

# APPROVED

AUG 5 2021

## BOARD OF RECREATION AND PARK COMMISSIONERS

**BOARD REPORT**

NO. 21-140

DATE August 05, 2021

C.D. 14

### BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: BROOKLYN HEIGHTS PARK – NEW PARK DEVELOPMENT (PRJ21254) PROJECT – APPROVAL OF FINAL PLANS; CONSIDERATION OF CATEGORICAL EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) INCLUDED IN BOARD REPORT 19-200

AP Diaz	_____	M. Rudnick	_____
H. Fujita	_____	<i>Fur</i> C. Santo Domingo	<i>DF</i> _____
J. Kim	_____	N. Williams	_____

*M. Shue*  
\_\_\_\_\_  
General Manager

Approved   X                        Disapproved \_\_\_\_\_                      Withdrawn \_\_\_\_\_

### RECOMMENDATIONS

1. Approve the final plans and specifications substantially in the form on file in the Board of Recreation and Park Commissioners' (Board) Office and as attached to this Report as Attachment 1, for the proposed Brooklyn Heights Park - New Park Development (PRJ21254) Project (Project);
2. Approve the proposed Project to be bid and constructed through the Department of Recreation and Parks (RAP) list of pre-qualified on-call contractors;
3. Approve the authorization of change orders as authorized under Report No. 06-136, for the construction contracts for this Project in the budget contingency amounts for such contracts as stated in this Report; and,
4. Authorize RAP Staff to make technical corrections as necessary to carry out the intent of this Report.

### SUMMARY

The property for the proposed Project was acquired in 2019. This 0.19-acre future park is located at 318 North Matthews Street in the Boyle Heights community of the City. This site is currently vacant and unimproved. Approximately 5,102 City residents live within a one-half mile walking distance from the future park.

## BOARD REPORT

PG. 2 NO. 21-140

### PROJECT SCOPE

On June 5, 2018, Proposition 68 (Prop 68) was passed by a majority of California voters to fund a \$4.1 billion “California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor for All Act of 2018”. The purpose of Prop 68 is to fund state and local parks, beaches, environmental protection and restoration, water infrastructure, and flood protection projects. A total of \$650,275,000 of Prop 68 funds have been dedicated to the Statewide Park Development and Community Revitalization Program (SPP).

On January 29, 2019, the State released the initial notice of funding availability for the Prop 68 SPP, which the state calls the “2019 Round”, in the amount of \$254,942,000 to be awarded to communities across the State. This grant program competitively awards grants for the creation of new parks, boundary expansion and improvement of existing parks, or the renovation of recreation features at existing parks. Prop 68 SPP funding is limited to parks located in areas that either lack adequate park space of 3 acres per 1000 persons or have significant poverty with an average annual household level income below \$51,026. Prop 68 SPP 2019 Round 3 applications were due August 5, 2019.

Prop 68 contains very robust community engagement requirements for each project sought. In order to receive the maximum amount of points for each project, each application must include at least five (5) community engagement sessions between July 1, 2018, and the grant submission deadline. The grant requires that the community be afforded opportunities to provide input and identify preferred priority and location of recreation features including park beautification ideas, and park safety features. In order to achieve these goals and obtain genuine community feedback, beginning in April 2019, RAP conducted an aggressive outreach strategy to actively engage constituents and incorporate their feedback into project scope and designs which were included in the Prop 68 applications submitted by RAP.

Developed through robust community outreach, needs assessments, facility conditions, and various Council Office recommendations, RAP staff presented the proposed twenty-three (23) projects for the Prop 68 SPP 2019 Round Project list to the Board for consideration (Report Nos. 19-097 and 19-165).

In September 2019, RAP was notified that the proposed Project was awarded Proposition 68 funds.

The scope of the proposed Project includes the following:

- Installation of a new playground equipment with integrated shade toppers.
- Installation of a new fitness equipment area with integrated shade toppers.
- Installation of new turf and shrub planting, smart wire irrigation system, stone pavement path, resilient paving, benches, security lighting and drinking fountain.

## BOARD REPORT

PG. 3 NO. 21-140

It should be noted the proposed Project design also includes space(s) for a public art component that is being developed in coordination with the Department of Cultural Affairs (DCA). In order to select the artists that will develop the public art for this park, DCA will be releasing a Request for Qualifications and through that process will select up to two artists and/or artist teams to develop the public art. Once designed, that art component will be presented to the Board for consideration pursuant to the Board's established policy for public artwork.

RAP staff has prepared the proposed Project plans and specifications as set forth in Attachment No 1 to this Report, which details and illustrates the proposed landscaping, irrigation, and site improvements as well as the location of various Project amenities such as the play equipment and fitness equipment. The proposed Project will be constructed utilizing RAP's pre-qualified on call contractors and/or vendors currently under contract with RAP.

### COMMUNITY OUTREACH

As previously noted, Prop 68 SPP program has extensive community outreach and engagement requirements.

Prior to the submission of the Prop 68 grant application for this Project, RAP held five community meetings with local residents and stakeholders to get input and feedback on the project concept. The final project concept that was developed and submitted for the State's consideration incorporated community feedback and input that RAP received on the proposed Project.

The final plans that RAP developed, and that are the subject of this report, reflect the received community input and fully incorporate all the required project elements as denoted in the awarded Prop 68 grant application.

On May 10, 2021, RAP and the Office of Council District 14 (CD 14) hosted a community meeting to update the community on the status of the proposed Project. In that meeting various items were discussed, including the background and process that led to the acquisition and development of the park, the final project design, and the role of DCA in the development of the future art component(s) for the park.

CD 14 is in full support of the recommendations of this report.

### PROJECT FUNDING

The proposed Project was awarded Five-Million, One-Hundred Ninety-Eight Thousand, Four-Hundred Dollars (\$5,198,400.00) in Proposition 68 Funds (C.F. 19-0605, Report Nos. 19-097 and 19-165).

The anticipated pre-qualified on-call contracts will be for Park Facility Construction. The budget contingency for the Park Facility Construction contracts will be Five Hundred Twenty Thousand Dollars (\$520,000).

BOARD REPORT

PG. 4 NO. 21-140

FUNDING SOURCE MATRIX

<b>Source</b>	<b>Fund/Dept/Acct</b>	<b>Amount</b>	<b>Percentage</b>
Prop 68 Funds	205/89/89SRGO	\$5,198,400.00	100%
<b>Total</b>		<b>\$5,198,400.00</b>	<b>100%</b>

PROJECT CONSTRUCTION

RAP Staff has determined that sufficient funding has been identified and construction of the proposed Project is set to begin in Summer 2021.

TREES AND SHADE

The proposed Project does not include the installation of trees or shade structures. The playground and fitness equipment areas are proposed to have integrated shade toppers.

ENVIRONMENTAL IMPACT

On October 2, 2019, through Report No. 19-200, the Board determined that the proposed Project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Article III, Section 1, Class 1(11d), Class 1(12), Class 3(4), Class 3(6), Class 4(3), Class 4(12), Class 11(3) and Class 25 of City CEQA Guidelines and Article 19, Sections 15301(I), 15303(e), 15304(b), 15304(f), 15311 and 15325(f) of California CEQA Guidelines. RAP Staff filed a Notice of Exemption with the Los Angeles County Clerk on October 18, 2019.

According to Article 19, Section 15162, of California CEQA Guidelines, no subsequent environmental document should be prepared, unless the lead agency finds, on the basis of substantial evidence and in the light of the whole record, that:

- substantial changes to the project have occurred;
- local circumstances under which the project has been undertaken have changed substantially; and
- new information of substantial importance about the project, the environment and the mitigation measures has emerged.

RAP Staff found that no substantial changes to the original project or to the local environment have occurred and that no new information that could show that the impacts of the projects have changed have emerged.

Therefore, RAP Staff recommends the Board finds that no further CEQA documentation is required.

## BOARD REPORT

PG. 5 NO. 21-140

### FISCAL IMPACT

The estimated costs for the design, development, and construction of the proposed park improvements will be funded by Proposition 68 funds. This is a funding source other than RAP's General Fund. The assessment of the future maintenance costs associated with this new Park have yet to be determined and will be included in future budget requests.

### STRATEGIC PLAN INITIATIVES AND GOALS

Approval of this Board Report advances RAP's Strategic Plan by supporting:

**Goal No. 1:** Provide Safe and Accessible Parks

**Outcome No. 1:** Every Angeleno has walkable access to a park in their neighborhood regardless of race, ethnicity, or socioeconomic status

**Result:** The development of this new park will provide a new public park that will increase the number of City residents that have walkable access to a park or recreational space. .

This Report was prepared by Darryl Ford, Superintendent, Planning, Maintenance and Construction Branch.

### ATTACHMENTS

- 1) Project Final Plans and Specifications (318 N Matthew St)

# DEPARTMENT OF RECREATION AND PARKS CITY OF LOS ANGELES

## 318 N Mathews Street Park

Los Angeles, CA 90033  
NEW PARK CONSTRUCTION



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: Michael Shull  
PROJECT LANDSCAPE ARCHITECT: CRAIG RAINES  
PROJECT ENGINEER:  
AS-SHOWN DRAWING: DATE:

### PROJECT DESCRIPTION

THE SCOPE OF WORK CONSISTS OF (but not limited to):

- Grub, fine grad.
- New turf, and shrub planting.
- New smart wire irrigation system.
- New Stone pavement path.
- New Resilient paving.
- New benches.
- New Drinking fountain.
- Purchase and installation of play surfacing and play equipment
- CONSTRUCT CITY SIDEWALK PER BOE/LADBS STDS
- PULL/OBTAIN ALL NECESSARY PERMITS FOR ROW WORK
- NOT INCLUDED IN SCOPE IS THE PURCHASE AND INSTALLATION OF THE SHADE STRUCTURES.

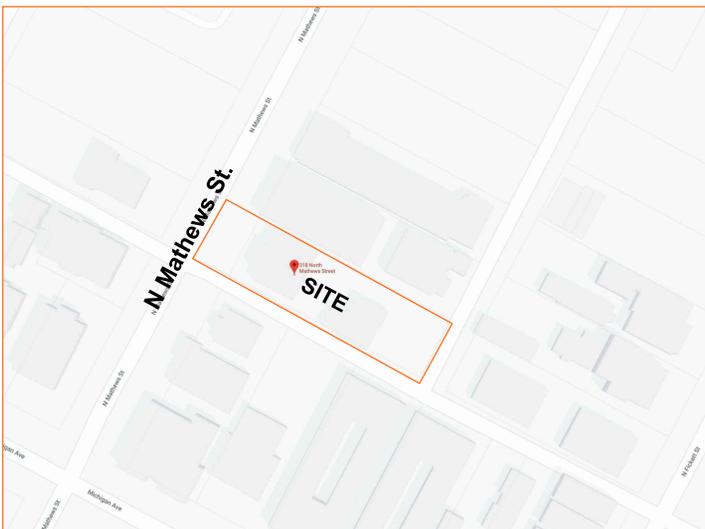


**318 N. MATHEWS STREET - CD14**  
PERSPECTIVE ONE GATHERING SPACE  
PROPOSITION 68



### INDEX OF SHEETS

SHT NO.	DESCRIPTION	To be modified
TS-01	TITLE SHEET	
SP-00	SPECIFICATIONS	
SP-01	SPECIFICATIONS	
SP-02	SPECIFICATIONS	
SP-03	SPECIFICATIONS	
LS-00	DEMOLITION PLAN	
LS-01	LAYOUT PLAN	
LS-02	LAYOUT BLOW UP	
LS-03	MATERIALS PLAN	
LS-04	PLANTING PLAN	
LS-05	IRRIGATION PLAN	
LS-06	DRAINAGE PLAN	
LS-07	DETAILS	
LS-08	DETAILS	
LS-09	DETAILS	
LS-10	DETAILS	
LS-11	PLANTING DETAILS	
LS-12	IRRIGATION DETAILS	
LS-13	IRRIGATION DETAILS	



**SITE MAP**  
NOT TO SCALE

#### PROJECT TEAM

**OWNER:** DEPARTMENT OF RECREATION & PARKS  
350 S GRAND 46TH FLOOR  
LOS ANGELES, CA 90071

**MICHAEL SHULL**  
GENERAL MANAGER  
(213) 202-2633

**DARRYL FORD**  
PCM, SUPERINTENDENT  
(213) 202-2655

**DESIGN:** **PLANNING, CONSTRUCTION & MAINTENANCE DIVISION**

**Craig Allen Raines** (Primary Contact)  
LANDSCAPE ACTING LANDSCAPE ARCH 2  
RLA #. 4082  
(213) 202-2652

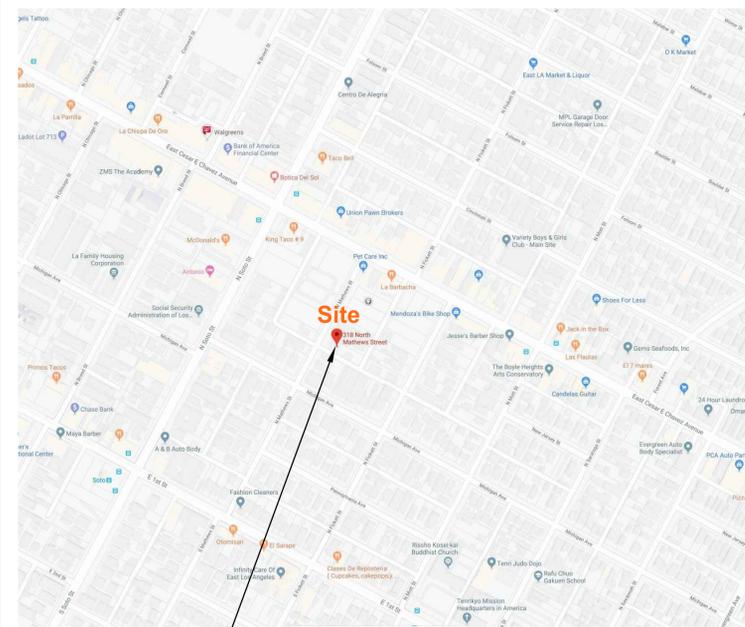
**ZHIYA HUANG**  
LANDSCAPE ARCH.  
(213) 202-2652

**GONGYING PU**  
LANDSCAPE ARCH.  
(213) 202-2652

**COUNCIL DISTRICT 14: KEVIN DE LEON**

#### ABBREVIATIONS

ABS	ACRYLONITRILE BUTADIENE	ID	INSIDE DIAMETER
STYRENE		INV.	INVERT ELEVATION
ADJ.	ADJACENT	IN.	INCH
ALT.	ALTERNATE	JOIN	MATCH EX. ADJACENT GRADE BOTH HORIZ. & VERT.
ANGLE		JT.	JOINT
APPROX.	APPROXIMATE	LB.	POUND
AC	ASPHALT CONCRETE	LF	LINEAL FEET
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	MAX.	MAXIMUM
AT		MFG.	MANUFACTURER
@		MH	MANHOLE
BC	BEGINNING OF CURVE	MIN.	MINIMUM
BPU	BACKFLOW PREVENTION UNIT	MISC.	MISCELLANEOUS
BM	BENCH MARK	NOT IN CONTRACT	
BS	BOTTOM OF STEP	NO. or #	NUMBER
BW	BOTTOM OF WALL	NTS	NOT TO SCALE
B/W	BOTH WAYS	OC	ON CENTER
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
C	CENTER LINE	PA	PLANTING AREA
CC	CENTER TO CENTER	PB	PULL BOX
CJ	CONTROL JOINT	P	PROPERTY LINE
CLF	CHAIN LINK FENCE	POC	POINT OF CONNECTION
CLEAN OUT		PP	POWER POLE
CONC.	CONCRETE	PRC	POINT OF REVERSE CURVE
CONST.	CONSTRUCT	PSI	POUND PER SQUARE INCH
CF	CUBIC FOOT	PVC	POLYVINYL CHLORIDE
CSP	CORRUGATED STEEL PIPE	QCV	QUICK COUPLER VALVE
CY	CUBIC YARD	R	RADIUS
DF	DRINKING FOUNTAIN	RCP	REINFORCED CONCRETE
DG	DECOMPOSED GRANITE	RCV	REMOTE CONTROL VALVE
DIA. or Ø	DIAMETER	RP	REDUCED PRESSURE
EA	EACH	SD	STORM DRAIN
EC	END OF CURVE	SHT.	SHEET
EJ	EXPANSION JOINT	SPECS.	SPECIFICATIONS
ELEV.	ELEVATION	SS	SANITARY SEWER
EQ.	EQUAL	SSPWC	STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION
FB	FIELD BOOK	SQ.FT.	SQUARE FEET
FL	FLOWLINE	TC	TOP OF CURB
FG	FINISH GRADE	TG	TOP OF GRATE
FIN.	FINISH	TS	TOP OF STEP
FS	FINISH SURFACE	TW	TOP OF WALL
FOC	FACE OF CURB	VERT.	VERTICAL
FOW	FACE OF WALL	W/	WITH
FT	FEET	WM	WATER METER
GAL.	GAUGE	WWM	WELDED WIRE MESH
GALV.	GALVANIZED		
GPM	GALLONS PER MINUTE		
HORIZ.	HORIZONTAL		
	LOCATION OF COMPACTION TEST, AS INDICATED ON THE PLANS		



**SITE LOCATION**  
**VICINITY MAP**

PROJECT NAME: **318 N Mathews Street Park**  
ADDRESS: **318 N Mathews St**  
**Los Angeles, CA 90033**

REVISIONS:	DATE:

PLAN NAME:  
**Title Sheet**

DRAWN BY:	APPROVED BY:
SCALE:	C. Raines
PRJ #	ISSUE DATE:
FILE NO.	
DRAWING NO.	
<b>TS-01</b>	
SHEET	OF SHEETS

THE CITY OF LOS ANGELES ON ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET

SECTION 02100  
SITE CLEARING, DEMOLITION

1.00 GENERAL

1.01 DESCRIPTION

All clearing of the site and demolition indicated on the drawings and in these specifications.

- (a) Obtain and pay for Demolition Permit(s) as may be required by the Los Angeles Dept. of Building & Safety.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- (a) Earthwork, Section 02200.
- (b) Asbestos Removal, Section 02040.

1.03 CODES AND REGULATIONS

Perform all work in strict accordance with all applicable Federal, State, and City of Los Angeles Codes and Regulations. Particular care shall be taken to meet all safety standards and requirements. If, in the opinion of the General Manager or any other authority having jurisdiction, additional measures are needed, the Contractor shall furnish such materials and devices as directed and shall install them, at no extra cost to the City.

1.04 WASTE MATERIAL

Trees, shrubs, branches, roots, broken concrete and materials resulting from site clearing and demolition operations, waste materials, rubbish and debris shall be promptly removed from the job site; accumulation is not permitted.

1.05 REPAIR OF DAMAGE

- (a) Any damage to remaining portions of building, site improvements, street improvements and/or private property as caused by Contractor's operation outside the scope of required site clearing and/or demolition shall be repaired or replaced at Contractor's expense.
- (b) Contractor shall repair or replace existing remaining work with new materials as necessary to restore damaged areas or surfaces to a condition equal to and matching that existing prior to start of work of this contract to the satisfaction and approval of the General Manager.

1.06 MISCELLANEOUS GENERAL REQUIREMENTS

- (a) Erect and maintain all construction fences and planking, bridges, shoring, lights, warning signs, and guards as necessary for protection of streets, sidewalks, adjoining warning signs, and guards as necessary for protection of streets, sidewalks, adjoining properties and the public.
- (b) Protect all sidewalks, drives, streets, buildings on adjacent properties and other item which are to remain undisturbed, both on and off the site of the work and adjacent streets as prescribed by the City of Los Angeles Department of Building and Safety.
- (c) Remove all protections when the work is complete or when so authorized by the General Manager.
- (d) Water or sprinkle dusty ground surfaces during site clearing operations at such frequencies as will hold down dust during all hours of work.
- (e) Notify all companies owning conduit, wires or pipes running to the property; arrange for any required removal and relocation of power poles and their guy wires, utility lines running to and on the property; cap pipes, conduits and sewers, where required, in accordance with instructions of said owners and the General Manager.

2.00 EXECUTION

2.01 SITE CLEARING

- (a) Remove all growths on the job-site within the area of new work.
  - (b) Remove large roots to a depth of at least 2 feet below finish grade or to a depth where settlement will not occur as caused by decomposition of roots.
- remove all rubbish and debris resulting from site clearing as soon as possible, do not allow to accumulate.

2.02 DEMOLITION

- (a) Required
  - Complete demolition and/or removal of all items indicated on the drawings and these specifications.
  - Removal of all debris and rubbish existing on the job site and/or resulting from demolition operations on and off the premises.
  - Removal of fixtures, equipment, and appurtenances noted on the drawings.
  - Complete removal of underground piping or conduit as well as obstructions interfering with new construction.
- (b) Methods
  - As devised by the Contractor for the work required, with suitable equipment.
  - In accordance with City of Los Angeles Building Codes and all other applicable laws and ordinances.
  - Procedures to be orderly and careful, with due consideration for occupants of adjacent properties and the public.
    - Provide bracing and shoring as necessary to avoid accidents or collapse of structure.
    - Where concrete walls, slabs, or sidewalks are required to be removed and adjoining work is to remain, straight line saw-cut the work to a minimum depth of one (1) inch to ensure straight removal.
    - Abandoned pipe or conduit shall be removed to a point not less than 5 feet beyond the construction limits of the contract work and shall be capped.

2.03 SALVAGEABLE MATERIALS

- (a) All salvageable materials indicated on the drawings or these specifications shall be carefully removed, cleaned and protected from damage and neatly stored on the site for pick-up by the City as directed by the General Manager.
- (b) All materials not indicated to remain on the premises or be reused in the project or classed as salvageable materials shall become the property of the contractor and shall be promptly removed from the job site.

2.04 STORAGE OF MATERIALS AT THE SITE

Not permitted beyond brief accumulation awaiting pick-up by removal trucks; materials and equipment removed from the building not to be stored at the site but to be hauled away promptly; any delay in removing materials and equipment from the site shall be subject to the approval of the General Manager.

END OF SECTION



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS

GENERAL MANAGER: Michael Shull  
ASSISTANT GEN. MANAGER: Ramon Barajas

PROJECT LANDSCAPE ARCHITECT: CRAIG JONES  
PROJECT ENGINEER: \_\_\_\_\_

LC NO. \_\_\_\_\_  
LC NO. \_\_\_\_\_

DATE: \_\_\_\_\_



PROJECT NAME:  
**318 N Mathews Street Park**

ADDRESS: **318 N Mathews St  
Los Angeles, CA 90033**

REVISIONS:	DATE:

PLAN NAME:  
**Specifications**

DRAWN BY: \_\_\_\_\_ APPROVED BY: C. Raines  
SCALE: n1s ISSUE DATE: \_\_\_\_\_  
PRJ # PRJ21085 FILE NO. \_\_\_\_\_  
DRAWING NO. **SP-00**  
SHEET OF SHEETS

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.

**GENERAL**

Division 1, General Provisions for the Department of Recreation and Parks; the Standard Specifications for Public Works Construction, hereinafter referred to as SSPWC, latest edition with the current yearly supplements; and the 2002 Edition of the Additions and Amendments to the SSPWC, shall be made a part of these plans. Website: http://eng.lacity.org/techdocs/stdplans/s-600/s61028.pdf. Where conflicts occur between Division 1, General Provisions for the Department of Recreation and Parks and the Standard Specifications for Public Works Construction, Division 1 of the Department of Recreation and Parks shall take precedence. Where conflicts occur between this Notice To Contractors (NTC) and the SSPWC this NTC shall take precedence. Subsections included within this NTC modify or add to the corresponding subsection (by number) of the SSPWC, latest edition with current yearly supplements; where options for materials and/or methods appear in the SSPWC, the option listed herein shall be used. This improvement consists only of work called for on these plans. The Contractor shall maintain adequate sanitary facilities on the jobsite from the beginning to end of grading operations. Underground structures: the location of existing underground structures, utilities, and pipelines as shown on the plans have been located from the best available records and have not been verified in the field. It shall be the contractor's responsibility to verify the locations of said substructures and lines even if not shown on the plans and to take all necessary precautions to prevent damage to the same. Straight grades shall be run between contours and/or spot elevations shown unless otherwise indicated. Should conflicting and/or erroneous information be found on the drawings, the Contractor shall notify the Landscape Architect prior to commencement of work. It shall be the responsibility of the Contractor to provide adequate supports for all excavations where necessary to protect personnel and property from any damage that might occur as a result of the collapse of excavation. The Contractor shall maintain current Cal OSHA permits as required and a copy of said permit shall be posted at the project. The Contractor shall provide access control for pedestrians and vehicles for entire project from the beginning to end of grading operations. The Contractor shall keep the construction area sufficiently dampened to control dust caused by grading and construction. Contractor shall, at all times, provide reasonable control of dust caused by wind. The Contractor shall control noise resulting from repair of heavy equipment after normal working hours by locating such activities as far as practicable from adjacent inhabited areas and so that such activities do not constitute a public nuisance or disturb the peace. Heavy equipment shall be kept in good operating condition and muffled as required by law.

**PLANS AND SPECIFICATIONS**

The Contractor/RAP Staff shall be responsible for:

- To get the necessary approval, sign offs and authorization from the project landscape architect, as indicate on the plans, prior to proceeding to the next project phase. All approvals and submittals shall be transmitted to the Recreation and Parks Advance Planning project landscape architect.
- Indicates required field inspections with the Department of Recreation and Parks Project Landscape Architect. Notify all party's three (3) days prior to the required inspection.

**SCHEDULE OF WORK**

The Contractor/Rap Construction staff shall submit a Schedule of Work for approval to the Department of Recreation and Parks Project Landscape Architect prior to the commencement of work. The Contractor/Rap Construction staff shall schedule all work on weekdays (excluding Saturday, Sunday and City holidays) between the hours of 7:00 a.m. and 4:00 p.m. The work area shall be as defined on the Title Sheet, or as indicated on the Plans by means of a contract limit line.

**INSPECTIONS**

All work and materials are subject to inspection and approval by Department of Recreation and Parks Project Landscape Architect. Any work done without proper inspection will be subject to rejection. The Contractor/RAP staff shall notify the Project Landscape Architect (3) days prior to inspection of the following for approval:

- ROUGH GRADING:** When forms have been set, to approve alignment. Offsets or vertical controls shall be verifiable in the field, or be provided in grade sheet form, and submitted to the Department of Recreation and Parks for approval prior to the inspection.
- FINISH GRADE REVIEW:** For all finish grades in planting areas following rolling and prior to turf or landscape planting.
- PRE-FINAL INSPECTION** (refer also to Section 42 of Division 1, General Provisions): A minimum of two weeks before the Final Inspection, Recreation and Parks shall hold a Pre-final Inspection. The Pre-Final Inspection shall be attended by the Department of Recreation and Parks, the Contractor, and invited parties associated with the Project. At this time, a list of items requiring correction or completion before the Final Inspection will be compiled. The following items shall be delivered to the appropriate Department of Recreation and Parks personnel: manufacturers' data, manuals, operating instructions, and keys, as required in Section 38 of Division 1, General Provisions.
- CONTRACT FINAL INSPECTION** (refer also to Section 43 of Division 1, General Provisions): Approximately seven (7) days prior to completion of the Work, the Contractor shall first notify the Department of Recreation and Parks Project Landscape Architect that he desires a Final Inspection of the Project. During this inspection, the Inspector, the Project Landscape Architect, the Contractor/RAP construction staff and other parties concerned only with the contractual requirements of the Work will compile a Final Inspection Correction List, incorporating all items of work and corrections required to complete the Project. This list must be completed with thirty (30) days of the Final Inspection, or a new Final Inspection and Correction List shall be required.

**MATERIALS SUBMITTAL**

The Contractor shall submit a minimum of six copies of the Materials List to the Department of Recreation and Parks project landscape architect within ten days of receiving the Notice to Proceed. All submittals shall be sent to the Department of Recreation and Parks Project Landscape Architect at the same time as one submittal package. Any materials substituted for originally specified materials that have been rejected by Recreation and Parks shall have an alternate item resubmitted for approval within one week of the Contractor receiving the notice of rejection.

**RECORD DRAWINGS (AS-BUILTS) SUBMITTALS**

Record drawings shall reflect any changes made to the plans or specifications during the progress of the work as a result of addenda, change orders or adjustments due to field conditions or plan clarification. They shall also indicate any additional information discovered during the progress of construction that was not a part of the contract documents. All deviations from the specified depth at which materials are constructed shall be shown on the record drawings. Record all appropriate as-built information on the record drawings in red ink. As-built information shall include but not be limited to drain lines, valve locations, mainline locations and mainline wire installed separately from mainline. The record of each trade shall be made on the plan sheets for each trade as provided in the original plan set. The Contractor/RAP Construction Staff shall be responsible for coordinating all sub-Contractors work and shall produce a complete record of all installations, which shall be kept on the job site and updated daily during construction. At the completion of the Work and prior to final inspection, the Contractor shall submit signed 'as-built' blue-line prints to the Department of Recreation and Parks at the Operational Final Inspection, prior to the City's acceptance of the Contract Work, (per Section 39 of Division I of the General Provisions).

**DEPARTMENT OF PUBLIC WORKS STANDARD PLANS**

The following Department of Public Works Standard Plans are to be included as a part of these plans: (If needed for work within ROW and any 'A' or 'B' permit work)

SSPWC 2002 Edition of the Additions and Amendments to the SSPWC website: http://eng.lacity.org/techdocs/stdplans/s-600/s61028.pdf

**LAYOUT OF WORK, GRADE SHEET APPROVAL**

Grade stakes shall be a minimum size of 1" x 2" and shall be driven a minimum of 12" into ground; each grade stake shall be protected by a flagged lath projecting 24" above ground; grade stakes disturbed by on-site activities shall be reset by the Surveyor. If specified on the plan the Contractor shall have his surveyor provide grade sheets. The grade sheets shall be submitted to the Department of Recreation and Parks for approval one week in advance of any grading operations.

**UNDERGROUND SUBSTRUCTURES**

The survey plans provided to the Contractor will show existing on-site underground substructures to the extent of the Department's records. Service lines from other public utilities, including the Department of Water and Power shall be located by notifying **UNDERGROUND SERVICE ALERT at 1 - (800) 422-4133 OR DIG ALERT AT 1-800-227-2600** prior to commencing any excavation.

**TREE PROTECTION - EXISTING TREES**

- All trees to remain in place shall be protected using the following guidelines:
  - No equipment is to be parked or operated under a tree. No materials shall be stored under a tree. Do not compact soil within the drip line of the tree.
  - All work shall be in accordance with the City of Los Angeles Oak Tree Ordinance.
  - No chemical herbicides are to be used within 100 feet of the tree's drip line.
  - Do not nail grade stakes or anything else to trees.
  - Any approved pruning shall be authorized by the Department of Recreation and Parks and done by a qualified Arborist.
  - No roots over two (2) inches in diameter are to be cut during the course of construction without the approval of the Department of Recreation and Parks.
  - No Irrigation trenching shall pass closer than eight (8) feet of the base of any tree.
  - If any contractor is unsure of a tree to remain in place or to be removed they are to contact the Department of Recreation and Parks immediately and prior to taking any action.
  - See plans for Oak Tree guidelines if applicable.

**1. GENERAL EARTHWORK**

**METHODS**

The Grading Plan when approved shall be on the job at all times. All grades between contours and/or spot elevations shall be assumed to be straight grades. There shall be no localized depressions or bumps. (303-1.1). The Contractor shall verify all grades and amounts of cut and fill before commencing work. The area to be filled shall be cleared of all vegetative material, except the existing trees to remain. Protect remaining trees during all construction. All fill soil shall be compacted to 90% relative compaction and the Contractor shall obtain and pay for all soil compaction tests. Locations where compaction testing is required are shown on the plans with the  $\Phi$  symbol. The Department of Recreation and Parks may modify the exact location in the field, depending on field conditions. The total number of compaction test shall be no less than the number shown by the symbol. Minimum compaction of earthwork shall be 90% relative compaction unless noted otherwise. Prior to placing fill rip existing subgrade to a depth of 6 inches. Intermix first 6 inches of fill placed with ripped subgrade to eliminate interface lens. Place remaining fill in 8" lifts. The source of import soil shall be approved by the Department of Recreation and Parks prior to any grading operations. The Contractor/RAP Staff shall be required to provide an Agricultural Suitability soil test to establish the suitability of any imported soil and that soil concentrations of boron and salinity are within agricultural limits. The Contractor shall, at his own expense, amend the soil according to the recommendations of the soils report. Fill material 24 inches, or more, below the finish grade may contain up to 25 percent broken concrete or bituminous paving with maximum dimension of 3 inches of any piece. The top 24 inches of fill may contain up to 10 percent broken concrete or bituminous paving with a maximum dimension of 1-1/2 inches of any piece. Where the plans call for turf, the top 6" of soil shall have no object larger than 1" in least dimension. The Contractor shall be responsible for removal and disposal of all excess soil and debris from the work area, (300-1.3.1, 300-2.6.) No soil or debris shall be disposed of on Recreation and Parks Property without the permission of the Department of Recreation and Parks. The Contractor shall conform to Section 7-8.1 of the SSPWC latest edition with the current yearly supplements for clean up and dust control. Ground water conditions encountered during the course of the work shall be brought to the attention of the Project Landscape Architect.

If any grading operation covered by this section shall extend into or through, or shall be commenced during the period of October 15 to April 15, the contractor/RAP STAFF shall be required to submit plans of the temporary erosion control methods and devices he proposes to use in connection with the grading operations to be performed during that period. Said plans shall be submitted to the Landscape Architect. The Contractor shall at no additional cost to the Department engage the services of an approved California licensed Soils Engineer and approved soils testing laboratory to provide subgrade, pipe bedding, and fill compaction control. The Soils Engineer shall perform field observation and testing during grading to assist the Contractor in obtaining the proper moisture content, compactive effort and degree of compaction. Where compaction is less than required, additional compaction effort shall be made with adjustment of moisture content, as necessary, until the specified compaction is obtained. Upon completion of grading, the Contractor shall furnish the Department of Recreation & Parks' compaction report, certified by the Soils Engineers, showing the results of compaction tests of fill, subgrade and bedding and certifying that fill, subgrade and pipe bedding compaction complies with the percentage compaction specified.

**2. CONCRETE**

All concrete construction shall be as specified in this Section unless specified otherwise in this Notice to Contractors.

**MATERIALS**

**BASE MATERIAL**  
Base material for Portland Cement concrete shall be (CMB) crushed miscellaneous base, (200-2.4).

**CONCRETE SPECIFIED BY CLASS**

Placed concrete shall be class 520-C-2500, maximum 4 inch slump. Pumped concrete shall be class 560-E-2500, maximum 6 inch slump. A complete delivery receipt shall be required for each truckload of concrete delivered. The receipt shall be given to the Department of Recreation and Parks, (201-1.1.2).

**PORTLAND CEMENT**

All cement shall be Type II, low alkali Portland cement conforming to ASTM C150 (201-1.2).

**AGGREGATES**

The aggregates for all concrete construction shall be fractured face aggregates obtained from a quarry in the San Gabriel River drainage area only and shall be certified non-reactive by an approved testing laboratory as approved by the Bureau of Contract Administration, (201-1.2.2).

**COMBINED AGGREGATE GRADINGS**

Combined aggregate gradings for Portland Cement shall be as specified under this section, (201-1.3.2).

**EXPANSION JOINTS**

Expansion joints shall use a 3/8 inch thick asphalt impregnated felt expansion joint.

**JOINT URETHANE SEALANT**

When specified, expansion joint material shall be urethane elastomeric sealant for concrete pavement shall be Lithoseal TrafficLac-G3 by L. M. Scofield Company, or an approved equal, (201-3). Color to match concrete.

**EXPANSION JOINT PREMOLDDED ASPHALTIC JOINT MATERIAL**

When specified, expansion joint material shall be 1/4 inch thick asphaltic joint material as manufactured by Sealight Co., or an approved equal, (201-3).

**DOWELS (EXPANSION AND END-OF-POUR JOINTS)**

Shall be grade 40 or grade 60 billet-steel, (201-2.2).

**END OF POUR JOINTS**

End of pour joints shall be 1/4 inch thick asphaltic joint material as manufactured by Sealight Co., or an approved equal, (201-3).

**COLORDED CONCRETE ADMIXTURES**

Admixtures for colored concrete shall be Lithochrome Color Hardener by L. M. Scofield Company (800) 800-9900, or Davis Mix-in Colors for concrete by Davis Colors, (800) 800-6856, or an approved equal. 2'x2' Samples to be poured for each color specified on the plan for approval by the project landscape architect.

**METHODS**

**SUBGRADE AND BASE PREPARATION AND COMPACTION**

Subgrade under all concrete shall be prepared and compacted in accordance with this section (301-1.). Locations where compaction testing is required are shown on the plans with the symbol. The Department of Recreation and Parks may modify the exact location in the field, depending on field conditions, if permission is granted from the Department of Recreation and Parks. The total number of compaction tests shall be no less than two (2) or the number indicated on the plans. The Contractor shall provide compaction tests for both subgrade and base material, if applicable, at the locations indicated on the construction plans. Results of the compaction tests shall be submitted to the Department of Recreation and Parks for approval prior to the pouring of concrete. Minimum subgrade and base compaction shall be 90% relative compaction.

**EXPANSION JOINTS**

Shall be placed against previously constructed concrete structures or as indicated in the plans (303-5.4.2) and per Recreation and Parks Detail 300 series.

**CONCRETE SURFACE FINISHING**

Concrete walks, pads shall have a medium sand blast finish/med water wash finish, unless otherwise noted on the plans. The Contractor shall prepare a minimum two (2) foot by two (2) foot sample for approval by the Project Landscape Architect before any concrete is placed, (303-5.5.3). Any sidewalk in the public street right of way constructed as a portion of this contract shall be finished as directed by the Department of Recreation and Parks and shall meet all the standards as per the SSPWC and LACBC requirements

**3. DISINTEGRATED GRANITE AND SOIL STABILIZERS**

**MATERIALS**

**DISINTEGRATED GRANITE**

Disintegrated granite shall be referred to by the abbreviation (D.G.), or referred to as a decomposed granite. All disintegrated granite shall conform to the following grading requirements:

Sieve Designation	% Passing	Sieve Designation	%Passing
3/8 inch	100	No. 30	40-50
No. 4	95-100	No. 50	25-35
No. 8	75-80	No. 100	20-25
No. 16	55-65	No. 200	5-15

The portion of D.G retained on the no. 4 sieve shall have a maximum percentage of wear of 50 at 500 revolutions as determined by AASHTO T96-77. The portion passing a No. 40 sieve shall have a maximum liquid limit of 25 and maximum plasticity index of 7 as determined by AASHTO T89-81 and AASHTO T90-81, respectively. Crushed aggregate screenings shall be free from clay lumps, vegetative matter and deleterious material.

**SOIL STABILIZER**

The stabilizer shall be a non-toxic, colorless, odorless, organic powder that binds D.G. screenings. The stabilizer shall be manufactured by Stabilizer Inc., (800) 336-2468, or an approved equal.

**DISINTEGRATED GRANITE AND SOIL STABILIZERS cont.**

**PORTLAND CEMENT (FOR SOIL CEMENT)**

Portland Cement shall be Type II, (201-1.2).

**4. STRUCTURAL CONCRETE AND MASONRY**

All work shall conform to the latest edition, L.A. City Building Code (LACBC) in addition to the SSPWC; the LACBC shall take precedence where conflicts occur with the SSPWC.

**CERTIFICATION AND TESTING**

As required by the LACBC, certificates of identification and/or testing shall be provided for all concrete, reinforcing steel, concrete block, mortar, and grout materials delivered to the job site.

The following items refer to the corresponding SSPWC subsections in order to resolve conflicts with the LACBC, to stress items of particular concern, or modify, add to, or choose options in the SSPWC.

**MATERIALS**

**CONCRETE SPECIFIED BY CLASS**

Concrete is designed for Fc=2000 psi; for durability placed concrete shall be class 560-C-3250, maximum 4 inch slump and pumped concrete shall be class 660-E-3250, maximum 6 inch slump. A complete delivery receipt shall be required for each truckload of concrete delivered. The receipt shall be given to the Department of Recreation and Parks.

**PORTLAND CEMENT**

All cement shall be Type II, low alkali Portland cement conforming to ASTM C150. (201-1.2).

**AGGREGATES**

The aggregates for all concrete construction shall be fractured face aggregates obtained from a quarry in the San Gabriel River drainage area only and shall be certified non-reactive by a testing laboratory as approved by the Bureau of Contract Administration per Section (201-1.2.2).

**COMBINED AGGREGATE GRADINGS**

Combined aggregate gradings for Portland Cement shall be as specified under this section, (201-1.3.2).

**REINFORCING STEEL**

Use ASTM A615 Grade 40 billet steel, (201-2).

**EXPANSION JOINTS**

Use "Sealtight" 1/2 inch thick, full depth, self-sealing asphalt expansion joints by W. R. Meadows Inc. or equal, (201-3).

**CONCRETE CURING COMPOUND**

Use Type I compound, (201-4).

**CEMENT MORTAR**

In lieu of the class and proportions shown in SSPWC 201-5.1, use Type S mortar, Fc=2000 psi, LACBC 91.2403(g), (201-5, 202-2.1.2).

**GROUT**

In lieu of SSPWC 202-1.5.2, use 2000 psi grout per LACBC 91.2403(r), (201-1.5).

**CONCRETE BLOCK**

Use 8" x 8" x 16" lightweight (103 pcf) units conforming with ASTM C90 Grade N-1, (202.2.1).

**LUMBER AND PLYWOOD FORMS**

Formwork shall comply with this section, (204-1).

**METHODS**

**FOUNDATION MATERIAL TREATMENT AND SUBGRADE FOR CONCRETE SURFACES**

Footing excavations shall comply with these subsections, (303-1.3).

**CONCRETE FORMWORK**

Installation and removal of formwork for concrete footings and structures shall comply with these subsections, (303-1.3).

**PLACING REINFORCEMENT**

The Contractor's attention is directed to the provisions of this subsection regarding: (1) securing reinforcing steel in position in accordance with the "Concrete Reinforcing Steel Institute" standards; (2) splicing of bars; and (3) bending of bars, (303-1.7). In masonry the thickness of grout between block units and reinforcing steel shall not be less than 1/2 inch.

**PLACING CONCRETE**

The Contractor's attention is directed to the provisions of this subsection regarding: (1) avoiding concrete segregation; (2) wetting forms and subgrade; (3) consolidation of concrete with vibrators; and (4) provision for construction and expansion joints, (303-1.8).

**CONCRETE SURFACE FINISH AND CURING COMPOUND**

Surface finish and provision for curing compound shall comply with these subsections, (303-1.9).

**MASONRY CONSTRUCTION**

The Contractor's attention is directed to the provisions of this subsection regarding: (1) workmanship; (2) proper masonry units; (3) metal stops on horizontal reinforcing; (4) thoroughly rodding vertical cores; (5) cleaning cores of debris and mortar; (6) holding reinforcement straight and in place; and (7) cutting masonry with a power driven abrasive saw. If work is stopped for one hour or longer a horizontal construction joint shall be provided by stopping the grout 1 1/2 inches below the top of block.

Masonry shall be laid in running bond, unless otherwise noted, (303-4).

**7. IRRIGATION SYSTEMS**

**MATERIALS**

**SOLVENT WELDED PLASTIC PIPE**

Schedule 40 PVC plastic pipe shall be used for pipe sizes up to and including 1 1/2 inch diameter on both the discharge and supply side of control valves, (212-2.1.3). Class 315 PVC plastic pipe shall be used for pipe sizes from 2 inch up to and including 3 inch diameter.

**RESTRAINED PLASTIC PIPE**

Class 150, DR 18, C900 PVC pipe shall be used for pipe sizes of 4inch up to and including 10inch diameter.

**REMOTE CONTROL VALVES**

All remote control valves shall be electrically operated with body of cast brass or bronze construction, (212-2.2.4) and installed per details.

**CONTROL WIRE**

Connection between the automatic controller(s) and the remote control valves shall be made with direct burial 14 gage, AWG-UF, 600 volt, copper wire. Wires shall be provided in the following colors: red, yellow, blue, green, orange, tan, purple, pink, brown, gray, and white.

**CONTROL WIRE CONNECTIONS**

Control wire connections shall be made with 3-M brand of DBY or DBR Direct Burial Splice kits, or approved equal. The splice kit shall consist of a one-piece malleable plastic bulb body with internal locking fingers, filled with re-entangle gel sealant and a Scotchlok Electrical Spring Connector. Materials shall be as follows:  
Connector shall be a flame retardant PVC insulator with a steel spring and shell within. Connector shall be a non-crimping system  
Tube material shall be clear see-through polypropylene.  
Gel material shall be hixotropic calcium organic complex.

**VALVE BOXES**

To Be Rainbird VB series Jumbo or approved equal.

Wire sizes and numbers of wires shall be as shown below:

CONNECTORCOLORNO. AND SIZE OF WIRE3M Model DBYYellowMax. 4-12 gage UF wires3M Model DBRRedMax. 3-14 gage UF wires

**QUICK COUPLING VALVES AND ASSEMBLIES**

Quick couplers shall be 1 inch i.p.s., two piece, brass or bronze construction equipped with a cover, unless otherwise specified on plans. The Contractor shall provide one quick coupler key with hose swivel for each five quick couplers installed. Contractor shall supply a minimum of one quick coupler key with hose swivel, (212-2.2.6) and shall be installed per details.

**METHODS**

**NEW PIPELINE INSTALLATION - GENERAL**

When pipelines run parallel they shall be separated horizontally by a minimum distance of 12". When pipelines cross each other they shall be separated vertically by a minimum distance of 3".  
**NOTE: ALL TRENCHING SHALL BE APPROVED BY THE PROJECT LANDSCAPE ARCHITECT PRIOR TO THE BACKFILL FILLING OF TRENCHES.**

No irrigation trenching shall pass closer than eight feet of the base of any tree. No tree root larger than 2" diameter shall be cut without approval of Department of Recreation and Parks.

**COVER OVER MAINLINES:**

Maintain 24 inches of cover over mainlines 3" and smaller in diameter. Mainlines 4" and larger in diameter shall have 30" of cover over the top of the pipe, (308-5.2). All trenching shall be per details.

**COVER OVER LATERAL LINES:**

Maintain 12 inches of cover over all lateral lines.

Pipe bedding and backfill: bedding shall surround the pipe to one foot above the top of the pipe. Bedding shall be placed in 6 inch lifts. All bedding shall be densified by water jetting. Water jetting shall be sufficient to thoroughly wet bedding material around the pipe, (306-1.2.1). There shall be no rocks over 1/2" in greatest dimension and no organic matter placed in the bedding material. Backfill shall be the material placed above the bedding. Backfill shall be placed in one-foot lifts and densified by water jetting. Jetting shall be continued until backfill collapses and water is forced to the surface, (306-1.3.1). Pipe trenches thoroughly densified by water jetting shall have a minimum relative compaction of 85%. There shall be no rocks over 2" in greatest dimension or organic matter in the backfill. Trench areas which exhibit insufficient densification shall be subject to compaction tests as requested by the Department of Recreation and Parks. All such compaction tests shall be at the expense of the Contractor. Additional tests may be required until the 85% minimum compaction is achieved. Finished trenches shall match finish grades flush with adjacent finish grades. The Contractor shall be responsible for maintaining the trenches flush and smooth until final acceptance of the project. Trenches in existing lawn shall be repaired per method A lawn repair of the Landscape Planting section of the Notice to Contractors. The maximum trench width shall be two and a half diameters of the pipe.

**PIPES CROSSING UNDER PAVING:**

Where irrigation piping crosses a vehicular roadway or other paving having a width of less than 25 feet, a PVC Schedule 40 PVC sleeve which is a minimum of two pipe sizes larger than the piping to pass through it, shall be jacked under the paving at a depth of 36" minimum. Where remote control wiring crosses under paving having a width of less than 25 feet, a 3 inch PVC Schedule 40 PVC sleeve shall be jacked under the paving at a depth of 36" minimum. All sleeves shall extend 3" minimum beyond the edges of paving.

Where irrigation piping crosses a vehicular roadway or other paving having a width greater than 25 feet, a trench shall be excavated across the roadway or paving to accommodate a Class 315 PVC sleeve a minimum of two pipe sizes larger than the piping to pass through it, at a depth of 36" below the bottom of the paving, as measured from the top of the sleeve. Where remote control wiring crosses under paving having a width greater than 25 feet, a 3 inch Schedule 40 PVC sleeve shall be installed at a depth of 36" below the bottom of the paving, as measured from the top of the sleeve. The backfill of the trench shall be a 2 sack cement slurry. The slurry shall extend from the bottom of the trench to within one inch of the bottom of the existing paving. The trench in the existing paving shall be repaired with a like paving material and join the existing paving both horizontally and vertically.

**REMOTE CONTROL WIRING UNDER PAVING**

Remote control wire under paving shall be placed in a 3" class 315 PVC sleeve buried at a depth of 36. Roadways less than 25 feet in width shall have the sleeve jacked under the roadway.

**FITTINGS ON MAINLINES:**

All outlets from a mainline shall be accomplished with line sized tees with an outlet of the specified size. No saddle tees shall be permitted.

**INSTALLATION OF VALVE BOXES**

Boxes shall be set flush with existing grade, including sloped areas, and all soil within 12 inches of the perimeter of the box shall be compacted



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS

ASSISTANT GEN. MANAGER: Ramon Barabais

GENERAL MANAGER: Michael Shull

PROJECT LANDSCAPE ARCHITECT - CONSULTANTS: \_\_\_\_\_

PROJECT ENGINEER: \_\_\_\_\_

ASSEMBLED DRAWING: \_\_\_\_\_

DATE: \_\_\_\_\_

LIC. NO. \_\_\_\_\_

LIC. NO. \_\_\_\_\_



PROJECT NAME: **318 N Mathews Street Park**

ADDRESS: **318 N Mathews St  
Los Angeles, CA 90033**

REVISIONS: \_\_\_\_\_ DATE: \_\_\_\_\_

△

△

△

△

△

△

PLAN NAME: **specifications**

DRAWN BY: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_

SCALE: n/s ISSUE DATE: \_\_\_\_\_

PRJ # \_\_\_\_\_ FILE NO. \_\_\_\_\_

DRAWING NO. **SP-02**

SHEET OF SHEETS

**IRRIGATION SYSTEMS cont.**

CONTROLLER	TAPE BUNDLE COLOR
A	RED
B	YELLOW
C	BLUE
D	GREEN
E	WHITE
F	BLACK

**INSTALLATION OF IRRIGATION CONTROL WIRING**

Wire bundles shall be taped at 5' o.c. Lay bundles in the mainline trench. Do not tape bundles to the mainline piping.

✓ The Contractor shall run two extra black control wires from the automatic controller to the farthest valve on the system, or to the farthest valve at each end of the controller area, if the farthest area extends in two directions from the controller.

Each controller shall have a separate 14 gage, AWG-UF, 600 volt, WHITE common wire for each 10 consecutive stations on each irrigation controller.

- Common 1, stations 1-10
- Common 2, stations 11-20
- Common 3, stations 21-30
- Common 4, stations 31-40

Each exterior controller enclosure shall have a ground rod installed if detailed on controller installation detail.

Wire shall not be taped to mainline (308-5.5). If control wires run in same trench as lateral lines, or are dead headed, wire depth shall be maintained at 24". For installation, see details.

✓ **IRRIGATION SYSTEM FLUSHING AND TESTING**

The irrigation system shall be flushed in the presence of the Department/Project Landscape Architect. Flushing shall start with the valve closest to the point of connection and proceed with each consecutive valve toward the valve farthest from the point of connection. Each lateral system shall have each riser capped during the flushing commencing with the riser closest to the valve and proceeding to the farthest riser. After the entire irrigation system has been flushed the system shall be pressure tested in accordance with section 308-5.6 of the SSPWC.

✓ The irrigation system mainlines shall be pressure tested following the flushing of the complete system. The mainlines shall be tested for 24 hours at 125 p.s.i. with all control valves in place and closed. During the test, the Contractor shall provide pressure gauges downstream from the backflow device and upstream from the farthest remote control valve in the system. Air pressure testing of the irrigation system is acceptable if approved by the Department of Recreation and Parks.

✓ **RECORD DRAWINGS (AS-BUILTS) AND CONTROLLER CHARTS**

All built plans shall be maintained daily throughout the construction period and turned over to the Department of Recreation and Parks at the Operational Final Inspection, as indicated in the General section of this Notice to Contractors in the Record Drawings Submittal section.

The Contractor/RAP staff shall provide two copies of a controller chart showing the irrigation system installed. The chart shall be done on a half size photographic reproduction of the irrigation plan and shall reflect the as-built data. Each station shall be shown in a different color and control wire locations shall be indicated. The complete plan shall be laminated on each side with a 20 mil acrylic plastic sheet. A 3/4" brass grommet shall be placed in each top corner. The Contractor shall obtain approval of the controller chart from the Department of Recreation and Parks, before proceeding with the plastic lamination.

**WARRANTY FOR IRRIGATION SYSTEM WORK**

The entire sprinkler irrigation system shall be warranted to be free from defects in materials and workmanship, and installed in accordance with this Notice to Contractors and the SSPWC. The Contractor/RAP Construction staff shall be required to repair or replace any defects in material or workmanship which may develop within one (1) calendar year from the date of acceptance, ordinary wear and tear and unusual abuse or neglect excepted. Further, the Contractor/RAP Construction Staff shall be required to make any necessary repairs within 24 hours of notification at no cost to the Department. If the Contractor or his agent fail to make such repairs within the stipulated time, the Department shall make such repairs or have repairs made by a third party and bill the Contractor for all expenses that accrue from making such repairs.

**GUARANTEE AGAINST SETTLEMENT**

If, within one (1) calendar year from the date of acceptance, settlement occurs along mainlines, lateral lines, at valve boxes, or other irrigation related appurtenances, and adjustments in pipes valves and sprinkler heads are required to bring the system, sod, or paving to the level of the permanent grades, the Contractor/RAP Construction Staff shall make all adjustments.

**STEEL PIPELINE**

Joints shall be made with Teflon tape applied to the male threads only, (308-5.2.2).

**PLASTIC PIPELINE-SOLVENT WELDED OR THREADED ENDS**

Prior to the application of the P.V.C. solvent cement, prepare all surfaces to be solvent welded with tetrahydrofuran primer tinted purple. Teflon tape shall be used on all plastic male pipe threads, (308-5.2.3).

✓ **BACKFLOW DEVICE INSTALLATION AND CERTIFICATION**

The Contractor shall obtain certification of the backflow device and submit two copies of the certification to the Department of Recreation and Parks at the Operational Final. The backflow certification shall be made on the County Health Department standard form and filed with the County Health Department, Cross Connection Section, Room 150, 2525 Corporate Place, Monterey Park, CA, 91754. The contractor shall paint all backflow prevention devices above ground with two coats of forest green enamel. Mask all identification tags prior to painting, (308-5.3). After certification remove all test cocks, replace with threaded brass plugs, and deliver test cocks to the Department of Recreation and Parks.

**6. CHAIN LINK FENCING AND MISCELLANEOUS METAL CONSTRUCTION**

**MATERIALS**

✓ **CHAIN LINK FENCING**

Chain link fencing materials shall be as specified in details RP 500-506 and Section (206-6).

✓ Pipes for posts, braces and rails shall be Class 1, Schedule 40, ASTM F 1083 or, Class 1A, with a minimum 50,000 psi yield strength. Class 1 pipe shall be galvanized as indicated in this section of the Notice to Contractors. Class 1A pipe shall have a minimum hot dipped zinc coating of 0.9 oz./Sq. Ft., 15 micrograms of chromate per square inch and a minimum or 3 mils of acrylic coating on the exterior of the pipe. The interior coating of Class 1A pipe shall be hot dipped galvanized with .9 oz./ Sq. Ft. Zinc. Materials for chain link fence posts, rails and braces shall be sized as follows:

NOMINAL SIZE (inches)	ACTUAL O.D. (inches)	CLASS 1 PIPE Wall Thickness	CLASS 1 Weight LBS per lin. ft.	CLASS 1A PIPE Wall Thickness	CLASS 1A Weight LBS/L.F. (pounds)
1 1/4"	1 5/8"	.140	2.27	.110	1.82
1 1/2"	1 7/8"	.145	2.72	.120	2.28
2"	2 3/8"	.154	3.65	.130	3.12
2 1/2"	2 7/8"	.203	5.79	.160	4.64
3"	3 1/2"	.216	7.57	.160	5.71
3 1/2"	4"	.226	9.11	.160	6.56
4"	4 1/2"	.237	10.79	NA	NA
6"	6 5/8"	.280	18.97	NA	NA

**CHAIN LINK FENCING AND MISCELLANEOUS METAL CONSTRUCTION cont.**

**CHAIN LINK FABRIC**

Galvanized steel chain link fabric shall conform to ASTM A 392, Class 2, 1.20 Oz./Sq.Ft. zinc. Fabric shall be 9 gauge and be woven in a 1 1/2" mesh unless otherwise indicated on the plan. Top and bottom selvages shall be knuckled.

PVC coated galvanized steel fabric, when specified, shall conform to ASTM F 668, Class 2b, "fused and adhered", and meet the galvanizing requirements contained in this section of the Notice to Contractors, (206-6.3).

**STEEL SHAPES**

All structural steel shapes shall be as specified in the applicable detail.

✓ **GALVANIZING**

When called out, metal products shall be hot dipped galvanized in accordance with **TABLE 210-3.2(A)** of the SSPWC.

✓ **MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

The manufacturer of the Chain link fabric, fence posts, rails and braces shall provide the Contractor a Certificate of compliance for each shipment sent to the project site. The Certificate shall state that the materials delivered conform the specification for materials as indicated in Section 8 of these Notices to Contractors. The Certificate of Compliance shall be delivered to the Construction Manager before any fencing materials are installed at the project site.

**REPAIRING OF DAMAGED GALVANIZED SURFACES**

Galvanized surfaces which have been damaged in transport or during installation shall be re-coated using the metalizing process or zinc oxide, zinc dust paint per Section 210-3.5 of the Standard Specification.

**TUBULAR STEEL SHAPES**

Cold formed shapes for tubular steel fencing shall conform to ASTM A 500, Grade B, in the size and wall thickness shown on the plans and details. Unless specified on the plans all post and rails shall be 3/16" thick. All pickets for fencing shall be 11 gage.

✓ **TUBULAR STEEL WELDING**

Shall conform to the AWS code for procedures, appearance and quality. All welds shall be ground smooth. All fabricated metal fencing panels shall be shop assembled and welded.

✓ **PAINTING (TUBULAR STEEL AND CHAIN LINK FENCING WHEN REQUIRED)**

"Factory" coated tubular steel fencing or chain link fencing shall be exempted from this requirement. All other shop fabricated tubular steel fencing or fencing constructed on site shall be painted in accordance with the requirements for painting "Ferrous Metal (Non-galvanized) Surfaces" below. The two finish coats shall be black unless otherwise specified.

**METHODS**

**CHAIN LINK FENCE**

Chain link fence shall be installed and stretched tight between posts.

All connection bolts shall not extend more than 1/4 inch past the end of the nut and be free from burrs.

**TUBULAR STEEL PAINTING**

Prior to priming and painting, all steel shall be made free of loose mill scale, rust, oil and grease. Welds shall be smoothed by grinding. Damage to "factory" coated tubular steel or chain link fencing shall be repaired after installation by sanding damaged paint surfaces and by applying one coat of manufacturer specified primer and two new coats of specified color coat.

**7. PAINTING**

**MATERIALS**

Paint systems, catalog names, and product numbers listed below are based on products of Dunn-Edwards Corporation. This shall be considered the standard of quality against which the Department of Recreation and Parks will judge equivalency. Equivalent materials from alternate manufacturers will be considered as an approved equal. Contractor's material submittal for proposed alternate must include complete material specifications from manufacturer. Paint systems described below are for specific surfaces as indicated. In addition to the information provided herein, paint materials shall also be governed by the requirements set forth in section 210-1 of the SSPWC.

Ferrous Metal Tubular Shapes (Non-Galvanized), Semi-Gloss					
Painting Sequence	Finishing Schedule	Recoat And Drying Time	Coverage At Required Wet Film Thickness	Required Wet Film/Dry Film Thickness	
1 <sup>st</sup> coat: Synthetic alkyd white corrosion inhibiting primer	Corrobar (43-5)	Min. 24 hrs. Max. 72 hrs.	450 square feet per gallon	3.5 wet mils; 2.0 dry mils	
2 <sup>nd</sup> coat: Semigloss enamel acrylic latex exterior enamel	Permasheen n (W 901)	Dry to touch: 30 min.; Recoat: 4 hrs.	375 square feet per gallon	4.2 wet mils; 1.5 dry mils	
3 <sup>rd</sup> coat: Semigloss enamel acrylic latex exterior enamel	Permasheen n (W 901)	Dry to touch: 30 min.	375 square feet per gallon	4.2 wet mils; 1.5 dry mils	

**Non ferrous metals (Galvanized steel, Aluminum, Cor-Ten® Steel), Semi-Gloss**

Painting Sequence	Finishing Schedule	Recoat And Drying Time	Coverage At Required Wet Film Thickness	Required Wet Film/Dry Film Thickness	
Pre-coat: galvanized steel only. Acid etch*	Galva-etch (GE 123)	n/a	n/a	n/a	
1 <sup>st</sup> coat: Alkyd primer	Galv-Alum (QD 43-7)	Dry to touch: 30 min.; recoat: 2 hrs. † Max. 48 hrs.	350 square feet per gallon	4.6 wet mils; 2.0 dry mils	
2 <sup>nd</sup> coat: Synthetic alkyd white corrosion inhibiting primer	Permasheen (W 901)	Dry to touch: 30 min.; Recoat: 4 hrs.	375 square feet per gallon	3.5 wet mils; 2.0 dry mils	
3 <sup>rd</sup> coat: Semigloss enamel acrylic latex exterior enamel	Permasheen (W 901)	Dry to touch: 30 min.	375 square feet per gallon	4.2 wet mils; 1.5 dry mils	

\* Galva-etch is a water reducible acid pre-treatment for galvanized metals. Do not use on aluminum.

† Recoat time for Galv-Alum is 2 hours if material is sprayed, 16 hours if brushed or rolled. Second coat must be applied within 48 hours

**Primers, Sealer, and Undercoaters**

Alkyd based	Block-it (QD 42-56) Quick-dry pigmented primer/sealer	Dry to touch: 30 min.; Recoat: 1 hr.	435 square feet per gallon	3.7 wet mils; 1.5 dry mils	
-------------	---	--------------------------------------	----------------------------	----------------------------	--

**PAINTING cont.**

**METHODS**

**GENERAL**

Refer also to section 310-1of the SSPWC.

**COLOR SPECIFIED**

Colors shall be selected from color chip samples provided by manufacturer of paint system approved for use by the Department of Recreation and Parks.

**CONDITION OF SURFACES TO BE PAINTED**

Contractor shall verify condition of surfaces to be painted prior to commencement of painting work. Work of other trades that been left or installed in a condition that is not suitable to receive paint, stain, or other specified coatings shall be immediately called to the attention of the Department of Recreation and Parks. Painting of defective or unsuitable surface implies acceptance of the surfaces.

**PROTECTION OF EXISTING WORK**

The Contractor shall take all necessary precautions to protect previously installed work and materials which may be affected by work. Items to be protected include, but are not limited to, turfgrass, shrubs, trees, ground cover, prefinished surfaces, and adjacent surfaces. Contractor shall furnish at his expense sufficient drop cloths, shields, and other protective devices necessary to prevent spray or splatter from fouling surfaces not being painted. Contractor shall be responsible for protecting equipment and fixtures from damage resulting from use of fixed, movable and hanging scaffolding, planing and staging, (310-1.4)

**PROTECTION OF OPEN FINE PAINTING**

"WET PAINT" signs, barricades, and such other devices as are required to protect newly finished surfaces shall be provided. Contractor shall be responsible for removal of signs protective materials, and temporary protective wrappings provided by others for protection of their work after completion of painting operations.

**SURFACE PREPARATION, GENERAL**

The Contractor shall perform preparation and cleaning procedures in strict accordance with coating manufacturer's instructions for each substrate condition, (310-2)

✓ **SURFACE PREPARATION FOR GALVANIZED SURFACES**

Galvanized surfaces shall be prepared for painting in accordance with section 310-3 of the SSPWC.

✓ **SURFACE PREPARATION FOR WOOD SURFACES**

Wood surfaces shall be prepared for painting in accordance with section 310-4 of the SSPWC.

**APPLICATION**

The Contractor shall apply painting and finishing materials in accordance with the manufacturer's printed instructions. Application methods and techniques that are best suited for the materials and surfaces to which coatings are being applied shall be used, (310-5)

The number of coats specified is the minimum that shall be applied. All undercoats shall be tinted to the approximate color of the finish coat. The Contractor shall apply additional coats when undercoats, stains, or other conditions show through the final paint coat, until paint film is of uniform finish, color and appearance.

Each material shall be applied at not less than the manufacturer's recommended spreading rate and mil thickness. The total dry-film thickness of coatings shall not be less than 1.2 mils for each required coat.

**CLEANING, TOUCH-UP AND REFINISHING**

The Contractor shall remove all splattering, spots and blemishes caused by work done throughout the work period. Upon completion of painting, the Contractor shall remove all rubbish, paint cans and accumulated materials resulting from work and dispose of off site. All areas of work shall be left in a clean, orderly condition. Runs, sags, misses, holidays, stains, or any other defects in the painted surfaces, including inadequate coverage and mil thickness, shall be satisfactorily touched up, refinished, or repaired a necessary to produce a result satisfactory to the Department of Recreation and Parks.

**8. LANDSCAPE PLANTING**

**MATERIALS**

**AMMONIUM PHOSPHATE**  
Shall be a standard agricultural grade of ammonium phosphate having guaranteed analysis of 16-20-0.

**GYPSUM**

Shall be agricultural grade.

**ESTABLISH - GENERAL PURPOSE FERTILIZER**

Shall have a minimum analysis of 1-1-3-5,(N-P-K), derived from rock phosphate, peat moss, chicken manure, sand, sulfate of potash, gypsum, and EDDHA chelate. As manufactured by Earth Works Soil Amendment, Inc., (310) 322-9702, or an approved equal.

**HYDROSEED MULCH FIBER**

Shall consist of virgin wood fiber of Aspen or Alder. It shall not contain any waste paper, newsprint or straw material. The mulch shall contain a green dye to facilitate application. Fiber shall be as manufactured by Conwed Co., (Green Tag), Silva-Fiber by Weyerhaeuser Co., or an approved equal, (212-1.2) (e).

**HYDROSEED STABILIZER**

Shall consist of natural multicolored materials supplied by Ecology Controls M-binder, (805) 684-0436, no equal.

**HYDROBLEND SOIL ACTIVATOR**

Shall have a minimum analysis of 1.2-1.4-5, (N-P-K), derived from rock phosphate, peat moss, chicken manure, sulfate of potash, gypsum. As manufactured by Earth Works Inc., (310) 322-9702, or an approved equal.

**FEATHER MEAL**

Shall have a minimum analysis of 12-0-0,(N-P-K), derived from feathermeal. As manufactured by Earth Works Inc., (310) 322-9702, or an approved equal.

**NITROFORM UREAFORM**

Shall be a standard commercial grade of nitroform having a guaranteed analysis of 38-0-0.

**ORGANIC AMENDMENT**

Shall be type I organic soil amendment, consisting of nitrolized fir shavings.

**OVERSEED TOPDRESSING, EARTH WORKS ORGANIC TOPDRESSING**

Shall be, derived from composted wood products, peat moss, chicken manure and a wetting agent. As manufactured by Earth Works Inc., (310) 322-9702, or an approved equal.

**Potassium sulfate**

Shall be a standard agricultural grade of potassium sulfate having guaranteed analysis of 0-0-50.

**ROUNDUP**

Shall be a water-soluble herbicide for non-selective control of weeds containing 480 grams per liter of the active ingredient Isopropylamine salt of N-(phosphonmethyl) Glycine (Glyphosate) per U.S. gallon, as manufactured by Monsanto Chemical Company, or approved equal.

**PRE-EMERGENT HERBICIDE**

Shall be Balan Granular, by Elanco, or an approved equal. All pre-emergent herbicides, when required, shall be specified and applied by a licensed Pest Control Advisor.

**FERTILIZER TABLETS**

Shall be fertilizer tablets shall be Agriform 21 gram, 20-10-5, available from Western Farm Service, (805) 487-4961.

**MULCH**

Shall be seasoned tree chip mulch, free all foreign matter including weed and tree seeds. Mulch chip size shall be minimum one (1) inch in diameter and not more than two (2) inches in diameter. Submit sample of mulch and source to the Project Landscape Architect/ The Department of Recreation and Parks for approval prior to application.

**WATER HOLDING POLYMER**

Shall be "Broadleaf P-4"

**METHODS**

**TOPSOIL PREPARATION - GENERAL**

The type and thickness of topsoil shall be as shown on the plans. If not shown, the topsoil shall be the existing class "C" on-site topsoil. Remove all stones over 1 inch in greatest dimension, to a depth of 6 inches below finish grade, (308-2.3.1).

Prior to planting, the top six (6) inches of all areas (including slopes) shall be free of weeds, stones, and other deleterious matter one (1) inch in diameter and larger.

RAP STAFF/ CONTRACTOR TO: Provide agricultural suitability tests from a approved Lab for all areas that are to be planted. Depth of test to coincide with size of material to be planted, ie: bore depth for turf 6, 12" for shrubs and 24" for trees

**LANDSCAPE PLANTING cont.**

**FINISH GRADING (FOR LAWN AREAS)**

Final grading of lawn areas shall take place after the soil has dried out to a workable condition following the soil preparation operations. The soil shall be remodeled and smoothed to the required grades and contours, then rolled two directions at right angles with a water ballast roller weighing 200 to 300 pounds. Any resulting irregularities in the grade after the initial rolling shall be re-raked, cut or filled, then re-rolled until the grade is free from irregularities. No heavy objects shall be taken over the areas at any time. The final finish grade shall be uniform, without abrupt changes in grade, within one-tenth of a foot of the grades shown on the plan, and approved by the Department of Recreation and Parks prior to seeding, (308-2.4).

**WEED ABATEMENT ("GROW AND KILL")**

Weed abatement shall apply to all turf and planting areas. The abatement operation shall be commenced only after removals, grading, hardscape, construction, installation of irrigation system, soil preparation, and fine grading of turf and planting areas have been completed. NO PLANTING SHALL COMMENCE UNTIL APPROVAL OF WEED ABATEMENT BY THE PROJECT LANDSCAPE ARCHITECT.

**NOTE:** It is required that herbicides be applied by a licensed **PEST CONTROL APPLICATOR**.

**CONTRACTOR RESPONSIBILITY DURING WEED ABATEMENT OPERATION AND APPLICATION PRECAUTIONS**

The Contractor shall abide by all laws and codes governing weed abatement operations including but not limited to CAL-OSHA requirements and The Healthy School Act which includes 72 hour notice to employees and patrons, submittal of a "Pest Control Recommendation

LANDSCAPE PLANTING cont.

MAINTENANCE AND PLANT ESTABLISHMENT

The Contractor/RAP Construction staff shall be responsible for maintenance within the area of work throughout the period of construction and the plant establishment period. The maintenance shall include continuous operations of watering, the removal of all weeds in planting areas and all broad leaf weeds in lawn areas, mowing, rolling, trimming, edging, cultivation, fertilization, spraying, control of pests, insects and rodents, reseeding, plant replacement (irrespective of cause), or any other operations necessary to assure normal plant growth and the collection and removal of all trash daily. Any malfunctions of, or damage to, the irrigation system caused by the Contractor or RAP staff in the prosecution of this work shall be repaired within 24 hours.

The plant establishment period shall be for a period of 90 days unless extended as described in this section. The plant establishment period shall be started when all planting and related work has been completed, in accordance with the contract documents. The beginning of the plant establishment period shall be determined by an on site review by the Department of Recreation and Parks Project Landscape Architect. Trees and shrubs shall be healthy and vigorous at the completion of the maintenance period. Broken or vandalized tree stakes shall be repaired to a condition as initially installed within seven (7) days of damage.

All lawn areas shall have 95 percent coverage with bare areas not exceeding three square inches. All lawns shall be of the grass specified and be free from all broad leaf weeds.

RAP Staff shall maintain the area of work at maximum seven (7) day intervals and perform any needed tasks to keep the plants in an optimum growing condition.

Five weeks after lawn seeding the RAP staff shall apply a slow release fertilizer at per soils test recommendations. The fertilizer shall be applied in the presence of the Department of Recreation and Parks.

The RAP staff shall immediately replace any and all plant materials and/or grass which, for any reason dies or is damaged while under the Contractors care. Replacement shall be made with seed and/or plants as indicated or specified for the original planting.

All shrubs and ground covers shall be guaranteed for a period of ninety (90) days from the end of the plant establishment period. All trees and shrubs 15 gallon size or larger shall be guaranteed for a period of one (1) year from the end of the plant establishment period.

The designated plant establishment period is part of the total contract time. The plant establishment period will be extended at fourteen (14) day intervals if, at the end of the plant establishment period, the planting, irrigation and other improvements do not reflect the intent of the plans.

GENERAL ELECTRICAL REQUIREMENTS

GENERAL

DESCRIPTION

- A. Comply with all provisions of the General Conditions, Supplementary Conditions and General Requirements as applicable to work of all Sections of Division 16 (CSI) concerning definitions, guarantees, submittals, as-builts, clean-up, etc.
B. ALL WORK TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) UNLESS OTHERWISE SPECIFIED.
C. All work of this Division shall be coordinated with work of other trades.

SCOPE

D. Required: Provide all labor, materials, equipment, tools and appliances required to furnish and install all electrical work as required for the project. Submit drawings of intended system. Drawings should include but are not limited to the following:

- 1. All construction power and lighting and power for testing equipment and systems through final acceptance of test.
2. Power and lighting service raceway(s) underground from the property line to (an on-site padmount transformer) (an on-site transformer vault) the main service switchboard(s). A ( ) ampere, ( ) volts, ( ) phase, ( ) wire underground supply from the transformer(s) to (the main service switchboard(s)). Note: Parenthesis with double underlining indicate choices to be made by the specifier.
3. Complete lighting and power system(s) including branch circuits, fixtures, outlets, lamps, switches, controllers, and auxiliary equipment.
4. Complete distribution system(s) including switchboards, panelboards, transformers, feeders, and auxiliary equipment.
5. Complete system of exterior (vandal resistant) lighting.
6. Underground service conduits from property line to \_\_\_\_\_.
7. Complete Grounding System.
8. Complete Intercom System(s)
a. Telephone system, including service raceways, cabinets, backboards, grounding, and ac power provisions.
b. Television antenna and coaxial cable distribution system.
9. Distribution for emergency power system including but not limited to a central battery inverter, lighting panelboard and branded circuit wiring.

- 10. Conduit System including backboards, pullboxes, wiring devices, grounding, etc. for the following as applicable:
c. Telephone System
d. Television antenna and coaxial cable distribution.
11. Control wiring and devices for equipment specified in Sections of Division 16 and other Technical Sections, except where specifically indicated.
12. Complete and Operable Fire Alarm System.
13. Connection and testing of electrical equipment and controls specified in Division 16 and other technical sections, except where specifically indicated or noted elsewhere on the Contract Drawing or in the Specifications.
14. Applicable excavating, trenching and backfilling.

WORK NOT INCLUDED

- E. Furnishing all electrical or partially electrically devices related uniquely to mechanical equipment and only as specified in the Mechanical Division 15.
F. Furnishing and installing of all motors.

LEGAL REQUIREMENTS AND STANDARDS

- G. Required: Comply with the latest, as applicable and effective, during the progress of Contracted Work.
14. Latest Los Angeles City Electrical, Fire and Building Codes and U.B.C. Supplement.
15. California State Administrative Code, Title 24, State Building Standard.
16. (CAL/OSHA) California State Occupational Safety and Health Act.
17. California State Fire Marshal Standards.
18. Los Angeles City Department of Water and Power.
19. U.L. - Underwriters Laboratories Inc.
20. NEC - National Electric Code.

10. Conduit System including backboards, pullboxes, wiring devices, grounding, etc. for the following as applicable:

- c. Telephone System
d. Television antenna and coaxial cable distribution.
11. Control wiring and devices for equipment specified in Sections of Division 16 and other Technical Sections, except where specifically indicated.
12. Complete and Operable Fire Alarm System.
13. Connection and testing of electrical equipment and controls specified in Division 16 and other technical sections, except where specifically indicated or noted elsewhere on the Contract Drawing or in the Specifications.
14. Applicable excavating, trenching and backfilling.

WORK NOT INCLUDED

- E. Furnishing all electrical or partially electrically devices related uniquely to mechanical equipment and only as specified in the Mechanical Division 15.
F. Furnishing and installing of all motors.

LEGAL REQUIREMENTS AND STANDARDS

- G. Required: Comply with the latest, as applicable and effective, during the progress of Contracted Work.
14. Latest Los Angeles City Electrical, Fire and Building Codes and U.B.C. Supplement.
15. California State Administrative Code, Title 24, State Building Standard.
16. (CAL/OSHA) California State Occupational Safety and Health Act.
17. California State Fire Marshal Standards.
18. Los Angeles City Department of Water and Power.
19. U.L. - Underwriters Laboratories Inc.
20. NEC - National Electric Code.
21. ASTM - American Society of Testing and Materials.
22. Current publications of the National Fire Protection Association.
23. National and American Standards Association.

General Compliance As Applicable

- 24. Drawings and specification requirements shall govern where they exceed Code requirements.
25. Where requirements between governing Codes and Regulations vary, the more restrictive provision shall apply.
26. Nothing contained in Contract Documents shall be construed as authority or permission to disregard or violate legal requirements.

GENERAL REQUIREMENTS

- I. Permits and Inspections:
27. Apply and pay for all required electrical work (construction and installation) prescribed by legally constituted public authorities.
28. Arrange and pay for all required inspections or examinations and shall deliver "certifications" of such inspections to the Architect or City Engineer prior to acceptance of the electrical work. Obtain approved plans from the Los Angeles City Department of Building and Safety.
J. Site Inspections:
29. Carefully examine the job-site and existing facilities and prepare the Contract Drawings for work coordination.
30. By act of submitting bid, it will be deemed the Contractor has made required inspections and has accepted such job-site conditions and has made allowances thereof in the preparation of "Bid" figures.
K. Verification of Dimensions: All dimensions (scaled, figured or noted) are approximate, given for estimating purposes. Before proceeding with work Contractor shall carefully check and verify all dimensions, sizes, etc. and shall assume full responsibility for proper fitting in and attachment of all materials and equipment to other equipment and to the structure.
L. Examination of the Contract Drawings:
31. No contract drawings are provided. Contractor to provide all relative documentation required successfully install electrical system. Plans shall be stamped by a licensed, by the state of California, Electrical Engineer.
M. Substitutions:
32. Items, articles or products named on the Contract Drawings and in the Specifications are intended to establish a standard of quality and required functional performance.
N. Submittals:
33. Prepare, review and coordinate schedule of submittals, determining necessary lead time for preparation, submitting, checking, and ordering and delivering materials and equipment to the job-site for timely arrival and conformance with the overall Construction schedule.
34. All submittals will be checked for general compliance with Specifications only.
35. Shop drawings shall be submitted in completed groups of materials (i.e., all lighting fixtures or all switchgear, etc.). The Contractor shall add and sign the following paragraph on all equipment and materials submitted for review.
e. "It is hereby certified that the (equipment) (material) shown and marked in this submittal is that proposed to be incorporated into the project; is in compliance with the Contract Drawings and Specifications and can be installed in the allocated spaces".
f. Failure to add the above written statement for compliance will result in return of submittals to be reviewed.
36. All required submittals on electrical items and equipment shall include complete catalog information such as construction ratings, insulation systems, including manufacturer's certification that items or equipment meet or exceed U.L. and Trade Standards, and the Specifications.
37. Equipment Floor Plans: Submit after approval of material and/or equipment is secured. Prepare for each electrical equipment room drawn to 2" = 10" scale. Layout drawing shall be to exact scale.
6. Materials list of items and equipment proposed to be provided for the work of this Division 16 and shall include the following as applicable:
g. Service and distribution switchgear.
h. Motor control centers.
i. Central battery inverter.
j. Lighting panelboards.
k. Dry type transformers.
l. Conduits.
m. Conductors.
n. Electrical equipment layout at 2" = 1'-0" scale indicating exact dimensions of equipment, clearances, housekeeping pads.
o. Disconnect switches, pull boxes and fuses.
p. Lighting fixtures.
q. Fire alarm and detection system.
r. Control devices, standard and special receptacles, switches and finish device plates.
s. Cabinets for signal and telephone systems, special terminals and cabinets.
t. Vibration isolators, including lateral and vertical seismic restraints.
u. All fabricated equipment.

- u.Clock and program system.
v.Time clocks, contactors, control switches, etc. including wiring diagrams and sequence of operation.

Special Submissions:

- 38. Test Reports For The Following:
w.Ground fault devices.
x. Megger Readings: Ground system, motors, feeders and switchgear.
y. Voltage Readings: Distribution, service and motors.
z. Fire alarm system.
39. Maintenance service and operating manuals for all equipment.
40. Items as outlined in other Sections.

P. "No Exceptions Taken": Be responsible for equipment ordered and/or installed prior to receipt of shop drawings returned from the Architect bearing the Electrical Engineer's stamp of "No Exceptions Taken". Corrections or modifications to equipment as noted on shop drawings shall be performed or equipment removed from the job site at request of Architect without additional compensation.

Q. Disapprovals: Any article or equipment supplied by the Contractor disapproved by the Architect or City Engineer as not conforming to the Specifications or not of proper quality or grade or suitability shall be deleted and suitable article or equipment be provided in lieu thereof in conformance with the Specifications at no added cost to the City.

Terminology:

\*Note: Specifier should name at least two manufacturers plus the words "or equal".

S. Contract Drawings: Make such drawings sufficiently complete for the proper installation and operation of the proposed materials or equipment, and for construction by all of the involved trades of the proposed revisions.

The cost of the drawings and any revisions to them do to review process comments shall be borne by the Contractor.

T. Record Drawings: Provide as-built record drawings for all work done. See also applicable provisions of THE GENERAL REQUIREMENTS.

U. Operation and Maintenance Manuals: Prior to final acceptance of Contracted Work by the City, furnish 4 bound copies of operation and maintenance manuals for each electrical equipment, as required in this Section. The contents shall include description of equipment, names of manufacturers, parts lists, model numbers, maintenance schedules, location of nearest facility for replacement parts or service, wiring and connection diagrams, internal schematic drawings, and other electrical/mechanical data necessary for operation and maintenance.

(END OF SECTION)

General Grading Notes:

- 1) All trees to be planted in either an elevated berm or elevated planter. There shall be a minimum of 3' of clean soil between the top of the non permeable soil slab and the area where with the trees are to be planted.
2) Contractor will provide all necessary agronomic suitability soil testing on site.
3) Contractor to provide licensed hazardous waste hauler and provide manifest copies to the City prior to completion of the project.
4) Contractor to pay and process a City of Los Angeles Department of Building and Safety grading and haul route permit.
5) If any abandoned oil wells are encountered, the contractor shall contact the State Division of Oil, Gas and Geothermal Resources for inspection and direction. All work within an approximate radius of 50 feet, and or any work that is requiring a access through the radius as indicated above, of any unforeseen oil well shall stop until appropriate direction is received from the City.
6) Contractor shall have identified an area for stockpiling of soil while contamination soil results are being assembled. Stockpile shall be covered with Visqueen and secured until a appropriate site for disposal and or reuse is identified.
7) Site shall be secured with 6 foot temporary chain link fencing for the duration of the contract. During site grading and excavation, an onsite, unarmed security officer is required.
8) Any railroad tracks encountered shall be recycled. Railroad ties shall be disposed of at appropriate landfill.
9) All grading & drainage plans and sportsfield lighting foundations shall be designed, approved, wet stamped, and signed by a California licensed civil engineer.
10. Complete 3 grow and kill cycles on the site prior to commencement of construction. Grow and Kills to utilized a RAP approved herbicide. Verify herbicide with RAP Forestry Division prior to use.
11. All debris and deleterious material to be removed and disposed of at a Los Angeles City approved facility for such.
12. Dust to be control via site watering. Contractor to adhere to BMP practices applicable to this site and project.

TREE PROTECTION SPECIFICATIONS

1.01 TREE PROTECTION

- (a) All trees that occur within the area of work, as shown on the plans, and NOT specifically designated for removal, shall be protected by the following means:
1. ANY FAILURE BY THE CONTRACTOR TO ADHERE TO THE REQUIREMENTS SPECIFIED BELOW WILL RESULT IN THE SUSPENSION OF ALL CONSTRUCTION ACTIVITIES, TO BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF OR PAYMENT FOR ANY TREES DAMAGED THROUGH NON-COMPLIANCE WITH THESE SPECIFICATIONS. THE MONETARY OR REPLACEMENT VALUE OF IMPACTED TREES WILL BE DETERMINED BY A RECREATION AND PARKS (RAP) ARBORIST OR BY A RAP APPROVED ARBORIST.
2. Defining the Tree Protection Zone (TPZ) - The radius (not the diameter) of the TPZ, measured from the outside of the tree trunk, shall be calculated according to the following:
(a) Single trunk trees - multiply the trunk diameter in inches, measured 4.5' above grade, by 1.5 feet.
(b) Multi trunk trees - multiply the sum of the diameters of all trunks in inches, measured 4.5' above grade, by 1.5 feet.
(c) Palm trees - 5' from the base of the trunk.
3. Beyond the TPZ, the contractor shall also be responsible for protecting all trees within the boundaries of the construction zone, including vehicular access areas, lay down areas, and any other areas impacted by construction activities. Any damage to trees in these areas shall also be subject to the same monetary or replacement requirements specified in #1 above. Any necessary root cutting in this area must be confirmed with either the RAP or other approved arborist. See also the General Conditions for any damage done by the contractor to landscaping or other park amenities that fall outside the boundaries of the construction zone.
4. Within the boundaries of the construction zone (including the TPZ), the contractor shall be responsible for mitigating construction-related dust accumulation on all trees by spraying the trunks, limbs, and foliage with water to a maximum height of 30 feet during the months of April through November, at monthly intervals.
5. Within the TPZ, the contractor shall adhere to the following requirements, including, but not limited to:
(a) No stockpiling or storage of any material, debris, or soil.
(b) No storage of any construction equipment.
(c) No vehicular access.
(d) No cutting of roots.
(e) No disturbance of soil or grade changes.
(f) No objects of any kind to be attached to tree trunks.
6. The contractor shall install a 5' temporary chain link fence with one pedestrian access gate along the boundary of the TPZ. See detail for temporary chain link fence on detail sheet.
7. The contractor shall provide one sign per each 20 linear ft. of fence bordering the TPZ indicating that fencing shall not be removed. See sign detail that is included as part of the temporary chain link detail.

8. No work is permitted within the TPZ without the approval of: 1) the project landscape architect, 2) the project manager, and 3) RAP Forestry staff. Any work authorized within the TPZ must be done in accordance with the recommendations of a RAP arborist and under the supervision of a Monitoring Arborist. A Monitoring Arborist must be: 1) an ISA Certified Arborist or a Registered Consulting Arborist, with verifiable experience in protecting trees during construction; 2) approved by RAP Forestry. The Monitoring Arborist shall be hired and paid by the contractor.

9. Irrigation to all trees NOT specifically designated for removal shall be kept in operation for the duration of the project. Contractor shall be responsible for hand watering all impacted trees if necessitated by temporary shutdowns to existing irrigation systems. Trees are to be irrigated deeply and infrequently so that soil moisture is detectable at a minimum depth of 18" using a soil probe.

10. Upon job completion, contractor shall remove all items installed to protect trees during the construction process.

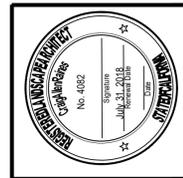
- 11. Any of the following Southern California native tree species fall under Ordinance No. 177404 of the Los Angeles Municipal Code:
(a) Oaks, including Valley Oak (Quercus lobata), California Live Oak (Quercus agrifolia), or any other tree of the oak genus indigenous to California but excluding Scrub Oak (Quercus dumosa);
(b) Southern California Black Walnut (Juglans californica var. californica);
(c) Western Sycamore (Platanus racemosa);
(d) California Bay (Umbellularia californica).
Contractor shall comply with the requirements of the ordinance found at: http://cityplanning.lacity.org/Code\_Summary/Other/ProtectedTreeOrd.pdf.

S:\Tree Protection\Tree Protection Specifications - April 3 2014

(END OF SECTION)



Vertical title block containing project name '318 N Mathews Street Park', project manager 'Michael Shull', assistant gen. manager 'Ramon Barajas', and various license numbers.



Project name and address block: '318 N Mathews Street Park', '318 N Mathews St', 'Los Angeles, CA 90033'.

Table with columns for REVISIONS and DATE, containing five empty rows for tracking changes.

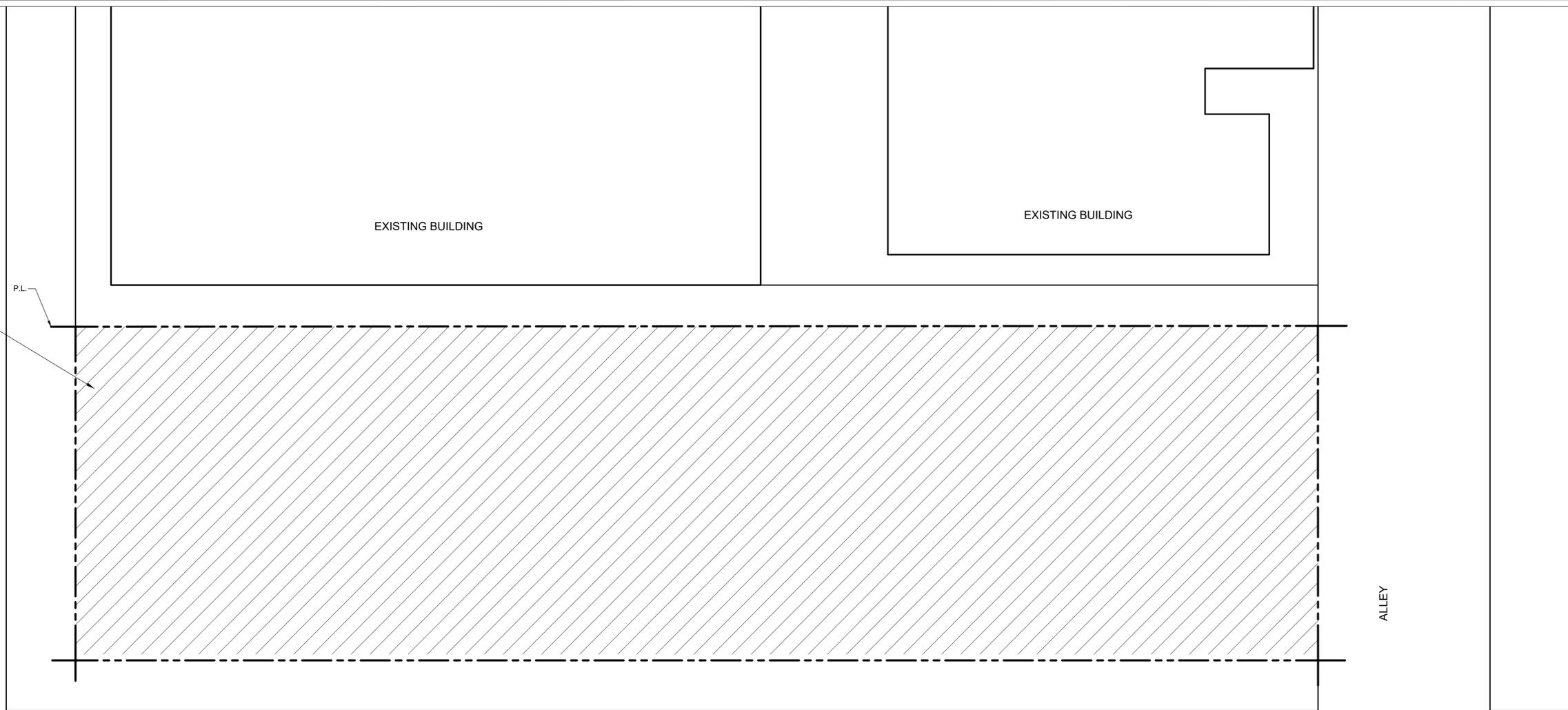
Plan name 'specifications', drawing number 'SP-03', and sheet information 'SHEET OF SHEETS'.

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REMOVE ALL THE MATERIAL, CONCRETE SURFACE, ALL THE PLANTS EXISTING TURF CURBS, AND DELETERIOUS MATERIAL OVER 1" DIAMETER.

AREA: 7590 SQ.FT

318 N MATHEWS ST.



ALLEY

ALLEY

EXISTING BUILDING

EXISTING BUILDING

EXISTING BUILDING

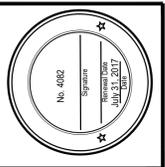


NOTE:

LAYOUT OF ALL PROPOSED SITE ELEMENT WILL BE DONE UNDER THE SUPERVISION OF THE PROJECT LANDSCAPE ARCH IN RAP.



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: MICHAEL A. SHULL ASSISTANT GEN. MANAGER: RAMON BARRAJAS  
PROJECT LANDSCAPE ARCHITECT: CAMERON BARNES LIC. NO. 4881  
PROJECT ENGINEER: LIC. NO. DATE  
AS BUILT DRAWN BY:



PROJECT NAME:  
**MATHEWS STREET PARK**  
ADDRESS: 318 N. Mathews Street,  
Los Angeles, CA 90004

REVISIONS:	DATE:
△	
△	
△	
△	
△	

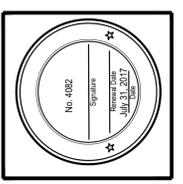
PLAN NAME:  
**DEMOLISH PLAN**

DRAWN BY:  
DATA HUNG  
CHECKED BY:  
SCALE:  
1" = 1'-0"  
PRJ # FILE NO.

DRAWING NO.  
**LS-00**  
SHEET OF SHEETS



THE CITY OF LOS ANGELES  
 DEPARTMENT OF RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL  
 ASSISTANT GEN. MANAGER: RAMON BARAJAS  
 PROJECT LANDSCAPE ARCHITECT: CRAM BAINES  
 PROJECT ENGINEER: [Signature]  
 LIC. NO. 4882  
 DATE: [Blank]



PROJECT NAME:  
**MATHEWS STREET PARK**  
 ADDRESS:  
**318 N. Mathews Street,  
 Los Angeles, CA 90004**

REVISIONS:	DATE:

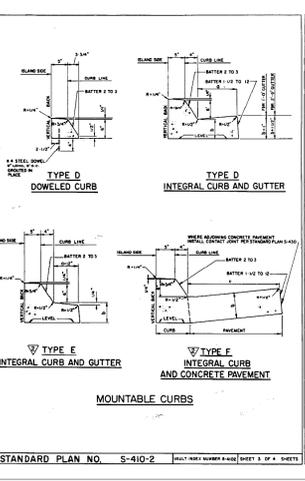
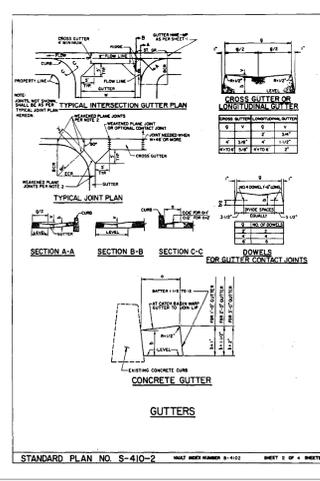
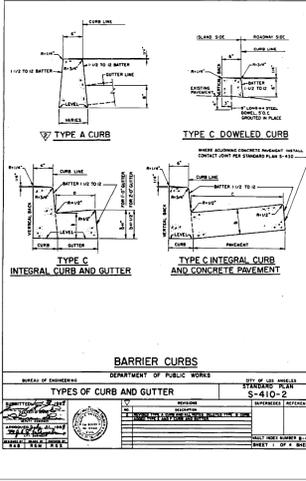
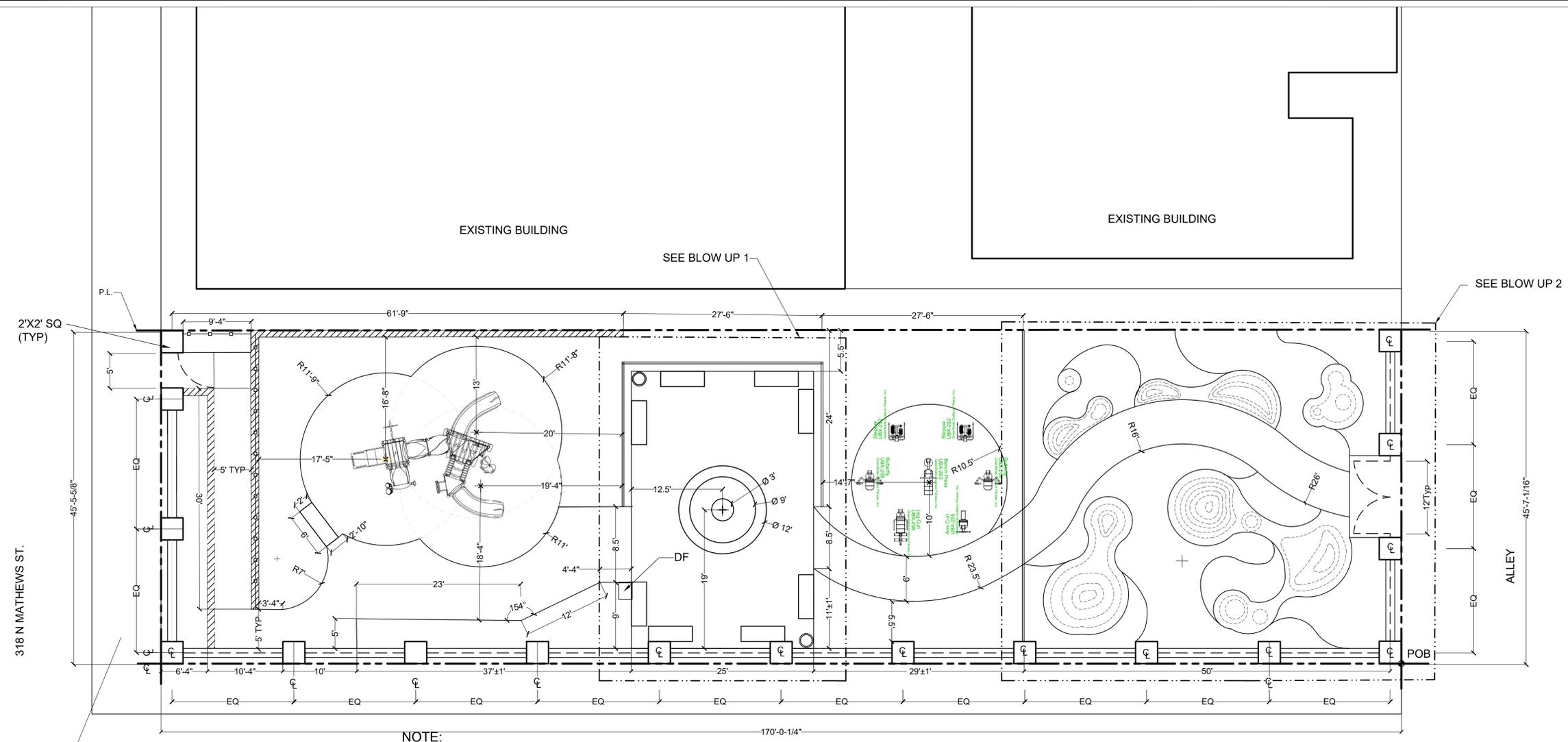
PLAN NAME:  
**LAYOUT PLAN**

DRAWN BY:  
 [Signature]  
 SCALE: 1"=10'

APPROVED BY:  
 [Signature]  
 ISSUE DATE:  
 [Blank]

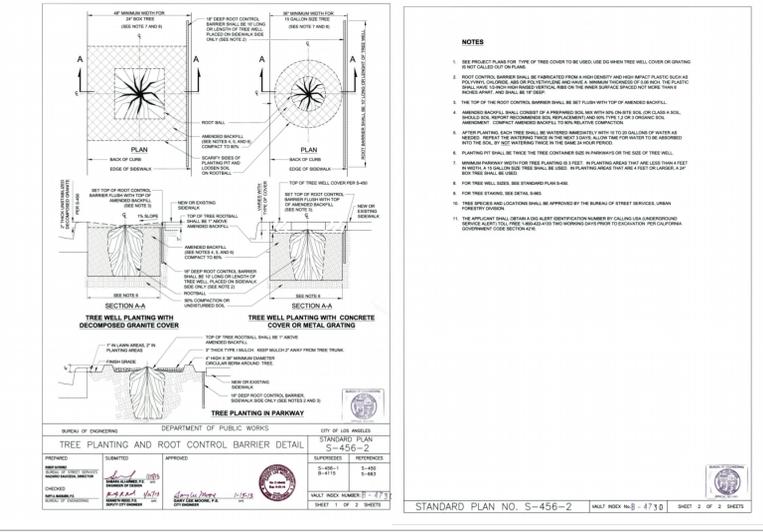
DRAWING NO.  
**LS-01**

SHEET OF SHEETS



**NOTES**

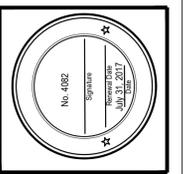
1. CURBS AND GUTTERS SHALL BE CONSTRUCTED OF PCC CONFORMING TO SUBSECTION 801-1 AND 801-2.
2. REINFORCED-PLANE JOINTS IN CURBS AND GUTTERS SHALL CONFORM TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SUBSECTION 303-4.3 (C) OR SHALL BE 1/2" DEEP SMOOTH JOINTS WITH A 1/2" MINIMUM JOINT SEALANT.
3. CURBS SHALL BE CONSTRUCTED ADJACENT TO EXISTING CURBS UNLESS OTHERWISE SPECIFIED BY THE DESIGNER. THE MINIMUM TRANSITION LENGTH SHALL BE:
4. THE MINIMUM TRANSITION LENGTH SHALL BE:
5. THE MINIMUM TRANSITION LENGTH SHALL BE:
6. MOUNTABLE CURBS SHALL NOT BE USED ADJACENT TO PEDESTRIAN WALKWAYS.
7. DIMENSIONS UNLESS OTHERWISE SPECIFIED:







THE CITY OF LOS ANGELES  
 DEPARTMENT OF RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL  
 ASSISTANT GEN. MANAGER: RAMON BARAJAS  
 PROJECT LANDSCAPE ARCHITECT: GRADUATES  
 PROJECT ENGINEER: \_\_\_\_\_  
 AS-BUILT DRAWING: \_\_\_\_\_



PROJECT NAME:  
**MATHEWS STREET PARK**  
 ADDRESS:  
**318 N. Mathews Street,  
 Los Angeles, CA 90004**

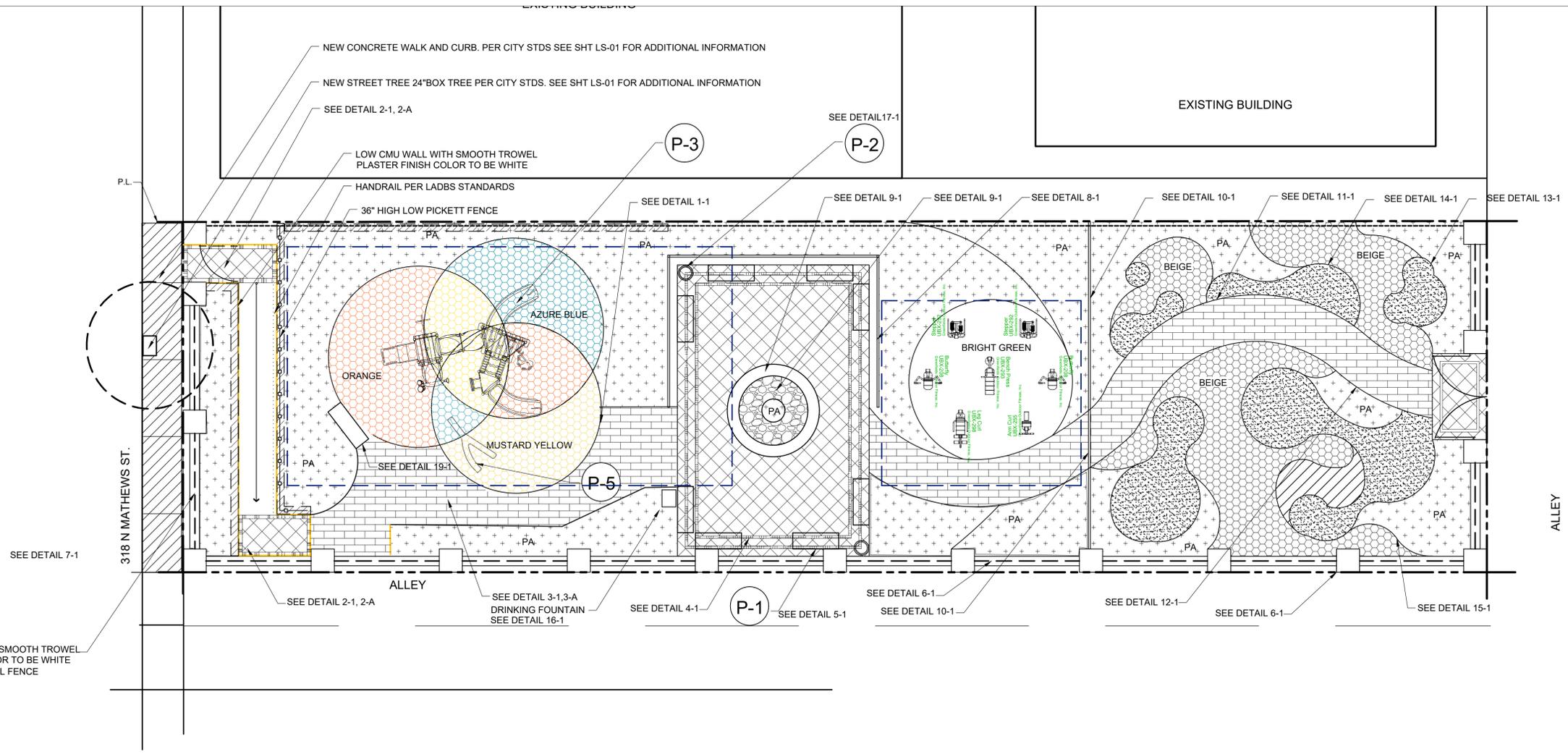
REVISIONS:	DATE:

PLAN NAME:  
**MATERIAL**

DRAWN BY: ZHY HANG (CONTR.)	APPROVED BY: 
SCALE: 1" = 1'-0"	ISSUE DATE: 
PRJ #	FILE NO.

DRAWING NO.  
**LS-03**

SHEET OF SHEETS



**MATERIALS LEGEND:**

SYMBOL	NAME	SOURCES	SQ.F	DETAIL
	PRAIA GRAY 24"x24" PORCELAIN PAVERS	Bourget Flagstone Co. or submitted approved equal	1002	2-1 2-A 4-1
	RESILIENT SURFACE WEAR COURSE: 3/8" TO 1/2" THICK EPDM GRANULES COLORED WITH URETHANE RESIN, TYP.	Game time or submitted approved equal	2036	1-1 14-1 15-1
	6" X 9" X 2 3/8" GRAY RECTANGLE CAMBRIDGE COBBLE PAVERS	Bourget Flagstone Co. or submitted approved equal	925	3-1 3-A
	SYNTHETIC TURF BE FOREVER LONG	K9 turf of submitted approved equal	543	11-1 13-1 14-1
	4"X4"ITALIA PORFIDI COBBLESTONE PAVERS	Bourget Flagstone Co. or submitted approved equal	96	2-1 2-A 4-1
	CRUSHED GLASS (S( 40% LIGHT BLUE,20% RED,20% ORANGE, 20% YELLOW)	Smoken' barrel works or submitted approved equal	57	9-1

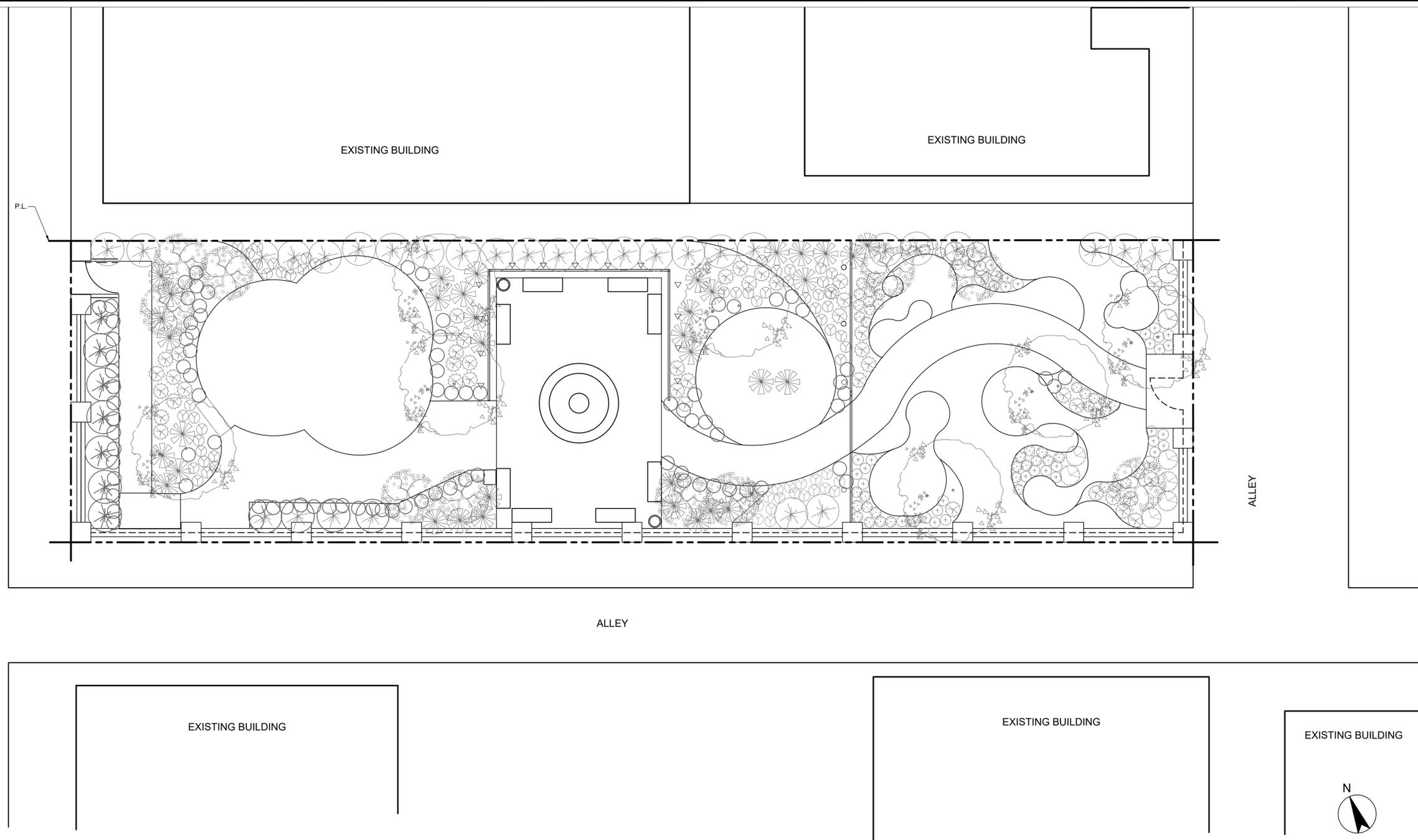
SYMBOL NUMBER	MODEL NUMBER	USE ZONE	RESOURCE
	72" PLANWELL METAL BENCH, BLACK ARMS AND LEGS, BRONZE SURFACE	26" * 73" * 32"	Landscape form or submitted approved equal
	SIDE-OPENING METAL LITTER RECEPTACLES, 30 ø, BLACK	30" * 30"	Landscape form or submitted approved equal
	PCE 1107 AYERS RPCK	28'10" * 28'10"	Kompan or submitted approved equal
	POD 6232	12' * 12'	Gametime or submitted approved equal
	FORKED LOG BALANCE BEAM 38233	19' * 14'	Gametime or submitted approved equal
	SMALL SPROUT 5140	12' * 12'	Gametime or submitted approved equal
	ELE400158 SPINNER BOWL	13.9' * 13.9'	Kompan or submitted approved equal
	ELE 400007 NAVIGATOR	17.7' * 17.7'	Kompan or submitted approved equal

EXISTING BUILDING



THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

318 N MATHEWS ST.



**SHRUBS:**

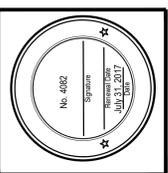
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPC COLUMN	QUANTITY	RESOURCE
	CALLISTEMON 'LITTLE JOHN'	LITTLE JOHN DWARF BOTTLEBRUSH	5 GAL.	2'	32	MONROVIA OR APPROVED AS EQUAL
	PHORMIUM 'MAORI MAIDEN'	RAINBOW MAIDEN	5 GAL.	4'	9	MONROVIA OR APPROVED AS EQUAL
	LANTANA CAMARA 'MONIKE'	COMPACT LANTANA	1 GAL.	2'	41	MONROVIA OR APPROVED AS EQUAL
	HEMEROCALLIS	DAYLILY	1 GAL.	1'	67	EL NATIVO GROWERS OR APPROVED AS EQUAL
	MAIREANA SEDIFOLIA	PEARL BLUEBUSH	1 GAL.	2'	15	MONROVIA OR APPROVED AS EQUAL
	EURYOPS PECTINATUS 'VIRIDIS'	GREEN-LEAVED EURYOPS	5 GAL.	4'	17	MONROVIA OR APPROVED AS EQUAL
	DIANELLA 'LITTLE REV'		1 GAL.	2'	100	SAN MARCOS NURSERY

**TREES & VINES:**

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPC COLUMN	QUANTITY	RESOURCE
	PARKINSONIA ACULEATA	PALO VERD	36" BOX		5	SAN MARCOS GROWERS OR APPROVED AS EQUAL
	OLEA EUROPAEA 'MONHER'	FRUITLESS OLIVE	36" BOX		8	MONROVIA OR APPROVED AS EQUAL
	CUPRESSUS SEMPERVIRENS	ITALIAN CYPRESS	24" BOX	5'	14	SAN MARCOS GROWERS OR APPROVED AS EQUAL
	BOUGAINVILLEA JAMES WALKER	BOUGAINVILLEA	15 GAL.	5'	4	SAN MARCOS GROWERS OR APPROVED AS EQUAL
	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	15 GAL.	5'	35	EL NATIVO GROWERS OR APPROVED AS EQUAL



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: MICHAEL A. SHULL ASSISTANT GEN. MANAGER: RAMON BARAJAS  
PROJECT LANDSCAPE ARCHITECT: [NAME] LIC. NO. [NO.]  
PROJECT ENGINEER: [NAME] LIC. NO. [NO.]  
AS BUILT DRAWN BY: [NAME] DATE: [DATE]



PROJECT NAME:  
**MATHEWS STREET PARK**  
ADDRESS:  
**318 N. Mathews Street,  
Los Angeles, CA 90004**

REVISIONS:	DATE:
△	
△	
△	
△	
△	
△	

PLAN NAME:  
**PLANTING**

DRAWN BY: [NAME] APPROVED BY: [NAME]  
SCALE: 1/8" = 1'-0" ISSUE DATE:  
PRJ # [NO.] FILE NO. [NO.]

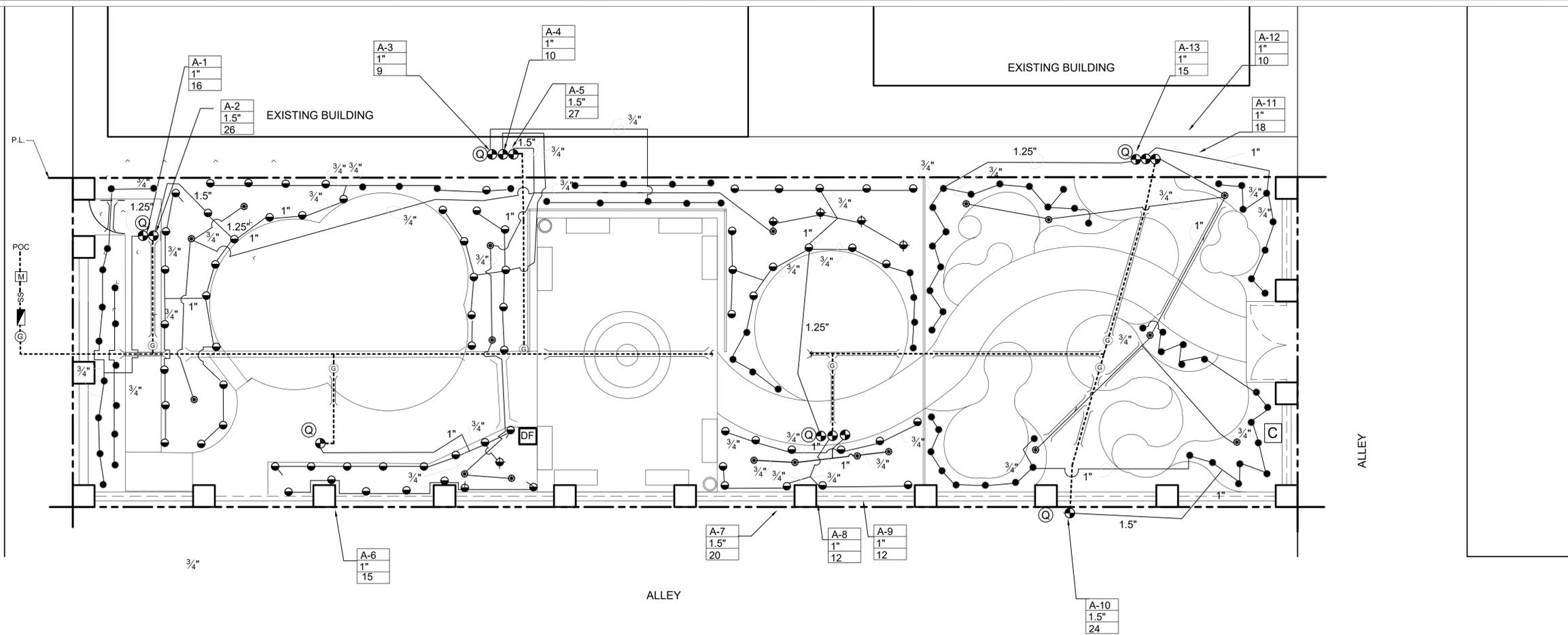
DRAWING NO.  
**LS-04**

SHEET OF SHEETS

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

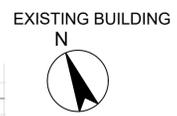
STATIC WATER PRESSURE:  
Max: 77 Min: 63  
  
CONNECT TO  
EXISTING MAIN LINE

318 N MATHEWS ST.



EXISTING BUILDING							
IRRIGATION LEGEND:							
SYMBOL	QUANTITY	MANUFACTURER/MODEL/DESCRIPTION	DEGREE	PSI	GPM	RADIUS	REMARKS
	20	1806 Series Spray Heads 8 Series SAM-PRS	360,180,90	30	0.83-1.17	8'	ADJUST ARC AND RADIUS AS NEEDED
	78	1806 Series Spray Heads 12 Series SAM-PRS	180	30	0.41-0.59	10-12'	ADJUST ARC AND RADIUS AS NEEDED
	38	1400 Series Pressure Compensating Bubbler	90-360	30	1	3'	
	29	Rainbird Deep Water Tree Bubbler Three/ per tree	360	30	1 GPM PER HEAD		ADJUST ARC AND RADIUS AS NEEDED
	7	NIBCO T-113 OR APPROVED EQUALCLASS 125 BRONZE GATE SHUT OFF VALVE WITH WHEEL HANDLE, SAME SIZE AS PIPE DIAMETER, SIZE RANGE: 3/4"-1 1/2"					INSTALL PER DETAIL SEE SHEET LS-06
	16	BUCKNER SUPERIOR 950 BRASS INDUSTRIAL ELECTRIC REMOTE CONTROL VALVE, SEE PLAN CALLOUT FOR VALVE SIZE.					INSTALL PER DETAIL SEE SHEET LS-06
		NETAFIM LOW VOLUME CONTROL ZONE KIT LCV2S8010075 - LOW FLOW KIT WITH 1" CONTROL VALVE					
		LATERAL LINE, P.V.C. SCH. 40; SOLVENT WELD, SIZE AS NOTED ON PLAN.					INSTALL PER DETAIL SEE SHEET LS-06
		PVC SLEEVE UNDER PAVING. SCHEDULE 40 PVC SLEEVE SHALL BE TWO PIPE SIZES GREATER THAN PIPING WHICH IS TO RUN IN THE SLEEVE, OR 4" DIA. FOR CONTROL WIRES WITHOUT MAINLINE. COVER DEPTH SHALL BE THE SAME AS THE MAINLINE					INSTALL PER DETAIL SEE SHEET LS-06
	1	FLOW METER AND MASTER VALVE: TO BE BERMAID 1 1/2" 910 MODEL. FLOW SENSING NORMALLY OPEN. 24 AC INSTALL PER MFG. CONNECT TO CONTROLLER					INSTALL PER DETAIL SEE SHEET LS-06
	1	NEW BACKFLOW ENCLOSURE					INSTALL PER DETAIL SEE SHEET LS-06
	1	FEBCO 825YD 2" REDUCED PRESSURE TYPE BACKFLOW DEVICE WITH LINE SIZE "Y" STRAINER AND BERMAID #790 BURST CONTROL VALVE.					INSTALL PER DETAIL SEE SHEET LS-06
	1	RAINBIRD: ESP LXME -24 STATION W/ ENCLOSURE					USE PVC CONDUIT FOR WIRE BURIAL (NO DIRECT BURIAL) INSTALL IN METAL ENCLOSURE PER DETAIL SEE SHEET LS-09
		1" RAINBIRD QUICK COUPLER					

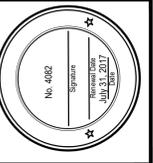
EXISTING BUILDING							
SIZE	DESCRIPTION	Length	PSI loss/100'	GPM	LOSS		
2"	SERVICE LINE			30.0			
1 1/2"	WATER METER			30.0			
3"	BACKFLOW PREVENTER			30.0			
1 1/2"	MASTER VALVE			30.0			10.00
1 1/2"	FLOW SENSOR			30.0			
1 1/2"	PRESSURE REGULATOR			30.0			
	GATE / BALL VALVE			30.0			
1 1/2"	REMOTE CONTROL VALVE			30.0			
3"	MAINLINE	0	1.10	110.0		0.00	
2"	MAINLINE	168	1.74	50.0		2.92	
1 1/2"	LATERAL LINE	0	2.28	30.0		0	
1 1/4"	LATERAL LINE	80	2.72	22.0		2.176	
1"	LATERAL LINE	0	3.70	12.0		0	
3/4"	LATERAL LINE		4.50	7.0		0	
TOTAL PVC LATERAL LINE LOSS						0.00	
PVC LATERAL LINE FITTING LOSS (10%)						0.00	
TOTAL FRICTION LOSS						15.1	
ELEVATION @ METER				0.0	HEAD ELEVATION	0.0	
ELEVATION DIFFERENCE				0.0	x	0.433	0.00
PSI REQUIRED AT HEAD							0.0
TOTAL PSI REQUIRED						15.1	
REGULATED PRESSURE @ POC (IF APPLICABLE)						0.0	
RESIDUAL PRESSURE (MUST BE POSITIVE)						47.9	



VALVE NUMBER	IRRIG. TYPE	MPR	PH. NO.	GPM	18.0	63.0
A-5						



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: MICHAEL A. SHULL  
ASSISTANT GEN. MANAGER: RAMON BARAJAS  
PROJECT LANDSCAPE ARCHITECT: CAMERON BARNES  
PROJECT ENGINEER:  
AS BUILT BY: DATE:

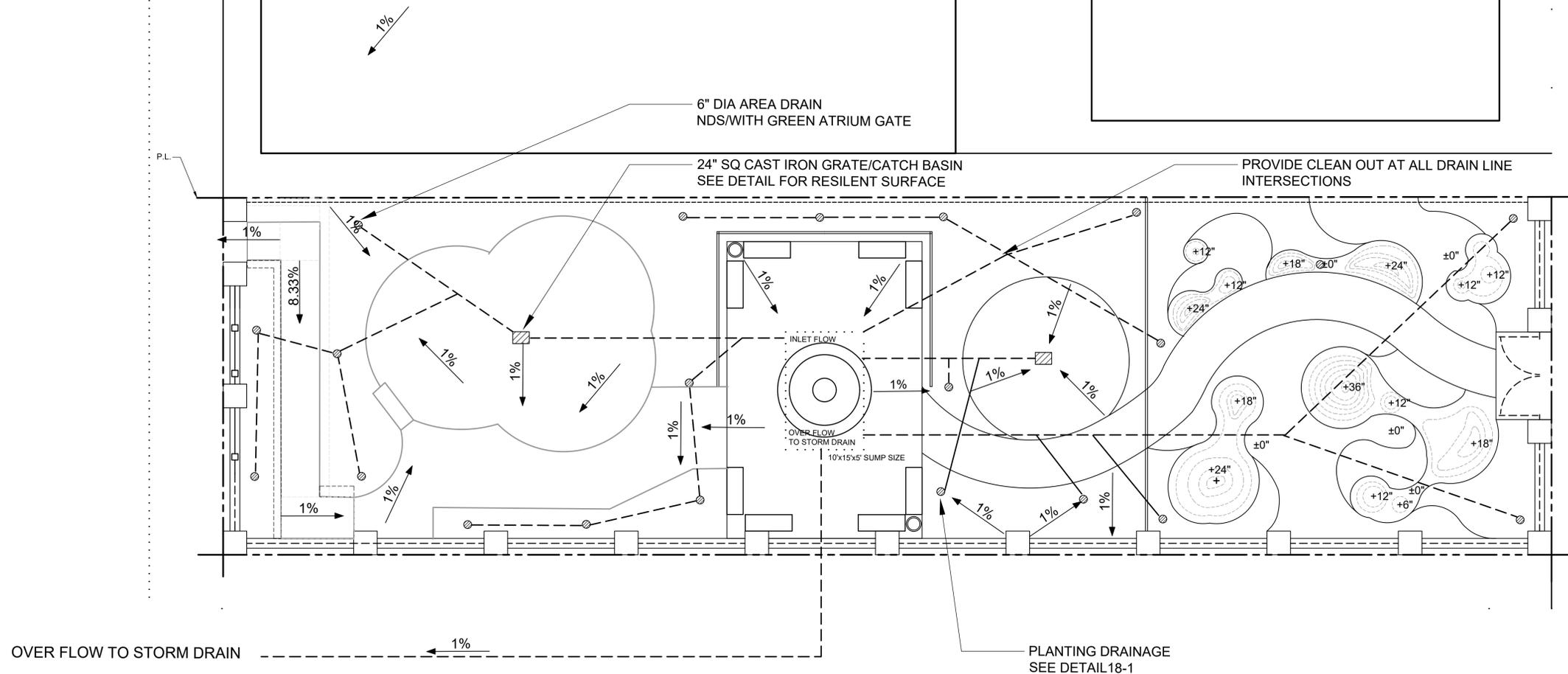


PROJECT NAME:  
**MATHEWS STREET PARK**  
ADDRESS:  
318 N. Mathews Street,  
Los Angeles, CA 90004

REVISIONS:	DATE:
△	
△	
△	
△	
△	

PLAN NAME:  
**IRRIGATION**  
  
DRAWN BY: ZIFA HANG  
CHECKED BY:  
SCALE: 1" = 1'-0"  
PRJ #  
ISSUE DATE:  
FILE NO.  
DRAWING NO.  
**LS-05**  
SHEET OF SHEETS

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



**NOTE:**

1. MAX 3% AND MIN 1% SLOPE WILL BE APPLIED IN PAVING AREA.
2. WATER TO BE RETAINED ON SITE IN SUMP.
3. LAYOUT OF ALL PROPOSED SITE ELEMENT WILL BE DONE UNDER THE SUPERVISION OF THE PROJECT LANDSCAPE ARCH CRAIG RAINES.



THE CITY OF LOS ANGELES  
 DEPARTMENT OF RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL ASSISTANT GEN. MANAGER: RAMON BARAJAS  
 PROJECT LANDSCAPE ARCHITECT: CRAIG RAINES  
 PROJECT ENGINEER: \_\_\_\_\_  
 AS BUILT'S DRAWN BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_



PROJECT NAME:  
**MATHEWS STREET PARK**  
 ADDRESS:  
 318 N. Mathews Street,  
 Los Angeles, CA 90004

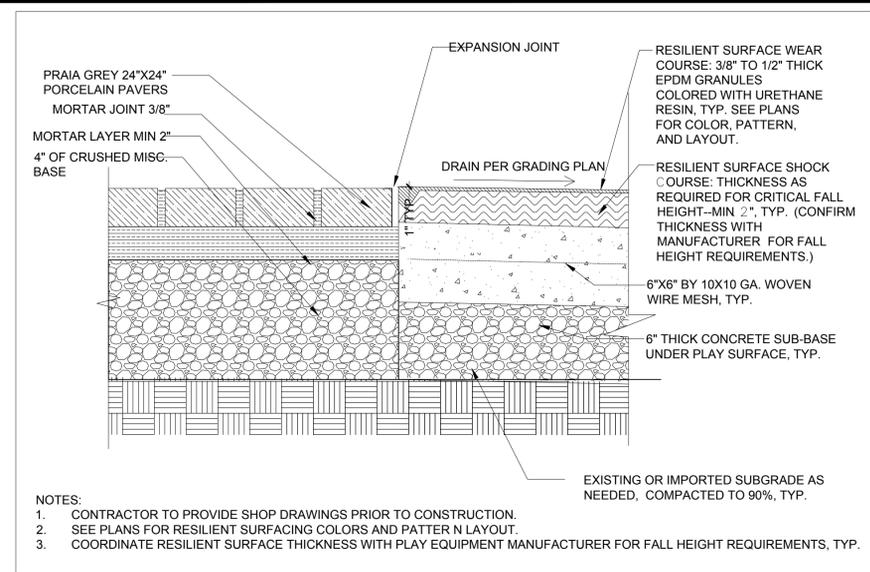
REVISIONS:	DATE:
△	
△	
△	
△	
△	
△	

PLAN NAME:  
**DRAINAGE PLAN**

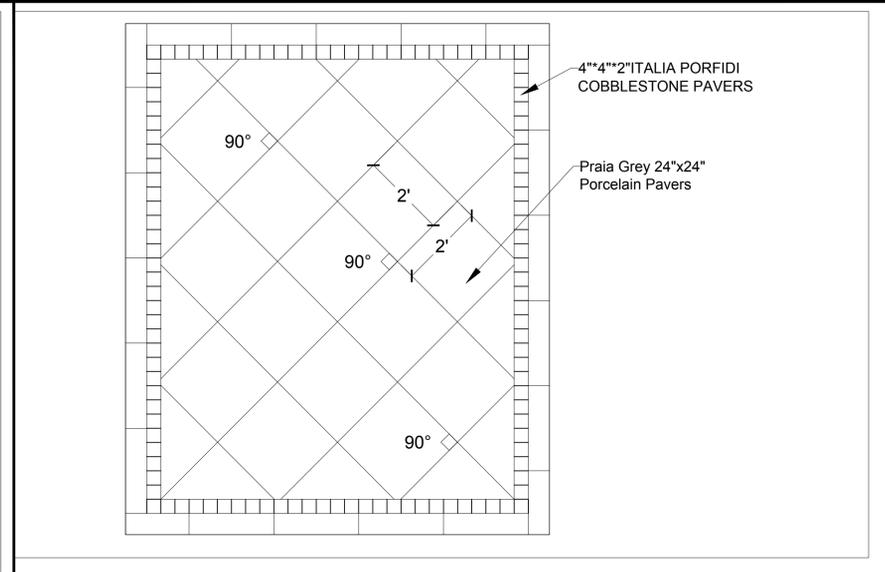
DRAWN BY: DINA RAMOS CONTRIBUTOR	APPROVED BY:
SCALE: 1" = 1'-0"	ISSUE DATE:
PRJ #	FILE NO.

DRAWING NO.  
**LS-06**  
 SHEET OF SHEETS

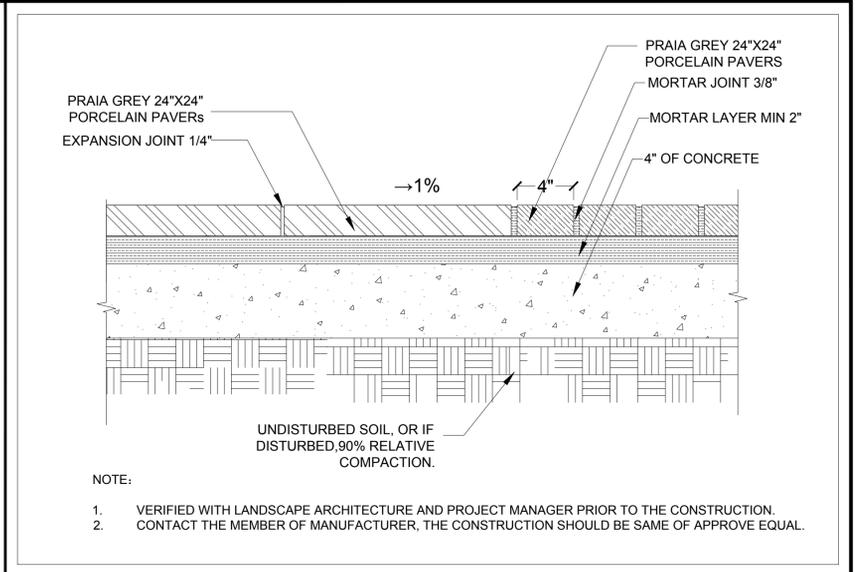
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



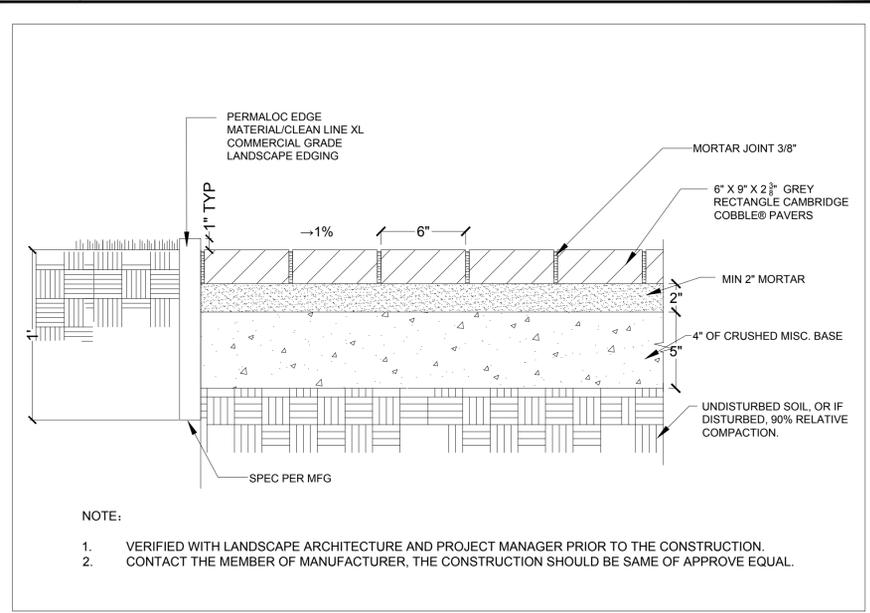
1-1 RESILIENT SURFACE & COBBLE PAVERS 2-1/2" = 1'-0"



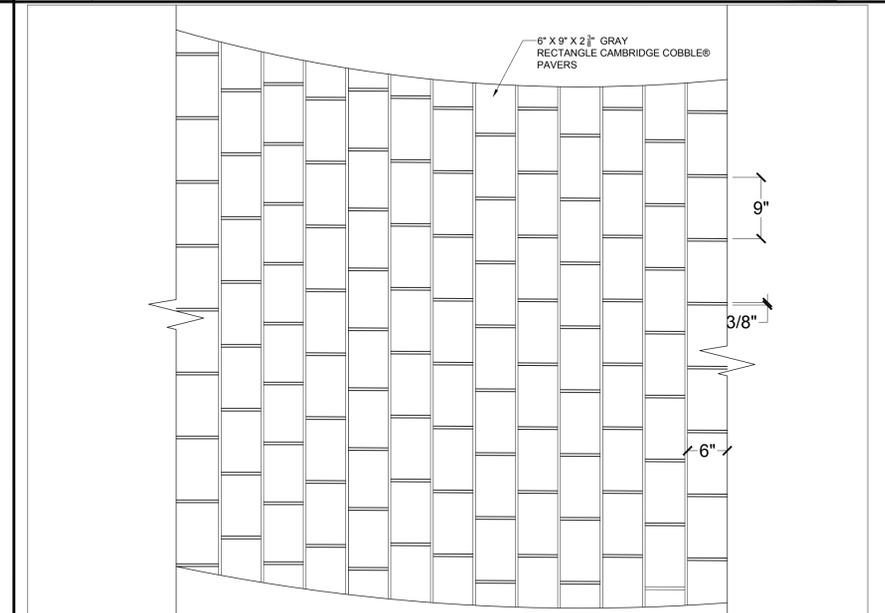
2-1 BLOW UP OF ENTRANCE GATHERING SPACE 1/2" = 1'-0"



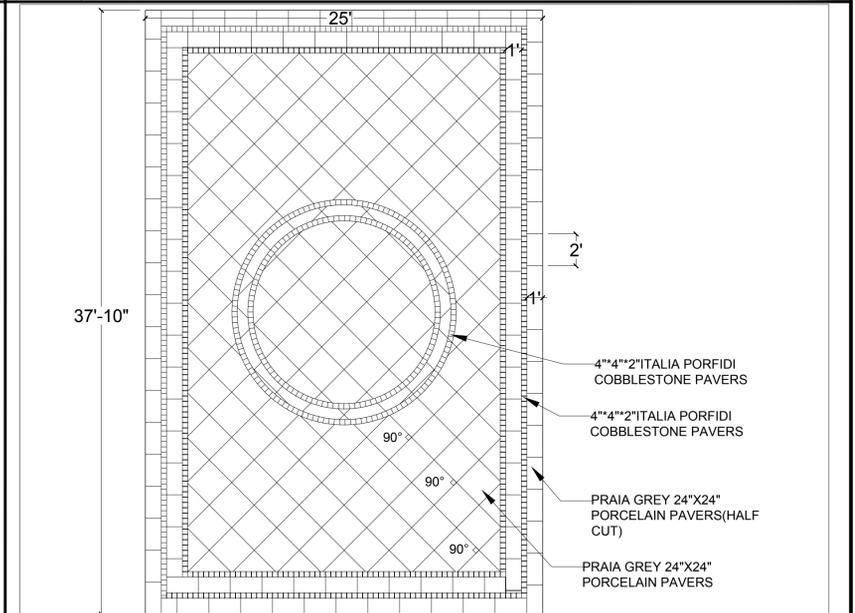
2-A ENTRANCE GATHERING SPACE 2" = 1'-0"



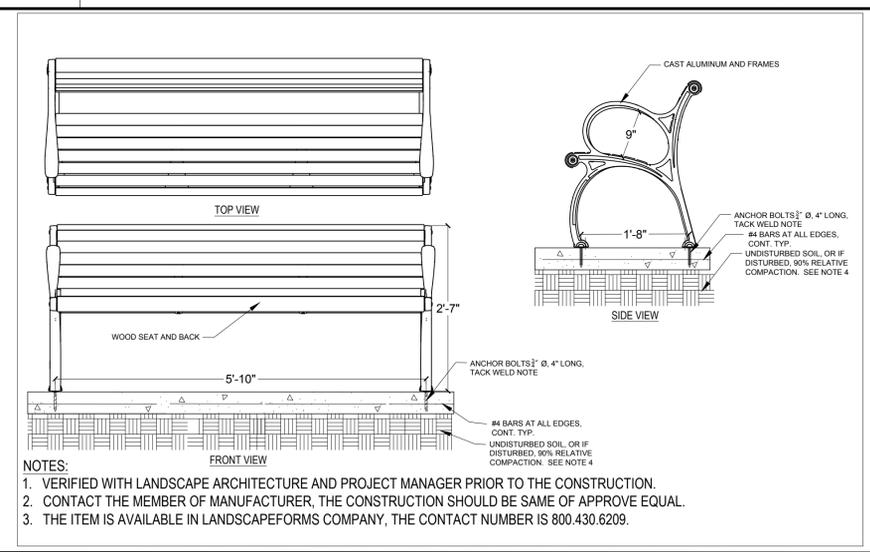
3-1 PEDESTRIAN GREY CAMBRIDGE COBBLE PAVERS 2" = 1'-0"



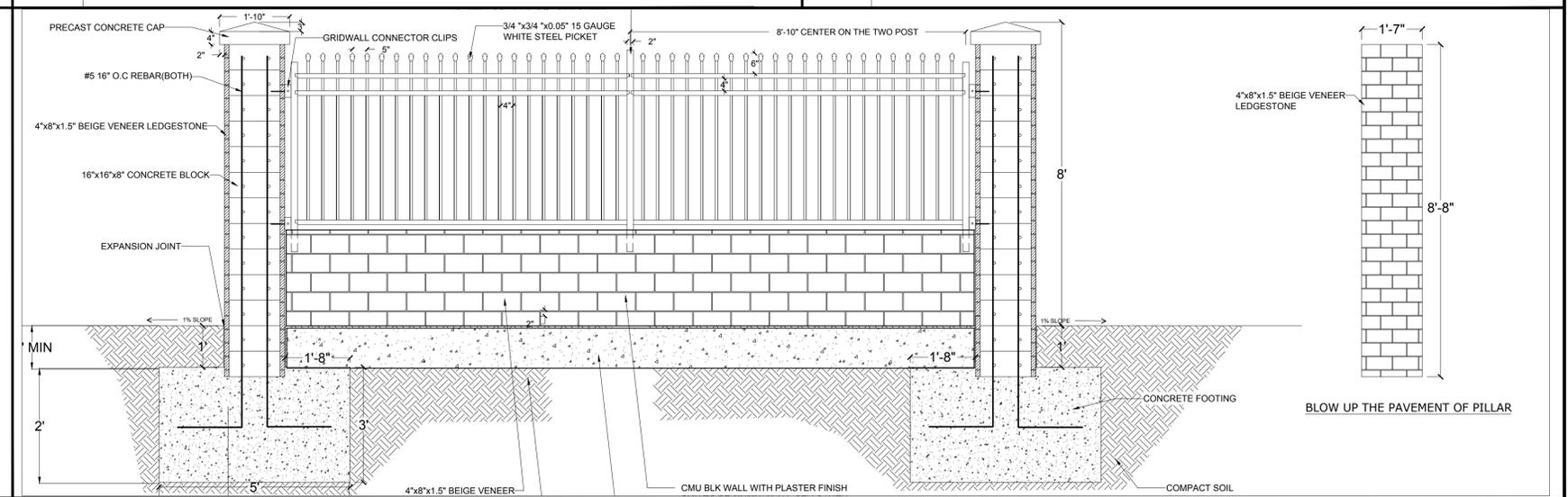
3-A PEDESTRIAN GREY CAMBRIDGE COBBLE PAVERS 1" = 1'-0"



4-1 BLOW UP OF CENTER GATHERING SPACE 3/16" = 1'-0"



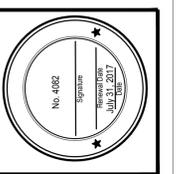
5-1 BENCH WITH WOOD SEAT, SURFACE MOUNT 3/4" = 1'-0"



6-1 BOUNDARY COLUMN WITH WHITE FENCE 1/2" = 1'-0"



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: MICHAEL A. SHULL  
PROJECT LANDSCAPE ARCHITECT: CRAIG BARNES  
PROJECT ENGINEER: ASHLEY TSOUZANIS  
ASSISTANT GEN. MANAGER: RAMON BARBAJAS  
LIC. NO. 482  
LIC. NO.  
DATE:

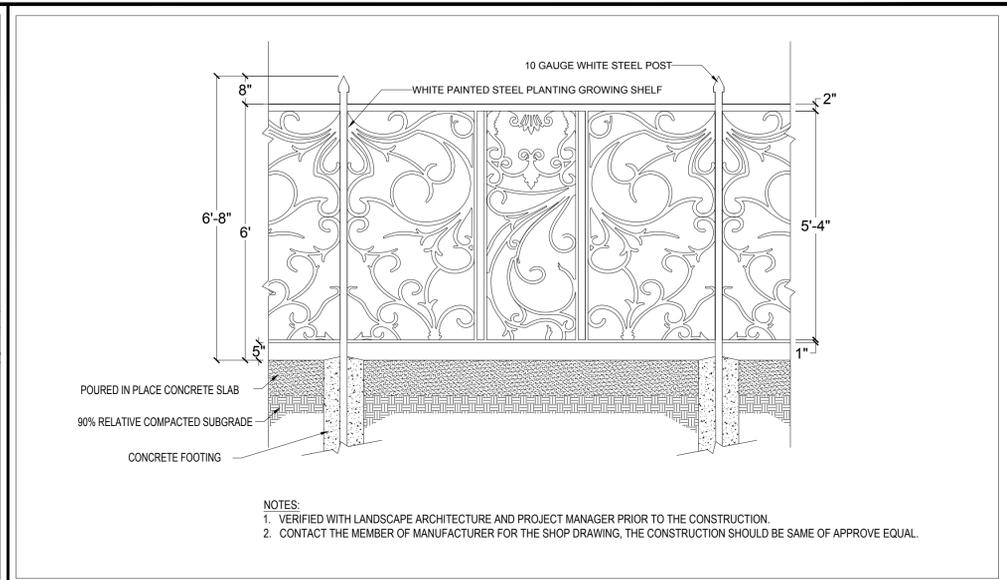
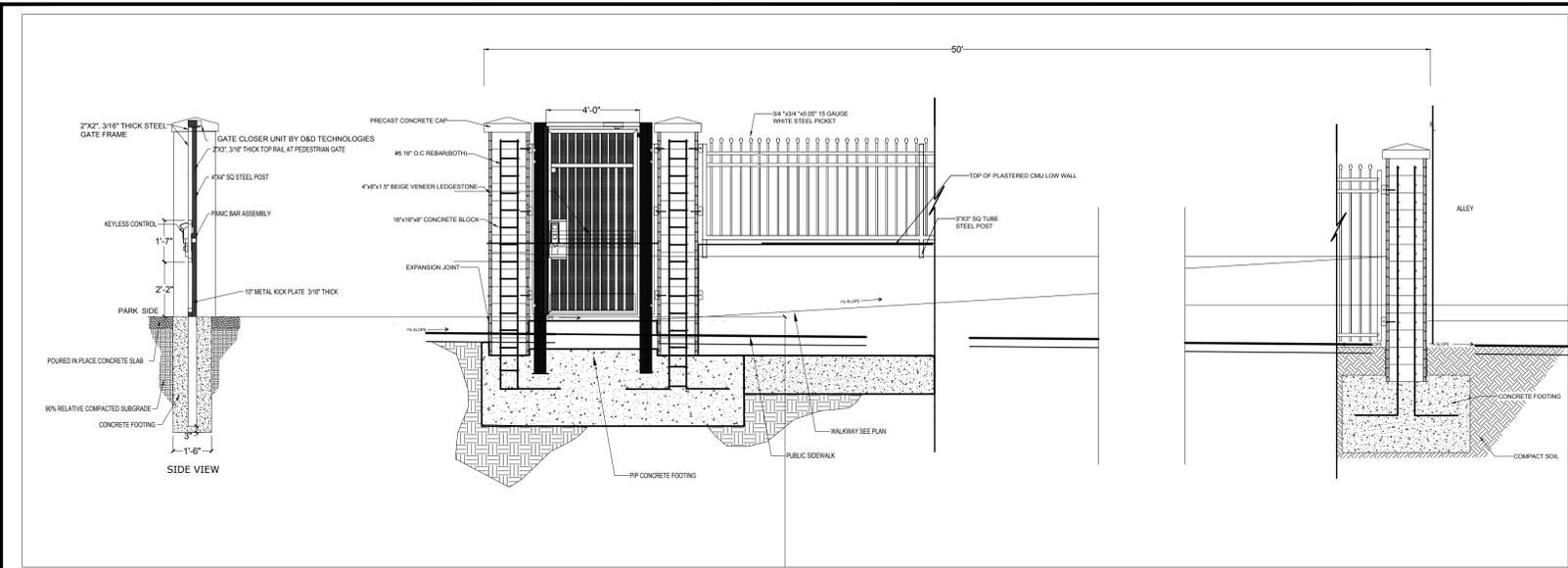


PROJECT NAME:  
**318 N Mathews Street Park**  
ADDRESS:  
**318 N Mathews St  
Los Angeles, CA 90033**

REVISIONS:	DATE:

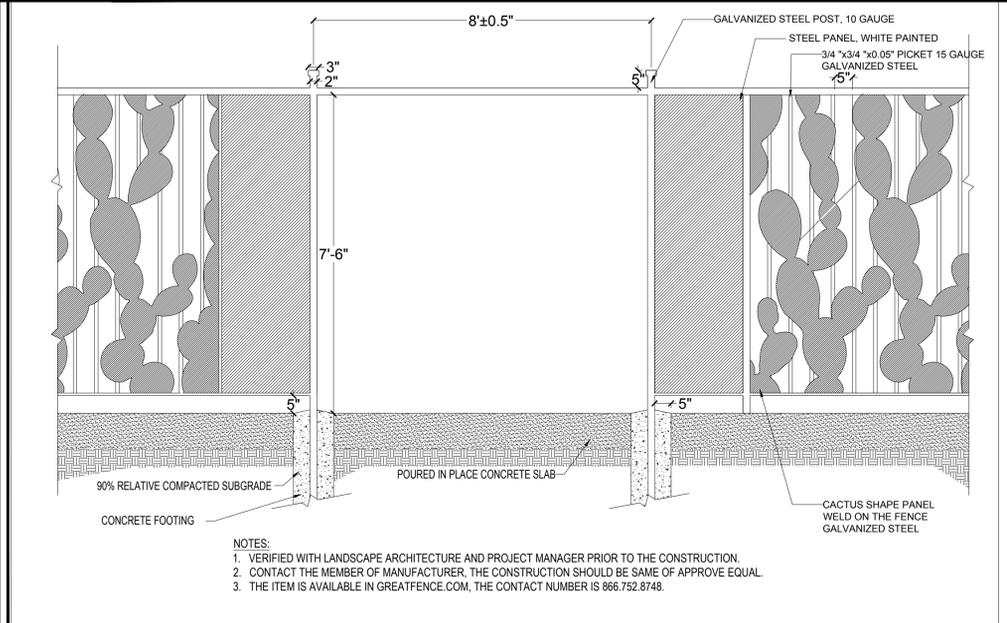
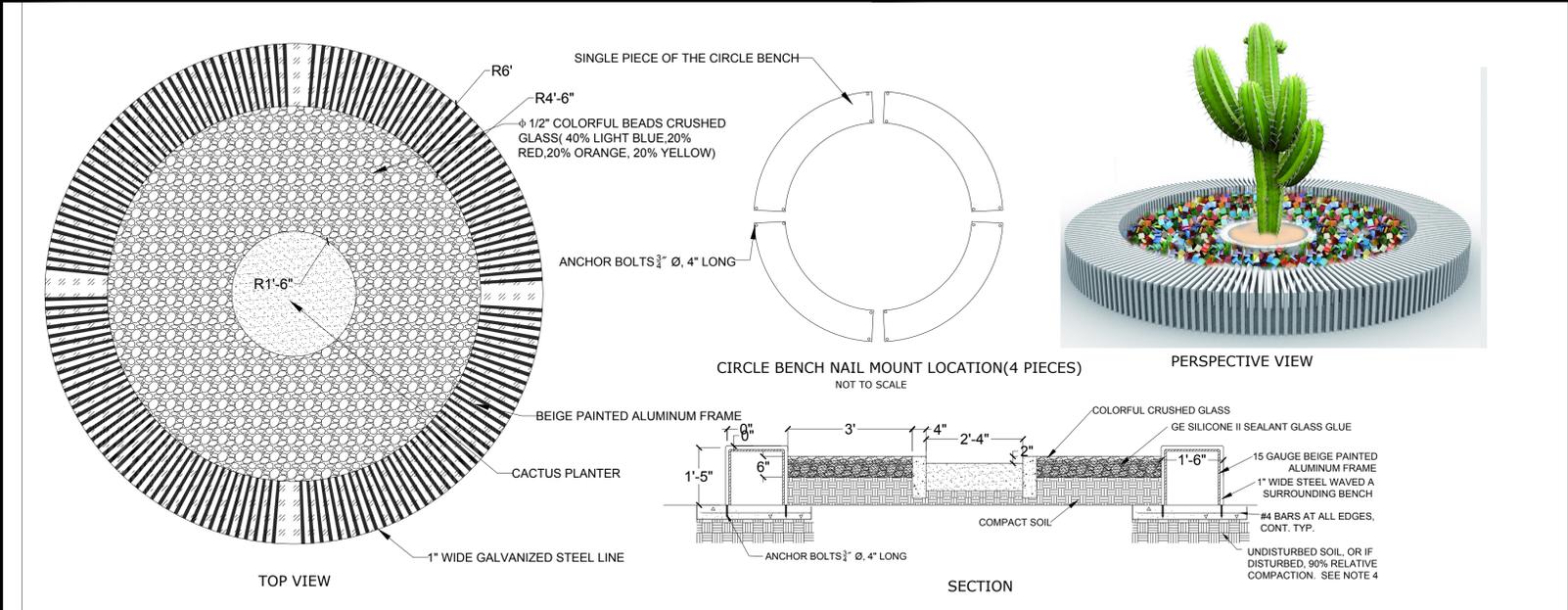
PLAN NAME:  
**Detail**  
DRAWN BY:  
SONGJING PU  
SHP/HSJ  
APPROVED BY:  
   
SCALE:  
   
ISSUE DATE:  
   
PRJ #  
   
FILE NO.  
   
DRAWING NO.  
**LS-07**  
SHEET OF SHEETS

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



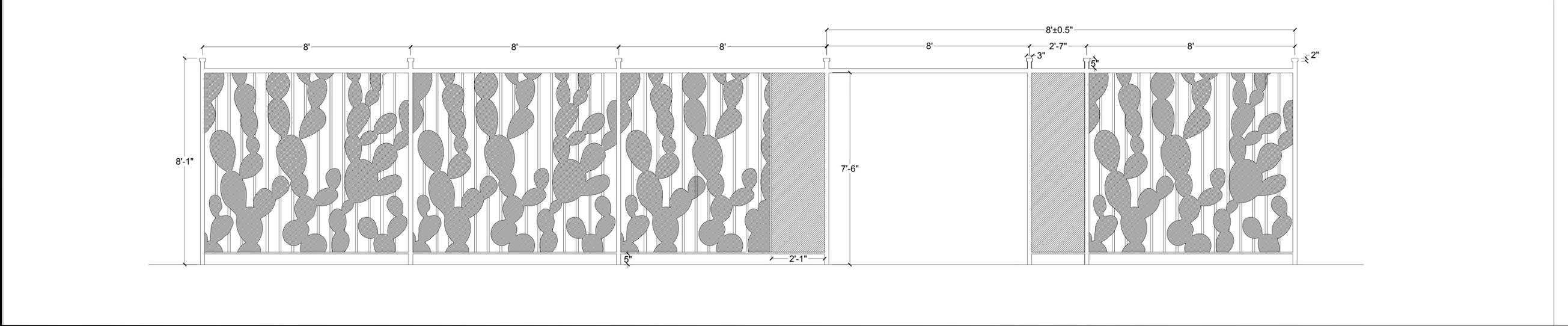
7-1 THE ENTRANCE GATE( MOUNTED ON FENCE) 1/2" = 1'-0"

8-1 VERTICAL PLANTING GROWING SHELF 1/2" = 1'-0"



9-1 CENTRAL PLANTING CONTAINER WITH BENCH 1/2" = 1'-0"

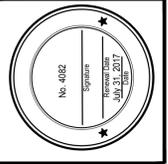
10-1 WHITE PAINTED FENCE 1/2" = 1'-0"



10-A BLOW UP OF WHITE PAINTED FENCE 1/2" = 1'-0"



THE CITY OF LOS ANGELES  
 DEPARTMENT OF RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL  
 ASSISTANT GEN. MANAGER: RAMON BARAJAS  
 PROJECT LANDSCAPE ARCHITECT: CHANG BAMES  
 PROJECT ENGINEER: \_\_\_\_\_  
 LIC. NO. \_\_\_\_\_  
 LIC. NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_

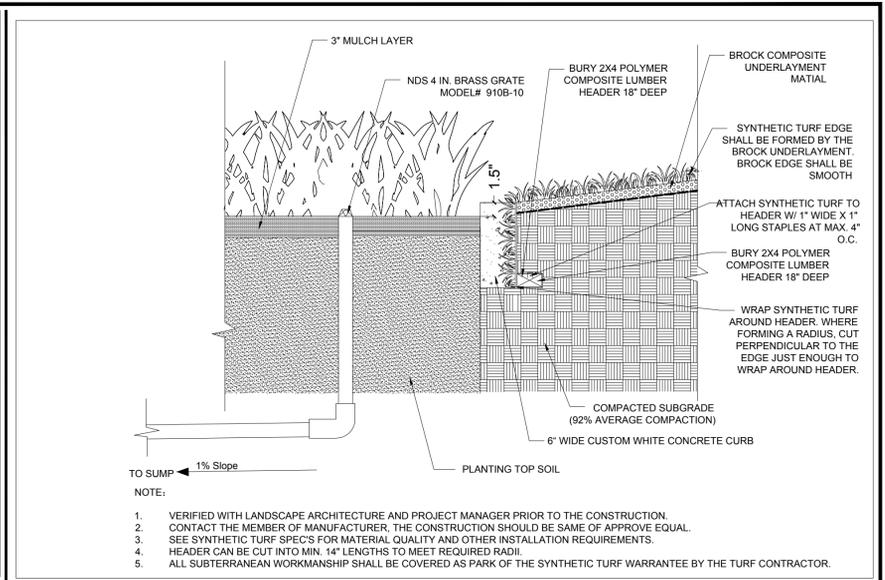
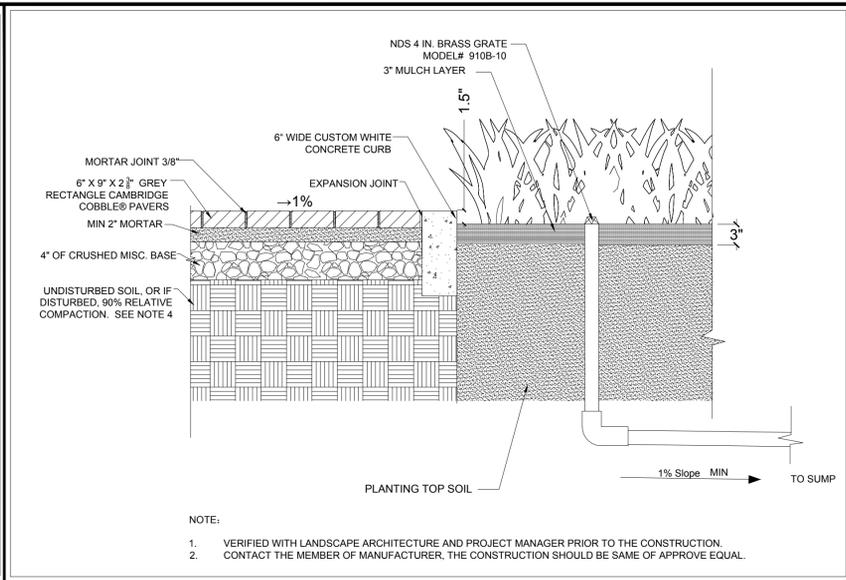
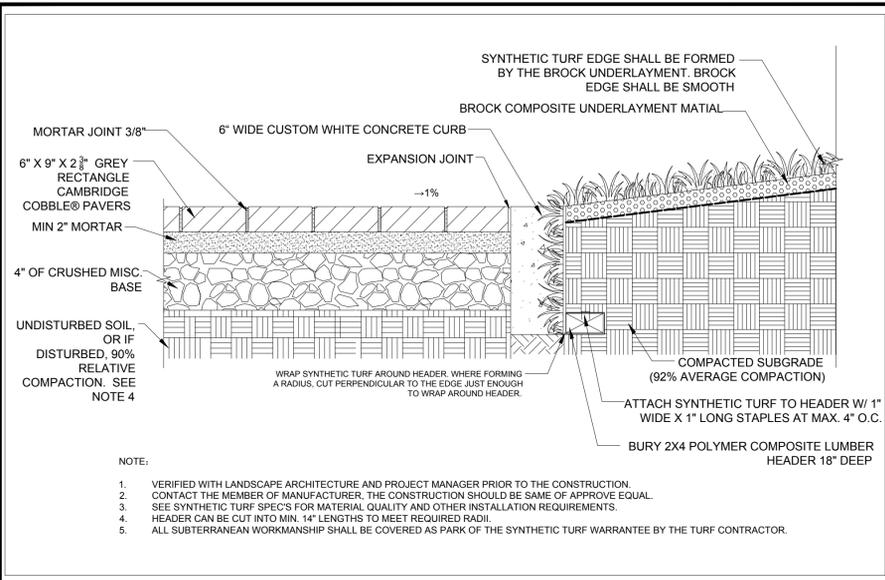


**318 N Mathews Street Park**  
 318 N Mathews St  
 Los Angeles, CA 90033  
 PROJECT NAME:  
 ADDRESS:

REVISIONS:	DATE:

PLAN NAME:  
**Detail**  
 DRAWN BY: SONORIK H. BHARADWAJ  
 APPROVED BY: \_\_\_\_\_  
 SCALE: \_\_\_\_\_  
 ISSUE DATE: \_\_\_\_\_  
 PRJ # \_\_\_\_\_  
 FILE NO. \_\_\_\_\_  
 DRAWING NO.  
**LS-08**  
 SHEET OF SHEETS

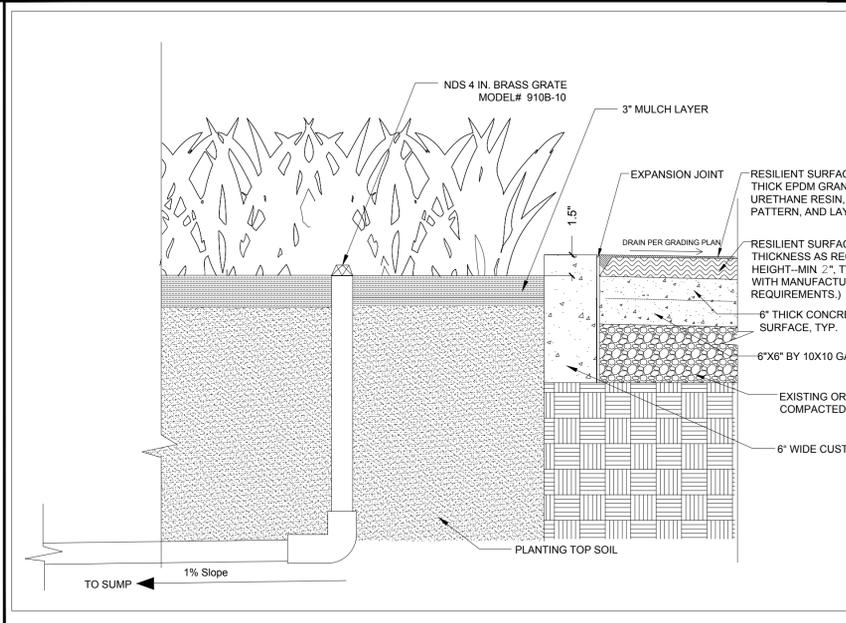
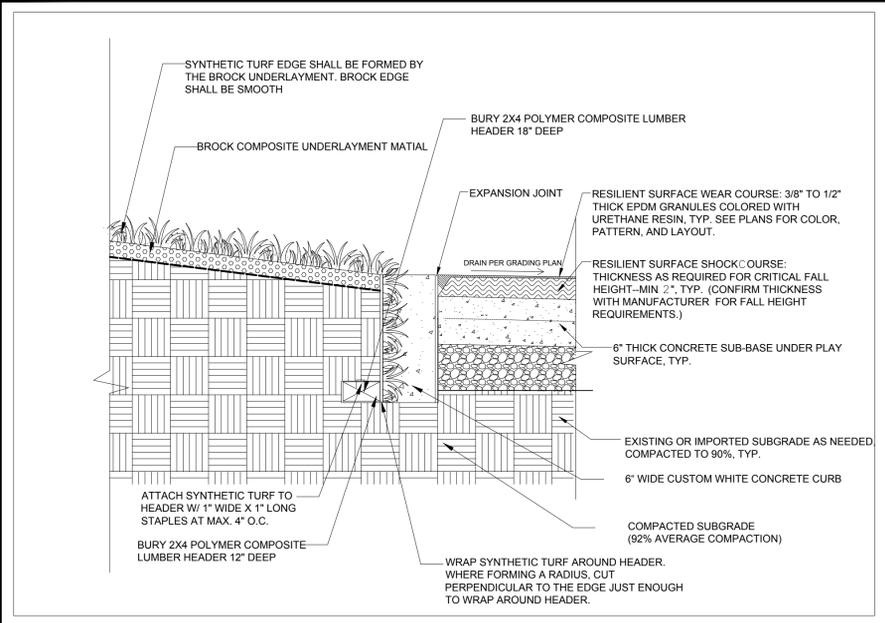
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



11-1 PEDESTRIAN COBBLE PAVERS & SYNTHETIC TURF MOUNT 1-1/2" = 1'-0"

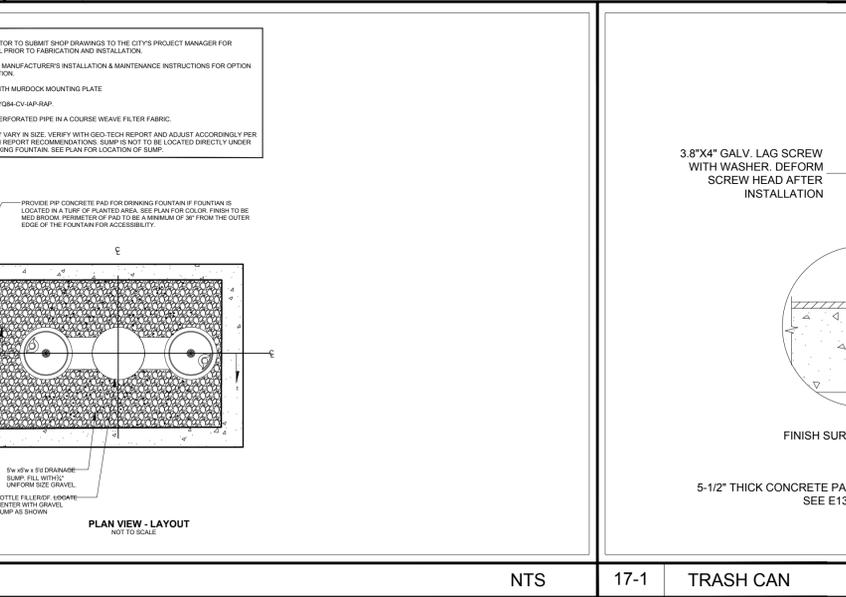
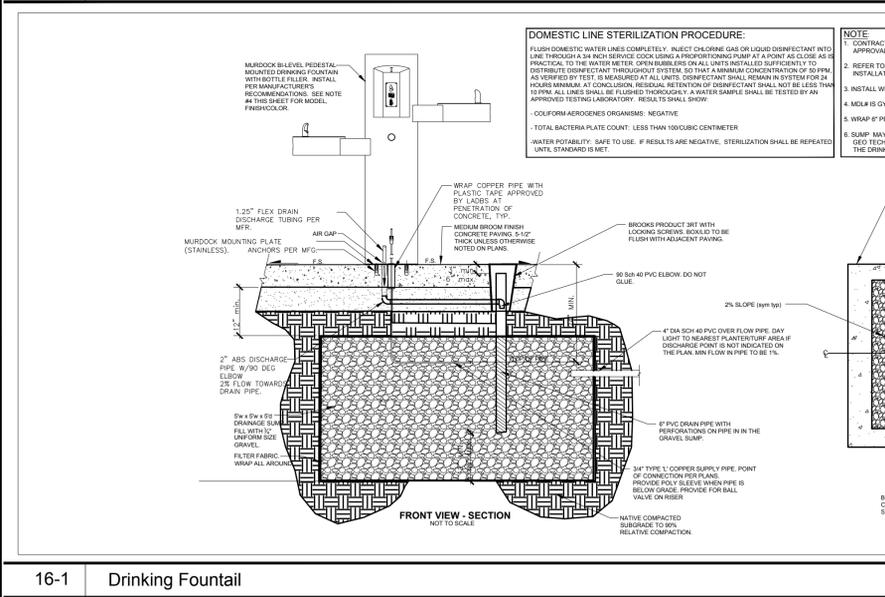
12-1 PEDESTRIAN COBBLE PAVERS & SURROUNDING SHRUB 1" = 1'-0"

13-1 SURROUNDING SHRUB & SYNTHETIC TURF MOUNT 1" = 1'-0"



14-1 RESILIENT SURFACE & SYNTHETIC TURF MOUNT 1-1/2" = 1'-0"

15-1 SYNTHETIC TURF MOUNT & RESILIENT SURFACE 1-1/2" = 1'-0"

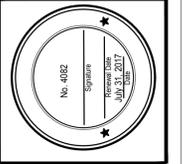


16-1 Drinking Fountain NTS

17-1 TRASH CAN 1" = 1'-0"



THE CITY OF LOS ANGELES  
 DEPARTMENT OF RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL  
 ASSISTANT GEN. MANAGER: RAMON BARAJAS  
 PROJECT LANDSCAPE ARCHITECT: CRAG BARNES  
 PROJECT ENGINEER:  
 AS-SUBSITS DRAWING BY:  
 LIC. NO.: 4881  
 LIC. NO.:  
 DATE:

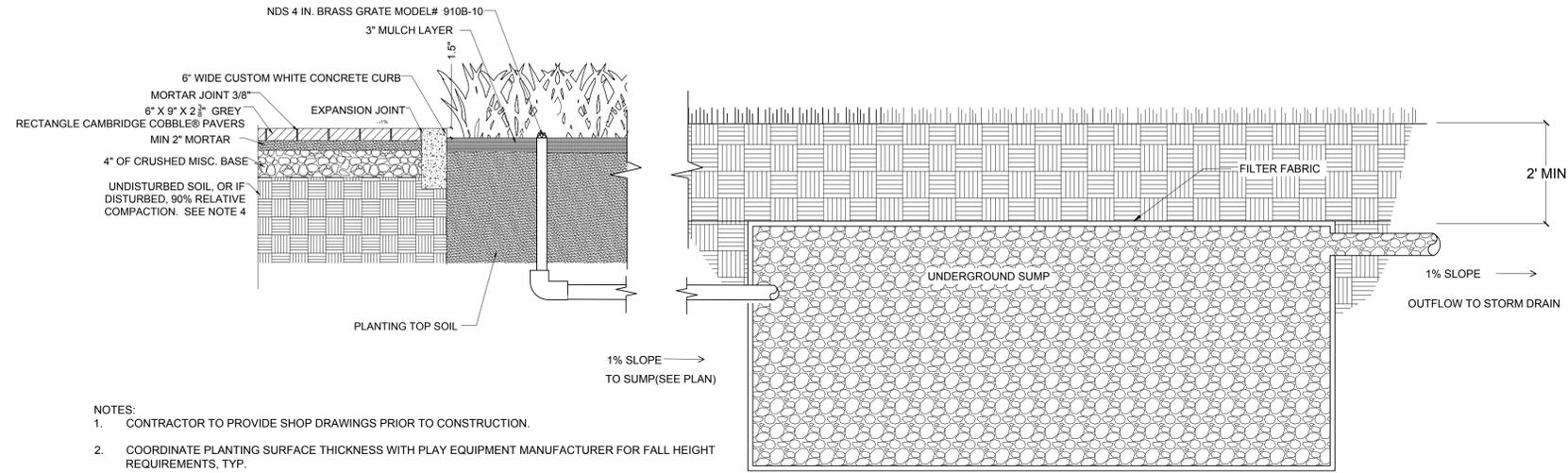


**318 N Mathews Street Park**  
 ADDRESS: 318 N Mathews St  
 Los Angeles, CA 90033

REVISIONS:	DATE:

PROJECT NAME:  
**Detail**  
 DRAWN BY: GONCHIK  
 APPROVED BY: MATHIAS  
 SCALE: ISSUE DATE:  
 PRJ # FILE NO.  
 DRAWING NO.  
**LS-09**  
 SHEET OF SHEETS

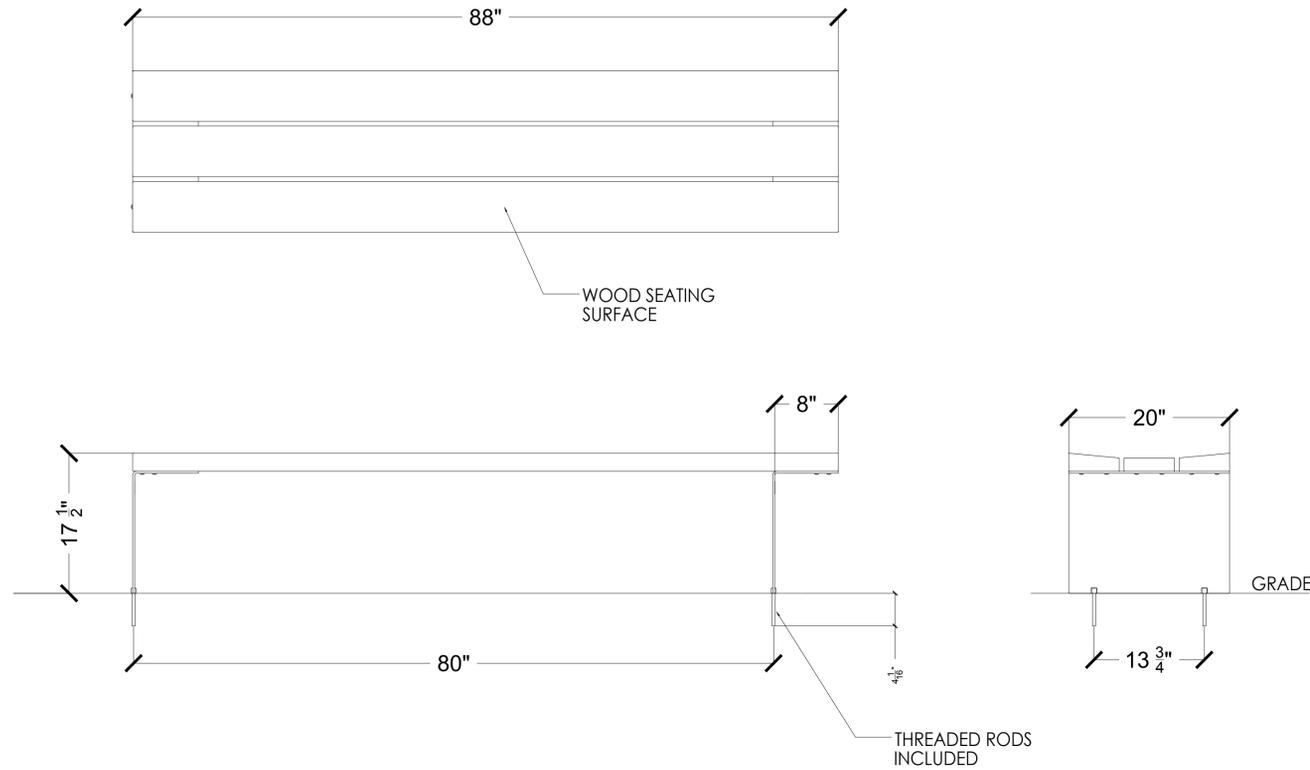
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



- NOTES:
- CONTRACTOR TO PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION.
  - COORDINATE PLANTING SURFACE THICKNESS WITH PLAY EQUIPMENT MANUFACTURER FOR FALL HEIGHT REQUIREMENTS, TYP.

18-1 SUMP UNDER PLANTING

3/4"=1'-0"

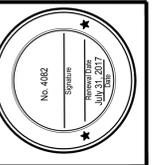


19-1 88" POWDERCOATED METAL (COLOR: GRASS) BACKLESS BANCAL BENCH

NOT TO SCALE



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: MICHAEL A. SHULL  
ASSISTANT GEN. MANAGER: RAMON BARAJAS  
PROJECT LANDSCAPE ARCHITECT: CHANG CHANES  
PROJECT ENGINEER:  
LIC. NO. #892  
LIC. NO.  
DATE



PROJECT NAME:  
**318 N Mathews Street Park**  
ADDRESS:  
**318 N Mathews St  
Los Angeles, CA 90033**

REVISIONS:	DATE:
△	
△	
△	
△	
△	
△	

PLAN NAME:  
**Detail**

DRAWN BY:  
GONGRONG PI  
JINFA HANG

APPROVED BY:

SCALE:

ISSUE DATE:

PRJ #

FILE NO.

DRAWING NO.  
**LS-10**

SHEET OF SHEETS

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



THE CITY OF LOS ANGELES  
 DEPARTMENT OF RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL ASSISTANT GEN. MANAGER: RAMON BARRAJAS  
 PROJECT LANDSCAPE ARCHITECT: SAME NAME U.C. NO. /SRL  
 PROJECT ENGINEER: U.C. NO. /SRL  
 AS BUILT'S DRAWN BY: DATE

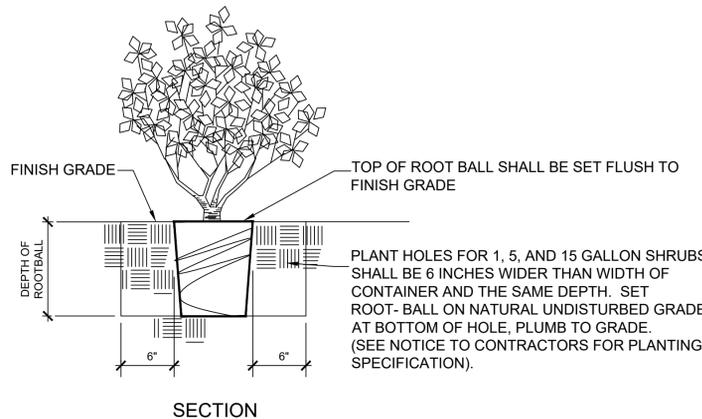


PROJECT NAME:  
**318 N Mathews Street Park**  
 ADDRESS:  
**318 N Mathews St, Los Angeles, CA 90033**

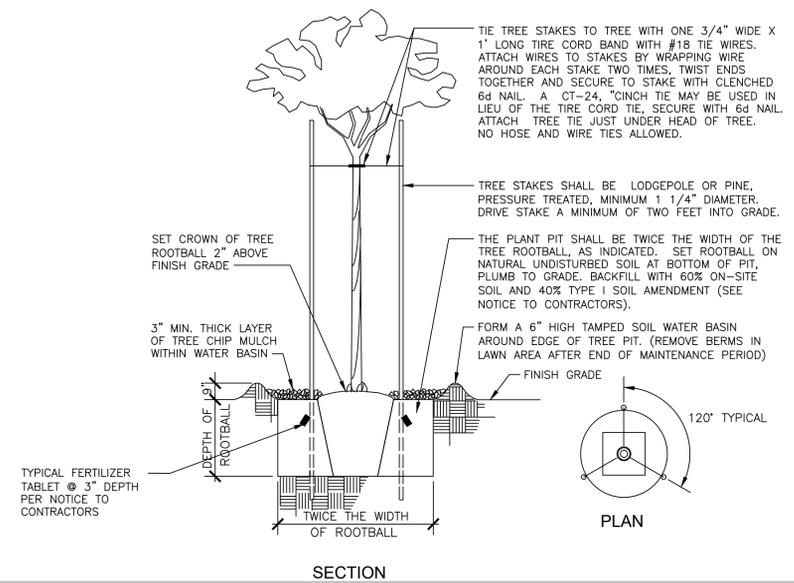
REVISIONS:	DATE:
△	
△	
△	
△	
△	

PLAN NAME:  
**PLANTING DETAIL**

DRAWN BY: Zhiya Huang Gongyong Pu	APPROVED BY:
SCALE:	ISSUE DATE:
PRJ #	FILE NO.
DRAWING NO. <b>LS-11</b>	
SHEET OF SHEETS	



19-1 SHRUB PLANTING DETAIL 1" = 1'-0"



20-1 TREE PLANTING & 3X STAKING 1" = 1'-0"

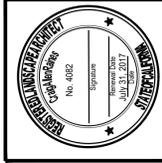
THE CITY OF LOS ANGELES OR ITS OFFICERS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.



**PARK PROUDLA**

THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS

GENERAL MANAGER: MICHAEL A. SHULL ASSISTANT GEN. MANAGER: RAMON BARRAJAS  
PROJECT LANDSCAPE ARCHITECT: CRAIG BARNES  
PROJECT ENGINEER: \_\_\_\_\_ LIC. NO. \_\_\_\_\_  
AS-BUILT DRAWN BY: \_\_\_\_\_ DATE: \_\_\_\_\_



**ALLEGHENY STREET PARK**  
11961 ALLEGHENY STREET,  
SUN VALLEY, CA 91325

PROJECT NAME:  
ADDRESS:

REVISIONS:	DATE:

PLAN NAME:  
**IRRIGATION DETAIL**

DRAWN BY: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_  
SCALE: \_\_\_\_\_ ISSUE DATE: \_\_\_\_\_  
PRJ # \_\_\_\_\_ FILE NO. \_\_\_\_\_  
DRAWING NO.  
**LS-12**  
SHEET OF SHEETS

MANUFACTURER'S INSTALLATION INSTRUCTIONS  
BPU NOTES-- MOUNTING HARDWARE: REFER TO BEFORE POURING CONC. CURB. INSTALL WITH VENT 12 IN. MIN. CLEAR ABOVE TOP OF CURB, AND 12 IN. OF VERTICAL SEPARATION BETWEEN CENTERLINE OF UNITS WHERE DOMESTIC & IRRIGATION DEVICES ARE INSTALLED TOGETHER

PLAN VIEW

ELEVATION

BACKFLOW SIZE AND ENCLOSURE MODEL & CURB SIZE TABLE

SIZE:	RAINMAN RMSS (714) 776-5420, or LE MEUR BFSS (714) - 039	OR ENCL. DIA. (width x length)	LENGTH "L"	STRONG BOX INC. (714) 947-6992	ENCL. DIM. (width x length)	LENGTH "L"
1 INCH	42" SINGLE	24"x42"	50 INCHES	SBBC-45AL	16"x45"	53 INCHES
2 INCH	60" DOUBLE	24"x60"	68 INCHES	SBBC-60ALHP	24"x60"	68 INCHES
3 INCH	84" DOUBLE	24"x84"	92 INCHES	SBBC-90ALHP	24"x90"	98 INCHES

NOTE: FOR SIZES 4 IN. AND LARGER, USE BACKFLOW CAGE, RP DETAIL102

BRASS OR BRONZE PRESSURE REGULATOR, SET AS INDICATED ON THE IRRIGATION PLAN

UNIT WITH INLET AND OUTLET VALVES.

BRASS OR BRONZE Y- STRAINER, 2" AND LARGER PROVIDE LOOSE KEY HOSE BIBB (BLOW OFF COCK).

3" AND LARGER UNITS, PROVIDE A 1" DIA. PIPE SUPPORT WITH A 12" SQ. X 5 1/2" THICK CONC. FOOTING

LINE SIZED GALV. UNION AT EACH SIDE MIN. 1' BELOW FINISH GRADE.

FINISH GRADE

PVC MALE ADAPTER

PVC MAINLINE

GALV. STEEL COUPLING

18" X 18" X 18" CONCRETE THRUST BLOCK.

COPPER MAINLINE FROM METER

NOTES:

- ALL PIPE SHALL BE COPPER UNLESS OTHERWISE NOTED. USE TEFLON TAPE ON ALL MALE THREADS. BACKFLOW AND REGULATING EQUIPMENT 3" AND LARGER SHALL BE FLANGE MOUNTED.
- THE BACKFLOW PREVENTER SHALL BE TESTED BY A CERTIFIED TESTER WITH THE RESULTS SENT TO THE L.A. COUNTY HEALTH DEPT., ON THE "BACKFLOW PREVENTION DEVICE TESTING REPORT". PROVIDE A COPY TO THE PROJECT MANAGER AT THE OPERATIONAL FINAL.
- THE Y-STRAINER AND PRESSURE REGULATOR MAY BE INSTALLED ON THE VERTICAL INLET PIPE FOR UNITS 2" AND SMALLER.

6" DIA. P.V.C. SLEEVE, RIGID PIPE, MIN. 18" LONG.

2-2"x4"x24" RECYCLED PLASTIC SUPPORT BLOCKS UNDER THE LONG AXIS OF THE VALVE BOX. AVAILABLE FROM ESP PROD., 800-775-2784, OR EQUAL.

1-1/2 CUBIC FEET OF 3/4" GRAVEL

KEEP GRAVEL 3 INCHES CLEAR OF MAIN LINE

SCHEDULE 40 P.V.C. MALE ADAPTER AT EACH SIDE GATE VALVE

LINE SIZED GATE VALVE

FOR 4" GATE VALVES AND LARGER REFER TO RECREATION AND PARKS RP DETAILS #130 AND 131.

1-1 BACKFLOW DEVICE ENCLOSURE 1'-0" = 1'-0"

2-1 BACKFLOW PREVENTER UNIT TO 3" 1'-0" = 1'-0"

3-1 GATE VALVE INSTALLATION 1'-0" = 1'-0"

1" QUICK COUPLER BRASS TWO PIECE BODY, CENTER IN VALVE BOX, SEE LEGEND

3/4" DIA GALVANIZED STEEL PIPE STAKE W/STEEL CLAMPS (COMMERCIAL QUALITY GALVANIZED OR CADMIUM PLATED) - TWO REQUIRED

2-2"x4"x24" RECYCLED PLASTIC SUPPORT BLOCKS UNDER THE LONG AXIS OF THE VALVE BOX. AVAILABLE FROM ESP PROD., 800-775-2784, OR EQUAL.

1" DIA. COPPER RISER, 12" LONG

1 CUBIC FOOT 3/4" GRAVEL SUMP

TEE OR ELL AS REQUIRED

KEEP GRAVEL 3" MIN. CLEAR OF MAIN LINE

SECTION

PLAN VIEW

SCHEDULE 80 P.V.C. TEE SxSxT

1" DIA. COPPER NIPPLE 12" LONG

COPPER ELL

1" DIA. x 3" COPPER NIPPLE

STEEL PIPE STAKE

1" QUICK COUPLER

1" DIA. x 3" SCH 80 P.V.C. THREADED NIPPLE

COPPER ELL

1'-0" HT. ABOVE SURFACE OF SLAB

2" MIPT x 1/2" FIPT sched. 40 galv. bushing

2" FIPT x 2" FIPT sched. 40 galv. coupling

Make connections with 3-M DBY connectors, or approved equal. Provide 12 inch wire pigtail to facilitate splice at top of pole before installing top fittings. Trim sensor wire as required to make connection. Connect wire to controller per manufacturer's instructions.

2" sched 40 galv steel pipe MIPT at both ends

Controller slab if located next to controller - See Irrigation Plan

30" x 12" dia. concrete footing

Compacted or undisturbed soil

2" x 2" FIPT x FIPT sched. 40 galv. coupling

2" galv short sweep ell

No. 14 UF direct burial wires to long sweep ell at controller

NOTES:

- Use #14 UF direct burial wire only.
- Provide rigid conduit sleeve wherever wire runs under paving.
- Install Mini-Click Rain Switch per manufacturer's instructions.
- Glenn Hiller Products, Inc. (654) 755-1101.
- Locate device on post as located on plans.

BACKFILL AS INDICATED IN THE NOTICE TO CONTRACTORS FOR PIPELINE INSTALLATION GENERAL.

POSITION CONTROL WIRES IN LOWER LEFT OR RIGHT HAND QUADRANT OF MAINLINE. TAPE WIRE AT 5' INTERVALS; DO NOT SECURE TO MAINLINE.

1. PIPE BEDDING AND BACKFILL SHALL BE WATER JETTED TO ACHIEVE PROPER DENSIFICATION. PIPE AND CONTROL WIRE CROSSING VEHICULAR ROADWAY SHALL BE AS INDICATED ABOVE. SEE NOTICE TO CONTRACTORS, SECTION 7, PIPELINE INSTALLATION GENERAL FOR TRENCHING SPECIFICATIONS.

4-1 QUICK COUPLER INSTALLATION 5/6" = 1'-0"

5-1 MINI-CLICK II RAIN SWITCH ON POST 5/6" = 1'-0"

6-1 IRRIGATION TRENCHING DETAIL 1'-0" = 1'-0"

"CHRISTY" STD. VALVE I.D. TAG - NUMBER AND LETTER TO CORRESPOND TO CONTROLLER AND VALVE NUMBER. AFFIX TO CONTROL WIRE WITH PLASTIC ELECTRICAL TIE.

WIRE CONNECTORS, SEE SPECIFICATIONS

SCHEDULE 40 P.V.C., TYP.

2 CUBIC FEET OF 3/4" CRUSHER RUN GRAVEL

KEEP GRAVEL 3 INCHES CLEAR OF MAINLINE

SCHEDULE 40 P.V.C. MAINLINE

NOTES:

- ALL PIPE AND FITTINGS SHALL BE SCHEDULE 40 P.V.C.
- EACH VALVE SHALL HAVE A SEPARATE CONTROL WIRE RUNNING FROM THE AUTOMATIC CONTROLLER.

CONTROLLER POWER SWITCH AND 110V GFI ELECTRICAL OUTLET.

STAINLESS STEEL BACKING BOARD

CONNECT TERMINAL STRIP TO CONTROLLER WITH #12 THWN WIRE. PROVIDE 10 SEPARATE COLORS CORRESPONDING TO THE WIRING COLORS AS INDICATED IN THE NOTICE TO CONTRACTORS.

SECURE ENCLOSURE TO CONC. SLAB WITH 4 3/8 INCH GALVANIZED ANCHOR BOLTS, 1 AT EACH CORNER. UTILIZE MANUFACTURER'S STEEL TEMPLATE SET IN CONCRETE.

10' LONG BY 5/8" DIA. COPPER GROUNDING ROD

WIRE AND CONDUIT SIZING FROM CONTROLLER TO ELECTRICAL PANEL

CIRCUIT VOLTAGE	LENGTH OF RUN	CONDUIT & WIRE SIZE	EQUIPMENT GROUND WIRE SIZE
120 V	600' MAX.	3/4" - 2#12 & 1#12 THWN CU	
	BET. 601' & 885'	3/4" - 2#10 & 1#12 THWN CU	

WIRE AND CONDUIT REQUIREMENTS BASED ON TOTAL LOAD OF 235 WATTS

NOTE: 24V CONTROL WIRING UNDER PAVING SHALL BE IN A MINIMUM 3" DIAMETER CONDUIT.

3/4" PVC COATED RIGID CONDUIT FOR ELECTRICAL SERVICE

1" PVC COATED RIGID CONDUIT FOR PAIGE CABLE OR FUTURE TELEPHONE SERVICE

3" DIA. PVC LONG SWEEP ELL AND CONDUITD EXTEND 2' BEYOND EDGE OF SLAB.

CONCRETE VALVE BOX WITH CAST IRON LOCKING COVER EMBOSSED "R.C.V." PER SPECIFICATIONS

SET VALVE BOX FLUSH WITH FINISH GRADE

CONTROL WIRE

PROVIDE A COILED 12 FOOT PIGTAIL LOOP AT EACH WIRE CONNECTION SINGLE COMMON WIRE TO R.C.V.

REMOVE KNOCKOUTS

SCHEDULE 40 P.V.C., TYP.

2 CUBIC FEET OF 3/4" CRUSHER RUN GRAVEL

KEEP GRAVEL 3 INCHES CLEAR OF MAINLINE

SCHEDULE 40 P.V.C. MAINLINE

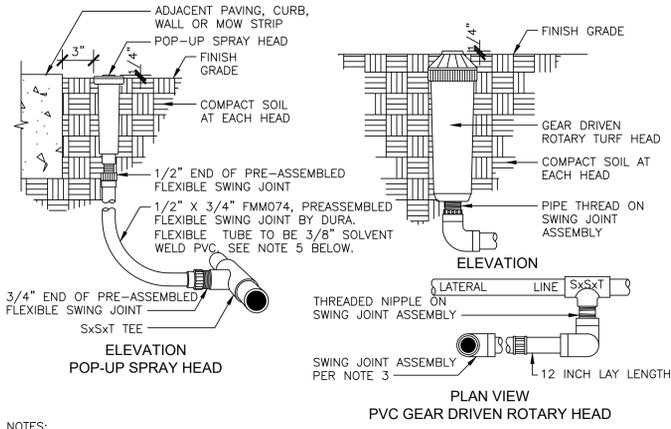
NOTES:

- ALL PIPE AND FITTINGS SHALL BE SCHEDULE 40 P.V.C.
- EACH VALVE SHALL HAVE A SEPARATE CONTROL WIRE RUNNING FROM THE AUTOMATIC CONTROLLER.

7-1 RCV INSTALLATION 5/6" = 1'-0"

8-1 SINGLE CONTROLLER ENCLOSURE 5/6" = 1'-0"

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.



- NOTES:**
1. PLACE ALL HEADS 1/4" ABOVE FINISH GRADE AT INITIAL INSTALLATION. SET HEADS 3" AWAY FROM WALKS, CURBS, WALLS OR MOW STRIPS.
  2. INSTALL HEADS PERPENDICULAR TO FINISH GRADE.
  3. SWING JOINTS FOR PVC GEAR DRIVEN ROTARY HEADS SHALL BE: FOR 1" SPRINKLER HEAD INLET - DURA MODEL # 1-A1-LAC-1-12 (CITY OF LOS ANGELES STANDARD) FOR 3/4" SPRINKLER HEAD INLET - DURA MODEL # E008-12. ALL SWING JOINTS SHALL HAVE 12 INCH LAY LENGTH. AVAILABLE FROM DURA PLASTIC PRODUCTS, INC. (800) 854-2323
  4. THE SWING JOINTS FOR PVC GEAR DRIVEN ROTARY HEADS SHALL BE "O" RING THREADED ASSEMBLIES. TURN THE THREADED PARTS UNTIL THEY BOTTOM OUT THEN BACK OUT ONE FULL TURN TO ALLOW JOINTS TO SWIVEL FREELY.
  5. IN LIEU OF USING FLEXIBLE SWING JOINTS, CONTRACTOR MAY INSTALL POP-UP HEADS ON RIGID PIPE SWING JOINTS AT NO ADDITIONAL CHARGE TO THE CITY.

9-1 IRRIGATION HEAD INSTALLATION 1'-0" = 1'-0" 1'-0" = 1'-0"

**IRRIGATION NOTES**

- 1. IRRIGATION PLANS**  
THE PLAN(S) IS DIAGRAMMATIC. LOCATE ALL PIPING, VALVES, ETC. IN PLANTING AREAS WHERE POSSIBLE UNLESS OTHERWISE NOTED. LOCATE ALL IRRIGATION HEADS A MINIMUM OF 3" FROM THE EDGE OF CURBS, WALLS, FENCES, AND/ OR OTHER HARDSCAPE AREAS AND 12" FROM BUILDING WALL.
- 2. VERIFY CONDITIONS**  
THE CONTRACTOR SHALL VERIFY EXISTING LOCATIONS OF ALL UTILITY SERVICE LINES AND SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE INCURRED DURING HIS/HER WORK. VERIFY THE STATIC PSI AND THE GPM AT THE POINT OF CONNECTION. NOTIFY THE PROJECT ENGINEER LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO THE START OF WORK.
- 3. BACKFLOW DEVICE CERTIFICATION**  
THE CONTRACTOR SHALL OBTAIN CERTIFICATION OF THE BACKFLOW DEVICE(S) FROM THE LOS ANGELES COUNTY HEALTH DEPARTMENT. SUBMIT THE CERTIFICATE OF APPROVAL FOR BACK FLOW DEVICE PLUS (2) TWO COPIES TO THE PROJECT ENGINEER AT THE TIME OF OPERATIONAL TESTING OF THE IRRIGATION SYSTEM.
- 4. VALVE BOXES**  
UNLESS OTHERWISE SHOWN OR NOTED, STANDARD PLAN S-655-0 IS MODIFIED AS FOLLOWS: ALL VALVE/PULL BOXES SHALL BE 9 1/2" x 16" x 12" AND 12" x 22" x 12" SIZES, MADE OF CONCRETE WITH CAST IRON, DOUBLE TOGGLE LOCKING TRAFFIC LID. ALL VALVE/PULL BOX LIDS SHALL BE EMBOSSED WITH THE FOLLOWING IDENTIFICATION IN 2" HIGH INITIALS:  

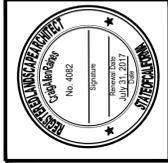
SHUT - OFF VALVE	SOV
REMOTE CONTROL VALVE	RCV
QUICK COUPLER VALVE	QCV
ELECTRICAL PULL BOX	ELECTRICAL

CAST IRON LIDS SHALL BE COMPLETELY REMOVABLE FROM THE CONCRETE VALVE BOX (TRAFFIC RATED TYPE). HINGED CAST IRON LIDS ARE UNACCEPTABLE AND ARE NOT TO BE INSTALLED.
- 5. PIPE AND FITTINGS**  
ALL MAIN LINES SHALL BE NEW SCH. 80 PVC. AND ALL LATERAL LINES SHALL BE NEW SCH. 40 PVC. ALL THREADED FITTINGS SHALL BE NEW SCH. 80 PVC., UNLESS OTHERWISE NOTED.
- 6. SWING JOINTS**  
ALL SWING JOINTS AND RISERS SHALL BE CONSTRUCTED OF EITHER SCHEDULE 80 PVC. OR SCHEDULE 40 GALVANIZED STEEL THREADED FITTINGS (SEE CONSTRUCTION DETAILS FOR CONSTRUCTION AND INSTALLATION SWING JOINTS). STREET ELLS WILL NOT BE PERMITTED. CONTRACTOR TO SUBMIT A SWING JOINT FOR APPROVAL PRIOR TO I INSTALLATION.
- 7. TRENCHING/EXCAVATION**  
THE CONTRACTOR SHALL NOT TRENCH OR EXCAVATE FOR IRRIGATION PIPING, CONDUIT, WALL FOOTINGS, ETC. WITHIN THE DRIP LINE OF ANY EXISTING TREE. ALLOWANCES CAN BE MADE ONLY IF THE CONTRACTOR SUBMITS A WRITTEN REQUEST TO THE PROJECT ENGINEER/LANDSCAPE ARCHITECT STATING WAYS AND MEANS AS TO HOW THE CONTRACTOR WILL PROCEED WITH MINIMUM DISTURBANCE TO THE TREE.
- 8. PIPE BEDDING AND BACKFILL**  
BEDDING SHALL SURROUND THE PIPE TO ONE FOOT ABOVE THE TOP OF THE PIPE. BEDDING SHALL BE PLACED IN 6" LIFTS. ALL BEDDING SHALL BE DENSIFIED BY WATER JETTING. WATER JETTING SHALL BE SUFFICIENT TO THOROUGHLY WET BEDDING MATERIAL AROUND THE PIPE (SSPWC 308-1.2.1). THERE SHALL BE NO ROCKS OVER 1/2" IN GREATEST DIMENSION AND NO ORGANIC MATTER PLACED IN THE BEDDING MATERIAL. BACKFILL SHALL BE THE MATERIAL PLACED ABOVE THE BEDDING. BACKFILL SHALL BE PLACED IN ONE-FOOT LIFTS AND DENSIFIED BY WATER JETTING. JETTING SHALL BE CONTINUED UNTIL BACKFILL COLLAPSES AND WATER IS FORCED TO THE SURFACE (SSPWC 308-1.3.1. . .). PIPE TRENCHES THOROUGHLY DENSIFIED BY WATER SETTLING SHALL HAVE A MINIMUM RELATIVE COMPACTION OF 85%. THERE ARE NO ROCKS OVER 2" IN GREATEST DIMENSION OR ORGANIC MATTER IN THE BACKFILL. TRENCH AREAS WHICH EXHIBIT IN-SUFFICIENT IDENTIFICATION SHALL BE SUBJECT TO COMPACTION TESTS AS REQUESTED BY THE INSPECTOR OR THE PROJECT ENGINEER. ALL SUCH COMPACTION TEST SHALL BE AT EXPENSE OF THE CONTRACTOR, UNTIL THE 85% COMPACTION IS ACHIEVED. FINISHED TRENCHES SHALL MEET AND MATCH ADJACENT FINISH GRADE FLUSH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TRENCHES FLUSH AND SMOOTH UNTIL FINAL ACCEPTANCE OF THE PROJECT. TRENCHES IN EXISTING LAWN SHALL BE REPAIRED PER METHOD 'A' LAWN REPAIR PER THE SSPWC 308-4.8.2.
- 9. ELECTRICAL CONTROL WIRES**  
CONTROL WIRING SHALL BE DIRECT BURIAL TYPE MINIMUM 10 GA. (AWG). SEE IRRIGATION CONTROLLER DETAIL FOR WIRE SIZE. PROVIDE WIRING TO ALL REMOTE CONTROL VALVES INCLUDING A SPARE CONTROL WIRE TO THE FURTHEST REMOTE CONTROL VALVE. IN THE EVENT THAT ONE CONTROLLER HAS SEVERAL DIRECTIONS OF CONTROL WIRE RUNS, ALL DIRECTIONS SHALL HAVE AN EXTRA CONTROL WIRE. ALL SPARE CONTROL WIRES SHALL BE IDENTIFIED WITH INTEGRAL WIRE COLOR CODING AS FOLLOWS:  

COMMON WIRE	WHITE
CONTROL WIRE	RED (FIRST CONTROLLER)
	ORANGE (SECOND CONTROLLER)
	YELLOW (THIRD CONTROLLER IF APPLICABLE)
SPARE WIRE	GREEN
- 10. ELECTRICAL CONTROL WIRE CONNECTIONS**  
CONTROL WIRE CONNECTIONS SHALL BE MADE USING AN APPROVED, WATERTIGHT CONNECTOR SYSTEM. WIRES SHALL BE CONNECTED USING A COPPER CRIMP SLEEVE. THE CONNECTION SHALL BE PLACED IN A TWO-PIECE (MALE-FEMALE) MALLEABLE PLASTIC CASING FILLED WATERPROOF SEALANT.
- 11. LOW HEAD DRAINAGE**  
THE CONTRACTOR SHALL INSTALL IN-LINE LOW HEAD DRAINAGE VALVES AT IRRIGATION HEADS OR AS INDICATED ON THE PLAN (S) WHERE NECESSARY TO PREVENT LOW HEAD DRAINAGE AT NO ADDITION COST TO THE CITY.
- 12. CONTROLLER CHARTS**  
THE CONTRACTOR SHALL PROVIDE TWO SETS OF THE CONTROLLER CHARTS SHOWING THE APPROVED AS-BUILT IRRIGATION PLANS. THE CHARTS SHALL BE DONE ON HALF SIZE PHOTOGRAPHIC REPRODUCTION OF THE APPROVED IRRIGATION AS-BUILT PLANS AND SHALL REFLECT ALL AS-BUILT DATA. EACH STATION SHALL BE SHOWN IN A DIFFERENT COLOR AND CONTROL WIRE LOCATIONS SHALL BE INDICATED. THE COMPLETE PLAN(S) SHALL BE LAMINATED ON EACH SIDE WITH 20 MIL. ACRYLIC PLASTIC SHEET. A 3/4" BRASS GROMMET SHALL BE PLACED IN EACH TOP CORNER. THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE AS-BUILT PLANS PRIOR TO PROCEEDING WITH THE PLASTIC LAMINATION.



THE CITY OF LOS ANGELES  
DEPARTMENT OF RECREATION AND PARKS  
GENERAL MANAGER: MICHAEL A. SHULL  
PROJECT LANDSCAPE ARCHITECT: CHAD BAILES  
ASSISTANT GEN. MANAGER: RAMON BARAJAS  
LIC. NO. 882  
LIC. NO.  
DATE



PROJECT NAME:  
**ALLEGHENY STREET PARK**  
ADDRESS:  
**11961 ALLEGHENY STREET,  
SUN VALLEY, CA 91325**

REVISIONS:	DATE:

PLAN NAME:  
**IRRIGATION DETAIL**

DRAWN BY: BRIAN HUANG (CONTRACTOR)	APPROVED BY:
SCALE:	ISSUE DATE:
PRJ #	FILE NO.
DRAWING NO. <b>LS-13</b>	
SHEET OF SHEETS	