTLE TREE. Evergreen
 CAESALPINIA gilliesii (Poinciana gilliesii). BIRD OF PARADISE BUSH. Deciduous
 CALLISTEMON citrinus (C. lanceolatus). LEMON BOTTLEBRUSH. Evergreen
 CALLISTEMON viminalis. WEEPING BOTTLEBRUSH. Evergreen
 CASSIA leptophylla. GOLD MEDALLION TREE. Evergreen
 CERCIDIUM floridum (C. torreyanum). BLUE PALO VERDE. Deciduous
 CERCIS occidentalis. WESTERN REDBUD. Deciduous
 CHIONANTHUS retusus. CHINESE FRINGE TREE. Deciduous
 CHORISIA speciosa. FLOSS SILK TREE. Evergreen
 CINNAMOMUM camphora. CAMPHOR TREE. Evergreen
 CUPANIOPSIS anacardioides. CARROT WOOD, TUCKEROO. Evergreen
 ERYTHRINA coralloides. NAKED CORAL TREE. Deciduous
 EUCALYPTUS torquata. CORAL GUM. Evergreen
 FICUS microcarpa nitida. INDIAN LAUREL FIG. Evergreen
 GINKGO biloba. MAIDENHAIR TREE. Deciduous
 GLEDITSIA triacanthos 'Sunburst'. HONEY LOCUST. Deciduous
 HETEROMELES arbutifolia (Photinia arbutifolia). TOYON, CHRISTMAS BERRY, CALIFORNIA HOLLY. Evergreen
 HYMENOSPORUM flavum. SWEETSHADE. Evergreen
 JUNIPERUS scopulorum 'Blue Haven'. BLUE HEAVEN. Evergreen
 KOELREUTERIA bipinnata (K. integrifoliola). CHINESE FLAME TREE. Deciduous
 KOELREUTERIA paniculata. GOLDENRAIN TREE. Deciduous
 LAGERSTROMIA indica. CRAPE MYRTLE. Deciduous
 LIRIODENDRON tulipifera. TULIP TREE. Deciduous
 MAGNOLIA grandiflora. SOUTHERN MAGNOLIA. BULL BAY. Evergreen
 MAGNOLIA grandiflora 'Majestic Beauty'. MAGNOLIA. Evergreen
 MAGNOLIA soulangiana, SAUCER MAGNOLIA (Often erroneously called TULIP TREE). Deciduous
 MAGNOLIA soulangiana 'Alexandrina'. SAUCER MAGNOLIA. Deciduous
 MALUS floribunda. JAPANESE FLOWERING CRABAPPLE. Deciduous
 MELALEUCA quinquenervia (sold as M. leucadendra). CAJEPUT TREE. Evergreen
 OLEA europaea. OLIVE. Evergreen
 PICEA pungens 'Glauc'. COLORADO BLUE SPRUCE. Evergreen
 PINUS canariensis. CANARY ISLAND PINE. Evergreen
 PINUS eldarica. 'Mondell Pine'. CALABRIAN PINE. Evergreen
 PINUS pinaster. CLUSTER PINE, FRENCH TURPENTINE PINE, MARITIME PINE. Evergreen
 PINUS pinea. ITALIAN STONE PINE. Evergreen
 PISTACIA chinensis. CHINESE PISTACHE. Deciduous
 PITTOSPORUM rhombifolium. QUEENSLAND PITTOSPORUM. Evergreen
 PITTOSPORUM undulatum. VICTORIAN BOX. Evergreen
 PLATANUS acerifolia. (Often sold as P. orientalis.) LONDON PLANE TREE. Deciduous
 PODOCARPUS gracilior. (Often sold as P. elongatus.) FERN PINE. Evergreen
 PRUNUS cerasifera. CHERRY PLUM, MYROBALAN. Deciduous
 PRUNUS cerasifera 'Krauter Vesuvius'. PURPLE LEAF PLUM. Deciduous
 PRUNUS cerasifera 'Thundercloud'. PURPLE LEAF PLUM, Deciduous
 PYRUS calleryana. ORNAMENTAL PEAR. Deciduous
 QUERCUS ilex, HOLLY OAK, HOLM OAK. Evergreen
 QUERCUS suber. CORK OAK. Evergreen
 SAPIUM sebiferum. CHINESE TALLOW TREE. Deciduous
 TABEBUIA avellanedae. (T. ipe). Deciduous
 TABEBUIA chrysotricha. (sometimes sold as T. putcherrima,) GOLDEN TRUMPET TREE. Deciduous
 ZELKOVA serrata. SAWLEAF ZELKOVA, Deciduous

Foothill Service Island Plant Material Recommendations

Recommended species are the result of evaluating each for their appearance/maintenance factors; tolerance to chemicals and smog/heat; growth habit in our environment and traffic visibility.

1. *Pittosporum tobira* "Wheelerii", Dwarf Mock Orange.
2. *Raphiolepis indica* "Enchantress", Dwarf Pink India Hawthorn.
3. *Lagerstroemia indica* "Petites", Dwarf Crepe Myrtles.
4. *Xylosma congestum* "Compactum", Dwarf Xylosma.
5. *Ilex vomitoria* "Nana", Dwarf Yaupon Holly.
or
Ilex cornuta "Rotunda", Dwarf Chinese Holly.
6. *Juniperus chinensis* "Armstrongii" ♦ Armstrong Juniper.

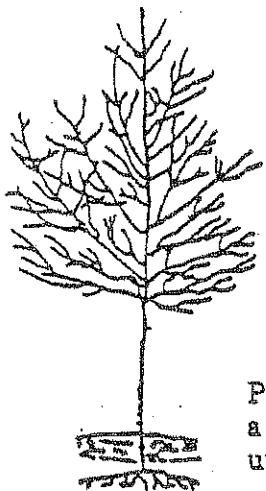
(Armstrong Juniper can be used for good effect in special situations - i.e. individual wells on rock median island on Foothill Blvd. at Mountain Ave.)

7. *Nandina domestica* Compacta "Nanair", Dwarf Heavenly Bamboo.
8. *Leucophyllum texanum* "Compacta", Texas Ranger Shrub.
9. *Escallonia* "Fradesi", Compact Escallonia.
10. *Agapanthus africanus*, Lily of the Nile.

PRUNING TREES

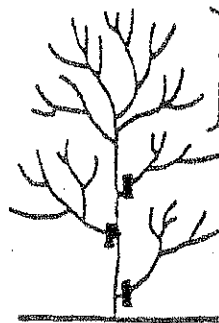
Remove crossing limbs, broken branches, and excessive growth next to the tree to admit sunlight and air circulation.

Make three saw cuts to prevent ripping the bark of the tree trunk. Start the first cut on the underside of the limb about one foot from the trunk or branch and saw through one third of the branch. Start the second cut on top of the branch, about 3 inches behind the bottom cut, sawing until the branch splits off. Saw off the stub flush with the trunk to allow the wound to heal.



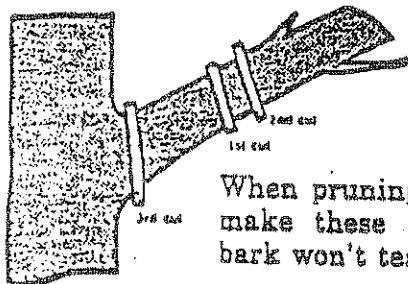
Lower branches on street trees should be removed to a height of 8 to 10 feet.

Prune this way to give tree a head you can walk or mow under.



Head or Crown

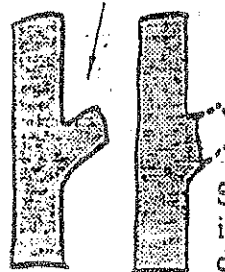
Remove side growth from trunk to encourage high, well formed head or crown.



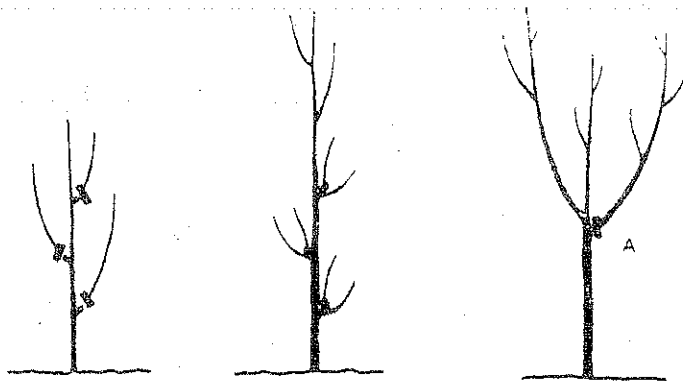
When pruning large limbs, make these three cuts so bark won't tear.

To prevent tearing bark, split in trunk, cut limb as shown.

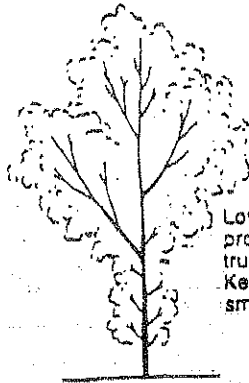
Don't Leave Stubs



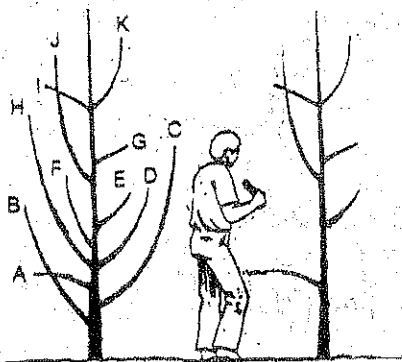
Stub looks ugly; more important, it can result in decay. Cut branch to trunk.



To keep the leader dominant, pinch back strong, competing laterals. The leader on the right has been choked out by strong growing laterals. The original leader and the less desirable lateral should be removed.



Low, temporary branches protect and nourish the trunks of young trees. Keep them relatively small by pruning.



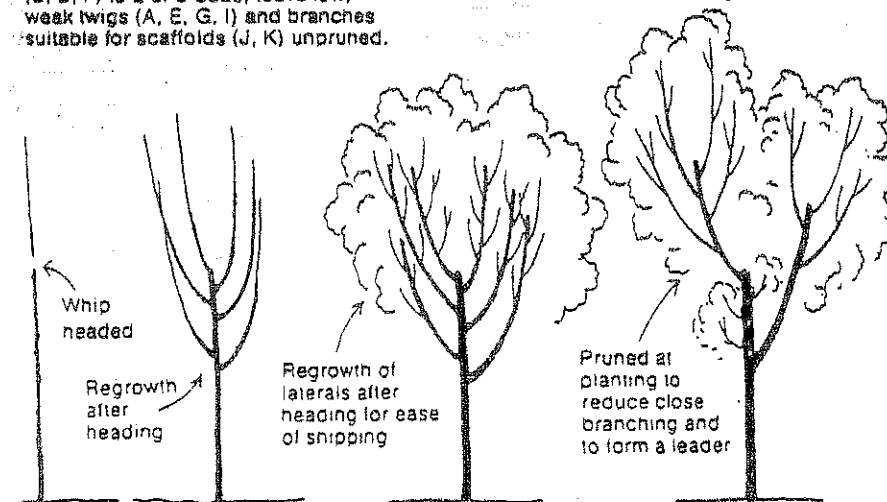
Selection of temporary branches: Thin out low, vigorous ones (C, H) head low limbs of moderate vigor (B, D, F) to 2 or 3 buds; leave low, weak twigs (A, E, G, I) and branches suitable for scaffolds (J, K) unpruned.



All branches on short, young trees are handled as temporary until the tree grows tall enough to have scaffolds at the desired heights.

Ortho
"The World of
Trees"

Chevron Chemical
Company 19-



Unfortunately many landscape trees are headed before you buy them. Such trees often need severe pruning to develop a framework high enough above the ground.

1. Parkway treatment per this Standard Drawing is

1. Parkway treatment per this Standard Drawing is **REQUIRED** for the following:
- (a) All frontage or double - frontage lots.
 - (b) All uses subject to Conditional Use Permits, except where a Special Parkway Landscaping Plan (which includes an automatic sprinkler system and lawn or other low growth plantings) has been approved

2. Parkway treatment^s per this Standard Drawing is PERMITTED in the following instances:

permitted in the following instances:

- All Industrial Zones
- All Commercial Zones
- All Multi-Family Residential Zones
- Side yards in Single-Family Residential Zones
- Under Special Conditions Only (as approved by Engineering Dept.) for front yards in Family Residential Zones.

* Where this type of pathway treatment is used for any of the above listed "permitted locations" pathway tree irrigation shall be provided by one of the following:

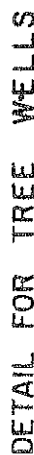
- (1.) Underground sprinkler system per detail this drawing, except not to be connected to the City water system.

- (2.) Open fire wells (not covered by masonry materials) having a minimum area of 40 s.f. and an above ground water spigot at each fire well.

³⁰ 3. All manufacturer's names and catalog numbers listed herein are for descriptive purposes only and in each instance shall be deemed to be followed by "Or Equal As Approved by The Engineer".

* 4. The water supply line shall include approved automatic control equipment; vacuum breaker; City meter. The size of the water supply line varies with the number of wells served—minimum size shall be 3/4" diameter pipe; all piping shall be Schedule 40 galvanized iron pipe with threaded joints.

DRIVEN BY LWA	DATE 10-1-70	PARKWAY TREATMENT with MASONRY MATERIALS (Required @ Permitted Locations)
Revisions By:	DATE	
		APPROVED BY <i>Fred C. Blanchard</i> CITY ENGINEER
		DRAWING NO. CU - P 7



No Scale

2010

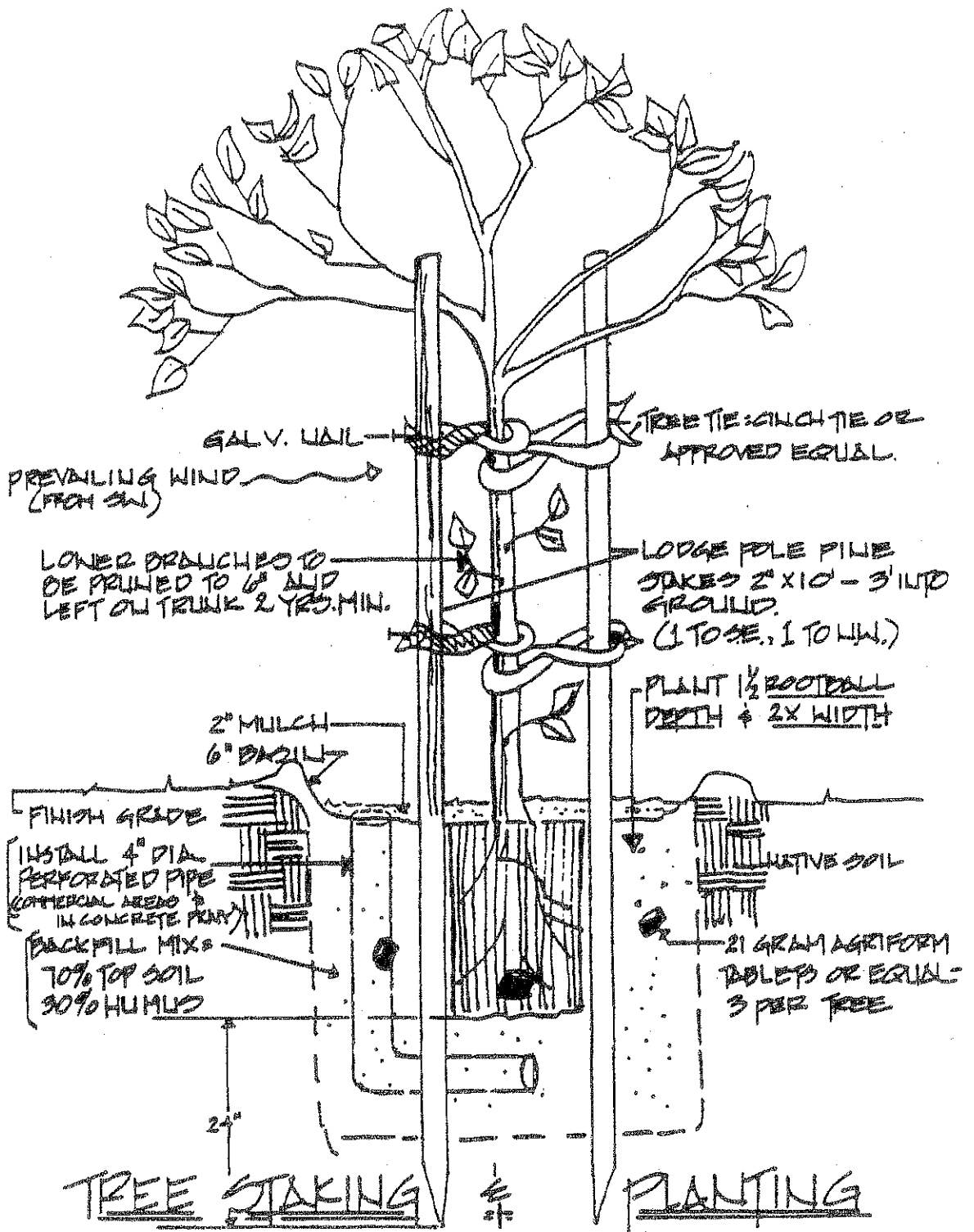
Mo Cola



© Other Styles and Materials
As Approved by the
City Engineer.

DESCRIPTION OF TREE WELL MATERIALS®

BROOKS	1-R	7 1/2" x 12"	Box	1 Ea
BROOKS	1-RD16	Cast Iron	Cover	1 Ea
ORANGEBURG	Elbow	4" dia., 90°		2 Ea
ORANGEBURG	Perforated Pipe,	4" dia.		4-LF Min
RAIN-O-MAT	Flood Head	No. 302-B	1 Ea	



Construction Permits for Work in Parkways

1. Capital Projects Engineer Hudson reported on an ongoing problem encountered in damage to parkway improvements incident to major projects of sidewalk or curb replacements. Citizens create or have created a number of parkway treatments which can be damaged during reconstruction of curbs or sidewalks. In some cases, the repair of these improvements is much more expensive than the sidewalk or curb repair. To avoid major unexpected repair costs in the future, staff recommended two courses of action for Committee consideration:
 - a. When citizens obtain permits to install improvements in the public right-of-way (parkways), they be made aware that subsequent sidewalk, curb or other projects may damage those improvements, and that extraordinary cost of repair will normally not be assumed by the City.
 - b. When the City sets up a project for such repairs, and it is apparent that there may be substantial damage to installed work in the parkway, there will be discussion with the adjoining property owner as to the possibility of damage and who will bear the cost of repair -- prior to initiation of work. Some types of parkway improvements do not present a major cost to repair, others do and it is important to determine costs prior to commencing work.

The Committee recommends that Council approve the concepts set forth above as a guide to staff for future work.

S/L. 4/1/87

STD. PLAN NSP A88

EST. COUNTY	NO. 107	DATE	APPROVED
JULY 1, 1992 PLANS APPROVED DATE			

NOTES

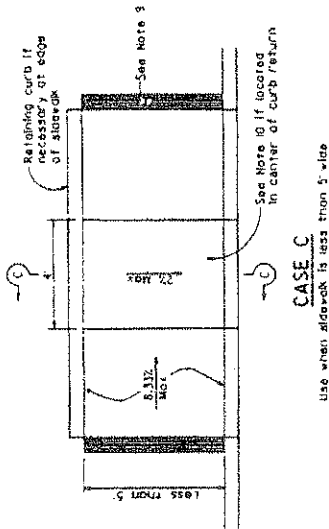
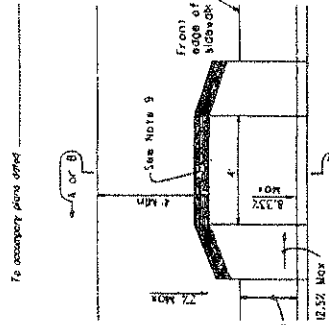
1. If distance from curb to back of sidewalk is less than 5' and the sidewalk is to be depressed, the curb shall be depressed longitudinally as in Case A or C or may be widened as in Case B.
2. If sidewalk is less than 5' wide, the full width of the sidewalk shall be depressed as shown in Case C.
3. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown on the plan to accommodate wheelchair.
4. If planting area width is equal to or greater than ramp length (i.e., ramp slope shall be distance ≥ 3 times Case B).
5. For Cases F and G, the longitudinal portion of the sidewalk may need to be depressed as shown in Case B.
6. If located on a curb, the sides of the sidewalk shall be depressed out the minimum width of the ramp, shall be 4".
7. The bottom of the utility shall have a $1/2"$ lip at 45°.
8. Sidewalk and ramp thickness, 1' and 12" respectively.
9. The ramp shall have a 12" wide border with $1/2"$ grooves approximately $1/2"$ on center. See grooving detail. The surface of the ramp shall be rougher than the surrounding sidewalk except when located in center of curb return.
10. When ramp is located in center of curb return, it shall be grooved in a herringbone pattern with $1/2"$ grooves approximately $1/2"$ on center. See grooving detail. The surface of the ramp shall be rougher than the surrounding sidewalk except when located in center of curb return.
11. Ramp slope shall vary uniformly from a maximum of 4% to 25% of curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Cases C and G.
12. Utility boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp shall be relocated by others prior to or in conjunction with curb ramp construction.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURB RAMP DETAILS NO. 1

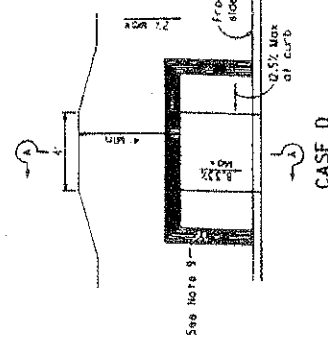
NO SCALE

NEW STANDARD PLAN NSP A88



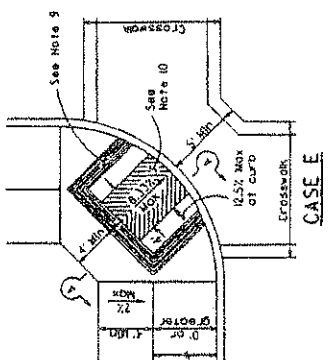
CASE C

Use when sidewalk is less than 5' wide



CASE D

CASE E



CASE F

CASE G

DETAIL H

GROOVING DETAIL

LIP DETAIL

SECTION A-A

SECTION B-B

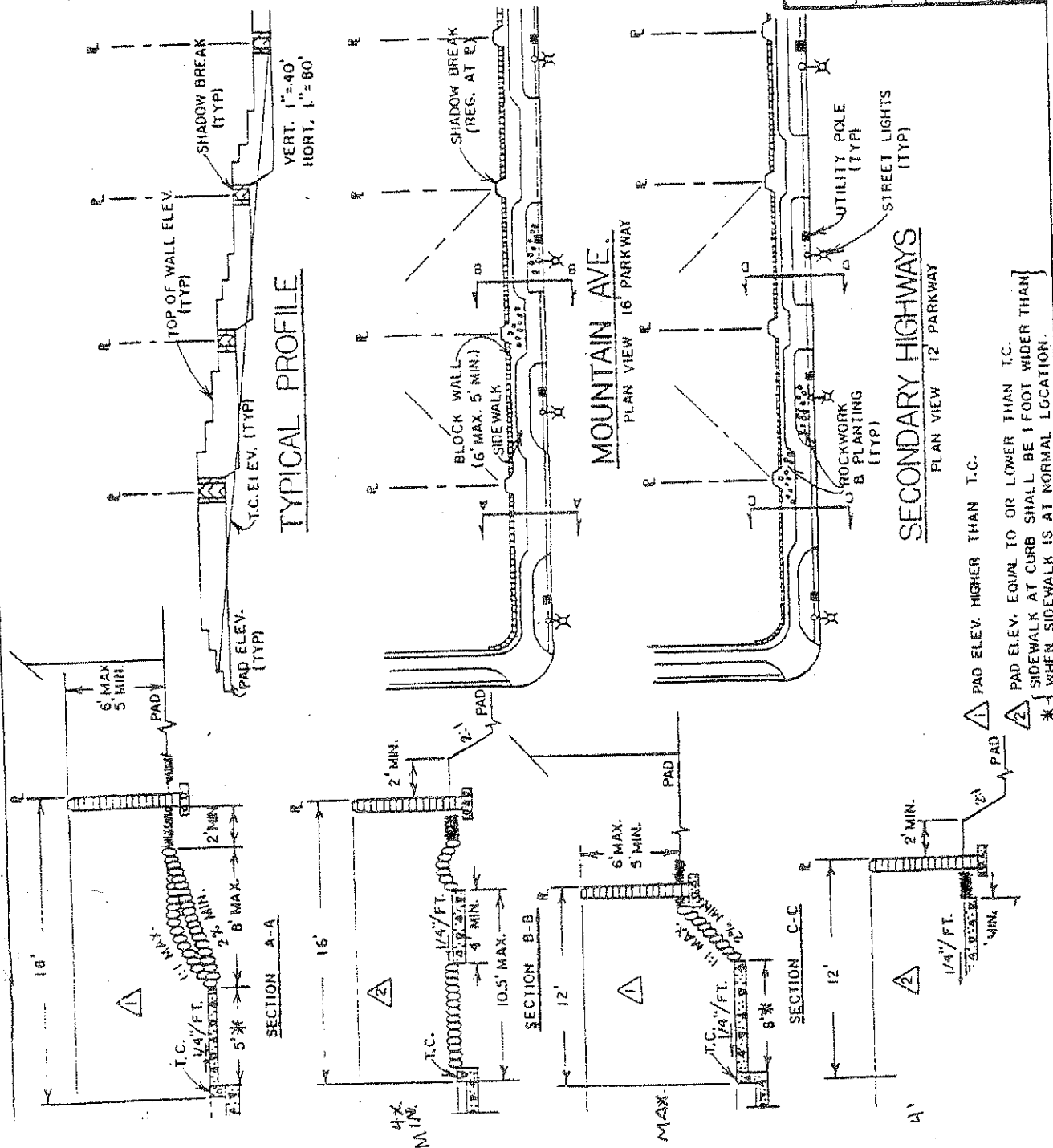
SECTION C-C

1/4" = 1' - 0" CU P-8/1
(Supersedes CU P-8)

① ALL ITEMS SHOWN ON THIS STANDARD DRAWING, SHALL APPEAR ON THE STREET IMPROVEMENT PLANS.

- ② FOR PARKWAY ROCK, DETAILS, SEE
STANDARD PLANS, "MOUNTAIN
AVENUE PARKWAY LANDSCAPING"
DETAILS.
- ③ REFER TO STD. DWG. CU-E-1, FOR
DETAILS OF REAR YARD EMBANKMENT'S
AT EXTERIOR LOT LINES, AND STD.
DWG. CU-E-2 FOR DETAILS OF REAR
YARD EXCAVATIONS AT EXTERIOR
LOT LINES.

- ④ REFER TO PROJECT LANDSCAPE PLANS FOR ARCHITECTURAL TREATMENT OF WALLS, SHADOW BREAKS AND PLANTING DETAILS.
- ⑤ IRRIGATION SYSTEM IS REQUIRED. REFER TO STANDARD DRAWINGS CU-P-6 AND CU-P-7 AND PROJECT LANDSCAPING PLANS FOR DETAILS.
- ⑥ WALL HEIGHTS EXCEEDING MAXIMUM SHOWN SHALL BE SUBJECT TO APPROVAL BY ADMINISTRATIVE COMMITTEE
- ⑦ PAD ELEVATION IS FINISHED FLOOR ELEVATION MINUS 6".



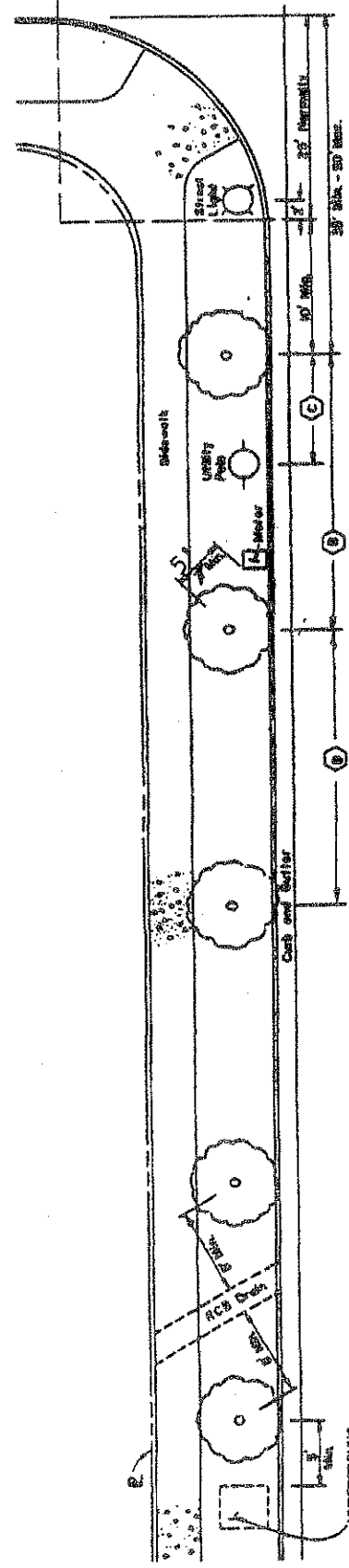
CITY OF UPLAND STANDARD DRAWING		PARKWAY LANDSCAPING MOUNTAIN AVENUE SECONDARY HIGHWAYS	
DRAWN BY	DATE	APPROVED BY	2-11-81
FV		DEPT. CITY ENGINEER	
		DRAWING NO. CU-P-10	

NOTES

For approved tree list and planting details see Standard Drawing CU-P-6

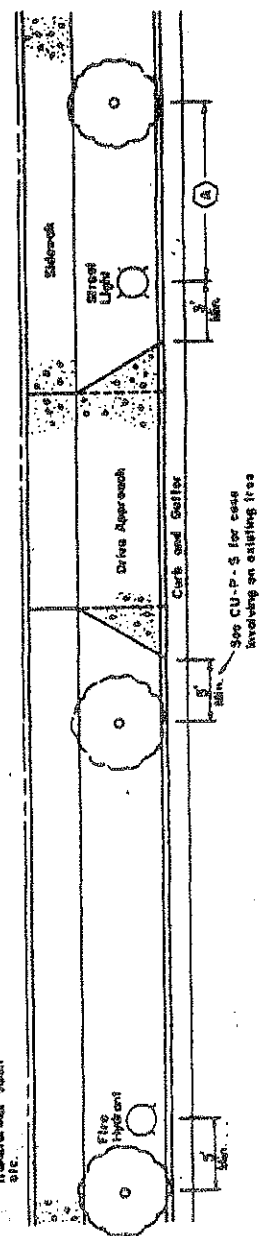
LEGEND

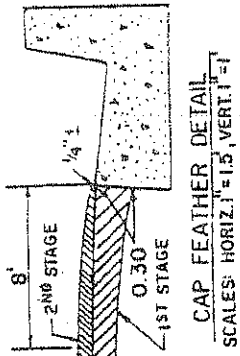
- (A) 10' Min. - for those trees listed under "Small Trees" on Standard Drawing CU-P-6
15' Min. - for all other trees
- (B) Spacing in accordance with minimum and maximum dimensions shown on CU-P-6.
- (C) 6' Min. - for those trees listed under "Small Trees" on Standard Drawing CU-P-6
10' Min. - for all other trees
- (D) The Min. for (A) and (C) shall be 1/2 (B) max.



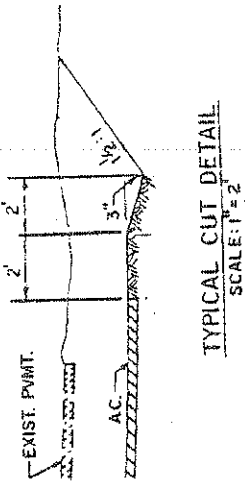
CITY OF UPLAND STANDARD DRAWING

DESIGNED BY	DATE	CLEARANCES
D.V.H.	10/23/73	FOR
REVISION BY	DATE	PLACING STREET TREES AND STREET LIGHTS
R.J.W.	10-10-78	Approved By
		<i>Paul J. Black</i>
		CITY ENGINEER
		DRAWING NO. CU-P-9

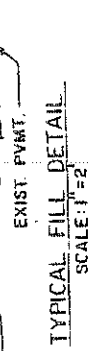




CAP FEATHER DETAIL
 SCALES: HORIZ. 1"=1.5', VERT. 1"=1'



TYPICAL CUT DETAIL
 SCALE: 1"=2'



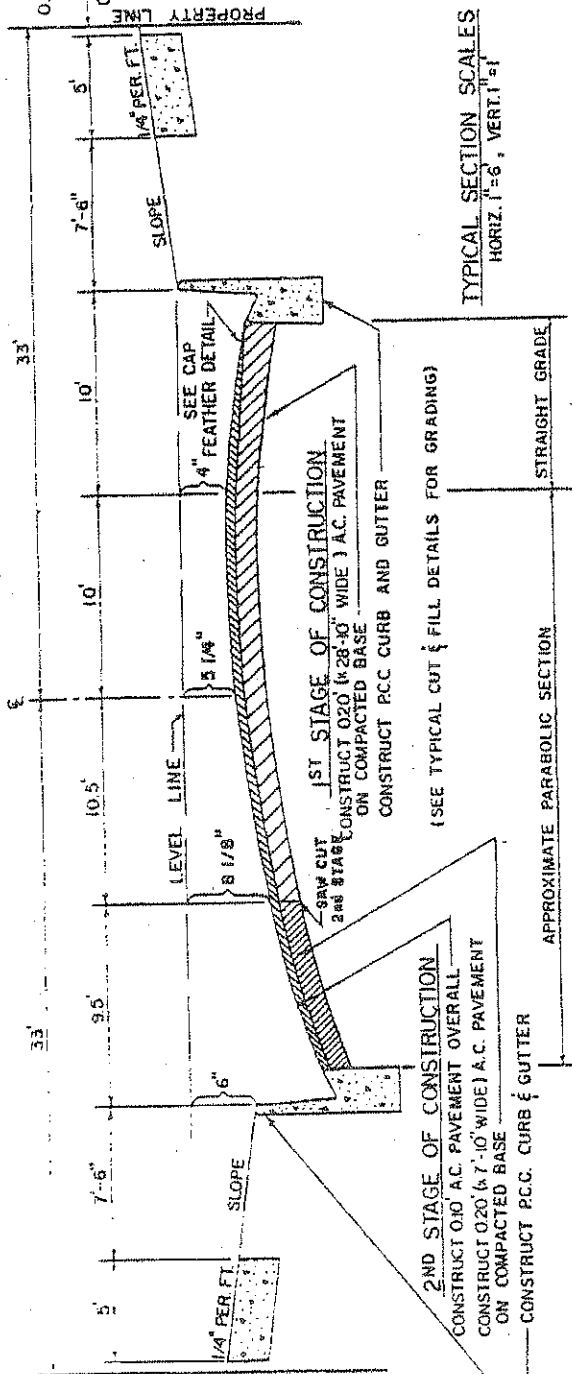
TYPICAL FILL DETAIL
 SCALE: 1"=2'

TYPICAL SECTIONS
 FOR
 STAGE CONSTRUCTION OF
 SELECT SYSTEM STREETS

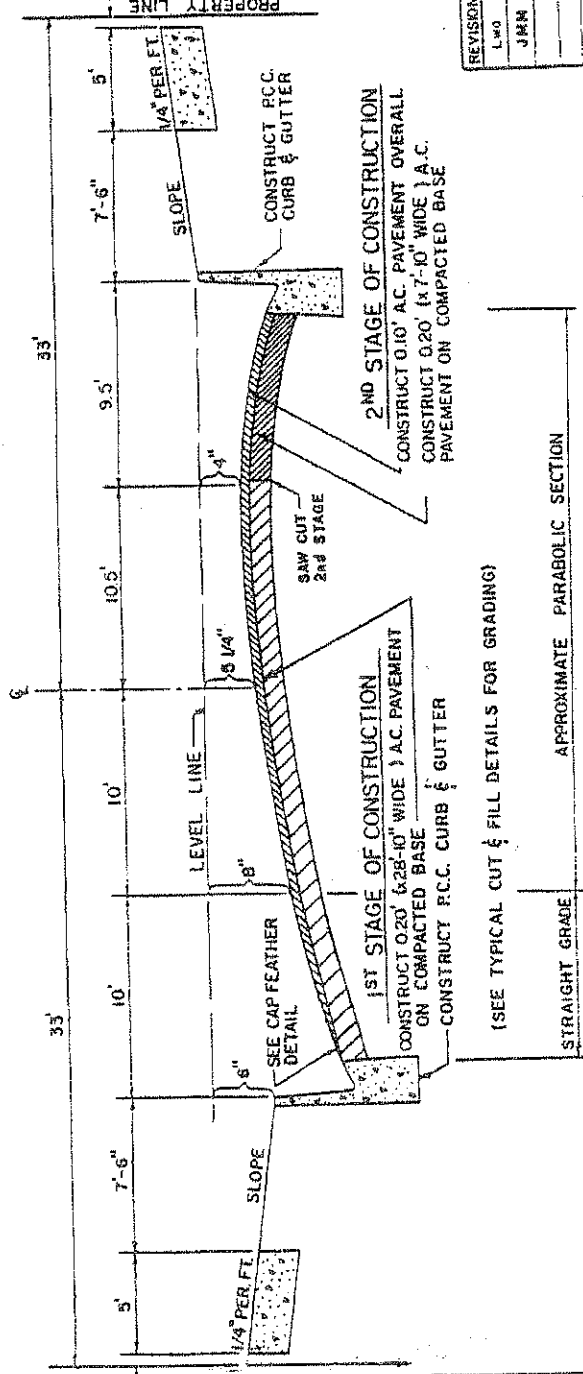
CITY OF UPLAND

REVISIONS	DATE
1	5-15-70
2	2-24-72
3	
4	
5	

DRAWN BY: Paul Harris	APPROVED BY: <i>Paul Harris</i>
CHECKED BY: JMM	CITY ENGINEER RCE 1903
DATE: March 15, 1975	
SHEET NO. 2 OF 3 SHEETS	DRAWING NO. CU-5-1



TYPICAL SECTION SCALES
 HORIZ. 1"=6', VERT. 1"=1'



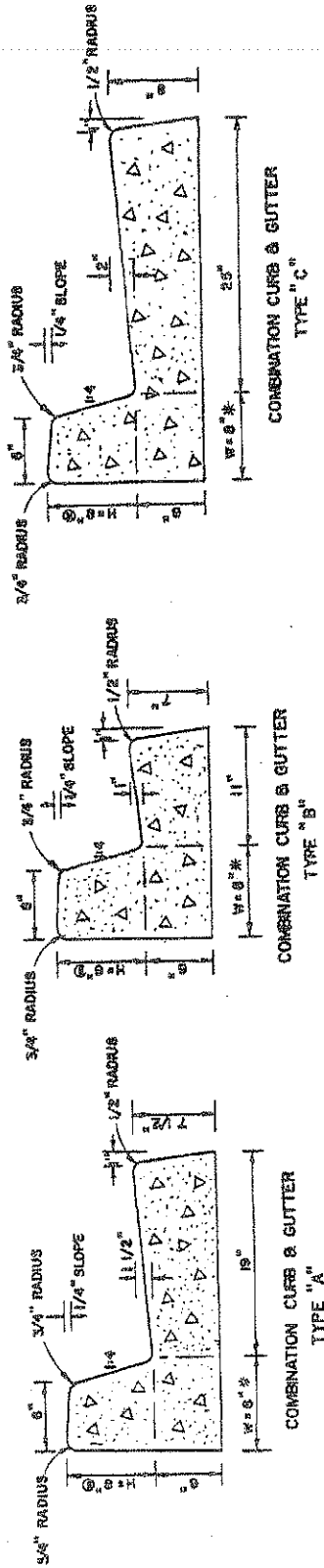
2ND STAGE OF CONSTRUCTION
 CONSTRUCT 0.10' A.C. PAVEMENT OVERALL
 CONSTRUCT 0.20' (4' 7'-10\"/>

1ST STAGE OF CONSTRUCTION
 CONSTRUCT 0.20' (4' 7'-10\"/>

(SEE TYPICAL CUT & FILL DETAILS FOR GRADING)

APPROXIMATE PARABOLIC SECTION

STRAIGHT GRADE



GENERAL NOTES

1. ALL CURBS AND GUTTERS ARE TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE PER CITY OF UPLAND STANDARD SPECIFICATIONS.
2. TYPE "A" CURB & GUTTER SHALL BE USED IN ALL INSTANCES EXCEPT AS NOTED HEREON.
3. TYPE "C" CURB & GUTTER SHALL BE USED WHENEVER THE FLOW LINE GRADIENT IS LESS THAN 0.60%.
4. TYPE "B" CURB & GUTTER, MODIFIED TYPE "A", MODIFIED TYPE "C", AND SPECIAL CURB AND GUTTER SECTIONS SHALL ONLY BE USED WHEN SPECIFICALLY CALLED FOR ON THE PLANS.

© STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN

CITY OF UPLAND
STANDARD DRAWING

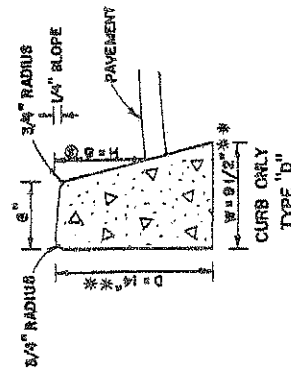
DRAWN BY	DATE	COMBINATION CURB & GUTTER AND CURBS ONLY
WCH	8-25-64	
REVISION BY	DATE	APPROVED BY
JRM	10-28-71	<i>John C. Blomberg</i> CITY ENGINEER
		DRAWING NUMBER: CU-R-2

* VARIABLE DIMENSIONS
CURB & GUTTER

HEIGHT	WIDTH
6"	7 1/2"
7"	7 3/4"
9"	8 1/4"
10"	8 1/2"
11"	8 3/4"
12"	9"

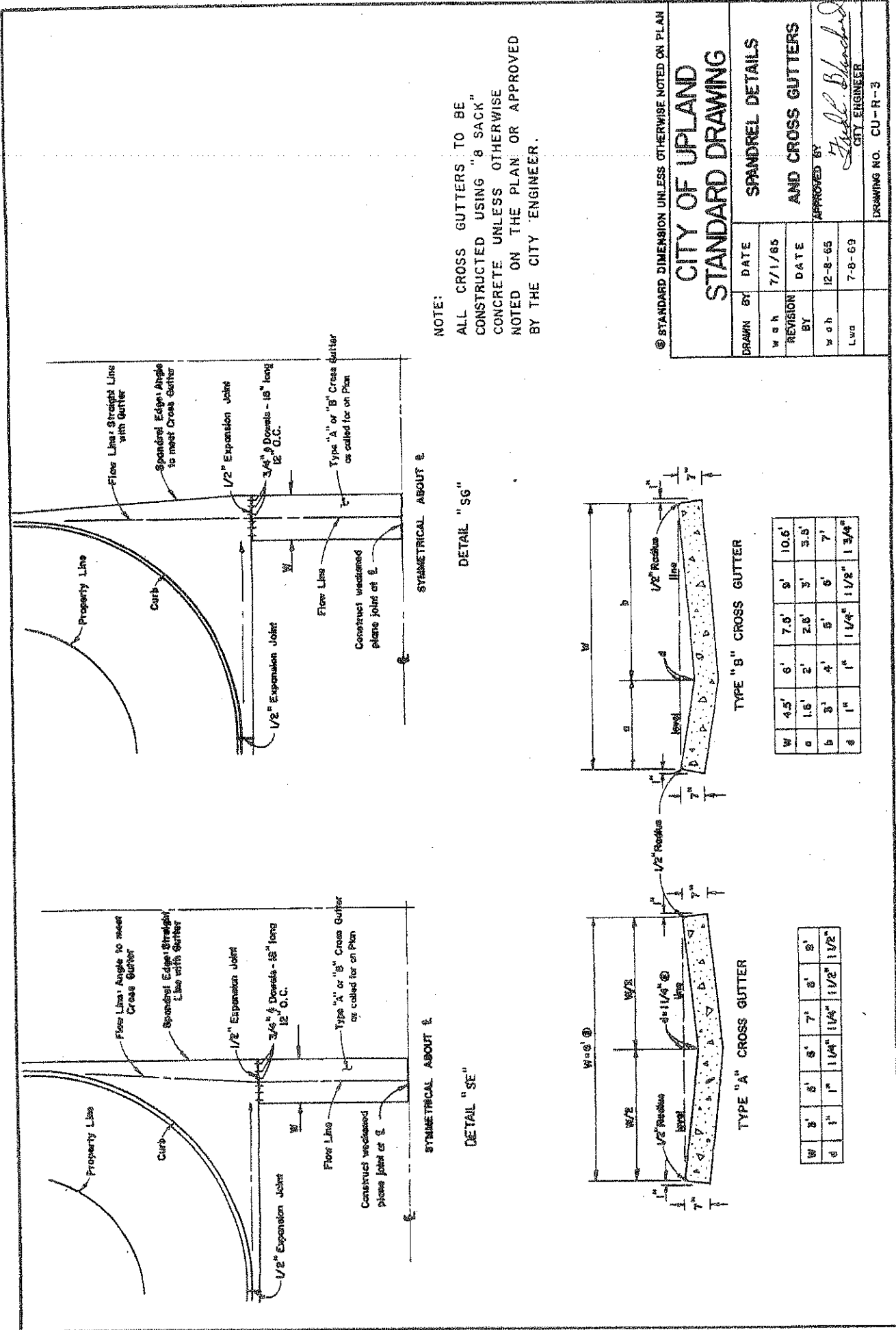
** VARIABLE DIMENSIONS
CURB ONLY

HEIGHT	DEPTH	WIDTH
4"	10"	8 1/2"
5"	11"	8 3/4"
6"	12"	9"
7"	13"	9 1/4"
9"	15"	9 3/4"
10"	16"	10"
11"	18"	10 1/2"
12"	19"	10 3/4"
13"	20"	11"
14"	21"	11 1/4"



** DIMENSIONS SHOWN FOR "D" & "W" ARE FOR STANDARD 8" CURB HEIGHT. WHEN PLANS CALL FOR OTHER THAN H=8", USE "D" & "W" FROM TABLE INCLUDED HEREON.

* DIMENSION SHOWN FOR "W" IS FOR STANDARD 8" CURB HEIGHT. WHEN PLANS CALL FOR OTHER THAN H=8", USE "W" FROM TABLE INCLUDED HEREON.



NOTE:
 ALL CROSS GUTTERS TO BE
 CONSTRUCTED USING "B SACK"
 CONCRETE UNLESS OTHERWISE
 NOTED ON THE PLAN OR APPROVED
 BY THE CITY ENGINEER.

© STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN

CITY OF UPLAND STANDARD DRAWING

DRAWN BY		DATE	
W a h		7/1/65	
REVISION		DATE	
BY		DATE	
W a h		12-8-65	
L w d		7-8-69	

**SPANDREL DETAILS
AND CROSS GUTTERS**

APPROVED BY

Thelma Blanchard
CITY ENGINEER

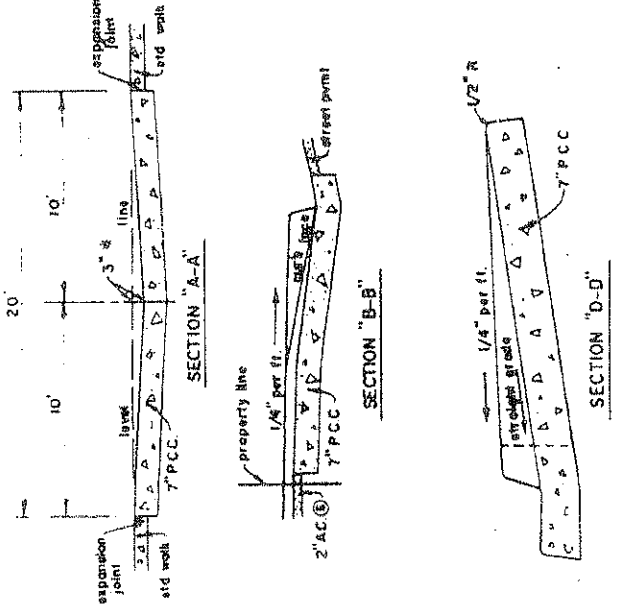
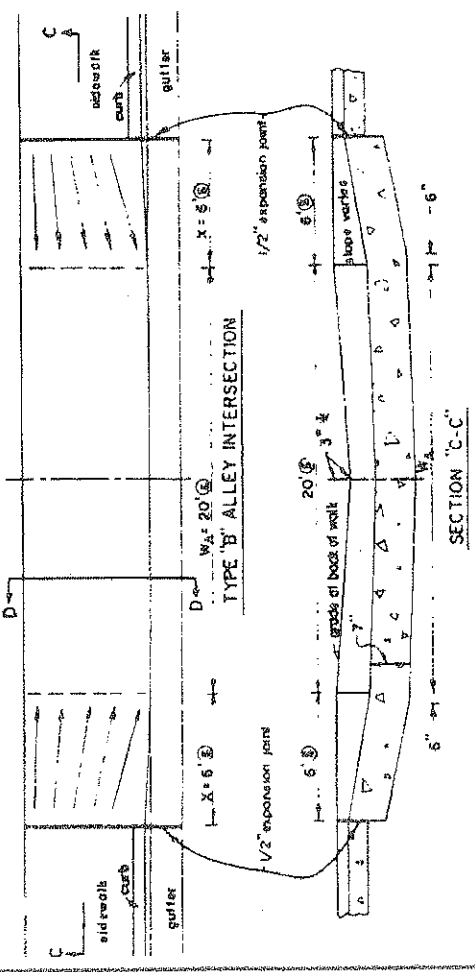
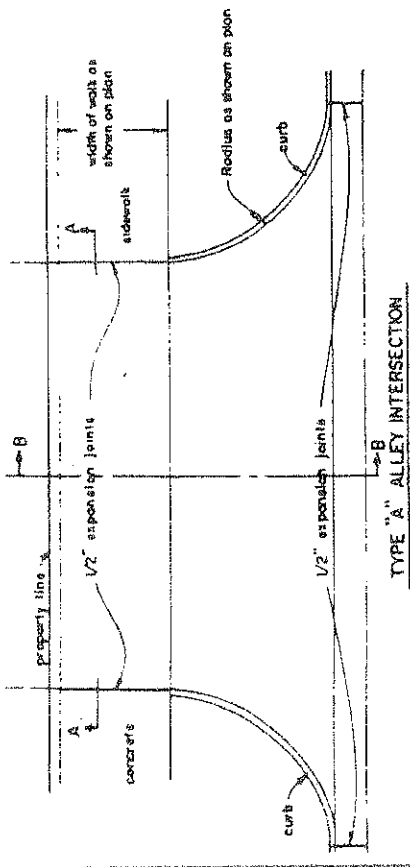
DRAWING NO. CU-R-3

TYPE "B" CROSS GUTTER

W	4.5'	6'	7.5'	9'	10.6'
d	1.6'	2'	2.6'	3'	3.5'
b	3'	4'	5'	6'	7'
e	1"	1 1/4"	1 1/2"	1 3/4"	

TYPE "A" CROSS GUTTER

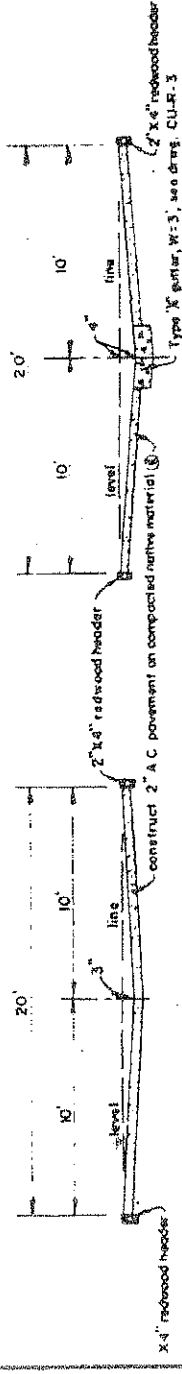
W	3'	5'	6'	7'	8'
d	1"	1 1/4"	1 1/2"	1 3/4"	



* 4" when alley has concrete gutter.
 (E) STANDARD UNLESS OTHERWISE NOTED ON PLAN

CITY OF UPLAND STANDARD DRAWING			
ALLEY SECTIONS		AND DETAILS	
DRAWN BY	DATE	REVISION BY	DATE
W O H	7/10/85		
APPROVED BY		CITY ENGINEER	
		DRAWING NO CU-R-4	

STANDARD ALLEY SECTIONS



TO BE USED WITH GRADES OF 0.60% OR GREATER

TO BE USED WITH GRADES OF LESS THAN 0.60%

Technical drawing of a street cross-section showing various layers and materials. The drawing includes labels for 'sidewalk grade', 'curb grade', 'asphaltic concrete surface', 'aggregate base material', and 'detail A'. It also includes dimensions like 'R/W' and 'S'.

Aggregate Base Material may be substituted for asphaltic concrete in excess of 30 thickness. (minimum thickness = 4")

Asphaltic Concrete Surface:
Thickness dependent on base
30" minimum thickness for Select S
20" minimum thickness for all other

⊕ variable dimension, normal distance = 5.0^3

*.3.0 minimum for Select System Streets
may be developed thru Stage Construction
as indicated on drawg. CU-R-1.

GENERAL NOTES

1. Dimensions "G" thru "M" on given person are for 8' curb heights, and should be adjusted for other curb heights.
2. Minimum sidewalk width for business districts = 6'.

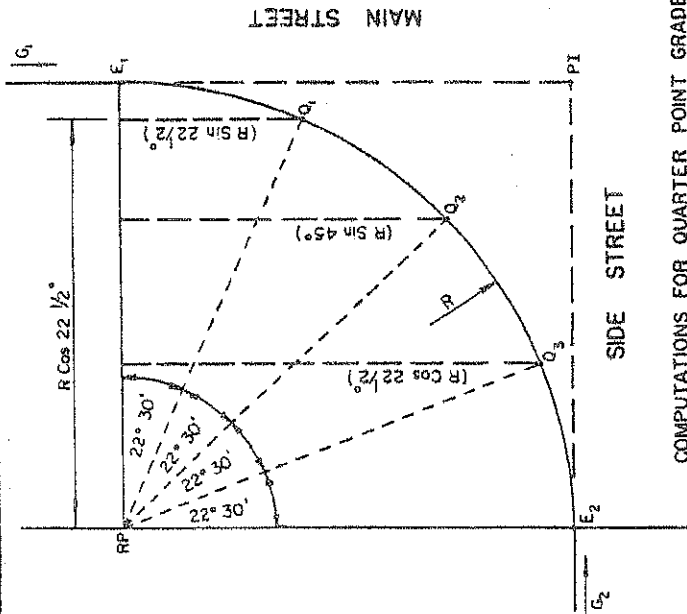
NORMAL DIMENSIONS FOR TYPICAL ROADWAY SECTIONS

R	S (min)	R/W	Q	E	F	G	H	I	J	K	L	M
36'	4'	60' min	9'	4.5'	0"	—	3 1/2"	—	2"	—	3 1/2"	—
					3"	—	6"	—	3 1/2"	2 3/4"	3 1/2"	—
					6"	—	6"	—	5 1/4"	—	4"	—
40'	5'	66'	10'	5'	0"	—	3 1/2"	—	2"	—	3 1/2"	—
					3"	—	6"	—	3 1/2"	2 3/4"	3 1/2"	—
					6"	—	8"	—	5 1/4"	—	4"	—
52'	5'	80'	13'	6.5'	0"	—	2 1/2"	—	1/2"	—	2 1/2"	—
					3"	—	5 1/2"	—	3"	—	3"	—
					6"	—	7 1/2"	—	3 1/2"	—	3"	—
					9"	—	10"	—	5 1/2"	—	3 1/2"	—
64'	5'	88'	16'	8'	0"	4 1/2"	2 3/4"	1 1/4"	0"	1 1/4"	2 3/4"	4 1/2"
					3"	5 1/2"	3 3/4"	1 1/2"	0"	1 1/4"	2 3/4"	4 1/2"
					6"	9 1/2"	6 3/4"	4 1/2"	2 3/4"	1 1/2"	2 3/4"	4 1/2"
					9"	12 1/2"	9 3/4"	7 1/2"	5 3/4"	4 1/4"	3"	4 1/2"
					0"	4 1/2"	2 3/4"	1 1/4"	0"	1 1/4"	2 3/4"	4 1/2"
					3"	6 1/2"	3 3/4"	1 1/2"	0"	1 1/4"	2 3/4"	4 1/2"
72'	5'	100'	18'	9'	6"	9 1/2"	6 3/4"	4 1/2"	2 3/4"	1 1/2"	2 3/4"	4 1/2"
					9"	12 1/2"	9 3/4"	7 1/2"	5 3/4"	4 1/4"	3"	4 1/2"
					12"	14 3/4"	11 1/4"	8 1/2"	6 1/4"	4 1/2"	3"	4 1/2"

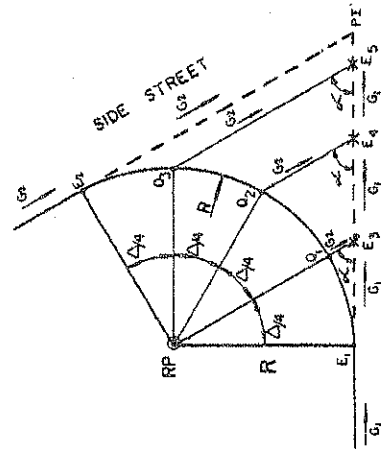
⑧ STANDARD UNLESS OTHERWISE NOTED ON PLAN

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	ROADWAY SECTION	APPROVED BY <i>Frederic B. Blandford</i> CITY ENGINEER	DRAWING NO. CU-R-5
	7/22/65			
	DATE			
W. A. B.	5-26-71			



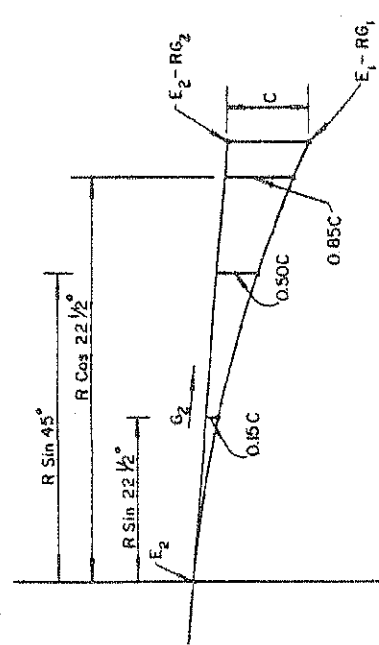
COMPUTATIONS FOR QUARTER POINT GRADES
(CURB RETURNS WITH Δ BETWEEN 89° AND 91°)



DETAIL FOR RETURNS LESS THAN 89° MORE THAN 91°

NOTES:

- (1) The method established hereon shall be used to compute both top of curb and flow line grades for all curb returns.
- (2) MAIN STREET GRADES
The gradient of the "Main Street" shall be straight across the spandrel (A vertical curve will not be allowed).
SIDE STREET GRADES
"G2" is the tangent grade of the side street at the end of the curb return. A grade break will not be allowed at the end of the curb return. A reverse vertical curve (Opposite that of the curb return) will not be allowed at the end of the curb return.
The rate of change in grade for a side street vertical curve shall not exceed 8% per 100 feet.
- (3) Curb return grade for returns other than 90° shall be established on a plane with the side street and main street gradients meeting at the return P.I.



LEGEND & FORMULAE

$$C = E_2 - E_1 + R(G_1 - G_2)$$

$$Q_1 = E_1 + C(1 - \cos^2 22\frac{1}{2}^\circ) + R[G_2(1 - \cos 22\frac{1}{2}^\circ) - G_1 \sin 22\frac{1}{2}^\circ]$$

$$Q_2 = E_1 + C(1 - \sin^2 45^\circ) + R[G_2(1 - \sin 45^\circ) - G_1 \sin 45^\circ]$$

$$Q_3 = E_1 + C(1 - \sin^2 22\frac{1}{2}^\circ) + R[G_2(1 - \sin 22\frac{1}{2}^\circ) - G_1 \cos 22\frac{1}{2}^\circ]$$

G = Rate of Grade

E = Elevation at Point Indicated (Ends of Return)

Q = Elevation at Point Indicated (Quarter Points)

LEGEND & FORMULAE

$$E_1 - G_1 T = E_2 - G_2 T$$

$$\Delta = 180^\circ - \Delta$$

$$E_2 = E_1 - G_1 [R \sin \Delta/4 + R(1 - \cos \Delta/4) \cot \Delta/4]$$

$$E_4 = E_1 - G_1 [R \sin \Delta/2 + R(1 - \cos \Delta/2) \cot \Delta/4]$$

$$E_5 = E_1 - G_1 [R \sin 3/4 \Delta + R(1 - \cos 3/4 \Delta) \cot \Delta/4]$$

$$Q_1 = E_1 + G_1 [R(1 - \cos \Delta/4) \div \sin \Delta/4]$$

$$Q_2 = E_1 + G_1 [R(1 - \cos \Delta/2) \div \sin \Delta/4]$$

$$Q_3 = E_1 + G_1 [R(1 - \cos 3/4 \Delta) \div \sin \Delta/4]$$

E, Q = Elevation of Points Indicated

G, Q = Rate of Grade

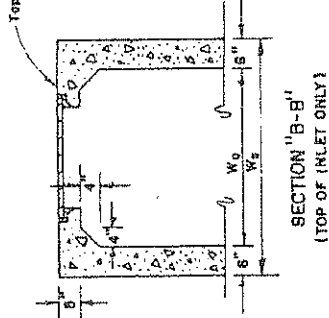
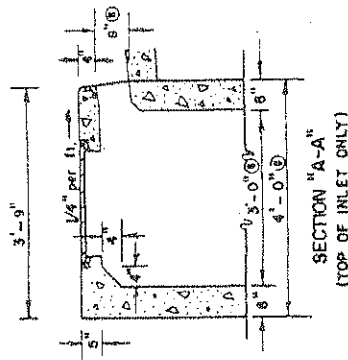
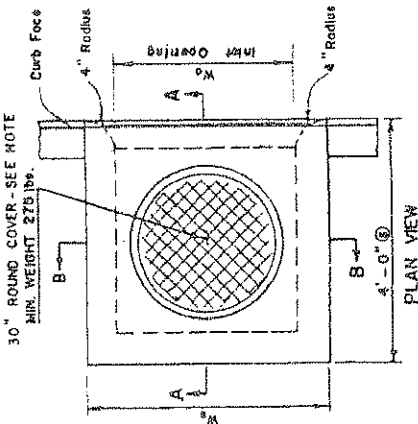
T = Tangent of Curb Return

Maximum "C"	
R	C
15	0.13
20	0.24
25	0.37
30	0.54
35	0.70
40	0.80
45	0.90
50	1.00
60	1.20

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	Required Method For Establishing Curb Return Grades	
B.G.	3/21/74	DATE	
REVISION BY		DATE	
APPROVED BY:		CITY ENGINEER	
		DRAWING NO. CU-R-6	

MANHOLE FRAME AND COVER:
30" ROUND COVER - SEE NOTE
MIN. WEIGHT 275 lbs.



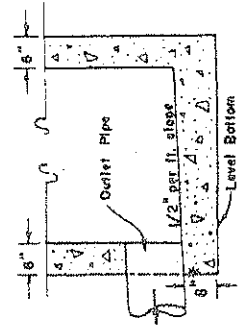
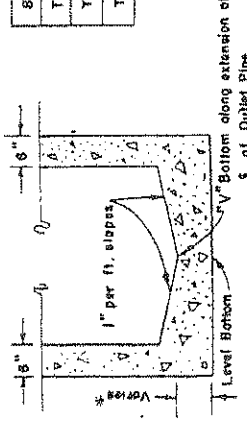
GENERAL NOTES

1. REFER TO CITY OF UPLAND STANDARD DRAWING CU-S-4 FOR REINFORCING STEEL AND ALL OTHER ADDITIONAL DETAILS.
2. MANHOLE FRAME & COVER EQUAL TO ALHAMBRA FOUNDRY A036 - 30" CIRCULAR TELEPHONE TYPE WITH ALL TELEPHONE MARKINGS REMOVED, MINIMUM WEIGHT 250 LBS. OR EQUAL TO CITY OF LOS ANGELES STANDARD B2189 PARKWAY TYPE WITH LOCKING DEVICE.

WIDTH OF STRUCTURE (W₀)
WIDTH OF INLET OPENING (W_i)

STRUCTURE	W ₀	W _i
Type "A-1"	2'-11 3/8"	3'-1 3/8"
Type "A-2"	6'-4 3/4"	7'-4 3/4"
Type "A-3"	9'-10 1/8"	10'-10 1/8"

TYPICAL DETAILS OF BOTTOM OF INLET STRUCTURES



SECTION OF BOTTOM
DRAWN THRU PIPE

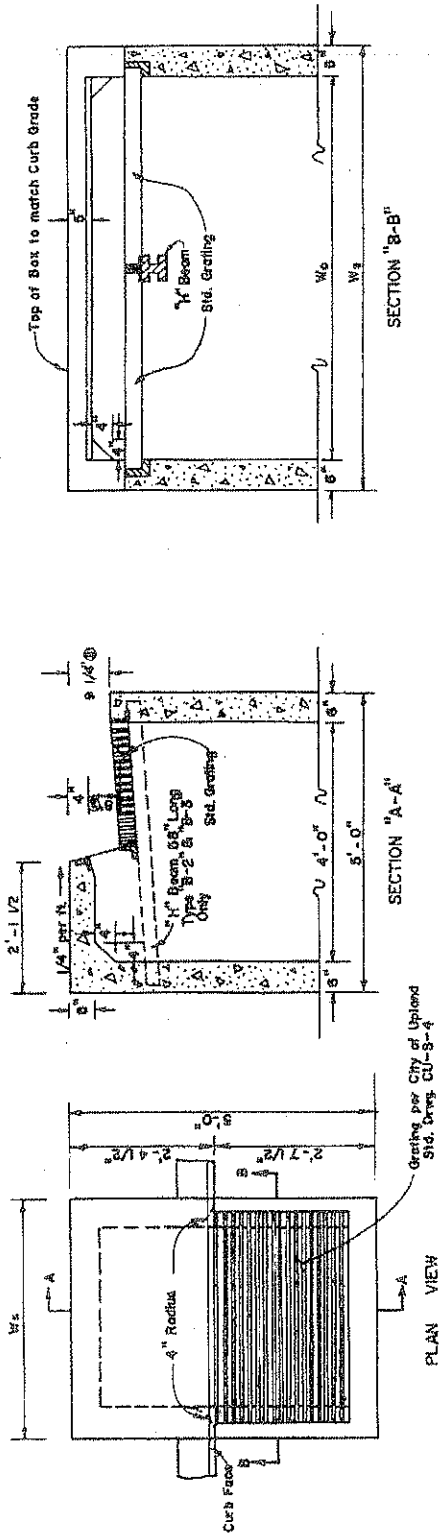
SECTION OF BOTTOM
DRAWN PERPENDICULAR TO PIPE

③ STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	CURB	INLETS
W. A. H.	8-24-85		
REVISION BY	DATE		
L. G. K.	12-22-86		TYPES "A-1", "A-2" & "A-3"
L. A. L.	10-12-77		
		APPROVED BY	
			<i>John C. Blanchard</i>
			CITY ENGINEER
			DRAWING NO. CU-S-1

* MINIMUM BOTTOM THICKNESS = 6" AT CENTER OF PIPE OUTLET



SECTION "A-A"

SECTION "B-B"

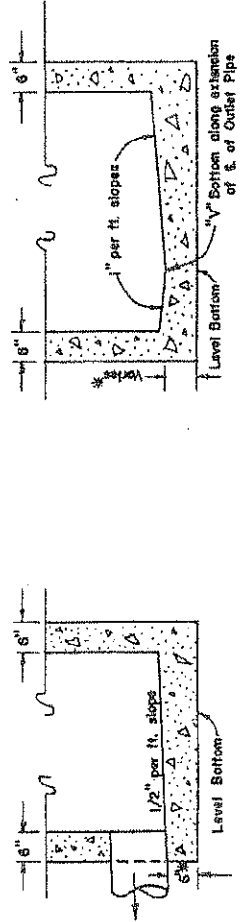
GENERAL NOTES

REFER TO CITY OF UPLAND STANDARD DRAWING
CU-S-4 FOR REINFORCING STEEL, GRATINGS,
AND ALL OTHER ADDITIONAL DETAILS.

WIDTH OF STRUCTURE (W_s)
WIDTH OF ALET OPENING (W_a)

STRUCTURE	W _s	W _a	"H" BEAM
Type "B-1"	2'-11 3/8"	3'-11 3/8"	Not Required
Type "B-2"	6'-4 3/4"	7'-4 3/4"	1'-5" WF 18.8#
Type "B-3"	9'-10 1/8"	10'-10 1/8"	2'-5" WF 18.8#

TYPICAL DETAILS OF BOTTOM OF INLET STRUCTURES



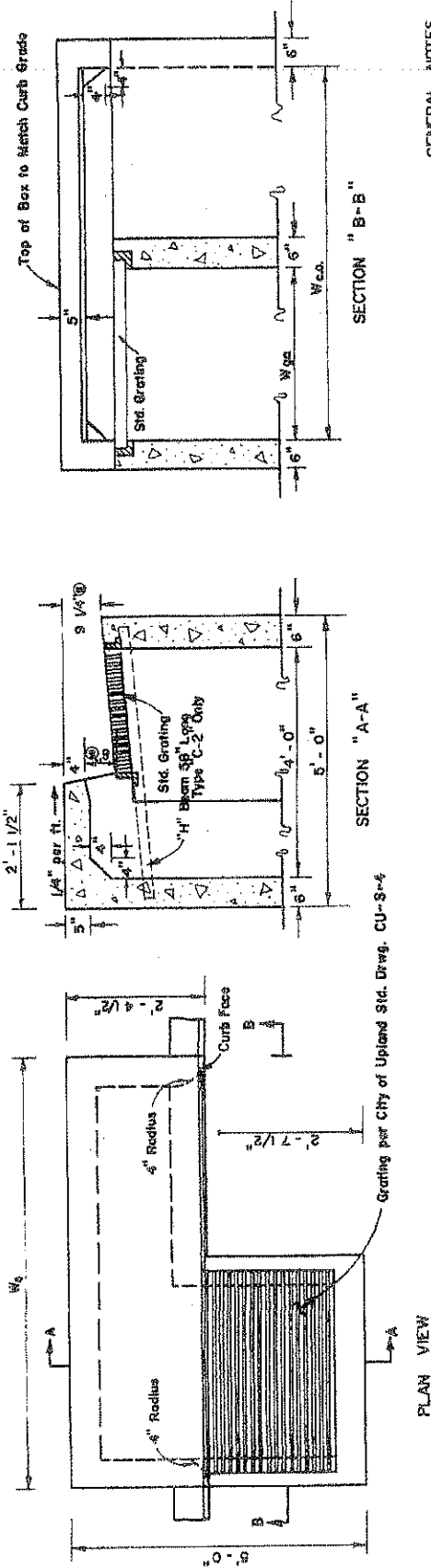
SECTION OF BOTTOM DRAWN PERPENDICULAR TO PIPE

* Minimum bottom thickness = 8" at center of pipe outlet.

© STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN.

CITY OF UPLAND
STANDARD DRAWING

DRAWN BY	DATE	CURB INLETS TYPES:
W a h	6/29/65	"B-1", "B-2" & "B-3"
REVISION BY	DATE	APPROVED BY
W a h	11-26-65	<i>Frederick Blomberg</i>
L.G.K.	12-21-66	CITY ENGINEER
		DRAWING NO. CU-S-2



PLAN VIEW

SECTION "B-B"

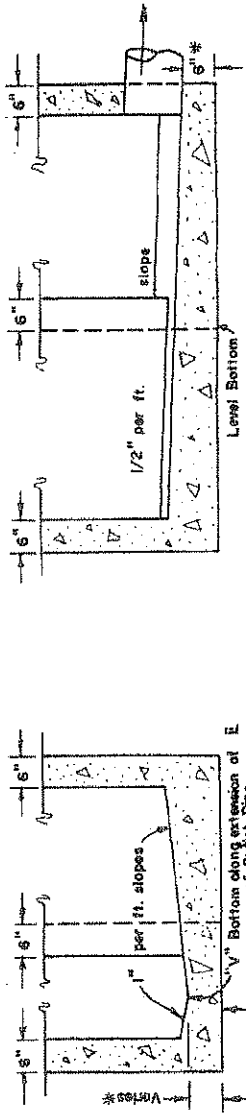
GENERAL NOTES

REFER TO CITY OF UPLAND STANDARD DRAWING
CU-S-4 FOR REINFORCING STEEL, GRATING,
AND ALL OTHER ADDITIONAL DETAILS.

WIDTH OF STRUCTURE (W_s)
WIDTH OF GRATE OPENING ($W_{g.o.}$)
WIDTH OF CURB OPENING ($W_{c.o.}$)

STRUCTURE	W_s	$W_{g.o.}$	$W_{c.o.}$	"H" BEAM
Type "C-1"	7'-4 3/4"	2'-11 3/8"	6'-4 3/4"	Not Required
Type "C-2"	10'-10 1/8"	6'-4 3/4"	9'-10 1/8"	1'-5" WF 18.9#

TYPICAL DETAILS OF BOTTOM OF INLET STRUCTURES



SECTION OF BOTTOM DRAWN PERPENDICULAR TO PIPE &

SECTION OF BOTTOM DRAWN THRU PIPE &

* Minimum bottom thickness = 6" at center of pipe outlet

© STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN.

CITY OF UPLAND
STANDARD DRAWING

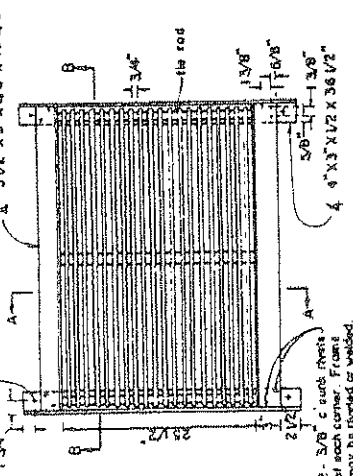
DRAWN BY	DATE	CURB INLETS
W G H	6/29/66	
REVISION BY	DATE	TYPES "C-1" & "C-2"
W G H	11-26-66	
L.G.K.	12-21-66	
APPROVED BY		CITY ENGINEER
J. L. C. Blumh		
DRAWING NO.		CU-S-3

REINFORCING STEEL

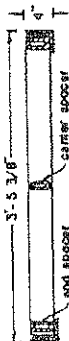
5" x 1/2" protection bar 4" from bottom of the depression
NOTE: a 2nd bar is required if top upswing is over 6"

3" Typical of Manhole

6" Dia. hole on each corner for 1/2" x 5" anchor bolts with square head & nut
4 3 1/2" x 3" x 3/8" x 40 1/8"

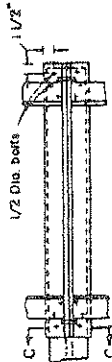


PLAN

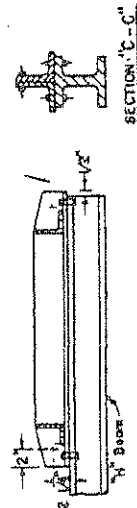


SECTION "B-B"

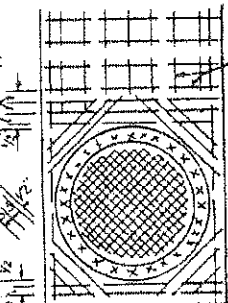
CENTER SUPPORT ASSEMBLY



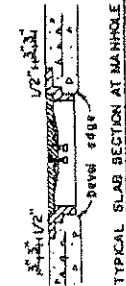
PLAN



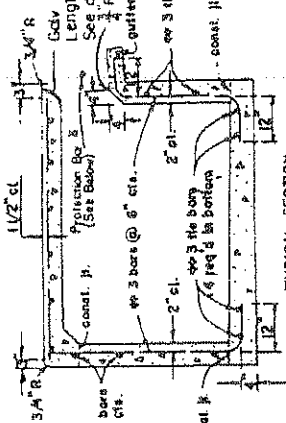
SECTION "C-C"



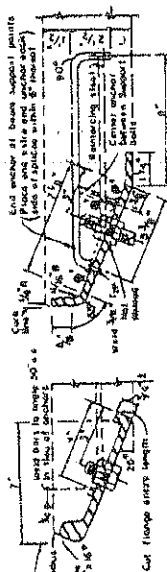
TYPICAL TOP SLAB REINFORCING
All Curb Inlets & Outlet Structures



TYPICAL SLAB SECTION AT MANHOLE



TYPICAL SECTION
All Curb Inlets & Outlet Structures



FACE PLATE ANCHORAGE

BULB ANGLE

3/4" hot galn steel anchor
embedded 5" in wall of structure

GENERAL NOTES

REINFORCING STEEL

- The details shown hereon apply to standard Curb Inlets and Outlets per City of Upland design no. CU-8-1, CU-5-2, CU-5-3 & CU-5-5.
- All reinforcing steel, unless otherwise noted, shall be 3/8" Dia.
- To be Parkway Type, min. weight 130 lbs., equal to the City of Los Angeles Standard No. B 210 with locking device OR Telephone Type with all markings removed, min. weight 250 lbs. (ALHAMBRA FOUNDRY NO. A 1136 or equal.)

FRAME AND GRATE

- Center support assembly shall be used for multiple grating installations.
- As exposed metal parts shall be galvanized. Welding, machining and drilling shall be done before galvanizing.
- Bolt holes shall be 3/8" Dia. unless otherwise specified. Bolts shall be used to join two or more frames to "H" beam.
- The rods shall be 1/2" Dia. x 25 1/8", threaded 3/4" on bolt ends. Use one 1/2" Dia. square head nut of each end.
- Top of grating shall be flush with street surface on all corners.
- All parts shall be of structural grade steel, except spacers, which shall be either cast iron or steel.

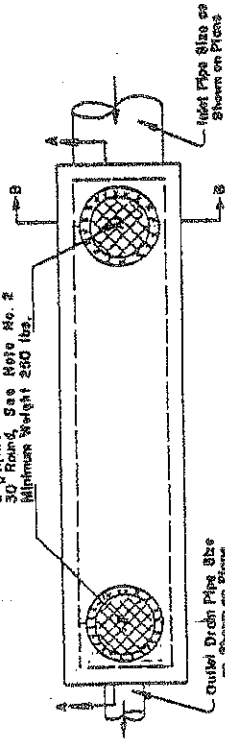
CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	FRAME & GRATING
W. A. H.	7/9/58	
REVISIONS	DATE	REINFORCING STEEL
L. S. S.	10/7/62	APPROVED BY
L. S. S.	12/2/62	
L. S. S.	5/20/70	
M. A. B.	9/28/71	
L. A. L.	2/20/77	

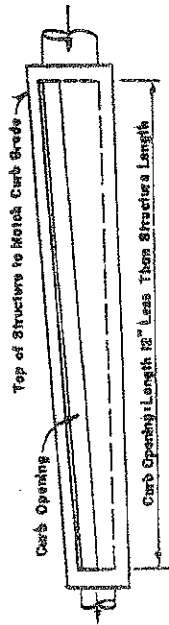
APPROVED BY
J. H. Blomberg
CITY ENGINEER

DRAWING NO. CU-S-4

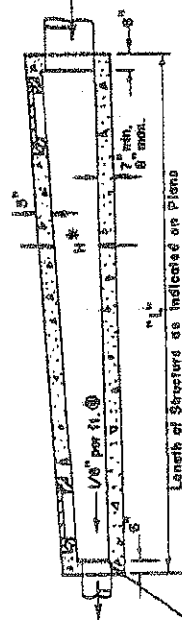
MANHOLE FRAMES AND COVERS
2 Required See Note No. 2
30 Round, 280 lbs.
Minimum Weight 280 lbs.



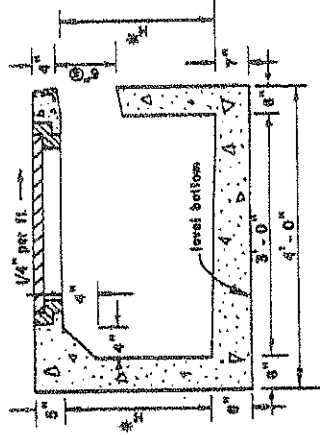
PLAN VIEW



FRONT VIEW



SECTION "A-A"



SECTION "B-B"

GENERAL NOTES

1. REFER TO CITY OF UPLAND STANDARD DRAWING CU-S-4 FOR REINFORCING STEEL AND ALL OTHER ADDITIONAL DETAILS.
2. MANHOLE COVER & FRAME TO BE PARKWAY TYPE EQUAL TO CITY OF LOS ANGELES STANDARD 82189 WITH LOCKING DEVICE OR TELEPHONE TYPE, MINIMUM WEIGHT 280 LBS., WITH ALL MARKINGS REMOVED. (ALHABERA FOUNDRY NO. A1136 OR EQUAL.)

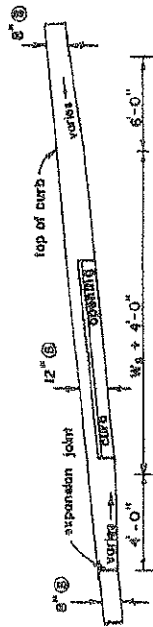
* "H" IS VARIABLE DIMENSION. MAXIMUM "H" EQUALS INSIDE HEIGHT OF INLET PIPE PLUS 2" AT INLET END OF STRUCTURE.

© STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN.

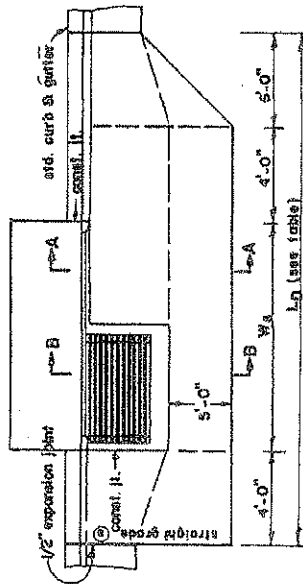
CITY OF UPLAND
STANDARD DRAWING

DATE	DATE	CURB OUTLET
7/1/65		
REVISION	DATE	STRUCTURE
BY		
L A L	10/18/77	
		APPROVED BY
		<i>Jeff C. Blum</i>
		CITY ENGINEER
		DRAWING NO. CU-S-5

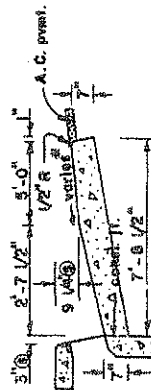
INLETS



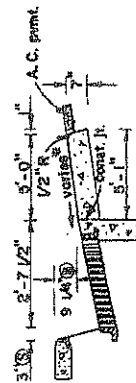
TYPICAL CURB ELEVATION VIEW FOR CURB INLETS



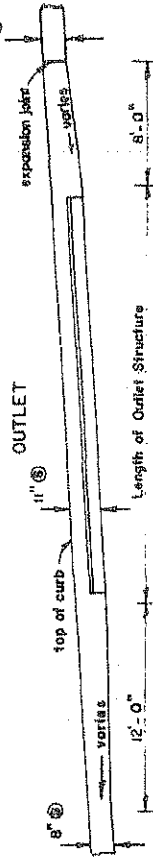
TYPICAL PLAN VIEW FOR CURB INLETS



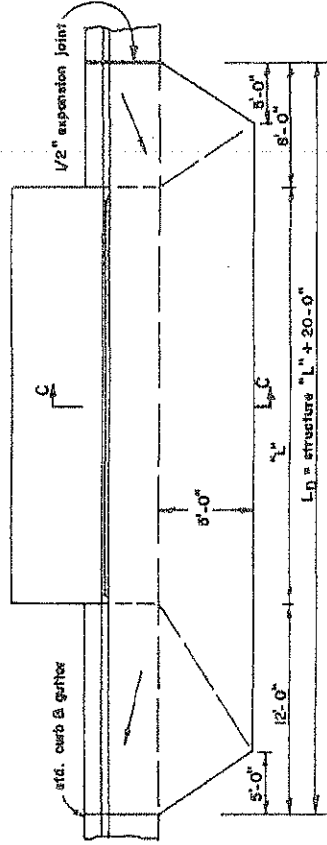
SECTION "A-A"



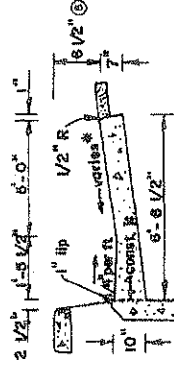
SECTION "B-B"



TYPICAL CURB ELEVATION VIEW FOR CURB OUTLET STRUCTURE



TYPICAL PLAN VIEW FOR CURB OUTLET STRUCTURE



SECTION "C-C"

* Slope to meet pavement grade.

⑤ STANDARD DIMENSION UNLESS OTHERWISE NOTED ON PLAN.

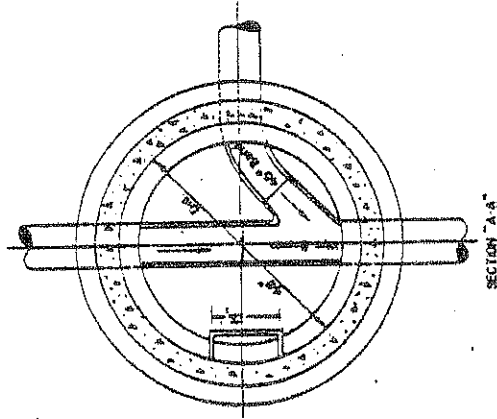
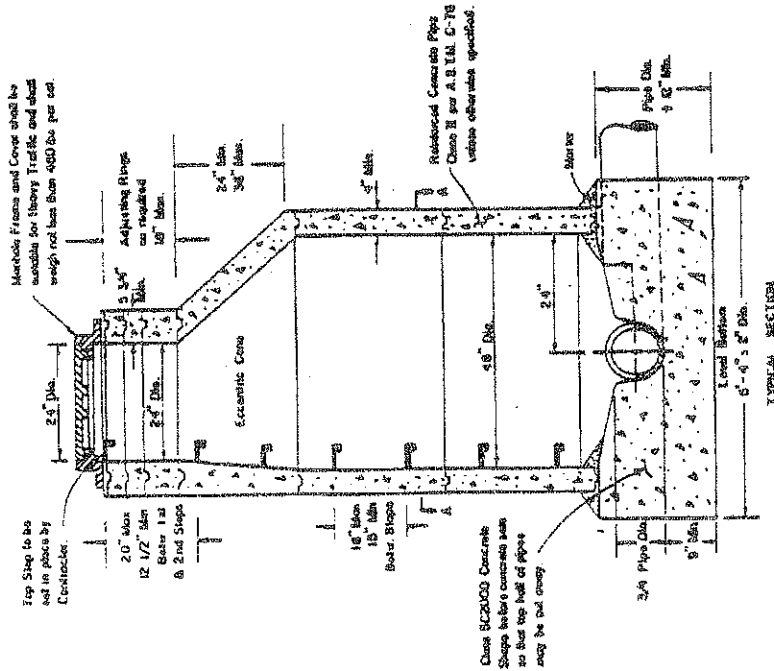
CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	STANDARD GUTTER
W A H	7/12/65	DEPRESSIONS FOR CURB
REVISION BY	DATE	INLETS AND OUTLETS
W A H	11-26-65	APPROVED BY
L. S. K.	12-21-66	CITY ENGINEER
		DRAWING NO. CU-S-6

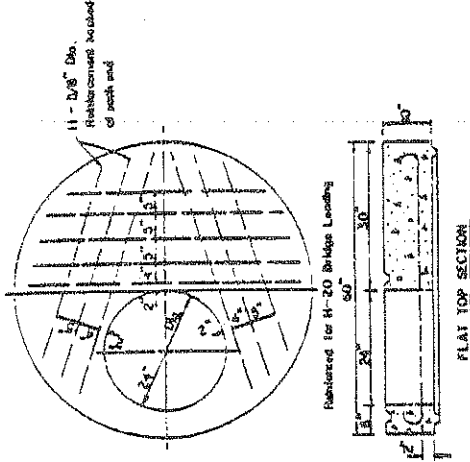
CURB INLET

STRUCTURE	A-1 & B-1	A-2, B-2 & C-1	A-3, B-3 & C-2
L.D.	17'-11 3/8"	21'-4 3/4"	24'-10 1/8"

TYPE "A" MANHOLE



TYPE "B" MANHOLE



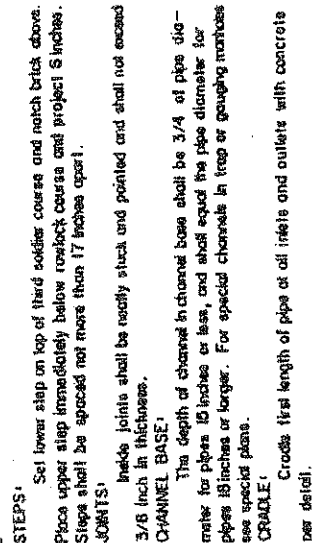
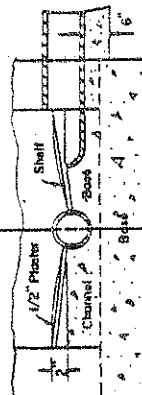
NOTE: Type "B" Manhole same as Type "A" Manhole except that Flat Top Section shall be used in place of Eccentric Cone Section. B Manhole walls shall be 6" Precast. Sections having 6" minimum wall thickness (minimum reinforcement for Sections having 6" wall thickness shall be No. 4 wire hoops.)

GENERAL NOTES

STANDARD MANHOLE - TYPE "A",
Type "A" Manholes shall be used in all cases, unless otherwise noted on the Plan or in the Specifications.
DROP MANHOLES:
Drop Manholes shall be constructed using a Tee Branch at top invert and a 50° Bend at the bottom invert. The entire Drop Section shall be encased in concrete, having a 6 inch minimum cover, from the base of the Manhole to the center of the upper pipe section.

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	PRECAST CONC. MANHOLES TYPE "A" & TYPE "B"
W. H. H.	10/21/50	FOR SANITARY SEWER SYSTEMS
REVISION BY	DATE	APPROVED BY
		<i>Paul C. Blanchard</i> CITY ENGINEER
		DRAWING NO. CU-2-1



CONCRETE BASE:
During construction, all pipes shall be rigidly supported by brick piers one foot deep, located just outside the structure. Construct top of concrete base 2 inches below level of lowest pipe. Fill space beneath pipe with mortar and shove from both sides with base course brick to form a water tight joint.

BASE OR FAN COURSE:
Lay brick flat on radial lines with laps to same level.

ARCHES:
Lay walling brick on edge to form a true radial arch with full mortar joints around all pipe openings. Turn arch of two each courses over pipes 3 inches or more in diameter.

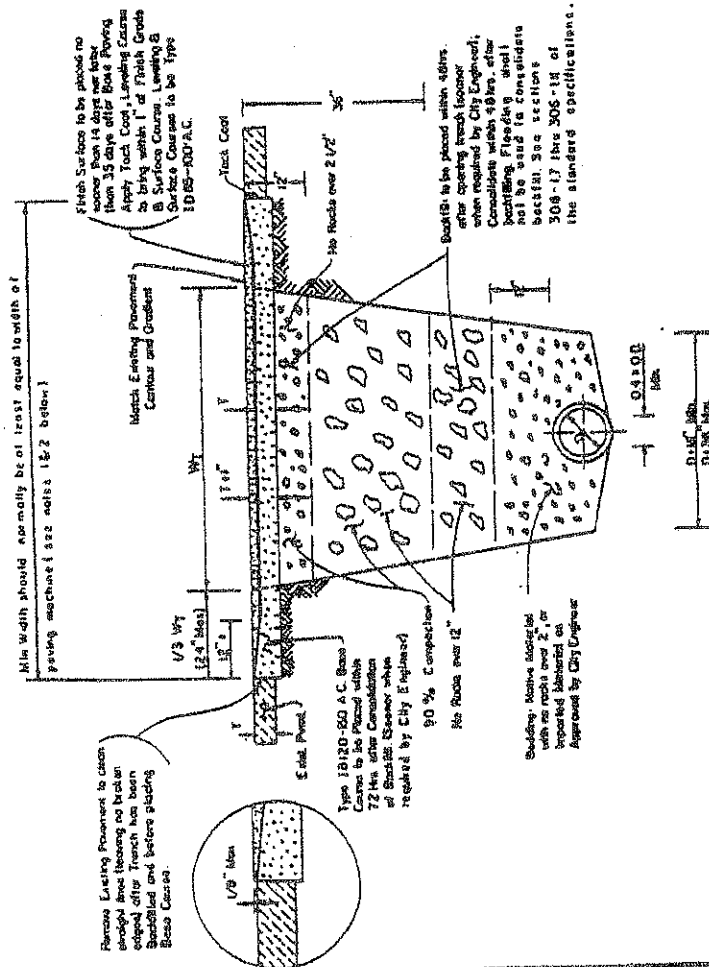
SOLDIER COURSES:
Lay header brick on radial lines with flat four courses vertical. Lay succeeding courses with a uniform batter to obtain an inside diameter of 2.4" at top of last or fractional soldier course. Use split brick to offset soldier courses.

STRETCHER COURSES:
Lay outside brick flat in a deep bed of mortar. Shove brick hard together against adjacent soldier course.

ROWLOCK COURSE:
Lay half course of brick on edge across soldier and stretcher courses, radial lines.

CITY OF UPLAND		BRICK MANHOLE		FOR SANTARY SEWER SYSTEMS	APPROVED BY <i>Frank C. Blomberg</i> CITY ENGINEER	DRAWING NO. CU-Z-2
STANDARD DRAWING		TYPE "C"				
DRAWN BY WOB REVISION BY	DATE 10/21/55 DATE					

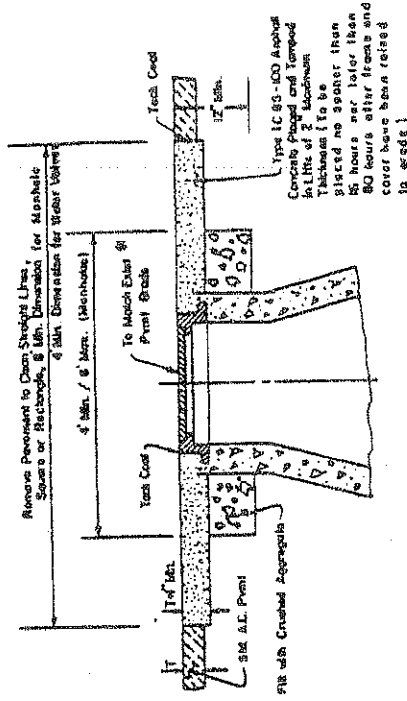
DETAIL FOR TRENCHING, BACKFILL & A.C. PAVEMENT REPAIR



GENERAL NOTES

1. Spreader Boxes may be employed for ditch paving jobs less than 500 ft. R.
2. All joints shall be vertical butt joints. Top or feathered joints are not allowed.
3. Unless otherwise instructed by City Engineer, trench patch should be straight grade across width, and should not be crowned at center.

DETAIL FOR ADJUSTING MANHOLES & WATER VALVES TO GRADE



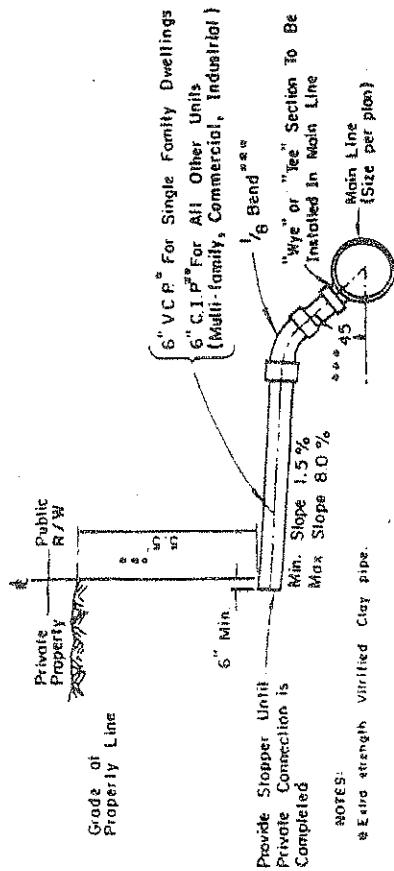
GENERAL NOTES

1. Frame and Cover to be set 3" to 6" below Subgrade before A.C. Pavement is Placed.
2. Frame and Cover to be adjusted to Grade after A.C. Paving. Pavement Repairs to be made per this Detail after Raising to Grade.
3. Reset Top Step in Manhole at the Time Frame and Cover are raised to Grade; add additional step when necessary to maintain proper spacing between Steps (see Drawg. CU-Z-1 & CU-Z-2 for Correct Spacing of Steps).

CITY OF UPLAND STANDARD DRAWING

DRAWN BY	DATE	TRENCHING, BACKFILLING, ADJUSTING TO GRADE AND ASSOCIATED PAVEMENT REPAIRS
WAB	10/26/85	
REVISION BY	DATE	APPROVED BY
L.S.G.	10-24-85	<i>Paul C. Blodgett</i> CITY ENGINEER
L.G.K.	12-22-85	
WAB	12-1-76	DRAWING NO. CU-Z-3

1. Trench repair shall be per City Standard CU-Z-3 except as modified below. This drawing and these modifications shall be considered a part of the plans.
 - a. Pavement removals for trench resurfacing shall be at right angles to or parallel with the centerline of the street. No curvilinear trench surfacing will be permitted.
 - b. All pavement cuts for trench resurfacing shall be saw cut leaving a clean straight line.
 - c. If the remainder pavement between the edge of the trench cut and gutter line (or pavement joint, previous trench cut, longitudinal crack, transverse crack, etc.) is less than four feet, that pavement shall be removed, Resurfacing shall be incorporated with trench resurfacing.
 - d. If the remainder pavement between the edge of trench cut and gutter line is four feet or greater, the remainder pavement shall be ground down tapering from 1" at the gutter to 0" four feet out from gutter, Trench resurfacing shall include overlaying this ground pavement.
 - e. Depending upon width of trench, location of trench, condition of pavement, number of lanes, traffic volumes and other factors, additional requirements are made, Such requirements may include 1 lane resurfacing, half street resurfacing, whole street resurfacing, and slurry seals.
 - f. Prior to saw cutting for trench resurfacing, removal limits shall be approved by City Inspector.
2. Sidewalk and curb and gutter repair shall be to the closest expansion joint.
3. A Street Closure Permit shall be obtained from the City at least 48 hours prior to the start of construction.
4. Compaction test required - 95%. (Note: This item may be revised to 90% by City).
5. City of Upland Water Department Standard W6-23, which is attached, shall be considered a part of this plan.
6. Centerline of trench, conduit or other utility installation shall not be closer than 5' from the edge of the gutter.
7. A preconstruction meeting shall be scheduled with the engineering department at least 10 days prior to start of construction unless otherwise directed by Engineering Department Public Works Director. Call 909 291- 2964 to schedule inspection(s).



NOTES:

* Extra strength vitrified clay pipe.

** Commercial standard Cost from Pipe (CS No 188, US Dept of Commerce)

*** Normal, unless otherwise noted on plan

SANITARY SEWER LATERAL LINE

SANITARY SEWER ON HORIZONTAL CURVE
 Will only be permitted when concentric with the street E, and shall conform to the following limiting requirements:
 Minimum Radius: 200' L²
 Minimum Grade in % = 0.4 + $\frac{90}{R}$
 Maximum Spacing of stakes 25 ft.
 All locations Req'd at both ends of curve with Max. spacing of 250 ft.

NOTE 1

Terminal Cleanouts shall not be used more than 150 ft. from a manhole or wherever 4 or more connections are located on the lateral section of the sewer main line.

Surface Grade

See Cover Detail

1/8 Bend^a

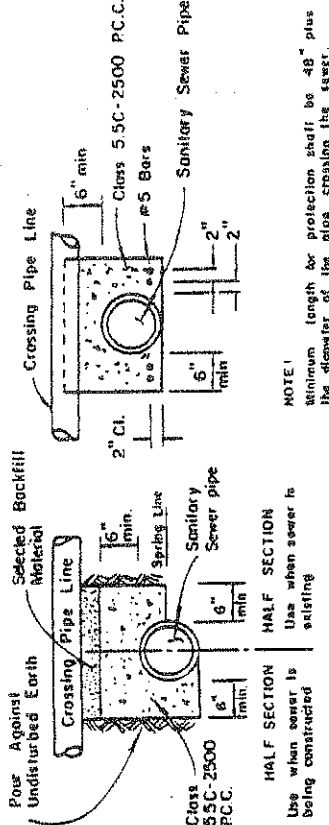
8" V.C.P.^b

8" Wye Section

Plug

Main Line

^a Extra strength vitrified clay pipe



NOTE 1

Minimum length for protection shall be 48" plus the diameter of the pipe crossing the sewer.

PROTECTION FOR SANITARY SEWERS

(Use When Clearance Between Sewer And Other Pipe Is 10" or Less)

GENERAL NOTES:

1. The width of the trench at the top of the pipe shall not exceed 3 times the diameter of the sanitary sewer pipe.
2. Grade stakes shall be set every 25 feet to insure a true gradient.
3. Maximum spacing between manholes:
 $S_{max} = 35 (D + G/2)$
 S_{max} = Maximum spacing
 D = Diameter in inches
 G = Gradient in percent

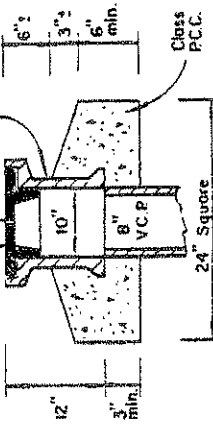
* Minimum Slope Shall Be Increased For Dead End Lines Having A Limited Number Of Connections

MAIN LINE GRADIENTS		
DIA.	MIN. SLOPE	MAX. SLOPE
8"	0.40 %	8.0 %
12"	0.32 %	7.0
15"	0.24 %	5.0
18"	0.18 %	4.0
21"	0.12 %	3.0
24"	0.10 %	2.5

CASTING: Althambro A1240 or Approved Equal

1" Finger Hole

Secure Cover With 1/4" Set Screws (2 ea Req'd)



SANITARY SEWER TERMINAL CLEANOUT

CITY OF UPLAND STANDARD DRAWING

Drawn By		Date		SANITARY SEWER SYSTEMS	
LWA		4-27-70		MAIN LINES	
Revisions By		Date		LATERAL LINES	
B.G.		12-12-73		TERMINAL CLEANOUTS	
B.F.		12-4-75		Approved By	
					
				City Engineer	
				DRAWING NO. CU-Z-4	

DESIGN PROFESSIONAL'S STATEMENT
TEMPORARY DRAINAGE AND EROSION CONTROL

This drainage and erosion control plan was prepared under my direction. Berms, swales, sandbags and other temporary drainage facilities shown here are to be installed and maintained during the construction phase of the project.

In my opinion, adequate provisions have been made to provide drainage of surface water from the site without causing flooding or sedimentation problems on public rights-of-way or surrounding private property.

Firm Name

Signature

Title RCE #

Date

CITY ENGINEER'S STATEMENT
TEMPORARY DRAINAGE AND EROSION CONTROL

I hereby accept this temporary drainage and erosion control plan as meeting the prerequisites for issuance of permits and for record purposes.

This plan was prepared under the direction of a fully qualified professional who has stated that the implementation of the drainage devices shown hereon will alleviate potential flooding and erosion problems affecting public rights-of-way and surrounding private property during the construction stage of the project.

City Engineer RCE #

Date

DESIGN PROFESSIONAL'S STATEMENT
(Parkway Landscaping and Irrigation)

This plan was prepared under my direction and is, in my professional opinion, in accordance with all applicable City of Upland standards, requirements and conditions of approval, and, to the best of my knowledge, with all applicable California State Laws and requirements. The irrigation system is designed according to generally accepted standards and, in my opinion, will provide adequate coverage with relatively low maintenance. The hard-scape items (sidewalks, drive approaches, etc.) shown on this plan conform, to the best of my knowledge, to the civil engineering plans for this project. In the event of any discrepancies, the civil engineering plans are assumed to be correct.

The developer has arranged to have (firm Name): _____
Inspect, or direct the inspection of the construction of the public and private facilities shown on these plans, and to furnish the statements, reports, and "as built" plans required by Planning Department Directive No. 9.

I have received a copy of the approved street tree list. The trees selected for the public right-of-way have been selected from that list.

Firm Name

Name

Title

Date

STATEMENTS OF CITY OF UPLAND
(Parkway Landscaping and Irrigation)

I hereby accept this Plan as meeting the prerequisite for issuance of applicable permits and for record purposes. This Plan was prepared under the direction of a fully qualified professional who has stated that the Plan conforms with all applicable requirements of the City. The design & elevations, sizes, details and features of the landscaping and irrigation have not been reviewed by the City, except as they relate to the City Standards, conditions of approval, and backflow prevention devices.

Water Utility Director

Date

City Engineer

RCEU

Date

DESIGN PROFESSIONAL'S STATEMENT FOR ROUGH GRADING

On behalf of _____, I hereby state that I am an official representative of
The firm and that as of _____ (date), the rough grading of has been
completed, under my supervision, and is in substantial conformance with the official Grading Plan filed with
the City, except as otherwise revised in an acceptable manner and in accordance with all applicable City of
Upland Grading Standards and Conditions of Approval concerning grading and Section 8110 of the Upland
Municipal Code. In my opinion, adequate provisions have been made for the drainage of surface waters from
each building site.

I agree that concurrent with the filing of this grading statement for the final unit of this development, if
substantial changes have been made, I will file an "As Built" plan with the City for record purposes which will
reflect all significant changes from the original plan and which will include a statement that all changes
conform to City Grading Standards and Conditions of Approval concerning grading and Section 8110 of the
Upland Municipal Code. The "As Built" plan will show conditions as they existed on the inspection date
indicated on this statement and will not show subsequent changes made by individual lot owners.

Remarks:

Firm Name

Signature

Title RCE #

Date

DESIGN PROFESSIONAL'S STATEMENT FOR FINAL GRADING

On behalf of _____, I hereby state that I am an official representative of the firm and that as of _____ (date), the final grading of _____ has been completed, under my supervision, and is in substantial conformance with the official Grading Plan filed with the City, except as otherwise revised in an acceptable manner and in accordance with all applicable City of Upland Grading Standards and Conditions of Approval concerning grading and Section 8110 of the Upland Municipal Code. In my opinion, adequate provisions have been made for the drainage of surface waters from each building site.

I agree that concurrent with the filing of this grading statement for the final unit of this development, if substantial changes have been made, I will file an "As Built" plan with the City for record purposes which will reflect all significant changes from the original plan and which will include a statement that all changes conform to City Grading Standards and Conditions of Approval concerning grading and Section 8110 of the Upland Municipal Code. The "As Built" plan will show conditions as they existed on the inspection date indicated on this statement and will not show subsequent changes made by individual lot owners.

Remarks: _____

Firm Name

Signature

Title RCE #

Date

DESIGN PROFESSIONAL'S STATEMENT

This grading plan was prepared under my direction and is in accordance with Section 8110 of the Upland Municipal Code: The site grading and related structural features as designed and shown hereon conform with, all applicable details and provisions of Series CU-E of the Standard Drawings of the City of Upland, with Series ED-E of the Engineering Directives, and with any City of Upland Conditions of Approval concerning grading. In my opinion, adequate provisions have been made for the drainage of surface waters from each building site.

Firm Name

Signature

Title

RCE #

Date

STATEMENT OF CITY ENGINEER

I hereby accept this Grading Plan as meeting the prerequisite for issuance of a Grading Permit and for record purposes. This Grading Plan was prepared under the direction of a fully qualified professional who has stated that the plan conforms with all applicable requirements of the City. The design, elevations, details and features of the on-site grading have not been reviewed by the City, except as they relate to public improvements within adjacent right of ways and easements.

City Engineer

RCE

Date

General Notes

- I. The Land Surveyors Act, Section 8771 of the Business & Professions Code, and Sections 732.5, 1492.5, 1810.5 of the Streets & Highways Code require that survey monuments shall be protected and perpetuated.
2. When monuments are near the path of construction, the monuments shall be located and referenced out by a Licensed Land Surveyor or Registered Civil Engineer (authorized to practice Land Surveying), prior to the time of construction.
3. Corner Records shall be filed with County Surveyor prior to the start of construction, for those survey points that exist as shown on recorded Tract Maps, Parcel Maps, Records of Surveys, Highway Maps or points that provide survey control. These Corner Records shall describe the monuments found as well as tie distances to reference points for the resetting of the survey monuments.
4. When the construction is completed, the monuments shall be set to the surface, or a survey monument box set at the monument or permanent witness monuments set to perpetual the location. Corner Records are to be filed with the County Surveyor for the new monuments set.
5. Reconstruction and relocation of improvements or utilities on roads pursuant to Section 8771, is understood to mean grinding, asphalt overlays, chips seals, slurry seals or any other work that will cover or disturb the survey monuments.

Survey monuments that exist as shown on Recorded Maps, Highway Maps or points that provide survey control within the construction area, shall be located and referenced out by a Licensed Land Surveyor or Registered Civil Engineer (authorized to practice Land Surveying), and Comer Records shall be filed with the County Surveyor prior to the start of construction. These Comer Records shall describe the monuments found with tie distances to reference points for resetting of the survey monument. When construction is completed, monuments shall be set and Comer Records shall be filed with the County Surveyor showing the new monuments.

SAMPLE

DESIGN PROFESSIONAL'S STATEMENT
(ON SITE STREET LIGHTING)

THIS PLAN WAS PREPARED UNDER MY DIRECTION AND IS, IN MY PROFESSIONAL OPINION, IN ACCORDANCE WITH ALL APPLICABLE CITY OF UPLAND STANDARDS, REQUIREMENTS AND CONDITIONS OF APPROVAL, AND, TO THE BEST OF MY KNOWLEDGE, WITH ALL APPLICABLE CALIFORNIA STATE LAWS AND REQUIREMENTS. THE STREET LIGHTING SYSTEM IS DESIGNED ACCORDING TO GENERALLY ACCEPTED STANDARDS AND, TO THE BEST OF MY KNOWLEDGE, THIS SYSTEM HAS BEEN INSTALLED IN THE SAME LOCATIONS AND WITH THE SAME WATTAGES AS SHOWN ON THE PLAN.

THE DEVELOPER HAS ARRANGED TO HAVE WHITTAKER ELECTRIC COMPANY INSPECT, OR DIRECT THE INSPECTION OF THE CONSTRUCTION OF PUBLIC AND PRIVATE FACILITIES SHOWN ON THESE PLANS, AND TO FURNISH THE STATEMENTS, REPORTS AND "AS BUILT" PLANS REQUIRED BY THE CITY OF UPLAND ENGINEERING DEPARTMENT.

[WHITTAKER **W**ELECTRIC co.]
CONTRACTING ENGINEERING
963 SOUTH "J" ST, SAN BERNARDINO, CA. 92410

Gene Bealor
GENE BEALOR - VICE PRESIDENT.
2/17/83
DATE