1.0 GENERAL

- 1.1 THIS SECTION SHALL GOVERN THE PREPARATION, PLANTING AND IRRIGATION SYSTEM CONSTRUCTION FOR LANDSCAPE AREAS REQUIRED BY THE PLANS OR SPECIFICATIONS.
- 1.2 EXISTING UTILITIES AND IMPROVEMENTS NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED IN PLACE. REMOVALS SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY PROCEDURES
- 1.3 UNLESS OTHERWISE PROVIDED, WALLS, CURBS, PLANTER BOXES, WALKS, IRRIGATION SYSTEMS, AND SIMILAR IMPROVEMENTS REQUIRED BY THE PLANS OR SPECIFICATIONS SHALL BE CONSTRUCTED FOLLOWING ROUGH GRADING AND BEFORE LANDSCAPING.

2.0 EXRTHWORK AND TOPSOIL PLACEMENT

- 2.1 EARTHWORK AND TOPSOIL PLACEMENT SHALL INCLUDE EXCAVATION AND BACKFILL FOR THE IRRIGATION SYSTEM AND THE PREPARATION FOR AND THE SPREADING, DENSIFICATION, CULTIVATION, AND RAKING OF TOPSOIL, INCLUDING FERTILIZATION AND CONDITIONING.
- 2.2 PLANTING HOLES AND BACKFILL SHALL BE IN ACCORDANCE WITH SUBSECTION 6.0
- 2.3 PRELIMINARY ROUGH GRADING AND RELATED WORK TO PREPARE AREAS FOR LANDSCAPING WORK TO WITHIN 0.1 FOOT OF FINISH GRADE.

3.0 TOPSOIL PREPARATION AND CONDITIONING

AGRICULTURAL GYPSUM

3.1 FOR ALL AREAS TO BE PLANTED WITH FLATTED GROUNDCOVER OR PLANT MATERIALS SMALLER THAN ONE (1) GALLON SIZED PLANTS, THE FOLLOWING AMENDMENTS SHELL BE TILLED INTO THE TOP SIX (6) INCHES OF THE NATIVE SOIL PER 1000 SQUARE FEET:

TOPGRO ORGANIC FERTILIZER NITROGEN FORTIFIED FIR WOOD/BARK AMENDMENT

2 CUBIC YARDS 2 CUBIC YARDS 50 POUNDS

- 3.2 SOIL SHALL NOT BE WORKED WHEN IT IS SO WET OR SO DRY AS TO CAUSE EXCESSIVE COMPACTION OR THE FORMING OF HARD CLODS OR DUST.
- 3.3 TOPSOIL SHALL BE SCARIFIED AND CULTIVATED TO A FINELY DIVIDED CONDITION TO A DEPTH OF 6 INCHES MINIMUM BELOW FINISH GRADE. DURING THIS OPERATION, ALL STONES OVER 1 INCH IN GREATEST DIMENSION SHALL BE REMOVED.

4.0 FERTILIZING AND CONDITIONING PROCEDURES

- 4.1 THE PLANTING AREA SHALL BE BROUGHT TO FINISH GRADE BEFORE SPREADING THE FERTILIZERS OR CONDITIONING MATERIALS SPECIFIED.
- 4.2 FERTILIZING AND CONDITIONING MATERIALS SHALL BE MECHANICALLY SPREAD AT A UNIFORM RATE. THE QUANTITIES OF MATERIALS NECESSARY FOR THE PLANTING AREA SHALL BE AT THE SITE AND SHALL BE VERIFIED BY DELIVERY TICKETS FURNISHED TO THE ENGINEER BEFORE SPREADING.
- 4.3, AFTER SPREADING, FERTILIZING AND CONDITIONING MATERIALS SHALL BE UNIFORMLY CULTIVATED INTO THE UPPER 6 INCHES OF SOIL BY SULTABLE EQUIPMENT OPERATED IN AT LEAST TWO DIRECTIONS APPROXIMATELY AT RIGHT ANGLES. THE RESULTING SOIL SHALL BE IN A FRIABLE CONDITION.

5.0 FINISH GRADING

- 5.1 THE FINISH GRADE SHALL BE SMOOTH, UNIFORM, AND FREE OF ABRUPT GRADE CHANGES AND DEPRESSIONS TO ENSURE SURFACE DRAINAGE.
- 5.2 THE FINISH GRADE BELOW ADJACENT PAVING, CURBS OR HEADERS SHALL BE 1 INCH IN LAWN AREAS AND 2 INCHES IN SHRUB OR GROUNDCOVER AREAS
- 5.3 AFTER FERTILIZING AND CONDITIONING, THE SOIL SHALL BE WATERED AND ALLOWED TO SETTLE TO PROVIDE A STABLE SURFACE, NOT OVERLY DENSIFIED TO THE EXTENT THAT IT WILL PREVENT AERATION AND WATER INFILTRATION. AFTER THE SOIL HAS DRIED OUT TO A WORKABLE CONDITION, THE PLANTING AREAS SHALL BE REGRADED, RAKED, AND SMOOTHED TO THE REQUIRED GRADES AND CONTOURS. FINISH SURFACES SHALL BE CLEAN AND SUITABLE FOR PLANTING.

6.0 PLANTING

- 6.1 THE TYPES, SIZES, AND QUANTITIES OF PLANT MATERIALS SHALL BE AS CALLED FOR IN THE SPECIFICATIONS.
- 6.2 ALL PLANTS WILL BE INSPECTED PRIOR TO PLANTING, INCLUDING PLANTS PREVIOUSLY APPROVED AT THE NURSERY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF ALL PLANTS, PLANTED OR OTHERWISE, UNTIL ACCEPTANCE.
- 6.3 PLANTING SHALL BE PERFORMED WITH MATERIALS, EQUIPMENT, AND PROCEDURES FAVORABLE TO THE OPTIMUM GROWTH OF THE PLANTS AND IN COMPLIANCE WITH THESE PROCEDURES.
- 6.4 EXCEPT AS NOTED FOR SPECIMEN PLANTING, ALL PLANTING SHALL FOLLOW THE COMPLETION OF THE IRRIGATION SYSTEM.

7.0 PROTECTION AND STORAGE

- 7.1 THE CONTRACTOR SHALL KEEP ALL PLANT MATERIAL DELIVERED TO THE SITE IN A HEALTHY CONDITION FOR PLANTING. PLANTS SHALL NOT BE ALLOWED TO DRY OUT. BARE ROOT STOCK SHALL BE SEPARATED AND "HEELED IN" MOIST EARTH OR OTHER SUITABLE MATERIAL. BALLED AND BURLAPPED PLANTS SHALL HAVE THE ROOT BALL COVERED WITH MOIST SAWDUST, WOOD CHIPS, OR OTHER APPROVED MATERIAL.
- 7.2 THE CONTRACTOR SHALL PROVIDE A SECURE AREA FOR NURSERY AND PLANT MATERIAL AND EQUIPMENT ACCESSIBLE TO THE ENGINEER OR INSPECTOR FOR THE DURATION OF THE ESTABLISHMENT PERIOD.

8.0 LAYOUT AND PLANT LOCATION

- 8.1 PLANTING AREAS SHALL BE STAKED BY THE ENGINEER. DETAILED LAYOUT WITHIN THE PLANTING AREAS SHALL BE PERFORMED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO PLANTING. PARKWAY TREES WILL BE LOCATED IN THE FIELD BY THE ENGINEER BEFORE PLANTING.
- 8.2 THE FIRST ROW OF PLANTS IN AREAS DESIGNATED FOR CENTER TO CENTER SPACING OF PLANTS SHALL BE LOCATED AT ONE-HALF OF DESIGNATED SPACING FROM THE EDGE OF THE AREA.
- 8.3 SPECIMEN PLANTING. PLANTS IN BOXES 24 INCHES AND LARGER SHALL BE PLANTED BEFORE INSTALLATION OF LATERAL IRRIGATION LINES.

8.4 IRRIGATION LINES CONFLICTING WITH SPECIMEN PLANT LOCATIONS SHALL BE REROUTED TO CLEAR THE ROOT BALL.

9.0 TREE AND SHRUB PLANTING

- 9.1 PLANTING HOLES SHALL BE APPROXIMATELY ROUND WITH VERTICAL SIDES TWICE THE DEPTH AND WIDTH OF THE PLANT CONTAINER OR BALL, AND SHALL BE LARGER IF NECESSARY TO PERMIT HANDLING AND PLANTING WITHOUT INJURY OR BREAKAGE OF THE ROOT BALL OR ROOT SYSTEM. ANY PLANT WITH A BROKEN OR CRACKED ROOT BALL BEFORE OR DURING PLANTING SHALL NOT BE PLANTED.
- 9.2 CONTAINERS SHALL BE OPENED AND REMOVED IN SUCH A MANNER THAT THE PLANT BALL ROOT IS NOT INJURED. BALLED PLANT WRAPPINGS SHALL BE LOOSENED OR CUT BACK AFTER PLANT IS POSITIONED IN THE PLANTING HOLE.
- 9.3 THE NATIVE SOIL AT THE BOTTOM OF PLANTING HOLES SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES.
- 9.4 ALL PLANTING HOLES SHALL BE BACKFILLED WITH A PREPARED SOIL MIX. SOIL SHALL CONSIST OF 50 PERCENT OF THE SPECIFIED TOPSOIL AND 50 PERCENT ORGANIC SOIL AMENDMENT.
- 9.5 AFTER PLANTING, THE PLANT SHALL BE PLUMB, WITH THE ROOT CROWN AT ITS NATURAL GROWING DEPTH WITH RESPECT TO FINISH GRADE. PLANTING SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:
- 9.5.1 A LAYER OF PREPARED SOIL MIX SHALL BE DEPOSITED IN THE PLANTING HOLE.
- 9.5.2 THE PLANT SHALL BE SET APPROXIMATELY AT THE CENTER OF THE HOLE.
- 9.5.3 PREPARED SOIL MIX SHALL BE DEPOSITED IN THE REMAINDER OF THE HOLE TO FINISH GRADE.
- 9.5.4 THE BACKFILL SHALL BE THOROUGHLY WATER-SETTLED AND ADDITIONAL PREPARED SOIL MIX ADDED TO FILL ANY REMAINING VOID BELOW FINISH GRADE.
- 9.5.5 A CIRCULAR WATERING BASIN SLIGHTLY LARGER THAN THE PLANTING HOLE, 4 INCHES HIGH FOR TREES AND 2 INCHES HIGH FOR SHRUBS, SHALL BE LEFT AROUND THE PLANT. THE BOTTOM OF THE BASIN SHALL BE AT APPROXIMATE FINISH GRADE OR SLIGHTLY LOWER. AMENDMENT OR MULCH SHALL BE SPREAD AT LEAST 2 INCHES THICK IN THE BASIN.
- 9.5.6 THE PLANT SHALL BE GUYED AND STAKED AS SPECIFIED IN CITY OF LOS ANGELES STANDARD PLAN S-663-0.
- 9.5.7 THE AREA AROUND PLANTS SHALL BE REGRADED TO FINISH GRADE. THE EXCESS SOIL SHALL BE DISPOSED OF BY THE CONTRACTOR.

10.0 GROUND COVER AND VINE PLANTING

- 10.1 SOIL PREPARATION AND FINE GRADING SHALL BE COMPLETED PRIOR TO GROUND COVER PLANTING.
- 10.2 GROUND COVER AND VINES SHALL BE PLANTED IN MOIST SOIL AND SPACED AS INDICATED ON THE PLANS.
- 10.3 EACH PLANT SHALL BE PLANTED WITH ITS PROPORTIONATE AMOUNT OF FLAT SOIL TO MINIMIZE ROOT DISTURBANCE. SOIL MOISTURE SHALL BE SUCH THAT THE SOIL DOES NOT CRUMBLE WHEN REMOVING PLANTS.
- 10.4 FOLLOWING PLANTING, GROUND COVER AND VINE AREAS SHALL BE GRADED TO RESTORE SMOOTH FINISH GRADE AND TO ENSURE PROPER SURFACE DRAINAGE. A 1-INCH LAYER OF AMENDMENT OR MULCH SHALL BE SPREAD OVER THE PLANTED AREAS. WATERING, SHALL BEGIN IMMEDIATELY FOLLOWING MULCHING.
- 10.5 WHEN NECESSARY TO PREVENT PLANT DAMAGE FROM PEDESTRIAN TRAFFIC DURING THE INITIAL GROWING STAGE, THE CONTRACTOR SHALL ERECT TEMPORARY PROTECTIVE FENCING TO BE REMOVED AT THE END OF THE PLANT ESTABLISHMENT PERIOD.
- 10.6 VINES SHALL BE TIED TO WALLS, FENCES, ETC., IN THE MANNER PRESCRIBED ON THE PLANS. TEMPORARY STAKING SHALL BE REMOVED AT THE END OF THE PLANT ESTABLISHMENT PERIOD.

11.0 EROSION CONTROL PLANTING

- 11.1 EROSION CONTROL PLANTING SHALL BE FOR SLOPE PROTECTION. TOPSOIL PREPARATION AND CONDITIONING SHALL BE IN ACCORDANCE WITH SUBSECTION 3.0.
- 11.2 ICE PLANT SPRIGS SHALL BE PLANTED IN MOIST SOIL IN HOLES OR FURROWS 4 INCHES DEEP AND THE HOLE OR FURROW REFILLED WITH SOIL AND MADE FIRM AROUND THE PLANT IN SUCH A MANNER THAT THE PLANT IS NOT DAMAGED
- 11.3 SPRIGS SHALL BE PLANTED INDIVIDUALLY AT SPECIFIED SPACING. WHEN ROW SPRIGGING IS SPECIFIED, PLANTING SHALL BE IN FURROWS CUT ALONG THE CONTOUR OF THE SLOPE.
- 11.4 IF MULCHING OF SPRIGGED AREAS IS REQUIRED, IT SHALL IMMEDIATELY FOLLOW PLANTING.

12.0 WATERING

- 12.1 ALL SEEDED AND PLANTED AREAS SHALL BE KEPT MOIST DURING THE ESTABLISHMENT PERIOD.
- 12.2 AREAS CONTAINING ICE PLANTS SHALL BE MAINTAINED IN A BARELY MOIST CONDITION TO A DEPTH OF 1 INCH BELOW THE PLANTED ROOT DEPTH.
- 12.3 WHEN A PERMANENT IRRIGATION SYSTEM IS NOT AVAILABLE, THE CONTRACTOR SHALL PROVIDE WHATEVER TEMPORARY SYSTEM IS NECESSARY TO PROVIDE ADEQUATE WATERING DURING THE ESTABLISHMENT PERIOD WITHOUT EROSION DETRIMENTAL TO THE PLANTING.
- 12.4 THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM FOR ALL REPLACEMENT PLANTS DURING THE ESTABLISHMENT PERIOD.

13.0 MAINTENANCE AND PLANT ESTABLISHMENT

13.1 THE CONTRACTOR SHALL MAINTAIN ALL PLANTED AREAS ON A CONTINUOUS BASIS AS THEY ARE COMPLETED DURING THE PROGRESS OF THE WORK AND DURING THE ESTABLISHMENT PERIOD, AND SHALL CONTINUE TO MAINTAIN THEM UNTIL FINAL ACCEPTANCE.

13.2 ALL PLANTED AREAS SHALL BE KEPT FREE OF DEBRIS AND SHALL BE WEEDED AND CULTIVATED AT INTERVALS NOT TO EXCEED 10 DAYS. THE FIRST MOWING OF LAWN AREAS SHALL BE PERFORMED WHEN THE GRASS IS 2-1/2 INCHES HIGH AND SHALL BE REPEATED AS OFTEN AS IS NECESSARY TO MAINTAIN THE LAWN AT A HEIGHT OF 2 INCHES. IN NO CASE SHALL THE LAWN BE CUT LOWER THAN 1-1/2 INCHES IN HEIGHT.

13.3 ANY REQUIRED PRUNING OF PLANTS WILL BE DESIGNATED BY THE ENGINEER AT THE START OF THE PLANT ESTABLISHMENT PERIOD AND THE CONTRACTOR SHALL PERFORM THE PRUNING AS PART OF THE PLANT ESTABLISHMENT WORK.

13.4 THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION TO BEGIN THE PLANT ESTABLISHMENT PERIOD AFTER ALL PLANTING AND RELATED WORK HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

13.5 AFTER PLANTING IS COMPLETED, A FIELD NOTIFICATION WILL BE ISSUED TO THE CONTRACTOR TO ESTABLISH THE EFFECTIVE BEGINNING DATE OF THE PLANT ESTABLISHMENT PERIOD. THE PLANT ESTABLISHMENT PERIOD SHALL BE FOR A PERIOD OF 30 CALENDAR DAYS EXCLUDING TREES WHICH WILL HAVE AN ESTABLISHMENT PERIOD OF 5 YEARS AND SHALL BE EXTENDED BY THE ENGINEER IF THE PLANTED AREAS ARE IMPROPERLY MAINTAINED, APPRECIABLE PLANT REPLACEMENT IS REQUIRED, OR OTHER CORRECTIVE WORK BECOMES NECESSARY.

- 13.6 UPON COMPLETION OF THE PLANT ESTABLISHMENT PERIOD, A FINAL INSPECTION FOR ACCEPTANCE WILL BE PERFORMED BY THE ENGINEER. IF THE PLANT ESTABLISHMENT PERIOD IS SATISFACTORILY COMPLETED AHEAD OF OTHER WORK INCLUDED IN THE CONTRACT, THE MAINTENANCE OF PLANTED AREAS SHALL BE CONTINUED BY THE CONTRACTOR UNTIL ALL OTHER WORK HAS BEEN COMPLETED AND ACCEPTED.
- 13.7 TREES, SHRUBS AND GROUNDCOVER SHALL BE PRUNED TO CLEAR SIDEWALKS AND ROADWAYS. ALL SHRUBS AND GROUNDCOVER IN THE TRAFFIC ISLANDS AND MEDIANS ARE TO BE KEPT THREE (3) FEET HIGH
- 13.8 PRIOR TO FINAL ACCEPTANCE, THE VENICE ACTION COMMITTEE WILL REMOVE, UPON WRITTEN REQUEST, AT ITS OWN EXPENSE, ANY PLANT MATERIAL THE CITY FINDS UNSUITABLE FOR USE WITHIN THE AREAS PLANTED BY THIS PROJECT.

14.0 GUARANTEE

THE ENTIRE IRRIGATION CONTROL SYSTEM SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF 1 YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK.

, 4" PORS CEANOTHUS GRISELB HORIZONTALIS @ 18" O.C.

FESTUCA PUBBA MOLATE

ESCHSCHOLZIA CALIFORNICA

ACHILLEA MILLEFOLIUM

(125 FLATS OF 4 POTS)

· SEED MIX:

LBS/ACRE

TREE SCHEDULE

SYMBOL NOTATION	BOTANICAL NAME	COMMON	SIZE	SPACING	REMARKS
T-1	Platanus racemosa	California Sycamore - single trunk	15 gal.	Per plan	
T-2	Platanus racemosa	California Sycamore - multi trunk	15 gal.	Per plan	
T-3	Quercus agrifolia	Coast Live Oak	15 gal.	Per plan	
T-4	Cassia leptophylla	Gold Medallion Tree	15 gal.	Per plan	
T-5	Tipuana lipu	Tipu Tree	15 gal.	Per plan	
T-6	Spathodea campanulata	African Tulip Tree	15 gal.	Per plan	
T-7	Washingtonia robusta	Mexican Fan Palm	B.T.F. varies	Per plan	A= 6'-0" B.T.F. B= 10'-0" B.T.F. C= 15'-0" B.T.F. D= 22'-0" B.T.
T-8	Cedrus deodara	Deodar Ceder	24" box	Per plan	
T-9	Eucalyptus deglupta	Mindanao Gum	15 gal.	10'- 0" o.c.	
T-10	Lyonothamnus floribundus	Catalina Ironwood	15 gal.	10' - 0" o.c.	,
T-11	Arbutus menziesii	Madrone	15 gal.	10' - 0" o.c.	

SHRUB SCHEDULE

SYMBOL NOTATION	BOTANICAL	COMMON	SIZE	SPACING	REMARKS
S-1	Aloe arborescens	Tree Aloe	5 gal.	3'- 0" o.c. max.	
S-2	Leonotis leonurus	Lìon's Tail	1 gal.	2'- 0" to 3'- 0" o.c.	
S-3	Phormium tenax - "rubrum"	Purple/Red New Zealand Flax	5 gai.	4'- 0" o.c.	Locate per plan.
S-4	Phormium "Bronze Baby"	Dark Red / Bronze New Zealand Flax	5 gal.	2'- 0" to 3'- 0" o.c.	Locale per plan. Contact. San Marcos Growers: (805)683-1561.
S-5	Acacia redolens	-	1 gal.	4'- 0" o.c.	

GROUNDCOVER / VINE SCHEDULE

SYMBOL	BOTANICAL	COMMON NAME	SIZE	SPACING	REMARKS
GC-1 / V-1	Bougainvillea - California Gold	Bougainvillea - California Gold	5 gal.	3'-6" o.c.	GC = Plant as groundcover; V = Plant as vine on walls or fencing; Plant with GC-2 or V-2 at a 1 to 1 ratio
GC-2 / V-2	Bougainvillea - Orange King	Bougainvillea - Orange King	5 gal.	3'-6" o.c.	GC = Plant as groundcover; V = Plant as vine on walls or fencing; Plant with GC-1 or V-1 at a 1 to 1 ratio.
GC-3	Lampranthus spectabilis	Trailing Orange Ice Plant	from flat	9" o.c. trì- spacing	Orange flowers
GC-4	Eschscholzia californica	California Poppy	from seeds	3 lbs. per acre	Broad cast under Aloes (S-1), Lions Ta (S-2), and Bougainvilleas (GC-1 & GC 2) as a nurse crop. 98% min. purity 75% min. germination. Contact. S&S Seeds (805)684-0436
GC-5			SEE NO	TF3)	Contact: S & S Seeds - (805) 684 - 0436

TURF AND GRASSES SCHEDULE .

SYMBOL	BOTANICAL	COMMON	SIZE	SPACING	REMARKS
TG-1	Pennisetum setacium 'rubrum' 80116AINIVILLEA	Purple Fountain Grass ROSENKA PULG	1 gal.	18° o.c. tri- spacing 244° 0.6	PLACE IN FIELD W LAND APCH.
TG-2	Marathon II	-	sod ¹	•	
TG-3	Pennisetum Setaceum	Fountain Grass	1 gal.	18" o.c. tri- spacing	
TG-4	Cortaderia Selloana Ivory Feathers (Trademark) 'Pumila'	Ivory Feathers (Trademark) Dwarf Pampas Grass	1 gal.	18" o.c. tri- spacing	Contact Monrovia Nursery Co (800) 999 - 9321

MEADOW SEED M MIN. PURITY/GERMINATION Oencthera cheiranti Phacelia campanulari Sisyrinchium bellum

BLDG, NO.

WORK ORDER NO. PLAN NO.

JOB CAPTAIN DRAWN BY CHECKED BY

SHEET NO. 2

ENG 6 104 7/93DA/HVI