

APPROVED
SEP 04 2019

**BOARD OF RECREATION
AND PARK COMMISSIONERS**

BOARD REPORT

NO. 19-177

DATE September 4, 2019

C.D. 6

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER PHASE II (AKA ALBERT PIANTANIDA INTERGENERATIONAL CENTER) (W.O. #E170420F) PROJECT – APPROVAL OF FINAL PLANS; CATEGORICAL EXEMPTION FROM THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PURSUANT TO ARTICLE III, SECTION 1, CLASS 1(3) [OPERATION OF PEDESTRIAN TRAILS], CLASS 1(12) [LIGHTING FOR SECURITY AND OPERATIONS], CLASS 3(6) [INSTALLATION OF ACCESSORY STRUCTURES], CLASS 4(3) [LANDSCAPING AND TREE PLANTING], CLASS 4(12) [MINOR TRENCHING AND BACKFILLING] AND CLASS 11(6) [PLACEMENT OF MINOR STRUCTURES] OF CITY CEQA GUIDELINES AND ARTICLE 19, SECTIONS 15301(c), 15303(e), 15304(b) and (f), AND 15311 OF CALIFORNIA CEQA GUIDELINES

AP Diaz _____
H. Fujita _____
V. Israel _____
S. Piña-Cortez _____
*C. Santo Domingo _____
N. Williams _____


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Approved X Disapproved _____ Withdrawn _____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, for the Mid-Valley Intergenerational Multipurpose Center (AKA Albert Piantanida Intergenerational Center) Phase II (W.O. #E170420F Prop K Specified Grant ID No. S58) Project (Project);
2. Find 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(3), Class 1(12), Class 3(6), Class 4(3), Class 4(12) and Class 11(6) of City CEQA Guidelines and Article 19, Sections 15301(c), 15303(e), 15304(b) and (f), and 15311 of California CEQA Guidelines, and direct staff to file a Notice of Exemption (NOE);
3. Authorize the Department of Recreation and Parks' (RAP) Chief Accounting Employee or designee to prepare a check to the Los Angeles County Clerk in the amount of \$75.00 for the purpose of filing an NOE; and,
4. Authorize the RAP's Chief Accounting Employee or designee to make technical corrections as necessary to carry out the intent of this Report.

BOARD REPORT

PG. 2

NO. 19-177

SUMMARY

The Mid-Valley Intergenerational Multipurpose Center (AKA Albert Piantanida Intergenerational Center) Phase II (W.O. #E170420F) Project is located at 9540 Van Nuys Boulevard, Los Angeles, California 91402, in Council District No. 6. The scope of work, as written in the Proposition K – L.A. for Kids Program (Prop K) Specified Scope, is to acquire land and construct a new senior center and multipurpose inter-generational center. The property was acquired, utilizing Prop K and Los Angeles County Proposition A funds. Due to limited funding, the design and construction of the project was divided into two phases (Phase I and Phase II). The plans and specifications for both phases were prepared by the Department of Public Works, Bureau of Engineering (BOE), Architectural Division.

Phase I - Completed

Phase I was the development of the westerly 1.3 acres of the overall 2.7-acre project site. The scope of work consisted of the construction of a new 2,500 square foot multipurpose building. In addition, there were also outdoor improvements including landscape, irrigation, walking paths, parking, picnic tables, seating benches, electrical vehicle charging station, bicycle storage locker, drinking fountains, security lighting, trash enclosure, signage, and fitness and children's play equipment. Construction was completed on January 5, 2015 and Final Acceptance was approved by the Board on February 9, 2015 (BR 15-040)(Attachment No. 1). Phase I was funded by Proposition 40 RZH, Proposition 40 PC, Quimby, and CIEP funds.

Phase II

Phase II is the development of the remaining 1.4 acres of the 2.7-acre project site. The scope of work consists of new landscaping, new construction of a basketball court, group activity area, installation of new irrigation, security lighting, walking paths, fencing and children's play area, exercise equipment areas, trash cans, benches, and tables. The Project is funded by Proposition 68, CIEP, and Sites and Facility Funds.

The Project's conceptual design was presented to the community on March 2, 2017, at the existing multipurpose building for community input. Two (2) community members attended the meeting. The proposed conceptual design was also presented to RAP Facility Repair and Maintenance Commission Task Force on May 9, 2017. Final plans were presented to the community on June 20, 2018. The Project receives support from both Council office and community members.

RAP and BOE staff reviewed the project scope of work and have determined that the work can be performed by RAP's pre-qualified on-call contractors. Staff recommends the Project be constructed by the on-call contractors and that BOE provide construction management services during the construction of these improvements.

BOARD REPORT

PG. 3

NO. 19-177

The City Engineer's estimate for the base bid is \$1,300,000. Sufficient funds are available for the base bid construction and construction contingencies from the following funds and accounts:

<u>FUNDING SOURCE</u>	<u>FUND/DEPT./ACCT. NO.</u>
Prop 68	205/89/89RHDT
Site & Facility	209/88/88PACN
CIEP	100/54/00J031

TREES AND SHADE

The project site for the Phase II project has a tree canopy coverage area of 10,785 square feet. Seventeen (17) trees that are non-native and non-protected will be removed as part of the Project's construction. Thirteen (13) of the trees to be removed are either unhealthy or drought stress and four (4) are dead; these trees have a canopy coverage area of 2,486 square feet. The proposed trees to be removed are: five (5) Arizona Ash, four (4) Italian Cypress, three (3) Weeping Bottlebush, one (1) Mexican Fan Palm, one (1) Jacaranda, one (1) Black Locust, one (1) California Sycamore, and one (1) Peruvian Pepper. The Project includes planting of thirty-one (31) new trees, which, after five (5) years and at an estimated 75% survival rate, will have a tree canopy coverage area of 14,700 square feet, for a new total site tree canopy coverage area of 22,999 square feet. The Project will have a tree canopy site coverage of at least 40% at five (5) years post construction. The proposed trees to be planted are: four (4) 24-inch box Crape Myrtle, four (4) 24-inch box Brisbane Box, two (2) 36-inch box Desert Museum Palo Verde, eleven (11) 24-inch box Afghan Pine, and ten (10) 24-inch box Chinese Pistache.

RAP staff will design and install the children's' play equipment with shades. The associated cost will be funded through the Project's budget.

ENVIRONMENTAL IMPACT

The proposed Project consists of the construction of the installation of new lighting and fencing for security and operations, of the installation of new accessory structures in a public facility, of new landscaping and new tree planting, of minor trenching and backfilling for new irrigation and of the placement of minor structures accessory to institutional facilities. As such, staff recommends that the Board determines that the Project is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Article III, Section 1, Class 1(3), Class 1(12), Class 3(6), Class 4(3), Class 4(12) and Class 11(6) of City CEQA Guidelines, as well as to Article 19, Sections 15301, 15301(c), 15303(e), 15304 (b) and(f), and 15311 of California CEQA Guidelines. A Notice of Exemption will be filed with the Los Angeles County Clerk upon Board's approval.

BOARD REPORT

PG. 4

NO. 19-177

FISCAL IMPACT

There is no immediate fiscal impact to RAP's General Fund. Future costs for operations and maintenance have not yet been determined but will be addressed 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

Key Metric: Percentage of Angelenos with park access within ½ miles from their home

This Report was prepared by Ray Araujo, Project Manager, Department of Public Works, Bureau of Engineering (BOE), Architectural Division. Reviewed by Neil Drucker, BOE, Architectural Division, Interim Division Manager; and Darryl Ford, Superintendent, Planning, Maintenance and Construction Branch.

LIST OF ATTACHMENT(S)

1. Board Report No.15-040 – Mid-Valley Intergenerational Multi-Purpose Center Project – Final Acceptance.
2. Colored schematic site plan.
3. Final plans and specifications

APPROVED
FEB 18 2015

REPORT OF GENERAL MANAGER

NO. 15-040

DATE February 18, 2015

BOARD OF RECREATION
 AND PARK COMMISSIONERS

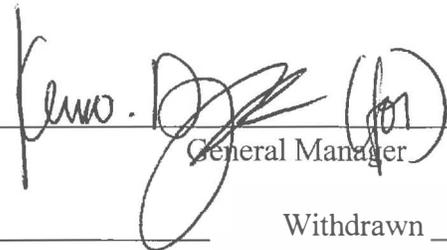
C.D. 6

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER
 (PRJ20163) (W.O. #E170239F) PROJECT - FINAL ACCEPTANCE AND
 RELEASE OF RETENTION

R. Adams	_____	V. Israel	_____
*R. Barajas	<u>CSDA</u>	K. Regan	_____
H. Fujita	_____	N. Williams	_____

as amended



 General Manager

Approved _____

Disapproved _____

Withdrawn _____

RECOMMENDATIONS:

That the Board:

1. Approve the final acceptance of work performed for the Mid-Valley Intergenerational Multipurpose Center (PRJ20163) (W.O. # 170239F) project under Contract No. 3442 and awarded to Mallcraft, Inc., as outlined in the Summary of this Report;
2. Authorize the Department's Chief Accounting Employee to immediately release all retention monies held under Mallcraft, Inc., Contract No. 3442, after deducting for any remaining stop notices and/or penalties, if any, as outlined in the Summary of this Report;
3. Authorize the Board Secretary to furnish Mallcraft, Inc., with a letter of acceptance for the subject project.

SUMMARY:

On April 17, 2013, the Board awarded Mallcraft, Inc., Contract No. 3442, in the amount of \$2,120,000, under Report No. 13-093, for the construction of the Mid-Valley Intergenerational Multipurpose Center (PRJ20163) (W.O. # E170239F) project. On June 5, 2013, the Board executed Contract No. 3442. The Notice-to-Proceed was issued to Mallcraft, Inc. on June 11, 2013. The

REPORT OF GENERAL MANAGER

PG. 2 NO. 15-040

Board also authorized the Department of Public Works, Bureau of Engineering (BOE) to negotiate and execute construction change orders within the amount of the approved construction budget.

The project is located at 9540 North Van Nuys Boulevard, Panorama City, California in Council District 6. The scope of work for the subject project consisted of the construction of a new multipurpose facility, which includes a single story, 2,500 square foot building and outdoor improvements including; landscape, irrigation, walking paths, and parking and installation of picnic tables, benches, electrical car charging station, bicycle storage locker, drinking fountains, security lighting, trash enclosure, and signage. The installation of fitness and children's play equipment were also included in the project scope, using the City's On-Call contractors. This work was done under a separate contract, and was not part of the work awarded to Mallcraft, Inc.

Construction is now 100% complete. On January 5, 2015, the Department of Building and Safety issued the Certificate of Occupancy for the project. On February 9, 2015, the Department of Recreation and Parks (RAP) took beneficial occupancy of the facility.

There were 60 Change Orders issued, totaling \$411,645¹ or 19.4% of the original awarded amount. The total contract amount, including approved change orders, is \$2,531,645.00¹. The funds to pay for the cost of Change Order No.10 will be reimbursed to the City by Wildan Engineering, Geotechnical consultant for the subject project, for costs incurred during construction, due to an error by Wildan Engineering. Wildan Engineering has agreed that the error was caused by their work, and agreed, through a Settlement Agreement, now in the process of being executed, to reimburse the City for any and all additional costs incurred by the project due to their error. The project was completed within the overall approved budget.

Department staff has consulted with the Department of Public Works, Bureau of Contract Administration, Office of Contract Compliance concerning the status of the labor compliance requirements and Affirmative Action requirements on the project and, to date, there are no outstanding wage violations, and Mallcraft, Inc., is in compliance.

FISCAL IMPACT STATEMENT:

There is no fiscal impact to the Department at this time. Current staff within the immediate area will provide the necessary maintenance.

This Report was prepared by Ray Araujo, Recreational and Cultural Facilities Program, Department of Public Works, Bureau of Engineering (BOE). Reviewed by Neil Drucker, Program Manager, Recreational and Cultural Facilities Program, BOE; , Deputy City Engineer, BOE; and Cathie Santo Domingo, Superintendent, Planning, Construction and Maintenance Branch.

CO & CO Request Log: Mid-Valley Multi-Purpose Intergenerational Center
W.O.No.: E170239

CO No	CO Req	DESCRIPTIONS	PCO ECO Date	GC Prop Amount	Proposal Date	CMD Est Amount	Apprvd Amount	Apprvd Date	Change Order Status	FCO Date	C.O. Type	Pymt Type	Cal. Days Req.	App'd Comp Cal Days	App'd Non Comp Cal Days	REMARKS
001		7 Day Time Extension	NA	\$ -	NA	\$ -	\$ -	NA	Executed	08/09/13	U	LS	7	0	7	Issued due to City delay in providing RTI plans
002	002	Reimbursement of Permit	NA	\$ 15,014.00	08/06/13	\$ 12,874.00	\$ 12,874.00	08/07/13	Executed	08/07/13	U	LS	0	0	0	Issued due to no allowance orders in budget
003	001	Cistern Removal	08/01/13	\$ 3,362.00	07/24/13	\$ 2,963.00	\$ 3,362.00	10/18/13	Executed	11/06/13	U	LS	0	0	0	Unforeseen condition, time delay addressed in CO 010
004	7R1	Removal of Unidentified Trees and Iron Fence	10/16/13	\$ 5,820.00	10/02/13	\$ 4,850.00	\$ 5,820.00	10/02/13	Executed	11/06/13	U	LS	0	0	0	No additional time issued
005	003	Printing Fees	NA	\$ 1,332.31	08/06/13	\$ 1,204.00	\$ 1,204.00	08/13/13	Executed	08/13/13	U	LS	0	0	0	City services could not provide 10 full copies of plans and specs in a reasonable time.
006	12R1	Landscaping Plan Changes	08/06/13	\$ 12,597.00	01/23/14	\$ 10,438.00	\$ 10,438.00	08/28/14	Executed	10/24/14	S	LS	14	0	14	Issued due to improvements within drip line of trees.
007		Credit Use of Existing Fence and BMP	08/09/13	\$ -	NA	\$ -	\$ -	NA	Canceled	NA	NA	NA	0	0	0	Wash cost of removal with cost of use
008	005	Locate and CCTV Sewer Laterals for POC	08/12/13	\$ 7,151.00	08/20/13	\$ 1,832.00	\$ 1,832.00	02/13/14	Executed	04/15/14	U	LS	0	0	0	
009		New 4" Communications Conduit at PL		\$ -	NA	\$ -	\$ -	NA	Canceled	NA	NA	NA	0	0	0	Cost of CO not worth time to put COR together
010	008	Corrections to Backfill Material for Building and Parking Lot Area	09/06/13	\$ 98,782.00	02/05/14	\$ 48,292.00	\$ 82,000.00	03/13/14	Executed	03/13/14	U	TM	43	20	23	Resolved all time delays prior to the date of FCO
011	4R1	Plan Clarification #1 - Electrical	NA	\$ 24,149.00	08/19/13	\$ 8,519.00	\$ 14,538.00	10/22/14	Executed	10/22/14	U	LS	14	0	0	Time issued on CO 030
012	10R	PSI. Added Scope Per Shop Drawings	NA	\$ 2,708.00	10/25/13	\$ 1,200.00	\$ 2,500.00	09/11/14	Executed	10/23/14	S	LS	5	0	0	
013	016	Plywood at Roof		\$ 9,765.00	02/11/14	\$ 6,966.00	\$ 6,966.00	03/25/14	Executed	04/15/14	E	LS	5	0	0	Time negotiation unresolved
014	017	DWP Fees for Meter	NA	\$ 9,238.00	02/10/14	\$ 8,243.00	\$ 7,670.00		Canceled		E	LS	0	0	0	City not responsible to pay utility fees
015	026	Closure Plate and Notching Track		\$ 2,334.00	03/18/14	\$ -	\$ -	NA	Canceled	NA			0	0	0	Rejected due to PSI erection mistake
016	025	Added Closure, Clip, and Welding		\$ 5,117.00	03/18/14	\$ -	\$ -	NA	Canceled	NA			0	0	0	Voided by RDJ in COR 35R1
017	021	Removal of 2 Trees - Jacaranda and Juniper		\$ 2,862.00	03/19/14	\$ 2,147.00	\$ 2,147.00	03/28/14	Executed	04/15/14	S	LS	0	0	0	Deducted the Arborist's time
018	19R3	Added Cost of Haul-Off for Excess Spills		\$ 30,469.00	05/12/14	\$ 15,234.00	\$ 20,000.00	01/03/15	Executed		E	LS	0	0	0	Rejected as there is no calculation for bid quantities shown in COR
019	13R1	Omega Gate and Trilogy Locks		\$ 7,769.00	08/22/14	\$ 7,420.00	\$ 7,420.00	09/11/14	Executed	01/22/15	S	LS	30	0	0	Issue w/o time
020	23R2	Ceiling Expansion Covers		\$ 10,574.00	10/30/14	\$ 9,289.00	\$ 10,574.00	01/27/15	Executed		E	LS	0			Added per addendum, but type and model not specified
021	028	Anodizing Premium - Nannawall	04/28/14	\$ 5,547.00	04/28/14	\$ 5,437.00	\$ 5,437.00	05/06/14	Executed	06/04/14	S	LS	0	0	0	Premium color requirement not specified in documents
022	030	Added Steel	05/28/14	\$ 1,984.00	05/28/14	\$ 750.00	\$ 1,984.00	09/11/14	Canceled		U	LS	0	0	0	Added supports for decking
023	033	Seismic for Pendant Lights	NA	\$ 1,290.00	07/14/14	\$ 1,352.00	\$ 1,290.00	07/15/14	Canceled		E	LS	0	0	0	Not required; plan clarification eliminated light pendants that would require seismic bracing
024	029	Grading at North and South West Limits	NA	\$ 2,037.00	07/10/14	\$ 1,741.00	\$ 1,741.00	07/15/14	Executed	08/20/14	S	LS	0	0	0	T&M tickets used for tracking purposes only. Negotiated in Lump Sum Need TIA for 40 days.
025	011	Trash Enclosure Redesign	NA	\$ 11,966.00	08/22/14	\$ 11,966.00	\$ 11,966.00	09/11/14	Executed	01/22/15	S	LS	40	0	0	
026	071	Change in Curb Height Requirements		\$ 6,225.00	10/28/14	\$ 5,942.00	\$ 5,942.00	10/28/14	Executed	01/22/15	S	LS	0	0	0	
027	031	Stainless Steel Sink at Exterior RR	NA	\$ 3,813.00	08/22/14	\$ 2,360.00	\$ 3,524.00	01/27/15	Executed	01/30/15	E	LS	7	0	0	
028	038	Security Alarm Revisions	NA	\$ 1,853.00	08/22/14	\$ 1,853.00	\$ 1,853.00	08/02/14	Executed	01/30/15	S	LS	5	0	0	
029	TM	Steel Stud Changes	NA	\$ 21,046.00	08/19/14	\$ 1,337.00	\$ 12,114.00	09/11/14	Executed				30			Negotiated in toto
030	4R2	Plan Clarification #1 - Structural		\$ 10,216.00	08/22/14	\$ 8,228.00	\$ 8,228.00	09/11/14	Executed				14	0	14	
031	051	Architect Vent at East Overhang		\$ 1,011.00	09/16/14	\$ 810.00	\$ 810.00	12/02/14	Executed	01/22/15	E	LS	5	0	0	
032	44R1	Roof Panel Installation		\$ 3,830.00	09/15/14	\$ 610.00	\$ 610.00	12/03/14	Executed	01/22/15	E	LS	3	0	0	
033	45R1	Piping for Drinking Fountain		\$ 5,266.00	09/12/14	\$ 3,300.00	\$ 3,300.00	12/03/14	Executed	01/22/15	E	LS	2	0	0	
034	046	Added Aluminium Reveals		\$ 2,617.00	09/04/14	\$ 2,239.00	\$ 2,239.00	12/03/14	Executed	01/22/15	E	LS	0	0	0	
035	40R1	Signage Changes		\$ 8,452.00	01/13/15	\$ 3,392.00	\$ 7,800.00	01/30/15	Executed		S		0			Needs revised breakdown.
036	041	Hand Dryer		\$ 974.00	08/28/14	\$ 900.00	\$ 900.00	12/03/14	Executed	01/22/15	E	LS	0	0	0	
037	42R	Additional Fire Sprinklers		\$ 10,280.00	09/08/14	\$ 10,280.00	\$ 10,280.00	11/20/14	Executed	12/04/14	E	LS	0	0	0	
038	47R1	Driveway Change CMB to CAB		\$ 26,061.00	09/10/14	\$ 14,447.00	\$ 14,447.00	12/03/14	Executed	01/22/15	E	LS	10	0	0	
039	069	Corbels at Reception		\$ 424.00	10/20/14	\$ 400.00	\$ 424.00	12/03/14	Executed	01/22/15	E	LS	0	0	0	
040	037	Car Charger		\$ 4,919.00	09/25/14	\$ 4,919.00	\$ 4,919.00	01/22/15	Executed	01/22/15	S	LS	0	0	0	
041	052	Reinforce Openings		\$ 741.00	09/11/14	\$ 741.00	\$ 741.00	01/30/15	Executed		E		0			
042	062	Fire Extinguishers and Cabinets		\$ 1,363.00	10/02/14	\$ 1,363.00	\$ 1,363.00	01/22/15	Executed	01/22/15	U	LS	0	0	0	
043	066	Level 5 Finish		\$ 2,740.00	10/08/14	\$ 2,500.00	\$ 2,500.00		Canceled				0			Included in CO 029
044	061	Added Lights at Break Area		\$ 638.00	09/20/14	\$ 460.00	\$ 638.00	12/03/14	Executed	01/22/15	E	LS	0	0	0	
045	078	Replacement of HVAC Unit	12/05/14	\$ 17,063.00	12/02/14	\$ 15,000.00	\$ 14,535.00	12/09/14	Executed	01/22/15	E	LS	0	0	0	
046	068	Paint Building Exterior	10/15/14	\$ 4,150.00	10/15/14	\$ 4,150.00	\$ 4,150.00	12/03/14	Executed	01/22/15	E	LS	0	0	0	
047	070	Door 107 Hardware	11/06/14	\$ 1,006.00	11/06/14	\$ 1,006.00	\$ 1,006.00	12/03/14	Executed	01/22/15	E	LS	0	0	0	
048	072	Tapered Insulation for Canopy	11/18/14	\$ 2,564.00	11/18/14	\$ 2,564.00	\$ 2,564.00	01/30/15	Executed	01/30/15	S	LS	0	0	0	
049	059	Change in Wall Tile Layout	12/05/14	\$ 977.00	12/05/14	\$ 234.00	\$ 977.00	01/19/15	Executed	01/30/15	S	LS	0	0	0	
050	76A	FDC Changes	12/29/14	\$ 2,204.00	12/23/14	\$ 1,190.00	\$ 1,905.00	01/19/15	Executed	01/22/15	E	LS	0	0	0	
051	009	Sewer Connection	02/01/15	\$ 39,454.00	09/10/14	\$ 20,000.00	\$ 21,000.00	01/30/15	Executed		E		0			
052	075	Smoke Detector Lowering	01/09/15	\$ 1,047.00	01/09/15	\$ 494.00	\$ 1,047.00	01/30/15	Executed	01/30/15	E	LS	0	0	0	
053	082	Canopy Signage Changes	01/13/15	\$ 2,332.00	01/13/15	\$ 1,621.00	\$ 2,332.00	01/30/15	Executed		E		0			2136 offer pending
054	057	Expansion Joints at Tile Wall	09/25/14	\$ 578.00	09/25/14	\$ 378.00	\$ 378.00	01/30/15	Executed		E		0			
055	055	Fire Rated Plywood at Corn Room		\$ 1,054.00	01/14/15	\$ 1,054.00	\$ 1,054.00	01/19/15	Executed	01/22/15	E	LS	0	0	0	
056	043	Framing and Drywall Changes		\$ 2,081.00	11/21/14	\$ 1,451.00	\$ 1,915.00	01/30/15	Executed		E		0			
057	049	Added Screws at Canopy		\$ 1,112.00	09/10/14	\$ 1,112.00	\$ 1,112.00	01/30/15	Executed		E		0			
058	058	Waterproofing at Window Frames		\$ 1,197.00	11/20/14	\$ 1,113.00	\$ 1,113.00	01/30/15	Executed		S		0			
059	060	Offsite Improvements		\$ 31,035.00	01/27/15	\$ 16,000.00	\$ 16,000.00	01/30/15	Executed		U		0			
060	064	Added Countertop per Submittal		\$ 2,417.00	10/03/14	\$ 2,000.00	\$ 2,000.00	01/30/15	Executed		E		0			
061	074	Main Duct Relocation		\$ 2,064.00	01/12/15	\$ 1,900.00	\$ 1,900.00	01/30/15	Executed		E		0			
062	080	Add Angle and Weld to HSS Tubing		\$ 3,709.00	01/08/15	\$ 3,709.00	\$ 3,709.00	01/30/15	Executed		E		0			
063	085	Revise duct work at Kitchen		\$ 890.00	01/28/15	\$ 800.00	\$ 800.00	01/30/15	Executed		E		0			
064	048	Standby Time for Inspections		\$ 4,545.00	09/10/14	\$ 3,000.00	\$ 3,000.00	02/02/15	Executed		U		0			
065	053	Overtime		\$ 5,784.00	01/27/15	\$ 5,784.00	\$ 5,784.00	02/02/15	Executed		E		0			
066	024	Structural Steel Issues		\$ 53,898.00	12/12/14	\$ 24,855.00	\$ 24,855.00	02/02/15	Executed		E		0			
067	050	Extended Overhead		\$ 85,570.00	01/27/15	\$ 14,550.00	\$ 14,550.00	02/02/15	Executed		U		15		45	
068		Final Closeout Change Order		\$ 44,894.00	02/10/15	\$ 22,934.00	\$ 22,934.00	02/10/15	Executed		U					

Footnotes
1. Percentages of Change Order Types are based on approved dollar amounts.
2. Forecasted Change Orders = Unresolved + Negotiated



Mid-Valley Multi-Purpose

Intergenerational Center - Expansion



MARCH 2ND, 2017

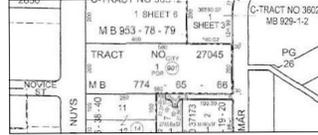
ABBREVIATIONS*

ABAND	ABANDONED	MAX	MAXIMUM
AC	ASPHALT CONCRETE	MCD	MULTIPLE CONCRETE DUCT
ACI	AMERICAN CONCRETE INSTITUTE	MH	MAINTENANCE HOLE
AHD	AHEAD	MIN	MINIMUM
AL	AIR LINE	MTD	MULTIPLE TILE DUCT
&	AND		
ASST	ASSISTANT		
ASTM	AMERICAN SOCIETY FOR TESTING OF MATERIALS		
AVE	AVENUE, AVERAGE	N	NORTH, MANNING'S N FACTOR
AVG	AVERAGE	N/O	NORTH OF
		No(S)	NUMBER(S)
BK	BACK	NOS	NORTH OUTFALL SEWER
BL	BYPASS LINE	NS, N/S	NORTH OF SOUTH PROPERTY LINE
BLK	BLOCK	#	NUMBER
BLVD	BOULEVARD	(N)	NORTH SIDE LATERAL CONNECTION
BM	BENCH MARK		
BUR	BURIED		
BCR	BEGINNING OF CURB RADIUS	OH	OVERHEAD
		OLS	OVERHEAD LIGHT STANDARD
		OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
CAL-AM	CALIFORNIA-AMERICAN WATER COMPANY		
CB	CATCH BASIN		
CFS	CUBIC FEET PER SECOND		
CI	CAST IRON	PA	PLANTER AREA
CJ	CONSTRUCTION JOINT	PB	PULL BOX
CL	CENTERLINE	PCF	POUNDS PER CUBIC FOOT
CLF	CHAIN LINK FENCE	PI	POINT OF INTERSECTION
CLR	CLEAR, CLEARANCE	PL	PROPERTY LINE, PLATE
CLSM	CONTROLLED LOW STRENGTH MATERIAL	PL	PROPERTY LINE
CO	COMPANY, CHANGE ORDER	POC	POINT OF CONNECTION
CONC	CONCRETE	PP	POWER POLE, PAPER PIPE
CONST	CONSTRUCT, CONSTRUCTION	PROP	PROPOSED
CP	CONTROL POINT	PSF	POUNDS PER SQUARE FOOT
		PSI	POUNDS PER SQUARE INCH
		PM	PROJECT MANAGER
d	DEPTH	PACBELL	TELEPHONE, PACIFIC BELL, PACIFIC
D	DIAMETER		TELEPHONE AND TELEGRAPH
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE
DIST	DISTRICT	PVMT	PAVEMENT
DIV	DIVERSION, DIVISION		
DMH	STORM DRAIN MAINTENANCE HOLE	Q	FLOW RATE
DRWY, DWY	DRIVEWAY		
DU	DUCT	R	RADIUS
DWG(S)	DRAWING(S)	RCP	REINFORCED CONCRETE PIPE
DWPPS	DEPARTMENT OF WATER AND POWER POWER SERVICE	REV	REVISION, REVISED, REVERSED
DWPWS	DEPARTMENT OF WATER AND POWER WATER SERVICE	REHAB	REHABILITATION
		RELOC	RELOCATION
E	EAST	S	SOUTH, SLOPE
EF	EACH FACE	SCG	SOUTHERN CALIFORNIA GAS
ELEC	ELECTRIC	SD	STORM DRAIN
EL	ELEVATION	SG	SUB GRADE
ELEV	ELEVATION	SL	SEWER LATERAL
ELS	ELECTROLIERS	SMH	SEWER MAINTENANCE HOLE
EMBED	EMBEDMENT	SN, S/N	SOUTH OF NORTH PROPERTY LINE
ENGR	ENGINEER	S/O	SOUTH OF
E/O	EAST OF	SPEC(S)	SPECIFICATION(S)
EW	EAST WAY	SPK	NAIL SPIKE
EW, E/W	EAST OF WEST PROPERTY LINE	SQ	SQUARE
EX, EXIST.	EXISTING	SS	STAINLESS STEEL, SANITARY SEWER
(E)	EAST SIDE LATERAL CONNECTION	SSFM	SANITARY SEWER FORCE MAIN
		SSI	SUB SURFACE IRRIGATION
		SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
		ST	STREET
F&P	FIRE AND POLICE	STA	STATION
FG	FINISH GRADE	STD	STANDARD
FH	FIRE HYDRANT	STL	STEEL
FIG	FIGURE	(S)	SOUTH SIDE LATERAL CONNECTION
FL	FLOW LINE		
FOC	FACE OF CURB	T	TELEPHONE, TELEPHONE VAULT
FRP	FIBERGLASS REINFORCED PLASTIC	TCS	TERMINAL CLEANOUT STRUCTURE
FT	FOOT, FEET	TH	TEST HOLE
FWY	FREEWAY	TS	TRAFFIC SIGNAL
		TSC	TRAFFIC SIGNAL CONDUIT
		TYP	TYPICAL
GM	GAS METER		
GV	GAS VALVE, GATE VALVE		
		U	UNIFORM BUILDING CODE (INCLUDING LOS ANGELES CITY ADDITIONS)
HC	HOUSE CONNECTION (6" UNLESS OTHERWISE NOTED)	UBC	UNIFORM BUILDING CODE (INCLUDING LOS ANGELES CITY ADDITIONS)
HDPE	HIGH DENSITY POLYETHYLENE		
HORIZ	HORIZONTAL		
		V	VARIES, VARIABLE
		VAR	VITRIFIED CLAY PIPE
ID	INSIDE DIAMETER	VERT	VERTICAL
IE	INVERT ELEVATION		
IN	INCHES		
INV	INVERT	W	WEST
		W	WEST
		W/	WITH
		WE, W/E	WEST OF EAST PROPERTY LINE
JS	JUNCTION STRUCTURE	WHC	WATER HOUSE CONNECTION
JT	JOINT	WM	WATER METER
		WO	WORK ORDER
		W/O	WITHOUT, WEST OF
LASAN	LOS ANGELES CITY, BUREAU OF SANITATION	WV	WATER VALVE
LA	LANE	(W)	WEST SIDE LATERAL CONNECTION
LF	LINEAR FEET	WWF	WELDED WIRE FABRIC
LT	LEFT, LIGHT		
LADOT	LOS ANGELES DEPARTMENT OF TRANSPORTATION	X	BY, TIMES

* NOTE: THIS IS A GENERAL ABBREVIATION LIST. NOT ALL ABBREVIATIONS MAY BE USED IN THESE DRAWINGS. SEE PM FOR ANY ABBREVIATIONS THAT ARE UNCLEAR, OR NOT ON THIS LIST.

LEGAL DESCRIPTION:

TRACT: TR 27045
 LOT: 1
 MAP REFERENCE: MB 774-65/66
 PARCEL ID: 2644025901



PROJECT DESCRIPTION:

FIELD IMPROVEMENTS WHICH INCLUDES THE FOLLOWING:

1. GRADING OF SUB-GRADE FOR NEW PLAYGROUND.
2. GROUP ACTIVITY/GATHERING AREA.
3. GRADING OF SUB-GRADE FOR FITNESS STATIONS.
4. PATHWAYS - D.G AND CONCRETE.
5. LOW-WATER USE PLANTING WITH MULCH.
6. STORMWATER INFILTRATION GALLERY.
7. BASKETBALL COURT.
8. SECURITY LIGHTING.
9. IRRIGATION SYSTEM.

SHEET INDEX

GENERAL

- G001 TITLE SHEET
- G002 SHEET INDEX AND GENERAL INFORMATION
- G003 GENERAL NOTES
- G004 SOILS REPORT APPROVAL LETTER
- G005 GREEN BUILDING CODE SHEETS
- G006 ACCESSIBILITY ROUTE
- G007 ACCESSIBILITY NOTES
- G008 ACCESSIBILITY NOTES

ARCHITECTURAL - REFERENCE ONLY OMITTED

- G201 TILE 24- DISABLED ACCESS-DETAILS OMITTED
- G202 TILE 24- DISABLED ACCESS-DETAILS OMITTED
- G203 TILE 24- DISABLED ACCESS-DETAILS OMITTED
- A101 SITE PLAN OMITTED
- A101a PARKING LAYOUT PLAN OMITTED
- A401 ENLARGED RESTROOM PLAN & ELEVATIONS OMITTED
- A601 DOOR SCHEDULE, NOTES AND DIAGRAMS OMITTED

LANDSCAPE

- L001 LANDSCAPE CONSTRUCTION NOTES, SHEET 1
- L002 LANDSCAPE CONSTRUCTION NOTES, SHEET 2
- L003 LANDSCAPE CONSTRUCTION NOTES, SHEET 3
- L004 LANDSCAPE CONSTRUCTION NOTES, SHEET 4
- L102 SITE SURVEY
- L103 GRADING PLAN - AS-BUILT / PHASE I
- L201 DEMOLITION PLAN
- L301 GRADING PLAN
- L302 LID PLAN
- L303 LID CALCULATIONS SIZING & CHAMBER SYSTEM
- L304 LID FORMS
- L401 CONSTRUCTION PLAN
- L402 CONSTRUCTION DETAILS, SHEET 1
- L403 CONSTRUCTION DETAILS, SHEET 2
- L404 CONSTRUCTION DETAILS, SHEET 3
- L405 CONSTRUCTION DETAILS, SHEET 4
- L501 LAYOUT PLAN
- L601 IRRIGATION PLAN / AS-BUILT
- L602 IRRIGATION PLAN
- L603 IRRIGATION NOTES & WATER EFFICIENCY
- L604 IRRIGATION DETAILS
- L701 PLANTING PLAN & DETAILS
- L702 TREE PROTECTION ZONE (TPZ)

ELECTRICAL

- E001 G. NOTES, SCOPE OF WORK, SYB LIST AND SITE SECURITY PLAN
- E101 EXIST. & NEW SITE LIGHTING PLAN, WIRING DIAGRAM, LIGHT FIX SCH.
- E102 PANEL SCHEDULE AND LIGHT POLE DETAILS
- E201 ELECTRICAL SPECIFICATIONS
- E301 TITLE 24 - OUTDOOR

BUREAU OF ENGINEERING

CITY OF LOS ANGELES

ENGINEERING

CITY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

CITY OF LOS ANGELES

RECREATION & PARKS

GENERAL MANAGER, MICHAEL A. SHULL

CLIENT: DEPARTMENT OF RECREATION & PARKS

SHEET TITLE: SHEET INDEX & GENERAL INFORMATION

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. G002

SHEET 2 OF 43

SHEETS 43

DATE: 8/20/19 9:52 AM

REVISIONS:

NO. 1

DATE: 8-04-18

BY: JANE ADRIAN

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

LIC. NO. 3940

ARCHITECT: JANE ADRIAN

LANDSCAPE ARCHITECT: JANE ADRIAN

DESIGNED BY: LORENA MATOS, P.L.A. / ASLA | ENV SP / COM / LEED AP

DRAWN BY: LORENA MATOS, P.L.A. / ASLA | ENV SP / COM / LEED AP

TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 8/20/19 9:52 AM
 FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATIONAL PHASE II\CONSTRUCTION DOCUMENTS\DWG\M2_G002_SHEET_INDEX_GENERAL_INFORMATION.DWG

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.

BOARD OF BUILDING AND SAFETY COMMISSIONERS
MARSHAL L. BROWN, PRESIDENT
HELENA JURJANY, VICE PRESIDENT
VAN AMBATIELOS, VICTOR H. CUEVAS
ELENORE A. WILLIAMS

CITY OF LOS ANGELES CALIFORNIA



ANTONIO R. VILLARAIGOSA MAYOR

DEPARTMENT OF BUILDING AND SAFETY 333 NORTH FLORIDA STREET, LOS ANGELES, CA 90012

ROBERT R. "BOB" OVROM GENERAL MANAGER

RAYMOND S. CHAN, C.E., S.E. EXECUTIVE OFFICER

SOILS REPORT APPROVAL LETTER

February 10, 2012 LOG # 76206 SOILS FILE - 2

Los Angeles City Recreation and Parks
200 N Spring Street, 23rd Floor
Los Angeles, CA 90012

TRACT: 27045
LOT: 1
LOCATION: 9540 Van Nuys Boulevard

CURRENT REFERENCE REPORT/LETTER(S)	REPORT NO.	DATE(S) OF DOCUMENT	PREPARED BY
Laboratory Report	12-00050	08/08/2011	Standard Div/DGS
Laboratory Report	140-5866	10/21/2011	Standard Div/DGS
Soils Report	10-076	11/02/2011	GED/Public Works

PREVIOUS REFERENCE REPORT/LETTER(S)	REPORT NO.	DATE(S) OF DOCUMENT	PREPARED BY
Soil Report	17264-S	12/23/1998	J. Kovacs & Assoc
Approval	Log #26775	01/25/1999	LADBS

The Grading Section of the Department of Building and Safety has reviewed the current reports for the proposed construction of the Mid-Valley Multi-Purpose Center. The Department has approved a previous report for the renovation of an 1-story structure on the property.

According to the current report, the property is vacant. The previous structures on site including a basement and foundations have been removed. The removal was backfill with structural fill. The proposed construction will be on the west side, and a supplementary report will be prepared for the future development of the remainder of the site. The subsurface materials consist of fill over native soil of sand, and silty sand. No groundwater was encountered during exploration down to a depth of 31 feet. An infiltration test has been performed on site, but the report provides no recommendation on installing a stormwater infiltration system. The report recommends removing and recompacting the existing fill, and supporting the proposed building with spread footings on the compacted fill. The accessory structures will be supported on compacted fill or native soil. Recommendations on open cuts are provided in the report for the proposed temporary excavations.

LADBS 0-3 (Rev. 01/11) AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

Page 2
9540 Van Nuys Boulevard

The reports are acceptable, provided the following conditions are complied with during site development:

(The numbers in the parentheses are in reference to the applicable sections of the 2011 Building Code, or to the Department's Information Bulletins. The Department Information Bulletins are posted on the internet at LADBS.ORG.)

- The soil engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans which clearly indicates that the soil engineer has reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in the report. (7006.1)
- All the recommendations of the report, which are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.
- A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1)
- All the footings shall be supported on the compacted fill or the competent native soils, as recommended in the report.
- Compacted fill shall extend laterally beyond the footings a minimum distance equal to the depth of the fill below the bottom of footings or a minimum of 3 feet whichever is greater.
- In the event expansive soil, as described in Code Section 1803.5.3, is experienced on site, the footings and slabs shall be designed and constructed to the requirements of the Department's Information Bulletin No. P/BC 2008-116. (1803.5.3, P/BC 2008-116)
- The seismic Site Class is D, as recommended in the report. All the other seismic design parameters shall be reviewed by LADBS building plan check. (1613.5.2)
- A grading permit shall be obtained. (106.1.2)
- All newly graded slopes shall be no steeper than a gradient of 2:1 (horizontal: vertical). (7010.2 and 7011.2)
- If import soils are used, no footings shall be poured until the soil engineer has submitted a compaction report containing in-place shear test data and settlement data to the Department, and obtained approval. (7008.2)
- Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (1809.2)
- All manufactured fills shall be compacted to a minimum relative compaction of 90 percent of the maximum dry density within 40 feet below the finish grade, and 93 percent of the

Page 3
9540 Van Nuys Boulevard

maximum dry density deeper than 40 feet below the finish grade, in accordance to ASTM D1557. Where cohesionless soil having less than 15% of particles finer than 0.005 millimeters is used in the fill, it shall be compacted to a minimum of 95% relative compaction. Placement of gravel in lieu of compacted fill is allowed only if complying with the Code. (7011.3)

- All roof and pad drainage shall be conducted to an approved drainage device/facility, or to the street in an acceptable manner. (7013.10)
- The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1)
- A supplemental report shall be submitted to the Grading Division of the Department containing recommendations for shoring, underpinning, and sequence of construction in the event that any excavation would remove lateral support to the public way, adjacent property, or adjacent structures. A plot plan and cross-section(s) showing the construction type, number of stories, and location of the structures adjacent to the excavation shall be part of the excavation plans. (3307.3 & 7006.2)
- A structure shall be considered surcharging an excavation if the structure is located within a horizontal distance from the top of the excavation equal to the depth of the excavation. (3307.3.1)
- Prior to the issuance of any permit which authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation. (3307.1)
- Unsupported temporary excavations shall not be subject to surcharged load. The portion of the excavations higher than 3 feet shall be sloped to a gradient no steeper than 1:1, as recommended in the report.
- Prior to excavation, an initial inspection shall be called at which time sequence of shoring, protection fences and dust and traffic control will be scheduled. (108.9.1)
- The soil engineer shall inspect all excavations to determine that conditions are as anticipated and shall make recommendations for correction of hazards found during grading. (7008, 1704.70)
- Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. He shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the LADBS Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the grading Division of the Department. All fill shall be

Page 4
9540 Van Nuys Boulevard

placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. An engineer's certificate of compliance shall include the grading permit number and the legal descriptions as described in the permit. (7011.3)

- Prior to the pouring of concrete, a representative of the soil engineer shall inspect and approve the footing excavations. A notice shall be posted on the job site for the City Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Department upon completion of the work.

RAPHAEL CHENG
Geotechnical Engineer I

RHC/rhc
Log #76206
(213) 482-0480

cc: GED/Public Works
VN District Office
Applicant

BUREAU OF ENGINEERING

ENGINEERING CITY OF LOS ANGELES

DATE BY: _____

NO. REVISIONS: _____

BUILDING NO. XX/XX

INDEX NO. _____

ARCHITECT: JANE ADRIAN

LANDSCAPE ARCHITECT: JANE ADRIAN

DESIGNED BY: LORENA MATOS, P.E. | ASLA | ENV SP / COM / LEED AP

DRAWN BY: LORENA MATOS, P.E. | ASLA | ENV SP / COM / LEED AP

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

CLIENT: DEPARTMENT OF RECREATION & PARKS
GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: SOILS REPORT APPROVAL LETTER

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD
VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. G004

SHEET 4 OF SHEETS 43

PLOTTED: 8/12/2019 2:18 PM

TEMPLATE SHEET REVISION DATE: 11/2015
REVISION DATE: 7/31/2019 3:46 PM
FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATIONAL PHASE II\CONSTRUCTION DOCUMENTS\DWG\MVZ_G004-G005_SOIL_REPORT_APPROVAL_AND_GREEN_BUILDING_CODE.DWG

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.



Storm Water Pollution Control Requirements for Construction Activities Minimum Water Quality Protection Requirements for All Construction Projects

The following notes shall be incorporated in the approved set of construction/grading plans and represents the minimum standards of good housekeeping which must be implemented on all construction projects.

Construction means constructing, clearing, grading or excavation that result in soil disturbance. Construction includes structure teardown (demolition). It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility; emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water; mechanical permit work; or sign permit work. (Order No. 01-182, NPDES Permit No. CAS004001 - Part 5: Definitions)

- 1. Eroded sediments and pollutants shall be retained on site and shall not be transported from the site via sheet flow, swales, area drains, natural drainage or wind.
2. Stockpiles of earth and other construction-related materials shall be covered and/or protected from being transported from the site by wind or water.
3. Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and shall not contaminate the soil nor the surface waters. All approved toxic storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of properly and shall not be washed into the drainage system.
4. Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained on the project site.
5. Excess or waste concrete may not be washed into the public way or any drainage system. Provisions shall be made to retain concrete waste on-site until it can be appropriately disposed of or recycled.
6. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of storm water and dispersal by wind.
7. Sediments and other materials shall not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the street/public ways. Accidental depositions must be swept up immediately and may not be washed down by rain or by any other means.
8. Retention basins of sufficient size shall be provided to retain storm water runoff on-site and shall be properly located to collect all tributary site runoff.
9. Where retention of storm water runoff on-site is not feasible due to site constraints, runoff may be conveyed to the street and the storm drain system provided that an approved filtering system is installed and maintained on-site during the construction duration.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.



LANDSCAPING

Section A: Landscape Designer

I certify that I am qualified by the State of California to perform landscape design services; the landscape design and water use calculations for this project were prepared by me or under my supervision; the landscape design and water use calculations comply with the requirements of the Model Water Efficient Landscape Ordinance, and the Landscape Documentation Package is complete; OR Interior T.L., no landscape work performed (do not complete sections B or C below); OR This project is not subject to the Model Water Efficient Landscape Ordinance (do not complete sections B or C below).

Name: JANE ADRIAN Relationship to Project: ARCHITECT
Company Name (if applicable): CITY OF LOS ANGELES State License # (if applicable): 3940
Signature: [Signature] Date: 6-04-18

Section B: Landscape Installer

I certify that (a) I am qualified by the State of California to provide landscape design services; the landscape project for this project was installed by me or under my supervision; (b) the landscaping for the identified property has been installed in substantial conformance with the approved Landscape Documentation Package and complies with the requirements of the Model Water Efficient Landscape Ordinance; (c) a diagram of the irrigation plan showing hydrozones is kept with the irrigation controllers; (d) the Certificate of Completion has been completed in compliance with the requirements of the Model Water Efficient Landscape Ordinance and shall be implemented.

Name: Relationship to Project:
Company Name (if applicable): State License # (if applicable):
Signature: Date:

Section C: Owner/Representative

I certify that I am the property owner or an authorized representative and have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is my responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule.

Name: Relationship to Project:
Company Name (if applicable): State License # (if applicable):
Signature: Date:

Qualified Irrigation Service Provider: The following individuals are authorized to provide services required by the Irrigation Guidelines in the State of California: Landscape Architects, Landscape Contractors, Landscape Designers and Irrigation Consultants. Personal property owners may design and sign plans for work on any property they own.



NON-RESIDENTIAL BUILDINGS

- 1. State on plans that the outdoor lighting systems shall be designed and installed to comply with all of the following:
a. The minimum requirements in California Energy Code for Lighting Zones 1-4
b. Footlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11
c. Allowable BUG ratings not exceeding those shown in Table 5.106.8 (5.106.8)
2. Separate submersibles shall be installed in any building or new space within a building that is projected to consume more than 1,000 gal/day. (5.303.1.2)
3. New plumbing fixtures and fittings shall not exceed the maximum allowable flow rate specified in Section 5.303.3. (5.303.3)
4. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80psi, or the shower shall be designed to only allow one showerhead to be in operation at a time. (5.303.3.3)
5. For projects that include landscape work, the Landscape Certification, Form GRN 12, shall be completed prior to final inspection approval. (State Assembly Bill No. 1881, 5.304.1)
6. Installed automatic irrigation system controllers are weather- or soil-based controllers. (5.304.3)
7. Weather-resistant exterior wall and foundation envelope shall be detailed in conformance with Los Angeles Building Code Section 1403.2 and California Energy Code Section 150. (5.407.1)
8. Automatic landscape irrigators shall be installed such that it doesn't spray on the building. (5.407.2.1)
9. New exterior entries and openings subject to foot traffic shall be protected against water intrusion using features such as overhangs, awnings and/or recesses for a combined depth over the entry of at least 4 feet. (5.407.2.2.1)
10. Nonabsorbent interior floor and wall finishes shall be used within at least two feet around and perpendicular to new exterior entries and/or opening subject to foot traffic. (5.407.2.2.1)
11. Exterior entries shall have flashing integrated with the drainage plane. (5.407.2.2.2)
12. Only a City of Los Angeles certified hauler will be used for hauling of construction waste. (5.408.1)
13. 100% of excavated soil and vegetation resulting from land clearing shall be reused or recycled. (5.408.3)
14. A final report for the testing and adjusting of all new systems shall be completed and provided to the field inspector prior to final approval. This report shall be signed by the individual responsible for performing these services. (5.410.4.4)
15. For all new equipment, an Operation & Systems Manual shall be provided to the owner and the field inspector at the time of final inspection. (5.410.4.5)
16. All new gas fireplaces must be direct-vent, sealed combustion type. Wood burning fireplaces are prohibited per AQMD Rule 445. (5.503.1, AQMD Rule 445) (5.506.2)
17. If the new HVAC system is used during construction, use return air filters with a MERV of 8. Replace all filters immediately prior to occupancy. (5.504.1.3)
18. All new ducts and other new related air distribution components openings shall be covered with tape, plastic, or sheetmetal until the final startup of the heating, cooling and ventilating equipment. (5.504.3)
19. Architectural paints and coatings, adhesives, caulks and sealants shall comply with the Volatile Organic Compound (VOC) limits listed in Tables 5.504.4.1-5.504.4.3. (5.504.4.1-5.504.4.3)
20. The VOC Content Verification Checklist, Form GRN 2, shall be completed and verified prior to final inspection approval. The manufacturer's specifications showing VOC content for all applicable products shall be readily available at the job site and be provided to the field inspector for verification. (5.504.4.3.2)
21. All new carpet installed in the building interior meets the seating and product requirements of one of the following:
a. Carpet and Rug Institute's Green Label Plus Program
b. California Department of Public Health's Specification 01150
c. NSF/ANSI 149 at the Gold level
d. Scientific Certifications Systems Indoor Advantage™ Gold. (5.504.4.4)
22. All new carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program. (5.504.4.4.1)
23. New hardwood plywood, particle board, and medium density fiberboard composite wood products used in the interior or exterior of the building shall meet the formaldehyde limits. (5.504.4.5, 10.504.4.5)
24. The Formaldehyde Emissions Verification Checklist, Form GRN 3, shall be completed prior to final inspection approval. The manufacturer's specifications showing formaldehyde content for all applicable wood products shall be readily available at the job site and be provided to the field inspector for verification. (5.504.4.5)
25. 80% of the total area receiving new resilient flooring shall comply with one or more of the following:
a. VOC emission limits defined in the CHPS High Performance Products Database
b. Certified under UL GREENGUARD Gold
c. Certification under the Resilient Floor Covering Institute (RFCI) EcoScore program
d. Meet the California Department of Public Health's Specification 01350 (5.504.4.6)
26. An air filter with a Minimum Efficiency Reporting Value (MERV) of 8 or higher shall be installed on the mechanical system for outside and return air prior to occupancy. (5.504.5.3)
27. Mechanically ventilated buildings within 1,000 feet of a freeway shall provide regularly occupied areas of the building with a MERV 13 filter for outside and return air. Filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. (5.504.5.3)
28. Designated outdoor smoking area shall be at least 25 feet from an outdoor air intake or operable windows. (5.504.7)
29. Ventilated spaces in buildings shall meet the minimum requirements of Section 121 of the California Energy Code and Chapter 4 of the California Code of Regulations, Title 8. (5.506.1)
30. Buildings that use Demand Control Ventilation shall have CO2 sensors and ventilation controls installed in accordance with the requirements of the current edition of the California Energy Code, CEC, Title 24, Part 6, Section 12161. (5.506.2)
31. The HVAC, refrigeration, and fire suppression equipment shall not contain CFC or Halons. (5.508.1)
32. Retail food stores of 8,000 sq. ft. or more of conditioned area that have a commercial refrigeration system with a global warming potential (GWP) of 150 or greater shall have leak reduction measures in accordance with LAGBC Section 5.508.2. Separate mechanical plan check is required. (5.508.2)



NON-RESIDENTIAL BUILDINGS

- 1. For new buildings or additions exceeding 50,000 ft², install a separate water meter or sub-meter for the following areas:
A. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gpd (380 L/day).
B. Where potable water is used for industrial/process uses, for water supplied to the following subsystems:
a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
c. Steam and hot-water boilers with energy input more than 500,000 Btu/h (147 kW).
C. For each building that uses more than 100 gpd on a parcel containing multiple buildings. (5.303.1.1)
2. Provide a 20% reduction in the overall potable water use for each building. The reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the Los Angeles Plumbing Code.
New projects having a water supply of 2" or less and additions and alterations projects may use the prescriptive method outlined in this section. (5.303.2)
3. A water budget for landscape irrigation use that conforms to the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO) is required for new landscape areas of 500 sqft or more.
The following methods to reduce potable water use in landscape areas include, but are not limited to, use of captured rainwater, recycled water, graywater, or water treated for irrigation purposes and conveyed by a water district or public entity. (5.304.1, 5.304.2)
4. New buildings on a site with 1,000 square feet or more of cumulative landscape area shall have separate meters or submeters for outdoor water use. (5.304.4)
5. Additions and alterations on a site with 1,000 square feet of cumulative landscape area which require water service upgrade shall have separate meters or submeters for outdoor water use. (5.304.4)
6. Locks shall be installed on all publicly accessible exterior faucets and hose bibs. (5.304.5)
7. Except as provided in this section, for sites with over 500 square feet of landscape area, alternate waste piping shall be installed to permit discharge from the clothes washer, bathtub, showers, and bathroom/restrooms wash basins to be used for a future graywater irrigation system. (5.305.1)
8. Except as provided in this section, where City-recycled water is available within 200 feet of the property line, water closets, urinals, floor drains, and process cooling and heating in the building shall be supplied from recycled water and shall be installed in accordance with the Los Angeles Plumbing Code. (5.305.2)
9. Cooling towers shall comply with one of the following:
A. Shall have a minimum of 6 cycles of concentration (blowdown)
B. A minimum of 50% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash. (5.305.3)
10. Develop and construct a system for onsite reuse of the groundwater where groundwater is being extracted and discharged. Alternatively, the groundwater may be discharged to the sewer. (5.305.4)
11. Provide a hot water system complying with one of the following:
A. The hot water system shall not allow more than 0.6 gallons of water to be delivered to any fixture before hot water arrives.
B. Where a hot water recirculation or electric resistance heat trace wire system is installed, the branch from the recirculating loop or electric resistance heat trace wire to the fixture shall contain a maximum of 0.6 gallons. (Los Angeles Plumbing Code Section 610.4.1)



COMPLETE AND INCORPORATE THIS FORM INTO THE PLANS 9540 NORTH VAN NUYS BLVD

Project Address: VAN NUYS, CA 91402 Permit Number: 17024 - 10000 - 00011

Table with 3 columns: ITEM #, BOD ITEMS, PAGE NUMBER IN BOD DOCUMENT. Lists HVAC systems and controls, indoor lighting system, water heating system, landscape irrigation systems, and covered processes.

Table with 3 columns: Item #, Description, and Status. Lists efficiency, reliability, flexibility, simplicity, expandability, cost, payback period, utility company incentives, owner preference, etc.

Architect/Engineer/Designer Acknowledgement table with columns: Name, License Number, Signature, Date. Includes entries for Architect of Record, Mechanical Designer, Electrical Designer, Plumbing Designer, Landscape Architect, Renewable Energy System Designer, and Others (specify).

Commissioning Agent Acknowledgement: I have reviewed the Basis of Design (BOD) and verified that it meets the Owner's Project Requirements (OPR). Name: Company Name (if applicable): Agent's Signature: Date:

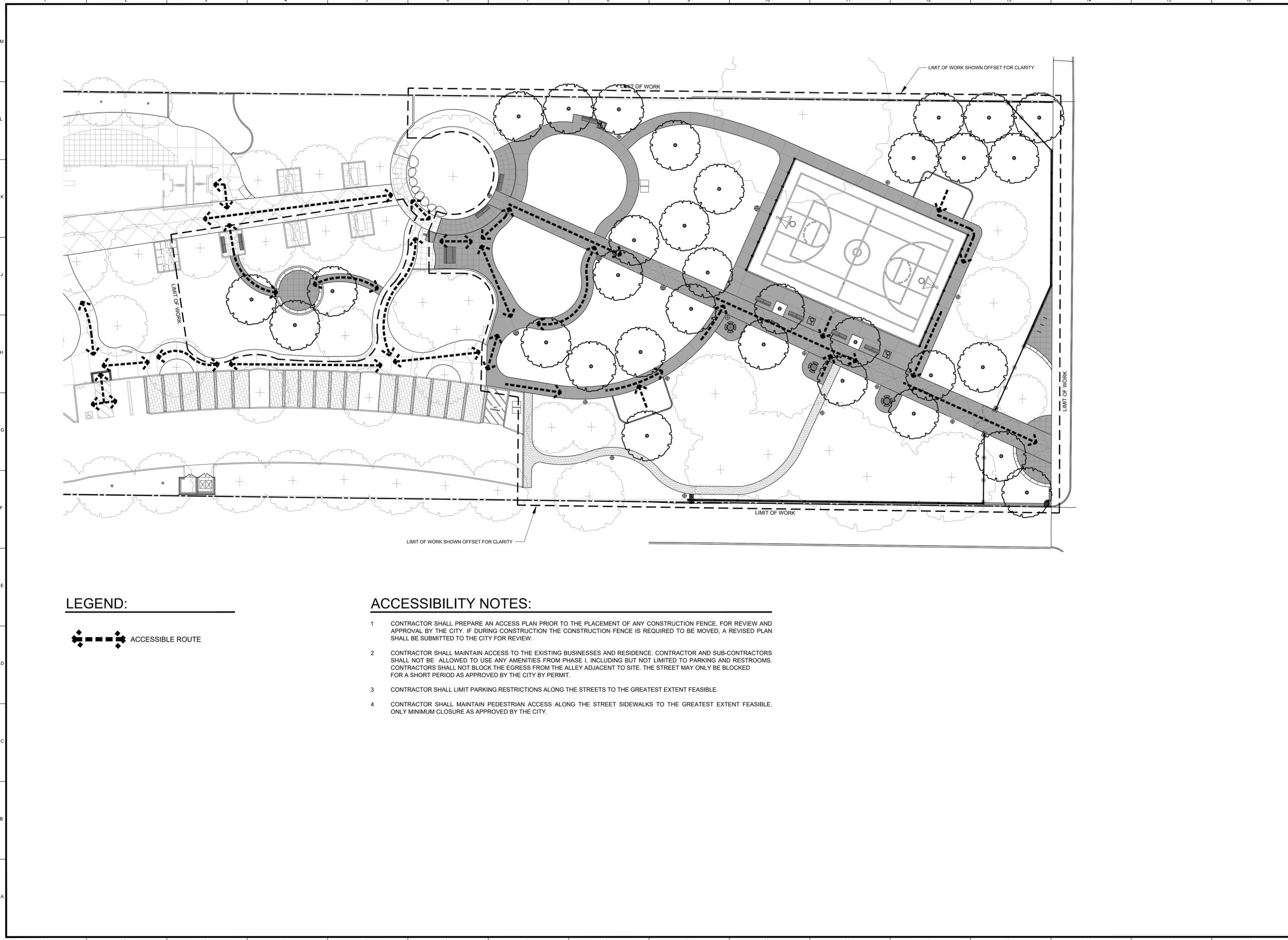
NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR FILLING OUT THE (FORMS) INFORMATION ON THIS SHEET AND CONTACTING THE CITY ENGINEER FOR FINAL SIGNATURES.

Vertical sidebar containing: ENGINEERING, BUREAU OF ENGINEERING, CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, ARCHITECTURAL DIVISION, GARY LEE MOORE, PE, ENV SP, CITY ENGINEER, LANDSCAPE ARCHITECT: JANE ADRIAN, LICENSE NO. 3940, DESIGNED BY: LORENA MATOS, P.E., ASLA, ENV SP, COM/LEED AP, DRAWN BY: LORENA MATOS, P.E., ASLA, ENV SP, COM/LEED AP, CHECKED BY: JANE ADRIAN, APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER, WORK ORDER NO. E170420D, PLAN FILE NO. 622, DRAWING NO. G005, SHEET 5 OF SHEETS 43, PLOTTED: 8/12/2016 2:18 PM

TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 06/20/19 9:59 AM
 FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATION\PHASE I\CONSTRUCTION DOCUMENTS\DWG\MV2_G006_ACCESSIBILITY_ROUTE.DWG

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.



LEGEND:



ACCESSIBILITY NOTES:

- 1 CONTRACTOR SHALL PREPARE AN ACCESS PLAN PRIOR TO THE PLACEMENT OF ANY CONSTRUCTION FENCE, FOR REVIEW AND APPROVAL BY THE CITY. IF DURING CONSTRUCTION THE CONSTRUCTION FENCE IS REQUIRED TO BE MOVED, A REVISED PLAN SHALL BE SUBMITTED TO THE CITY FOR REVIEW.
- 2 CONTRACTOR SHALL MAINTAIN ACCESS TO THE EXISTING BUSINESSES AND RESIDENCE. CONTRACTOR AND SUB-CONTRACTORS SHALL NOT BE ALLOWED TO USE ANY AMENITIES FROM PHASE I, INCLUDING BUT NOT LIMITED TO PARKING AND RESTROOMS. CONTRACTORS SHALL NOT BLOCK THE EGRESS FROM THE ALLEY ADJACENT TO SITE. THE STREET MAY ONLY BE BLOCKED FOR A SHORT PERIOD AS APPROVED BY THE CITY BY PERMIT.
- 3 CONTRACTOR SHALL LIMIT PARKING RESTRICTIONS ALONG THE STREETS TO THE GREATEST EXTENT FEASIBLE.
- 4 CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS ALONG THE STREET SIDEWALKS TO THE GREATEST EXTENT FEASIBLE. ONLY MINIMUM CLOSURE AS APPROVED BY THE CITY.

CITY OF LOS ANGELES		DEPARTMENT OF PUBLIC WORKS		BUREAU OF ENGINEERING	
CLIENT: DEPARTMENT OF RECREATION & PARKS GENERAL MANAGER: MICHAEL A. SHULL		ARCHITECTURAL DIVISION		ENGINEERING CITY OF LOS ANGELES	
SHEET TITLE: ACCESSIBILITY ROUTE		DESIGNED BY: LORENA MATOS, P.E. / ASLA ENV SP / CCM / LEED AP		DATE: 6-04-18	
PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II		DRAWN BY: LORENA MATOS, P.E. / ASLA ENV SP / CCM / LEED AP		NO. REVISIONS: 0	
ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402		CHECKED BY: JANE ADRIAN		INDEX NO. XX/XX	
WORK ORDER NO. E170420D		APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER		BUILDING NO. XX/XX	
PLAN FILE NO. 622		DRAWING NO. G006		DATE: 6-04-18	
SHEET 6 OF 43		PLOTTED: 06/20/19 9:59 AM		REVISIONS:	

GENERAL PROJECT INFORMATION

PLAN CHECK NO. 17024-10000-00011
JOB ADDRESS 9540 NORTH VAN NUYS BLVD CITY VAN NUYS, CA ZIP 91402
REVIEWED BY JANE ADRIAN PHONE (213)485-4845 DATE 6-4-2018

NOTE: Code references are to the 2017 edition of the City of Los Angeles Building Code

INSTRUCTIONS

- Corrections with identified item numbers apply to this plan check.
Incorporate all comments as marked on checked set of plans, calculations, and this correction sheet.
Blueprint or copy the attached Accessibility General Notes document onto the plans.

The State of California delegates to the local jurisdiction the authority to ensure compliance with Title 24, Part 2 of the California Code of Regulations. This correction list indicates specific areas of Title 24, Part 2 which are applicable to your project.

SUPPLEMENTAL CORRECTION SHEETS:

- Check list No. 1 - Elevators, LULAs & Platform Lifts
Check list No. 2 - Signs
Check list No. 3 - Restaurant
Check list No. 4 - Assembly
Check list No. 5 - Group B and Group M Occ.

REVIEW THE FOLLOWING CHECKED INFORMATION BULLETINS AND FORMS. REVISE PLANS TO SHOW COMPLIANCE (COPY CAN BE OBTAINED AT WWW.LADBS.ORG)

- PBC 2017-084 - Details for Parking
PBC 2017-085 - Details for Ramps, Stairs & Elevators
PBC 2017-086 - Details for Doors, Maneuvering Spaces & Routes
PBC 2017-087 - Details for Restrooms and Drinking Fountains
PBC 2017-088 - Details for Tubs and Showers

A. APPLICATION AND ADMINISTRATION

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 1 of 14

where any portion of the sphere is within 4 inches of the finish floor or ground surface. To prevent wheel entrapment, the curb or barrier shall provide a continuous and uninterrupted barrier along the length of the ramp.

HANDRAILS

- 30. Show required handrails on each side of stairs and ramps, including required top and bottom extensions.
31. Provide details and dimensions of the handrail cross-section(s), clearances, and gripping surfaces.
32. Dimension to the top of gripping surfaces of handrails. Handrails shall be 34 inches minimum to 38 inches maximum vertically above walking surfaces, stair nosings, and ramp surfaces and shall be at a consistent height.

STAIRWAYS

- 40. A stair is defined as a change in elevation, consisting of one or more risers. For all stairs, comply with the following:
a. Provide stair details, including tread rise and run, nosings, stripping, handrails, etc.
b. Open risers are not permitted.

CURB RAMPS, BLENDED TRANSITIONS, AND ISLANDS

- 41. For curb ramps/blended transitions/islands, please comply with the following:
a. Perpendicular ramp runs shall have a running slope not steeper than 1:12 (8.33%).
b. For perpendicular ramps, where provided, curb ramp flares shall not be steeper than 1:10.

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 5 of 14

- 1. When alterations or additions are made to existing buildings or facilities, an accessible path of travel to the specific area of alteration or addition shall be provided unless otherwise exempt.
2. Primary accessible path of travel shall include a primary entrance to the building or facility; toilet and bathing facilities serving the area; drinking fountains serving the area; public telephones serving the area, and signs.

B. BUILDING BLOCKS

- 1. Confirm any elevation differences on the plans and provide detail(s) showing compliance with Section 11B-303 Changes of Level.
2. At the location(s) indicated on the plan, show and dimension the required turning space (circle or T-shaped).
3. At the location(s) indicated on the plans, provide sections detailing minimum knee and toe clearance.

C. ACCESSIBLE ROUTES

- 1. Show on the site plan accessible routes that comply with the following. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve.
2. Show on the site plan at least one accessible route that complies with the following. At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 2 of 14

- d. A turning space 48 inches minimum by 48 inches minimum shall be provided at the bottom of the curb ramp. The slope of the turning space in all directions shall be 1:48 maximum (2.083%).
e. Blended transition ramps shall have a running slope not steeper than 1:20 (5%).
f. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles.

D. GENERAL SITE AND BUILDING ELEMENTS

PARKING SPACES

- 1. Where parking spaces are provided, accessible parking spaces shall be provided in number and kind required per Section 11B-208 Parking Spaces. Show and detail all required disabled access stalls, including dimensions, markings, signage, clear height, etc.
2. Provide () accessible parking spaces as required by Table 11B-208.2.
3. Provide accessible spaces for each parking facility (parking lots and parking structures). The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not based on the total number of parking spaces provided in all of the parking facilities provided on site.

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 6 of 14

- 7. Show on the floor/site plans at least one accessible route that complies with the following. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility, including mezzanines, which are otherwise connected by a circulation path.
8. Show on the floor/site plan accessible routes and circulation paths that comply with the following. Accessible routes shall coincide with or be located in the same area as general circulation paths.

EMPLOYEE WORKSTATIONS

- 9. Detail accessible route to employee workstation and specify compliance with Division 4. Spaces and elements within employee workstations shall only be required to comply with Sections 11B-207.1, 11B-215.3, 11B-302, 11B-303, and 11B-404.2.3.
10. Indicate on the floor plans the use of each space. Specifically call out common areas and employee work stations.

DETECTABLE WARNINGS AND DETECTABLE DIRECTIONAL TEXTURE

- 11. Show and detail all required detectable warnings on the plans to demonstrate compliance with the selected items below.
a. Curb ramps shall have detectable warnings that extend 36 inches in the direction of travel for the full width of the ramp run less than 2 inches maximum on each side, excluding any flared sides.
b. On perpendicular curb ramps, detectable warnings shall be located so the edge nearest the curb is 6 to 8 inches from the line at the face of the curb marking the transition between the curb and the gutter, street or highway.

ENTRANCES

- 13. Show and specify the required primary building entry.
14. For the new building proposed, detail compliance at all entrances and exterior ground-floor exits to buildings and facilities shall comply with 11B-404 Doors, Doorways, and Gates.

TECHNICAL REQUIREMENTS FOR ACCESSIBLE ROUTES

- 16. On the site plan, show and define the required accessible path of travel: 48 in minimum width walkway, 5% maximum slope in the direction of travel, 2% maximum cross-slope.
17. Delinate all walking surfaces and dimension the required widths (36"/44"/48"/60").

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 3 of 14

- 7. Accessible parking spaces complying with Section 11B-502 Parking Spaces serving a particular building or facility shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance (as near as practical to an accessible entrance).
8. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces complying with Section 11B-502 Parking Spaces shall be dispersed and located closest to the accessible entrances.
9. In parking facilities that do not serve a particular building or facility, accessible parking spaces complying with Section 11B-502 Parking Spaces shall be located on the shortest accessible route of travel to an accessible pedestrian entrance to the parking facility.

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 7 of 14

DOORS, DOORWAYS, AND GATES

- 18. Specify all door and gate widths, heights, hardware, thresholds, kick plates, etc.
19. Show and dimension all required landings/maneuvering clearances.
20. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.
21. At least one of the active leaves of doorways with two leaves shall comply with 11B-404.2.3 Clear Width and 11B-404.2.4 Maneuvering Clearances.

RAMPS

- 29. Provide enlarged ramp details, including finish floor elevation at each landing, clear width, slope, cross-slope, top and bottom landing dimensions, handrails, handrail extensions, etc. complying with the following:
a. Ramp runs shall not exceed a running slope of 1:12 (8.33%) and cross slopes of ramp runs shall not be steeper than 1:48 (2.083%).
b. Floor or ground surfaces of ramp runs shall comply with 11B-302 Floor or Ground Surfaces. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 4 of 14

- 23. An additional sign shall be posted either: 1) in a conspicuous place at each entrance to an off-street parking facility or 2) immediately adjacent to on-site accessible parking and visible from each parking space.
a. The additional sign shall not be less than 17 inches wide by 22 inches high.
b. The additional sign shall clearly state in letters with a minimum height of 1 inch the following:

RELATIONSHIP TO ACCESSIBLE ROUTES

- 25. Parking spaces and access aisles shall be designed so that persons using them are not required to travel behind parking spaces other than to pass behind the parking space in which they are parked.

PASSENGER DROP-OFF & LOADING ZONES AND BUS STOPS

- 27. Parking facilities that provide valet parking services shall provide at least one passenger drop-off and loading zone complying with Section 11B-503 Passenger Drop-off and Loading Zones.
28. Mechanical access parking garages shall provide at least one passenger drop-off and loading zone complying with Section 11B-503 Passenger Drop-off and Loading Zones at vehicle drop-off and vehicle pick-up areas.

DRINKING FOUNTAINS

- 1. No fewer than two drinking fountains shall be provided. When provided, one drinking fountain shall comply with 11B-602.1 through 11B-602.6, 11B-602.8 and 11B-602.9 and one drinking fountain shall comply with 11B-602.7 and 11B-602.9.
2. Where more than the minimum number of drinking fountains specified in 11B-211.2 are provided, 50 percent of the total number of drinking fountains provided shall comply with 11B-602.1 through 11B-602.6, 11B-602.8 and 11B-602.9 and 50 percent of the total number of drinking fountains provided shall comply with 11B-602.7 and 11B-602.9.

E. PLUMBING FIXTURES AND FACILITIES

- 1. No fewer than two drinking fountains shall be provided. When provided, one drinking fountain shall comply with 11B-602.1 through 11B-602.6, 11B-602.8 and 11B-602.9 and one drinking fountain shall comply with 11B-602.7 and 11B-602.9.

Commercial Plan Review Checklist (Rev. 1/1/17)

Page 8 of 14

Vertical sidebar containing: BUREAU OF ENGINEERING, ENGINEERING, CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, ARCHITECTURAL DIVISION, GARY LEE MOORE, PE, ENV SP, CITY ENGINEER, LANDSCAPE ARCHITECT: JANE ADRIAN, LICENSE NO. 3940, DESIGNED BY: LORENA MATOS, P.E., I.A.S.A., ENV SP, COMM/LEED AP, DRAWN BY: LORENA MATOS, P.E., I.A.S.A., ENV SP, COMM/LEED AP, CHECKED BY: JANE ADRIAN, APPROVED BY: MAHMOUD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER, ACCESSIBILITY NOTES, MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II, ADDRESS: 9540 NORTH VAN NUYS BOULEVARD, VAN NUYS, CA 91402, WORK ORDER NO. E170420D, PLAN FILE NO. 622, DRAWING NO. G007, SHEET 7 OF 43, PLOTTED: 8/12/2018 2:18 PM

- Drinking fountains shall comply with Sections 11B-307 Protruding Objects and 11B-602 General Requirements. **§11B-602.1**
 - Provide details at hi-low drinking fountains, including clear floor space at low unit, knee and toe clearance, spout heights and locations, spout angles, etc., **§11B-602**
 - Units shall have a clear floor or ground space complying with Section 11B-305 Clear Floor or Ground Space positioned for a forward approach and centered on the unit. Knee and toe clearance complying with Section 11B-306 Knee and Toe Clearance shall be provided. **§11B-602.2**
 - Where drinking fountains are used by children, a parallel approach complying with Section 11B-305 Clear Floor or Ground Surfaces shall be permitted at units where the spout is 30 inches maximum above the finish floor or ground and is 3 1/2" maximum from the front edge of the unit, including bumpers. **§11B-602.2 exception**
 - Spout outlets shall be 36 inches maximum above the finish floor or ground. **§11B-602.4**
 - The spout shall be located 15 inches minimum from the vertical support and 5 inches maximum from the front edge of the unit, including bumpers. **§11B-602.5**
 - The spout shall provide a flow of water 4 inches high minimum and shall be located 5 inches maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches from the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches and 5 inches maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum. **§11B-602.6**
 - Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the finish floor or ground. **§11B-602.7**
 - Wall and post-mounted cantilevered drinking fountains shall be 18 inches minimum and 19 inches maximum in depth. **§11B-602.8**
 - All drinking fountains shall either be located completely within alcoves, positioned completely between wing walls, or otherwise positioned so as not to encroach into pedestrian ways. The protected area within such a drinking fountain is located shall be 32 inches wide minimum and 18 inches deep minimum, and shall comply with Section 11B-305.7 Maneuvering Clearance. When used, wing walls or barriers shall protect horizontally at least as far as the drinking fountain and to within 6 inches vertically from the floor or ground surface. **§11B-602.9**
- TOILET AND BATHING ROOM CLEARANCES**
- Where toilet facilities and bathing facilities are provided, they shall comply with 11B-213 Toilet Facilities and Bathing Facilities. Where toilet facilities and bathing facilities are provided in facilities permitted by 11B-206.2.3 Multi-Story Buildings and Facilities Exceptions 1 and 2 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance. **§11B-213.1**
 - Where separate toilet facilities are provided for the exclusive use of separate user groups, the toilet facilities serving each user group shall comply with 11B-213 Toilet Facilities and Bathing Facilities. **§11B-213.1.1**
 - Where toilet rooms are provided, each toilet room shall comply with 11B-603 Toilet and Bathing Rooms. Where bathing rooms are provided, each bathing room shall comply with 11B-603 Toilet and Bathing Rooms. **§11B-213.2 (See exception)**
 - Unisex toilet rooms shall contain not more than one lavatory, and not more than two water closets without urinals or one water closet and one urinal. Unisex bathing rooms shall contain one shower or one shower and one bathtub, one lavatory, and one water closet. Doors to unisex toilet rooms and unisex bathing rooms shall have privacy latches. **§11B-213.2.1**
 - Door shall not swing into the clear floor space or clearance required for any fixture. Other than the door to the accessible water closet compartment, a door in any position may encroach into the turning space by 12 inches maximum. **§11B-603.2.3**
 - At single user toilet or bathing rooms, doors shall be permitted to swing into the clear floor space or clearance required for any fixture only if a 30 inch by 48-inch minimum clear floor space is provided within the room beyond the arc of the door swing. **§11B-603.2.3 (See exception)**
 - Mirrors located above the lavatories or countertops shall be installed within the bottom edge of the reflecting surface 40 inches maximum above the finish floor or ground. Mirrors not located above the lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches maximum above the finish floor or ground. **§11B-603.3**

- Show that at least 50 percent of the shelf space is within required reach ranges. **§11B-804.5**
- As a range/cooktop is provided, detail the required forward reach approach at the sink. **§11B-804.6.4**

ADDITIONAL COMMENTS

Blank area for additional comments.

- Coat hooks shall be located within one of the reach ranges specified in Section 11B-308. Shelves shall be located 40 inches minimum and 48 inches maximum above the finish floor. Medicine cabinets shall be located with a usable shelf no higher than 44 inches maximum above the finish floor. **§11B-603.4**
 - Where towel or sanitary napkin dispensers, waste receptacles, or other accessories are provided in toilet facilities, at least one of each type shall be located on an accessible route. All operable parts, including coin slots, shall be 40 inches maximum above the finish floor. Baby changing stations are not required to comply with Section 11B-603.5. **§11B-603.5**
 - Provide bathtub details, confirming compliance with Section 11B-607, including the requirements for clearances, grab bars, seats, controls, shower spray unit, and water and bathtub enclosures. **§11B-608**
 - Provide details confirming disabled access compliance at shower compartments, including the requirements for clearances, grab bars, seats, controls, shower spray unit and water, thresholds, shower enclosures, shower floor or ground surface and soap dish. **§11B-608**
- WATER CLOSETS AND TOILET COMPARTMENTS**
- Where toilet compartments are provided, at least 5 percent but no fewer than one toilet compartment shall comply with Section 11B-604.8.1. In addition to the compartments required to comply with 11B-604.8.1, where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures, toilet compartments complying with Section 11B-604.8.2 shall be provided in the same quantity as the toilet compartments required to comply with Section 11B-604.8.1. **§11B-213.3.1**
 - Where water closets are provided, at least 5 percent but no fewer than one shall comply with Section 11B-604. **§11B-213.3.2**
 - The clear width for accessible routes to accessible toilet compartments shall be 44 inches except for door-opening widths and door swings. **§11B-403.5.1 exception 5**
 - The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 17 inches minimum to 18 inches maximum from the side wall or partition, except that the water closet shall be 17 inches minimum and 19 inches maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in Section 11B-604.8.2 Ambulatory Accessible Compartments. Water closets shall be arranged for a left-hand or right-hand approach. **§11B-604.2**
 - Clearance around a water closet shall be 60 inches minimum measured perpendicular from the sidewall and 56 inches minimum measured perpendicular from the rear wall. A minimum 60 inches wide and 48 inches deep maneuvering space shall be provided in front of the water closet. **§11B-604.3.1**
 - The seat height of a water closet above the finish floor shall be 17 inches minimum and 19 inches maximum measured to the top of the seat. Seats shall not be sprung the return to a lifted position. Seats shall be 2 inches high maximum and a 3-inch high seat shall be permitted only in alterations where the existing fixture is less than 15 inches high. **§11B-604.4**
 - The sidewall grab bars shall be 42 inches long minimum, located 12 inches maximum from the rear wall and extending 54 inches minimum from the rear wall with the front end positioned 24 inches minimum in front of the water closet. **§11B-604.5.1**
 - The rear grab bar shall be 36 inches long minimum and extend from the centerline of the water closet 12 inches minimum on one side and 24 inches minimum on the other side. **§11B-604.5.2 (See exception)**
 - Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 11B-309.4 Operation except they shall be located 44 inches maximum above the floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with Section 11B-604.8.2 Ambulatory Accessible Compartments. **§11B-604.6**
 - Toilet paper dispensers shall comply with Section 11B-309.4 Operation and shall be 7 inches minimum and 9 inches maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be below the grab bar, 19 inches minimum above the finish floor and shall not be located behind the grab bars. Dispensers shall not be of a type that control delivery or that does not allow continuous paper flow. **§11B-604.7**
 - Wheelchair accessible toilet compartments shall meet the requirements of Sections 11B-604.8.1 Wheelchair Accessible Compartments and 11B-604.8.3 Coat Hooks and Shelves. Compartments containing more than one plumbing fixture shall comply with Section 11B-603 Toilet and Bathing Rooms. Ambulatory accessible compartments shall comply with Sections 11B-604.8.2 Ambulatory Accessible Compartments and 11B-604.8.3 Coat Hooks and Shelves. **§11B-604.8**

- Show that at least 50 percent of the shelf space is within required reach ranges. **§11B-804.5**
- As a range/cooktop is provided, detail the required forward reach approach at the sink. **§11B-804.6.4**

Blank area for additional comments.

- In a wheelchair accessible compartment with an in-swing door, a minimum 60 inches wide by 36 inches deep maneuvering space shall be provided in front of the clearance required in Section 11B-604.8.1.1 Wheelchair Accessible Compartment Size. **§11B-604.8.1.1.1, Figures 11B-604.8.1.1.2(b) and 11B-604.8.1.1.3(b)**
 - In a wheelchair accessible compartment with a door located in the side wall or partition, either in-swinging or out-swinging, a minimum 60 inches wide and 60 inches deep maneuvering space shall be provided in front of the water closet. **§11B-604.8.1.1.2, Figure 11B-604.8.1.1.2**
 - In a wheelchair accessible compartment with end-opening door located in the front wall or partition (facing water closet), either in-swinging or out-swinging, a minimum 60 inches wide and 48 inches deep maneuvering space shall be provided in front of the water closet. **§11B-604.8.1.1.3, Figure 11B-604.8.1.1.3**
 - Toilet compartment doors, including door hardware, shall comply with Section 11B-404 Doors, Doorways, and Gates except that if the approach is from the push side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 48 inches minimum measured perpendicular to the compartment door in its closed position. Door shall be located in front partition or in the side wall or partition farthest from the water closet. **§11B-604.8.1.2**
 - Where toilet compartment doors are located in the front partition, the door opening shall be 4 inches maximum from the sidewall or partition farthest from the water closet. Where located in the sidewall or partition, the door opening shall be 4 inches maximum from the front partition and the door shall be self-closing. **§11B-604.8.1.2**
 - A door pull complying with Section 11B-404.2.7 Door and Gate Hardware shall be placed on both sides of the door near the latch. Door shall not swing into the clear floor space or clearance required for any fixture. Doors may swing into that portion of the maneuvering space which does not overlap the clearance required at a water closet. **§11B-604.8.1.2 (See exception)**
 - At least one side partition shall provide a toe clearance of 9 inches minimum above the finish floor and 6 inches deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Partition components at toe clearances shall be smooth without sharp edges or abrasive surfaces. Compartments for children's use shall provide a toe clearance of 12 inches minimum above the finish floor. **§11B-604.8.1.4**
 - Ambulatory accessible compartments shall have a width of 35 inches minimum and 37 inches maximum. **§11B-604.8.2.1**
 - Water closets and toilet compartments for children's use shall comply with Section 11B-604.9 Water Closets and Toilet Compartments for Children's Use and follow suggested dimensions on Table 11B-604.9. **§11B-604.9**
 - Where urinals are provided, at least 10 percent but no fewer than one shall comply with Section 11B-605. **§11B-213.3.3**
 - Urinals shall be the stall-type or the wall-hung type with the rim 17 inches maximum above the finish floor or ground. Urinals shall be 13 1/2 inches deep minimum measured from the outer face of the urinal rim to the back of the fixture. **§11B-605.2**
 - Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 11B-309 Operable Parts except that the flush control shall be mounted at a maximum height of 44 inches above the finish floor. **§11B-605.4**
 - Where lavatories are provided, at least 10 percent but no fewer than one shall comply with Section 11B-606 and shall not be located in a toilet compartment. **§11B-213.3.4, §11B-606.1**
 - For lavatories and sinks, a clear floor space complying with Section 11B-305 Clear Floor or Ground Surfaces, positioned for a forward approach, and knee and toe clearance complying with Section 11B-306 Knee and Toe Clearance shall be provided. **§11B-606.2**
 - Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches maximum above the finish floor or ground. **§11B-606.3**
- SIGNS RELATED TO TOILETS AND BATHING FACILITIES**
- Entrances leading to toilet rooms and bathing rooms complying with 11B-603 Toilet and Bathing Rooms shall be identified by a geometric symbol complying with 11B-703.7.2.6 Toilet and Bathing Room Geometric Symbols.
 - Where existing toilet rooms or bathing rooms do not comply with 11B-603 Toilet and Bathing Rooms, directional signs indicating the location of the nearest compliant toilet room or bathing room within the facility shall be provided.
 - Signs shall comply with 11B-703.5 Visual Characters and shall include the International Symbol of Accessibility complying with 11B-703.7.2.1 ISA.

- Where existing toilet rooms or bathing rooms do not comply with 11B-603 Toilet and Bathing Rooms, the toilet rooms or bathing rooms complying with 11B-603 Toilet and Bathing Rooms shall be identified by the International Symbol of Accessibility complying with 11B-703.7.2.1 ISA.
 - Where clustered single user toilet rooms or bathing facilities are permitted to use exceptions to 11B-213.2 Toilet and Bathing Rooms, toilet rooms or bathing facilities complying with 11B-603 Toilet and Bathing Rooms shall be identified by the International Symbol of Accessibility complying with 11B-703.7.2.1 ISA unless all toilet rooms and bathing facilities comply with 11B-603 Toilet and Bathing Rooms.
 - Existing buildings that have been remodeled to provide specific toilet rooms or bathing rooms for public use that comply with these building standards shall have the location of and the directions to these rooms posted in or near the building lobby or entrance on a sign complying with 11B-703.5 Visual Characters, including the International Symbol of Accessibility complying with 11B-703.7.2.1 ISA. **§11B-216.8**
- WASHING MACHINE AND CLOTHES DRYERS**
- Washing machines and clothes dryer's operable parts must comply with Section 11B-309 Operable Parts. **§11B-611.3**
 - Top loading machines shall have the door to the laundry compartment located 36 inches maximum above the finish floor. Front loading machines shall have the bottom of the opening to the laundry compartment located 15 inches minimum and 36 inches maximum above the finish floor. **§11B-611.4**
- F. COMMUNICATION ELEMENTS AND FEATURES**
- ASSISTIVE LISTENING SYSTEMS**
- Assistive listening systems shall be provided in assembly areas, including conference and meeting rooms, used for the purpose of entertainment, educational or civic gatherings, or similar purposes. **§11B-219.2**
Note: Assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers. **§202, §11B-219.2**
 - Provide () assistive listening systems. A minimum number of receivers equal to 4 percent of the total number of seats, but in no case less than two. Twenty-five percent minimum of receivers provided for assistive listening systems, but no fewer than two, shall be hearing-aid compatible with exception when all seats in an assembly area are served by means of an induction loop. **§11B-219.3**
- TWO-WAY COMMUNICATION SYSTEMS**
- Two-way communication systems that are provided to gain admittance to a building or facility or to restricted areas within a building or facility shall provide both audible and visual signals. Handset cords, if provided, shall be 29 inches long minimum. **§11B-230.1, §11B-708**
 - Common use or public use system interface of communications systems between a residential dwelling unit and a site building, or floor entrance shall include the capability of supporting voice and TTY communication with the residential dwelling unit interface. **§11B-708.4.1**
 - Residential dwelling unit system interface of communications systems between a residential dwelling unit and a site building, or floor entrance shall include a telephone jack capable of supporting voice and TTY communication with the common use or public use system interface. **§11B-708.4.2**
- TELEPHONES**
- Where coin-operated public pay telephones, coin less public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with 11B-217 Telephones for each type of public telephone provided. A bank of telephones shall be considered to be two or more adjacent telephones. **§11B-217.1**
 - Provide () wheelchair accessible telephones in accordance with Table 11B-217.2. **§11B-217.2**
- G. SPECIAL ROOMS, SPACES, AND ELEMENTS**
- KITCHENS, KITCHENETTES AND WET BARS**
- Provide a section and detail showing that sinks comply with 11B-606 Lavatories and Sinks, including clear floor space height, faucets, and at exposed pipes and surfaces. **§11B-804.4**

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

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY: BUILDING NO. XXXXX

INDEX NO.

NO. REVISIONS:

ARCHITECT

LANDSCAPE ARCHITECT

LICENSED

CITY ENGINEER

ARCHITECTURAL DIVISION

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: ACCESSIBILITY NOTES

PROJECT: MID VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. G008

SHEET 8 OF SHEETS 43

PLOTTED: 8/12/2019 2:19 PM

LANDSCAPE CONSTRUCTION NOTES

TABLE OF CONTENTS

Landscape Construction Notes - General

SECTION	SECTION TITLE
	Landscape Construction Notes - General
1	General Earthwork
2	Concrete
3	Disintegrated Granite and Soil Stabilizer
4	Welded Wire Fencing
5	Asphalt Sports Court
6	Irrigation Systems
7	Landscape Planting

GENERAL

The latest edition and supplements of the Standard Specifications for Public Works Construction, hereinafter referred to as (SSPWC) adopted by the Board of Public Works and the City of Los Angeles including the City of Los Angeles Department of Public Works SSPWC additions and amendments (Brown Book) shall be made a part of these plans.

Website: <http://eng2.lacity.org/brownbook/frame.cfm>
<http://eng2.lacity.org/techdocs/stdplans/index.htm>

Where conflicts occur between these Landscape Construction Notes and the SSPWC these LANDSCAPE CONSTRUCTION NOTES shall take precedence. Where conflicts occur between Notes on Drawing Sheets and the SSPWC the NOTES ON DRAWING SHEETS shall take precedence.

Subsections included within these LANDSCAPE CONSTRUCTION NOTES modify or add to the corresponding subsection (by number) of the SSPWC, latest edition with current yearly supplements where noted; where options for materials and/or methods appear in the SSPWC, the option listed hereon shall be used.

This improvement consists only of work called for on these plans.

PLANS AND SPECIFICATIONS

The General Contractor shall be responsible for issuing a complete set of plans and specifications to all Sub-Contractors.

Indicates approvals or submittals, including items to be turned over at the pre-final. All approvals and submittals shall be transmitted to the City Engineer.

Indicates required field inspections with the Bureau of Contract Administration (BCA) Inspector, Geotechnical Engineering Division (GED) and the City Engineer. Notify all party's three (3) days prior to the required inspection.

SCHEDULE OF WORK: The Contractor shall submit a Schedule of Work for approval to the City Engineer prior to the commencement of work. The work area shall be as indicated on the Plans by means of a contract limit line or property line.

JOB START MEETING: The Contractor shall schedule a Job Start Meeting with the City Engineer after receipt of the Notice To Proceed. This meeting shall include the following participants: the Project Manager, Construction Manager, Bureau of Contract Administration (BCA) Inspector, Landscape Architect, Geotechnical Engineering Division (GED), Department of Recreational and Parks (RAP) and Region Maintenance personnel, prior to the commencement of meeting to review the content of the plans and discuss the coordination of the project with the Department's operations at the project site. The pre-construction meeting can be held at the same time as the Job Start Meeting at the Contractors discretion.

INSPECTIONS: All work and materials are subject to inspection and approval by the City Engineer. Any work done without proper inspection will be subject to rejection as indicated in Section 2-11 of the Standard Specifications for Public Works Construction.

The Contractor shall notify the Bureau of Contract Administration (BCA) Inspector and the City Engineer three (3) days prior to inspection of the following for approval:

1. 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 City Engineer for review prior to the inspection.

2. TREE TAGGING: Tagging of 24" box or larger trees at the grower with Recreation and Parks tags. This inspection will be for compliance with the caliper, height and spread requirements if given on the plant legend and general health and appearance of plants.

3. ON-SITE PLANT MATERIAL INSPECTION: The inspection of all plant materials under 24" box size at the job site. This inspection will be for compliance with the plant legend and to confirm the general health and appearance of plants. The Contractor shall also stake all tree planting locations at this time for review.

4. IRRIGATION PRESSURE AND COVERAGE TESTS: The pressure test shall include all lines under continuous pressure during normal operation, and take place under the direction of the City Engineer/BCA Inspector. Following the pressure test, the entire irrigation system shall be tested for coverage under the direction of the City Engineer. The coverage test shall cycle through each station of the irrigation system from the automatic controller for all new irrigation systems. The BCA Inspector, City Engineer, Contractor and Recreation and Parks Regional maintenance staff shall be notified three (3) days before the scheduled test.

5. FINISH GRADE REVIEW: For all finish grades in planting areas following soil preparation, and fine grading/rolling and prior to seeding, sodding or landscape planting.

6. PRE-FINAL INSPECTION: Approximately two weeks before completion of the Work, the contractor will schedule a Pre-final Inspection to be attended by the Bureau of Contract Administration Inspector, the City Engineer, 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. In addition, at this time the Contractor shall arrange for the delivery of manufacturers data, manuals, and operating instructions and keys to the appropriate Department of Recreation and Parks personnel.

7. CONTRACT FINAL INSPECTION: Approximately seven (7) days prior to completion of the Work, the Contractor shall first notify the Bureau of Contract Administration Inspector and then the City Engineer that he desires a Final Inspection of the Project. During this inspection,

which will be arranged as soon as possible, the Inspector, the City Engineer, the Contractor and other parties concerned with contractual requirements will compile a Final Inspection Correction List, incorporating all items of work and corrections required to complete the Project. This list must be completed within thirty (30) days of Final Inspection, or a new Final Inspection will be held and a new Final Inspection Correction List compiled.

8. IN-PLANT INSPECTION: Contractor shall be responsible for determining and scheduling all required in-plant inspections with the Bureau of Contract Administration, Materials Control Division in a timely manner.

9. MATERIALS SUBMITTAL:

A. Furnish a schedule and list of required submittals to the CITY ENGINEER, in accordance to CONTRACTOR'S CONSTRUCTION SCHEDULE AND REPORTS of these General Requirements, including required submittals by Subcontractors.

B. Wherever called for in these specifications or on the plans, or where required by the CITY ENGINEER, furnish to the CITY ENGINEER for review 10 copies of each submittal. The term "submittal" as used herein shall be understood to include detail design calculations, design drawings, Shop Drawings, Working Drawings fabrication and installation drawings, erection drawings, lists, graphs, operating instructions, catalog sheets, data sheets, samples, and similar items. Unless otherwise required, Submit said submittals to the CITY ENGINEER at a time sufficiently early (see paragraph F. below) to allow review of same by the CITY ENGINEER and to accommodate the rate of construction progress required under the Contract without delaying the Contract Work and with due regard for the possibility of resubmittals. Submittals shall be in English.

C. Design or Shop Drawings or other submittal shall be accompanied by the standard "CONTRACTOR'S SUBMITTAL TRANSMITTAL" form. A submittal not accompanied by such a form, or where all applicable items on the form are not completed, or are incorrectly completed, will be returned, at the CITY ENGINEER'S discretion, for resubmittal.

D. Normally, a separate transmittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single transmittal form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates a review of the group or package as a whole. A multiple-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the CITY ENGINEER.

E. Shop Drawings shall show in detail the size, sections, and dimensions of all the member(s); the arrangement and construction of all connections and joints; all holes, straps, and other fittings required for attaching Work; and other pertinent details. When required, PROJECT ENGINEERING computations shall be submitted. Be responsible for delivering reviewed copies of Shop Drawings to all others whose Work is dependent thereon. Maintain at the site of the Project, a complete file of revised Shop Drawings and manufacturers' data for this Project, at all times.

F. Except as may otherwise be provided herein, the CITY ENGINEER will make a reasonable attempt to return prints of each submittal to the CONTRACTOR, with its comments noted thereon, within 30 calendar days following their receipt by the CITY ENGINEER. It is considered reasonable that the CONTRACTOR shall make a complete and acceptable submittal to the CITY ENGINEER by the second submission of a submittal item. The CITY reserves the right to withhold moneys due the CONTRACTOR to cover additional costs of the CITY ENGINEER'S review beyond the third submittal. Submittals will be returned to the CONTRACTOR with one of three (3) markings:

- If three (3) copies of a submittal are returned to the CONTRACTOR marked "NO EXCEPTIONS TAKEN/PROCEED," formal revision and resubmission of said submittal will not be required.
- If three (3) copies of a submittal are returned to the CONTRACTOR marked "MAKE CORRECTIONS NOTED/PROCEED CONDITIONALLY," formal revision and resubmission of said submittal will not be required.
- If one (1) copy of a submittal is returned to the CONTRACTOR marked "REJECTED-RESUBMIT/DO NOT PROCEED," revise said submittal and resubmit TEN (10) copies of said revised submittal to the CITY ENGINEER.

J. Work for which Shop Drawings are required shall be performed in accordance with the reviewed copies. Fabrication of an item shall not commence before the CITY ENGINEER has reviewed the pertinent submittal and returned the copies to the CONTRACTOR marked either "NO EXCEPTIONS TAKEN/PROCEED," or "MAKE CORRECTIONS NOTED/PROCEED CONDITIONALLY." Revisions indicated on submittals shall be considered as changes necessary to meet the requirements of the Contract Documents and shall not be taken as the basis for claims for extra Work.

K. CONTRACTOR submittals shall be carefully reviewed by an authorized representative of the CONTRACTOR prior to submission to the CITY ENGINEER. Each submittal shall be dated, signed, and certified by the CONTRACTOR as being correct and in strict conformance with the Contract Documents. No consideration for review by the CITY ENGINEER of any CONTRACTOR submittal will be made for any items that have not been so certified by the CONTRACTOR. Non-certified submittals will be returned to the CONTRACTOR without action taken by the CITY ENGINEER, and any delays caused thereby shall be the total responsibility of the CONTRACTOR.

L. The CITY ENGINEER'S review of CONTRACTOR submittal shall not relieve the CONTRACTOR of the entire responsibility for the correctness of details and dimensions and conformance to the project specifications. The CONTRACTOR shall assume all responsibility and risk for any misfits due to any errors in the submittal. Any fabrication or other Work performed in advance of the receipt of reviewed submittals shall be entirely at the CONTRACTOR'S risk and expense. The CONTRACTOR shall be responsible for the dimensions and the design of adequate connections and details.

10. SUBSTITUTIONS AND "OR EQUAL" SUBMITTAL:

A. Make "Or Equal" submittals within thirty (30) calendar days after issuance of Notice-to-Proceed. A request or submittal received after the specified period will be considered as NOT EQUAL to that so specified and will be processed as a substitution described hereinafter.

B. Clearly identify manufacturers' data submitted to the CITY ENGINEER for review for each proposed substitute with the corresponding Contract Drawing detail and Specification section. If the CITY ENGINEER decides to accept for use in the Project a material, process or article which is not the equal of that specified, make substitution in the manner described in CHANGES AND EXTRA WORK of the General Conditions, with a credit to the CITY for the difference in value.

C. The CITY ENGINEER will determine whether the material offered is equivalent to that specified. Any revision to structures, piping, mechanical, electrical, instrumentation, or any other

Work made necessary by such substitution must be approved by the CITY ENGINEER, and the entire cost both direct and indirect of these revisions shall be borne by the CONTRACTOR.

D. Materials, processes, or articles may be requested as a substitution by the CONTRACTOR, in lieu of that specified, under the following conditions:

- Submit in writing and in the manner described in SUBMITTAL of these General Requirements.
- Submit thirty (30) calendar days before starting the Work, as established by the CITY ENGINEER, so as not to cause any delay in completion of the Project. No other request will be considered after expiration of the period specified, except that in exceptional cases where it is determined to be in the best interest of the CITY, as approved by the CITY ENGINEER.
- Agree to pay for all project engineering, required permits, and design services, if required, to make changes and adjustments in material and Work of trades directly or indirectly affected by the substitute, to the satisfaction of the CITY ENGINEER, at no cost to the CITY.
- All requests for substitution shall be made through the CONTRACTOR. Submissions by the CONTRACTOR shall imply the CONTRACTOR'S approval of such substitution.
- No requests for substitutions will be considered during the bidding period.
- Furnish adequate data with each request for review of a substitute to enable the CITY ENGINEER to evaluate the proposed substitution.

RECORD DRAWINGS (AS-BUILTS) SUBMITTALS

A. Record Drawings are full size drawings (Plans) which are marked up during construction to delineate the actual in-place constructed conditions. Record Drawings shall be provided by the CONTRACTOR for this Project. Requirements for Record Drawings as specified elsewhere shall supplement the requirements specified herein.

B. Record Drawings shall include all changes in the plans including those issued as Change Orders, Plan Clarifications, Addenda, Notice to Bidders, responses to Requests for Information, Jobsite Memos, and any additional details needed for the construction of the Project but not shown on the plans. Substructures encountered while excavating that are left in place shall be located by survey, to the satisfaction of the CITY ENGINEER, shown, and identified on the Record Drawings. Substructures, including but not limited to concrete structures, electrical conduit and duct banks, drains and sanitary sewer pipelines, process piping, water lines, etc, whose installed location differs from that shown on the original plans shall be precisely located by survey to the satisfaction of the CITY ENGINEER and recorded on the as-built drawings before backfilling.

C. Mark Record Drawings with red or blue waterproof ink on one (1) set of full size prints to produce a record of the complete installation. Prepare additional drawings that may be required to indicate record conditions on 24" x 36" paper. Additions to Contract Drawings shall employ and use drafting standards, which are consistent with the drafting standards, used in the Contract Drawings.

D. Keep Record Drawings on the job and update during construction and make available for the CITY ENGINEER'S inspection and copying at all times. The CITY ENGINEER will review the Record Drawings before submittal of monthly payment requests. If in the opinion of the CITY ENGINEER, the Record Drawings are not current or accurate, approval of the monthly payment may be withheld until the drawings are made current. Submit a signed certification with each monthly payment request stating that the Record Drawings are current and accurate as of the date of the payment request.

E. Where the plans are diagrammatic or lacking precise details, produce dimensioned full size sheets as the Record Drawings. For installations outside of structures, the locations shall be given by coordinates and elevations. Where substructures are encased in concrete, the outside dimensions of the encasement shall also be given.

F. In the case of those drawings which depict the detail requirements for equipment to be assembled and wired in the factory, the Record Drawings shall be updated by indicating those portions which are superseded by final Shop Drawings and by including appropriate reference information describing the Shop Drawings by manufacturer, drawing and revision numbers.

G. At the completion of the Work and after final inspection, copy the Record Drawing (as installed) data, using red ink, onto a new set of high quality prints provided by the CITY. Certify to the completeness and accuracy of the "as installed" information indicated on the prints with its signature. Then deliver as a submittal to the CITY ENGINEER for review and approval both the field developed prints and the final signed prints as a condition precedent to the CITY'S release of any retained funds.

DEPARTMENT OF PUBLIC WORKS STANDARD PLANS

The following Department of Public Works Standard Plans are to be included as a part of these plans:

NUMBER	TITLE
S-410-2	Types of Curb and Gutter
S-430-1	Contraction, Expansion & Weakened Plane Joints in Concrete Pavement
S-442-3	Curb Ramps
S-450-2	Tree Well Type A

SSPWC

2018 Edition of the Greenbook
2009 Edition of the Additions and Amendments to the SSPWC
website: <http://eng2.lacity.org/brownbook/frame.cfm>
<http://eng2.lacity.org/techdocs/stdplans/index.htm>

LAYOUT OF WORK

Contractor shall provide all required surveying services for the project per Article 12 of the General Requirements. The City will provide electronic files of the project layout and grading for the Contractors use during construction. 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 promptly reset by the Surveyor.

UNDERGROUND SUBSTRUCTURES

The construction 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 prior to commencing any excavation.

TREE PROTECTION - EXISTING TREES

All trees to remain in place shall be protected using the following guidelines:

TREE PROTECTION SPECIFICATION

These tree protection specifications shall be followed to protect all trees whose dripline is encroached upon either directly or indirectly by construction within City parks.

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 INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST.

An ISA Certified Arborist, private or Urban Forestry, shall be invited to the Job Start Meeting and also notified 48-hours prior to construction

A. **TREE PROTECTION:** 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:

- 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.
(d) If conflicts with the required TPZ interfere with required work area needed for construction, TPZ may be reduced at the discretion of the CITY ENGINEER.

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.

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.

Within the TPZ, the contractor shall adhere to the following requirements, including, but not limited to:

- No stockpiling or storage of any material, debris, or soil.
- No storage of any construction equipment.
- No vehicular access.
- No cutting of roots.
- No disturbance of soil or grade changes.
- No objects of any kind to be attached to tree trunks.
- The contractor shall install a 5' temporary chain link fence with one pedestrian access gate along the boundary of the TPZ. Area within TPZ shall be mulched as per recommended by Arborist. See detail for temporary chain link fence on detail sheet.
- 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.
- No work is permitted within the TPZ without the approval of: 1) the project Landscape Architect, 2) the Project Manager, and 3) Urban Forestry or RAP staff. Any work authorized within the TPZ must be done in accordance with the recommendations of a ISA 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; 2) approved by RAP Forestry.
- 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.
- Upon job completion, contractor shall remove all items installed to protect trees during the construction process.
- Any of the following Southern California native tree species fall under Ordinance No. 177404 of the Los Angeles Municipal Code:

- 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 berberidifolia*); (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 (or latest) found at: http://cityplanning.lacity.org/Code_Studies/Other/ProtectedTreeOrd.pdf.

BUREAU OF ENGINEERING
ENGINEERING
CITY OF LOS ANGELES
DATE: BY: [REDACTED]
NO REVISIONS: [REDACTED]
BUILDING NO. XX/XX
INDEX NO. [REDACTED]

DEPARTMENT OF PUBLIC WORKS
LANDSCAPE ARCHITECT
JAMES W. MOORE, ARCHITECT
No. 3940
1000 W. 10th St.
Los Angeles, CA 90015
LIC. NO. 3940
DESIGNED BY: LORENA MATOS, P.E., A.S.A., ENV. SP., CCM/LEED AP
DRAWN BY: LORENA MATOS, P.E., A.S.A., ENV. SP., CCM/LEED AP
CHECKED BY: JANE ADRIAN
APPROVED BY: MAHMOUD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER

CITY OF LOS ANGELES
CLIENT: DEPARTMENT OF RECREATION & PARKS
GENERAL MANAGER: MICHAEL A. SHULL
SHEET TITLE: LANDSCAPE CONSTRUCTION NOTES, SHEET 1
PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
ADDRESS: 9540 NORTH VAN NUYS BOULEVARD
VAN NUYS, CA 91402

WORK ORDER NO. E170420D
PLAN FILE NO. 622
DRAWING NO. L001
SHEET 16 OF SHEETS 43
PLOTTED: 8/12/2019 2:18 PM

TEMPLATE SHEET REVISION DATE: 11/2015
REVISION DATE: 05/2019 9:44:46 PM
FILE: Q:\INHOUSE-DESIGN\MID-VALLEY\MULTI-PURPOSE INTERGENERATION\PHASE I\CONSTRUCTION DOCUMENTS\DWG\M2_L001-L005_LANDSCAPE_NOTES.DWG

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.

REVISION DATES
(DESIGN STAGE ONLY)

1. GENERAL EARTHWORK

METHODS

The approved Grading Plan 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 humps, (308-2.1).

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.

The source of import soil shall be approved by the Geotechnical Engineering Division (GED) prior to any grading operations. The Contractor shall be required to provide an Agricultural Suitability soil test to establish the suitability of 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.

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 Project Manager.

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 City Engineer. Geological reports shall be provided when requested by the Contractor.

If any grading operations covered by this section extend into or through, or shall commenced during the period of October 15 to April 15, **the contractor 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 to the City Engineer.** Said plans shall be submitted to the City Engineer/BCA Inspector for review on or before September 15 or at least 30 days before any grading is performed during said period.

STORM WATER POLLUTION CONTROL

The Contractor is responsible for the Storm Water Pollution Control Measure for Construction Activities. See sheet G003 / Form GRN 1 for stormwater pollution control requirements.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Contractor is responsible for the payment of the Notice of Intent (NOI) to the State of California and the development of the Storm Water Pollution Prevention Plan (SWPPP) document, which is to be prepared by a Qualified SWPPP Developer (QSD). This document is to be submitted to the City Engineer for review and submission to the State Water Resources Control Board. The SWPPP must describe the erosion control practices to be implemented during construction and the selection and implementation of appropriate BMPs to account for site-specific and seasonal conditions. Contractor shall draft the SWPPP before start of construction and submit it to the City Engineer for review; no construction work shall commence without an approved SWPPP. The document is to remain on the construction site and all of the measures stated in the document are to be implemented during the duration of construction. The QSD shall be responsible for creating, revising, overseeing and implementing the SWPPP and the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

2. CONCRETE

All concrete construction shall be as specified in this Section unless noted otherwise in the Landscape Construction Notes.

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 City Engineer/BCA Inspector, (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 shall be certified non-reactive by an approved testing laboratory as approved by the City, (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 as shown.

JOINT URETHANE SEALANT

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

EXPANSION JOINT PREMOLDED 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).

COLORED 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.

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 \oplus

The Engineer/BCA Inspector may modify the exact location in the field, depending on field conditions, if permission is granted from the City Engineer. 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 City Engineer 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 the applicable details.

CONCRETE SURFACE FINISHING

Concrete walks, pads, or mow strips shall have a medium broom finish, unless otherwise noted on the plans. The Contractor shall prepare a minimum four foot by four foot sample for approval by the City Engineer 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 City Engineer/BCA Inspector and as shown on separate plan.

COLORED CONCRETE ADMIXTURES

Colored concrete admixtures shall be formulated and mixed according to manufacturer's printed instructions. Calcium chloride set-accelerators shall not be used.

PAVEMENT MARKINGS

Paint for parking stalls and game courts shall be regular dry type non-reflective paint, applied to a wet film thickness of 7 mil. Paint shall be Zone-Loc, Traffic Line Paint, as manufactured by Morton, or an approved equal, in the specified color, (310-5.6 and 210.6)

3. DISINTEGRATED GRANITE AND SOIL STABILIZERS

GENERAL

A. Section Includes: Supply and installation of stabilized crushed aggregate paving as indicated in the Contract documents, including:

1. Base Course
2. Crushed Aggregate Paving
3. Organic Binder for Crushed Aggregate

References

ASTM C136 – Sieve Analysis of Fine and Coarse Aggregates.

B. ASTM D2419 – Sand Equivalent Value of Soils and Fine Aggregates.

SUBMITTALS

A. Submit in accordance with Submittal Procedures:

1. Manufacturer's product data sheet.
2. (1 quart min.) sample of base course.
3. Base Course gradation indicating that the product meets specifications.
4. (1 quart) min.) sample of stabilized crushed aggregate paving.
5. Stabilized crushed aggregate gradation indicating that the product meets specifications.

MOCK-UP

- A. Install 20 square feet minimum of stabilized crushed aggregate paving including base course, at location approved by Project Manager and/or Construction Manager.
- B. Allow the City Engineer to view mock-up before proceeding with rest of stabilized crushed aggregate paving.
- C. Approved mock-up may remain as part of completed Work.

DELIVERY, STORAGE AND HANDLING

A. Protect stabilized crushed aggregate mix from contamination. Store under cover.

SEQUENCING

- A. Do not install work specified in this Section prior to acceptance of earth moving.
- B. Coordinate work specified in this Section with work specified in other Sections to minimize cutting and operation of heavy equipment over installed stabilized crushed aggregate paving.
- C. Do not install stabilized crushed aggregate surfacing when subbase is wet at saturated field capacity.

MATERIALS

- A. Comply with MTO OPSS 1010 – "Material Specification for Aggregates – Granular A, B, M and Select Subgrade Material" specification for Granular A material.
- B. Crushed Aggregate Materials:

1. Crushed Aggregate Material shall consist of sound, angular, durable particles.
2. Gradation, in accordance with ASTM C136:

Sieve	Sieve Size (mm)	Percent Passing
1/2"	12.7	100%
3/8"	9.51	90-100%
4	4.76	50-100%
30	0.595	25-55%
100	0.149	10-25%
200	0.074	5-18%

3. Aggregate color shall be "GOLD" selected from a pre-approved material pallet from Gail Materials 951-667-6106, www.gailmaterials.net.

C. Organic Binder:

1. Organic-Lock™ self-healing organic binder by Gail Materials, Corona, CA; phone 951-667-6106; fax 951-667-6102; www.gailmaterials.net.

2. Requests for substitutions will be considered in accordance with provisions of Substitution

PROCEDURES.

3. Material shall be delivered to site pre-wetted by supplier. Mix rate of Organic-Lock depends on the selected material as well as the application and shall be determined by Gail Materials.

EXECUTION

Refer to manufacturer's installation instructions for additional requirements.

EXAMINATION

A. Contractor shall examine grading and subsoil conditions. Do not proceed until subgrade is approved and conditions are acceptable.

PREPARATION OF SUBGRADE

- A. Excavate to depth required so that finish grade can be established as noted on plans.
- B. Remove excavated soil from site. Spread excavated surface
- C. Compact subgrade to 95% Modified Proctor Density. Excavate soft and unstable areas of subgrade that cannot be compacted to standard noted, fill and compact with approved granular material.

BASE COURSE

Place base course material over subgrade to depths and dimensions shown on drawings in maximum (6") lifts compacted to 95% Modified Proctor Density. Pre-soak base or native soil (material below Organic-Lock Pathway Aggregate) to assist in the bonding of materials and to prevent a layering effect prior to placement of Organic-Lock Pathway Aggregate.

PRE-BLENDED ORGANIC LOCK™ AGGREGATE SURFACING

- A. Prewetted Organic Lock Aggregate Paving can be installed in one lift for pathway, trails or equal application. For areas of vehicular use (in excess of 6' in width), a compacted depth of 6 inches or greater shall be installed in 3 inch compacted lifts. Estimated compacted max density is +/- 129 lbs/cu. ft. The moisture percentage in the prewetted Organic Lock Aggregate Paving will be determined by Gail Materials and will depend on selected aggregate.
- B. Depending on weather conditions, the time required to allow the material to set-up before it can be compacted varies. Generally, this time period is between 6 and 48 hours. The top layer should be firm and not sticky. Compaction can begin when you can walk on the material without significantly sinking in and material does not feel muddy. If material sticks to the roller during compaction, allow the material to further dry. Do not allow the material to completely dry out.
- C. Make 4-6 passes using a 1-10 ton double or single static drum roller, or equivalent. **Do not use a vibratory compactor or vibratory setting on the compactor.** The contractor shall select the proper size roller for the appropriate application.
- D. After final compaction, the surface shall be true to elevation and shall not vary by more than (1/4") tested with a straight edge at any location on the surfaces. Surfaces can either be crowned at a minimum of 2% and/or installed with a cross slope of minimum 1%, or otherwise as noted on plan.
- E. Compaction testing shall not be conducted until the Organic Lock Aggregate Paving has been allowed to thoroughly dry and cure.

ADJUSTMENT AND CLEANING

A. All paved areas or adjacent surface shall be brushed clean and excess materials shall be removed from the work site and disposed of in an approved dump location.

PROTECTION OF WORK

- A. Do not allow traffic on stabilized crushed aggregate paving after placement or until compacted stabilized crushed aggregate paving has fully cured. This time may vary depending on weather conditions.
- B. Protect stabilized crushed aggregate paving surface from damage until Project completion. Repair damaged areas to match specified requirements.

4. WELDED WIRE FENCING

GENERAL

A. Section Includes: This section specifies fencing and gates.

REFERENCES

A. Reference Standards:

1. ASTM International (ASTM)
 - a. ASTM A36 Standard Specification for Carbon Structural Steel.
 - b. ASTM A53 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
 - c. ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated Galvanized or Zinc-Iron Alloy-Coated Galvannealed by the Hot-Dip Process.
 - d. ASTM B117 Standard Practice for Operating Salt Spray (Fog) Apparatus.
 - e. ASTM D3359 Standard Test Methods for Measuring Adhesion by Tape Test.
 - f. ASTM F2453 Standard Specification for Welded Wire Mesh Fence Fabric.
 - g. ASTM F626 Standard Specification for Fence Fittings.
 - h. ASTM F668 Standard Specification for Polyvinyl Chloride (PVC), Polyolefin and Other Polymer-Coated Steel Chain Link Fence Fabric.
 - i. ASTM G26 Practice for Operating Light Exposure Apparatus (Xenon Arc Type) With and Without Water for Exposure of Nonmetallic Materials (Withdrawn 2000).
 - j. ASTM G53 Practice for Operating Light and Water Exposure Apparatus (Flourescent UV Condensation Type) for Exposure of Nonmetallic Materials (Withdrawn 2000).

ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate work of this Section with work of other trades for proper time and sequence to avoid construction delays.

ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate work of this Section with work of other trades for proper time and sequence to avoid construction delays.

ACTION SUBMITTALS

A. General: Submit listed submittals in accordance with Section: GENERAL, SUBMITTALS
B. Product Data: Submit specified products as follows:

1. Manufacturer's product data.
2. Catalog pages illustrating products to be incorporated into project.
3. Material Safety Data Sheets (MSDS)

C. Shop Drawings: Indicate information on shop drawings as follows:

1. Layout of fencing, include types and locations of gates.
2. Footing details.
3. Fastening details, gate details, and relationships to adjacent construction.

CLOSEOUT SUBMITTALS

A. General: Submit listed submittals in accordance with Section: GENERAL, CONTRACT FINAL INSPECTION.
B. Operation and Maintenance Data:

1. Submit operation and maintenance data for installed projects. Include:

- a. Manufacturer's instructions detailing maintenance requirements.
- b. Parts catalog giving showing complete list of available parts.
- c. Replacement parts with cuts and identifying numbers.

C. Warranty Documentation: Submit warranty documents specified.

DELIVERY, STORAGE & HANDLING

A. Deliver and Acceptance Requirements:

1. Deliver material in accordance with Section [01 61 00 - Common Product Requirements] and in accordance with manufacturer's written instructions.
2. Deliver materials in manufacturer's original packaging with identification labels intact and in sizes to suit project.

B. Storage and Handling Requirements:

1. Store materials protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.

WARRANTY

A. Warranty: Refer to Contract Conditions and Section [01 78 36 - Warranties] for project warranty provisions.
B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and does not limit, other rights Owner may have under other Contract Documents.

1. Warranty Term: 5 years commencing on date of substantial completion.

PRODUCTS

SECURITY FENCING AND GATES

A. Manufacturer: Cochrane USA.

1. Contact: Ryan Kalin, West Coast Regional Manager; Direct: 202-705-6022, Mobile: 305-607-7665; E-mail: rkalin@cochraneusa.com; Website: www.cochraneusa.com
2. Single Source Responsibility: Provide components and materials specified in this section from a single manufacturer.
3. Substitution Limitations:
 - a. Substitutions: In accordance with Section: GENERAL, SUBSTITUTIONS

B. Components:

1. Posts - Cochrane Taper Locking Post:
 - a. Length: As indicated on the drawings.
 - b. Post width shall be 3.5 inches (85 mm), tapering to 2 inches (45 mm) with a depth of 3.5 inches (85 mm).
 - c. Post Locking Recess Mechanism to secure panel edge.
 - d. Fittings: Locking Recess Mechanism, UV stabilized polymer cap.
 - e. Pot finish: Hot Dipped Galvanized then Marine Fusion Bond Coated.
2. Panels-Cochrane ClearVu:
 - a. Panel shall be of 10 feet 10 inches width and 8 feet in height
 - b. Aperture Size (Centers): 3 x 1/2 inches.
 - c. Reinforcing (Rigidity): 4 x 2 inches by 50 mm deep-V formation horizontal recessed bands.
 - d. Side Flanges: 2 x 2 1/2 inch flanges at 70 degrees along sides of panel (internal fixtures-all fixtures shall be on the inside of the fence line).
 - e. Anti-scale locking devices: located on post panel connection.
 - f. Top and Toe Flanges: 2 x 2 1/2 inch flanges, integrated rigid angle.
 - g. panel post shall have a flush panel post finish with no climbing aid and no external locking devices or components exposed to attack sides of the fence line.
3. Swinging Gates: As indicated on the drawings.

C. Materials:

1. Steel Pipe (ASTM A53): Zinc-coated and seamless.
2. Steel (ASTM A36): Carbon structural steel.
3. Panel Fabric (ASTM F2453): Welded wire mesh.
4. Fittings (ASTM F626): Zinc-coated.

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING



DATE: BY:	
NO. REVISIONS:	▲▲▲▲▲
BUILDING NO.	XX/XX
INDEX NO.	



ARCHITECTURAL DIVISION	DATE:
LANDSCAPE ARCHITECT: JANE ADRIAN	LIC. NO. 3940
DESIGNED BY: LORENA MATOS, P.L.A. / ASLA / ENV SP / COM / LEED AP	6-04-18
DRAWN BY: LORENA MATOS, P.L.A. / ASLA / ENV SP / COM / LEED AP	6-04-18
CHECKED BY: JANE ADRIAN	6-04-18
APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER	6-04-18

SHEET TITLE:	LANDSCAPE CONSTRUCTION NOTES, SHEET 2
PROJECT:	MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
ADDRESS:	9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO.	E170420D
PLAN FILE NO.	622
DRAWING NO.	L002
SHEET	17
OF	43

PLOTTED: 8/5/2019 4:45 PM

D. Fabrication:

1. Panels: Fabricate panels posts with a flush panel post finish with no climbing aid.
2. Swinging Gates:
 - a. Weld all connections and joints to form rigid frames or assembled with corner fittings.
 - b. Fabricate hinges so that they will not twist or turn under the action of the gate, and arranged so that a closed gate cannot be lifted off the hinges to obtain entry.
3. Sliding Gates:
 - a. Weld all connections and joints to form rigid frames or assembled with corner fittings.
 - b. Provide all fittings, brackets and rear wheel tracks from standard manufactured products for the intended application.

E. Finishes:

1. Galvanize: Hot-dip galvanize in accordance with ASTM A653.
2. Finish: Manufacturer's standard Marine Fusion Bond Coating.
 - a. Performance:
 - a.a. Loss of Adhesion (ASTM D3359): Zero loss.
 - a.b. Corrosion: (ASTM B117): Under-film scribe tested for 1000 hours: 0-0.5 mm
 - a.c. Salt Resistance (ASTM G26 and G53): No appreciable loss of color, gloss or mechanical properties for 2000 hours.
 - b. Color: As indicated on the drawings.

EXECUTION

EXAMINATION

A. Verification of Conditions: Verify that conditions of substrates previously installed under other sections or contracts are acceptable for product installation in accordance with manufacturer's instructions prior to security fencing and gate installation.

1. Inform Project Manager of unacceptable conditions immediately upon discovery.
2. Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval from Project Manager.

PREPARATION

A. Ensure structure or substrate is adequate to support security fencing and gates.

INSTALLATION

- A. Coordinate security fencing and gate work with work of other trades for proper time and sequencing to avoid construction delays.
- B. Install security fencing and gates plumb and level.
- C. Accurately fit, align, securely fasten and install free from distortion or defects.

ADJUSTING

- A. Adjust components and systems for correct function and operation in accordance with manufacturer's written instructions.
- B. Lubricate moving parts to operate smoothly and fit accurately.

PROTECTION

- A. Protect installed product from damage during construction.
- B. Repair damage to adjacent materials caused installation.

5. ASPHALT SPORTS COURT

MATERIALS

BASE MATERIAL

Base material for asphalt surfacing shall be crushed miscellaneous base (CMB) (200-2.4).

ASPHALT COMPOSITION AND GRADING

Asphalt to be used for court surface overlayment shall be Type D2-PG 64-10-50. Asphalt for court base shall be Type C2-PG 64-10-50, (203-6.3).

ASPHALT TACK COAT

Asphalt areas that are to be resurfaced shall receive a tack coat prior to the application of the new wearing surface. The tack coat shall be Grade SS-1h emulsified asphalt at a rate of 0.05-0.10 gallons per square yard uniformly applied. (302-5.4)

METHODS

SUBGRADE AND BASE PREPARATION AND COMPACTION

Subgrade under all asphalt shall be prepared and compacted in accordance with this section (301-1.).

Locations where compaction testing is required shall be determined by the BCA Inspector. The total number of compaction test shall be no less than the number required by the BCA inspector.

The Contractor shall provide compaction tests for both subgrade and base material, when applicable. Minimum subgrade and base compaction shall be 90% relative compaction.

ASPHALT CONCRETE PAVEMENT - HEADERS, LAYING, ROLLING, SLURRY COAT

Asphaltic concrete pavement and headers shall comply with this subsection. All asphalt pavement shall be laid with a self-propelled mechanical paver having hopper, spreader screws, screed and tamper mechanism ("Barber-Green", "Blaw-Knox" or equal). All concrete overlayment shall have a tack coat applied to the base course if the base course has been laid 48 hours or more before the overlayment course. A tack coat shall also be applied to a base course if the base course has dirt or debris that falls on it before an overlayment is applied. A tack coat (AR 4000) shall be applied to all concrete or A.C. paving adjoining the new work, (302.7.2.).

ASPHALT BASKETBALL COURT

Paving for basketball court shall be 1 inch of Type D2 asphalt over 3 inches of Type C2 asphalt with a viscosity of AR 4000. If the 1 inch overlayment is constructed within 48 hours of the base course and no dirt or organic matter has fallen on the base course then no tack coat is needed. If the base course is dirty or it has been over 48 hours since laying the base course then it shall be cleaned with a rotary power-operated vacuum sweeper to remove all dirt, water, oil and foreign matter.

Prior to laying the overlayment, a tack coat shall be uniformly applied to the base course. Apply tack coat at 0.25 gallons per square yard, (302-7.2.2).

PAVEMENT MARKINGS

Paint for parking stalls and game courts shall be regular dry type non reflective, applied at a wet film thickness of 7 mil. "Zone - Loc" "Traffic Line Paint", as manufactured by Morton, or an approved equal, in the specified color, per Section, (310-5.6), (210-1.6).

6. IRRIGATION SYSTEMS

MATERIALS

SOLVENT WELDED PLASTIC PIPE

Schedule 40 PVC plastic pipe shall be used for pipe sizes up to and including 2 1/2 inch diameter on both the discharge and supply side of control valves, (212-2.1.3). Class 200 PVC plastic pipe shall be used for pipe sizes from 3 inch up to and including 6 inch 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.

POP-UP SPRAY HEADS

The pop-up spray head body shall have a 6" or 12" pop-up stroke. The body of the spray head shall be constructed of corrosion and UV-resistant, heavy-duty A.B.S. The spray head body shall have a factory-installed drain check valve capable of checking up to 10 feet in elevation change. The spray head body shall have a standard pressure-regulating device as an integral part of the pop-up riser maintaining a constant nozzle outlet pressure of 30 or 45 psi with inlet pressures of up to 100 psi. Nozzles shall be matched precipitation rate, fixed spray or multiple-stream rotating type series with adjustable radius from 10' to 30', and arcs adjustable from 45 to 360 degrees.

CONTROL WIRE

Connection between the automatic controller(s) and the remote control valves shall be Rainmaster TW-CAB-14 or approved equal, made with polyethylene double-jacketed or UF-B UL PVC double-jacketed two-conductor solid core designed for direct burial with insulation 3/16 inch(.060") thick, high density, sunlight resistant incased in an outer jacket of polyethylene or PVC conforming to ICEA S-GL-402 or NEMA WC5, having a minimum wall thickness of .045 inches. Two-wire polyethylene 'twisted' cable and single strand 14 gauge PVC irrigation wire are not acceptable.

2-WIRE CONTROL WIRE SIZING

Standard wire lengths for straight line installation i.e. wire distance to the furthest device without any loop:

WIRE SIZE(GAUGE)	#14	#12
TOTAL LOOP WIRE LENGTH	10,000'	14,800'
DISTANCE TO FURTHEST VALVE	5,000'	7,400'

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-enterable 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 chloer.

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

CONNECTOR	COLOR	NO. AND SIZE OF WIRE
3M Model DBY	Yellow	Max. 4-12 gage UF wires
3M Model DBR	Red	Max. 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.

VALVE BOXES

Valve boxes shall be plastic with locking cover.

For Remote Control Valves:

The dimensions of the box shall be 21.8 inches by 16.6 inches, Model VB-STD-H by Rainbird, or approved equal. The lid shall be permanently embossed "RCV", Paint is not acceptable. "Brand" lids with controller station number.

For Quick Couplers and Gate Valves:

The dimensions of the box shall be 13.75 inches bottom diameter and 10" top diameter. Model VB-10RND-H, by Rainbird, or approved equal. The lid shall be permanently embossed "GV" for gate valves and "QC" for quick coupler valves. Paint is not acceptable.

Boxes are to be installed per the applicable details.

METHODS

EXISTING IRRIGATION SYSTEM REPAIR - GENERAL

The contractor shall reconstruct any existing irrigation lines that are to remain in service, when they interfere or are damaged by construction. Reconstruction of the irrigation lines shall conform to the applicable sections of the landscape construction notes using all new materials except existing irrigation heads, which may be reinstalled. When modifications to an existing irrigation system are part of the project, the contractor shall verify the operation of all existing irrigation controllers, remote control valves, quick coupling valves, and irrigation heads prior to the commencement of work. The project manager shall be notified, in writing, of any inoperable equipment encountered.

Maintain 12 inches of cover over all lateral lines and 24 inches of cover over mainlines 2" and smaller in diameter. Reconnect existing remote control valves with approved watertight connectors, (801-5.4).

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

All PVC mainline shall be installed with a direct burial #12 AWG solid steel core soft drawn tracer wire, with 30 mil polyethylene jacket. Color shall be "blue" for irrigation pipelines and "purple" for recycled water (non-potable) pipelines. Prior to backfill, install tracer wire on top of pipe and secure in place with ties at maximum 10-foot intervals. The tracer wire system shall be installed as a continuous single wire - no looping or coiling of wire is allowed. The wire shall be installed in such a manner as to be able to properly trace all pipelines without loss or deterioration of signal or without the transmitted signal migrating off the tracer wire. Splices along the continuous run of tracer wire for repair of a wire break or replacement of failed segment of wire shall use 3m brand DBR direct bury splice kit or approved equal. Except for approved spliced-in repair or replacement connections, tracer wire shall be continuous and without splives from each tracer wire access point.

COVER OVER MAINLINES:

Maintain 24 inches of cover over mainlines 2" and smaller in diameter. Mainlines 3" 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.

No irrigation trenching shall pass closer than 10 feet of the base of any existing tree. No tree root larger than 2" diameter shall be cut without approval. SEE TREE PROTECTION SPECIFICATIONS.

PIPE BEDDING AND BACKFILL:

All trench backfill shall be performed in accordance with approved soils report. Pipe bedding shall be clean site soil, free of all rocks, debris, etc. over 1/2" diameter. bedding shall surround the pipe to one foot min. above the top of the pipe and shall be placed in 8-inch lifts. Backfill shall be the material placed above the bedding to finish grade. there shall be no rocks over 2" in greatest dimension or organic matter in the backfill. backfill shall be placed in 8-inch lifts. All bedding and backfill shall be properly moisture conditioned and compacted at each lift. All trenches shall have a minimum relative compaction of 90%. Compaction shall be tested by the City at locations to be determined by the Geotechnical Engineer. Trench backfill which exhibits insufficient compaction shall be subject to excavation and re-compaction until minimum compaction is achieved. Finished trenches shall be flush with adjacent finish grades. The contractor shall be responsible for maintaining the trenches flush and smooth with adjacent surface grade until final acceptance of the project. After compaction has been approved, trenches in existing turf areas shall be re-planted per "method a" lawn repair of the landscape planting section of the landscape construction notes, unless otherwise noted.

The maximum trench width shall be two and a half diameters of the pipe.

PIPES AND REMOTE CONTROL WIRING CROSSING UNDER PAVING:

Where irrigation piping crosses a vehicular roadway or other paving having a width of less than 25 feet, a 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 inches minimum. Where remote control wiring crosses under paving having a width of less than 25 feet, a 3 inch Schedule 40 PVC sleeve shall be jacked under the paving at a depth of 30 inches minimum. All sleeves shall extend 3 feet 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 Schedule 40 PVC sleeve a minimum of two pipe sizes larger than the piping to pass through it, at a depth of 30 inches 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 30 inches 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.

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 by water settlement as indicated in the trench repair section of this specification. Boxes are to be positioned per details.

LAYOUT OF PIPING:

Pipe layout as shown on irrigation plan is schematic. Contractor may route piping in the most expedient manner consistent with the requirements set forth herein, including avoidance of tree roots. Contractor shall adhere to As-Built requirements as shown below.

PLACEMENT OF IRRIGATION HEADS:

Note: irrigation plans are designed, as a minimum standard, for head-to-head coverage. Head locations shall be determined by referencing the irrigation plan and using the head spacing listed in the irrigation head legend. Accuracy of final installation shall be within plus or minus 12 inches for all rotary heads having a throw of 30 feet or greater; within plus or minus 4 inches for all head types with a throw of under 30 feet. Where heads are located adjacent to paving, the heads shall be placed within three inches of such paving unless otherwise noted.

Prior to head installation, contractor shall mark the proposed locations of all irrigation heads in the field for review and approval by the engineer. Contractor shall make any adjustments to head locations requested by the engineer at that time at no additional expense to the City. contractor shall provide minimum 48 hours notice prior to the requested time of inspection.

INSTALLATION OF IRRIGATION HEADS

Heads in lawn areas shall be set flush with finish grade at initial installation and protected during construction. All soil 12 inches from the perimeter of the head shall be compacted as indicated in applicable details. All plastic sprinkler heads shall be installed on swing joint assemblies as shown on details.

AUTOMATIC CONTROL SYSTEM INSTALLATION

The automatic controller shall be of the type indicated on the plans (including station capacity and specific modules and accessories from the same manufacturer) and installed inside an approved enclosure per details.

LOW VOLTAGE WIRE CONNECTIONS

Connectors shall be DBY or DBR as manufactured by 3M Corp. Control wires shall be stripped of 1/2 inch insulation, inserted into the electrical spring connector, and the connector twisted in a clockwise direction until the wires are tight. Insert the completed splice into the gel-filled tube, and check visually to confirm that the wire nut has been pushed past the fingers and is seated in the bottom of the tube. Position wires in wire channels and close insulator cover.

INSTALLATION OF CONTROL WIRE

All 2-wire cable shall be installed in 1-1/4" min. SCH 80 PVC conduit per details. Contractor shall provide pull boxes at intervals not to exceed 200'. Contractor shall submit a proposed layout of conduit routing and pull box locations for approval to the Project Manager prior to installation. Contractor shall provide grounding for 2-wire path at locations shown on plans per details and manufacturers requirements.

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

IRRIGATION SYSTEM FLUSHING AND TESTING

The irrigation system shall be flushed in the presence of the City Engineer/BCA Inspector. 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 City Engineer.

RECORD DRAWINGS (AS-BUILTS) AND CONTROLLER CHARTS

As built plans shall be maintained throughout the construction period and turned over to the city engineer at the operational final inspection.

The contractor 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 City Engineer, 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 these landscape construction notes and the SSPWC. The contractor 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 shall be required to make any necessary repairs within 24 hours of notification at no cost to the City. If the contractor or his agent fail to make such repairs within the stipulated time, the City 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 shall make all adjustments without additional cost to the City, including complete restoration of any planting, paving, or other improvements damaged as a result of settlement.

7. LANDSCAPE PLANTING

MATERIALS

GYPSUM

Shall be agricultural grade.

ORGANIC AMENDMENT

"Type 1" organic soil amendment shall be a relatively dry and friable fine-textured organic composite that is well-composted and nitrogen stabilized, derived primarily from composted greenwaste or processed wood products, and free of foreign matter including any viable plant, tree or weed seed. 99% of material shall pass through a 1/2" screen. Salinity: material shall have a maximum saturation extract conductivity of 2.50 millisiemens per centimeter.

Contractor shall submit a sample of the organic soil amendment to the City Engineer/BCA Inspector for approval prior to installation.

GRO-POWER PLUS - GENERAL PURPOSE FERTILIZER

Shall have a minimum analysis of 5-3-1 (N-P-K) derived from ammonium phosphate, urea, sulfate of potash, compost and sulfides and oxides of iron, manganese and zinc, with 1.00% Alkyl Naphthalene Sodium Sulfonate soil penetrant as manufactured by Gro-Power Inc., 5065 Telephone Avenue, Chino, CA 91710 (909) 393-3744, or an approved equal.

FERTILIZER TABLETS

Fertilizer tablets shall be Gro-Power planting tablets, 7 gram 12-8-8 (N-P-K) 20% HUMUS, 4% HUMIC ACIDS, 3.5% Sulfur, 2% Iron, Micronutrients, as manufactured by Gro-Power Inc., 5065 Telephone Avenue, Chino, CA 91710 (909) 393-3744, or an approved equal.

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-(phosphonomethyl) 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.

TOP DRESSING 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 Manager or BCA Inspector for approval prior to application.

PLANT MATERIALS:

a. ALL PLANTS: The plant names shown or listed on the Contract Drawings shall conform to the "Sunset Western Garden Book," latest edition unless otherwise specified. In all cases, botanical names take precedence over common names.

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.

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY: _____

NO. REVISIONS: _____

BUILDING NO. XX/XX

INDEX NO. _____

DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, PE, ENV SP, CITY ENGINEER

ARCHITECTURAL DIVISION

LANDSCAPE ARCHITECT: JANE ADRIAN LIC. NO. 3940 P-04-18

DESIGNED BY: LORENA MATOS, P.E., A.S.L.A. ENV SP / COM / LEED AP P-04-18

DRAWN BY: LORENA MATOS, P.E., A.S.L.A. ENV SP / COM / LEED AP P-04-18

CHECKED BY: JANE ADRIAN P-04-18

APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER P-04-18

CITY OF LOS ANGELES

CLIENT: DEPARTMENT OF RECREATION & PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: LANDSCAPE CONSTRUCTION NOTES, SHEET 3

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. L003

SHEET 18 OF SHEETS 43

PLOTTED: 8/12/2019 2:19 PM

TEMPLATE SHEET REVISION DATE: 11/2015
REVISION DATE: 9/12/2019 7:39 AM
FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATIONPHASE I\CONSTRUCTION DOCUMENTS\DWG\NAV2_L001.L006_LANDSCAPE_NOTES.DWG

TEMPLATE SHEET REVISION DATE: 11/2015
REVISION DATE: 01/2019 7:33 AM
FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATIONPHASE\CONSTRUCTION DOCUMENTS\DWG\MV2_L001.L005_LANDSCAPE_NOTES.DWG

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.

b. QUALITY: All plants shall have a growth habit normal to the species in accordance with U.S.A. Standards fore Nursery Stocks, latest editions; shall be sound, healthy, vigorous and free from insect pests, plant disease, sun scalds, fresh bark abrasions, excessive abrasions or other objectionable disfigurements. Tree trunks shall have normal well-developed branch systems, and vigorous and fibrous root system, not root bound and shall be free of girdling roots.

c. TYPE AND SIZE: Plant materials shall be as listed on the Contract Drawings, unless otherwise instructed by the Project Manager. In case of conflict between the plant schedule totals and total plant count of the contract documents, the Contractor shall the higher number of plants.

d. DELIVERY OF PLANT MATERIAL: shall begin only when it is ready for the work and after the inspections are made and any required soil samples and tests have been reviewed by the Project Manager. All materials furnished for the work shall be not less than the reviewed sample. Upon delivery, Contractor shall tag one plant of each variety for identifying purposes.

e. PRUNING: Other than normal side pruning during the growth period, no pruning shall be done prior to the inspection at the nursery.

f. TREES: All trees shall conform to types, sizes and heights noted on the Contract Drawings. All trees shall be measured for height from the root crown to the last division of the terminal leader and measured for the diameter 3 feet above the root crown. All palm trees shall be measured for height from the root crown to the brown trunk and measured for the diameter 3 feet above the root crown. Trees and palms shall stand erect without support.

All trees shall be staked as designated on the Contract Drawings. Wood tree stakes shall be 2 inches in diameter by 10 feet long, lodgepole grade, pressure treated, capable of standing in the ground at least two years.

g. SOD: Shall be of the type designated on the planting plan, or an approved equal. Sod shall be delivered to the jobsite within 24 hours of being cut at the nursery, and COMPLETELY installed within 12 hours of delivery to the jobsite. The sod shall be machine cut to between 1/4" and 5/8" thick, not including top growth or thatch.

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. Topsoil shall be scarified and cultivated to a uniform, finely divided condition to a depth of 8 inches. 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 2 inches of all areas (including slopes) shall be free of weeds, stones and other deleterious matter 1 inch in diameter and larger. Soil shall not be worked when it is so wet or dry as to cause excessive compaction or the formation of large clods or dust.

TOPSOIL PREPARATION FOR SOD AREAS:

If not otherwise specified, all lawn and ground cover areas shall receive the following soil preparation:

- 3 cubic yards, Type I organic soil amendment per 1,000 sq. ft.)
- 25 lbs of Gro-Power Plus fertilizer per 1,000 sq.ft.
- 15 lbs. of Agricultural Gypsum per 1,000 sq. ft.

The soil preparation materials shall be uniformly cultivated into the soil to a depth of 9 inches minimum and thoroughly watered, (308-2.3.1).

TOPSOIL PREPARATION FOR NON-TURF AREAS:

Prior to application of soil amendments< soil shall be lightly cultivated to a depth of 3". All non-turf planting areas shall receive the following amendments broadcast evenly over the surface:

- 300 lb. LIVE EARTH HUMATE SOIL CONDITIONER PLUS GYPSUM per 1,000 sq. ft.
- Contact: Todd Burns, (661) 978-7307 for availability.

The soil preparation materials shall be uniformly cultivated into the soil to a depth of 3 inches and thoroughly watered in to a depth of 8" by any means required (including hand watering if needed), (308-2.3.1).

FINISH GRADING (FOR LAWN AREAS)

Finish 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 in 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 City Engineer/BCA Inspector prior to seeding or sodding. (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 demolition, grading, hardscape, construction, installation of irrigation system, soil preparation, and fine grading of turf and planting areas have been completed.

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 Form" to RAP, and a completed and accurate MSDS (Material Safety Data Sheet) to be at the site of application. The area of application shall be posted as such and barricaded for public safety and information. On sites over 1/2 acre in size the contractor shall utilize a the City Engineer approved plan of phasing the application.

The Contractor is responsible or any and all damage done to plant materials outside of the treatment area. Contractor shall replace, in kind and size, any plant material damaged or killed through the application of herbicide.

Any Contractor, who is obligated under contract with the Department for the construction or refurbishment of a park facility that involves the intended use of herbicides or other pesticides, must first notify the pest management supervisor of the Forestry Division (213) 485-3674. Prior to any approved pesticide applications at any recreation/child care center, the contractor is also required to notify the recreation director-in-charge at least 72 hours in advance of the date/s of application. This is to conform to the State of California Healthy Schools Act of 2000(AB2260). Also, all pest control work performed at any facility should fall within the guidelines of the Department's IPM programs. In addition, each individual project will require a written recommendation by a licensed Pest Control Advisor for any pesticide application.

Any questions regarding pesticide application and procedures at Recreation and Parks facilities shall be directed to the City Engineer/BCA Inspector and the RAP Forestry group, Vegetative Management (213) 485-4826.

In addition to the afore listed responsibilities the following precautions shall be observed in handling and applying herbicide:

1. Before applying, Contractor shall read and understand all instructions provided by the manufacturer.
2. Product shall not be used when winds are gusty or in excess of 3 miles per hour, or when any other conditions exist, which would result in drift.
3. Avoid combinations of pressure and nozzle type or adjustment that result in mist.
4. Do not apply during rain, or if rain is forecast within twelve hours. If rain occurs within twelve hour period, material must be reapplied after plant growth has dried out.
5. Contractor shall observe extreme care not to allow spray to contact desirable plant material. Use cardboard, plywood, or other appropriate material to shield plant materials outside of the treatment area from overspray.
6. Do not apply to bare ground.
7. Do not add any other products to any herbicide mix, including spreader stickers or surfactants, unless required by the label directions and approved by the Department's Pest Control Advisor (PCA).

WEED ABATEMENT ("GROW AND KILL"):

Weed abatement shall apply to all planting areas. The abatement operation shall be commenced only after demolition, grading, hardscape, construction, installation of irrigation system, and fine grading of planting areas have been completed.

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

WEED ABATEMENT: GROW AND KILL METHOD

Contractor shall follow the "grow and kill" steps set forth below:

- Step 1. Treat all vegetation (lawn) to be removed with glyphosate herbicide at a minimum application rate of five (5) quarts of glyphosate herbicide mixed in 50 gallons of clean water per acre applied by spraying thoroughly moisten all plant material with herbicide.
- Step 2. 40-hour minimum after the glyphosate herbicide spraying, clear site of all dead or living vegetative growth by hand or mechanical means. Do not water during the period.
- Step 3. Thoroughly water all turf and planting areas as needed to keep soil evenly moist for a period of at least two weeks.
- Step 4. At the conclusion of the 2-week period, treat all remaining plants within the treatment area with glyphosate herbicide at an application rate of five (5) quarts of glyphosate herbicide mixed in 50 gallons of clean water per acre applied by spraying. Thoroughly moisten all plant material with herbicide.
- Step 5. After two week kill period, remove all dead plant growth. If any living plants are observed, entire plant, including roots, shall be removed by hand. Minimize physical disturbance of the soil.

WEED SUPPRESSION (NON-HERBICIDE WEED REMOVAL)

Weed suppression, shall apply to all turf and planting areas. The suppression 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. Contractor shall thoroughly water all turf and planting areas for a period of two weeks minimum prior to commencing removal. Contractor shall clear site of all dead vegetation and living weeds by hand or mechanical means. All removed vegetation shall be properly disposed of off site.

PLANT MATERIAL INSPECTION

All plant materials, including plants previously approved at the nursery, shall be inspected by the City Engineer/BCA Inspector prior to planting. The Contractor shall be responsible for the condition of all plants, planted or otherwise, until final acceptance by the City and termination of maintenance period. Contractor shall be obligated to honor all requirements of warranty as indicated herein. Contractor shall perform planting with materials and equipment according to procedures favorable to the optimum growth of the plant. Do not plant during windy conditions. Except as noted for specimen planting, do not start planting operations until the completion of weed suppression and completion and acceptance of the irrigation system

Plant pits for all 1 gallon, 5 gallon, 15 gallon, and all boxed size trees, shall be twice the width and equal to the depth of the container rootball. Note that this requirement differs from the SSPWC (308-4.5).

PLANT PROTECTION AND STORAGE

Keep all plant materials delivered to the job site in a healthy condition for planting. Do not allow plants to dry out or suffer physical damage from other construction activities.

PLANTING LAYOUT

Plant locations indicated on the Contract Drawings are approximate. Contractor shall make a detailed layout of plants, etc., in the planting areas and obtain approval of the City Engineer/BCA Inspector prior to actual planting operations. Plants may be re-spotted prior to planting as directed by the City Engineer/BCA Inspector without additional compensation to the Contractor.

Locate the first row of plants in areas designated for on center spacing at one-half the designated spacing from the edge of the area. Do not stretch the maximum specified spacing for each species shown on the plans.

PLANTING BACKFILL MIX

Unless specified otherwise or required by an agricultural suitability and fertility analysis, container plants shall be backfilled with thoroughly amended site soil per the following specification.

Unless otherwise specified, the backfill mix for all plants shall be 100% amended site soil.

Each plant pit shall also receive Gro-Power 7 gram 12-8-8 planting tablets as shown in the relevant planting details, and as follows:

- 1 gallon - 2 tablets
- 5 gallon - 5 tablets
- 15 gallon - 10 tablets
- 24" box - 15 tablets
- Specimen trees: 5 tablets per half inch of caliper at base, not less than 15.

Space tablets evenly around the perimeter of the rootball, approximately 3 inches below finish surface. After shrub or tree has been planted, water by hand to hydrate soil. **Unless otherwise specified, planting tablets shall not be used with California native species.**

PLANTING

Make planting holes approximately square with vertical sides no greater than the depth of the plant container (or such depth as needed so that the root crown has the correct relationship to adjacent finished grade per the planting details) and approximately twice the width of the plant container or rootball and larger if necessary to permit handling and planting without injury to the root system. Install root barriers if/where indicated on the Contract Drawings in accordance with the details and/or the manufacturer's recommendations. Lightly scarify native soil at the bottom of planting holes. DO NOT PLANT IN DRY SOIL.

Specimen Planting: When in close proximity to irrigation lines, plants in boxes (24 inches or larger) may be planted before installation of lateral irrigation lines. Re-route irrigation lines in conflict with specimen plant locations to clear the rootball.

Do not plant plants with a broken or cracked rootball. Such plants shall be considered defective and rejected.

Open and remove plant containers in such a manner that the plant roots are not injured.

After "water settling" the bottom half of the planting hole, set the plant approximately in the center of the planting hole and adjust the root crown to the correct relationship to finish grade per the planting details. After the plant has been placed, additional backfill shall be added to the hole to cover approximately one-half the height of the rootball. At this stage, water shall be added to the top of the partly filled hole to thoroughly saturate the rootball and adjacent soil. The remainder of the hole shall be backfilled and watering repeated.

Prune or remove any broken or damaged minor limbs. Any major damage to plant material shall be brought to the attention of the City Engineer/BCA Inspector.

Immediately after planting, form a circular watering basin slightly larger than the planting hole: 6 inches high for trees and 3 inches high for shrubs. The bottom the basin shall be at the level of the surrounding finish grade.

Restore the area around the plants and watering basins to designated finish grade and dispose of excess soil.

After planting, plants shall be plumb, with the root crown at the correct relationship to finish grade per the planting details. All plants which settle more than 1 inch shall be raised by the Contractor to the correct level, as shown in the planting details, at no additional cost to the City.

Remove all watering basins around trees planted in lawn areas at the end of the maintenance period. All trees planted in lawn areas shall have a 36 inch diameter unplanted area around each tree.

SOD LAWN

Sod shall be laid on a grade which has been amended and finish graded in accordance with the topsoil preparation and finish lawn grading specifications of the Landscape Construction Notes. The sod strips shall be laid tight against the adjacent strip with landscape ends forming a running bond pattern. After laying the sod, roll with a minimum 300 lb. water ballast roller and irrigate.

The sod shall be as specified on planting plan, or approved equal.

MULCHING

All planting areas except lawn shall receive a minimum two (3) inch deep layer of Top Dressing Mulch per the Planting Details and the Landscape Construction Notes Materials list. Mulch shall be spread evenly throughout planting beds and tree watering basins. Do not bury plant crowns.

PLANT ESTABLISHMENT PERIOD

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 and approved by the City Engineer. The beginning of the plant establishment period shall be determined by an on site review by the City Engineer. The Contractor 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.

The Contractor shall be responsible for maintenance within the area of work **throughout the period of construction and the plant establishment period.** Broken or vandalized trees, shrubs, or tree stakes shall be repaired/replaced to a condition as initially installed within seven (7) days of damage. The maintenance shall include continuous operations of picking up trash and emptying trash cans daily, 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, plant replacement (irrespective of cause), or any other operations necessary to assure normal plant growth and the collection and removal of all trash daily. The Contractor shall maintain the area of work at maximum seven (7) day intervals and perform any needed mowing of existing lawns within the area of work when the grass reaches a three (3) inch height maximum. Five weeks after lawn seeding the Contractor shall apply a slow release 38-0-0 granular fertilizer at a rate of 15 pounds per 1000 sq. ft. to all lawn areas. The fertilizer shall be applied in the presence of the City Engineer/BCA Inspector.

All lawns shall be of the grass seed or sod specified and shall be free from all broad leaf weeds. The lawn shall not be allowed to grow higher than three (3) inches and shall be mowed to a one and one half (1-1/2) inch height. The lawn shall be mowed at least twice during the plant establishment period. All lawn areas shall have 95 percent coverage with bare areas not exceeding three square inches at the end of the plant establishment period. Trees and shrubs shall be healthy and vigorous at the completion of the plant establishment period.

Any malfunctions of, or damage to, the irrigation system caused by the Contractor in the prosecution of his work shall be repaired within 24 hours.

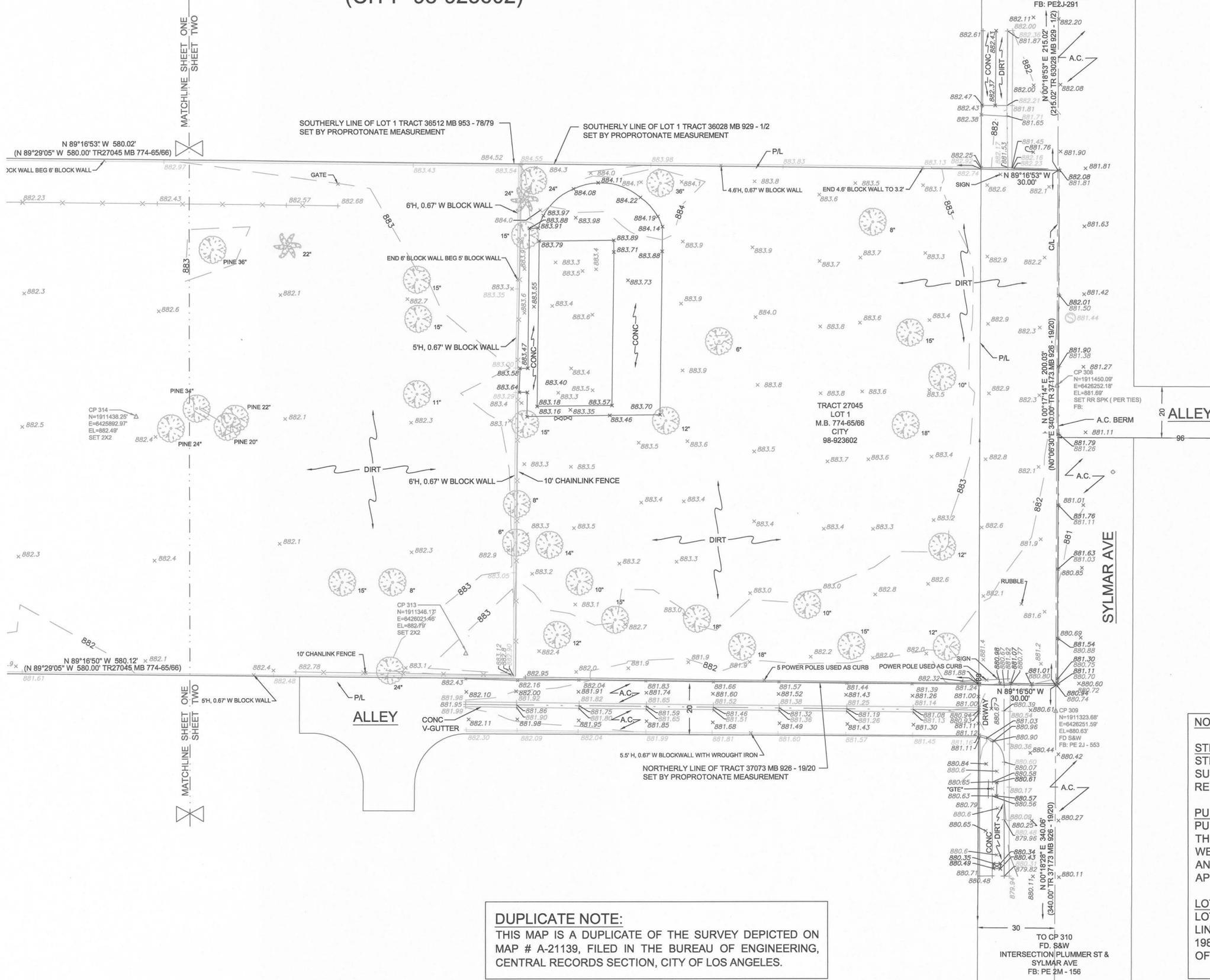
The designated plant establishment period is part of the total contract time. The plant establishment period will be extended at fourteen (14) day intervals if, at the end of the plant establishment period, the planting, irrigation and other improvements do not reflect the intent of the plans and Landscape Construction Notes. All extensions of the plant establishment period shall be subject to the assessment of liquidated damages, (308-6).

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 Contractor shall immediately replace any and all plant materials and/or grass which, for any reason dies or is damaged while under the guaranteed period to a condition as initially installed within seven (7) days of being notified. Replacement shall be made with seed and/or plants as indicated or specified for the original planting.

ENGINEERING
CITY OF LOS ANGELES
BUREAU OF ENGINEERING
DATE: BY:
NO. REVISIONS:
BUILDING NO. XX/XX
INDEX NO.
LANDSCAPE ARCHITECT
No. 3940
LISCENSED
JULY 15, 1988
GARY LEE MOORE, PE, ENV SP, CITY ENGINEER
ARCHITECTURAL DIVISION
LANDSCAPE ARCHITECT: JANE ADRIAN LIC. NO. 3940
DESIGNED BY: LORENA MATOS, P.E. | ASLA | ENV SP | COM | LEED AP
DRAWN BY: LORENA MATOS, P.E. | ASLA | ENV SP | COM | LEED AP
CHECKED BY: JANE ADRIAN
APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER
SHEET TITLE: LANDSCAPE CONSTRUCTION NOTES, SHEET 4
PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402
WORK ORDER NO. E170420D
PLAN FILE NO. 622
DRAWING NO. L004
SHEET 19 OF SHEETS 43
PLOTTED: 8/12/2019 2:19 PM

MID VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER

LIMITS OF SURVEY:
 LOT 1 TRACT 27045 M.B. 774 PGS 65 - 66
 (CITY 98-923602)



W.O. E170239A SURVEY NO. 29666
 SURVEYED BY: PENADO/TOSTO
 DATE: 7/28/11
 SCALE IN FEET
 SCALE: 1"=20'
 CONTOUR INTERVAL=
 FIELD BOOK TITLE PAGE: 40202-646

LEGEND

○ POST	○ SEWER CLEAN OUT
⊕ MANHOLE	○ LIGHT STANDARD
⊕ SEWER MAINHOLE	⊕ TRAFFIC STANDARD
⊕ STORM DRAIN MH	⊕ LIGHT & TRAFFIC STANDARD
⊕ POWER MH	⊕ PARKING METER
⊕ TELEPHONE MH	⊕ ELEC. VENT
⊕ SEWER CLEAN-OUT	⊕ SIGN
⊕ CURB DRAIN	⊕ FIRE HYDRANT
⊕ TRAFFIC SIGNAL PULLBOX	⊕ GUARD POST
⊕ IRRIGATION PULLBOX	⊕ POWER POLE
⊕ ELECTRIC PULLBOX	⊕ GUY WIRE
⊕ PULLBOX	⊕ TREE - SIZE IN INCHES
⊕ WATER METER	⊕ PALM TREE - SIZE IN INCHES
⊕ GAS VALVE	
⊕ WATER VALVE	

NOTES:

STREET RIGHT OF WAY
 STREET RIGHT OF WAYS ON THIS MAP WERE LOCATED BY FIELD SURVEY BY RETRACEMENT OF CITY ENGINEER FIELD BOOKS AS REFERENCED HEREON.

PUBLIC EASEMENTS:
 PUBLIC EASEMENTS AS SHOWN ON CITY CADASTRAL MAPS ARE THE ONLY EASEMENTS SHOWN ON THIS MAP; SAID EASEMENTS WERE IMPORTED FROM ELECTRONIC CADASTRAL MAP 198B149 AND 201B149 AND ARE A GRAPHIC REPRESENTATION OF THE APPROXIMATE LOCATION OF SAID LINES

LOT LINES:
 LOT LINES WERE NOT ESTABLISHED BY THIS SURVEY; SUCH LINES WERE IMPORTED FROM ELECTRONIC CADASTRAL MAP 198B149 AND 201B149 AND ARE A GRAPHIC REPRESENTATION OF THE APPROXIMATE LOCATION OF SAID LINES

DUPLICATE NOTE:
 THIS MAP IS A DUPLICATE OF THE SURVEY DEPICTED ON MAP # A-21139, FILED IN THE BUREAU OF ENGINEERING, CENTRAL RECORDS SECTION, CITY OF LOS ANGELES.

CITY OF LOS ANGELES
 DEPARTMENT OF PUBLIC WORKS
 GARY LEE MOORE, P.E., CITY ENGINEER
 SURVEY DIVISION

BUREAU OF ENGINEERING
 ENGINEERING
 CITY OF LOS ANGELES

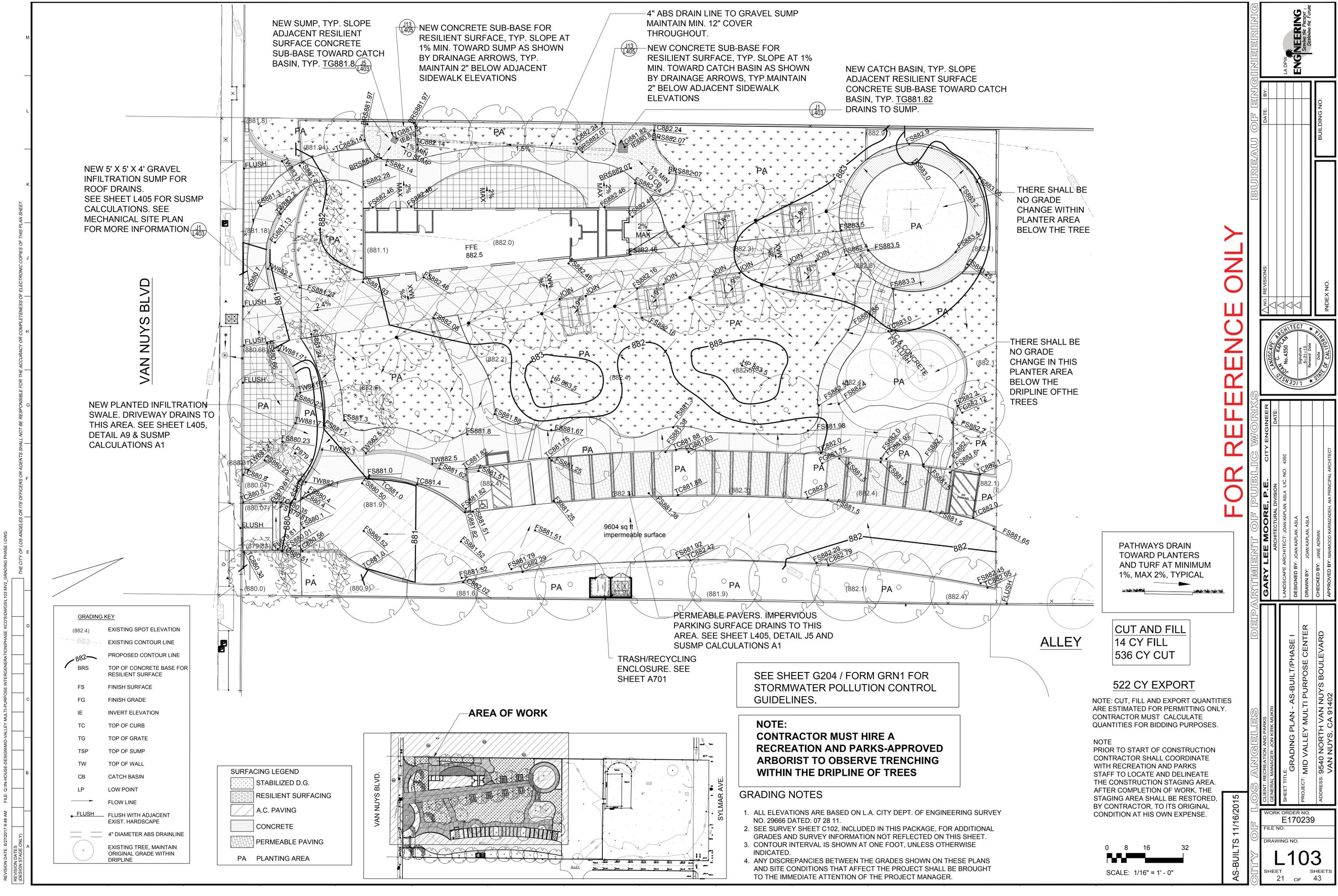
NO. REVISIONS: _____
 DATE: _____
 SURVEY NO. 29666
 INDEX NO. _____

DATE: 01/12/2017
 P.L.S.: 7806
 SURVEYOR: MARK KINDIG
 FIELD SURVEYOR: SCAR PENADO & JOHN TOSTO
 DRAWN BY: FRANK GARCIA
 CHECKED BY: SCAR PENADO & JOHN TOSTO
 APPROVED BY: _____

SITE SURVEY
 PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER
 ADDRESS: 9540 VAN NUYS BLVD., VAN NUYS, CA 91402

WORK ORDER NO. E170420D
 DRAWING NO. L102
 SHEET 20 OF 43 SHEETS

REVISION DATES (DESIGN STAGE ONLY)
 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.



NEW 5' X 5' X 4' GRAVEL INFILTRATION SUMP FOR ROOF DRAINS. SEE SHEET L405 FOR SUSMP CALCULATIONS. SEE MECHANICAL SITE PLAN FOR MORE INFORMATION.

VAN NUYS BLVD

NEW PLANTED INFILTRATION SWALE. DRIVEWAY DRAINS TO THIS AREA. SEE SHEET L405, DETAIL A9 & SUSMP CALCULATIONS A1

NEW SUMP, TYP. SLOPE ADJACENT RESILIENT SURFACE CONCRETE SUB-BASE TOWARD CATCH BASIN, TYP. TG881.8

NEW CONCRETE SUB-BASE FOR RESILIENT SURFACE, TYP. SLOPE AT 1% MIN. TOWARD SUMP AS SHOWN BY DRAINAGE ARROWS, TYP. MAINTAIN 2" BELOW ADJACENT SIDEWALK ELEVATIONS

4" ABS DRAIN LINE TO GRAVEL SUMP MAINTAIN MIN. 12" COVER THROUGHOUT.

NEW CONCRETE SUB-BASE FOR RESILIENT SURFACE, TYP. SLOPE AT 1% MIN. TOWARD CATCH BASIN AS SHOWN BY DRAINAGE ARROWS, TYP. MAINTAIN 2" BELOW ADJACENT SIDEWALK ELEVATIONS

NEW CATCH BASIN, TYP. SLOPE ADJACENT RESILIENT SURFACE CONCRETE SUB-BASE TOWARD CATCH BASIN, TYP. TG881.82 DRAINS TO SUMP.

THERE SHALL BE NO GRADE CHANGE WITHIN PLANTER AREA BELOW THE TREE

THERE SHALL BE NO GRADE CHANGE IN THIS PLANTER AREA BELOW THE DRIPLINE OF THE TREES

PATHWAYS DRAIN TOWARD PLANTERS AND TURF AT MINIMUM 1%, MAX 2%, TYPICAL

CUT AND FILL
14 CY FILL
536 CY CUT

522 CY EXPORT

NOTE: CUT, FILL AND EXPORT QUANTITIES ARE ESTIMATED FOR PERMITTING ONLY. CONTRACTOR MUST CALCULATE QUANTITIES FOR BIDDING PURPOSES.

NOTE: PRIOR TO START OF CONSTRUCTION CONTRACTOR SHALL COORDINATE WITH RECREATION AND PARKS STAFF TO LOCATE AND DELINEATE THE CONSTRUCTION STAGING AREA. AFTER COMPLETION OF WORK, THE STAGING AREA SHALL BE RESTORED, BY CONTRACTOR, TO ITS ORIGINAL CONDITION AT HIS OWN EXPENSE.

PERMEABLE PAVERS. IMPERVIOUS PARKING SURFACE DRAINS TO THIS AREA. SEE SHEET L405, DETAIL J5 AND SUSMP CALCULATIONS A1

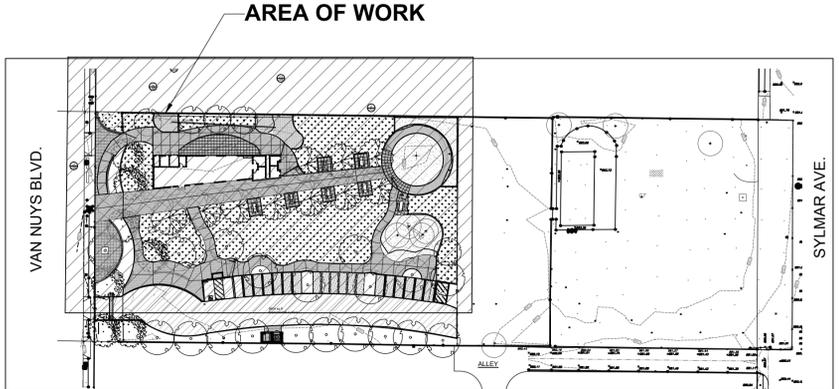
TRASH/RECYCLING ENCLOSURE. SEE SHEET A701

SEE SHEET G204 / FORM GRN1 FOR STORMWATER POLLUTION CONTROL GUIDELINES.

NOTE: CONTRACTOR MUST HIRE A RECREATION AND PARKS-APPROVED ARBORIST TO OBSERVE TRENCHING WITHIN THE DRIPLINE OF TREES

GRADING NOTES

- ALL ELEVATIONS ARE BASED ON L.A. CITY DEPT. OF ENGINEERING SURVEY NO. 29668 DATED: 07 28 11.
- SEE SURVEY SHEET C102, INCLUDED IN THIS PACKAGE, FOR ADDITIONAL GRADES AND SURVEY INFORMATION NOT REFLECTED ON THIS SHEET.
- CONTOUR INTERVAL IS SHOWN AT ONE FOOT, UNLESS OTHERWISE INDICATED.
- ANY DISCREPANCIES BETWEEN THE GRADES SHOWN ON THESE PLANS AND SITE CONDITIONS THAT AFFECT THE PROJECT SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE PROJECT MANAGER.



GRADING KEY

(882.4)	EXISTING SPOT ELEVATION
882	EXISTING CONTOUR LINE
882	PROPOSED CONTOUR LINE
BRS	TOP OF CONCRETE BASE FOR RESILIENT SURFACE
FS	FINISH SURFACE
FG	FINISH GRADE
IE	INVERT ELEVATION
TC	TOP OF CURB
TG	TOP OF GRATE
TSP	TOP OF SUMP
TW	TOP OF WALL
CB	CATCH BASIN
LP	LOW POINT
→	FLOW LINE
FLUSH	FLUSH WITH ADJACENT EXIST. HARDSCAPE
—	4" DIAMETER ABS DRAINLINE
+	EXISTING TREE, MAINTAIN ORIGINAL GRADE WITHIN DRIPLINE

SURFACING LEGEND

[Pattern]	STABILIZED D.G.
[Pattern]	RESILIENT SURFACING
[Pattern]	A.C. PAVING
[Pattern]	CONCRETE
[Pattern]	PERMEABLE PAVING
PA	PLANTING AREA

FOR REFERENCE ONLY

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS

CITY OF LOS ANGELES

AS-BUILTS 11/16/2015

GARY LEE MOORE, P.E. CITY ENGINEER

ARCHITECTURAL DIVISION

LANDSCAPE ARCHITECT: JOAN KARLAN, ASLA LIC. NO. 4980

DESIGNED BY: JOAN KARLAN, ASLA

DRAWN BY: JOAN KARLAN, ASLA

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, AIA PRINCIPAL ARCHITECT

PROJECT: MID VALLEY MULTI PURPOSE CENTER

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170239

FILE NO.

DRAWING NO. L103

SHEET 21 OF 43

INDEX NO.

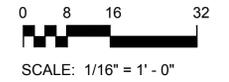
BUILDING NO.

DATE:

NO. REVISIONS

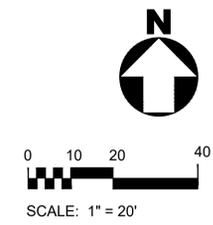
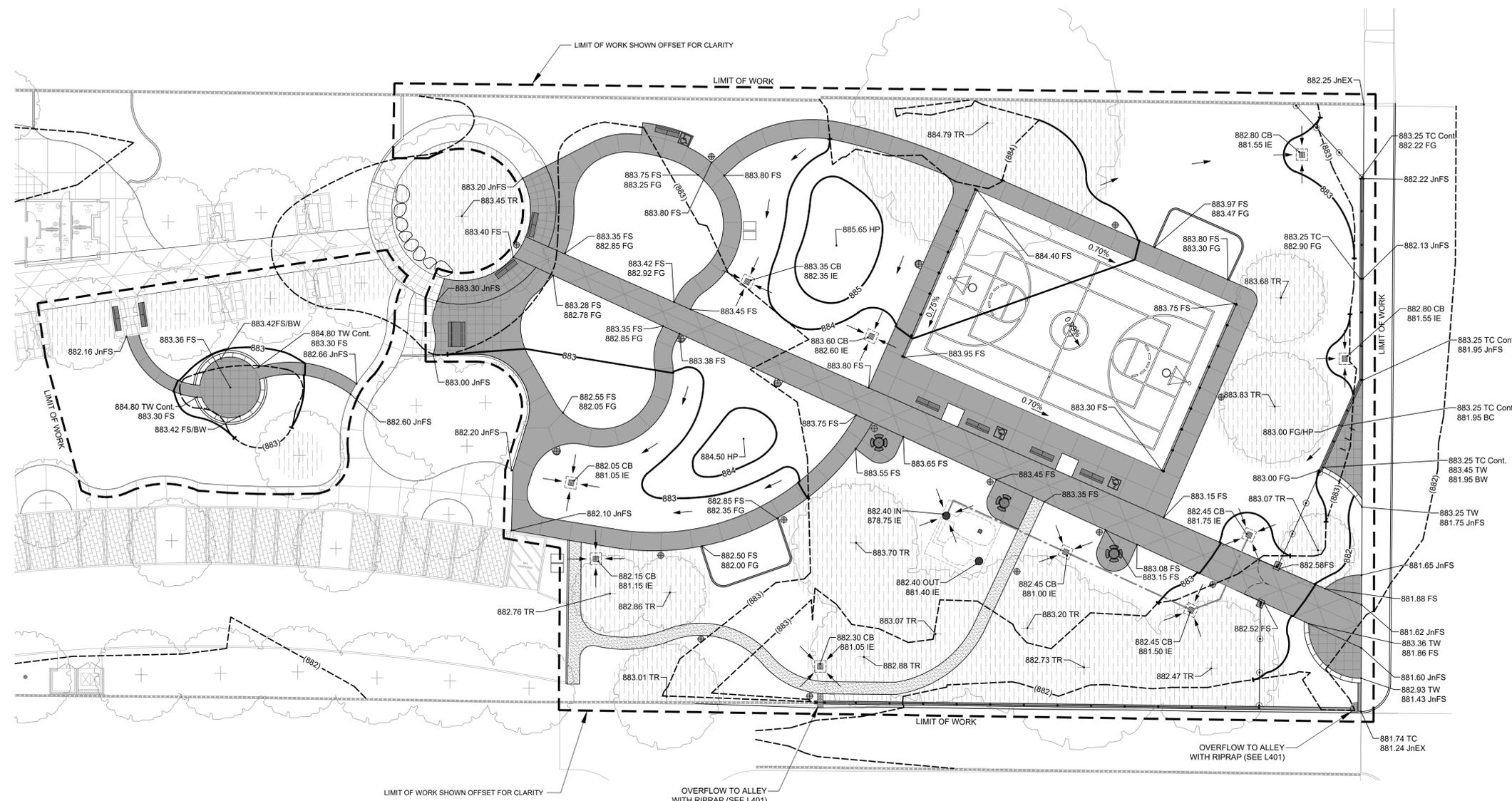
LA DPW ENGINEERING

Serving the People of Los Angeles



TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 06/2019 10:01 AM
 FILE: Q-IN-HOUSE-DESIGN\MID-VALLEY\MULTIPURPOSE INTERGENERATION\PHASE II\CONSTRUCTION DOCUMENTS\DWG\L301_GRADING_PLAN.DWG

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.



DIGALERT

Call Toll Free
 1-800-227-2600

**TWO
 WORKING DAYS
 BEFORE YOU
 DIG**

Underground Service Alert
 of Southern California

GRADING LEGEND

BC	BOTTOM OF CURB	-- (882) --	EXISTING CONTOUR LINE
BW	BOTTOM OF WALL	— 882 —	PROPOSED CONTOUR LINE
CB	CATCH BASIN (TOP OF DRAIN)	883.80 FS	PROPOSED SPOT ELEVATION
Cont.	CONTINUOUS ELEVATION	→	DIRECTION OF FLOW
FG	FINISH GRADE	— — — — —	4" DIAMETER ABS DRAINLINE TO LID SYSTEM
FS	FINISH SURFACE	(Tree symbol)	EXISTING TREE, ANY WORK WITHIN DRIPLINE SHALL BE PERFORMED UNDER THE SUPERVISION OF R.A.P. APPROVED ARBORIST PROVIDED AND PAID BY THE CONTRACTOR
HP	HIGH POINT	(Catch basin symbol)	CATCH BASIN WITH SUMP
IE	INVERT ELEVATION	(Hatched area symbol)	TREE PROTECTION ZONE SEE SHEET L702
IN	L.I.D. SYSTEM INLET STRUCTURE		
JnEX	JOIN EXISTING GRADE		
JnFS	JOIN FINISHED SURFACE		
OUT	L.I.D. SYSTEM OUTLET STRUCTURE		
TR	EXISTING TREE		
TC	TOP OF CURB		
TW	TOP OF WALL		

GRADING AND DRAINAGE NOTES

- 1) ALL GRADING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE BCA INSPECTOR. THE CONTRACTOR MUST NOTIFY THE BCA INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY GRADING/CONSTRUCTION OPERATIONS
- 2) SURVEYING REQUIRED FOR VERTICAL AND HORIZONTAL ALIGNMENT MUST BE PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE AND PERFORMED PER THE GENERAL REQUIREMENTS.
- 3) A COPY OF THE MOST RECENT VERSION OF THE APPROVED GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE JOB SITE AT ALL TIMES.
- 4) GEOTECHNICAL REPORT DATED NOVEMBER 2ND, 2011 FILE # 10-076 PREPARED BY THE GEOTECHNICAL ENGINEERING REPORT SHALL BE MADE AS PART OF THIS PLAN. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND CONSTRUCTION SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER OF RECORD OR HIS DESIGNEE.
- 5) WHEN REQUIRED BY CODE, SHORING FOR TRENCH EXCAVATIONS SHALL BE PROVIDED TO SATISFY STATE OF CALIFORNIA SAFETY REQUIREMENTS AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AND OBTAINING ALL REQUIRED SHORING PERMITS.
- 6) THE CONTRACTOR SHALL NOT BEGIN ANY CONSTRUCTION OPERATION UNTIL THE SUBGRADE HAS BEEN APPROVED BY THE GRADING INSPECTOR AND GEOTECHNICAL ENGINEER WHERE REQUIRED.
- 7) CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE ON SURFACE FLOW AREAS AT .5% (MIN.) ON HARDSCAPE AND 2% (MIN.) ON SOIL GRADE UNLESS OTHERWISE INDICATED.
- 8) CONTRACTOR SHALL ASSUME STRAIGHT GRADE BETWEEN ELEVATION POINTS LISTED FOR FINISH GRADE OF NEW CONSTRUCTION UNLESS INSTRUCTED OTHERWISE.
- 9) FINISH GRADE OF PLANTING AREAS SHALL BE WITHIN A TOLERANCE OF .04 FEET (1/2") OF GRADING PLAN AS SHOWN. FINISH GRADE IN MULCHED PLANTING AREAS SHALL BE 1" BELOW TOP OF ADJACENT PAVING. ALL SOIL SURFACES SHALL BE BROUGHT TO A CONSISTENT GRADE, HAVING NO IRREGULARITIES, DEPRESSIONS, OR RIDGES TO THE SATISFACTION OF THE CITY ENGINEER. FINE GRADE ALL AREAS TO PROVIDE POSITIVE DRAINAGE AND SMOOTH, CONSISTENT GRADE TRANSITIONS.
- 10) CONTRACTOR SHALL REMOVE FROM THE SITE AND LEGALLY DISPOSE OF ALL DEBRIS AND EXCAVATED MATERIAL NOT REQUIRED FOR FILL. NO RUBBISH OR DEBRIS SHALL BE BURIED ON THE SITE.

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY: _____

NO. REVISIONS: _____

INDEX NO. XXXXX

BUILDING NO. XXXXX

LANDSCAPE ARCHITECT

JAMES KIMMEL ARCHITECT

No. 3940

Professional Seal

DATE: 6-04-18

ARCHITECTURAL DIVISION

GARY LEE MOORE, PE, ENV SP, CITY ENGINEER

LIC. NO. 3940

LANDSCAPE ARCHITECT: JANE ADRIAN

DESIGNED BY: LORENA MATOS, P.L.A. / A.S.A. / ENV SP / COM / LEED AP

DRAWN BY: LORENA MATOS, P.L.A. / A.S.A. / ENV SP / COM / LEED AP

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

CLIENT: DEPARTMENT OF RECREATION & PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: GRADING PLAN

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

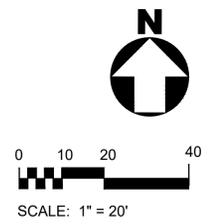
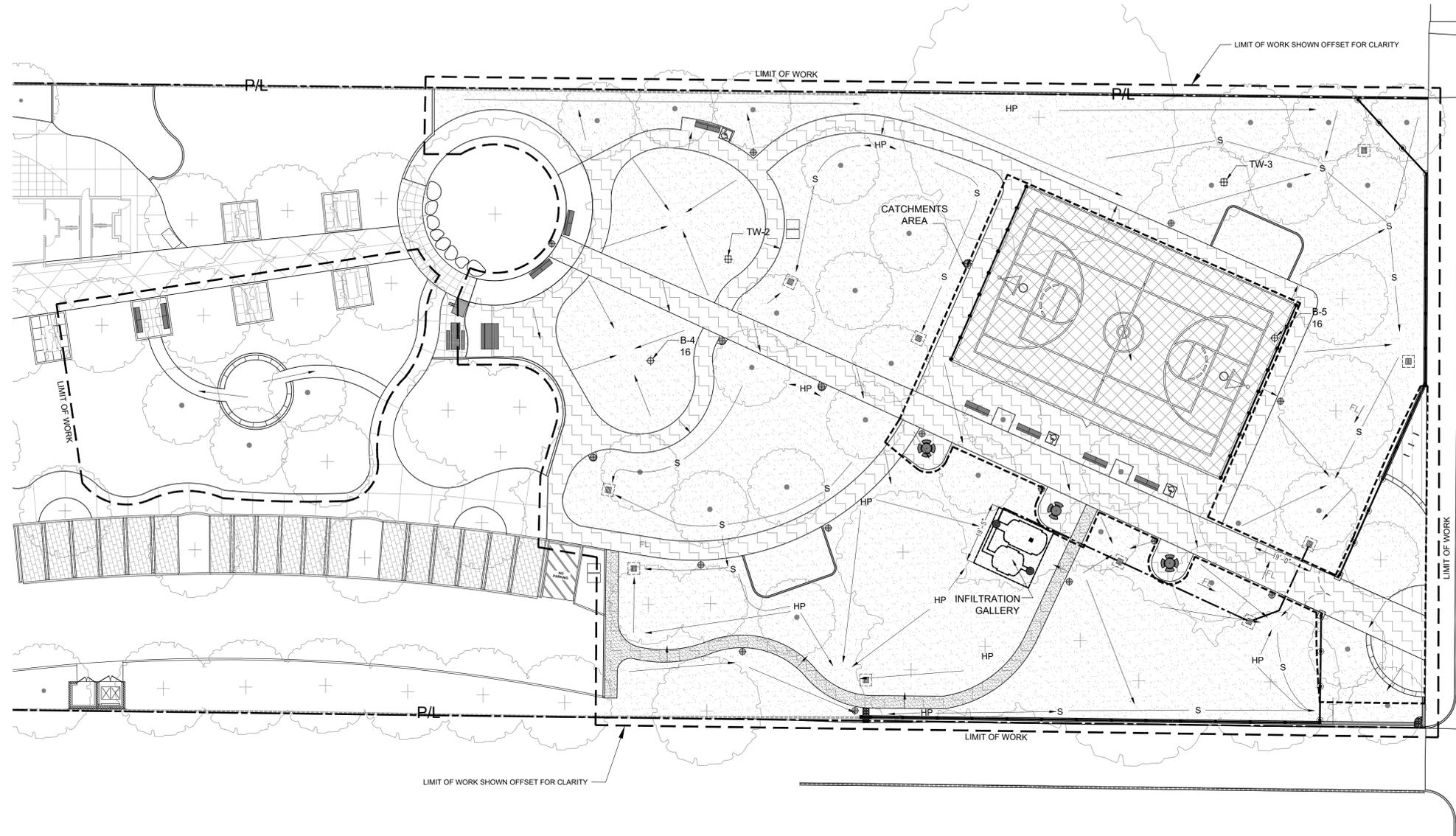
WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. L301

SHEET 23 OF SHEETS 43

PLOTTED: 06/2019 10:01 AM



SITE INFORMATION:

- TRACT NUMBER: 27045
- LIQUEFACTION AREA: NO
- BORING NUMBER, APPROXIMATE LOCATION AND TOTAL DEPTH IN FEET
- TEST WELL NUMBER, APPROXIMATE LOCATION
- FLOOD ZONE: NO
- 24hr RAINFALL: 1.1"



SITE

DRAINAGE AREAS:

	AREA A: BASKETBALL	5,575 SQ FT
	AREA B: ENTRY	593 SQ FT
	AREA D: PATH	10,861 SQ FT
TOTAL PROJECT IMPERVIOUS AREA:		17,029 SQ FT / 0.391 ACRES
	PERVIOUS AREA	37,710 SQ FT
TOTAL PROJECT PERVIOUS AREA:		37,710 SQ FT / 0.866 ACRES

KEY:

- 4" DIAMETER ABS DRAINLINE
- CATCH BASIN WITH SUMP
- PIPE FLOW LINE
- SURFACE FLOW
- CATCH BASIN
- SWALE

LID NOTES:

- CONTRACTOR SHALL SCHEDULE AND NOTIFY THE CITY ENGINEER AT LEAST 48 HRS IN ADVANCE OF ANY STORMWATER CONSTRUCTION. THE CITY ENGINEER MUST BE PRESENT AT ALL STORMWATER CONSTRUCTION FOR OBSERVATION. AS PER LASANITATIONS FORMS, STORMWATER BMP VERIFICATION AND STORMWATER OBSERVATION REPORT SHOWN ON SHEET L303. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING PHOTOS OF BMP'S TAKEN DURING ALL STORMWATER CONSTRUCTION PHASES AND FILLING UP FORMS.
- CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY STORMWATER INSPECTION VERIFICATION BY THE CITY ENGINEER AND/OR LASANITATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FILLING OUT AND FILING ANY FORMS RELATED TO STORMWATER BMP VERIFICATION AND STORMWATER OBSERVATION REPORT.
- CONTRACTOR SHALL INSPECT, PERFORM MAINTENANCE, AND COMMISSIONING OF STORM CHAMBER SYSTEM PRIOR TO ACCEPTANCE BY THE CITY ENGINEER.
- CONTRACTOR SHALL PREPARE AND PROVIDE TWO (2) COPIES OF THE CHAMBER SYSTEM MAINTENANCE MANUAL AND TWO (2) TRAINING SECTIONS TO BOE/BOS/RAP STAFF. TRAINING SECTIONS SHALL BE AT THE SITE WITH STEP BY STEP HANDS ON TRAINING AT NO EXTRA COST TO THE CITY.
- ANY CHANGES (TYPES, SIZE, LOCATION) TO APPROVED STORMWATER BEST MANAGEMENT PRACTICE(S) (BMP'S) AND CHAMBER SYSTEM, CONTRACTOR MUST OBTAIN WRITTEN APPROVAL FROM LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TWO (2) SETS OF REQUIRED MAINTENANCE TOOLS. SUCH AS BUT NOT LIMITED TO FLASH LIGHTS, STADA ROD, CAMERA, AND RECORD MAINTENANCE LOG AT NO EXTRA COST TO THE CITY.

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

CLIENT: DEPARTMENT OF RECREATION & PARKS
GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: LID PLAN
PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D
PLAN FILE NO. 622
DRAWING NO. L302
SHEET 24 OF SHEETS 43
PLOTTED: 8/6/2019 10:02 AM

ARCHITECTURAL DIVISION
LANDSCAPE ARCHITECT: JANE ADRIAN LIC. NO. 3940
DESIGNED BY: LORENA MATOS, P.L.A. / ASLA | ENV SP / COM / LEED AP
DRAWN BY: LORENA MATOS, P.L.A. / ASLA | ENV SP / COM / LEED AP
CHECKED BY: JANE ADRIAN
APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER

DATE: BY: REVISIONS:
INDEX NO. XX/XX
BUILDING NO. XX/XX

ENGINEERING CITY OF LOS ANGELES

TEMPLATE SHEET REVISION DATE: 11/2015
REVISION DATE: 01/2019 12:54 PM
FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATIONAL PHASE II\CONSTRUCTION DOCUMENTS\DWG\L302_LID_PLAN.DWG

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.

INFILTRATION GALLERY SIZING: AREA 1

1. IMPERVIOUS AREA: 12,880
 CATCHMENT AREA: (IMPERVIOUS AREA x 0.9)
 (12,880 x 0.9) = 11,592 S.F

V_m (ft3) = (0.091 ft) x 11,592 ft2
 V_m = 1054.87 ft3

2. DESIGN INFILTRATION RATE

$K_{sat, design} = K_{sat, measure} / FS = 5.2 \text{ in/hr} / 3 = 1.73 \text{ in/hr}$

$K_{sat, design} = 1.73 \text{ in/hr}$

3. MINIMUM BOTTOM INFILTRATION

$A_{min} = 1,054.87 \text{ ft}^3 \times 12 \text{ in/ft} / 1.73 \text{ in/hr} \times 48 \text{ hr}$
 $A_{min} = 12,658.44 / 83.04$
 $A_{min} = 152.43 \text{ ft}^2$

4. MINIMUM STORAGE VOLUME

$V_{storage} = V_m / \text{Void ratio} = 1,052.87 \text{ ft}^3 / 0.90$
 $V_{storage} = 1,169.85 \text{ ft}^3$

$V_{provided} = 1,288 \text{ ft}^3$

CHAMBER SYSTEM

- CHAMBERS SHALL BE STORMTECH MC-4500 OR APPROVED EQUAL.
- CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE CAPOLYMERS.
- CHAMBERS ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTOR SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LOAD-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGNER WILL BE ALLOWED. THE CHAMBER MANUFACTURE SHALL SUBMIT THE FOLLOWING TO THE SITE DESIGNER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
 - A STRUCTURAL EVALUATION SEALED BY A CALIFORNIA REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
 - A STRUCTURAL EVALUATION SEALED BY A CALIFORNIA REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
 - STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

CHAMBER MODEL	MC-4500
OUTLET CONTROL STRUCTURE	YES (OUTLET)
REQUIRED STORAGE VOLUME	1170 CUBIC FT.
STONE POROSITY	40%
STONE ABOVE CHAMBERS	12 IN.
STONE FOUNDATION DEPTH	9 IN.
AVERAGE COVER OVER CHAMBERS	24 IN.

SYSTEM VOLUME AND BED SIZE	
INSTALLED STORAGE VOLUME	1288 CUBIC FT.
STORAGE VOLUME PER CHAMBER	162.6 CUBIC FT.
STORAGE VOLUME PER END CAP	108.6 CUBIC FT.
NUMBER OF CHAMBERS REQUIRED	3 EACH
NUMBER OF END CAPS REQUIRED	4 EACH
ROWS/CHAMBERS	1 ROW(S) OF 2 CHAMBER(S)
LEFTOVER ROWS/CHAMBERS	1 ROW(S) OF 1 CHAMBER(S)
MAXIMUM LENGTH	18.77 FT.
MAXIMUM WIDTH	20.02 FT.
APPROX. BED SIZE REQUIRED	374 SQUARE FT.

SYSTEM COMPONENTS	
AMOUNT OF STONE REQUIRED	76 CUBIC YARDS
VOLUME OF EXCAVATION (NOT INCLUDING FILL)	94 CUBIC YARDS
NON-WOVEN FILTER FABRIC REQUIRED	156 SQUARE YARDS
LENGTH OF ISOLATOR ROW	13.17 FT.
WOVEN ISOLATOR ROW FABRIC	26 SQUARE YARDS

NOTES FOR BIDDING AND INSTALLATION:

- CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURE'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "PRODUCT CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFIELD WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
 RECOMMENDED BACKFILL METHODS:
 STONESHOOTER LOCATED OFF THE CHAMBER BED.
 BACKFILL AS ROW ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVERED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY COMPACTED PRIOR TO PLACING CHAMBERS.
- MAINTAIN MINIMUM 9" (230 MM) SPACING BETWEEN THE CHAMBERS ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300MM) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4" - 2" (20-50)MM MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- ITS RECOMMENDED THE USE OF "FLEXSTORM CATCH IT" INSERTD=S DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT:

- CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "PRODUCT CONSTRUCTION GUIDE"
- THE USE OF EQUIPMENT OVER CHAMBER IS LIMITED:
- FULL 36" (900MM) OF STABILIZED COVER MATERIALS OVER THE CHAMBER IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- ANY CHAMBERS DAMAGED BY DURING CONSTRUCTION ARE NOT COVERED UNDER THE STANDARD WARRANTY.

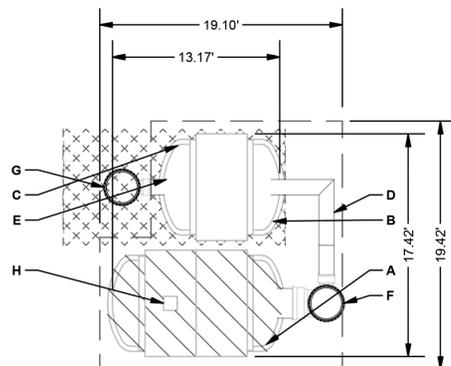
CONTRACTOR SHALL SUBMIT MANUFACTURE'S SHOP DRAWINGS FOR APPROVAL

PROPOSED LAYOUT

3	STORMTECH MC-4500 CHAMBERS	887.40
4	STORMTECH MC-4500 END CAPS	882.90
12	STONE ABOVE (in)	882.40
9	STONE BELOW (in)	882.40
40	% STONE VOID	882.40
1180	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)	881.40
	(COVER STONE INCLUDED)	880.40
	(BASE STONE INCLUDED)	878.37
334	SYSTEM AREA (SF)	875.59
77.03	SYSTEM PERIMETER (ft)	875.53
		875.40
		874.65

PROPOSED ELEVATIONS

MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	887.40
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	882.90
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	882.40
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	882.40
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	882.40
TOP OF STONE:	881.40
TOP OF MC-4500 CHAMBER:	880.40
12" x 12" TOP MANIFOLD INVERT:	878.37
24" ISOLATOR ROW INVERT:	875.59
12" BOTTOM CONNECTION INVERT:	875.53
BOTTOM OF MC-4500 CHAMBER:	875.40
BOTTOM OF STONE:	874.65



- ISOLATOR ROW (SEE DETAIL)
- PLACE MINIMUM 17.50' OF ADS GEOSYNTHETICS 315WTM WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
- BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH SHEET #7 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

		*INVERT ABOVE BASE OF CHAMBER		
PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM CORED END CAP/TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR ROWS	2.26'	
PREFABRICATED END CAP	B	12" TOP CORED END CAP/TYP OF ALL 12" TOP CONNECTIONS	47.84"	
PREFABRICATED END CAP	C	12" BOTTOM CORED END CAP/TYP OF ALL 12" BOTTOM CONNECTIONS	1.55'	
MANIFOLD	D	12" X 12" TOP, ADS N-12	35.69"	
PIPE CONNECTION	E	12" BOTTOM CONNECTION	1.55'	
NYLOPLAST (INLET W/ ISO ROW)	F	30" DIAMETER (24" SUMP MIN)		2.5 CFS IN
NYLOPLAST (OUTLET)	G	30" DIAMETER (DESIGN BY ENGINEER)		2.0 CFS OUT
INSPECTION PORT	H	4" SEE DETAIL		

NOTE:
 CONTRACTOR SHALL PROVIDE ALL REQUIRED CALCULATIONS/DESIGN BY A CALIFORNIA REGISTERED ENGINEER AS PART OF THE SCOPE OF WORK.

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.

REVISION DATES (DESIGN STAGE ONLY)

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY:

BUILDING NO. XX/XX

NO. REVISIONS:

INDEX NO.

ARCHITECTURAL DIVISION

DATE: 6-04-18

LANDSCAPE ARCHITECT: JANE ADRIAN

LIC. NO. 3940

DESIGNED BY: LORENA MATOS, P.A. | A.S.A. | ENV. SP. / COM / LEED AP

6-04-18

DRAWN BY: LORENA MATOS, P.A. | A.S.A. | ENV. SP. / COM / LEED AP

6-04-18

CHECKED BY: JANE ADRIAN

6-04-18

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

6-04-18

CLIENT: DEPARTMENT OF RECREATION & PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: LID GALLERY SIZING & CHAMBER SYSTEM

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD

VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. L303

SHEETS 43

SHEET 25

OF

March 1, 2018
 Lorena Matos
 City of Los Angeles, Department of Public Works,
 Bureau of Engineering - Architectural Division
 (Sent via email: lorena.matos@cityofla.org)

Job No. 500-LAS04
 Re: Updated Potential Stormwater Infiltration Project
 Proposed Public Property Development
 9540 North Van Nuys Boulevard
 Van Nuys, California 91402
 Ref: Potential Stormwater Infiltration Project
 Proposed New Development
 9540 Van Nuys Boulevard
 Van Nuys, CA 91402
 Prepared by the ULARA Watermaster, dated May 15, 2012 (Attached)

Dear Ms. Matos:
 Provided herein is an updated discussion of the information and reports that you have recently provided our office regarding your plans for the possible infiltration of stormwater that is to be collected and incorporated into the Low Impact Development (LID) improvements for the proposed public property development at 9540 North Van Nuys Boulevard, in the Van Nuys area of the City of Los Angeles (City). An initial LID Stormwater Infiltration project was originally submitted to our office for this site on April 30, 2012, and an approval letter response from our office, as referenced above, was sent to Mr. Asatur Keymetlyan of City of Los Angeles, Department of Public Works, Bureau of Engineering - Architectural Division (LADPW) for that address on May 15, 2012. A copy of that letter is attached hereto. Site specific details of the surrounding area, and a brief summary of the nearby potentially contaminating activities (PCAs), can be found in that letter.

The initially proposed development described above has been updated by the project engineer from the initial LID project to include an additional infiltration system for the proposed development of an outdoor recreational area at the subject property. We understand the updated development project will be developed in the eastern portion of the subject property.

UPPER LOS ANGELES RIVER AREA WATERMASTER
 RICHARD C. SLADE - WATERMASTER
 Re: City of Los Angeles vs. City of San Fernando, et al.
 Case No. 65079 - County of Los Angeles

May 15, 2012
 Mr. Asatur Keymetlyan
 City of Los Angeles, Department of Public Works (LADPW)
 Bureau of Engineering - Architectural Division
 (Sent via email: asatur.keymetlyan@cityofla.org)

Job No. 500-LAS04
 Re: Potential Stormwater Infiltration Project
 Proposed New Development
 9540 Van Nuys Blvd
 Panorama City, CA 91402

Dear Mr. Keymetlyan:
 Provided herein is my review of the information and reports that you sent me regarding the proposed construction of a new community building and a neighborhood park located at 9540 Van Nuys Blvd, in the Panorama City area of the City of Los Angeles (City). Specifically, this property, which lies in the San Fernando Valley, is located approximately 420 feet north of the intersection of Plummer St and Van Nuys Blvd. This portion of the San Fernando Valley overlies the San Fernando Groundwater Basin, the largest of the four groundwater basins in the Superior Court adjudicated Upper Los Angeles River Area (ULARA). Provided herein also is my opinion, as ULARA Watermaster, of the plan that you have recommended to improve the quality of the recharge resulting from the proposed capture and infiltration of stormwater to be collected and treated by your SUSMP for the subject property.

In regard to stormwater infiltration, the State Regional Water Quality Control Board-Los Angeles Region (RWQCB-LA) promulgated its National Pollutant Discharge Elimination System (NPDES) permit process in 1990 to help minimize the impacts of stormwater and urban runoff on the receiving water bodies in its sphere of influence (i.e., the Los Angeles River and the Pacific Ocean). The goal of their NPDES process was to minimize the impacts on the river, and ultimately to the ocean, by reducing the amount and improving the quality of surface water runoff from storm events. Because your proposed improvement project is located in the San Fernando Valley, all local rainfall and surface water runoff from this site will drain into the Los Angeles River and eventually to the ocean.
 Several years after the implementation of the NPDES process, the City of Los Angeles, Department of Public Works, Bureau of Sanitation - Watershed Protection Division (LAWPD), promulgated a series of guidelines intended to increase onsite infiltration of stormwater at all proposed developments and re-developments throughout the City. These guidelines established the requirements and limitations for utilizing onsite stormwater infiltration and also specified an order of preference (via a set of Best Management Practices-BMPs) for providing Standard Urban Stormwater Mitigation Plan (SUSMP) improvements at each development and/or re-development site in the City.
 The specific order of the BMP preference list was established by the LAWPD to collect and provide basic "treatment" of onsite stormwater runoff, and to help increase the amount of

For this proposed updated development, you sent the following for Watermaster review:
 a. An email, received by the Watermaster's office on February 13, 2018, in response to the Watermaster's Data Request Memorandum (a copy of that Memorandum is provided to LID applicants upon their initial visit to the LAWPD office in downtown Los Angeles). Your latest email and attachments provided responses to most of the items identified in the Watermaster's Memorandum.
 b. A set of CAD-type drawings, prepared by LADPW, which contains a grading plan, construction plans, and an LID plan. The LID plan shows the proposed locations for three stormwater infiltration galleries utilizing stormwater infiltration chambers, and several catch basins. We understand that these proposed facilities are to be components of your stormwater infiltration system.
 c. A soils report, *Geotechnical Engineering Report, Mid-Valley Multi-Purpose Center*, prepared by LADPW and dated November 2, 2011. The report described the earth materials encountered beneath the subject site in 8 soil borings drilled and sampled to maximum depths of approximately 31 feet below ground surface (bgs). It should be noted that groundwater was not encountered during drilling in any of these borings. Infiltration rates for the onsite earth materials were tested to depths of approximately 7 feet bgs in three additional borings drilled for the infiltration test.

Please note that no one from my office conducted a site visit to the subject LID property and that the information presented in this review was provided by the applicant and/or obtained from a cursory review of a few regulatory agency websites and basic sources of referenced information. Among the key items noted during our review of the available updated documents are the following:

- The subject property development is located approximately 400 feet north of the intersection of Plummer Street and Van Nuys Boulevard. A Google Earth Pro® satellite image dated October 2, 2016 shows the property was developed at that time with a single building at the western portion of the property, and undeveloped at the eastern portion of the property.
- The subject property is bordered by the following: to the north and south by multi-unit residential buildings; to the west by Van Nuys Boulevard; and to the east by Sylmar Avenue.
- A check of the online GeoTracker database maintained by the California State Water Resources Control Board (SWRCB) shows that within 1,000 feet of the subject LID project, there are: no "open" leaking underground storage tank (LUST) sites; no "open" military cleanup sites; no "open" California Department of Toxic Substances Control (DTSC) sites; or no "open" cleanup program sites.
- As shown in the CAD-type drawings provided by LADPW, stormwater will be collected from rainfall that flows as sheet flow across non-permeable paved areas and from excess rainfall that has not infiltrated into any proposed permeable areas. The collected

UPPER LOS ANGELES RIVER AREA WATERMASTER
 RICHARD C. SLADE - WATERMASTER
 Re: City of Los Angeles vs. City of San Fernando, et al.
 Case No. 65079 - County of Los Angeles

May 15, 2012
 Mr. Asatur Keymetlyan
 City of Los Angeles, Department of Public Works (LADPW)
 Bureau of Engineering - Architectural Division
 (Sent via email: asatur.keymetlyan@cityofla.org)

Job No. 500-LAS04
 Re: Potential Stormwater Infiltration Project
 Proposed New Development
 9540 Van Nuys Blvd
 Panorama City, CA 91402

Dear Mr. Keymetlyan:
 Provided herein is my review of the information and reports that you sent me regarding the proposed construction of a new community building and a neighborhood park located at 9540 Van Nuys Blvd, in the Panorama City area of the City of Los Angeles (City). Specifically, this property, which lies in the San Fernando Valley, is located approximately 420 feet north of the intersection of Plummer St and Van Nuys Blvd. This portion of the San Fernando Valley overlies the San Fernando Groundwater Basin, the largest of the four groundwater basins in the Superior Court adjudicated Upper Los Angeles River Area (ULARA). Provided herein also is my opinion, as ULARA Watermaster, of the plan that you have recommended to improve the quality of the recharge resulting from the proposed capture and infiltration of stormwater to be collected and treated by your SUSMP for the subject property.

In regard to stormwater infiltration, the State Regional Water Quality Control Board-Los Angeles Region (RWQCB-LA) promulgated its National Pollutant Discharge Elimination System (NPDES) permit process in 1990 to help minimize the impacts of stormwater and urban runoff on the receiving water bodies in its sphere of influence (i.e., the Los Angeles River and the Pacific Ocean). The goal of their NPDES process was to minimize the impacts on the river, and ultimately to the ocean, by reducing the amount and improving the quality of surface water runoff from storm events. Because your proposed improvement project is located in the San Fernando Valley, all local rainfall and surface water runoff from this site will drain into the Los Angeles River and eventually to the ocean.
 Several years after the implementation of the NPDES process, the City of Los Angeles, Department of Public Works, Bureau of Sanitation - Watershed Protection Division (LAWPD), promulgated a series of guidelines intended to increase onsite infiltration of stormwater at all proposed developments and re-developments throughout the City. These guidelines established the requirements and limitations for utilizing onsite stormwater infiltration and also specified an order of preference (via a set of Best Management Practices-BMPs) for providing Standard Urban Stormwater Mitigation Plan (SUSMP) improvements at each development and/or re-development site in the City.
 The specific order of the BMP preference list was established by the LAWPD to collect and provide basic "treatment" of onsite stormwater runoff, and to help increase the amount of

stormwater will then be directed to one of several catch basins on the proposed development. The catch basins will then direct the stormwater to stormwater infiltration chambers (i.e., the infiltration system). Stormwater directed to the infiltration chambers would reportedly be able to infiltrate into the subsurface (i.e., made available for deep percolation). The proposed infiltration system is to be constructed across the central portion of the proposed development.
 Again, it should be noted that the purpose of this LID stormwater infiltration review letter from the Watermaster's office is not in any way to evaluate and/or opine on the technical feasibility of the infiltration of stormwater at the site, but rather only to assess the concept of infiltration (and recharge) at the site strictly in regard to its potential impact on local groundwater quality. Thus, the Watermaster has no opinion regarding the potential for, or the technical feasibility of, the collected stormwater to be infiltrated into the earth materials beneath the subject property.

Further, your eventual LID permit from the LAWPD will require the property owner (and all successors) to provide for ongoing operation and maintenance in perpetuity for all of the onsite LID facilities. The Watermaster considers this issue of ongoing maintenance of your proposed LID facilities to be critical to the long-term protection of the groundwater quality in the San Fernando Basin.

Based on our review of the new documents you provided, and assuming that the updated final stormwater collection system and infiltration systems are constructed as proposed and properly maintained in the future, then the Watermaster has no objection to the infiltration component of your current (latest) LID, in relation to the local groundwater quality. If the project and/or your LID and/or your infiltration system is revised again in the future and differs from that which has been generally characterized herein, the Watermaster would then need to review those revised plans.

Respectfully submitted,

 Richard C. Slade
 ULARA Watermaster

UPPER LOS ANGELES RIVER AREA WATERMASTER
 RICHARD C. SLADE - WATERMASTER
 Re: City of Los Angeles vs. City of San Fernando, et al.
 Case No. 65079 - County of Los Angeles

May 15, 2012
 Mr. Asatur Keymetlyan
 City of Los Angeles, Department of Public Works (LADPW)
 Bureau of Engineering - Architectural Division
 (Sent via email: asatur.keymetlyan@cityofla.org)

Job No. 500-LAS04
 Re: Potential Stormwater Infiltration Project
 Proposed New Development
 9540 Van Nuys Blvd
 Panorama City, CA 91402

Dear Mr. Keymetlyan:
 Provided herein is my review of the information and reports that you sent me regarding the proposed construction of a new community building and a neighborhood park located at 9540 Van Nuys Blvd, in the Panorama City area of the City of Los Angeles (City). Specifically, this property, which lies in the San Fernando Valley, is located approximately 420 feet north of the intersection of Plummer St and Van Nuys Blvd. This portion of the San Fernando Valley overlies the San Fernando Groundwater Basin, the largest of the four groundwater basins in the Superior Court adjudicated Upper Los Angeles River Area (ULARA). Provided herein also is my opinion, as ULARA Watermaster, of the plan that you have recommended to improve the quality of the recharge resulting from the proposed capture and infiltration of stormwater to be collected and treated by your SUSMP for the subject property.

In regard to stormwater infiltration, the State Regional Water Quality Control Board-Los Angeles Region (RWQCB-LA) promulgated its National Pollutant Discharge Elimination System (NPDES) permit process in 1990 to help minimize the impacts of stormwater and urban runoff on the receiving water bodies in its sphere of influence (i.e., the Los Angeles River and the Pacific Ocean). The goal of their NPDES process was to minimize the impacts on the river, and ultimately to the ocean, by reducing the amount and improving the quality of surface water runoff from storm events. Because your proposed improvement project is located in the San Fernando Valley, all local rainfall and surface water runoff from this site will drain into the Los Angeles River and eventually to the ocean.
 Several years after the implementation of the NPDES process, the City of Los Angeles, Department of Public Works, Bureau of Sanitation - Watershed Protection Division (LAWPD), promulgated a series of guidelines intended to increase onsite infiltration of stormwater at all proposed developments and re-developments throughout the City. These guidelines established the requirements and limitations for utilizing onsite stormwater infiltration and also specified an order of preference (via a set of Best Management Practices-BMPs) for providing Standard Urban Stormwater Mitigation Plan (SUSMP) improvements at each development and/or re-development site in the City.
 The specific order of the BMP preference list was established by the LAWPD to collect and provide basic "treatment" of onsite stormwater runoff, and to help increase the amount of

stormwater will then be directed to one of several catch basins on the proposed development. The catch basins will then direct the stormwater to stormwater infiltration chambers (i.e., the infiltration system). Stormwater directed to the infiltration chambers would reportedly be able to infiltrate into the subsurface (i.e., made available for deep percolation). The proposed infiltration system is to be constructed across the central portion of the proposed development.
 Again, it should be noted that the purpose of this LID stormwater infiltration review letter from the Watermaster's office is not in any way to evaluate and/or opine on the technical feasibility of the infiltration of stormwater at the site, but rather only to assess the concept of infiltration (and recharge) at the site strictly in regard to its potential impact on local groundwater quality. Thus, the Watermaster has no opinion regarding the potential for, or the technical feasibility of, the collected stormwater to be infiltrated into the earth materials beneath the subject property.

Further, your eventual LID permit from the LAWPD will require the property owner (and all successors) to provide for ongoing operation and maintenance in perpetuity for all of the onsite LID facilities. The Watermaster considers this issue of ongoing maintenance of your proposed LID facilities to be critical to the long-term protection of the groundwater quality in the San Fernando Basin.

Based on our review of the new documents you provided, and assuming that the updated final stormwater collection system and infiltration systems are constructed as proposed and properly maintained in the future, then the Watermaster has no objection to the infiltration component of your current (latest) LID, in relation to the local groundwater quality. If the project and/or your LID and/or your infiltration system is revised again in the future and differs from that which has been generally characterized herein, the Watermaster would then need to review those revised plans.

Respectfully submitted,

 Richard C. Slade
 ULARA Watermaster

UPPER LOS ANGELES RIVER AREA WATERMASTER
 RICHARD C. SLADE - WATERMASTER
 Re: City of Los Angeles vs. City of San Fernando, et al.
 Case No. 65079 - County of Los Angeles

May 15, 2012
 Mr. Asatur Keymetlyan
 City of Los Angeles, Department of Public Works (LADPW)
 Bureau of Engineering - Architectural Division
 (Sent via email: asatur.keymetlyan@cityofla.org)

Job No. 500-LAS04
 Re: Potential Stormwater Infiltration Project
 Proposed New Development
 9540 Van Nuys Blvd
 Panorama City, CA 91402

Dear Mr. Keymetlyan:
 Provided herein is my review of the information and reports that you sent me regarding the proposed construction of a new community building and a neighborhood park located at 9540 Van Nuys Blvd, in the Panorama City area of the City of Los Angeles (City). Specifically, this property, which lies in the San Fernando Valley, is located approximately 420 feet north of the intersection of Plummer St and Van Nuys Blvd. This portion of the San Fernando Valley overlies the San Fernando Groundwater Basin, the largest of the four groundwater basins in the Superior Court adjudicated Upper Los Angeles River Area (ULARA). Provided herein also is my opinion, as ULARA Watermaster, of the plan that you have recommended to improve the quality of the recharge resulting from the proposed capture and infiltration of stormwater to be collected and treated by your SUSMP for the subject property.

In regard to stormwater infiltration, the State Regional Water Quality Control Board-Los Angeles Region (RWQCB-LA) promulgated its National Pollutant Discharge Elimination System (NPDES) permit process in 1990 to help minimize the impacts of stormwater and urban runoff on the receiving water bodies in its sphere of influence (i.e., the Los Angeles River and the Pacific Ocean). The goal of their NPDES process was to minimize the impacts on the river, and ultimately to the ocean, by reducing the amount and improving the quality of surface water runoff from storm events. Because your proposed improvement project is located in the San Fernando Valley, all local rainfall and surface water runoff from this site will drain into the Los Angeles River and eventually to the ocean.
 Several years after the implementation of the NPDES process, the City of Los Angeles, Department of Public Works, Bureau of Sanitation - Watershed Protection Division (LAWPD), promulgated a series of guidelines intended to increase onsite infiltration of stormwater at all proposed developments and re-developments throughout the City. These guidelines established the requirements and limitations for utilizing onsite stormwater infiltration and also specified an order of preference (via a set of Best Management Practices-BMPs) for providing Standard Urban Stormwater Mitigation Plan (SUSMP) improvements at each development and/or re-development site in the City.
 The specific order of the BMP preference list was established by the LAWPD to collect and provide basic "treatment" of onsite stormwater runoff, and to help increase the amount of

Low Impact Development (LID)
 Post Construction Stormwater Mitigation
 Best Management Practices (BMPs)
STORMWATER BMP(s) VERIFICATION

Upon LADBS Inspector Verification that approved stormwater BMPs are in place, a Stormwater Observation Report (SOR) Form shall be submitted to Department of Public Works, Bureau of Sanitation, 201 N. Figueroa, 3rd floor, station 18, MID-VALLEY INTER. MULTI-PURPOSE. CENTER, PHASE II
 Project Address: 9540 NORTH VAN NUYS BLVD
 VAN NUYS, CA 91402
 RESIDENTIAL (4 UNITS OR LESS, <10,000 SF, <2,500 SF within a ESA)

Item #	Stormwater BMP	Description (Units, total)	Reference Sheet(s)* (Sheet #)
1	Rain Tank(s) - 50 to 129 gal each		
2	Rain Tank(s) - > 130 gal min		
3	Shade Tree - min 15 gal		
4	Flow thru Planter(s)		
5	Permeable pavers / Porous concrete (min 10% open space)	<input type="checkbox"/> Incidental; total SF <input type="checkbox"/> Infiltration; total SF	
6	Rain Garden	<input type="checkbox"/> # - Lined; total SF <input type="checkbox"/> # - Unlined; total SF	
7	Dry Well		
8	SUMP Pump (modification was not required)		

ALL OTHER DEVELOPMENT
 (Residential: 5 ≥ units, 10,000 ≥ SF, within a ESA and ≥2,500SF)

Item #	Stormwater BMP	Description (Units, total)	Reference Sheet(s)* (Sheet #)
1	Infiltration Basin / Trench	INFILTRATION GALLERY, AS PER PLAN	L301-L303 L401 & L406
2	Dry Well		
3	Permeable pavers / Porous concrete (min 10% open space)	<input type="checkbox"/> Incidental; total SF <input type="checkbox"/> Infiltration; total SF	
4	Rain Tank(s) - 530 gal min	<input type="checkbox"/> Above Grade <input type="checkbox"/> Below Grade	
5	Cistern		
6	Flow thru Planter(s)	<input type="checkbox"/> # - Lined; total SF <input type="checkbox"/> # - Unlined; total SF	
7	Biofiltration		
8	Vegetative Swale / Filter Strip	VEGETATIVE SWALE 700 LF	L301-L303 L401-L406
9	Catch Basin Filter(s)		
10	Trench Drain Filter(s)		
11	Down Spout Filter(s)		
12	SUMP Pump (modification was not required)		

* At a minimum: Site Plan, Architectural Elevations, Roof Plan, Civil Sheets and Detail

STORMWATER OBSERVATION REPORT FORM
 (Residential ≥ 5 units & All other Development)
 LOW IMPACT DEVELOPMENT

IN THE EVENT THAT THE APPROVED STORMWATER BMP CANNOT BE BUILT PER PLANS (OR ANY MODIFICATION), CONSULT WITH BUREAU OF SANITATION STAFF PRIOR TO ANY PLAN MODIFICATIONS. FAILURE TO DO SO MAY DELAY OBTAINING A FINAL APPROVAL AND CERTIFICATE OF OCCUPANCY (C OF O).

STORMWATER OBSERVATION means the visual observation of the stormwater related Best Management Practices (BMPs) for conformance with the approved LID Plan at significant construction stages and at completion of the project. Stormwater observation does not include or waive the responsibility for the inspections required by Section 108 or other sections of the City of Los Angeles Building Code.

STORMWATER OBSERVATION must be performed by the engineer or architect responsible for the approved LID Plan or designated staff in their employment. As part of the observation, provide photos of the BMPs taken during various construction phases.

STORMWATER OBSERVATION REPORT must be signed and stamped (see below) by the engineer or architect responsible for the approved LID Plan and submitted to the city prior to the issuance of the certificate of occupancy. PRIOR TO CERTIFICATE OF OCCUPANCY (C OF O), SOR FORM, PRINTED PHOTOS OF THE BMPs TAKEN DURING VARIOUS CONSTRUCTION PHASES AND APPROVED STAMPED PLANS BY THE BUREAU OF SANITATION MUST BE SUBMITTED TO THE PUBLIC COUNTER FOR STAFF APPROVAL.

Project Address: MID-VALLEY INTER. MULTI-PURP. CENTER, PHASE II
 9540 NORTH VAN NUYS BLVD
 VAN NUYS, CA 91402
 Building Permit No.: 17014-10000-00011
 Name of Engineer/Architect responsible for the approved LID Plan: JANE ADRIAN LANDSCAPE ARCHITECT II
 Phone Number: (213)4854845

List all BMPs installed as part of the project. Coordinates of the most significant (or typical) BMPs:
 BMP Type: INFILTRATION SUB 1A of units: 1
 BMP Type: VEGETATIVE SWALE # of units: 700 LF
 Lat: 77111827.2918 Long: 22936847.9961
 Lat: _____ ; Long: _____
 BMP Type: _____ # of units: _____
 BMP Type: _____ # of units: _____
 Lat: _____ ; Long: _____
 Lat: _____ ; Long: _____

I DECLARE THAT THE FOLLOWING STATEMENTS ARE TRUE TO THE BEST OF MY KNOWLEDGE:
 1. I am the engineer or architect responsible for the approved LID Plan, and;
 2. I, or designated staff under my responsible charge, has performed the required site visits at each significant construction stage and at the completion to verify that the Best Management Practices (BMPs) as shown on approved plans have been constructed and installed in accordance with the approved LID Plan.

Signature _____ Date _____
 Wet Stamp of Engineer or Architect

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

ARCHITECTURAL DIVISION

GARY LEE MOORE, PE, ENV SP, CITY ENGINEER

LANDSCAPE ARCHITECT: JANE ADRIAN
 DESIGNED BY: LORENA MATOS, P.E., A.S.A., ENV SP, CCIM/LEED AP
 DRAWN BY: LORENA MATOS, P.E., A.S.A., ENV SP, CCIM/LEED AP
 CHECKED BY: JANE ADRIAN
 APPROVED BY: MAHMOUD HARMIZADEH, A.I.A., DEPUTY CITY ENGINEER

DATE: _____

NO. REVISIONS: _____

BUILDING NO. XXX/XX

INDEX NO. _____

SHEET TITLE: LID FORMS

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD
 VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. L304

SHEET 26 OF SHEETS 43

PLOTTED: 8/6/2019 10:04 AM

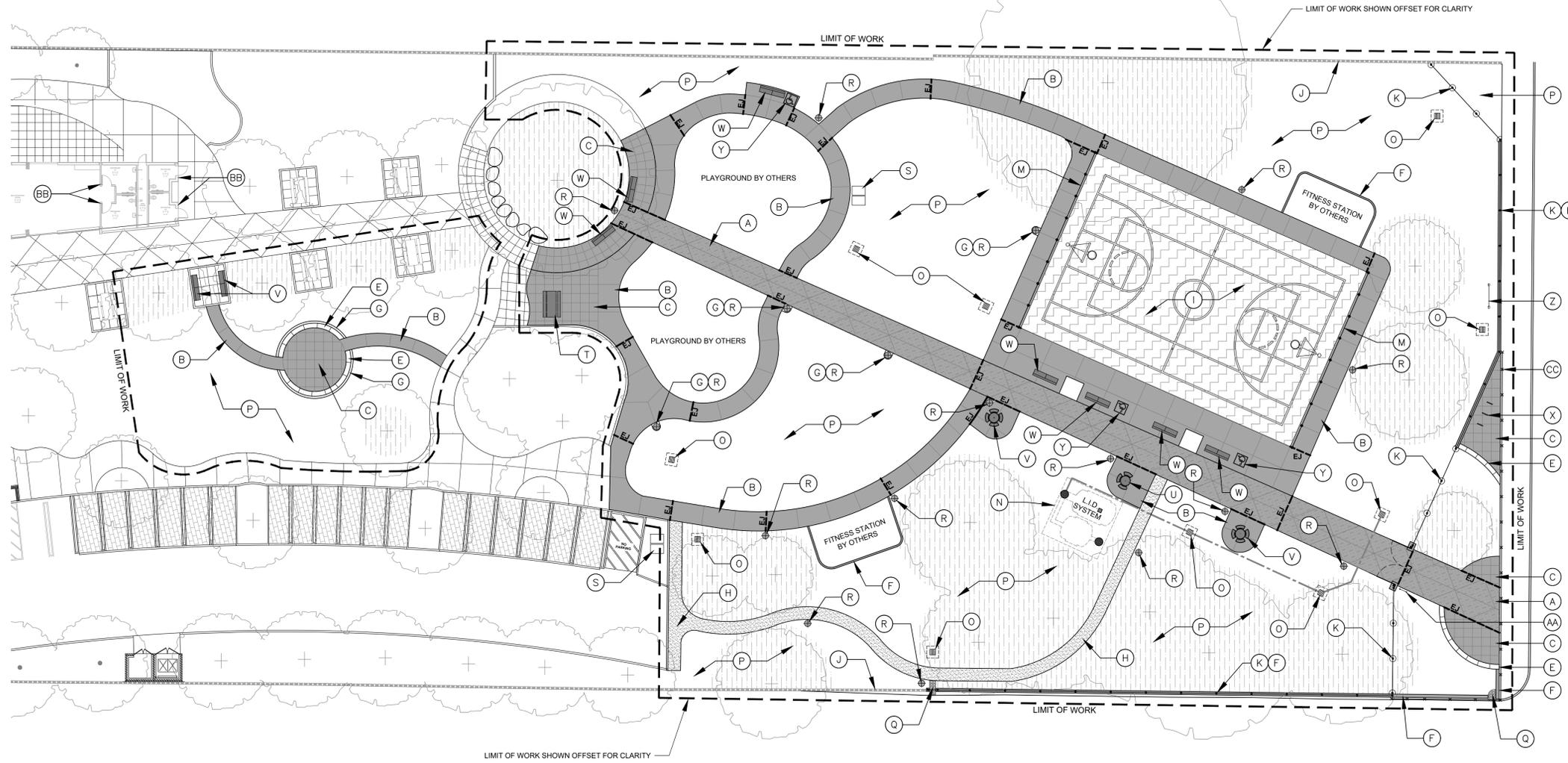
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)

TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 8/6/2019 10:04 AM
 FILE: Q:\IN-HOUSE\DESIGN\MID-VALLEY MULTI-PURPOSE INTERGENERATIONAL PHASE II\CONSTRUCTION DOCUMENTS\DWG\L304_LID_FORMS.DWG

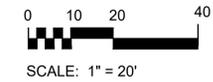
TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 08/2019 10:20 AM
 FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY\MULTI-PURPOSE INTERGENERATIONAL PHASE II\CONSTRUCTION DOCUMENTS\DWG\L401_CONSTRUCTION_PLAN.DWG

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.



CONSTRUCTION LEGEND

- CONCRETE FINISH A
SCORELINES PER SHEET L402, DETAIL J9
- CONCRETE FINISH B
- CONCRETE FINISH C
SCORELINES PER SHEET L402, DETAIL J9
- ASPHALTIC CONCRETE PAVING
PER SHEET L402, DETAIL J13
- STABILIZED DECOMPOSED GRANITE
PER SHEET L402, DETAIL E1
- TREE PROTECTION ZONE
SEE SHEET L702
- 4" DIAMETER ABS DRAINLINE
- CATCH BASIN WITH SUMP
PER SHEET L403, DETAIL J9
- LIGHT FIXTURE PER ELECTRICAL PLANS
- DOWELED EXPANSION JOINT
PER SHEET L402, DETAIL J5



CONSTRUCTION KEY

- (A) CONSTRUCT NEW CONCRETE PAVING, MEDIUM BROOM FINISH, COLOR: FLAGSTONE BROWN, [DAVIS COLORS # 641]. HAND TOOL OR SAW CUT SCORELINES AS SHOWN. SEE SHEET L402, DETAILS J1, J5 AND J9, GRADING PLAN SHEET L301 AND LAYOUT PLAN SHEET L501.
- (B) CONSTRUCT NEW CONCRETE PAVING, COLOR: NATURAL GRAY CONCRETE, MEDIUM BROOM FINISH. SCORE LINES SPACED AT MAX 10". SEE SHEET L402, DETAILS J1 AND J5, GRADING PLAN SHEET L301 AND LAYOUT PLAN SHEET L501.
- (C) CONSTRUCT NEW CONCRETE PAVING, MEDIUM BROOM FINISH, COLOR: PALOMINO, [DAVIS COLORS #5447]. HAND TOOL OR SAW CUT SCORELINES EVERY 34" BOTH WAYS, SQUARE PATTERN AS SHOWN. MATCH AND CONTINUE EXISTING ADJACENT SCORELINE PATTERN WHERE PRESENT. SEE SHEET L402, DETAILS J1, J5 AND J9, GRADING PLAN SHEET L301 AND LAYOUT PLAN SHEETS L501 AND L502.
- (D) CONSTRUCT EXPANSION JOINT (EJ), SHEET L402, DETAIL J5.
- (E) CONSTRUCT NEW CONCRETE SEAT WALL. SEE SHEET L402, DETAIL A1.
- (F) CONSTRUCT NEW CONCRETE CURB. SEE SHEET L402, DETAIL E5.
- (G) CONSTRUCT NEW CONCRETE MOW STRIP. SEE CONSTRUCTION DETAIL SHEET L402, DETAIL E9.
- (H) CONSTRUCT STABILIZED D.G. SURFACE WITH STEEL EDGING. SEE SHEET L402, DETAIL E1.
- (I) CONSTRUCT NEW BASKETBALL COURT. SEE SHEET L402, DETAILS A9, A13 AND J13.
- (J) EXISTING WALL. PROTECT IN PLACE.
- (K) PROVIDE AND INSTALL NEW 8' HIGH CLEAR VJ FENCE OR APPROVED EQUAL. COLOR: BLACK RAL 9004. POST FOOTINGS SHALL BE INSIDE PROPERTY LINE BOUNDARY. SEE SHEET L403, DETAIL E1.
- (L) PROVIDE AND INSTALL NEW 12'-4" CLR CLEARVU DOUBLE SWING & TRILOGY LOCK OR APPROVED EQUAL AT ENTRY. SEE SHEET L403, DETAIL A1.
- (M) PROVIDE AND INSTALL 10' HIGH CHAIN LINK FENCE ALONG BASELINES OF BASKETBALL COURT. SEE SHEET L403, DETAIL E5.
- (N) PROVIDE AND INSTALL LID INFILTRATION CHAMBER SYSTEM. SEE SHEETS L301, L302, L303, L304, L405 AND L501.
- (O) PROVIDE AND INSTALL PRE-CAST CONCRETE CATCH BASIN. SEE GRADING PLAN SHEET L301 AND SHEET L403, DETAIL J9.
- (P) PLANTING AREA. SEE IRRIGATION SHEETS L601-L604 AND PLANTING SHEETS L701-L703.

- (Q) INSTALL RIPRAP FOR DRAINAGE. ONE LAYER OF 6"-8" RIVER ROCK COBBLESTONES GROUTED IN WITH 3" OF CONCRETE. NO OBVIOUS MORTAR SHALL BE SEEN WHEN LOOKING DOWN ON THE ROCKS. AS THE PURPOSE OF THE RIPRAP IS TO ALLOW STORMWATER TO LEAVE THE SITE INTO THE ALLEY, THE FINISH GRADE OF THE ROCKS SHALL BE THE SAME AS THE ADJACENT GRADE OF THE GROUND. PROVIDE SAMPLE FOR APPROVAL.
- (R) INSTALL NEW LIGHTING PER ELECTRICAL PLAN, TYP.
- (S) INSTALL NEW ELECTRICAL BOX PER ELECTRICAL PLAN, TYP.
- (T) NEW LOCATION FOR EXISTING PICNIC TABLE. CONTRACTOR SHALL FOLLOW ALL ADA GUIDELINES FOR SPACING BETWEEN TABLES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PICNIC TABLE DUE TO RELOCATION.
- (U) PROVIDE AND INSTALL ONE (1) NEW CONCRETE ADA PICNIC TABLE WITH ADA USE ONLY SIGN (ADA CONCRETE PICNIC TABLE BY QSP CONCRETE SOLUTIONS OR APPROVED EQUAL). SEE SHEET L404, DETAIL E5.
- (V) PROVIDE AND INSTALL TWO (2) NEW CONCRETE PICNIC TABLES (CONCRETE PICNIC TABLE BY QSP CONCRETE SOLUTIONS OR APPROVED EQUAL). SEE SHEET L404, DETAIL E1.
- (W) PROVIDE AND INSTALL NINE (9) NEW 8' WIDE BENCHES (EVA BENCH BY VICTOR STANLEY OR APPROVED EQUAL) WITH CENTER ARM REST AND HORIZONTAL STEEL SLATS (RAL COLOR # 2011). SURFACE MOUNT INSTALLATION PER MANUFACTURER INSTRUCTIONS.
- (X) PROVIDE AND INSTALL THREE (3) NEW SURFACE MOUNTED BIKE RACKS, MODEL #U238-SF WITH GALVANIZED STEEL FINISH, MANUFACTURED BY MADRAX (GRABER MANUFACTURING, INC.), 1080 UNIEK DRIVE, WAUNAKEE, WI 53597, (800) 448-7931, SALES@MADRAX.COM, OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- (Y) PROVIDE ACCESSIBLE WHEELCHAIR SPACE WITH ADA PAINTED LOGO, 48" X 48".
- (Z) INSTALL CONSTRUCTION SIGN. PROJECT MANAGER TO DETERMINE FINAL LOCATION. SEE SHEET L404, DETAIL J1.
- (AA) INSTALL ADA SIGN AT PARK ENTRY. SEE SHEET L404, DETAIL E9.
- (BB) PROVIDE AND INSTALL FOUR (4) ALL GENDER RESTROOM DOOR SIGNS. SEE SHEET L404, DETAIL J13.
- (CC) INSTALL TEMPORARY 8' HIGH CHAIN LINK FENCE. INSTALL ON OUTSIDE EDGE OF LIMIT OF WORK SO AS NOT TO IMPEDE CONSTRUCTION. SEE SHEET L403, DETAIL J1.

CONSTRUCTION NOTES

1. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH PROJECT MANAGER TO LOCATE AND DELINEATE THE CONSTRUCTION STAGING AREA. SEE GENERAL CONDITIONS AND GENERAL REQUIREMENTS.
2. CONSTRUCTION SIGN SHALL BE INSTALLED WITHIN TWO WEEKS OF THE START OF CONSTRUCTION. OBTAIN PROJECT MANAGER'S APPROVAL FOR SIGN LOCATION AND FINAL TEXT PRIOR TO FABRICATION AND INSTALLATION. SEE LANDSCAPE CONSTRUCTION NOTES AND CONSTRUCTION SIGN DETAIL.
3. LIMIT OF WORK IS AT PROPERTY LINE UNLESS OTHERWISE NOTED HEREIN.
4. ALL EXISTING R.O.W. CONCRETE SIDEWALK, STREET TREES, LIGHT FIXTURES/WIRING AND DRAINAGE FIXTURES, ETC. ARE TO BE PROTECTED IN PLACE PER LANDSCAPE CONSTRUCTION NOTES UNLESS OTHERWISE NOTED.
5. ALL EXISTING SITE FEATURES SHOWN TO REMAIN OR LOCATED OUTSIDE THE LIMIT OF WORK SHALL BE PROTECTED IN PLACE.
6. ADJACENT FENCING AND C.M.U. WALLS OUTSIDE OF PROPERTY LINE SHALL BE PROTECTED IN PLACE AND NOT DISTURBED WITHOUT PROPERTY OWNERS WRITTEN PERMISSION.
7. ANY NEW CONSTRUCTION LOCATED WITHIN THE PROTECTED ROOT AREA OF AN EXISTING TREE IS SUBJECT TO THE REQUIREMENTS LISTED IN THE SECTION "TREE PROTECTION GUIDELINES" OF THE LANDSCAPE CONSTRUCTION NOTES. PRIOR TO ANY CONSTRUCTION, CONTRACTOR SHALL HAVE ALL REQUIRED TREE PROTECTION ZONE FENCING IN PLACE.
8. ALL MATERIAL AND WORK SHOWN ON THIS PLAN SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
9. LAYOUT AND STAKING OF ALL PROJECT ELEMENTS SHALL BE DONE A LICENSED SURVEYOR PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE. DIGITAL PLAN FILES SHALL BE PROVIDED BY CITY TO FACILITATE LAYOUT. FINAL LAYOUT AND LOCATION OF ALL PROJECT ELEMENTS SHALL BE REVIEWED AND APPROVED BY THE PROJECT MANAGER PRIOR TO INSTALLATION. CONTRACTOR SHALL REQUEST REVIEW AND APPROVAL OF LAYOUT FOR ANY PROJECT ELEMENTS 48 HOURS MINIMUM IN ADVANCE. SEE LANDSCAPE CONSTRUCTION NOTES.
10. PAVING, MASONRY AND CONCRETE INSTALLERS ARE TO COORDINATE WITH THE ELECTRICAL, DRAINAGE AND IRRIGATION INSTALLER/SUBCONTRACTORS FOR SLEEVING, PIPING AND/OR CONDUIT INSTALLATION UNDER OR THROUGH HARDSCAPE ELEMENTS PRIOR TO INSTALLATION OF HARDSCAPE ELEMENTS.

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY: _____

NO. REVISIONS: _____

BUILDING NO. XX/XX

INDEX NO. _____

LANDSCAPE ARCHITECT
 JAMES W. MOORE, JR.
 No. 3940
 License No. 10000
 State of California
 License No. 10000

DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, PE, ENV SP, CITY ENGINEER

ARCHITECTURAL DIVISION

LANDSCAPE ARCHITECT: JANE ADRIAN DATE: 8-04-18

DESIGNED BY: LORENA MATOS, P.E. / ASLA / ENV SP / COM / LEED AP DATE: 8-04-18

DRAWN BY: LORENA MATOS, P.E. / ASLA / ENV SP / COM / LEED AP DATE: 8-04-18

CHECKED BY: JANE ADRIAN DATE: 8-04-18

APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER DATE: 8-04-18

CLIENT: DEPARTMENT OF RECREATION & PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: CONSTRUCTION PLAN

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

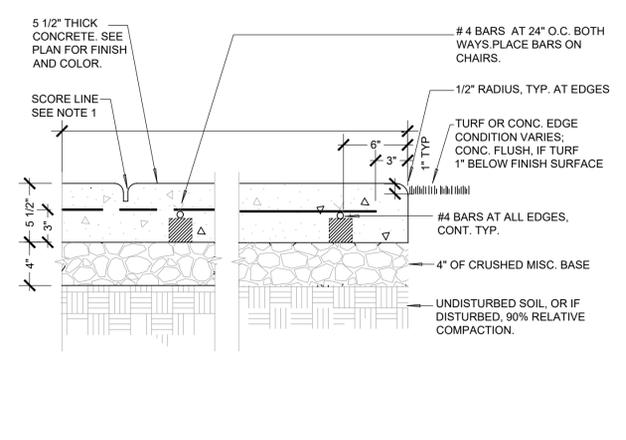
WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. L401

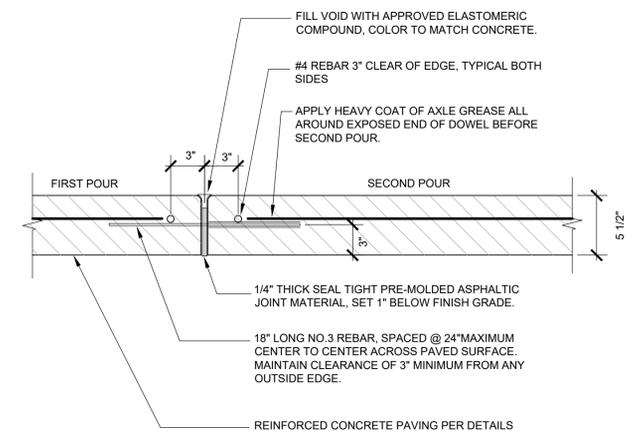
SHEET 27 OF SHEETS 43

PLOTTED: 8/6/2019 10:21 AM



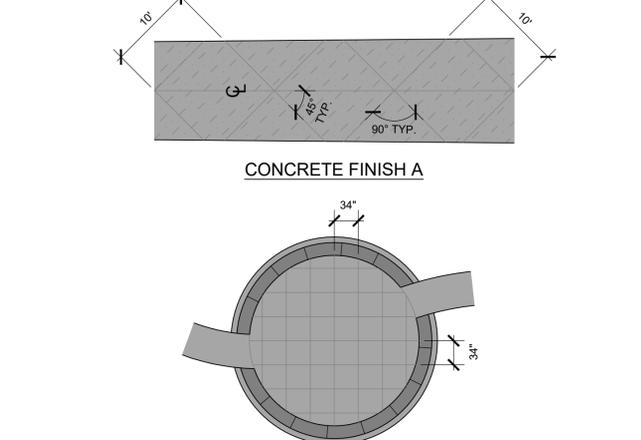
NOTES:

1. PROVIDE TOOLED OR SAWCUT SCORE LINES, 1" DEEP, AT LOCATIONS SHOWN ON CONSTRUCTION PLAN.
2. EXPANSION JOINTS SHALL BE CONSTRUCTED AS SHOWN ON DETAIL E13. PROVIDE EXP. JOINT AGAINST PREVIOUSLY CONSTRUCTED FIXED ELEMENTS.
3. SEE LANDSCAPE CONSTRUCTION NOTES ON SHEET L002 REGARDING END OF POUR JOINTS.
4. CONFIGURATION OF CONCRETE PAVING VARIES, REFER TO CONSTRUCTION PLAN ON SHEET L501.



SECTION

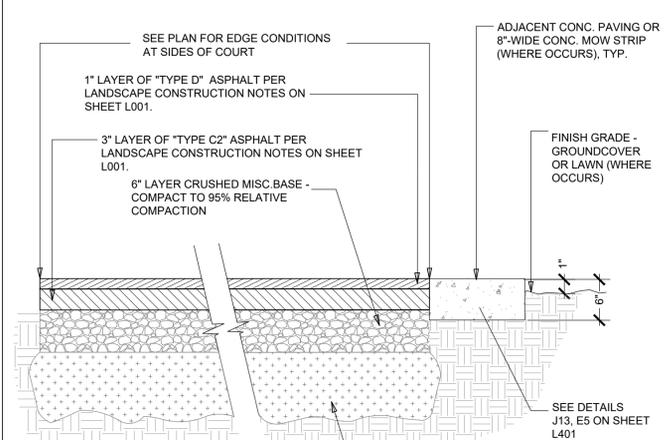
NOTE:
MAINTAIN LINE AND GRADE AT EXPANSION JOINTS.



CONCRETE FINISH A

CONCRETE FINISH C

NOTE:
SCORELINE LAYOUT SHALL BE REVIEWED BY LANDSCAPE ARCHITECT WITHIN 48 HOURS OF CONCRETE POURING.



ASPHALTIC CONCRETE PAVING

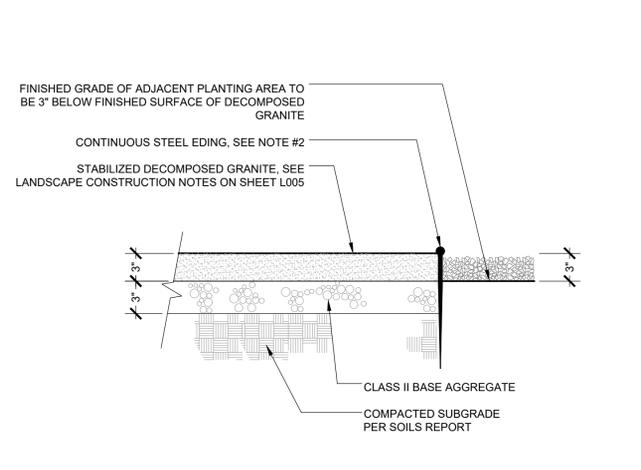
NOTE:
SCARIFY SUBGRADE MIN. 8" DEEP AND COMPACT TO 90%, TYP.

J1 CONCRETE PAVING
N.T.S.

J5 DOWELED EXPANSION JOINT
N.T.S. RP DETAIL 307

J9 CONCRETE SCORELINE PATTERNS
N.T.S.

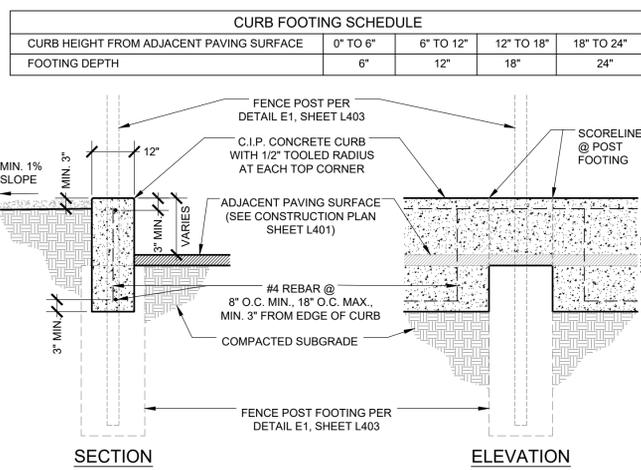
J13 ASPHALTIC CONCRETE PAVING
N.T.S. RP DETAIL 3161



E1 DECOMPOSED GRANITE PAVING
N.T.S. RP DETAIL 381B

NOTES:

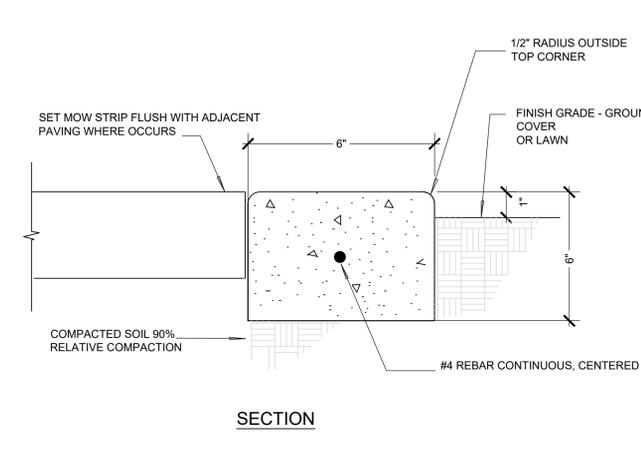
1. SEE SPECIFICATIONS FOR DECOMPOSED GRANITE ON SHEET L005. COLOR SHALL BE "CALIFORNIA GOLD" OR EQUAL.
2. INSTALL STEEL EDGING (3/16" x 5" x 10' LENGTHS) BY COL-MET PRODUCTS PER MANUFACTURER'S SPECIFICATIONS. PHONE: (800) 829-8225.
3. FINISHED SURFACE OF DECOMPOSED GRANITE SHALL BE 1/4" BELOW CONCRETE WALKWAY.



E5 CONCRETE CURB
N.T.S.

NOTES:

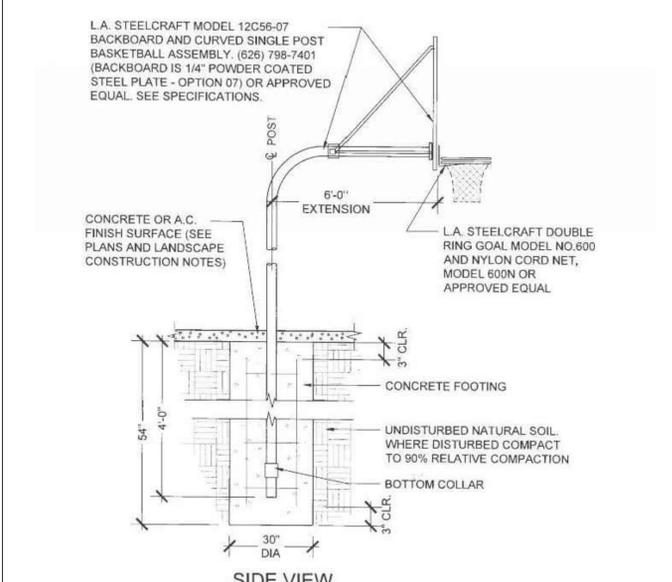
1. SEE GRADING PLAN SHEET L301 FOR TOP OF CURB AND FINISH SURFACE ELEVATIONS.
2. PROVIDE EVENLY SPACED TOOLED SCORE LINES NOT TO EXCEED 20" O.C. OR AS SHOWN.
3. PROVIDE TOOLED SCORE LINES AT THE BEGINNING AND END OF ALL CURVED SECTIONS.
4. FINISH CURBS WITH A SMOOTH STEEL TROWELED FINISH ON ALL EXPOSED SURFACES.



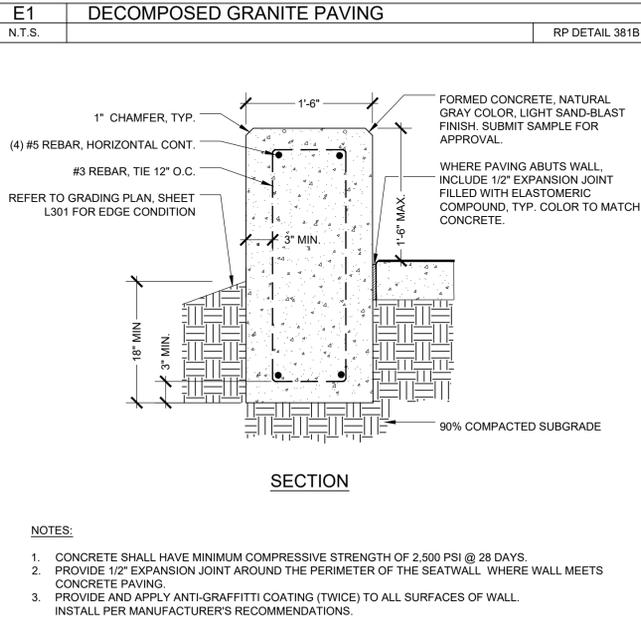
E9 CONCRETE MOW STRIP
N.T.S.

NOTES:

1. SCORE MOW STRIP AT MAX. 10' O.C. AND AT ALL CHANGES IN DIRECTION SIMILAR TO CONCRETE PAVING DETAIL.
2. WHEN MOW STRIP IS INSTALLED ADJACENT TO EXISTING A.C. PAVING, THE EXISTING A.C. PAVING SHALL BE SAWCUT 30" FROM THE EDGE OF THE MOW STRIP AND NEW ASPHALT CONCRETE PLACED AFTER MOW STRIP IS IN PLACE.



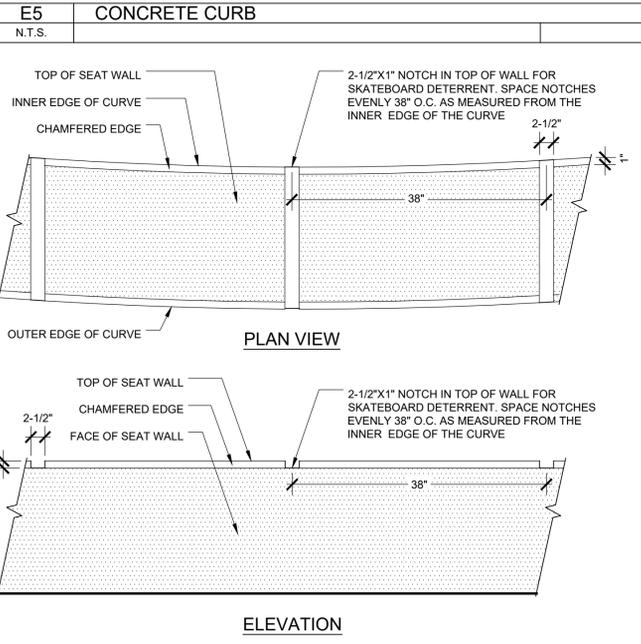
A13 BASKETBALL COURT GOAL WITH CURVED POST
N.T.S. RP DETAIL 3281



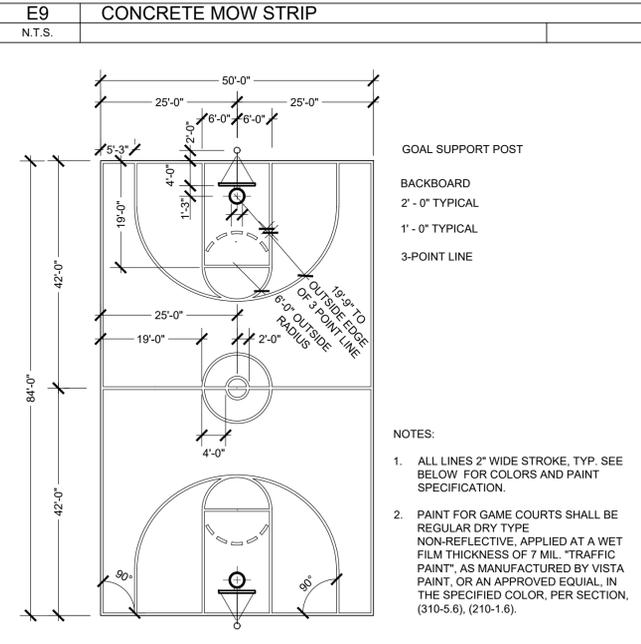
A1 CONCRETE SEAT WALL
N.T.S.

NOTES:

1. CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI @ 28 DAYS.
2. PROVIDE 1/2" EXPANSION JOINT AROUND THE PERIMETER OF THE SEATWALL WHERE WALL MEETS CONCRETE PAVING.
3. PROVIDE AND APPLY ANTI-GRAFFITI COATING (TWICE) TO ALL SURFACES OF WALL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



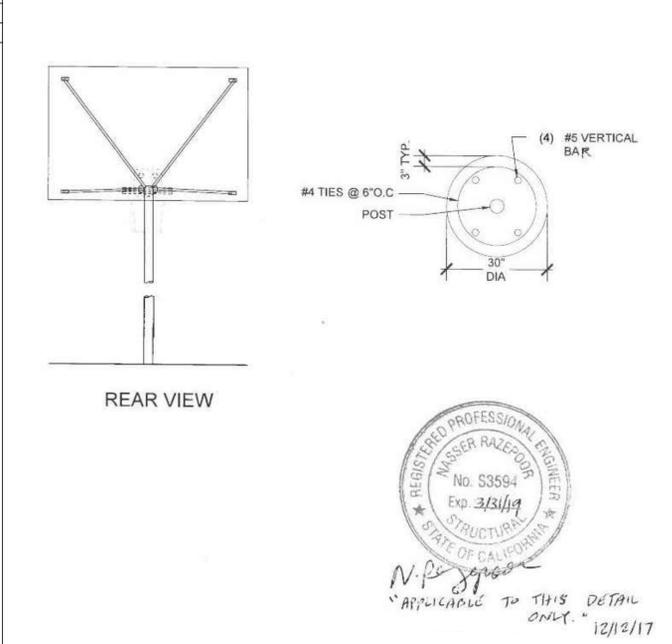
ELEVATION



A9 BASKETBALL COURT STRIPING PLAN
N.T.S. RP DETAIL 100

NOTES:

1. ALL LINES 2" WIDE STROKE, TYP. SEE BELOW FOR COLORS AND PAINT SPECIFICATION.
2. PAINT FOR GAME COURTS SHALL BE REGULAR DRY TYPE, NON-REFLECTIVE, APPLIED AT A WET FILM THICKNESS OF 7 MIL. "TRAFFIC PAINT", AS MANUFACTURED BY VISTA PAINT, OR AN APPROVED EQUAL, IN THE SPECIFIED COLOR, PER SECTION. (310-5.6), (210-1.6).



A13 BASKETBALL COURT GOAL WITH CURVED POST
N.T.S. RP DETAIL 3281

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY: _____

NO. REVISIONS: _____

INDEX NO. XX/XX

DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, PE, ENV SP CITY ENGINEER

ARCHITECTURAL DIVISION

LANDSCAPE ARCHITECT: JANE ADRIAN LIC. NO. 3940 6-04-18

DESIGNED BY: LORENA MATOS, P.E., A.S.I.A. | ENV SP / COM / LEED AP 6-04-18

DRAWN BY: LORENA MATOS, P.E., A.S.I.A. | ENV SP / COM / LEED AP 6-04-18

CHECKED BY: JANE ADRIAN 6-04-18

APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER 6-04-18

CLIENT: DEPARTMENT OF RECREATION & PARKS
GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: CONSTRUCTION DETAILS, SHEET 1

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD
VAN NUYS, CA 91402

WORK ORDER NO. E170420D

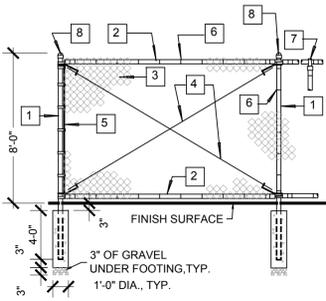
PLAN FILE NO. 622

DRAWING NO. L402

SHEET 28 OF 43

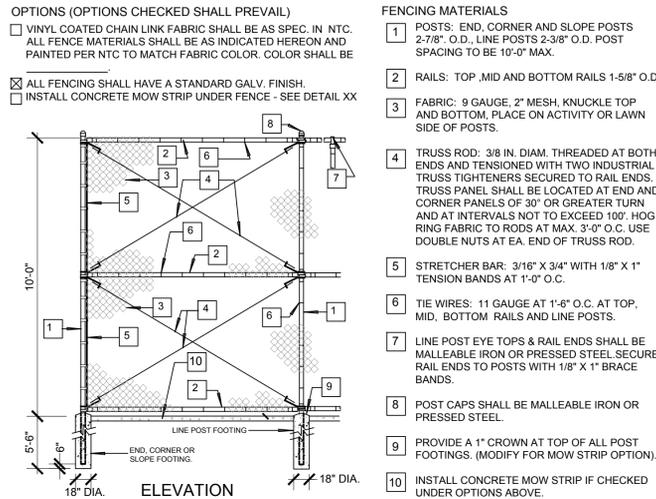
PLOTTED: 8/5/2019 4:30 PM

OPTIONS (OPTIONS CHECKED SHALL PREVAIL)
 VINYL COATED CHAIN LINK FABRIC SHALL BE INDICATED IN SPECIFICATIONS. ALL FENCE MATERIALS SHALL BE AS INDICATED HEREON AND PAINTED PER NOTICE TO CONTRACTORS TO MATCH THE FABRIC COLOR. THE COLOR SHALL BE MATCH EXISTING.
 ALL FENCING SHALL HAVE A STANDARD GALVANIZED FINISH.

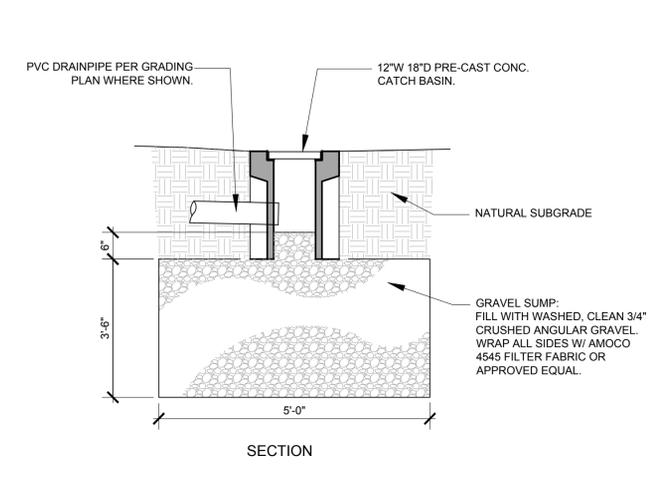


- FENCING MATERIALS**
- POSTS: END, CORNER AND SLOPE POSTS 2-7/8" IN. O.D., LINE POSTS 2-3/8" IN. O.D. POST SPACING TO BE 10'-0" MAX.
 - RAILS: TOP AND BOTTOM RAILS 1-5/8" O.D.
 - FABRIC: 9 GAUGE, 2 IN. MESH, KNUCKLE TOP AND BOTTOM, PLACE ON PATH OR EXTERIOR SIDE OF POSTS.
 - TRUSS ROD: 3/8 IN. DIAM. THREADED AT BOTH ENDS AND TENSIONED WITH TWO INDUSTRIAL TRUSS TIGHTENERS SECURED TO RAIL ENDS. TRUSS PANEL SHALL BE LOCATED AT END AND CORNER PANELS OF 30' OR GREATER TURN AND AT INTERVALS NOT TO EXCEED 100'. HOG RING FABRIC TO RODS AT MAX. 3'-0" O.C.
 - STRETCHER BAR: 3/4" x 3/4" WITH 1/2" x 1" TENSION BANDS AT 1'-0" O.C.
 - TIE WIRES: 11 GAUGE AT 1'-6" O.C. AT TOP, BOTTOM AND LINE POSTS.
 - LINE POST EYE TOPS & RAIL ENDS SHALL BE MALLEABLE IRON OR PRESSED STEEL. SECURE RAIL ENDS TO POSTS WITH 1/2" x 1" BRACE BANDS.
 - POST CAPS SHALL BE MALLEABLE IRON OR PRESSED STEEL.

- NOTES:**
- CHAIN LINK FENCE MATERIALS SHALL CONFORM TO THE CHAIN LINK FENCE AND MISCELLANEOUS METAL CONSTRUCTION SECTION OF THE NOTICE TO CONTRACTORS.
 - CONCRETE FOOTINGS SHALL BE ALLOWED TO SET FOR SEVEN (7) DAYS PRIOR TO INSTALLATION OF FABRIC OR HARDWARE.
 - THE BOTTOM OF THE FABRIC SHALL BE POSITIONED ONE INCH ABOVE FINISH GRADE.
 - HOLD DOWN CONC. FTGS. TO RECEIVE FINISH SURFACE PAVEMENT WHERE FTG. IS NOT SURROUNDED BY LANDSCAPED AREA. IN SUCH CASES, PROVIDE 1" CROWN ON TOP OF ALL POST FTGS. AT FINISH GRADE.
 - CONC. FTG. TO BE 2500 PSI @ 28 DAYS. PROVIDE 3" OF GRAVEL UNDER CONC. FTG.



- NOTES:**
- CHAIN LINK FENCE MATERIALS SHALL CONFORM TO THE CHAIN LINK FENCE AND MISCELLANEOUS METAL CONSTRUCTION SECTION OF THE NOTICE TO CONTRACTORS.
 - CONC. FOOTINGS SHALL BE ALLOWED TO SET FOR SEVEN (7) DAYS PRIOR TO INSTALLATION OF FABRIC OR HARDWARE.
 - THE BOTTOM OF THE FABRIC SHALL BE POSITIONED 1" ABOVE FINISH GRADE.
 - CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL FENCES AND GATES.



- NOTE:**
TOP OF GRATE ELEVATION SHALL BE AS INDICATED ON GRADING PLAN, SHEET L301.

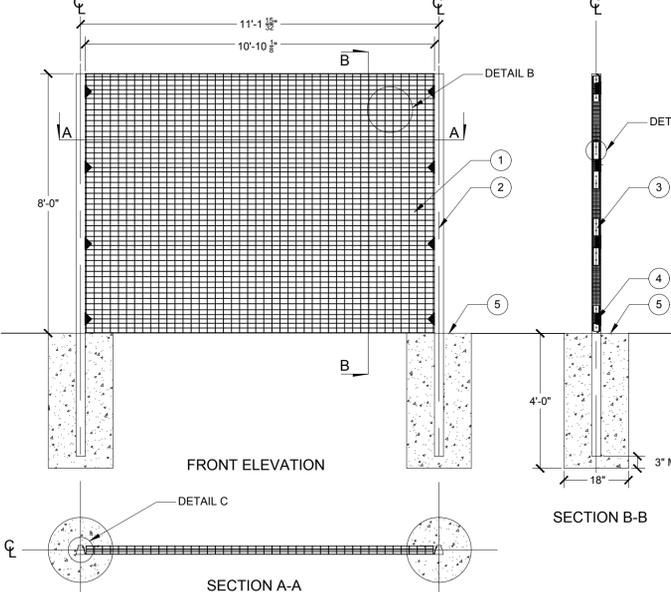
J1	EIGHT FOOT TEMPORARY CHAINLINK FENCE	RP DETAIL 504
N.T.S.		

J5	TEN FOOT CHAINLINK FENCE AT BASKETBALL COURT	RP DETAIL 506
N.T.S.		

J9	PRE-CAST CONCRETE CATCH BASIN WITH SUMP	RP DETAIL 100
N.T.S.		

J13	NOT USED
N.T.S.	

- NOTES:**
- GRADING: THE GROUND SHALL BE GRADED TO AN EVEN SLOPE ALL ALONG THE LENGTH OF THE AREA WHERE THE FENCE IS TO BE INSTALLED.
 - INSTALLATION: INSTALL THE FENCE ALONG THE SPECIFIED AREA. THE FENCE SHALL BE INSTALLED A DISTANCE OF A MINIMUM OF 30 MM (1 1/2") AND MAXIMUM OF 50 MM (2") ABOVE THE GROUND SURFACE.
 - INSERT ALL THE POSTS VERTICALLY AT THE PROPER HEIGHT IN CONCRETE FOOTING. ONCE THE CONCRETE IS SET, THE MESH SECTIONS ARE FASTENED TO THE POSTS WITH THE CLAMPS.
 - WHEN ANY POST OR WIRE MESH SECTION IS FIELD CUT OR TRIMMED FOR FIT, A ZINC RICH PRIMER MUST BE APPLIED TO THE EXPOSED ENDS; AFTER AN CLEARVU TOUCH-UP PAINT MATCHING THE PROPER COLOR SHALL BE USED.
 - IF ANGLED INSTALLATION IS NECESSARY, CONTACT THE MANUFACTURER FOR DIRECTION.
- CONTRACTOR SHALL CONTACT MANUFACTURER PRIOR TO INSTALLATION AND FOR ANY CLARIFICATION BEFORE BIDDING.
 Tel: (202) 705 6022/(305) 607 7665
 RKALIN@COCHRANE.CO
 WWW.COCCHRANE.CO
- CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL FENCES AND GATES.

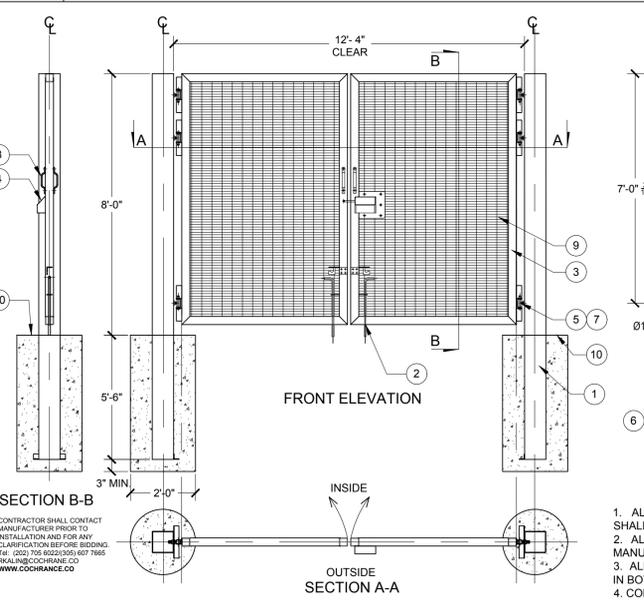


- DESCRIPTION:**
- PANEL: CLEARVU MESH PANELS 10'-10" WIDE x 8' HIGH GALVANIZED Ø1/8" WIRE WITH APERTURE SIZE (CENTERS) @ 3" x 1/2" PANEL FORMATION: PANEL REINFORCED WITH 4 x 1 31/32" DEEP 'V' FORMATION HORIZONTAL RECESSED BANDS (RIGIDITY), 2 x 2 61/64" [75] 70° FLANGES ALONG SIDES (INTERNAL FIXTURES - ANTI VANDAL, ALLOWING FOR FLUSH POST AND PANEL FINISH, 48 LINE WIRE SECURE CONNECTION, LOCKING RECESS MECHANISM) COATING: MESH GALVANIZED, THEN MARINE FUSION BOND COATED.
 - POST: COCHRANE TAPER LOCKING POST 3 11/32" x 3 11/32", 5/64" WALL THICKNESS. THEN SEALED WITH UV STABILIZED POLYMER CAP. COATING: HOT DIPPED GALVANIZED, THEN MARINE FUSION BOND COATED.
 - CLAMPS: 8 X SINGLE BOLT COMB CLAMPS. 8 X DOUBLE BOLT COMB CLAMPS. COATING: GALVANIZED, THEN MARINE FUSION BOND COATED.
 - ANTI-SCALE: COCHRANE ANTI-SCALE COATING: GALVANIZED, THEN MARINE FUSION BOND COATED.
 - PROVIDE A 1" CROWN AT TOP OF ALL POST FOOTINGS. (MODIFY FOR MOW STRIP OPTION).
- INTERNAL FIXTURE (ANTI-VANDAL)
 END CAPS (TO BE WELDED ON)
 FLUSH FINISH

E1	8 FOOT CLEARVU FENCE
N.T.S.	

E9	NOT USED
N.T.S.	

E13	NOT USED
N.T.S.	



- DESCRIPTION:**
- HINGE POST: 8" x 8" x 1/4" SQUARE TUBE
 - DROP BOLT: Ø1/2" ROUND BAR
 - GATE FRAME: 3" x 3" x 1/4" SQUARE TUBE
 - LOCKING DEVICE: Ø1/2" T-SLIDE LOCK, WITH LOCK BOX. C-05-004-05-01-02-01-00
 - HINGE: ADJUSTABLE SCREW HINGE (424.6)
 - BASE PIN: 2" x 2" x 1/4" ANGLE IRON
 - COVER PLATE: 10 5/8" x 2" x 1/4" ANGLE IRON CP2014-00-01
 - GRAB HANDLE: HANDLE
 - MESH: CLEARVU MESH
 - PROVIDE A 1" CROWN AT TOP OF ALL POST FOOTINGS. (MODIFY FOR MOW STRIP OPTION).
- DB2014-HBKT-00-00
 DB2014-00-00
 DB2014-CLT-00-00
 Ø25mm HOLE
 Ø25mm HOLE
1. ALL PANELS, POSTS, AND HARDWARE SHALL BE ORDERED WITH "BLACK" POWDERCOAT FINISH. ALL FENCE POSTS SHALL BE PAINTED TO MATCH FENCING.
 2. ALL CONNECTION HARDWARE INCLUDING NUTS, BOLTS, ETC. SHALL BE OF "TAMPER-PROOF" STYLE AS PROVIDED BY MANUFACTURER, TYP.
 3. ALL GATES SHALL HAVE LOCKING HARDWARE AS NECESSARY (SLIDE BOLT WITH HASP OR SIMILAR) TO SECURE GATES IN BOTH CLOSED POSITION AND OPEN POSITION (WITH GUARD POST) WITH A CITY PROVIDED PADLOCK
 4. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL FENCES AND GATES.

A1	DOUBLE LEAF CLEARVU GATE
N.T.S.	

A9	NOT USED
N.T.S.	

A13	NOT USED
N.T.S.	

BUREAU OF ENGINEERING

ENGINEERING

CITY OF LOS ANGELES

DATE: BY: BUILDING NO. XXXXX

INDEX NO.

REVISIONS:

NO. DESCRIPTION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

CLIENT: DEPARTMENT OF RECREATION & PARKS
 GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: CONSTRUCTION DETAILS, SHEET 2
 PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
 ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

GARY LEE MOORE, PE, ENV SP CITY ENGINEER
 ARCHITECTURAL DIVISION
 LANDSCAPE ARCHITECT: JANE ADRIAN LIC. NO. 3940
 DESIGNED BY: LORENA MATOS, P.L.A./A.S.A./ENV SP/CCM/LEED AP
 DRAWN BY: LORENA MATOS, P.L.A./A.S.A./ENV SP/CCM/LEED AP
 CHECKED BY: JANE ADRIAN
 APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

DATE: 6-04-18
 DATE: 6-04-18
 DATE: 6-04-18
 DATE: 6-04-18

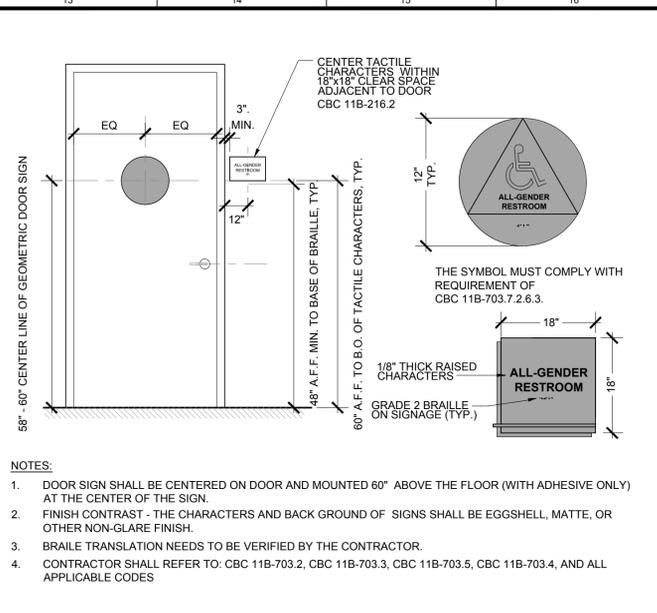
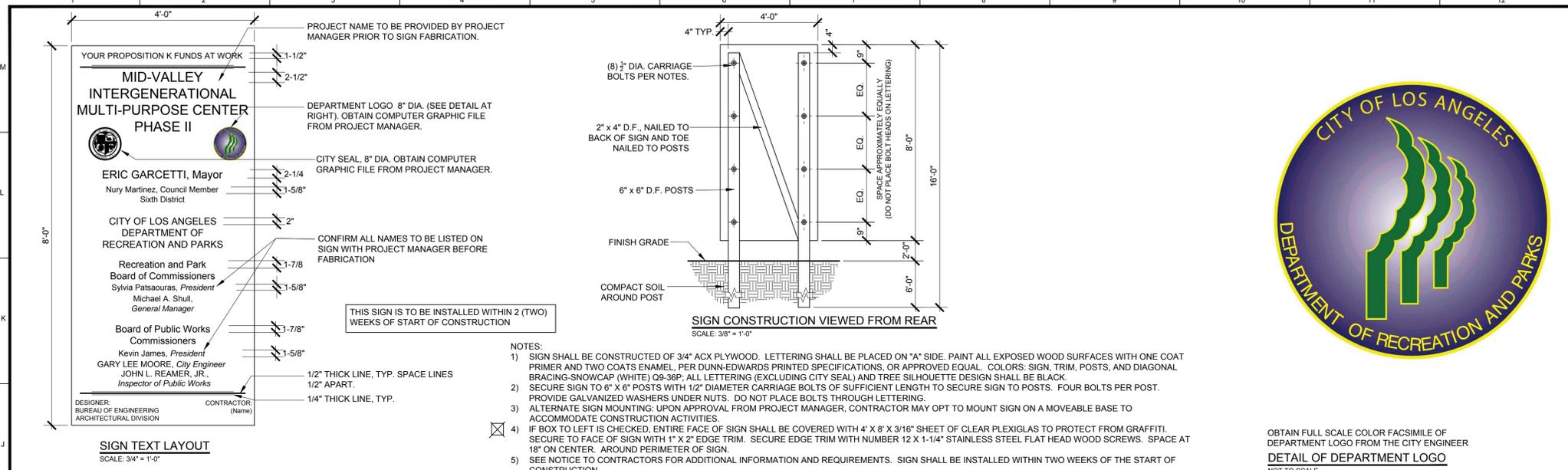
LICENSED LANDSCAPE ARCHITECT

WORK ORDER NO. E170420D
 PLAN FILE NO. 622
 DRAWING NO. L403
 SHEET 29 OF 43

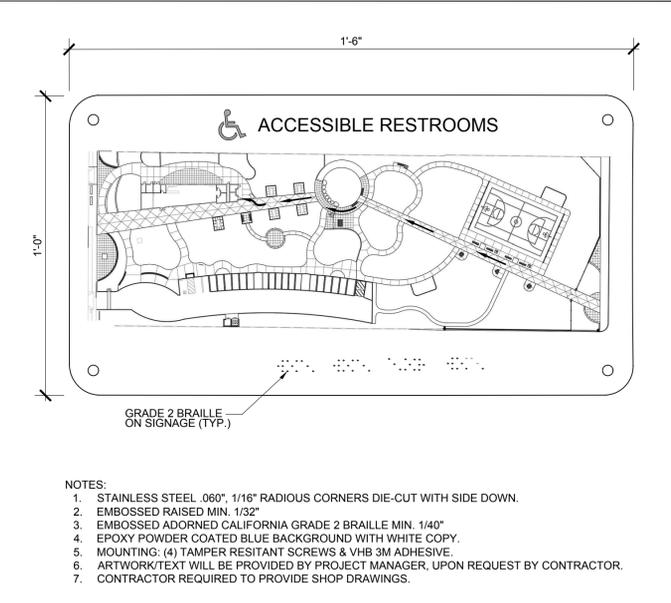
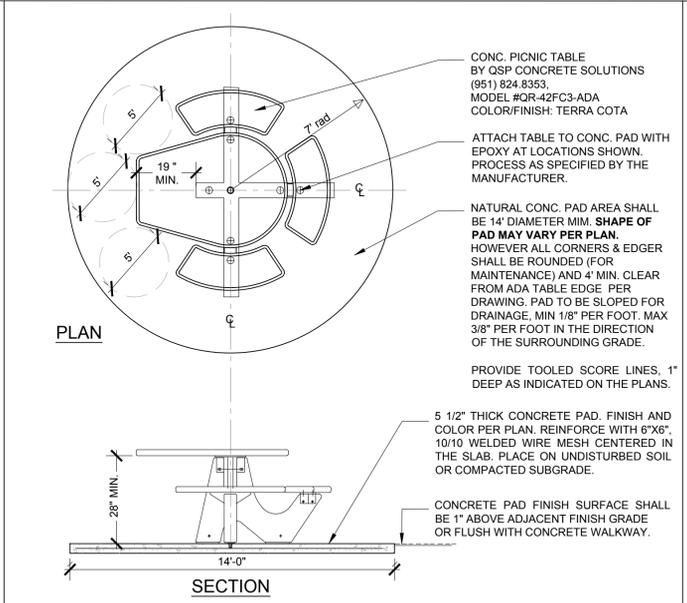
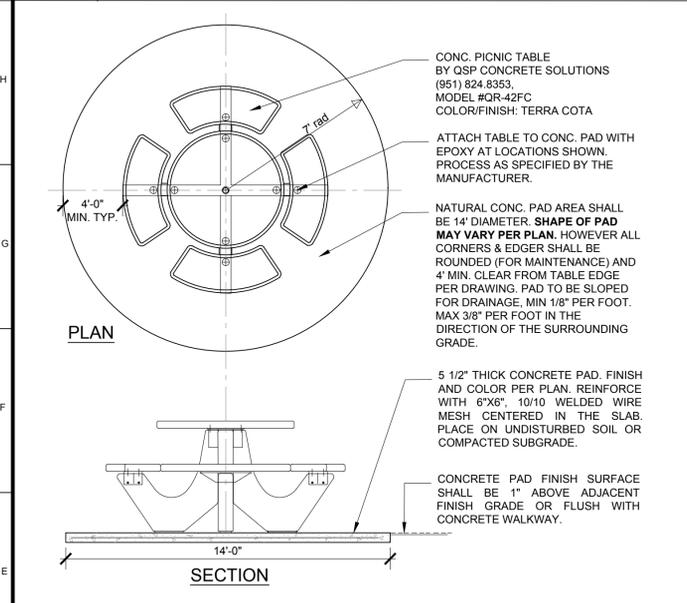
PLOTTED: 8/12/2019 2:20 PM

TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 7/31/2019 4:37 PM
 FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY\MULTI-PURPOSE INTERGENERATION\PHASE II\CONSTRUCTION\DETAILS\DWG

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.



J1	CONSTRUCTION SIGN	J13	ADA RESTROOM SIGN
N.T.S.		N.T.S.	RP DETAIL 504



E1	PICNIC TABLE INSTALLATION AND CONCRETE PAD	E5	ADA PICNIC TABLE INSTALLATION AND CONCRETE PAD	E9	ADA WAYFINDING SIGN AT ENTRY GATE	E13	NOT USED
N.T.S.		N.T.S.		N.T.S.		N.T.S.	

A1	NOT USED	A5	NOT USED	A9	NOT USED	A13	NOT USED
N.T.S.		N.T.S.		N.T.S.		N.T.S.	

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS

CITY OF LOS ANGELES

CLIENT: DEPARTMENT OF RECREATION & PARKS
 GENERAL MANAGER: MICHAEL A. SHULL

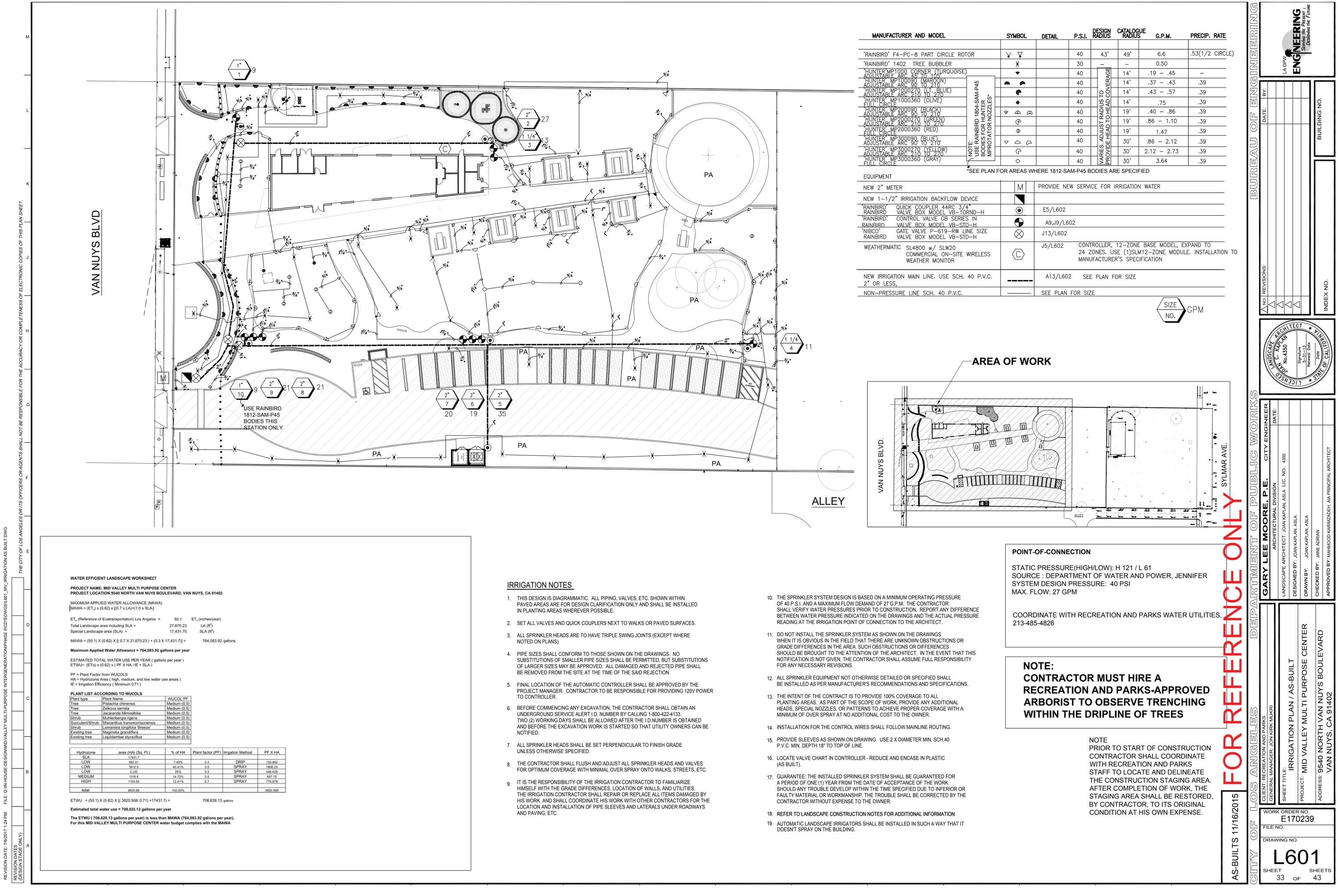
SHEET TITLE: CONSTRUCTION DETAILS, SHEET 3
 PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
 ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D
 PLAN FILE NO. 622
 DRAWING NO. L404
 SHEET 30 OF 43

DATE: 6-04-18
 ARCHITECT: JANE ADRIAN
 LIC. NO. 3940
 DESIGNED BY: LORENA MATOS, P.E. | ASLA | ENV SP / COM / LEED AP
 DRAWN BY: LORENA MATOS, P.E. | ASLA | ENV SP / COM / LEED AP
 CHECKED BY: JANE ADRIAN
 APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

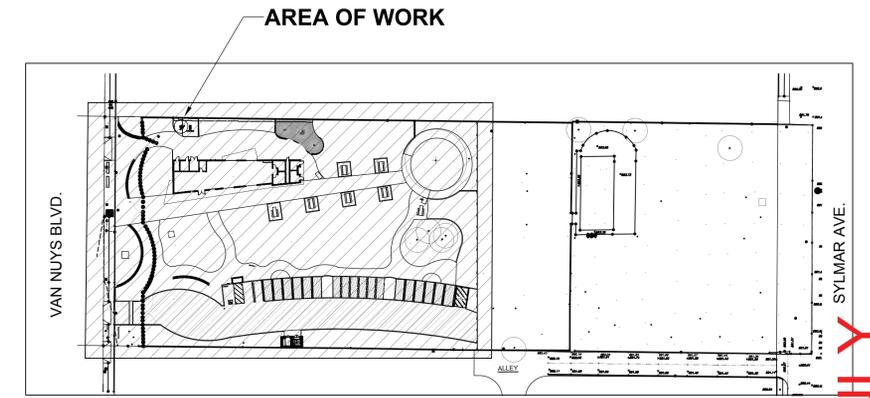
DATE: 6-04-18
 NO. REVISIONS: 1
 BUILDING NO. XX/XX
 INDEX NO.

ENGINEERING
 CITY OF LOS ANGELES



MANUFACTURER AND MODEL	SYMBOL	DETAIL	P.S.I.	DESIGN RADIUS	CATALOGUE RADIUS	G.P.M.	PRECIP. RATE
'RAINBIRD' F4-PC-8 PART CIRCLE ROTOR	▽		40	43'	49'	6.6	.53(1/2 CIRCLE)
'RAINBIRD' 1402 TREE BUBBLER	×		30			0.50	
'HUNTER' MP1000 CORNER (TURQUOISE) ADJUSTABLE ARC 45 TO 105	⊙		40		14'	.19 - .45	-
'HUNTER' MP100090 (MAROON) ADJUSTABLE ARC 90 TO 210	⊙		40		14'	.37 - .43	.39
'HUNTER' MP1000270 (L. BLUE) ADJUSTABLE ARC 110 TO 270	⊙		40		14'	.43 - .57	.39
'HUNTER' MP1000360 (OLIVE) FULL CIRCLE	⊙		40		14'	.75	.39
'HUNTER' MP200090 (BLACK) ADJUSTABLE ARC 90 TO 270	⊙		40		19'	.40 - .86	.39
'HUNTER' MP2000270 (GREEN) ADJUSTABLE ARC 110 TO 270	⊙		40		19'	.86 - 1.10	.39
'HUNTER' MP2000360 (RED) FULL CIRCLE	⊙		40		19'	1.47	.39
'HUNTER' MP300090 (BLUE) ADJUSTABLE ARC 90 TO 270	⊙		40		30'	.86 - 2.12	.39
'HUNTER' MP3000270 (YELLOW) ADJUSTABLE ARC 110 TO 270	⊙		40		30'	2.12 - 2.73	.39
'HUNTER' MP3000360 (GRAY) FULL CIRCLE	⊙		40		30'	3.64	.39

EQUIPMENT	SYMBOL	DETAIL
NEW 2" METER	M	PROVIDE NEW SERVICE FOR IRRIGATION WATER
NEW 1-1/2" IRRIGATION BACKFLOW DEVICE	▣	
'RAINBIRD' QUICK COUPLER 44RC 3/4"	⊙	E5/L602
'RAINBIRD' VALVE BOX MODEL VB-10RND-H	⊙	
'RAINBIRD' CONTROL VALVE GB SERIES IN	⊙	A9,J9/L602
'RAINBIRD' VALVE BOX MODEL VB-STD-H	⊙	
'NISCO' GATE VALVE P-619-RW LINE SIZE	⊙	J13/L602
'RAINBIRD' VALVE BOX MODEL VB-STD-H	⊙	
WEATHERMATIC SL4800 w/ SLW20 COMMERCIAL ON-SITE WIRELESS WEATHER MONITOR	⊙	J5/L602 CONTROLLER, 12-ZONE BASE MODEL, EXPAND TO 24 ZONES. USE (1)SLM12-ZONE MODULE. INSTALLATION TO MANUFACTURER'S SPECIFICATION
NEW IRRIGATION MAIN LINE. USE SCH. 40 P.V.C. 2" OR LESS.	---	A13/L602 SEE PLAN FOR SIZE
NON-PRESSURE LINE SCH. 40 P.V.C.	---	SEE PLAN FOR SIZE



WATER EFFICIENT LANDSCAPE WORKSHEET

PROJECT NAME: MID VALLEY MULTI PURPOSE CENTER
 PROJECT LOCATION: 9540 NORTH VAN NUYS BOULEVARD, VAN NUYS, CA 91402

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)
 MAWA = (ET_a) x (0.62) x [(0.7 x LA)_h + (1.0 x SLA)]

ET_a (Reference of Evapotranspiration) Los Angeles = 50.1 ET_a (inches/year)
 Total Landscape area including SLA = 27,670.23 LA (ft²)
 Special Landscape area (SLA) = 17,431.70 SLA (ft²)

MAWA = (50.1) x (0.62) x [(0.7 x 27,670.23) + (0.3 x 17,431.7)] = 764,083.92 gallons

Maximum Applied Water Allowance = 764,083.92 gallons per year

ESTIMATED TOTAL WATER USE PER YEAR (gallons per year)
 ETWU = (ET_a) x (0.62) x (PF x HA) / IE + SLA

PF = Plant Factor from WUCOLS
 HA = Hydrozone Area (high, medium, and low water use areas)
 IE = Irrigation Efficiency (Minimum 0.71)

Plant Type	Plant Name	WUCOL	PF
Tree	Pistachia chinensis	Medium	(0.5)
Tree	Zelkova serrata	Medium	(0.5)
Tree	Lycaranda Menziesii	Medium	(0.5)
Shrub	Muhlenbergia rigens	Medium	(0.5)
Succulent/Shrub	Miscanthus Transmontanensis	Medium	(0.5)
Shrub	Lomandra longifolia 'Breeze'	Medium	(0.5)
Existing tree	Maginolia grandiflora	Medium	(0.5)
Existing tree	Liquidambar styraciflua	Medium	(0.5)

Hydrozone	area (HA) (Sq. Ft.)	% of HA	Plant factor (PF)	Irrigation Method	PF X HA
SLA	17431.7				
LOW	960.31	7.49%	0.2	DRIP	133.862
LOW	3612.5	46.41%	0.5	SPRAY	1806.25
LOW	2.32	.29%	0.2	SPRAY	466.428
MEDIUM	1316.6	14.22%	0.5	SPRAY	657.75
HIGH	1103.54	12.41%	0.7	SPRAY	776.678
total:	8933.99	100.00%			3820.968

ETWU = (50.1) x (0.62) x [(3820.968 / 0.71) + 17431.7] = 708,628.13 gallons

Estimated total water use = 708,628.13 gallons per year

The ETWU (708,628.13 gallons per year) is less than MAWA (764,083.92 gallons per year).
 For this MID VALLEY MULTI PURPOSE CENTER water budget complies with the MAWA

IRRIGATION NOTES

- THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE.
- SET ALL VALVES AND QUICK COUPLERS NEXT TO WALKS OR PAVED SURFACES.
- ALL SPRINKLER HEADS ARE TO HAVE TRIPLE SWING JOINTS (EXCEPT WHERE NOTED ON PLANS).
- PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE TIME OF THE SAID REJECTION.
- FINAL LOCATION OF THE AUTOMATIC CONTROLLER SHALL BE APPROVED BY THE PROJECT MANAGER. CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING 120V POWER TO CONTROLLER.
- BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT I.D. NUMBER BY CALLING 1-800-422-4133. TWO (2) WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED SO THAT UTILITY OWNERS CAN BE NOTIFIED.
- ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE WITH MINIMAL OVER SPRAY ONTO WALKS, STREETS, ETC.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH THE GRADE DIFFERENCES, LOCATION OF WALLS, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK, AND SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS UNDER ROADWAYS AND PAVING, ETC.
- THE SPRINKLER SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 40 P.S.I. AND A MAXIMUM FLOW DEMAND OF 27 G.P.M. THE CONTRACTOR SHALL VERIFY WATER PRESSURES PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE ARCHITECT.
- DO NOT INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT THERE ARE UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES IN THE AREA. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT GIVEN, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.
- ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- THE INTENT OF THE CONTRACT IS TO PROVIDE 100% COVERAGE TO ALL PLANTING AREAS. AS PART OF THE SCOPE OF WORK, PROVIDE ANY ADDITIONAL HEADS, SPECIAL NOZZLES, OR PATTERNS TO ACHIEVE PROPER COVERAGE WITH A MINIMUM OF OVER SPRAY AT NO ADDITIONAL COST TO THE OWNER.
- INSTALLATION FOR THE CONTROL WIRES SHALL FOLLOW MAINLINE ROUTING.
- PROVIDE SLEEVES AS SHOWN ON DRAWING. USE 2 X DIAMETER MIN. SCH 40 P.V.C. MIN. DEPTH 18" TO TOP OF LINE.
- LOCATE VALVE CHART IN CONTROLLER - REDUCE AND ENCASE IN PLASTIC (AS BUILT).
- GUARANTEE: THE INSTALLED SPRINKLER SYSTEM SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK. SHOULD ANY TROUBLE DEVELOP WITHIN THE TIME SPECIFIED DUE TO INFERIOR OR FAULTY MATERIAL OR WORKMANSHIP, THE TROUBLE SHALL BE CORRECTED BY THE CONTRACTOR WITHOUT EXPENSE TO THE OWNER.
- REFER TO LANDSCAPE CONSTRUCTION NOTES FOR ADDITIONAL INFORMATION
- AUTOMATIC LANDSCAPE IRRIGATORS SHALL BE INSTALLED IN SUCH A WAY THAT IT DOESN'T SPRAY ON THE BUILDING.

POINT-OF-CONNECTION

STATIC PRESSURE(HIGH/LOW): H 121 / L 61
 SOURCE : DEPARTMENT OF WATER AND POWER, JENNIFER SYSTEM DESIGN PRESSURE: 40 PSI
 MAX. FLOW: 27 GPM

COORDINATE WITH RECREATION AND PARKS WATER UTILITIES, 213-485-4826

NOTE:
CONTRACTOR MUST HIRE A RECREATION AND PARKS-APPROVED ARBORIST TO OBSERVE TRENCHING WITHIN THE DRIPLINE OF TREES

NOTE
 PRIOR TO START OF CONSTRUCTION CONTRACTOR SHALL COORDINATE WITH RECREATION AND PARKS STAFF TO LOCATE AND DELINEATE THE CONSTRUCTION STAGING AREA. AFTER COMPLETION OF WORK, THE STAGING AREA SHALL BE RESTORED, BY CONTRACTOR, TO ITS ORIGINAL CONDITION AT HIS OWN EXPENSE.

FOR REFERENCE ONLY

DEPARTMENT OF PUBLIC WORKS

CITY OF LOS ANGELES

AS-BUILTS 11/16/2015

CLIENT: RECREATION AND PARKS

GENERAL MANAGER: JON KIRK (MURKI)

SHEET TITLE: IRRIGATION PLAN / AS-BUILT

PROJECT: MID VALLEY MULTI PURPOSE CENTER

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

ARCHITECTURAL DIVISION

LANDSCAPE ARCHITECT: JOAN KAPLAN, ASLA, LIC. NO. 4350

DESIGNED BY: JOAN KAPLAN, ASLA

DRAWN BY: JOAN KAPLAN, ASLA

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, AIA PRINCIPAL ARCHITECT

DATE: _____

NO. REVISIONS: _____

INDEX NO. _____

BUILDING NO. _____

WORK ORDER NO. E170239

FILE NO. _____

DRAWING NO. L601

SHEET 33 OF 43

BUREAU OF ENGINEERING

ENGINEERING

LA DPW

ENGINEERING

Shaping the Future

REVISION DATE: 7/6/2017 12:4 PM

FILE: C:\INHOUSE\DESIGN\MID-VALLEY MULTI PURPOSE INTERGENERATION PHASE (IIGD)\DWG\L601_MV_ IRRIGATION AS BUILT.DWG

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.

IRRIGATION NOTES:

1. THE SPRINKLER SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 55 P.S.I. AND A MAXIMUM FLOW DEMAND OF 30 G.P.M. THE CONTRACTOR SHALL VERIFY WATER PRESSURES PRIOR TO CONSTRUCTION, AND REPORT ANY DIFFERENCE BETWEEN WATER PRESSURE AND AVAILABLE FLOW INDICATED ON THE DRAWINGS AND THE ACTUAL READING AT THE IRRIGATION POINT OF CONNECTION IMMEDIATELY TO THE PROJECT MANAGER.
2. BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT I.D. NUMBER BY CALLING 1-800-422-4133. PROVIDE TWO (2) WORKING DAYS AFTER THE NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED SO THAT UTILITY OWNERS CAN BE NOTIFIED.
3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF ANY UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY.
4. ANY EXISTING IRRIGATION SYSTEM COMPONENTS DEPICTED HEREIN ARE BASED UPON AS-BUILT RECORD DRAWINGS, AND ARE SHOWN HERE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SYSTEM COMPONENTS TO REMAIN PRIOR TO ENGAGING IN CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL IMMEDIATELY NOTIFY PROJECT MANAGER OF ANY DISCREPANCIES BETWEEN AS-BUILT AND EXISTING CONDITIONS.
5. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT CONDITIONS OR OBSTRUCTIONS EXIST THAT WERE UNKNOWN AT THE TIME THESE PLANS WERE PREPARED. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT MANAGER OF ANY SUCH CONDITIONS PRIOR TO PERFORMING ANY AFFECTED WORK. IN THE EVENT THAT THIS NOTIFICATION IS NOT GIVEN, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.
6. THE CONTRACTOR SHALL PROMPTLY REPAIR OR REPLACE ALL EXISTING AND NEW SITE FEATURES DAMAGED BY HIS WORK.
7. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR CLARITY ONLY AND SHALL BE INSTALLED IN PLANTING AREAS. SET ALL VALVES AND QUICK COUPLERS ADJACENT TO WALKS OR PAVED SURFACES PER DETAILS.
8. ANY TRENCHES DUG TO ACCOMMODATE NEW IRRIGATION LINES OR 2-WIRE CONDUIT THAT PASS INSIDE THE PROTECTED ROOT AREA OF AN EXISTING TREE ARE SUBJECT TO THE REQUIREMENTS LISTED IN THE SECTION "TREE PROTECTION GUIDELINES" OF THE LANDSCAPE CONSTRUCTION NOTES.
9. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS UNDER PAVING IN A TIMELY MANNER. SEE TRENCHING DETAIL FOR SLEEVING REQUIREMENTS.
10. 2-WIRE CABLE CONDUIT SHALL GENERALLY FOLLOW MAINLINE WHERE POSSIBLE. CONTRACTOR SHALL SUBMIT PROPOSED LOCATION OF 2-WIRE CONDUIT RUNS AND PULL BOXES FOR APPROVAL BY PROJECT ENGINEER PRIOR TO INSTALLATION.
11. THE CONTRACTOR SHALL FLUSH AND PRESSURE TEST ALL MAINLINES PER LANDSCAPE CONSTRUCTION NOTES. CONTRACTOR SHALL FLUSH ALL LATERAL LINES AND IRRIGATION HEADS PER THE LANDSCAPE CONSTRUCTION NOTES.
12. THE INTENT OF THESE IRRIGATION PLANS IS TO PROVIDE 100% COVERAGE TO ALL PLANTING AREAS. AS PART OF THE SCOPE OF WORK, CONTRACTOR SHALL PROVIDE ANY ADDITIONAL HEADS, SPECIAL NOZZLES, OR PATTERNS TO ACHIEVE PROPER COVERAGE WITH A MINIMUM OF OVER SPRAY AT NO ADDITIONAL COST TO THE CITY.
13. UPON COMPLETION OF INSTALLATION, CONTRACTOR SHALL CONDUCT A COVERAGE TEST PER LANDSCAPE CONSTRUCTION NOTES. CONTRACTOR SHALL NOTIFY PROJECT MANAGER TO REQUEST THE TEST, WHICH WILL BE SCHEDULED AT THE SOONEST DATE POSSIBLE PER AVAILABILITY OF RAP AND LADWP STAFF.
14. REFER TO LANDSCAPE CONSTRUCTION NOTES FOR ADDITIONAL INFORMATION REGARDING THIS SECTION OF WORK.

GREEN BUILDING CODE NOTES:

1. "PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES"
2. "CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR."
3. "IRRIGATION SHALL NOT BE PERMITTED WITHIN 24-INCHES OF ANY NON-PERMEABLE SURFACE."
4. "A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES."
5. "A CERTIFIED OF COMPLETION SHALL BE FILLED AND CERTIFIED BY THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT."
6. "AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION"

WATER EFFICIENT :

PROJECT NAME: MID VALLEY MULTI PURPOSE CENTER
 PROJECT LOCATION: 9540 NORTH VAN NUYS BOULEVARD, VAN NUYS, CA 91402

Reference Evapotranspiration ET(0) is 50.1

Hydrozone # / Planting Description	Water Use per WUCOLS	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (sq.ft.)	ETAF x Area	Estimated Total Water Use (ETWU) (gal/yr)
Regular Landscape Areas								
1 / Tree	Very Low	0.2	Drip Bubbler	0.81	0.25	48	12	368
2 / Tree	Medium	0.4	Drip Bubbler	0.81	0.49	106	52	1,626
3 / Vine	Medium	0.4	Drip Bubbler	0.81	0.49	3	1	43
4 / Shrub	Low & Very Low	0.2	Drip Bubbler	0.81	0.25	900	222	6,903
5 / Shrub	Low	0.3	Drip Bubbler	0.81	0.37	484	179	5,568
6 / Shrub	Low & Very Low	0.2	Drip Bubbler	0.81	0.25	1,408	348	10,799
7 / Shrub	Low & Very Low	0.2	Drip Bubbler	0.81	0.25	2,140	528	16,413
8 / Shrub	Low & Very Low	0.2	Drip Bubbler	0.81	0.25	2,061	509	15,807
9 / Shrub	Low & Very Low	0.2	Drip Bubbler	0.81	0.25	6,704	1655	51,417
						Totals	13,854	3,507
Special Landscape Areas								
10/ Turf - Shade Areas	High	0.8	Spray	0.75	1.07	8,223	8771	272,451
						Totals	8,223	8,771
							ETWU Total:	381,395
							Maximum Allowed Water Allowance (MAWA):	449,070

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	3,507
Total Area	13,854
Average ETAF	0.253

ETAF Calculations

All Landscape Areas

Total ETAF x Area	12,279
Total Area	22,077
Sitewide ETAF	0.556

"I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS."

"I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE DOCUMENTATION PACKAGE."

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.

BUREAU OF ENGINEERING

ENGINEERING CITY OF LOS ANGELES

DATE: BY:

BUILDING NO. XX/XX

NO. REVISIONS:

INDEX NO.



GARY LEE MOORE, PE, ENV SP - CITY ENGINEER

ARCHITECTURAL DIVISION

DATE: 6-04-18

LANDSCAPE ARCHITECT: JANE ADRIAN

LIC. NO. 3940

DATE: 6-04-18

DESIGNED BY: LORENA MATOS, P.L.A. / ASLA | ENV SP / CCM / LEED AP

DATE: 6-04-18

DRAWN BY: LORENA MATOS, P.L.A. / ASLA | ENV SP / CCM / LEED AP

DATE: 6-04-18

CHECKED BY: JANE ADRIAN

DATE: 6-04-18

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER

DATE: 6-04-18

CLIENT: DEPARTMENT OF RECREATION & PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: IRRIGATION NOTES & WATER EFFICIENCY

PROJECT: MID VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

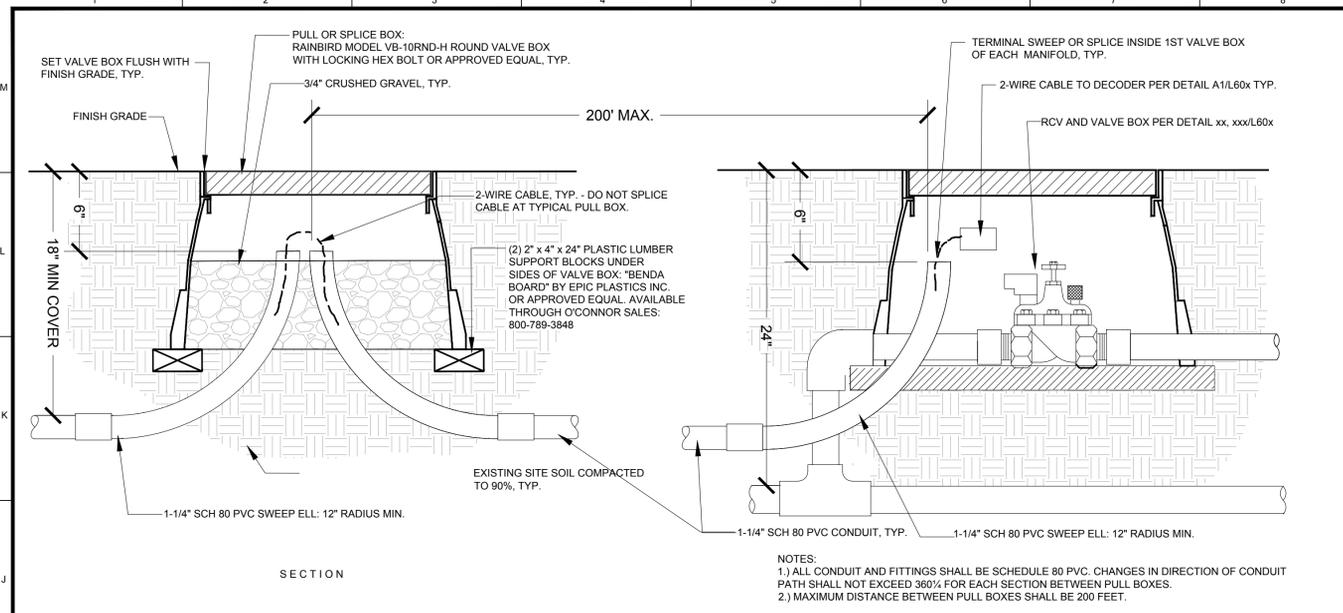
WORK ORDER NO. E170420D

PLAN FILE NO. 622

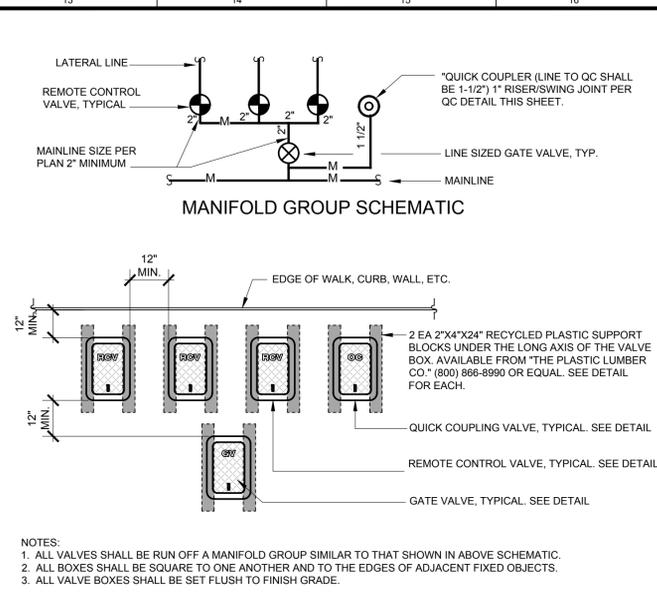
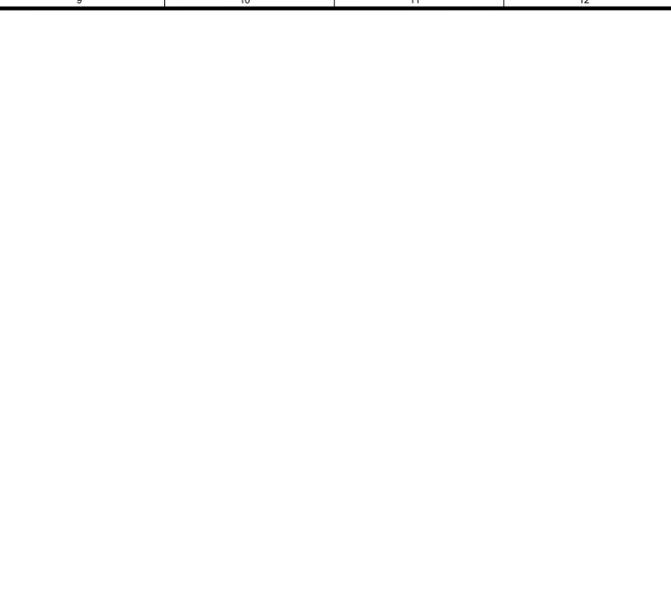
DRAWING NO. L603

SHEET 35 OF 43

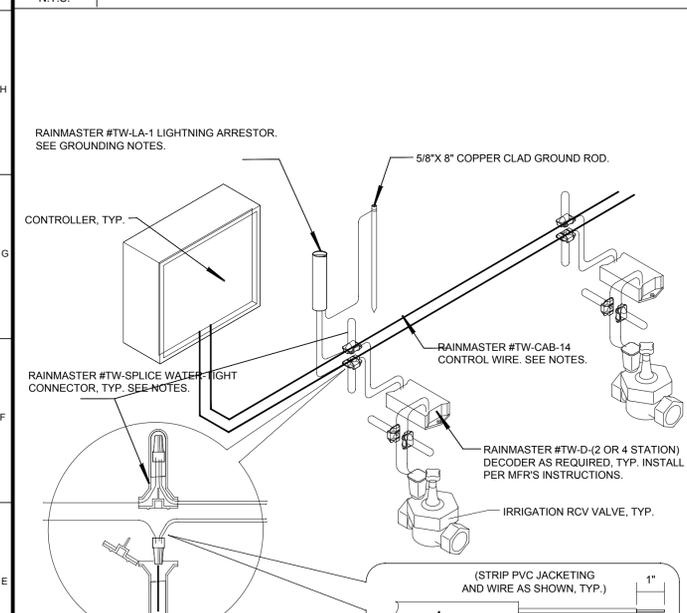
SHEETS 43



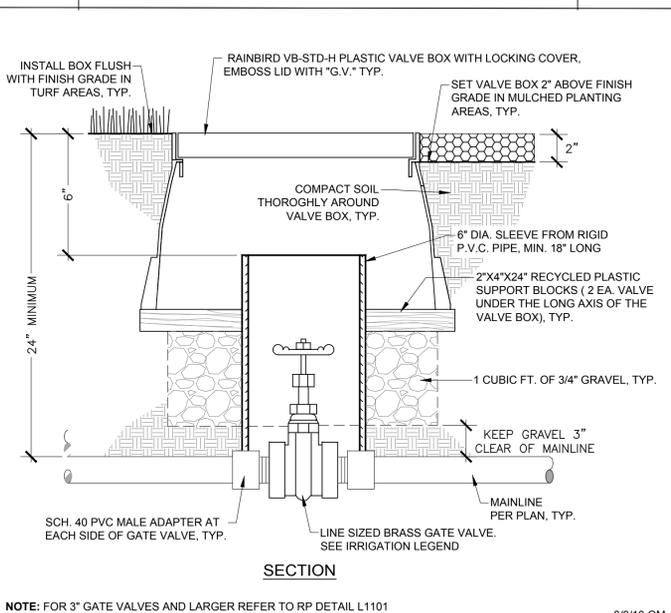
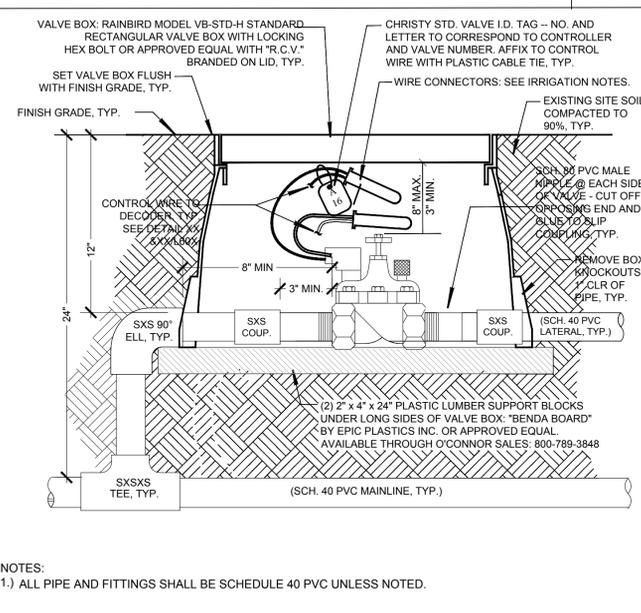
J1 2-WIRE CONDUIT INSTALLATION
N.T.S.



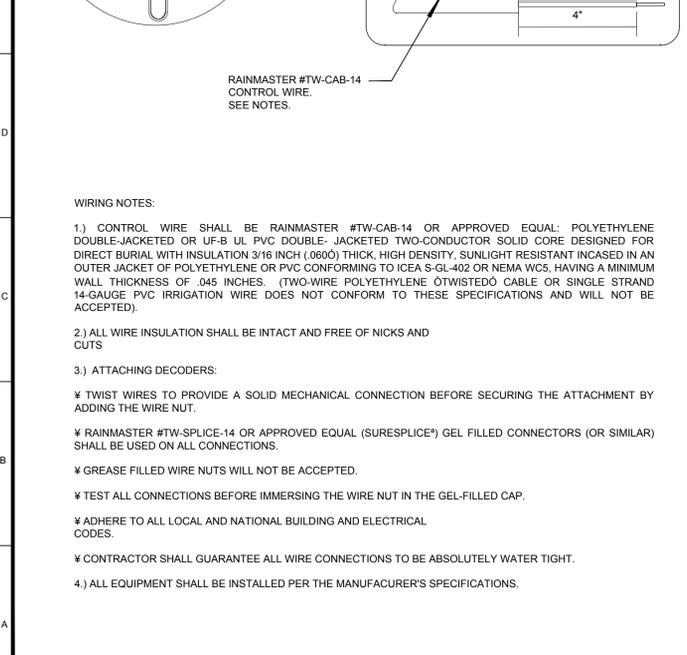
J13 VALVE BOX PLACEMENT (2" MAINLINE OR SMALLER)
N.T.S. BOE_VERSION JAN107



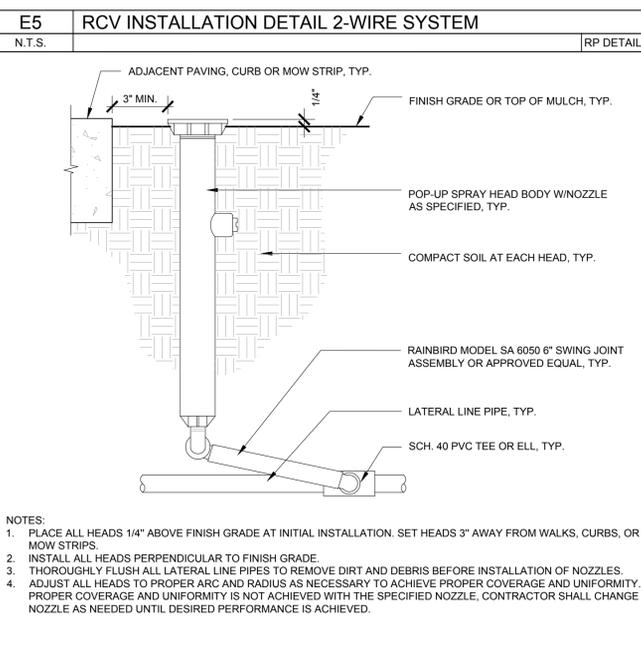
E5 RCV INSTALLATION DETAIL 2-WIRE SYSTEM
N.T.S.



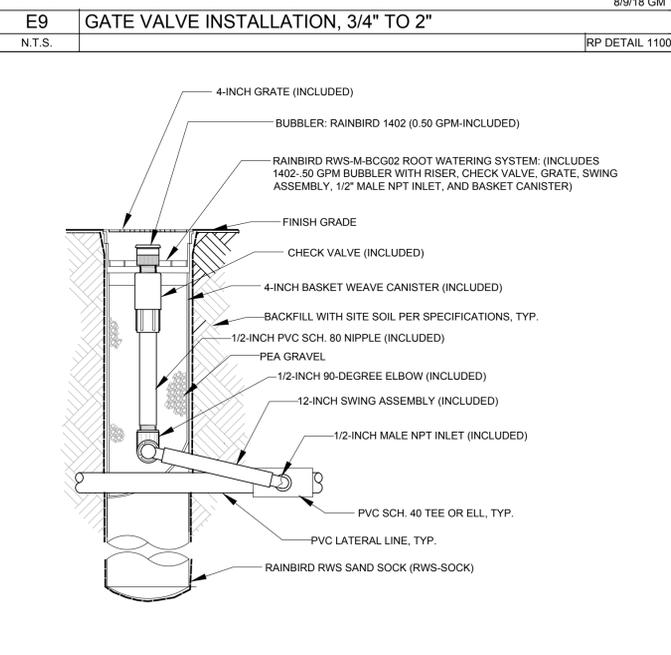
E9 GATE VALVE INSTALLATION, 3/4" TO 2"
N.T.S.



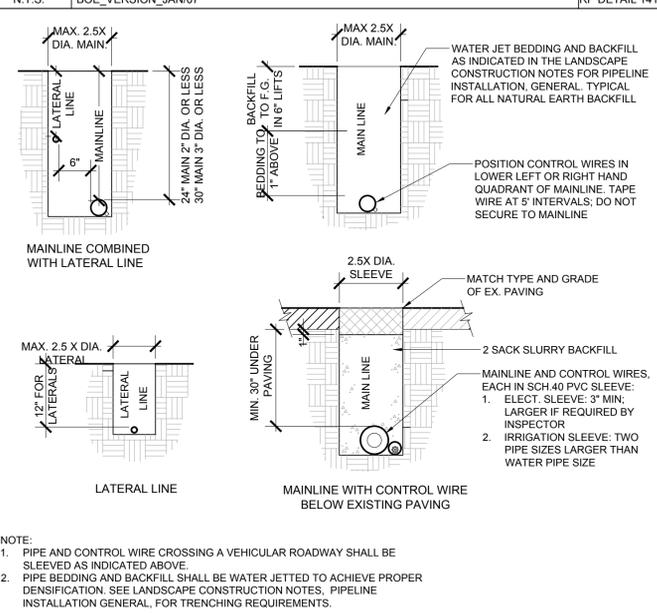
A1 2-WIRE IRRIGATION SYSTEM WIRING (RAINMASTER OR EQUAL)
N.T.S.



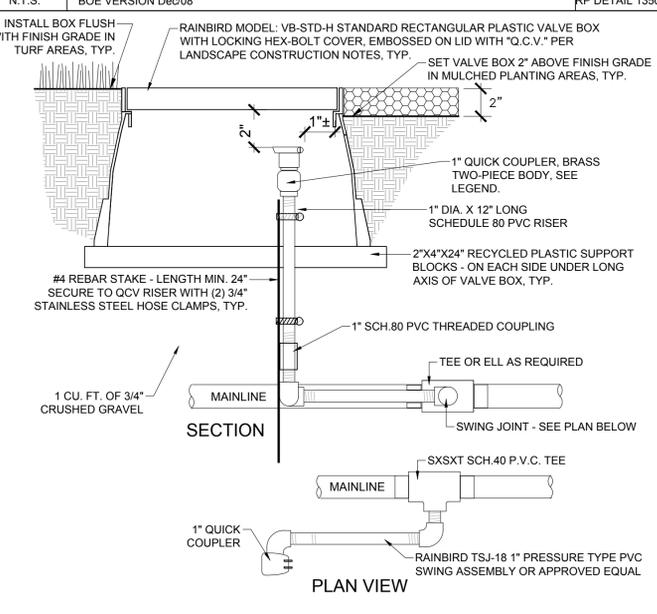
A5 POP-UP SPRAY HEAD INSTALLATION
N.T.S.



A9 ROOT WATERING SYSTEM BUBBLER ASSEMBLY
N.T.S.



E13 IRRIGATION TRENCHING DETAIL
N.T.S.



A13 QUICK COUPLER INSTALLATION (2" MAINLINE OR SMALLER)
N.T.S.

A1 2-WIRE IRRIGATION SYSTEM WIRING (RAINMASTER OR EQUAL)
N.T.S.

A5 POP-UP SPRAY HEAD INSTALLATION
N.T.S.

A9 ROOT WATERING SYSTEM BUBBLER ASSEMBLY
N.T.S.

A13 QUICK COUPLER INSTALLATION (2" MAINLINE OR SMALLER)
N.T.S.

BUREAU OF ENGINEERING
ENGINEERING
CITY OF LOS ANGELES

DATE: BY: [REDACTED]
NO. REVISIONS: [REDACTED]

BUILDING NO. XX/XX
INDEX NO.

LANDSCAPE ARCHITECT
JAMES WOODWARD ARCHITECT
No. 3940
10000 Wilshire Blvd., Suite 100
Beverly Hills, CA 90210
Tel: 310.206.1111
www.jameswoodward.com

DEPARTMENT OF PUBLIC WORKS
GARY LEE MOORE, PE, ENV SP, CITY ENGINEER
ARCHITECTURAL DIVISION
LANDSCAPE ARCHITECT: JANE ADRIAN
DESIGNED BY: LORENA MATOS, P.E., ASLA | ENV SP / COM / LEED AP
DRAWN BY: LORENA MATOS, P.E., ASLA | ENV SP / COM / LEED AP
CHECKED BY: JANE ADRIAN
APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER

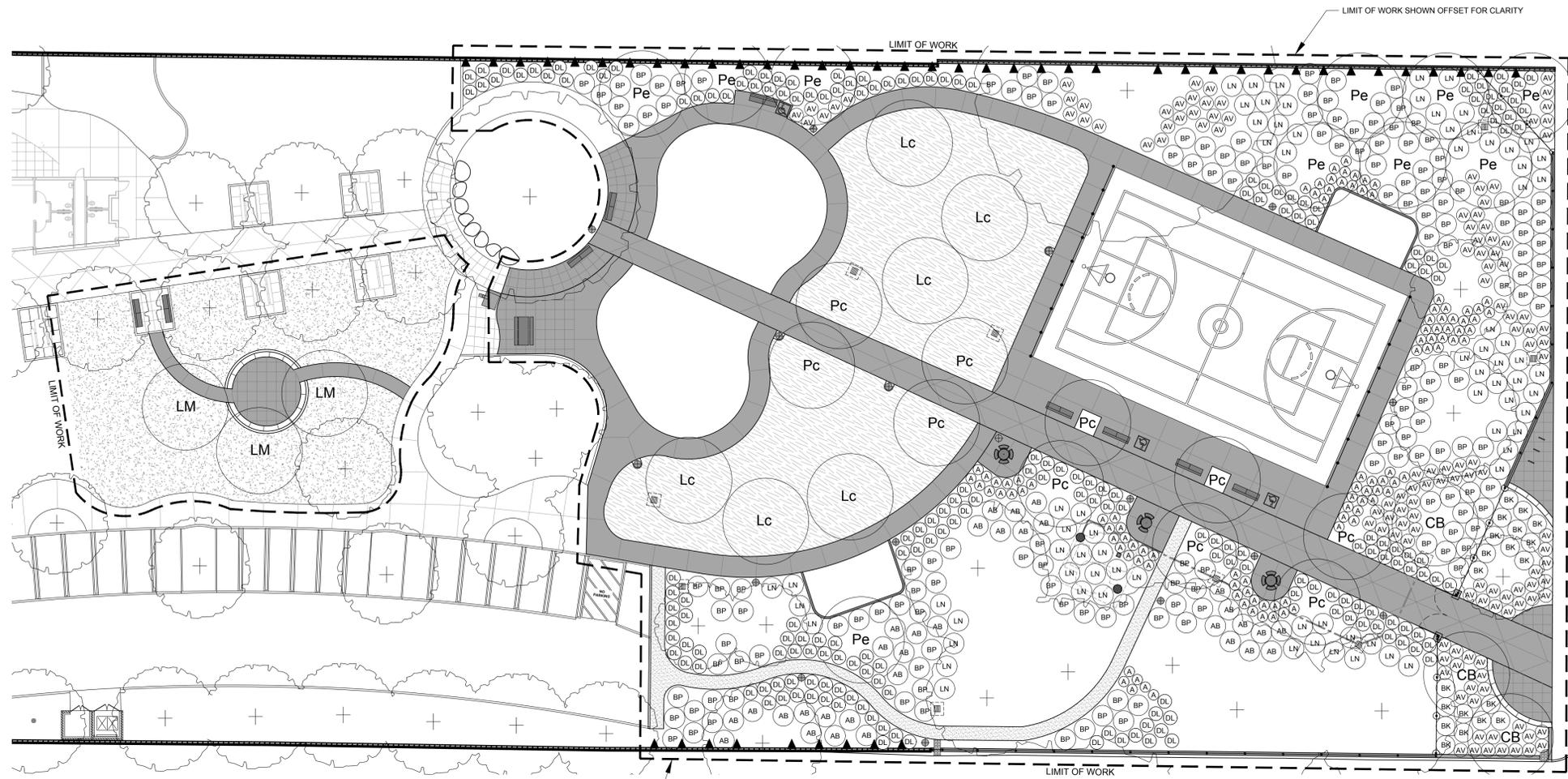
CLIENT: DEPARTMENT OF RECREATION & PARKS
GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: IRRIGATION DETAILS
PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D
PLAN FILE NO. 622
DRAWING NO. L604
SHEET 36 OF 43
PLOTTED: 8/12/2019 2:21 PM

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.

TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 7/31/2019 4:38 PM
 FILE: Q:\IN-HOUSE-DESIGN\MID-VALLEY\MULTI-PURPOSE INTERGENERATIONAL PHASE II\CONSTRUCTION DOCUMENTS\DWG\L701_PLANTING_PLAN.DWG

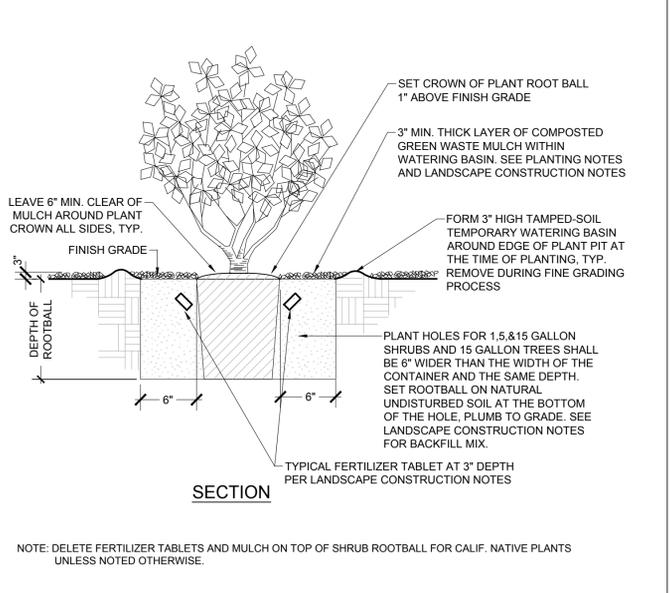
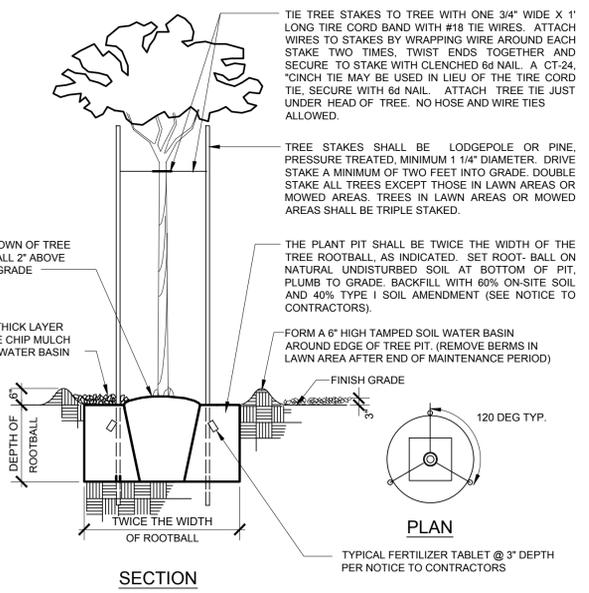
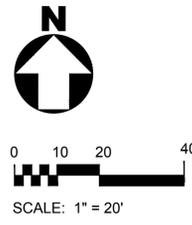


PLANTING NOTES

- EXISTING TREE PROTECTION: SEE TREE PROTECTION SECTION IN LANDSCAPE CONSTRUCTION NOTES.
- ALL PLANTING AREAS SHALL RECEIVE SOIL PREPARATION PER THE LANDSCAPE CONSTRUCTION NOTES. AREAS INSIDE TREE PROTECTION ZONES SHALL RECEIVE ALTERNATE SOIL PREPARATION METHODS AND MATERIALS PER THE LANDSCAPE CONSTRUCTION NOTES WHERE DESIGNATED.
- SOIL PREPARATION FOR EACH AREA SHALL NOT BE PERFORMED UNTIL THE IRRIGATION SYSTEM IS COMPLETED, INSPECTED AND APPROVED PER THE LANDSCAPE CONSTRUCTION NOTES.
- HYDROSEEDING, SOD OR CONTAINER PLANTING SHALL NOT BE INSTALLED UNTIL AFTER SOIL PREPARATION, FINE GRADING AND "GROW AND KILL" WEED ABATEMENT PER THE LANDSCAPE CONSTRUCTION NOTES ARE COMPLETED AND APPROVED. SPECIMEN TREES IN PAVED AREAS MAY BE EXEMPTED AT THE DISCRETION OF CITY ENGINEER.
- TREE PLANTING SHALL BE PERFORMED PER DETAIL A1 ON THIS SHEET (L701).
- SHRUB PLANTING SHALL BE PERFORMED PER DETAIL A5 ON THIS SHEET (L701).
- PLANTING LEGEND AS SHOWN ON EACH PLANTING PLAN SHEET IS FOR THE ENTIRE PROJECT, AND IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. IN CASE OF DISCREPANCIES, THE QUANTITY OF SYMBOLS FOR EACH PLANT SHOWN ON THE PLANTING PLAN SHALL TAKE PRECEDENCE. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL QUANTITIES AS SHOWN ON THE PLANTING PLAN.
- AVAILABILITY & SUBSTITUTIONS: NO SUBSTITUTIONS OF PLANT SPECIES, TYPE, CULTIVAR, SIZE ETC. WILL BE ACCEPTED WITHOUT PRIOR APPROVAL OF PROJECT MANAGER. CONTRACTOR IS EXPECTED TO UTILIZE ALL APPROPRIATE NURSERY RESOURCES IN THE SOUTHERN CALIFORNIA REGION BEFORE DETERMINING IF A SPECIFIED MATERIAL IS UNAVAILABLE. SEE LANDSCAPE CONSTRUCTION NOTES.
- SEE THE LANDSCAPE CONSTRUCTION NOTES FOR REQUIRED INSPECTIONS OF PLANT MATERIALS PRIOR TO INSTALLATION.
- AFTER PLANT MATERIALS ARE INSPECTED AND APPROVED, AND PLANTING AREA IS READY FOR PLANTING, CONTRACTOR SHALL PLACE ALL CONTAINER PLANTS IN A GIVEN AREA - STILL INSIDE THEIR RESPECTIVE NURSERY CONTAINERS - IN THE PLANTING AREAS PER THE LAYOUT SHOWN ON THE PLANTING PLAN FOR INSPECTION AND APPROVAL BY THE LANDSCAPE ARCHITECT. NO PLANTING SHALL BE INSTALLED (OR PLANTING HOLES EXCAVATED) UNTIL THE PLANT TYPE, QUALITY AND LOCATION HAS BEEN APPROVED BY THE LANDSCAPE ARCHITECT. ANY PLANTS INSTALLED PRIOR TO APPROVAL ARE SUBJECT TO REMOVAL AND RE-PLANTING OR REPLACEMENT AT THE CONTRACTOR'S EXPENSE. PROJECT MANAGER SHALL BE NOTIFIED MINIMUM 48 HOURS IN ADVANCE OF REQUESTED INSPECTION.
- ALL PLANTING AREAS EXCEPT HYDROSEEDED AND SODDED AREAS SHALL RECEIVE A MINIMUM (3) INCH DEEP LAYER OF TOP DRESSING MULCH PER THE PLANTING DETAILS AND THE LANDSCAPE CONSTRUCTION NOTES MATERIALS LIST. PRIOR TO PLACING MULCH, PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO THE SOIL PER LANDSCAPE CONSTRUCTION NOTES.
- MULCH SHALL BE SPREAD EVENLY THROUGHOUT PLANTING BEDS. DO NOT BURY PLANT CROWNS.
- SEE LANDSCAPE CONSTRUCTION NOTES FOR PLANTING MAINTENANCE AND ESTABLISHMENT PERIOD REQUIREMENTS.

PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	REMARKS
TREES					
(+)	EXISTING TREE				PROTECT IN PLACE
CB	<i>Chilopsis linearis</i> 'Bubba'	BUBBA DESERT WILLOW	24" BOX	3	STANDARD FORM, STAKE PER DETAIL A1
LM	<i>Lagerstroemia indica x fauriei</i> 'Muskegee'	MUSKOGEE CRAPE MYRTLE	24" BOX	3	STANDARD FORM, STAKE PER DETAIL A1
Lc	<i>Lophostemon confertus</i>	BRISBANE BOX	36" BOX	6	STAKE PER DETAIL A1
Pe	<i>Pinus eldarica</i>	AFGHAN PINE	24" BOX	10	STAKE PER DETAIL A1
Pc	<i>Pistacia chinensis</i>	CHINESE PISTACHE	24" BOX	10	STANDARD FORM, STAKE PER DETAIL A1
SHRUBS & PERENNIALS					
BP	<i>Baccharis pilularis</i> 'Pigeon Point'	PIGEON POINT COYOTE BRUSH	1 GAL.	158	-
BK	<i>Berberis pinnata</i> 'Ken Hartman'	KEN HARTMAN CALIFORNIA BARBERRY	5 GAL.	20	-
DL	<i>Diets grandiflora</i> 'Lemon Drops'	LEMON DROPS FORTNIGHT LILY	5 GAL.	200	-
LN	<i>Lantana x 'New Gold'</i>	NEW GOLD LANTANA	1 GAL.	76	-
SUCCULENTS					
AV	<i>Agave desmetiana</i> 'Variegata'	VARIEGATED SMOOTH AGAVE	1 GAL.	125	-
AB	<i>Agave shawii x attenuata</i> 'Blue Flame'	BLUE FLAME AGAVE	5 GAL.	32	-
A	<i>Aloe striata</i>	CORAL ALOE	5 GAL.	105	-
VINES					
▲	<i>Parthenocissus tricuspidata</i>	BOSTON IVY	5 GAL. STAKED	47	-
TURF					
(hatched)	<i>Cynodon transvaalensis x dactylon</i> 'Tifway II'	TIFWAY II BERMUDA	SOD	-	-
(stippled)	TURF REPAIR AREA		SOD	-	RE-SOD ALL AREAS IMPACTED BY IRRIGATION AND PAVING INSTALLATION AND ANY AREAS LARGER THAN 2' x 2' WITH LESS THAN 50% TURF COVERAGE.



A1	TREE PLANTING WITH 3X STAKING	A5	SHRUB PLANTING
N.T.S.		N.T.S.	

BUREAU OF ENGINEERING
 DEPARTMENT OF PUBLIC WORKS
 CITY OF LOS ANGELES

ENGINEERING
 CITY OF LOS ANGELES

DATE: BY: _____
 NO. REVISIONS: _____
 BUILDING NO. XX/XX
 INDEX NO. _____

LANDSCAPE ARCHITECT
 JAMES KNOWLTON ARCHITECT
 No. 3940
 9540 NORTH VAN NUYS BOULEVARD
 VAN NUYS, CA 91402
 LICENSED
 REVIEWED DATE: 6-04-18

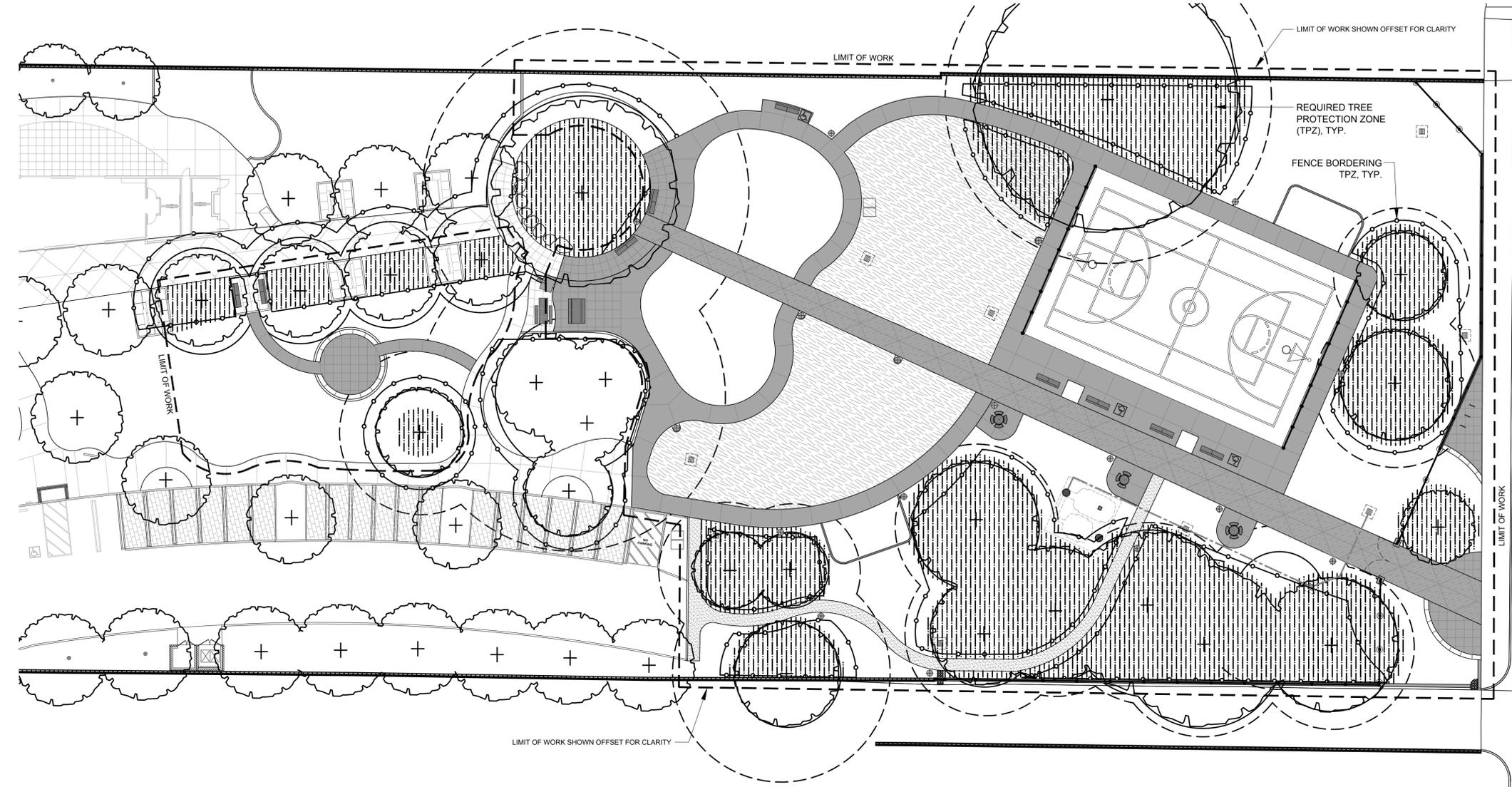
GARY LEE MOORE, PE, ENV SP, CITY ENGINEER
 ARCHITECTURAL DIVISION
 LANDSCAPE ARCHITECT: JANE ADRIAN
 LIC. NO. 3940
 DESIGNED BY: LORENA MATOS, P.L.A. | A.S.A. | ENV SP | COMM / LEED AP
 6-04-18
 DRAWN BY: LORENA MATOS, P.L.A. | A.S.A. | ENV SP | COMM / LEED AP
 6-04-18
 CHECKED BY: JANE ADRIAN
 6-04-18
 APPROVED BY: MAHMOOD KARMAZADEH, A.I.A., DEPUTY CITY ENGINEER
 6-04-18

CLIENT: DEPARTMENT OF RECREATION & PARKS
 GENERAL MANAGER: MICHAEL A. SHULL
 SHEET TITLE: PLANTING PLAN & DETAILS
 PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II
 ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D
 PLAN FILE NO. 622
 DRAWING NO. L701
 SHEET 37 OF 43
 PLOTTED: 8/12/2019 2:21 PM

TEMPLATE SHEET REVISION DATE: 11/2015
 REVISION DATE: 01/2019 1:28 PM
 FLE: Q:\IN-HOUSE-DESIGN\MID-VALLEY\MULTI-PURPOSE INTERGENERATIONPHASE\CONSTRUCTION DOCUMENTS\DWG\M2_L702_TREE_PROTECTION_ZONE.DWG

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.



TREE PROTECTION NOTES:

TREE PROTECTION - EXISTING TREES
 ALL TREES TO REMAIN IN PLACE SHALL BE PROTECTED USING THE FOLLOWING GUIDELINES:

TREE PROTECTION SPECIFICATION
 THESE TREE PROTECTION SPECIFICATIONS SHALL BE FOLLOWED TO PROTECT ALL TREES WHOSE DRIPLINE IS ENCLOSED UPON EITHER DIRECTLY OR INDIRECTLY BY CONSTRUCTION WITHIN CITY PARKS.

ANY FILL ARE 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 COMPLIANCE WITH THESE SPECIFICATIONS. THE MONETARY OR REPLACEMENT VALUE OF IMPACTED TREES WILL BE DETERMINED BY RECREATION AND PARKS ARBORIST OR BY RAP APPROVED ISA CERTIFIED ARBORIST.

AN ISA CERTIFIED ARBORIST, PRIVATE OR URBAN FORESTRY, SHALL BE INVITED TO THE JOB START MEETING AND ALSO NOTIFIED 48-HOURS PRIOR TO CONSTRUCTION

A. TREE PROTECTION: 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. **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.
 - (d) **If a TPZ is delineated on the plans, the size and shape shown on the plans shall supercede the above requirements.**
2. The contractor shall install a 5' high temporary chain link fence with one pedestrian access gate along the boundary of the TPZ. Add mulch within TPZ area as per Arborist requirements. See detail for temporary chain link fence on detail sheet.
3. The contractor shall provide one sign per each 20 lineal ft. of fence surrounding the TPZ indicating that fencing shall not be removed. See TPZ sign detail.
4. 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 by RAP Forestry staff within the TPZ must be done in accordance with the recommendations of RAP Forestry and under the supervision of a Monitoring Arborist. The Monitoring Arborist shall be supplied by the Contractor at his own expense, and be an ISA Certified Arborist or a Registered Consulting Arborist with verifiable experience in protecting trees. The Monitoring Arborist must be approved by RAP Forestry prior to commencement of work.

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 un-approved trenching, excavation or disturbance of soil will be allowed.
 - (e) No objects of any kind shall be attached to tree trunks.
 - (f) For any approved excavation or trenching, no cutting of roots over 2" diameter will be allowed. Contractor shall use a pneumatic drill (a.k.a. "air spade") to excavate under woody roots larger than 2" in diameter. If any roots are unintentionally severed, remedial cuts are to be made under the supervision the Monitoring arborist, and soil backfilled immediately.
6. 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.
7. Beyond the TPZ, the contractor shall also be responsible for protecting all existing trees to remain in place 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 below. Any necessary root cutting in this area must be approved in advance by either RAP Forestry or by a RAP approved ISA certified arborist employed by the Contractor. 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.
8. Irrigation to all existing 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 or demolition of existing irrigation systems. Trees are to be irrigated deeply and as often as required such that soil moisture is detectable at a minimum depth of 18" using a soil probe.
9. Upon completion of all trenching, grading, excavation and soil preparation work, contractor shall remove all items installed to protect trees during the construction process with approval of the Project Manager.
10. 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_Studies/Other/ProtectedTreeOrd.pdf.

DAMAGES
 If a tree that is designated to remain is removed or caused to be irreversibly damaged as determined by the Recreation and Parks Arborist, install a replacement tree matching in size, quality and variety using an installer designated by the Recreation and Parks Arborist. If an acceptable replacement tree is not available, pay damages to the City for the value of the damaged tree as assessed by the tree value formula in the ISA Guide for Establishing Value of Trees and Other Plants.



Call Toll Free
1-800-227-2600

TWO
WORKING DAYS
BEFORE YOU
DIG

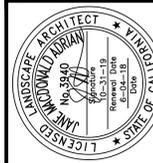
Underground Service Alert
of Southern California

LEGEND:

 TREE PROTECTION ZONE (TPZ)
 ANY WORK UNDER THE TPZ SHALL BE PERFORMED UNDER THE SUPERVISION AND APPROVAL OF A RAP PRE-APPROVED ISA ARBORIST.

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING

<p>ENGINEERING</p> <p>CITY OF LOS ANGELES</p>	<p>DATE: BY:</p>
<p>NO. REVISIONS:</p>	<p>BUILDING NO. XX/XX</p>
	<p>INDEX NO.</p>
<p>GARY LEE MOORE, PE, ENV SP - CITY ENGINEER</p>	<p>DATE: 6-04-18</p>
<p>ARCHITECTURAL DIVISION</p>	<p>LIC. NO. 3940</p>
<p>LANDSCAPE ARCHITECT: JANE ADRIAN</p>	<p>DESIGNED BY: LORENA MATOS, P.L.A. / ASLA / ENV SP / CCM / LEED AP</p>
<p>DESIGNED BY: LORENA MATOS, P.L.A. / ASLA / ENV SP / CCM / LEED AP</p>	<p>DRAWN BY: LORENA MATOS, P.L.A. / ASLA / ENV SP / CCM / LEED AP</p>
<p>DRAWN BY: JANE ADRIAN</p>	<p>CHECKED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER</p>
<p>APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., DEPUTY CITY ENGINEER</p>	<p>DATE: 6-04-18</p>

CLIENT: DEPARTMENT OF RECREATION & PARKS
 GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: TREE PROTECTION ZONE (TPZ)

PROJECT: MID-VALLEY INTERGENERATIONAL MULTI-PURPOSE CENTER, PHASE II

ADDRESS: 9540 NORTH VAN NUYS BOULEVARD VAN NUYS, CA 91402

WORK ORDER NO. E170420D

PLAN FILE NO. 622

DRAWING NO. L702

SHEET 38 OF 43

PLOTTED: 8/12/2019 2:21 PM

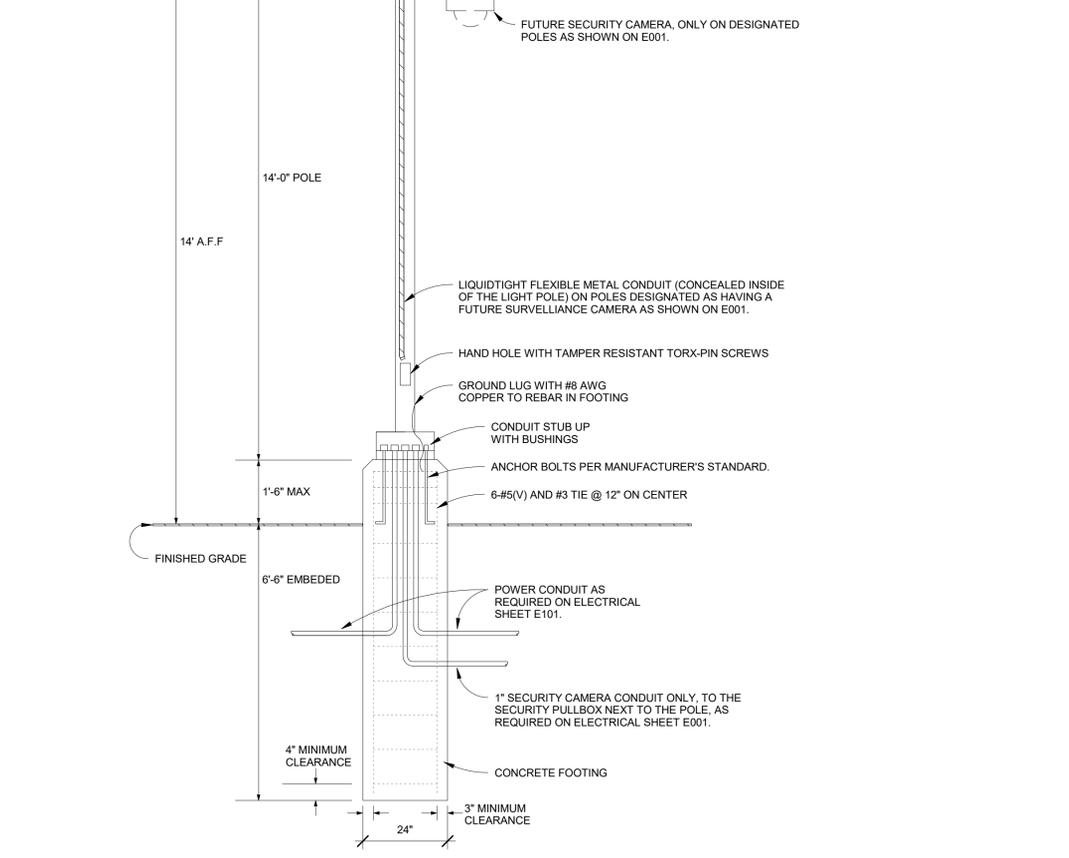
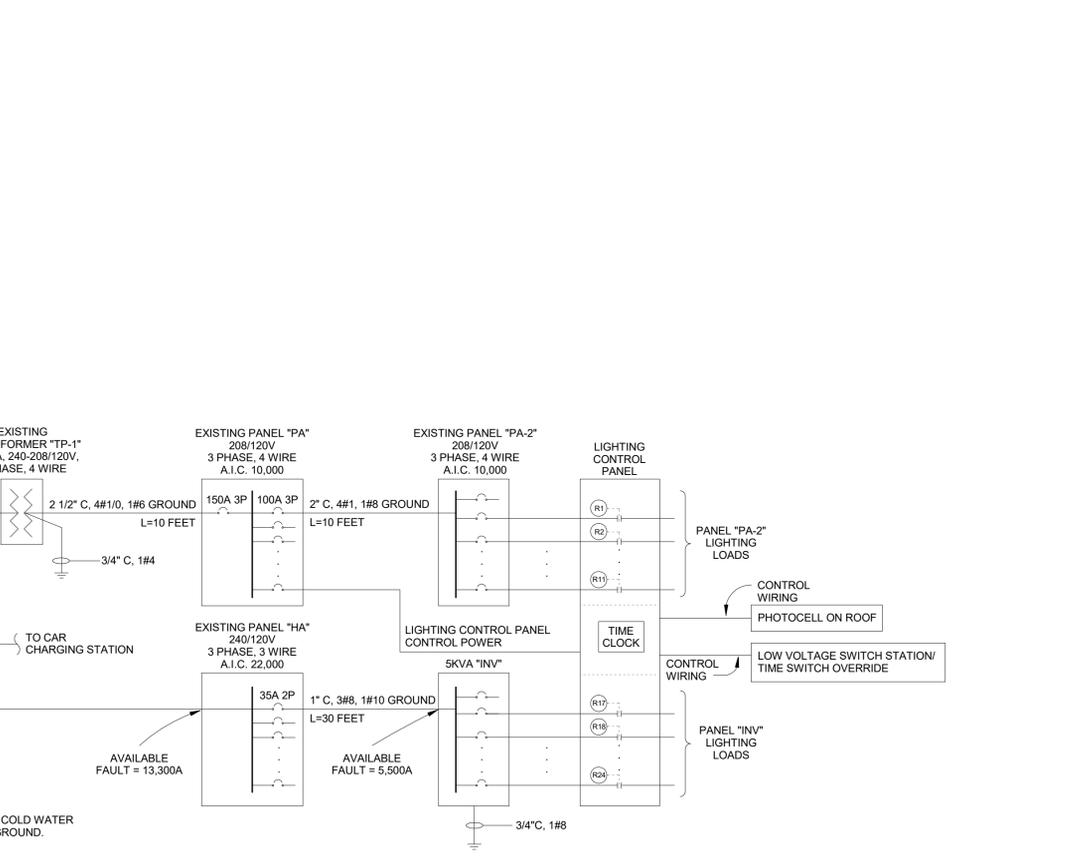
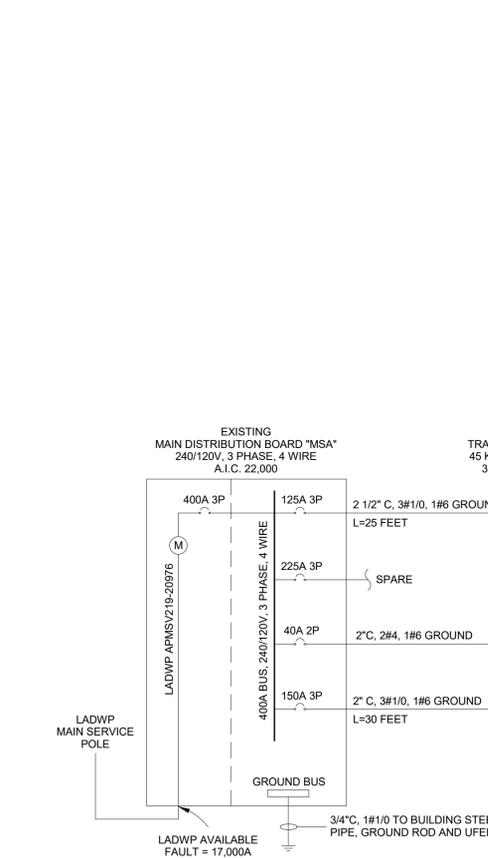
REVISED PANEL "PA"									
VOLTS: 208/120V		CODE: BLANK OR N: NON-CONTINUOUS				MAIN: 150A			
PHASE: 3		L: LONG-CONTINUOUS				BUS SIZE: 225A			
WIRES: 4						A.I.C. (MIN): 10,000A			
CKT #	BREAKER TRIP POLE	CIRCUIT DESCRIPTION	L	R	M	VOLT-AMPS			
						A	B	C	
1	20 1	OFFICE #102 RECEPTACLE				360	--	--	
2	20 1	ELECTRICAL RM #112 REC.				360	--	--	
3	20 1	OFFICE #102 RECEPTACLE				--	360	--	
4	20 1	STORAGE ROOM RECEPTACLE				--	180	--	
5	20 1	OFFICE #102 RECEPTACLE				--	--	360	
6	20 1	COMM. ROOM #113 REC.				--	--	720	
7	20 1	LOBBY #101 RECEPTACLE				540	--	--	
8	20 1	COMM. ROOM #113 REC.				360	--	--	
9	20 1	LOBBY #101 RECEPTACLE				--	--	720	
10	20 1	COMM. ROOM #113 REC.				--	--	360	
11	20 1	MULTI-PURPOSE RM #104 REC.				--	--	360	
12	20 1	IRRIGATION CONTROLLER				--	--	720	
13	20 1	MULTI-PURPOSE RM #104 REC.				360	--	--	
14	20 1	IRRIGATION CONTROLLER				720	--	--	
15	20 1	MULTI-PURPOSE RM #104 REC.				--	360	--	
16	20 1	IRRIGATION CONTROLLER				--	720	--	
17	20 1	SPARE				--	--	--	
18	20 1	EXTERIOR RECEPTACLE				--	--	540	
19	20 1	GARBAGE DISPOSAL				1200	--	--	
20	20 1	EXTERIOR RECEPTACLE				360	--	--	
21	20 1	MICROWAVE				--	1200	--	
22	15 1	HANDRYER				--	456	--	
23	20 1	REFRIGERATOR			L	--	--	1000	
24	20 1	SPARE				--	--	--	
25	20 1	GAS RANGE				180	--	--	
26	20 1	SPARE				--	--	--	
27	20 1	COFFEE MAKER			L	--	1200	--	
28	20 1	FIRE ALARM CONTROL PANEL			L	--	500	--	
29	20 1	PANTRY RECEPTACLE				--	--	800	
30	20 1	SECURITY PANEL			L	--	--	500	
31	20 1	PANTRY RECEPTACLE				900	--	--	
32	20 1	LIGHTING CONTROL PANEL			L	360	--	--	
33	20 1	PANTRY RECEPTACLE				--	900	--	
34	20 1	SPARE				--	--	--	
35	20 1	RESTROOM RECEPTACLE				--	--	540	
36	20 1	SPARE				--	--	--	
37	--	SPACE				--	--	--	
* 38	100 3	PANEL "PA2"				5748	--	--	
39	--	SPACE				--	--	--	
* 40	--	PAIRED WITH CIRCUIT #38				--	5955	--	
41	--	SPACE				--	--	--	
* 42	--	PAIRED WITH CIRCUIT #38				--	--	5718	
SUBTOTAL						11448	12911	11258	
TOTAL VA						35617			
LONG CONTINUOUS LOAD (25%)						250			
LARGEST MOTOR (25%)						300			
TOTAL LOADS						36167			
PANEL PA TOTAL LINE CURRENT						100.4			
HIGH PHASE AMPS WITH LCL						118.6			

REVISED PANEL "PA2"									
VOLTS: 208/120V		CODE: BLANK OR N: NON-CONTINUOUS				MAIN: LUG ONLY			
PHASE: 3		L: LONG-CONTINUOUS				BUS SIZE: 225A			
WIRES: 4						A.I.C. (MIN): 10,000A			
CKT #	BREAKER TRIP POLE	CIRCUIT DESCRIPTION	L	R	M	VOLT-AMPS			
						A	B	C	
1	20 1	LIGHTING			L	550	--	--	
2	20 1	LIGHTING			L	460	--	--	
3	20 1	LIGHTING			L	--	680	--	
* 4	20 1	EXTERIOR LIGHTING (PHASE 2)	6			L	--	348	
5	20 1	LIGHTING			L	--	--	350	
* 6	20 1	EXTERIOR LIGHTING (PHASE 2)	4			L	--	232	
7	20 1	LIGHTING			L	400	--	--	
* 8	20 1	EXTERIOR LIGHTING (PHASE 2)	6			L	348	--	
9	20 1	EXTERIOR LIGHTING			L	--	800	--	
10	15 1	EF-1 & EF-2				--	300	--	
11	20 1	EXTERIOR LIGHTING			L	--	800	--	
12	15 1	EF-3 & EF-4				--	300	--	
13	20 1	EXTERIOR LIGHTING			L	800	--	--	
14	15 1	EF-5				150	--	--	
15	20 1	EXTERIOR LIGHTING			L	--	800	--	
16	15 1	EF-6				--	150	--	
17	20 1	EXTERIOR LIGHTING			L	--	--	1200	
18	15 1	EF-7				--	--	150	
19	20 1	MULTIPURPOSE ROOM REC.				360	--	--	
20	20 1	SPARE				--	--	--	
21	20 1	MULTIPURPOSE ROOM REC.				--	360	--	
22	20 1	DRINKING FOUNTAIN				--	360	--	
23	20 1	MULTIPURPOSE ROOM REC.				--	--	360	
24	20 1	ROOF RECEPTACLE				--	--	180	
25	20 1	GARBAGE DISPOSAL				1200	--	--	
26	20 1	SPARE				--	--	--	
27	20 1	MICROWAVE				--	1500	--	
28	20 1	SPARE				--	--	--	
29	20 1	REFRIGERATOR			L	--	--	1200	
30	20 1	SPARE				--	--	--	
31	20 1	EXTERIOR FIELD RECEPTACLE				360	--	--	
32	20 1	SPARE				--	--	--	
* 33	20 1	IRRIGATION CONTROLLER...				--	720	--	
34	20 1	SPARE				--	--	--	
35	--	SPACE				--	--	--	
36	--	SPACE				--	--	--	
37	--	SPACE				--	--	--	
38	--	SPACE				--	--	--	
39	--	SPACE				--	--	--	
40	--	SPACE				--	--	--	
41	--	SPACE				--	--	--	
42	--	SPACE				--	--	--	
SUBTOTAL						4988	6018	4772	
TOTAL VA						15778			
LONG CONTINUOUS LOAD (25%)						2422			
LARGEST MOTOR (25%)						300			
TOTAL LOADS						18500			
PANEL PA2 TOTAL LINE CURRENT						51.35			
HIGH PHASE AMPS WITH LCL						56.3			

REVISED PANEL "HA"									
VOLTS: 240/120V		CODE: BLANK OR N: NON-CONTINUOUS				MAIN LUG ONLY			
PHASE: 3		L: LONG-CONTINUOUS				BUS SIZE: 225A			
WIRES: 3						A.I.C. (MIN): 22,000A			
CKT #	BREAKER TRIP POLE	CIRCUIT DESCRIPTION	L	R	M	VOLT-AMPS			
						A	B	C	
1	--					--	--	--	
2	20 1					--	--	--	
3	--					--	--	--	
4	--					--	--	--	
5	--					--	--	--	
6	--					--	--	--	
7	--					--	--	--	
8	--					--	--	--	
9	--					--	--	--	
10	--					--	--	--	
11	--					--	--	--	
12	--					--	--	--	
13	--					--	--	--	
14	--					--	--	--	
15	--					--	--	--	
16	--					--	--	--	
17	--					--	--	--	
18	--					--	--	--	
19	--					--	--	--	
20	--					--	--	--	
21	--					--	--	--	
22	--					--	--	--	
23	15 2	CU-1				--	--	1320	
24	--					--	--	--	
25	--	PAIRED WITH CIRCUIT #23				1320	--	--	
26	--					--	--	--	
27	15 2	FC-1				--	--	150	
28	--					--	--	--	
29	--	PAIRED WITH CIRCUIT #27				--	--	150	
30	--					--	--	--	
31	40 3	EW-1				4000	--	--	
32	--					--	--	--	
33	--	PAIRED WITH CIRCUIT #31				--	4000	--	
34	--					--	--	--	
35	--	PAIRED WITH CIRCUIT #31				--	--	4000	
36	--					--	--	--	
37	60 3	AC-1				8070	--	--	
38	--					--	--	--	
39	--	PAIRED WITH CIRCUIT #37				--	8070	--	
* 40	35 2	5KVA "INV" INVERTER				--	2024	--	
41	--	PAIRED WITH CIRCUIT #37				--	--	8070	
* 42	--	PAIRED WITH CIRCUIT #40				--	--	2124	
SUBTOTAL						13390	14244	15664	
TOTAL VA						43298			
LONG CONTINUOUS LOAD (25%)						0			
LARGEST MOTOR (25%)						0			
TOTAL LOADS						43298			
PANEL HA TOTAL LINE CURRENT						104.2			
HIGH PHASE AMPS WITH LCL						124.7			

REVISED PANEL "INV"									
INPUT: 240V		CODE: BLANK OR N: NON-CONTINUOUS				MAIN LUG ONLY			
OUTPUT: 240/120V		L: LONG-CONTINUOUS				BUS SIZE: 225A			
WIRES: 3						A.I.C. (MIN): 22,000A			
CKT #	BREAKER TRIP POLE	LOCATION	QTY	ZONE	VOLT-AMPS				
					A	B	C		
1	20 1	EMERGENCY LIGHTING			600	--	--		
2	20 1	EMERGENCY LIGHTING			--	434	--		
3	20 1	SPARE			--	--	--		
4	20 1	SPARE			--	--	--		
5	20 1	SPARE			424	--	--		
6	20 1	EXTERIOR EMER. LIGHTING	3		--	600	--		
7	20 1	EXTERIOR EMER. LIGHTING	3		600	--	--		
8	20 1	EXTERIOR EMER. LIGHTING	4		--	800	--		
9	20 1	EXTERIOR EMER. LIGHTING	2		400	--	--		
* 10	20 1	EXTERIOR EMER. LIGHTING (PHASE 2)	5		--	290	--		
11	20 1	SPARE			--	--	--		
12	20 1	SPARE			--	--	--		
13	20 1	SPARE			--	--	--		
14	20 1	SPARE			--	--	--		
15	20 1	SPARE			--	--	--		
16	20 1	SPARE			--	--	--		
17	20 1	SPARE			--	--	--		
18	20 1	SPARE			--	--	--		
19	20 1	SPARE			--	--	--		
20	20 1	SPARE			--	--	--		
SUBTOTAL					2024	2124			
TOTAL VA					4148				

REVISED LIGHTING CONTROL PANEL				
RELAY	CIRCUIT	CIRCUIT DESCRIPTION	LOW VOLT. SWITCH OVERRIDE	REMARKS
1	PA2-1	LOBBY, STORAGE AND RECEPTION	YES	
2	PA2-3	MULTIPURPOSE ROOM	YES	
3	PA2-2	BREAK ROOM	YES	
4	PA2-7	EXTERIOR LIGHTING		PC ON, T/C OFF
5	PA2-9	EXTERIOR LIGHTING		PC ON, T/C OFF
6	PA2-11	EXTERIOR LIGHTING		PC ON, T/C OFF
7	PA2-13	EXTERIOR LIGHTING		PC ON, T/C OFF
8	PA2-15	EXTERIOR LIGHTING		PC ON, T/C OFF
9	PA2-17	EXTERIOR LIGHTING		PC ON, T/C OFF
* 10	PA2-4	EXTERIOR LIGHTING		PC ON, T/C OFF
* 11	PA2-6	EXTERIOR LIGHTING		PC ON, T/C OFF
* 12	PA2-8	EXTERIOR LIGHTING		PC ON, T/C OFF
13		SPARE		
14		SPARE		
15		SPARE		
16		SPARE		
17	INV-1	MULTI-PURP & COMM. RM EMER. LTG	YES	
18	INV-2	EXTERIOR EMERGENCY LIGHTING		PC ON/OFF
19	INV-6	SITE EMERGENCY LIGHTING		PC ON/OFF
20	INV-7	SITE EMERGENCY LIGHTING		PC ON/OFF
21	INV-8	SITE EMERGENCY LIGHTING		PC ON/OFF
22	INV-9	SITE EMERGENCY LIGHTING		PC ON/OFF
* 23	INV-10	SITE EMERGENCY LIGHTING		PC ON/OFF
24		SPARE		
25		SPARE		
26		SPARE		
27		SPARE		
28		SPARE		
29		SPARE		
30		SPARE		
31		SPARE		
32		SPARE		
33		SPARE		
34		SPARE		
35				
36				



1 EXISTING PARTIAL SINGLE LINE POWER DIAGRAM N.T.S.

2 LIGHTING POLE 18' BASE DETAIL N.T.S.

2 LIGHTING POLE 18' BASE DETAIL N.T.S.

ELECTRICAL SPECIFICATIONS

DIVISION 16

1. GENERAL SCOPE OF WORK

WORK IN THIS CONTRACT: ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE LIGHTING AND ELECTRICAL DISTRIBUTION SYSTEM, COMPLETE AND READY FOR USE, IN ACCORDANCE WITH THESE CONTRACT DRAWINGS AND THESE SPECIFICATIONS.

2. CLEANING, INSTALLATION AND REMOVAL OF RUBBISH

BESIDES THE GENERAL CLEANING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT THE FOLLOWING SPECIAL CLEANING FOR ALL TRADES SHALL BE DONE AT THE COMPLETION OF THE WORK AND DURING INSTALLATION.

- A. CLEAN ALL ELECTRICAL EQUIPMENT AND DEVICES, REMOVE STAINS, DUST, DIRT, PLASTER, PAINT AND ETC.
B. REMOVE ALL SPOTS, SOILS, PLASTERS AND PAINTS FROM ALL EXISTING WORK AND CLEAN TO ORIGINAL CONDITION.
C. PROTECT AND CLEAN ALL FIXTURES AND EQUIPMENT.

3. CONSTRUCTION WATER, LIGHT AND POWER

A. THE DEPARTMENT WILL FURNISH AT NO COST TO CONTRACTOR WATER AND ELECTRICITY AS IT EXISTS ON THE SITE. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL TEMPORARY LINES, FIXTURES AND EQUIPMENT FOR WATER AND ELECTRICITY AND REMOVE SAME AT COMPLETION OF WORK AT HISHER OWN EXPENSE.

B. THE DEPARTMENT WILL NOT BE HELD RESPONSIBLE FOR FAILURE OF EXISTING SOURCES TO SUPPLY CONTINUOUS WATER OR POWER, NOR WILL THE DEPARTMENT BE HELD RESPONSIBLE FOR THE EXISTING SOURCES TO SUPPLY ADEQUATE DEMAND AS REQUIRED BY THE CONSTRUCTION OF THIS WORK.

4. MAIN SERVICE

A. REQUIRED:

- 1. UNDERGROUND SERVICE CONDUIT FOR LIGHT AND POWER FROM MAIN SWITCHBOARD TO PROPERTY LINE AS DIRECTED BY THE DEPARTMENT OF WATER AND POWER.
2. INSTALLATION OF CURRENT TRANSFORMER IN SWITCHBOARD, THE TRANSFORMER TO BE FURNISHED BY THE DEPARTMENT OF WATER AND POWER.

B. NOT INCLUDED IN CONTRACT:

- 1. UNDERGROUND SERVICE CONDUITS FROM PROPERTY LINE TO UTILITY SOURCE TO BE INSTALLED BY THE DEPARTMENT OF WATER AND POWER AND TO BE PAID FOR BY THE CITY.
2. MAIN SERVICE UNDERGROUND CONDUCTORS FROM UTILITY SOURCE TO MAIN SWITCHBOARD.
3. CURRENT TRANSFORMERS FOR SWITCHBOARD.
4. SERVICE CONNECTIONS TO CURRENT TRANSFORMERS AND METERS.
5. METERS.
6. EXCESS CABLE CHARGES TO BE PAID BY THE CITY.

5. MAIN SWITCHBOARD

A. TYPE: NEMA 3R FLOOR STANDING ENCLOSURE, DEAD FRONT, DEAD REAR, WITH ALL BUSSING, WIRING AND CONNECTIONS ACCESSIBLE FROM THE FRONT, ARRANGED IN ACCORDANCE WITH WIRING DIAGRAMS AND APPROVED SHOP DRAWINGS AS MANUFACTURED BY MYERS, HOFFMAN, OR APPROVED EQUIVALENT MODEL.

B. CONSTRUCTION:

- 1. ALL BUSSING MATERIALS SHALL BE TIN PLATED COPPER PER NEMA STANDARDS.
2. VERTICAL SECTIONS SHALL HAVE FULL HEIGHT BUSSING AND WHERE SPACES FOR FUTURE DEVICES ARE SHOWN ON THE DRAWINGS, ALL THE NECESSARY MOUNTING HARDWARE AND PROVISIONS SHALL BE FURNISHED.

C. SERVICE SECTION:

- 1. SHALL CONTAIN FIXED POSITION MAIN CIRCUIT BREAKER EQUIPPED WITH PROVISIONS FOR UTILITY COMPANY METERING IN STRICT ACCORDANCE WITH THE DEPARTMENT OF WATER AND POWER REQUIREMENTS. THE MAIN CIRCUIT BREAKER SHALL BE TRIP FREE, THERMAL MAGNETIC, MOLDED CASE TYPE, BY SQUARE D, SIEMENS, OR APPROVED EQUIVALENT MODEL.
2. THERE SHALL BE MEANS TO LOCK EACH MAIN SERVICE BREAKER IN THE OPEN POSITION WITH A PADLOCK. THE DEPARTMENT OF WATER AND POWER WILL FURNISH THE LOCK AND OPEN THE MAIN BREAKER WHEN REQUIRED BY STATION MAINTENANCE OR REPAIR.
D. DISTRIBUTION SECTION: SHALL CONTAIN THERMAL-MAGNETIC MOLDED CASE CIRCUIT BREAKER OF THE REQUIRED VOLTAGE & AMPERAGE WITH A MINIMUM OF 10,000A RMS SYMMETRICAL SHORT CIRCUIT INTERRUPTING CAPACITY BY SQUARE D (TYPE QOB), SIEMENS MODEL, OR APPROVED EQUIVALENT MODEL, UNLESS NOTED OTHERWISE ON THE PLAN.

E. CURRENT AND POTENTIAL TRANSFORMERS:

SHALL BE PROVIDED BY THE DEPARTMENT OF WATER AND POWER AND SHALL BE MOUNTED IN THE SWITCHBOARD BY THE CONTRACTOR SO AS TO BE ACCESSIBLE. PROVISIONS SHALL BE FURNISHED FOR EXTERNAL TESTING OF ALL LINE CURRENTS AND VOLTAGE COMPLETE WITH TEST BLOCKS AND PLUGS.

F. IDENTIFICATION: ENGRAVED LAMINATED PLASTIC NAMEPLATES TO BE PROVIDED FOR EACH DEVICE ON THE SWITCHBOARD. NAMEPLATES TO BEAR THE DESIGNATION OF THE LOAD CONTROLLED.

G. TIGHTEN CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR EQUIPMENT CONNECTORS, WHERE MFRS TORQUING REQUIREMENTS ARE NOT INDICATED, USE TIGHTENING TORQUES SPECIFIED IN UL STANDARD 486A.

H. MOUNTING INDOOR TYPE: SECURELY BOLTED TO FLOOR AND WALL AND PLUMB AND SQUARE. PROVIDE 4" RAISED CONCRETE SLAB FOR MOUNTING OF SWITCHGEAR LOCATED ON THE GROUND FLOOR. DIMENSION OF RAISED CONCRETE SLAB TO BE THE SAME AS THE SWITCHGEAR.

I. MOUNTING OUTDOOR TYPE: SHALL BE IN NEMA 3R, GAUGE 10 METAL ENCLOSURE UNLESS NOTED OTHERWISE ON THE PLAN.

J. SHOP DRAWINGS: BEFORE ANY FABRICATION OF SWITCHBOARD IS BEGUN, SHOP DRAWINGS INDICATING THE MATERIALS AND DETAILS OF CONSTRUCTION AND EQUIPMENT AND UL LISTING SHALL BE APPROVED BY THE DEPARTMENT OF WATER AND POWER PRIOR TO THEIR SUBMITTAL TO THE DEPT. OF RECREATION AND PARKS.

K. GROUNDING: PROVIDE AND INSTALL A DRIVEN GROUND COPPER ROD 5/8" IN DIAMETER BY 10 FT. LONG FOR SERVICE GROUNDING REQUIREMENTS LOCATED INSIDE THE ENCLOSURE. ALSO PROVIDE AND USE OTHER GROUNDING ELECTRODES AS INDICATED ON PLAN OR AS REQUIRED BY CODE. EACH ELECTRODE SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM. THE BONDING JUMPER SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CODE, ARTICLE 250. TIGHTEN CONNECTORS TO COMPLY WITH TIGHTENING TORQUES SPECIFIED IN UL STD. 486 TO ASSURE PERMANENT AND EFFECTIVE GROUND.

6. PANELBOARDS

A. PANELBOARDS SHALL BE CIRCUIT BREAKER TYPE WITH BOLT-ON TYPE, TRIP FREE CIRCUIT BREAKERS. PANELBOARDS SHALL BE BUSHING AND BUSHING MAIN LUGS OR MAIN LUGS AND ALL BRANCH CIRCUIT BREAKER AS INDICATED ON THE SCHEDULES. EACH BRANCH BREAKERS SHALL HAVE PERMANENT TYPE PLASTIC OR METAL NUMBERS TO IDENTIFY THE CIRCUIT PROTECTED. MINIMUM SIZE SHALL BE 20"W X 5 3/4"D, HEIGHT AS REQUIRED. PANELBOARD SHALL BE SQUARE D TYPE NQDD OR EQUIVALENT SIEMENS MODEL OR EQUAL.

B. IDENTIFICATION SHALL HAVE ENGRAVED LAMINATED PLASTIC NAMEPLATES. SCHEDULES SHALL BE TYPEWRITTEN AND SHALL DESIGNATE THE AREA OR EQUIPMENT SERVED BY EACH CIRCUIT MOUNTED IN A CARD HOLDER ON THE INSIDE OF THE DOOR AND COVERED WITH GLASS OR CLEAR PLASTIC.

C. SHOP DRAWINGS ARE REQUIRED; THEY SHALL INDICATE ALL THE DETAILS OF CONSTRUCTION AND EQUIPMENT. ALL ITEMS SUBMITTED FOR INSTALLATION SHALL BEAR A UL LABEL AND BE LISTED FOR THE PURPOSE.

D. CIRCUIT BREAKERS SHALL HAVE A MINIMUM OF 10,000 AMPS RMS SYMMETRICAL FOR 120/240 VOLTS AND 22,000 AMPS FOR 277/480 VOLTS SYSTEM UNLESS NOTED ON THE PLAN.

E. MOUNTING SHALL BE FLUSH WITH SURROUNDING WALLS UNLESS SPECIFICALLY NOTED TO BE SURFACE MOUNTED ON THE PLAN. MAXIMUM HEIGHT OF THE HIGHEST CIRCUIT BREAKER OR CONTROL DEVICES SHALL BE NO MORE THAN 6 FEET ABOVE THE SURROUNDING FINISH FLOOR.

F. TIGHTEN CONNECTORS AND TERMINALS INCLUDING SCREWS AND BOLTS IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR EQUIPMENT CONNECTORS, WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTORS AND TERMINALS TO COMPLY WITH TIGHTENING TORQUE SPECIFIED IN UL STANDARDS 486 A & B.

7. RAINPROOF ENCLOSURES FOR SWITCHBOARD AND/OR PANELBOARDS (SEE DETAIL DRAWING)

A. RAINPROOF ENCLOSURE FOR OUTDOOR INSTALLATION SHALL BE FREE STANDING NEMA TYPE 3R GAUGE 10 CONSTRUCTION (EXCEPT GAUGE 12 STAINLESS STEEL FOR IRRIGATION CONTROLLER SERVICE) ENCLOSURE OF SUITABLE DIMENSION. ALL BOLT HEADS EXPOSED ON THE EXTERIOR OF ENCLOSURE SHALL BE ROUND HEAD GALVANIZED TYPE OR EQUAL.

B. DOORS SHALL BE CUSTOM EQUIPPED WITH STRONG PAD LOCKABLE STEEL COVER TO PROTECT THE OPERATING HANDLES. PAD LOCKABLE COVERS SHALL ACCOMMODATE THE DEPARTMENT OF RECREATION AND PARKS LOCKS. PROVIDE TOP AND BOTTOM DOOR LOUVERS.

C. MOUNTING OUTDOOR TYPE SHALL BE SECURELY BOLTED TO A STEEL REINFORCED CEMENT CONCRETE PAD EXTENDING 6 INCHES BEYOND THE PANEL ENCLOSURE IN BOTH LENGTH AND WIDTH DIMENSIONS AND 36 INCHES IN FRONT OF PANEL ENCLOSURE. THE PAD SHALL EXTEND 6" ABOVE AND 6" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS. REINFORCING STEEL SHALL BE #4 REBAR LAID LENGTHWISE AND CROSSWISE 6" O.C. WITH 3 INCH CLEAR COVER TO SUBGRADE, AND SECURELY TIED AT EACH POINT OF CONTACT.

D. LIGHTS AND RECEPTACLES: PROVIDE AND INSTALL A SURFACE MOUNTED LED FIXTURE, WP WALL SWITCHER AND 20 AMP RATED PULL DOWN TYPE ACLE INSIDE THE ENCLOSURE FED FROM ONE 20A-1P CIRCUIT BREAKER WIRED WITH 2#12 THHN/THWN CU AND 1#12 GROUND IN 3/4" CONDUIT.

8. CONTROLS

A. TYPES:

- 1. CIRCUIT BREAKERS - SHALL BE THERMAL MAGNETIC. EACH BREAKER SHALL BE EQUIPPED WITH A DEVICE FOR INDIVIDUAL PADLOCKING.
2. ELECTRONIC TIME SWITCH - SHALL BE INTERMATIC MODEL NO. ET70215C ASTRONOMICAL ELECTRONIC TIME CONTROL WITH AUTOMATIC DAYLIGHT SAVING TIME AND LEAP YEAR ADJUSTMENTS.
3. AUTOMATIC SHUT-OFF TIMER - SHALL BE INTERMATIC MODEL NO. FF12HC. IT SHALL BE SOLID STATE WITH ADJUSTABLE TIMER RANGE FROM FIVE MINUTES TO 12 HOURS. THE CONTROL SHALL BE RATED FOR 20 AMPS, 125 VAC, 60 HZ.
4. LOCAL SWITCHES - SHALL BE SPECIFICATION GRADE, HUBBLE 1221-1 SERIES OR EQUIVALENT LEVITON MODEL OR EQUAL.
5. LIGHTING CONTACTORS - AMPERE RATING, NUMBER OF POLES, LINE VOLTAGE, CONTROL VOLTAGE, MOMENTARY OR MAINTAINED CONTACT AS INDICATED ON DRAWINGS, OR AS REQUIRED, SQUARE D CLASS 8903, OR EQUIVALENT AUTOMATIC SWITCH CO. MODEL OR EQUAL.
6. PUSH BUTTON STATIONS - HEAVY DUTY CONTROL STATIONS, LOCATE IN RECREATION DIRECTORS OFFICE (UNLESS OTHERWISE INDICATED) FOR REMOTE CONTROL OF FIELD LIGHTING. SQUARE D CLASS 9001, TYPE B IN NEMA 4 ENCLOSURE FOR OUTSIDE INSTALLATIONS OR EQUIVALENT FURNAS MODEL OR EQUAL. LOCATE PUSH BUTTON AS SPECIFIED ON THE PLAN OR DETAIL.

B. IDENTIFICATION - ALL CONTROL DEVICES SHALL BE IDENTIFIED BY ENGRAVED PLATES DESIGNATING THE EQUIPMENT CONTROLLED, MOTORS AND EQUIPMENT SHALL BEAR NEAT, LEGIBLE AND PERMANENT IDENTIFICATION CORRESPONDING WITH THAT ON THE CONTROL DEVICES USING ENGRAVED LAMINATED PLASTIC NAMEPLATES AFFIXED WITH A MINIMUM OF TWO ESCUTCHEON PINS OR SCREWS.

C. LOCATIONS - FOR OUTDOOR INSTALLATION, TIME SWITCHES AND CONTACTORS SHALL BE LOCATED IN A SEPARATELY PARTITIONED SPACE INSIDE THE RAINPROOF ENCLOSURE, OR AS INDICATED IN THE PLAN.

9. BOXES

A. TYPES: WEATHERPROOF CAST BOXES: FOR OUTDOOR AND SURFACE WIRING AND WHERE INDICATED ON THE DRAWINGS BY SYMBOL 'WP', CROUSE-HINDS FD OR RUSSELL-STOLL FD SERIES OUTLET BOXES OR EQUAL. CONCRETE PULL BOX SHALL BE PROVIDED WITH A 'MR. STEEL SECURITY LID' FOR UNDERGROUND INSTALLATION, BROOKS PRODUCT MODEL 5PB OR EQUAL, OR AS INDICATED ON THE PLAN.

B. ACCESSORIES: WEATHERPROOF FOR CROUSE-HINDS FD SERIES OUTLET BOXES OR RUSSELL-STOLL FD SERIES OR EQUAL.

C. UNDERGROUND PULL BOXES: AVOID INSTALLATION AT THE LOWEST SPOT OF THE SURROUNDING AREAS, PULL BOX SHOULD SIT ON 2"x4" FRAMED REDWOOD AND SHALL HAVE AT LEAST 12" LAYER OF PEA GRAVEL BENEATH THE BOX.

10. RECEPTACLES

A. TYPES: ALL RECEPTACLES SHALL BE SPECIFICATION GRADE AND SHALL MEET NEMA WD-1-1974 TESTS.

B. FLUSH WALL TYPE, HUBBELL 5262-1, 15 AMPERE, 125 VOLTS OR HUBBELL 8300-1, 20 AMPERE, 125 VOLT, OR EQUIVALENT LEVITON MODEL OR EQUAL.

C. CONNECTIONS SHALL BE SCREW - TERMINAL TYPE, NO PUSH-IN TYPE CONNECTIONS ARE PERMITTED.

11. OUTLET PLATES

A. SHALL BE STAINLESS STEEL FOR ALL RECEPTACLE AND LIGHT SWITCH, SIGNAL AND COMMUNICATION OUTLETS.

B. SHALL BE ENGRAVED PLATES FOR SPECIAL EQUIPMENT, MOTORS, VOLTAGE OTHER THAN 120 VOLT AND GANGED SWITCHES.

12. INSTALLATION OF POLES

A. TYPE: SHALL BE ROUND TAPERED GALVANIZED STEEL UNLESS OTHERWISE INDICATED. POLE HEIGHT SHALL BE 30' UNLESS OTHERWISE NOTED ON THE PLAN.

B. ERECTION: IN ACCORDANCE WITH APPROVED SHOP DRAWINGS, PLUMB AND PROPERLY ALIGNED. BASE PLATES SHALL BE GROUDED USING AN APPROVED STANDARD COMMERCIAL NON-SHRINK GROUDED MORTAR WITH L.A. RESEARCH REPORT NUMBER. THE NON-SHRINK MORTAR SHALL BE HELD BACK ONE INCH FROM EDGES OF BASE PLATES, AND THE SPACE THEN FILLED WITH GROUT COMPOSED OF ONE PART LOW ALKALI PORTLAND CEMENT TO TWO PARTS WASHED SAND, BEVELED AND TROWELED SMOOTH.

C. GROUNDING: SECURELY GROUND ALL FLOODLIGHTING POLES WITH APPROVED GROUNDING BUSHINGS AND GROUNDING CLAMPS.

D. CONDUITS ENTERING AND/OR LEAVING POLE FOOTING SHALL BE RIGID PVC COATED STEEL WITH PLASTIC BUSHING. MAKE TRANSITION FROM PVC TO METALLIC AT A MINIMUM DISTANCE OF 3'-0" FROM FOOTINGS.

E. TACK WELDING OF NUTS TO WASHER AND WASHER TO BASE PLATE AS REQUIRED.

13. CONDUIT

A. REQUIRED: ALL WIRING SHALL BE IN RIGID CONDUIT, OR PVC COATED GALVANIZED RIGID STEEL CONDUIT EXCEPT AS FOLLOWS:

1. CONCRETE ENCASED SCHEDULE 40 PVC MAY BE USED UNDERGROUND WHEN TRANSITIONING TO PVC COATED GALVANIZED RIGID STEEL CONDUIT STUBS. PVC COATED GALVANIZED RIGID STEEL CONDUIT SHALL BE USED 3 FEET INSIDE OF FOOTING LINES AND UNDERGROUND PULL BOXES.

2. EMT MAYBE USED ABOVE GROUND INSIDE BUILDINGS WHERE NOT ENCASED IN MASONRY OR CONCRETE AND NOT SUBJECT TO PHYSICAL DAMAGE.

3. FOR METHANE ZONES: ALL UNDERGROUND CONDUITS SHALL BE THREADED PVC COATED GALVANIZED RIGID CONDUIT STEEL CONDUIT. FOR ALL PENETRATIONS THROUGH THE GRADE, A CONDUIT SEAL SHALL BE INSTALLED WITHIN 18" ABOVE THE FINISHED GRADE, UNLESS OTHERWISE NOTED.

B. TYPES:

- 1. RIGID STEEL CONDUIT: IN ACCORDANCE WITH USA STD C80.1 AND ASTM B-6.
2. ELECTRICAL METALLIC TUBING: IN ACCORDANCE WITH USA STD C80-3 & ASTM B-6.
3. PVC CONDUIT: SHALL CONFORM TO NEMA STANDARD TC-6-1967, WC-1094 AND UL STANDARD 651, 1974 HEAVY WALL, SCHEDULE 40 BURIED NOT LESS THAN 24 INCHES BELOW GRADE.
4. PVC EXTERNALLY COATED RIGID STEEL CONDUIT, RIGID STEEL ZINC COATED WITH ADDITIONAL COATING OF PVC CONFORMING TO ANSI C-80 & NEMA RN1.

C. FITTINGS AND ACCESSORIES:

- 1. FOR RIGID STEEL CONDUIT: APPROVED TYPES: ERICSON COUPLING OR THREADESS CONNECTORS FOR JOINING RUNS, GROUNDING BUSHINGS SHALL BE THOMAS & BETTS OR APPLETON MALLEABLE IRON INSULATED GROUNDING BUSHINGS, UL FILE E14814A. FACTORY ELLS SHALL NOT BE USED UNDERGROUND.
2. FOR ELECTRICAL METALLIC TUBING: COMPRESSION GLAND OR STEEL SET SCREW TYPE COUPLINGS AND CONNECTORS WITH INSULATED THROAT.

D. SIZES: MINIMUM OF 3/4" CONDUIT UNLESS NOTED ON THE PLAN

E. CONCRETE COVER: UNDERGROUND CONDUIT RUNS IN RECREATION AND PARKS PROPERTY INSTALLED WITH SCHEDULE 40 PVC SHALL HAVE A MINIMUM 3" TOP COVER OF CONCRETE OVER ITS ENTIRE LENGTH (EXCEPT UNDER CONCRETE SIDEWALKS) AND SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR SIZED ACCORDING TO THE PREVAILING CODE, BUT NOT LESS THAN SHOWN ON THE PLAN. CONCRETE COVER SHALL BE A MINIMUM OF 100-E-100 SLURRY MIX OR AS REQUIRED BY LADWP. SEE DETAIL #1 ON SHEET E201.

14. CONDUIT INSTALLATION

A. ALL CONDUITS SHALL BE CONCEALED EXCEPT WHERE OTHERWISE INDICATED ON THE DRAWINGS.

B. PVC COATED STEEL CONDUIT WHICH WILL BE BURIED IN THE GROUND SHALL HAVE WATER TIGHT JOINTS. JOINTS SHALL BE ASSEMBLED WITH ANTI-SEIZURE COMPOUND AS RECOMMENDED BY THE CONDUIT MANUFACTURER.

C. INSTALL EXPANSION FITTINGS IN ALL RACEWAYS WHENEVER EXPANSION JOINTS ARE CROSSED. FITTINGS SHALL BE EQUAL TO "OZ" TYPE "XZ" OR "TX".

D. FOR CONCRETE SLABS-ON-GRADE:

- 1. NO HORIZONTAL CONDUIT SHALL BE INSTALLED IN CONCRETE SLABS-ON-GRADE.
2. CONDUITS PENETRATING THE CONCRETE SLABS-ON-GRADE SHALL BE PVC COATED RIGID GALVANIZED STEEL.
3. CONDUITS PENETRATING THE CONCRETE SLABS-ON-GRADE SHALL EXTEND THREE INCHES ABOVE THE TOP OF THE CONCRETE FLOOR.

E. TOPS OF UNDERGROUND CONDUIT RUNS OUTSIDE OF BUILDING OR UNDER CONCRETE SLABS SHALL NOT BE LESS THAN 24" BELOW FINISHED GRADE, NOR LESS THAN THAT REQUIRED BY THE DEPARTMENT OF WATER AND POWER. UNDERGROUND CONDUIT SHALL NOT PASS OVER TANKS OR OTHER UNDERGROUND EQUIPMENT OR THROUGH FOOTINGS EXCEPT AS DETAILED ON THE STRUCTURAL DRAWINGS.

F. ALL CONDUIT BENDS INSTALLED UNDERGROUND SHALL BE THE LONG RADIUS TYPE WITH RADII NOT LESS THAN 10 TIMES THE INTERNAL DIAMETER OF THE CONDUIT AND WITH NOT MORE THAN TWO 90° BENDS AND ONE 45° SWEEP IN ANY RUN. EXCEPTION: FOR POWER AND LIGHT CONDUIT ABOVE GROUND, FACTORY ELLS ARE PERMITTED.

G. EACH RUN SHALL BE TESTED IMMEDIATELY AFTER INSTALLATION TO ASSURE FREEDOM FROM OBSTRUCTION AND EACH END PLUGGED AFTER THE TESTING IS COMPLETED. A GALVANIZED IRON PULL WIRE NO. 12 AWG OR 18-INCH NYLON POLYPROPYLENE CORD SHALL BE INSTALLED IMMEDIATELY AFTER CONDUIT INSTALLATION IN EACH CONDUIT IN WHICH THE CONDUCTORS WILL NOT BE IMMEDIATELY INSTALLED.

H. CONDUITS "JACK-THRU" AND/OR BORED THRU UNDERGROUND SHALL BE MINIMUM 1" RIGID STEEL CONDUIT.

I. CONDUITS IN UNDERGROUND PULL BOXES SHALL BE SEALED WITH "LHD1" OR "LHD5" DUCT SEAL AS MANUFACTURED BY DOTTIE CO. OR APPROVED EQUAL.

J. PLACE 6" WIDE, 4 MIL PLASTIC YELLOW MARKER TAPE AT 12 INCHES BELOW THE FINISHED GRADE ALONG AND ABOVE BURIED CONDUITS. LABEL TAPE "CAUTION-ELECTRIC LINE BELOW" OR SIMILAR WORDING. SEE DETAIL #1 ON SHEET E201.

15. CONDUCTORS

A. TYPE THHN/THWN, 600 VOLTS INSULATION PER UL 83 FOR ALL GENERAL WIRING SUBJECT TO TEMPERATURES AT 75°C MINIMUM, WET OR DRY LOCATIONS.

B. TYPES:

- 1. COPPER WIRE FOR ALL CONDUCTORS.
2. FOR GENERAL WIRING USE SOLID WIRE FOR NO. 10 AWG AND SMALLER.
3. STRANDED FOR WIRES NO. 8 AWG AND LARGER OR FOR FLEXIBILITY WHERE INDICATED ON THE DRAWINGS AS FLEXIBLE CONDUIT CONNECTION.
4. NO CONDUCTORS SMALLER THAN NO 12 AWG EXCEPT FOR CONTROL WIRES WHICH SHALL BE NO 14 AWG OR AS INDICATED ON THE PLAN.
5. CONDUCTORS FROM BASE OF NEW OR EXISTING POLES UP TO LUMINAIRES SHALL BE NO. 10 AWG MINIMUM UNLESS OTHERWISE NOTED ON THE PLAN. PROVIDE APPROXIMATELY 18" SLACK IN HAND HOLE AND PULL BOXES.
6. FOR IRRIGATION CONTROL WIRES, REFER TO IRRIGATION SPECIFICATIONS.

C. SPLICES:

- 1. BRANCH AND FEEDER CONDUCTOR JOINTS SHALL BE LOCATED ONLY IN OUTLET BOXES, PANELBOARD GUTTERS, FIXTURES OR PULL BOXES. CONDUCTOR JOINTS SHALL NOT BE MADE IN CONDUIT FITTINGS.
2. ALL SPLICES IN UNDERGROUND PULL BOXES SHALL BE SCOTCH BAGGED AND WATER TIGHT.

D. COLOR CODE:

- 1. FOR POLYPHASE CIRCUITS, IDENTIFY EACH PHASE THROUGHOUT THE CIRCUIT WITH DESIGNATION PHASE A (BLACK), PHASE B (RED) AND PHASE C (BLUE).
2. FOR CONDUCTORS SMALLER THAN NO. 6 AWG COLOR CODING SHALL BE ACCOMPLISHED BY INHERENT INSULATION COLOR. TAGGING PAINT OR OTHER MARKINGS SHALL NOT BE USED FOR COLOR IDENTIFICATION.

E. INSPECTION: CONTRACTOR SHALL NOTIFY THE GENERAL MANAGER OR AUTHORIZED REPRESENTATIVE 48 HOURS PRIOR TO START OF PULLING WIRE THROUGH ANY OF THE UNDERGROUND CONDUIT RUNS. THE CONTRACTOR SHALL START PULLING WIRE ONLY AFTER THE AUTHORIZED REPRESENTATIVE INSPECTS AND FIND THAT: THE WIRE CONTAINS NO SPLICES, THE NEUTRAL WIRE IS WHITE AND THE EQUIPMENT GROUND WIRE IS GREEN.

16. TAGGING

REQUIRED ON BOTH HOT AND NEUTRAL WIRES OF ALL CIRCUITS IN SWITCHBOARD AND PANELBOARDS, AT PULL JUNCTION AND OUTLET BOXES, AT EACH DEVICE OR LIGHTING FIXTURE. TAGGING SHALL PROVIDE POSITIVE AND PERMANENT IDENTIFICATION AND SHALL BE SCOTCH NUMERAL TAPE BY THE MINNESOTA MINING AND MANUFACTURING CO.

17. EQUIPMENT AND ELECTRICAL CONNECTIONS

A. PROVIDE ALL THE INSTRUMENTS, EQUIPMENT AND LABOR REQUIRED FOR THE SPECIFIED TESTS. CONDUCT ALL THE TESTS IN THE PRESENCE OF THE GEN. MANAGER OR AUTHORIZED REPRESENTATIVE. CONDUCT THE TEST AT SUCH TIME AS THE GEN. MANAGER MAY DIRECT OR AS SPECIFIED. TESTS FAILING TO CONFORM TO THE REQUIREMENTS OF THE DRAWING AND SPECIFICATIONS, AND ANY PIECE OF EQUIPMENT THAT FAILS THE TEST DESCRIBED HEREIN WILL BE REJECTED AND SUITABLE EQUIPMENT SHALL BE PROVIDED AND INSTALLED. TABULATE AND FORWARD TO THE PROJECT MANAGER IN TRIPPLICATE ALL THE PERTINENT TEST DATA. INCLUDE THE DATE OF THE TEST, IDENTIFICATION OF ALL THE ITEMS TESTED, READINGS FOR EACH TEST, COMMENTS WHERE REQUIRED AND THE SIGNATURES OF THE INDIVIDUAL CONDUCTING THE TEST AND OF THE GEN. MANAGER'S REPRESENTATIVE OBSERVING THE TEST. FORWARD ALL THE TEST DATA TO THE PROJECT MANAGER WITHIN 10 DAYS OF THE TEST PERFORMANCE BUT IN NO CASE LATER THAN 5 DAYS BEFORE THE SCHEDULED FINAL INSPECTION.

B. THE FOLLOWING TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE DEPT. INSPECTOR OR REPRESENTATIVE. TABULATE TEST RESULTS FOR THE DEPT. OF RECREATION AND PARKS RECORDS.

1. CONDUCTORS 600-VOLT CLASS: AFTER WIRING IS COMPLETED AND CONNECTED FOR OPERATION, BUT PRIOR TO PLACING SYSTEMS IN SERVICE AND BEFORE ANY BRANCH CIRCUIT BREAKERS ARE CLOSED, PERFORM INSULATION RESISTANCE TESTS IN ALL CIRCUITS. MEASURE THE INSULATION RESISTANCE BETWEEN EACH CONDUCTORS AND GROUND. TAKE READINGS AFTER THE VOLTAGE HAS BEEN APPLIED FOR A MINIMUM OF ONE MINUTE. THE MINIMUM INSULATION RESISTANCE BASED ON THE ALLOWABLE AMPACITY OF THE CONDUCTOR AS FIXED BY NFPA 70 SHALL BE AS FOLLOWS:

Table with 2 columns: AMPERES and OHMS. Rows include 25 THROUGH 50, 51 THROUGH 100, 101 THROUGH 200, 201 THROUGH 400.

2. HIGH VOLTAGE CONDUCTORS (ABOVE 600 VOLTS): AFTER INSTALLATION AND BEFORE SPLICING AND TERMINATING, PERFORM A FIELD ACCEPTANCE TEST ON CABLES, PRIOR TO TESTING. THE CABLES SHALL NOT BE CONNECTED TO ANY EQUIPMENT. THE TEST PROCEDURE SHALL BE IN ACCORDANCE WITH AEC AND NEMA FIELD ACCEPTANCE TEST SHALL BE 15 KV FOR DC FOR 15 MINUTES. IF CABLE FAILS TO PASS INITIAL TEST, PERFORM SUBSEQUENT ACCEPTANCE TESTS UNTIL THE WORK IS IN COMPLIANCE WITH THE CONTRACT REQUIREMENTS.

3. GROUND RODS: GROUND RESISTANCE TEST SHALL BE PERFORMED IN NORMALLY DRY WEATHER NOT LESS THAN 48 HOURS AFTER RAINFALL. GROUND RESISTANCE SHALL BE MEASURED FOR EACH PIECE OF EQUIPMENT TO BE EQUIPPED TO THE GROUND. USE A PORTABLE GROUND TESTING MEGGER TO TEST EACH GROUND OR GROUP OF GROUNDS. THE EQUIPMENT SHALL BE EQUIPPED WITH A METER READING DIRECTLY IN OHMS OR FRACTIONS THEREOF TO INDICATE THE GROUND VALUE OF THE GROUND ELECTRODE UNDER TEST. PROVIDE ONE COPY OF THE GROUND MEGGER'S DIRECTIONS, INDICATING THE METHOD TO BE USED.

4. GROUND RODS: GROUND RESISTANCE TEST SHALL BE PERFORMED IN NORMALLY DRY WEATHER NOT LESS THAN 48 HOURS AFTER RAINFALL. GROUND RESISTANCE SHALL BE MEASURED FOR EACH PIECE OF EQUIPMENT TO BE EQUIPPED TO THE GROUND. USE A PORTABLE GROUND TESTING MEGGER TO TEST EACH GROUND OR GROUP OF GROUNDS. THE EQUIPMENT SHALL BE EQUIPPED WITH A METER READING DIRECTLY IN OHMS OR FRACTIONS THEREOF TO INDICATE THE GROUND VALUE OF THE GROUND ELECTRODE UNDER TEST. PROVIDE ONE COPY OF THE GROUND MEGGER'S DIRECTIONS, INDICATING THE METHOD TO BE USED.

5. GROUND RODS: GROUND RESISTANCE TEST SHALL BE PERFORMED IN NORMALLY DRY WEATHER NOT LESS THAN 48 HOURS AFTER RAINFALL. GROUND RESISTANCE SHALL BE MEASURED FOR EACH PIECE OF EQUIPMENT TO BE EQUIPPED TO THE GROUND. USE A PORTABLE GROUND TESTING MEGGER TO TEST EACH GROUND OR GROUP OF GROUNDS. THE EQUIPMENT SHALL BE EQUIPPED WITH A METER READING DIRECTLY IN OHMS OR FRACTIONS THEREOF TO INDICATE THE GROUND VALUE OF THE GROUND ELECTRODE UNDER TEST. PROVIDE ONE COPY OF THE GROUND MEGGER'S DIRECTIONS, INDICATING THE METHOD TO BE USED.

18. LAMPS

A. LED SHALL BE USED FOR THIS PROJECT.

19. LIGHTING FIXTURES

A. TYPES:

- 1. AS INDICATED HEREINAFTER AND IN THE LIGHTING FIXTURE LIST, ALL FIXTURES MUST BE UL LISTED AND SUPPORTING MEMBERS SUCH AS RODS AND PIPES MUST BE APPROVED BY THE CITY OF LOS ANGELES ELECTRICAL TESTING LABORATORY.

2. ALL FIXTURES USED AS RACEWAYS SHALL CONFORM TO THE CODE REQUIREMENTS FOR MAXIMUM NUMBER OF CONDUCTORS PERMITTED. BOX TEMPERATURES SHALL NOT EXCEED 75 DEGREES CELSIUS ADJACENT TO THHN/THWN WIRE.

3. ALL FIXTURES SHALL BE UL LISTED FOR THE PURPOSE, WET LOCATION FOR OUTDOOR INSTALLATION, AND DAMP LOCATION FOR SHOWERS AND CANOPIES.

B. FITTINGS AND ACCESSORIES: AS NECESSARY FOR PROPER INSTALLATION AND OPERATION.

C. DEVIATION SHALL BE SUBMITTED TO THE DEPARTMENT FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION.

D. SPORTS LIGHTING FIXTURES: SUBMIT AN AIMING DIAGRAM FROM FIXTURE MANUFACTURER TO THE DEPARTMENT FOR APPROVAL PRIOR TO INSTALLATION. CONTRACTOR SHALL ENSURE THAT FIXTURES ARE INSTALLED IN ACCORDANCE TO APPROVED AIMING DIAGRAM (IF APPLICABLE).

20. RECORD DRAWINGS

A. IMMEDIATELY AFTER WORK IS INSTALLED, CAREFULLY DRAW ON PRINTS IN RED INK ALL WORK WHICH IS INSTALLED AT VARIANCE WITH THE WORK AS INDICATED ON THE DRAWINGS, INDICATE BY MEASURED DIMENSION TO BUILDING CORNERS OR OTHER PERMANENT MONUMENTS THE EXACT LOCATION OF ALL CHANGES.

B. ACCURATE LOCATIONS OF ALL POLES, CONDUIT RUNS, WIRING, NAMES AND MODEL NUMBER OF ACCEPTED SUBSTITUTE EQUIPMENT, ELECTRICAL OUTLETS AND OTHER EQUIPMENT AS INSTALLED SHALL BE PROVIDED IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS.

21. OPERATING MANUALS AND INSTRUCTIONS

A. THE CONTRACTOR SHALL FURNISH TO THE CITY FOUR BOUND COPIES OF OPERATING AND MAINTENANCE MANUAL FOR ALL ELECTRICAL EQUIPMENT.

B. THE CONTRACTOR SHALL EXPLAIN IN DETAIL ALL MANUALS FOR THE OPERATION AND MAINTENANCE OF ALL EQUIPMENT TO THE RECREATION AND PARKS MAINTENANCE PERSONNEL BEFORE COMPLETION AND ACCEPTANCE OF THE PROJECT.

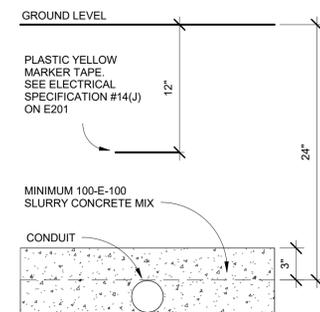
22. ANTI-GRAFFITI COATINGS

THE CONTRACTOR SHALL APPLY AN ANTI-GRAFFITI COATING TO ALL LIGHT POLE CONCRETE BASES. THE FOLLOWING ARE ACCEPTABLE PRODUCTS:

- A. "SUPER-KOTE A-G5" SEALER MANUFACTURED BY VEN-CHEM COMPANY INC. P.O. BOX 3186, SANTA BARBARA, CALIFORNIA, PHONE (805) 967-7600 OR "MONOCHEM PERMA-SHIELD" BY FRAZEE PAINT CO. RESEARCH REPORT NO. 28080, PHONE (800) 826-9048.
B. THE "GRAFFITI RASOR SYSTEMS" MANUFACTURED BY RAINPROOF SYSTEMS, CITY OF COMMERCE, CA 90022. RESEARCH REPORT NO. 25035, PHONE (213) 887-8761.
C. "VANDAL GUARD" BY RAINGUARD PRODUCTS CO., 821 W. HYDE PARK BLVD. INGLEWOOD, CA 90302, PHONE (310) 670-2953.
D. OR APPROVED EQUAL.

23. SUBMITTALS

SHOP DRAWINGS AND SUBMITTALS SHALL BE SUBMITTED IN HARD COPIES (MINIMUM OF 3), AND SHALL BE IN COMPLETED GROUPS OF MATERIALS (I.E. ALL LIGHTING FIXTURES OR ALL SWITCHGEAR, ETC.). SHOP DRAWINGS AND SUBMITTALS SHALL BE SUBMITTED FOR ALL ELECTRICAL MATERIALS OR EQUIPMENT, AS SPECIFIED IN THE SOPE OF THE PROJECT PRIOR TO INSTALLATION.



1 UNDERGROUND CONDUIT INSTALLATION DETAIL N.T.S.

Vertical sidebar containing logos for BUREAU OF ENGINEERING, CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, and various project details like SHEET TITLE: ELECTRICAL SPECIFICATIONS, PROJECT: MID VALLEY MULTIPURPOSE CENTER (PHASE 2), and DRAWING NO. E201.

FILE PATH: Q:\In-House-Design\Mid-Valley-Multi-Purpose-Intergeneration\PHASE 2\CENTRAL REVISED 8.05.19.rvt

