# City of Riverside
# Park and Recreation
## Reid Park Improvements
### 701 N. Orange St.

## GENERAL NOTES

NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHTS-OF-WAY, PUBLIC PROPERTY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT, A STREET OPENING PERMIT, ENCROACHMENT PERMIT AND PUBLIC LANDSCAPE PERMIT AS ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT AND/OR PARK AND RECREATION DEPARTMENT

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE WORK AREA IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY

CONSTRUCTION WITHIN THE RIGHT-OF-WAY 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

CONSTRUCTION ON-SITE SHALL BE PER RARK AND RECREATION DEPARTMENT STANDARDS.

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

QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING ANY REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON

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

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.

## GRADING NOTES

ALL GRADING SHALL CONFORM TO APPENDIX CHAPTER 33, VOL. 1 OF THE CURRENT CITY-ADOPTED EDITION OF THE UNIFORM BUILDING CODE

ALL PROVISIONS OF THE PRELIMINARY SOILS REPORT PREPARED BY C.H.J INC. DATED 6-30-03 SHALL BE COMPLIED WITH DURING GRADING OPERATIONS CITY BUSINESS TAX CERTIF. NO. 004913 EXP. DATE 12-31-04

THE CONTRACTOR IS RESPONSIBLE FOR EROSION, DUST, AND TEMPORARY DRAINAGE CONTROL DURING GRADING OPERATIONS

ANY IMPROVEMENTS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE A SEPARATE CONSTRUCTION PERMIT AND INSPECTION FROM THE PUBLIC WORKS DEPARTMENT

IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ADEQUATE COMPACTION HAS BEEN ATTAINED ON THE ENTIRE GRADING SITE, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES

IT IS THE SOIL ENGINEER'S RESPONSIBILITY TO OBSERVE AND PERFORM COMPACTION TESTING DURING THE GRADING TO EVALUATE THE PREPARATION OF THE NATURAL GROUND SURFACE TO RECEIVE THE FILL AND THE COMPACTION ATTAINED IN THE FILL INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES

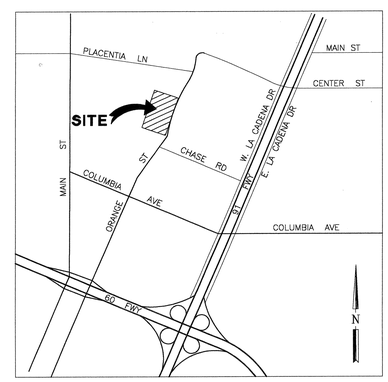
GRADING OPERATIONS SHALL BE LIMITED TO BETWEEN THE HOURS OF 7 A.M. AND 7 P.M. ON WEEKDAYS AND BETWEEN 8 A.M. AND 5 P.M. ON SATURDAYS. NO GRADING WILL BE PERMITTED ON SUNDAY OR FEDERAL HOLIDAYS. (RIVERSIDE MUNICIPAL CODE, 7.35.010, ORDINANCE NO. 6273)

## ENGINEER'S NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CITY OR THE ENGINEER.

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.




VICINITY MAP
N.T.S.

## CONSTRUCTION NOTES

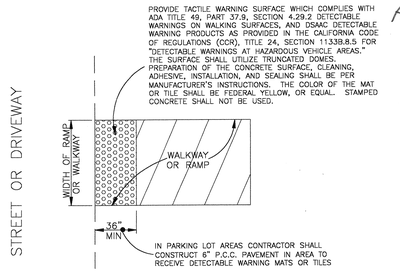
- (A) PROTECT EXISTING AC PAVEMENT
- (B) PROTECT EXISTING CONCRETE
- (C) PROTECT EXISTING CONC. CURB & GUTTER
- (D) PROTECT EXISTING CONC. SIDEWALK
- (E) PROTECT EXISTING FENCE
- (F) PROTECT EXISTING TREE
- (J) PROTECT EXISTING RESTROOM BUILDING

## CONSTRUCTION NOTES

- (1) SAWCUT EXIST. PAVEMENT FOR A CLEAN EDGE
- (2) REMOVE EXIST. AC PAVEMENT
- (4) REMOVE EXIST. CONC. CURB
- (5) REMOVE EXIST. CURB & GUTTER
- (6) REMOVE EXIST. SIDEWALK
- (9) RELOCATE EXIST. PALM TREES, REMOVE EXIST. BROAD LEAF TREES
- (11) SEE ELECTRICAL PLANS FOR EXIST. LIGHT STANDARD NOTES
- (14) REMOVE EXIST. STORM DRAIN
- (17) REMOVE EXISTING HEAD WALL
- (24) RELOCATE EXIST. STORAGE STRUCTURE TO NEW SLAB AS DIRECTED
- (25) CONSTRUCT 6" CONC. CURB PER CITY OF RIVERSIDE STD. NO. 200 (TYPE II)
- (26) CONSTRUCT 6" CURB & GUTTER PER CITY OF RIVERSIDE STD. NO. 200 (TYPE I)
- (29) CONSTRUCT SIDEWALK PER CITY OF RIVERSIDE STD. NO. 325
- (31) CONSTRUCT WHEELCHAIR RAMP PER CITY OF RIVERSIDE STD. NO. 304
- (32) CONSTRUCT WHEELCHAIR RAMP PER CITY OF RIVERSIDE STD. NO. 304 (MODIFIED)
- (34) CONSTRUCT 0.25' AC PAVEMENT OVER 0.40' AGG. BASE (CL 2)
- (36) OVERLAY EXISTING AC PAVEMENT
- (39) STRIPE PARKING LOT AS SHOWN ON PLAN
- (40) INSTALL STOP SIGN PER CITY OF RIVERSIDE STD. NO. 666
- (41) CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STD. NO. 405 (W PER PLAN)
- (42) INSTALL 18" RCP STORM DRAIN
- (44) INSTALL UNDER SIDE WALK DRAIN PER CITY OF RIVERSIDE STD. NO. 410
- (46) CONSTRUCT CROSS GUTTER PER CITY OF RIVERSIDE STD. NO. 220, W=10'
- (47) CONSTRUCT 4" THICK CONC. SWALE – 4' WIDE, 0.3' DEEP
- (48) CONSTRUCT HEADWALL PER CALTRANS STD. D89
- (49) CONSTRUCT 2'X2' DROP INLET BROOKS PRODUCTS NO. 2424 OR EQUAL WITH KRISTAR "FloGard" (OR EQUAL) FILTER INSERT
- (50) INSTALL 15" PVC STORM DRAIN
- (51) INSTALL HC PARKING SIGN & PAVEMENT MARKINGS PER A.D.A. STANDARDS
- (52) INSTALL 8" PVC STORM DRAIN
- (53) INSTALL DETECTABLE WARNINGS (TRUNCATED DOMES) PER DETAIL ON SHEET 1

## LEGEND

- BLOW-OFF
- CLEANOUT
- AREA DRAIN BOX
- FIRE HYDRANT
- MANHOLE
- STREET LIGHT
- WATER VALVE
- POWER / TELEPHONE POLE
- GUY ANCHOR
- —o— WOODEN POST FENCE
- —x— CHAIN LINK FENCE
- BOX
- CONCRETE PAVING
- A.C. PAVING
- CURB AND GUTTER
- —W— WATERLINE
- —S— SEWER LINE
- —SD— STORM DRAIN LINE
- —E— ELECTRICAL CONDUIT
- —G— GAS LINE
- —T— TELEPHONE CONDUIT
- —C— CABLE TELEVISION CONDUIT
- TCB TOP OF CATCH BASIN




DETECTABLE WARNINGS DETAIL
(TRUNCATED DOMES)
N.T.S.

## INDEX OF SHEETS


1. TITLE SHEET
2. REMOVAL PLAN
3. PARKING LOT IMPROVEMENTS PLAN
4.–8. LANDSCAPE & IRRIGATION PLANS } NOT INCLUDED AS PART OF GRADING PLAN
9.–11. ELECTRICAL PLANS } NOT INCLUDED AS PART OF GRADING PLAN


DID NOT AWARD

ADDITIVE BID ITEM

DID NOT AWARD

## ESTIMATE OF EARTHWORK QUANTITIES

| | EXCAVATION C.Y. | EMBANKMENT C.Y. |
|---|---|---|
| RAW QUANTITIES | 2500 | 4000 |
| OVER-EXCAVATION | 0 | 0 |
| SHRINKAGE 15% | 0 | 0 |
| SUBSIDENCE 0.1' | 0 | 0 |
| TOTAL | 0 | 0 |

SITE ACREAGE 1.9 Ac DISTURBED ACREAGE 1.4 Ac

THE ABOVE ARE FOR REFERENCE AND FEE PURPOSES ONLY. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATIONS, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTH-WORK QUANTITIES.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN EARTHWORK QUANTITIES FOR BIDDING, CONTRACT AND CONSTRUCTION PURPOSE. IF IT APPEARS THERE WILL BE AN EXCESS OR SHORTAGE OF MATERIAL, THE CONTRACOR SHALL NOTIFY THE ENGINEER TO DETERMINE IF POSSIBLE GRADE ADJUSTMENTS CAN BE MADE TO ALLEVIATE SAID MATERIAL EXCESS OR SHORTAGE.

## SOILS REPORT

PREPARED BY:
CHJ INC.
1355 E. COOLEY DR
COLTON, CA 92324
(909)824-7210
DATED: JULY 10, 2003
JOB NO. 03508-7

CITY OF RIVERSIDE BUSINESS TAX CERTIFICATE No.60137 EXP. DATE 5-2-06

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

PLANNING DEPARTMENT
APPROVED BY DATE

CITY OF RIVERSIDE – PUBLIC UTILITIES, ELECTRIC
APPROVED BY DATE

### PRIVATE ENGINEERING NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED PROFESSIONAL ENGINEER JOHN R. FRIEDRICH No. C27861 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE: 11-22-05

CITY PROJECT MANAGER:
ALISA SRAMALA, PARK PLANNER
CITY OF RIVERSIDE
3900 MAIN ST.
RIVERSIDE, CA 92522
(909) 826-2024

SCALE: N.T.S.
DATE: 11-2002

GFB-FRIEDRICH & ASSOC., INC.
CONSULTING CIVIL ENGINEERS
6529 RIVERSIDE AVENUE, STE. 230
RIVERSIDE, CA 92506
(951) 781-0811, gfb-jafl@pacbell.net

BENCH MARK: BENCH, J-7-F ELEV. 827.252
PK NAIL @ EC OF CURB RETURN ON SOUTHWEST CORNER OF COLUMBIA AND ORANGE ST.

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY M.M. DRAWN BY C.R.W. CHECKED BY J.A.F.

WDID

CITY OF RIVERSIDE
PARK AND RECREATION

| APPROVED BY | BY | DATE | APPROVED BY |
|---|---|---|---|

DATE

PRECISE GRADING PLAN
SHEET 1 OF 3

REID PARK
PARKING LOT IMPROVEMENTS
TITLE SHEET

FILE NO.
FOR:

PW04-0818
PROJECT NO.
SHEET 1 OF 11

RECEIVED
NOV 02 2005
CITY CLERK'S OFFICE
RIVERSIDE, CA

NAME: REIDTITLE.DWG.DWG DATE: OCT 27, 2005 TIME: 4:38 PM

**BID SET 02-06-06**

## CONSTRUCTION NOTES

1. SAWCUT EXIST. PAVEMENT FOR A CLEAN EDGE
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- (F) PROTECT EXISTING TREE
- (J) PROTECT EXISTING REST ROOM BUILDING

**NOTE:**

CONTRACTOR SHALL SALVAGE ALL IRRIGATION HEADS IMPACTED BY NEW CONSTRUCTION, AND CAP ALL LATERAL LINES TO ENSURE UNINTERRUPTED SCHEDULING OF IRRIGATION.

N

SCALE

20 0 10 20 40

( IN FEET )
1 inch = 20 ft.

ADDITIVE BID ITEM

PLANNING DEPARTMENT

APPROVED BY DATE

CITY OF RIVERSIDE BUSINESS TAX CERTIFICATE No.60137 EXP. DATE 5-2-06

WDID

PRECISE GRADING PLAN
SHEET 2 OF 3

PW04-0818

PROJECT NO. PROJECT_NO.

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

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REGISTERED PROFESSIONAL ENGINEER JOHN A. FRIEDRICH No. C27861 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE: 10-29-05

GFB-FRIEDRICH & ASSOC., INC.
CONSULTING CIVIL ENGINEERS
6529 RIVERSIDE AVENUE, STE. 230
RIVERSIDE, CA 92506
(951) 781-0811, gfb-jaf@pocbell.net

SCALE: 1"=20'
DATE: 4-2003
BENCH MARK: BENCH, J-7-F ELEV. 827.252
PK NAIL @ EC OF CURB RETURN ON SOUTHWEST CORNER OF COLUMBIA AND ORANGE ST.

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY M.M. DRAWN BY G.R.W. CHECKED BY J.A.F.

CITY OF RIVERSIDE
PARK AND RECREATION

APPROVED BY | BY | DATE | APPROVED BY

DATE

REID PARK
REMOVAL PLAN

FOR:

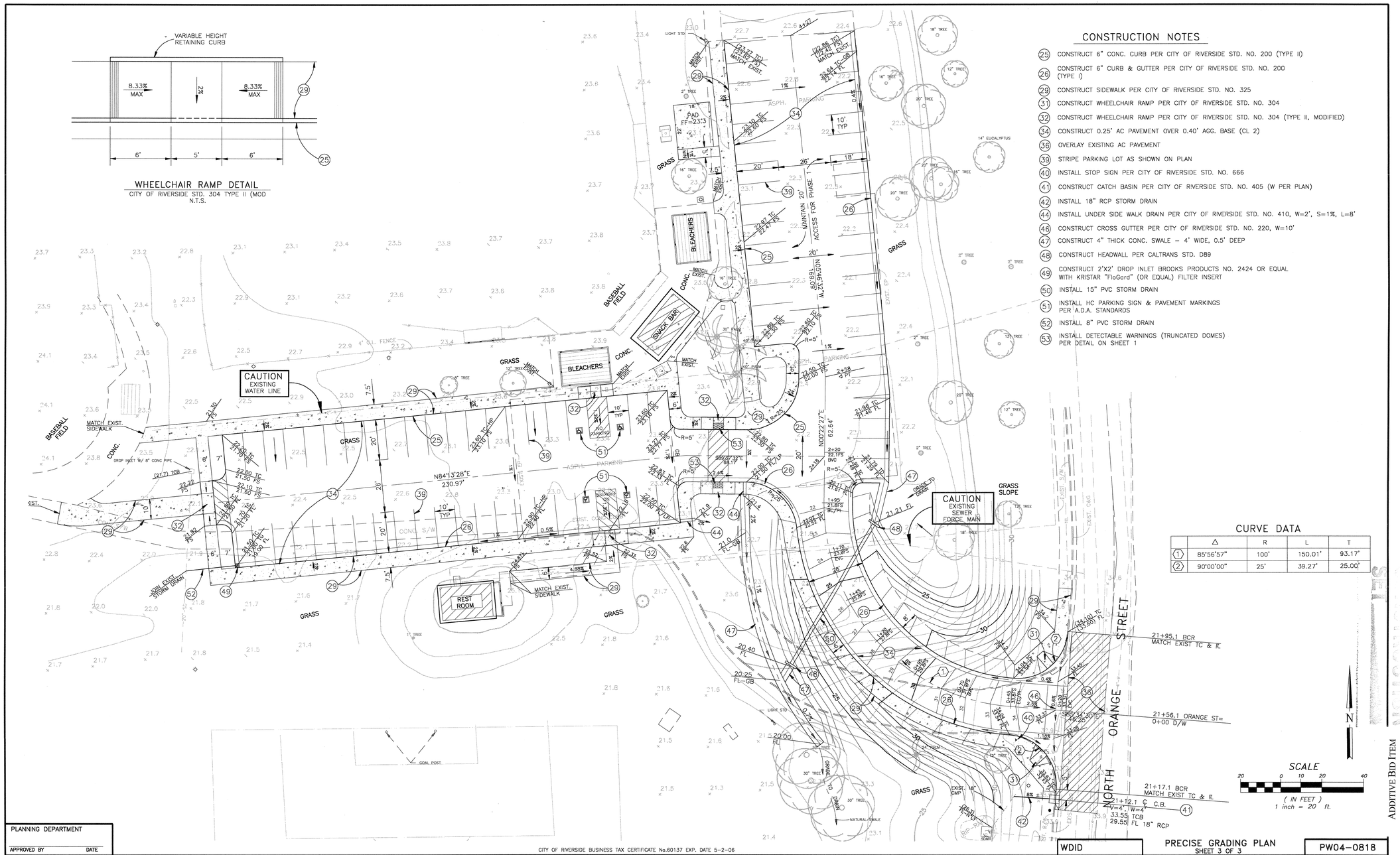
RECEIVED APR 18 2006 PROJECT MANAGEMENT

SHEET 2 OF 11

FILE NO.:

NAME: REIDREMOVAL.DWG DATE: OCT 27, 2005 TIME: 4:42 PM

**BID SET 02-06-06**

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## CURVE DATA

| | Δ | R | L | T |
|---|---|---|---|---|
| 1 | 85°56'57" | 100' | 150.01' | 93.17' |
| 2 | 90°00'00" | 25' | 39.27' | 25.00' |

ADDITIVE BID ITEM

PLANNING DEPARTMENT

APPROVED BY _____ DATE _____

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

**PRIVATE ENGINEERING NOTE**

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REGISTERED PROFESSIONAL ENGINEER
ALBERT A. FRIEDRICH
No. C27861
Exp. 3/31/06
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE: 10-22-05

CITY OF RIVERSIDE BUSINESS TAX CERTIFICATE No.60137 EXP. DATE 5-2-06

GFB-FRIEDRICH & ASSOC., INC.
CONSULTING CIVIL ENGINEERS
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RIVERSIDE, CA 92506
(951) 781-0811, gfb-jaf@pacbell.net

SCALE: 1"=20'
DATE: 11-2002

BENCH MARK: BENCH, J-7-F ELEV. 827.252
PK NAIL @ EC OF CURB RETURN ON SOUTHWEST CORNER OF COLUMBIA AND ORANGE ST.

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY M.M. DRAWN BY G.R.W. CHECKED BY J.A.F.

CITY OF RIVERSIDE
PARK AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| | | |

APPROVED BY _____

DATE _____

WDID

PRECISE GRADING PLAN
SHEET 3 OF 3

REID PARK
PARKING LOT IMPROVEMENTS

FOR:

PW04-0818
PROJECT NO. PROJECT_NO.

SHEET 3 OF 11

FILE NO.:

RECEIVED
APR 13 2006
PARK PLANNING

NAME: REID_PK.DWG.DWG DATE: OCT 27, 2005 TIME: 4:39 PM

**BID SET 02-06-06**

1. BASE INFORMATION INCLUDING THE LOCATION OF PROPERTY LINES, EASEMENTS, BUILDING, ROADS AND CURBS HAVE BEEN TAKEN FROM THE RECORD DRAWINGS. REFER TO THE RECORD CIVIL ENGINEERS DRAWINGS FOR ADDITIONAL INFORMATION.

2. REFER TO THE CIVIL ENGINEERS DRAWINGS FOR UTILITY INFORMATION INCLUDING STORM DRAIN, SEWER, WATER, ELECTRICAL, GAS, TELEPHONE AND CABLE TV.

3. REFER TO THE CITY AND / OR COUNTY STANDARD PLANS AND SPECIFICATIONS AS APPLICABLE.

4. CONTRACTOR TO VERIFY SITE INFORMATION INCLUDING PROPERTY LINES, TOP AND TOE OF SLOPES, ROADWAY CURB AND GUTTERS, UTILITIES AND OTHER INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS.

5. EXCAVATION IN THE VICINITY OF UTILITIES AND EXISTING MATERIALS SHALL BE UNDERTAKEN WITH GREAT CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK. ANY DAMAGE CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL PIPING, CONDUIT, SLEEVES, ETC., SHALL BE SET IN PLACE PRIOR TO INSTALLATION OF CONSTRUCTION ITEMS.

7. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, AREA DISCREPANCIES AND / OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.

8. SEE CIVIL ENGINEER'S DRAWINGS FOR CURBS AND A/C PAVING.

9. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOBSITE AND NOTIFY ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

GENERAL NOTES 04 N.T.S.


L0.1 LEGEND, NOTES AND SCHEDULES

L1.0 IRRIGATION PLAN

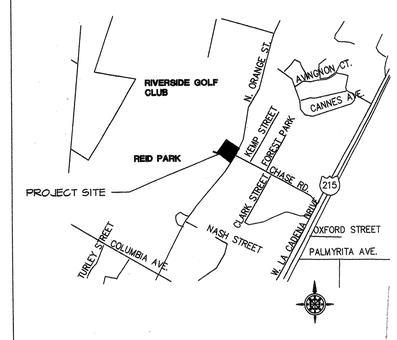
L1.1 IRRIGATION DETAILS

L2.0 PLANTING PLAN

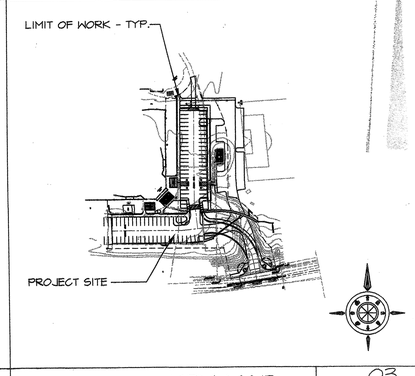
L2.1 PLANTING DETAILS


FOR IRRIGATION AND PLANTING SPECIFICATIONS REFER TO THE SPECIFICATION MANUAL DISTRIBUTED BY THE PARKS AND RECREATION DEPARTMENT SPECIFICALLY FOR THIS PROJECT.

SHEET INDEX 01 N.T.S.




VICINITY MAP 02 N.T.S.




KEY MAP 03 N.T.S.

ADDITIVE BID ITEM

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

PRIVATE ENGINEERING NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED LANDSCAPE ARCHITECT
IAN J. DAVIDSON
No. 2651
Signature
6/30/05
Exp. Date
STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF: DATE

IAN J. DAVIDSON
R.L.A. No. 2651 EXP. DATE: 6/30/03

SCALE: 1"=20'
DATE: 8/9/2004
BENCH MARK:


i.D.L.A.
Ian Davidson, Landscape Architect
3744 TENTH STREET, SUITE 200
RIVERSIDE, CA 92501
909 683 1255 . FAX 909 683 4363
email: idavidson@idlaino.com


| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY C.G. DRAWN BY S.S. CHECKED BY I.J.D.

CITY OF RIVERSIDE
PARK AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY

DATE

REID PARK
LANDSCAPE IMPROVEMENTS
LEGENDS, NOTES AND SCHEDULES

FOR:

PROJECT NO. 14102

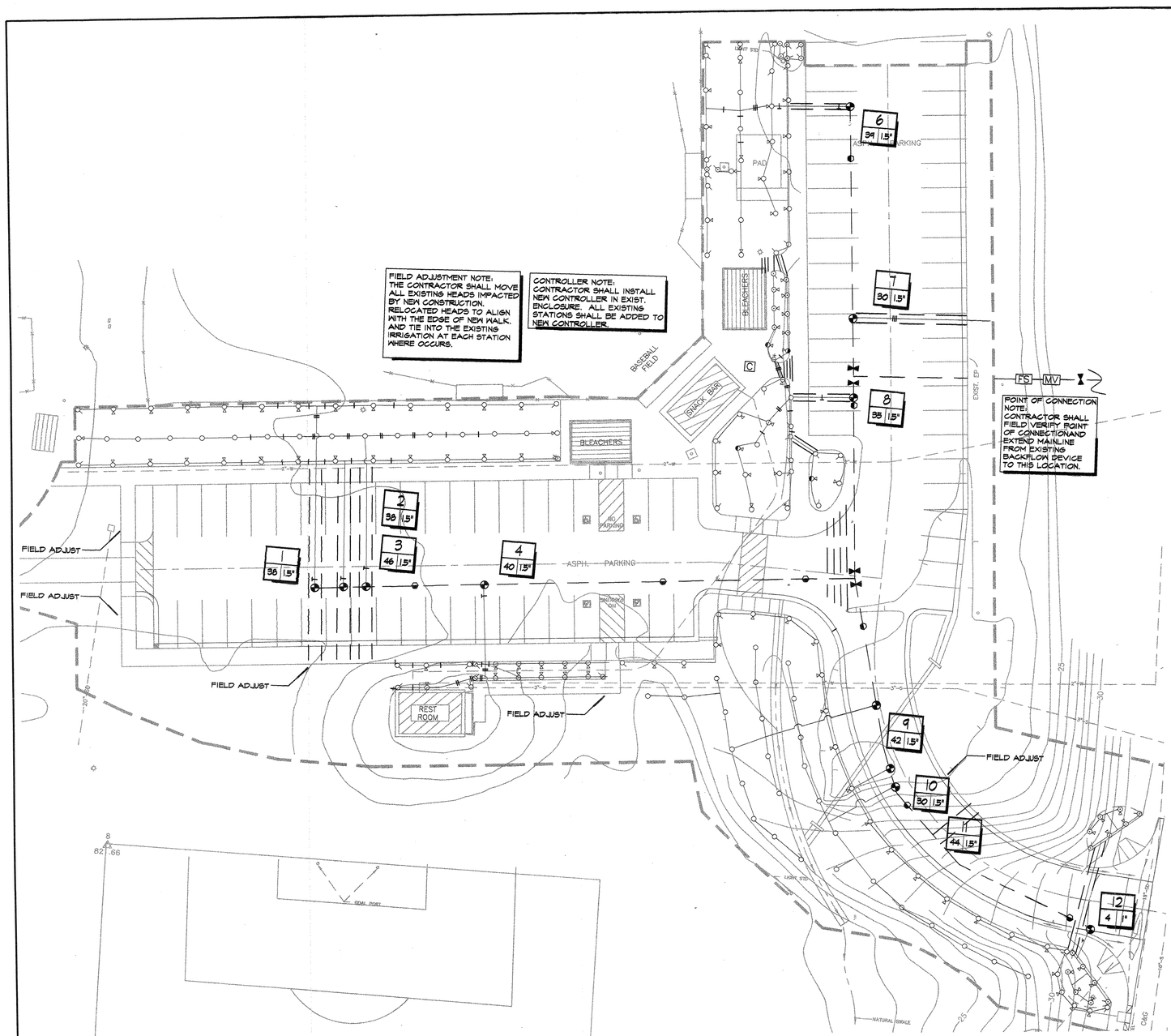
L0.1

SHEET 4 OF 11

FILE NO. 14102CV

DRAFT 8/9/05

BID SET 02-06-06




## SPRINKLER LEGEND

| SYMBOL | MANUFACTURER/MODEL # | NOZZLE | RAD | PSI | FLOW (GPM) Q | T | H | TT | TQ | F | DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TURF POP-UP SPRAY HEADS | | | | | | | | | | | |
| | TORO 570-6P-5 | Q/T/H/F | 5' | 30 | .09 | .12 | .18 | | | .35 | G, L1.2 |
| | TORO 570-6P-8 | Q/T/H/F | 8' | 30 | .22 | .29 | .44 | | | .85 | G, L1.2 |
| | TORO 570-6P-8 | 8-VAN | 8' | 30 | VARIABLE | | | | | | G, L1.2 |
| | TORO 570-6P-10 | Q/T/H/F | 10' | 30 | .33 | .44 | .66 | | | 1.3 | G, L1.2 |
| | TORO 570-6P-10 | 10-VAN | 10' | 30 | VARIABLE | | | | | | G, L1.2 |
| | TORO 570-6P-12 | Q/T/H/TT/TQ/F | 12' | 30 | .48 | .64 | .96 | 1.3 | 1.4 | 1.9 | G, L1.2 |
| | TORO 570-6P-12 | 12-VAN | 12' | 30 | VARIABLE | | | | | | G, L1.2 |
| | TORO 570-6P-15 | Q/T/H/TT/TQ/F | 15' | 30 | .75 | 1.0 | 1.5 | 2.0 | 2.3 | 3.0 | G, L1.2 |
| | TORO 570-6P-15 | 15-VAN | 15' | 30 | VARIABLE | | | | | | G, L1.2 |
| SHRUB HI-POP SPRAY / BUBBLER HEADS | | | | | | | | | | | |
| | TORO 570Z-12P-5 | Q/T/H/F | 5' | 30 | .09 | .12 | .18 | | | .35 | G, L1.2 |
| | TORO 570Z-12P-8 | Q/T/H/F | 8' | 30 | .22 | .29 | .44 | | | .85 | G, L1.2 |
| | TORO 570Z-12P-8 | 8-VAN | 8' | 30 | VARIABLE | | | | | | G, L1.2 |
| | TORO 570Z-12P-10 | Q/T/H/F | 10' | 30 | .33 | .44 | .66 | | | 1.3 | G, L1.2 |
| | TORO 570Z-12P-10 | 10-VAN | 10' | 30 | VARIABLE | | | | | | G, L1.2 |
| | TORO 570Z-12P-12 | Q/T/H/TT/TQ/F | 12' | 30 | .48 | .64 | .96 | 1.3 | 1.4 | 1.9 | G, L1.2 |
| | TORO 570Z-12P-12 | 12-VAN | 12' | 30 | VARIABLE | | | | | | G, L1.2 |
| | TORO 570Z-12P-15 | Q/T/H/TT/TQ/F | 15' | 30 | .75 | 1.0 | 1.5 | 2.0 | 2.3 | 3.0 | G, L1.2 |

## EQUIPMENT LEGEND

| SYMBOL | MANUFACTURER/MODEL # | SIZE | DETAIL |
|---|---|---|---|
| C | CALSENSE ET2000 48-R-RR-SSER | 48 STA. | A, L1.2 |
| M | IRRIGATION WATER METER -EXISTING | 2" | |
| | BACKFLOW PREVENTER-EXISTING | 2" | |
| MV | SUPERIOR MODEL 3100 NORMALLY OPEN MASTER CONTROL VALVE | 1 1/2" | D, L1.2 |
| FS | DATA INDUSTRIAL FM 1.5 FLOW SENSOR | 1 1/2" | |
| | BALL VALVE | LINE SIZE | I, L1.2 |
| | TORO 474-08 QUICK COUPLING VALVE WITH LOCKING VINYL COVER | 1" | C, L1.2 |
| | TORO P-220-27 PRESSURE REGULATING CONTROL VALVE | PLAN SIZE | D, L1.2 |
| | SCH 40 PVC IRRIGATION PRESSURE MAINLINE - 18" MINIMUM COVER | 2" | F, L1.2 |
| | CLASS 200 PVC NON-PRESSURE LATERAL LINE - 12" MINIMUM COVER | PLAN SIZE | F, L1.2 |
| | SCH 40 PVC IRRIGATION PIPE/CONTROL WIRE SLEEVE - 18" MINIMUM COVER | PER SPECS | E, L1.2 |
| Not Shown | UF DIRECT BURIAL CONTROL WIRE WITH WATERPROOF CONNECTIONS | 14 GA | |

## PIPE SIZING CHART

| | |
|---|---|
| | 3/4" PIPE |
| | 1" PIPE |
| | 1 1/4" PIPE |
| | 1 1/2" PIPE |
| | 2" PIPE |
| | 2 1/2" PIPE |
| | 3" PIPE |
| | 4" PIPE |
| | 6" PIPE |
| | 8" PIPE |

## SCH 40 PVC SLEEVING CHART

| | | |
|---|---|---|
| 1 1/4" SLEEVE | 1-4 WIRES | 1/2" PIPE |
| 1 1/2" SLEEVE | 5-10 WIRES | 3/4" PIPE |
| 2" SLEEVE | 11-20 WIRES | 1" PIPE |
| 2 1/2" SLEEVE | 21-30 WIRES | 1 1/4" PIPE |
| 3" SLEEVE | 31-40 WIRES | 1 1/2" PIPE |
| 4" SLEEVE | 41-60 WIRES | 2" PIPE |
| 6" SLEEVE | 61-99 WIRES | 3" PIPE |
| 8" SLEEVE | 100+ WIRES | 4" PIPE |
| 10" SLEEVE | N/A | 6" PIPE |

## STATION # / CONTROLLER

| FLOW (GPM) | VALVE SIZE |
|---|---|

N

40' 30' 20' 10' 0 20' 40'

SCALE 1"=20'

ADDITIVE BID ITEM

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

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REGISTERED LANDSCAPE ARCHITECT
IAN DAVIDSON 2651
Signature
6/30/03
Exp. Date
STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF: DATE
IAN J. DAVIDSON
R.L.A. No. 2651 EXP. DATE: 6/30/03


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DESIGNED BY C.G. DRAWN BY S.S. CHECKED BY I.J.D.

CITY OF RIVERSIDE
PARK AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY
DATE

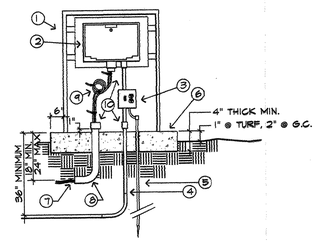
REID PARK
LANDSCAPE IMPROVEMENTS
IRRIGATION PLAN

FOR:

RECEIVED
JUN 16 2003
PARK DEPARTMENT

PROJECT NO. 14102
L1.0
SHEET 5 OF 11
FILE NO. 14102IR

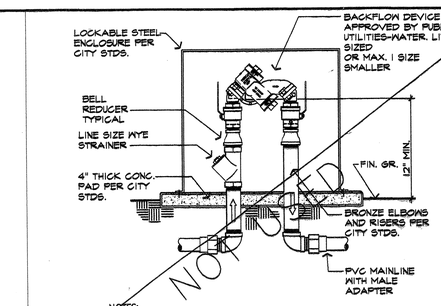
**BID SET 02-06-06**




CONSTRUCTION NOTES:

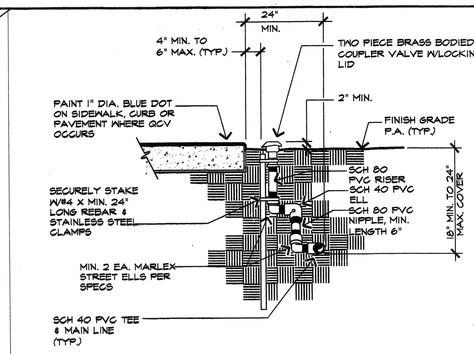
1. STRONG BOX STAINLESS STEEL ENCLOSURE, MODEL SIZED TO FIT CONTROLLER, WITH SERVICE ADDRESS STENCILED ON LOCKING HINGED DOOR. SECURELY ANCHOR ENCLOSURE TO CONCRETE PAD.
2. WEATHER PROOF AUTOMATIC CONTROLLER, SECURELY WALL MOUNTED TO ENCLOSURE.
3. SQUARE D BREAKER BOX MODEL QO2-4L70S, OR APPROVED EQUAL WITH SINGLE 15 AMP BREAKER AND DUPLEX OUTLET. MAKE 120 V POWER AND GROUND CONNECTION AT BREAKER BOX. MOUNT IN ENCLSOURE.
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. 90° WRAPPED HDG SWEEP ELL, SIZED TO FIT WIRE FOR NUMBER OF STATIONS ON THE CONTROLLER, PLUS SPARES AND COMMON.
9. THREE FOOT 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. PROVIDE INSULATING ELECTRICAL BUSHINGS AT CONTROLLER AND END OF CONDUITS.

A Controller

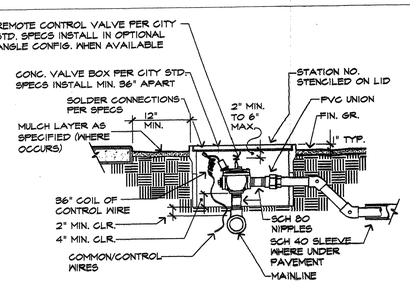



NOTES:
1) INSTALL BACKFLOW DEVICE SQUARE WITH HARDSCAPE ELEMENTS AS APPROVED BY THE PARK PROJECTS INSPECTOR IN THE FIELD.
2) COORDINATE WITH PUBLIC UTILITIES-WATER FOR LOCATION OF B ACKFLOW AND WATER SERVICE. WHEREVER POSSIBLE, LOCATE SERVICE A B ACKFLOW IN THE PARKWAY AT MID-BLOCK A MINIMUM OF 150' FROM THE BCR AT THE NEAREST INTERSECTION PER CITY STANDARDS.

B Backflow device

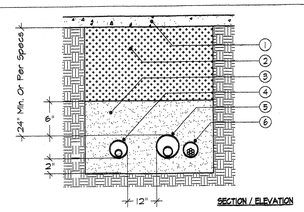



C Quick coupler




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 BOX DOES NOT REST ON ANY IRRIGATION LINES.
4) PROVIDE STAMPED BRASS TAG 1/2" BY 1" W/ 1/4" HIGH SEQUENCE NUMBER ON ALL CONTROL WIRES.
5) WHERE PIPE DEPTH MUST CHANGE IN LESS THAN 10' HORIZONTAL DISTANCE, USE 45 DEGREE ELBOWS,

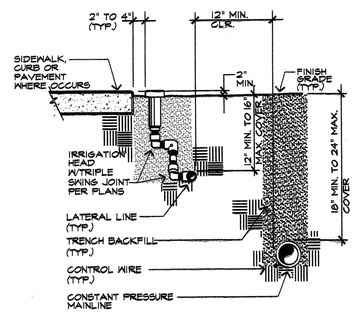
D Control valve & Master valve



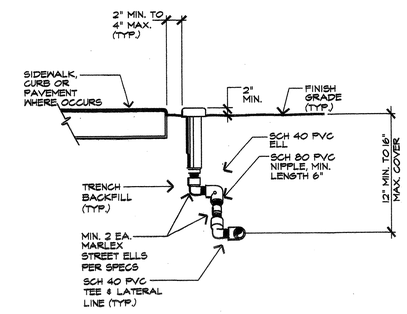

1. HARDSCAPE (TYP)
2. CLEAN BACKFILL - 90% COMPACTION REQUIRED - SEE SPECS
3. SAND (TYP)
4. NON-PRESSURE LATERAL LINE / SLEEVE (SIZE PER CHART)
5. PRESSURE MAINLINE / SLEEVE (SIZE PER CHART)
6. CONTROL WIRE SLEEVE ADJACENT TO MAINLINE SLEEVE (SIZE PER CHART)

Notes:
All sleeves to be SCH 40 PVC. Size all sleeves per sleeving chart on plans. Extend sleeves 12" beyond edge of hardscape on both ends. Reclaimed water sleeves to be minimum 42"-48" deep (or per Water District Standards where applicable).

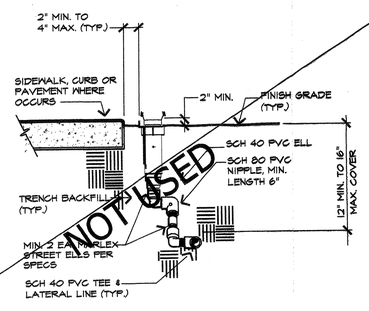
E Sleeving



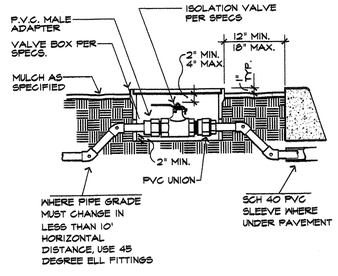

F Trenching




G Spray heads




H Rotor head




I Ball valve

CONSTRUCTION SET

ADDITIVE BID ITEM

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

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REGISTERED LANDSCAPE ARCHITECT — IAN J. DAVIDSON — Signature — 6/30/05 Exp. Date — STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF: DATE
IAN J. DAVIDSON
R.L.A. No. 2651 EXP. DATE: 6/30/03


i.D.L.A.
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909 682 1888 : FAX 909 682 4958
email: idavidson@idlaino.com


SCALE: 1"=20'
DATE: 8/9/2004
BENCH MARK:

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY C.G. DRAWN BY S.S. CHECKED BY I.J.D.

CITY OF RIVERSIDE
PARK AND RECREATION

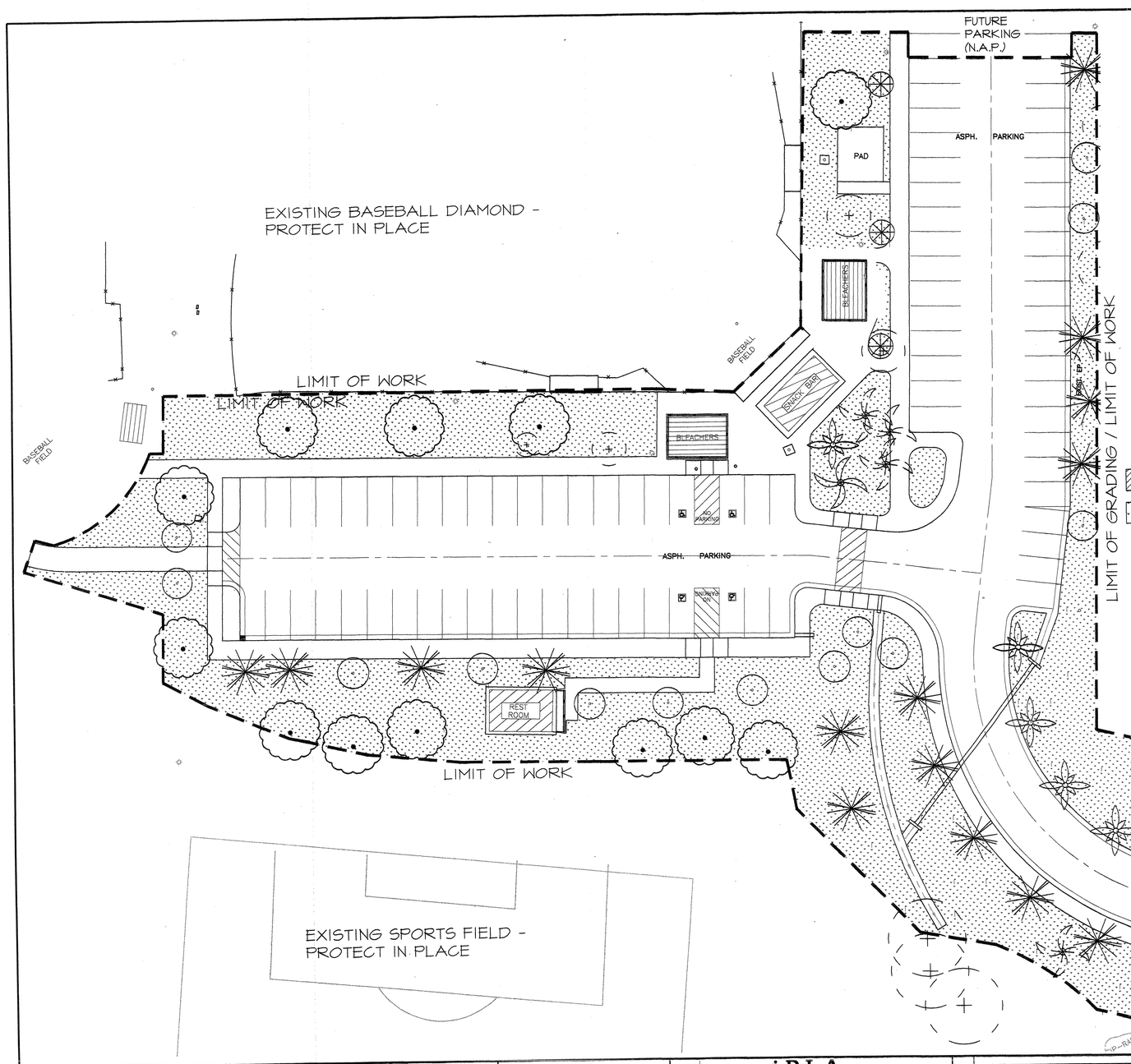
| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY
DATE

REID PARK
LANDSCAPE IMPROVEMENTS
IRRIGATION DETAILS
FOR:

PROJECT NO. 14102
L1.1
SHEET 6 OF 11
FILE NO. 14102ID

BID SET 02-06-06




## PLANTING LEGEND

| SYMBOL | KEY | BOTANICAL NAME / COMMON NAME | SIZE | SPACING | COMMENTS |
|---|---|---|---|---|---|
| | | TREES | | | |
| | T1 | EXISTING TREE - PROTECT IN PLACE. | -- | -- | -- |
| | T2 | EXISTING PALM TREE - PROTECT IN PLACE (RELOCATE EXISTING PALM - REFER TO PARKS AND RECREATION SPECIFICATIONS) | -- | -- | -- |
| | T3 | WASHINGTONIA ROBUSTA / MEXICAN FAN PALM | 18' B.T.H. | PER PLAN | MATCH EXIST. |
| | T4 | PINUS HALEPENSIS BRUTIA / CALABRIAN PINE | 24" BOX | PER PLAN | STD. |
| | T5 | CERCIS CANDANDENSIS 'FOREST PANSY' / EASTERN REDBUD | 24" BOX | PER PLAN | STD. |
| | T6 | GINGKO BILOBA / MAIDEN HAIR TREE | 24" BOX | PER PLAN | STD.-MALE ONLY |
| | T7 | PLATANUS ACERIFOLIA 'BLOODGOOD' / LONDON PLANE TREE | 24" BOX | PER PLAN | STD. |
| | | SHRUBS | | | |
| | S1 | HEMEROCALLIS HYB. 'RED BARON / DEEP RED DAYLILY | 1 GAL. | PER PLAN | TRI-SPACE |
| | | GROUNDCOVERS | | | |
| | G1 | VINCA MAJOR / PERIWINKLE | FLATS | 12" O.C. | TRI-SPACE |
| | G2 | TURF / SEED - SEE SPECIFIED SEED MIX IN PARK AND RECREATION STANDARD SPECIFICIATIONS. | | | |

NOTES:

1. REFER TO SPECIFICATION PER PARKS AND RECREATION FOR SOURCE OF TURF SEED MIX.

2. BARK MULCH UNDER ALL NON-TURF AREAS ON SLOPES LESS THAN 2:1. SEE NOTE 17, SHEET L-.-.

3. QUANTITIES ARE FOR CONVENIENCE ONLY. CONTRACTOR IS STILL RESPONSIBILE TO INSTALL ALL PLANTING AS INDICATED ON THE PLANTING PLAN.

NOT FOR CONSTRUCTION

SET

ADDITIVE BID ITEM

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

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DESIGNED BY C.G. DRAWN BY S.S. CHECKED BY I.J.D.

CITY OF RIVERSIDE
PARK AND RECREATION

| APPROVED BY | BY | DATE |
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| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY
DATE

FOR:

REID PARK
LANDSCAPE IMPROVEMENTS
PLANTING PLAN

PROJECT NO. 14102
L2.0
SHEET 7 OF
FILE NO. 14102PP

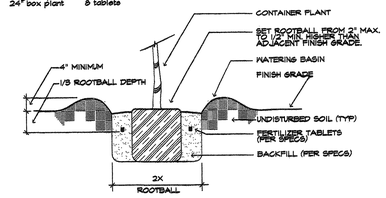
REVIEWED
APR 5 2006
A. MALAMPHOUN

**BID SET 02-06-06**

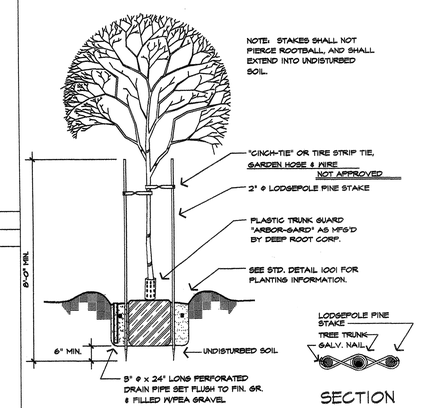
## GENERAL PLANTING NOTES

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 guying 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 |




SHRUB PLANTING 04 N.T.S.

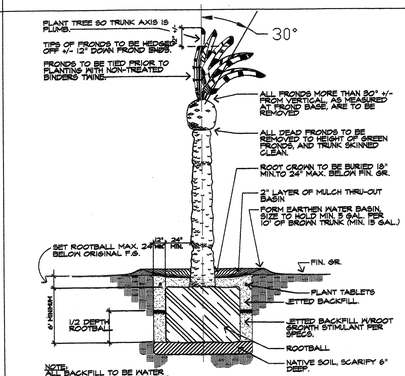



NOTE: SEE DETAIL 03 / THIS SHEET FOR TREE GUARD INSTALLATION.
NOTE: SEE DETAIL 06/ THIS SHEET FOR ROOT BARRIER INSTALLATION.

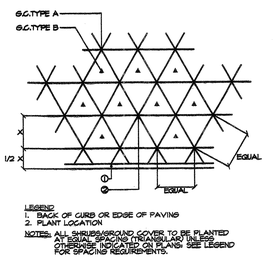
DOUBLE STAKE 02 N.T.S.

1. CONTRACTOR IS TO COMPLY WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS PERTAINING TO THE INSPECTION OF PLANT MATERIALS FOR DISEASES AND INSECT INFESTATION.
2. FOR TREE STAKING AND SHRUB PLANTING REQUIREMENTS REFER TO THE WORKING DRAWINGS AND SPECIFICATIONS.
3. LANDSCAPE ARCHITECT SHALL APPROVE ALL PLANT MATERIALS FOR CONFORMANCE TO THE PLANS AND SITE CONDITIONS AND THE FINAL PLACEMENT OF THE PLANT MATERIAL PRIOR TO INSTALLATION. CONTACT LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO DIGGING PLANT PITS.
4. CONTRACTOR SHALL CAULK OUT INTENDED TREE LOCATIONS FOR ALL TREES OF 15 GALLON SIZE AND LARGER, AND CONTACT LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO DIGGING PLANT PITS.
5. ALL TREES SHALL BE EQUAL TO, OR SURPASS "VALLEY CREST" STANDARDS FOR SIZE AND QUALITY.
6. ALL SHRUBS SHALL BE EQUAL TO, OR SURPASS "HINES" STANDARDS FOR SIZE AND QUALITY.
7. CONTRACTOR SHALL USE NURSERY TAGS TO VERIFY ALL PLANT MATERIAL SPECIES, VARIETY AND SIZE IN ACCORDANCE WITH THE PLANTING PLAN AND WITH THE AMERICAN ASSOCIATION OF NURSERYMEN "STANDARD OF PRACTICE."
8. PLANT MATERIAL SHALL BE HEALTHY, WELL-DEVELOPED AND REPRESENTATIVE OF THEIR SPECIES AND VARIETIES. MATERIALS SHALL BE FREE FROM DISFIGUREMENTS, AND HAVE WELL-DEVELOPED BRANCH STRUCTURE AND ROOT SYSTEMS. CONTRACTOR TO COMPLY WITH THE FOLLOWING CONDITIONS:
   - A. DO NOT PRUNE ANY PLANT MATERIALS PRIOR TO DELIVERY WITHOUT SPECIFIC APPROVAL FROM THE LANDSCAPE ARCHITECT.
   - B. PLANTS ARE SUBJECT TO INSPECTION FOR SIZE, SPECIES, VARIETY, CONDITION LATENT DEFECTS, AND INJURY PRIOR TO DELIVERY TO THE PROJECT SITE AND AT ANY TIME DURING THE COURSE OF CONSTRUCTION.
   - C. MATERIAL DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT WILL NOT BE DELIVERED TO THE PROJECT SITE OR WILL IMMEDIATELY BE REMOVED FROM THE SITE IF ALREADY DELIVERED.
   - D. CONTRACTOR SHALL BE PREPARED TO SHOW THAT PLANT MATERIAL IS NOT ROOT BOUND TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.
9. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO TAG ALL PLANT MATERIALS AT THE NURSERY OF HIS CHOICE FOR USE ON THE PROJECT.
9. SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT THE LANDSCAPE ARCHITECT'S PRIOR WRITTEN APPROVAL.
10. IF A SPECIFIED PLANT SPECIES OR VARIETY IS NOT OBTAINABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL TO THE LANDSCAPE ARCHITECT FOR CONSIDERATION TO PROVIDE THE NEAREST EQUIVALENT SIZE OR VARIETY.
11. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE TO THE OWNER THAT ALL PLANT MATERIAL WILL GROW IN A VIGOROUS AND HEALTHY MANNER FOR THE FOLLOWING PERIODS OF TIME:
   - A. LESS THAN 5 GALLON SIZE: 60 DAYS.
   - B. 5 GALLON TO 15 GALLON SIZE: 180 DAYS.
   - C. 15 GALLON AND LARGER (INCLUDING ALL PALM TREES): 1 YEAR.
12. THE GUARANTEE FOR EACH PERIOD SHALL BEGIN ON THE DATE OF FINAL ACCEPTANCE OF THE PROJECT AFTER THE SUCCESSFUL COMPLETION OF THE SPECIFIED MAINTENANCE PERIOD.
13. CONTRACTOR SHALL REPLACE ALL DEAD, DYING OR UNHEALTHY PLANTS DURING THE GUARANTEE PERIOD.
14. REPLACEMENT PLANTS SHALL MATCH THE ORIGINAL IN SPECIES, VARIETY SIZE AND CHARACTER.
15. THE CONTRACTOR SHALL KILL AND/OR REMOVE ALL EXISTING WEEDS FROM THE SITE PRIOR TO THE START OF CONSTRUCTION. TREAT SOIL IN ALL AREAS SCHEDULED FOR PLANTING, SEEDING, OR TO RECEIVE INERT GROUNDCOVER MATERIALS WITH A PRE-EMERGENT HERBICIDE AS RECOMMENDED AND APPLIED BY A LICENSED PEST CONTROL SPECIALIST. REAPPLY PRE-EMERGENT AFTER ROOTED GROUNDCOVERS HAVE BEEN PLANTED.
16. ALL TREES SHALL BE PLANTED A MINIMUM OF 2' FROM ALL PAVING, WALLS, BUILDINGS, MOWCURBS, HEADERS, TURF EDGE, ETC., UNLESS OTHERWISE NOTED ON PLANS.
17. ALL LANDSCAPE PLANTERS, GROUNDCOVER AND NEW SHRUB AREAS ARE BE MULCHED AT THE CONCLUSION OF PLANTING OPERATION. 1" DEEP LAYER IN AREAS OF GROUNDCOVER, 2" DEEP LAYER IN ALL SHRUB AREAS (CONTINUOUS).
18. SOIL PREPARATION AND BACKFILL RECOMMENDATIONS CONTAINED WITHIN THE SPECIFICATIONS OR CONSTRUCTION DRAWINGS OR DETAILS ARE FOR BID PURPOSES ONLY. FINAL SOIL RECOMMENDATION FROM AN APPROVED AGRICULTURAL SOILS LAB WILL DETERMINE THE ULTIMATE SOIL PREPARATION AND BACKFILL MIX.
19. A COPY OF THE SOILS REPORT SHALL BE GIVEN TO THE LANDSCAPE ARCHITECT PRIOR TO ANY WORK BEING DONE. THE CONTRACTOR SHALL NOTIFY THE OWNER OFFICER OF ANY SOIL PROBLEMS THAT MIGHT AFFECT PLANT GROWTH.
20. INSPECTIONS:
   - A. INSPECTIONS WILL BE REQUIRED.
   - B. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT AT LEAST 48 HOURS (2 WORKING DAYS) IN ADVANCE OF AN ANTICIPATED INSPECTIONS REQUIRED AT EACH OF THE STEPS BELOW:
      1. AT COMPLETION OF FINISH GRADING WORK FOLLOWING SOIL PREPARATION WORK.
      2. WHEN CONTAINER PLANTS ARE SPOTTED FOR PLANTING, BUT BEFORE PLANTING HOLES ARE EXCAVATED.
      3. WHEN PLANTING AND ALL OTHER INDICATED OR SPECIFIED WORK HAS BEEN COMPLECTED.
      4. AT START OF PLANT ESTABLISHMENT PERIOD.
      5. AT END OF PLANT ESTABLISHMENT PERIOD, PRIOR TO FINAL ACCEPTANCE OF THE PROJECT FOR MAINTENANCE.
21. MAINTENACE PERIOD:
   - A. MAINTENANCE PERIOD SHALL BE 60 DAYS. UNLESS OTHERWISE REQUIRED BY THE PROJECT MANUAL AND SPECIFICATIONS.

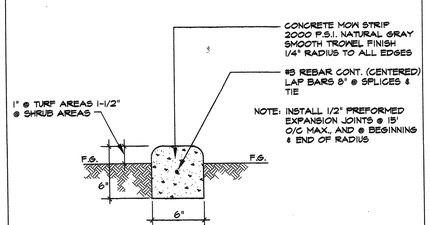
PLANTING NOTES 12 N.T.S.



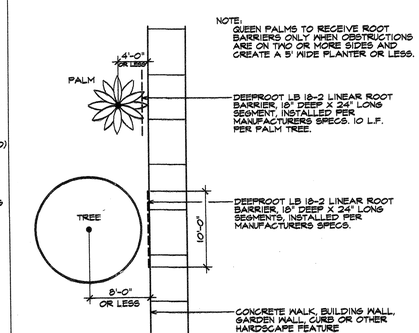

PALM TREE WITH SUMP 08 N.T.S.



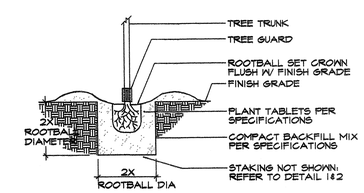

SHRUB SPACING 05 N.T.S.




CONCRETE MOW CURB 09 N.T.S.




ROOT BARRIER 06 N.T.S.




TREE GUARD TO BE INSTALLED IN TREE LOCATED IN ALL TURF AREAS.

TREE GUARD 03 N.T.S.

ADDITIVE BID ITEM

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

PRIVATE ENGINEERING NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO EPPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED LANDSCAPE ARCHITECT — IAN DAVIDSON 2651 — Signature — 6/30/05 Exp. Date — STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF: DATE
IAN J. DAVIDSON
R.L.A. No. 2651 EXP. DATE: 6/30/03

ID LA LANDSCAPE ARCHITECTURE


**i.D.L.A.**
**Ian Davidson, Landscape Architect**
**3744 TENTH STREET, SUITE 200**
**RIVERSIDE, CA 92501**
**909 888 1888 . FAX 909 888 4358**
**email: idavidson@idlaino.com**


SCALE: 1"=20'
DATE: 8/9/2004
BENCH MARK:

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY C.G. DRAWN BY S.S. CHECKED BY I.J.D.

CITY OF RIVERSIDE
PARK AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

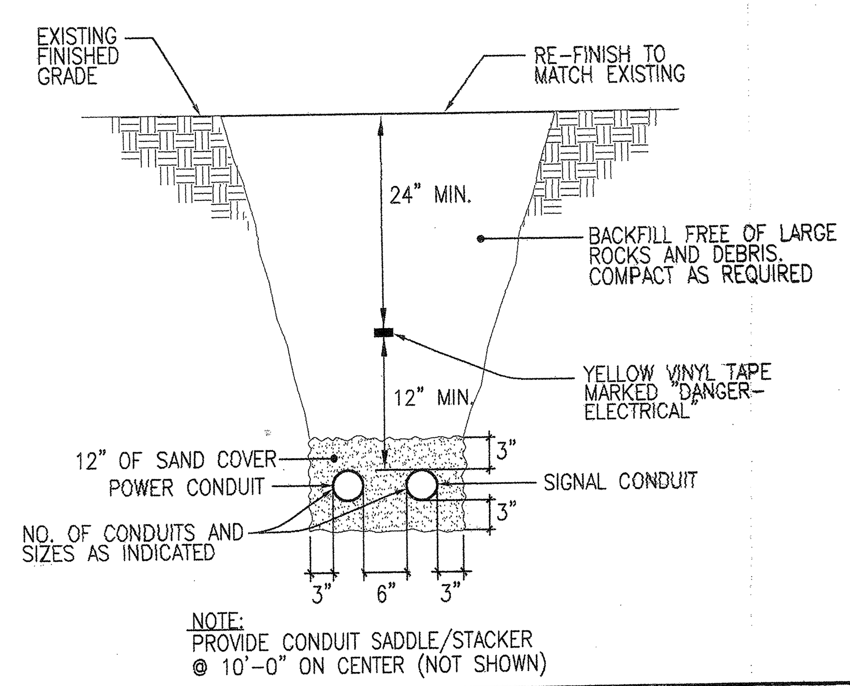
APPROVED BY
DATE

REID PARK
LANDSCAPE IMPROVEMENTS
PLANTING DETAILS

FOR:

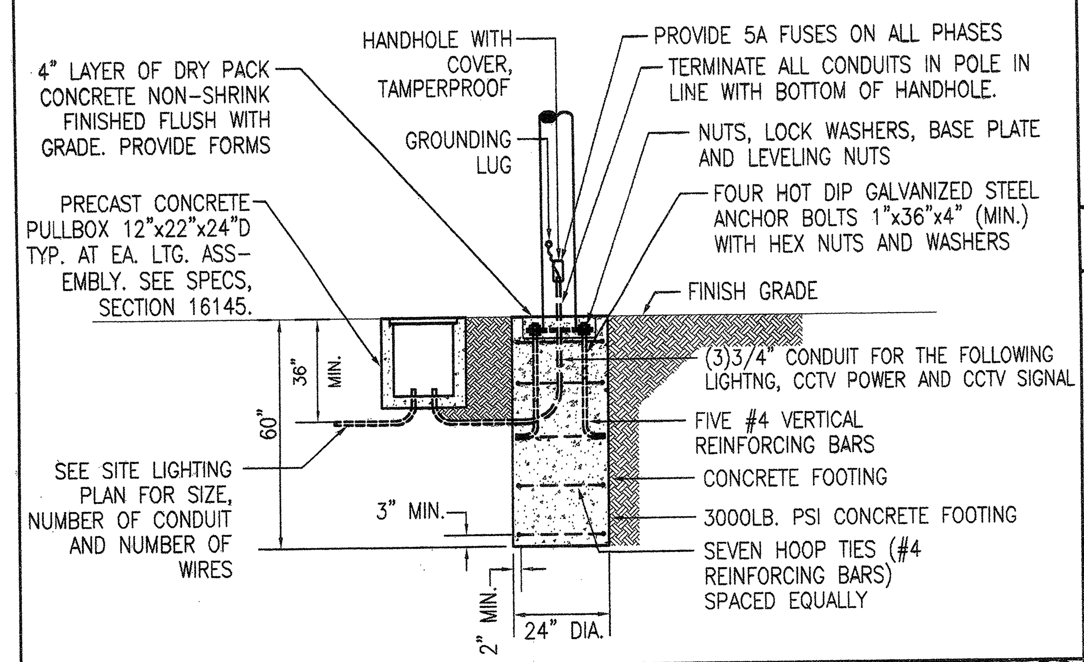
PROJECT NO. 14102
L2.1
SHEET 8 OF 11
FILE NO./ 14102PD

**BID SET 02-06-06**



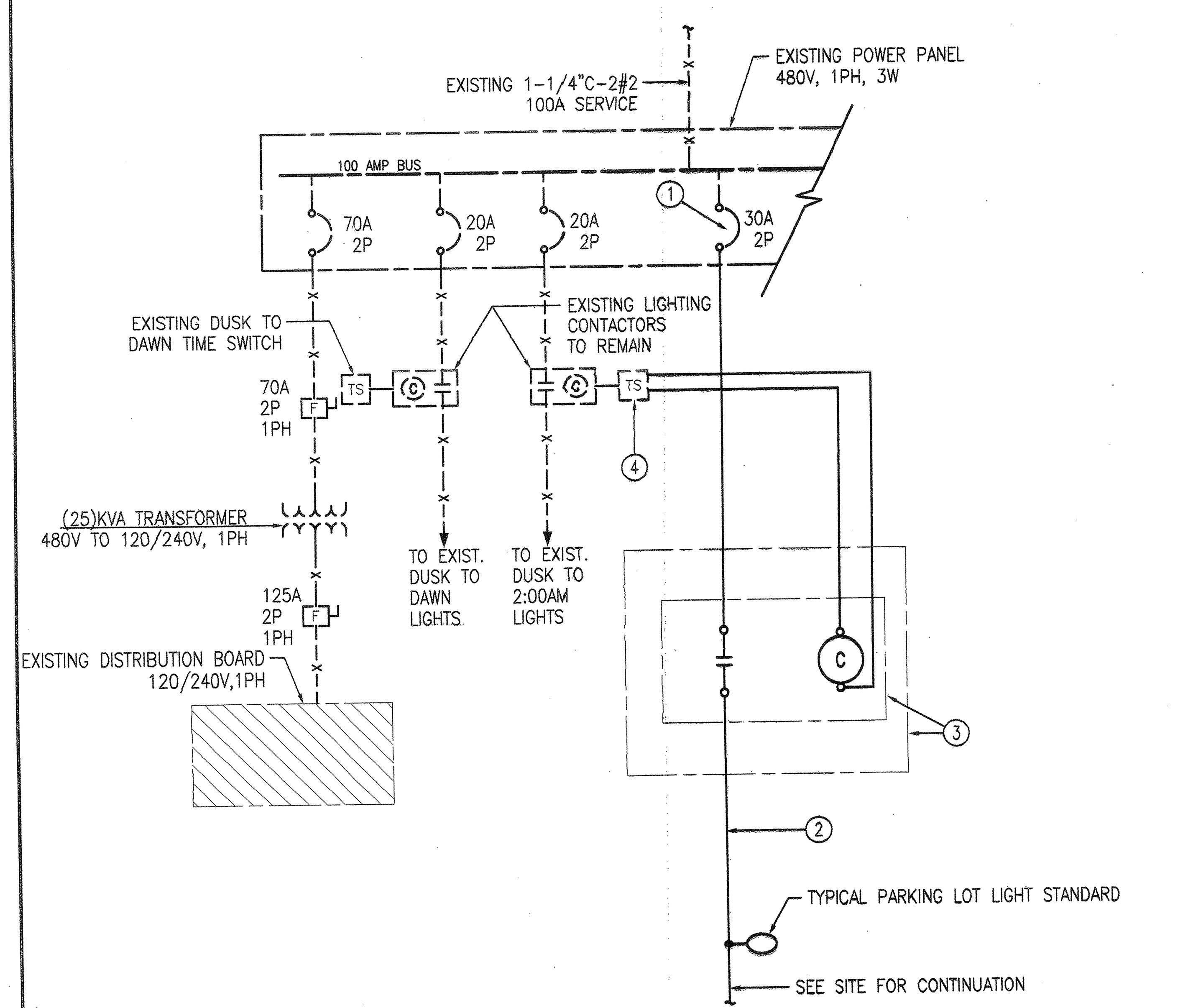

## CONDUIT TRENCH DETAIL

SCALE NONE (3)




## LIGHT STANDARD BASE DETAIL

SCALE NONE (1)




## REFERENCE NOTES

1. NEW 30A-2P CIRCUIT BREAKER TO MATCH EXISTING PANELBOARD.
2. 1" CONDUIT WITH 2#6 & 1#8 GROUND.
3. 600V RATED 30AMP MULTI POLE CONTACTOR WITH COIL VOLTAGE TO MATCH EXISTING TIME SWITCH. MOUNT CONTACTOR IN CONTACTOR CABINET ADJACENT TO EXISTING TIME SWITCH.
4. CONNECT NEW LIGHTING CONTACTOR TO EXISTING DUSK TO 2:00AM TIME SWITCH AS REQUIRED.

| | | |
|---|---|---|
| EXISTING LOAD | = | 32 KVA |
| ADDING LOAD | = | 6 KVA |
| TOTAL LOAD | | 38 KVA |

## WIRING DIAGRAM

SCALE NONE (2)

## GENERAL NOTES

1. MINIMUM WIRE SIZE FOR LINE VOLTAGE WIRING SHALL BE #12.
2. ALL CONDUIT SIZES SHALL CONFORM TO CALIFORNIA ELECTRICAL CODE (CEC) 2001 EDITION, UNLESS NOTED AS LARGER.
3. SUBSCRIPTS, a,b,c ETC., AT SWITCH SYMBOLS, ARE TO DISTINGUISH BETWEEN SWITCHES.
4. ALL SYMBOLS SHOWN IN SYMBOL LIST ARE NOT NECESSARILY USED ON THIS PROJECT.
5. A GREEN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED IN EACH AND EVERY CONDUIT AND SHALL BE CONNECTED TO EACH OUTLET, ENCLOSURE, DEVICE, FIXTURE, ETC. THROUGHOUT THE ENTIRE PROJECT. THE RACEWAYS SHALL NOT BE RELIED UPON FOR "EQUIPMENT GROUNDING".
6. PANEL HOMERUN DESIGNATIONS:
   BA 1&3&5 = ONE THREE PHASE, 3-WIRE CIRCUIT, NO NEUTRAL TO PANEL "BA".
   BA 1&3 = ONE SINGLE PHASE, 2-WIRE CIRCUIT, NO NEUTRAL TO PANEL "BA".
   BA 1-3-5 = THREE SINGLE PHASE CIRCUITS WITH COMMON NEUTRAL TO PANEL "BA".
   BA 2,4,6 = THREE SINGLE PHASE CIRCUITS WITH SEPARATE NEUTRAL FOR EACH CIRCUIT TO PANEL "BA".

## SPECIAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AT THE JOB SITE. NEW WORK SHALL BE COORDINATED WITH ALL EXISTING MATERIALS, EQUIPMENT, SUPPORTS AND OBSTRUCTIONS. THE PLANS INDICATE DIAGRAMMATICALLY THE ROUTE REQUIRED FOR THE NEW CONDUIT INSTALLATION.
2. MAKE ALL NECESSARY ALTERATIONS TO COORDINATE AND CONNECT THE EXISTING WORK WITH THE NEW ELECTRICAL WORK SUCH THAT WHEN THE WORK IS COMPLETE, THE ENTIRE ELECTRICAL INSTALLATION, EXISTING AND NEW, IS IN A COMPLETE AND OPERABLE OPERATING CONDITION.
3. PERFORM ALL NEW ELECTRICAL WORK IN SUCH A MANNER AS NOT TO INTERFERE IN ANY WAY WITH THE EXISTING ELECTRICAL SYSTEMS IN THE BUILDING. NONE OF THE EXISTING SYSTEMS SHALL BE DISCONNECTED WHILE THE BUILDING IS IN USE, UNLESS SCHEDULED WITH AND AGREED TO BY THE OWNER IN WRITING.
4. IF OVERTIME IS REQUIRED TO COMPLY WITH NOTE #3 ABOVE, IT SHALL BE INCLUDED AS PART OF THE BASE BID.
5. ALL DRILLING, PATCHING, CUTTING, CHANNELING OF MASONRY, PLASTER OR DRYWALL WHICH IS REQUIRED TO INSTALL THE ELECTRICAL WORK SHALL BE DONE BY THIS CONTRACTOR.
6. ALL NEW CONDUIT INSTALLED SHALL BE RIGID STEEL, EMT OR PVC. ALL CONDUCTORS SHALL BE COPPER.
7. NOT ALL EXISTING ELECTRICAL SYSTEMS WITHIN THE REMODELED AREA THAT MUST BE DEMOLISHED AND/OR REMOVED ARE SHOWN ON THE ELECTRICAL DRAWINGS. THE CONTRACTOR SHALL MAKE ALLOWANCES IN HIS BID FOR THE REMOVAL OF ELECTRICAL SYSTEMS WITHIN THE AREA OF REMODEL. BRANCH CIRCUITS SERVING ELECTRICAL SYSTEMS OUTSIDE THE AREA OF REMODEL SHALL BE RECONNECTED AND CONTINUITY MAINTAINED. ELECTRICAL EQUIPMENT INDICATED AS EXISTING TO BE RELOCATED SHALL CAREFULLY BE REMOVED AND STORED FOR FUTURE RE-INSTALLATION. THE CONTRACTOR MAY RE-USE ABANDONED CONDUITS FOR HOMERUNS TO EXISTING PANELS.

## ELECTRICAL SHEET INDEX

9 ELECTRICAL SYMBOL LIST, NOTES, DETAILS AND SHEET INDEX.
10 ELECTRICAL DEMOLITION SITE PLAN.
11 ELECTRICAL SITE PLAN.

## ELECTRICAL SYMBOL LIST

- POLE LIGHT STANDARD WITH ONE CUTOFF LUMINAIRE.
- POLE LIGHT STANDARD WITH TWO CUTOFF LUMINAIRES.
- SINGLE FLOODLIGHT FIXTURE.
- DOUBLE FLOODLIGHT FIXTURE.
- LANDSCAPE BOLLARD LIGHT FIXTURE.
- LIGHT FIXTURE WALL MOUNTED.
- WALKING LIGHT STANDARD WITH ONE LUMINAIRE.
- DUPLEX RECEPTACLE, +18" OR AS NOTED.
- JUNCTION BOX, WALL MOUNTED, +18" OR AS NOTED.
- MAIN SWITCHBOARD OR DISTRIBUTION BOARD, FLOOR STANDING 90" HIGH.
- FLUSH MOUNTED PANELBOARD, +6'-6" TO TOP.
- SURFACE MOUNTED PANELBOARD, +6'-6" TO TOP.
- CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALL.
- CONDUIT RUN CONCEALED UNDER FLOOR OR BELOW GRADE.
- CONDUIT RUN EXPOSED PARALLEL OR PERPENDICULAR TO STRUCTURE, ALIGN WITH STRUCTURE.
- CONDUIT "HOME RUN," CONNECT TO PANEL, TERMINAL CABINET OR TERMINAL BOARD.
- CONDUIT RISING UP FROM BELOW.
- CONDUIT DROPPING DOWN FROM ABOVE.
- E — CONDUIT ONLY STUB OUT WITH CAP AND MARKER.
- —X—X— EXISTING CONDUIT AND CONDUCTORS TO REMAIN UNLESS OTHERWISE NOTED.
- —XR—XR— EXISTING CONDUIT AND CONDUCTORS. REMOVE ALL CONDUCTORS OR CABLES. IF CONDUIT IS EXPOSE TO VIEW REMOVE CONDUIT AND SUPPORTS.
- —XRR—XRR— EXISTING CONDUIT AND CONDUCTORS TO BE REMOVED ARE RE-INSTALLED WITH NEW 36" BELOW NEW FINISH GRADE.
- —XA—XA— EXISTING CONDUIT TO BE ABANDON IN PLACE. REMOVE ALL CONDUCTORS OR CABLES.
- —XX—XX— EXISTING CONDUIT REWIRED AS NOTED ON THE DRAWINGS.
- 3/4"C-2#12 — 3/4"C-3#12.
- 3/4"C-4#12 — 3/4"C-5#12.
- 1"C-6#12 — 1"C-7#12
  WIRE SIZE OTHER THAN #12 IS NOTED ON EACH CONDUIT RUN WITH SIZE OF CONDUIT (e.g.: 3/4"C-3#10). INCLUDE A GREEN GROUND CONDUCTOR IN EACH CONDUIT. (GREEN CONDUCTOR NOT SHOWN).
- (LA) PANELBOARD DESIGNATION.
- (STC) TERMINAL CABINET OR BACKBOARD DESIGNATION.
- (MSA) FEEDER DESIGNATION (SEE FEEDER SCHEDULE OR SINGLE LINE DIAGRAM).
- (12) REFERENCE NOTE FOR ITEM ON DRAWING.
- (1 / 2/32) INDICATES: 1 = FIXTURE TYPE; 2/32 = NUMBER OF LAMPS AND WATTAGE PER LAMP. ALSO NUMBER ADJACENT TO FIXTURE = CIRCUIT NUMBER, AND LOWER CASE LETTER = CONTROLLING SWITCH. SEE DRAWINGS OR SPECIFICATIONS, SECTION 16500 FOR LIGHT FIXTURE DESCRIPTION.
- DASHED SYMBOL INDICATES EXISTING ELECTRICAL ITEM TO REMAIN UNLESS OTHERWISE NOTED "R" ADJACENT TO SYMBOL INDICATES ITEM IS TO BE REMOVED. PROVIDE BLANK COVER PLATE FOR OUTLET. "RR" ADJACENT TO SYMBOL INDICATES ITEM IS TO BE REMOVED AND RELOCATED AS SHOWN ON THE DRAWINGS.
- EXISTING WALKWAY LIGHT STANDARD TO REMAIN UNLESS OTHERWISE NOTED.
- EXISTING WALL MOUNTED LIGHT FIXTURE TO REMAIN UNLESS OTHERWISE NOTED.
- EXISTING STREET LIGHT
- EXISTING DUPLEX RECEPTACLE TO REMAIN UNLESS OTHERWISE NOTED.
- (LA) EXISTING PANELBOARD DESIGNATION.

CONSTRUCTION SET

ADDITIVE BID ITEM

REGISTERED PROFESSIONAL ENGINEER YUSSEF N. MATTA No. 17031 EXP. 09/30/05 ELECTRICAL STATE OF CALIFORNIA

JMD ENGINEERING, INC.
*ELECTRICAL ENGINEERS*
2908 Allesandro Street
Los Angeles, CA 90039
(323) 667-9082 x Fax: (323) 667-9083

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Call: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE

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REGISTERED PROFESSIONAL ENGINEER JOHN A. FRIEDRICH No. C27861 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE: ________

SCALE: AS NOTED
DATE: 01-09-04

GFB-FRIEDRICH & ASSOC., INC.
CONSULTING CIVIL ENGINEERS
6529 RIVERSIDE AVENUE, STE. 230
RIVERSIDE, CA 92506
(909) 781-0811
gfb-jaf@pacbell.net

BENCH MARK:

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| | | | |

DESIGNED BY JMD DRAWN BY L.G CHECKED BY JMD

CITY OF RIVERSIDE
PARKS AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY ________
DATE ________

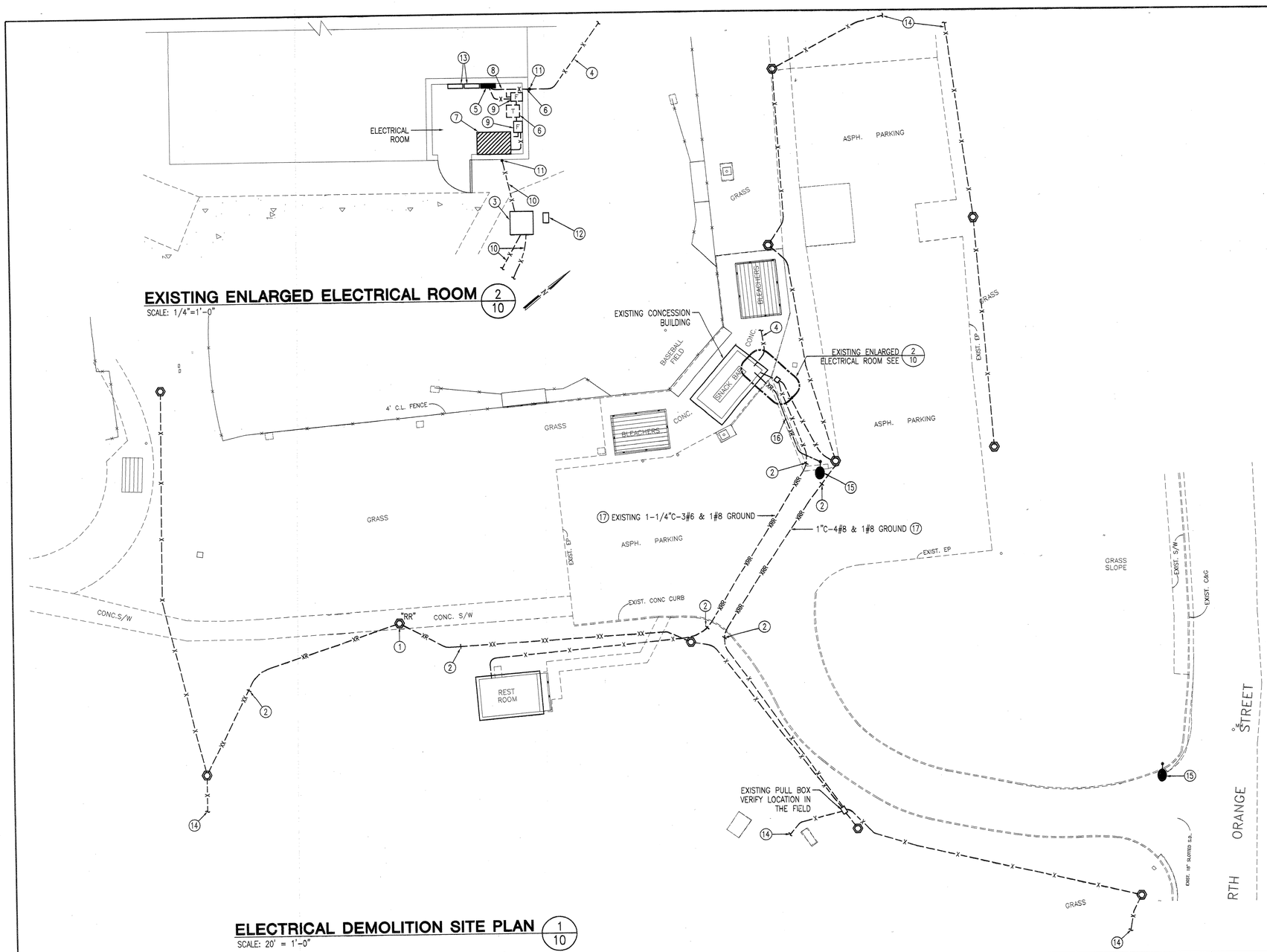
REID PARK
PARKING LOT IMPROVEMENT
ELECTRICAL SYMBOL LIST, NOTES, DETAILS AND SHEET INDEX
FOR:

PROJECT NO. 02-0313
SHEET 9 OF 11
FILE NO.:

RECEIVED APR 18 2006 PARK & RECREATION PLANNING & DESIGN

W:\Construction Admin Projects\02-0313 Riverside Parks\Reid\E-09.dwg 1=1.00 06/15/2004 13:46

BID SET 02-06-06




## ELECTRICAL DEMOLITION SITE PLAN 1/10

SCALE: 20' = 1'-0"

## REFERENCE NOTES

1. DISCONNECT AND REMOVE EXISTING WALKWAY LIGHT FIXTURE. REMOVE EXISTING FOOTING AN ANCHOR BOLTS. RELOCATE FIXTURE AS SHOWN ON SHEET 11.
2. INTERCEPT EXISTING CONDUIT AND CONDUCTORS. PULL THE CONDUCTORS BACK TO PREVIOUS FIXTURE OR EQUIPMENT ON EACH SIDE. INTERCEPT AND EXTEND CONDUIT AS SHOWN AND PULL NEW CONDUCTORS TO MATCH EXISTING. RECONNECT SAME AS BEFORE.
3. EXISTING PULL BOX 24"x24"x24" DEEP TO REMAIN. PROTECT IN PLACE.
4. EXISTING UNDERGROUND 480V SERVICE CONDUITS WITH CONDUCTORS TO REMAIN. PROTECT IN PLACE.
5. EXISTING DISTRIBUTION PANEL 480V, SINGLE PHASE TO REMAIN. PROTECT IN PLACE.
6. EXISTING 25KVA TRANSFORMER 480V TO 120/240V, 1PH, 3W TO REMAIN. PROTECT IN PLACE.
7. EXISTING 120/240 DISTRIBUTION PANEL TO REMAIN. PROTECT IN PLACE.
8. EXISTING CONDUITS WITH CONDUCTORS, 480V, 1PH, 3W FEED TO EXISTING PANEL. PROTECT IN PLACE
9. EXISTING DISCONNECT SWITCH TO REMAIN. SEE SINGLE LINE DIAGRAM FOR SIZE. PROTECT IN PLACE.
10. EXISTING UNDERGROUND CONDUITS WITH CONDUCTORS TO REMAIN. PROTECT IN PLACE.
11. EXISTING CONDUIT STUB-UP WITH CONDUCTORS TO REMAIN. PROTECT IN PLACE.
12. EXISTING IRRIGATION CONTROL SYSTEM TO REMAIN. PROTECT IN PLACE.
13. EXISTING LIGHTING CONTACTORS AND TIME SWITCHES TO REMAIN. CONNECT NEW LIGHT STANDARDS THERETO AS REQUIRED FOR PROPER CONTROL AS SHOWN ON SHEET 11.
14. EXISTING CONDUIT AND CONDUCTORS TO NEXT LIGHT FIXTURE. PROTECT IN PLACE.
15. DISCONNECT AND REMOVE EXISTING WOOD LIGHT POLE WITH FIXTURE. FILL HOLE WITH CLEAN SOIL TO MATCH FINISH GRADE. COORDINATE REMOVAL WITH CITY OF RIVERSIDE PARKS AND RECREATION.
16. DISCONNECT AND REMOVE EXISTING OVERHEAD SERVICE CONDUCTORS.
17. CONTRACTOR SHALL LOCATE THE EXISTING UNDERGROUND BRANCH CIRCUIT LIGHTING CONDUIT AND RELOCATE AS REQUIRED 36" BELOW THE NEW FINISH GRADE.

N

SCALE

20 0 10 20 40

( IN FEET )
1 inch = 20 ft.

RECEIVED APR 18 2006 PARK & RECREATION PLANNING & DESIGN

REGISTERED PROFESSIONAL ENGINEER JESSE N. MAYS No. 17031 EXP. 09/30/06 ELECTRICAL STATE OF CALIFORNIA

JMD ENGINEERING, INC.
ELECTRICAL ENGINEERS
2908 Alessandro Street
Los Angeles, CA 90039
(323) 667-9082 x Fax: (323) 667-9083

NOT CONSTRUCTION DOCUMENTS

ADDITIVE BID ITEM

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REGISTERED PROFESSIONAL ENGINEER JOHN A. FRIEDRICH No. C27861 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
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EXPIRATION DATE: 3-31-06 DATE:

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(909) 781-0811
gfb-jaf@pacbell.net

SCALE: 20'=1'-0"
DATE: 01-09-04
BENCH MARK:

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY JMD DRAWN BY L.G CHECKED BY JMD

CITY OF RIVERSIDE
PARKS AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY
DATE

REID PARK
PARKING LOT IMPROVEMENT
ELEC. DEMO. SITE PLAN

FOR:

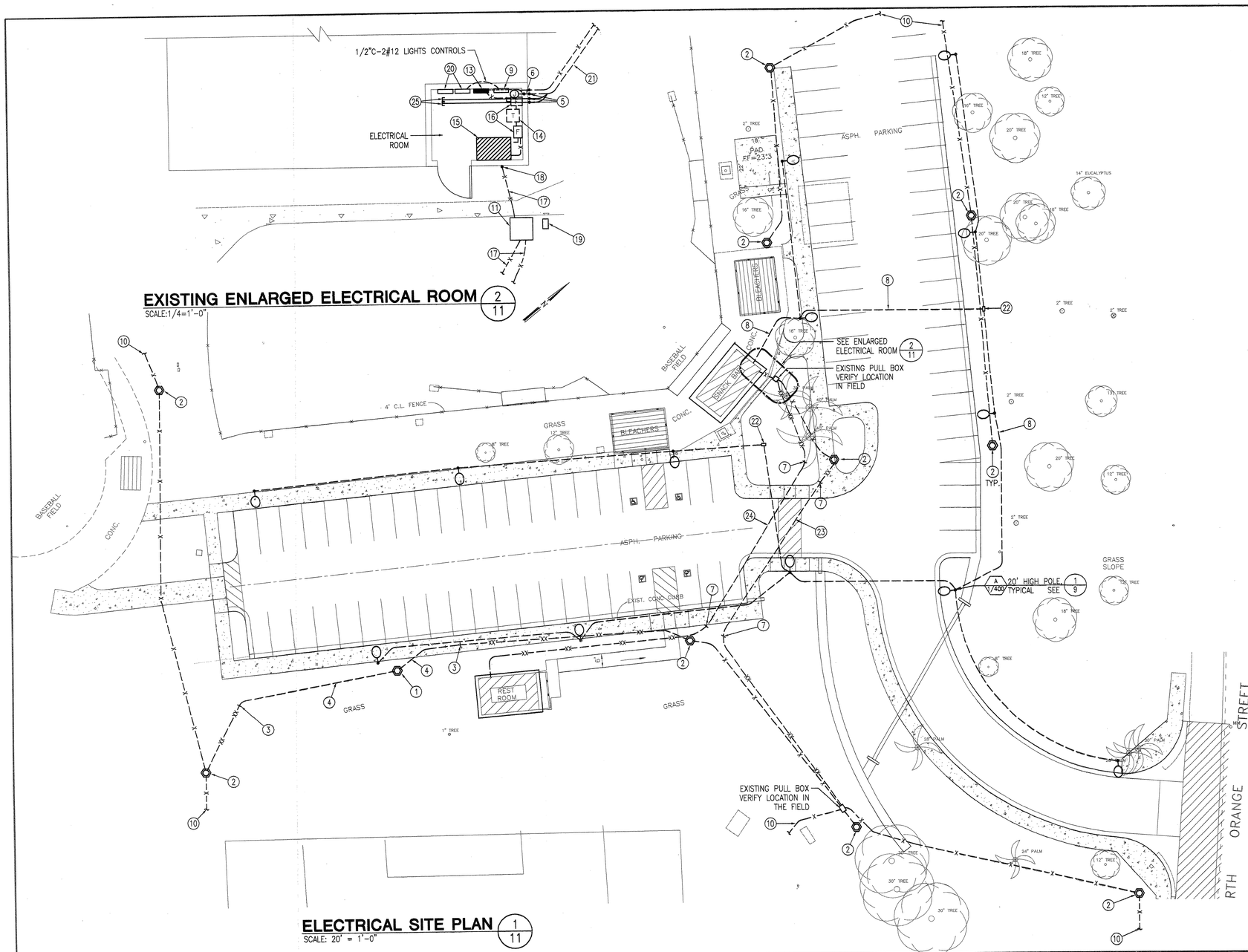
PROJECT NO. 02-0313
SHEET 10 OF 11
FILE NO.:

W:\Construction Admin Projects\02-0313 Riverside Parks\Reid\E-10.dwg 1=240 06/15/2004 13:46

**BID SET 02-06-06**

## EXISTING ENLARGED ELECTRICAL ROOM (2/11)

SCALE:1/4=1'-0"




## ELECTRICAL SITE PLAN (1/11)

SCALE: 20' = 1'-0"

## REFERENCE NOTES

1. EXISTING RELOCATED WALKWAY LIGHT FIXTURE.
2. EXISTING WALKWAY LIGHT FIXTURE TO REMAIN. PROTECT IN PLACE.
3. POINT OF INTERCEPTION TO CONNECT BETWEEN NEW AND EXISTING CONDUIT. PULL IN NEW CONDUCTORS SAME SIZE AS BEFORE AND RECONNECT AS REQUIRED.
4. NEW CONDUIT AND CONDUCTORS TO MATCH EXISTING.
5. STUB-UP ON WALL +36" AND "LB" THROUGH WALL INTO ELECTRICAL ROOM. PROVIDE WEATHERPROOF SEALANT AROUND CONDUIT OPENING.
6. CORE DRILL WALL AS REQUIRED FOR NEW CONDUIT.
7. POINT OF INTERCEPTION CONNECT BETWEEN NEW AND EXISTING CONDUITS. PULL NEW CONDUCTORS TO MATCH EXISTING BACK TO PREVIOUS FIXTURE ON EACH SIDE. RECONNECT SAME AS BEFORE.
8. CONDUIT AS FOLLOW:
   1" CONDUIT WITH 2#6 & 1#8 GROUND.
   1" CONDUIT FOR FUTURE CCTV POWER.
   1" CONDUIT FOR FUTURE CCTV SIGNAL.
9. NEW LIGHTING CONTACTOR.
10. EXISTING CONDUIT AND CONDUCTORS TO NEXT LIGHT FIXTURE TO REMAIN. PROTECT IN PLACE.
11. EXISTING PULL BOX 24"x24"x24" DEEP TO REMAIN. PROTECT IN PLACE.
12. EXISTING UNDERGROUND 480V SERVICE CONDUITS WITH CONDUCTORS TO REMAIN. PROTECT IN PLACE.
13. EXISTING DISTRIBUTION PANEL 480V, SINGLE PHASE TO REMAIN. PROTECT IN PLACE.
14. EXISTING 25KVA TRANSFORMER 480V TO 120/240V, 1PH, 3W TO REMAIN. PROTECT IN PLACE.
15. EXISTING 120/240 DISTRIBUTION PANEL TO REMAIN. PROTECT IN PLACE.
16. EXISTING DISCONNECT SWITCH TO REMAIN. SEE SINGLE LINE DIAGRAM FOR SIZE. PROTECT IN PLACE.
17. EXISTING UNDERGROUND CONDUITS WITH CONDUCTORS TO REMAIN. PROTECT IN PLACE.
18. EXISTING CONDUIT STUB-UP WITH CONDUCTORS TO REMAIN. PROTECT IN PLACE.
19. EXISTING IRRIGATION CONTROL SYSTEM TO REMAIN. PROTECT IN PLACE.
20. EXISTING LIGHTING CONTACTORS AND TIME SWITCHES TO REMAIN. CONNECT NEW LIGHT STANDARDS THERETO AS REQUIRED FOR PROPER CONTROL.
21. SAW CUT EXISTING SIDEWALK FOR THE INSTALLATION OF THE NEW CONDUIT. PATCH TO MATCH EXISTING AFTER INSTALLATION IS COMPLETE.
22. PARKING LOT LIGHTING PULL BOX 12" x 22" x 24" WITH ENGRAVED COVER.
23. NEW 1"C-4#8 & 1#8 GROUND TO REPLACE EXISTING.
24. NEW 1-1/4"C-3#6 & 1#8 GROUND TO REPLACE EXISTING.
25. STUB CCTV CONDUITS INSIDE THE ROOM AS DIRECTED BY THE OWNER.

### SPECIAL NOTE FOR THIS SHEET

(1) 1"C-2#6 & 1#8 GROUND
(2) 1" CONDUIT FOR FUTURE CCTV POWER AND SIGNAL

N

SCALE
20 0 10 20 40
( IN FEET )
1 inch = 20 ft.

ADDITIVE BID ITEM


JMD ENGINEERING, INC.
ELECTRICAL ENGINEERS
2908 Alessandro Street
Los Angeles, CA 90039
(323) 667-9082 • Fax (323) 667-9083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227-2600
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**PRIVATE ENGINEERING NOTE**

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED PROFESSIONAL ENGINEER JOHN A. FRIEDRICH No. C27861 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE:


GFB-FRIEDRICH & ASSOC., INC.
CONSULTING CIVIL ENGINEERS
6529 RIVERSIDE AVENUE, STE. 230
RIVERSIDE, CA 92506
(909) 781-0811
gfb-jaf@pacbell.net


SCALE: 20'=1'-0"
DATE: 01-09-04
BENCH MARK:

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| | | | |

DESIGNED BY JMD DRAWN BY L.G CHECKED BY JMD

CITY OF RIVERSIDE
PARKS AND RECREATION

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|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY
DATE

REID PARK
PARKING LOT IMPROVEMENTS
ELECTRICAL SITE PLAN

02-0313

SHEET 11 OF 11

FOR:
FILE NO.:

BID SET 02-06-06

## STEEL ROUND TAPERED ROADWAY LIGHTING POLES
*20 TO 50 FEET (6 TO 15 METERS)*

POLES AND BRACKETS STEEL ROUND TAPERED ROADWAY LIGHTING

### POLE SELECTION TABLE

Shipped with pole: anchor bolts, anchor bolt covers, handhole cover, shaft cap, hardware, and anchor bolt circle template.

| Nominal Mounting Height (ft) | Arm Length (ft) | Number of Arms | Max Recommended Total Load: EA* Weight (lbs) | Effective Projected Area (sq ft) | Max Isotach Zone (MPH) | Ordering Number | Shaft Dimensions: Bottom OD X Top OD X Length X Thickness (in. X in. X ft-in. X gauge) | Approximate Weight (lbs) | Pole Base Data Item Number |
|---|---|---|---|---|---|---|---|---|---|
| **POLES WITH SINGLE MEMBER ARM (FIG. 1)** | | | | | | | | | |
| 20 | 4 | 1 | 75 | 1.5 EPA EA | 110 | RRTS20SA4S6.511PP | 6.5X4.2X17-0X11 | 141 | 2 |
| 20 | 6 | 1 | 75 | 1.5 EPA EA | 110 | 20SA6S6.511PP | 6.5X4.2X17-0X11 | 151 | 2 |
| 25 | 4 | 1 | 75 | 1.5 EPA EA | 110 | 25SA4S7.011PP | 7.0X4.0X22-0X11 | 180 | 3 |
| 25 | 6 | 1 | 75 | 1.5 EPA EA | 110 | 25SA6S7.011PP | 7.0X4.0X22-0X11 | 190 | 3 |
| 25 | 8 | 1 | 60 | 1.5 EPA EA | 110 | 25SA8S7.011PP | 7.0X4.0X22-0X11 | 200 | 3 |
| 30 | 4 | 1 | 75 | 1.5 EPA EA | 110 | 30SA4S7.511PP | 7.5X3.8X27-0X11 | 275 | 4 |
| 30 | 6 | 1 | 75 | 1.5 EPA EA | 110 | 30SA6S7.511PP | 7.5X3.8X27-0X11 | 285 | 4 |
| 30 | 8 | 1 | 60 | 1.5 EPA EA | 110 | 30SA8S7.511PP | 7.5X3.8X27-0X11 | 295 | 4 |
| 35 | 6 | 1 | 75 | 1.5 EPA EA | 110 | 35SA6S8.011PP | 8.0X3.6X32-0X11 | 330 | 5 |
| 35 | 8 | 1 | 60 | 1.5 EPA EA | 110 | 35SA8S8.011PP | 8.0X3.6X32-0X11 | 340 | 5 |
| 40 | 6 | 1 | 75 | 1.5 EPA EA | 110 | 40SA6S9.011PP | 9.0X3.9X37-0X11 | 401 | 8 |
| 40 | 8 | 1 | 60 | 1.5 EPA EA | 110 | 40SA8S9.011PP | 9.0X3.9X37-0X11 | 411 | 8 |
| 20 | 4 | 2 | 75 | 1.5 EPA EA | 110 | RRTS20SA4D6.511PP | 6.5X4.2X17-0X11 | 171 | 2 |
| 20 | 6 | 2 | 75 | 1.5 EPA EA | 110 | 20SA6D6.511PP | 6.5X4.2X17-0X11 | 186 | 2 |
| 25 | 4 | 2 | 75 | 1.5 EPA EA | 110 | 25SA4D7.011PP | 7.0X4.0X22-0X11 | 210 | 3 |
| 25 | 6 | 2 | 75 | 1.5 EPA EA | 110 | 25SA6D7.011PP | 7.0X4.0X22-0X11 | 225 | 3 |
| 25 | 8 | 2 | 60 | 1.5 EPA EA | 110 | 25SA8D7.011PP | 7.0X4.0X22-0X11 | 240 | 3 |
| 30 | 4 | 2 | 75 | 1.5 EPA EA | 110 | 30SA4D7.511PP | 7.5X3.8X27-0X11 | 305 | 4 |
| 30 | 6 | 2 | 75 | 1.5 EPA EA | 110 | 30SA6D7.511PP | 7.5X3.8X27-0X11 | 320 | 4 |
| 30 | 8 | 2 | 60 | 1.5 EPA EA | 110 | 30SA8D7.511PP | 7.5X3.8X27-0X11 | 335 | 4 |
| 35 | 6 | 2 | 75 | 1.5 EPA EA | 110 | 35SA6D8.011PP | 8.0X3.6X32-0X11 | 370 | 5 |
| 35 | 8 | 2 | 60 | 1.5 EPA EA | 110 | 35SA8D8.011PP | 8.0X3.6X32-0X11 | 385 | 5 |
| 40 | 6 | 2 | 75 | 1.5 EPA EA | 110 | 40SA6D9.011PP | 9.0X3.9X37 0X11 | 436 | 8 |
| 40 | 8 | 2 | 60 | 1.5 EPA EA | 110 | 40SA8D9.011PP | 9.0X3.9X37-0X11 | 456 | 8 |
| 25 | 6 | 3 | 75 | 1.5 EPA EA | 110 | RRTS25SA6T7.011PP | 7.0X4.0X22-0X11 | 262 | 3 |
| 30 | 6 | 3 | 75 | 1.5 EPA EA | 110 | 30SA6T7.511PP | 7.5X3.8X27.0X11 | 326 | 4 |
| 35 | 6 | 3 | 75 | 1.5 EPA EA | 110 | 35SA6T8.011PP | 8.0X3.6X32-0X11 | 371 | 5 |
| 40 | 6 | 3 | 75 | 1.5 EPA EA | 110 | 40SA6T9.011PP | 9.0X3.9X37-0X11 | 447 | 8 |
| 25 | 6 | 4 | 75 | 1.5 EPA EA | 110 | RRTS25SA6Q7.011PP | 7.0X4.0X22-0X11 | 355 | 3 |
| 30 | 6 | 4 | 75 | 1.5 EPA EA | 110 | 30SA6Q7.511PP | 7.5X3.8X27.0X11 | 395 | 4 |
| 35 | 6 | 4 | 75 | 1.5 EPA EA | 100 | 35SA6Q8.011PP | 8.0X3.6X32-0X11 | 445 | 5 |
| 40 | 6 | 4 | 75 | 1.5 EPA EA | 100 | 40SA6Q9.011PP | 9.0X3.9X37-0X11 | 490 | 8 |
| **POLES WITH TRUSS ARM (FIG. 2)** | | | | | | | | | |
| 25 | 10 | 1 | 75 | 1.5 EPA EA | 110 | RRTS25TA10S6.511PP | 6.5X3.7X20-0X11 | 256 | 2 |
| 25 | 12 | 1 | 62 | 1.5 EPA EA | 110 | 25TA12S6.511PP | 6.5X3.7X20-0X11 | 265 | 2 |
| 30 | 10 | 1 | 63 | 1.5 EPA EA | 110 | 30TA10S7.011PP | 7.0X3.5X25-0X11 | 295 | 3 |
| 30 | 12 | 1 | 60 | 1.6 EPA EA | 100 | 30TA12S7.011PP | 7.0X3.5X25-0X11 | 304 | 3 |
| 30 | 15 | 1 | 60 | 1.5 EPA EA | 100 | 30TA15S7.511PP | 7.5X4.0X25-0X11 | 380 | 4 |
| 35 | 10 | 1 | 75 | 1.5 EPA EA | 110 | 35TA10S8.011PP | 8.0X3.8X30-0X11 | 361 | 5 |
| 35 | 12 | 1 | 60 | 1.5 EPA EA | 100 | 35TA12S8.011PP | 8.0X3.8X30-0X11 | 370 | 5 |
| 35 | 15 | 1 | 60 | 1.5 EPA EA | 90 | 35TA15S8.511PP | 8.5X4.3X30-0X11 | 450 | 7 |
| 40 | 12 | 1 | 60 | 1.5 EPA EA | 90 | 40TA12S8.511PP | 8.5X3.8X33-6X11 | 435 | 7 |
| 40 | 15 | 1 | 60 | 1.5 EPA EA | 90 | 40TA15S9.011PP | 9.0X4.3X33-6X11 | 480 | 8 |
| 45 | 12 | 1 | 64 | 1.5 EPA EA | 90 | 45TA12S9.511PP | 9.5X4.1X38-6X11 | 510 | 10 |
| 45 | 15 | 1 | 62 | 1.5 EPA EA | 90 | 45TA15S10.011PP | 10.0X4.6X38-6X11 | 567 | 11 |
| 50 | 15 | 1 | 60 | 1.5 EPA EA | 90 | 50TA15S10.510PP | 10.5X4.4X43-6X10 | 900 | 13 |
| 25 | 10 | 2 | 75 | 1.5 EPA EA | 90 | RRTS25TA10D6.511PP | 6.5X3.7X20-0X11 | 327 | 2 |
| 25 | 12 | 2 | 75 | 1.5 EPA EA | 90 | 25TA12D6.511PP | 6.5X3.7X20-0X11 | 344 | 2 |
| 30 | 10 | 2 | 75 | 1.5 EPA EA | 90 | 30TA10D7.011PP | 7.0X3.5X25-0X11 | 366 | 3 |
| 30 | 12 | 2 | 75 | 1.6 EPA EA | 90 | 30TA12D7.511PP | 7.5X4.0X25-0X11 | 475 | 4 |
| 30 | 15 | 2 | 75 | 1.5 EPA EA | 90 | 30TA15D8.011PP | 8.0X4.5X25-0X11 | 535 | 5 |
| 35 | 10 | 2 | 75 | 1.5 EPA EA | 90 | 35TA10D8.011PP | 8.0X3.8X30-0X11 | 413 | 5 |
| 35 | 12 | 2 | 75 | 1.5 EPA EA | 90 | 35TA12D8.511PP | 8.5X4.3X30-0X11 | 545 | 7 |
| 35 | 15 | 2 | 75 | 1.5 EPA EA | 90 | 35TA15D9.011PP | 9.0X4.8X30-0X11 | 615 | 8 |
| 40 | 12 | 2 | 75 | 1.5 EPA EA | 90 | 40TA12D9.511PP | 9.5X4.8X33-6X11 | 586 | 10 |
| 40 | 15 | 2 | 75 | 1.5 EPA EA | 90 | 40TA15D10.011PP | 10.0X5.3X33-6X11 | 661 | 11 |
| 45 | 12 | 2 | 75 | 1.5 EPA EA | 90 | 45TA12D10.510PP | 10.5X5.1X38-6X10 | 860 | 13 |
| 45 | 15 | 2 | 75 | 1.5 EPA EA | 90 | 45TA15D10.510PP | 10.5X5.1X38-6X10 | 912 | 13 |
| 50 | 15 | 2 | 75 | 1.5 EPA EA | 90 | 50TA15D10.07PP | 10.0X3.9X43-6X7 | 939 | 12 |

* EA = Each Arm

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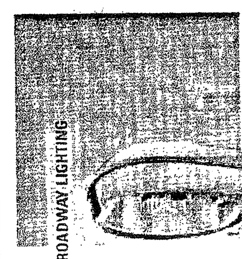
## M-400A POWR/DOOR® LUMINAIRE WITH CUTOFF OPTICS

M-400 ROADWAY LIGHTING



**APPLICATIONS**
- For street, highway and parking lot lighting

**SPECIFICATION FEATURES**
- Powr/Module ballast assembly
- Filtered optics
- Universal two or four-bolt slipfitter
- Standardized reflector
- "Dead back" tunnel type, FRP terminal board
- 2 in. pipe mounting only with MDCA
- Die-cast aluminum housing with electrocoat gray paint finish
- Adjustable mogul base socket (house side) - E39 standard
- ALGLAS® finish on reflector
- No-tool PE receptacle
- Plug-in ignitor available
- External paddle type stainless steel bail latch
- Ⓤ/Ⓤ listed unit available—See Options
- Standard optical construction is IP55
- True 90° cutoff—no light above 90° (meets RP8-2000 for full cutoff) with flat glass

### ORDERING NUMBER LOGIC

| MDCA | 40 | S | 1 | A | 2 | 1 | F | MC3 | 1 | F |
|---|---|---|---|---|---|---|---|---|---|---|
| XXXX | XX | X | X | X | X | X | X | XXX | X | XXX |
| MDCA = M-400A with Cutoff Optics 4-Bolt Slipfitter; MDCL = M 400A with Cutoff Optics 2-Bolt Slipfitter | 10 = 100; 15 = 150 (55V); 17 = 175; 20 = 200; 24 = 250/400; 25 = 250; 31 = 310; 40 = 400; NOTE: Dual wattage connected for lower wattage only | S = HPS; M = MH; C = Merc; Standard: Lamp not included. | 60Hz: 0 = 120/208/240/277 Multi-volt; 1 = 120; 2 = 208; 3 = 240; 4 = 277; 5 = 480; 7 = 120X240; 8 = 240V Ballast 120V PE Receptacle not reconnectable; D = 347; F = 120X347; T = 220; W = 230; 50Hz: 6 = 220; R = 230; Y = 240; NOTE: Dual voltage connected for lower voltage | See Ballast Selection Table; A = Autoreg; C = Merc-Reg; H = HPF Reactor or Lag; M = Mag-reg; N = NPF Reactor or Lag; P = CWI with Grounded Socket Shell | 1 = None; 2 = PE Receptacle; NOTE: Receptacle connected same voltage as unit except as noted. Order PE Control separately. | 1 = Non Plug-in/None; 2 = Plug-in base and Ignitor | A = Acrylic Clear Globe (250 watt Maximum); F = Flat Glass; G = Shallow Glass Globe; L = Polycarbonate Clear Globe (250 watt Maximum) | See Photometric Selection Table; S = Short; M = Medium; C = Cutoff; 1 = Type I; 2 = Type II; 3 = Type III | 1 = Fiber gasket; 2 = Charcoal with elastomer gasket | F = Fusing (Not available with multivolt or dual voltage); J = Line Surge Protector, Expulsion Type; N = Meets ANSI C136.31 requirments for Bridge and Underpass Vibration; U = UL Listed Glass Lens and (60Hz only) |

### PHOTOMETRIC SELECTION TABLE

**CLEAR REFRACTORS** All light sources are clear.

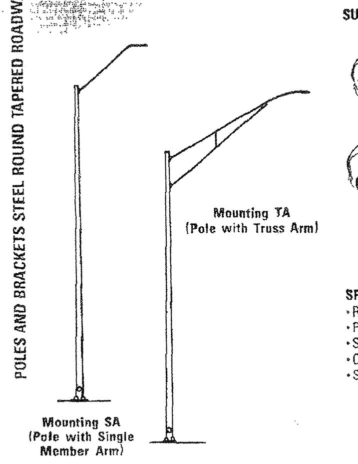
| Wattage | Light Source | IES Distribution Type / Photometric Curve Number 35–45xxxx: Flat Glass MC2* | Flat Glass MC3* | SAG Glass Globe MC1 | SAG Glass Globe SC2 | SAG Glass Globe SC3 | MC2 | MC3 | Polycarbonate |
|---|---|---|---|---|---|---|---|---|---|
| 150 (55V) | HPS | 0386 | 0387 | N/A | N/A | N/A | 0547 | 0546 | C/F |
| 200-400 | HPS | 1001 | 1002 | N/A | 0101 | 0102 | 1003 | 1004 | 1045** |
| 175 & 250 | MH | 0343 | 0342 | N/A | N/A | N/A | 0544 | 0545 | C/F |
| 400 "G" | MH | N/A | N/A | 0281 | N/A | N/A | 0280 | N/A | N/A |
| 400 "G" | Merc | N/A | N/A | N/A | N/A | N/A | 0375 | 0376 | N/A |
| 400(Coated) | Merc | N/A | N/A | N/A | 0282 | C/F | N/A | N/A | N/A |

NOTE: N/A = Not Available  C/F = Contact Factory
*Meets RP8-2000 for full cutoff
**250 watts maximum

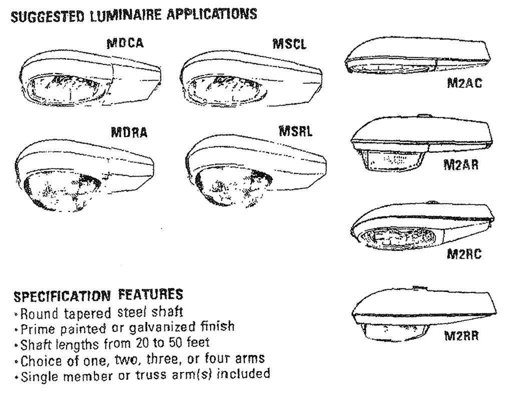
*GE Lighting Systems, Inc.*
www.gelightingsystems.com

## STEEL ROUND TAPERED ROADWAY LIGHTING POLES
*20 TO 50 FEET (6 TO 15 METERS)*

POLES AND BRACKETS STEEL ROUND TAPERED ROADWAY LIGHTING




SUGGESTED LUMINAIRE APPLICATIONS




**SPECIFICATION FEATURES**
- Round tapered steel shaft
- Prime painted or galvanized finish
- Shaft lengths from 20 to 50 feet
- Choice of one, two, three, or four arms
- Single member or truss arm(s) included

### ORDERING NUMBER LOGIC (See Pole Selection Table for actual Ordering Numbers)

| R | R | T | S | 20 | SA | 4S | 6.5 | 11 | PP | E |
|---|---|---|---|---|---|---|---|---|---|---|
| X | X | X | X | XX | XX | XXX | XXXX | XX | XX | X |
| R – Roadway | R – Round | T = Tapered | S = Steel | 20 – 20; 25 = 25; 30 – 30; 35 – 35; 40 = 40; 45 – 45*; 50 – 50*; NOTE: *Shaft over 40 ft may be two-piece with overlapping joint (upper portion 11 gauge; lower portion gauge as listed | SA – Single Member Arm (See illustration above); TA = Truss Arm (See illustration above); NOTE: Arms are included with poles; two arms at 180, three at 120°, and four at 90° | 4S = One 4' arm; 6S – One 6' arm; 8S = One 8' arm; 10S = One 10' arm; 12S = One 12' arm; 15S – One 15' arm; 4D = Two 4' arms; 6D – Two 6' arms; 8D = Two 8' arms; 10D – Two 10' arms; 12D = Two 12' arms; 15D = Two 15' arms; 6T = Three 6' arms; 6Q – Four 6' arms | 6.5 = 6.5; 7.0 = 7.0; 7.5 = 7.5; 8.0 – 8.0; 8.5 = 8.5; 9.0 – 9.0; 9.5 = 9.5; 10.0 = 10.0; 10.5 – 10.5 | 7 = 7; 10 – 10; 11 = 11 | GV = Galvanized; PP – Prime painted (Standard); NOTE: If galvanized finish is required, substitute GV for PP in ordering number given in Pole Selection Table. | E – Electrical Festoon Box; NOTE: If this option is required, add E to ordering number listed in Pole Selection Table. |

**REFERENCES**
See Page P-20 for Option Information
See Page P-21 for Pole Base Data
See Page P-2 for Pole Selection Guidelines

*GE Lighting Systems, Inc.*
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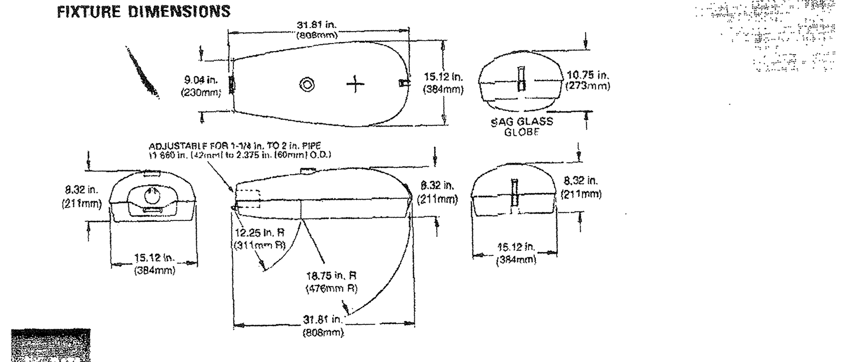
# FIXTURE TYPE "A"

## M-400A POWR/DOOR® LUMINAIRE WITH CUTOFF OPTICS & 4 BOLT SLIPFITTER

M-400 ROADWAY LIGHTING

FIXTURE DIMENSIONS




**DATA**

| | | |
|---|---|---|
| Approximate Net Weight | 33-39 lbs | 15-19 kgs |
| Effective Projected Area | 1.1 sq. ft. max | .01 sq. M max |
| Suggested Mounting Height | 30 50 ft. | 9-15 M |

**REFERENCES**
See Page R-44 for start of Accessories.
See Page R-48 for Explanation of Options and Other Terms Used.
See Pole and Bracket Section Page P-2 for pole selection.

### BALLAST SELECTION TABLE

| Wattage | Light Source | Multi-volt | 60Hz 120 | 208 | 240 | 277 | 480 | 120X 240 | 347, 120X347 | 240/120 PE R | 220 | 230 | 50Hz 220 | 230 | 240 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 150 (55V) | HPS | H,N | G,H,M,N | G,M | G,M | G,M | G,M | G,H,M,N | G*,H,M*,N | G,M | N/A | N/A | N/A | N/A | N/A |
| 200 | HPS | A,M,P | A,G,H,M,N,P | A,G,H,M,N,P | A,G,H,M,N,P | A,G,M,P | A,G,M,P | A,G,M,P | N/A | A,G,H,M,N | N/A | H | N/A | N/A | N/A |
| 250 | HPS | A,M,P | A,G,H,M,N,P | A,G,H,M,N,P | A,G,H,M,N,P | A,G,M,P | A,G,M,P | A,G,M,P | A,M,P | A,G,H,M,N | A,H | H | A,H,M,N | H | M |
| 250/400 | HPS | A | A | A | A | A | A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 310 | HPS | A,M | A,G,M | A,G,H,M,N | A,G,H,M,N | A,G,M | A,G,M | A,G,M | N/A | A,G,H,M,N | N/A | H | N/A | N/A | N/A |
| 400 | HPS | A,M | A,G,M | A,G,H,M,N | A,G,H,M,N | A,G,M | A,G,M | A,G,M | A,G,M | A,G,H,M,N | H,A,N | H | A,H,M,N | N/A | A,H,M |
| 175 | MH | A | A | A | A | A | A | A | A | A | N/A | N/A | N/A | N/A | N/A |
| 250 | MH | A | A | A | A | A | A | A | A | A | A | N/A | N/A | N/A | N/A |
| 400 | MH | A | A,P | A,P | A,P | A,P | A,P | A,P | A,P | A | A | N/A | N/A | N/A | A |
| 400 | Merc | C | C,N | C/F | C,H,N | C,H,N | C | C | N/A | A,C,H,N | N/A | N/A | C/F | N/A | H |

NOTE: N/A = Not Available
*Not available in 120X347 volt
C/F = Contact factory

### MDCA — SUGGESTED CATALOG ORDERING NUMBERS

| Catalog Number | Wattage | Light Source | Voltage (60 Hz) | Ballast Type | Refractor Type | Photometric Distribution |
|---|---|---|---|---|---|---|
| MDCA25S0A22FMC21 | 250 | HPS | Multivolt | Auto-Regulator | Glass | MC2 |
| MDCA40S0A22FMC31 | 400 | HPS | Multivolt | Auto-Regulator | Glass | MC3 |

All GE suggested catalog ordering numbers come with PE receptacle. PE control must be ordered separately. Order and install SCCL-PECTL if no PE is desired.
Multivolt ballasts can be for either 120, 208, 240, or 277 volt incoming power supply.

*GE Lighting Systems, Inc.*
www.gelightingsystems.com

# FIXTURE TYPE "A"

CONSTRUCTION SET

ADDITIVE BID ITEM


JMD ENGINEERING, INC.
ELECTRICAL ENGINEERS
2908 Allesandro Street
Los Angeles, CA 90039
(323) 667-9082 × Fax: (323) 667-9083


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

**PRIVATE ENGINEERING NOTE**

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED PROFESSIONAL ENGINEER
JOHN A. FRIEDRICH
No. C27861
Exp. 3/31/06
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE: ________


GFB-FRIEDRICH
& ASSOC., INC.
CONSULTING CIVIL ENGINEERS
6529 RIVERSIDE AVENUE, STE. 230
RIVERSIDE, CA 92506
(909) 781-0811
gfb-jaf@pacbell.net


SCALE: AS NOTED
DATE: 11-09-04
BENCH MARK:

MARK | REVISIONS | APPR. | DATE
DESIGNED BY JMD DRAWN BY L.G CHECKED BY JMD

CITY OF RIVERSIDE
PARKS AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY ________
DATE ________

REID PARK
PARKING LOT IMPROVEMENT
FIXTURE DETAILS

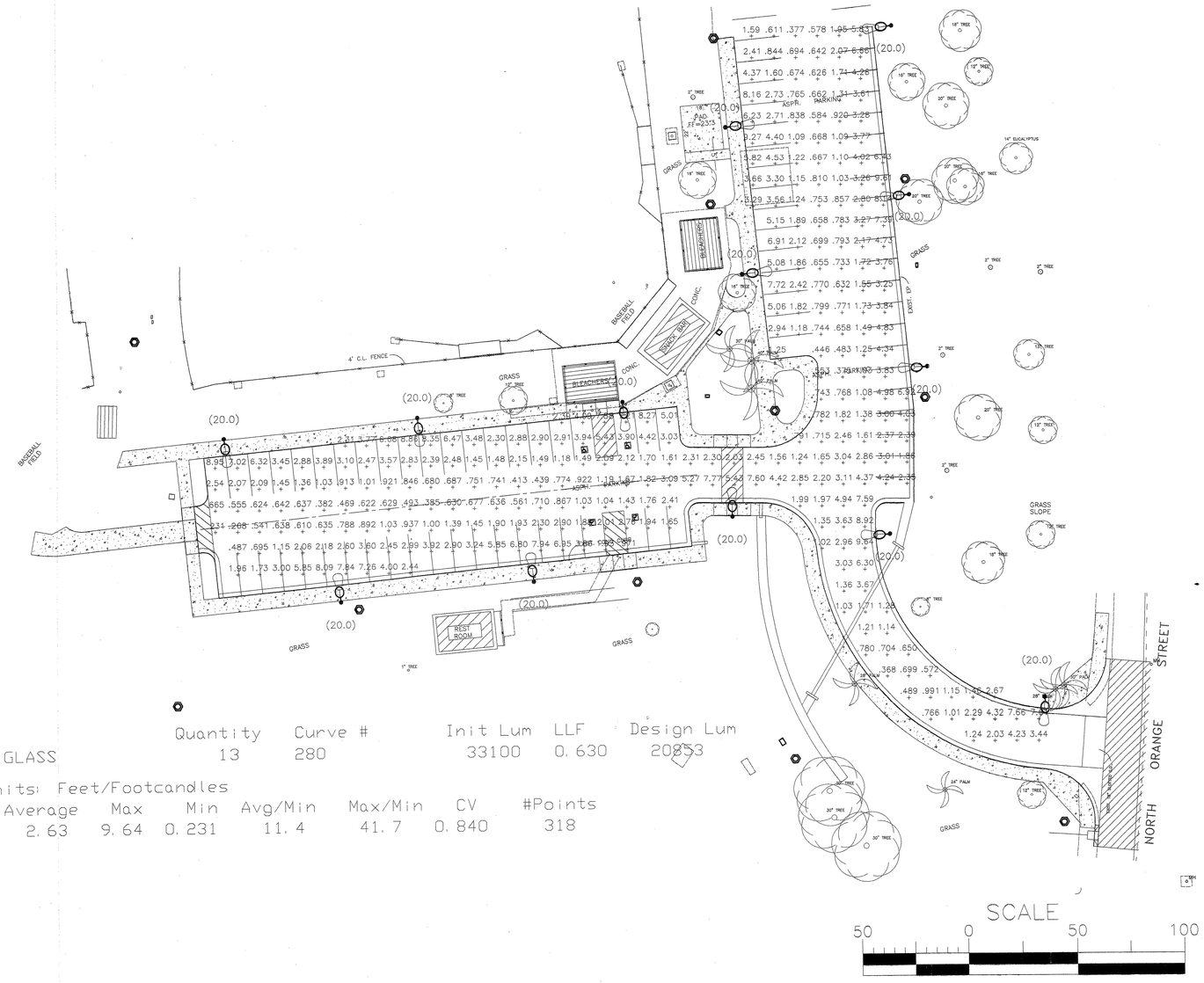
FOR:

PROJECT NO. 02-0313
SHEET ____ OF ____
FILE NO.:

RECEIVED APR 18 2006 PARK & RECREATION PLANNING & DESIGN

W:\Construction Admin Projects\02-0313 Riverside Parks\E-01.dwg 1=1.00 06/17/2004 14:30

**BID SET 02-06-06**




| Fixture | Quantity | Curve # | Init Lum | LLF | Design Lum |
|---|---|---|---|---|---|
| M400A SAG GLASS | 13 | 280 | 33100 | 0.630 | 20853 |

System Units: Feet/Footcandles

| Grid | Average | Max | Min | Avg/Min | Max/Min | CV | #Points |
|---|---|---|---|---|---|---|---|
| Parking | 2.63 | 9.64 | 0.231 | 11.4 | 41.7 | 0.840 | 318 |

ADDITIVE BID ITEM

JMD ENGINEERING, INC.
ELECTRICAL ENGINEERS
2908 Allesandro Street
Los Angeles, CA 90039
(323) 667-9082 x Fax: (323) 667-9083

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REGISTERED PROFESSIONAL ENGINEER JOHN A. FRIEDRICH No. C27861 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 27861
EXPIRATION DATE: 3-31-06 DATE:

GFB-FRIEDRICH & ASSOC., INC.
CONSULTING CIVIL ENGINEERS
6529 RIVERSIDE AVENUE, STE. 230
RIVERSIDE, CA 92506
(909) 781-0811
gfb-jof@pacbell.net

SCALE: AS NOTED
DATE: 11-09-04
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| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY JMD DRAWN BY LG CHECKED BY JMD

CITY OF RIVERSIDE
PARKS AND RECREATION

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGR. | | |
| PARK DEPARTMENT | | |
| TRAFFIC DIVISION | | |
| CHIEF P.W. ENGR. | | |

APPROVED BY
DATE

REID PARK
PARKING LOT IMPROVEMENT
FOOTCANDLES

FOR:

PROJECT NO. 02-0313
SHEET ___ OF ___
FILE NO.:

W:\Construction Admin Projects\02-0313 Riverside Parks\Reid\Footcandles.dwg 1=1.00 06/18/2004 11:16

BID SET 02-06-06