

VIL

V1-157

CITY OF RIVERSIDE

DEPT. OF PARKS AND RECREATION

BASEBALL FIELD LIGHTING

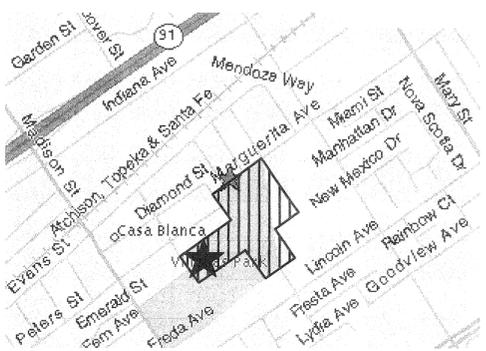
VILLEGAS PARK - BUNKER STREET FIELD

7240 MARGUERITA ST. RIVERSIDE, CA

- ⊕ POLE MOUNTED LIGHT FIXTURE - REFER TO DETAILS FOR QUANTITY OF LAMPS.
- ⊕ DUPLEX RECEPTACLE, WALL MOUNTED ϕ + 15" A.F.F. OR AS NOTED.
- ⊕ QUADPLEX RECEPTACLE, WALL MOUNTED ϕ + 15" A.F.F. OR AS NOTED.
- ⊕ JUNCTION BOX, ACCESSIBLE AND MOUNTED FOR THE APPLICATION DENOTED ON PLANS.
- ⊕ JUNCTION BOX, WALL MOUNTED. FIELD VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
- ⊕ FLUSH MOUNTED ELECTRICAL PANELBOARD OR LOAD CENTER. REFER TO PANEL SCHEDULE.
- ⊕ SURFACE MOUNTED ELECTRICAL PANELBOARD OR LOAD CENTER. REFER TO PANEL SCHEDULE.
- ⊕ DISTRIBUTION SWITCHBOARD REFER TO SINGLE LINE DIAGRAM.
- ⊕ TRANSFORMER, REFER TO SINGLE LINE DIAGRAM.
- ⊕ FUSED DISCONNECT SWITCH - HP RATED WITH FUSES PER EQUIPMENT MANUFACTURER AND WEATHERPROOF AS REQUIRED.
- ⊕ GROUND CONNECTION, SIZE AS INDICATED OR AS REQUIRED.
- ⊕ SINGLE POLE SWITCH, +48" A.F.F., SUBSCRIPTS AT SYMBOL INDICATE THE FOLLOWING.
 - 2 - DOUBLE POLE
 - 3 - THREE WAY
 - 4 - FOUR WAY
 - K - KEY OPERATED
 - P - PILOT LIGHT
 - R - REMOTE CONTROL SWITCH
 - M - MOTOR STARTING SWITCH
 - RL - ROTARY LOCK KEY TYPE SWITCH
 - PB - PUSHBUTTON
- ⊕ a,b,c, ETC.-IDENTIFICATION OF OUTLETS CONTROLLED AND NUMBER OF SWITCHES AT LOCATION.
- ⊕ PULLBOX, CONCRETE W/ BOLT ON COVER, SIZED PER N.E.C. OR AS NOTED.
- ⊕ INDICATES WEATHERTIGHT FLEXIBLE CONNECTION TO EQUIPMENT.
- ⊕ HOME RUN TO PANEL. LETTER DESIGNATES PANEL, NUMBER INDICATES CIRCUITS.
- ⊕ CONDUIT RUN CONCEALED, IN WALLS, FLOOR, OR ABOVE CEILING.
- ⊕ CONDUIT RUN CONCEALED BELOW GRADE, 3/4" MINIMUM.
- ⊕ CONDUIT STUB OUT, CAP & MARK.
- ⊕ BRANCH CIRCUIT WIRING, 2 #12 IN 1/2" CONDUIT OR AS NOTED OR SYMBOLIZED
 - ⊕ 1/2" - 3 #12
 - ⊕ 1/2" - 4 #12
 - ⊕ 1/2" - 5 #12
 - ⊕ 1/2" - 6 #12
 - ⊕ 3/4" - 7 #12
 - ⊕ 3/4" - 8 #12
- ⊕ CHAIN LINK FENCE
- ⊕ LIGHT FIXTURE CALL OUT, "1A" INDICATES FIXTURE TYPE (REFER TO FIXTURE SCHEDULE), "65" INDICATES TOTAL FIXTURE WATTAGE, NUMBER ADJACENT INDICATES QUANTITIES (NUMBER IS SHOWN FOR BRANCH CIRCUIT PURPOSE ONLY, NOT FOR MATERIAL TAKE-OFF).
- ⊕ DETAIL CALLOUT, "3" INDICATES DETAIL NUMBER "E-1" INDICATES SHEET NUMBER.
- ⊕ PLAN NOTE REFERENCE.
- ⊕ REVISION REFERENCE.
- CO CONDUIT ONLY, WITH PULL ROPE.
- MH MOUNTING HEIGHT
- WP WEATHERPROOF, NEMA 3R
- PROVIDE FURNISH, INSTALLED AND CONNECTED, COMPLETE.
- GFI GROUND FAULT CIRCUIT INTERRUPTER
- EM EMERGENCY
- NL NIGHT LIGHT
- C CONDUIT
- OFCI OWNER FURNISHED, CONTRACTOR INSTALLED.
- ADA AMERICANS WITH DISABILITY ACT
- E/G EQUIPMENT GROUND (GREEN)
- (E) EXISTING TO REMAIN
- (ER) EXISTING, TO BE REMOVED.
- UG UNDERGROUND
- GEC GROUNDING ELECTRODE CONDUCTOR
- N.E.C. NATIONAL ELECTRICAL CODE
- U.O.N. UNLESS OTHERWISE NOTED

1. VERIFY EXISTING SITE CONDITIONS, SERVICE REQUIREMENTS (ELECTRICAL & TELEPHONE) AND EXACT LOCATIONS OF SERVICE FACILITIES BEFORE SUBMITTING BID. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS, ACTUAL PHYSICAL LOCATIONS AND WORK TO BE PERFORMED.
2. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL AND ELECTRONIC SYSTEM.
3. CONSTRUCTION TERMINOLOGY, AND THE STANDARDS AND ACCEPTABLE METHODS OF INSTALLATION REQUIRED BY THESE CONTRACT DOCUMENTS ARE BASED ON PUBLISHED STANDARDS OF N.E.C.A. (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION), NATIONAL ELECTRICAL SAFETY CODE, AMERICAN NATIONAL STANDARDS INSTITUTE DOCUMENTS, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, UNDERWRITERS LABORATORIES, AND THE CALIFORNIA ELECTRICAL CODE. SUBMITTAL OF BID INDICATES THE CONTRACTOR IS COGNIZANT OF THESE STANDARDS AND THE REQUIREMENTS NECESSARY TO PERFORM ALL THE WORK AS SET FORTH IN THESE CONTRACT DOCUMENTS.
4. ELECTRICAL CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS, CITY PAYS FOR PERMIT, COORDINATE AND PAY FOR ALL TEMPORARY ELECTRICAL SERVICE CHANGES WITH THE SERVING UTILITY, AND OWNER. COORDINATE TEMPORARY CONSTRUCTION REQUIREMENTS WITH ALL TRADES PRIOR TO CONSTRUCTION.
5. ALL WORK THAT REQUIRES SERVICE INTERRUPTION TO ANY BUILDING ON THE SITE SHALL BE COORDINATED WITH THE CITY, A MINIMUM OF 48 HOURS IN ADVANCE.
6. THESE PLANS ARE DIAGRAMMATIC ONLY. FOLLOW AS CLOSELY AS POSSIBLE AND REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS, STRUCTURAL DETAILS, EXACT EQUIPMENT AND OUTLET LOCATIONS. ALTHOUGH NOT SHOWN, CONTRACTOR SHALL PROVIDE ALL J-BOXES, PULL BOXES, ELLS, OFFSETS ETC. FOR A COMPLETE CODE APPROVED INSTALLATION. FOOTAGE SHOWN ON ELECTRICAL SINGLE LINES AND RISER DIAGRAMS ARE FOR CALCULATION PURPOSES ONLY AND ARE NOT FOR BIDDING PURPOSES OR MATERIAL TAKEOFF. ALL LOCATIONS OF EVERY OUTLET SHALL BE VERIFIED PRIOR TO ROUGH-IN.
7. THE CONNECTION METHOD SHOWN IS FOR BIDDING PURPOSES. THIS CONTRACTOR SHALL COORDINATE AND PROVIDE, FROM ACTUAL BUILDING SHOP DRAWINGS, THE CONNECTION SHOWN ON THOSE DRAWINGS.
8. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN COMPLIANCE WITH OSHA.
9. ALL MATERIALS SHALL BE NEW, AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES FOR THE USE AND ENVIRONMENT AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY, AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY A.N.S.I., U.L., N.E.M.A. AND N.B.F.U. INSTALL PER MANUFACTURERS' RECOMMENDATIONS. ALL EXTERIOR EQUIPMENT SHALL BE WEATHERPROOF.
10. SUBSTITUTIONS OF SPECIFIED MATERIALS ARE IN ACCORDANCE WITH THE GENERAL CONDITIONS.
11. SUBMIT SHOP DRAWINGS FOR ALL MAJOR PIECES OF ELECTRICAL EQUIPMENT INCLUDING BUT NOT LIMITED TO: PANELBOARDS, CONTROL CABINETS AND OTHER POWER COMPONENTS.
12. CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, LOCAL CODES, O.S.H.A. AND THE PRESENTLY ADOPTED NATIONAL ELECTRICAL CODE (N.E.C.)
13. THE COMPLETE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH THE PRESENTLY ADOPTED EDITION OF THE N.E.C., ART. #250 AND AS SHOWN ON THE DRAWINGS. AT THE REQUEST OF AND IN THE PRESENCE OF THE AUTHORIZED INSPECTOR, THE CONTRACTOR SHALL PROVIDE SYSTEM RESISTANCE READINGS.
14. PENETRATIONS TO FIRE-RATED MATERIALS SHALL BE RESTORED TO EQUAL RATING AS REQUIRED BY THE STATE FIRE MARSHAL.
15. CONDUCTORS SHALL BE CODE GRADE, 600 VOLT CLASS, COPPER, MARKED 24" ALONG ITS LENGTH SHOWING MANUFACTURER'S NAME, MAXIMUM ALLOWABLE VOLTAGE AND SIZE. CONDUCTORS SHALL BE TYPE "THWN" (WET) OR "THHN" (DRY), DELIVER THE WIRE TO THE SITE IN UNBROKEN PACKAGES.
16. CONDUIT SHOWN AS EXPOSED OR APPROVED FOR EXPOSED INSTALLATION ON THE EXTERIOR SHALL BE INTERMEDIATE METAL CONDUIT, I.M.C. OR RIGID GALVANIZED STEEL, RUN IN RIGHT ANGLES OR PARALLEL TO GRADE. SECURED WITH TWO HOLE MALLEABLE PIPE STRAPS AND SCREWS. ALL BOXES AND FITTINGS SHALL BE SUPPORTED AND SECURED IN COMPLIANCE WITH N.E.C. ARTICLE 370. ALL FITTINGS AND COUPLERS SHALL BE COMPRESSION TYPE AND WEATHERPROOF. IF VIEWED BY PUBLIC, CONTRACTOR SHALL APPLY 2 COATS OF PAINT TO MATCH SURFACE ATTACHED TO.
17. CONDUIT SHOWN AS EXPOSED ON THE INTERIOR SHALL BE WIREMOLD 800 RUN IN RIGHT ANGLES OR PARALLEL TO FINISHED FLOOR SECURED AND INSTALLED WITH NECESSARY ACCESSORIES FOR COMPLETE INSTALLATION.
18. P.V.C. CONDUIT, WITH CODE SIZED GROUND, SHALL BE USED UNDERGROUND ONLY, IF APPROVED BY LOCAL CODE. INSTALL PER LOCAL CODE REQUIREMENTS. ALL CONDUIT SWEEPS AND RISERS SHALL BE I.M.C. OR RIG. WITH HALF-LAPPED TAPE COVERING OR FACTORY APPLIED PVC COATING. ROUTE UNDERGROUND CONDUITS AROUND PROPOSED BUILDING LOCATIONS.
19. ALL CONDUIT ONLY (C.O.) SHALL HAVE A 3/16" PULL WIRE OR ROPE.
20. EXISTING CONDUIT ONLY TO BE USED SHALL BE CLEANED PRIOR TO INSTALLATION OF NEW CABLES OR CONDUCTORS.

21. USE ONLY COMPETENT AND SKILLED PERSONNEL AND PERFORM ALL WORK, INCLUDING AESTHETIC AS WELL AS ELECTRICAL AND MECHANICAL ASPECTS TO STANDARDS
22. WHERE IT BECOMES NECESSARY TO DRILL INTO OR CUT THROUGH ANY EXISTING FLOORS, WALLS OR CEILINGS TO PERMIT THE INSTALLATION OF ANY WORK UNDER THIS CONTRACT, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR TO THE EXPIRATION OF THE WARRANTY, SUCH CUTTING AND PATCHING SHALL BE PERFORMED BY TRADESMEN EXPERIENCED IN THE WORK REQUIRED. CONTRACTOR SHALL PAY FOR ALL COSTS REQUIRED FOR CUTTING OR REPAIRING. ALL FINISHES SHALL MATCH EXISTING OR NEW ADJACENT SURFACES.
23. CONTRACTOR SHALL EXCAVATE TRENCHES TO A UNIFORM WIDTH AND DEPTH PURSUANT TO THE N.E.C., BUT NOT LESS THAN 36" COVER. CONTRACTOR SHALL REPLACE AND COMPACT ALL EXCAVATIONS IN CONTINUOUS LAYERS OF NOT MORE THAN 6 INCHES COMPACTED DEPTH TO THE SPECIFIED DENSITY OF NINETY PERCENT (90%). CONTRACTOR SHALL MAINTAIN OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO ATTAIN REQUIRED COMPACTION DENSITY.
24. PROVIDE ENGRAVED PLASTIC NAMEPLATES FOR ALL MAJOR PIECES OF EQUIPMENT, AND DISTRIBUTION FEEDERS. PLATES SHALL BE 3 PLY, BLACK FACE, WHITE CORE WITH 1/4" HIGH CONDENSED GOTHIC LETTERING. SCREW-ON ATTACHMENT OR PERMANENT ADHESIVE TAPE ONLY AS MANUFACTURED BY 3M IS PERMITTED.
25. HAND THE OWNER ONE SPARE SET OF EACH SIZE AND TYPE OF FUSE INSTALLED ON THIS PROJECT.
26. PROVIDE THE OWNER WITH ONE (1) SET OF COMPLETE ELECTRICAL "AS-BUILT" REPRODUCIBLE DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DEPTHS OF UNDERGROUND RUNS AND ALL LOCATIONS. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO THE OWNER AT JOB COMPLETION.
27. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
28. WHERE A CONFLICT OCCURS BETWEEN THESE NOTES AND ELECTRICAL SPECIFICATION ISSUED AS A PART OF THESE DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL.
29. CONTRACTOR SHALL REPLACE ALL LANDSCAPE DEVICES AND VEGETATION INCLUDING BUT NOT LIMITED TO IRRIGATION PIPING, SPRINKLERS, GRASS AND ANY VEGETATION REMOVED FOR THE PURPOSE OF INSTALLING OR AS A RESULT OF PROVIDING NEW SPORTS LIGHTING.



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ELECTRICAL (CONSULTANT)
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CONTACT: JOSE SALAZAR, PROJECT ENGINEER

E1.0 GENERAL NOTES & SYMBOLS LIST
E2.0 LIGHT POLE DETAILS
E3.0 DEMOLITION PLAN
E4.0 ELECTRICAL SITE PLAN
E5.0 POWER DISTRIBUTION & CONTROL LOGIC
E6.0 LIGHT DISTRIBUTION PLAN

SHEET INDEX

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Contact Name: JOSE SALAZAR

No. E13883
Exp. 6/30/04
ELECTRICAL

<p>DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG</p> <p style="font-size: 8px;">UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA</p>	<p>VICINITY MAP</p>	<p>CONSULTANTS</p> <p>PREPARED UNDER THE DIRECTION OF</p> <p style="text-align: center;">CITY OF RIVERSIDE 3900 MAIN STREET RIVERSIDE, CA</p> <p>REGISTERED LANDSCAPE ARCHITECT, RLA</p> <p>EXPIRATION DATE _____ DATE _____</p> <p>SCALE: 1"=30'-0" NORTH: </p> <p>DATE: 02/03/03</p>	<p>ELECTRICAL SYMBOLS LIST</p> <p>MARK _____ REVISIONS _____ APPR. DATE _____</p> <p>DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____</p>	<p>GENERAL NOTES</p> <p>CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS</p> <p>APPROVED BY _____ BY DATE _____</p> <p>PRINCIPAL ENGINEER _____</p> <p>PARK DEPARTMENT _____</p> <p>TRAFFIC DIVISION _____</p> <p>CHIEF P.W. ENGR. _____</p> <p>DIRECTOR OF PUBLIC WORKS _____</p> <p>DATE _____</p>	<p>VILLEGAS PARK BUNKER ST. - FIELD IMPROVEMENTS</p> <p>7240 MARGUERITA STREET RIVERSIDE, CA</p> <p>Electrical Plan</p>	<p>PROJECT NO. _____</p> <p style="font-size: 24px; font-weight: bold;">E-10</p> <p>SHEET 1 OF 6</p> <p>FILE NO. _____</p>
	<p>CITY OF RIVERSIDE DEPT. OF PARKS AND RECREATION</p>		<p>APPROVED BY _____ BY DATE _____</p>		<p>PROJECT NO. _____</p>	

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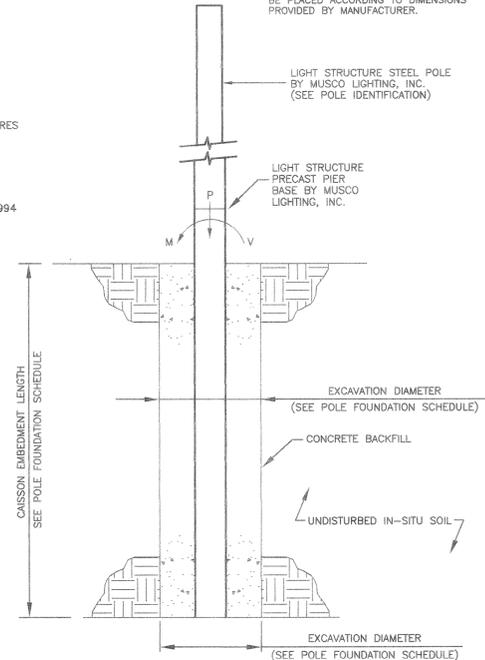
LIGHTING FIXTURE SCHEDULE

DESCRIPTION	LAMPS			VOLTS	MANUFACTURER	CATALOG #	MOUNTING
	NO.	WATTS	TYPE				
SS 302 SECURITY LIGHTING ADJUSTABLE FLOODLIGHT WIDE NEMA BEAM SPREAD, KNUCKLE FITTER TO MOUNT ON SPORTS FIELD POLE.	1	250	HPS	240	DAYRITE	FLM-Y-PCR-BTM-250-S-24-WSF	Ø20'-0" ABOVE GRADE ON SPORTS FIELD POLE
A1 3200 H.L.D. SPORTS LIGHT FIXTURE	2	1500	MH	240	MUSCO	LV-BMZ	PER PLANS
B1 9600 H.L.D. SPORTS LIGHT FIXTURE	6	1500	MH	240	MUSCO	LV-BMZ	PER PLANS
C1 6400 H.L.D. SPORTS LIGHT FIXTURE	4	1500	MH	240	MUSCO	LV-BMZ	PER PLANS

POLE BASE NOTES

- GENERAL**
- ALL CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO THE UNIFORM BUILDING CODE, 1998 EDITION.
 - WIND: 70 MPH (EXPOSURE C)
 - REFERENCE POLE LOCATION DRAWING FOR ACTUAL POLE PLACEMENT AND SITE LOCATION.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION PROCEDURES AND SAFETY CONDITIONS AT THE JOB SITE.
- SOIL DESIGN PARAMETERS**
- ALLOWABLE END BEARING SOIL PRESSURE: 1,000 PSF
ALLOWABLE LATERAL PASSIVE SOIL BEARING PRESSURE: 200 PSF/FT
 - REFERENCE CHAPTER 18, SECTION 1806.7.2.1 AND TABLE 18-1-A OF THE 1994 EDITION OF THE UNIFORM BUILDING CODE.
 - DESIGN SOIL PARAMETERS ARE AS NOTED. ACTUAL ALLOWABLE SOIL PARAMETERS MUST BE VERIFIED ON SITE.
 - A GEOTECHNICAL ENGINEER SHALL BE AVAILABLE AT THE TIME OF THE FOUNDATION INSTALLATION TO VERIFY THE SOIL DESIGN PARAMETERS AND TO PROVIDE ASSISTANCE IF ANY PROBLEMS ARISE IN FOUNDATION INSTALLATION.
 - ENCOUNTERING SOIL FORMATIONS THAT WILL REQUIRE SPECIAL CONSIDERATION OF EXCAVATION PROCEDURES MAY EXIST. POLE FOUNDATIONS MAY NEED TO BE REANALYZED ACCORDING TO THE SOIL CONDITIONS THAT EXIST.
 - IF ANY DISCREPANCIES OR INCONSISTENCIES ARISE, NOTIFY THE ENGINEER OF SUCH DISCREPANCIES. FOUNDATIONS WILL THEN BE REVISED ACCORDINGLY.
 - ALL PIERS AND CONCRETE BACK FILL MUST BEAR ON AND AGAINST FIRM, UNDISTURBED SOIL.
 - ALL EXCAVATIONS MUST BE FREE OF LOOSE SOIL, AND DEBRIS PRIOR TO FOUNDATION INSTALLATION AND PLACEMENT OF CONCRETE BACK FILL. CASING MAY BE REQUIRED IF CAVING OCCURS.
 - ALL EXCAVATIONS MUST BE FREE OF WATER OR CONCRETE SHALL BE PLACED WITH A TREMIE PIPE IN ACCORDANCE WITH ACI STANDARD 304.
- CONCRETE BACK FILL**
- CONCRETE BACK FILL SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 3,000 PSI. SPECIAL INSPECTION IS NOT REQUIRED. (3,000 PSI CONCRETE STRENGTH NOT REQUIRED BY STRUCTURAL DESIGN.)
 - USE TYPE II PORTLAND CEMENT OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
 - MIX IN CONFORMANCE WITH ASTM C-94. (1" MAX AGG. SIZE)
 - AGGREGATES PER ASTM C-33.
 - PLACE CONCRETE IMMEDIATELY AFTER COMPLETION OF EXCAVATION AND INSPECTION BY THE GEOTECHNICAL ENGINEER. NO EXCAVATIONS SHALL BE LEFT UNPROTECTED OR OPEN OVERNIGHT.
 - CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION (NO CONSTRUCTION JOINT) WITH SPECIAL EQUIPMENT WITH A MAXIMUM FREEFALL OF 5 FT. AND TO PREVENT CONCRETE FROM STRIKING THE SIDES OF THE EXCAVATION. VIBRATE TOP 5 FT.
 - CONCRETE BACK FILL SHALL ATTAIN A MINIMUM STRENGTH OF 2,000 PSI PRIOR TO POLE INSTALLATION.
- MISCELLANEOUS**
- FIXTURES MUST BE LOCATED TO MAINTAIN 10'-0" MINIMUM HORIZONTAL CLEARANCE FROM ANY OBSTRUCTION.
 - POLES, FIXTURES, PRE-CAST BASES, ELECTRICAL ITEMS, PLATFORMS, SPECIFICATIONS, AND INSTALLATION PER MUSCO LIGHTING, INC.
 - FIXTURE: EPA = 2.8 WEIGHT = 25 LBS (PER MUSCO LIGHTING, INC.)

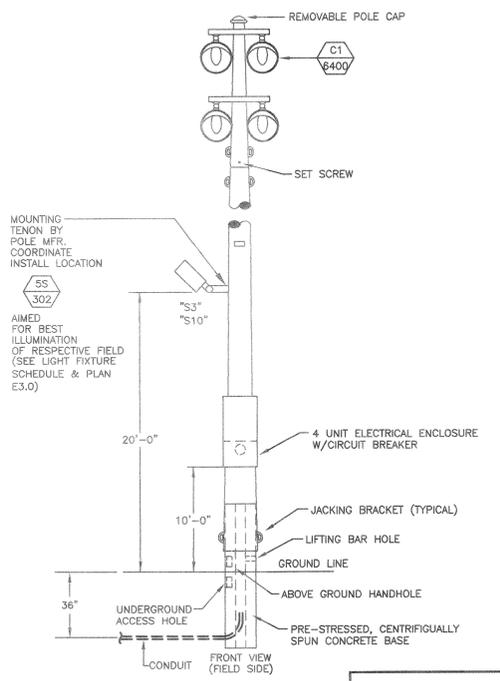
NOTE:
ALL SPORTS LIGHTING STANDARDS SHALL BE PLACED ACCORDING TO DIMENSIONS PROVIDED BY MANUFACTURER.



POLE IDENTIFICATION				
LOCATION MARK	POLE TYPE	PRECAST BASE TYPE	FIXTURE CONFIGURATION	FIXTURE EPA
A1A2	LS60-A	2B	2	5.5
B1B2	LS70-A	3B	6(3+3)	16.8
C1C2	LS60-A	2B	4(2+2)	11.2

POLE FOUNDATION SCHEDULE				
TYPE	FORCES (MAXIMUM)		CAISSON	
	MOMENT (KIP-FT)	SHEAR (KIPS)	VERTICAL (KIPS)	DIAMETER (INCH)
LS60-A	28.12	0.792	1,181	30"
LS70-A	48.29	1.087	1,483	30"

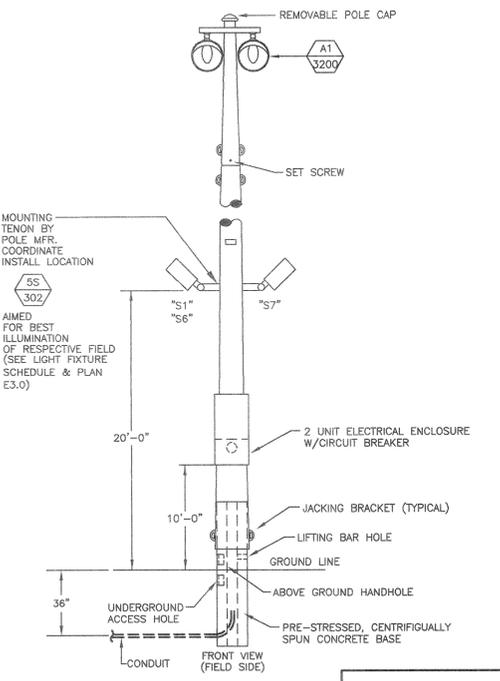
PRECAST BASE TYPE	WEIGHT (LBS)	OVERALL LENGTH	HEIGHT ABOVE GRADE	EMBEDMENT IN CAISSON	OUTSIDE DIAMETER
1B	1,020	15'-2"	7'-2"	8'-0"	9.56"
2B	1,840	17'-3"	7'-3"	10'-0"	12.00"
3B	2,670	20'-0"	8'-0"	12'-0"	13.36"
4B	3,710	22'-0"	8'-0"	14'-0"	15.72"
5B	5,180	23'-11"	7'-11"	16'-0"	18.25"
6B	8,030	28'-1"	8'-1"	18'-0"	20.56"
7B	11,680	27'-10"	7'-10"	20'-0"	23.72"



POLES C1 & C2

LIGHTING FIXTURE DETAIL

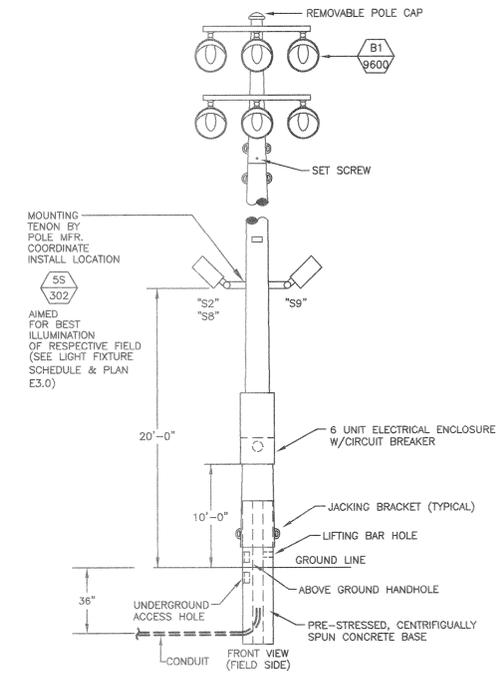
SCALE N.T.S. 3



POLES A1 & A2

LIGHTING FIXTURE DETAIL

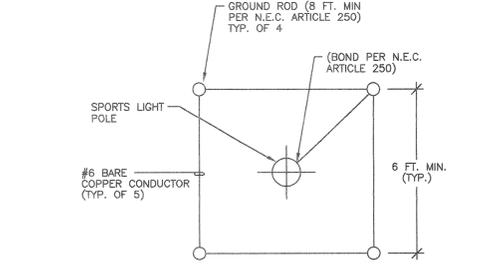
SCALE N.T.S. 1



POLES B1 & B2

LIGHTING FIXTURE DETAIL

SCALE N.T.S. 4



GROUNDING DETAIL FOR POLES: C1, C2, & B2

GROUND RING DETAIL

SCALE N.T.S. 2

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Project Number: 01-750C
Contact Name: JOSE SALAZAR

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AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PREPARED UNDER THE DIRECTION OF
REGISTERED LANDSCAPE ARCHITECT, RLA
EXPIRATION DATE: _____ DATE: _____
SCALE: 1"=30'-0"
DATE: 02/03/03

CITY OF RIVERSIDE
3900 MAIN STREET
RIVERSIDE, CA

BENCHMARK
--
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MARK REVISIONS APPR. DATE
DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: _____ BY: _____ DATE: _____
PRINCIPAL ENGINEER
PARK DEPARTMENT
TRAFFIC DIVISION
CHIEF P.W. ENGR.

APPROVED BY: _____
DIRECTOR OF PUBLIC WORKS
DATE: _____

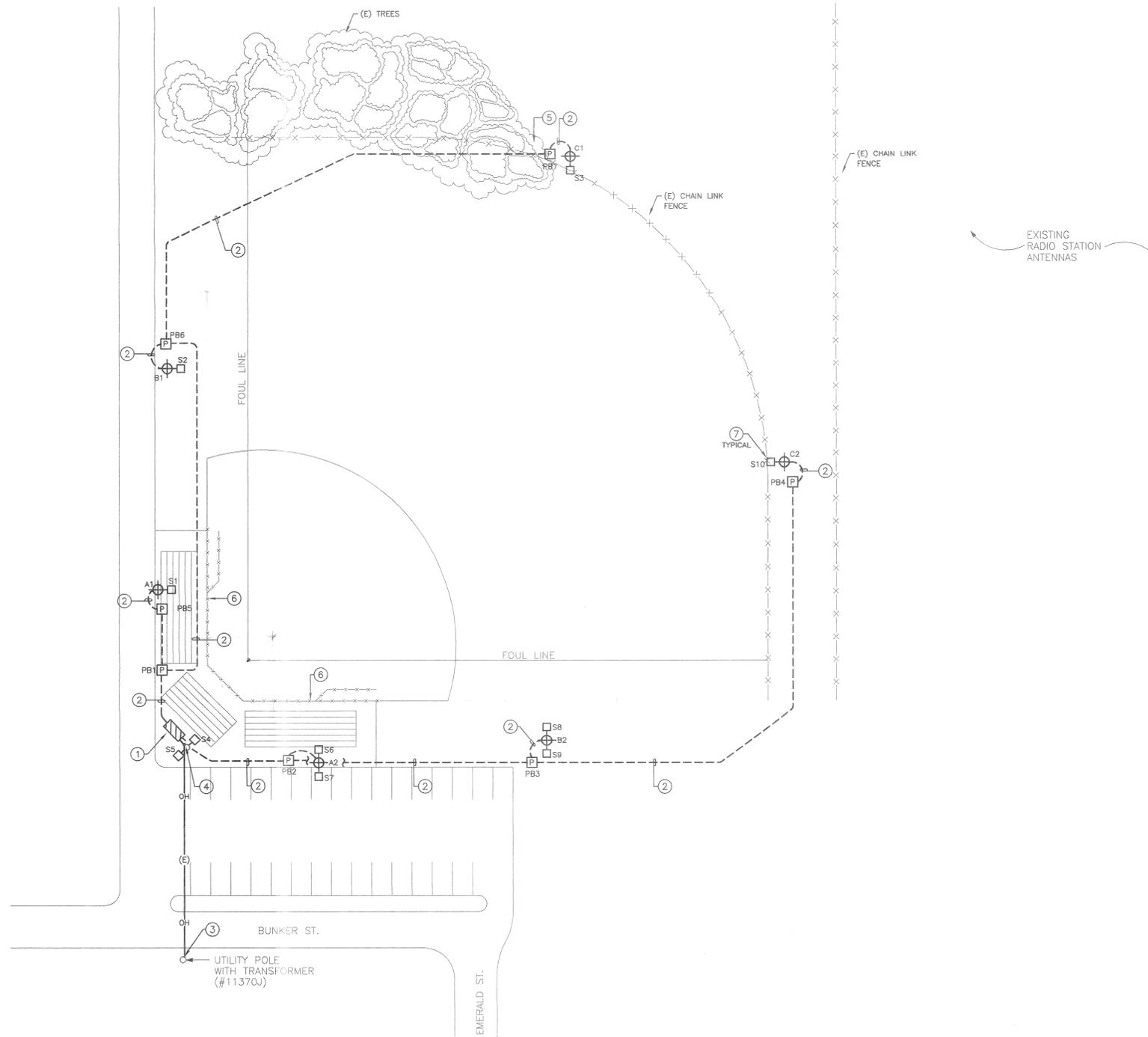
VILLEGAS PARK
BUNKER ST. - FIELD IMPROVEMENTS
7240 MARGUERITA STREET
RIVERSIDE, CA
Electrical Plan

PROJECT NO. -
E-2.0
SHEET 2 OF 6
FILE NO. -

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PLAN NOTES:

- ① NEW MAIN SWITCH BOARD "MSA" AND CONTROL SECTION. SEE SINGLE LINE DIAGRAM.
- ② REFER TO SINGLE LINE DIAGRAM FOR ELECTRICAL CONNECTIONS TO FIELD LIGHTS.
- ③ EXISTING UTILITY POLE WITH POLE MOUNTED TRANSFORMER.
- ④ EXISTING UTILITY POLE TO REMAIN.
- ⑤ ALL TREES WITHIN POLE C1'S PERIMETER MUST BE PROPERLY TRIMMED.
- ⑥ CONTRACTOR SHALL PROVIDE NEW PROTECTIVE NETTING AND ALL NECESSARY EQUIPMENT REQUIRED TO SUPPORT IT PROPERLY.
- ⑦ NEW SECURITY FLOOD LIGHT. REFER TO SYMBOL LIST AND LIGHTING FIXTURE SCHEDULE.



UNDERGROUND PULLBOX SCHEDULE

I.D.	COVER	COVER I.D.
PB1, PB2	CONCRETE COVER	LIGHTING
PB3, PB6	CONCRETE COVER	LIGHTING
PB4, PB5, PB7	CONCRETE COVER	LIGHTING

SCHEDULE NOTES:
 1. UNDERGROUND PULLBOXES SHALL BE BROOKS #38 SERIES, OR APPROVED EQUAL. PROVIDE WITH BOLT-DOWN TRAFFIC RATED COVERS.

ELECTRICAL SITE PLAN

SCALE 1" = 30'-0" 1

JDSAengineers inc.
 3780 Twelfth Street, Suite B
 Riverside, California 92501
 Tel: 951-787-1257 Fax: 951-787-8602
 Project Number: 01-7500
 Contact Name: JOSE SALAZAR

Professional Engineer
 No. E13883
 Exp. 5/30/04
 State of California

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 AT LEAST TWO DAYS
 BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PREPARED UNDER THE DIRECTION OF
 REGISTERED LANDSCAPE ARCHITECT, RLA
 EXPIRATION DATE: _____ DATE: _____
 SCALE: 1"=30'-0" NORTH: _____ BENCHMARK: _____
 DATE: 02/04/03

CITY OF RIVERSIDE
 3900 MAIN STREET
 RIVERSIDE, CA

MARK REVISIONS APRIL DATE
 DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED BY _____ BY DATE _____
 PRINCIPAL ENGINEER
 PARK DEPARTMENT
 TRAFFIC DIVISION
 CHIEF P.W. ENGR.
 APPROVED BY _____
 DIRECTOR OF PUBLIC WORKS
 DATE _____

VILLEGAS PARK
 BUNKER ST. - FIELD IMPROVEMENTS
 7240 MARGUERITA STREET
 RIVERSIDE, CA
 Electrical Plan

PROJECT NO. _____
 SHEET 4 OF 6
 FILE NO. _____

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RD NO.

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548

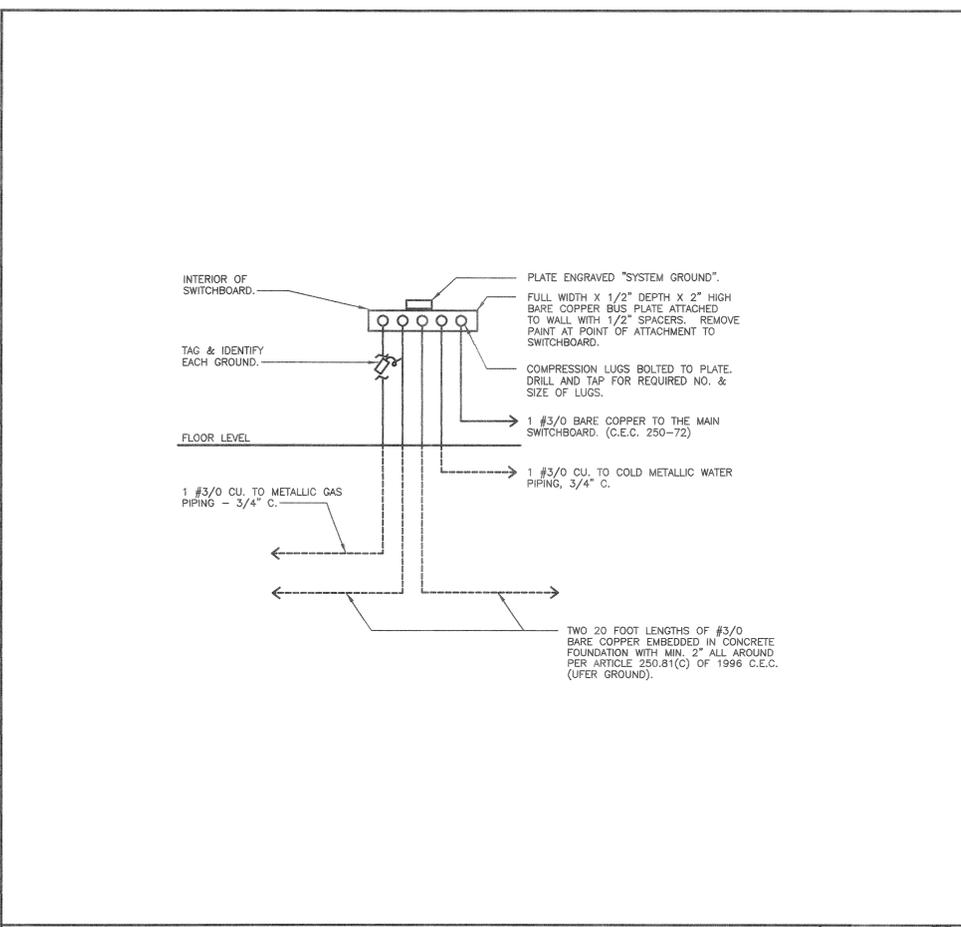
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548

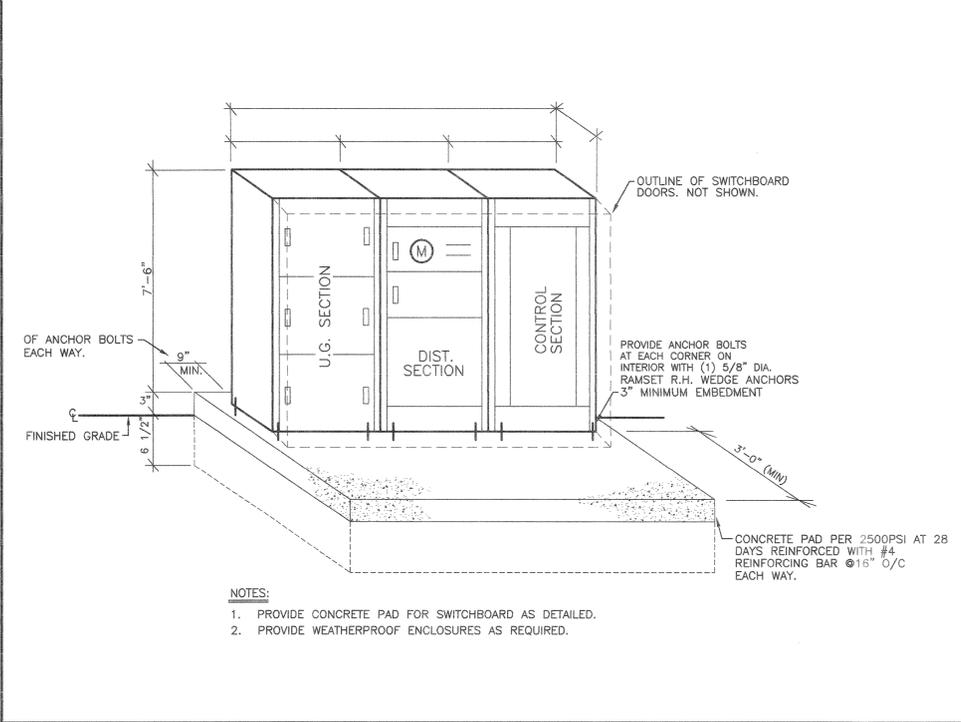
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REORDER BY NUMBER 07548

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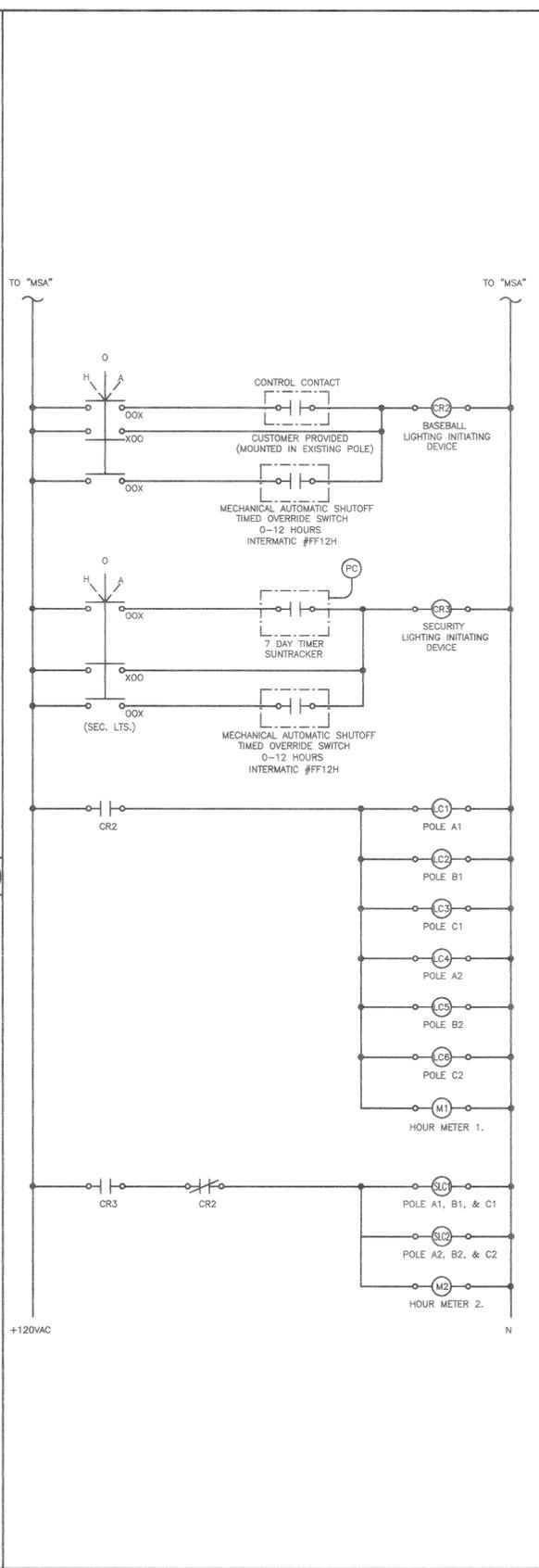


GROUND DETAIL SCALE N.T.S. 3

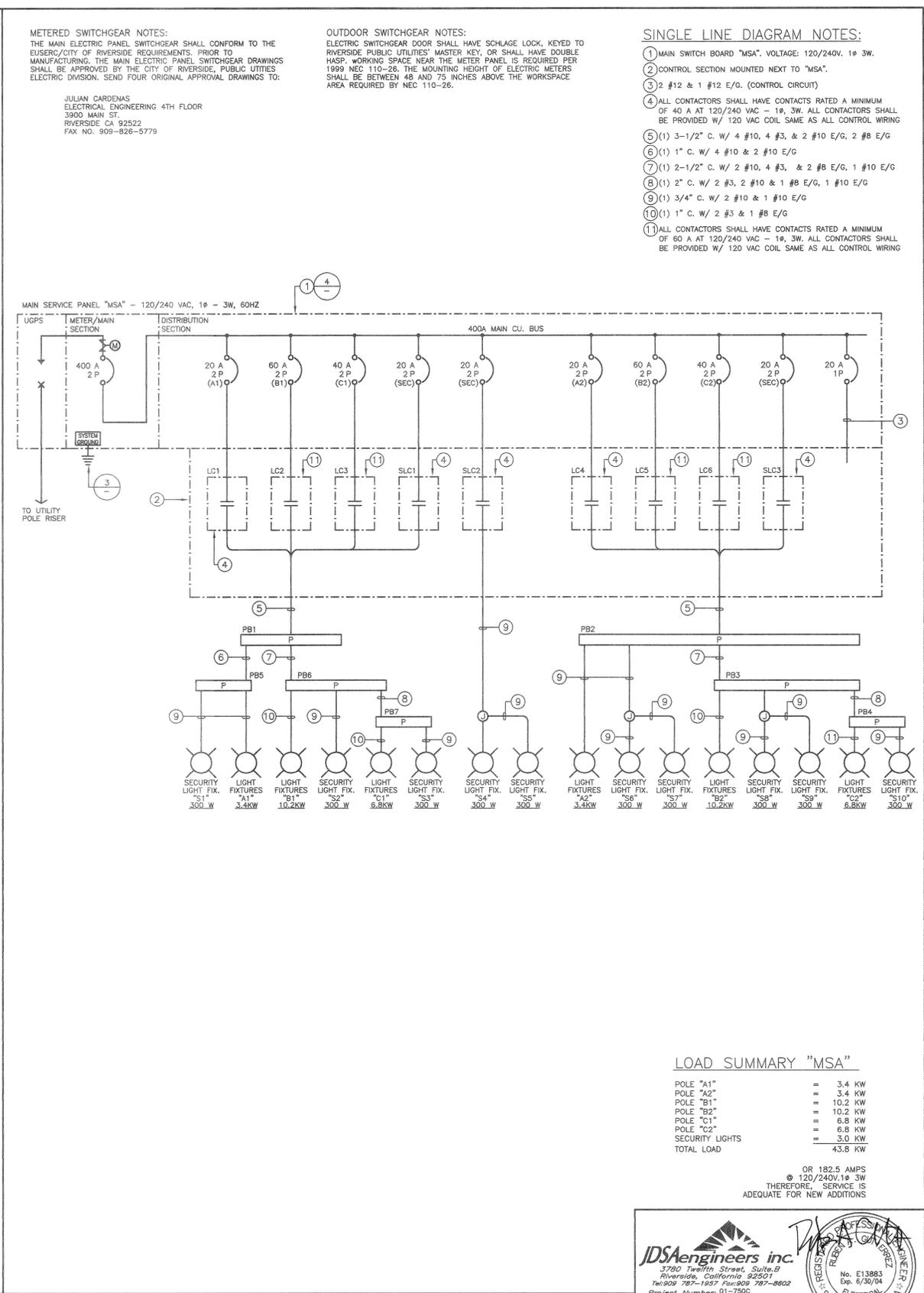


NOTES:
1. PROVIDE CONCRETE PAD FOR SWITCHBOARD AS DETAILED.
2. PROVIDE WEATHERPROOF ENCLOSURES AS REQUIRED.

MAIN SWITCH BOARD DETAIL SCALE N.T.S. 4



CONTROL LOGIC DIAGRAM SCALE N.T.S. 2



SINGLE LINE DIAGRAM SCALE N.T.S. 1



PREPARED UNDER THE DIRECTION OF
REGISTERED LANDSCAPE ARCHITECT, RLA
EXPIRATION DATE: _____ DATE: _____
SCALE: 1"=30'-0" NORTH: _____ BENCHMARK: _____
DATE: 02/04/03

CITY OF RIVERSIDE
3900 MAIN STREET
RIVERSIDE, CA

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: _____ BY: _____ DATE: _____
PRINCIPAL ENGINEER
PARK DEPARTMENT
TRAFFIC DIVISION
CHIEF P.W. ENGR.
DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____

VILLEGAS PARK
BUNKER ST. - FIELD IMPROVEMENTS
7240 MARGUERITA STREET
RIVERSIDE, CA
PROJECT NO. _____
E-5.0
SHEET 5 OF 6
FILE NO. _____
Electrical Plan



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BID NO.

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REORDER BY NUMBER 0754R

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REORDER BY NUMBER 0754R

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REORDER BY NUMBER 0754R

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 0754R

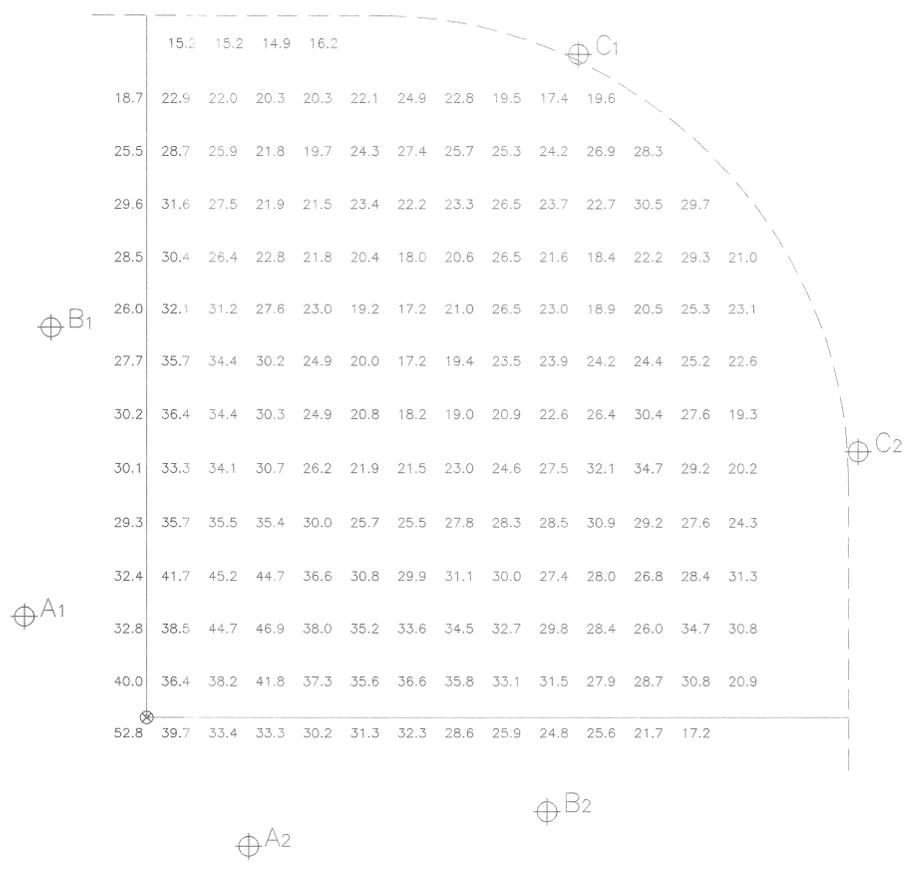
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REORDER BY NUMBER 0754R

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REORDER BY NUMBER 0754R

Fixture Type: LV-8 MZ
Lamp Type: 1500W MZ
Lumens: 155000
File # / Date: 100347r1 / 28-Oct-2002
Prepared By: C Hoy

EQUIPMENT LISTING						
Pole count	Pole Location	Mounting height	Pole size	Elev. /unit	Fixt. /unit	Kilowatt/unit
2	A1-A2	60'	60"	0'	2	3.2
2	B1-B2	70'	70"	0'	6	9.6
2	C1-C2	60'	60"	0'	4	6.4

RIVERSIDE, CA VILLEGAS PARK
258'X310'X266' SOFTBALL FIELD



⊗ Pole location dimensions are relative to 0,0 reference point

INITIAL ILLUMINATION

BASEBALL

HORIZONTAL FOOTCANDLES

ON PLANE AT Z= 3

	Infield	Outfield
Target Points:	25	154
Average:	38.02	25.85
Maximum:	52.78	36.60
Minimum:	29.29	14.93
Avg/Min:	1.298	1.732
Max/Min:	1.802	2.452
UG (Adj) pts:	1.329	1.790
CV:	0.149	0.197
Number of Luminaires:	24	
* KW Consumption:	38.40	
**Average Tilt Factor:	0.974	
***Recoverable Light Loss Factors: x 1.000		
Total Light Loss Factor(LLF)	0.974	

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LIGHT DISTRIBUTION PLAN

SCALE
N.T.S. 1

JDSAengineers inc.
3780 Twelfth Street, Suite B
Riverside, California 92507
Tel: 951-787-1957 Fax: 951-787-8802
Project Number: 01-7500
Contact Name: JOSE SALAZAR

Professional Engineer
No. E13883
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ELECTRICAL
STATE OF CALIFORNIA

<p>PREPARED UNDER THE DIRECTION OF</p> <p>REGISTERED LANDSCAPE ARCHITECT, RLA</p> <p>EXPIRATION DATE _____ DATE _____</p> <p>SCALE: 1"=30'-0"</p> <p>DATE: 02/03/03</p>	<p>NORTH:</p> <p>BENCHMARK</p> <p>---</p> <p>---</p>	<p>CITY OF RIVERSIDE 3900 MAIN STREET RIVERSIDE, CA</p>	<p>CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS</p> <p>APPROVED BY _____ BY DATE _____</p> <p>PRINCIPAL ENGINEER _____</p> <p>PARK DEPARTMENT _____</p> <p>TRAFFIC DIVISION _____</p> <p>CHEF P.W. ENGR. _____</p> <p>DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____</p>	<p>APPROVED BY _____ BY DATE _____</p> <p>DIRECTOR OF PUBLIC WORKS _____</p> <p>DATE _____</p>	<p>PROJECT NO. _____</p> <p>E-6.0</p> <p>SHEET 6 OF 6</p> <p>FILE NO. _____</p>
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VILLEGAS PARK
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