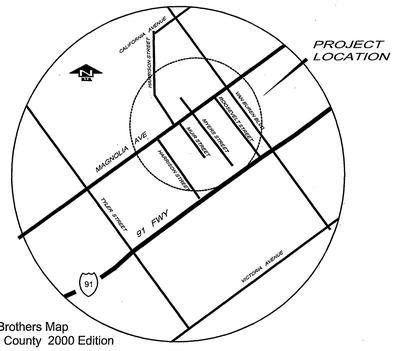
ARLINGTON VILLAGE BEAUTIFICATION AND MAGNOLIA IRRIGATION STREET IMPROVEMENT PLANS MAGNOLIA AVENUE

CITY OF RIVERSIDE, CALIFORNIA

A HUD FUNDED PROJECT



Thomas Brothers Map
Riverside County 2000 Edition
Page 714

Vicinity Map
N.T.S.

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REMOVAL NOTES — ~~ESTIMATE OF QUANTITIES~~

(1)	SAWCUT TO CLEAN STRAIGHT LINE.	7,095 L.F.
(2)	REMOVE EXISTING PCC SIDEWALK AND DRIVE APPROACH.	72,512 S.F.
(3)	PROTECT IN PLACE.	LUMP SUM
(4)	ADJUST TO FINAL GRADE AS NECESSARY.	102 EA.
(5)	REMOVE AND REPLACE EXISTING IMPROVEMENTS.	6 EA.
(6)	REMOVE AND SALVAGE EXISTING IMPROVEMENTS	4 EA.

CONSTRUCTION NOTES

(7)	CONSTRUCT 6" THICK A.C. PAVEMENT.	49,600 S.F.
(8)	CONSTRUCT SIDEWALK PER CITY OF RIVERSIDE STD 325.	58,802 S.F.
(9)	CONSTRUCT DRIVE APPROACH PER CITY OF RIVERSIDE STD 302.	10,916 S.F.
(10)	CONSTRUCT BUS STOP SHELTER PER DETAIL ON SHEET 5 AND CITY SPECIFICATIONS	4 EA.
(11)	CONSTRUCT PEDESTRIAN BENCH PER DETAIL ON SHEET 5 AND CITY SPECIFICATIONS.	9 EA.
(12)	REMOVE AND REPLACE EXISTING CURB AND GUTTER PER DETAIL.	1335 L.F.

LIGHTING NOTES

(13)	CONSTRUCT PEDESTRIAN LIGHT ELECTROLIER PER DETAILS ON SHEET 7.	55 EA.
(14)	INSTALL #3 PULLBOX, & 2" CONDUIT TO EXISTING POWERPOLE. CONDUIT SHALL EXTEND 8' UP POLE & TERMINATE.	5 EA.
(15)	INSTALL 1" SCHEDULE 40 PVC CONDUIT WITH 3 #8 CONDUCTORS, CONDUIT SHALL BE INSTALLED WITH 18" MIN. COVER IN PARKWAYS & 24" MIN COVER IN STREET CROSSINGS.	4030 L.F.

GENERAL NOTES

1. NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT-OF-WAY IN ACCORDANCE WITH THE PROVISIONS OF THE LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
4. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
5. QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
7. SEE "PEDESTRIAN LIGHTING PLANS" FOR QUANTITY AND LOCATION OF REQUIRED PEDESTRIAN LIGHTS.
8. ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE CITY
9. WHERE NEW PAVEMENT IS TO JOIN THE EXISTING PAVEMENT, THE EDGE OF THE EXISTING PAVEMENT SHALL BE TRIMMED IN A SMOOTH AND STRAIGHT LINE. CONSTRUCT MATCH-UP PAVING AS SHOWN ON THE PLANS AND OVERLAY PAVING AS DIRECTED IN THE FIELD TO PRODUCE A SMOOTH SECTION.
10. CONSTRUCT DRIVEWAY APPROACHES PER STANDARD DRAWING 302. EXACT SIZE AND LOCATION TO BE STAKED BY THE CITY PRIOR TO CONSTRUCTION OF THE CURB AND GUTTER.
11. ALL OVERHANGING TREE LIMBS THAT ARE LESS THAN 14' ABOVE THE STREET GRADE SHALL BE TRIMMED BACK.
12. ALL TRAFFIC SIGNS SHALL BE INSTALLED PRIOR TO OPENING THE STREETS TO TRAFFIC.
13. ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN FIVE DAYS AFTER NOTIFICATION FROM THE CITY INSPECTORS.
14. STREET IMPROVEMENT WORK THAT WILL CAUSE DAMAGE TO THE DETECTOR LOOP(S) SHALL NOT BE PERFORMED UNTIL TRAFFIC SIGNAL MAINTENANCE PERSONNEL HAVE BEEN NOTIFIED AND THE NECESSARY TIMING ADJUSTMENTS ARE MADE TO MAINTAIN SIGNAL OPERATION.
15. FINAL STRIPING FOR TRAFFIC CONTROL AND/OR PAVEMENT MARKING TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
16. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE # 1-800-227-2600, TWO WORKING DAYS BEFORE DIGGING. NO CONSTRUCTION PERMIT WILL BE ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS BEEN PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY U.S.A.

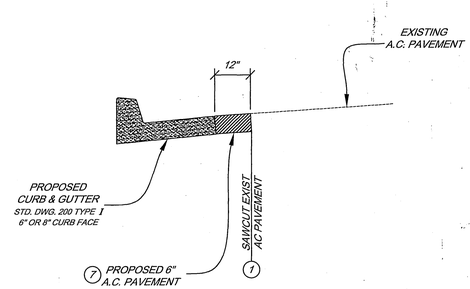
LEGEND

EXISTING TOPOGRAPHY

- EXISTING POWER POLE
- EXISTING WATER METER
- EXISTING TELEPHONE M.H.
- EXISTING ELECTRICAL POWER BOX
- EXISTING PALM TREE
- EXISTING PLANTER
- EXISTING STREET LIGHT
- EXISTING TRAFFIC SIGN
- EXISTING STREET NAME SIGN
- EXISTING TREE
- EXISTING TRAFFIC SIGNAL
- EXISTING PULL BOX
- EXISTING STORM DRAIN M.H.
- EXISTING SANITARY SEWER M.H.
- EXISTING VAULT
- EXISTING FIRE HYDRANT
- EXISTING AIR RELEASE VALVE
- EXISTING VENT
- EXISTING WATER VALVE

PROPOSED IMPROVEMENTS

- PROP PEDESTRIAN LIGHT (ELECTROLIER)
- PROP PULL BOX
- PROP UNDERGROUND CONDUIT
- PROP DRIVE APPROACH
- PROP PEDESTRIAN BENCH
- EXISTING CONCRETE
- CONCRETE REMOVAL AREAS
- PROPOSED CONCRETE



REMOVE & REPLACE DETAIL (12)
N.T.S.

REGISTERED PROFESSIONAL ENGINEER
CHARLES WILBUR LOCKMAN
R.C.E. No. 42485
Exp. 3/31/06
CIVIL
STATE OF CALIFORNIA

Underground Service Alert
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227-2600
TWO WORKING DAYS BEFORE YOU DIG

PREPARED IN THE OFFICE OF
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Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

SEAL:

PREPARED UNDER THE SUPERVISION OF:
DATE 10/19/04
CHARLES W. LOCKMAN
R.C.E. 42485 EXP. 03/31/06

MARK	REVISIONS	APPR.	DATE
1	DELETE QUANTITY ESTIMATES	RH	10/22/04

DESIGNED BY R.S.L. DRAWN BY R.S.L. CHECKED BY C.W.L.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	RH	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/22/04
STREET DIVISION		
CONST. CONTRACT. ADMIN.		10/22/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

ARLINGTON VILLAGE BEAUTIFICATION & MAGNOLIA IRRIGATION
STREET IMPROVEMENT PLANS
TITLE SHEET
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

HORIZ. SCALE: N/A VERT. SCALE: N/A

R-3780
C-1
SHEET 1 OF 16
JOB NO. 03-3623

Drawing Status: Design Print INDEXED 1-04-05 LH Plot Date: 03/30/04

Drawing File Name: 03-3623 Title.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Title

REMOVAL NOTES

1. SAWCUT TO CLEAN STRAIGHT LINE
2. REMOVE EXISTING PCC SIDEWALK AND DRIVE APPROACH
3. PROTECT IN PLACE
4. PROTECT IN PLACE AND ADJUST TO FINAL GRADE AS NECESSARY
5. REMOVE AND REPLACE EXISTING IMPROVEMENTS
6. REMOVE EXISTING BUS STOP BENCHES

CONCRETE REMOVAL AREAS

EXISTING SIDEWALK

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MARK	REVISIONS	APPR.	DATE

DESIGNED BY R.S.I. DRAWN BY R.S.I. CHECKED BY C.W.L.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	PH	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		1/20/04
STREET DIVISION		
CONST. CONTRACT ADMIN.		10/22/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

ARLINGTON VILLAGE BEAUTIFICATION &
MAGNOLIA IRRIGATION
STREET IMPROVEMENT PLANS
REMOVAL PLAN
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
STA. 180+57.25 TO 202+00.00

HORIZ. SCALE: N/A VERT. SCALE: N/A

R-3780
C - 2
SHEET 2 OF 16
JOB NO. 03-3623
PC-___-S

Drawing File Name: 03-3623 BASE MAP.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Base Map

Drawing Status: Design Print INDEXED 1-04-05 ЧH Plot Date: 03/30/04

LEGEND

CONCRETE REMOVAL AREAS

EXISTING SIDEWALK

REMOVAL NOTES

1. SAWCUT TO CLEAN STRAIGHT LINE
2. REMOVE EXISTING PCC SIDEWALK AND DRIVE APPROACH
3. PROTECT IN PLACE
4. PROTECT IN PLACE AND ADJUST TO FINAL GRADE AS NECESSARY
5. REMOVE AND REPLACE EXISTING IMPROVEMENTS
6. REMOVE AND SALVAGE EXISTING IMPROVEMENTS

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MARK	REVISIONS	APPR.	DATE

DESIGNED BY R.S.I. DRAWN BY R.S.I. CHECKED BY C.W.L.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

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PRINCIPAL ENGINEER	DH	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/20/04
STREET DIVISION		
CONST. CONTRACT ADMIN.		10/22/04

APPROVED BY
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DATE 10/22/04

ARLINGTON VILLAGE BEAUTIFICATION &
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STREET IMPROVEMENT PLANS
REMOVAL PLAN
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
STA. 202+00.00 TO 213+00.00

HORIZ. SCALE: N/A VERT. SCALE: N/A

R-3780
C-3
SHEET 3 OF 16
JOB NO. 03-3623

PC-___-S

Drawing File Name: 03-3623 BASE MAP.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Base Map

Drawing Status: Design Print INDEXED 1-04-05 FH Plot Date: 03/30/04

CONSTRUCTION NOTES

(8.) CONSTRUCT SIDEWALK PER CITY OF RIVERSIDE STD 325

(9.) CONSTRUCT DRIVE APPROACH PER CITY OF RIVERSIDE STD 302

(10.) CONSTRUCT BUS STOP SHELTER PER DETAIL ON SHEET 5 AND SPECIFICATIONS

(11.) CONSTRUCT PEDESTRIAN BENCH PER DETAIL ON SHEET 5 AND SPECIFICATIONS

(12.) REMOVE AND REPLACE EXISTING CURB AND GUTTER PER DETAIL

LEGEND

PROPOSED CONCRETE

Drawing File Name: 03-3623 BASE MAP.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Base Mc

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MARK	REVISIONS	APPR.	DATE

DESIGNED BY R.S.I. DRAWN BY R.S.I. CHECKED BY C.W.L.

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PUBLIC WORKS DEPARTMENT

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PRINCIPAL ENGINEER	PH	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/20/04
STREET DIVISION		
CONST. CONTRACT ADMIN.		10/22/04

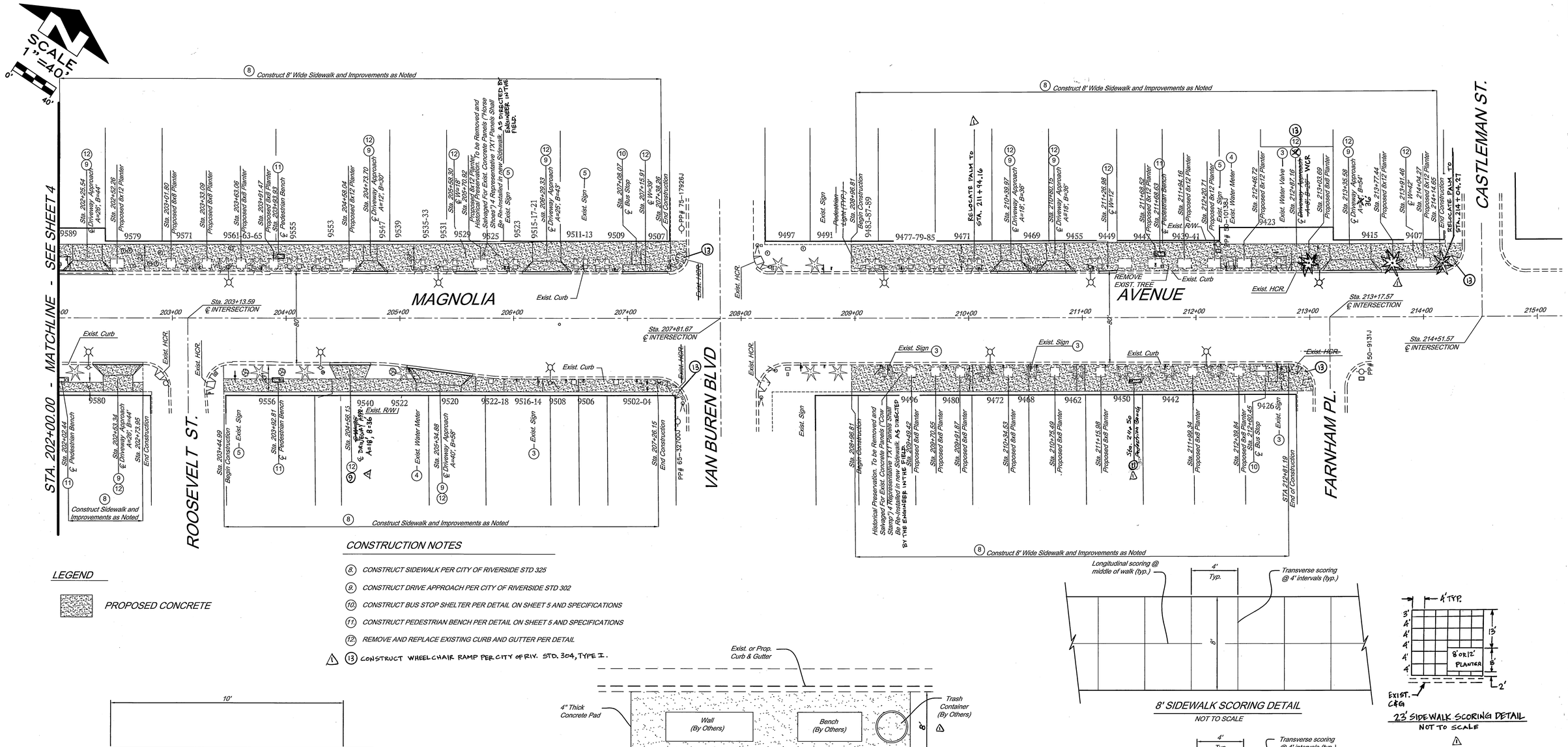
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

ARLINGTON VILLAGE BEAUTIFICATION &
MAGNOLIA IRRIGATION
STREET IMPROVEMENT PLANS
SIDEWALK AND LANDSCAPE IMPROVEMENTS
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

HORIZ. SCALE: N/A VERT. SCALE: N/A

R-3780
C-4
SHEET 4 OF 16
JOB NO. 03-3623
PC-5

Drawing Status: Design Print INDEXED 1-04-05 FH Plot Date: 03/31/04



CONSTRUCTION NOTES

(8.) CONSTRUCT SIDEWALK PER CITY OF RIVERSIDE STD 325

(9.) CONSTRUCT DRIVE APPROACH PER CITY OF RIVERSIDE STD 302

(10.) CONSTRUCT BUS STOP SHELTER PER DETAIL ON SHEET 5 AND SPECIFICATIONS

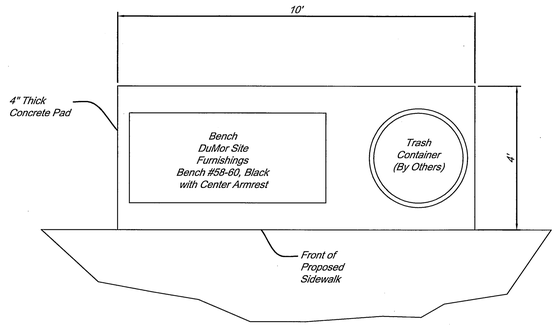
(11.) CONSTRUCT PEDESTRIAN BENCH PER DETAIL ON SHEET 5 AND SPECIFICATIONS

(12.) REMOVE AND REPLACE EXISTING CURB AND GUTTER PER DETAIL

⚠ (13.) CONSTRUCT WHEELCHAIR RAMP PER CITY OF RIV. STD. 304, TYPE I.

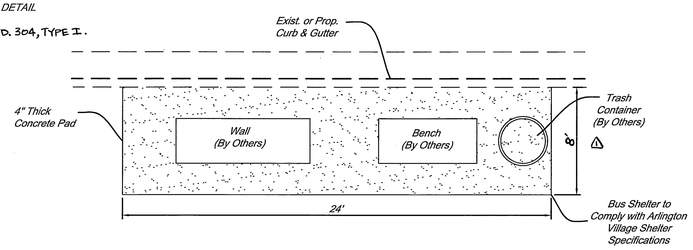
LEGEND

PROPOSED CONCRETE



TYPICAL PEDESTRIAN BENCH

SCALE: 1" = 2'



TYPICAL BUS STOP

SCALE: 1" = 4'

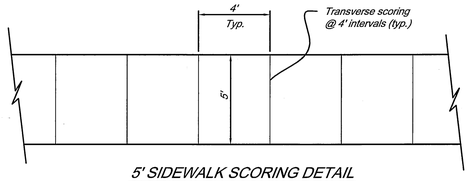
8' SIDEWALK SCORING DETAIL

NOT TO SCALE

23' SIDEWALK SCORING DETAIL

NOT TO SCALE

⚠



5' SIDEWALK SCORING DETAIL

NOT TO SCALE

General Notes

1. All sidewalks shall be constructed in accordance with Section 303-5 of the Standard Specifications for Public Works Construction.
2. Expansion joints shall be placed where joining existing concrete, at drive approaches, BC's, EC's and at intervals not to exceed 24'.
3. Weakened plane joints shall be installed at intervals not to exceed 12'.

REGISTERED PROFESSIONAL ENGINEER CHARLES WILBUR LOCKMAN No. 42485 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

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SEAL:

PREPARED UNDER THE SUPERVISION OF:
CHARLES W. LOCKMAN DATE 10/19/04
R.C.E. 42485 EXP. 03/31/06

MARK	REVISIONS	APPR.	DATE
⚠	REVISED BY CITY STAFF	PH	10/20/04

DESIGNED BY R.S.L. DRAWN BY R.S.L. CHECKED BY C.W.L.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	PH	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT	JH	10/22/04
STREET DIVISION		
CONST. CONTRACT ADMIN.	RP	10/22/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

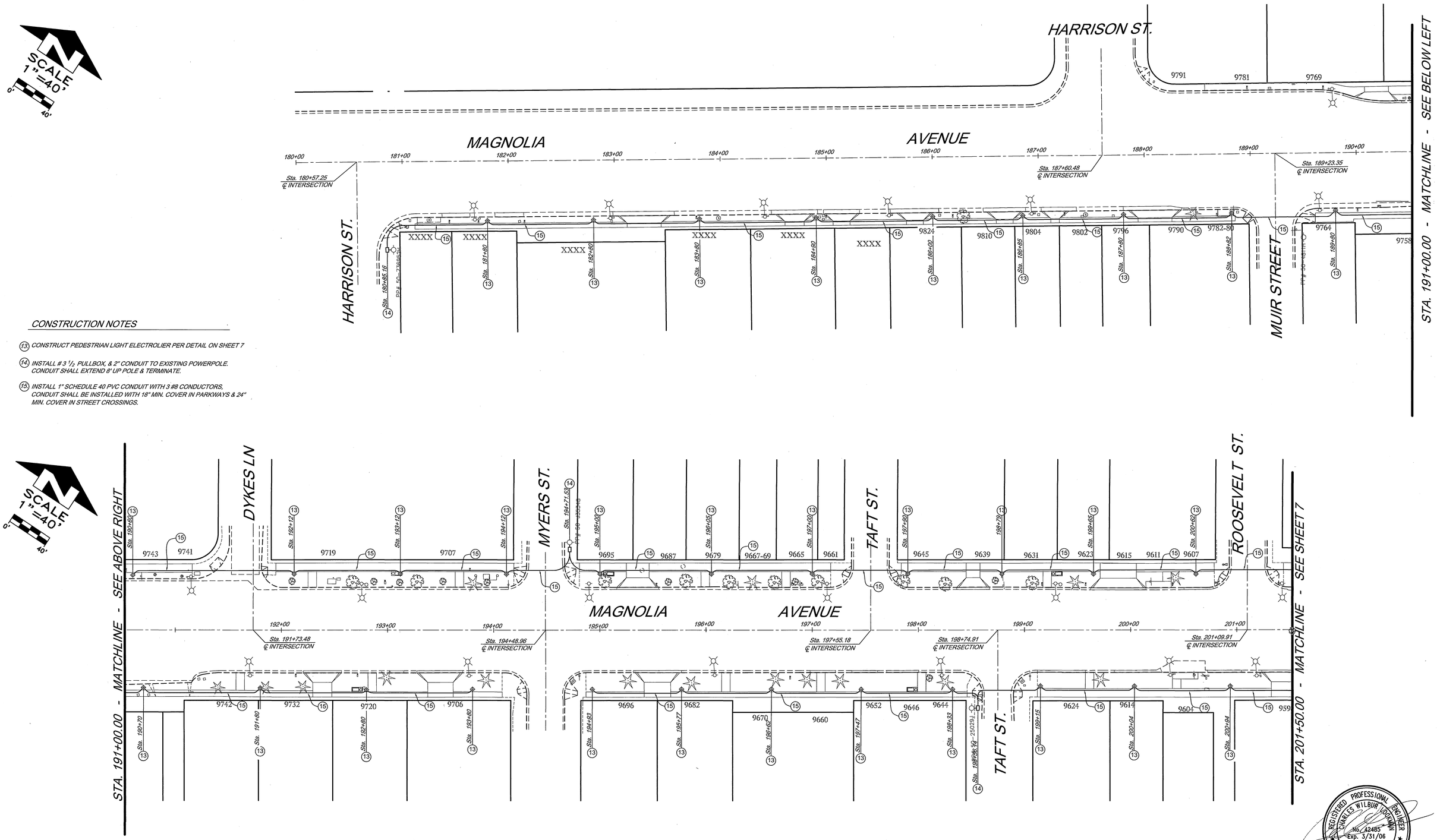
ARLINGTON VILLAGE BEAUTIFICATION & MAGNOLIA IRRIGATION
STREET IMPROVEMENT PLANS
SIDEWALK AND LANDSCAPE IMPROVEMENTS
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
STA. 202+00.00 TO 213+00.00

HORIZ. SCALE: N/A VERT. SCALE: N/A

R-3780
C - 5
SHEET 5 OF 14
JOB NO. 03-3623

Drawing Status: Design Print INDEXED 1-04-05 LH Plot Date: 03/31/04

Drawing File Name: 03-3623 BASE MAP.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Base Map



CONSTRUCTION NOTES

(13) CONSTRUCT PEDESTRIAN LIGHT ELECTROLIER PER DETAIL ON SHEET 7

(14) INSTALL # 3 ½ PULLBOX, & 2" CONDUIT TO EXISTING POWERPOLE. CONDUIT SHALL EXTEND 6' UP POLE & TERMINATE.

(15) INSTALL 1" SCHEDULE 40 PVC CONDUIT WITH 3 #8 CONDUCTORS, CONDUIT SHALL BE INSTALLED WITH 18" MIN. COVER IN PARKWAYS & 24" MIN. COVER IN STREET CROSSINGS.

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DESIGNED BY R.S.L. DRAWN BY R.S.L. CHECKED BY C.W.L.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	DH	10/21/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		
STREET DIVISION		
CONST. CONTRACT ADMIN.		
ELECTRIC DIVISION		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

ARLINGTON VILLAGE BEAUTIFICATION & MAGNOLIA IRRIGATION
STREET IMPROVEMENT PLANS
PEDESTRIAN AND LANDSCAPE LIGHTING
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
STA. 180+57.25 TO 202+00.00

HORIZ. SCALE: N/A VERT. SCALE: N/A

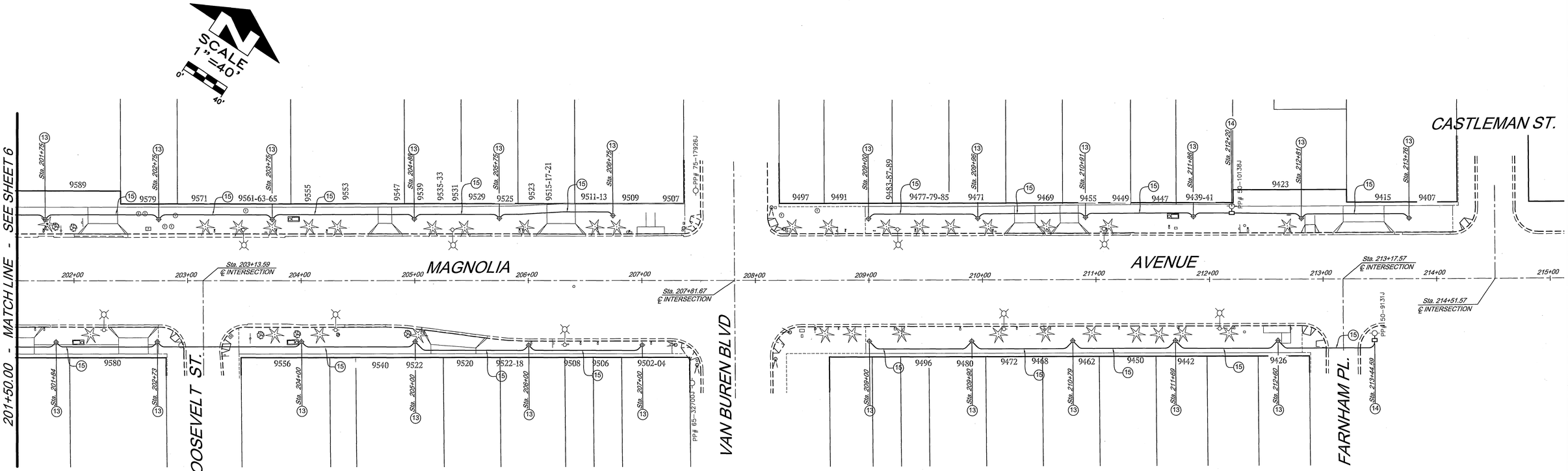
R-3780
C - 6
SHEET 6 OF 16
JOB NO. 03-3623

PC 1 - S 1

REGISTERED PROFESSIONAL ENGINEER
CHARLES WILBUR LOCKMAN
No. 42485
Exp. 3/31/06
CIVIL
STATE OF CALIFORNIA

Drawing Status: Design Print INDEXED 1-04-05 FH Plot Date: 03/23/04

Drawing File Name: 03-3623 BASE MAP.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Base Map

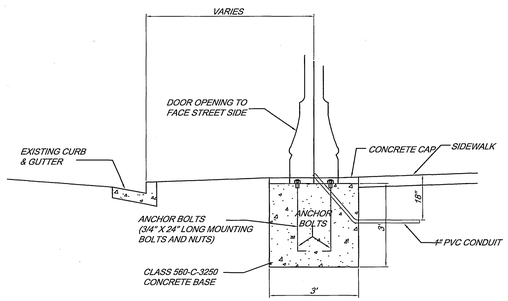


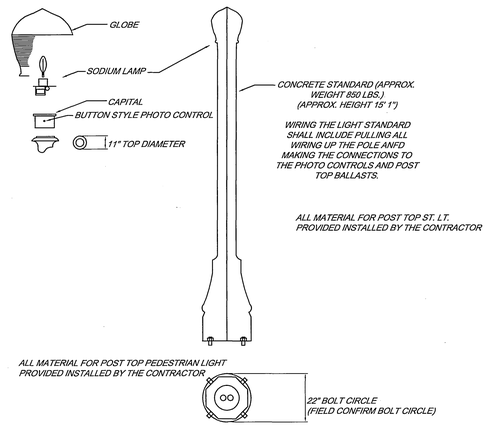
CONSTRUCTION NOTES

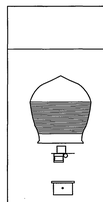
(13.) CONSTRUCT PEDESTRIAN LIGHT ELECTROLIER PER DETAIL ON SHEET 7

(14.) INSTALL # 3 1/2 PULLBOX, & 2" CONDUIT TO EXISTING POWERPOLE. CONDUIT SHALL EXTEND 8' UP POLE & TERMINATE.

(15.) INSTALL 1" SCHEDULE 40 PVC CONDUIT WITH 3 #8 CONDUCTORS, CONDUIT SHALL BE INSTALLED WITH 18" MIN. COVER IN PARKWAYS & 24" MIN. COVER IN STREET CROSSINGS.

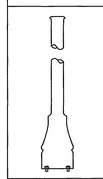






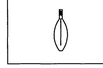
POST TOP LUMINAIRE

MANUFACTURER	QTY.	HT.	DESCRIPTION	MANUFACTURER'S CATALOG NUMBER
KING LUMINAIRE COMPANY INC.	1		COMPLETE WITH POLYCARB. GLOBE, 100W 240V REGULATOR TYPE BALLAST ASSEMBLY, AND CAST ALUMINUM CAPITAL WITH BUILT IN BUTTON PHOTOCELL.	RIV-K199E-EPPE-III-100-HPS-240-KW9E-PBC-BLK
ANTIQUE ST. LAMPS INC.			SHIELD LAMPS WITH ASSEMBLY TO DIRECT LIGHT DOWN.	ANTIQUE - RSL30/CC - SAM 100/240 III



CONCRETE STANDARD

MANUFACTURER	QTY.	HT.	DESCRIPTION	MANUFACTURER'S CATALOG NUMBER
AMERON INC. POLE PRODUCTS DIVISION DISTRIBUTED THRU: PACIFIC LIGHTING SALES INC. (714) 752-3085	1	15' 1"	CONCRETE AGGREGATE WITH GRAFFITI-RESISTANT SURFACE AND ADAPTOR PLATE WHICH FITS THE APPROPRIATE LUMINAIRE.	20CT15-853 (MUST SPECIFY LUMINAIRE TO GET CORRECT ADAPTOR PLATE)



HIGH PRESSURE SODIUM LAMP

MANUFACTURER	QTY.	DESCRIPTION	SIZE	MANUFACTURER'S CATALOG NUMBER	
G.E. SYLVANIA	1 EA.	CLEAR 55V	100W	G.E. SYLVANIA	SYLVANIA S54

REGISTERED PROFESSIONAL ENGINEER
CHARLES WILBUR LOCKMAN
No. 42485
Exp. 3/31/06
CIVIL
STATE OF CALIFORNIA

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Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

SEAL:

PREPARED UNDER THE SUPERVISION OF:
CHARLES W. LOCKMAN
DATE 10/19/04
R.C.E. 42485 EXP. 03/31/06

MARK	REVISIONS	APPR.	DATE

DESIGNED BY R.S.L. DRAWN BY R.S.L. CHECKED BY C.W.L.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		10/19/04
TRAFFIC DIVISION		10/19/04
PARKS DEPARTMENT		10/19/04
STREET DIVISION		10/19/04
CONST. CONTRACT ADMIN.		10/19/04
ELECTRIC DIVISION		10/22/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

ARLINGTON VILLAGE BEAUTIFICATION & MAGNOLIA IRRIGATION
STREET IMPROVEMENT PLANS
PEDESTRIAN AND LANDSCAPE LIGHTING
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
STA. 202+00.00 TO 213+00.00

HORIZ. SCALE: N/A VERT. SCALE: N/A

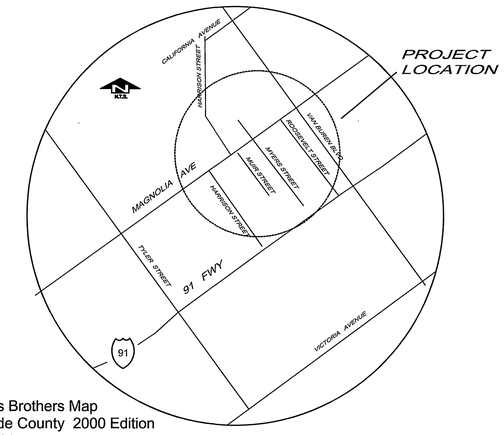
R-3780
C-7
SHEET 7 OF 16
JOB NO. 03-3623

S-1

Drawing File Name: 03-3623 BASE MAP.dwg
Drawing File Path: C:/Drawings 2000/03-3623 Magnolia-03-3623 Base Map

Drawing Status: Design Print INDEXED 1-04-05 GH Plot Date: 03/25/04

STREET IMPROVEMENT PLANS
MAGNOLIA AVENUE
CITY OF RIVERSIDE, CALIFORNIA



Thomas Brothers Map
Riverside County 2000 Edition
Page 714

Vicinity Map
N.T.S.

GENERAL NOTES FOR PUBLIC LANDSCAPES

1. ALL RELATED WORK SHALL CONFORM TO THE CITY OF RIVERSIDE PARK AND RECREATION DEPARTMENT STANDARDS AND SPECIFICATIONS FOR PLANTING AND IRRIGATION WORK.
   A. SPECIFICATIONS SECTION 02441 AND 02480.
2. A "PUBLIC LANDSCAPE' PERMIT, AS ISSUED BY THE PARK AND RECREATION DEPARTMENT IS REQUIRED. CONTACT THE PARK PROJECTS INSPECTOR AT (909) 826-6254 TO SCHEDULE A PRE-CONSTRUCTION MEETING AND TO OBTAIN THE PERMIT.
3. WHEN CALLING FOR INSPECTIONS CONTACT THE PARK PROJECTS INSPECTOR A MINIMUM OF 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION. A WRITTEN APPROVAL WILL BE PROVIDED ON THE PUBLIC LANDSCAPE PERMIT CARD FOR EACH STAGE OF INSPECTION A VERBAL APPROVAL WILL NOT BE ACCEPTABLE. INSPECTIONS ARE REQUIRED PER THE STANDARDS SPECIFICATIONS, AND INCLUDE BUT ARE NOT NECESSARILY LIMITED TO THE FOLLOWING:
   A. AFTER COMPLETION OF FINAL GRADING AND WHEN ALL UTILITY SERVICES HAVE BEEN MARKED, BUT PRIOR TO INITIATING ANY LANDSCAPE WORK WITHIN THE PUBLIC RIGHT OF WAY;
   B. AT TIME OF INSTALLATION OF IRRIGATION SLEEVES AND CONSTANT PRESSURE MAINLINES, BUT PRIOR TO BACK FILL OF TRENCHES FOR SAME (NOTE: MAINLINES MUST BE PRESSURE TESTED IN THE PRESENCE OF THE PARK PROJECTS INSPECTOR);
   C. AT TIME OF INSTALLATION OF IRRIGATION VALVES, LATERALS AND HEADS;
   D. FOR SPOTTING OF ALL TREES PRIOR TO DIGGING PLANTING PITS;
   E. WHILE DIGGING PLANT PITS AND PLANTING/RELOCATIONG TREES;
   F. AFTER PLANTING AND ALL OTHER INDICATED OR SPECIFIED WORK HAS BEEN COMPLETED, FOR START OF MAINTENANCE;
   G. AT SUBSTANTIAL COMPLETION OF THE PROJECT FOR CITY'S ACCEPTANCE TO START THE REQUIRED MAINTENANCE PERIOD;
   H. AT THE END OF THE MAINTENANCE PERIOD, THE CONTRACTOR/DEVELOPER SHALL CALL THE PARK PROJECTS INSPECTOR AT THE NUMBER LISTED ABOVE FOR A FINAL ACCEPTANCE INSPECTION IN ORDER TO BE RELEASED FROM MAINTENANCE. DEVELOPERS BONDS **WILL NOT** BE RELEASED UNTIL AFTER **RECEIPT OF WRITTEN** NOTIFICATION FROM THE CITY THAT THE PROJECT HAS PASSED FINAL INSPECTION AND THE PARK AND RECREATION DEPARTMENT IS ASSUMING MAINTENANCE RESPONSIBILITIES.
4. THE DEVELOPER SHALL BE RESPONSIBLE TO ACCEPTABLY MAINTAIN ALL PLANTINGS FOR A MINIMUM PERIOD OF ONE (1) YEAR.

LANDSCAPE ARCHITECT
LANTEX
LANDSCAPE ARCHITECTURE INC.
31726 RANCHO VIEJO ROAD, SUITE 206
SAN JUAN CAPISTRANO, CA 92675
(949) 248-1993 FAX (949) 493-0706

CIVIL ENGINEER
LOCKMAN & ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
14125 TELEPHONE AVENUE, SUITE 1
CHINO, CA 91710
(909) 548-6418 FAX (909) 548-6841

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RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

PREPARED IN THE OFFICE OF
LANTEX
Landscape Architecture Inc.
31726 Rancho Viejo Road, Suite 206
San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HUMAN
No 2403
Signature
Date
STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
	REV PLANTING & IRRIGATION PER NEW HARDSCAPE LAYOUT		10/15/04

DESIGNED BY BH DRAWN BY DP CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

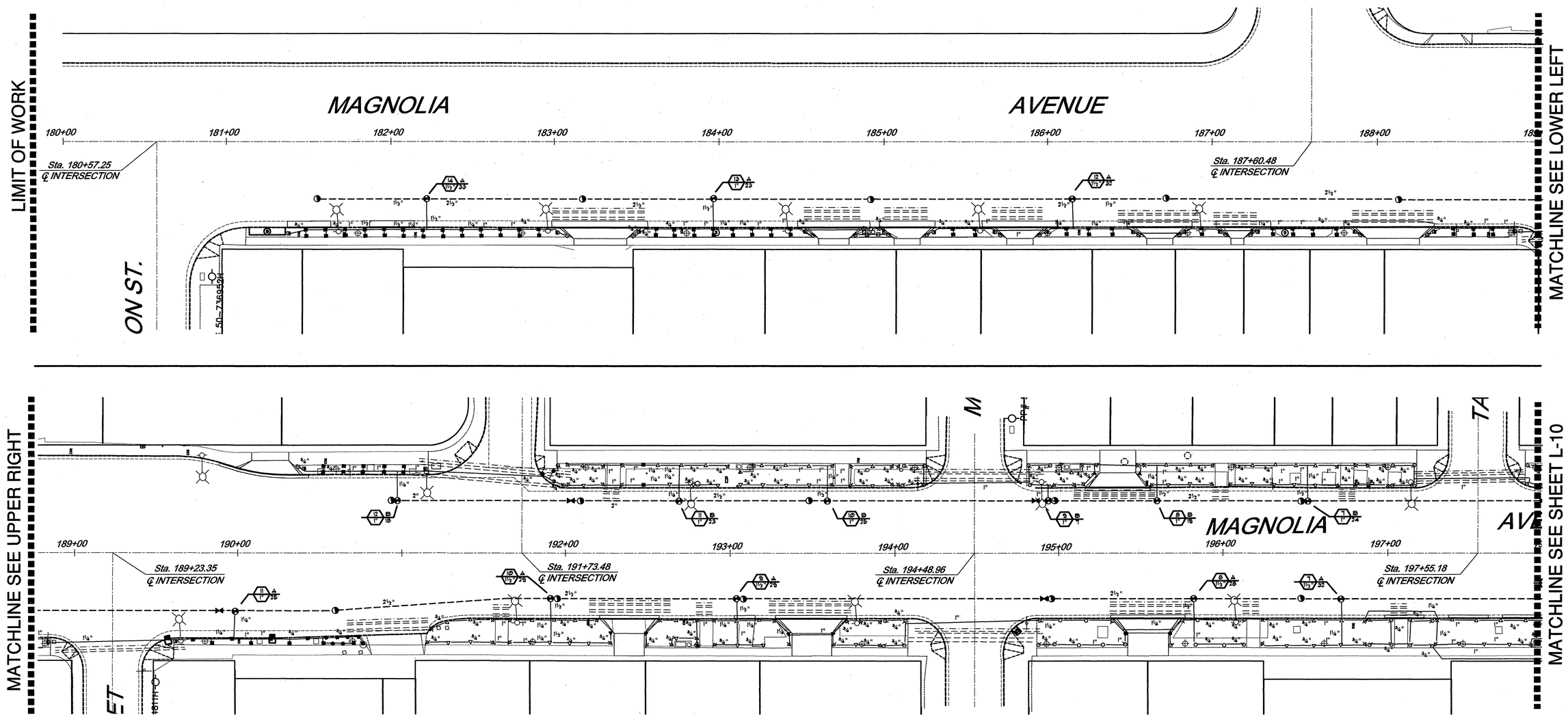
APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
TRAFFIC DIVISION		
PARKS DEPARTMENT		
CONSTRUCTION MGR.		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

MAGNOLIA AVENUE
TITLE SHEET
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-8 OF 16
JOB NO. 03-3623

PC—PK/PROJS—Lantex Plot Date: 10/15/04



REFER TO SHEET L-10 FOR IRRIGATION LEGEND & NOTES, SHEET L-13 FOR DETAILS.

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LANTEX
Landscape Architecture Inc.
31726 Rancho Viejo Road, Suite 206
San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HINMAN
No. 4031
Signature
Date
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
	REVISE IRRIGATION PER NEW HARDSCAPE LAYOUT		10/15/04

DESIGNED BY BH DRAWN BY DP CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER	PA	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/22/04
CONSTRUCTION ADM.		10/22/04

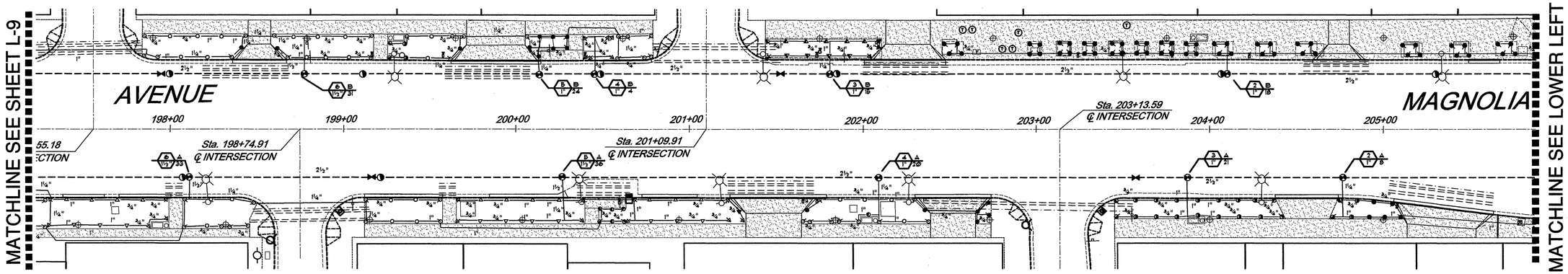
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

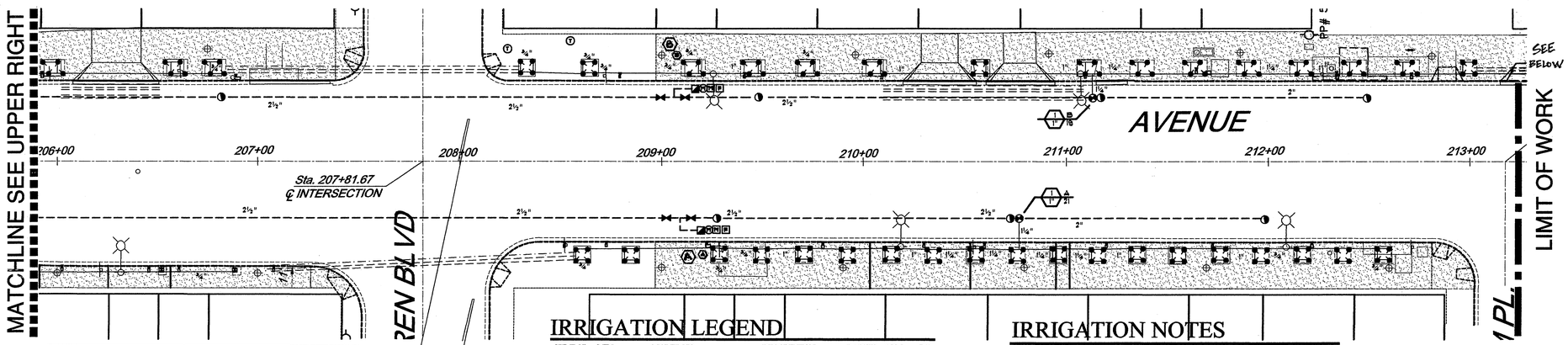
MAGNOLIA AVENUE
IRRIGATION PLAN
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-9 OF 16
JOB NO. 03-3623

PC-___-PK/PRP03-___
Lantex Plot Date: 10/15/04

INDEXED 1-04-05





POINT OF CONNECTION 'B'
11/2" (DOMESTIC) WATER METER - COORDINATE LOCATION IN FIELD.
2" ~~11/2"~~ FEBCO 825YA REDUCED PRESSURE TYPE BACKFLOW DEVICE.
CONTRACTOR TO INSTALL A 2" MASTER VALVE / PRESSURE REGULATOR AND MASTER VALVE RELAY TO CONTROLLER.
COORDINATE THESE LOCATIONS WITH CITY INSPECTOR.

AVAILABLE PRESSURE :	77	PSI
DESIGN PRESSURE :	62.95	PSI
MAXIMUM DEMAND :	31	GPM

CONTROLLER NOTE 'B'
CONTRACTOR TO INSTALL A CALSENSE ET2000-16-R/RR CONTROLLER WITHIN A STAINLESS STEEL ENCLOSURE. CONTRACTOR TO PROVIDE 110V CONTINUOUS POWER. INCLUDE WITH CONTROLLER A WCS 'RAIN GUARD' RAIN SHUT OFF DEVICE. LOCATE IN AN AREA FREE FROM OVERHEAD OBSTRUCTION. COORDINATE LOCATION WITH CITY INSPECTOR.

POINT OF CONNECTION 'A'
11/2" (DOMESTIC) WATER METER - COORDINATE LOCATION IN FIELD.
2" ~~11/2"~~ FEBCO 825YA REDUCED PRESSURE TYPE BACKFLOW DEVICE.
CONTRACTOR TO INSTALL A 2" MASTER VALVE / PRESSURE REGULATOR AND MASTER VALVE RELAY TO CONTROLLER.
COORDINATE THESE LOCATIONS WITH CITY INSPECTOR.

AVAILABLE PRESSURE :		
DESIGN PRESSURE :	77	PSI
MAXIMUM DEMAND :	68.52	PSI
	36	GPM

CONTROLLER NOTE 'A'
CONTRACTOR TO INSTALL A CALSENSE ET2000-16-R/RR CONTROLLER WITHIN A STAINLESS STEEL ENCLOSURE. CONTRACTOR TO PROVIDE 110V CONTINUOUS POWER. INCLUDE WITH CONTROLLER A WCS 'RAIN GUARD' RAIN SHUT OFF DEVICE. LOCATE IN AN AREA FREE FROM OVERHEAD OBSTRUCTION. COORDINATE LOCATION WITH CITY INSPECTOR.

IRRIGATION LEGEND

SYMBOL	MFG	MODEL NO.	DESCRIPTION	RADIUS	GPM	PSI
	RAINBIRD	1806-SAM-PRS-5Q	QUARTER SPRAY HEAD	5'	.10	30
	RAINBIRD	1806-SAM-PRS-5H	HALF SPRAY HEAD	5'	.20	30
	RAINBIRD	1806-SAM-PRS-8Q	QUARTER SPRAY HEAD	8'	.26	30
	RAINBIRD	1806-SAM-PRS-8H	HALF SPRAY HEAD	8'	.52	30
	RAINBIRD	1806-SAM-PRS-8F	FULL SPRAY HEAD	8'	1.05	30
	RAINBIRD	1806-SAM-PRS-12Q	QUARTER SPRAY HEAD	12'	.65	30
	RAINBIRD	1806-SAM-PRS-12H	HALF SPRAY HEAD	12'	1.30	30
	RAINBIRD	1806-SAM-PRS-12F	FULL SPRAY HEAD	12'	2.60	30
	RAINBIRD	1806-SAM-PRS-15Q	QUARTER SPRAY HEAD	15'	.92	30
	RAINBIRD	1806-SAM-PRS-15H	HALF SPRAY HEAD	15'	1.85	30
	RAINBIRD	1806-SAM-PRS-15F	FULL SPRAY HEAD	15'	3.70	30
	RAINBIRD	1806-SAM-PRS-8Q	QUARTER SPRAY HEAD	8'	.26	30
	RAINBIRD	1806-SAM-PRS-8H	HALF SPRAY HEAD	8'	.52	30
	RAINBIRD	1806-SAM-PRS-8F	FULL SPRAY HEAD	8'	1.05	30
	RAINBIRD	1806-SAM-PRS-12Q	QUARTER SPRAY HEAD	12'	.65	30
	RAINBIRD	1806-SAM-PRS-12H	HALF SPRAY HEAD	12'	1.30	30
	RAINBIRD	1806-SAM-PRS-12F	FULL SPRAY HEAD	12'	2.60	30
	RAINBIRD	1806-SAM-PRS-15Q	QUARTER SPRAY HEAD	15'	.92	30
	RAINBIRD	1806-SAM-PRS-15H	HALF SPRAY HEAD	15'	1.85	30
	RAINBIRD	1806-SAM-PRS-15F	FULL SPRAY HEAD	15'	3.70	30
	RAINBIRD	1806-SAM-PRS-15EST	END SPRAY HEAD	4x15'	.61	30
	RAINBIRD	1806-SAM-PRS-15SST	STRIP SPRAY HEAD	4x30'	1.21	30

CONTRACTOR MAY SUBSTITUTE TORO 10' NOZZLES AS NEEDED IN PLACE OF 8' NOZZLES.

- (M) 2" BRASS MASTER VALVE SUPERIOR 950-DWPRS W/ PRESSURE REG. & SELF FLUSHING OR EQUAL.
- 2" ~~EXISTING 4"~~ REDUCED PRESSURE TYPE BACKFLOW DEVICE. ~~VERIFY LOCATION~~ TO BE LOCATED IN FIELD.
- [M] 1½" ~~2" (DOMESTIC) EXISTING~~ WATER METER - ~~VERIFY ON SITE FOR EXACT LOCATION.~~ TO BE LOCATED IN FIELD.
- 2" SIZE AND SMALLER SHALL BE NIBCO/APOLLO 70-008-01 BRASS BALL VALVE FULL PORT OR EQUAL. 2½" SIZE AND LARGER SHALL BE NIBCO T-136 OR MILWAUKE 1141 GATE VALVE OR EQUAL.
- REMOTE CONTROL VALVES (RCV): RCV'S TO BE BRASS EQUAL TO SUPERIOR 950-DWPRS. MIN. 3' SEPERATION BETWEEN ALL QUICK COUPLER & RCV'S
- [F] FLOW METER/SENSOR - TO BE COMPATIBLE WITH BOTH MASTER VALVE AND CONTROLLER
- [A] IRRIGATION CONTROLLER - SEE NOTE
- PVC CLASS 200 LATERAL LINE - 12" COVER IN PLANTING AREAS, PVC SCH 40-24" COVER UNDER PAVING.
- PVC SCH. 40 MAINLINE 11/2" AND SMALLER CLASS 315 2" AND LARGER - 18"-24" COVER IN PLANTING AREAS/ 24" COVER UNDER PAVING - SIZES INDICATED
- PVC CLASS 200 WIRE SLEEVE - SIZES AND LOCATION BY CONTRACTOR.
- PVC SCHEDULE 40 MAIN AND LATERAL LINE SLEEVE 2 X DIA. OF PIPE.
- QUICK COUPLER

IRRIGATION NOTES

DIAGRAMMATIC PLAN
THIS SYSTEM IS DIAGRAMMATIC. ALL PIPE, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS AND JOINT TRENCHES WHEREVER POSSIBLE.

SPRINKLER ADJUSTMENT REQUIRED
THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND PREVENT OVERSPRAY ONTO WALKS AND ROADWAYS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS. CONTRACTOR TO USE PRESSURE COMPENSATING SCREENS WHEN RADIUS IS REDUCED MORE THAN FIFTY PERCENT (50%).

FIELD CONDITIONS
DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST AND SHOULD BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR MUST ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS REQUIRED.

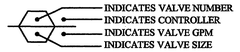
SWING JOINTS
INSTALL ALL HEADS WITH DOUBLE OR TRIPLE SWING JOINTS, USING STREET ELLS, AS PER DETAIL.

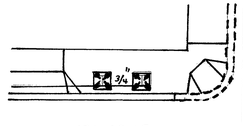
MINIMUM PRESSURE AND MAXIMUM GALLONS REQUIRED
THE SPRINKLER SYSTEM DESIGN IS BASED ON A MINIMUM OPERATIONAL PRESSURE AND A MAXIMUM DEMAND AT THE POINT OF CONNECTION, AS NOTED ON THE PLAN. BEFORE INSTALLING THE SYSTEM, CHECK POINT OF CONNECTION AND IMMEDIATELY NOTIFY CONTRACTING OFFICER IF PRESSURE IS NOT AS NOTED OR THE REQUIRED GALLONS PER MINUTE IS NOT AVAILABLE.

WATER LINE UNDER PAVING
ALL MAINLINE UNDER PAVING SHALL BE INSTALLED 24" DEEP. ALL LATERAL LINES UNDER PAVING SHALL BE SCH 40 PVC AND INSTALLED 24" DEEP.

SYSTEM COVERAGE
THE IRRIGATION CONTRACTOR IS TO ADJUST HEAD LOCATIONS IN THE FIELD IN ORDER TO GUARANTEE 100% COVERAGE. CONTRACTOR TO CONTACT THE CONTRACTING OFFICER PRIOR TO ANY MAJOR CHANGE(S) RESULTING IN ADDITIONAL COST TO THE OWNER.

CONTROLLER WIRE
A MINIMUM OF THREE (3) SPARE CONTROLLER WIRES DIFFER IN COLOR THAN THE ACTIVE CONTROLLER WIRES, SHALL BE INSTALLED FROM THE CONTROLLER TO THE END OF THE RUN.





MIN. 3' SEPERATION BETWEEN ALL QUICK COUPLER & RCV'S

NORTH
SCALE: 1"=30'

WORST CONDITION CALC. 'A'

VALVE A/14 @ 33 GPM

SIZE	ITEM	LOSS
11/2"	WATER METER	2.1
2" ~~11/2"~~	BACKFLOW DEVICE	13.0
21/2"	GATE VALVE	1.4
11/2"	REMOTE CONTROL VALVE	3.6
21/2"	CL 315 MAINLINE 2540'lf.	7.62
	SCH 40 PVC LATERAL LINES	4.8
	IRRIGATION HEAD PRESSURE	30
	ELEVATION LOSS	N/A
	SYSTEM LOSS	62.32
	10% RESIDUAL PRESSURE	6.2
	TOTAL SYSTEM LOSS	68.52
	AVAILABLE PRESSURE	77 PSI
	RESIDUAL PSI	+ 8.48 PSI

SET REGULATOR @ 85 PSI WITH A NORMALLY OPEN MASTER VALVE.

WORST CONDITION CALC. 'B'

VALVE B/10 @ 25 GPM

SIZE	ITEM	LOSS
11/2"	WATER METER	1.4
2" ~~11/2"~~	BACKFLOW DEVICE	13.0
21/2"	GATE VALVE	1.4
1"	REMOTE CONTROL VALVE	4.25
21/2"	CL 315 MAINLINE 1650'lf.	3.80
	SCH 40 PVC LATERAL LINES	4.8
	IRRIGATION HEAD PRESSURE	30
	ELEVATION LOSS	N/A
	SYSTEM LOSS	57.25
	10% RESIDUAL PRESSURE	5.7
	TOTAL SYSTEM LOSS	62.95
	AVAILABLE PRESSURE	77 PSI
	RESIDUAL PSI	+ 14.05 PSI

SET REGULATOR @ 85 PSI WITH A NORMALLY OPEN MASTER VALVE.

REFER TO SHEET L-13 FOR IRRIGATION DETAILS.

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LOCKMAN & ASSOCIATES
Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

PREPARED IN THE OFFICE OF
LANTEX
Landscape Architecture Inc.
31726 Rancho Viejo Road, Suite 206
San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HANNAH
No. 2403
Signature
Date
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
	REVISE IRRIGATION PER NEW HARDSCAPE LAYOUT		10/15/04
1	REVISIONS PER R.V. CITY STAFF	DH	10/20/04

DESIGNED BY BH DRAWN BY DP CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER	DH	10/21/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/14/04
CONSTRUCTION MGT	BC	10/20/04

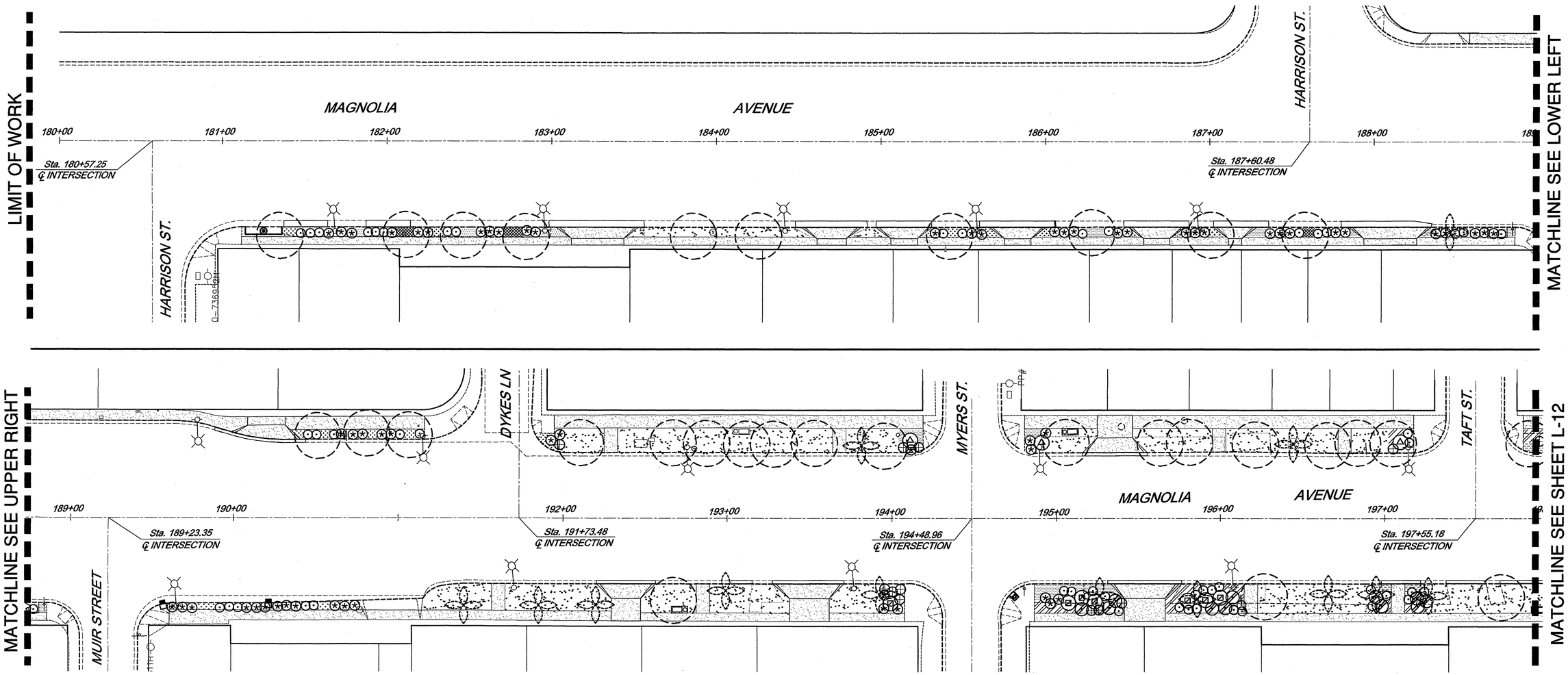
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/21/04

MAGNOLIA AVENUE
IRRIGATION PLAN
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-10 OF 16
JOB NO. 03-3623

INDEXED 1-04-05 EA

PC-----PK/PRP03-----Lantex Plot Date: 10/15/04



TREE LEGEND

EXISTING TREE TO REMAIN

EXISTING PALM TREE TO REMAIN

RE-LOCATED PALM TREE.
REMOVE EXISTING TREE WHERE NECESSARY.

⚠ IPE ~~CHRYSOTRICHA~~ (~~GOLDEN~~ PINK TRUMPET TREE)
PROPOSED TABEBUIA REMOVE EXISTING TREE WHERE NECESSARY. 24" Box

SHRUB & GROUNDCOVER LEGEND

SYM	BOTANICAL NAME	COMMON NAME	SIZE	QTY
SHRUBS				
⊠	CAMELIA SASANQUA 'APPLE BLOSSOM'	NCN	5 GAL	35
⊘	CASSIA ARTEMISOIDES	FEATHERY CASSIA	5 GAL	47
△	COLEONEMA PULCHRUM	PINK BREATH OF HEAVEN	5 GAL	17
⊙	FELICIA AMELLOIDES	BLUE MARGARITE	1 GAL	152
✳	LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDEFR	1 GAL	85
⊕	ROSA FLORIBUNDA 'FLOWER CARPET'	GROUNDCOVER ROSE	1 GAL	88
GROUNDCOVER				
	ACHILLEA TOMENTOSA	WOOLY YARROW	FLATS	PLANT @ 18" O.C.
	ANEMONE HYBRIDA	JAPANESE ANEMONE	FLATS	PLANT @ 18" O.C.
	DUCHESNEA INDICA	INDIAN MOCK STRAWBERRY	1 GAL	PLANT @ 12" O.C.
	DOUBLE DWARF FESCUE	TURF	SOD	
	GAILLARDIA PULCHELLA	NCN	FLATS	PLANT @ 12" O.C.
	MAHONIA REPENS	CREEPING MAHONIA	1 GAL	PLANT @ 24" O.C.

NORTH

SCALE: 1"=30'

Underground Service Alert
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CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

PREPARED IN THE OFFICE OF
LOCKMAN & ASSOCIATES
Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

PREPARED IN THE OFFICE OF
LANTEX
Landscape Architecture Inc.
31726 Rancho Viejo Road, Suite 206
San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HINMAN
No. 2403
Signature
10/15/04
Date
STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
⚠	REVISE PLANTING PER NEW HARDSCAPE LAYOUT	BH	10/15/04
⚠	REVISE TREE LEGEND	BH	10/21/04

DESIGNED BY BH DRAWN BY CLN CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER	DK	10/21/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		
CONSTRUCTION MGT	DE	10/21/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

MAGNOLIA AVENUE

PLANTING PLAN

COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780

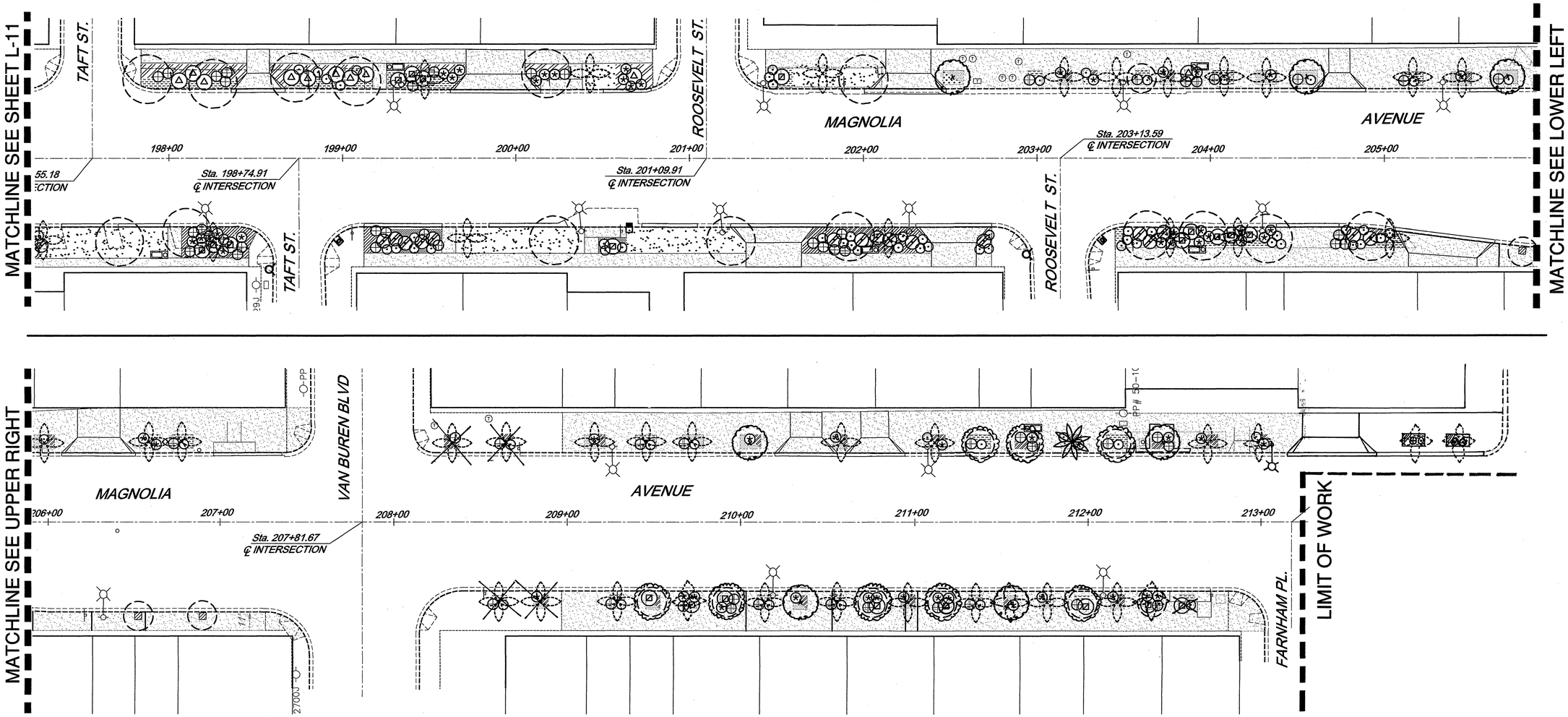
SHEET L-11 OF 16

JOB NO. 03-3623

PC-_____-PK/PRP03-_____

Lantex Plot Date: 10/15/04

INDEXED 1-04-05 GH



TREE LEGEND

- EXISTING TREE TO REMAIN
- EXISTING PALM TREE TO REMAIN
- RE-LOCATED PALM TREE. REMOVE EXISTING TREE WHERE NECESSARY.
- PROPOSED TABEBUIA ~~CHRYSOTRICHA~~ IPE (~~GOLDEN~~ PINK TRUMPET TREE) REMOVE EXISTING TREE WHERE NECESSARY. 24" Box

SHRUB & GROUNDCOVER LEGEND

SYM	BOTANICAL NAME	COMMON NAME	SIZE	QTY
	CAMELIA SASANQUA 'APPLE BLOSSOM'	NCN	5 GAL	35
	CASSIA ARTEMISOIDES	FEATHERY CASSIA	5 GAL	47
	COLEONEMA PULCHRUM	PINK BREATH OF HEAVEN	5 GAL	17
	FELICIA AMELLOIDES	BLUE MARGARITE	1 GAL	152
	LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDEFR	1 GAL	85
	ROSA FLORIBUNDA 'FLOWER CARPET'	GROUNDCOVER ROSE	1 GAL	88

GROUNDCOVER

ACHILLEA TOMENTOSA	WOOLY YARROW	FLATS	PLANT @ 18" O.C.
ANEMONE HYBRIDA	JAPANESE ANEMONE	FLATS	PLANT @ 18" O.C.
DUCHESNEA INDICA	INDIAN MOCK STRAWBERRY	1 GAL	PLANT @ 12" O.C.
DOUBLE DWARF FESCUE	TURF	SOD	
GAILLARDIA PULCHELLA	NCN	FLATS	PLANT @ 12" O.C.
MAHONIA REPENS	CREEPING MAHONIA	1 GAL	PLANT @ 24" O.C.

NORTH

SCALE: 1"=30'

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RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

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Landscape Architecture Inc.
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San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HINMAN
No. 2403
Signature
Date
STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
1	REVISE PLANTING PER NEW HARDSCAPE LAYOUT		10/15/04
	REVISED PER RIV. CITY STAFF.	PH	10/22/04

DESIGNED BY BH DRAWN BY CLN CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER	PH	10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/22/04
CONSTRUCTION ADM		10/22/04

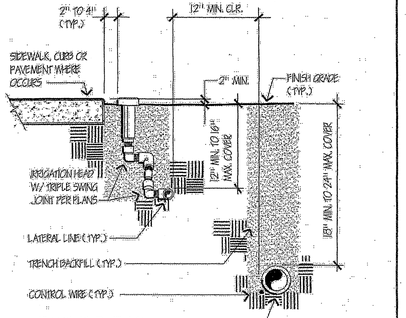
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

MAGNOLIA AVENUE
PLANTING PLAN
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-12 OF 16
JOB NO. 03-3623

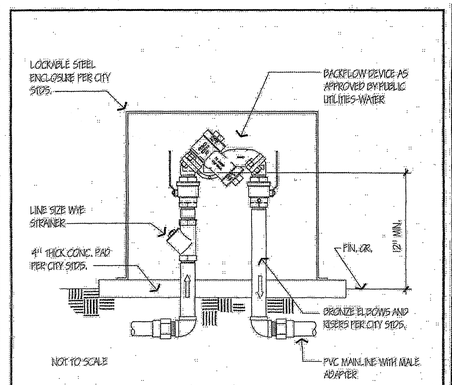
PC-_____-PK/PRP03-_____
Lantex Plot Date: 10/15/04

INDEXED 1-04-05 GH



NOT TO SCALE

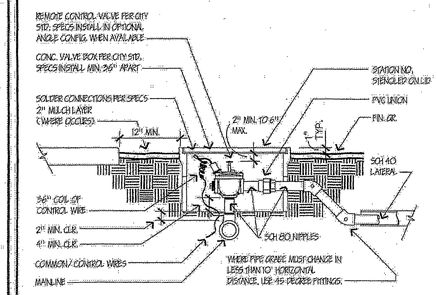
Approved	Date	Park and Recreation Department CITY OF RIVERSIDE	Detail No.
BJ	11/12/02		
Revised	Date	TRENCH AND LINE PLACEMENT	4010



NOT TO SCALE

Notes:
1) Install backflow device square with hardscape elements as approved by the Park Projects Inspector in the field.
2) Coordinate with Public Utilities-Water for location of backflow and water service. Wherever possible, locate service and backflow in the parkway at mid-block a minimum of 100' from the intersection per City standards.

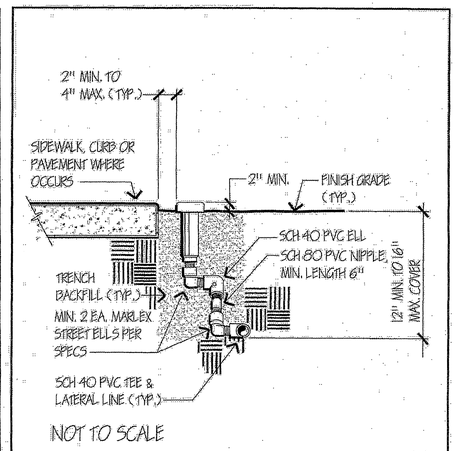
Approved	Date	Park and Recreation Department CITY OF RIVERSIDE	Detail No.
BJ	03/23/02		
Revised	Date	REDUCED PRESSURE BACKFLOW DEVICE	4011



NOTES:
1) EACH VALVE SHALL HAVE ITS OWN TEE OR ELL CONNECTION TO THE MAINLINE, NO MANIFOLD CONNECTIONS.
2) PROVIDE MINIMUM 3" CLEAR DISTANCE BETWEEN VALVES.
3) INSTALL VALVE BOX SO THAT BOLTS DO NOT REST ON ANY IRRIGATION LINES.
4) PROVIDE STAMPED BRASS TAG 1/2" DIA. BY 1" W/ 1/4" HIGH SEQUENCE NUMBER ON ALL CONTROL WIRES.

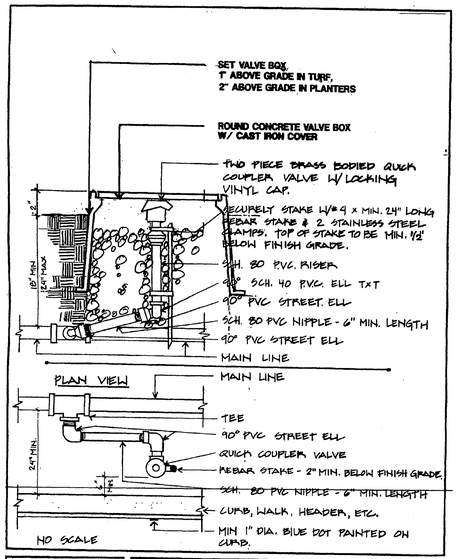
NOT TO SCALE

Approved	Date	Park and Recreation Department CITY OF RIVERSIDE	Detail No.
BJ	04/21/02		
Revised	Date	REMOTE CONTROL VALVE	4030



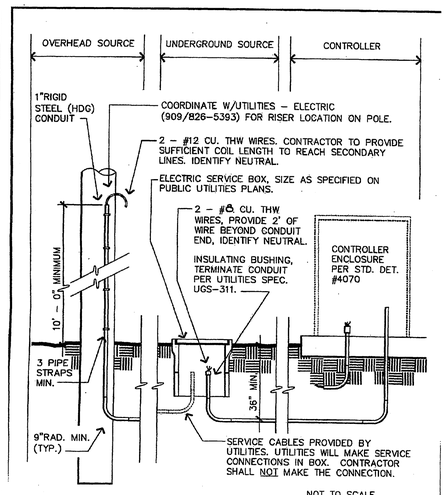
NOT TO SCALE

Approved	Date	Park and Recreation Department CITY OF RIVERSIDE	Detail No.
BJ	11/12/02		
Revised	Date	IRRIGATION SPRAY HEAD	4040



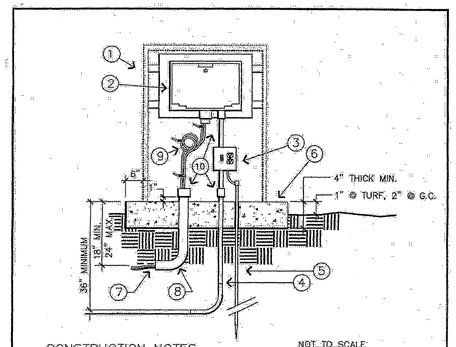
NO SCALE

Approved	Date	Park & Recreation Department CITY OF RIVERSIDE	Detail No.
Tony Nelson 10-27-03			
Revised	Date	QUICK COUPLER	4050



NOT TO SCALE

Approved	Date	Park and Recreation Department CITY OF RIVERSIDE	Detail No.
BJ	05/01/02		
Revised	Date	NON-METERED ELECTRIC SERVICE	4060



CONSTRUCTION NOTES: NOT TO SCALE

1. STRONG BOX STAINLESS-STEEL ENCLOSURE, MODEL (SIZE) TO FIT CONTROLLER, WITH SERVICE ADDRESS STENCILED ON LOCKING HINGED DOOR. SECURELY ANCHOR ENCLOSURE TO CONCRETE PAD.
2. WEATHER PROOF AUTOMATIC CONTROLLER, SECURELY WALL MOUNTED TO ENCLOSURE.
3. SQUARE D BREAKER BOX MODEL QOC-ALTB2, OR APPROVED EQUAL WITH DOUBLE 15 AMP BREAKER AND DUPLEX OUTLET. MAKE 120 V FUSED AND GROUND CONNECTION AT BREAKER BOX. MOUNT IN ENCLOSURE.
4. 3-#8 CU. THW WIRES IN MIN. 2" SCH 40 PVC CONDUIT FROM CONTROLLER TO POWER SOURCE. BOND SERVICE TO BREAKER BOX.
5. #8 CU COPPER GROUND WIRE AND 5/8" BY 8' LONG DRIVEN COPPER GROUNDING ROD WITHIN ENCLOSURE; DRIVE ROD PRIOR TO INSTALLATION OF ENCLOSURE.
6. CONCRETE PAD, EXTEND SUFFICIENT DISTANCE IN FRONT OF ENCLOSURE TO ALLOW UNOBSTRUCTED AREA FOR DOOR SWING FREE OF PLANTINGS, 6" MIN. BEYOND ENCLOSURE ON ALL OTHER SIDES.
7. LOW VOLTAGE DIRECT BURIAL WIRES TO CONTROL VALVES.
8. #2 WRAPPED HDD SWEEP ELL, SIZED TO FIT WIRE FOR NUMBER OF STATIONS ON THE CONTROLLER, PLUS SPARES AND COMMON.
9. ALLOW EXTRA EXPANSION LOOP OF CONTROL WIRE, NEATLY LACED WITH ZIP-LOCKS. MAKE CONNECTION DIRECTLY TO IRRIGATION CONTROLLER TERMINALS FOR 12 STATION & SMALLER. USE TERMINAL STRIPS FOR CONTROLLERS LARGER THAN 12 STATIONS.
10. ENSURE INSULATING ELECTRICAL BUSHINGS AT CONTROLLER AND END OF CONDUITS.

Approved	Date	Park and Recreation Department CITY OF RIVERSIDE	Detail No.
BJ	05/01/02		
Revised BJ - Rev. Conductors	Date 11/21/02	IRRIGATION CONTROLLER	4070

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Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

PREPARED IN THE OFFICE OF
LANTEX
Landscape Architecture Inc.
31726 Rancho Viejo Road, Suite 206
San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
DUANE RICHARD HINMAN
No. 2403
Signature
Date
STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
	REVISE PLANTING PER NEW HARDSCAPE LAYOUT		10/15/04

DESIGNED BY BH DRAWN BY CLN CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER	DLR	10/26/04
TRAFFIC DIVISION		
PARKS DEPARTMENT	BH	10/26/04
CONSTRUCTION MGR	BE	10/25/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/27/04

MAGNOLIA AVENUE
IRRIGATION DETAILS
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-13 OF 16
JOB NO. 03-3623

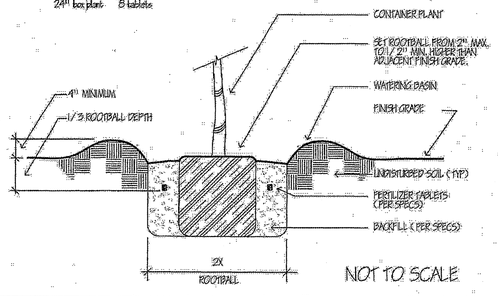
Indexed 1-04-05 gh

PC-_____-PK/PRP03-_____
Lantex Plot Date: 10/15/04

GENERAL PLANTING NOTES

1) Contact the Street Tree Inspector at 951-6126 two working days (48 hours) prior to installing any plant material.
2) Trees planted in turf areas shall be maintained with a minimum 12" radius around the tree free of turf throughout the maintenance period.
3) Watering basins may be removed after the maintenance period.
4) For staking information as applicable, refer to Standard Detail 1002.
5) For planting information as applicable, refer to Standard Detail 1003.
6) For specification information, refer to City of Riverside Park and Recreation Department Standard Specifications, Section 02480 Planting.
7) Provide Fertilizer Tablets as follows:

1 gallon plant	2 tablets
5 gallon plant	3 tablets
15 gallon plant	5 tablets
24" box plant	8 tablets



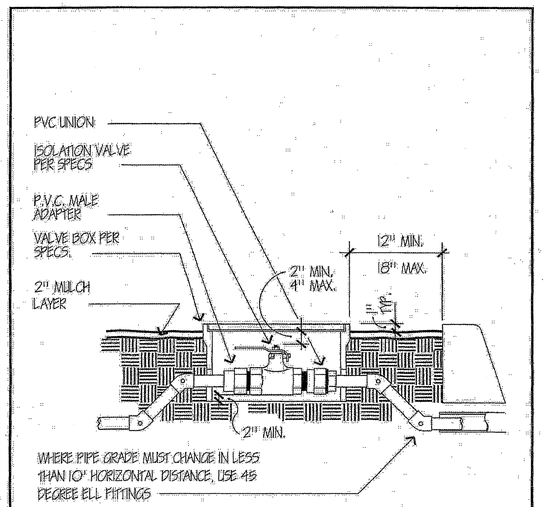
NOT TO SCALE

Approved	Date
BJ	04/18/96
Revised	Date

Park and Recreation Department
CITY OF RIVERSIDE

PLANTING DETAIL

Detail No. 1001



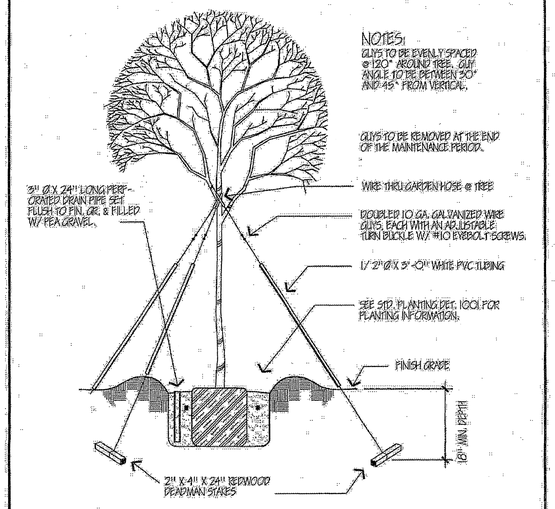
NOT TO SCALE

Approved	Date
BJ	04/30/02
Revised	Date

Park and Recreation Department
CITY OF RIVERSIDE

ISOLATION VALVE IN BOX

Detail No. 4052



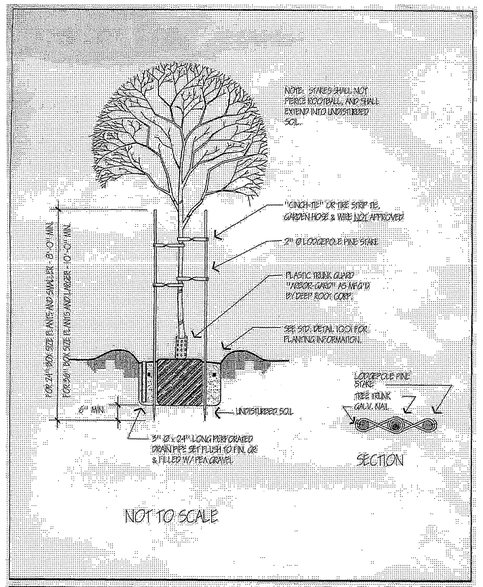
NOT TO SCALE

Approved	Date
BJ	04/10/96
Revised	Date

Park and Recreation Department
CITY OF RIVERSIDE

TREE GUYING DETAIL

Detail No. 1003



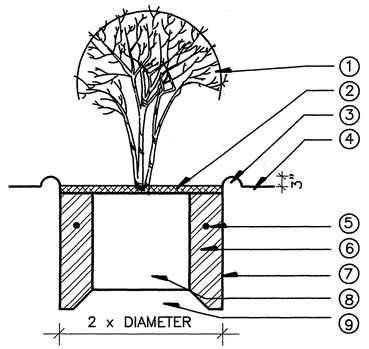
NOT TO SCALE

Approved	Date
BJ	02/18/98
Revised	Date

Park and Recreation Department
CITY OF RIVERSIDE

DOUBLE STAKING DETAIL

Detail No. 1002



1. 1 OR 5 GALLON SHRUB
2. 2" LAYER OF MULCH
3. WATER BASIN
4. FINISH GRADE
5. FERTILIZER TABLETS – SEE SPECIFICATIONS.
6. AMENDED SOIL FOR PLANTING – SEE SPECIFICATIONS.
7. PLANT PIT EXCAVATION
8. ROOTBALL
9. SOIL MANTLE

SHRUB PLANTING

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(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT — BRUCE RICHARD HAWKIN — No. 2403 — Signature — Date — STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
	REVISE PLANTING PER NEW HARDSCAPE LAYOUT		10/15/04

DESIGNED BY BH DRAWN BY CLN CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER	DH	10/21/04
TRAFFIC DIVISION		
PARKS DEPARTMENT	BE	10/21/04
CONSTRUCTION MGMT	BE	10/21/04

APPROVED BY _____ PUBLIC WORKS DIRECTOR
DATE 10/22/04

MAGNOLIA AVENUE
PLANTING DETAILS
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-14 OF 16
JOB NO. 03-3623

PC-____-PK/PROJ-____
Lantex Plot Date: 10/15/04

INDEXED 1-04-05 GH

SECTION 02441 - IRRIGATION

PART 1 - GENERAL

1.01 STANDARD SPECIFICATIONS: The provisions of the "Standard Specifications for Public Works Construction", current edition, shall apply except as modified herein.

1.02 SCOPE: The Work of this Section shall consist of furnishing all labor, materials, equipment, appliances and services necessary for the execution and completion of all **Irrigation Work** as shown on the Plans and as described in the Specifications including, but not necessarily limited to, the following:
l Provide complete operating irrigation systems;
l Installation of new and refurbishment of existing irrigation systems as necessary to provide complete operating irrigation systems for all planting areas within the Work Limits;
l 120 volt electrical service for and connection to the controller;
l Irrigation Controller within lockable Controller Enclosure as designated on the Approved Plans;
l Coordination with Work of other Sections;
l Testing;
l Clean-up;
l Replacements, Repairs, Guarantees and Warranty Work.

1.03 RELATED WORK:
Planting 02480

1.04 SUBMITTALS:

A. Materials List: Contractor shall submit a complete materials list for approval by the Park Projects Inspector prior to performing any Work. Catalog data and full descriptive literature must be submitted whenever the use of items different than those specified is requested. Notarized certificate must be submitted by plastic pipe and fitting manufacturer indicating that material complies with the Project Specifications, unless material has been previously approved, and used on other projects by City. Material list shall be submitted using the following format:

Item	Description	Manufacturer	Model No.
1	Pressure Supply Line	Lasco	Sch. 40
2	Lawn Head	Rainbird	2400
etc.	etc.	etc.	etc.

B. "Record" Prints:
1. Record accurately on one set of blue-line prints all changes in the Work constituting departures from the Plans, including changes in pressure and non-pressure line locations.
2. The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Park Projects Inspector. Prior to final inspection of the Work, submit "record" Mylar prints to City for approval.
3. Dimension from two permanent points of reference (buildings, monuments, sidewalks, curbs, pavement, etc.). Data to be shown on "record" prints shall be recorded day-to-day as the project is being installed.
4. Show locations and depths of the following items:
a) Point of connection.
b) Routing of irrigation pressure lines (dimension maximum 100 feet along routing).
c) Ball valves.
d) Irrigation remote control valves.
e) Quick coupling valves.
f) Routing of control wires.
g) Related equipment (as may be directed).
5. Maintain record prints on site at all times.

1.05 INSPECTIONS:

A. Inspections will be required for:
1. Pressure test of irrigation main line.
2. Coverage test.
3. Final inspection/start of maintenance.
4. Final acceptance.

B. Inspection Requests: Contractor shall notify the Park Projects Inspector a minimum of 48 hours (two working days) in advance for all inspections including the following:
1. Pressure supply line installation and testing
2. System layout
3. Coverage tests
4. Final Inspection

C. Evidence of Inspection by Others: When inspections have been conducted by other than the Park Projects Inspector, Contractor shall show evidence of when and by whom these inspections were made.
o
D. Requirements for Inspection: No inspection is to commence without "record" prints available on the site. In the event Contractor calls for an inspection without up to date "record" prints, without completing previously noted corrections, or without preparing the system for inspection, the inspection may be canceled.

E. Closing in Uninspected Work: Do not allow or cause any of the Work of this Section to be covered up or enclosed until it has been inspected, tested and approved by the Park Projects Inspector.

F. Coverage test: When the irrigation system is completed, Contractor shall perform a coverage test in the presence of the Park Projects Inspector to determine if the water coverage for planting areas is complete and adequate. This test must be accepted by the Park Projects Inspector before planting may commence.

G. Hydrostatic test:
1. Prior to the installation of any valves, all pressure lines shall be tested under a hydrostatic pressure of 150 psi for a period of not less than two hours, with all ends of lines capped and the line fully charged with water after all air has been expelled from the line.
2. All hydrostatic tests shall be made in the presence of the Park Projects Inspector or Inspector's designated representative. No pressure line shall be backfilled until it has been inspected, tested, approved in writing, and the mainline and valve locations have been noted on the "record" prints.
3. Contractor shall furnish the necessary force pump and all other test equipment, and shall perform the test.

1.06 TURNOVER ITEMS:

A. Controller Charts:
1. "Record" prints must be approved by the Park Projects Inspector before charts are prepared.
2. Provide one controller chart for each automatic controller. The chart shall show the entire area covered by the controller, preferably in a single sheet. The chart shall be a reduced copy of the approved "record" print. Reduce the print to a size that is the maximum dimensions that will fit within the controller door without folding. If the controller sequence is illegible at this reduction scale, the chart may be provided as a "multi-sheet" chart to provide adequate legibility.
3. Each control station on the Chart shall be marked with a different color to show its area of coverage.
4. When completed and approved, the chart shall be hermetically sealed between two pieces of plastic, each piece being minimum 20 mils in thickness. The chart shall be installed in the controller enclosure using Velcro fasteners, and three different color grease pencils (red, black and blue) shall be provided in the enclosure for maintenance notations on the chart.
5. Controller charts shall be completed prior to the final acceptance inspection.

B. Operation and Maintenance Manuals: Within a minimum of 14 calendar days prior to acceptance of construction, prepare and deliver to the Park Projects Inspector all required descriptive materials, properly prepared in two individually bound copies of the operation and maintenance manual. The manual shall describe the material installed and shall be in sufficient detail to permit operating personnel to identify, operate, and maintain all equipment. Spare parts lists and related manufacturer's information shall be included for each equipment item installed. Each complete, bound manual shall include the following information:
1. Index sheet stating Contractor's address and telephone number, including names and addresses and telephone numbers of local manufacturer's representatives.
2. Complete operating and maintenance instructions on all major equipment.

C. Materials to be furnished: The following items shall be supplied as part of this Contract and shall be turned over to the Park Projects Inspector at the conclusion of the Project at the Final Acceptance Inspection:
1. 4% additional irrigation heads of each type and spray pattern shown.
2. Two (2) special tools/wrenches for disassembly and adjustment of each type irrigation equipment/heads installed that require such special tools/wrenches.
3. Two keys for each type of automatic controller.
4. Two quick coupler "quills" with a 3/4" bronze hose bib, bent nose type with hand wheel and two quick coupler locking lid keys.
5. One valve box cover key.
6. "Record" prints and Mylar >As-Built Plans .
7. Remove and turn over backflow device valve handles.
8. Documentation of Water Department's inspection and acceptance of backflow device.

1.07 GUARANTEE:

A. General: The entire irrigation system, including all Work done under this Contract, shall be guaranteed against all defects and fault of material and workmanship for a period of one (1) year following Final Acceptance of the Work as documented by the Notice of Completion filed with the Riverside County Recorder's Office. All materials used shall carry a manufacturer's guarantee of one (1) year. Should any problem with the irrigation system be discovered within the guarantee period, it shall be corrected by Contractor at no additional expense to City within fourteen (14) calendar days of receipt of written notice from City.

B. Form of Guarantee: Guarantee shall be submitted on Contractors own letterhead as follows:

GUARANTEE FOR IRRIGATION SYSTEM

PROJECT: ____________________

LOCATION: ____________________

We hereby guarantee the irrigation system we have furnished and installed against defects in materials and workmanship, ordinary wear and tear and unusual abuse, or neglect excepted, and that the Work has been completed in accordance with the Plans and Specifications. We agree to repair or replace any or all of the Work, together with any other adjacent Work which may be displaced by so doing, that may prove to be defective in its workmanship or materials within a period of one (1) year after the date the Notice of Completion for the above named Project is filed with the County Recorder by the City of Riverside, California, at no additional cost to City. We shall make such repairs or replacements within 14 calendar days following written notification by City. When the immediate repair or replacement of the Work is necessary to ensure the public safety and welfare, which would be endangered by continued usage of the facility, such circumstance will be deemed an operational emergency. In the event of such an emergency, after City contacts our firm and after authorizing 24 hours to initiate repairs, if we fail to initiate and diligently complete such repairs in a timely manner, the Director may direct City forces to perform such functions as the Director may deem necessary to correct the Work and immediately place the facility back in operational condition. If such procedure is implemented, we shall bear all expenses incurred by City. In all cases, the judgment of the Director shall be final in determining whether an operational emergency exists. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from City (other than an operational emergency), we authorize City to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefor upon demand.

PRINTED NAME & TITLE: ____________________

SIGNATURE: ____________________

ADDRESS: ____________________

PHONE: ( ) ____________
(Area Code) Number

C. Operational Instruction: After the system has been completed, Contractor shall instruct the Park Projects Inspector in the operation and maintenance of the system and shall furnish a complete set of operating instructions.
d adj
D. Trench Settlement: Any settling of trenches which may occur during the one-year period following acceptance shall be repaired to City's satisfaction by Contractor without any additional expense to City. Repairs shall include the complete restoration of all planting, paving or other improvements of any kind which are damaged as a result of the Work.

PART 2 - MATERIALS

2.01 GENERAL: All materials shall conform with Section **212 - 2 IRRIGATION SYSTEM MATERIALS** of the Standard Specification except as modified herein.

2.02 PIPE AND FITTINGS:

A. General:
1. Pressure supply lines 2 inches in diameter and up to 8 inches in diameter shall be either Class 315 solvent weld PVC or Class 200 rubber gasket type PVC. Solvent weld and ring type pipe shall not be used together on the same pressure supply line.
2. Pressure supply lines 1-1/2 inches in diameter and smaller shall be minimum schedule 40 PVC.
3. Non-pressure lines shall be minimum Class 200 PVC.

B. Steel Pipe: Amend Standard Specifications Section **212-2.1.2 Steel Pipe** to read:
"All steel pipe shall be hot-dipped galvanized,....", and add: "All fittings for steel pipe shall be 250 pound rated galvanized malleable iron, banded pattern. Pipe sizes indicated on the Plans are nominal inside diameter, unless otherwise noted."

C. Plastic Pipe:
1. Add the following to Standard Specifications Section **212-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings** :
"All plastic pipe shall bear the following markings: manufacturer's name, nominal pipe size, schedule or class, type of material, pressure rating in PSI, NSF seal of approval, and date of extrusion."
2. Amend Standard Specifications Section **212-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings** to read:
"All plastic pipe fittings shall be standard weight schedule 40 and shall be injection molded of an improved PVC fitting compound. All threaded plastic fittings shall have injection molded threads. . No cut threads will be accepted on PVC pipe and fittings. All tees and ells shall be manufactured in injection molds that are sidegated. All threaded nipples shall be standard weight schedule 80 with molded threads. "
3. Amend first sentence of Standard Specifications Section **212-2.1.4 Plastic Pipe for Use with Rubber Ring Gaskets** to read:
"All rubber gasket PVC pipe, couplings, and fittings shall conform to ASTM D 2241 Type 1, Grade 1, 2000-PSI design stress"; and add the following to the Section: "Couplings, rubber gaskets, and fittings shall be as approved by the pipe manufacturer. Ring-type rubber gasket couplings shall permit a five (5) degree deflection of the pipe at each coupling (2-1/2 degrees each side) without ex-filtration or infiltration, cracking or breaking."

D. Asbestos Cement Pipe (ACP): Is not approved for use on City projects.

2.03 VALVES AND VALVE BOXES:

A. Valves:
1. Ball Valves: All ball valves shall be bronze bodied, capable of withstanding a minimum working pressure of not less than 150 psi.
2. Manual Control Valves: Add the following to Standard Specifications Section **212-2.2.3 Manual Control Valves** : Anti-siphon-type valves shall be all bronze with swivel-type replaceable seating members and an approved vacuum breaker as an integral part of assembly.
3. Quick-Coupling Valves: Add the following to Standard Specifications Section **212-2.2.6 Quick Coupling Valves and Assemblies** : Quick coupling valves shall have locking vinyl cover and shall be 1" in size.
4. Remote Control Valves: Add the following to Standard Specifications Section **212-2.2.4 Remote Control Valves** :
a) Valves shall be spring-loaded, self-cleaning, packless diaphragm activated, of a normally closed type.
b) Valve solenoid shall be corrosion-proof and constructed of stainless steel molded in epoxy to form one integral unit, and shall be 24 volt A.C., 2.0 watt maximum (2" and smaller valves).
c) Valve shall close against flow without chatter and with minimum closing surge pressure (minimum 5 seconds closing time per valve).
d) Valve shall be completely serviceable in the field without removing valve body from line.

B. Boxes:
1. Concrete Valve Boxes: Add the following to Standard Specifications Section **212-2.2.7 Valve Boxes** : Remote control valve boxes shall be rectangular concrete boxes with non-hinged locking cast-iron covers. Valve station number shall be stenciled in two-inch-high (2") numerals on cover using epoxy resin base paint of a contrasting color. Ball valve boxes shall be round concrete boxes with non-hinged cast iron covers marked either "Ball Valve" or "G. V." with letters cast or tooled in the cover.
2. Plastic Valve Boxes: (For use on Drip Irrigation Systems only)
a) General: Valve boxes and covers shall be fabricated from a durable plastic material resistant to weather, sunlight and chemical reactions. The covers shall be secured with a hidden latch mechanism or bolts. The cover and box shall be capable of sustaining a load of 1,500 pounds. Valve box extensions shall be by the same manufacturer as the valve box. The box covers shall be factory embossed for the designated use and stenciled by the installer with 2" high letters in a contrasting color as noted below. Boxes and covers shall be as manufactured by AMETEK or City approved equal.
b) Rectangular Plastic Boxes and Covers: Shall be a minimum of 12" wide x 18 long", with depths as necessary to protect the valve and provide the clear dimensions as detailed and/or specified. The covers shall be embossed with words or initials to identify the use for the box (e.g. "Flush Valve" or the letters "F.V.", and Air Relief Valve or the letters AA.R.V.@) as noted on the Plan.
c) Round Plastic Boxes and Covers: Shall be minimum 12" diameter, round boxes with covers embossed with words to identify the use for the box (e.g. "Quick Coupler Valve" or the letters "Q.C.V.") and shall be marked as noted on the Plans

2.04 BACKFLOW PREVENTION DEVICE: Add the following to Standard Specifications Section **212-2.3 Backflow Preventer Assembly** : The backflow prevention unit shall be a reduced pressure type vacuum breaker of the size, manufacture, and model number as indicated on the Plans. If not indicated, the device shall be the same size as the water service and the manufacturer and model number shall be as approved by the Park Projects Inspector.
2.05 IRRIGATION HEADS: All irrigation heads shall be as shown on the Plans and shall conform with Section **212-2.4 Sprinkler Equipment** of the Standard Specifications. All heads used on the same control valve shall be matched precipitation rate heads. All heads used on turf shall be minimum 6" pop-up types; all heads used in shrub areas shall be minimum 12" pop-up types.

2.06 ELECTRICAL MATERIALS:

A. Conduit: Amend Standard Specifications Section **212-3.2.1 Conduit** to read: All conduit below grade shall be schedule 40 PVC of sufficient size to carry all proposed wiring. Conduit above grade shall be galvanized steel per the Standard Specifications. Low Voltage (24 volt) wiring shall be provided with a separate conduit/sleeve from both high voltage wiring (110/120 volt and higher) and the irrigation mainline sleeve.

B. Electrical Service: Materials for electrical service shall comply with the standard specifications, governing utility agency standards, and requirements of all applicable codes. All controllers serving landscape areas that will **not being turned over to the City** for maintenance, shall be powered through a **metered** electrical service. Controllers serving landscape areas to be maintained by the City shall be powered through a non-metered electrical service.

C. Wire: Add the following to Standard Specifications Section **212-3.2.2 Conductors** : "All low voltage conductors shall be 14 gauge for control and 12 gauge for common wires. All low voltage common wire shall be white with a colored stripe. Stripe color shall be different for each controller installed. All low voltage control wire shall be of one color other than white or green. A different color control wire shall be used for each controller installed."

2.07 CONTROLLER UNIT: Add the following to Standard Specifications Section **212-3.3 Controller Unit** :

A. Controller: Shall be wall mounted type, as indicated on the Plans, with a heavy duty watertight case and locking hinged cover, installed within a lockable steel enclosure.

B. Controller Enclosure: Shall be metal, sized to fit the controller and the other electrical components as required per Standard Detail 4060, Le Meur - Type V, Strongbox - sized to fit unit, or City approved equal.

PART 3 - EXECUTION

3.01 GENERAL: All Work shall conform with Section **308 LANDSCAPE AND IRRIGATION INSTALLATION** of the Standard Specifications except as modified herein. No Work of this Section other than sleeving under pavement shall commence prior to the completion and acceptance of all Grading Work.

Add the following to Standard Specifications Section **308-5.1 General** :

A. Irrigation System Design & Water Supply:
1. The irrigation system design is based upon an available water pressure of p.s.i. at a flow rate of g.p.m. Individual stations are designed to this minimum p.s.i. The system is also designed to withstand a maximum pressure of p.s.i. Contractor shall verify the size of the existing water supply/meter and the existing operating water pressure at the water supply location shown on the Plans prior to starting construction. Contractor shall notify the Park Projects Inspector in writing of any discrepancies noted. Failure to provide such written notification may cause Contractor to provide for modifications to the irrigation system as necessary to provide for a fully operational system providing 100 % coverage at the operating pressure available, all at no additional cost to City.
2. Connection to, or the installation of, the water supply shall be at the location shown on the Plans. Minor changes caused by actual site conditions shall be made at no additional cost to City.

B. Electrical Service: Contractor shall provide either a **metered** (for areas to be maintained by **other than the City**, such as an HOA) or non-metered electrical service (for areas to be maintained by the City) as required, and shall make the final 120 V connection to the irrigation controller.
C. Code Requirements: Prior to all Work of this Section, Contractor shall carefully inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence. Verify that the irrigation system may be installed in strict accordance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations.

In the event any equipment or methods indicated on the Plans or in the Specifications is in conflict with local codes, immediately notify the Park Projects Inspector prior to installing the Work. If this notification is not provided, Contractor shall assume full responsibility for the cost of all revisions necessary to comply with all codes.

D. Grades: Contractor is to keep within the specified material depths with respect to finish grade. Failure to obtain specified material depths may subject Contractor to adjusting the grades or depth of lines until acceptable depths of cover are achieved, all as directed by the Park Projects Inspector and at no additect, Contþ[illegible]onal cost to City.

E. Coordination with Work of Other Trades: Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Contractor shall coordinate the installation of all irrigation materials with all other Work. Special attention shall be given to coordination of piping locations versus tree and shrub locations and sleeve locations versus pavement installation to avoid conflicts.

F. Maintain Record Prints: Contractor shall maintain "record" prints on site at all times. Upon completion of the Work, transfer all "record" information on changes and dimensions to reproducible sepia Mylar or photo Mylar prints. The changes and dimensions shall be recorded in a legible and workmanlike manner, to the satisfaction of the Park Projects Inspector.

3.02 TRENCHING AND BACKFILLING:

A. Trenching:
1. Add the following to Standard Specifications Section **308-2.2 Trench Excavation and Backfill** : Dig trenches and support pipe continuously on bottom of ditch. Where lines occur under paved areas, depth dimensions shall be considered below subgrade.
2. Amend Standard Specifications Section **308-2.2, Subparagraph 2 Waterlines continuously pressurized**) to read: Water lines continuously pressurized - minimum 18 inches, maximum 24 inches. (These measurements are to be from subgrade elevation for piping under pavement.)
3. Amend Standard Specifications Section **308-2.2, Subparagraph 3 Lateral sprinkler lines**) to read: Lateral irrigation lines - minimum 12 inches and maximum 16 inches. All main lines and lateral lines running parallel to other such lines shall have a minimum horizontal separation of 12".
4. Add the following to Standard Specifications Section **308-2.2 Trench Excavation and Backfill** : Where it is necessary to excavate adjacent to existing trees, Contractor shall avoid injury to trees and tree roots. Excavation in areas where 2-inch and larger roots occur shall be done by hand. All roots 2 inches and larger in diameter shall be tunneled under and shall be heavily wrapped with wet burlap to prevent scarring or drying. Where trenching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, making a clean cut through the roots. Roots 1 inch and larger in diameter shall be painted with two coats of tree seal or approved equal. Trenches adjacent to trees shall be closed within 24 hours.
5. Permanent Resurfacing: Add the following to Standard Specifications Section **308-5.1 General** : All surface improvements damaged or removed as a result of Contractor's operations shall be reconstructed by Contractor to the same dimensions, except for pavement thickness, and with the same type materials used in the original Work. Trench resurfacing shall be 1 inch greater in thickness than existing pavement. Concrete pavement shall be removed and replaced in "full panels" with no horizontal dimension less than five (5) feet. Contractor shall review the planned limits and lines of concrete removal and replacement with the Park Projects Inspector prior to sawcutting for Removal Work.

B. Backfill:
1. Amend Standard Specifications Section **308-2.2 Trench Excavation and Backfill** to read: " Backfill shall be uniformly tamped in 4-inch layers under and around the pipe for the full width of the trench and the full length of the pipe. Materials shall be sufficiently damp to permit thorough compaction, free of voids. Backfill shall be compacted to dry density equal to adjacent undisturbed soil and shall conform to adjacent grades."
2. Add the following to Standard Specifications Section **308-2.2 Trench Excavation and Backfill** :
a) Flooding in lieu of tamping is not allowed without specific prior written approval of the Park Projects Inspector.
b) Under no circumstances sect, Contþ[illegible]hall the wheels of any vehicle not designed for the purpose of soils compaction be used to compact backfill.

3.03 PIPE INSTALLATION:

A. General: Add the following to Standard Specifications Section **308-5.2.1 Irrigation Pipeline Installation, General** :
1. Piping under existing pavement may be installed by jacking, boring, or hydraulic driving. However, no hydraulic driving is permitted under asphaltic concrete pavement.
2. Cutting or breaking of existing pavement is not permitted except as approved in writing by Park Projects Inspector. When approved, all necessary repairs and replacements will be made at no additional cost to City.
3. Carefully inspect all pipe and fittings before installation, removing all dirt, scale and burrs and reaming; install pipe with all markings up for visual inspection and verification.
4. Contractor shall install concrete thrust blocking per the manufacturer's recommendations at all changes of direction and terminal points of pressure pipe.
5. Parallel lines shall not be installed directly over one another. Provide a minimum of 12" horizontal separation for all parallel lines.
6. For plastic-to-metal connections, work the metal connections first. Use a non-hardening pipe dope on all threaded plastic-to-metal connections, except where noted otherwise.
7. All piping under pavement shall be sleeved using schedule 40 PVC sleeves. Each line shall be separately sleeved.
8. Do not install multiple assemblies ("manifold") on plastic lines. Provide each equipment assembly (e.g. RCV, quick coupler, ball valve, head, backflow device) with its own connection to its service line.

B. Plastic Pipe: Add the following to Standard Specifications Section **308-5.2.3 Plastic Pipeline** :
1. Exercise care in handling, loading, unloading and storing plastic pipe and fittings, store plastic pipe and fittings under cover until ready to install; transport plastic pipe on a vehicle with a bed long enough to allow pipe to lay flat, avoid undue bending and any concentrated external load.
2. 360E applicators shall be used to apply primer and solvent on pipe sizes 2-1/2 inches and larger.

3.04 BACKFLOW INSTALLATION: Add the following to Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment** : Install backflow assemblies at locations approved in the field by the Park Projects Inspector and at heights required by local codes.

3.05 VALVE AND VALVE BOX INSTALLATION:

A. Valves:
1. Amend Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment** to read: Valves shall be the same size as the pipeline in which valves are installed unless otherwise specified on the Plans. Valves shall be installed a minimum of three feet in horizontal distance apart, each with its own connection to the pressure main line.
2. Amend Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment** to read: Install quick couplers within valve boxes per the Park and Recreation Department's standards at maximum 75' o.c., and maximum 50' from ends of all planting areas.
3. Add the following to Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment** : Valves shall be installed in shrub areas whenever possible. No valves or valve boxes other than quick coupler valves shall be installed within a designated turf area.

B. Valve Boxes:
1. General: Valve boxes shall be installed with a minimum of 2" vertical clearance between the box and all pipelines and valve components and/or special equipment within the box. Valve boxes found resting on either the valve, special equipment or pipelines shall be cause for rejection of the installation.
2. Uses:
a) Concrete Valve Boxes:
I) Rectangular: Unless noted otherwise on the Plans, each remote control valve, all wire splices, and each master control valve shall be installed within a rectangular concrete valve box.
ii) Round: Unless noted otherwise on the Plans, each quick coupler valve (except where located within the infield of a baseball/softball field) and each ball valve shall be installed within a round concrete valve box.
c) Plastic Valve Boxes: (for drip irrigation systems only)
I) Rectangular: Unless noted otherwise on the Plans, each drip irrigation flush valve, and each air relief valve shall be installed within a rectangular plastic valve box.
ii) Round: Unless noted otherwise on the Plans, ball valves,quick coupler, and/or gate valves shall be installed within a round plastic valve box.

3.06 IRRIGATION HEAD INSTALLATION: Amend Standard Specifications Section **308-5.4.1 Sprinkler Head Installation and Adjustment, General** to read: Irrigation heads shall be installed as designated on the Plans and per the Park and Recreation Department's standard details. Upon coverage testing of the system if 100 % coverage is not afforded by the system as designed, additional heads shall be added as necessary to achieve 100 % coverage.

3.07 CONTROLLER INSTALLATION: Add the following to Standard Specifications Section **308-5.5 Automatic Control System Installation** :

A. Controller Installation: The controller location, as shown on the Plans, is diagrammatic. The final location of the controller(s) shall be as approved by the Park Projects Inspector before installation. Typical controller location shall be mid-block 3' behind the sidewalk. If replacement of existing controller(s) is a part of the project, Contractor shall remove the existing controller(s) and replace with the replacement unit as specified. Contractor shall install all conduit runs, 120V wire and cable, and 24V control wire, as necessary for a complete and operational system.

B. Controller Enclosure:
(1) Conventional Type: The controller shall be wall mounted within a LeMeur vandal resistant enclosure, unless noted otherwise on the Plans. Controller enclosure shall be located in shrub areas and/or adjacent to other hardscape items. Enclosure shall be painted with two coats of paint, color as approved, and shall have the service address painted in a contrasting color on the enclosure door; submit color samples. A 4" thick concrete slab for maintenance access shall be provided, size approximately 15 sq. ft., line, grade and dimensions as directed by the Park Projects Inspector.

B. Coordination of Controller Location with Various Service Connections: Contractor shall coordinate the electrical service with the approved controller location. Contractor shall verify the locations of 120V power prior to installing controller(s) and shall coordinate final assembly mounting locations with the needed utilities. Contractor shall furnish and install grounding rods and ground wires for each controller. Ground rods shall be installed a minimum of eight feet from their respective controller housing and the ground wire run back to the controller.

C. Controller Connections: Contractor shall inspect, test, and certify all low voltage control wire splices and ground rod installations as applicable. Any repairs as necessary to provide properly operating wiring are to be made by Contractor at no additional cost to City. After repairs are satisfactorily completed, Contractor shall connect the ground wires to the ground rods and the controller(s).

D. Controller Programming: Following establishment of the turf, the irrigation system shall be programmed to operate during the periods of minimal use of the Project area (i.e., 11:00 p.m. through 6:00 a.m.).

3.08 WIRING:

A. Wiring: Add the following to Standard Specifications Section **308-5.5 Automatic Control System Installation** :
1. All splice connections shall occur in a valve box. All wire runs between the valve and the controller shall be a continuous run with no splices unless noted otherwise on the Plans.
2. All low voltage wiring splices shall be made-up as soldered connections, wrapped with a minimum of two (2) layers of electrical tape and sealed with Scotch-coat. Scotch-lok, Uni-pack, Penn-tite, or other similar type connectors are not acceptable.

3.09 FINISHING AND TESTING: Amend Standard Specifications Section **308-5.6.2 Pipeline Pressure Test** to read: Pressure test the mains - minimum 2 hours at 150 PSI. Add the following to Standard Specifications Section **308-5.6.2 Pipeline Pressure Test** : Center-load all plastic pipe prior to pressure testing. The entire system shall be operating properly before any planting operations commence.

3.10 COMPLETION CLEANING: Add the following to Standard Specifications Section **308 LANDSCAPE AND IRRIGATION INSTALLATION** : Upon completion of the Work, Contractor shall smooth all ground surfaces, remove excess materials, rubbish, debris, etc., sweep adjacent streets, curbs, gutters, walkways and trails, and remove construction equipment from the premises.

END OF SECTION

BJ/02441.MAS
01/06/97

Underground Service Alert
CALL BEFORE YOU DIG
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

PREPARED IN THE OFFICE OF
LOCKMAN | & | ASSOCIATES
Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
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(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HINMAN
No. 2403
Signature
10/15/04
Date
STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
	REVISE PLANTING PER NEW HARDSCAPE LAYOUT		10/15/04

DESIGNED BY BH DRAWN BY CLN CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/20/04
CONSTRUCTION ADM		10/22/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

MAGNOLIA AVENUE
IRRIGATION SPECIFICATIONS
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-15 OF 16
JOB NO. 03-3623

PC-____-PK/PRP03-____
Lantex Plot Date: 10/15/04

INDEXED 1-04-05

SECTION 02483 - PUBLIC LANDSCAPE PLANTING

PART 1 - GENERAL

1.01 DEFINITIONS:

A. Contractor: Where used throughout this specification, the term AContractor@ shall mean the licensed Contractor hired by the Builder/Developer to install the landscape improvements and any and all subcontractors to Contractor.

B. Builder/Developer: The Legal entity/individual responsible for development of the project who has entered into the agreement and posted a surety to guarantee the installation of the public landscape improvements.

1.02 RELATED DOCUMENTS:

A. Standard Specifications: All Public Landscape Planting Work shall conform to the "Standard Specifications for Public Works Construction" Current Edition, prepared by the Southern California Chapter of the American Public Works Association and Southern California District of the Associated General Contractors of California, published by Building News, Inc., Los Angeles, California, and all amendments thereto, as adopted by the City of Riverside, and as provided herein.

B. Reference Standards: American Association of Nurserymen Standards.

1.03 SCOPE: The Work of this Section shall consist of furnishing all labor, materials, equipment, appliances and services necessary for the execution and completion of all **Public Landscape Planting Work** as shown on the Plans and as described in the Specifications including, but not necessarily limited to, the following:

l Soil preparation;
l Finish grading;
l Planting trees;
l Guying and staking trees;
l Planting shrubs, vines and groundcover;
l Hydroseeding turf;
l Soil erosion control;
l Maintenance;
l Plant establishment;
l Coordination with Work of other Sections;
l Testing;
l Clean-up;
l Replacements, Repairs, Guarantees and Warranty Work.

1.04 RELATED WORK: *(Comment: Line out inapplicable sections)*
Submittals 01300
Clear and Grub and Selective Demolition 02110
Site Grading 02210
Irrigation 02441
Electrical 16530

1.05 SOILS TEST: Contractor shall notify the Park Projects Inspector upon completion of fine grading and prior to commencement of soil preparation work. The Contractor shall take soils samples in the presence of the Park Projects Inspector and shall obtain agronomic soils tests for all planting areas after completion of fine grading and prior to start of soil preparation work. Tests shall be performed by an approved agronomic soils testing laboratory and shall include a fertility and suitability analysis with written recommendations for soil preparation, planting backfill mix, auger hole requirements, and post plant fertilization program. The soils report recommendations will take precedence over the minimum amendment and fertilizer application rates specified herein only if the soils report recommendations exceed the specified minimums. Contractor shall allow a minimum two week period for the soils testing work commencing upon the Park Projects Inspector's acceptance of grade.

1.06 GUARANTEE: All trees installed by the Contractor shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship for a period of one (1) year following the date of completion. During the guarantee period, any trees found to be dead, missing, or in poor condition shall be replaced by Contractor within ten (10) days of written notification. Park Projects Inspector shall be the sole judge as to the condition of the trees. Replacement shall be made in accordance with City standards. Material and labor involved in replacing trees shall be provided by Contractor at no additional cost to City and/or the Developer.

1.07 INSPECTIONS: Inspections are required. Contractor shall contact the Park Projects Inspector and the Developer's Landscape Architect at least 48 hours (2 working days) in advance of an anticipated inspection. An inspection will be required at each of the steps listed below:

A. Fine Grade Prior to Commencement of Soil Preparation: Upon completion of fine grading and prior to commencement of soil preparation, for acceptance of fine grading work and taking of soils samples.

B. Finish Grade: Inspection of completed finish grading work following soil preparation work.

C. Plant Material: Inspection of plant materials upon delivery to the job site, but prior to planting.

D. Plant Locations: When container plants and/or bare root stock are spotted for planting, but before planting holes are excavated.

E. Completed Planting: When planting and all other indicated or specified work has been completed.

F. Chemical Applications: During application of pre-emergent chemical.

G. Start of Plant Establishment: At the start of the Plant Establishment Period.

H. End of the Plant Establishment: Prior to Final Acceptance of the Project for ongoing maintenance, the project will be inspected for end of the Plant Establishment Period. Acceptance for maintenance shall be confirmed in writing. Contractor shall remain responsible for maintenance until receipt of written confirmation of acceptance of the Project for maintenance by the applicable party (Home Owners Association, City, or Master Property Owners Association as applicable).

1.08 SUBMITTALS: The following written certifications are required to be submitted to the Park Projects Inspector upon delivery of the respective materials to the job site:
Total Quantity of commercial fertilizers, by type
Total Quantity of soil amendments and conditioners, by type
Total Quantity of seed, by type
Total Quantity of fiber-mulch
Total Quantity of iron sulphate

1.09 PLANT ESTABLISHMENT PERIOD: The Plant Establishment Period shall be for a minimum period of **one (1) year**; see also Subsections **3.12 Maintenance and Plant Establishment** and **3.13 Start of Plant Establishment Period** regarding length of plant establishment and criteria to start.

PART 2 - MATERIALS

2.01 GENERAL: All materials shall conform with Section **212 - Landscape and Irrigation Materials** of the Standard Specifications except as modified herein.

2.02 FERTILIZER, SOIL AMENDMENTS AND CONDITIONERS: Add the following to Standard Specifications Section **212-1.2.3 Commercial Fertilizer** :

A. Planting Tablets: Tightly compressed long-lasting, slow-release fertilizer tablets weighing 21 grams, with a potential acidity of not more than 5 percent by weight and having an analysis of 20-10-5 derived from the sources listed in the following guaranteed analysis:
GUARANTEED ANALYSIS

Total Nitrogen (N) .... 20 %
Derived from urea formaldehyde
7.0% water soluble nitrogen
13.0% water insoluble nitrogen

Available Phosphoric Acid (P2O5)......... 10 %
Derived from calcium phosphate

Soluble Potash (K20)................. 5 %

Combined Calcium (Ca)............... 2.6 %
Derived from calcium phosphates

Combined Sulfur (S)................. 1.6 %
Derived from ferrous and potassium sulfates

Iron (expressed as elemental Fe)......... 35 %
Derived from ferrous sulfate

B. Commercial fertilizer: Shall bear the manufacturer's guaranteed statement of analysis and shall meet the following minimum requirements: 16 % nitrogen, 6 % phosphoric acid, and 8 % potash.

C. Organic Soil Amendment: Shall be type 1 organic soil amendment, wood based product, nitrogen stabilized, and free of foreign matter.

D. Soil Conditioners: Add to Standard Specifications, new Section as follows:

212-1.2.6 Inorganic Conditioners. Inorganic conditioners shall be agricultural grade gypsum, soil sulfur and iron sulfate. Iron sulphate shall be ferric sulphate or ferrous sulphate in pelleted or granular form containing not less than 18.5 % iron, expressed as metallic iron, and shall be registered as an agricultural mineral with the State Department of Food and Agriculture in compliance with Chapter 5 "Fertilizing Materials", of Division 7 of the Food and Agriculture Code of California, commencing at Section 14501.

2.03 HEADERS, STAKES AND TIES: Add the following to Standard Specifications Section **212-1.5 Headers, Stakes and Ties** :

A. Headers: Standard Specifications Section **212-1.5.2 Headers and Stakes** replace with the following to read:

"Headers shall be Concrete Headers/Mow Curbing - Concrete shall be 5 sack mix with a maximum slump test of four inches (4"). Provide sufficient concrete forming and stakes (maximum 3' o.c.) to provide continuous line without waving."

B. Tree Stakes: Shall be straight-grained lodgepole pine, or City approved equal. Stakes shall be free from knots, checks, split, or disfigurements.

C. Tree Ties: Shall be made from tire casing, 22" long by 3/4" wide, fastened to tree stake with two galvanized 5d roofing nails each. **Metal ATwist Braces@ are NOT ALLOWED.**

2.04 HYDROSEEDING MATERIALS:

A. Binding Agent: Shall be a dry powder organic concentrate, Ecology Controls "M-Binder" as available from Robinson Fertilizer Company, Anaheim, CA 714/632-9715 or City approved equal.

B. Fertilizers:
1. Controlled Release Fertilizer (CRF):
a) Total Quantity Exceeding 1 Ton: CRF shall be ASierra 17-6-12 Plus Minors@ Controlled Release Fertilizer (Stock# 90209), 4-5 month time release formulation, using resin coated prills, as manufactured by The Scotts Co., Marysville, OH 1-800-492-8255 (Local ManufactureR's Representative: Jack Wackerman, 760/757-2150), or City approved equal, and as available through Western Farm Service, Riverside, CA (909) 686-3736.

b) Total Quantity Less than 1 Ton: CRF shall be A Osmocote@ Controlled Release Fertilizer with a formulation of 17-7-12 (Stock #90010) as manufactured by the Scotts Company, Marysville, OH 1-800-492-8255 (Local Manufacturer's Representative: Jack Wackerman, 760/757-2150), or City approved equal, and as available through Western Farm Service, Riverside, CA (909) 686-3736.

2. Triple Super Phosphate: Shall be a premium quality granulated high phosphorus ABest@ fertilizer product having an analysis of 0-45-0, as manufactured by J. R. Simplot Company, Lathrop, CA (209) 858-2511, or City approved equal.

C. Fiber-Mulch: Shall be produced from cellulose such as wood pulp or similar organic material and shall be of such character that it will disperse into a uniform slurry when mixed with water. The fiber shall be of such character that when used in the applied mixture, an absorptive or porous mat, but not a membrane, will result on the surface of the ground. Materials which inhibit germination or growth shall not be present in the mixture.

D. Seed: Turf seed mix as specified.

E. Water: All water used for hydroseeding shall be potable domestic water. Contact the City Public Utilities Department, Water Division at 909/826-5648 regarding availability of water and temporary construction meter and charges for water drawn from City fire hydrants.

2.05 JUTE NETTING: Jute netting shall be new and shall be of uniform, plain-weave, flame-retardant mesh. The mesh shall be dyed green and shall be made from unbleached single jute yarn. The yarn shall be of loosely twisted construction and shall not vary in thickness by more than one-half its normal diameter. Jute netting shall be furnished in rolled strips and shall meet the following requirements:
Width - 48 inches, with a tolerance of one inch wider or narrower.
Minimum 78 warp ends per width of roll.
Minimum 41 weft ends per yard of length.
Weight shall average 1.22 pounds per linear yard, with a tolerance of 5 percent heavier or lighter.

2.06 PLANTS: Add the following to Standard Specifications Section **212-1.4 Plants** :

A. General: Add the following to sub-section **212-1.4.1 General** : All plants shall be true to name, with at least one of each bundle or lot tagged with the name and size in accordance with the American Association of Nurserymen Standards. In all cases, botanical names shall take precedence over common names. All plants and planting materials shall meet or exceed the specifications of Federal, State, and County Laws requiring inspection for plant disease and insect control.

B. Quality and Size:
1. Quality: All plant material shall comply with the definition for number one nursery stock per the current edition of "Horticultural Standards" as adopted by the American Association of Nurserymen.
2. Size: Add the following to Standard Specifications Sections **212-1.4.2 Trees** and **212.1.4.3 Shrubs** :
a) All container plants supplied by Contractor shall be of the standard height and diameter set by the American Standard for Nursery Stock as specified for the container size within which the plants are delivered to the site. The height of the trees shall be measured from the root crown to the last division of the terminal leader and the diameter shall be measured six (6) inches above the crown roots.
b) All palm trees shall be the size(s) as noted on the approved plans, but in no case less than a minimum overall height of 8 to 12 feet as measured from the crown of the rootball to the tips of the fronds, or four feet of brown trunk whichever is greater.
c) All container grown trees shall be the size(s) as noted on the approved plans, but in no case less than a minimum 15 gallon container size, with minimum caliper and height in accordance with the American Association of Nurseryman standards for container plants.

C. Bare Root Stock: Substitution of bare root stock for plant material specified by container size shall be subject to the review and approval of the Park Projects Inspector. All bare root stock shall conform to the American Nurseryman's Association standards. Minimum caliper shall be two (2) inch diameter and minimum height shall be twelve (12) feet.

D. Cuttings: Modify Standard Specifications Section **212-1.4.6 Cuttings** to read: All cuttings used on the project shall be fully rooted cuttings unless otherwise approved in writing by the Park Projects Inspector.

2.07 MULCH:

A. Nitrolized Shavings: Shall conform with Standard Specifications Section **212-1.2.5 (a) Type I Mulch.**

B. Tree Mulch: Shall be a ground wood product as produced through a wood chipper, and shall consist of twigs and branches with pieces of a maximum size of 2" diameter by 4" long, free of seeds, trash and debris and other inert non-organic materials.

2.08 TURF PLANTINGS:
A. SEED: Add the following to Standard Specifications Section **212-1.3 Seed** :
Seeded Turf: For turf areas being planted solely from seed, use the following seed mix:
Proportion
Turf Seed Mix Purity Germination by weight
Perennial Rye (50 % 'Caliente Fine', 50 % 'Prelude') 60 % 95% 90%
PJ Bluegrass (50 % 'Rugby' 50 % 'Parade') 10 % 98% 80%
Un-Hulled Bermuda (Certified Arizona Common)* 30 % 98% 85%
Seeding rate: Shall be as noted on the approved plans, but in no case less than a minimum of 218 pounds per acre (5 LBS/1,000 SF)
ch*Note: For applications in May through September, use Hulled Bermuda.

B. SOD: Turf sod shall be of the type noted on the Plans. All sod shall be new, fresh, viable sod delivered in full pallets ready for installation.

PART 3 - EXECUTION

3.01 GENERAL: All Work shall conform with Section **308 LANDSCAPE AND IRRIGATION INSTALLATION** of the Standard Specification, except as modified herein.

At Contractor's option, subject to the Park Project Inspector and Landscape Architect's acceptance of the material available and the appropriateness of the planting season, bare root stock may be substituted for the required 15 gallon and 24" box tree species if commercially available as bare root plantings and provided the corresponding minimum caliper and height requirements specified above in Part 2 Materials are met.

3.02 WEED CONTROL MEASURES: Upon completion of all fine grading work, and prior to soil preparation, perform weed control measures as follows:
1. Irrigate all areas designated to be planted for a minimum of 10 minutes per setting, two settings per day for seven days to germinate all weed seed possible.
2. Apply a contact weed killer and allow sufficient time to obtain complete kill of all weeds germinated.
3. Repeat step one above.
4. Repeat step two above.

3.03 SOIL PREPARATION: Add the following to Standard Specifications Section **308-2.3 Topsoil Preparation and Conditioning** :

A. Work Sequence: All fine grading, mounding and weed control measures shall be completed prior to soil preparation. Soil Preparation Work shall not commence until the agronomic soils test has been completed. Should 30 calendar days elapse between completion of soil preparation and commencement of planting, all areas shall be prepared again.

B. Excluded Areas: Planting areas with slopes 3:1 and steeper shall not be soil prepared. In lieu of soil preparation, such slopes will require fertilizer tablets for all plantings as specified below.

C. Soil Preparation: In all planting areas with gradients less than 3:1, areas to be soil prepared shall first be cross ripped to a minimum depth of 6" with tractor tines spaced at maximum 18" on center. Following cross-rip operations, a layer of soil amendments shall be spread and rototilled into the soil to a minimum depth as noted on the Plans, but not less than 4 inches, or as recommended by the soils report if greater, so that the soil shall be loose, friable, and free from rocks, sticks, and other objects undesirable to planting.

D. Amendment Application Rates: The following soil amendments shall be added per 1,000 square feet to all planting areas with gradients less than 3:1 (agronomic soil test recommendations shall take precedence where these minimum amounts are exceeded):
1. 6 cubic yards Type I organic soil amendment.
2. 15 pounds commercial fertilizer.
3. 100 pounds gypsum.
4. Soil sulfur per soils report.

3.04 FINISH GRADING: Contractor shall finish grade all planting areas, filling as needed or removing surplus dirt, raking to remove all rocks and debris over 1 inch in diameter, and floating to a smooth uniform grade. All areas shall slope to drain. Flow lines shall be established to roads, curbs, drainage swal as is ne□□□□es and inlets, and/or sidewalks as shown on the Plans and as directed. All fill material placed within the top 12" from finish grade elevations in all planting areas shall be topsoil.

All landscape areas shall be finish graded to "dress out", maintain, and/or re-establish finish grades and flow lines as approved prior to amending the soil. Contractor shall call for inspection upon completion of finish grading work. Contractor shall not proceed with planting work until finish grades have been inspected and accepted by the Park Projects Inspector.

3.05 EROSION CONTROL: Add new Section to the Standard Specifications:

"**308-4.9.6 Jute Netting .** All slopes areas exceeding 3:1 shall receive jute netting. Netting shall also be provided during the Plant Establishment Period, when and as directed by the Park Projects Inspector, along flow lines and other locations where erosion is evident. Jute netting shall be installed loosely, up and down the slope. The installed netting shall fit the soil surface contour and shall be held in place by 9-inch long, 11-gage (minimum) steel wire staples driven vertically into the soil at approximately 24-inch spacing. Jute netting strips shall overlap along the sides at least 6 inches. Ends of strips shall be buried into the soil at least 6 inches. Lap all ends of rolls a minimum of 24"."

3.06 INSPECTION OF CONTAINER PLANTS: The root condition of plants furnished in containers and proposed for use in the Work will be checked by the Park Projects Inspector by removal of earth from the roots of not less than two plants nor more than 2 % of the total number of plants of each species or variety from a single source. When container-grown plants are from several different sources, the roots of not less than two plants of each species or variety from each source may be checked by the Park Projects Inspector at the Inspector's option. The selection of plants to be checked will be made by the Park Projects Inspector.
Care shall be exercised to avoid rendering plants unsuitable for planting by virtue of this inspection. However, all plants rendered unsuitable for planting shall be considered as samples, and replacements shall be provided at no additional cost to City. In case the sample plants are found to be defective, the entire lot or lots of plants represented by the defective samples will be rejected.

3.07 PLANTING BACKFILL:

A. Mixing: All backfill materials shall be bulk mixed, not individually mixed at each plant pit.

B. Proportions: Backfill for planting pits shall be enriched using the following blend per cubic yard (agronomic soil test recommendations shall be reviewed prior to soil mixing):
1. Container Plants:
60% top soil 3 lbs. gypsum
40% Type I Organic Amendment 2 lbs. iron sulphate
2 lbs. commercial fertilizer
2. Bare Root Stock:
10% wood shavings 90 % top soil
fertilizer and soil conditioners as specified for container plants.

3.08 PLANTING:

A. Tree and Shrub Planting: Add the following to the Standard Specification Section **308-4.5 Tree and Shrub Planting** :
1. Soil surrounding planting pit shall be in a friable condition and moist to a depth of 8".
2. Backfill using specified soil mix to within 8" of finish grade. At this depth, place the plant fertilizer tablets Agriform 20-10-5, 21 grams each, or City approved equal. A minimum of 1 tablet for 1 gallon, 3 tablets for 5 gallons, 5 tablets for 15 gallons, and 8 tablets for a 24" box. Complete backfilling to finish grade.
3. Trees (othe as is ne□□□□r than relocated palms) shall be planted at such a depth that the crown roots bear the same relative position to finish grade as the crown roots did in the soils where the trees were grown. Backfill after planting shall be compacted carefully into place without injuring the roots of the tree or breaking up the ball of earth surrounding the roots.

B. Groundcover and Vine Planting: Add the following to Standard Specifications Section **308-4.7 Groundcover and Vine Planting** :
1. On slopes exceeding 3:1 ratio, apply 5 gram Agriform tablets, one per plant in lieu of soil preparation work.
2. Prepare the soil in all planting areas (except where slopes exceed 3:1) by applying 1.5 cubic yards of Nitrolized Shavings and 5 lbs. of the specified commercial fertilizer per 1,000 square feet. Repeat fertilization at 30 day intervals throughout the duration of the Work up to 4 applications. After the fourth application decrease frequency to once every 90 days. Spec
3. All planting areas, areas to receive Tree-Mulch and bare dirt areas shall be treated with a pre-emergent chemical (subject to approval by the Park Projects Inspector prior to application). Chemicals shall be applied by a licensed Pest Control Agent. This treatment shall be applied at the following times during the Contract: a) before planting, b) at beginning of Plant Establishment Period, and c) at end of Plant Establishment Period. The Park Projects Inspector, (909) 715-3469, shall be given a minimum of 48 hours (2 working days) notice prior to each application. No chemicals shall be applied other than in the presence of the Inspector.
4. All areas designated to receive Tree-Mulch shall have mulch applied and spread to provide a uniform thickness of not less than 3" of mulch, and shall be neat and clean, free of trash.
3.09 TREE STAKING: Amend the Standard Specifications Section **308-4.6.1 Method AA@ Tree Staking** and **308.4.6.2 Method AB@ Tree Staking** to read: Stake trees in accordance with the Park and Recreation Department's Standard Detail #1002.

3.10 TURF PLANTING: Add the following to Standard Specifications Section **308-4.8.2, (b) Method AB@** : Turf Planting shall be performed by either hydroseeding or sodding as indicated on the Plans, or, if not noted, as suitable for the species of turf specified and as acceptable to the City:

A. Pre-moistening: All areas to be planted shall be moistened to a depth of six inches just prior to application.

B. Hydroseeding:
1. Mixing of hydroseed slurry:
a. Mixing shall be performed in a tank, with a built-in continuous agitation and recirculation system of sufficient operating capacity to produce a homogeneous slurry of fiber, M-Binder, seed, fertilizer and water in the following designated unit proportions:
Fiber-Mulch: as is ne□□□□ 1,500 lbs./acre
Fertilizers:
CRF 870 lbs./acre (20#/1000 SF)
Triple superphosphate 200 lb./acre (4 2#/1000 SF)
Seed: as specified above.
Binding Agent: 100 lbs./acre (use on all slopes 5:1 and steeper)
Water: 3,000 gal./acre (maximum)
Agricultural Grade Gypsum: 500 lb./acre
b. With agitation system operating at part speed, water shall be added to the tank, good recirculation shall be established. Materials shall be added in such a manner that they are uniformly blended into the mixture in the following sequence (assumes a nominal 1500 gallon tank):
c. When tank is 1/3 filled with water:
Add binding agent - 2 acre requirement.
Add 5 - 50 pound bales of fiber-mulch.
Add seed - 2 acre requirement.
Add fertilizer - 2 acre requirement.
d. Agitate mixture at full speed when the tank is half-filled with water.
e. Add remainder fiber-mulch requirement, 10 bales, before tank is 3/4 full. Add remainder fertilizers, seed and gypsum. Slurry distribution should begin immediately.

2. Application: Hydroseed slurry shall be applied under high pressure evenly and result in a uniform coat on all areas to be treated. Care shall be exercised to assure that plants in place are not subjected to the direct force of the application. Slurry shall be immediately removed from walks, structures, plants, etc., that are inadvertently sprayed.

3. Clean-up: The slurry shall not be sprayed on non-designated areas. Any slurry spilled or sprayed into areas other than those designated to receive spray shall be cleaned up at Contractor's expense to the satisfaction of the Park Projects Inspector.

B. Sodding: All areas to receive sod shall be Finish Graded prior to commencement of sodding. Immediately prior to laying sod, all areas shall be irrigated to moisten the soil as specified above. Rooting Agent shall be applied per the written recommendations of the Sod Grower. Contractor shall provide a copy of such recommendations to the Park Projects Inspector prior to installation of the sod. Lay sod in parallel rows with a running bond pattern using uniformly sized strips of sod. Use whole pieces wherever possible. Lay sod smooth, with tight joints, no gaps greater than 1/8" in size. All irrigation heads shall be marked with flags for ease of location. Cut sod neatly trimming it away from around each irrigation head a maximum of 1/8" all around to allow for proper spray pattern and smooth pop-up and retract operation. Immediately following completion of sodding operations, irrigate as necessary.

bhe as is ne□□□□C. Replanting: At the point that the turf is generally showing signs of establishment, all bare spots shall be replanted within 10 days by Contractor, either with seed or sod as designated by the Park Projects Inspector. Contractor shall be responsible for all replanted turf areas for as long after replanting as is necessary until acceptable germination/rooting and establishment is realized and approved by the Park Projects Inspector.

3.11 WATERING: Add the following to Standard Specifications Section **308-4.9.5 Watering** :

A. Responsibility: It shall be Contractor's responsibility to maintain a balanced watering program to ensure proper growth until Final Acceptance of the Work.

B. Initial Watering: Immediately after planting, apply water to each plant. Apply water in a moderate stream in the planting hole until the material about the roots is completely saturated from the bottom of the hole to the top of the ground.

C. Ongoing Watering: Apply water in sufficient quantities and as often as seasonal conditions require to keep the planted areas moist at all times, well below the root system of plants.

D. Irrigation:
1. Contractor shall properly and completely maintain the irrigation system. A balanced water program shall be maintained to ensure proper germination and growth until Final Acceptance of the Work. Plants which cannot be watered sufficiently with the irrigation system shall be watered by means of a hose.
2. All controllers are to have each station individually adjusted on a weekly basis. System shall be set considering the application rate each area is capable of receiving. The system shall operate on short intervals, with the cycle repeating at a later time to reduce runoff.

3.12 MAINTENANCE AND PLANT ESTABLISHMENT: Amend the first sentence of Standard Specifications Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT** to read: " Contractor shall maintain **all areas within the Work Limits of this Project** on a continuous basis...until Final Acceptance".

3.13 START OF PLANT ESTABLISHMENT: Add the following to Standard Specifications Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT** :

A. Criteria for Start of Plant Establishment Period:
1. The Plant Establishment Period shall not start until all elements of the Project that impact the landscape are completed in accordance with the Contract Documents. Projects will not be segmented into phases.
2. Permanent power to remote controllers shall be established.
3. The Plant Establishment Period for the Project shall not begin until after the first mowing of the newly planted turf areas. For Plant Establishment purposes "First Mowing" is defined as the first mowing after the point in time that a minimum of 85 % of the turf area has attained a minimum height of 2". Until the above specified percentage of turf area is established and mown, Contractor shall mow as necessary to maintain those portions of turf exceeding 2" at the mowing height of 1 1/2 inches. At no time shall any turf exceed 3" in height.
4. Written acceptance of the Park Projects Inspector must be obtained to start the Plant Establishment Period.
5. If the project maintenance fails to continuously meet standards required, the Plant Establishment Period "day count" will be suspended and will not recommence until Contractor has corrected all deficiencies.
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3.14 MAINTENANCE TASKS: Add the following to Standard Specifications Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT** :

A. General: During the contract period provide all watering, weeding, mowing, fertilizing and cultivation and spraying necessary to keep the plants and turf in a healthy growing condition and to keep the planted areas neat, edged, and attractive. All shrubs planted by Contractor shall be pinched and pruned as necessary to encourage new growth and to eliminate rank sucker growth. Old wilted flowers and dead foliage shall be immediately pinched or cut off. Do not prune trees without written approval of the Park Projects Inspector.

B. Iron Chlorosis: After planting and during the Plant Establishment Period, in the event that any plantings exhibit iron chlorosis symptoms, apply FE 138 Geigy or equivalent at manufacturer's recommended rates.

C. Replacement Plantings: During the Plant Establishment Period, should the appearance of any planting installed by Contractor indicate weakness, that plant shall be replaced immediately with a new, healthy plant. At the end of the Plant Establishment Period, all plant materials shall be in a healthy, growing condition and spaced as indicated on the Plans.

D. Fertilization: Contractor shall apply commercial fertilizer to all turf areas at a rate of 10 pounds per 1,000 square feet, and all groundcover areas at a rate of 5 pounds per 1,000 square feet, at 30-day intervals, for 3 applications as a minimum, above and beyond the original soil preparation application.

E. Planting Establishment: All planting areas that do not show a prompt establishment of plant material, and areas where plant material is missing, shall be replanted at 10-day intervals until the plant material is established. For turf sod plantings, sod shall exhibit sufficient root growth knitting into the subgrade such that the sod can no longer be removed by hand. If a good rate of growth has not been demonstrated within 30 days of first planting/hydroseeding, Contractor shall be responsible to determine the appropriate horticultural practices necessary to obtain good growth. Contractor shall obtain agronomic soils testing of all areas not showing good growth and shall provide copies of the test results to the Park Projects Inspector to verify the appropriateness of all maintenance work performed.

F. Grading and Drainage: During the Plant Establishment Period all flow lines shall be maintained to allow for free flow of surface water. Displaced material which interferes with drainage shall be removed and placed as directed. Low spots and pockets shall be graded to drain properly. Jute netting shall be installed at flow lines and other locations where erosion is evident, when directed by the Park Projects Inspector.
1. Damage to planting areas shall be repaired immediately and throughout the Plant Establishment Period. Depressions caused by vehicles, bicycles, or foot traffic shall be filled and leveled. Replant damaged areas.
2. All paved areas shall be washed and maintained in a neat and clean condition at all times.
3. All subsurface drains and inlets shall be periodically cleared of debris, leaves and trash and flushed with clear water to avoid build up of silt and debris.
4. Debris and trash shall be removed from the site daily.

G. Disease and Pest Control: Throughout the Plant Establishment Period, all plants shall be maintained in a disease and pest free condition. A licensed pest control operator shall be retained by Contractor to recommend and apply all pesticides, herbicides, and fungicides. Exterminate gophers, moles, and all other rodents, and repair damage.

3.15 END OF PLANT ESTABLISHMENT PERIOD: Add the following to Standard Specification Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT** :
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A. Request for Inspection: When Contractor believes the Plant Establishment Period is complete and the Project is ready for Final Acceptance, Contractor shall request inspection of the Project. The Park Projects Inspector will inspect the Project for Final Acceptance. Deficiencies noted during inspection shall extend the Plant Establishment Period until all are corrected.

B. Established Plantings: All planting areas shall show a good rate of growth and shall be well established "filled in" plantings free of voids. Bare areas will be unacceptable. Contractor shall provide sod or plantings from flats as necessary to fill in all bare areas. Such sod or plantings shall be planted a minimum of 10 days prior to the end of the Plant Establishment Period and shall have roots "knit-in" to the native soil.

C. Written Acceptance: Final Acceptance and assumption of maintenance responsibilities by City shall occur only upon the Parks Department Representative's written acceptance of the Project for maintenance by City.

3.16 CLEAN UP: Upon completion of the Work, Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters; wash down all walkways, and trails; and remove construction equipment from the premises.

END OF SECTION

BJ/02483.MAS
09/27/00

Underground Service Alert
CALL BEFORE YOU DIG
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

PREPARED IN THE OFFICE OF
LOCKMAN | & | ASSOCIATES
Consulting Engineers and Planners
10281-A TRADEMARK STREET
RANCHO CUCAMONGA CA 91730
TEL: (909) 944-6988 FAX (909) 948-8508

PREPARED IN THE OFFICE OF
LANTEX
Landscape Architecture Inc.
31726 Rancho Viejo Road, Suite 206
San Juan Capistrano, California 92675
(949) 248-1993 FAX (949) 493-0706

REGISTERED LANDSCAPE ARCHITECT
BLAKE RICHARD HINMAN
No. 2403
Signature
Date
STATE OF CALIFORNIA
EXPIRES 11-30-2004

MARK	REVISIONS	APPR.	DATE
	REVISE PLANTING PER NEW HARDSCAPE LAYOUT		10/15/04

DESIGNED BY BH DRAWN BY CLN CHECKED BY BH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		10/22/04
TRAFFIC DIVISION		
PARKS DEPARTMENT		10/22/04
CONSTRUCTION ADM		10/22/04

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/04

MAGNOLIA AVENUE
PLANTING SPECIFICATIONS
COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
Harrison Ave. to Castleman St.

R-3780
SHEET L-16 OF 16
JOB NO. 03-3623

PC-____-PK/PRP03-____
Lantex Plot Date: 10/15/04

INDEXED 1-04-05

HARRISON ST

MAGNOLIA AV

MUR AV

SEE BELOW LEFT

DYKES LN

MYERS ST

TAFT ST

ROOSEVELT ST

SEE ABOVE RIGHT

SEE BELOW LEFT

MAGNOLIA AV

TAFT ST

ROOSEVELT ST

SEE ABOVE RIGHT

CASTLEMAN ST

MAGNOLIA AV

VAN BUREN BL

FARNHAM PL

MC KENZIE ST

SCALE: 1"=40'

LEGEND

W	WATER
SD	STORM DRAIN
S	SEWER
E	UNDERGROUND ELECTRIC

FOR REFERENCE ONLY

MAGNOLIA AVENUE
UTILITY MAP
HARRISON STREET TO
CASTLEMAN AVENUE

R-3780

SHEET 16A OF 16

HORIZ. SCALE: 1" = 40' VERT. SCALE: N/A

FILE: 16\

INDEXED 1-04-05 LH