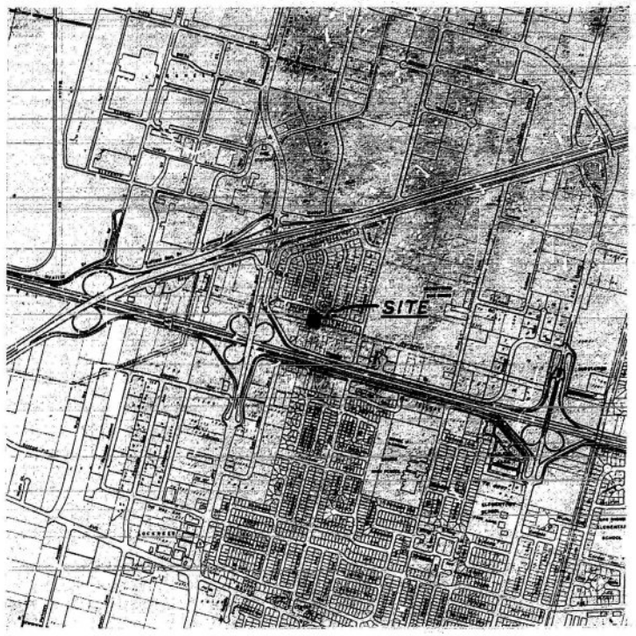
CITY OF SUNNYVALE, CALIF.

ORCHARD GARDENS PARK
TENNIS COURTS PR-77-5



LOCATION MAP
SCALE: 1" = 1000'

APPROVED BY:
Director of Parks and Recreation DATE

APPROVED BY:	
Water System Engineer	Date
Traffic Engineer	Date
Fire	Date
Engineer Const. Supervisor	Date

REVIEWED FOR APPROVAL BY:
ASST. CITY ENGINEER 14432 R.E. NO. 2-22-78 DATE
APPROVED BY:
DIRECTOR OF PUBLIC WORKS R.E. NO. 2-23-78 DATE

DESIGNED BY:	DRAWN BY:	CHECKED BY:	FIELD BOOK: NO. PG.	DATE: 12/1/77
TITLE:				SHEET 1 OF 7
SCALE: Horiz. 1"= Vert. 1"=	DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE			FILE NO.

C.P.P. 63.1

GARNER DRIVE

REMOVE EXISTING DRIVEWAYS (ADDITIVE ALTERNATE NO. 2)

EXIST. JOINT POLE

REMOVE EX. MANHOLE & PLUG EX. IN AND OUT 6" V.C.P. LINES

PLUGGED

EX. 100 PR. PT & T TO BE RELOCATED BY OTHERS

EX. FLAGPOLE

REMOVE EX. SHRUBBERY

REMOVE 7 EXISTING TREES INCLUDING ROOT SYSTEM.

REMOVE EXISTING ASPHALT PAVING

EX. ANCHOR TO BE RELOCATED BY OTHERS

EX. 4" ORANGEBERG

REMOVE 150 L.F. CHAIN LINK FENCE

EX. JOINT POLE

EX. 15" R.C.P.

REMOVE GRATE AND CONVERT EXISTING DROP INLET TO A JUCTION BOX BY CAPPING WITH CONCRETE, RIM 29.27 INV. 26.87. PLUG ORANGEBERG LINES.

R-28.24
I-27.04

EX. 6" ORANGEBERG

EX. 6" ORANGEBERG

SITE PREPARATION

APPROVED BY:		REVIEWED FOR APPROVAL BY:		DESIGNED BY:	DRAWN BY: N.L.	CHECKED BY:
Water System Engineer	Date	ASS'T. CITY ENGINEER R.E. NO.	DATE	FIELD BOOK: NO. P6	DATE: 12/1/77	
Traffic Engineer	Date	APPROVED BY:		TITLE: ORCHARD GARDENS PARK TENNIS COURTS PR-77-5	SHEET 2 OF 7	
Fire	Date			SCALE: Horiz. 1"=10' Vert. 1"=	DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE	FILE NO.
Engineer Const. Supervisor	Date	DIRECTOR OF PUBLIC WORKS R.E. NO.	DATE			

PRINTED ON NO. 1000H CLEARPRINT

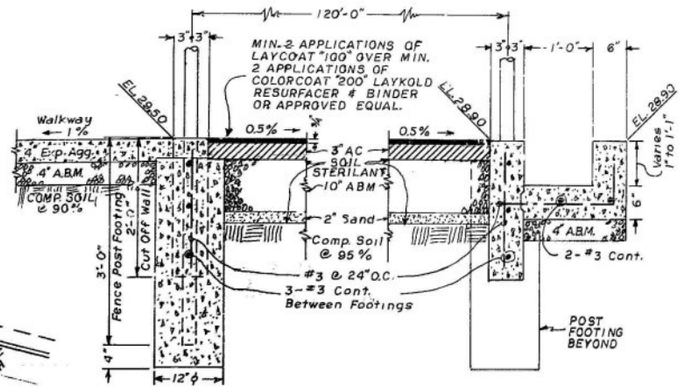
GARNER DRIVE

#4 REBAR CONT.
½"R. ← 5%
TENNIS COURT
12"

TYP. MOWBAND
SCALE: 1"=1'-0"

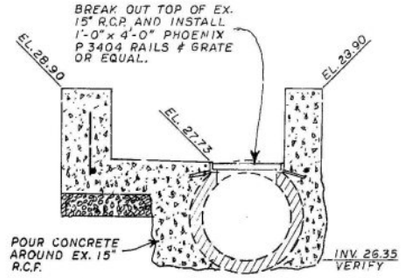
(CONCRETE WORK - ADDITIVE ALTERNATE NO. 2)
REPLACE CURB & GUTTER AT OLD DRIVEWAY AREAS
PLANTER AREA SPACE AROUND EXISTING TREE
BROOM FINISH
EL. 27.65 MATCH
INSTALL BROOKS K 4047 JB
EX. 4" SLEEVES
INSTALL 2-4" TYPE C PLASTIC CONDUIT 30" COVER TYP.
INSTALL 132 L.F. MOW BAND
EL. 29.40
INSTALL 2 4" C PC
5' R.
EX. PP.
3' GATE
EL. 29.50
S = 0.5% →
S = 0.5% →
EL. 28.82
EL. 28.90
9' R.
EL. 28.90
UB
INSTALL 2 SECTIONS 4' HIGH MODULAR WALL (ADDITIVE ALTERNATE NO. 1)
1'-0" Typ.
S = 10%
GUTTER
SEPARATOR FENCE
INSTALL 5 SECTIONS OF 8" HIGH x 4" WIDE x 16' LONG SLUMPSTONE TEXTURED MODULAR WALL. (ADDITIVE ALTERNATE NO. 1)
5' R.
INST. 2-4" C PC TURN ONE UP POLE PLUG ONE AT BASE
EX. PP.
P/L
TOP GRATE 27.73
T.C. 28.90
3' GATE
T.C. 28.90
F.L. 28.23
4' R.
CONNECT TO EX. 4" ORANGEBERG @ EDGE OF WALKWAY BEYOND
EX. EL. 29.50 MATCH
INSTALL 55 L.F. 4" TRANSITE PIPE
ABANDON EX. 4" ORANGEBERG
A
A
11'-0"
EL. 29.50
CONSTRUCT 20" FLAT GRATE DROP INLET OVER EX. 15" R.C.P. RIM 28.7± INV 26.8±
10'-0"
EX. 15" R.C.P.
INSTALL 140 L.F. 6" TRANSITE PIPE
3' GATE
10' R.
INSTALL 115 L.F. MOW BAND
10'-0"
EX. EL. 28.9± MATCH
REMOVE 50 L.F. EX. 6" ORANGEBERG DRAIN PIPE AND REPLACE WITH 6" C.I.P., NO HUB, SOIL TYPE.
EX. EL. 28.7± MATCH
ABANDON EX. 6" ORANGEBERG
CONNECT TO EX. DROP INLET BEYOND
EXPOSED AGGREGATE WALKWAY

B
B
C
C

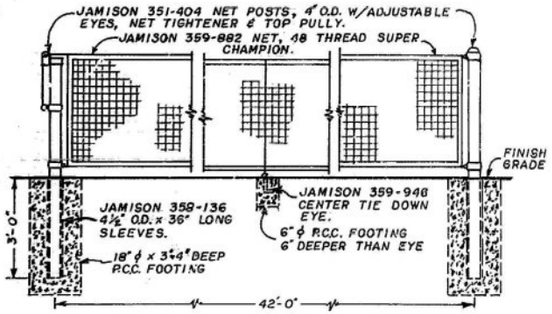


SECTION A-A
SCALE: 1"=1'-0"

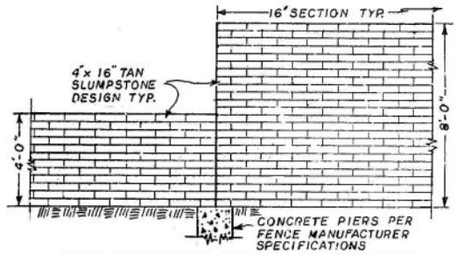
SECTION B-B
SCALE: 1"=1'-0"



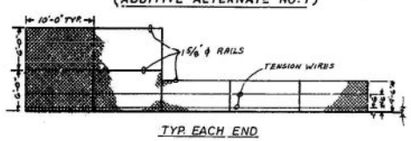
SECTION C-C
SCALE: 1"=1'-0"



TENNIS NET POST DETAIL
NO SCALE

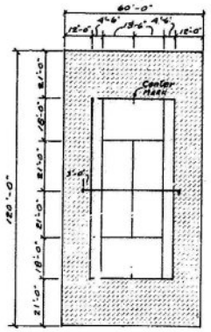


TYP. MODULAR WALL ELEVATION
(ADDITIVE ALTERNATE NO. 1)



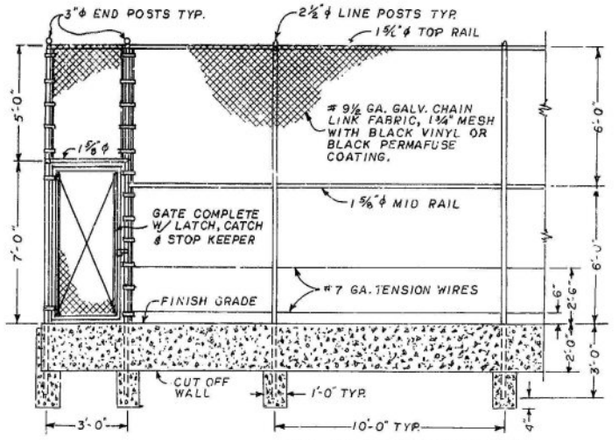
TYP. EACH END

TYP. SEPARATOR FENCE ELEVATION
NO SCALE



LEGEND
GREEN
RED

TYPICAL LAYOUT
NO SCALE



NOTE: ALL FRAMING AND FITTINGS LEFT NATURAL GALV. FINISH.

TENNIS COURT FENCE DETAIL
NO SCALE

CONSTRUCTION

APPROVED BY:	REVIEWED FOR APPROVAL BY:	DESIGNED BY: N.L.	DRAWN BY: N.L.	CHECKED BY:	FIELD BOOK: NO. PG. / DATE: 12/1/77
Water System Engineer — Date	ASS'T. CITY ENGINEER — R.E. NO. — DATE	TITLE: ORCHARD GARDENS PARK TENNIS COURTS			SHEET 3 OF 7
Traffic Engineer — Date	APPROVED BY:				PR-77-5
Fire — Date	DIRECTOR OF PUBLIC WORKS — R.E. NO. — DATE	SCALE: Horiz. 1"=10'-0" Vert. 1"=	DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE		FILE NO.
Engineer Const. Supervisor — Date					

PRINTED ON NO. 1000H CLEARPRINT

GARNER DRIVE

EXIST. PLANTING

EXIST. TURF

28.0

28.5

3 | 15 Gal. GEIJERA PARVIFLORA
@ 10' o.c. (AUSTRALIAN WILLOW)

TURF AREA

24.0

29.0

TURF AREA
SEEDING BY CITY

1 | 15 Gal. GEIJERA PARVIFLORA
(AUSTRALIAN WILLOW)

21 | 5 Gal. CYPRESS SEMPERVIRENS
@ 5' o.c. (ITALIAN CYPRESS)

REMOVE TURF AND FILL WITH TOPSOIL TO MATCH WALKWAY. SEEDING BY CITY.

EXIST. PLANTING

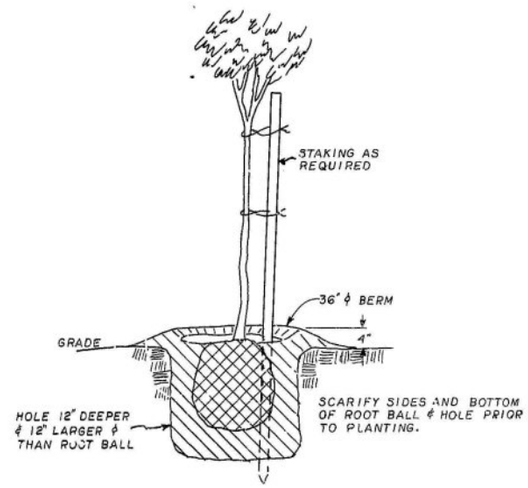
EXIST. TURF

29.0

28.50

EXIST. TURF

EXIST. TURF



TREE PLANTING DETAIL
NO SCALE

LANDSCAPING

APPROVED BY:	REVIEWED FOR APPROVAL BY:	DESIGNED BY	DRAWN BY: NL	CHECKED BY:	FIELD BOOK: NO. PG	DATE: 12/1/77
Water System Engineer Date	ASS'T. CITY ENGINEER R.E. NO. DATE	TITLE: ORCHARD GARDENS PARK TENNIS COURTS		PR-77-5		SHEET 4 OF 7
Traffic Engineer Date	APPROVED BY:	SCALE: Horiz. 1"=10' Vert. 1"	DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE			FILE NO.
Fire Date	DIRECTOR OF PUBLIC WORKS R.E. NO. DATE					
Engineer Const. Supervisor Date						

PRINTED ON NO. 1000H CLEARPRINT

GARNER DRIVE

IF WATER DEPT. REQUIRES B.F.U. AT A LOCATION OTHER THAN THAT SHOWN, COMPLY. ADJUST LENGTH OF 1½" POTABLE LINE ACCORDINGLY.

EXISTING 3" A.C. MAIN LINE - TYPICAL

POINT OF CONNECTION #1 - POUR THRUST BLOCK.

CUT, CAP & ABANDON. POUR THRUST BLOCK.

REMOVE RCV # E-2 AND PLUG MAIN OUTLET. CONNECT CONTROL LINES AND VALVE HERE

CONNECT NEW 1½" LINE TO EXISTING POTABLE LINES TO BUILDING AND DRINKING FOUNTAINS.

INSTALL BACK FLOW UNIT WITH 12" CLEARANCE TO FENCE.

CONTROLLER IS IN PARK BUILDING APPROXIMATELY 105±FT EAST OF NEW B.F.U. LOCATION. CONDUITS EXIST FROM CONTROLLER, THRU STRUCTURE AND PATIO, TO PLANTING AREA FOR NEW 24-V CONTROL LINES. CONNECT AS REQUIRED.

POINT OF CONNECTION #2 - POUR THRUST.

CUT, CAP & ABANDON. POUR THRUST.

NEW TREE LOCATION - TYP.

¾" TYP.

135°-U.

ADJUST COVERAGE OF ALL EXISTING SYSTEMS TO COMPLY WITH NEW PAVING EDGES, WEST AND SOUTH OF NEW TENNIS COURTS

RCV # E-2 - REMOVE VALVE, PLUG MAIN OUTLET.
RCV # E-1 & # E-3 - RECONNECT TO NEW MAIN & EXISTING LATERALS.
RCV # E-4 - RECONNECT TO NEW MAIN, INSTALL NEW SYSTEM AS INDICATED BELOW.

EXISTING MAIN IS UNDER NEW COURT AREA.
1- CUT, CAP & ABANDON AS REQUIRED.
2- INSTALL NEW MAIN LINE AND RECONNECT TO 3-2" EXISTING RCV'S [SHOWN IN APPROXIMATE LOCATION]

POINT OF CONNECTION #3 - POUR THRUST. CUT, CAP & ABANDON, POUR THRUST.

ADJUST COVERAGE OF EXISTING SYSTEMS, THIS AREA, AS REQ'D. BY NEW PAVING AND COURT AREAS.

135°-U

A TYPICAL QCV AT COURT INSTALLATION
NO SCALE

C.L. FENCE POST

U-BOLT

QUICK COUPLING VALVE. INSTALL W/ HINGE IN "UP" POSITION

⅜-16 U-BOLT W/ ¼"x1"x6"± STEEL PLATE, 2 LOCK WASHERS AND 2 HEX NUTS.

COURT

MAIN, PVC

ALL PIPING FROM THIS POINT TO QCV, USE 1½ STD. G.I. SCH. 40

B BACK FLOW UNIT INSTALLATION
NO SCALE

ADJUSTABLE PIPE SUPPORT

CLA-VAL # D-2"

B.F.U.

GRADE

2-2" COMPANION FLANGE ASSY.

12"x12"x L" REQ'D. CONC. THRUST W/ #4 REBAR @ 6"

3" PVC

3" PVC

ALL LINE THIS AREA 2" G.I. SCH. 40

PAINT ABOVE GRADE APPURTENANCES WITH RUSTOLEUM, 1 COAT PRIMER & 1 COAT GRAY GREEN.

ELEVATED STRIP SPRAY

FLUSH POP-UP SPRAY

STAINLESS CLAMP

GRADE

6"

½" G.I. 90° ELL

KING BROS FLEX-RISER

PVC LATERAL LINE & THREADED FITTING

18"

½" G.I. NIPPLE

18"

½ x 40" G.I. PIPE STAKE W/ STAINLESS STEEL CLAMP ABOVE GRADE

C TYPICAL SPRAY RISER INSTALLATION
NO SCALE

1- INSTALL STRIP SPRAYS ON ℄ OF PLANTING LINE.
2- STAKE & CLAMP ONLY STRIP SPRAY RISERS.
3- INSTALL POP-UP SPRAYS FLUSH W/ GRADE
4- PROVIDE 4" CLEARANCE BETWEEN POP-UP AND PAVING, HEADER, ETC.
5- USE ONLY TEFLON TAPE FOR ALL THREADED CONNECTIONS.

QUICK COUPLING VALVE FLUSH W/ GRADE

CARSON # 1419 BOX WITH EXTENSION & BOLT DOWN LID AT GRADE

GRADE

G.I. COUPLING OR 90° ELL

4" NIPPLE, SCH. 80 PVC TBE

PVC MAIN LINE & THREADED FITTING

1"

18"

12"

BOX

EXTENSION

6"

LATERAL

8"

8"

ALL PIPING THIS AREA, G.I. SCH. 40 FITTINGS.

D TYPICAL RCV/QCV INSTALLATION
NO SCALE

1- LIMIT ONE RCV PER BOX.
2- NO EARTH FILL INSIDE BOX OR TOUCHING VALVE.
3- SUPPLY EACH RCV WITH FLOW CONTROL & PETCOCK.
4- PROVIDE 24" COIL ON EACH 24-V LINE IN EACH BOX.
5- USE ONLY MOODY CONNECTORS W/ FITTING COMPOUND FOR ALL 24-V SPLICES.
6- FOR RCV WITHOUT QCV - DELETE ALL G.I. FITTINGS.
7- USE ONLY TEFLON TAPE FOR ALL THREADED CONNECTIONS.

LEGEND & NOTES

SYMBOL	CATALOG NO.	MANUFACTURER	ITEM
•	305 SF-2	RAIN-O-MAT	SHRUB STRIP SPRAY
▼	403 HP-QU	BUCKNER	2" HI-POP BRASS LAWN SPRAY
▽	403 HP-HU	"	" " "
⊕	403 HP-20	"	" " "
V	403 HP-40	"	" " "
□	403 HP-PO	"	" " "
◆	14 RLT	BUCKNER	QUICK COUPLING VALVE
◇	4 R	BUCKNER	QUICK COUPLING VALVE - TENNIS COURTS ONLY.
+○	1825A-2" [EXIST]	FEBCO	REMOTE CONTROL VALVE - RELOCATE & RECONNECT.
+●	2000E SERIES	GRISWOLD	REMOTE CONTROL VALVE - NEW ITEM
⊠	D-2"	CLA-VAL	BACK FLOW UNIT - INSTALL PER LOCAL CODE.
⋈	G-736-0-2" / B-110-1½"	STOCKHAM	GATE VALVE - IN BOX.

(E1) ALL 4 "E" RCV'S CONTROLLED BY FIRST 16 STATIONS OF EXIST. 2406 GRISWOLD. ALL NUMBERED RCV'S CONTROLLED BY STATIONS #17-#24 OF SAME CONTROLLER.

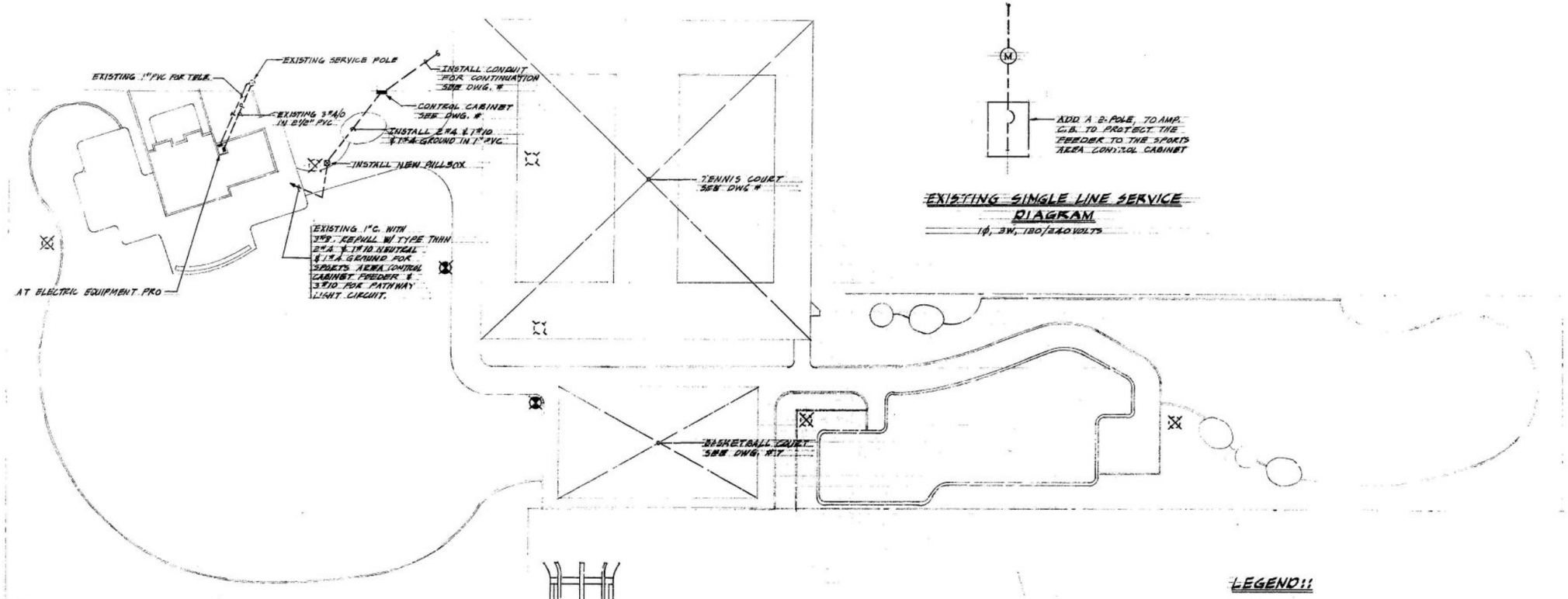
CONTROLLER & STATION IDENTIFICATION.
REMOTE CONTROL VALVE SIZE.

(B) PVC SLEEVE WITH SIZE INDICATION.
LATERAL LINE # 1120-200 PSI PVC } WITH SCH. 40 PVC FITTINGS.
MAIN LINE # 1120-315 PSI PVC }

1- DESIGN BASED ON 93 PSI AT EACH P.O.C.
2- SAW-CUT EXISTING PAVING, INSTALL SLEEVES BEFORE FUTURE PAVING. REPLACE EXISTING PAVING TO ORIGINAL CONSTRUCTION & GRADE PER CITY OF SUNNYVALE STANDARDS.
3- SLEEVES SHALL HAVE 18" COVER, EXTEND 12" INTO EACH PLANTING AREA, CONTAIN ALL PIPING & CONTROL LINES AND HAVE LOCATIONS DIMENSIONED ON "AS-BUILT" DRWG.
4- ADJUST RADIUS OF EACH HEAD TO PROPER COVERAGE OF PLANTED AREAS.
5- BALANCE EACH BATTERY TO OPTIMUM COVERAGE AS REQUIRED BY THE HEADS.
6- VERIFY ALL CONDITIONS AND LOCATIONS ON SITE WITH THE INSPECTOR BEFORE STARTING CONSTRUCTION OF THIS SYSTEM.

GEORGE W. BELL A.S.I.C.
IRRIGATION CONSULTANT
PO BOX 683
MILLBRAE, CALIFORNIA 415/589-6959

APPROVED BY:		REVIEWED FOR APPROVAL BY:			DESIGNED BY	DRAWN BY	CHECKED BY	FIELD BOOK NO.	PG	DATE
Water System Engineer	Date	ASST. CITY ENGINEER	R.E. NO	DATE	G.B.	G.B.				11-14-77
Traffic Engineer	Date	APPROVED BY:			TITLE: ORCHARD GARDENS PARK TENNIS COURTS PR-77-5					SHEET 5 OF 7
Fire	Date	DIRECTOR OF PUBLIC WORKS	R.E. NO.	DATE	SCALE: HORIZ. 1"=10' VERT.	DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE				FILE NO.
Engineer Const. Supervisor	Date									

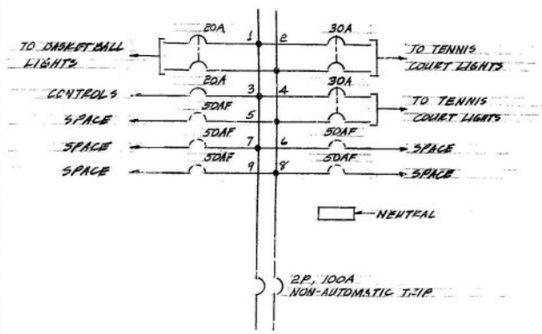


EXISTING SINGLE LINE SERVICE DIAGRAM

1ϕ, 3W, 120/240 VOLTS

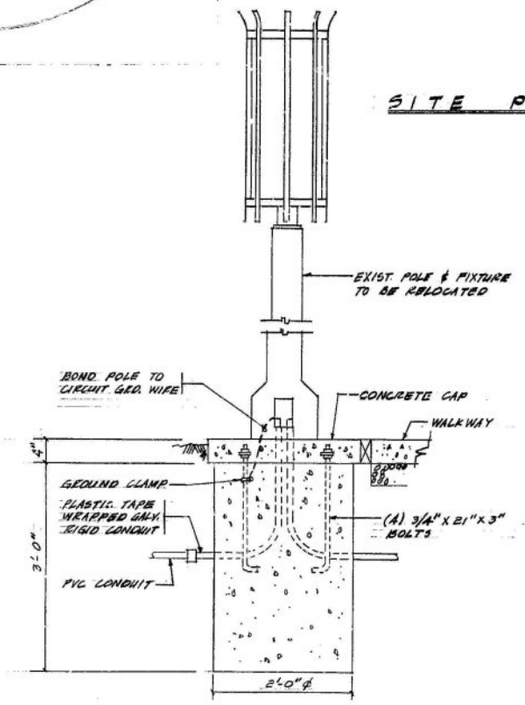
SITE PLAN

SCALE: 1"=20'-0"



SPORTS PANELBOARD

1ϕ, 3W, 120/240 VOLTS



FOUNDATION FOR PATHWAY LIGHT

SCALE: 1"=1'-0"

GENERAL NOTES:

1. a. UNDER BASE BID FURNISHED AND INSTALL ALL CONDUIT AND FLOODLIGHT POLE BASES FOR TENNIS COURT SYSTEM.

   b. UNDER ALTERNATE #4, FOR TENNIS COURT LIGHTING SYSTEM, FURNISH AND INSTALL FLOODLIGHT POLES FIXTURES, WIRE CONTROLS WITH ASSOCIATED CABINET FOR A COMPLETE OPERATING FLOODLIGHTING SYSTEM.

   c. UNDER ALTERNATE #5, FOR BASKETBALL COURT FURNISH AND INSTALL POLES, FIXTURES, FOUNDATIONS, CONDUIT, WIRES AND CONTROLS FOR A COMPLETE OPERATING SYSTEM.

   d. ANY WORK SHOWN AND NOT INDICATED TO BE INSTALLED UNDER AN ALTERNATE SHALL BE PROVIDED UNDER THE BASE BID.

2. CONTROL CABINET SHALL HAVE THE FOLLOWING FEATURES:
   a. FREE STANDING PAINTITE, NEMA TYPE-3R.
   b. HINGED DOORS HAVING RETURN EDGES.
   c. VANDAL RESISTANT
   d. GALVANIZED SHEET METAL 12GA.
   e. DOORS HAVING 3 POINT CATCH WITH LOCK.

3. ALL FLOODLIGHT FIXTURES SHALL HAVE APPROXIMATELY 85° V X H BEAM SPREAD AND SHALL BE LAMPED WITH 1000W METAL HALIDE LAMPS HAVING 110,000 LUMEN INITIAL OUTPUT. ALL BALLASTS SHALL OPERATE ON 240 VOLT SYSTEM.

LEGEND:

- RELOCATED EXISTING PATHWAY LIGHT — SEE DWG. # 7
- EXISTING PATHWAY LIGHT TO REMAIN — SEE DWG. # 7
- EXISTING PATHWAY LIGHT TO REMOVE AND RELOCATE TO NEW LOCATION.
- FLOODLIGHT POLE. ARROWS INDICATE NUMBER OF FIXTURES REQUIRED. SEE NOTE #1. NUMBER BY SYMBOL IS THE CIRCUIT NUMBER.
- EXISTING UNDERGROUND CONDUIT TO REMAIN, U.O.N.
- INSTALL NEW UNDERGROUND CONDUIT
- PULLBOX & SPLICE
- C.B. CIRCUIT BREAKER

APPROVED BY:

Water System Engineer	Date
Traffic Engineer	Date
Fire	Date
Engineer Const. Supervisor	Date

REVIEWED FOR APPROVAL BY:

ASST. CITY ENGINEER R.E. NO. DATE

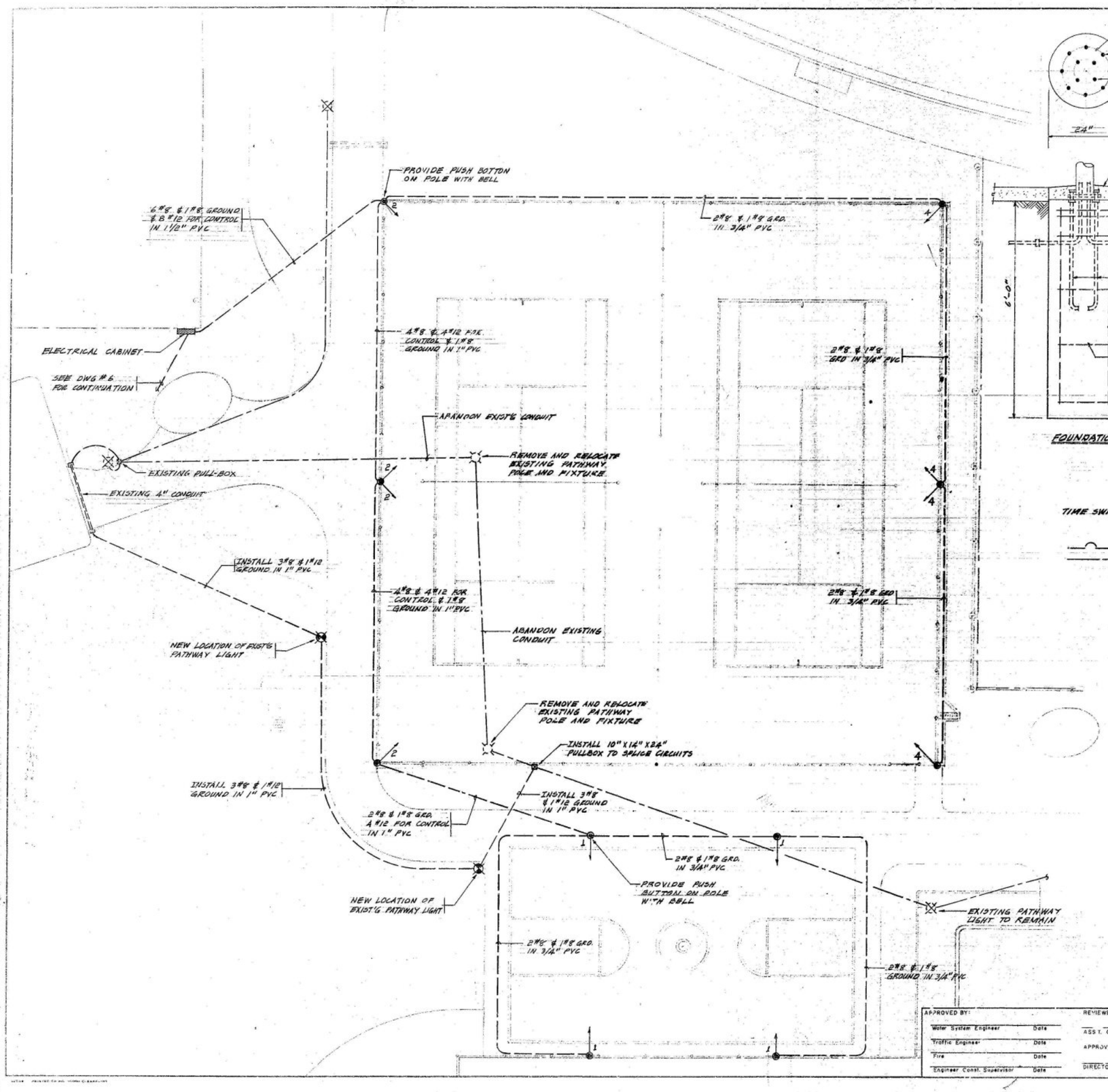
APPROVED BY:

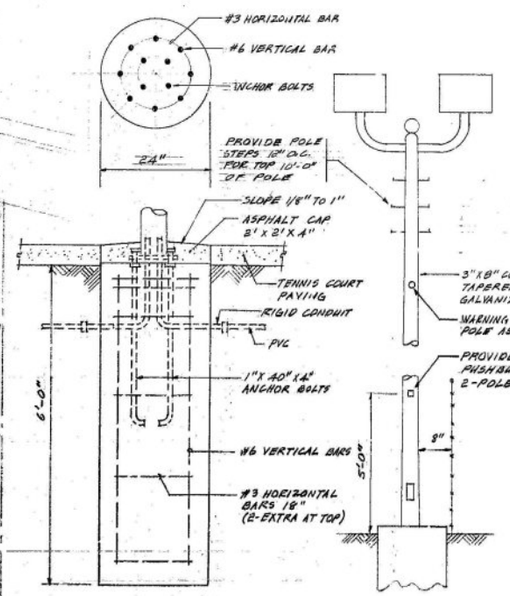
DIRECTOR OF PUBLIC WORKS R.E. NO. DATE

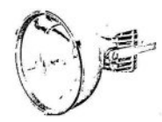
DESIGNED BY:	DRAWN BY:	CHECKED BY:	FIELD BOOK: NO. PG.	DATE:
RCS	RUDY	RCS		

TITLE: ORCHARD GARDENS PARK TENNIS COURTS — PR-77-5 — SHEET 6 OF 7

SCALE: Horiz. 1"= Vert. 1"= — DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE — FILE NO.







FLOODLIGHT FIXTURE BY GENERAL ELECTRIC POWERSPOT TYPE

FLOODLIGHT FIXTURE BY HUBBELL INC.

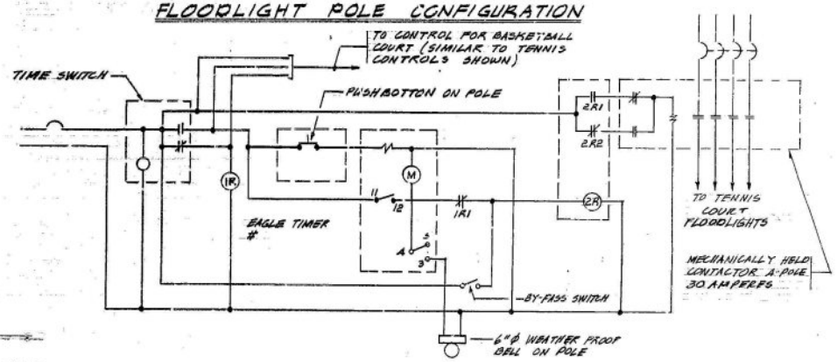
SEE NOTE #3 ON DWG. 6

A024HD
SLIPFITTER

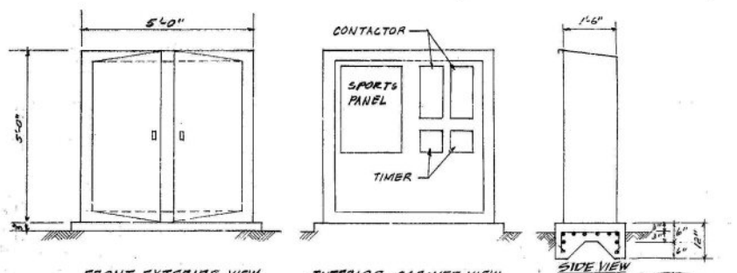
ONE LIGHT POLE

TWO LIGHT POLE

FLOODLIGHT POLE CONFIGURATION



TENNIS COURT FLOODLIGHT CONTROL



FRONT EXTERIAR VIEW

INTERIOR CABINET VIEW

SIDE VIEW

ELECTRIC EQUIPMENT CABINET DETAIL

NOT TO SCALE — SEE NOTE #2

ROBERT C. STERN
ELECTRICAL ENGINEER
TELEPHONE (415) 546-9233
988 MISSION ST. SAN FRANCISCO CA. 94103

APPROVED BY:		REVIEWED FOR APPROVAL BY:		DESIGNED BY	DRAWN BY	CHECKED BY	FIELD BOOK
Water System Engineer	Date	ASST. CITY ENGINEER R.E. NO.	DATE	RCS	RUDY	RCS	NO. PG.
Traffic Engineer	Date	APPROVED BY:		TITLE	ORCHARD GARDENS PARK TENNIS COURTS		PR-77-5 7 7
Fire	Date	DIRECTOR OF PUBLIC WORKS R.E. NO.	DATE	SCALE Horiz. 1"=10'-0" Vert.	DEPARTMENT OF PUBLIC WORKS CITY OF SUNNYVALE		
Engineer Const. Supervisor	Date						