

GENERAL NOTES

STREET IMPROVEMENTS

1. THIS NOTE HEREIN INCORPORATES, BY REFERENCE, THOSE GENERAL NOTES NUMBERED 1 THROUGH 22 OF PFRD STANDARD PLAN 1801, 1997 METRIC EDITION.
2. ALL WORK MUST BE IN CONFORMANCE WITH THE CURRENT ORANGE COUNTY PFRD STANDARD PLANS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION LATEST EDITIONS, WHICH MUST BE KEPT ON THE WORKSITE AT ALL TIMES.
3. THE DEVELOPER SHALL TELEPHONE PFRD/CONSTRUCTION AT 567-7800 AT LEAST 24 HOURS PRIOR TO STARTING CONSTRUCTION WORK SUBJECT TO PFRD/PUBLIC WORKS' INSPECTION.
4. PFRD ENCROACHMENT PERMIT REQUIRED. PFRD APPROVED PLANS DO NOT RELIEVE CONTRACTOR/DEVELOPER FROM RESPONSIBILITY TO OBTAIN A PUBLIC PROPERTY PERMIT WHICH SHALL BE AVAILABLE ON THE JOB AT ALL TIMES WORK IS BEING ACCOMPLISHED IN THE PUBLIC RIGHT-OF-WAY.
5. ALL CONCRETE CURB AND GUTTER FLOWLINES WITH LESS THAN 1% GRADE SHALL BE WATER TESTED PRIOR TO FINAL FINISHING TO INSURE PROPER DRAINAGE WITHOUT UNACCEPTABLE HIGH OR LOW SPOTS.
6. ALL UTILITY TRENCH BACKFILL AND COMPACTION INSPECTION OUTSIDE THE LIMITS OF DEDICATED STREET RIGHT-OF-WAY SHALL BE PERFORMED BY PLANNING & DEV. SERVICES.
7. ALL DAMAGED CONCRETE SIDEWALKS OR CURBS SHALL BE SAWCUT TO THE NEAREST TRANSVERSE SCORE MARK OR ADJUSTABLE CONTROL JOINT OR WEAKENED PLANE JOINT AND REPLACED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF PFRD STANDARD PLANS.
8. DEVELOPER SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN, DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF COUNTY'S INSPECTOR. THE ADJACENT STREET SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. DEVELOPER SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREET AFFECTED BY HIS CONSTRUCTION. METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE COUNTY RIGHT-OF-WAY WITHOUT THE PERMISSION OF COUNTY'S INSPECTOR.
9. PRIOR TO FINAL ACCEPTANCE OF STREET IMPROVEMENTS, ALL STREET PAVEMENT, STRIPING AND STENCILING WITHIN THE PERIMETER OF THE CONSTRUCTION PROJECT WILL BE RESTORED TO A LIKE NEW CONDITION, IN A MANNER MEETING THE APPROVAL OF THE DIRECTOR OF PUBLIC WORKS. ALL STRIPING AND STENCILING SHALL BE ACCORDING TO STANDARD PLAN NO. 1801, NOTE 17.
10. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE PROTECTED WITH ADEQUATE BARRICADES, LIGHTS, SIGNS AND WARNING DEVICES AS PER THE CURRENT STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, MANUAL OF TRAFFIC CONTROLS, AND TO THE DIRECTIONS OF THE COUNTY'S INSPECTOR.
11. PFRD STANDARD PLANS SHALL TAKE PRECEDENCE OVER ANY CONFLICTS EXCEPT FOR STANDARD PLANS AFFECTING UTILITY COMPANIES, IF THEIR STANDARDS ARE MORE STRINGENT.
12. NO CONCENTRATED FLOWS ACROSS ASPHALT PAVEMENT WITHOUT COUNTY INSPECTOR'S APPROVAL.
13. ALL TRAFFIC MARKINGS AND STRIPING SHALL BE STENCILS WHICH CONFORM WITH FEDERAL TRANSPORTATION METRIC STANDARDS.
14. WHEREVER EXISTING PAVEMENT JOINS ANY PROPOSED PAVEMENT, DEVELOPER SHALL SAWCUT, OVERLAY OR GILD PLANE TO PROVIDE A UNIFORM 1.7% GROSSFALL TO THE SATISFACTION OF PFRD FIELD INSPECTOR.
15. ALL INSTALLATIONS AND WORK AFFECTING COUNTY PROPERTIES OR FACILITIES SHALL CONFORM WITH STANDARD SPECIFICATIONS, STANDARD PLANS, AND WITH THE PROVISIONS OF THE CONSTRUCTION PERMIT GRANTED BY COUNTY'S PUBLIC PROPERTY PERMITS DIVISION. CONTRACTOR SHALL MAINTAIN A COPY OF SAID PERMIT AND STAMPED PLANS ON THE JOB SITE. USE OF COUNTY PROPERTY AND CONFORMANCE WITH THE ABOVE SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY COUNTY'S DUTY ASSIGNED INSPECTOR.
16. SURVEY MONUMENTS SHALL BE PRESERVED AND REFERENCED BEFORE CONSTRUCTION AND REPLACED AFTER CONSTRUCTION PURSUANT TO SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE.
17. MEDIAN GRATE INLETS AND PVC PIPE IN MEDIAN AREAS WILL BE MAINTAINED BY THE MASTER HOMEOWNERS ASSOCIATION.

STORM DRAIN

1. ALL CONCRETE IN REINFORCED CONCRETE STRUCTURES MUST BE 3250 POUNDS PER SQUARE INCH IN 28 DAYS; TYPE OF PORTLAND CEMENT CONCRETE TO BE DETERMINED BY PFRD MATERIALS LAB.
2. ALL PIPE LENGTHS ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE SHOWN.
3. FOR TRENCH EXCAVATIONS IN NATIVE SOIL, SHORING SHALL BE PROVIDED TO SATISFY STATE OF CALIFORNIA SAFETY REQUIREMENTS.
4. PIPE CONSTRUCTION IN FILL AREA MUST BE COORDINATED WITH THE GRADING TO INSURE THAT WHEN THE FILL OPERATION HAS BEEN COMPLETED AT GRADE THERE IS A MINIMUM OF 2 FEET (600mm) OF FILL ABOVE THE TOP OF PIPE.
5. ALL WORK MUST BE IN CONFORMANCE WITH THE CURRENT ORANGE COUNTY PFRD STANDARD SPECIFICATIONS AND MUST BE KEPT ON THE JOB SITE AT ALL TIMES.
6. THE CONTRACTOR MUST NOTIFY THE PFRD INSPECTOR AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION BY TELEPHONING 567-7800, OR BY WRITING THE ORANGE COUNTY PFRD, ATTN: CONSTRUCTION, P.O. BOX 486, SANTA ANA, CA 92702.
7. ALL FILLS MUST BE COMPACTED TO 90% RELATIVE COMPACTION AS DETERMINED BY THE CALIFORNIA TEST METHOD NO. 216, 1978 "FIVE LAYER METHOD." ALL BACKFILL MUST BE FREE OF VEGETABLE MATTER.
8. ALL SURVEYING REQUIRED FOR VERTICAL AND HORIZONTAL ALIGNMENT MUST BE PROVIDED BY THE CONTRACTOR OR DEVELOPER AND SUFFICIENT REFERENCE STAKING MUST BE IN ACCORDANCE WITH THE REQUEST OF THE PFRD INSPECTOR.
9. ALL REINFORCED CONCRETE PIPE MUST BE BEDDED IN ACCORDANCE WITH PIPE BEDDING DETAIL PER PFRD STANDARD PLAN 1319.
10. CONTRACTOR WILL NOTIFY PFRD MATERIALS LAB (PHONE 567-7858) 48 HOURS PRIOR TO D-LOAD TESTING OF R.C.P. FOR VERIFICATION OF RESULTS.
11. PRIOR TO THE PLACEMENT OF STORM DRAIN IMPROVEMENTS, THE DEVELOPER'S SOIL ENGINEER SHALL CERTIFY IN WRITING TO THE PFRD INSPECTOR THAT THE STORM DRAIN'S SUBGRADE IS OF ADEQUATE STRENGTH TO SUPPORT THE STRUCTURES AND ANY ANTICIPATED LOADS.
12. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE DEVELOPER'S CONTRACTOR SHALL OBTAIN A PERMIT FROM THE STATE DIVISION OF INDUSTRIAL SAFETY. A COPY OF PERMIT SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
13. WHENEVER APPLICABLE, THE DEVELOPER SHALL OBTAIN A PERMIT FROM THE STATE DEPARTMENT OF FISH AND GAME IN ACCORDANCE WITH SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
14. ALL STEEL THAT IS TO BE CONTINUOUS SHALL BE LAPPED A MINIMUM OF 45 BAR DIAMETERS.
15. CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4" MIN. (19mm).
16. A PERMIT FOR WORK WITHIN EXISTING STREET RIGHT OF WAY IS REQUIRED FROM THE PFRD FOR ANY ENCROACHMENT NECESSARY FOR CONSTRUCTION IN PUBLIC RIGHT OF WAY.
17. LENGTH OF MANHOLE STRUCTURES MAY BE INCREASED TO MEET PIPE ENDS AT OPTION OF CONTRACTOR AS LONG AS REINFORCING STEEL IS CONTINUED AS REQUIRED. ANY CHANGE IN SPUR LOCATION MUST BE APPROVED BY THE ENGINEER.
18. FLOOR OF MANHOLE STRUCTURE SHALL BE STEEL TROWELLED TO SPRING LINE.
19. BODY OF MANHOLE STRUCTURE, INCLUDING SPUR, MUST BE POURED IN ONE CONTINUOUS OPERATION, EXCEPT THAT CONSTRUCTION JOINT AT THE SPRING LINE WITH A LONGITUDINAL KEY WAY IS PERMITTED.
20. ALL REINFORCING BARS MUST BE SECURELY HELD IN PLACE IN THE FORMS. TWO-WAY MATS OF STEEL MUST BE WIRED TOGETHER BOTH WAYS AT ALTERNATE INTERSECTIONS.
21. STORM DRAIN BACKFILL FOR ALL FACILITIES WITHIN STREET RIGHT OF WAY IS TO BE PLACED AND COMPACTED UNDER PFRD INSPECTION AND MEET OR EXCEED PFRD MINIMUM STANDARDS.
22. ALL PIPE 24" (600mm) AND LARGER TO BE BANDED AND GROUTED.

STORM DRAIN PLANS FOR
CROWN VALLEY PARKWAY BRIDGE EMBANKMENTS
JARDINES TO LADERA PC

STORM DRAIN (CONT.)

23. RCP SHALL COMPLY WITH ALL A.S.T.M. APPLICABLE STANDARDS.
24. WORKING WITHIN ORANGE COUNTY FLOOD CONTROL FACILITIES IS RESTRICTED TO THE PERIOD OF APRIL 15 TO OCTOBER 15.
25. ALL LOCAL DEPRESSIONS AND CATCH BASINS SHALL BE CONSTRUCTED PER STREET IMPROVEMENT PLANS IN ACCORDANCE WITH PFRD STANDARD PLANS.
26. THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT STORM OR OTHER WATERS MAY PROCEED UNINTERRUPTED ALONG THEIR EXISTING STREET OR DRAINAGE COURSES.
27. IN THE COURSE OF WATER CONTROL, THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS TO PROTECT WATERS FROM POLLUTION WITH FUELS, OILS, BITUMENS, OR HARMFUL MATERIALS.
28. LOCAL DEPRESSIONS AND DECKS OF CURB INLETS SHALL NOT BE POURED UNTIL ADJACENT CURB AND GUTTER HAS BEEN POURED.
29. IF A DRIVEWAY ENCROACHES WITHIN A LOCAL DEPRESSION TRANSITION, USE PFRD STANDARD PLAN #1308 - TYPE A.
30. CATCH BASIN CURB SUPPORTS SHALL BE CONSTRUCTED PER DETAIL "A" AS SHOWN ON PFRD STD. PLAN NO. 1306 SHEET 2 OF 2.
31. STORM DRAIN SHALL BE MAINTAINED BY THE COUNTY.

NOTICE TO CONTRACTORS

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES LINES AND STRUCTURES WHETHER SHOWN OR NOT SHOWN ON THIS PLAN, AND SHALL BE RESPONSIBLE FROM PROTECTING FROM DAMAGE.

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THIS PLAN WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS.

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATION" OF THE U.S. DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S AND SUBCONTRACTORS' COMPLIANCE WITH THE FEDERAL AND STATE REGULATIONS.

CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL AND OWNER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

THE CONTRACTOR SHALL BE RESPONSIBLE TO REPORT DISCREPANCIES IN PLANS AND/OR FIELD CONDITIONS IMMEDIATELY TO THE CIVIL ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION, AND SHALL BE RESPONSIBLE FOR DISCREPANCIES NOT SO REPORTED AND RESOLVED.

THE ESTIMATED QUANTITIES HEREON ARE ONLY FOR THE PURPOSE OF OBTAINING THE NECESSARY PERMITS, AND HUITT-ZOLLARS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE ESTIMATED QUANTITIES. THE CONTRACTOR SHALL PERFORM HIS OWN QUANTITY TAKEOFF BEFORE SUBMITTING A BID FOR ANY PORTION OF THE IMPROVEMENTS COVERED BY THESE PLANS.

ALL GRADING, EXCAVATION, REMOVAL AND RECOMPACTION SHALL BE IN ACCORDANCE WITH GOFFMAN, MCCORMICK AND URBAN, INC. GEOTECHNICAL REPORT NO. 92-06, DATED MARCH 31, 1998.

UNAUTHORIZED CHANGES & USES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.



IMPORTANT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIGALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIGALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK

38B-36-88 ELEV. 478.775' = 145.931 M (1988)
AT THE SOUTHWEST CORNER OF THE INTERSECTION OF CROWN VALLEY PKWY. AND MARGUERITE PKWY.; 14.630 M. WESTERLY OF THE CENTERLINE OF MARGUERITE PKWY.; 24.994 M. SOUTHERLY OF THE CENTERLINE OF CROWN VALLEY PKWY. SET AT THE TOP OF THE NORTHWEST CORNER OF A 0.914 M. BY 0.914 M. CONCRETE BASE FOR THE TRAFFIC SIGNAL LIGHT POLE.

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON, ARE BASED ON THE BEARING BETWEEN O.C.S. HORIZONTAL CONTROL STATION G.P.S. No. 1417 AND STATION G.P.S. No. 1431, BEING N4°51'18"W PER RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

APPROVED FOR CONSTRUCTION WITHIN THE CITY OF MISSION VIEJO

CITY ENGINEER *Barbara* 9-14-99
R.C.E. 30924 EXPIRES 3-31-00 DATE

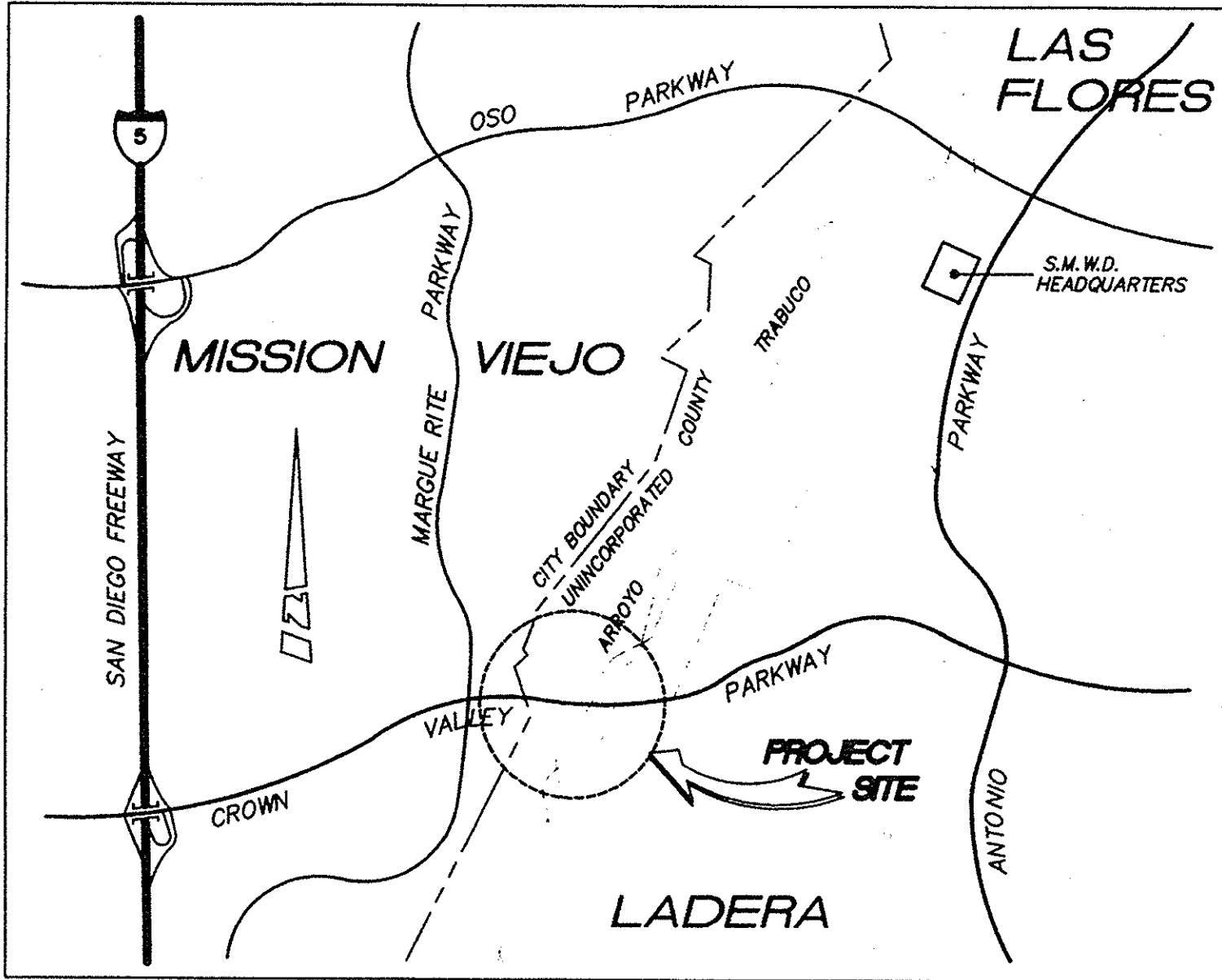
OWNER / DEVELOPER

DMB LADERA, L.L.C.
A DELAWARE LIMITED LIABILITY COMPANY
C/O: RMV LLC
CONTACT PERSON: PHIL HEALD
28811 ORTEGA HIGHWAY
SAN JUAN CAPISTRANO, CA 92675 (949) 240-3363

COUNTY OF ORANGE
PLANNING AND DEVELOPMENT SERVICES

THIS PLAN IS SIGNED BY PLANNING AND DEVELOPMENT SERVICES FOR CONCEPT AND ADHERENCE TO COUNTY STANDARDS AND REQUIREMENTS ONLY. PLANNING & DEVELOPMENT SERVICES IS NOT RESPONSIBLE FOR DESIGN ASSUMPTIONS OR ACCURACY.

APPROVED BY *Patricia* 9/14/99
R.C.E. NO. DATE



VICINITY MAP
NOT TO SCALE

ABBREVIATIONS

P.C.C.	PORTLAND CEMENT CONCRETE	A.C.	ASPHALT CONCRETE
P.P.	POWER POLE	A.B.	AGGREGATE BASE
R/W	RIGHT OF WAY	B.W.	BACK OF WALK
S.W.	SIDEWALK	C.B.	CATCH BASIN
S.L.P.B.	STREET LIGHT PULL BOX	C&G	CURB & GUTTER
T.C.	TOP OF CURB	C.F.	CURB FACE
T.E.	TRASH ENCLOSURE	C.O.	CLEAN OUT
T.F.	TOP OF FOOTING	C.	CENTERLINE
T.G.	TOP OF GRATE	D.G.	DECOMPOSED GRANITE
T.P.	TOP OF PAVEMENT	E.G.	EDGE OF GUTTER
T.W.	TOP OF WALL	E.P.	EDGE OF PAVEMENT
W.M.	WATER METER	F.F.	FINISHED FLOOR
W.V.	WATER VALVE	F.G.	FINISHED GRADE
300	PROPOSED ELEVATION	F.H.	FIRE HYDRANT
	EXISTING ELEVATION	F.L.	FLOW LINE
	TREE	F.S.	FINISHED SURFACE
	FLOW ARROW	G.B.	GRADE BREAK
SD	STORM DRAIN LINE	G.M.	GAS METER
W	WATER LINE	H.P.	HIGH POINT
S	SEWER LINE	INV.	INVERT
G	GAS LINE	LT	LIGHT
C	CABLE T.V. LINE	M.H.	MANHOLE
E	ELECTRICAL LINE	N.T.S.	NOT TO SCALE
T	TELEPHONE LINE	P.A.	PLANTER AREA

DRAWING INDEX

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4.	OUTLET STRUCTURE AND DETAILS.
5.	INLET STRUCTURE AND DETAILS.
6.	INLET STRUCTURE AND DETAILS.
7.	PAVING PLAN - WEST EMBANKMENT.
8.	PAVING PLAN - EAST EMBANKMENT.
9.	STORM DRAIN PLAN - WEST EMBANKMENT.
10.	STORM DRAIN PLAN - EAST EMBANKMENT.
11.	STORM DRAIN PROFILES - LINE "A".
12.	STORM DRAIN PROFILES - LINES "B" & "C".
13.	STORM DRAIN PROFILES - LINES "D", "E" & "F".



HUITT-ZOLLARS

Huitt-Zollars, Inc.
1501 Red Hill Avenue, Tustin, CA 92780 (714) 259-7900

DESIGNED BY: CARL F. TAYLOR	30924	3/31/2000	9/14/99
DRAWN BY: R.V.	R.C.E.	EXPIRES	DATE
CHECKED BY: CFT			
FIELD BOOK:			
STORM DRAIN PLANS FOR CROWN VALLEY PARKWAY BRIDGE EMBANKMENTS			
TITLE SHEET JARDINES TO LADERA PC			
SHEET 1 OF 13			JOB NO. 10-0367-03

DR. 18 (16295)