ITEM 9.C.

MOORPARK CITY COUNCIL
AGENDA REPORT

TO: **The Honorable City Council**

FROM: **Jeremy Laurentowski, Parks and Landscape Manager** JL
BY: **Jessica Sandifer, Management Analyst**

DATE: **April 3, 2014 (CC Meeting April 16, 2014)**

SUBJECT: **Consider the Project Plans and Specifications for the Park Site at 161 Second Street (Project 5081)**

BACKGROUND

On June 3, 2009, the City Council approved the Parks and Recreation Master Plan, prepared by Moore Iacofano Goltsman, Inc. A major component of the Master Plan is to identify deficiencies as they relate to park grounds and infrastructure. Ideally, every neighborhood within Moorpark should have convenient access to a local park that serves that particular neighborhood, and according to the Park and Recreation Master Plan, there is a deficiency within the Walnut Acres neighborhood. The Walnut Acres neighborhood is bounded on the west by Spring Road, east by Moorpark Avenue, south by Los Angeles Avenue, and on the north by the railroad and High Street. The closest neighborhood park is Poindexter Park, which serves approximately 1/3 of the west side of the Walnut Acres neighborhood, adjacent to Moorpark Avenue. The closest mini park, or pocket park, is Magnolia Park, which serves the neighborhoods to the north of High Street.

On February 2, 2011, the Redevelopment Agency of the City of Moorpark approved the acquisition of the property at 161 Second Street for the construction of a pocket park. Prior to acquisition, the property was partially improved with a single family dwelling. The purchase price of the approximate 15,000 square foot property was $520,000.00, which included escrow related costs. The cost to remove the existing structure and relocate the tenants was approximately $50,000.00, which included the cost of a professional service agreement to conduct the relocation. At that time, staff estimated that the total cost to acquire the property and construct the park was $1,000,000.00, and that funding for this work would be supplemented from the 2006 Tax Allocation Bond Fund.

On May 15, 2013, the City Council approved the City of Moorpark Mission Statement, Priorities, Goals and Objectives for FY 2013/14. Under Departmental Goals and Objectives, Section II, Revitalize downtown Moorpark with a focus on High Street and the surrounding business district and residential neighborhoods, which includes consideration of public rail transit, potential for increased residential density, and governmental and related public uses, the City Council approved Item 6, construct a public park on the Second Street property by March 31, 2014.

On June 19, 2013, the City Council approved the Option "C" conceptual design plan for the park and staff has entered into Agreements with several consultants to prepare the construction drawings and specifications for the design of the park consistent with the Option "C" layout. The Council will recall that Option "C" was selected because it provided the largest usable turf area. M3 Civil, Inc. has prepared the grading and drainage plans, including the horizontal layout of all hardscape features. Architerra Design Group has prepared the landscape architecture plans, and Visual Concepts Lighting, Inc. has prepared the onsite lighting plans.

DISCUSSION

The proposed park site at 161 Second Street is a pocket park intended to serve the immediate neighborhood, and due to the relatively small size of the property, staff does not intend to provide amenities typically associated with larger neighborhood parks or make the park available for rentals. The closest neighborhood park is Poindexter Park, which is less than one mile from most of the Walnut Acres neighborhood. Restrooms, a large picnic pavilion, and gazebos with bar-b-ques, are provided at this park for small events and gatherings. The distance from the Walnut Acres neighborhood to Poindexter Park is similar to other neighborhoods in the City, as the majority of Moorpark's residents travel within an approximate one mile radius to their local neighborhood park.

The park as designed contains all of the elements initially presented to the City Council during the conceptual design approval. For instance, all storm water runoff will be diverted to several below grade infiltration basins. The design intent of the basins is to capture a significant portion of the annual rainfall, and storm water runoff from adjacent surfaces, and infiltrate the rainfall back into the ground water supply, rather than flushing it out to the storm drain system. The nearest storm drain is located on Moorpark Avenue and staff anticipates that this system will retain 100% of site storm water during normal rainfall periods. The design also includes several areas of decomposed granite paving for picnic areas and the installation of bioswales, consisting of boulders and native landscaping to divert storm water. Decomposed granite is permeable and allows water to infiltrate back into the ground water supply. A low volume irrigation system has been proposed to minimize irrigation water use, and all landscape material, with the exception of the turf area, will consist of drought tolerant and California native plant species.

In addition, the design includes the installation of landscaped traffic calming devices adjacent to the south side of the park and along Second Street, from Moorpark Avenue to Bard Street. Staff contracted with a traffic engineer, Linscott Law & Greenspan, to prepare the traffic analysis and ultimate design of the Second Street improvements. The proposed devices will consist of a raised landscape planter, bulb-outs and striping to reduce the drive lane width from approximately 13'-6" to 12'-0". These devices will eliminate parking in front of the park, increasing visibility from Second Street, and are designed to slow traffic by restricting the drive aisle width. The traffic calming device adjacent to the park will also function as a stormwater infiltration basin, further diverting water flows away from the Moorpark Avenue storm drain. The plans show a pedestrian crossing directly adjacent to the front of the park site. Staff does not intend to install the ramp and crosswalk at this time, but will leave the traffic calming devices to reduce the vehicular speed along this section of Second Street. The crosswalk can be added in the future if warranted.

In addition, the removal of the overhead power lines and three existing wood utility poles used for street lighting on Second Street will occur prior to the construction of the park. Each of the three poles will be replaced with a standard light pole with underground electrical service. Staff has contracted separately with Southern California Edison (SCE) to replace the poles and run the underground electrical on Second Street, and is in the process of preparing an Agreement with Oilfield Electric Company to install the conduit required for this work.

The park will include amenities, such as picnic tables with bar-b-ques, bench seating areas, trash and recycle beverage containers, a drinking fountain, shade trees, an approximate 3,700 square foot open turf play area and a tot lot with play structures designed for children in the 2-5 year age group and one for children in the 5-12 year age group. All site amenities shall match the amenities installed at other parks within Moorpark for consistency. Staff will prepare a Request for Proposals (RFP) for the playground equipment and shall obtain approval from the Parks and Recreation Commission on the final design of the equipment.

FISCAL IMPACT

Staff has prepared a preliminary cost estimate for the project and has determined that the total costs to construct and maintain the park site are as follows:

Preliminary Budget	$689,894 (See Attachment 2)
Preliminary Maintenance Budget	$19,745/yr. (See Attachment 3)

During the City Council meeting on June 13, 2013, staff estimated that the total cost to construct the park would be approximately $578,561. However, these costs did not include the traffic calming improvements on Second Street. The majority of the cost increase, approximately $111,333, is due to the additional costs required to perform the traffic engineering study and civil engineering design of the street improvements, as well

as the actual construction costs for the island and bioswale adjacent to the park, traffic calming bulb-outs and striping. In addition, in 2012, staff contacted SCE to prepare plans and specifications to underground the utilities on Second Street and replace three wood light poles with concrete light poles consistent with other neighborhoods in Moorpark. It was not apparent to staff that the SCE plans did not include the installation of the conduit required to underground the utilities, as staff was under the impression this was included in the plan set and the turnkey installation cost. The additional cost to install the conduit by a sub-contractor is approximately $25,000. This cost was not included in the June estimate.

The Walnut Acres neighborhood is within Park Zone 1 Development Fund (2111) and funding is currently not available to build the park. Fund 2111 currently has a negative fund balance of $941,229, due to the installation of the Poindexter Park expansion project and skate park. The fund balance will be supplemented by future development fees within the Zone 1 boundary.

In addition, the City is faced with continuing constraints on funding for park maintenance, which has a direct impact on the General Fund. The FY 2013/14 operating budget for park maintenance is approximately $2,116,500. The Single Family Equivalent (SFE) assessment rate for park maintenance is currently set at $56.33 per household, per year. This assessment will generate approximately $745,000 for park maintenance, which contributes approximately 35% of the overall parks operating budget, and will require approximately $1,371,500 of funding contributions from the General Fund. Staff has estimated that the annual maintenance costs for this park will be approximately $19,745 per year. Funding for the long term maintenance of the Second Street Park will increase the City's annual operations budget, and additional funding contributions from the General Fund will be required.

On February 1, 2012, due to actions of the State of California, the Redevelopment Agency of the City of Moorpark was dissolved and the majority of the funding for future projects was removed. However, ABx1 26 and AB 1484 allow Tax Allocation Bond (TAB) proceeds to be expended according to the bond covenants. The TAB proceeds are managed by the Successor Agency of the Redevelopment Agency of the City of Moorpark (SARA). On March 1, 2013, and every six months since, a Recognized Obligation Payment Schedule (ROPS) has been submitted by the SARA to the State Department of Finance (DOF) for the design/engineering and construction of the Second Street Park, funded through TAB proceeds. The DOF has approved the Second Street Park project on each ROPS since March 2013, along with the total allocation of the funding necessary to build the Park. Staff anticipates that funding sources from the TAB proceeds will be utilized to fully fund the construction of the Second Street Park, as well as associated maintenance costs through June 30, 2015. Staff will make a recommendation on the final approval of the TAB funds at the time of the bid award.

STAFF RECOMMENDATION

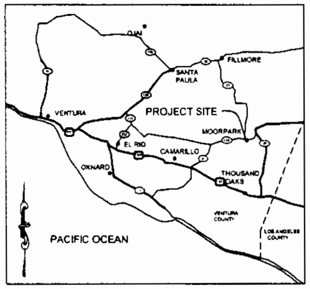
Approve the plans and specifications for the Second Street Park project and authorize bid solicitation for construction of the park.

Attachments:
1. Plans and Specifications
2. Preliminary Budget
3. Preliminary Maintenance Budget

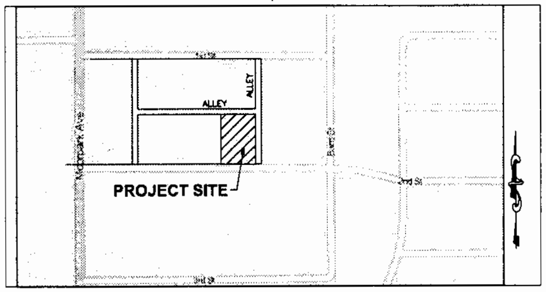
ATTACHMENT 1

PLANS AND SPECIFICATIONS

CITY OF MOORPARK
GRADING PLAN
NEIGHBORHOOD PARK
161 SECOND STREET



VICINITY MAP
N.T.S.



INDEX MAP
N.T.S.

GENERAL NOTES (GRADING)

1. GRADING SHALL BE IN ACCORDANCE WITH THE MOORPARK CITY BUILDING CODE WHICH ADOPTS BY REFERENCE THE 2007 CBC AND THE VENTURA COUNTY STANDARD LAND DEVELOPMENT SPECIFICATIONS, THE PROJECT CONDITIONS OF APPROVAL, AND LAND DEVELOPMENT MANUAL. WHEN CONFLICT EXISTS, THE MOST RESTRICTIVE STANDARD SHALL BE USED.
2. A PRECONSTRUCTION CONFERENCE OF ALL INTERESTED PARTIES SHALL BE HELD PRIOR TO ANY CONSTRUCTION OR GRADING.
3. THE ENGINEER OF RECORD SHALL CERTIFY THAT THE ROUGH GRADING PLAN CONFORMS TO THE CITY OF MOORPARK AND THE 2007 CBC REQUIREMENTS. THE CERTIFICATION SHALL FURTHER STATE THAT THE ROUGH GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TENTATIVE MAP AND THAT THE GRADES AND GRADING ON THE SITE ARE IN SUBSTANTIAL CONFORMANCE WITH THE ROUGH GRADING PLAN. THIS CERTIFICATION SHALL BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THE ROUGH GRADING PLAN.
4. ALL RECOMMENDATIONS, MADE BY THE SOILS ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED) CONTAINED IN THE REPORTS REFERENCED HEREON AS APPROVED OR CONDITIONED BY THE CITY, SHALL BE PART OF THIS GRADING PLAN.
5. ALL GRADED SURFACES SUBJECT TO EROSION SHALL BE PROTECTED AS APPROVED BY THE CITY ENGINEER. FINAL PROTECTION AND PLANTING SHALL BE PROVIDED AND FULLY FUNCTIONAL PRIOR TO FINAL APPROVAL OF GRADING, ISSUANCE OF A CERTIFICATE OF OCCUPANCY, OR UTILITY CLEARANCE FOR ANY BUILDING IN THE SITE, WHICHEVER OCCURS FIRST. BEFORE THE BEGINNING OF THE RAINY SEASON, ALL SLOPES AND GRADED AREAS SHALL BE PROTECTED TO THE SATISFACTION OF THE CITY ENGINEER.
6. ALL DELETERIUS MATERIAL, I.E. LUMBER, LOGS, BRUSH OR ANY OTHER ORGANIC MATERIAL OR RUBBISH, SHALL BE REMOVED FROM ALL AREAS TO RECEIVE COMPACTED FILL.
7. UNSUITABLE MATERIAL SHALL BE REMOVED AS REQUIRED BY THE SOILS ENGINEER (AND ENGINEERING GEOLOGIST) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES. STRICT COMPLIANCE TO REPORT RECOMMENDATIONS IS REQUIRED. DEVIATIONS REQUIRE REVIEW AND APPROVAL BY THE CITY ENGINEER.
8. ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE INSPECTED AND APPROVED BY THE SOILS ENGINEER (AND ENGINEERING GEOLOGIST) AFTER REMOVAL OF UNSUITABLE MATERIAL AND EXCAVATION OF KEYWAYS AND BENCHES AND PRIOR TO PLACEMENT OF SUBSURFACE DRAINAGE SYSTEMS OR ANY FILL.
9. ALL SOIL OR ROCK MATERIALS DEEMED UNSUITABLE FOR PLACEMENT IN COMPACTED FILL SHALL BE REMOVED FROM THE SITE. PRIOR TO USE IN COMPACTED FILL, ANY MATERIAL SUCH AS CONCRETE OR IMPORTED MATERIALS SHALL BE APPROVED BY THE SOILS ENGINEER AND CITY ENGINEER. WHERE EXCAVATED MATERIAL BEING USED AS FILL IS BLOCKY, IT SHALL BE BROKEN INTO SUITABLE PARTICLE SIZES, NONE LARGER THAN SIX INCHES IN LARGEST DIMENSION AND IN CONFORMANCE WITH THE 2007 CBC AND PER THE SOILS REPORT FOR THIS PROJECT.
10. THE SOILS ENGINEER SHALL DIRECT THE REMOVAL OR TREATMENT OF ANY EXISTING UNDERGROUND STRUCTURES SUCH AS SEPTIC TANKS, IRRIGATION LINES, ETC.
11. ANY WATER WELL LOCATED WITHIN THE SITE SHALL BE REPORTED TO THE CITY ENGINEER AND THE COMMUNITY DEVELOPMENT DIRECTOR PRIOR TO ITS MODIFICATION OR DESTRUCTION. SPECIAL PROCEDURES ARE REQUIRED FOR ABANDONMENT.
12. ALL EXCAVATED BACK SLOPES AND KEYS FOR BUTTRESS FILLS MUST BE EXAMINED BY THE ENGINEERING GEOLOGIST AND SOILS ENGINEER TO ENSURE THAT ALL POTENTIAL PLANES OF FAILURE HAVE BEEN EXPOSED IN THE EXCAVATION AND WILL BE ADEQUATELY SUPPORTED BY THE PROPOSED BUTTRESS. FIELD CERTIFICATION SHALL BE SUBMITTED BY THE CONSULTANTS.
13. STORM DRAIN PREVENTION MEASURES OR PREVENTIVE DEVICES REQUIRED BY THE CITY ENGINEER SHALL BE INSTALLED BY OCTOBER 1ST AS GRADING PROGRESSES AND MAINTAINED UNTIL APRIL 15TH OF THE SUCCEEDING YEAR. SUBMITTAL OF PLANS FOR REVIEW BY THE CITY ENGINEER IS REQUIRED ONE MONTH PRIOR TO THE START OF RAINY SEASON.
14. THE SOILS ENGINEER SHALL SUBMIT RECOMMENDATIONS FOR CORRECTIVE WORK TO INSURE SLOPE STABILITY WHERE UNSTABLE MATERIAL IS EXPOSED AT THE TOP CUTS.
15. UNLESS OTHERWISE SPECIFIED, CORRUGATED STEEL PIPE (CSP) SHALL BE BITUMINOUS COATED IN ACCORDANCE WITH THE STANDARD LAND DEVELOPMENT SPECIFICATIONS (SLDS). CSP SHALL NOT BE USED ON THE SITE WITHOUT THE APPROVAL OF THE CITY ENGINEER.
16. CONCRETE CAST IN PLACE PIPE (CCIPP) SHALL NOT BE USED ON THE SITE WITHOUT THE APPROVAL OF THE CITY ENGINEER.
17. TERRACE DRAINS, INTERCEPTOR DRAINS AND DOWN DRAINS SHALL BE CONSTRUCTED OF 3" P.C.C. REINFORCED WITH 6" X 6"- #10 X#10 W.W.M. AND SHALL BE OF EITHER SEMI CIRCULAR OR TRIANGULAR CROSS SECTION, AND SHALL BE INSTALLED PRIOR TO APPROVAL OF ROUGH GRADING. (COLOR OF CONCRETE SHALL BE OMAHA TAN).
18. MATERIALS FOR INTERCEPTOR DRAINS, TERRACE DRAINS, AND DOWN DRAINS SHALL MEET STANDARD LAND DEVELOPMENT SPECIFICATIONS, SUBSECTION 201-1 AND 400 EXCEPT THAT THE CONCRETE LINED SWALES, V-DITCHES, AND PAVED TERRACE DRAINS, DOWNDRAINS, BERMS, VELOCITY REDUCERS AND OTHER EROSION PROTECTION DEVICES SHALL BE OF CLASS 470-C-2000 UNLESS OTHERWISE SPECIFIED. (COLOR OF CONCRETE SHALL BE OMAHA TAN.)
19. INTERIM SOILS AND GEOLOGIC REPORTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED BY THE CITY ENGINEER.
20. "RECORD DRAWING" SOILS ENGINEERING AND ENGINEERING GEOLOGY REPORTS, SUMMARIZING ALL WORK PERFORMED AND CONCLUDING THAT FILLS HAVE BEEN PLACED ACCORDING TO THE APPROVED PLANS (AND STATING THAT ALL GEOLOGIC FEATURES ARE GROSSLY STABLE AS GRADED) SHALL BE SUBMITTED TO THE CITY PRIOR TO APPROVAL OF THE ROUGH GRADING BY THE CITY ENGINEER.
21. THE DESIGNED LONGITUDINAL GRADE OF TERRACE AND INTERCEPTOR DRAINS SHALL FOLLOW NATURAL TERRAIN AND PROPOSED SLOPES AS MUCH AS POSSIBLE. WHERE EXISTING SLOPES MUST BE REGRADED (TO ALLOW FOR BENCHING AND TERRACE OR INTERCEPTOR DRAINS) AREAS WILL BE IDENTIFIED AND DETAILS SHOWN ON THESE PLANS.
22. ALL CONSTRUCTION, GRADING, STORAGE AND TRANSPORTATION ACTIVITIES WILL BE CONDUCTED IN A MANNER CONSISTENT WITH THE STORM WATER POLLUTION CONTROL PLAN/STORM WATER POLLUTION PREVENTION PLAN SUBMITTED FOR THIS PROJECT AND THE VENTURA COUNTYWIDE STORM WATER QUALITY MANAGEMENT PROGRAM NDPES PERMIT NO. CAS004002 AND CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICES (BMP'S) HANDBOOKS. A COPY OF THE STORM WATER POLLUTION CONTROL PLAN AND/OR STORM WATER POLLUTION PREVENTION PLAN WILL BE ON SITE AND AVAILABLE FOR REVIEW AT ALL TIMES DURING CONSTRUCTION.
23. PRIOR TO INITIATION OF ANY WORK, ALL APPROPRIATE PERMITS WILL BE PROCURRED AND COPIES PROVIDED TO THE CITY ENGINEER.
24. REGULAR WATERING OF SITE WILL BE REQUIRED TO CONTROL DUST. ALL MEASURES SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.
25. ALL CLEARING, EARTH MOVING OR EXCAVATION ACTIVITIES SHALL CEASE DURING PERIODS WHEN WINDS EXCEED 15 MILES PER HOUR.
26. ANY RECORDED MONUMENTS IN THE CONSTRUCTION AREA SHALL BE LOCATED AND TIED OUT AND SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION.
27. HAUL ROUTE PERMIT ISSUED BY THE CITY OF MOORPARK SHALL BE REQUIRED FOR ALL IMPORT/EXPORT OF MORE THAN 100 TRUCK LOADS OR 1000 CUBIC YARDS, WHICHEVER IS LESS.

UTILITY HOLDERS:

SEWER: VENTURA COUNTY WATERWORKS DISTRICT NO. 1
6767 Spring Road
Moorpark, CA 93021
PH: (805) 378-3026

WATER: VENTURA COUNTY WATERWORKS DISTRICT NO. 1
6767 Spring Road
Moorpark, CA 93021
PH: (805) 378-3026

GAS: THE GAS COMPANY
P.O. BOX 2300
CHATSWORTH, CA 91313-2300
PH: (800) 427-2200

TELEPHONE: PACIFIC BELL
2130 WARD AVE., ROOM 124
SIMI VALLEY, CA 93065
(805) 583-6640

ELECTRIC: SOUTHERN CALIFORNIA EDISON
3589 FOOTHILL DR.
THOUSAND OAKS, CA 91361
PH: (805) 494-7066

CABLE TV: TIME WARNER CABLE
485 EASY ST., UNIT E
SIMI VALLEY, CA 93065
PH: (805) 526-3188

BENCH MARK:

DATUM BENCH MARK: 37-2 RM-1 (VCPID 1231) BRASS DISK AT THE SE CORNER OF THE INTERSECTION OF ROBERTS AVE. AND SPRING ROAD, 3.0 FT SOUTHERLY FROM THE B.C. IN THE TOP OF A CONCRETE CURB.

BM ELEV: 528.240, NAVD 1988.

PROJECT BENCH MARK (TBM): MOST NORTHERLY POINT OF A SSMH RIM, 188 FEET WESTERLY FROM THE INTERSECTION OF SECOND STREET AND BARD STREET, LOCATED AT THE INTERSECTION OF SECOND STREET AND N/S ALLEY EASEMENT.

TBM ELEV: 517.17 N. RIM

BASIS OF BEARINGS:

MAP GRID BASED ON ASSUMED COORDINATE SYSTEM WITH THE BASIS OF BEARING BEING N89°58'30"E AS REFERENCED TO THE CENTER LINE OF SECOND STREET PER VISTA VERDE TRACT NO. 3 (26MR73) RECORDED IN THE COUNTY OF VENTURA.

MAP NOTES:

THE PROJECT BOUNDARY DELINEATED HEREON, IS COMPILED FROM RECORD DATA ONLY, AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OR RECORD OF SURVEY. RECOVERED BOUNDARY MONUMENTS ARE REFERENCED AS FIELD TIES ONLY.

THIS MAP WAS COMPILED BY FIELD SURVEY METHODS, NOVEMBER, 2013.

SHEET INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE PLAN
3	GRADING AND DRAINAGE PLAN
4	DETAIL SHEET
5	CROSS SECTIONS
6	TRAFFIC CALMING SIGNING AND STRIPING
7	CONSTRUCTION EROSION CONTROL, NPDES

SURVEYOR'S STATEMENT

ANY RECORDED MONUMENTS IN THE CONSTRUCTION AREA SHALL BE LOCATED AND TIED OUT OR SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION.

APPROVAL OF CONSULTANTS

THIS GRADING PLAN IS ACCEPTABLE IN REGARDS TO SOILS (AND GEOLOGIC-IF APPLICABLE) CONDITIONS AND CONFORMS TO THE RECOMMENDATIONS OF THE SUPPORTIVE REPORTS

BY ____________________

SOIL ENGINEERING REPORTS: ____________________

ENGINEERING GEOLOGY REPORTS: ____________________

BY ____________________
SOILS ENGINEER R.C.E.

COMPANY ____________________

BY ____________________
ENGINEERING GEOLOGIST CERT. NO.

COMPANY ____________________

PROJECT CONSULTANTS

CIVIL ENGINEER: MJ CIVIL, INC.
400 ROSEWOOD AVENUE, SUITE 201
CAMARILLO, CA 93010
PH: (805) 445-4404

LANDSCAPE ARCHITECT: X
X
X
X

OWNER'S STATEMENT

A CIVIL ENGINEER, SOILS ENGINEER AND/OR GEOLOGIST WILL BE EMPLOYED TO GIVE TECHNICAL SUPERVISION TO MAKE INSPECTIONS OF THE WORK, WHENEVER APPROVAL OF THE PLANS AND ISSUANCE OF THE PERMIT ARE TO BE BASED ON THE CONDITION THAT SUCH PROFESSIONAL PERSONS BE SO EMPLOYED.

____________________ ____________
BY: OWNER'S REPRESENTATIVE DATE

ENGINEER-OF-RECORD CERTIFICATION

I, ______________________ ENGINEER-OF-RECORD FOR THE PROJECT SHOWN HEREON HEREBY CERTIFY THAT:

(1) THESE PLANS WERE PREPARED BY ME, OR UNDER MY SUPERVISION.

(2) THIS COMPUTER GENERATED COPY OF THE CITY OF MOORPARK GRADING COVER SHEET IS SUBSTANTIALLY THE SAME AS THAT CURRENTLY ON FILE WITH THE CITY ENGINEER'S OFFICE EXCEPT FOR THOSE REVISIONS AS NOTED AND SPECIFICALLY APPROVED BY THE CITY ENGINEER.

(3) THE DESIGN SHOWN HEREON SUBSTANTIALLY CONFORMS TO THE CONDITIONS OF THE CITY OF MOORPARK DISCRETIONARY APPROVAL(S), IF ANY, THAT PERTAIN TO THIS PROJECT

CIVIL ENGINEER ____________________ REG. NO. ____________
(SIGNATURE) DATE ____________

ENGINEERED GRADING INSPECTION CERTIFICATE

JOB ADDRESS OR TRACT NO. SECOND STREET, MOORPARK, CA

OWNER ____________________

ROUGH GRADING CERTIFICATION

(A) BY SOILS ENGINEER

I CERTIFY THAT THE ROUGH GRADING WORK INCORPORATES ALL RECOMMENDATIONS CONTAINED IN THE REPORT OR REPORTS FOR WHICH I AM RESPONSIBLE AND ALL RECOMMENDATIONS THAT I HAVE MADE BASED ON FIELD INSPECTION OF THE WORK AND TESTING DURING GRADING. I FURTHER CERTIFY THAT WHERE THE REPORTS OF AN ENGINEERING GEOLOGIST, RELATIVE TO THIS SITE, HAVE RECOMMENDED THE INSTALLATION OF BUTTRESS FILES OR OTHER SIMILAR STABIUZATION MEASURES. SUCH EARTHWORK CONSTRUCTION HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED DESIGN.

LOT NOS. ____________________

SEE REPORTS DATED ____________________

FOR TEST DATA RECOMMENDED ALLOWABLE SOIL BEARING VALUES AND OTHER SPECIAL RECOMMENDATIONS.

SOILS ENGINEER ____________________ REG. NO. ____________
(SIGNATURE) DATE ____________

(B) BY ENGINEERING GEOLOGIST

I CERTIFY THAT THE ROUGH GRADE WORK INCORPORATES ALL OF THE RECOMMENDATIONS CONTAINED IN THE REPORT OR REPORTS FOR WHICH I AM RESPONSIBLE AND ALL RECOMMENDATIONS THAT I HAVE MADE BASED ON FIELD INSPECTION OF THE WORK DURING GRADING.

LOT NOS. ____________________

ENGINEERING GEOLOGIST ____________________ CERT. NO. ____________
(SIGNATURE) DATE ____________

(C) CIVIL ENGINEER

I CERTIFY TO THE SATISFACTORY COMPLETION OF ROUGH GRADING INCLUDING GRADING TO APPROXIMATE FINAL ELEVATIONS; PROPERTY LINE LOCATED AND STAKED, CUT AND FILL SLOPES CORRECTLY GRADED AND LOCATED IN ACCORDANCE WITH THE APPROVED DESIGN; SWALES AND TERRACES GRADED READY FOR PAVING; BERMS INSTALLED; AND REQUIRED DRAINAGE SLOPES PROVIDED ON THE BUILDING PADS. I FURTHER CERTIFY THAT WHERE REPORT OR REPORTS OF AN ENGINEERING GEOLOGIST AND/OR SOILS ENGINEER HAVE BEEN PREPARED RELATIVE TO THIS SITE, THE RECOMMENDATIONS CONTAINED IN SUCH REPORTS HAVE BEEN INCORPORATED IN THE DESIGN.

LOT NOS. ____________________

CIVIL ENGINEER ____________________ REG. NO. ____________
(SIGNATURE) DATE ____________

FINAL GRADING CERTIFICATION

I CERTIFY TO THE SATISFACTORY COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED PLANS. ALL DRAINAGE DEVICES REQUIRED BY THE GRADING PERMIT, GRADING PLANS AND GRADING ORDINANCE HAVE BEEN INSTALLED. EROSION TREATMENT OF SLOPES AND IRRIGATION SYSTEMS (WHERE REQUIRED) HAVE BEEN INSTALLED. ADEQUATE PROVISIONS HAVE BEEN MADE FOR DRAINAGE OF SURFACE WATERS FROM BUILDING SITE AS OF THE DATE.

LOT NOS. ____________________

CIVIL ENGINEER ____________________ REG. NO. ____________
(SIGNATURE) DATE ____________

GRADING CONTRACTOR CERTIFICATION

BY GRADING CONTRACTOR (THE OWNER MAY SIGN IF THE GRADING WAS NOT DONE BY A LICENSED GRADING CONTRACTOR)

I CERTIFY THAT THE GRADING WAS DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE GRADING ORDINANCE, AND THE RECOMMENDATIONS OF THE CIVIL ENGINEER, SOILS ENGINEER AND ENGINEERING GEOLOGIST. IT IS UNDERSTOOD THAT THIS CERTIFICATION INCLUDED ONLY THOSE ASPECTS OF THE WORK THAT CAN BE DETERMINED BY ME, AS A COMPETENT GRADING CONTRACTOR, WITHOUT SPECIAL EQUIPMENT OR PROFESSIONAL SKILLS.

GRADING CONTRACTOR ____________________ LICENSE NO. ____________
(SIGNATURE) DATE ____________

EARTHWORK QUANTITIES

CUT: ____________ CU. YDS. FILL: ____________ CU. YDS.
EXPORT: ____________ CU. YDS. IMPORT: ____________ CU. YDS.
DISPOSAL SITE G.P. NO. N/A HAUL PERMIT NO. N/A

PERMITS

ENCROACHMENT NO. ____________ DATE ____________
STATE ENCROACHMENT NO. N/A DATE ____________
VENTURA COUNTY FLOOD CONTROL DISTRICT WATER COURSE PERMIT NO. N/A

PLANS CHECKED IN CONFORMANCE WITH PROJECT CONDITIONS OF APPROVAL

DATED: ____________

NAME: ____________________ DATE: ____________

6				
5				
4				
3				
2				
1				
△	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE

REGISTERED PROFESSIONAL ENGINEER KATHERINE M. McCUNNEY NO. 43804 EXP. 12-31-14 CIVIL STATE OF CALIFORNIA

PREPARED BY: J.N. 13.1387
M3_4-16-13 Option C.dwg
M³ CIVIL, INC.
Consulting Civil Engineers
400 Rosewood Avenue, Suite 201
Camarillo, CA 93010
(805) 445-4404
FAX (805) 445-4401
KATHERINE M. McCUNNEY, RCE 43804 EXP. 12/31/14 DATE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

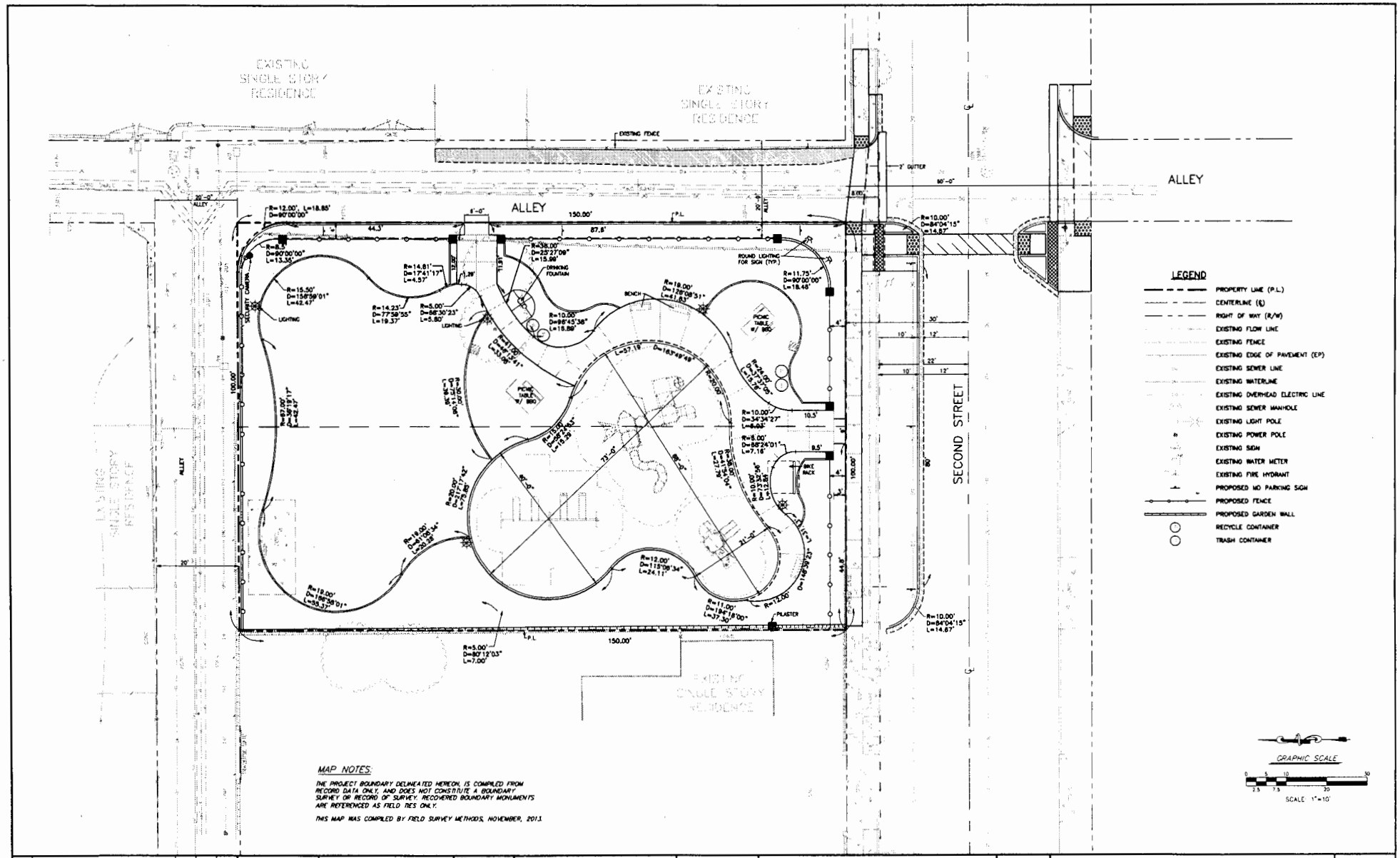
PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 DATE

CITY OF MOORPARK
PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA
TITLE SHEET

SHEET 1 OF 7
DRAWING NO.



MAP NOTES:

THE PROJECT BOUNDARY DELINEATED HEREON, IS COMPILED FROM RECORD DATA ONLY, AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OR RECORD OF SURVEY. RECOVERED BOUNDARY MONUMENTS ARE REFERENCED AS FIELD TIES ONLY.

THIS MAP WAS COMPILED BY FIELD SURVEY METHODS, NOVEMBER, 2013.

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0	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE

PREPARED BY: J.N. 131387
M3_4-16-13 Option C.dwg
M CIVIL, INC.
Consulting Civil Engineers
400 Rosewood Avenue, Suite 201
Camarillo, CA 93010
(805) 445-4404
FAX (805) 445-4401
DATE
KATHERINE M. McGUIRKEY, RCE 43804 EXP. 12/31/14

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 DATE

CITY OF MOORPARK

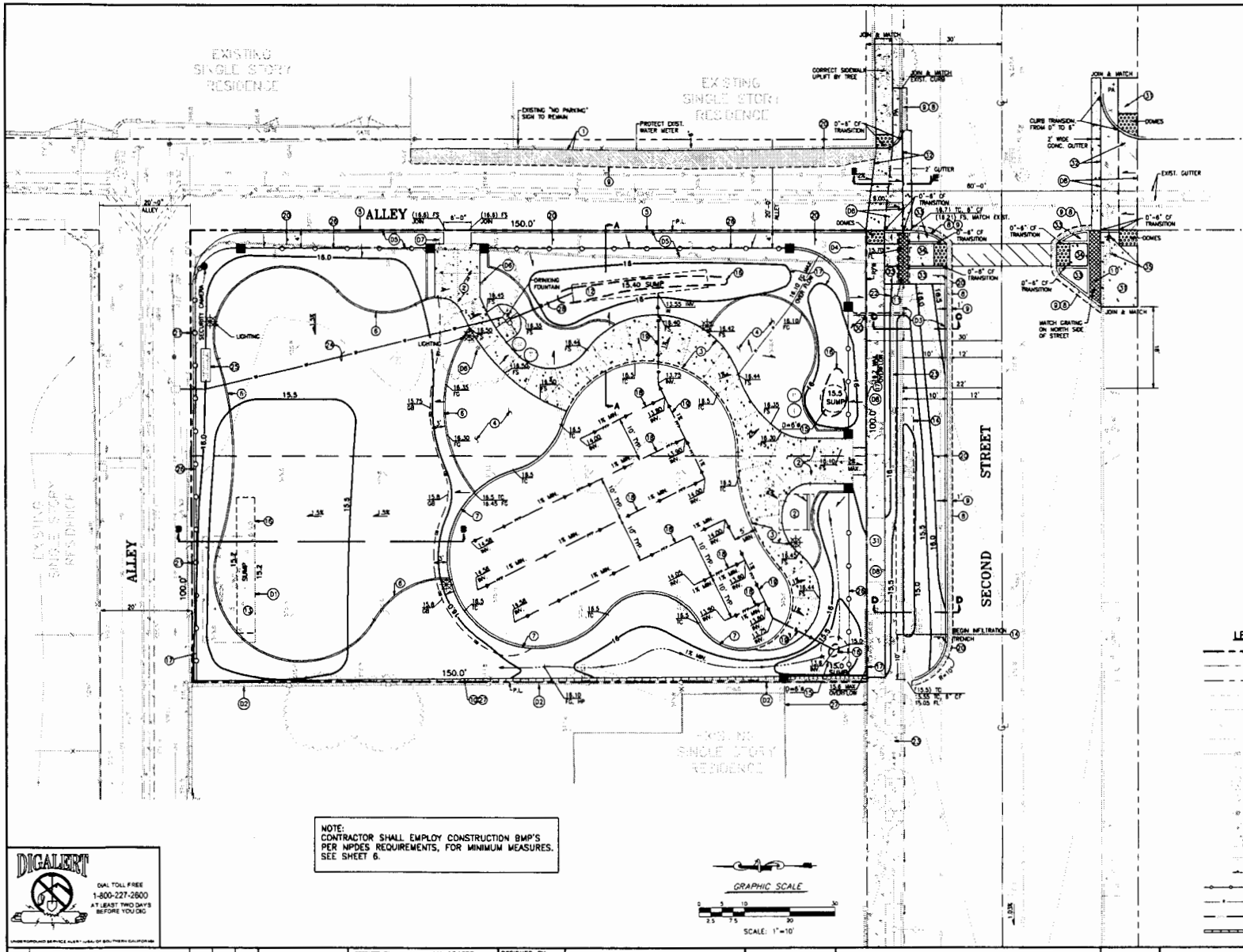
PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA

SITE PLAN

SHEET 2 OF 7
DRAWING NO.



NOTE:
CONTRACTOR SHALL EMPLOY CONSTRUCTION BMP'S PER NPDES REQUIREMENTS, FOR MINIMUM MEASURES. SEE SHEET 6.

CONSTRUCTION NOTES

1. Construct 6" AC pavement, Class C2 PG 64-10 on 5" Class II Base with 2" x 6" Redwood Header. See Detail 1 on Sheet 4.
2. Construct 4" Concrete sidewalk.
3. Construct 4" Concrete walkway with reinforced thickened edge. See Detail 3 on Sheet 4.
4. Construct 4" decomposed granite, compacted, per landscape plans, no decorative rock in this area.
5. Construct 6" x 6" concrete curb, flush along edge of pavement. See Detail on Sheet 4.
6. Construct edge strip per landscape plans.
7. Construct 6" depended curb along play area. See Detail on Sheet 4.
8. Construct 8" concrete curb per Standard Plan for Public Works Construction Plate 120-1, Type A1-8.
9. Saw cut pavement 1' from proposed curb face, patch pavement with AC pavement to match, 6" min.
10. Construct 8' high Masonry Garden Wall. See Detail on Sheet 4.
11. Install Galvanized Steel trench drain with 2' clear span handicap grating with anti theft bolting/locking, see detail 11 on sheet 4.
12. Construct stormwater infiltration trench. See Detail on Sheet 4, L=30'.
13. Construct stormwater infiltration trench. See Detail on Sheet 4, L=30'.
14. Construct stormwater infiltration trench. See Detail on Sheet 4, L=50'.
15. Construct stormwater percolation pit, 8' diameter. See Detail on Sheet 4.
16. Stormwater runoff "Sump Base" flat area as shown.
17. Sump area surface overflow, maximum sump depth 0.7'. Contractor to verify.
18. Install 4" perforated pipe drainage system below play area. See Detail 18 on Sheet 4. See play equipment footing locations by others.
19. Install 4" PVC storm drain collection pipe connect to infiltration pits.
20. Install "NO PARKING" sign along Alley/Street, where shown, see Detail on Sht. 4.
21. Install "NO PARKING" sign along Alley, attach to fence where shown.
22. Street Light to be installed by others.
23. Overhead electrical to be undergrounded by others.
24. Construct 3/4" Sch. 40 PVC, waterline to drinking fountain.
25. Construct 1" irrigation backflow valves for landscape purposes.
26. Install Perimeter fencing per Detail, see Landscape Plan.
27. Construct temporary fencing along property line, secure neighbor as required.
28. Install 2" PVC drinking fountain drain line, connect to infiltration basin as required.
29. Concrete Drainage Channel. See Detail 29 on sheet 4.
30. Install 6" sleeve for irrigation purposes, min. 30" cover. See Detail 30 on sht. 4.
31. Remove and reconstruct Concrete Sidewalk per SPPWC, Plate 112.
32. Remove ex. driveway and reconstruct Driveway Approach per Std Plans for for PW Construction, Std Plan 110-1 Type A, (=6" mod. to omit side warps
33. Construct decorative Cobble Stone landscape surface in planter area.
34. Construct 5' wide concrete Handicap/Pedestrain access way. Slope to drain.

DEMOLITION NOTES

- D1 Remove and dispose concrete slab.
- D2 Remove masonry wall along property line.
- D3 Remove concrete curb, gutter and pavement within proposed planter.
- D4 Remove steel and concrete bollard.
- D5 Saw Cut and remove AC pavement within Park limits along alley.
- D6 Remove trees within Park limits.
- D7 Remove Sign.
- D8 Remove concrete walkway and drive apron within Right of Way.

LEGEND

- PROPERTY LINE (P.L.)
- CENTERLINE (℄)
- RIGHT OF WAY (R/W)
- EXISTING FLOW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT (EP)
- EXISTING SEWER LINE
- EXISTING WATERLINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING SEWER MANHOLE
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING SIGN
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- PROPOSED NO PARKING SIGN
- PROPOSED FENCE
- PROPOSED RIDGE LINE
- PROPOSED PERFORATED PIPE
- PROPOSED GARDEN WALL

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	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE
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4				
3				
2				
1				
0				

REGISTERED PROFESSIONAL ENGINEER — KATHERINE M. McCONNEY, NO. 43604, EXP. 12-31-14, CIVIL, STATE OF CALIFORNIA

PREPARED BY: J.N. 13.1387
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KATHERINE M. McCONNEY, RCE 43604 EXP. 12/31/14

DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY:
PARK AND RECREATION DIRECTOR DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 DATE

CITY OF MOORPARK

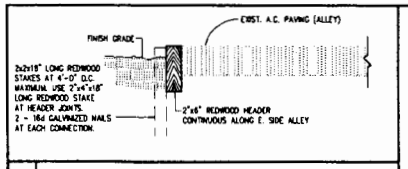
PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

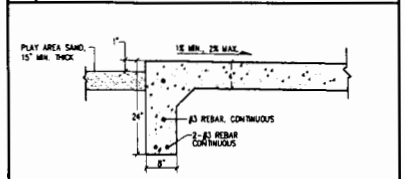
NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA

GRADING AND DRAINAGE PLAN

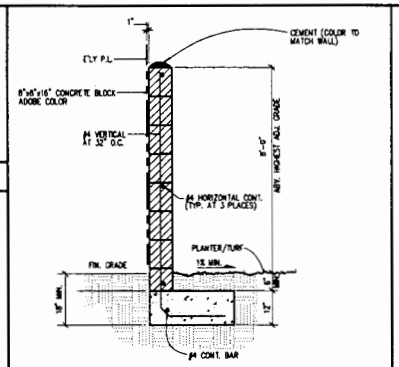
SHEET 3 OF 7
DRAWING NO.



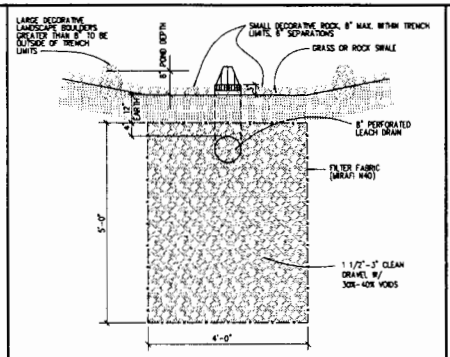
1 REDWOOD HEADER ALONG A.C.



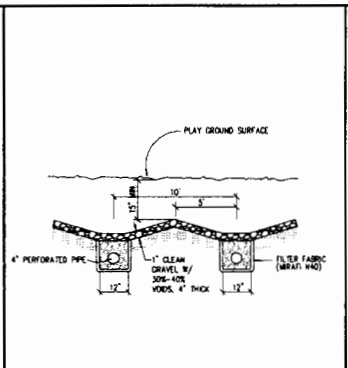
3 CONCRETE WALKWAY THICKENED EDGE



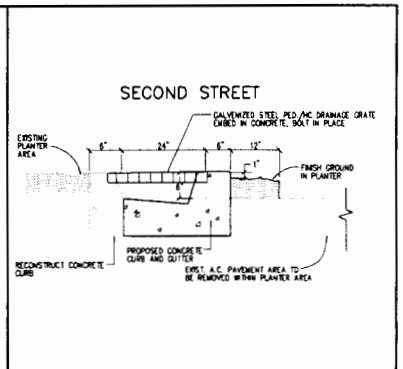
10 8' MASONRY GARDEN WALL



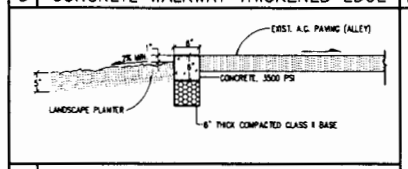
12 13 14 STORMWATER INFILTRATION TRENCH



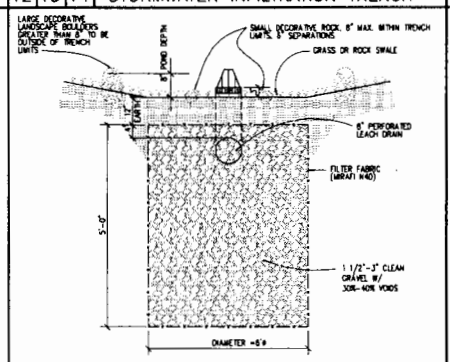
18 PERFORATED SUBDRAIN



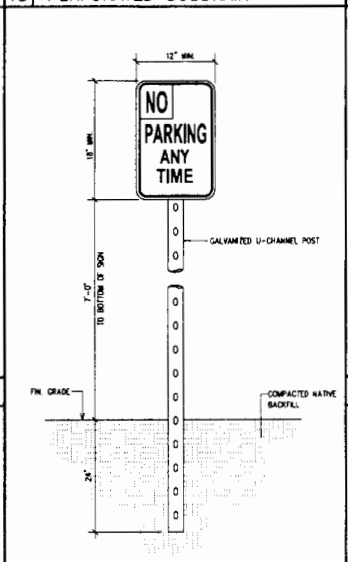
29 CONCRETE CURB DRAINAGE CHANNEL



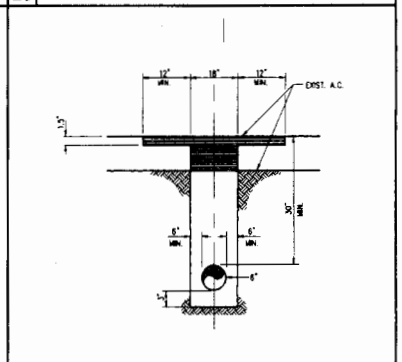
5 CONCRETE EDGE BANDING



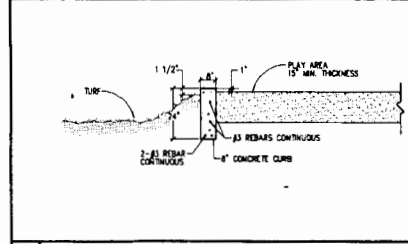
15 STORMWATER INFILTRATION PIT



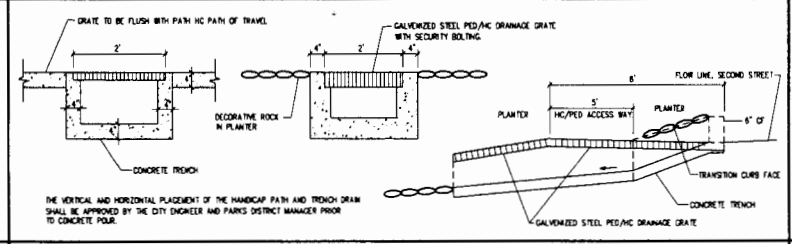
20 21 NO PARKING SIGN



30 CONDUIT SLEEVE AND A.C. PATCH



7 DEEPENDED CONCRETE CURB @ PLAY AREA



11 TRENCH DRAIN

CAUTION: UNDERGROUND STRUCTURES

ALL UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR THOSE SHOWN ON RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. THE DEVELOPER, BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO, UNDERSTANDS THAT THEY AGREE TO ASSUME LIABILITY, AND AGREE TO HOLD THE UNDERSIGNED HARMLESS FOR ANY LIABILITY FOR DAMAGE RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED, NOT INDICATED ON THE PUBLIC RECORDS EXAMINED, LOCATED AT VARIANCE WITH THAT REPORTED OR SHOWN ON RECORDS EXAMINED. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES CONCERNED BEFORE STARTING TO WORK.

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	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE
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REGISTERED PROFESSIONAL ENGINEER KATHERINE M. McCARNEY NO. 43804 EXP. 12-31-14 CIVIL STATE OF CALIFORNIA

PREPARED BY: J.N. 13.1387
M3_4-15-13 Option C.dwg
M3 CIVIL, INC.
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Camarillo, CA 93010
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FAX (805) 445-4401
DATE
KATHERINE M. McCARNEY, RCE 43804 EXP. 12/31/14

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 DATE

CITY OF MOORPARK

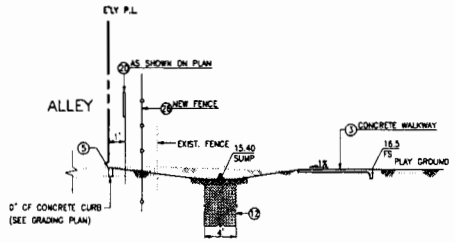
PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

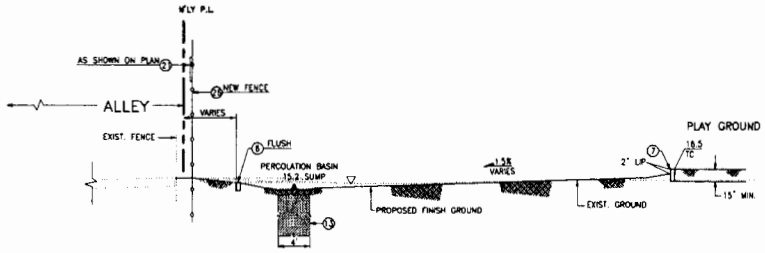
NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA

DETAILS SHEET

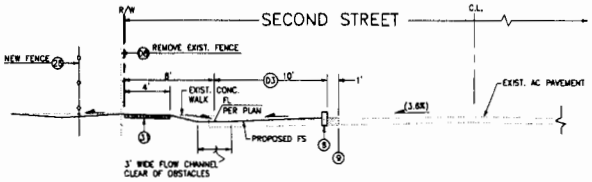
SHEET 4 OF 7
DRAWING NO.



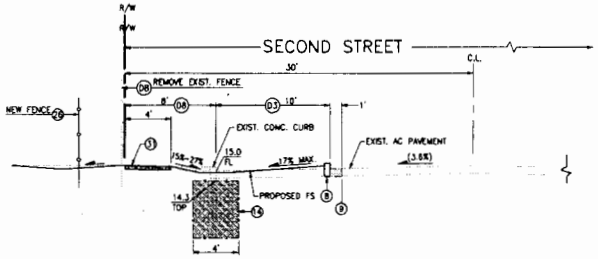
SECTION "A" – "A"
EAST PROPERTY LINE
N.T.S.



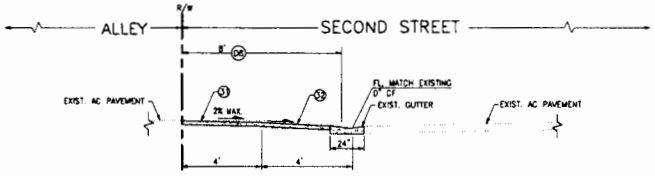
SECTION "B" – "B"
NORTH PROPERTY LINE
N.T.S.



SECTION "C" – "C"
SOUTH PROPERTY LINE
SCALE: 1"=5' H



SECTION "D" – "D"
SOUTH PROPERTY LINE
SCALE: 1"=5' H



SECTION "E" – "E"
ALLEY APPROACH
NTS

CAUTION: UNDERGROUND STRUCTURES

ALL UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR THOSE SHOWN ON RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. THE DEVELOPER, BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO, UNDERSTANDS THAT THEY AGREE TO ASSUME LIABILITY, AND AGREE TO HOLD THE UNDERSIGNED HARMLESS FOR ANY LIABILITY FOR DAMAGE RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED, NOT INDICATED ON THE PUBLIC RECORDS EXAMINED, LOCATED AT VARIANCE WITH THAT REPORTED OR SHOWN ON RECORDS EXAMINED. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES CONCERNED BEFORE STARTING TO WORK.

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	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE
6				
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REGISTERED PROFESSIONAL ENGINEER — KATHERINE M. McCLUNEY — NO. 43604 — EXP. 12-31-14 — CIVIL — STATE OF CALIFORNIA

PREPARED BY: J.N. 13.1387
M3_4-18-13 Option C.dwg
M³ CIVIL, INC.
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FAX (805) 445-4401
DATE
KATHERINE M. McCLUNEY, RCE 43604 EXP. 12/31/14

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR — DATE
ENGINEERING REVIEWED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 — DATE

CITY OF MOORPARK

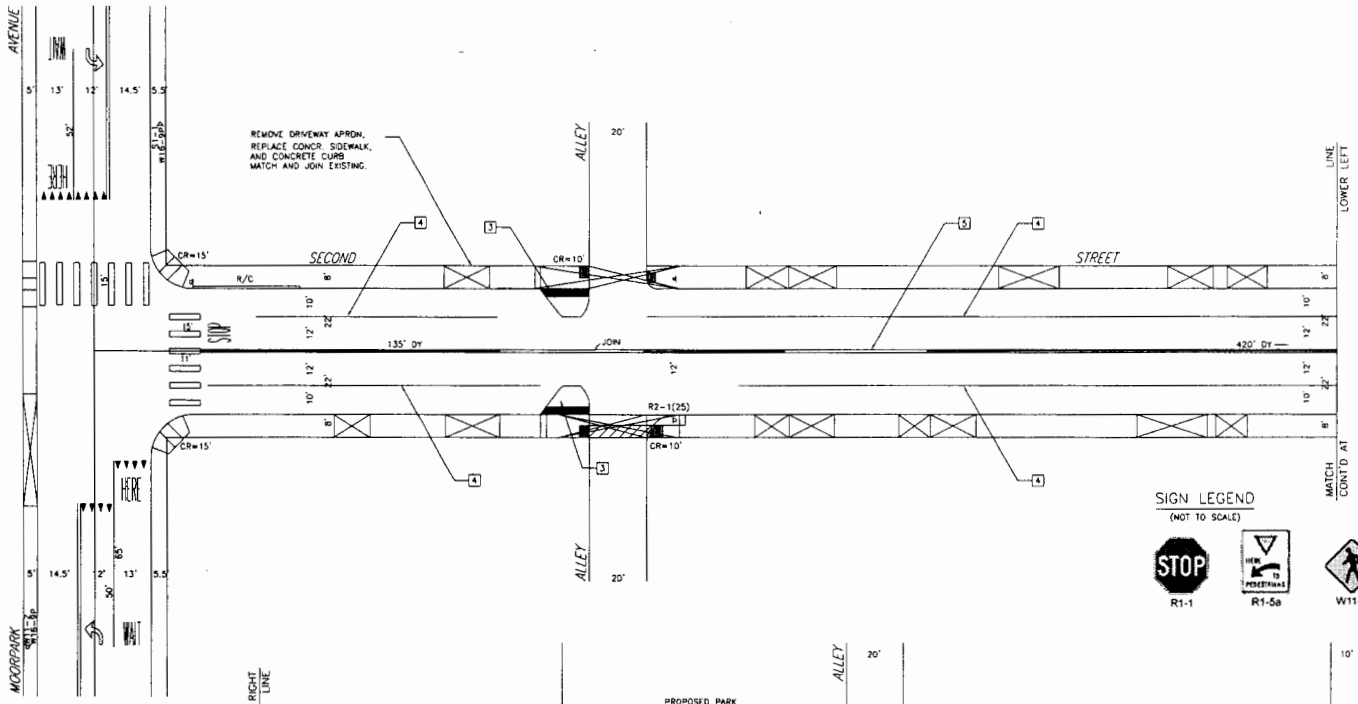
PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA

SECTIONS SHEET

SHEET 5 OF 7
DRAWING NO.



LEGEND

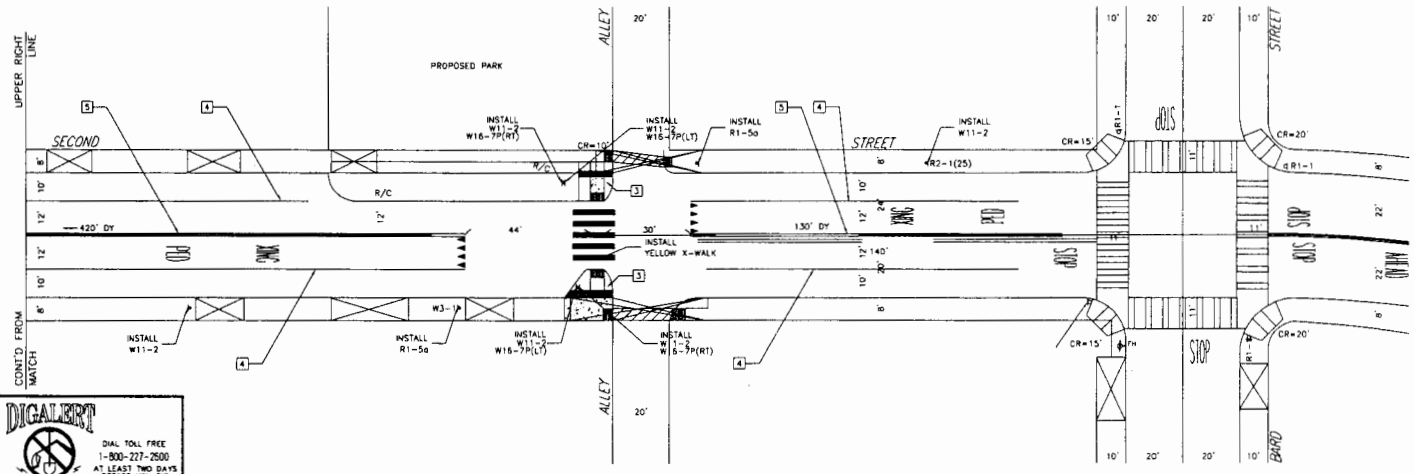
1. EXISTING STRIPING & MARKINGS TO REMAIN
   EXISTING STRIPING & MARKINGS TO BE REMOVED
   PROPOSED STRIPING & MARKINGS
2. EXISTING SIGNS • PROPOSED SIGNS
3. SIGNALIZED INTERSECTION
4. R/C EXISTING RED CURB
   R/C PROPOSED RED CURB

NOTES

1. LENGTH OF DESIGN : 950' ±
2. PAINT REMOVAL REQUIRED
3. INSTALL BULBOUT
4. INSTALL DETAIL 24, 4" WHITE EDGE LINE PER CALTRANS STANDARD PLAN A20B
5. INSTALL DETAIL 21, 4" DOUBLE YELLOW PER CALTRANS STANDARD PLAN A20A

SIGN LEGEND

(NOT TO SCALE)



2ND STREET FROM MOORPARK AVE. TO BARD STREET

CAUTION: UNDERGROUND STRUCTURES

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REGISTERED PROFESSIONAL ENGINEER — KATHERINE M. McCONNEY — NO. 43604 — EXP. 12-31-14 — CIVIL — STATE OF CALIFORNIA

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DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 DATE

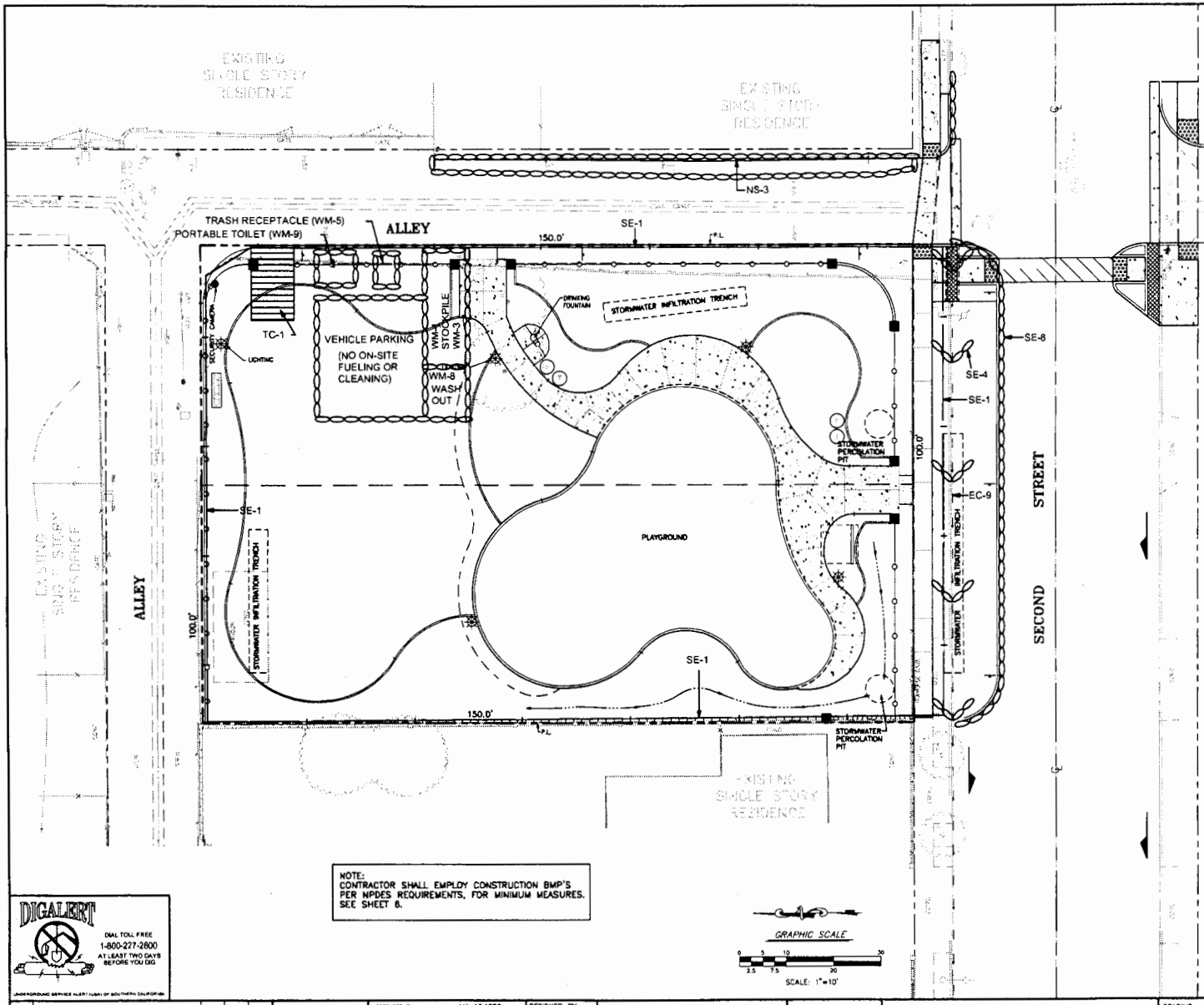
CITY OF MOORPARK

PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA
TRAFFIC CALMING SIGNING AND STRIPING PLAN

SHEET 6 OF 7
DRAWING NO.



NOTE:
CONTRACTOR SHALL EMPLOY CONSTRUCTION BMP'S PER NPDES REQUIREMENTS, FOR MINIMUM MEASURES. SEE SHEET 6.

DIGALERT
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EROSION CONTROL NOTES

1. IN CASE OF EMERGENCY, CALL CITY OF MOORPARK, PUBLIC WORKS.
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY ENGINEER.
4. EXCEPT AS OTHERWISE APPROVED BY THE CITY INSPECTOR, ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY PROBABILITY FORECAST EXCEEDS 40%.
5. ALL LOOSE SOIL AND DEBRIS WHICH MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE REMOVED FROM THE SITE.
6. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE CITY.
7. A GUARD WILL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO (2) FEET.
8. DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERABLE.
9. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS, AND DESILTING BASINS AND BASINS PUMPED DRY.
10. EROSION CONTROL DEVICES WILL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES AND PLANS OF THESE CHANGES SUBMITTED FOR APPROVAL AS REQUIRED.
11. THE PUBLIC SAFETY WILL BE PROVIDED FOR IN REGARD TO ANY PONDING OR POTENTIAL PONDING OF WATER AS REQUIRED BY SECTION 5270 ET. SEQ. OF THE COUNTY ORDINANCE CODE.
12. ADDITIONAL EROSION CONTROL DEVICES MAY BE INSTALLED AT THE DIRECTION OF THE CITY ENGINEER.
13. I, THE UNDERSIGNED CIVIL ENGINEER HAVE INSPECTED THE SITE, AND THESE PLANS REFLECT THE PROPOSED CONDITIONS OF THE PROJECT THAT REQUIRE EROSION PROTECTION.

KATHERINE M. McCUNNEY, RCE 43804 EXP. 12-31-14

NOTE: THESE ARE MINIMUM ON-SITE EROSION CONTROL MEASURES. OTHER MEASURES MAY BE REQUIRED TO PREVENT EROSION DURING INTENSE RAINFALL PERIODS.

EROSION CONTROL BMP LEGEND

SILT FENCE (SE-1)

SAND BAG (SE-8)

CHECK DAM (SE-4)

STABILIZED CONSTRUCTION ENTRANCE (TC-1)

EC-9	EARTH DIKES AND DRAINAGE SWALES
TC-1	STABILIZED CONSTRUCTION ENTRANCE/EXIT
NS-3	PAVING AND GRADING OPERATIONS
WM-1	MATERIAL DELIVERY AND STORAGE
WM-3	STOCKPILE MANGEMENT
WM-5	SOLID WASTE MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY/SEPTIC WASTE MANAGEMENT

	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE
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REGISTERED PROFESSIONAL ENGINEER KATHERINE M. McCUNNEY NO. 43804 EXP. 12-31-14 CIVIL STATE OF CALIFORNIA

PREPARED BY: J.N. 13.1387 M3_4-18-13 Option C.dwg
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Consulting Civil Engineers
400 Rosewood Avenue, Suite 201
Camarillo, CA 93010
(805) 445-4404
FAX (805) 445-4401
DATE
KATHERINE M. McCUNNEY, RCE 43804 EXP. 12/31/14

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
CITY ENGINEER, DAVID KLOTZLE, RCE 55752 DATE

CITY OF MOORPARK

PARK RECREATION AND COMMUNITY SERVICES

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

NEIGHBORHOOD PARK
161 SECOND STREET
MOORPARK, CA

EROSION CONTROL PLAN/NPDES

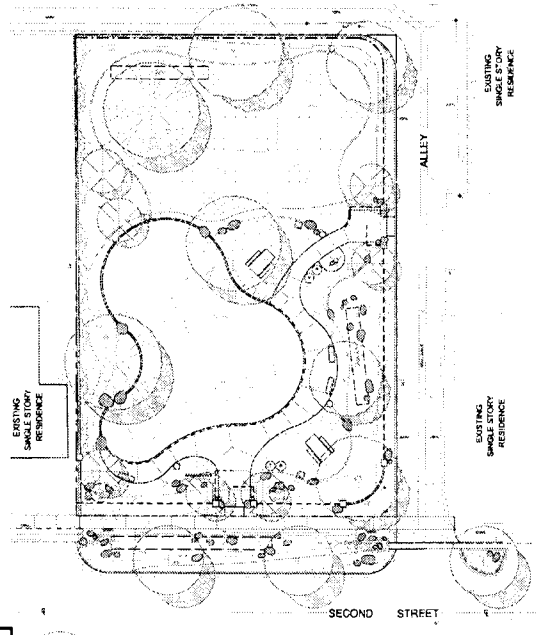
SHEET 7 OF 7
DRAWING NO.

ARCHITERRA
design group

LANDSCAPE ARCHITECTURAL CONSTRUCTION DOCUMENTS
FOR

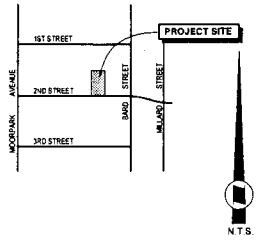
PARKSITE AT 161 SECOND STREET

City of Moorpark, CA



A.B.	Anchor Bolt	Int.	Integral
A.C.	Asphaltic Concrete	J. Box	Junction Box
Adj.	Adjacent	Jts.	Joints
Alt.	Alternate	L.A.	Landscape Architect
Arch	Architect	Lic.	Licensed
Auto.	Automatic	L.P.	Low Point
Bldg.	Building	Max.	Maximum
Blk.	Block	M.B.	Machine Bolt
B.M.	Bench Mark	Mech.	Mechanical
B.S.	Bottom of Steps	Med.	Medium
C.B.	Catch Basin	Min.	Minimum
C.F.	Cubic Foot	M.H.	Manhole
C.I.	Cast Iron	Multi.	Multi-branched
C.I.P.	Cast Iron Pipe	Nat.	Natural
C.J.	Cold Joint	N.I.C.	Not in Contract
C.L.	Center Line	O.C.	On Center
Clr.	Clearance	O.D.	Outside Diameter
C.O.	Clean Out	P.A.	Planting Area
C.M.P.	Corrugated Metal Pipe	Perf.	Perforated
Comp.	Compacted	P.O.C.	Point of Connection
Con.	Concrete	P.S.I.	Pounds Per Square
Cond.	Conduit	P.T.	Pressure Treated
Cont.	Continuous	P.V.C.	Poly Vinyl Chloride
Ctr.	Center	R.	Radius
Ctr. Sink	Counter Sink	R.C.P.	Reinforced Concrete
D.F.	Deck Drain	Rebar	Reinforcing Bar
D.F.	Douglas Fir	Rein.	Reinforcing
D.G.	Decomposed Granite	Req'd.	Required
Dia.	Diameter	Ret.	Retardant
Dim.	Dimension	Rough	Rough
Dtl.	Detail	R.S.	Rough Sawn
Ea.	Each	R.S.R.	Rough Sawn Redwood
E.J.	Expansion Joint	Rwd.	Redwood
Elec.	Electric	Sch.	Schedule
Elev.	Elevation	S.F.	Square Foot
Enc.	Enclosure	Sht.	Sheet
Eqp.	Equipment	Sht. Mtl.	Sheet Metal
Eq.	Equal	Sim.	Similar
E.W.	Each Way	S.L.	Sideline
E.W.W.M.	Electric Welded Wire Mesh	Smth.	Smooth
Ex.	Existing	Specs.	Specifications
Exp.	Exposed	Sq.	Square
F.F.	Finish Floor Elevation	Stl.	Steel
F.G.	Finish Grade	T.A.D.	Top of Area Drain
F.H.	Fire Hydrant	T.& B.	Top and Bottom
Fin.	Finish	T.B.	Top of Berm
F.L.	Flow Line	T.C.	Top of Curb
Flr.	Floor	Tex.	Textured
F.S.	Finish Surface	T.G.	Top of Grate
Ftg.	Footing	T.G.D.	Top of Grate Drain
Ftn.	Fountain	Ths.	Thick
Ga.	Gauge	T.P.	Top of Paving
Galv.	Galvanized	T.P.C.	Top of Pot Coupling
G.C.	Ground Cover	T.S.	Top of Steps
G.I.	Galvanized Iron	T.W.	Top of Wall
H.B.	Hose Bib	Twl.	Trowel
Hdr. Brd.	Header Board	Typ.	Typical
Horiz.	Horizontal	Vert.	Vertical
H.P.	High Point	W/	With
Hgt.	Height	W/O	Without
I.D.	Inside Diameter	W.S.	Water Surface
Inv.	Invert		

L-1.0	TITLE SHEET
L-1.1	CONSTRUCTION PLAN
L-1.2	CONSTRUCTION DETAILS
L-1.3	CONSTRUCTION DETAILS
L-2.1	IRRIGATION PLAN
L-2.2	IRRIGATION DETAILS
L-2.3	IRRIGATION DETAILS
L-3.1	PLANTING PLAN
L-3.2	PLANTING DETAILS
L-4.1	CONSTRUCTION SPECIFICATIONS
L-4.2	IRRIGATION AND PLANTING SPECIFICATIONS



ARCHITERRA DESIGN GROUP HEREBY CERTIFIES THAT THE DESIGN, DETAILS AND SPECIFICATIONS AS REPRESENTED HEREIN MEET PROFESSIONAL LANDSCAPE ARCHITECTURAL STANDARDS. ARCHITERRA DESIGN GROUP CANNOT GUARANTEE THE QUALITY OF CONSTRUCTION, INSTALLATION OR MAINTENANCE OF IMPROVEMENTS AS DESIGNED AND/OR SPECIFIED HEREIN AND DISCLAIMS ANY FUTURE LIABILITY RESULTING FROM DEVIATIONS. ARCHITERRA DESIGN GROUP IS NOT RESPONSIBLE FOR THE AMOUNT OR FREQUENCY OF IRRIGATION WATER APPLIED TO THE PROJECT DURING CONSTRUCTION OR THEREAFTER

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FIRST SUBMITTAL -
SECOND SUBMITTAL -
THIRD SUBMITTAL -
FOURTH SUBMITTAL -
SUBMITTAL -

ARCHITERRA DESIGN GROUP
LANDSCAPE ARCHITECTURE
SITE PLANNING
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CONTACT PERSON: GREGG DENSON

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AT LEAST TWO DAYS BEFORE YOU DIG

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DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY: PARK AND RECREATION DIRECTOR DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY: DAVID KLOTZLE, PE EXP. DATE DATE

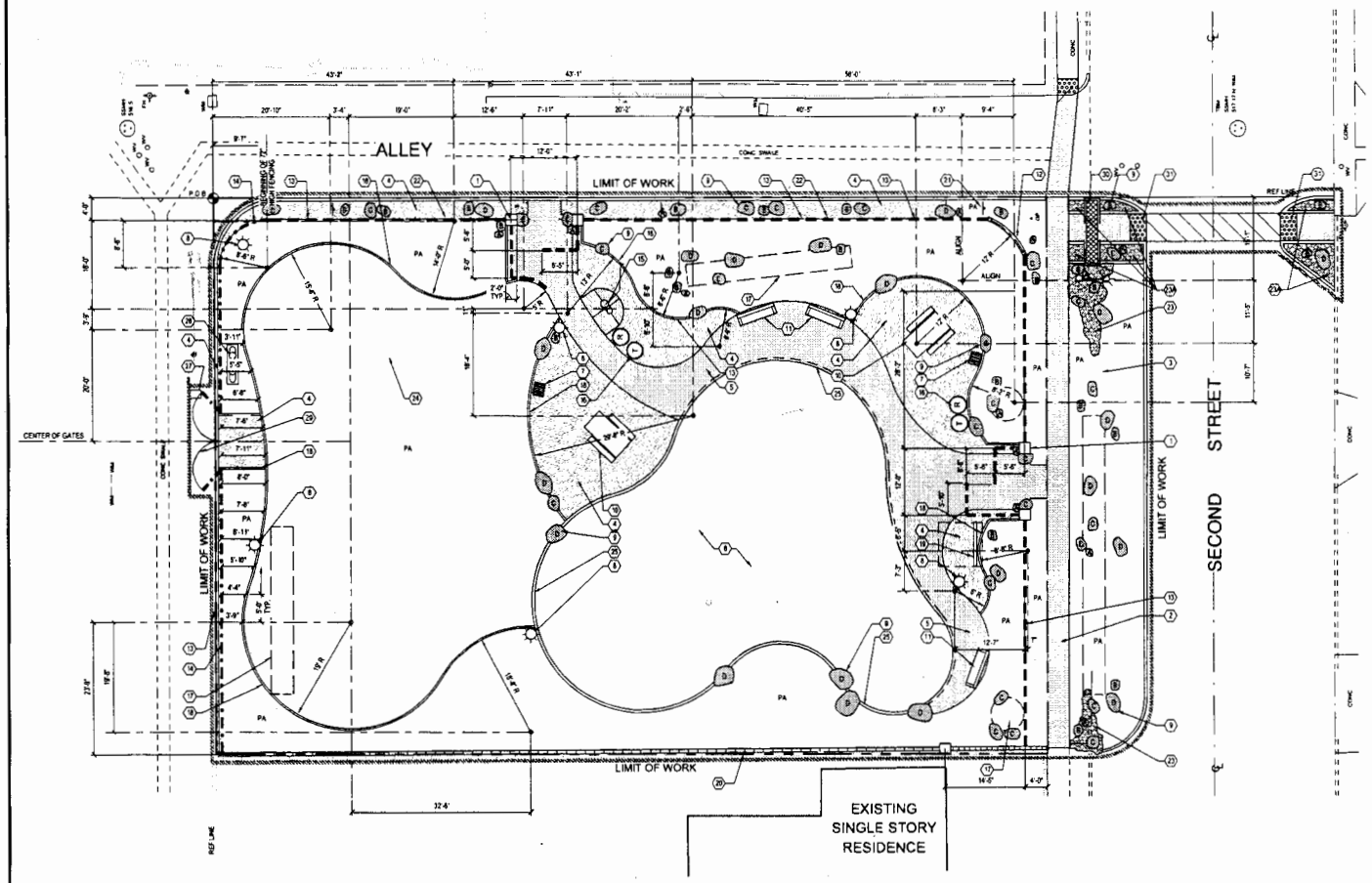
CITY OF MOORPARK
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME: L-1.0 TITLE SHEET

SHEET 1 OF 11
DRAWING NO. L-1.0



CONSTRUCTION NOTES

1. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO A FAILURE TO GIVE SUCH NOTIFICATION.
2. WALL AND FENCE LAYOUT SHALL CONFORM TO PROPERTY LINE AND TOP OF SLOPE CONDITIONS. STAKING FOR LOCATION OF WALLS AND FENCES SHALL BE PROVIDED BY THE CIVIL ENGINEER PRIOR TO EXCAVATION OF FOOTINGS.
3. ALL FORMS AND ALIGNMENTS OF PAVING, WALL / FENCE LAYOUT, AND SPECIAL PAVING AREAS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO POURING (GIVE A MINIMUM OF 48 HOURS NOTICE).
4. FOR SITE GRADING, SEE CIVIL ENGINEERS GRADING PLAN.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COST INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES.
6. CONTRACTOR SHALL COORDINATE IRRIGATION SLEEVE LOCATIONS UNDER PAVED AREAS AS REQUIRED. REFER TO IRRIGATION PLANS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH CONSTRUCTION OPERATIONS AS SHOWN.
8. PRIOR TO PLACING CONCRETE, THE CONTRACTOR SHALL SUFFICIENTLY COMPACT THE SUB-GRADE AND PROVIDE SUBSURFACE PREPARATION PER SPECIFICATIONS.
9. CONCRETE SURFACES SHALL BE FORMED WITH LONG, SMOOTH GRADIENT TO REDUCE DIPS, ABRUPT CHANGES AND SHARP TRANSITIONS.
10. ALL CURV-LINEAR CURBS, HEADER BOARDS, AND WALLS SHALL HAVE A CONTINUOUS SMOOTH CURVE WHERE APPLICABLE. ALL FORMS MUST BE INSPECTED AND APPROVED PRIOR TO BEGINNING THAT PHASE OF WORK.

CONSTRUCTION LEGEND (THIS SHEET ONLY)

1. PARK ENTRY WITH STONE VENEERED COLUMNS AND ACCENT BOULDERS (TOTAL OF 4) SEE DETAIL H, SHEET L-1.2.
2. CITY SIDEWALK LAYOUT AND DETAILING PER CIVIL PLANS.
3. TRAFFIC CALMING DEVICE/BIOSWALE. PER CIVIL ENGINEER'S PLANS.
4. 3" THICK DECOMPOSED GRANITE PAVING USING NEXPAVE WITH ORGANIC LOCK. AVAILABLE THROUGH GAL MATERIALS (951) 667-6106. INSTALL AND COMPACT/ROLL PER RECOMMENDATIONS. SEE DETAIL A, SHEET L-1.2.
5. MEANDERING PARK WALKWAY PER CIVIL ENGINEER'S PLANS.
6. CHILDREN'S TOT LOT WITH PLAY STRUCTURE BY OTHERS.
7. CHARCOAL BARBECUE (TOTAL OF 2) MODEL #CC-880-1518, AVAILABLE THROUGH QUICKCRETE PRODUCTS CORP. (800) 230-1377. SEE DETAIL K, SHEET L-1.2. APPLY 2 COATS OF VITROCEM CLEAR ANTI-GRAFFITI COATING TO CONCRETE BASE.
8. PARK WALKWAY LIGHT STANDARDS PER ELECTRICAL ENGINEER'S PLANS.
9. LANDSCAPE BOULDERS SET MINIMUM OF 1/3 INTO GRADE. "MALIBU" BOULDERS AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877)792-7625 OR APPROVED EQUAL. SIZES AS SHOWN BELOW. SEE DETAIL M, SHEET L-1.3.
   - A - 18" TO 24" DIA.
   - B - 24" TO 30" DIA.
   - C - 30" TO 36" DIA.
   - D - 36" TO 42" DIA.
10. ADA ACCESSIBLE LBT PICNIC TABLE (TOTAL OF 2) MODEL #DLBT96PT, COLOR C11-ADOBE TAUPE, TEXTURE T2-LSB. AVAILABLE THROUGH QUICKCRETE PRODUCTS CORP. (800) 230-1377. APPLY 2 COATS OF VITROCEM CLEAR ANTI-GRAFFITI COATING TO CONCRETE BASE.
11. PRECAST CONCRETE BENCH (TOTAL OF 3) "EL MONTE", MODEL #Q16M848, COLOR C11-ADOBE TAUPE, TEXTURE T2-LSB. AVAILABLE THROUGH QUICKCRETE PRODUCTS CORP. (800) 230-1377. APPLY 2 COATS OF VITROCEM CLEAR ANTI-GRAFFITI COATING TO CONCRETE BASE.
12. PRECAST PARK MONUMENT SIGN. SEE DETAIL C, SHEET L-1.3. APPLY 2 COATS OF VITROCEM CLEAR ANTI-GRAFFITI COATING TO CONCRETE BASE.
13. 42" HIGH TUBULAR STEEL FENCING. SEE DETAIL G, L-1.2.
14. 72" HIGH TUBULAR STEEL FENCING. INSTALL WITH RADIUS BEND AS SHOWN. SEE DETAIL F, SHEET L-1.2.
15. HAWS DRINKING FOUNTAIN MODEL#3300G, GALVANIZED STEEL, AVAILABLE THROUGH HAWS 775) 359-4712. SEE DETAILS H & I, SHEET L-1.2.
16. RECYCLING/TRASH BINS (TOTAL OF 2 EACH TYPE), QUICKCRETE "CALIFORNIA" SERIES "ROUND" OR CAL2532W, COLOR C11-ADOBE TAUPE, TEXTURE T2-LSB. LDR - A2-L COLORS-BLUE (RECYCLING) AND BLACK (TRASH), MATERIAL-STEEL. STANDARD OLDES SEALER. INCLUDE CABLE AND BOLTS. STD 2" DRAIN HOLE AND CR-PL28 PLASTIC 30 GAL. LINER. AVAILABLE THROUGH QUICKCRETE PRODUCTS CORP. (800) 230-1377.
17. BIOSWALE WITH DRY WELL SUMP. PER CIVIL ENGINEER'S PLANS.
18. DRY SUMP. SEE CIVIL ENGINEER'S PLANS FOR FINAL DETAILS AND LOCATIONS.
19. 4" WIDE CONCRETE HEADER. SEE DETAILS B & C, SHEET L-1.2.
20. GENESIS BIKE RACK CAPACITY 8, PRODUCT #GNS-8-HO-G, FINISH GALVANIZED. AVAILABLE THROUGH MADRAX. (800) 466-1931. SEE DETAIL D, SHEET L-1.2.
21. NEW BLOCK WALL. PER CIVIL ENGINEER'S PLANS.
22. "NO PARKING" SIGN. SEE CIVIL ENGINEER'S PLANS.
23. PERMASTRIP ALUMINUM EDGING SYSTEM (.08" X 3.5"). AVAILABLE THROUGH PERMALOC (800) 336-9660. INSTALL BETWEEN PLANTER AND DECOMPOSED GRANITE PAVING. SEE DETAIL A, SHEET L-1.2.
23. GROUTED COBBLE AT BIOSWALE INLET AND OUTLETS. COBBLE TO BE MIXED AT 75% "ARIZONA COBBLE" (SIZED 3"-7") AND 25% "MALIBU COBBLE" (SIZED 4"-8"). AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877)792-7625 OR APPROVED EQUAL. SEE DETAIL B, SHEET L-1.3.
23A. GROUTED COBBLE AT PLANTERS. COBBLE TO BE MIXED AT 75% "ARIZONA COBBLE" (SIZED 3"-7") AND 25% "MALIBU COBBLE" (SIZED 4"-8"). AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877)792-7625 OR APPROVED EQUAL. SEE DETAIL D, SHEET L-1.3.
24. POTABLE WATER SUPPLY LINE TO DRINKING FOUNTAIN PER CIVIL ENGINEER'S PLANS. PROVIDE BACKFLOW PREVENTION ASSEMBLY PER CIVIL ENGINEER'S PLANS (FOR POTABLE DRINKING SERVICE).
25. CONCRETE TOT LOT EDGING PER CIVIL ENGINEER'S PLANS. COORDINATION PLACEMENT OF BOULDERS PRIOR TO FORMING AND INSTALLING CONCRETE EDGING.
26. 3" THICK DECOMPOSED GRANITE PLACED MULCH USING NEXTPAVE WITH ORGANIC LOCK. AVAILABLE THROUGH GAL MATERIALS (951) 667-6106. PLACE AND WATER IN. DO NOT COMPACT USING MECHANICAL DEVICE. LIGHTLY COMPACT WITH HAND TAMP. SEE DETAIL F, SHEET L-3.2.
27. EXISTING WATER METER FOR DRINKING FOUNTAIN AND IRRIGATION.
28. BACKFLOW PREVENTION ASSEMBLY (FINAL LOCATION FOR POTABLE DRINKING WATER LINE PER CIVIL'S PLANS FOR IRRIGATION LOCATION. SEE IRRIGATION PLAN)
29. 10' WIDE DOUBLE SWING MAINTENANCE ACCESS GATES. SEE DETAIL A, SHEET L-1.2.
30. DRAINAGE CULVERT WITH REMOVABLE GRATES. PER CIVIL ENGINEER'S PLANS.
31. HANDICAP RAMP WITH TRUNCATED DOMES PER CIVIL ENGINEER'S PLANS.

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SCALE : 1"=10'

PLAN CROSS REFERENCES

FOR NOTES AND LEGENDS, SEE THIS SHEET
FOR DETAILS, SEE SHEET L-1.1 AND L-1.2
FOR SPECIFICATIONS, SEE SHEET L-4.0
FOR CORRESPONDING IRRIGATION PLAN SEE SHEET L-2.0
FOR CORRESPONDING PLANTING PLAN SEE SHEET L-3.0

	DESCRIPTION OF REVISION	R.C.E	APP'D	DATE
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DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY:
PARK AND RECREATION DIRECTOR DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY:
DAVID KLOTZLE, PE EXP. DATE DATE

CITY OF MOORPARK

PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

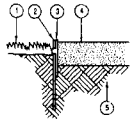
GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME: CONSTRUCTION PLAN

SHEET 2 OF 11

DRAWING NO. L-1.1

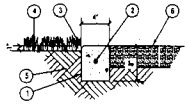


LEGEND:

1. ADJACENT TURF.
2. PERMASTRIP ALUMINUM EDGING SPLICING STAKS/LINE STAKE. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
3. PERMASTRIP ALUMINUM EDGING SYSTEM (1/8" X 3.5"). AVAILABLE THROUGH PERMALOC (800) 358-8660. INSTALL BETWEEN PLANTER AND DECOMPOSED GRANITE PAVING. NATURAL ALUMINUM COLOR. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
4. 3" THICK LAYER OF NEXTPAVE WITH ORGANIC-LOCK DECOMPOSED GRANITE.
5. COMPACTED NATIVE SUB-GRADE

A PERMASTRIP EDGING

SCALE: NTS



LEGEND:

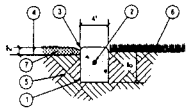
1. POURED CONCRETE MOW STRIP WITH FINE BRUSH FINISH.
2. #3 REBAR CONTINUOUS SET @ MID-DEPTH.
3. 1/2" BULLNOSE (TYPICAL).
4. FINISH GRADE
5. 90% COMPACTED SUB-GRADE.
6. 3" THICK LAYER OF NEXTPAVE WITH ORGANIC-LOCK DECOMPOSED GRANITE. COMPACTED PER MANUFACTURER'S RECOMMENDATIONS. PRE-HYDRATE PRIOR TO INSTALLATION AND INSTALL AND COMPACT IN ONE LIFT.

NOTE:
INSTALL CONTROL JOINTS @ 6'-0" O.C. MAX. SPACING AND AT ALL END OF CURB RETURNS.

PLACE ALL BOULDERS AS SHOWN PRIOR TO INSTALLING CONCRETE HEADER.

B 4" CONCRETE HEADER AT DG

SCALE: 3/4" = 1'-0"



LEGEND:

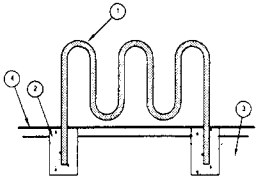
1. 4" WIDE POURED CONCRETE MOW STRIP WITH LIGHT BRUSH FINISH.
2. #3 REBAR CONTINUOUS SET @ MID-DEPTH.
3. 1/2" BULLNOSE (TYPICAL)
4. FINISH GRADE SET 2" BELOW GRADE AT PLANTER SIDE.
5. 90% COMPACTED SUB-GRADE.
6. FINISH GRADE SET 1" BELOW CONCRETE MOW CURB AT TURF.
7. 3" THICK PLACED MULCH TAPERED TO 2" AT MOW CURB.

NOTE:
INSTALL CONTROL JOINTS @ 6'-0" O.C. MAX. SPACING AND AT ALL END OF CURB RETURNS.

PLACE ALL BOULDERS AS SHOWN PRIOR TO INSTALLING CONCRETE HEADER.

C 4" CONCRETE HEADER AT TURF

SCALE: 3/4" = 1'-0"



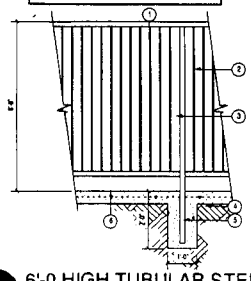
LEGEND:

1. LOOP STYLE BIKE RACK. MODEL PER PLAN.
2. 12" DIA. x 18" DEEP CONCRETE FOOTING SET FLUSH WITH DG PAVING.
3. 90% COMPACTED SUBGRADE.
4. DECOMPOSED GRANITE PAVING PER PLAN.

D BIKE RACK

SCALE: 1/2" =1'-0"

NOTE:
ALL CONNECTIONS TO BE CONTINUOUS WELDED. REMOVE ALL SLAG & SPLATTER & GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS WELDED CLOSED. PAINT STEEL WITH (1) COAT ZINC CHROMATE PRIMER & WITH (2) COATS ELECTRIC STATIC PAINT (COLOR AND TYPE PER CITY OF FONTANA APPROVAL).

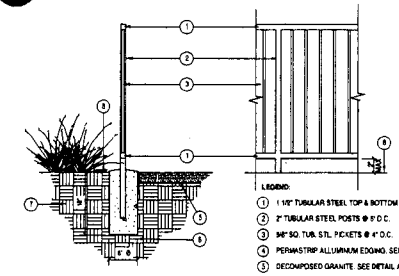


LEGEND:

1. 1"x2" 3/16" TUBULAR STEEL, TOP & BOTTOM RAILS, LAID FLAT.
2. 1/2" SQ. 16 GA. TUBULAR STEEL FENCE PICKETS @ 4" O.C. MAX. TYPICAL. (4" CLR. MAX. OPENING ALLOWED BY CODE.)
3. 2" SQ. 3/16" TUBULAR STEEL FENCE POST @ 8'-0" O.C. MAX.
4. UNDISTURBED OR RECOMPACTED SUBGRADE PER STRUCT. SOILS REPORT.
5. CONCRETE FOOTING. FOOTING SHALL ACHIEVE 2000 PSI @ END OF 28 DAYS. CROWN TOP 1" TO DRAIN.
6. 12" WIDE x 4" THICK CONCRETE MAINTENANCE BAND w/ #3 CONTINUOUS REBAR/WEVED AROUND FENCE POST LOCATIONS. CROWN TOP TO DRAIN. SEE CONSTRUCTION LEGEND FOR REQUIRED LOCATIONS.

F 6'-0 HIGH TUBULAR STEEL FENCE

SCALE: 1/2" = 1'-0"

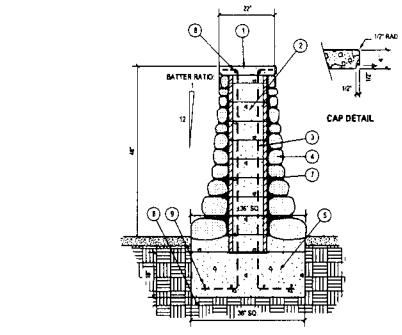


LEGEND:

1. 1 1/2" TUBULAR STEEL TOP & BOTTOM RAILS.
2. 2" TUBULAR STEEL POSTS @ 8' O.C.
3. 3/4" SQ. TUB. STL. PICKETS @ 4" O.C.
4. PERMASTRIP ALUMINUM EDGING. SEE DETAIL A, THIS SHEET.
5. DECOMPOSED GRANITE. SEE DETAIL A, THIS SHEET.
6. 18" DEEP CONCRETE FOOTING.
7. COMPACTED SUB-GRADE.
8. FINISH GRADE.

G 3'-6" HIGH TUBULAR STEEL FENCE

SCALE: 3/4" = 1'-0"



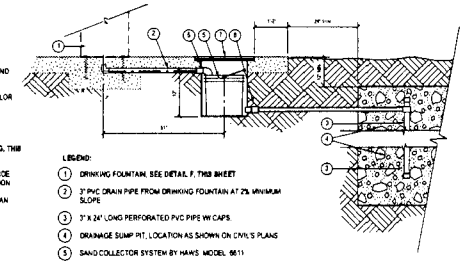
LEGEND:

1. DUAL-BOWL DRINKING FOUNTAIN w/ WHEELCHAIR ACCESSIBLE EXTENSION AND PET FOUNTAIN. MODEL AND MANUFACTURER PER CONSTRUCTION PLAN.
2. 8" THICK CONCRETE FOOTING BENEATH FOUNTAIN. COLOR AND FINISH TO MATCH ADJACENT PAVING.
3. 5/8" x 8" WEDGE ANCHORS (4) REQUIRED PER MANUFACTURER'S RECOMMENDATIONS
4. 3" DRAIN PIPE. CONNECT TO SUMP DRAIN. SEE DETAIL G, THIS SHEET
5. CONNECT TO 3/4" PVC POTABLE WATER SUPPLY. PROVIDE PVC SHUT-OFF BALL VALVE IN VALVE BOX @ CONNECTION
6. ADJACENT CONCRETE PAVING PER CONSTRUCTION PLAN
7. 90% COMPACTED SUBGRADE, OR PER SOIL REPORT.

NOTE:
REFER TO MANUFACTURER'S SPECIFICATIONS FOR DETAILED INSTALLATION INSTRUCTIONS

H DRINKING FOUNTAIN

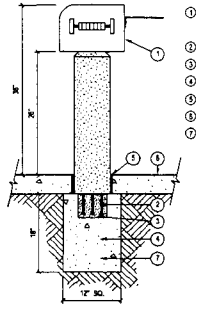
SCALE: 1" = 1'-0"



LEGEND:

1. DRINKING FOUNTAIN. SEE DETAIL F, THIS SHEET.
2. 3" PVC DRAIN PIPE FROM DRINKING FOUNTAIN AT 2% MINIMUM SLOPE
3. 3" X 24" LONG PERFORATED PVC PIPE W/ CAPS.
4. DRAINAGE SUMP PIT, LOCATION AS SHOWN ON CIVIL'S PLANS
5. SAND COLLECTOR SYSTEM BY HAWS MODEL 6611
6. IPS ELBOW (REMOVABLE)
7. COVER w/ (8) 1/4-20 VANDAL-PROOF SCREWS ON 12 1/2" B.C.
8. 1 1/2" IPS WASTE PIPE TO 3" PERFORATED PIPE

I DRINKING FOUNTAIN CLEAN OUT AND SUMP

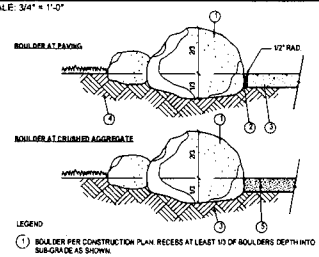


LEGEND:

1. BARBEQUE GRILL. MODEL PER CONSTRUCTION PLAN. PROVIDE WITH PRECAST CONCRETE SUPPORT. COLOR C-11 ADOBE TAUPE. APPLY 2 COATS OF VITROCEM CLEAR ANTI-GRAFFITI COATING TO CONCRETE BASE.
2. ANCHOR BOLTS PER MANUFACTURER
3. GROUT POCKET PER MANUFACTURER
4. 12" x 12" CONCRETE FOOTING
5. 1/2" FULL DEPTH EXPANSION JOINT W/ SEALANT
6. ADJACENT PAVING PER CONSTRUCTION PLAN
7. COMPACTED SUB-GRADE PER SOIL REPORT.

K PARK BARBEQUE

SCALE: 1" = 1'-0"



BOULDER AT PAVING

BOULDER AT CRUSHED AGGREGATE

LEGEND:

1. BOULDER PER CONSTRUCTION PLAN. RECESS AT LEAST 1/3 OF BOULDERS DEPTH INTO SUB-GRADE AS SHOWN.
2. 1/2" EXPANSION JOINT AT EDGE OF PAVING ABUTTING BOULDERS.
3. ADJACENT CONCRETE PAVING OR MOWSTRIP PER PLAN.
4. 90% COMPACTED SUB-GRADE.
5. ADJACENT STABILIZED DECOMPOSED GRANITE PER PLAN

NOTES:
1. LANDSCAPE ARCHITECT TO APPROVE BOULDERS AND SPOT LOCATIONS PRIOR TO INSTALLATION

M BOULDER PLACEMENT

SCALE: NTS

LEGEND:

1. CONSTRUCT 4" THICK P.I.P. INTEGRAL COLORED CONRETE CAP WITH GRACE PRODUCTS TOP CAST 03 FINISH. COLOR TO BE BOOFIELD C-11 "DESERT TAN".
2. 16" SQ. PRECISION BLOCK. GROUT CELLS SOLID.
3. (4) #3 VERTICAL REBAR. PROVIDE STD. HOOKS AT BOTTOM & ALTERNATE BENDS IN CONCRETE FTG AND BEND HORIZONTALLY AT CAP.
4. MORTARED COBBLE VENEER TO BE MIXED AT 75% "ARIZONA COBBLE" (SIZED 3"-7") AND 25% "MALIBU COBBLE" (SIZED 4"-8"). AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877/592-7625 OR APPROVED EQUAL. DEEP RAKE JOINTS MIN. 1/2" TO 1" MAX. STACK USING LARGER STONES (MALIBU 12"-18" DIA. AT BOTTOM AND GRADUALLY BUILD UP WITH SMALLER SIZES MIXING COBBLE AS INDICATED.
5. CONCRETE FOOTING. 36" WIDE X 18" DEEP.
6. COMPACTED SUBGRADE PER SOIL ENGINEER'S REPORT.
7. INSTALL MASONRY CLIPS FOR STONE VENEER EVERY OTHER COURSE.
8. #3 HORIZONTAL REBAR LOOPS. SET MID DEPTH AT CAP.
9. (4) #4 HORIZONTAL REBAR AT FOOTING. SET MIN. 3" CLEAR FROM EDGES

N STONE VENEERED PILASTER

SCALE: 1/2" = 1'-0"

△	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE
6				
5				
4				
3				
2				
1				

REGISTERED PROFESSIONAL ENGINEER — 7-31-14 — STATE OF CALIFORNIA

ARCHITERRA design group
landscape architecture and planning
10221-A Trademark Street
Rancho Cucamonga, CA 91730
(909) 484-2800
Fax (909) 484-2802

DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY: TDG
PARK AND RECREATION DIRECTOR — DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY: DAVID KLOTZLE, PE — EXP. DATE — DATE

CITY OF MOORPARK

PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

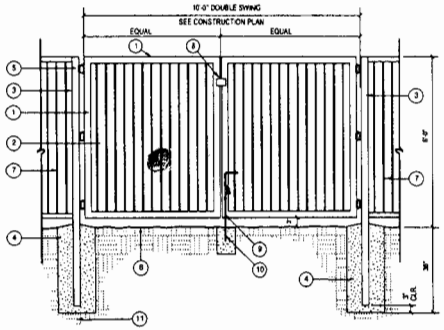
GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME: L-1.2 CONSTRUCTION DETAILS

SHEET 3 OF 11

DRAWING NO.



LEGEND

1. 2"x3" 11 GAUGE TUBULAR STEEL GATE FRAME WITH CORNERS MITERED, WELDED & GROUND SMOOTH.
2. 5/8" SQ. 16 GA. TUBULAR STEEL FENCE PICKETS @ 4" O.C. MAX. TYPICAL (4" CLR MAX. OPENING ALLOWED BY CODE).
3. 3"x3"x.25" TUBULAR STEEL HINGE POST SET IN 36" DEEP X 18" DIA. CONCRETE FOOTING. CAP TOP.
4. 36" DEEP X 18" DIA. CONCRETE FOOTING. FOOTING SHALL ACHIEVE 2500 PSI @ END OF 28 DAYS. CROWN TOP 1" AS SHOWN TO DRAIN.
5. GUARDIAN SMALL, STANDARD HINGE #2901. WELD TO GATE HINGE POST, AND GATE FRAME. (3) PLACES.
6. FINISH SURFACE AT ACCESS ROAD PER CIVIL ENGINEER'S PLAN.
7. TUBULAR STEEL FENCE PER DETAIL A, THIS SHEET.
8. LATCH W/ LOCKING TAB
9. 5/8" DIAMETER CAME BOLT W/ LOCKING TAB ON INSIDE OF GATE
10. 3/4" DIA. PVC SLEEVE FOR CAME BOLT. SET PLUMB IN 12"x 12" CONCRETE FOOTING.
11. 90% COMPACTED SUBGRADE PER SOILS REPORT.

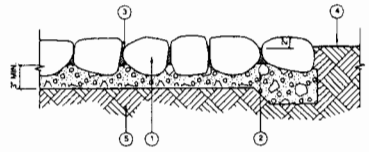
NOTE:

ALL CONNECTIONS TO BE CONTINUOUS WELDED. REMOVE ALL SLAG & SPLATTER AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS WELDED CLOSED. PAINT STEEL WITH (1) COAT ZINC CHROMATE PRIMER AND WITH (2) COATS ENAMEL, COLOR BLACK.

PROVIDE PADLOCK AND KEY TO OWNER'S REPRESENTATIVE.

A 10' DOUBLE SWING TUBULAR STEEL ACCESS GATE

SCALE: 1/2"=1'-0"

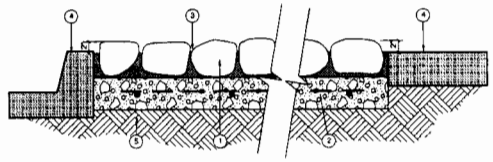


LEGEND:

1. GROUTED COBBLE TO BE MIXED AT 75% "ARIZONA COBBLE" (SIZED 3"-7") AND 25% "MALIBU COBBLE" (SIZED 4"-8"). AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877)792-7825 OR APPROVED EQUAL. PER CONSTRUCTION LEGEND. PLACE FLATTEST SURFACE FACING UP AND ROUGH SET INTO 3" THICK CONCRETE BASE. SWEEP COBBLE TO FOLLOW SWALE DESIGN AND DRAIN TO PROVIDE POSITIVE FLOW ACROSS COBBLE
2. 3" MIN. CONCRETE BASE WITH 6" DEEP X 12" WIDE DEEPENED OUTSIDE EDGE.
3. MORTAR RAKE JOINTS. WIDTH VARIES 1/2" TO 1" WIDE MAX. / 2" BELOW TOP OF COBBLE STONES.
4. FINISH GRADE.
5. COMPACTED SUBGRADE 95% COMPACTED AT GROUTED COBBLE ONLY. SEE CIVIL ENGINEER'S PLANS FOR BIOSWALE DETAILS.

B COBBLE PAVING AT SWALE

SCALE: 1" = 1'-0"

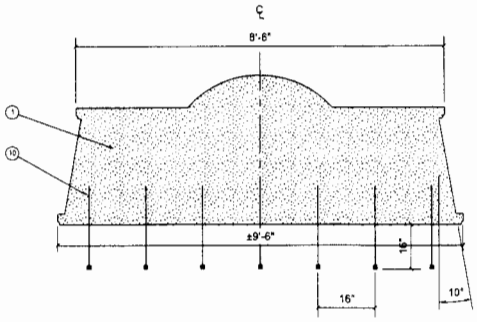


LEGEND

1. GROUTED COBBLE TO BE MIXED AT 75% "ARIZONA COBBLE" (SIZED 3"-7") AND 25% "MALIBU COBBLE" (SIZED 4"-8"). AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877)792-7825 OR APPROVED EQUAL. PER CONSTRUCTION LEGEND. PLACE FLATTEST SURFACE FACING UP AND MORTAR TO CONCRETE BASE. SET STONE 2" ABOVE FINISH CONCRETE SURFACES.
2. 6" MIN. DEPTH CONCRETE BASE BELOW COBBLE WITH #4 REBAR BOTH WAYS AT 18" O.C. 2500 PSI AT 28 DAYS.
3. DEEP MORTAR JOINTS. WIDTH VARIES 1/2" TO 1" WIDE MAX.
4. FINISH PAVING/CURBING. SEE CONSTRUCTION PLAN FOR LOCATIONS.
5. COMPACTED SUBGRADE 95% COMPACTED

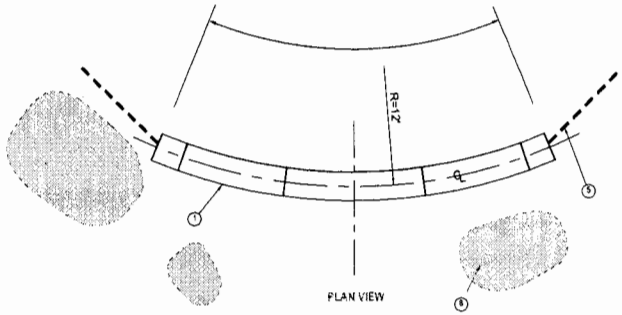
D COBBLE PAVING AT CURB RAMP

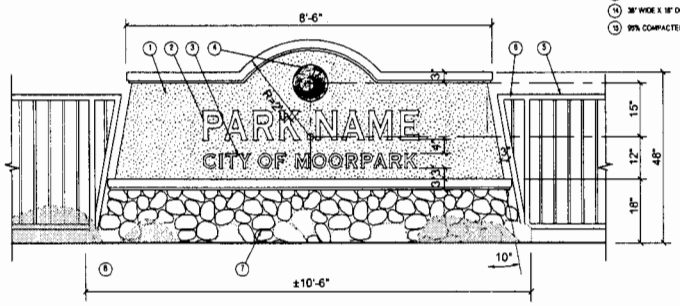
SCALE: 1" = 1'-0"



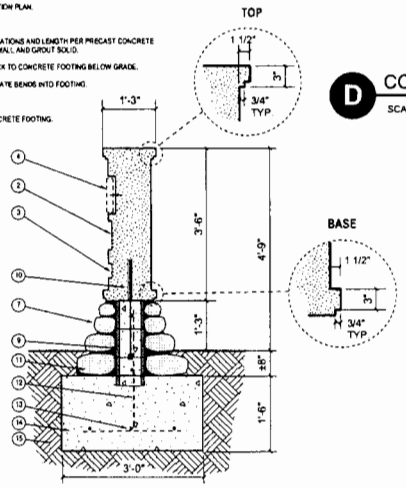
LEGEND

1. PRECAST MONUMENT SIGNAGE MANUFACTURER BY QUICKCRETE PRODUCTS CORP. (800) 230-1377 OR EQUAL. COLOR TO BE C-11 ADOBE TAUPE. LIGHT SAND BLAST FACE AND SMOOTH FINISH CAP AND POP OUT REVEAL. SEE SECTION FOR ADDITIONAL DETAILS
2. 8" TALL ±1.5" WIDE X 1" DEEP INSET LETTERING USING COPPERPLATE FONT. FINAL PARK NAME, FONT AND STYLE TO BE APPROVED BY CITY OF MOORPARK. CONTRACTOR TO PROVIDE SHOP DRAWINGS 1:1 FOR TEXT INSET. PAINT INSET LETTERS, FINAL COLOR BY CITY OF MOORPARK.
3. 4" TALL ±.75" WIDE X 1" DEEP INSET LETTERING USING COPPERPLATE FONT, "CITY OF MOORPARK". FINAL FONT AND STYLE TO BE APPROVED BY CITY OF MOORPARK. CONTRACTOR TO PROVIDE SHOP DRAWINGS 1:1 FOR TEXT INSET. PAINT INSET LETTERS, FINAL COLOR BY CITY OF MOORPARK.
4. CAST BRONZE MOORPARK CITY SEAL IN FLAT RELIEF. SIZE 12" DIAMETER X 5/16" THICKNESS PER CITY SUPPLIED CAMERA READY, BLACK AND WHITE ART. ALL BLACK LINES IN RAISED RELIEF AND SATIN FINISH. COLOR INFILL RECESSED AREAS IN 7 CUSTOM PMS COLORS PLUS WHITE PER CITY STANDARDS. FINISH WITH CLEAR ACRYLIC URETHANE. DRILL AND TAP BACK FOR 14-20 ALL-THREAD STUDS FOR BLIND MOUNT.
5. 42" HIGH TUBULAR STEEL PARK ENCLOSURE FENCING. SEE CONSTRUCTION PLAN FOR ADDITIONAL INFORMATION.
6. MODIFIED TUBULAR STEEL FENCING TO ACCOMODATE ANGLED MONUMENT SIGN. 15" OFFSET, MAXIMUM 3" OPENING BETWEEN 2" RAIL AND SIGNAGE.
7. MORTARED COBBLE VENEER TO BE MIXED AT 75% "ARIZONA COBBLE" (SIZED 3"-7") AND 25% "MALIBU COBBLE" (SIZED 4"-8"). AVAILABLE THROUGH SOUTHWEST BOULDER AND STONE (877)792-7825 OR APPROVED EQUAL. DEEP RAKE JOINTS MIN. 1/2" TO 1" MAX. STACK USING LARGER STONES (MALIBU 12"-18" DIA. AT BOTTOM AND GRADUALLY BUILD UP WITH SMALLER SIZES MIXING COBBLE AS INDICATED
8. BOULDER PLACEMENT PER CONSTRUCTION PLAN.
9. 8 X 8 X 16 CMU BLOCK GROUTED SOLID
10. THREADED ROD 25 AT 16 O. C., FINAL LOCATIONS AND LENGTH PER PRECAST CONCRETE MANUFACTURER. EMBED INTO BLOCK WALL AND GROUT SOLID.
11. MORTAR FIRST COBBLE VENEERED ROCK TO CONCRETE FOOTING BELOW GRADE.
12. #4 VERTICAL REBAR AT 16" O.C. ALTERNATE BENDS INTO FOOTING.
13. #4 HORIZONTAL REBAR AT 16" O.C.
14. 36" WIDE X 18" DEEP CONTINUOUS CONCRETE FOOTING.
15. 95% COMPACTED SUBGRADE.





ELEVATION



SECTION

NOTE:

APPLY 2 COATS OF VITROCEM CLEAR ANTI-GRAFFITI COATING TO PRECAST CONCRETE SIGNAGE.

C MONUMENT WALL

△	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE
6				
5				
4				
3				
2				
1				

ARCHITERRA design group
landscape architecture and planning
10021-A Trademark Street
Rancho Cucamonga, CA 91730
(909) 484-2800
Fax (909) 484-2802

DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY
PARK AND RECREATION DIRECTOR DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY
DAVID KLOTZLE, PE EXP DATE DATE

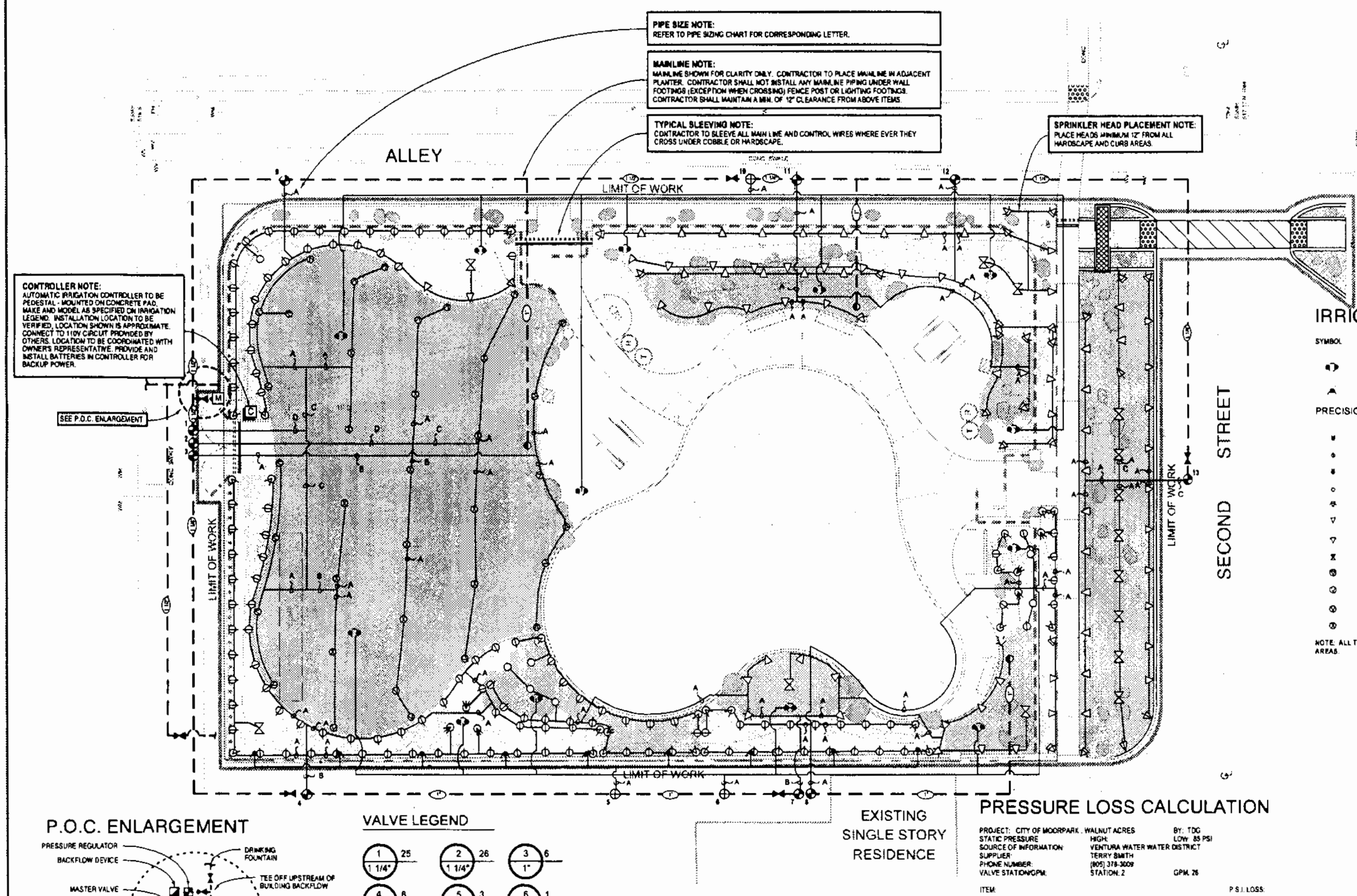
CITY OF MOORPARK
PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME
L-1.3 CONSTRUCTION DETAILS

SHEET 4 OF 11
DRAWING NO.



IRRIGATION NOTES

1. THIS SYSTEM IS DIAGRAMMATIC. ALL PIPE, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE.
2. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST AND SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR MUST ASSUME FULL RESPONSIBILITY FOR REVISIONS NECESSARY.
3. SYSTEM DESIGN IS BASED ON MINIMUM OPERATING PRESSURE SHOWN AT EACH POINT OF CONNECTION WITH MAXIMUM GPM DEMAND SPECIFIED. IRRIGATION CONTRACTOR SHALL VERIFY ALL PRESSURES ON SITE PRIOR TO CONSTRUCTION TO OWNER'S CONSTRUCTION REPRESENTATIVE.
4. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, CURBS, ETC. HE SHALL COORDINATE ALL HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUB-CONTRACTORS FOR LOCATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADS, PAVING AND STRUCTURES.
5. MAINLINE FEEDER BETWEEN POINT OF CONNECTION, METER, AND BACKFLOW PREVENTER TO BE OF MATERIAL REQUIRED BY CURRENT WATER DISTRICT.
6. FINAL LOCATION OF THE AUTOMATIC CONTROLLER ENCLOSURE AND THE BACKFLOW PREVENTION DEVICE SHALL BE APPROVED BY THE CITY'S AND OWNER'S REPRESENTATIVE, AND/OR LANDSCAPE ARCHITECT, WHERE APPLICABLE.
7. IN ADDITION TO THE SLEEVES SHOWN ON THE PLAN, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ADDITIONAL SLEEVES OF SUFFICIENT SIZE UNDER ALL PAVED AREAS PRIOR TO PAVING UPON APPROVAL OF THE OWNER'S REPRESENTATIVE, IF REQUIRED TO OPERATE SYSTEMS.
8. IRRIGATION CONTRACTOR SHALL FLUSH ALL LINES AND ADJUST ALL HEADS FOR MAXIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, STREETS, AND BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE RADIUS TO FIT UNUSUAL SITE CONDITIONS FOR APPROVAL PURPOSES AT NO EXTRA CHARGE. CALL LANDSCAPE ARCHITECT 48 HOURS IN ADVANCE FOR ANY COVERAGE TESTS.
9. QUALITY CONTROL OBSERVATION SEQUENCES ARE FOUND IN THE SPECIFICATIONS.
10. CLEAN-UP ON A DAILY BASIS PER OWNER'S REPRESENTATIVE'S APPROVAL.

IRRIGATION LEGEND

SYMBOL	MANUFACTURER	MODEL NUMBER	DESCRIPTION	RADIUS	G.P.M.	P.S.I.	COMMENTS
	RAINBIRD	RWS-B-C-1401	ROOT WATERING SERIES		0.33/ime	30	(2) PER TREE. SEE DETAIL I, SHEET L-2.2.
	RAINBIRD	XB-20PC	DRIPPER, ONE PER VINE		0.010	30	SEE DETAIL K, SHEET L-2.2
PRECISION SPRAY							
	TORO	O-T-5-QP	POP-UP-SPRAY HEAD	5'	0.06	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-5-HP	POP-UP-SPRAY HEAD	5'	0.13	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-5-TQP	POP-UP-SPRAY HEAD	5'	0.22	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-5-FP	POP-UP-SPRAY HEAD	5'	0.26	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-8-QP	POP-UP-SPRAY HEAD	8'	0.17	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-8-HP	POP-UP-SPRAY HEAD	8'	0.33	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-8-TQP	POP-UP-SPRAY HEAD	8'	0.66	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-8-FP	POP-UP-SPRAY HEAD	8'	0.69	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-15-QP	POP-UP-SPRAY HEAD	15'	0.58	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-15-HP	POP-UP-SPRAY HEAD	15'	1.16	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-15-TQP	POP-UP-SPRAY HEAD	15'	2.12	30	SEE DETAIL G, SHEET L-2.2.
	TORO	O-T-15-FP	POP-UP-SPRAY HEAD	15'	3.78	30	SEE DETAIL G, SHEET L-2.2.

NOTE: ALL TORO PRECISION SPRAY NOZZLES SHALL BE FITTED ONTO RAINBIRD 1806-PRS SERIES BODY FOR TURF AREAS AND RAINBIRD 1806-PRS SERIES BODY FOR ALL SHRUB AREAS.

EQUIPMENT	MANUFACTURER	MODEL NUMBER	DESCRIPTION
M			PROPOSED 1 1/2" DOMESTIC WATER METER BY OTHERS
	WILKENS	500 SERIES	3/4" PRESSURE REGULATOR, INSTALL AS NEED, IN VALVE BOX
	NIBCO	T-113	LINE-SIZE BRONZE FULL PORT BALL VALVE IN VALVE BOX. SEE DETAIL D, SHEET L-2.2
	FEBCO	825-YA-BV	1/2" REDUCED PRESSURE BACKFLOW IN STRONG BOX ENCLOSURE MODEL No. SBBC-30CR
	CALSENSE	FM-1B	1 1/2" FLOW METER SENSOR. SEE DETAIL C, SHEET L-2.2
	SUPERIOR	3200	1 1/2" MASTER VALVE, NORMALLY CLOSED
	RAINBIRD	EFB-CP SERIES	1" 100-EFB-CP WHERE IRRIGATION REQ. 5 GPM - 20 GPM. SEE DETAIL F, SHEET L-2.2 1 1/2" 125-EFB-CP WHERE IRRGIATION REQ. 20 GPM OR MORE SEE DETAIL F, SHEET L-2.2
	RAINBIRD	XCZ-075-PRF	3/4" LOW FLOW VALVE WITH 3/4" PR RBY FILTER, INSTALL IN RECTANGULAR VALVE BOX (DRIP LINE ONLY) SEE DETAIL F, SHEET L-2.2
	RAINBIRD	33DRC	1" POTABLE QUICK COUPLER VALVE. INSTALL WITHIN ROUND BOX SEE DETAIL H, SHEET L-2.2
C	RAIN MASTER	RME-24EG-SPED	24-STATION INSTALLED IN STAINLESS STEEL LARGE ENCLOSURE PEDESTAL. SEE DETAIL J, SHEET L-2.2
R	RAIN MASTER	RFS-1000	RAIN SENSOR WILL WIRELESS CONNECTION
	APPROVED	SCH. 40 PVC	MAINLINE, SIZE AS SHOWN, MIN. COVER 18"
	APPROVED	CL. 200 PVC	LATERAL LINE, SIZE AS SHOWN, MIN. COVER 12"
	APPROVED	SCH. 40 PVC	SLEEVES, SIZED 2X LARGER THAN PIPE TO BE INSERTED, UNLESS OTHERWISE NOTED
	APPROVED	SCH. 40 PVC	WIRE SLEEVE, SIZE AS REQUIRED, UNLESS OTHERWISE NOTED

NOTES:

1. CONTRACTOR TO INSTALL PCS SCREENS WHEREVER REQUIRED TO ADJUST THE RADIUS TO PROVIDE 100% COVERAGE TO REDUCE OVERTHROW ONTO WALLS AND WALKS AS MUCH AS POSSIBLE. SEE DETAIL __, SHEET L-__
2. DOT ADJACENT TO SYMBOL INDICATES NOZZLE INSTALLED ON RAINBIRD PA-80 SHRUB ADAPTOR PER DETAIL __, SHEET L-__. ALL HEADS LOCATED IN TURF AREAS TO BE INSTALLED ON 6" POP-UPS. USE RAINBIRD 1806 BODIES
3. LANDSCAPE CONTRACTOR TO VERIFY ALL EXISTING LINES ON JOBSITE PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY HIS WORK. CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY IRRIGATION LINES/SPRINKLER HEADS & EXISTING LANDSCAPE AREAS THAT ARE DAMAGED DURING CONSTRUCTION.

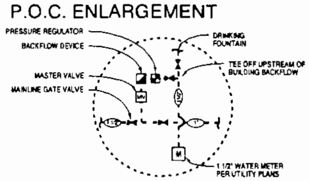
PRESSURE LOSS CALCULATION

PROJECT: CITY OF MOORPARK, WALNUT ACRES — BY: TDG
STATIC PRESSURE — HIGH: — LOW: 85 PSI
SOURCE OF INFORMATION: VENTURA WATER WATER DISTRICT
SUPPLIER: TERRY SMITH
PHONE NUMBER: (805) 378-3009
VALVE STATION/GPM: STATION: 2 — GPM: 26

ITEM:				P.S.I. LOSS:
WATER METER SIZE:	1 1/2"		@ 26 GPM	1.40
BACKFLOW:	1 1/2"		@ 26 GPM	12.0
MASTER VALVE	1 1/2		@ 26 GPM	0.75
FLOW SENSOR	1"		@ 26 GPM	3.50
BALL VALVE(S):	1 1/2"		@ 26 GPM	0.20
MAINLINE (SCH 40):	1 1/2"	73 L.F.	@ 26 GPM	1.30
AUTOMATIC VALVE SIZE	1 1/2"		@ 26 GPM	3.90
LATERAL LINE SIZE:	1 1/2"	39 L.F.	@ 26 GPM	0.49
	1 1/4"	12 L.F.	@ 26 GPM	0.0
	3/4"	37 L.F.	@ 26 GPM	0.34
IRRIGATION HEAD PRESSURE				30.00
SYSTEM LOSSES SUBTOTAL:				53.00
FITTING LOSSES (10% OF SUBTOTAL)				5.39
ELEVATION LOSSES/GAINS (ELEV x .433) ±.				0.00
TOTAL SYSTEM LOSSES:				59.29
AVAILABLE PRESSURE (LOW):				85
REGULATED PRESSURE				75
(-) DEFICIT OR (+) RESIDUAL PRESSURE			(+)	15.71

*CONTRACTOR TO SET PRESSURE REGULATOR TO A SYSTEM DESIGN PRESSURE OF PSI. CONTRACTOR TO FIELD ADJUST REGULATOR AS NECESSARY

P.O.C. ENLARGEMENT



VALVE LEGEND

VALVE #	VALVE SIZE	GPM
1	1 1/4"	25
2	1 1/4"	26
3	1"	6
4	1"	8
5	3/4"	3
6	3/4"	1
7	1"	9
8	1"	7
9	1"	7
10	3/4"	3
11	1"	6
12	1"	12
13	1"	19

VALVE SIZING KEY

VALVE # — 1 — 10 — GPM
3/4" — VALVE SIZE

SCHEDULE 40 PVC PIPE SIZING CHART		
A	3/4"	0-8 GPM
B	1"	9-12 GPM
C	1 1/4"	13-22 GPM
D	1 1/2"	23-30 GPM
E	2"	31-50 GPM

DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG

NORTH

0 5' 10' 20' 40'
SCALE: 1"=10'

PLAN CROSS REFERENCES

FOR NOTES AND LEGENDS, SEE THIS SHEET
FOR DETAILS, SEE SHEET L-1.1 AND L-1.2
FOR SPECIFICATIONS, SEE SHEET L-4.0
FOR CORRESPONDING IRRIGATION PLAN SEE SHEET L-2.0
FOR CORRESPONDING PLANTING PLAN SEE SHEET L-3.0

DESCRIPTION OF REVISION — R.C.E. — APP'D — DATE

ARCHITERRA design group
landscape architecture and planning
10221-A Trademark Street
Rancho Cucamonga, CA 91730
Fax (909) 484-2602

DESIGNED BY: TDG
DRAWN BY: TDG
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR — DATE
ENGINEERING REVIEWED BY:
DAVID KLOTZLE, PE — EXP. DATE — DATE

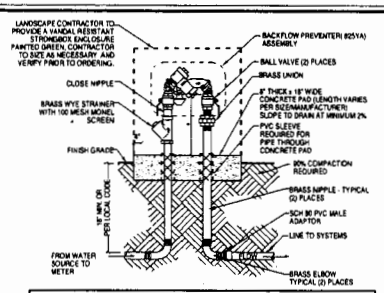
CITY OF MOORPARK
PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

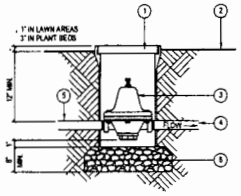
SHEET NAME: **L-2.1 IRRIGATION PLAN**

SHEET 5 OF 11
DRAWING NO.



A BACKFLOW PREVENTER (825YA)

SCALE: N.T.S.

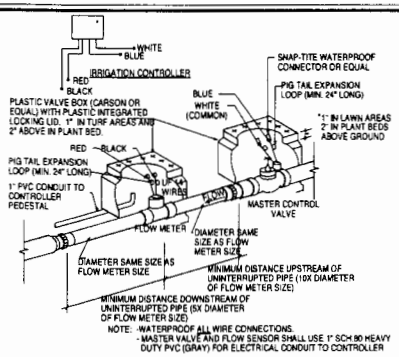


LEGEND:

1. 1 ROUND CONCRETE VALVE BOX & LOCKING COVER MARKED "PRESSURE REGULATOR".
2. FINISH GRADE.
3. PRESSURE REGULATOR. SEE IRRIGATION LEGEND FOR MODEL #
4. PIPE TO BALL VALVE AND MASTER VALVE.
5. PIPE BACKFLOW PREVENTER
6. 3/4" WASHED CRUSHED AGGREGATE BASE.

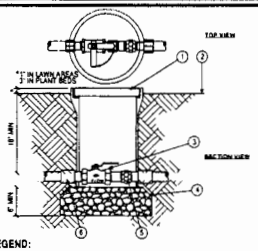
B PRESSURE REGULATOR

SCALE: N.T.S.



C FLOW METER / MASTER VALVE

SCALE: N.T.S.



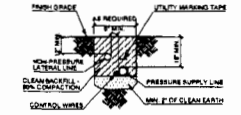
LEGEND:

1. 12" ROUND PLASTIC VALVE BOX & COVER MARKED "IRRIGATION BALL"
2. FINISH GRADE.
3. BALL VALVE - SEE IRRIGATION LEGEND FOR MODEL#
4. 3/4" WASHED CRUSED AGGREGATE BASE.
5. SCH. 80 PVC UNION.
6. SCH. 80 PVC MALE ADAPTORS.

NOTE:
PLACE AGGREGATE PRIOR TO INSTALLATION OF VALVE BOX.

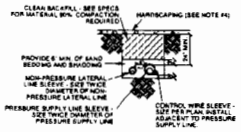
D BALL VALVE

SCALE: N.T.S.



TRENCHING NOTES:

1. BELOW PAVED AREAS A MINIMUM OF 6" LAYER OF CLEAN EARTH SHALL BE INSTALLED ABOVE AND BELOW PIPING.
2. PROVIDE MINIMUM COVER OF 24" ON PRESSURE SUPPLY LINES 3" AND LARGER.
3. WHEN USING RECLAIMED WATER MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN POTABLE AND RECLAIMED PRESSURE LINES. WHERE LINES CROSS, PROVIDE PVC SLEEVE FOR POTABLE LINE MINIMUM 10' EACH SIDE OF RECLAIMED WATER LINE.
4. BUNDLE WIRES WITH TAPE EVERY 10'.

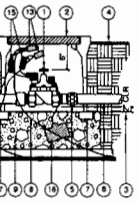


SLEEVING NOTES:

1. ALL SLEEVES TO BE SCH. 40 PVC
2. EXTEND ALL SLEEVES 12" BEYOND EDGE OF HARDSCAPING AT BOTH ENDS.
3. ROUTE SLEEVING AROUND HANDICAP RAMPS
4. PIPING UNDER PAVEMENT SUSCEPTIBLE TO TRAFFIC LOADS REFER TO CITY STD. (24" MIN. TO 36" MAX. DEPTH TO TOP OF PIPE BELOW STRUCTURAL SECTION)

E TRENCHING / SLEEVING

SCALE: N.T.S.



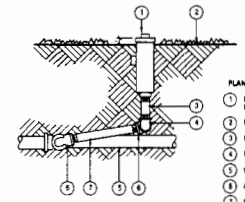
NOTE:
USE TEFLON TAPE OR TEFLON PIPE DOPE ON ALL PVC TO PVC OR METAL TO PVC MALE PIPE THREADS.

LEGEND:

1. ELECTRIC CONTROL VALVE.
2. 14 x 19 RECTANGULAR VALVE BOX w/ BOLT-DOWN COVER. HEAT BRAND VALVE STATION NO. ON LID IN 2" HIGH CHARACTERS.
3. 2" CLEAR SPACE.
4. FINISH GRADE.
5. SCH. 80 UNION PVC
6. PVC PIPE TO SPRINKLERS. ANGLE PIPE TO SPECIFIED DEPTH w/ 45° ELLS.
7. COMMON BRICK (4) REQUIRED.
8. COMMON WIRE TO OTHER VALVES ON SAME CONTROLLER.
9. 3/4" CRUSHED ROCK, 8" DEEP.
10. CONTROL/COMMON WIRES FROM CONTROLLER.
11. PVC SCH. 40 PIPE (TYP).
12. PVC SX5 90° ELL.
13. WIRE CONNECTOR.
14. MAINLINE FITTING w/ SOLVENT. WELD OUTLET.
15. COIL WIRES PER SECIFICATIONS.
16. YELLOW PLASTIC CHRISTY VALVE I D TAG AND RECLAIMED WATER TAG

F REMOTE CONTROL VALVE

SCALE: N.T.S.



PLAN LEGEND:

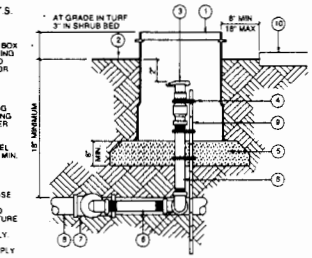
1. 6" POP-UP SPRAY HEAD PER IRRIGATION LEGEND
2. FINISH GRADE
3. PVC SCH. 80 NIPPLE 4" MIN. LENGTH.
4. PVC TxT 90° ELL
5. LATERAL LINE PIPE AND FITTING
6. 4MARLEX 90° STREET ELL
7. PVC SCH. 80 NIPPLE 6" LONG.

NOTE:
USE TEFLON TAPE OR TEFLON PIPE DOPE ON ALL PVC-TO-PVC, OR METAL-TO-PVC MALE PIPE THREADS.

INSTALL SPRAY HEADS AT MINIMUM 24" CLEAR OF NON-PERMEABLE PAVING.

G 6" POP-UP SPRAY HEAD

SCALE: N.T.S.



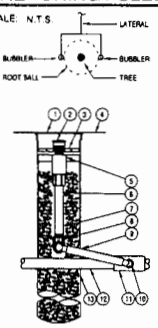
LEGEND:

1. PLASTIC VALVE BOX w/ GREEN LOCKING COVER, ETCHED "QC" (CARSON OR EQUAL).
2. FINISH GRADE.
3. QUICK COUPLING VALVE w/ LOCKING RUBBER CAP PER IRR. LEGEND.
4. STAINLESS STEEL SCREW CLAMP, MIN. (3) PLACES.
5. 3/4" WASHED CRUSHED AGGREGATE BASE
6. SPEARS SCH. 80 PRE-MANUFACTURED SWING JOINT RISER ASSEMBLY.
7. PRESSURE SUPPLY LINE FITTING.
8. PRESSURE SUPPLY LINE
9. #4 REBAR STAKE (24" LONG).
10. STRUCTURE OR ADJACENT PAVING.

NOTE:
PLACE AGGREGATE PRIOR TO INSTALLATION OF VALVE BOX

H QUICK COUPLER

SCALE: N.T.S



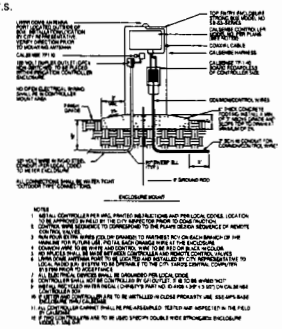
LEGEND:

1. 4-INCH GRATE (INCLUDED)
2. BUBBLER -RAINBIRD 0.25 GPM PER LEGEND (INCLUDED)
3. ROOT ZONE WATERING SYSTEM (RZWS): RAINBIRD RWS-M-B-C-1401 (INCLUDES 1401 BUBBLER PER LEGEND WITH RISER, CHECK VALVE, SWING ASSEMBLY, 1/2" MALE NPT INLET, AND BASKET CANISTER)
4. FINISH GRADE
5. CHECK VALVE (INCLUDED)
6. OPTIONAL PEA GRAVEL OR RWS SAND SOCK (RWS-SOCK) FOR SANDY SOILS
7. 1/2-INCH PVC SCH 80 NIPPLE (INCLUDED)
8. 1/2-INCH 90-DEGREE ELBOW (INCLUDED)
9. 12-INCH SWING ASSEMBLY (INCLUDED)
10. 1/2-INCH MALE NPT INLET (INCLUDED)
11. PVC SCH 40 TEE OR ELL
12. LATERAL PIPE
13. 4-INCH BASKET WEAVE CANISTER (INCLUDED)

NOTES:
SUPPLEMENTAL TREE IRRIGATION: (1) DEEP WELL SYSTEM FOR 3 GALLON TREES, (2) DEEP WELL SYSTEMS FOR 15 GALLON TREES, 24" BOX TREES AND LARGER.

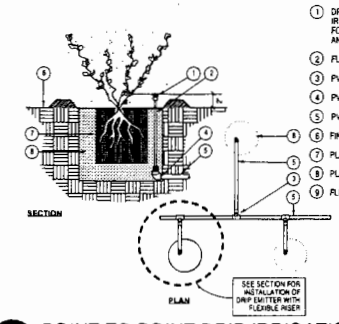
I RWS BUBBLERS TO TREE

SCALE: N.T.S.



J CONTROLLER

SCALE: N.T.S.

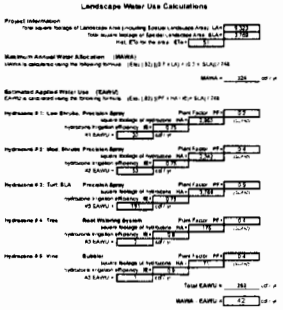


LEGEND:

1. DRIP EMITTER (SEE IRRIGATION LEGEND FOR MODEL NUMBER AND QUANTITY)
2. FLEXIBLE RISER
3. PVC SCH. 40 TEE
4. PVC SCH. 40 ELL
5. PVC LATERAL PIPE
6. FINISH GRADE
7. PLANT ROOT BALL
8. PLANTING PIT.
9. FLUSH VALVE.

K POINT TO POINT DRIP IRRIGATION

SCALE: N.T.S.



L WATER BUDGET CALCULATIONS

SCALE: N.T.S

6					
5					
4					
3					
2					
1					
△	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE	

ARCHITERRA design group
landscape architecture and planning
10221-A Trademark Street
Rancho Cucamonga, CA 91730
(909) 484-2800
Fax (909) 484-2802

DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY: TDG
PARK AND RECREATION DIRECTOR — DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY: DAVID KLOTZLE, PE — EXP. DATE — DATE

CITY OF MOORPARK
PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO
ENGINEERING PROJECT NO:

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME: L-2.2 IRRIGATION DETAILS

SHEET 6 OF 11
DRAWING NO

CONTROLLER WATER SCHEDULE - PLANT ESTABLISHMENT PERIOD

AVERAGE DAILY RUN TIMES (MINUTES)

Valve	Equipment	I.E.	Plant Material	K.L.	P.R.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
1	Precision	0.75	Turf	0.90	0.22	52	81	80	126	127	138	157	150	127	81	81	47
2	Precision	0.75	Turf	0.90	0.11	101	118	156	208	247	210	307	293	247	179	118	92
3	Precision	0.75	Turf	0.90	0.97	12	14	18	24	29	31	36	34	29	21	14	11
4	Precision	0.75	Shrubs - Low	0.20	0.47	5	6	8	11	13	14	16	15	13	9	6	5
5	Bubbler	0.90	Vine - Med	0.40	16.28	0	0	0	1	1	1	1	1	1	0	0	0
6	RWS	0.90	Tree - Med	0.40	7.80	1	1	1	1	1	1	2	2	1	1	1	1
7	Precision	0.75	Shrubs - Med	0.40	1.77	3	3	4	6	7	8	9	8	7	5	3	3
8	Precision	0.75	Shrubs - Low	0.20	1.91	1	2	2	3	3	4	4	4	3	2	2	1
9	Precision	0.75	Shrubs - Low	0.20	1.80	2	2	2	3	4	4	5	5	4	3	2	1
10	RWS	0.90	Tree - Low	0.40	7.70	1	1	1	1	1	1	2	2	1	1	1	0
11	Precision	0.75	Shrubs - Med	0.55	1.06	6	7	9	12	15	16	18	17	15	11	7	5
12	Precision	0.75	Shrubs - Low	0.20	1.39	2	2	3	4	4	5	5	5	4	3	2	2
13	Precision	0.75	Shrubs - Med	0.20	1.20	2	2	3	4	5	6	6	5	5	4	2	2
					Monthly Evapotranspiration Rate	2.2	2.4	3.4	4.8	6.4	8.9	6.7	6.4	6.4	3.9	2.4	2.0

RUN TIME FORMULA =2*(60*E.T)/(P.R.*28 DAYS)*K.L.*(1/I.E.)

Valve	Total Annual Minutes	Valve G.P.M.	Total Annual Gallons	Valve Area Sq.Ft.
1	33,479	4	133,918	1,756
2	68,433	2	130,840	1,716
3	7,550	3	22,650	297
4	3,436	4	13,744	811
5	167	12	2,005	71
6	268	8	2,147	76
7	1,849	9	16,642	491
8	853	12	10,236	604
9	1,019	9	9,168	541
10	353	8	2,825	100
11	3,848	5	23,090	545
12	1,170	15	17,557	1,036
13	1,363	16	21,675	1,279
Totals	126,879	106	408,520	9,323

51.0 Annual Evapotranspiration Rate

NOTE:
1. The plant establishment water schedules are shown for guideline use only and are to be modified according to plant needs and as the weather changes.
2. It is based on the mothly evapotranspiration rates for City of Moorpark, CA.

CONTROLLER WATER SCHEDULE - ESTABLISHED LANDSCAPE

AVERAGE DAILY RUN TIMES (MINUTES)

Valve	Equipment	I.E.	Plant Material	K.L.	P.R.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
1	Precision	0.75	Turf	0.90	0.22	26	30	40	53	63	69	79	75	63	46	30	23
2	Precision	0.75	Turf	0.90	0.11	50	60	78	103	124	135	154	147	124	89	60	46
3	Precision	0.75	Turf	0.90	0.97	6	7	9	12	14	16	18	17	14	10	7	5
4	Precision	0.75	Shrubs - Low	0.20	0.47	3	3	4	5	6	7	8	8	6	5	3	2
5	Bubbler	0.90	Vine - Med	0.40	16.28	0	0	0	0	0	0	0	0	0	0	0	0
6	RWS	0.90	Tree - Med	0.40	7.80	0	0	0	1	1	1	1	1	1	0	0	0
7	Precision	0.75	Shrubs - Med	0.40	1.77	1	2	2	3	3	4	4	4	3	3	2	1
8	Precision	0.75	Shrubs - Low	0.20	1.91	1	1	1	1	2	2	2	2	2	1	1	1
9	Precision	0.75	Shrubs - Low	0.20	1.80	1	1	1	2	2	2	2	2	2	1	1	1
10	RWS	0.90	Tree - Low	0.40	7.70	0	0	0	1	1	1	1	1	1	0	0	0
11	Precision	0.75	Shrubs - Med	0.55	1.06	3	4	5	6	7	8	9	9	7	5	4	3
12	Precision	0.75	Shrubs - Low	0.20	1.39	1	1	1	2	2	2	3	3	2	2	1	1
13	Precision	0.75	Shrubs - Med	0.20	1.20	1	1	2	2	3	3	3	3	3	2	1	1
					Monthly Evapotranspiration Rate	2.2	2.8	3.4	4.8	6.4	8.9	6.7	6.4	6.4	3.9	2.4	2.0

RUN TIME FORMULA =(60*E.T)/(P.R.*28 DAYS)*K.L.*(1/I.E.)

Valve	Total Annual Minutes	Valve G.P.M.	Total Annual Gallons	Valve Area Sq.Ft.
1	16,739	4	66,956	1755
2	32,716	2	65,433	1,716
3	3,775	3	11,325	297
4	1,718	4	6,872	811
5	84	12	1,003	71
6	179	8	1,073	75
7	825	9	8,321	491
8	427	12	5,118	604
9	509	9	4,584	541
10	177	8	1,412	100
11	1,924	6	11,545	545
12	585	15	8,779	1,036
13	677	16	10,838	1,279
Totals	60,435	106	203,260	9,323

51.0 Annual Evapotranspiration Rate

NOTE:
1. The water schedules are shown for guideline use only and are to be modified accordingly as the weather changes with the assistance of a programmed smart controller.
2. It is based on the mothly evapotranspiration rates for City of Moorpark, CA.

A CONTROLLER CHART

SCALE: N.T.S

E SCALE: N.T.S.

F SCALE: N.T.S.

G SCALE: N.T.S.

H SCALE: N.T.S

I SCALE: N.T.S.

J SCALE: N.T.S.

K SCALE: N.T.S.

L SCALE: N.T.S

	DESCRIPTION OF REVISION	R.C.E.	APPD.	DATE
6				
5				
4				
3				
2				
1				
△				

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DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY
PARK AND RECREATION DIRECTOR — DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY
DAVID KLOTZLE, PE — EXP. DATE — DATE

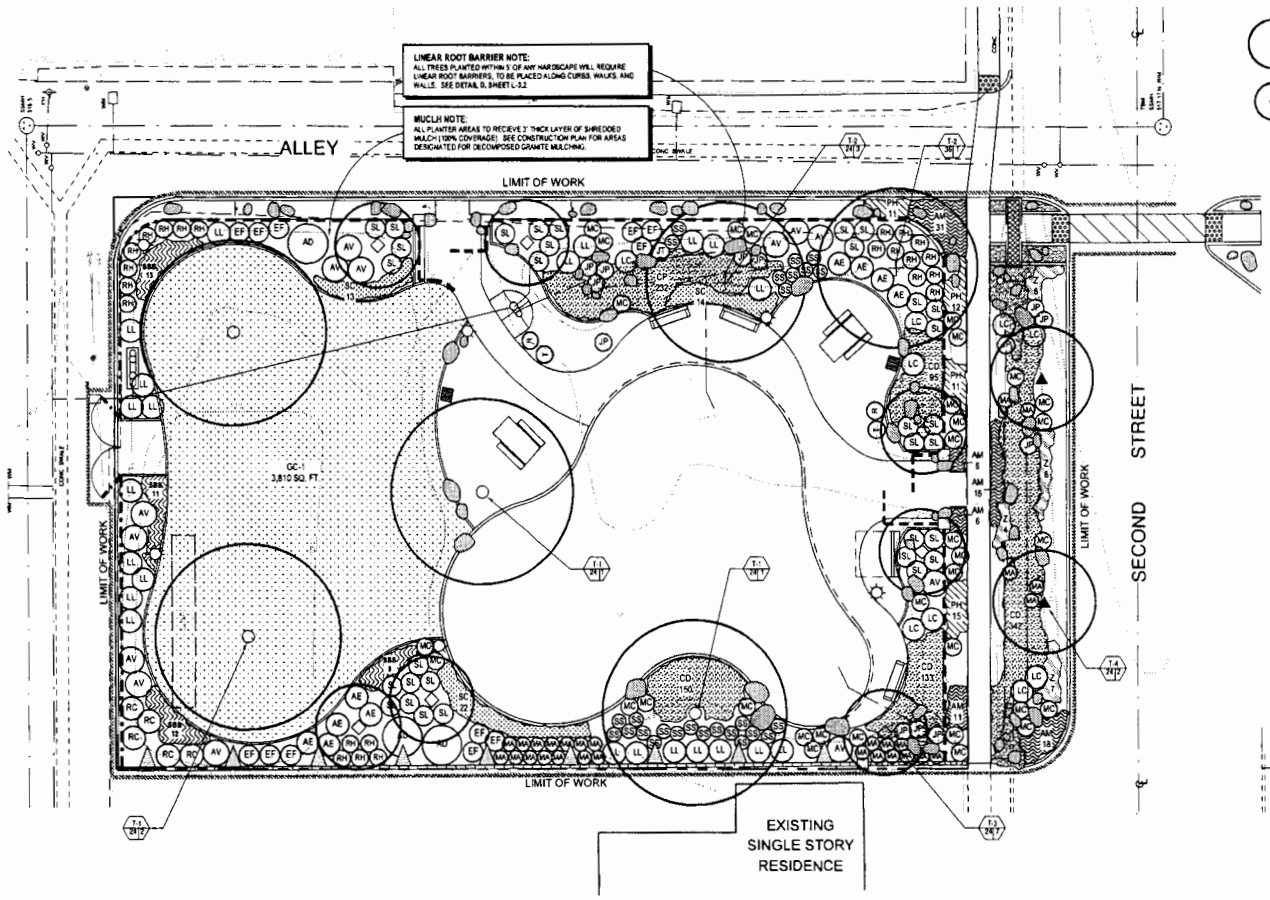
CITY OF MOORPARK
PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME
L-2.3 IRRIGATION DETAILS

SHEET 7 OF 11
DRAWING NO.



PLANTING LEGEND

SYMBOL	CALLOUT	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY	COMMENTS
	TREES						
	T-1	Platanus racemosa	Western Sycamore	24" Box 24" Box	per plan per plan	2 2	Multi-branched Standard in turf
	T-2	Quercus agrifolia	Coast Live Oak	36" Box 24" Box	per plan per plan	1 1	Standard Standard
	T-3	Cerca c. 'Forest Pansy'	Forest Pansy Redbud	24" Box	per plan	7	Low Branching
	T-4	Lagerstroemia i. 'Glendora White'	Glendora White Crape Myrtle	24" Box	per plan	2	Standard
	SHRUBS						
LC	S-1	Leymus c. 'Canyon Prince'	Giant Wild Rye	1 Gal	per plan	9	
MC	S-2	Muhlenbergia capillaris	Pink Muhly Grass	1 Gal	per plan	33	
AD	S-3	Arctostaphylos d. 'Howard McMinn'	Howard McMinn Manzanita	15 gal	per plan	3	
MA	S-4	Achillea 'Moonshine'	Moonshine Yarrow	1 Gal	18" o.c.	86	
SS	S-5	Salvia spathacea	Hummingbird Sage	1 gal	per plan	26	
JP	S-6	Juncus p. 'Elk Blue'	Elk Blue Rush	5 gal	Per plan	14	
MA	S-7	Mimulus aurantiacus	Bush Monkey Flower	1 Gal	30" o.c.	29	
PH	S-8	Penstemon h. 'Margarita BOP'	Foothill Penstemon	1 gal	18" o.c.	49	
Z	S-9	Zauschneria 'Everett's Choice'	California Fuchsia	1 gal	24" o.c.	25	
EF	S-10	Encelia farinosa	Brittlebush	1 gal	Per plan	13	
RC	S-11	Romneya c. 'White Cloud'	White Cloud Poppy	1 gal	Per plan	5	
LL	S-12	Lobelia laxiflora	Mexican Lobelia	5 gal	per plan	32	
SL	S-13	Salvia l. 'Santa Barbara'	Mexican Bush Sage	1 gal	per plan	32	
BBS	S-14	Salvia 'Bee's Bliss'	Bee's Bliss Sage	1 gal	24" o.c.	45	
AE	S-15	Arctostaphylos e. 'Carmel Sur'	Carmel Sur Manzanita	1 Gal	per plan	9	
RH	S-16	Rhamnus c. 'Little Sur'	Little Sur Coffeeberry	5 Gal	per plan	22	
SC	S-17	Santolina chamaecyparissus	Lavender Cotton	1 Gal	24" o.c.	49	
AV	S-18	Agave vilmoriniana	Octopus Agave	5 Gal	per plan	11	
CD	S-19	Carex pansa	Dune Sedge	4" Pots	12" o.c.	952	
	VINES						
	V-1	Parthenocissus tricuspidata	Boston Ivy	1 Gal	per plan	10	Train to wall
	TURF						
	GC-1	Cynodon dactylon	Tifgreen Hybrid Bermuda Available through Southland Sod Farms (805) 488-3585	Sod		3810 sq. ft.	Provide amendments per soils report specifications

PLANTING NOTES

1. SHRUB LAYOUT AS SHOWN ON PLAN INDICATES "SHRUB MASSES." QUANTITIES ARE AS SHOWN ON PLAN. ON CENTER SPACING AS SHOWN ON LEGEND. CONTRACTOR TO VERIFY QUANTITIES BASED ON SPACING AND ADD ADDITIONAL PLANT MATERIAL (AT NO ADDITIONAL COST TO THE OWNER) REQUIRED TO MAINTAIN DESIGN INTENT DUE TO EXISTING SITE CONDITIONS NOT ANTICIPATED DURING DESIGN. LAYOUT/SPACING WILL EITHER BE TRIANGULAR OR LINEAR AS SHOWN ON PLAN OR LEGEND. LANDSCAPE ARCHITECT TO APPROVE FINAL LAYOUT IN FIELD PRIOR TO INSTALLATION.
2. CONTRACTORS SHALL NOTIFY THE LANDSCAPE ARCHITECT OF SITE CONDITIONS WHICH PREVENT INSTALLATION PER PLANS AND SPECIFICATIONS.
3. CONTRACTOR SHALL BE LIABLE FOR REMOVING AND RE-INSTALLING IRRIGATION EQUIPMENT, AND REPLANTING AREAS WHICH ARE NOT INSTALLED PER PLAN AND SPECIFICATIONS.
4. REFER TO PLANTING SPECIFICATIONS FOR INSPECTION/CERTIFICATION SCHEDULE.
5. IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL PRIOR TO INSTALLATION OF PLANT MATERIALS.
6. TREES AND SHRUBS SHALL BE PLANTED AFTER CONCRETE PLACEMENT, BUT NOT BEFORE IRRIGATION COVERAGE TEST NO. 1 HAS BEEN APPROVED. (SEE SPECIFICATIONS).
7. PLACE TREES BETWEEN IRRIGATION HEADS WHEREVER POSSIBLE.
8. LANDSCAPE CONTRACTOR SHALL AMEND SOILS AS NOTED ON THE SOILS REPORT BY WALLACE LABORATORIES.
9. THE RECOMMENDATIONS OF THE SOIL REPORT SHALL SUPERSEDE THE SOIL PREPARATION AND BACKFILL MIX SPECIFICATIONS (SEE SPECIFICATIONS).
10. SHREDDED MULCH INSTALLATION: INSTALL SHREDDED MULCH IN ALL SHRUB AND GROUNDCOVER AREAS PER SPECIFICATIONS UNLESS OTHERWISE INDICATED ON PLANS. AREAS DESIGNATED FOR DECOMPOSED GRANITE MULCHING ARE SHOWN ON CONSTRUCTION PLAN.
11. CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF ANY DAMAGED LANDSCAPE AREAS BEYOND THE LIMIT OF WORK, INCLUDING REPAIRING ANY IRRIGATION LINES/SPRINKLER HEADS. THAT IS A DIRECT RESULT OF THE LANDSCAPE CONSTRUCTION AND/OR HIS SUB-CONTRACTOR. REPLACEMENT ITEMS SHALL BE EXACT DUPLICATION OF ORIGINAL WORK OR PLANTS, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT.
12. WHEREVER GROUNDCOVER AREAS ARE ADJACENT TO TURF, INSTALL CONCRETE MOWSTRIP OR EDGING AS INDICATED ON DRAWINGS.
13. CLEAN-UP SHALL TAKE PLACE ON A DAILY BASIS UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL GRADES AND FLOW LINES AS SHOWN ON THE GRADING PLAN. WHERE SOD IS TO BE INSTALLED ON A SWALE, THE FINISH GRADE MUST BE ADJUSTED SO THE SOD DOES NOT RESTRICT THE FLOW. CONCRETE MOW CURBS SHALL BE DEPRESSED AT SWALE LINES SO THAT DRAINAGE FROM PLANTERS CAN FLOW TOWARD PROPOSED CATCH BASINS.

PLANT SUBSTITUTION NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCURE ALL PLANT MATERIAL SHOWN IN THE PLANTING LEGEND. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT AND CITY REPRESENTATIVE.

PHOTO SUBMITTAL NOTE:
ALL PLANT MATERIAL, INCLUDING TREES, SHRUBS, AND VINES, SHALL BE INSPECTED AND APPROVED BY LANDSCAPE ARCHITECT, VIA PHOTO SUBMITTALS, PRIOR TO DELIVERY TO SITE. PHOTO SUBMITTALS SHALL INCLUDE NURSERY SUPPLIER AND DATE OF PHOTOS. ANY MATERIAL DELIVERED TO SITE WITHOUT APPROVAL IS SUBJECT TO REJECTION. PHOTO SUBMITTALS SHALL BE SENT TO LANDSCAPE ARCHITECT AND CITY REPRESENTATION A MINIMUM OF 48 HOURS PRIOR TO SHIPMENT OF MATERIAL. SUBMITTALS SHOULD INCLUDE SOME TYPE OF SCALE REFERENCE IN PHOTO (I.E. PERSON, MEASURING TAPE, ETC.). TREES SHALL BE NOTED WITH HEIGHT (FROM FINISH GRADE IN CONTAINER) AND CANOPY HEAD SIZE. LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF SCHEDULED NURSERY DELIVERY TIMES A MINIMUM OF 24 HOURS PRIOR TO SHIPMENT. REFER TO PLANTING SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS REGARDING QUALITY OF NURSERY STOCK.

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG

SCALE : 1"-10'

PLAN CROSS REFERENCES

FOR NOTES AND LEGENDS, SEE THIS SHEET
FOR DETAILS, SEE SHEET L-1.1 AND L-1.2
FOR SPECIFICATIONS, SEE SHEET L-4.0
FOR CORRESPONDING IRRIGATION PLAN SEE SHEET L-2.0
FOR CORRESPONDING PLANTING PLAN SEE SHEET L-3.0

SYMBOL LEGEND

TREES
CALL OUT SYMBOL — QUANTITY
SIZE (gallon)

	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE
6				
5				
4				
3				
2				
1				
△				

ARCHITERRA design group
landscape architecture and planning
13231-A Tradewinds Street
Rancho Cucamonga, CA 91730
(909) 484-2800
Fax (909) 484-2802

DESIGNED BY: PARK RECREATION AND COMMUNITY SERVICES
DRAWN BY
PARK AND RECREATION DIRECTOR — DATE
CHECKED BY: ENGINEERING REVIEWED BY:
APPROVED BY
DAVID KLOTZLE, PE — EXP DATE — DATE

CITY OF MOORPARK

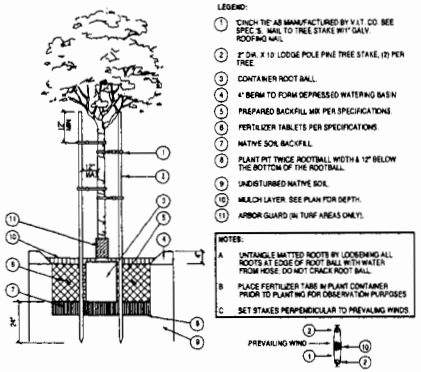
PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO
ENGINEERING PROJECT NO

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

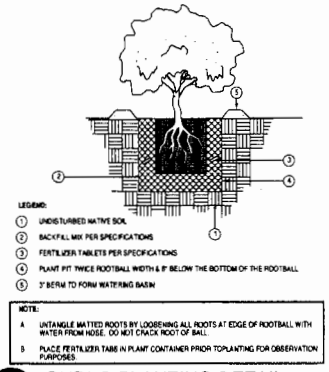
SHEET NAME
L- 3.1 PLANTING PLAN

SHEET 8 OF 11
DRAWING NO



A DOUBLE STAKE TREE PLANTING

SCALE: N.T.S.



B SHRUB PLANTING DETAIL

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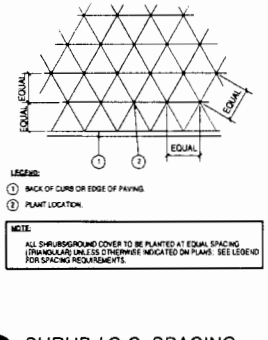

C SHRUB / G.C. SPACING

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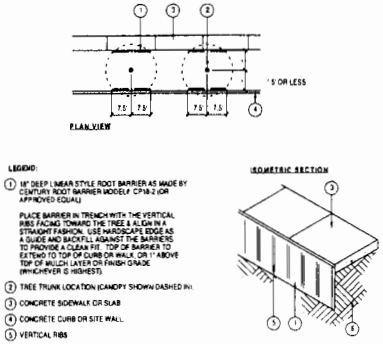
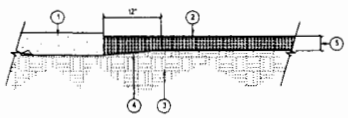


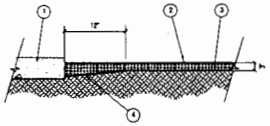
D LINEAR ROOT BARRIER

SCALE: N.T.S.



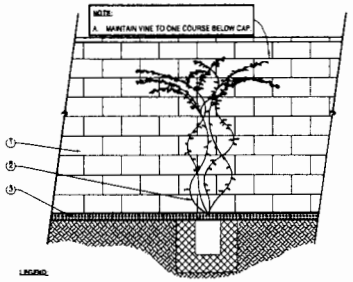
E MULCH

SCALE: N.T.S.



F D.G. MULCH

SCALE: N.T.S.



G VINE ON BLOCK WALL

SCALE: N.T.S.

WALLACE LABORATORIES, LLC
365 Coral Circle
El Segundo, CA 90245
phone (310) 615-0116 fax (310) 640-6863

March 17, 2014

Gregg Denson, gdenson@architerradesigngroup.com
Architerra Design Group
10221-A Trademark Street
Rancho Cucamonga, CA 91730

RE: Walnut Acres Park, City of Moorpark, Site Composite 6-12"
Our Sample ID 14-73-08

Dear Gregg,

The soil is highly alkaline with a pH of 8.22. Limestone is present which induces iron deficiency in iron inefficient or acid-loving plants. Salinity is moderate at 1.91 millimhos/cm. Nitrogen, manganese and phosphorus are low. Potassium is modest. Magnesium, sulfur and the other micronutrients are sufficient. Total available sodium is moderately high. SAR (sodium adsorption ratio) is 3.9.

Recommendations

General soil preparation on a square foot basis. Broadcast the following materials uniformly. The rates are per 1,000 square feet. Incorporate them homogeneously 6 inches deep:

Potassium sulfate (0-0-50) - 8 pounds
Triple superphosphate (0-45-0) - 4 pounds
agricultural gypsum - 40 pounds
Organic soil amendment - about 3 cubic yards, sufficient for 3% to 5% soil organic matter on a dry weight basis

For the preparation on a volume basis, homogeneously blend the following materials into clean soil. Rates are expressed per cubic yard:

Potassium sulfate (0-0-50) - 1/3 pound
Triple superphosphate (0-45-0) - 1/4 pound
agricultural gypsum - 2 pounds
Organic soil amendment - about 15% by volume, sufficient for 3% to 5% soil organic matter on a dry weight basis

Organic soil amendment:

1. Humus material shall have an acid-soluble ash content of no less than 6% and no more than 20%. Organic matter shall be at least 50% on a dry weight basis.
2. The pH of the material shall be between 6 and 7.5.

Soil Analyses Plant Analyses Water Analyses

Architerra Design Group, March 17, 2014, page 2

3. The salt content shall be less than 10 millimhos/cm @ 25° C in a saturated paste extract.
4. Boron content of the saturated extract shall be less than 1.0 part per million
5. Silicon content (acid-insoluble ash) shall be less than 30%.
6. Calcium carbonate shall not be present if to be applied on alkaline soils
7. Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, peat mosses etc. low in salts, low in heavy metals, free from weed seeds, free of pathogens and other deleterious materials.
8. Composted wood products are conditionally acceptable (stable humus must be present). Wood based products are not acceptable which are based on red wood or cedar.
9. Sludge-based materials are not acceptable.
10. Carbon:nitrogen ratio is less than 25:1
11. The compost shall be aerobic without malodorous presence of decomposition products.
12. The maximum particle size shall be 0.5 inch. 80% or more shall pass a No. 4 screen for soil amending.

Maximum total permissible pollutant concentrations in amendment in parts per million on a dry weight basis

arsenic	20	copper	150	selenium	50
cadmium	15	lead	200	silver	10
chromium	300	mercury	10	vanadium	500
cobalt	50	molybdenum	20	zinc	700
		nickel	100		

Irrigate deeply initially and lower the pH to less than 8.0 and reduce the SAR to less than 3.0. Afterwards apply ammonium sulfate (21-0-0) at 5 pounds per 1,000 square feet. Spray irrigation or hand watering may be needed to leach the soil and to move fertilizers into the soil.

For site maintenance, apply ammonium sulfate (21-0-0) at 5 pounds per 1,000 square feet about once per quarter. Monitor the site with periodic soil testing. Adjust the fertility program as needed. Correct iron deficiency if it develops with Becker Underwood Sprint 138 Fe or other FeEDDHA chelated iron.

Sincerely,

Garn A. Wallace, Ph. D.
GAW:ir

Soil Analyses Plant Analyses Water Analyses

H SOILS REPORT RECOMMENDATIONS

SCALE:

I

SCALE:

J

SCALE:

K

SCALE:

△	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE
6				
5				
4				
3				
2				
1				

ARCHITERRA design group
landscape architects and planning
10221-A Trademark Street
Rancho Cucamonga, CA 91730
(909) 484-2900
Fax (909) 484-2902

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
DAVID KLOTZLE, PE EXP DATE DATE

CITY OF MOORPARK
PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO
ENGINEERING PROJECT NO

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME
L-3.2 PLANTING DETAILS

SHEET 9 OF 11
DRAWING NO

CONCRETE

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

Work includes but is not limited to the following. Furnish all labor and materials, equipment, tools, equipment, facilities, transportation, and services necessary for installing all concrete work complete as indicated on the drawings and specifications, including, but not limited to:

A. Furnish and use or replenishing, place, bolts and anchors.

B. Install all items requiring to install related which are to be cast into concrete.

C. Complete then bolts, bedding, mounted in place walls, other thereof, footings, piers and walls for, walls, landing, benches, demolition, walls, all where applicable.

PART 2 - GENERAL

All requirements of subsection 2.01 standard specifications for Public Works Construction shall apply except as specified herein.

2.1 INSPECTION OF SITE

Examine existing work and surfaces before starting work in this section. Report to the Landscape Architect in writing any conditions which will prevent the proper execution of the work. Beginning the work in this section without reporting unsuitable conditions to the Landscape Architect constitutes acceptance of site conditions by the Contractor. Any required remedial repair or replacement of the work caused by unsuitable conditions shall be done at no additional cost to Owner.

2.2 PROTECTION OF EXISTING CONDITIONS

Contractor shall acquaintanted with on site conditions. He shall take necessary precautions to protect existing site conditions. Should damage be incurred, the Contractor shall repair damage to its original condition or further and install equal replacement at his own expense, to the satisfaction of the Owner.

2.3 COORDINATION

A. Construction On Site: Coordinate and cooperate with other contractors to enable the work to be executed as rapidly and as efficiently as possible.

B. Work With Other Trades: Coordinate with General Contractor items of other trades to be furnished and set in place. Such items of other work or other to be set unfastened, built in, attached to or supported by the work shall be provided by them in ample time that progress of the work is not delayed. Any cutting or patching made necessary to comply with the requirements shall be done at the Contractor's expense.

2.5 APPROVAL

Wherever the terms "approve," "approval of," or "approved" are used in this Specifications, they mean approval of the Landscape Architect, the Owner's Representative or their field representatives or in writing.

2.6 SUBMITTALS

At least 14 days after award of contract, Contractor shall submit for approval samples and/or manufacturers' labor catalog cuts and specific details of the following items in beginning form. Approved samples shall be retained for comparing work.

A. One 3 ft. x 3 ft. x 3 in. sample for each type of concrete finish and color at the job site.

B. Color samples for expansion joint compounds.

C. All submittal data shall be bind sheet in a weight package in the Landscape Architect order. 15 days after award of the Contract Letter, unless otherwise approved by the Landscape Architect and/or Owner's Construction Representative.

2.7 SUBSTITUTIONS

A. Specific details reference to manufacturers, names and proposed quantities of this section are used as standards. We reserve the right to substitute other material or methods without written approval of the Landscape Architect.

B. Approval, installation of any approved substitutions is Contractor's responsibility. Any changes required for installation of any approved substitution must be made to the satisfaction of Landscape Architect. Shop and product additions sent to Owner. Approval by Landscape Architect of substitutions materials and/or dimensional drawings do not cover these requirements.

PART 3 - MATERIALS

Materials shall be of the quality and of domestic manufacture as noted below:

A. Portland cement shall conform to ASTM C 150 Type I or Type II.

B. Concrete aggregate shall conform to ASTM C.33.

C. Water shall be clean, free from deleterious materials, acid or alkali, and potable.

D. Admixtures for all finished concrete shall be BRA Chemical Co.'s "Plastiment", or approved equal, applied in strict accordance with manufacturer's directions.

E. Reinforcement: conforming specs ASTM A 615 and ASTM A305, Modulus # - ASTM A 185.

F. Forms:

1. Lumber shall be "standard fair grade" Douglas fir.

2. Plywood for forming of surfaces which is exposed shall be Medium. All plywood used for forming shall be in best APA with Mark and edge sealed.

G. Expansion joint filler shall conform with ASTM D1751 (preformed).

PART 4 - EXECUTION

4.01 CONCRETE DESIGN MIX

A. Contractor assumes responsibility for the design mix and guarantees the used that ultimate strength as indicated on specified tests.

B. Concrete minimum 28-day ultimate strength shall be 2500 PSI.

C. Ready mixed concrete shall conform to ASTM C94.

4.02 CONCRETE PROPORTIONS & CONSISTENCY

A. The proportions of aggregates in concrete shall provide a dense mixture which will readily work into all corners of the forms and adjacent to reinforcements without any segregation of the mixture, must ensure free water to extract on the surface or cause excessive bleeding of the forms.

B. The recommended practice of the American Concrete Institute shall be followed with exceptions as follows: The maximum slump shall not exceed (7) five inches for footings, slabs on grade, and mass work, (4) 3 inches for foundation walls.

4.03 CONCRETE APPROVAL

The concrete quality improvements immediately are, subject to the approval of Owner, and no changes shall be made without prior written approval.

4.04 REBAR

Reinforcing bar shall be secured with 18" bar diameter minimum spacing.

4.05 CONVEYING AND PLACING

A. Before depositing any concrete against soil concrete, all fallows shall be removed, and the surface hardened to expose the embedded aggregate. The surface shall then be covered with cement grout, using the specified mix with 10 of the sand aggregate omitted. 1/4" minimum thick.

C. Conveying and site of all concrete shall be so as to prevent separation of aggregates, and in no case shall the fall exceed 5 feet. Troughs shall be used as required. Surfaces of concrete shall be left reasonably level, with a minimum amount of concrete being allowed to flow after being placed. Placing shall be performed as a continuous operation and each section is completed.

D. Concrete shall be placed and vibrated with mechanical vibrators in a manner satisfactory without necessitate of segregation. The pouring of concrete by vibration will not be permitted.

4.06 GROUTING

A. Grout shall be composed of one part Portland Cement and one parts of fine aggregate by volume. Admixture shall be mixed with and water added just sufficient to make the mixture flow under its own weight.

B. For dry bearing cement plates, a minimum of water shall be added to the mix so that when one sample a handfull flows in the hand, surface moisture but no free water. Shall appear on the surface. Do not mix more than can be used in 30 minutes.

4.07 CURING AND PROTECTION

A. All exposed surfaces of concrete shall be protected from damage due to temperature, dampness, and construction operations.

B. Curing shall be as follows:

1. All exposed surfaces of concrete shall be protected from premature drying and freezing. Moist curing shall be provided against water by rain. All concrete shall be kept wet for a period of ten days after pouring. If when the curing water may impact bath surfaces of water, the forms shall be left in place. Curing shall be provided from the first day after pouring and allowed to run down between the concrete and the forms.

2. All liquid curing compounds shall be used in accordance with the manufacturer's recommendations and shall not be used on surfaces receiving concrete hardener.

4.08 CONCRETE CURBS

Contract accepts quality of locations shown on Plans to establish. Not to line and grade, as approved by the Head Contract or City. Use forms and grade stakes to establish curbs. Place and compact subgrade strength. Provide expansion joints as directed or shown, and as required by the Contract Plans. Finish and round mitered. Form shape with brush. Finish portions to base or edge.

4.09 CLEANUP

Upon completion of all concrete work and before final acceptance, Contractor shall remove all tools, surface materials, equipment, debris, etc. Sort the site and the site shall be left in a clean, and condition acceptable to Owner.

PART 5 - WARRANTIES

In addition to manufacturers' guarantees or warranties, all work shall be guaranteed for one year from the date of final acceptance against defects in materials and workmanship by Contractor. Warranty shall also cover repair of damage to any part of the premises resulting from defects in materials and workmanship to the satisfaction of the Owner.

END OF SECTION

CONCRETE UNIT MASONRY

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

Furnish all labor, tools, equipment, materials, minimum motor and perform all operations necessary and incidental to the proper work stated and completion of all contract, and necessary in accordance with the Drawings and Specifications to bring, but not limited to the following work items:

A. Masonry (Stucco) where scheduled.

B. Walls (Stucco) where scheduled.

C. Masonry Backpaper (Stucco) where specified.

1.02 RELATED WORK

A. Furnishing and placing steel.

B. Concrete placement.

C. Stucco application.

PART 2 - GENERAL

2.01 PERMITS & INSPECTIONS

Obtain necessary City Building & Safety Department permits and inspections.

2.02 APPLICABLE STANDARDS

Any reference to the "Standard Specifications," "ASTM," or "ACI" mean shall mean the current or latest edition.

A. Standard Specifications, Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation, CALTRANS.

B. Standards:

1. ASTM - American Society of Testing and Materials.

2. ACI - American Concrete Institute Manual of Concrete Practice.

2.03 INSPECTION OF SITE

Examine related work and surfaces before starting work in this Section. Report to the Landscape Architect in writing any conditions which will prevent the proper execution of the work. Beginning the work in this Section without reporting unsuitable conditions to the Landscape Architect constitutes acceptance of site conditions by the Contractor. Any required remedial repair or replacement of the work caused by unsuitable conditions shall be done at no additional cost to Owner.

2.04 PROTECTION OF EXISTING CONDITIONS

Contractor shall acquaintanted with on site conditions. He shall take necessary precautions to protect existing site conditions. Should damage be incurred, the Contractor shall repair damage to its original condition or further and install equal replacement at his own expense, to the satisfaction of the Owner.

2.05 COORDINATION

A. Coordination work: Coordinate and cooperate with other contractors to enable the work to be executed as rapidly and as efficiently as possible.

B. Work with Other Trades: Coordinate with General Contractor items of other trades to be furnished and set in place. Such portions of other work or other to be set unfastened, built in, attached to or supported by the work shall be provided by them in ample time that progress of the work is not delayed. Any cutting or patching made necessary to comply with the requirements shall be done at the Contractor's expense.

2.06 FINAL ACCEPTANCE

A. Review: Review for Final Acceptance shall be held in conjunction with the final review of Section 4.4 B Painting and Construction.

B. Acceptance: Work under this Section will be accepted by Landscape Architect upon satisfactory completion of all work, upon Final Acceptance at the end of the maintenance period, including field filling of walls. Owner will assume responsibility for maintenance of the work. Said assumption does not relieve Contractor of obligations under warranty.

PART 3 - MATERIALS

Materials shall be of the quality and of domestic manufacture as noted below:

A. Concrete masonry units: ASTM C 90 Grade A-1 Type I, normal weight (as bearing unit).

1. Types and sizes: As indicated on drawings.

2. Color: As indicated on Color Schedule.

B. Portland cement: ASTM C 150, Type I or Type II.

C. Aggregates:

1. Sand: ASTM C 144, clean, hard, strong, durable, free from injurious amounts of organic, alkaline, organic, or other deleterious substances, and not less than 1 percent by weight passing No. 100 sieve.

2. Pea gravel: ASTM C 144, washed and graded with not more than 5 percent passing No. 8 sieve and with 100 percent passing 3/8 inch sieve.

D. Water: Clean, potable, free of deleterious materials.

E. Reinforcing: ASTM C 287, Type S, and containing 85% by weight of medium grade.

F. Admixtures for grout: Water-reducing admixtures, if included. Obtain acceptance from Project Superintendent prior to use.

1. Use according to manufacturer's printed instructions. Secure manufacturer or distributor initial recommendations for a qualified field representative to ensure proper use of admixture.

G. Wire ties (optional): Two gauge ceramic non-bearing walls. Size and shape shall conform to Landscape Architect where applicable.

H. Curing material: Sure Kleen No. 1000 (Kreamer), or Presco Solvent Co., Inc., or equivalent.

I. Expansion joint filler: ASTM C 1751.

J. Sealant material: As noted on plans.

K. Submit Catalogue Cut Concentrated waterproofing material.

L. Surface exterior walls: Acceptable masonry with contractor's grade be a minimum 28" 4" sized. Use finishing form whether for exposed or stucco masonry wall work.

PART 4 - EXECUTION

Execution of Work shall meet minimum requirements for foundations and footings, concrete masonry work, reinforced field steel work. Designs, if required shall, stucco finishing and backfilling clean up in the satisfaction of the Owner.

4.01 LAYOUT

All walls are to be placed in the field by use of footing, top of wall, length of walls and all ways in walls, on the square through "as-built" in the field. Any changes in dimensions which are or above approved shall be submitted for approval by Project Superintendent and adjusted if drawing corrections and approved by Landscape Architect and Project Superintendent. Any changes will be per square footage and unit cost.

4.02 INSPECTION OF WORK AREAS

A. Inspect related work and adjacent surfaces for conditions.

B. Correct conditions determined to a proper and timely completion of the work.

4.03 OBSERVATION OF MASONRY WORK

Perform all masonry work under continuous supervision by the Landscape Architect and/or Owner's representative.

4.04 PREPARATION

A. Previously placed concrete or masonry: Clean of efflorescence, laitance, and any loose or weak concrete. Wet down thoroughly with water under pressure. Remove loose surfaces and remove mortar and similar obstructions.

B. Masonry units: Thoroughly clean of dust, grease, oil or other matter which would reduce bond.

C. Welding: Do not use concrete block units before installation.

D. Reinforcement: Clean of excess mill scale, loose rust, oil and coatings which would reduce bond. Secure anchor in place.

4.05 PLACING REINFORCEMENT

A. Place reinforcement in accord with ACI 531.

B. Place all reinforcement and anchors prior to grouting.

C. Reinforcing steel: Secure dowels in other material.

1. Vertical bars: Continuous from position cell to top of wall, centered in cells, except where otherwise indicated. Secure vertical reinforcement in position at the bottom and at intervals not further apart than 192 bar diameters. Where necessary, tie vertical steel three in place by frames to other suitable devices as approved by Architect.

2. Horizontal bars: Wire temporarily stand each position and lap to indicate correct locations. Use deformed vertical bars where indicated, and in vertical bars in dowels.

3. Horizontal bars: Lap at least bars as indicated or minimum with a minimum of 48 bar diameters.

4. Tie at intersections using tie 18 gauge annealed wire.

4.06 MORTAR AND GROUT

A. Mortar: Type S in accord with UBC Chapter 24.

1. Color: As indicated on plans.

B. Grout: In accord with UBC Chapter 24, with exception that time shall not be used.

C. Stucco of mortar and grout not used within 30 minutes after leaving mixer. Retempering of mixture will be allowed in accord with UBC Chapter 24.

D. Mortar and grout minimum compressive strength:

1. Mortar: 28 days, 1,800 lbs.

2. Grout: 28 days, 2,000 lbs.

E. After all aggregations are of the same mix, etc. requirements for not less than three mixes. Do not use hard mixing unless specifically acceptable to Project Superintendent.

4.07 WORKMANSHIP

A. Measure and construct vertical continuity of walls to be true. Fully bed joins and accurately forming such units in manner to prevent cracks of grout.

B. Fractional units of masonry units are prohibited where whole units can be used. Cutting of divisions with engineer will not be allowed. Provide special units as necessary to form openings and lines.

C. Do not construct any part of any masonry wall more than a foot higher than adjoining portion.

D. Where absolutely necessary, for construction purposes, to place off longitudinal rows of masonry, stop off ends by stepping back alternate units weight in each course. Racking shall not be permitted.

E. At openings for ducts, tubes and conduit duct into masonry walls, do in form thickness units with allowance and.

F. Align vertical walls to maintain continuous uniform bed joint area.

G. Set units with joints straight and uniform in width.

4.08 JOINTS AND COURSING - REPAIRED MASONRY

A. Joints: Remove as necessary masonry and flush with adjacent concrete formed joint.

B. Bond: Continue surrounding bond, where otherwise not shed.

C. Joints: 3/8 inch wide.

D. Keep all areas to be grouted free from mortar so that grout and mortar fascination.

E. Perform finishing or coloring when mortar is set long as but still soft enough to scrape. Use a tool which compacts mortar, pressing excess mortar out of joint rather than dragging it out.

F. Rake out joints which are too tight or lack of bedding, point and finish joint. Where applicable.

G. Butter vertical head joints and for the bricks equal to face shell of unit and where more joints rigidly so that mortar bonds well to both units.

1. Fill joints totally from face of brick to at least depth of face shell.

H. Set finish, capping units and bearing plates in a full bed of mortar.

I. Control joints shall be as detailed. Field sealant where required, in accord with plans and specifications.

4.09 GROUTING

A. Immediately remove from exposed surfaces surplus mortar, grout, foreign material, and stains.

B. Detailing joints: Point finished surfaces into the joints of adjacent masonry and formed and remove deleterious joints. Provide smooth or indicate masonry joint.

C. Repairing and applying stucco: Repair masonry, remove grout, remove or repair, dirty contact the faces of masonry, remove if necessary. Should damaged surface occur, wash and clean surfaces immediately with 1 10% muriatic acid and rinse thoroughly. Repair and clean. Remove stains where they occur.

D. Clean efflorescence from masonry with solution cleaner or equal with chemical manufacturer's instructions.

E. After work is completed, do not saturate with water for curing or any other purpose.

4.11 CLEANUP

All subcontractor's materials and tools of this work shall be delivered from the job site upon completion of work. Subcontractor shall be responsible for damage to the finished surfaces of other work. Subcontractor guarantees all work will be performed in a good and workmanlike manner.

PART 5 - WARRANTIES

In addition to manufacturers' guarantees or warranties, all work shall be guaranteed for one year from the date of final acceptance against defects in materials and workmanship by Contractor. Warranty shall also cover repair of damage to any part of the premises resulting from defects in materials and workmanship to the satisfaction of the Owner.

END OF SECTION

PAINTING

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

Furnish all labor, tools, equipment, materials, transportation, and perform all operations necessary and incidental to proper execution and completion of all painting work in accordance with the Drawings and Specifications. Such work includes, but is not limited to, the following:

A. Handrails.

B. Miscellaneous metals.

C. Wood and metal door frames.

D. Doors.

E. Fencing.

1.02 RELATED WORK IN OTHER SECTIONS

The following items of associated work are included in other sections of these Specifications:

A. Shop paint of steel members and miscellaneous metal items.

PART 2 - GENERAL

2.01 SUBMITTALS

Before beginning work, prepare for approval a sample of each color and finish requested. Such samples, when approved, shall constitute standards for color and finish to be acceptable in place. Submit samples of each color and finish combination with those to be finished on the site. All such shall match the approved colors and samples. Submit samples to the Landscape Architect 15 days prior to construction for approval.

2.02 PRODUCT HANDLING

All painting materials shall be delivered to the site in the manufacturer's original containers with labels intact and seals unbroken. They shall be stored in a safe place, in accordance with current fire regulations. All necessary precautions shall be taken to avoid damage to fire.

2.03 ENVIRONMENTAL CONDITIONS

Surfaces shall be painted only when they are free from moisture. No painting of exterior surfaces shall be done less than 72 hours after a rain, nor during periods of dew or fog. Painting surfaces shall be prepared dried but before proceeding with the work. No painting shall be done when temperature is below 50 degrees F.

2.04 SCAFFOLDING AND PROTECTION

Furnish, erection and removal of scaffolding and ladders required for the work, and all step ladders for the protection of walls, floors, or other surfaces not to be painted. Painted and finished surfaces subject to damage or deterioration shall be protected, protected and covered. Contractor shall be responsible for any and all damage to painted work, and to that of other work caused by operations under this Section, and if required.

2.01 MANUFACTURERS

A. Materials are specified to brand names to establish a standard of quality. The Landscape Architect will consider substitutions for brand names of products upon bids, provided the propositions set forth for substitutions and specifications are fulfilled. The Landscape Architect reserves the right to accept any material which, in his opinion, will not produce the quality of work specified herein. The term "brand" as used herein includes generic, trade, and manufacturer's designations. Substitutions will be considered only when submitted by the contractor and human substitutions the approval for the primer and finish coats of the specifications provided.

1. Primer: Federal Specification TT-P-95, Type II (oil based) or TT-P-645 (oil, chemical, cure) to be compatible with finish coat.

2. Finish Coats: Enamel, satin, color, varnishes, stimulation, lacquers and sealers shall be as specified on plans and sealers.

2.02 COLOR AND LIFE OF FINISH

A. Colors shall be selected by Landscape Architect. Owner reserves the right to change colors to match another previous painting project or to use indicating color or accent.

B. Color of all surfaces finished under this Section shall, at the end of one year, form complete from various fading, and no variations will be allowed. All exposed shall be in harmony with the color of wood color, and shall be in accordance of finishes, forming, painting, staining, shading, should in primers of the end of the one year.

3.03 MATERIALS FOR GENERAL USE

Thinner, thinner oil, or other solvents required shall be as recommended by each manufacturer for the respective product.

PART 4 - EXECUTION

4.01 SURFACE PREPARATION

A. Painting: No painting or finishing shall be started until the surfaces to be painted or finished are in proper condition in every respect. Surfaces shall contain no paint peeling or powder to the satisfaction of Painting shall not be started in finished until then are repaired, unless indicated otherwise on the Landscape Architect.

B. Cementitious: Surfaces to be painted shall be clean and free of dust, dust and any other substance which might interfere with the adhesion of the paint. All surfaces to be painted shall be free of efflorescence, powder, and deposits. Remove efflorescence by brushing or the particular painting or coating required.

C. Verification: Surfaces which cannot be prepared or painted as specified shall be immediately brought to the attention of the Landscape Architect. Painting of work without such notification will be considered acceptance by Contractor of the surface conditions. Contractor will be responsible for faulty work unacceptable work caused by Contractor's or his subcontractor's failure to do satisfactorily the work specified herein, and at his own cost to the Owner.

4.03 WORKMANSHIP AND APPLICATION

A. Quality: All painting work be done by skilled and experienced craftsmen working under the supervision of a capable foreman. All workmanship must be of the highest quality, and by the qualified satisfaction of the Landscape Architect. All materials shall be applied in accordance with the manufacturer's directions, and maximum results be thus obtained only in compliance with the manufacturer's specifications.

B. Preparation: All material shall be thoroughly mixed, refined or smoothly thinned on a clean mixer or mopping and free from stuck, sagged, spots, and brush marks. No coats shall be applied until they shall be applied each hour thoroughly dried. Some surfaces between coats as necessary to produce a smooth finish.

C. Application shall be as follows:

1. Paint: Two coats to match color of buildings. Color to be selected by Owner.

2. Primer: Two coats, one coat shall applied one coat not as primer.

3. Unless otherwise indicated, all metals and primers shall be compatible chemically.

D. Finishing Products: Contractor certified applicator shall be free of scratching, marking, gouging, scaling, stains or stains, and the source of all surfaces shall human free from being good uniform in color.

4.05 CLEANUP AND CLEANING

A. Safety Disciplines: Upon completion of the painting work, Contractor shall remove from the premises and disposal of all scaffolding and equipment, surplus material, empty containers, and other debris resulting from Contractor's operations. The site shall be left clean and free of all debris.

PART 5 - WARRANTIES

In addition to manufacturers' guarantees or warranties, all work shall be guaranteed for one year from the date of final acceptance against defects in materials and workmanship by Contractor. Warranty shall also cover repair of damage to any part of the premises resulting from defects in materials and workmanship to the satisfaction of the Owner.

END OF SECTION

TUBULAR STEEL

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

A. Furnish and install tubular steel as shown, details and specifications.

1.02 RELATED WORK IN OTHER SECTIONS

The following items of associated work are included in other sections of these Specifications:

A. Painting.

PART 2 - GENERAL

2.01 QUALITY ASSURANCE

A. Qualifications:

1. Welders group welding on the premises of a fabrication approved by the City Building and Safety Department.

2. Welders receiving no western approved and certified in accordance with requirements of AWS.

B. Reference Standards:

1. NBC Steel Construction Manual.

2. Code for Arc and Gas Welding in Building Construction - AWS D1.0 of the American Welding Society.

3. "Welding Handbook" of the National Association of Tubular Steel Motor Manufacturers (NATMM).

2.03 SUBMITTALS

A. Submit complete shop drawings to the Landscape Architect within Owner's Representative for review in accordance in instruction. Show the following on the shop drawings:

1. Show dimensions, sizes, thicknesses, gauges, finishes, joining attachments and installations as indicated plans.

2. Where welded connections, connection inserts, and other items are required to help or other work, show exact locations required.

3. For equipment manufacturers items, submit each sheet showing Available List of items in the furnished sizes, gauges and dimensions.

2.03 COORDINATION WITH OTHER WORK

A. Examine drawings and specifications, and include of miscellaneous metal work which is not shown in specified or other sections.

B. Provide all connections, anchors, bolts, supplies, outlets, switches, sinking, supplying sides connecting adjacent to 50 installations as shown and other work.

C. Provide items or are installed by other trades work in advance, to permit proper coordinating and scheduling of other work.

PART 3 - MATERIALS

Materials shall be of high quality and of domestic manufacture as noted below:

A. Rolled steel shapes and steel plates: ASTM A36.

B. Steel tubing: ASTM A500 Grade A or ASTM A501 structural - G.S. pc. sections.

C. Steel pipe: ASTM A53, Type S or S, Grade A or A106, galvanized B weldable.

D. Steel bolts: ASTM A307, Grade A.

E. Welding rods: Conform to AWS requirements for intended use.

F. Cast iron inserts: As indicated on the plans.

G. Shop primer, base paint: Conform to either FS 77 P-08, Type II for red lead-based or type conform or to FS 77 P-15 for zinc chromate type paint (2 applications - shop & site).

H. Touch-up for galvanizing surfaces: 16 Zinc (Dry) Galvanizing Powder 38% by 38% zinc, 40% lead and flux, as manufactured by 40 Black Welding Alloys Co. or Spelter Co. equivalent or O.E. Co. or equal.

I. Non-shrink grout: Non Rust Construction Products Division Pre-Pack or equal non-rust.

J. Metal primer: FS 77 P-21C - (2 coats).

PART 4 - EXECUTION

4.01 FABRICATION

A. Conform to the requirements of the AISC manual standards.

1. For manual welding: use the electrode type E7010 and E7018 electrodes.

2. Weld primers shall be determined from MR Reports, shop by the chemical composition of the performance.

B. Shop prime all tubular items to 1 mil dry film thickness after fabrication, deburring and grinding smooth welds and rough welds. Touch-up after installation. Leave in proper condition to receive finish painting.

1. Do not paint rubber and other surfaces to be embedded or in contact to concrete.

C. Welds shall be ground smooth, all weld spatter removed and work shall comply with the specifications of the American Welding Society.

D. Subcontractor to perform all the work shall in accordance with the governing codes and specifications.

4.02 INSTALLATION

A. Miscellaneous metalwork shall be free from defects which would impair strength, durability and appearance.

B. Erect plants, designs, lines and accessories in place. Brace surfaces and anchor in place. Grind all field welds.

C. Provide non-shrink grouting of anchors, plates, bolts, rods and other items not designated to be done by others.

D. Conceal all connections in the finished work, where possible. Ground some connections shall be determined or form replacing the material they fasten.

E. Set steel sills for support posts, floor and plums in concrete forming on beam.

F. Protect all dissimilar metals from galvanic corrosion by physical layer, coatings, or isolation.

G. After installation, clean all rust, scale and oil. Clean field bolts, bolts, and stainless screws. Touch-up all prime with the same material as used for the shop coat, leaving all surfaces ready to receive finish coats. Apply sealant, dust or primer on site.

H. Safety and shop: Load and run fewer pieces of exterior metal anchors in metal surfaces, under as selected by Owner's Representative.

4.03 REPAIR OF DEFECTS

A. All defective or damaged work shall be replaced, removed and repaired as directed by the Landscape Architect or Owner's Representative at no cost to the Owner.

4.04 CLEAN UP

A. Clean up and remove from the site all unused materials and dispose according from the performance of this work and shall keep a clean of the site including site work areas. All that shall be removed complete any from the present site.

B. Touches: Contractor shall clean and touch Contractor's work as necessary or as required for final acceptance by the Landscape Architect within 24 hours notice.

C. Unpainted Surfaces: Contractor shall leave all surfaces free of dust, cement, plaster, mortar, or other materials less than any paint, stain, specifications, protection or remedies which are the result of his operation.

D. Location: Contractor shall not leave equipment and shelters or dispose of materials, paint or other chemicals in areas to be painted or in the vicinity of drying paints.

PART 5 - WARRANTIES

In addition to manufacturers' guarantees or warranties, all work shall be guaranteed for one year from the date of final acceptance against defects in materials and workmanship by Contractor. Warranty shall also cover repair of damage to any part of the premises resulting from defects in materials and workmanship to the satisfaction of the Owner.

END OF SECTION

6				
5				
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3				
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△	DESCRIPTION OF REVISION	R.C.E.	APPD	DATE

ARCHITERRA design group
landscape architecture and planning
10221-A Trademark Street
Rancho Cucamonga, CA 91730
(909) 484-2800
Fax (909) 484-2802

DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

PARK RECREATION AND COMMUNITY SERVICES
PARK AND RECREATION DIRECTOR DATE
ENGINEERING REVIEWED BY:
DAVID KLOTZLE, PE EXP. DATE DATE

CITY OF MOORPARK

PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME
L- 4.1 CONSTRUCTION SPECIFICATIONS

SHEET 10 OF 11
DRAWING NO

LANDSCAPE IRRIGATION SYSTEM

PART 1 - GENERAL

END OF SECTION

END OF SECTION

PLANTING

PART 1 - GENERAL

END OF SECTION

END OF SECTION

6			
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APPROVED BY:	DAVID KLOTZLE, PE EXP DATE DATE

CITY OF MOORPARK

PARK AND RECREATION
COMMUNITY SERVICES DEPARTMENT

GRADING PERMIT NO.

ENGINEERING PROJECT NO.

PARKSITE AT 161 SECOND STREET
MOORPARK, CA

SHEET NAME
L-4.2 PLANTING & IRRIGATION SPECIFICATIONS

SHEET 11 OF 11

DRAWING NO

WALNUT ACRES PARK

MOORPARK, CA

ELECTRICAL CONSTRUCTION NOTES

1. THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS SHALL BE CONSIDERED AS PART OF THE SPECIFICATION.
2. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS TO PERFORM ELECTRICAL WORK SHOWN, NOTED OR SCHEDULED FOR A COMPLETE AND FINISHED INSTALLATION.
   A. ALL MATERIALS AND EQUIPMENT SHALL BE COMMERCIAL AND SHALL CARRY A U.L. LABEL.
   B. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UNDERWRITER'S LABORATORIES LIST OF APPROVED ITEMS AND SHALL MEET REQUIREMENTS OF ASTM, IEEE, 2013 NEC, NEMA, AND OTHER RECOGNIZED STANDARDS AND SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND OTHER APPLICABLE CODES, WHICHEVER ARE MORE STRINGENT.
3. THE WORD "PROVIDE" AS USED HEREIN MEANS TO FURNISH AND INSTALL COMPLETE.
4. ALL WORK TO BE IN ACCORDANCE WITH THE 2013 CEC (2013 NEC) AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
5. SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTION CERTIFICATES.
6. ABOVE GRADE CONDUIT SHALL BE STANDARD RIGID STEEL ACCORDING TO CODE REQUIREMENTS. CONDUIT SHALL BE CONCEALED IN FINISHED AREAS, EXCEPT AS OTHERWISE APPROVED BY ARCHITECT. RIGID CONNECTIONS SHALL BE COMPRESSION TYPE. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 OR 80 PVC BURIED A MINIMUM OF 24".
7. WIRE SHALL BE SINGLE CONDUCTOR COPPER WITH 600 VOLT INSULATION. ALUMINUM CONDUCTORS ARE NOT PERMITTED. #12 AND SMALLER SHALL BE SOLID. #10 AND LARGER SHALL BE STRANDED. MINIMUM WIRE SIZE SHALL BE #12. ALL WIRE AND CABLE SHALL BE NEW AND SHALL BE BROUGHT TO THE SITE IN UNBROKEN PACKAGES. ALL WIRING OF ANY TYPE SHALL BE IN CONDUIT.
   A. GENERAL WIRING SHALL BE THWN OR THHN.
8. ABOVE GRADE WIRE CONNECTORS SHALL BE BY "SCOTCHLOCK" OR EQUAL FOR #8 OR SMALLER AND T&B "LOCK-TITE" FOR #6 AND LARGER.
9. THIS CONTRACTOR SHALL DO ALL CUTTING, CHASING OR CHANNELING AND PATCHING REQUIRED FOR ANY WORK UNDER THIS DIVISION. ANY CUTTING SHALL HAVE PRIOR APPROVAL OF THE OWNER.
10. PROVIDE SAFETY AND DISCONNECT SWITCHES, SHALL BE FUSED OR NON-FUSED AS CALLED FOR ON DRAWINGS AND AS REQUIRED BY CODE. SWITCHES SHALL BE HEAVY DUTY, LOAD AND HORSEPOWER RATED AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC OR EQUAL.
11. JUNCTION, PULL BOXES AND COVERS WITHIN BUILDING SHALL BE GALVANIZED STEEL, CODE GAUGE SIZE AND ACCESSIBLE.
12. ELECTRICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES, AND UPON COMPLETION SHALL TURN OVER TO THE OWNER A "RECORD" SET OF PRINTS SHOWING THE CHANGES.
13. ALL ELECTRIC WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING MAINTAINING AND REPAIRING. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL, SUCH AS CHANNELS, RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK AND SHALL BE FASTENED TO STEEL, CONCRETE OR MASONRY, BUT NOT TO PIPING. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. EXPOSED CONDUITS SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES OR BEAMS AND SEPARATED AT LEASED 3" FROM WATER LINES WHEREVER THEY RUN ALONGSIDE OR ACROSS SUCH LINES. CONDUCTORS SHALL BE ON CONDUIT, DUCTS, OR APPROVED RACEWAYS.
14. ALL 90 DEGREE ELBOWS TO BE FACTORY MADE BENDS.
15. PRIVATE LIGHTING SYSTEM SHALL NOT BE JOINT TRENCH WITH PUBLIC UTILITY SYSTEM.
16. CONTRACTOR TO MAINTAIN PROPER SEPARATION AS REQUIRED BY THE UTILITY COMPANIES.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR ANY AND ALL UTILITY AND CITY INSPECTIONS.
18. ALL GROUND CONDUCTORS SHALL BE SPLICED TOGETHER WITH APPROVED CONNECTOR AT PULL BOXES AND CONNECTED TO GROUND LUG INSIDE POLE.
19. SEE IMPROVEMENT PLANS FOR SITE, SEWER AND WATER (ETC.) IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
20. CONTRACTOR SHALL CONTACT "DIG ALERT" FOR MARK-OUT PRIOR TO TRENCHING AS REQUIRED.
21. THESE PLANS ARE SCHEMATIC AND ARE FOR THE PURPOSE OF SHOWING HOW TO CONNECT THE ELECTRICAL SYSTEM. WHILE THE DRAWING IS AT ACTUAL SCALE, THE SYMBOLS REFERENCED ARE NOT, AND MAY APPEAR TO SHOW THE EQUIPMENT IN PLACES NOT INTENDED. THE CONTRACTOR IS TO FIELD VERIFY ALL UTILITY COMPANY SERVICE POINTS/METER LOCATIONS, POLES, PULL BOXES BUILDING LIGHT LOCATIONS, SERVICE EQUIPMENT LOCATIONS AND OTHER ELECTRICAL APPURTENANCES PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE ADDRESSED TO THE CLIENT BY MEANS OF A "REQUEST FOR INFORMATION" (RFI). CONTRACTOR IS TO VERIFY ALL LIGHT LOCATIONS WITH THE CITY PRIOR TO START OF CONSTRUCTION AND DURING STAKING. REFER TO LIGHT STANDARD DETAIL FOR STANDARDS.
    CONTRACTOR SHALL CONTACT "DIG ALERT" FOR MARK-OUT PRIOR TO TRENCHING AS REQUIRED.
22. PANEL CIRCUIT DIRECTORY TO COMPLY WITH SECTION 408.4, CEC.
23. NATIVE SOIL SHALL BE ACCEPTABLE FOR TRENCH BACK FILL PROVIDED THAT THE FILL MATERIAL USED SHALL PASS THROUGH A 1" SIEVE (CITY STANDARDS). SEE NOTES & DETAIL B/EL-2.
24. CONTRACTOR SHALL LABEL EACH CIRCUIT WITH PHENOLIC PLASTIC LABEL TAGS IN ANY DEVICE THAT HAS ACCESS. THIS SHALL INCLUDE LIGHT POLES, PULL BOXES, PANELS, AND ETCETERA. PANEL, CIRCUIT NUMBER AND VOLTAGE SHALL BE IDENTIFIED. TAGS SHALL BE AFFIXED WITH NYLON ZIP-TIES.

SPECIFICATIONS

1. ALL PULL BOXES TO BE TYPE 3-1/2 PB (10-1/2" X 17-1/2" X 12"D) WITH CONCRETE BOLT DOWN COVER MARKED "ELECTRICAL", BOX-C9EB, LID-C9R06). LEAVE 3' SLACK OF CONDUCTORS IN PULLBOX. SIZE PER SECTION 370-28, CEC.
2. FUSE HOLDERS TO BE WATERPROOF AND UL LISTED.
3. ALL CONDUIT BELOW GRADE AND OUTSIDE OF PARKING LOT OR ROADWAY TO BE MINIMUM 3/4" SCHEDULE 40 PVC.
4. ALL SPLICES BELOW GRADE SHALL BE MADE IN APPROVED PULL BOXES AND SHALL BE WATERTIGHT. USE ONLY EPOXY ENCAPSULATED TYPE 3M BAGS OR EQUAL.
5. ALL BELOW GRADE CONDUIT SHALL BE SEALED UPON COMPLETION OF INSTALLATION.
6. ALL ELECTRICIANS TO HAVE PROOF OF CALIFORNIA ELECTRICIANS CERTIFICATE/CREDENTIALS.
7. ALL ABOVE GRADE JUNCTION BOXES TO BE WEATHER-PROOF, SIZE PER SECTION 370-28, CEC.
8. DVR AND CCTV CAMERA SHALL BE PROVIDE BY THE CITY OF MOORPARK AND INSTALLED BY THEIR CCTV VENDOR.

GENERAL NOTES

1. THE CONTRACTOR SHALL PREPARE A CONDUIT LAYOUT DRAWING INDICATING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND THE ROUTING AND DEPTH OF ALL NEW UNDERGROUND FEEDER AND BRANCH CIRCUIT CONDUITS. THIS DRAWING SHALL ALSO INDICATE THE UNDERGROUND PLUMBING, PIPING AND ALL OTHER UNDERGROUND STRUCTURES NEW AND EXISTING. THE DRAWING SHALL BE USED AS THE BASIS FOR COORDINATION BETWEEN THE DISCIPLINES. THE CONDUIT LAYOUT DRAWING SHALL BE SUBMITTED TO THE CLIENT FOR REVIEW AND APPROVAL PRIOR TO CONDUIT INSTALLATION. NO TRENCHING SHALL BE STARTED OR CONDUIT SHALL BE INSTALLED UNTIL THIS CONDUIT LAYOUT DRAWING HAS BEEN SUBMITTED, REVIEWED AND APPROVED.

LEGEND

- BELOW GRADE ELECTRICAL CONDUIT AND WIRE RUN. SEE PLANS FOR TYPE AND # OF WIRES.
- CONCRETE UNDERGROUND PULLBOX. SEE SPEC. 1 AND DETAIL C/EL-3
- TYPE 'A' AREA LIGHT. SEE LUMINAIRE SCHEDULE SHEET EL-1 AND DETAIL A/EL-3
- TYPE 'B' AREA LIGHT. SEE LUMINAIRE SCHEDULE SHEET EL-1 AND DETAIL A/EL-3
- TYPE 'C' MONUMENT LIGHT. SEE LUMINAIRE SCHEDULE SHEET EL-1 AND DETAIL E/EL-3
- TYPE 'D' AREA LIGHT. SEE LUMINAIRE SCHEDULE SHEET EL-1 AND DETAIL E/EL-3
- SCE AND AT&T SERVICE POINT. VERIFY EXACT LOCATION WITH UTILITY WORK ORDER.
- 100A, 1Ø, 3W, 120/240V METER PEDESTAL. SEE PLAN FOR METER PEDESTAL 'A' AND DETAILS D/EL-3.
- A-1 CIRCUIT DESIGNATION. 1ST # INDICATES PANEL. REMAINING #'S INDICATE CIRCUIT POSITIONS.
- IRRIGATION CONTROLLER
- CCTV CAMERA LOCATION. SEE DETAIL A/EL-3

SHEET INDEX

SHEET #	DESCRIPTION
EL-1	NOTES, SPECIFICATIONS, NOTES
EL-2	LIGHTING PLAN, SCHEDULE
EL-3	DETAILS
EL-4	TITLE-24

TITLE-24 APPLICATION CATEGORIES

WALNUT ACRES
MOORPARK
SEE SHEET EL-4 FOR MANDATORY MEASURES.

(A) LIGHTING POWER ALLOWANCE FOR GENERAL HARDSCAPE-ALL DRIVEWAYS, PARKING STALLS AND PLANTING ISLANDS, SIDEWALKS, STAIRS = 3,200 S.F. OF ILLUMINATED HARDSCAPE. TOTAL GENERAL HARDSCAPE LIGHTING ALLOWANCE = 1,432 WATTS. TOTAL INSTALLED WATTS = 420 PER OLTG-1C PART 4 OF 4

(B) MONUMENT SIGN ALLOWANCE-EXTERNALLY LIT = 45 SF MAXIMUM

LUMINAIRE SCHEDULE

SPECIFIED BY: VISUAL CONCEPTS LIGHTING, INC. 858-278-4503

TYPE		SYMBOL	FIXTURE									VOLTS							LAMPS		MOUNTING					DESCRIPTION	MFR & CATALOG NO.
	QTY		LUMENS	CBCP	KELVIN	FLOUR	INDUC	LED	LPS	MH	HPS	12	120	208	240	277	480	NO.	TYPE	WATTS	WELL	SURF	SPECIAL	WALL	POLE		
A	1		3427		4000			X					X					1	40 LED	70					X	AREA LIGHT DETAIL A/EL-3	CREE (FIXTURE) ARE-EDR-5M-DA-04-E-UL-BK-700-40K-MUL(4/H3) AV POLES AND LIGHTING (POLES) AVPL-SSS-15-4-11-XX GALV-BK (MATCH)-10YR
B	4		2454		4000			X					X					1	40 LED	70					X	AREA LIGHT DETAIL A/EL-3	CREE LED ARE-EDR-4MB-DA-02-E-UL-BK-700-40K-MUL(4/H3) AV POLES AND LIGHTING (POLES) AVPL-SSS-15-4-11-XX GALV-BK (MATCH)-10YR
C	1		2310		3000			X					X					1	MULTI LED	35		X				MONUMENT LIGHT DETAIL D/EL-5	CREE LIGHTING FLD-OL-N6-D4-07-D-UL-BK-350K-40K
D	1		2454		4000			X					X					1	40 LED	70					X	AREA LIGHT DETAIL E/EL-3	CREE LED: ARE-EDR-4MB-DA-02-E-UL-BK-700-40K-MUL(4/H3) AVPL-SSS-20-4-11-XX-GALV-BK (MATCH) 10YR

VISUAL CONCEPTS
PRODUCERS OF LIGHTING FUSION
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Project:
WALNUT ACRES PARK
MOORPARK, CA 93021

Client:
CITY OF MOORPARK
799 MOORPARK AVE.
MOORPARK, CA 93021

REGISTERED PROFESSIONAL ENGINEER
MILTON C NIEDERHAUS
No. E 8838
ELECTRICAL
EXP. 9/14
STATE OF CALIFORNIA

Revisions:

Sheet Info:

Drawn By:	PJD
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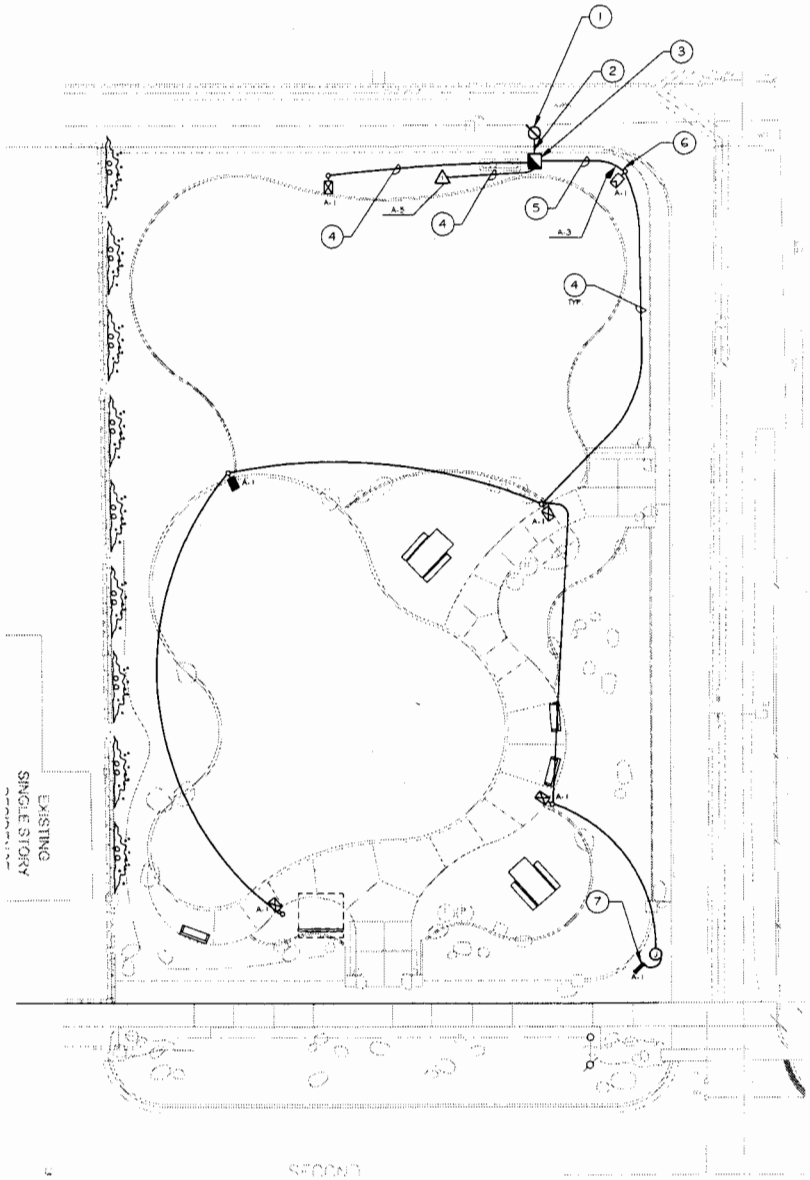
NOTES
SPECIFICATIONS

Sheet Reference:

EL-1

Sheet: 1 of 4



PLAN NOTES

1. SCE UTILITY COMPANY SERVICE POINT. VERIFY EXACT LOCATION WITH SCE SERVICE WORK ORDER.
2. PROVIDE (1) 3" DB AND (1) 2" CONDUIT ONLY WITH PULL ROPE. SEE SCE AND AT&T SERVICE ORDER FOR EXACT LOCATION OF TRENCH AND INSTALLATION REQUIREMENTS.
3. PROVIDE 1 DUA, 120/240V, 1Ø, 3W METER PEDESTAL A. SEE DETAIL 0/EL-3.
4. PROVIDE 3/4"C-2#10, 1#10 GND. BURY 24" BELOW GRADE.
5. PROVIDE (1) 3/4" C- 4#10, 1#10 GND. FOR CCTV POWER AND (1) 1" CONDUIT ONLY FOR CCTV SIGNAL CABLE INSTALLED BY CCTV VENDOR. BURY 24" BELOW GRADE.
6. CCTV CAMERA LOCATION. SEE DETAIL 4/EL-3.
7. SEE DETAIL 5/EL-3 FOR MONUMENT LIGHT INSTALLATION.

NORTH

0 5 10' 20'
SCALE: 1"=10'-0"

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PRODUCERS OF LIGHTING FUSION
PO BOX 278 VERO BEACH, FL 32961
(561) 778-5581 FAX (561) 778-5583
1 SAN MARCO, 14 WALL
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Project:
WALNUT ACRES PARK
MOORPARK, CA 93021

Client:
CITY OF MOORPARK
799 MOORPARK AVE.
MOORPARK, CA 93021

REGISTERED PROFESSIONAL ENGINEER
MILTON C. NIEDERHAUS
No. E 8638
ELECTRICAL
Exp. 6/14
STATE OF CALIFORNIA

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LIGHTING LAYOUT

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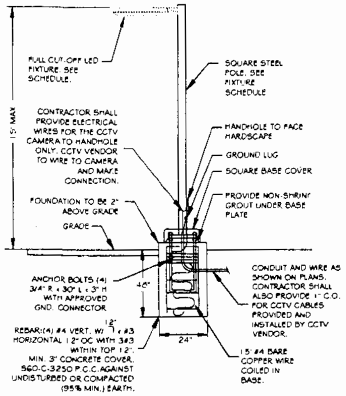
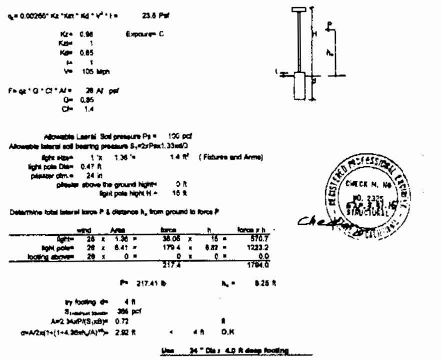
EL-2

Sheet 2 of 4





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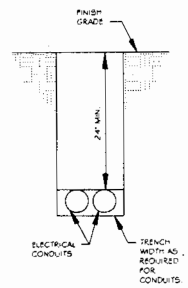
(A) TYPE 'A', 'B' AREA LIGHT INSTALLATION DETAIL



BACKFILL MATERIAL:
THE MATERIAL USED FOR BACKFILLING THE TRENCH ABOVE THE SHADING MATERIAL AND EXTENDING UPWARD TO THE SUBGRADE SHALL BE FREE OF ROCKS OR CLODS LARGER THAT 6" IN ANY DIMENSION. THE COARSE MATERIAL SHALL BE WELL DISTRIBUTED THROUGHOUT THE FINER MATERIAL. THE AMOUNT OF ROCKS OR CLODS SHALL BE LIMITED, IN THE OPINION OF THE INSPECTOR. THE BACKFILL MATERIAL SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES, ORDINANCES AND CITY STANDARDS AND BE FREE OF DEBRIS AND ORGANIC MATTER.

SHADING MATERIAL AND INSTALLATION.
NATURAL SAND, MANUFACTURED SAND, DECOMPOSED GRANITE, ROCK FREE SANDY LOAM, EXISTING NATIVE MATERIAL OR COMBINATION THEREOF. AGGREGATE MATERIAL SHALL BE CAPABLE OF PASSING THROUGH A ½" SIEVE. GRAVEL SHALL NOT AMOUNT TO MORE THAN 50% OF MIXTURE. SCREENING OR OTHER SUITABLE MEANS MAY BE REQUIRED AT THE INSPECTORS DISCRETION.
THE EARTH TRENCH BOTTOM SHALL BE STABLE WITH A UNIFORM GRADE CONTAINING NO HARD CLODS, ROCKS, AND ETCETERA, THAT MAY DAMAGE THE CONDUIT. IF IN THE OPINION OF THE INSPECTOR, THE CONDUIT MAY BE DAMAGED DURING COMPACTION, A 3" SHADE OF MATERIAL ABOVE AND BELOW THE CONDUIT MAY BE REQUIRED.

COMPACTION:
SHADING AND BACKFILL SHOULD BE COMPACTED IN ACCORDANCE WITH GOVERNMENTAL AGENCIES AND SHALL HAVE A MINIMUM OF 90% RELATIVE COMPACTION. VERIFY REQUIREMENTS WITH INSPECTOR.

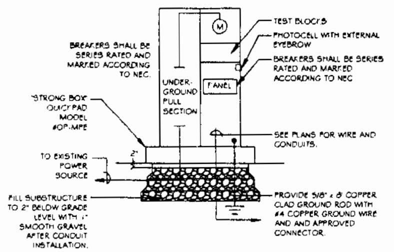
NOTE TO CONTRACTOR:
MAINTAIN PROPER SEPARATION FROM ALL WET AND DRY UTILITIES PER THE CITY OF MOORPARK AND SCE.

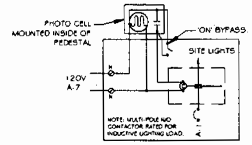
NO SCALE

(B) TRENCH AND CONDUIT INSTALLATION DETAIL

MANUFACTURER TO BE 'STRONG BOX' MODEL# MPS-A16-42K-P-C, 100A, 120/240V, 1Ø, 3 WIRE, COMMERCIAL, NEMA 3R STAINLESS STEEL OUTDOOR SERVICE ENCLOSURE. SCE AVAILABLE FAULT CURRENT (SHORT CIRCUIT CALCULATION) IS 42,000 AMPS. MAIN BREAKER SHALL BE RATED FOR 42 KAIC. METER SHALL BE EQUIPPED WITH TEST-BLOCKS.

NOTE:
INTERNET/PHONE SERVICE MPOE SHALL BE IN BACK SIDE CABINET ON PLYWOOD BACKBOARD. DVR SHALL ALSO BE INSTALLED IN THIS SECTION. PROVIDE QUAD RECEPTACLE IN BACK SECTION FOR DVR.





MOUNTING: PEDESTAL — PANEL: A — LOCATION: ALLEY
VOLTAGE: 120/240 — PHASE: 1 — WIRE: 3 — AIC SYM: 10,000 — BUS: 125A — MAIN: 100A/2P

	LOCATION	WATTAGE ØA	WATTAGE ØB	LTG	MIS	POL	BKR	CIR	PH	CIR	BKR	POL	MIS	LTG	WATTAGE ØA	WATTAGE ØB	LOCATION
(A)	AREA LTS/ MON LTS	455		8		1	20	1	A	2							SPACE
	CCTV CAMERA/DVR		300		1	1	20	3	B	4							SPACE
	IRRIG. CONTROLLER	360			1	1	20	5	A	6							SPACE
	PC/CONTACTOR		300		1	1	20	7	B	8							SPACE
	SPACE							9	A	10							SPACE
	SPACE							11	B	12							SPACE
	SPACE							13	A	14							SPACE
	SPACE							15	B	16							SPACE
		815	600				WATTS/LINE										SPACE

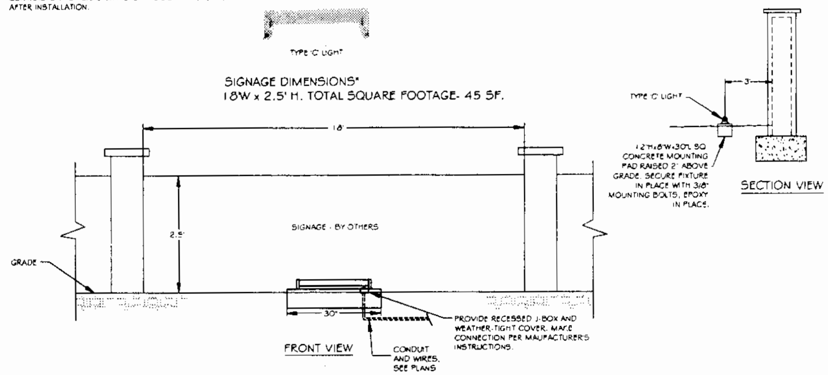
TOTAL ØA: 815 WATTS
TOTAL ØB: 600 WATTS
TOTAL WATTS: 1415
PANEL AMPS: 5.9
HIGH PHASE LCL AMPS: 8.5
BREAKERS SHALL BE SERIES RATED AND MARKED ACCORDING TO NEC.

(A) LIGHTS CONTROLLED BY PHOTOCELL AND LIGHTING CONTACTOR.

NO SCALE

(C) METER PEDESTAL 'A', LIGHTING CONTROLS, SCHEDULE, 1-LINE AND INSTALLATION DETAIL PER CEC 110

NOTE:
CONTRACTOR TO PERFORM NOTE-TIME LIGHT ADJUSTMENT AFTER INSTALLATION.



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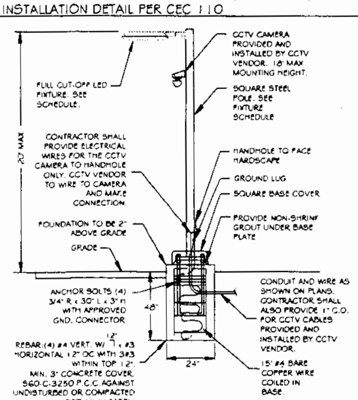
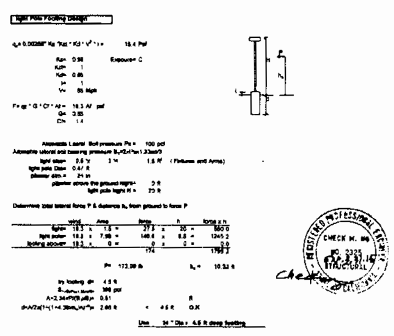
(D) TYPE 'C' MONUMENT LIGHT INSTALLATION DETAIL





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(E) TYPE 'D' AREA LIGHT INSTALLATION DETAIL

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PRODUCERS OF LIGHTING FUSION

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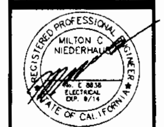
WALNUT ACRES PARK
MOORPARK, CA 93021

Client:
CITY OF MOORPARK
799 MOORPARK AVE.
MOORPARK, CA 93021



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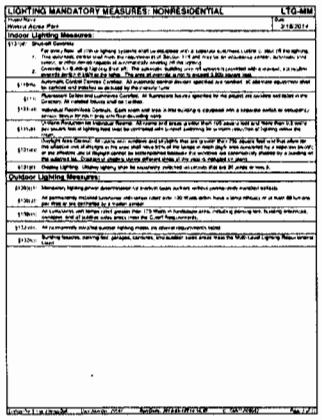

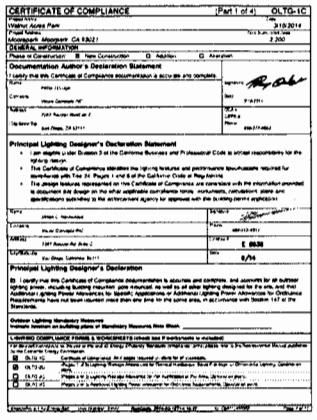

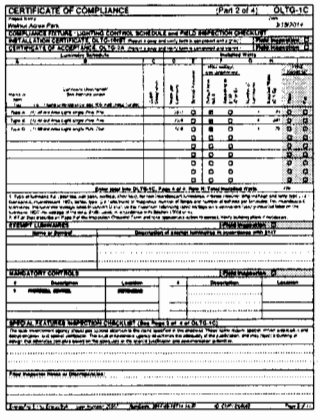

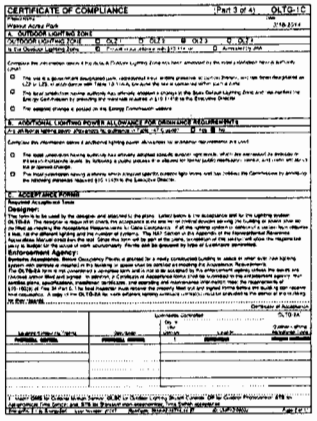

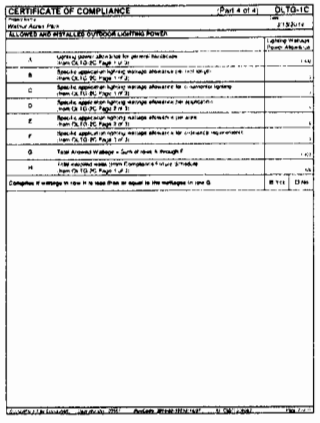

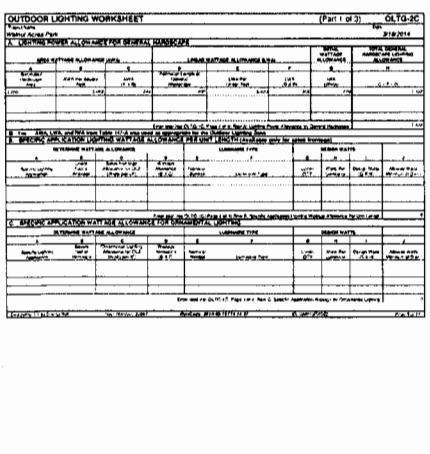

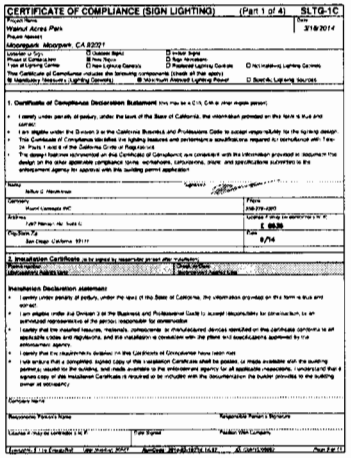

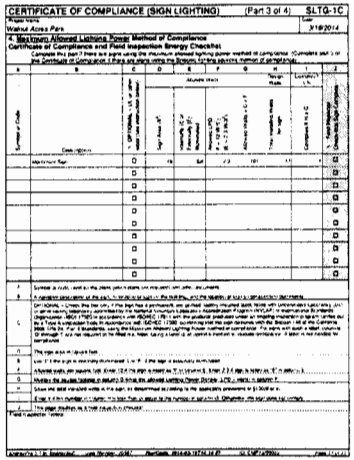

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PRODUCERS OF LIGHTING PLANS
PHONE: 714 997 1147 FAX: 714 997 1148
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Project:
WALNUT ACRES PARK
MOORPARK, CA 93021

Client:
CITY OF MOORPARK
799 MOORPARK AVE.
MOORPARK, CA 93021

REGISTERED PROFESSIONAL ENGINEER
MILTON C. NIEDERHAUS
C 68-34
ELECTRICAL
EXP. 9/14
STATE OF CALIFORNIA

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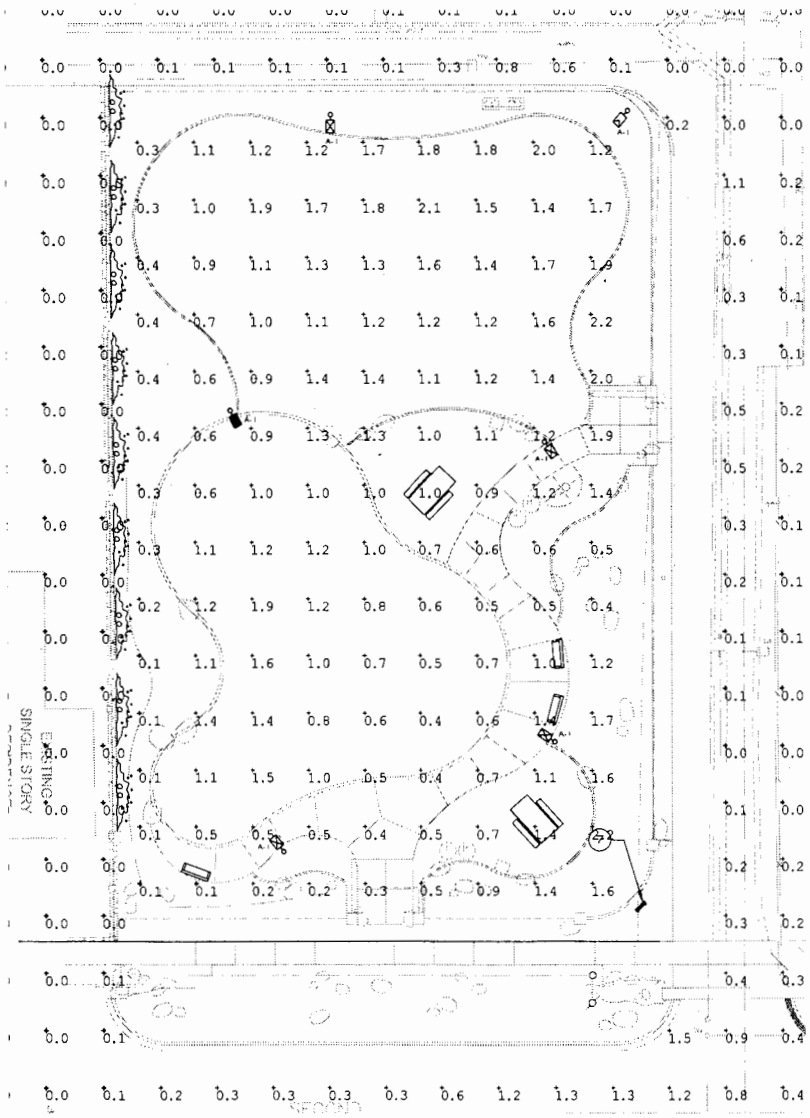

NORTH

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VISUAL CONCEPTS

PROFESSIONAL LIGHTING DESIGN

Project:
WALNUT ACRES PARK
MOORPARK, CA 93021

Client:
CITY OF MOORPARK
799 MOORPARK AVE.
MOORPARK, CA 93021

REGISTERED PROFESSIONAL ENGINEER
MILTON C. NIEDERHAUSER
STATE OF CALIFORNIA

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PS-1

Sheet 2 of 4

ATTACHMENT 2

WALNUT ACRES PARK

4/9/2014

Preliminary Budget

CONSULTING TEAM

ITEM	DESCRIPTION	QTY		UNIT PRICE			TOTAL
Civil Engineer	Survey + Grading Plan + Traffic Eng.	1	$	32,890.00	ea	$	32,890.00
Landscape Arch	Construction Docs & specs.	1	$	24,750.00	ea	$	24,750.00
Lighting consultant	Lighting design	1	$	7,750.00	ea	$	7,750.00
Construction Mgmt	Construction Mgmt	1	$	28,500.00	ea	$	28,500.00
	CONSULTANT SUB-TOTAL:					**$**	**93,890.00**

GRADING & DRAINAGE

ITEM	DESCRIPTION	QTY		UNIT PRICE			TOTAL
Grading	Grade + equipment + erosion control	120	$	150.00	hr	$	18,000.00
Infiltration Trench	4'x5' w/gravel & drain	125	$	150.00	ea	$	18,750.00
Infiltration Pit	6' diameter w/gravel & drain	2	$	1,200.00	ea	$	2,400.00
Drainline	4" PVC (tot lot system to infiltration pits)	35	$	20.00	l.f.	$	700.00
Tot lot drainage	4" perf. Pipe w/gravel and filter fabric	275	$	15.00	l.f.	$	4,125.00
temporary fencing	chainlink	300	$	10.00	l.f.	$	3,000.00
NPDES	erosion control measures	1	$	2,400.00	ea	$	2,400.00
	GRADING SUB-TOTAL:					**$**	**49,375.00**

PLANTING

ITEM	DESCRIPTION	QTY		UNIT PRICE			TOTAL
Trees	24" box incl. root barrier/staking	14	$	300.00	ea	$	4,200.00
Trees	36" box incl. root barrier/staking	1	$	1,200.00	ea	$	1,200.00
Turf	Sod	5,200	$	1.50	s.f.	$	7,800.00
Shrubs & vines	1 gallon	421	$	9.50	ea	$	3,999.50
Shrubs & vines	5 gallon	69	$	25.00	ea	$	1,725.00
Shrubs & vines	15 gallon	3	$	69.00	ea	$	207.00
groundcover	4" pots	1,000	$	3.50	ea	$	3,500.00
Soil prep	till and amendment	15,000	$	0.22	s.f.	$	3,300.00
Bark mulch	2" depth	6,500	$	0.35	s.f.	$	2,275.00
	PLANTING SUB-TOTAL:					**$**	**28,206.50**

IRRIGATION

ITEM	DESCRIPTION	QTY		UNIT PRICE			TOTAL
POC	Meter + street tie in	1	$	15,000.00	ea	$	15,000.00
Controller	Eto based w/rain sensor	1	$	3,000.00	ea	$	3,000.00
Enclosure	Stainless steel/Elec. Meter combo	1	$	4,500.00	ea	$	4,500.00
Backflow	1.5" + enclosure (irrigation)	1	$	3,500.00	ea	$	3,500.00
Backflow	1" + enclosure (domestic)	1	$	2,500.00	ea	$	2,500.00
Master valve	Brass 1.5"	1	$	850.00	ea	$	850.00
Domestic water	3/4" pvc waterline drinking ftn	75	$	9.00	lf	$	675.00
Mainline	1.5" pvc	750	$	1.50	lf	$	1,125.00
Domestic drain	2" pvc drainline drinking ftn	15	$	18.00	lf	$	270.00
Flow Meter	Brass 1.5"	1	$	650.00	ea	$	650.00
quick coupling valves	installed in valve box	3	$	150.00	ea	$	450.00
Drip Irrigation valve	1.5"	3	$	550.00	ea	$	1,650.00

Irrigation valve	1.5"	10	$	550.00	ea	$	5,500.00
Tree Bubblers	deep watering system	30	$	65.00	ea	$	1,950.00
Shrub Sprays	12" pop-ups	275	$	30.00	ea	$	8,250.00
Turf Sprays	6" pop-ups	40	$	25.00	ea	$	1,000.00
	IRRIGATION SUB-TOTAL:					**$**	**50,870.00**

HARDSCAPE & AMENITIES

ITEM	DESCRIPTION	QTY		UNIT PRICE			TOTAL
Fence	6'-0" ht. Wrought Iron	100	$	40.00	l.f.	$	4,000.00
Fence	42" ht. Wrought Iron	300	$	35.00	l.f.	$	10,500.00
Maintenance Gate	10' wide double locking gate	1	$	1,200.00	ea	$	1,200.00
Battered Pilaster	48" ht. w/stone veneer	4	$	2,500.00	ea	$	10,000.00
Park rules signage	On post	1	$	1,000.00	ea	$	1,000.00
Park signage	Misc. no parking and street signage	20	$	275.00	ea	$	5,500.00
Park Monument	Cast in place concrete w/stone veneer	1	$	8,500.00	ea	$	8,500.00
Masonry Wall	8'-0" ht. splitface block w/graffiti coating	150	$	100.00	l.f.	$	15,000.00
Masonry Wall	decorative to match existing	20	$	100.00	l.f.	$	2,000.00
Boulders	variable sizes	85	$	150.00	ea	$	12,750.00
Cobble	6"/8" w/conc. base & grouted	300	$	12.00	sf	$	3,600.00
Decomposed granite	compacted	1500	$	4.00	s.f.	$	6,000.00
AC Pavement	6" w/base	750	$	5.00	s.f.	$	3,750.00
Park walkways	4" concrete w/thinkened edge	950	$	10.00	s.f.	$	9,500.00
Sidewalk/hardscape	4" concrete w/base	800	$	7.50	s.f.	$	6,000.00
City Sidewalk	R&R concrete 4" w/base	400	$	9.00	s.f.	$	3,600.00
Concrete Curb	6" adjacent to alley	140	$	15.00	l.f.	$	2,100.00
Concrete Curb	6" deepened at tot lot	240	$	45.00	l.f.	$	10,800.00
Concrete Curb	6" type 120-1 (street)	350	$	15.00	l.f.	$	5,250.00
Concrete Curb	6" curb and gutter (street)	150	$	15.00	l.f.	$	2,250.00
Concrete apron/drivew	at alley locations	4	$	2,500.00	ea	$	10,000.00
Conc. access ramp	pedestrian crossing	2	$	1,800.00	ea	$	3,600.00
Conc. gutter w/grate	pedestrian crossing	2	$	2,800.00	ea	$	5,600.00
Sawcut	demo	1200	$	2.00	l.f.	$	2,400.00
Demo asphalt/conc	removal	2500	$	2.00	s.f.	$	5,000.00
ADA	truncated domes	10	$	350.00	ea	$	3,500.00
Striping	thermoplastic centerline	800	$	1.75	l.f.	$	1,400.00
Striping	thermoplastic edgeline	1600	$	0.65	l.f.	$	1,040.00
Striping	misc. signs and arrows	8	$	150.00	ea	$	1,200.00
Striping	croswalks	3	$	450.00	ea	$	1,350.00
Mowstrip	4" conc. adjacent to turf/planters	350	$	4.50	l.f.	$	1,575.00
Mowstrip	Metal adjacent to turf/planters	120	$	3.50	l.f.	$	420.00
Redwood header	east side of alley	100	$	3.00	l.f.	$	300.00
Tot lot	Equipment & installation	1	$	85,000.00	ea	$	85,000.00
Tot lot ADA surface	poured-in place on concrete base	1800	$	25.00	s.f.	$	45,000.00
Tot lot wood fiber	12" depth engineered wood fiber	48	$	75.00	cu. ft.	$	3,600.00
Trash Receptacles	Concrete w/grafitti coating	2	$	1,100.00	ea	$	2,200.00
Recycle Bins	Concrete w/grafitti coating	2	$	1,100.00	ea	$	2,200.00
Picnic table	Concrete w/grafitti coating	2	$	1,950.00	ea	$	3,900.00
Bar-b-que	steel on concrete pad	2	$	1,000.00	ea	$	2,000.00
Bench	Concrete w/grafitti coating	3	$	1,250.00	ea	$	3,750.00
Drinking Ftn	galvanized steel + sump drain and tie in	1	$	4,500.00	ea	$	4,500.00
Bicycle Rack	powder coated steel	1	$	1,500.00	ea	$	1,500.00

Security Camera	25' pole w/camera	1	$	7,500.00	ea	$ 7,500.00
Lighting	15' light poles (LED)	6	$	5,500.00	ea	$ 33,000.00
	HARDSCAPE SUB-TOTAL:					**$ 354,835.00**

STREET LIGHTS & SECURITY CAMERA

ITEM	DESCRIPTION	QTY		UNIT PRICE		TOTAL
Street Lights	Upgrade (3) St Lights and underground	1	$	25,000.00	ea	$ 25,000.00
Undergrounding	conduit for electrical	1	$	25,000.00	ea	$ 25,000.00
	STREET LIGHTING SUB-TOTAL:					**$ 50,000.00**

SUB-TOTAL	**$ 627,176.50**
10% CONTINGENCY	**$ 62,717.65**
TOTAL	**$ 689,894.15**

ATTACHMENT 3

4/9/2014

WALNUT ACRES PARK

Preliminary Maintenance Budget

MAINTENANCE ITEM	DESCRIPTION	QTY	UNIT PRICE		TOTAL
Landscape Services	trash, tot lot, mowing/fert.	12	$ 650.00	ea	$ 7,800.00
Tree Trimming		1	$ 250.00	ea	$ 250.00
Property Maintenance		1	$ 1,200.00	ea	$ 1,200.00
Water	irrigation, drinking ftn	1	$ 5,500.00	ea	$ 5,500.00
Electricity	Irrigation, camera, lighting	1	$ 3,200.00	ea	$ 3,200.00
			Sub-Total		**$ 17,950.00**
			10% Contingency		**$ 1,795.00**
			Total		**$ 19,745.00**