

SIDEWALK CONSTRUCTION - MCCLELLAN ROAD PROJECT # 2016-20

Land Planning

Landscape Architecture Civil Engineering Utility Design Land Surveying Stormwater Compliance

San Jose, CA 95131





NO DATE DESCRIPTION PROJECT NO: 4844.0

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CAD DWG FILE: 484400TS01.DW DESIGNED BY: DRAWN BY: CHECKED BY:

06/15/2010

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TITLE SHEET

TS01

1 **OF 7**

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (2010 EDITION), AND STANDARD PLANS (2010 EDITION), AND THE CITY OF CUPERTINO STANDARD DETAILS. THE CONTRACTOR SHALL PERFORM THE WORK AS SHOWN ON THE DRAWINGS, AND TO THE SATISFACTION OF THE CITY
- 2. APPROVAL OF THESE PLANS SHALL NOT RELEASE THE OWNER OR ERRORS, OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION OF IMPROVEMENTS, PUBLIC INTEREST REQUIRES A MODIFICATION OF OR A DEPARTURE FROM THE CITY OF CUPERTING STANDARD DETAILS OR THESE IMPROVEMENT PLANS, THE CITY ENGINEER DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BI COMPLETED, AT THE SOLE EXPENSE OF THE OWNER OR CONTRACTOR.
- 3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE APPROVED PLANS OR THE LATEST REVISED PLANS ARE FURNISHED TO ITS SUBCONTRACTORS, AND TO ENSURE THE LATEST APPROVED PLANS ARE ONSITE AT ALL TIMES DURING CONSTRUCTION.
- 4. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR TWO (2) WORKING DAYS PRIOR TO REQUIRING AN INSPECTION
- NOTIFY THE CITY INSPECTOR TWO (2) WORKING DAYS IN ADVANCE OF REQUIRING SERVICES FOR CHECKING FIELD STAKING, THREE (3) COPIES OF THE CUT SHEETS SHALL BE FURNISHED TO THE CITY INSPECTOR.
- 6. CONSTRUCTION SURVEY STAKES OR MARKS (CONTROL STAKES) TO ESTABLISH LINES AND GRADES SHALL BE SET BY THE CONTRACTOR'S SURVEYOR OR ENGINEER.
- CITY STANDARD STREET MONUMENTS AND OTHER PERMANENT MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BEFORE ACCEPTANCE OF THE IMPROVEMENTS BY THE CITY ENGINEER. ATTENTION IS DIRECTED TO SECTION 8771 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE FOR THE REQUIREMENTS CONCERNING SURVEY MONUMENTS. EXISTING SURVEY MONUMENTS SHALL BE LOCATED AND REFERENCED BY OR UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER PRIOR TO CONSTRUCTION OPERATIONS, AND A CORNER RECORD OR RECORD OF SURVEY SHALL BE FILED WITH THE COUNTY SURVEYOR OF THE COUNTY OF SANTA CLARA. EXISTING SURVEY MONUMENTS SHALL BE RESET TO FINISH GRADE, AND A CORNER RECORD OR RECORD OF SURVEY SHALL BE FILED WITH THE COUNTY SURVEYOR OF THE COUNTY OF SANTA CLARA PRIOR TO THE RECORDING OF THE CERTIFICATE OF COMPLETION FOR THE PROJECT.
- 8. CONSTRUCTION AREA TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO BEGINNING WORK.
- 9. CONTRACTOR SHALL REPLACE IN FULL ALL PAINT MARKINGS AND STRIPES AFFECTED BY CONSTRUCTION. PLACEMENT AND REMOVAL OF PAINT STRIPING SHALL BE IN ACCORDANCE WITH CALTRANS 2010 STANDARD SPECIFICATIONS SECTION 84-3 - TRAFFIC STRIPES AND PAVEMENT MARKINGS AND SECTION 15-2.02C - REMOVE TRAFFIC STRIPE AND PAVEMENT MARKINGS, RESPECTIVELY.
- 10. EXISTING PAVEMENT THAT IS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AS REQUIRED BY THE CITY ENGINEER.
- 11. ALL NEW PAVEMENT SHALL MATCH THE EXISTING PAVEMENT SECTION AND SHALL CONSIST OF A MINIMUM OF 4" HOT MIX ASPHALT ON 8" CLASS 2 AGGREGATE BASE.
- 12. CONCRETE FOR USE IN ALL CONCRETE STRUCTURES SHALL CONFORM TO CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 90. DROP INLETS, SIDEWALKS, CURBS AND GUTTERS SHALL CONTAIN 590 LBS. OF CEMENT PER CUBIC YARD AND SHALL ATTAIN A MINIMUM STRENGTH OF 3,000 PSI IN 28 DAYS.
- 13. ONE POUND OF DISPERSING BLACK SHALL BE MIXED WITH EACH CUBIC YARD OF CONCRETE AT THE BATCH PLANT.
- 14. DRIVEWAY CONFORMS SHALL CONSIST OF 4" PCC ON 4" CLASS 2 AB.

- 15. A MINIMUM THICKNESS OF 5" OF CONCRETE SHALL BE REQUIRED FOR COMMERCIAL DRIVEWAY APPROACHES AND 4" FOR RESIDENTIAL. THE DRIVEWAY APPROACH SHALL BE INSTALLED CONCURRENT WITH THE CONSTRUCTION OF THE CURB AND GUTTER
- 16. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE COMPLIANCE WITH AMERICAN'S WITH DISABILITIES ACT (ADA) FOR ALL AFFECTED PAVEMENT AND SIDEWALK FEATURES.
- 17. CURB RAMP SHALL BE CALTRANS CASE A OR CASE G PER CALTRANS 2010 STANDARD PLAN A88A DATED MAY 20, 2011. DETECTABLE WARNING SURFACE SHALL BE REPLACEABLE AND SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS SECTION 73.
- 18. ALL TRENCH BACKFILL, FILL AREAS, AND BASE MATERIAL SHALL ATTAIN A MINIMUM 95% RELATIVE COMPACTION. FOR TYPICAL TRENCH SECTIONS, EXCEPT FOR SANITARY SEWERS, REFER TO THE CITY STANDARD DETAILS.
- TRENCH PLATES IN THE TRAVELED WAY SHALL BE TRAFFIC RATED, PROPERLY SECURED AND SHALL BE RECESSED UPON THE REQUEST OF THE DIRECTOR
- 20. ALL TRENCHES LOCATED WITHIN 5' OF THE EDGE OF PAVEMENT (I.E. CURB, LIP OF GUTTER, EDGE OF PAVEMENT, ETC.) SHALL BE REPAVED TO THE EDGE OF
- 21. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND FACILITIES IN THE AREA OF WORK, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT 811 TWO (2) WORKING DAYS IN ADVANCE OF ANY WORK FOR LOCATION OF THE UNDERGROUND FACILITIES.
- 22. STORM DRAIN LINES MODIFIED AS PART OF THE WORK ON THESE PLANS SHALL BE CLEARED OF ALL DEBRIS AND OBSTRUCTIONS PRIOR TO FINAL
- 23. DROP INLETS SHALL BE CONSTRUCTED CONFORMING TO CITY STANDARD DETAILS UNLESS OTHERWISE NOTED ON THE PLANS. DROP INLETS SHALL BE INSTALLED CONCURRENT WITH THE CONSTRUCTION OF CURB AND GUTTER "NO DUMPING FLOWS TO THE BAY." PLAQUE SHALL BE INSTALLED ON THE CURB ADJACENT TO ALL INLETS AND WILL BE FURNISHED BY THE CITY. CONTRACTOR MAY CONSTRUCT INLETS AS CAST-IN-PLACE OR AS PRECAST ELEMENTS WHICH CONFORM TO THE DIMENSIONS INDICATED ON CITY OF CUPERTINO STANDARD DETAIL 3-2.
- 24. MANHOLE FRAMES AND COVERS AND ALL OTHER UTILITY SURFACE FACILITIES SHALL BE BROUGHT TO FINISHED GRADE PRIOR TO FINAL SIGNOFF.
- 25. ALL WATER LINES, VALVES, HYDRANTS, AND APPURTENANCES THERETO INSTALLED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PROPERTY OF THE WATER UTILITY COMPANY.
- 26. ADJUSTMENT OF UTILITY BOXES SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE UTILITY OWNER. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES FOR INSPECTION REQUIREMENTS INCLUDING PG&E, AT&T, SJWC, AND CSD.
- 27. TREES, ROOTS, AND FOREIGN MATTER IN EXISTING OR PROPOSED RIGHT-OF-WAY SHALL BE REMOVED TO A DEPTH OF 2' BELOW SUBGRADE AND DISPOSED PER CALTRANS STANDARDS. IN THE CASE OF LIVE TREE ROOTS FROM CITY STREET TREES, CONTRACTOR SHALL CONTACT THE CITY FOR FIELD OBSERVATION PRIOR TO REMOVING TREE ROOTS.
- 28. CONTRACTOR SHALL TRIM EXISTING TREES AS NECESSARY TO MAINTAIN 10' CLEARANCE ABOVE PROPOSED SIDEWALKS AND AS NECESSARY FOR
- 29. CONTRACTOR SHALL INSTALL TOP SOIL TO A DEPTH OF 8" BELOW FG IN ALL CONSTRUCTED PARKSTRIPS AND AREAS OF CURB, GUTTER AND SIDEWALK REMOVAL WHERE HARDSCAPE IS NOT REPLACED. FLUSH WITH BACK OF CURB, FRONT OF SIDEWALK, AND EXISTING UTILITY BOXES.



VICINITY MAP NOT TO SCALE

HORIZONTAL CONTRO

<u>CP</u>	NORTHING	EASTING	DESCRIPTION
1003	1941127.11	6109318.64	FOUND IRON PIPE IN MON BOX
1007	1941090.56	6108292.15	FOUND BRASS DISK IN MON BOX
1009	1941138.21	6108477.08	FOUND GRANITE MON IN MON BOX

ELEV DATUM: SCVWD BM1071, ELEV=327.04' (NAVD88). DATE ADJUSTED MAY 4, 2010, "SCVWD BRASS DISK (R180); ON TOP OF THE SOUTHERLY CURB OF STEVENS CREEK BOULEVARD AT APPROXIMATELY 200 FEET WESTERLY OF PENINSULA/BUBB ROAD AND NEAR RAILROAD CROSSING POLE #22118. ALSO, 2.5 FEET NORTH OF THE RAILROAD CROSSING LIGHTS, AND 20 FEET WEST F ROM THE CENTER OF THE TRACKS. CITY OF CUPERTINO"

PROJECT TBM: PT 1004, ELEV=372.86', SET MAG IN AC BERM NORTH SIDE OF MCCELLAN AVE IN FRONT OF ADDRESS 21901, ±18' FROM CENTERLINE OF DRIVEWAY

CITY OF CUPERTINO APPROVAL

APPROVED BY:
TIMM BORDEN , RCE 45512, DIRECTOR OF PUBLIC WORKS
DATED:
REVIEWED BY:

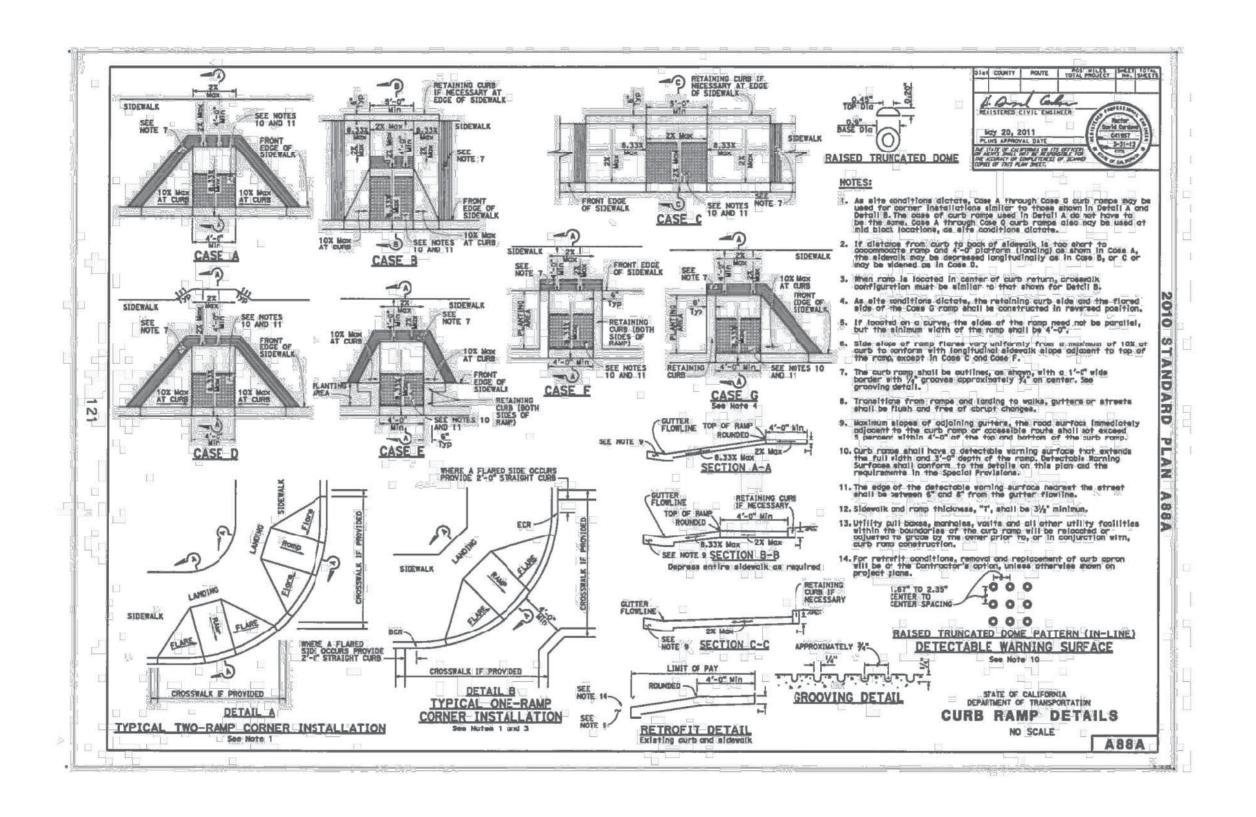
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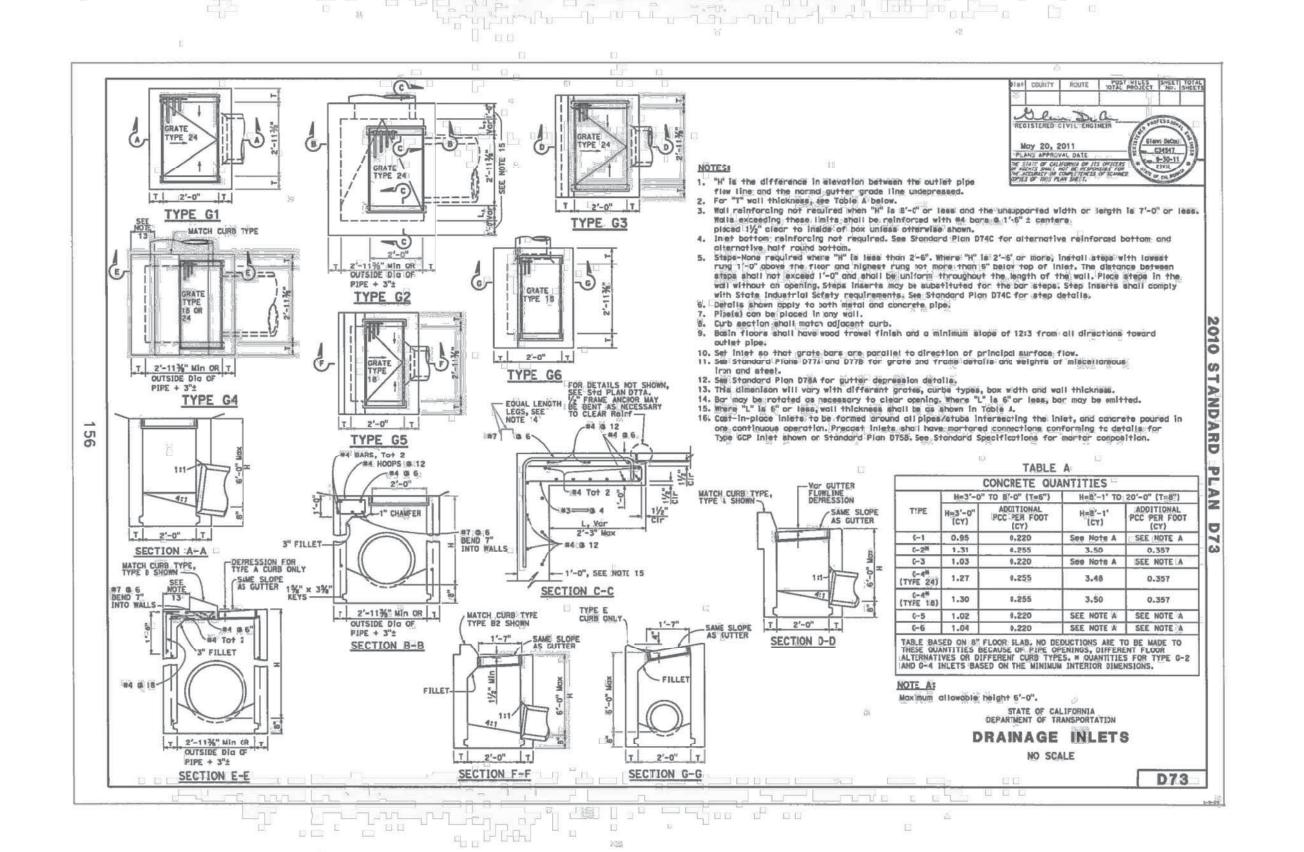
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	1	TS01	TITLE SHEET
	2	DT01	DETAILS
	3	DT02	DETAILS
	4	DT03	DETAILS
	5	IP01	IMPROVEMENT PLANS
	6	IP02	IMPROVEMENT PLANS
	7	EC01	CONSTRUCTION BEST MANAGEMENT PRACTICES



ARRDE\/IATIONIC

ABE	BREVIATIONS
AB AC	AGGREGATE BASE ASPHALTIC CONCRETE OR HOT MIX ASPHALT PER CALTRANS STANDARD SPECIFICATIONS
AT&T BOC	AMERICAN TELEPHONE & TELEGRAPH BACK OF CURB
BOW	BACK OF WALK
CL	CENTERLINE
CONC	CONCRETE
CONF CP	CONFORM CONTROL POINT
CSD	CUPERTINO SANITARY DISTRICT
DI	DROP INLET
E	EAST
EXIST FC	EXISTING FACE OF CURB
FG	FINISHED GRADE
FOW	FRONT OF WALK
FL	FLOW LINE
GB HMA	GRADE BREAK HOT MIX ASPHALT
HP	HIGH POINT
INV	INVERT
N	NORTH
OG PG&E	ORIGINAL GRADE PACIFIC GAS & ELECTRIC
PCC	PORTLAND CEMENT CONCRETE
PVC	POLYVINYL CHLORIDE
S	SOUTH
SD SDCB	STORM DRAIN STORM DRAIN CATCH BASIN
SDCB	STANDARD DROP INLET PER CUPERTINO
	STANDARD DETAIL 3-2
SDR	STANDARD DIMENSION RATIO
SJWC STD	SAN JOSE WATER COMPANY STANDARD
TC	TOP OF CURB
TG	TOP OF GRATE
TOL	TOP OF LIP
TYP	TYPICAL
W	WEST







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PROJECT CAD DW DESIGN DRAWN CHECKET DATE:

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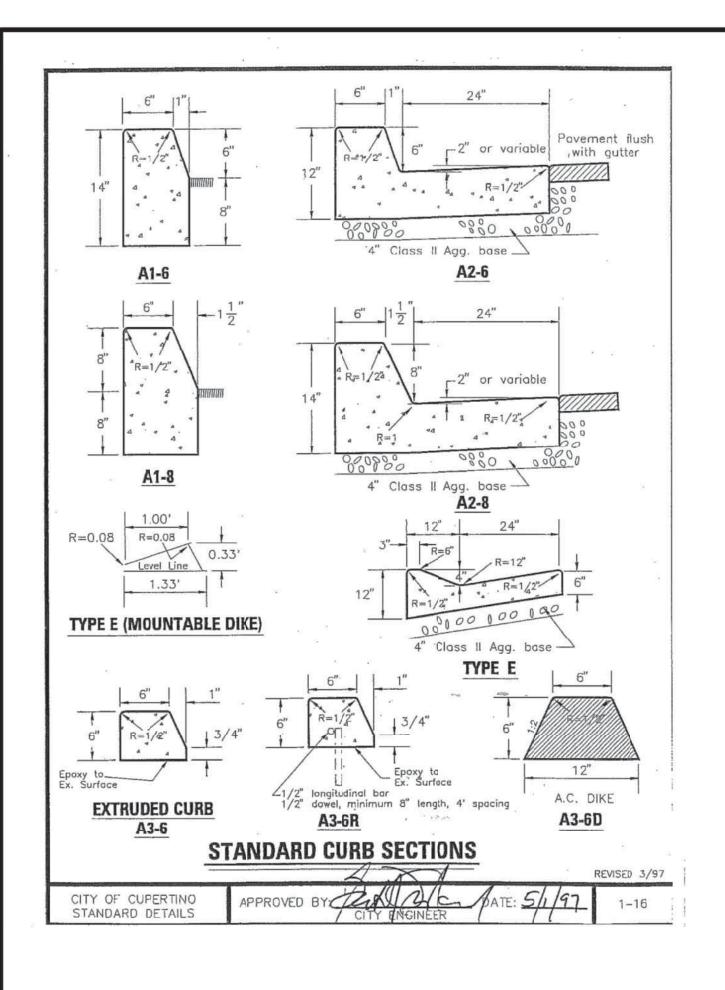
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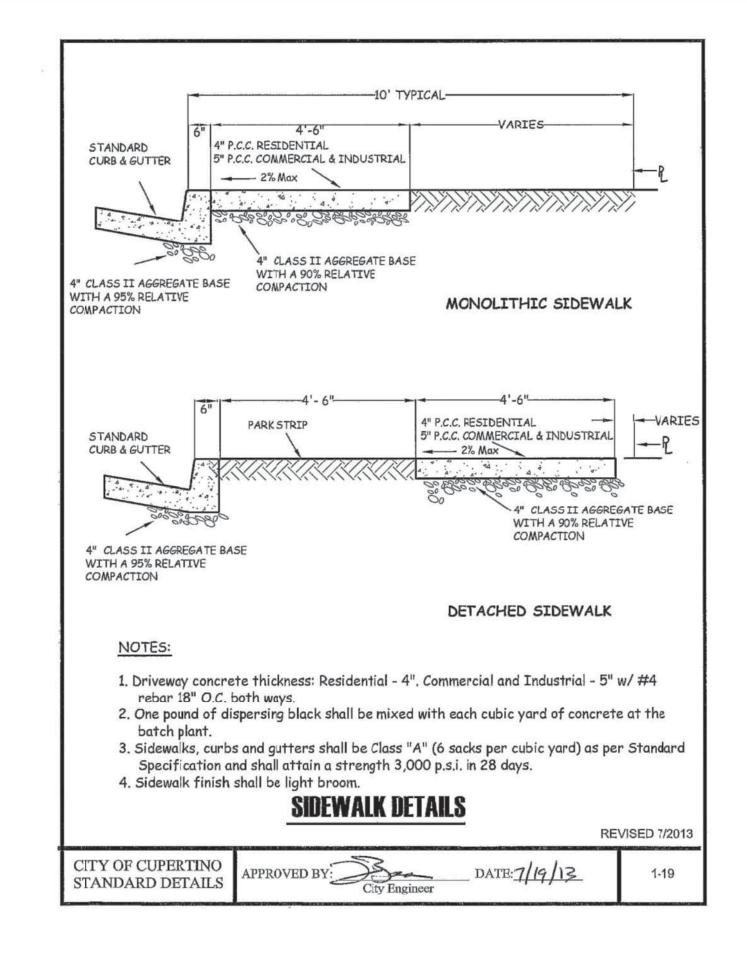
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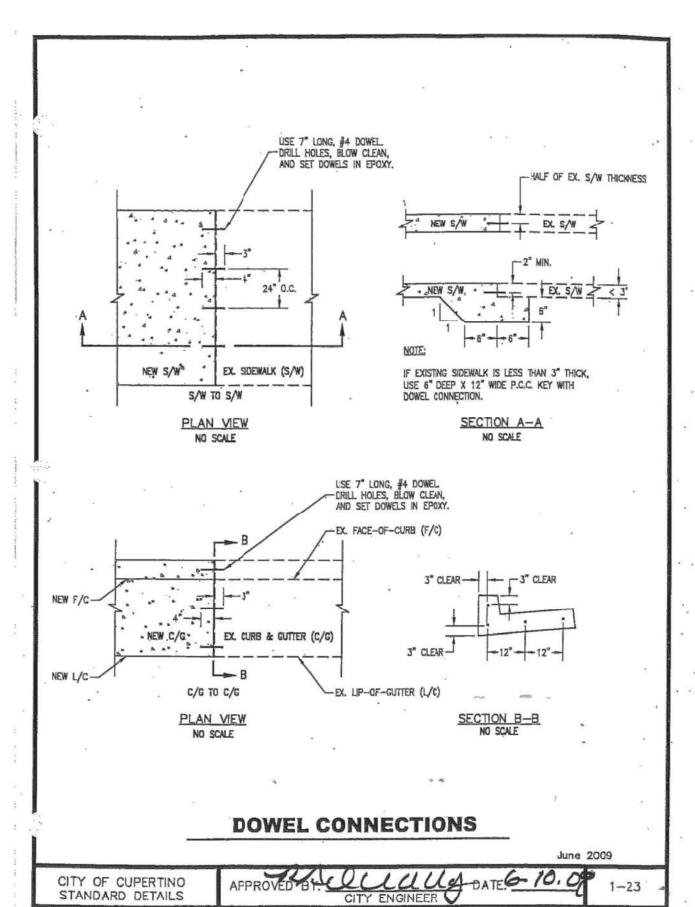
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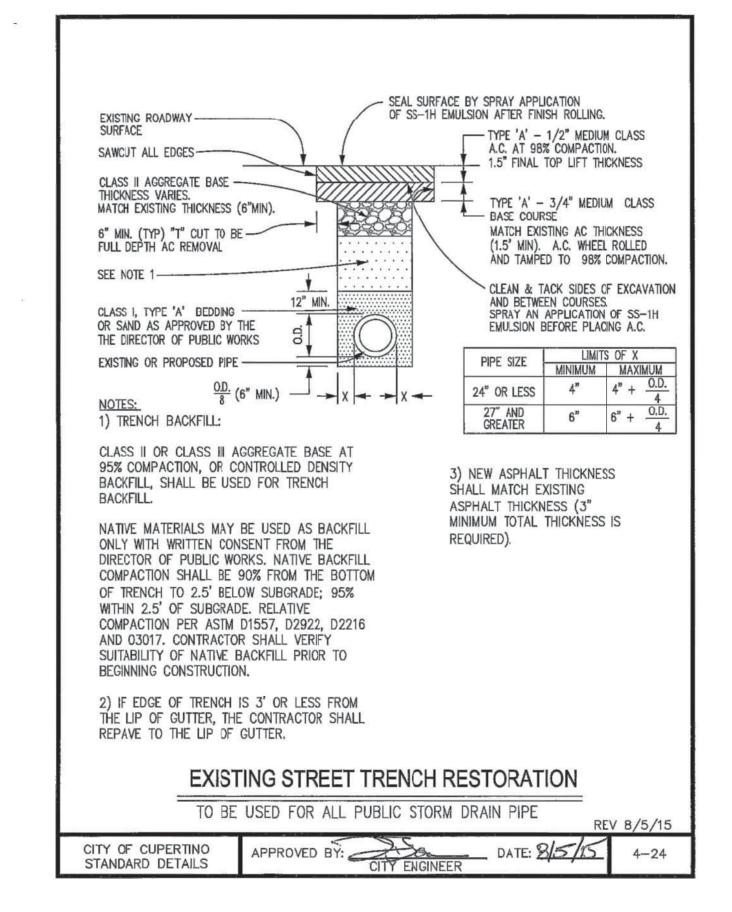
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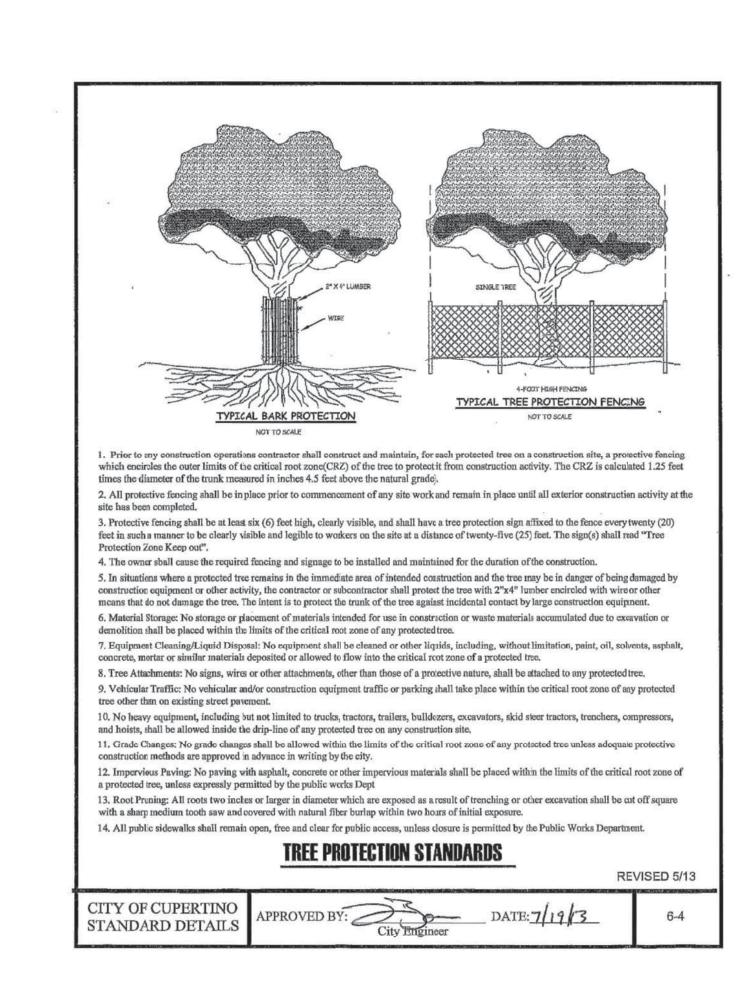
2 **OF 7**













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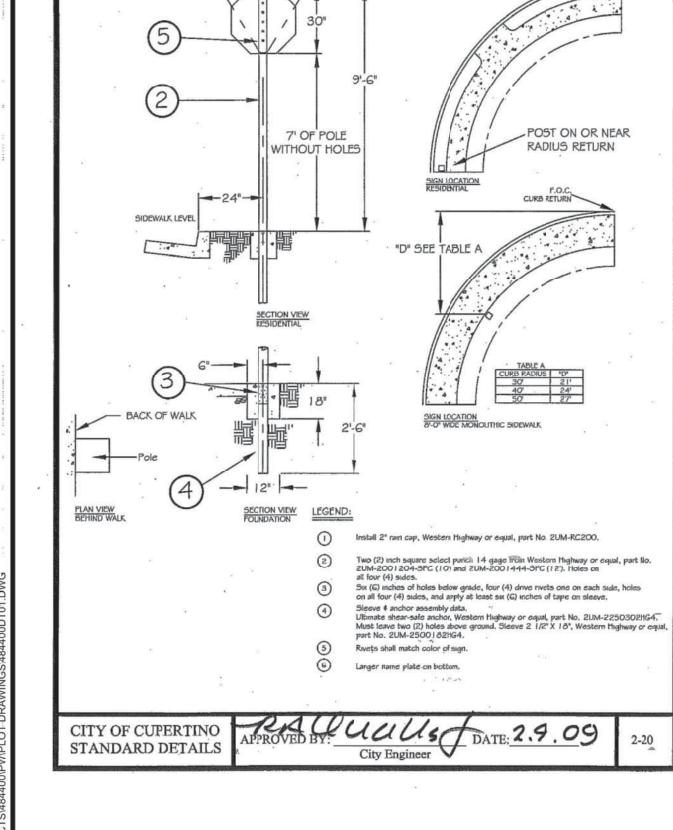
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MCCLELLAN ROA
SIDEWALK CONSTRU

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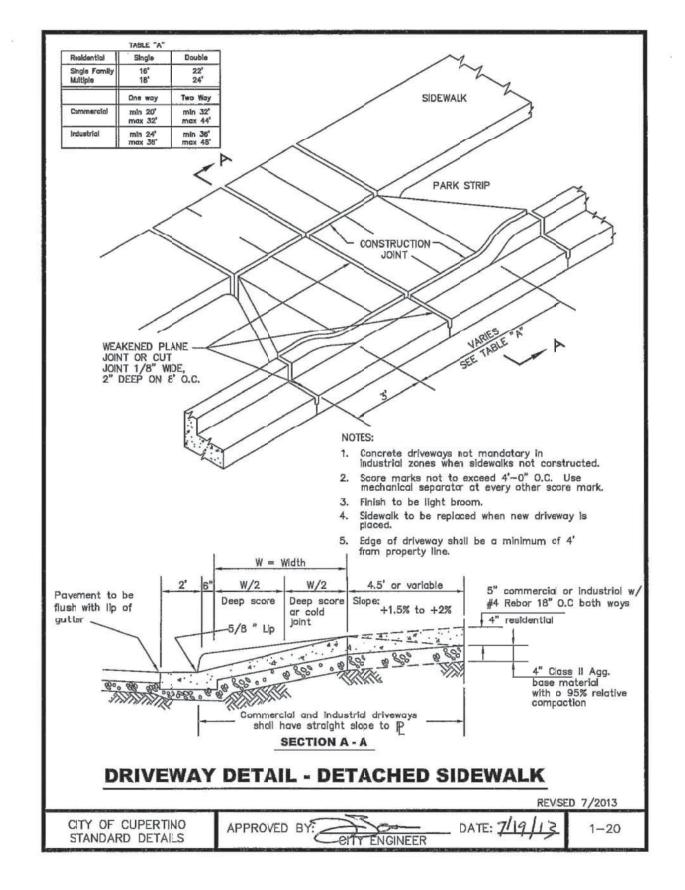
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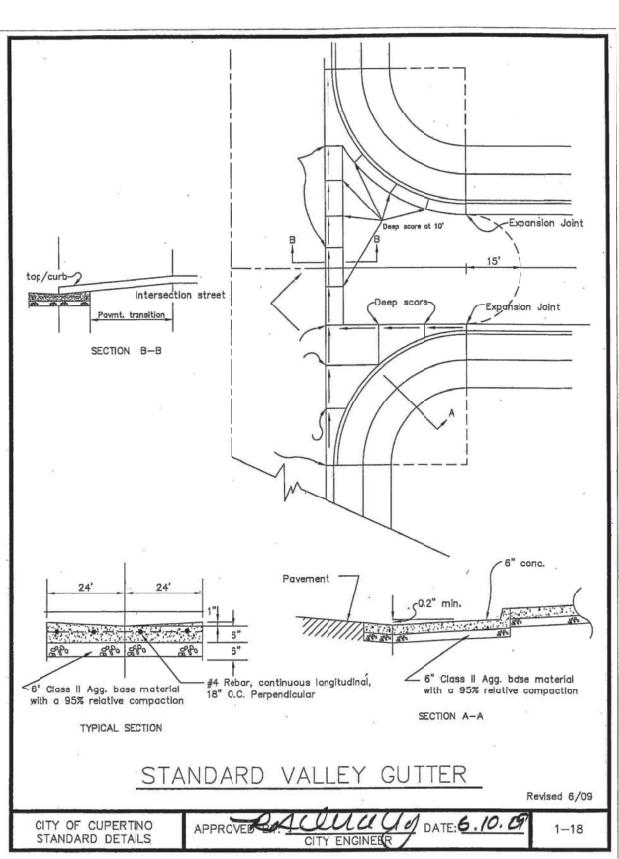
3 **OF** 7

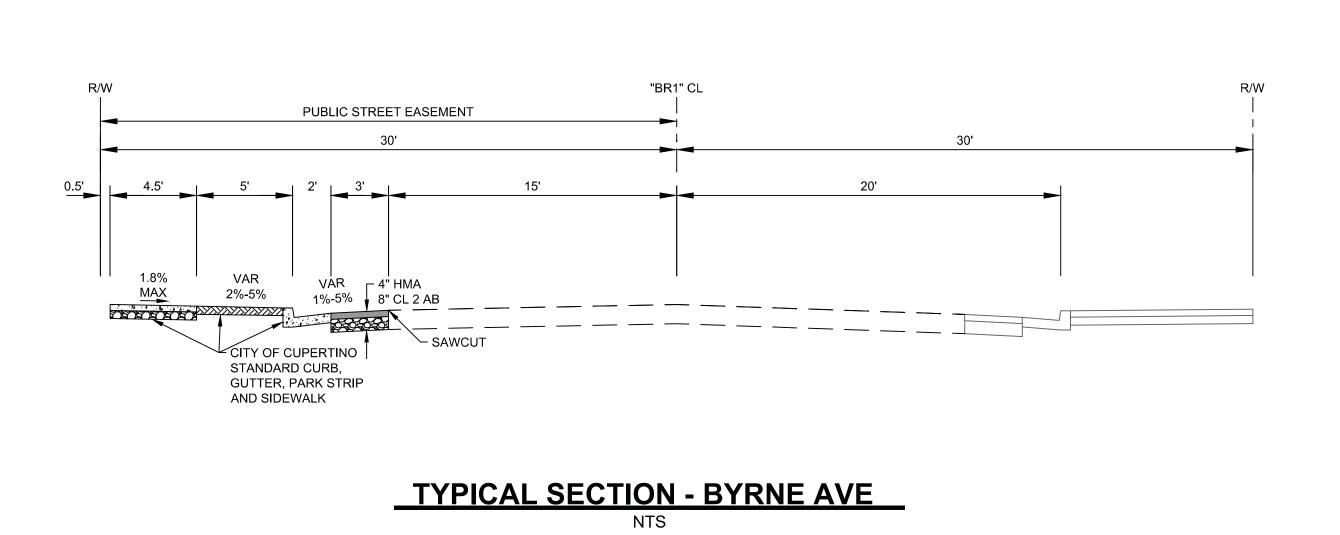


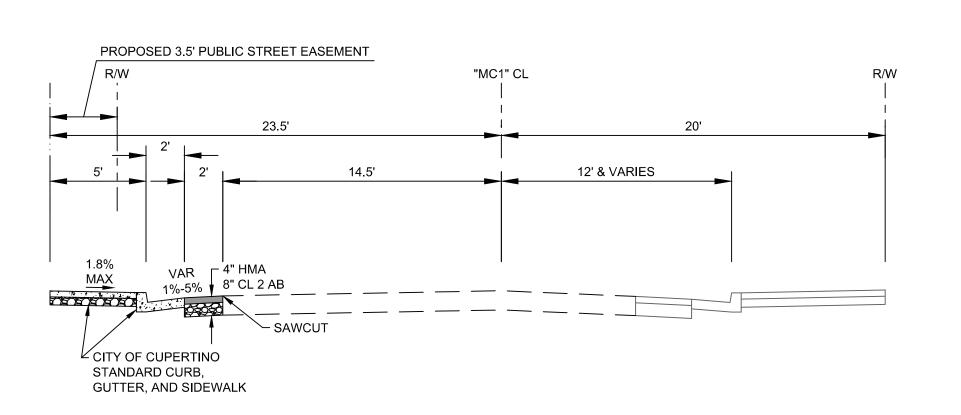
SEE CITY STD. DETAIL 2-22 FOR STREET NAME SIGNING



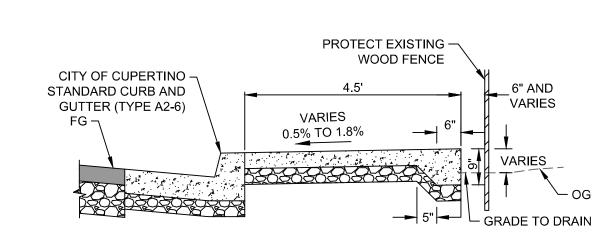
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Sirgle Family 16' 22' Multiple 18' 24' Conwercial min 20' min 32' max 33' max 44' Industrial min 21' min 36' max 33' max 44' Industrial min 21' min 36' max 33' max 44' Industrial min 21' min 36' max 33' max 48' Industrial min 21' min 36' max 33' max 48' Industrial 2006' max 33' max 48'	[n	TABLE "A"		
Multiple 18' 24' Commercial min 29' max 44' max 35' max 44' max 35' max 45' Industrial min 29' min 36' max 45' Industrial min 29' max 45' Industrial max 35' max 45'				
Conmercial min 29' max 44' max 35' max 48' min 36' max 48'		2-2164		
Industrial min 24' min 36' max 45' min 36' min		One way Tw	o Woy	
WEAKENED PLANE JOINT OR CUT JOINT OR CUT JOINT OR CUT SIDEWALK SIDEWALK NOTES: 1. Concrete driveways not mandatory in Industrial zones when sidewalks not construct 2. Score marks not to exceed 4'-0' C.C. Use mechanical separator at every other score m 3. Finish to be ligh: broom 4. Sidewalk to be replaced when new drive— way is placed. 5. Edge of driveway shall be a minimum of 4' from property line. 6. If on-street parking is permitted, driveway sh be flush with gutter. Pavement to be tuch with lip of gutter SECTION A - A DRIVEWAY DETAIL - MONOLITHIC SIDEWALK	Commercial			
SIDEWALK NOTES: 1. Concrete driveways not mandatory is industrial zones when sidewalks not construct 2 Score marks not to exceed 4"-0" C.C. Uses mechanical separator at every other score m 3. Finish to be ligh: broom 4. Sidewalk to be replaced when new criveway is placed. 5. Edge of driveway shall be a minimum of 4" from property line. 6. If on-street parking is permitted, driveway si be flush with guiter. Povement to be sush with lip of guiter Sidewalk and sush with guiter. Powement to be sush with lip of guiter Sidewalk and sush sush with guiter. Powement to be sush with guiter. Powement to be sush with guiter. Powement to be sush with lip of guiter 18" C.C. both ways be flush with guiter. Powement to be sush with lip of guiter 18" C.C. both ways be flush with guiter. Powement to be sush with guiter. Powement to be sush with lip of guiter 18" C.C. both ways be flush with guiter. Powement to be sush with lip of guiter 18" C.C. both ways be flush with guiter.	Industrial			SIDEWALK
Pavement to be flush with guiter. Pavement to be flush with lip of gutter 5" commercial or industrial w/ #4 rebar 18" O.C. both ways 4" residential 4" Class II Agg. bass material with a 95% relative compaction SECTION A - A DRIVEWAY DETAIL - MONOLITHIC SIDEWALK	/		WAY.	NOTES: 1. Concrete driveways not mandatory in industrial zones when sidewalks not construct 2. Score marks not to exceed 4'-0" C.C. Use mechanical separator at every other score m 3. Finish to be ligh: broom 4. Sidewalk to be replaced when new crive—way is placed.
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TYPICAL SECTION - MCCLELLAN RD



THICKENED SIDEWALK DETAIL

Land Planning Landscape Architecture Civil Engineering Utility Design

Land Surveying

Stormwater Compliance

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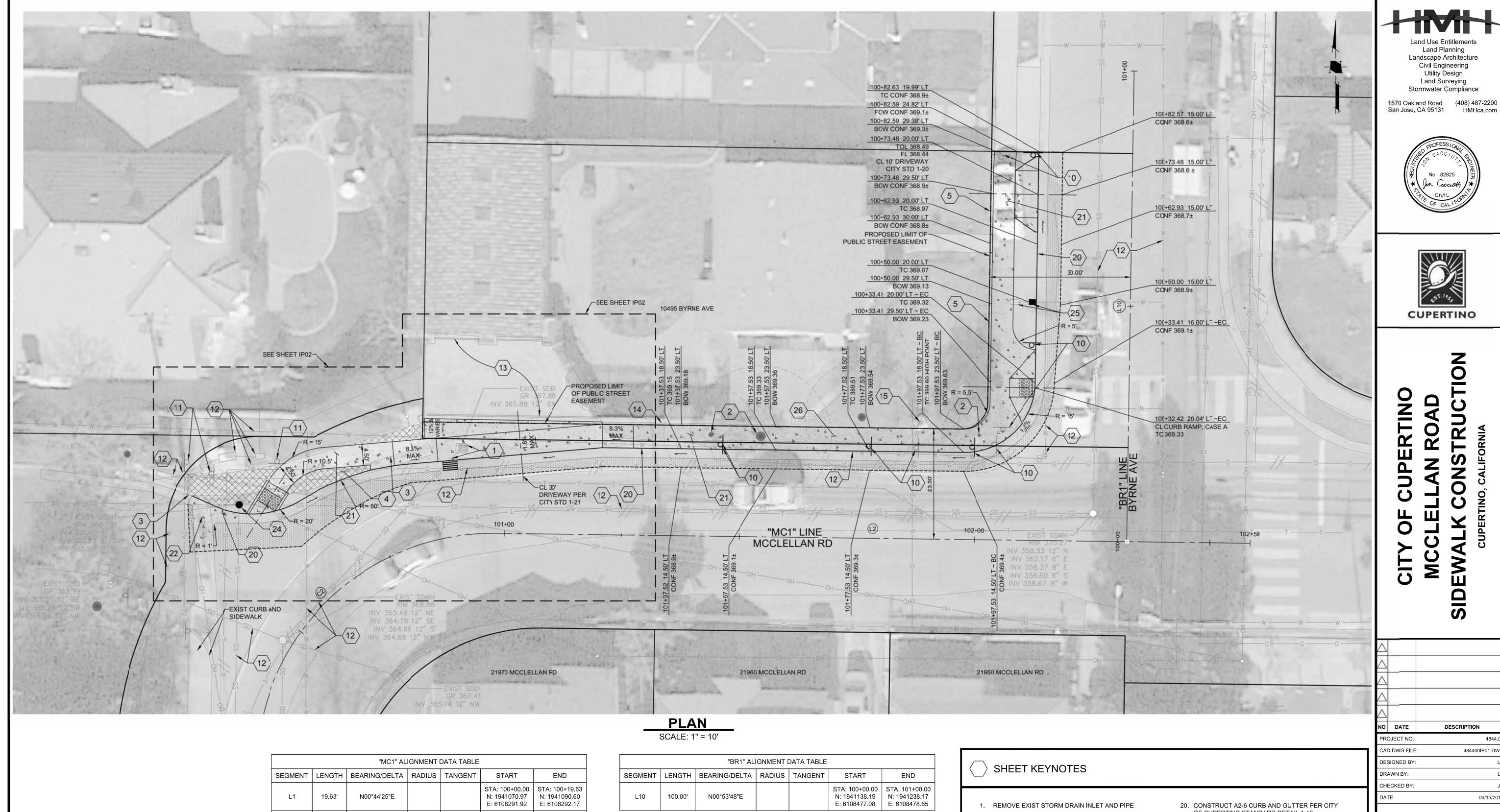
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AWN BY:	LA
ECKED BY:	JC
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DETAILS

DT03 4 OF 7



STA: 100+19.63 | STA: 100+98.18 N: 1941090.60 N: 1941139.95 E: 6108292.17 E: 6108342.82

STA: 100+98.18 | STA: 102+58.57

N: 1941139.95 N: 1941137.84

E: 6108342.82 E: 6108503.21

50.00'

50.01'

C2

L2

78.55'

160.40'

90°00'43"

S89°14'52"E



1 INCH = 10 FEET

- REMOVE EXIST TREE
- 3. REMOVE EXIST CURB AND GUTTER
- 4. REMOVE EXIST SIDEWALK
- 5. REMOVE WOODEN HEADER BOARD
- 10. RELOCATE ROADSIDE SIGN
- 11. PROTECT EXIST SIGN IN PLACE
- 12. PROTECT EXIST UTILITY IN PLACE
- 13. PROTECT EXIST PAVERS
- 14. PROTECT EXIST FENCE
- 15. RELOCATE BOULDER (ON SITE)

OF CUPERTINO STANDARD DETAIL 1-16

21. CONSTRUCT SIDEWALK PER CITY OF

- CUPERTINO STANDARD DETAIL 1-19
- 22. CONSTRUCT CONCRETE VALLEY GUTTER PER CITY OF CUPERTINO STANDARD DETAIL 1-18
- 23. NOT USED
- 24. ADJUST MANHOLE TO GRADE
- 25. WATER METER RELOCATED BY OTHERS ADJUST BOX TO GRADE
- 26. CONSTRUCT THICKENED SIDEWALK DETAIL PER SHEET DT03. FOR DETAILS NOT SHOWN SEE CUPERTINO STD 1-19. DETAIL EXTENDS ALONG MCCLELLAN RD FROM 101+27.18 TO 101+97.53.

IMPROVEMENT PLAN

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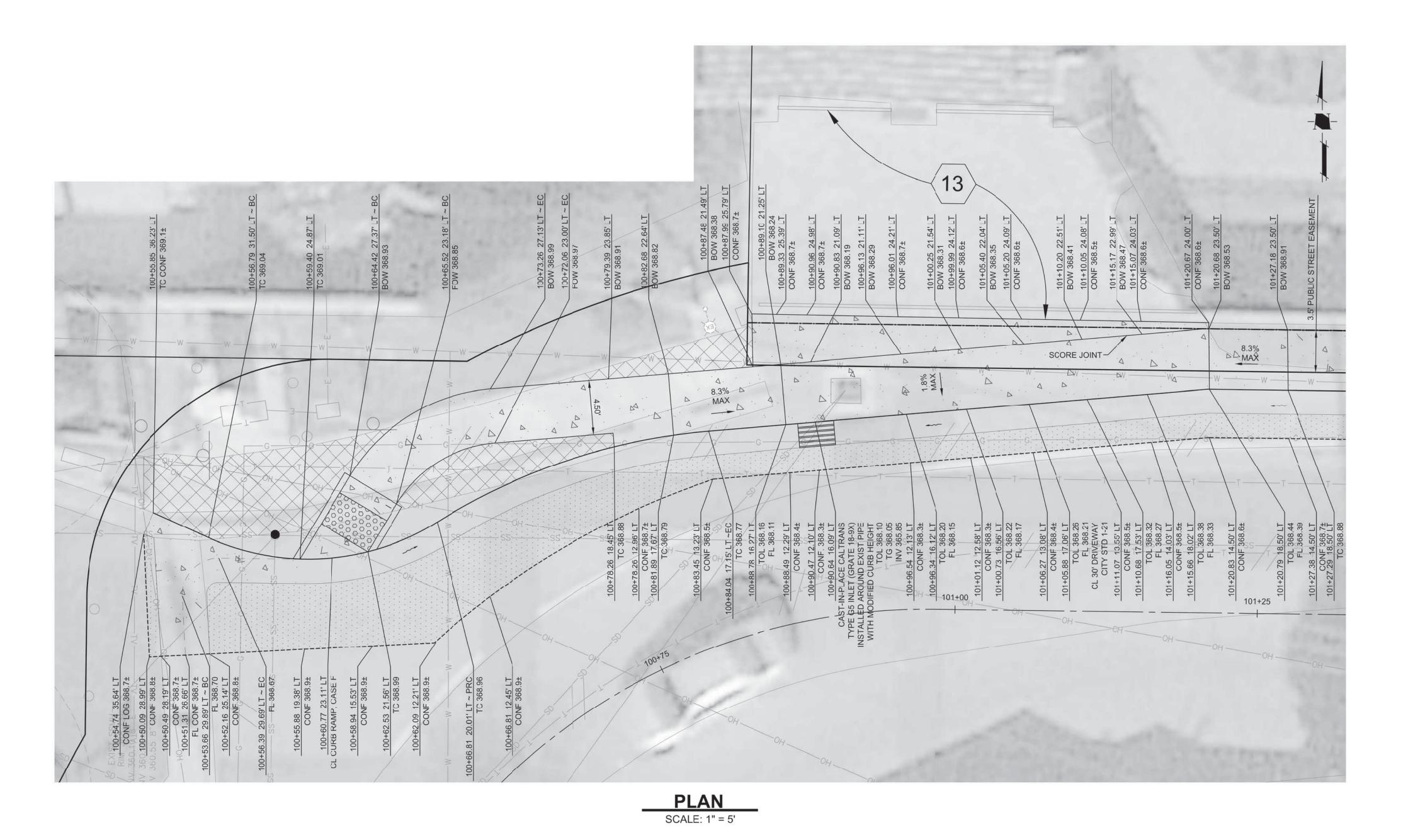
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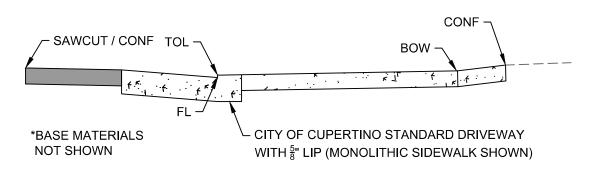
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DRIVEWAY ANNOTATION LEGEND





- 1. REMOVE EXIST STORM DRAIN INLET AND PIPE
- 2. REMOVE EXIST TREE
- 3. REMOVE EXIST CURB AND GUTTER
- 4. REMOVE EXIST SIDEWALK
- 5. REMOVE WOODEN HEADER BOARD
- 10. RELOCATE ROADSIDE SIGN
- 11. PROTECT EXIST SIGN IN PLACE
- 12. PROTECT EXIST UTILITY IN PLACE
- PROTECT EXIST PAVERS
- 13. PROTECT EXIST PAVERS
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- 20. CONSTRUCT A2-6 CURB AND GUTTER PER CITY OF CUPERTINO STANDARD DETAIL 1-16
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Land Use Entitlements
Land Planning
Landscape Architecture
Civil Engineering
Utility Design
Land Surveying
Stormwater Compliance

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CITY OF CUPERTINO MCCLELLAN ROAD SIDEWALK CONSTRUCTION

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IMPROVEMENT PLAN

IP02

6 **OF 7**

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USA GO

In the Santa Clara Valley, storm drains flow directly to our local creeks, and on to San Francisco Bay, with no treatment.

Storm water pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or

Proper management of construction sites reduces pollution significantly.

This sheet summarizes the "Best Management Practices" (BMPs) for storm water pollution prevention.

ORDINANCE OF THE CITY OF CUPERTINO FOR STORM WATER POLLUTION PREVENTION & WATERCOURSE PROTECTION: Chapter 9.18

9.18.040 Discharge into the storm drain prohibited

It shall be unlawful to discharge, or cause, allow, or permit to be discharged into any storm drain or natural outlet or channel all waste, including but not restricted to, sewage, industrial wastes, petroleum products, coal tar or any refuse substance arising from the manufacture of gas from coal or petroleum, chemicals, detergents, solvents, paints, contaminated or chlorinated swimming pool water, pesticides herbicides and fertilizers.

9.18.070 Accidental Discharge

All persons shall notify the Director of Public Works by telephone immediately upon accidentally discharging wastes to enable countermeasures to be taken by the City to minimize damage to storm drains and the receiving waters. This notification shall be followed, within ten (10) days of the date of occurrence, by a detailed written statement describing the causes of the accidental discharge and the measures being taken to prevent further occurrences. Such notifications will not relieve persons of liability for violations of this chapter or for any fines imposed on the city on account thereof under Section 13350 of the California Water Code, or for violations of Section 5650 of California Fish and wildlife Code, or any other applicable provisions of State or Federal laws.

Any person who violates any provision of this Chapter shall be quilty of a misdemeanor and upon conviction thereof shall be punished as provided in Chapter 1.12 of the City of Cupertino Municipal Code.

Chapter 1.12: General Penalty, Section 1.12.010, paragraph D,

Unless otherwise specified by this code, an

- infraction is punishable by: 1. A fine not to exceed \$100 for a first violation
- 2. A fine not to exceed \$200 for a second violation
- 3. A fine not to exceed \$500 for a third violation of the same chapter within one year.

9.18.240 Civil penalty for illicit discharges*

Any person who discharges pollutants, in violation of this Chapter, by the use of illicit connections shall be civilly liable to the City in a sum not to exceed twenty-five thousand dollars per day per violation for each day in which such violation occurs.

*Excerpts - For complete CODE language refer to the City of Cupertino Municipal Code.

> Building Dept: 408-777-3228 Public Works Dept: 408-777-3354 Santa Clara County Recycling Hotline 800-533-8414 www.reducewaste.org www.recyclestuff.com Small Business Hazardous Waste: 408-299-7300 Cupertino Sanitary Sewer Distr 408-253-7071 Santa Clara Valley Urban Runoff Pollution Prevention Prgm 800-794-2482 State Office of Emergency Services 1-800-852-7550 (24 hrs)

General Construction and Site Supervision

Storm Drain Pollution from Construction Activities

Construction sites are common sources of storm water pollution. Materials and wastes that blow o wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay. As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

General Principles

- Keep an orderly site and ensure good housekeeping practices are used.
- Maintain equipment properly.
- Cover materials when they are not in use. ☐ Keep materials away from streets, storm drains and drainage channels.
- Ensure dust control water doesn't leave site or discharge to storm drains.
- Advance Planning To Prevent Pollution Schedule excavation and grading activities for dry weather periods. To reduce soil rosion, plant temporary vegetation or place other erosion controls before rain begins. Use the Erosion and Sediment Control Manual,
- Control Board, as a reference. Control the amount of runoff crossing your site (especially during excavation!) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater run off velocities by constructing temporary check dams or berms where appropriate.
- Train your employees and subcontractors. The city can provide brochures about these issues for you to distribute to workers at your construction site. Inform your subcontractors about the stormwater requirements and their own responsibilities. Use Blueprint for a Clean Bay, a construction best management ractices guide available at our Building Dept. counter.

Good Housekeeping Practices

- Designate one area of the site for auto parking, vehicle refueling and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, bermed if necessary. Make major repairs off site.
- ☐ To prevent off-site tracking of dirt, provide entrances with stabilized aggregate surfaces. Or provide a tire wash area.
- ☐ Keep materials out of the rain prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before trains, sweep and remove materials from surfacest hat drain to storm drains, creeks, or channels.
- ☐ Keep pollutants off exposed surfaces. Place trash cans and recyding recept ades around the site to minimize litter
- Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on paved surfaces. Use dry cleanup methods whenever possible you must use water, use just enough to keep the
- dump sters under roofs or cover with tarps or plastic sheeting secured around the outside of the dump ster. Never clean out a dump ster by hosing it down on the construction site. Place portable toilets away from sorm drains.

Make sure portable to ilets are in good working

order. Check frequently for leaks. Materials/Waste Handling

Cover and maintain dumpsters. Place

- Practice Source Reduction -- minimize waste when you order materials. Estimate carefully. Recycle excess materials, whenever possible, such as concrete, asphalt, scrap metal, solvents, available from the Regional Water Quality degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires:
 - www.reducewaste.org for info. ☐ Dispose of all wastes properly. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave them in the street or near a creek or stream bed.
 - In addition to local grading and building permits, you will need to obtain coverage under the State's General Construction Activity Stormwater Permit if your construction site's disturbed area totals 5 acres or more. Information on the General Permit can be obtained from the Regional Water Quality Control Board. (This criteria will change to one acre as of Mar 2003.)

Landscaping, Gardening, and Pool Maintenance

- discharged to storm drains. These chemicals are Landscaping/Garden Maintenance toxic to aquate life. Protect stockpiles and landscaping materials from wind and rain by storing them under
- ☐ Schedule grading and excavation projects during dry weather.

Use temporary check dams or ditches to

tarps or secured plastic sheeting.

- divert run off away from storm drains. Protect stom drains with sandbags, gravelfilled bags, straw wattles, or other sediment
- ☐ Re-vegetation is an excellent form of erosion control for any site
- ☐ Store pesticides, fertilizers, and other chemicals indoors or in a shed cr storage
- ☐ Use pesticides sparingly, according to instructions on the label. Rinse empty containers, and use rinsewater as product Dispose of rinsed, empty containers in the trash. Dispose of unused pesticides as hazardous waste.
- ☐ In Cupertino, residents with curbside recycling can collect lawn, garden and tree trimmings in vardwaste toters. Yardwaste will be collected and composted by the city's conractors. Residents are encouraged to compost vardwaste on-site themselves. Cr take vardwaste to a landfill where it will be
- Landscape contractors should take clippings and pruning wast to a landfill that composts yard waste (BFI's Newby Island and Zanker Rd. landfill are the nearest)
- Do not blow or rake leaves into the street.

Storm Drain Pollution from Landscaping and **Swimming Pool Maintenance**

Many landscaping activities expose soils and increase the likelihood that earthand garden chemicals will run off into the storm drains during irrigation or when it rains Swimming pool water containing chlorine and copper-based algaecides should never be

Pool/Fountain/Spa Maintenance Draining pools or spas

When it's time to drain a pool, spa, or fountain please be sure to call the Cupertino Sanitary District before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows should be kept to the low levels typicaly possible through a garden hose Higher flow rates may be prohitited by local

- Never discharge pool or spa water to a street or storm drain; discharge to a sanitary sewer cleanout
- ☐ If possible, when emptying a pool or spa, let chlorine dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area.
- ☐ Do not use copper-based algaecides. Control algae with chlorine or other alternatives, such as sodium bromide.

Filter Cleaning

- ☐ Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area, and spade filter residue into soil. Dispose of spent diato maceous earth in the garbage.
- If there is no suitable dirt area, call Cupertino Sanitary for instructions on discharging filter backwash or rinsewater to the sanitary sewer.

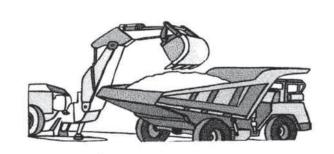
Earth-Moving **Activities**

Storm Drain Pollution from Earth-Moving Activities

Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm drains when handled improperly. Sediments in runoff can dog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runoff crossing a site and slow the flow with check dams or roughened ground surfaces.

Practices During Construction

- ☐ Remove existing vegetation only when absolutely necessary. Plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Protect downslope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or citches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's Erosion and Sediment Control Field Manual for proper erosion and sediment control
- Over stockpiles and excavated soil with secured tarps or plastic sheeting.



Dewatering Operations

Storm Drain Pollution From Dewatering Activities

Be sure to call your city's storm water inspector at 408-472-9907 before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin tank, and sediment trap may be required. Reuse water for dust control, irrigation or another on-site purpose to the greatest extent

Check for Sediment or Toxic Pollutants

- ☐ Check for odors, discoloration, or an oily sheen on ground water.
- ☐ Ask your city inspector whether the groundwater must be tested by a certified
- Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain OR you may be required to discharge to the sanitary sewer or collect and haul the water off-site for treatment and disposal at an appropriate treatment facility.
- When discharging to a storm drain, protect the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate
- Contact Cupertino Sanitary District at 253-7071 prior to discharging to the sanitary sewer.

Heavy Equipment Operation

Storm water Pollution from Heavy Equipment on Construction Sites

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible.

Site Planning and Preventive Vehicle

- Designate one area of the construction site, well away from stream sor storm drain inlets, for aut and equipm ent parking, refueling, and routine vehicle and equipment maintenance. Contain the area with berms, sand bags, or other Maintain all vehicles and heavy equipment.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off-site, where clean up is easier.
- If you must drain and replace motoroil, radiator drop cloths to catch drips and spills. Collect all spent fluids, stole in separate containers, and properly dispose as hazardous waste (recycle
- ☐ Donot use dieseloil to lubricate equipment parts, or clean equipment. Use only water for any onsite cleaning
- Cover exposed fifth wheel hitches and other oily or greasy equipment during rain events.

Spill Cleanup

- Clean up spills im mediately.
- Neverhose down 'dirty" pavement or impermeable surfaces where fluids have spilled.
 Use dry cleanup methods (absorbent possible and properly dispose of absorben
- Sweep up spilled dry materials immediately.
- Use as little wateras possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil
- ☐ Call 911 for signif cant spills
- ☐ If the spill poses a significant hazard to htman health and safety, property or the environment, you must also report it to the State Office of Emergency Services.

The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

Painting and Application of Adhesives

Storm Drain Pollution from Paints, Solvents, and Adhesives

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

Handling Paint Products

☐ Keepall liquid paint products and wastes awayfrom the gutter, street, and storm

Painting Cleanup

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or creek.
- For water-based paints, paint out brushes to the extent possible, and rinse into an inside sink drain that goes to the sanitary sewer. For oil-based paints, paint out brushes to the

extent possible and clean with thinner or

solvent. Filter and reuse hinners and solvents,

where possible. Dispose of excess liquids and

residue as hazardous waste. ■ When thoroughly dry, empty paint cans, used brushes, rags, and drop doths may be disposed of as garbage

- Paint chips and dustfrom non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash
- ☐ Chemical paint stripping residue, and chips and dust from marine paints, or paints containing lead, mercury or tributyl tinmust be disposed of as hazardous wastes. Lead based paint removal requires a state-certified
- When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct washwater onto a dirt area and spade into soil. Or, check with Cupertino Sanitary District to find out if you can mop or vacuum the washwater and dispose of it in a sanitary sewer drain. Sampling of the washwater may
- Washwater from painted buildings constructed before 1978 can contain high amounts of Lead, even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. (See Yellow Pages for a state-certified
- If there is loose paint on the building, or if the paint tests positive for lead, block storm drains. Check with Cupertino Sanitary District to determine whether you may discharge water to the sanitary sewer, or if you must send it offsite for disposal as hazardous waste.

Paint Disposal, Return or Donation

 Dispose of unwanted liquid paint, thinners, solvents, glues, and deaning fluids as hazardous waste (call the Small Business Hazardous Waste Prgm: 299-7300).

Or Return to supplier. (Unopened cans of paint

may be able to be returned. Check with the

vendor regarding its "buy-back" policy.)

■ Donate excess paint (call 299-7300 to donate.)

Roadwork

- General Business Practices ☐ Develop and implement erosion/sediment
- control plans for roadway embankments. Schedule excavation and grading work during dry weather.
- Check for and repair leaking equipment. Perform major equipment repairs at designated areas in your mair tenance yard, where cleanup is easier. Avoid performing
- equipment repairs at construction sites. ☐ When refueling or when vehicle /e quipment maintenance must be done on site, designate a location away from storm drains and creeks.
- ☐ Do not use diesel oil to lubricate equipment parts or clean equipment. ☐ Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly. (www.recyclestuff.com for list of recycling

Asphalt/Concrete Removal

companies.)

- Avoid creating excess dust when breaking asphalt
- After breaking up old pavement, be sure to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.

☐ When making saw cuts, useas little water as

possible. Shovel or vacuum saw-cut slurry and

drain inlets during saw-cutting. Sweep up, and

remove from the site. Cover or protect storm

properly dispose of, all residues. Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for asphalt, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

Storm Drain Pollution

from Roadwork

During Construction

- Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh materials from contacting stormwater
- Cover and seal catch bas ins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.

Protect drainage ways by using earth dikes,

sand bags, or other controls to divert or trap and filter ruroff. Never wash excess material from exposedaggregate concrete or similar treatments into

a street or storm drain. Collect and recycle or

- dispose to dirt area. Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms
- Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use Clean up all spills and leaks using "dry" methods (with absorbent materials and/or

rags), or dig up, remove, and properly dispose

Collect and recycle or appropriately dispose of excess abrasive gravel or sand. ???

of contaminated soil.

Avoid over-application by water trucks for dust

Fresh Concrete and Mortar Application —

Storm Drain Pollution from Fresh Concrete and Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

- General Business Practices ☐ Wash out concrete mixers only in designated washout areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by
- ☐ Wash out chutes onto dirt areas that do not flow to streets or drains Always store both dry and wel materials

under cover, protected from rainfall and runoff

pumping back into mixers for reuse.

and away from storm drains or waterways. Protect dry materials from wind Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains,

rainfall, and runoff.

☐ Do not use diesel fuel as a lubricant on

During Construction

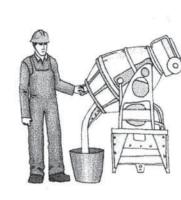
- Don't mix up more fresh concrete or cement than you will use in a wo-hour period.
- ☐ Set up and operate small mixers on tarps or heavy plastic drop cloths.

construction, wash fines onto dirt areas, not

- down the drive way or into the street or storm Protect applications of fresh concrete and mortar from rainfall and runoff until the
- material has dried. Wash down exposed aggregate concrete only when the washwater can (1) flow onto a dirt area. (2) drain onto a bermed surface from which it can be pumped and disposed of properly, or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure run off does not reach gutters or
- storm drains. ☐ When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete. See www.reducewaste.org for info on recyclers.
- Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.

Never dispose of washout into the street,

storm drains, drainage ditches, or streams.



Small Business

Hazardous Waste

Disposal Prgm

Businesses that generate less

than 27 gallons or 220 pounds

of hazardous waste per month

are eligible to use this program.

Call 408-299-7300

for a quote.



UPDATED JANUARY 2011

SHEET: 7

SHEETS EC01

CITY OF CUPERTINO

TIMM BORDEN, RCE 45512 12/31/12 DIRECTOR OF PUBLIC WORKS

Report spills to 911

1/26/2011

CONSTRUCTION BEST MANAGEMENT PRACTICES

DEPARTMENT OF PUBLIC WORKS