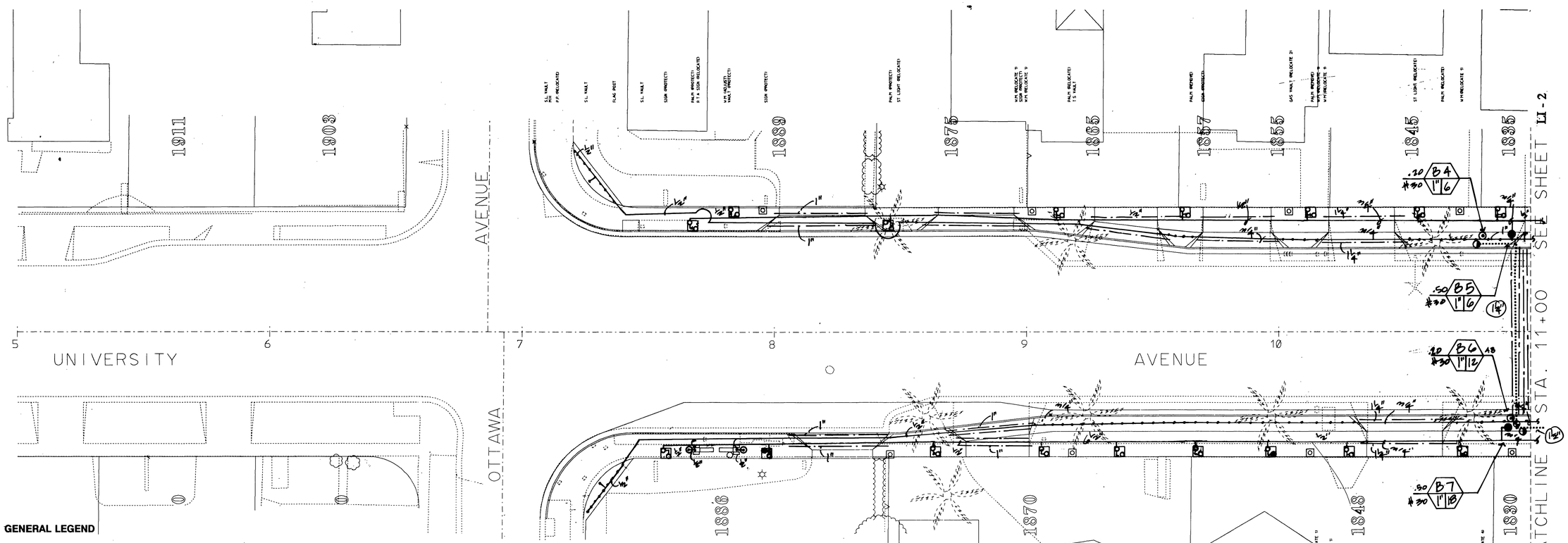


GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~RTG-OA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRG-D~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #33-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-S~~	DETAIL #1
	EMITTER	~~NEPGO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~NEPGO OTO-12~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #90-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .30 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~NEPGO #PFTV-24-PR-25 — R.SM.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

CONTRACTOR SHALL PROVIDE SLEEVES BEFORE ANY CONCRETE WORK FOR IRRIGATION LINES AND WIRES. (ALL PIPES CROSSING STREET AND DRIVEWAYS)

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98

N

IRRIGATION PLAN

REGISTERED ARCHITECT
N. SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
~~APPROVED BY~~		
DEPUTY P.W. DIRECTOR		4/20/95
PRINCIPAL ENGINEER		4/20/95
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5/1/95

~~PUBLIC WORKS DIRECTOR~~

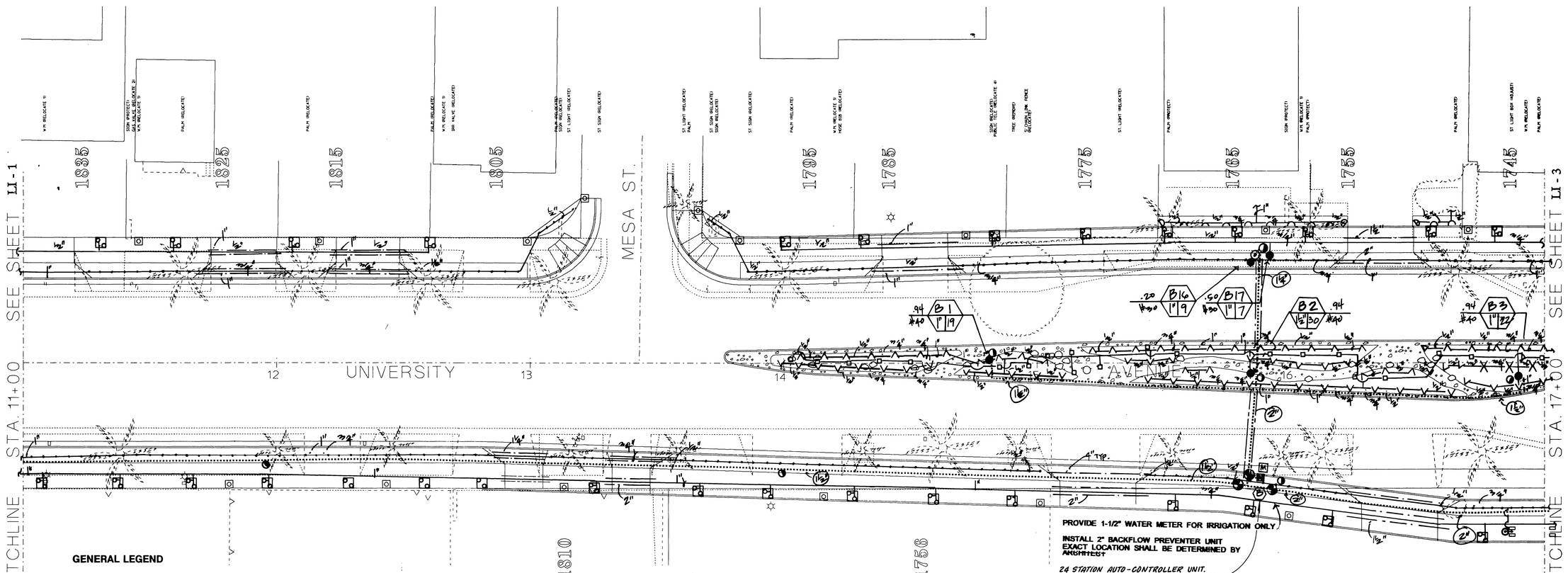
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271

LI-1

SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~PTS-OA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRS-D~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #33-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-2"~~	DETAIL #1
	EMITTER	~~REPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~REPCO 010-10~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #6G-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10SA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10SA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~REPCO #FFPV-34PR-20+ - R.O.W.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA
5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98 CD

N

IRRIGATION PLAN

REGISTERED ARCHITECT
N. SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

~~APPROVED BY~~

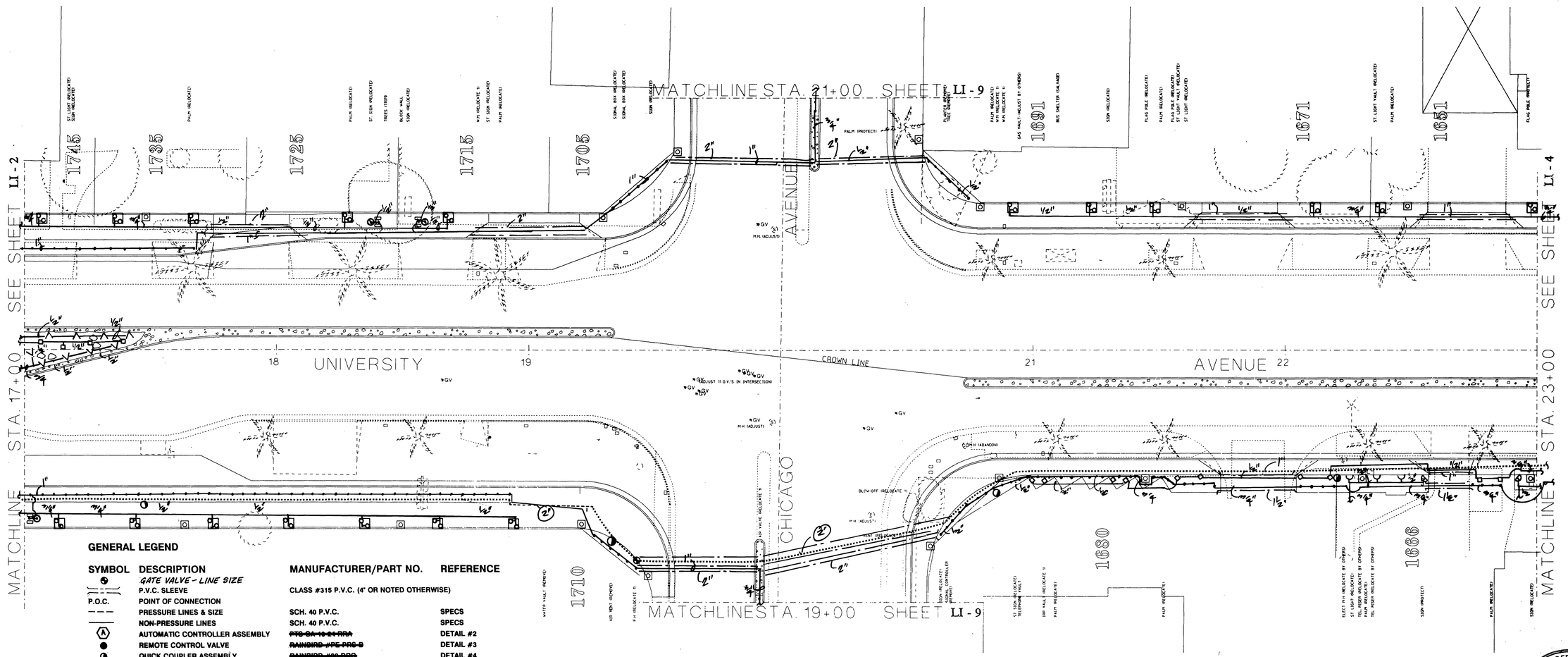
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ SCALE 1" = 20'

R-3271

LI-2

SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
	AUTOMATIC CONTROLLER ASSEMBLY	~~RTS-OA-12-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD-#PE-PRC-B~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD-#36-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO-#825-Y-2"~~	DETAIL #1
	EMITTER	~~PEPCO-QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BÜBBLER	~~PEPCO-040-10~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD-#1400~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD-#50-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD-#1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD-#1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD-#1806-SFLT-F~~ 8'R 1.4 GPM	DETAIL #7
	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD-#1806-SFLT-Q~~ 8'R .72 GPM	DETAIL #7
	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD-#1806-SFLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~PEPCO-#PFPV-34-PR-20+ - R.O.W.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

Duane K. Greenwood
5/6/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/95 CD

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
LANDSCAPE ARCHITECTURE
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

~~APPROVED BY~~

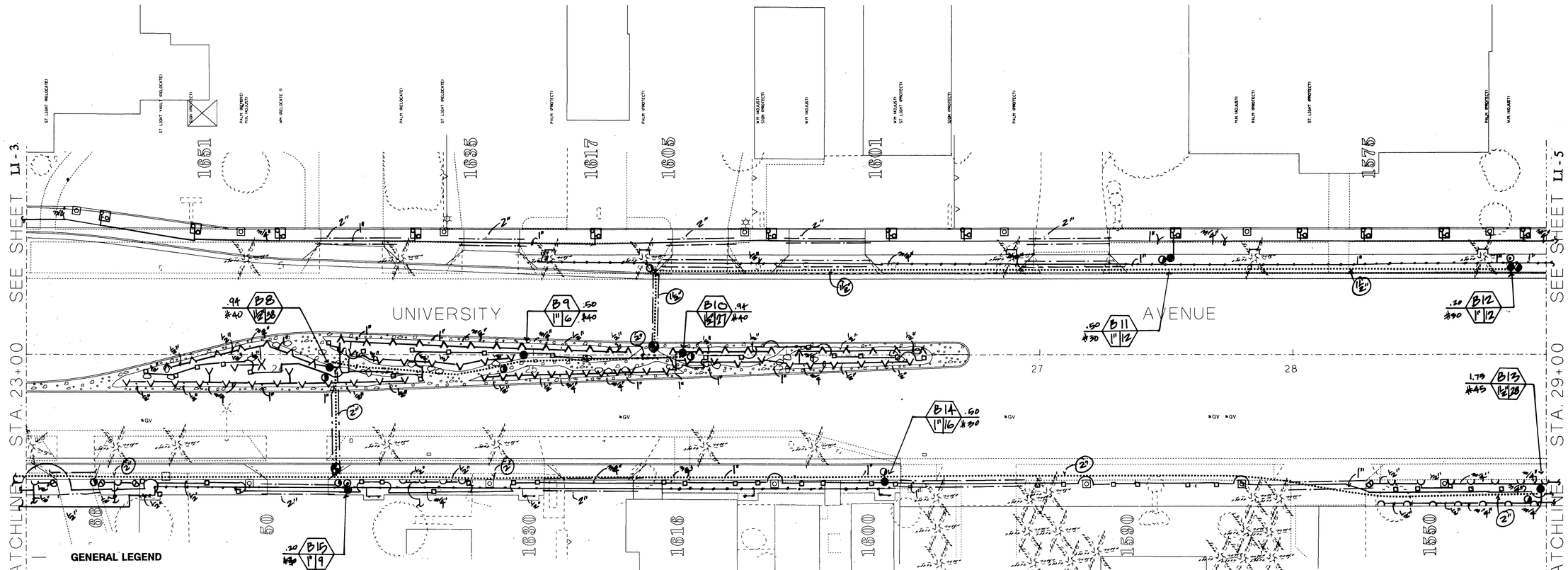
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271

LI-3

SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~PTC-CA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRS-D~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #60-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-2"~~	DETAIL #1
	EMITTER	~~PEPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~PEPCO 010-12~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #5Q-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-G~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~PEPCO #PFPV-04-PR-20 - R.C.V.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

Duane K. Greenwood
5/16/95

Grounds W. Fuchs
City Park's Planner
April 24, 2001

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

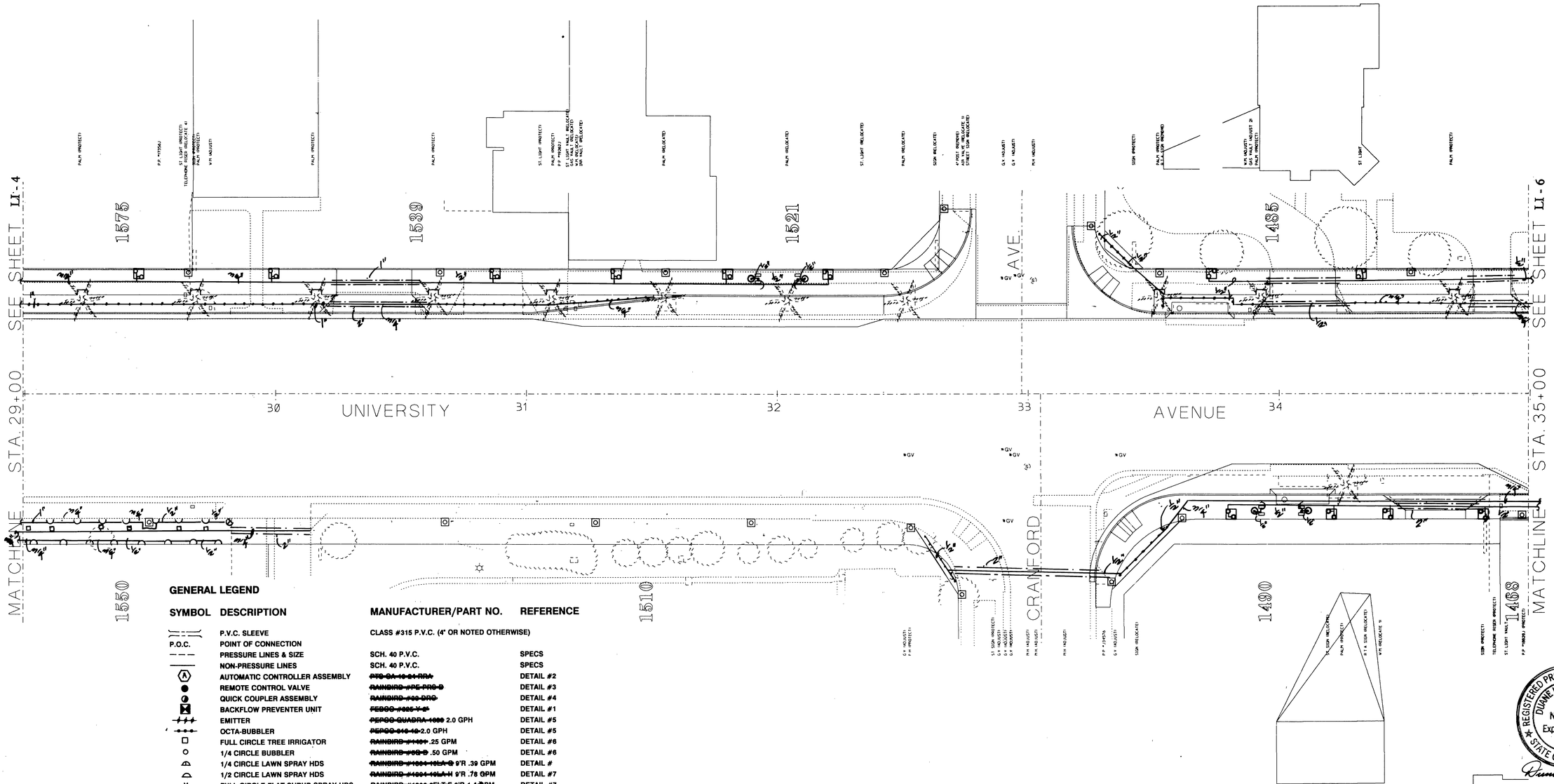
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		6/12/97
PRINCIPAL ENGINEER		6/5/97
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-31-95

~~APPROVED BY~~
~~CHIEF ENGINEER DIRECTOR~~
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271
LI-4
SHEET ___ OF ___



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
(A)	AUTOMATIC CONTROLLER ASSEMBLY	~~PTS-CA-10-24-RRA~~	DETAIL #2
●	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRS-D~~	DETAIL #3
◐	QUICK COUPLER ASSEMBLY	~~RAINBIRD #00-DRC~~	DETAIL #4
⊠	BACKFLOW PREVENTER UNIT	~~FEBCO #825 Y-2~~	DETAIL #1
	EMITTER	~~PEPCO QUADRA 1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~PEPCO 010-10~~ 2.0 GPH	DETAIL #5
□	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
○	1/4 CIRCLE BUBBLER	~~RAINBIRD #6Q-D~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-Q~~ 8'R .36 GPM	DETAIL #7
⊙	FILTER AND PRESS REGULATOR	~~PEPCO #PFPV-04-PR-20-R.O.V.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA
5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

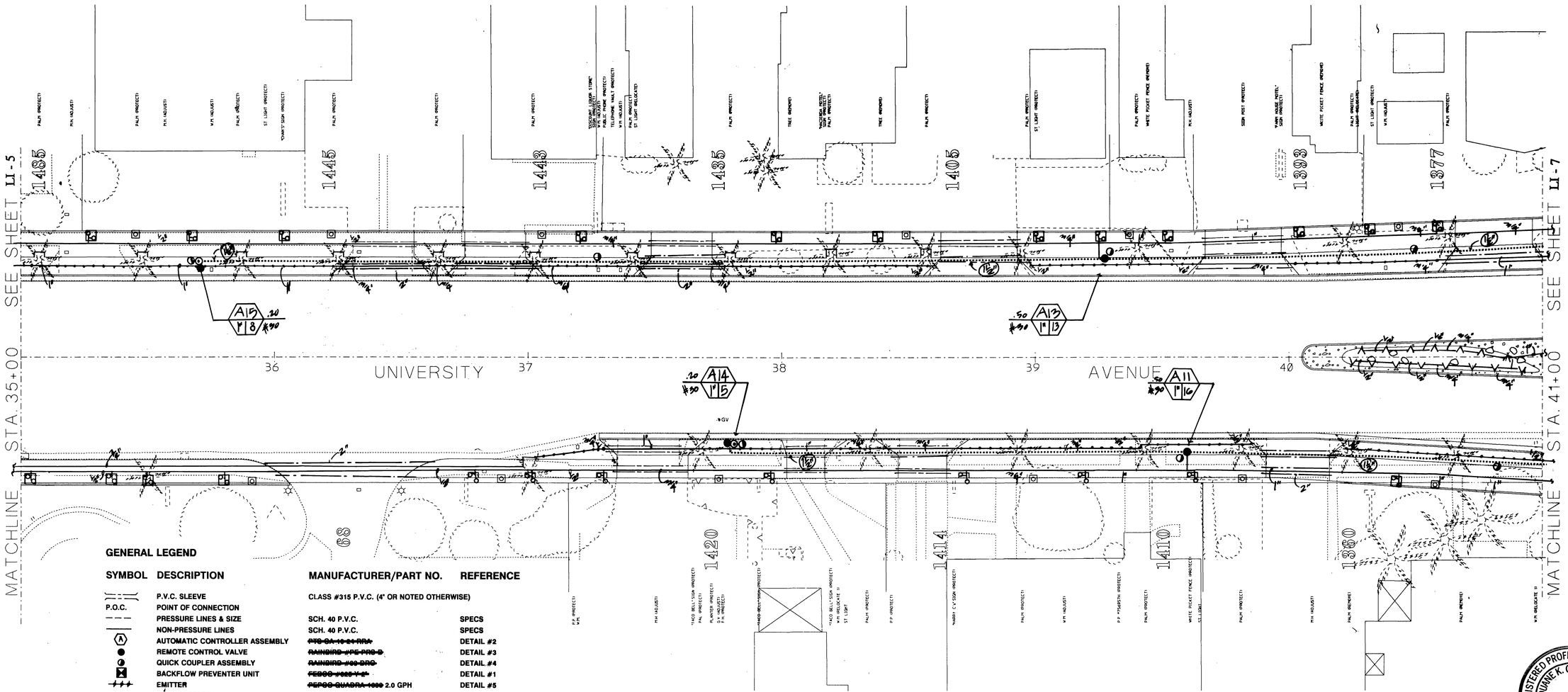
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-26-95

~~APPROVED BY~~
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ SCALE 1" = 20'

R-3271
LI-5
SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~PTC-GA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRO-D~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #33-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-2"~~	DETAIL #1
	EMITTER	~~PEPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~PEPCO 010-12~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #5Q-D~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-Q~~ 8'R .36 GPM	DETAIL #7
⊙	FILTER AND PRESS REGULATOR	~~PEPCO #PFPV-24-PR-20-1 R.O.V.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/95 CD

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

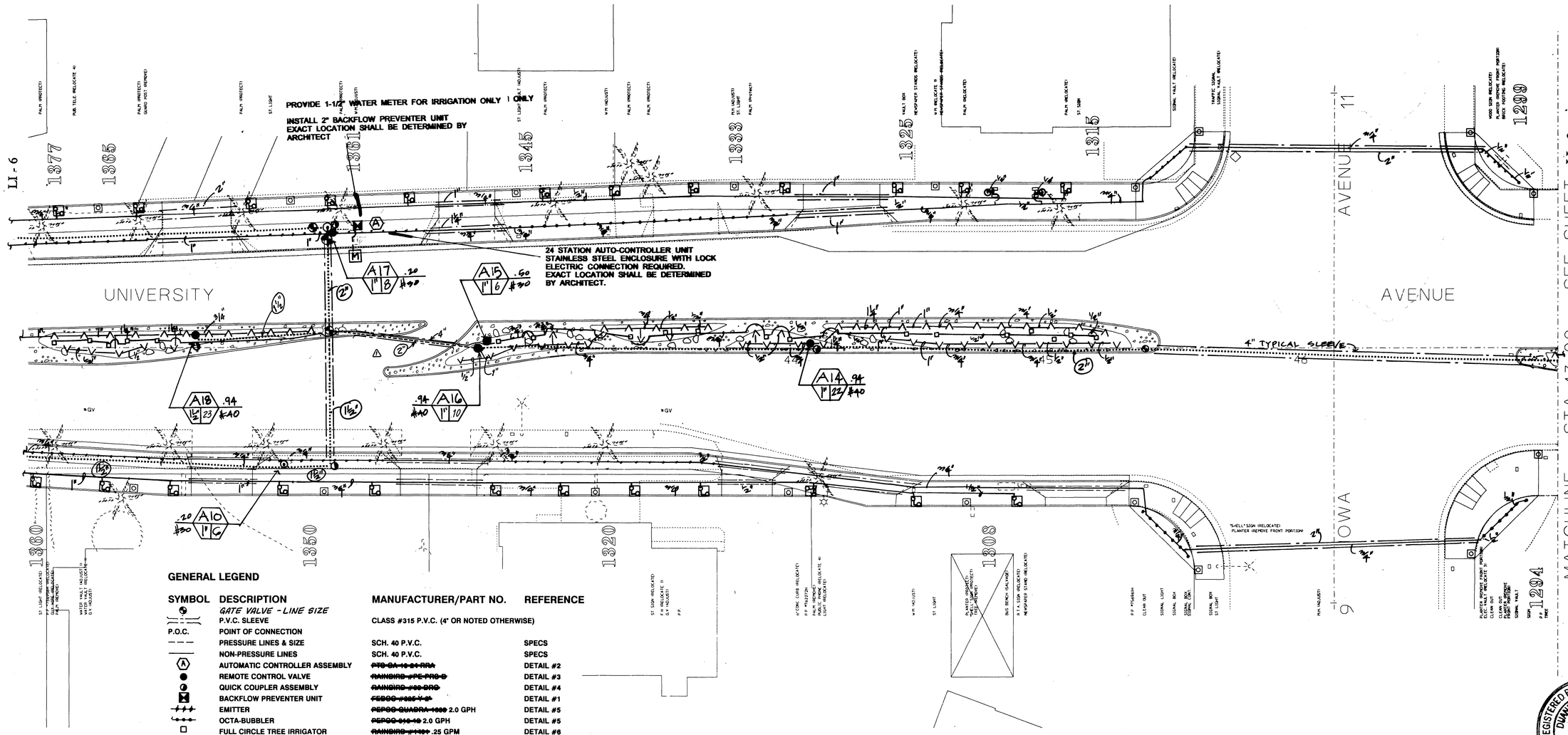
APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		11/12/95
PRINCIPAL ENGINEER		6/5/95
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-21-95

~~APPROVED BY~~

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ SCALE: 1" = 20'

R-3271
LI-6
SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~RTS-OA-12-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRG-D~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #35-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825 Y-S~~	DETAIL #1
	EMITTER	~~NEPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~NEPCO 510-10~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1400~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #1401-D~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-0FLT-F~~ 8'R 1.4 GPM	DETAIL #7
	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-0FLT-Q~~ 8'R .72 GPM	DETAIL #7
	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-0FLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~NEPCO #PFPV-24(PR-30)-RGVA~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA
5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98 CD

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE
1	REVISED IRRIGATION TO ACCOMMODATE MEDIAN OPENING.		5/10/96

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

~~APPROVED BY~~

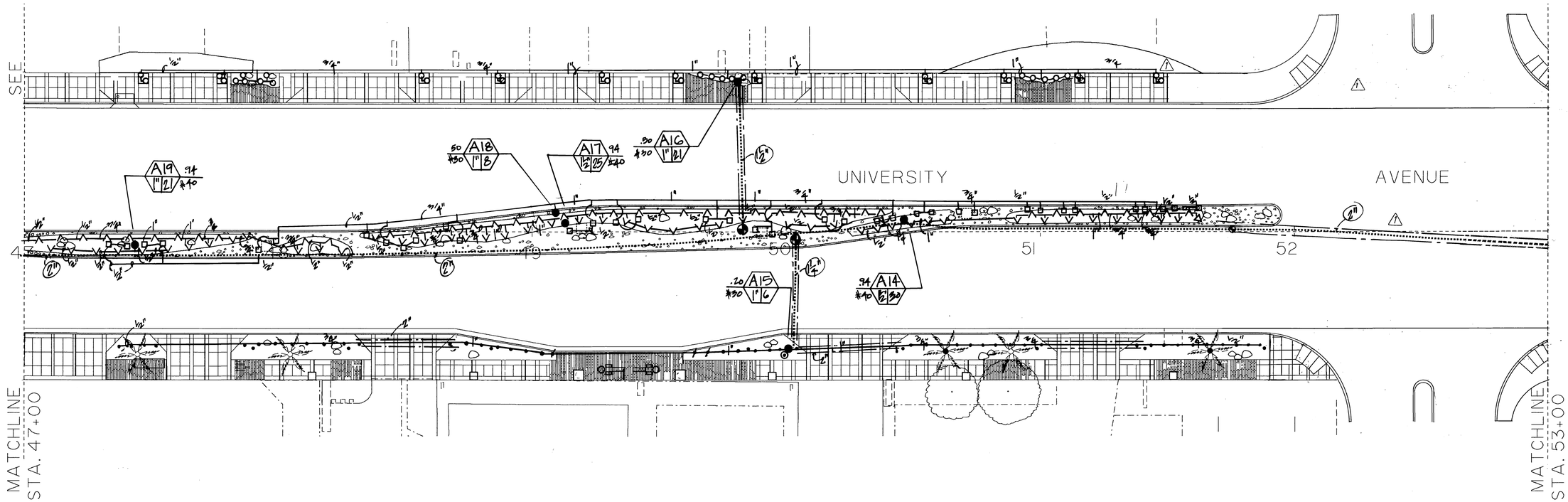
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271

LI-7

SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
	AUTOMATIC CONTROLLER ASSEMBLY	~~PTS-CA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRS-B~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #60-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-5~~	DETAIL #1
	EMITTER	~~PEPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~PEPCO 010-10~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #60-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-F~~ 8'R 1.4 GPM	DETAIL #7
	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-Q~~ 8'R .72 GPM	DETAIL #7
	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~PEPCO #PFFV-04-PR-20 - R.O.V.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98 CD

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR.	DATE
	IRRIGATION LINES		
1	ADDED CURB RETURNS AND REVISED		9/29/95

DESIGNED BY R.A. DRAWN BY jrp CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

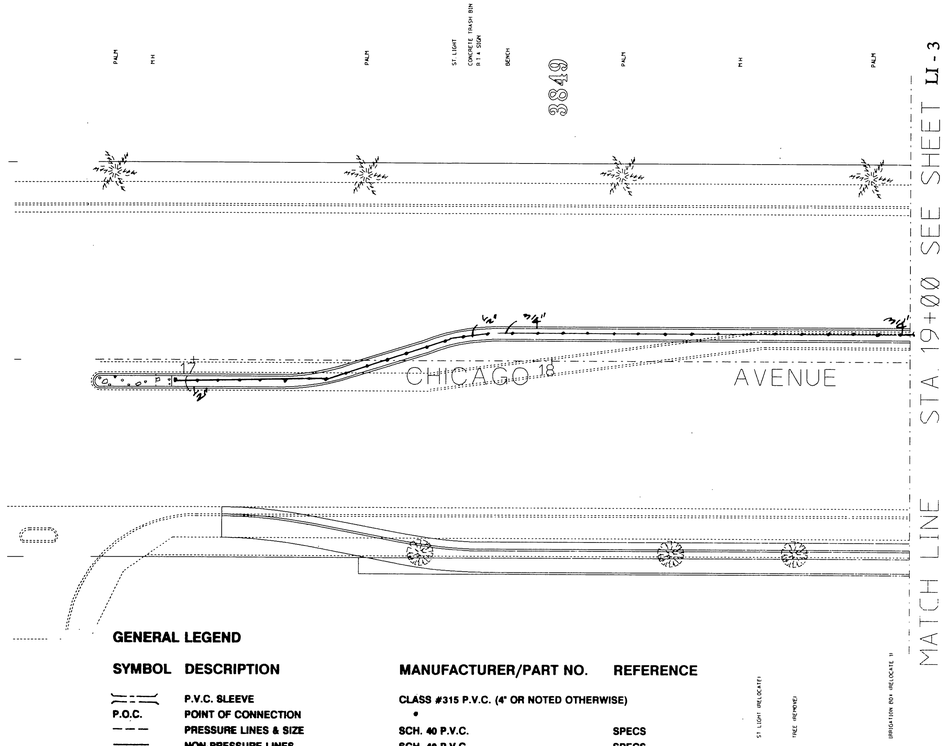
APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-2-95

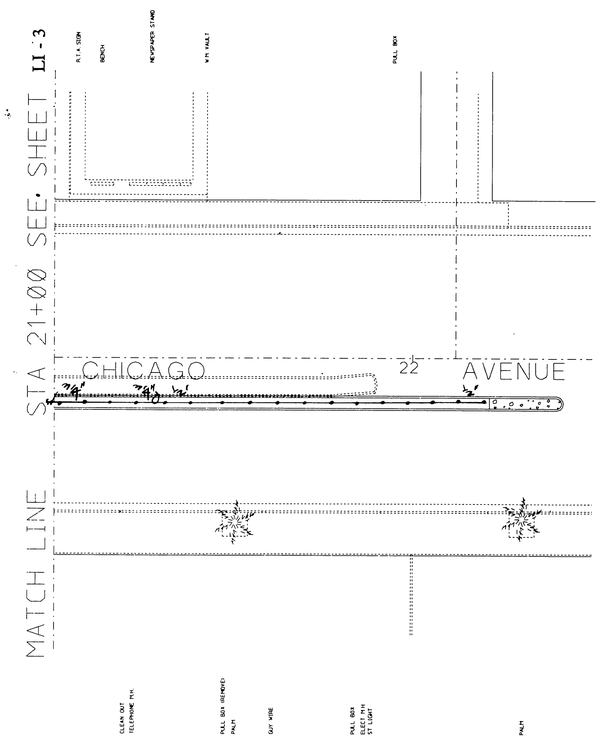
~~APPROVED BY~~

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271
LI-8
SHEET ____ OF ____





GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION	•	
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
	AUTOMATIC CONTROLLER ASSEMBLY	~~PTS-OA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRS-D~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #[illegible]-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #[illegible]~~	DETAIL #1
	EMITTER	~~PEPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~PEPCO [illegible]~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #[illegible]~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #[illegible]~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-8FLT-Q~~ 8'R .36 GPM	DETAIL #7
⊙	FILTER AND PRESS REGULATOR	~~PEPCO #PFPV-64-PR-20-1-R.C.V.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA
5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98 CD

N▶ IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	[illegible]	6/12/95
PRINCIPAL ENGINEER	[illegible]	6/5/95
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT	[illegible]	5-31-95

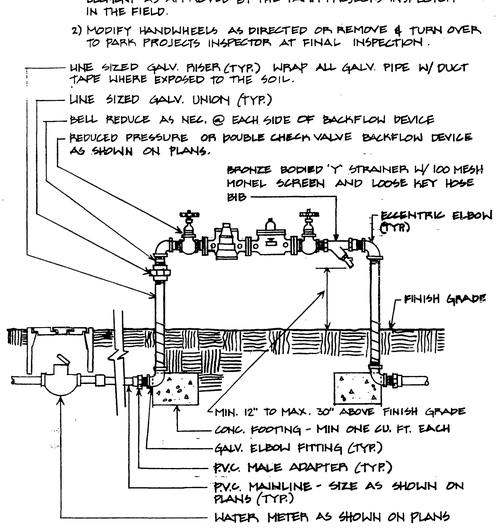
~~APPROVED BY~~
~~[illegible]~~
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

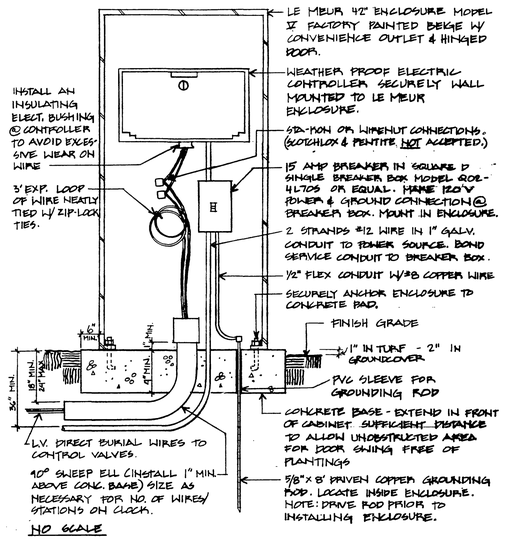
R-3271
LI-9
SHEET ____ OF ____

NOTES: 1) INSTALL BACKFLOW DEVICE SQUARE WITH HARDSCAPE ELEMENT AS APPROVED BY THE PARK PROJECTS INSPECTOR IN THE FIELD.

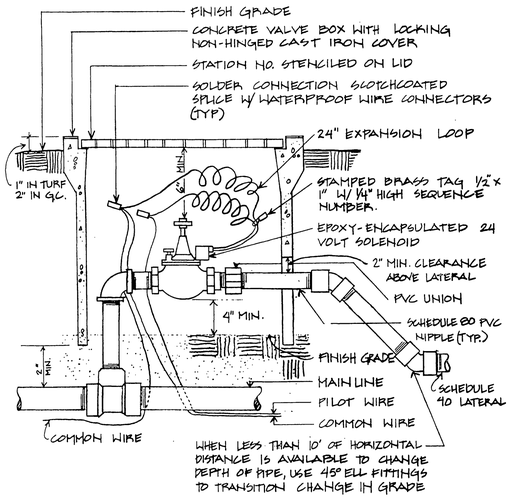
2) MODIFY HANDWHEELS AS DIRECTED OR REMOVE & TURN OVER TO PARK PROJECTS INSPECTOR AT FINAL INSPECTION.



1 TYPICAL BACKFLOW DEVICE



2 TYPICAL CONTROLLER



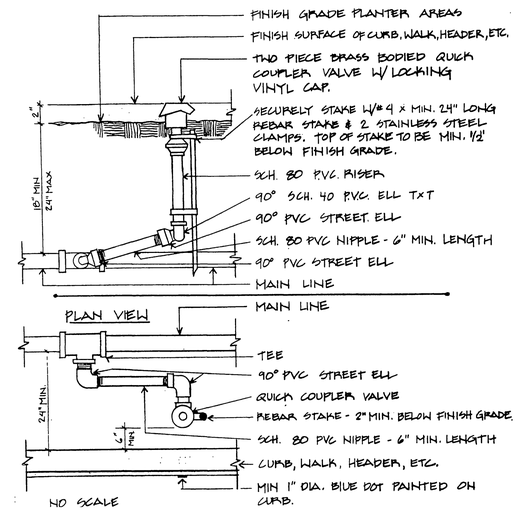
NOTES: 1) EACH VALVE SHALL HAVE ITS OWN TEE OR ELL CONNECTION TO THE MAINLINE, NO MANIFOLD CONNECTIONS

2) PROVIDE MINIMUM 3' CLEAR DISTANCE BETWEEN VALVES.

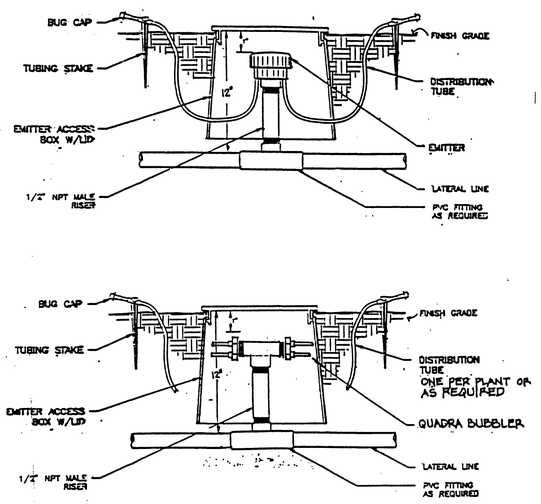
3) INSTALL VALVE BOX IN A MANNER THAT BOX DOES NOT REST ON ANY IRRIGATION LINE.

NO SCALE

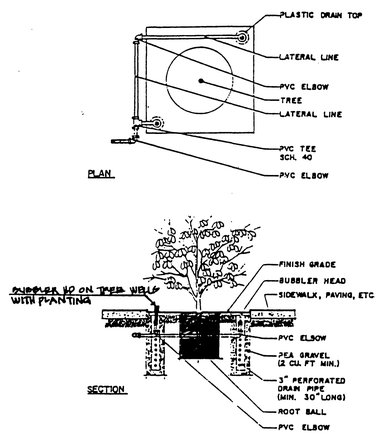
3 TYPICAL AUTOMATIC VALVE



4 TYPICAL QUICK COUPLER VALVE



5 TYPICAL DRIP IRRIGATION EMITTER ASSEMBLY



6 TYPICAL TREE WELL IRRIGATION ASSEMBLY

REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6/30/97 CIVIL STATE OF CALIFORNIA

Duane K. Greenwood 5/16/95

INDEXED 5/98 CD

IRRIGATION DETAILS 1

ENGINEER IN RESPONSIBLE CHARGE

DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97

DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

DATE

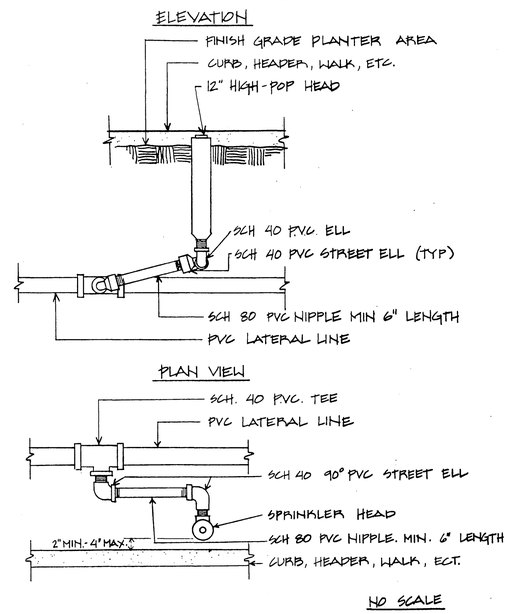
UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO 215 FREEWAY

SCALE: VARIES

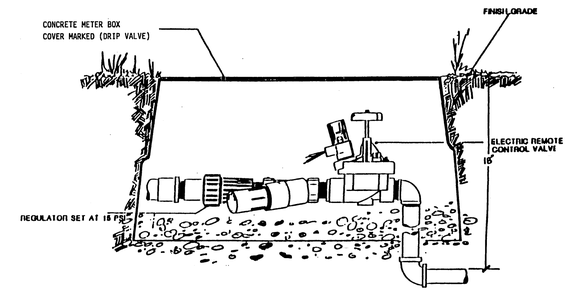
R-3271

LI-10

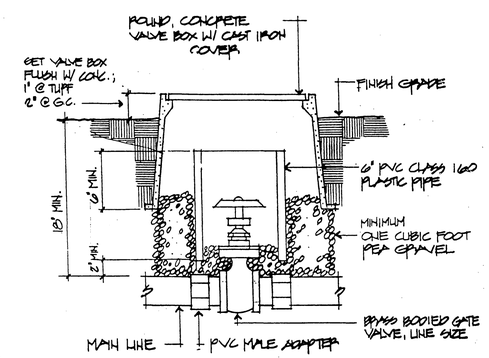
SHEET ____ OF ____



7 TYPICAL SPRAY HEAD ASSEMBLY



8 EMITTER VALVE / FILTER ASSEMBLY



9 TYPICAL GATE VALVE ASSEMBLY

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

INDEXED 5/98 CD

5/16/95

IRRIGATION DETAILS 2

ENGINEER IN RESPONSIBLE CHARGE

DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97

DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

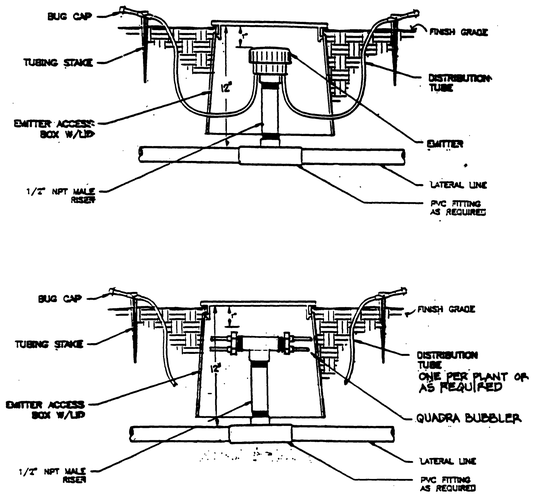
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

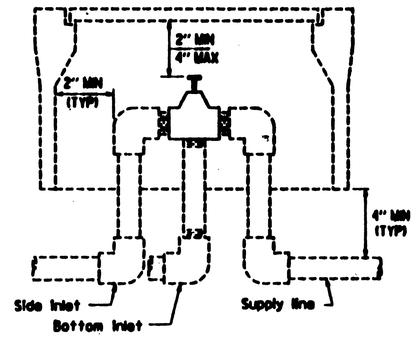
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO 215 FREEWAY
SCALE: VARIES

R-3271
LI-11
SHEET ____ OF ____



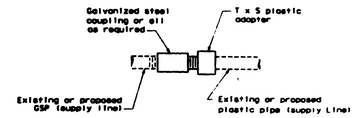
5 TYPICAL DRIP IRRIGATION EMITTER ASSEMBLY



ELEVATION

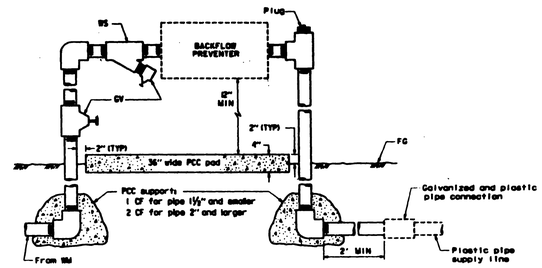
3 CAL TRANS VALVE

NO SCALE



PLAN

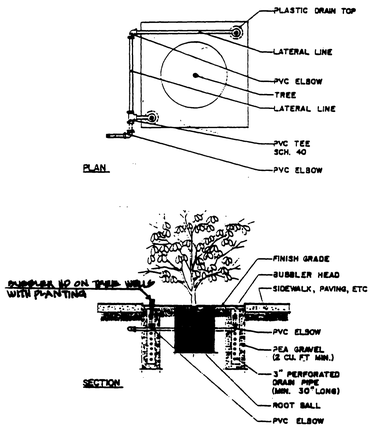
GALVANIZED AND PLASTIC PIPE CONNECTION



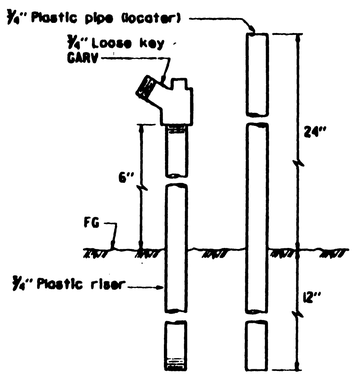
ELEVATION

1 CAL TRANS BACKFLOW PREVENTER ASSEMBLY

NO SCALE



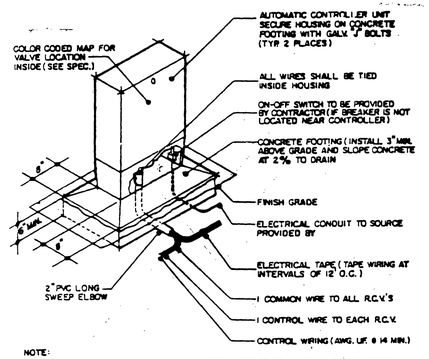
6 TYPICAL TREE WELL IRRIGATION ASSEMBLY



ELEVATION

4 CAL TRANS FLUSH VALVE

NO SCALE



NOTE:

- COMMON WIRE TO BE WHITE AND CONTROL WIRE TO BE BLACK IN COLOR UNLESS OTHERWISE NOTED.
- NO SPLICES SHALL BE MADE BETWEEN CONTROLLER AND REMOTE CONTROL VALVE UNLESS OTHERWISE APPROVED.
- CONTROL WIRING SEQUENCE CORRESPONDS TO OPERATING SEQUENCE OF REMOTE CONTROL VALVES AND AUTOMATIC CONTROLLER UNIT. (AS ON DRAWING)
- *CONTROLLER TO HAVE MASTER VALVE CIRCUIT.*

2 TYPICAL AUTOMATIC CONTROLLER ASSEMBLY

REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6/30/97 CIVIL STATE OF CALIFORNIA

Duane K. Greenwood 5/16/95

INDEXED 5/98 CB

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

IRRIGATION DETAILS 3

REGISTERED ARCHITECT NI SUH PARK C 4549 STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT FREDERICK STEVEN ABELSON LIC. NO. 3524 9/30/96 Date STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKB

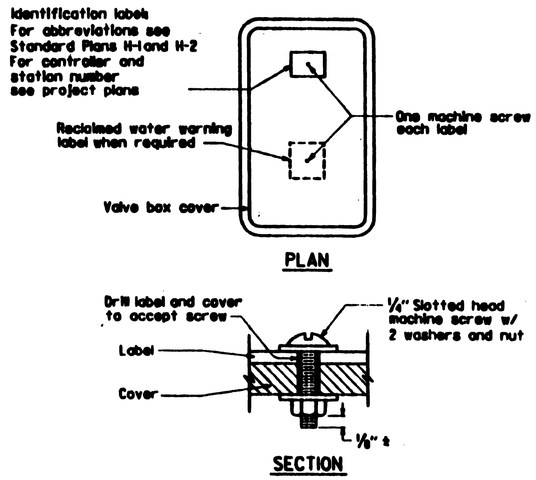
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

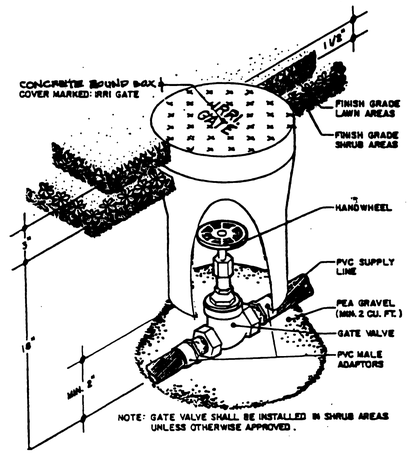
~~APPROVED BY~~
~~PUBLIC WORKS DIRECTOR~~
DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE:

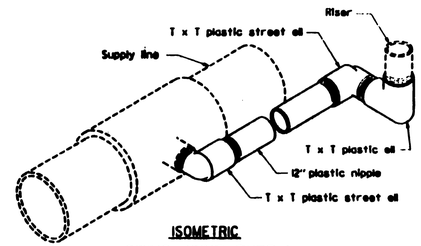
R-3271
L1-12
SHEET ___ OF ___



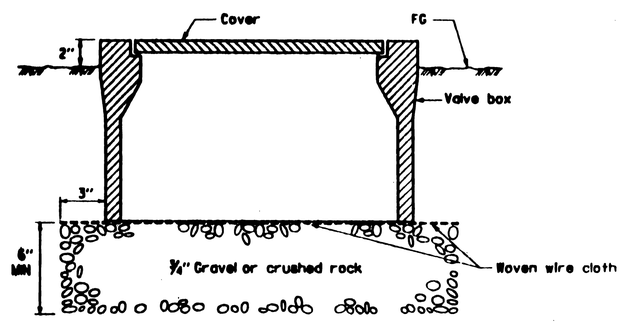
11 CAL TRANS VALVE BOX IDENTIFICATION
NO SCALE



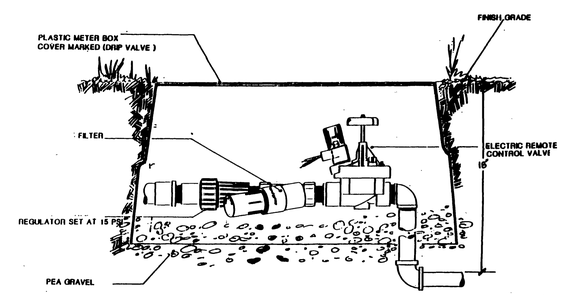
9 TYPICAL GATE VALVE ASSEMBLY



7 CAL TRANS SWING JOINT
NO SCALE



10 CAL TRANS VALVE BOX
NO SCALE



8 EMITTER VALVE/FILTER ASSEMBLY

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

INDEXED 5/98 CD

Duane K. Greenwood 5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

IRRIGATION DETAILS 4

REGISTERED ARCHITECT
N. SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

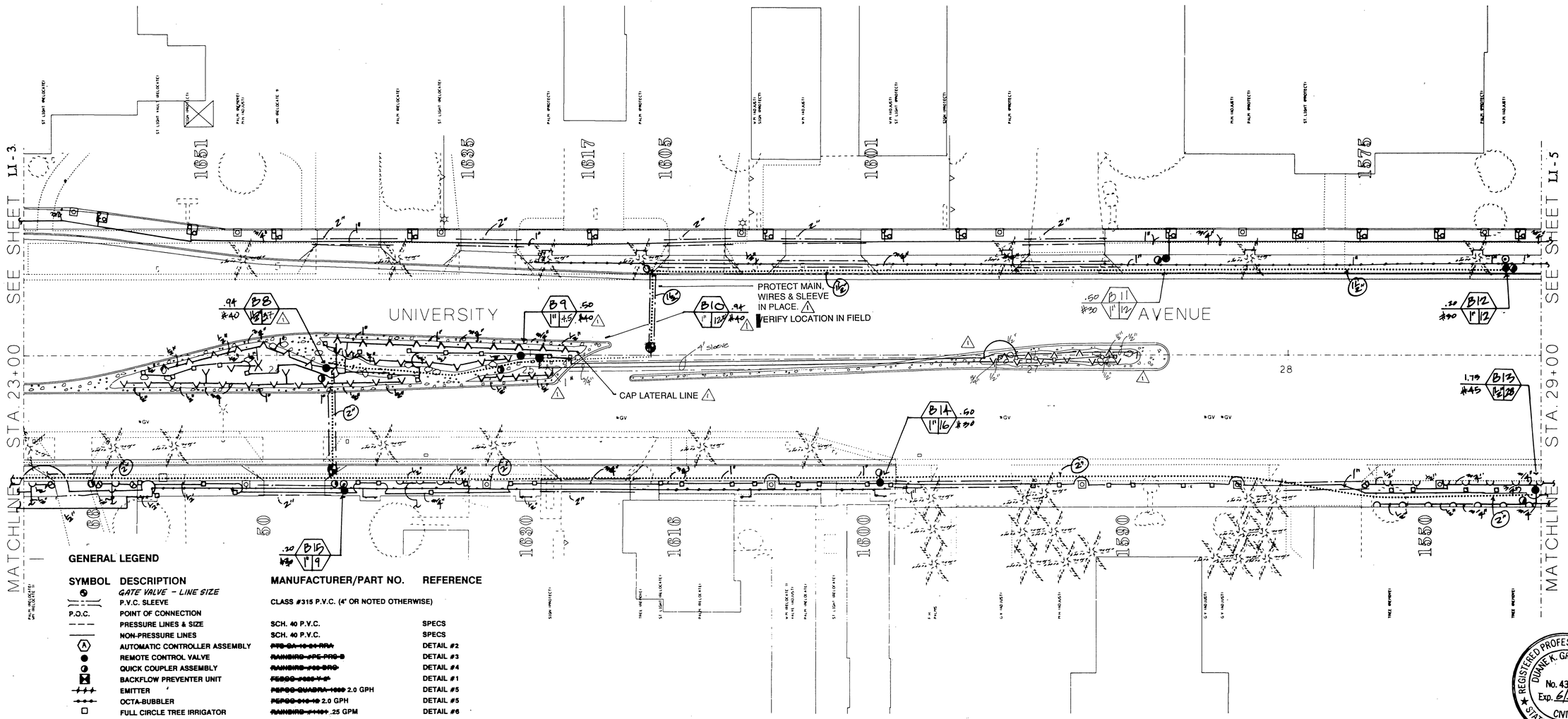
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
~~APPROVED BY~~		
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE:

R-3271
LI-13
SHEET ___ OF ___



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE – LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~RTS-SA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRG-B~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #33-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-S~~	DETAIL #1
	EMITTER	~~NETAFIM QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~NETAFIM OTB-10~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1400~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #33-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1806-SFLT-Q~~ 8'R .36 GPM	DETAIL #7
	FILTER AND PRESS REGULATOR	~~FEBCO #FPPV-24-PR-20 – R.O.V.~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

Duane K. Greenwood
5/16/95

CITY OF RIVERSIDE BUSINESS TAX CERT. NO. 104192
EXP. DATE 04/24/02

STATE BOARD OF REGISTERED LANDSCAPE ARCHITECTS
ARTHUR D GUY III
EXP. 5-31-02
LIC. NO. 2214
STATE OF CALIFORNIA

BORTHWICK ■ GUY ■ BETTENHAUSEN
LANDSCAPE ARCHITECTS • PLANNERS
2212 DUPONT DRIVE • SUITE A • IRVINE, CA 92612 • TEL: (949) 476-8616 • FAX: (949) 476-8707

ART D. GUY — DATE 4-23-01

CITY OF RIVERSIDE PARKS DEPARTMENT
AUTHORIZED SIGNATURE — DATE Apr 24, 2001

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

INDEXED 5/98

N

IRRIGATION PLAN

REGISTERED ARCHITECT
M. SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
5/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE
1	CONSTRUCT MEDIAN OPENING		4-23-01

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

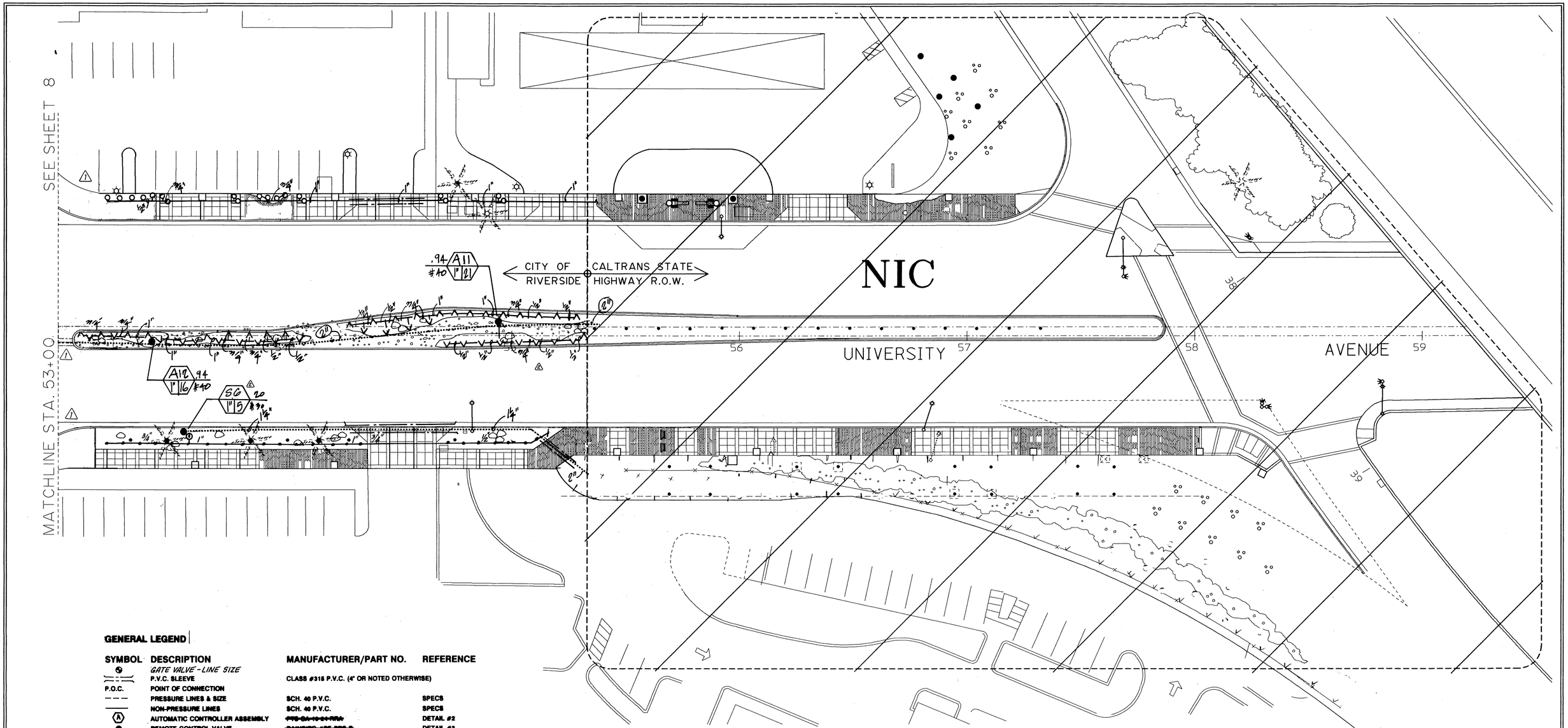
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
~~APPROVED BY~~		
DEPUTY P.W. DIRECTOR		5/16/95
PRINCIPAL ENGINEER		5/15/95
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-31-95

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271
LI-4A
SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/PART NO.	REFERENCE
	GATE VALVE - LINE SIZE		
	P.V.C. SLEEVE	CLASS #315 P.V.C. (4" OR NOTED OTHERWISE)	
P.O.C.	POINT OF CONNECTION		
	PRESSURE LINES & SIZE	SCH. 40 P.V.C.	SPECS
	NON-PRESSURE LINES	SCH. 40 P.V.C.	SPECS
A	AUTOMATIC CONTROLLER ASSEMBLY	~~PTS-CA-10-24-RRA~~	DETAIL #2
	REMOTE CONTROL VALVE	~~RAINBIRD #PE-PRS-B~~	DETAIL #3
	QUICK COUPLER ASSEMBLY	~~RAINBIRD #60-DRC~~	DETAIL #4
	BACKFLOW PREVENTER UNIT	~~FEBCO #825-Y-2~~	DETAIL #1
	EMITTER	~~FEPCO QUADRA-1000~~ 2.0 GPH	DETAIL #5
	OCTA-BUBBLER	~~FEPCO 810-12~~ 2.0 GPH	DETAIL #5
	FULL CIRCLE TREE IRRIGATOR	~~RAINBIRD #1401~~ .25 GPM	DETAIL #6
	1/4 CIRCLE BUBBLER	~~RAINBIRD #6Q-B~~ .50 GPM	DETAIL #6
	1/4 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-Q~~ 9'R .39 GPM	DETAIL #
	1/2 CIRCLE LAWN SPRAY HDS	~~RAINBIRD #1804-10LA-H~~ 9'R .78 GPM	DETAIL #7
X	FULL CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-F~~ 8'R 1.4 GPM	DETAIL #7
V	1/2 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-Q~~ 8'R .72 GPM	DETAIL #7
▽	1/4 CIRCLE FLAT SHRUB SPRAY HDS	~~RAINBIRD #1800-8FLT-Q~~ 8'R .36 GPM	DETAIL #7
⊙	FILTER AND PRESS REGULATOR	~~FEPCO #FFTV-24-PR-20-1-R-GW~~	DETAIL #8

DENOTES SEQUENCE NUMBER AT CONTROLLER
GALLONS PER MINUTE
VALVE SIZE
DESIGN PSI AT CONTROL VALVE
PRECIPITATION RATE OF SYSTEM

ALL HEADS SHALL HAVE A CHECK VALVE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

5/16/95

INDEXED 5/98 CD

N

IRRIGATION PLAN

REGISTERED ARCHITECT
KI SUH PARK
C 4549
STATE OF CALIFORNIA

GRUEN ASSOCIATES
ARCHITECTURE PLANNING ENGINEERING
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT
FREDERICK STEVEN ABELSON
LIC. NO. 3524
9/30/96
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR	DATE
2	Modified Irr. line & Control Valve.		7/18/96
	IRRIGATION LINES		
1	ADDED CURB RETURNS AND REVISED		7/18/96

DESIGNED BY R.A. DRAWN BY jrp CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RMC	6/12/95
PRINCIPAL ENGINEER		4/5/95
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-31-95

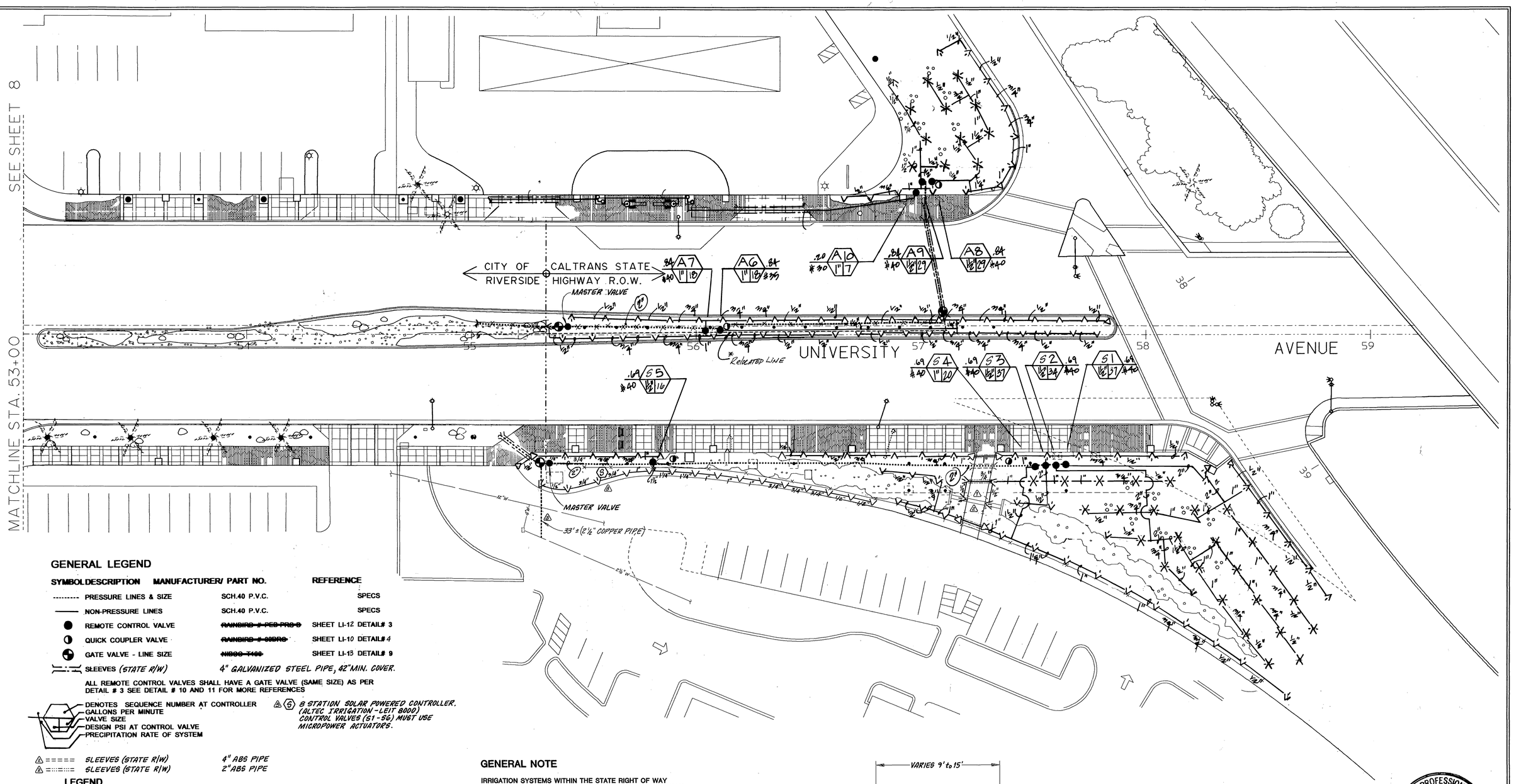
~~APPROVED BY~~

~~PUBLIC WORKS DIRECTOR~~

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271
LI-8.1
SHEET ____ OF ____



GENERAL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER/ PART NO.	REFERENCE
--------	PRESSURE LINES & SIZE	SCH.40 P.V.C.	SPECS
———	NON-PRESSURE LINES	SCH.40 P.V.C.	SPECS
●	REMOTE CONTROL VALVE	~~RAINBIRD # PEB-PRS-D~~	SHEET LI-12 DETAIL# 3
◑	QUICK COUPLER VALVE	~~RAINBIRD # 33DRC~~	SHEET LI-10 DETAIL# 4
⊕	GATE VALVE - LINE SIZE	~~NIBCO T-100~~	SHEET LI-13 DETAIL# 9
	SLEEVES (STATE R/W)	4" GALVANIZED STEEL PIPE, 42" MIN. COVER.	

ALL REMOTE CONTROL VALVES SHALL HAVE A GATE VALVE (SAME SIZE) AS PER DETAIL # 3 SEE DETAIL # 10 AND 11 FOR MORE REFERENCES

△ 6 8 STATION SOLAR POWERED CONTROLLER. (ALTEC IRRIGATION - LEIT 8000) CONTROL VALVES (S1 - S6) MUST USE MICROPOWER ACTUATORS.

△ ===== SLEEVES (STATE R/W) 4" ABS PIPE
△ ::::: SLEEVES (STATE R/W) 2" ABS PIPE

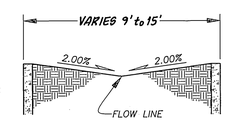
LEGEND

SYMBOL	ARC	RAD	TRJ	DESCRIPTION	PCS	PSI	GPM	MFG.	BODY	NOZ.	REFERENCE
V	H	8'		SHRUB POP-UP B	30		.60	~~RVD~~	~~1800~~	8H	DETAIL # 7
▽	Q	8'		SHRUB POP-UP S	30		.30	~~RVD~~	~~1800~~	8Q	DETAIL # 7
V	Q	12'		SHRUB POP-UP G	20		.65	~~RVD~~	~~1800~~	15Q	DETAIL # 7
V	H	12'		SHRUB POP-UP G	20		1.30	~~RVD~~	~~1800~~	15H	DETAIL # 7
✳	F	12'		SHRUB POP-UP BL	20		2.60	~~RVD~~	~~1800~~	15F	DETAIL # 7
◘	F	0		TREE BUBBLER	30		.25	~~RVD~~	~~1400~~		DETAIL # 6

ALL ~~RAINBIRD (RVD)~~ SPRINKLER HEADS SHALL BE WITH A PRESSURE COMPENSATING SCREEN AND SAM CHECK VALVES.
SEE LEGEND FOR COLOR CODE.

GENERAL NOTE

IRRIGATION SYSTEMS WITHIN THE STATE RIGHT OF WAY SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS IN SECTION 20-5 "IRRIGATION SYSTEMS" OF THE CURRENT CALTRANS SPECIFICATIONS.



TYPICAL CROSS SECTION AT MEDIAN

SCALE: 1"=4'

REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6/30/97 CIVIL STATE OF CALIFORNIA

5/16/95

IRRIGATION CONSULTANTS GROUP
569 S. MARENGO AVENUE
PASADENA, CA 91101
(818) 792-1870 FAX (818) 792-2574

REVISED PLAN
CalTrans Permit No.
08-95-N-MC-0240

INDEXED 5/98
*As-Built 4/7/97

N

IRRIGATION PLAN

REGISTERED ARCHITECT KI SUH PARK C 4549 STATE OF CALIFORNIA

GRUEN ASSOCIATES
6330 San Vicente Blvd., Los Angeles, CA 90048 (213) 937-4270

REGISTERED LANDSCAPE ARCHITECT FREDERICK STEVEN ABELSON LIC. NO. 3524 9/30/96 Date STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
RICK ABELSON
R.L.A. No. 3524 expires 9/30/96
DATE

MARK	REVISIONS	APPR.	DATE
3	Added Solar Controller & Revised Sprinklers.		7/16/96
2	Added Sleeves, Revised Sprinklers Per 1		3/15/96
1	Added Sidewalk, Revised Sprinklers		12/22/95

DESIGNED BY R.A. DRAWN BY jrp CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
~~APPROVED BY~~		
DEPUTY P.W. DIRECTOR		6/21/95
PRINCIPAL ENGINEER		4/5/96
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		5-4-95

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO IOWA AVENUE
HORIZ. SCALE: 1" = 20'

R-3271
LI-8.2
SHEET ____ OF ____

SPRINKLER SCHEDULE △

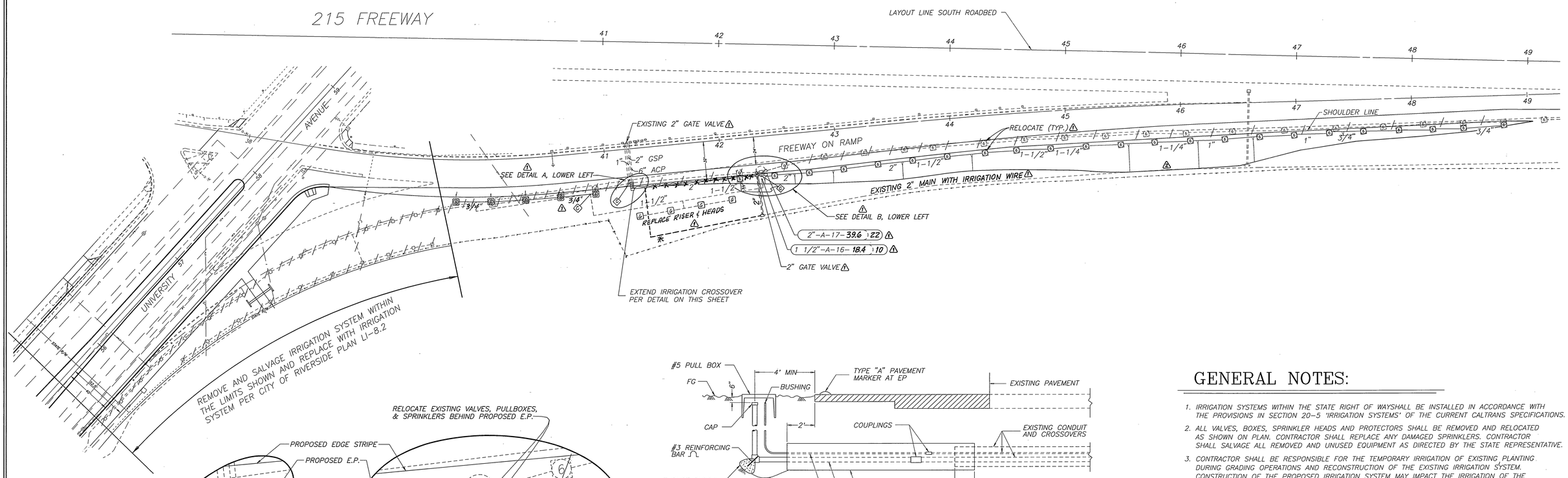
	SYMBOL	TYPE	DESCRIPTION	SPRAY PATTERN	OPERATING PRESSURE (PSI)	PLUS/MINUS 5% DISCHARGE GPM	PLUS/MINUS 5% DISCHARGE GPH	PLUS/MINUS 5% RADIUS (FT)	PLUS/MINUS 5% W X L (FT)	MATERIAL	NOZZLE SIZE	INLET CONNECTION (NPT IN)	POSITIVE-LOCKING ADJ ARC STOP (1)	BACKSPLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL FLAP	ADJ DISCHARGE	RISER TYPE	RISER MATERIAL PLASTIC	RISER MATERIAL GALVANIZED	RISER SIZE (IPS IN)	RISER HEIGHT (IN)	SWING JOINT (TYPE)	RISER SUPPORT	SPRINKLER PROTECTOR (TYPE)	REMARKS	QUANTITIES RELOCATED	QUANTITIES NEW
△	6	A-6	GEAR DRIVEN	P	40	1.80	--	30	--	PL	5 STD	3/4"	--	--	--	--	--	V	--	--	3/4"	--	--	--	1 1	(6) SALVAGE EXISTING 12" POP UP UNIT (HUNTER PGH)	23	5
△	6	A-6	GEAR DRIVEN	F	40	1.90	--	27	--	PL	5 LOW	3/4"	--	--	--	--	--	I	--	X	3/4"	12"	1 1	--	--	(6) SHRUB (HUNTER PGS)		4
△																												

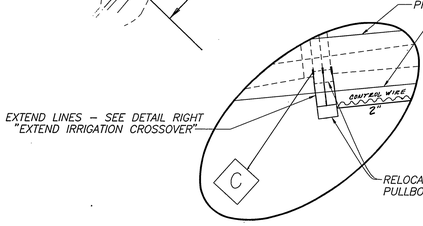
X: DENOTES REQUIREMENT
APPLICABLE WHEN CIRCLED:

1 – ARC STOP SHALL BE FITTED WITH A NUT AND BOLT.
2 – VINYL-COATED CAST IRON HOUSING.
3 – SWING JOINT REQUIRED ADJACENT TO SHOULDERS, CURBS, SIDEWALKS AND DIKES.
4 – UNLESS OTHERWISE SHOWN ON PLANS.
5 – SEE SPECIAL PROVISIONS.
(6) – INTERNAL CHECK VALVE.

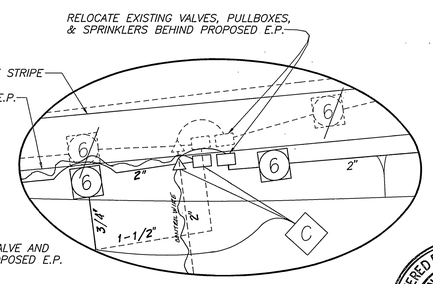
LEGEND △

- CONNECT TO EXISTING
- GATE VALVE
- IRRIGATION PULLBOX
- IRRIGATION CONTROL WIRE

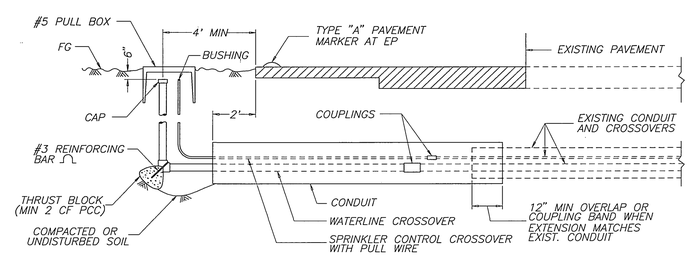




DETAIL A △
RELOCATION OF PULLBOX & VALVE
N.T.S.



DETAIL B △
RELOCATION OF PULLBOXES, VALVES AND SPRINKLERS
N.T.S.



SECTION
EXTEND IRRIGATION CROSSOVER
N.T.S.

GENERAL NOTES:

1. IRRIGATION SYSTEMS WITHIN THE STATE RIGHT OF WAYSHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS IN SECTION 20-5 'IRRIGATION SYSTEMS' OF THE CURRENT CALTRANS SPECIFICATIONS.
2. ALL VALVES, BOXES, SPRINKLER HEADS AND PROTECTORS SHALL BE REMOVED AND RELOCATED AS SHOWN ON PLAN. CONTRACTOR SHALL REPLACE ANY DAMAGED SPRINKLERS. CONTRACTOR SHALL SALVAGE ALL REMOVED AND UNUSED EQUIPMENT AS DIRECTED BY THE STATE REPRESENTATIVE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY IRRIGATION OF EXISTING PLANTING DURING GRADING OPERATIONS AND RECONSTRUCTION OF THE EXISTING IRRIGATION SYSTEM. CONSTRUCTION OF THE PROPOSED IRRIGATION SYSTEM MAY IMPACT THE IRRIGATION OF THE AREA EXTENDING APPROXIMATELY 1,300 FT. EAST OF STATION 49+00.

△ 4. CONTRACTOR SHALL ACQUIRE AND INSTALL NEW SPRINKLER MATERIALS AS REQUIRED TO COMPLETE SYSTEM MODIFICATIONS.

REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6/30/97 CIVIL STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 6/27/95

MARK	REVISIONS	APPR	DATE
△	Revised toe of slope.	DKG	10/25/95
△	REVISION REQUIRED BY CALTRANS.	DKG	8/30/96

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

DATE

INDEXED 5/98 CD * AS-BUILT 4/7/97

UNIVERSITY AVENUE ONRAMP IRRIGATION
TO SOUTHBOUND 215 FREEWAY

HORIZ. SCALE: 1" = 40'

REVISED PLAN
CalTrans Permit No.
08-95-N-MC-0240

R-3271

LI-8.3

SHEET ____ OF ____