

**PLEASANT VALLEY RECREATION & PARK DISTRICT  
CITY OF CAMARILLO, CITY HALL COUNCIL CHAMBERS  
601 CARMEN DR., CAMARILLO, CALIFORNIA**

**BOARD OF DIRECTORS  
REGULAR MEETING AGENDA  
November 7, 2019**

**5:00 P.M.**

**CLOSED SESSION**

**1. CALL TO ORDER**

**A. Adjourn to Closed Session**

**B. CLOSED SESSION**

**1) Conference with Legal Counsel – Existing Litigation**

The District Board will conduct a closed session, pursuant to Government Code section 54956.9(d)(1), to confer with legal counsel regarding litigation to which the City is a party. The title of such litigation is as follows: *Pleasant Valley Recreation & Park District and Service Employees International Union Local 721*; Public Employment Relations Board Case Number Case No. LA-CE-1378-M.

**C. Reconvene into Regular Meeting**

**6:00 P.M.**

**REGULAR MEETING**

**NEXT RESOLUTION #640**

**2. PLEDGE OF ALLEGIANCE**

**3. ROLL CALL**

**4. AMENDMENTS TO THE AGENDA** - This is the time and place to change the order of the agenda, delete, or add any agenda item(s) and to remove any consent agenda items for discussion.

**5. PRESENTATIONS**

**A. Camarillo Pony Baseball Association**

**B. Camarillo Youth Basketball Association**

**C. District Highlights**

**6. PUBLIC COMMENT** - In accordance with Government Code Section 54954.3, the Board reserves this time to hear from the public. If you would like to speak about an item on the agenda, we would prefer you complete a Speaker Card, give it to the Clerk of the Board, and wait until it comes up. If you would like to make comments about other areas not on this agenda, in accordance with California law, we will listen, note them, and bring them back up at a later date for discussion. Speakers will be allowed three minutes to address the Board.

**7. CONSENT AGENDA** – Matters listed under the Consent Agenda are considered routine and shall be acted upon without discussion and by one motion. If discussion is desired the item will be removed from the Consent Agenda for discussion and voted on as a separate item. If no discussion is desired, then the suggested action is for the Chair to request that a motion be made to approve the Consent Agenda.

**A. Minutes for Regular Board Meeting of October 2, 2019**

Approval receives and files minutes.

**B. Warrants, Accounts Payable & Payroll**

Approval of District's disbursements dated on or before September 30, 2019.

**C. Financial Reports**

Monthly unaudited financial reports are presented to the Board for information. Approval receives and files the financial reports for September 30, 2019.

**D. Review and Approval of Surplus Supplies and Equipment List**

Approval of the list is required prior to the disposition of listed surplus items

**E. Consideration and Approval of the Request for Proposal and Specifications for the Aquatic Center Shower and Dressing Room Remodel**

Approval of the bid specifications is needed in order to release the RFP.

**F. Approval of the Purchase of Two Replacement Fleet Vehicles**

Vista Ford of Oxnard is the low bidder for two Ford Ranger XL's needed as replacement fleet vehicles.

**8. NEW ITEMS – DISCUSSION/ACTION**

**A. Miracle League 805, Inc. Option and Discussion**

Staff has provided four options at three different parks for a possible location for a Miracle League 805's baseball field.

Suggested Action: Review options for a location for Miracle 805 and provide direction to staff.

**B. Freedom Gym Programming Options and Discussion**

The recent sale of the Freedom Gymnasium has prompted consideration of various options available to the District.

Suggested Action: Provide staff direction regarding Freedom Gym programming options.

**C. Approval of 2020 Part Time Salary Schedule with Minimum Wage Impact**

The State of California is currently in the fifth year of a seven-year plan to gradually increase minimum wage. Minimum wage will increase to \$13.00 per hour on January 1, 2020.

Suggested Action: A MOTION to Approve the 2020 Part Time Salary Schedule with minimum wage impact.

**D. Consideration of a 3-Year Community Event Funding Agreement between the City of Camarillo and the Pleasant Valley Recreation and Park District to Produce the Summer Concert Series**

City and District staff are proposing to enter into a three-year agreement to produce the Summer Concert Series.

Suggested Action: A MOTION to authorize and Approve the General Manager to enter into a three (3) year agreement between the City of Camarillo and the Pleasant Valley Recreation & Park District to produce the Summer Concert Series.

**E. Consideration and Approval of Bid Award for Freedom Park Parking Lot Re-Paving Project to J&H Engineering**

By performing a complete re-pavement, the District will be able to initiate the implementation of a preventative maintenance standard at Freedom Park.

Suggested Action: A MOTION to authorize and approve the General Manager to enter into agreement with J&H Engineering in the amount of \$231,800, plus a 5% contingency bringing the total to \$243,390 for the Freedom Park re-paving project.

**9. INFORMATIONAL ITEMS, which do not require action, will be reported by members of the Board and staff:**

- A. Chairman Kelley
- B. Ventura County Special District Association/California Special District Association
- C. Ventura County Consolidated Oversight Board
- D. Santa Monica Mountains Conservancy
- E. Standing Committees – Finance, Liaison, Long Range Planning, Personnel and Policy
- F. Ad Hoc Committees – Journey; Ran Rancho
- G. Foundation for Pleasant Valley Recreation and Parks
- H. General Manager’s Report

**10. ORAL COMMUNICATIONS-** Informal items from Board Members or staff not requiring action.

**11. ADJOURNMENT**

**Notes:** The Board of Directors reserves the right to modify the order in which agenda items are heard. Written materials related to these agenda items are available for public inspection in the Office of the Clerk of the Board located at 1605 E. Burnley Street, Camarillo during regular business hours beginning the Friday preceding the Wednesday Board meeting.

**Announcement:** Public Comment: Members of the public may address the Board on any agenda item before or during consideration of the item. [Government Code section 54954.3] Should you need special assistance (i.e. a disability-related modification or accommodations) to participate in the Board meeting or other District activities (including receipt of an agenda in an appropriate alternative format), as outlined in the Americans With Disabilities Act, or require further information, please contact the General Manager at 482-1996, extension 114. Please notify the General Manager 48 hours in advance to provide sufficient time to make a disability-related modification or reasonable accommodation.



**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
CO-SPONSORED GROUP  
ANNUAL UPDATE**

Group: Camarillo Pony Baseball Association

Date: 10/21/2019

One representative from your organization must attend the following PVRPD Board Meeting on:

**Thursday, November 7th at 6pm at Camarillo City Hall**

OFFICERS	NAME	ADDRESS	DAY PHONE	CELL PHONE
President	Johnny Lovato	3890 Olivo Ct, Camarillo	805-443-7078	805-443-7078
Vice President	Alex Mathis	1201 East La Loma Ave	805-444-2716	805-444-2716
Treasurer	Steve Smith	2160 Woodcreek, Camarillo	805-443-7486	805-443-7486
Secretary	Jaymi Stevens	1025 Durkin St, Camarillo	805-377-2789	805-377-2789

Number of participants last year: 1050

Projected number of participants upcoming year: 1100

Changes Organization has made from previous year: New board members: new Secretary is Jaymi Stevens, new Director of Fundraiser/Sponsorship is Dan Kuykendall, and new Director of Public Relations is Jeff Torok.

Comments for the PVRPD Board of Directors: With all the new housing being built in Camarillo, we believe CPBA is going to continue to grow. We have no doubt that we will continue to need 100% of both Freedom Park and Kildee fields to give our young players the best Camarillo Pony Baseball experience.

Primary Facility (ies) Used? Freedom Park and Kildee fields

What Time are Board Meetings Held? 7pm on the first Tuesday of each month

Where are Board Meetings Held? Skyway Room at Freedom Park

When are new Board Members Elected? At the General Board Meeting in June

When are new Board Members Installed? At the General Board Meeting in September

Pleasant Valley Recreation and Park District Liaison: Lanny Binney, Recreation Supervisor

Please attach a copy of your By-Laws to this form.

**Please Complete and Return the Annual Update and Financial Statement by October 21, 2019**

Lanny Binney  
1605 E. Burnley Street, Camarillo, CA 93010  
Phone: 482-1996 x 17  
Fax: 805-482-3468

Form Completed by (print): Johnny Lovato Date 10/21/2019

Sign: Johnny Lovato

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
COMMUNITY SERVICE GROUP - ANNUAL REVIEW  
FINANCIAL STATEMENT**

NAME OF ORGANIZATION \_\_\_\_\_

**Last Year's Financial Statement**

**Proposed Budget**

Date: 8/31/2019

From: 9/1/19-8/31/20

<b>Beginning Balance:</b>	\$	150,591.00
<i>(Include all accounts, i.e. savings and CDs)</i>		
<b>Revenue:</b>		
Registration:	\$	258,463.00
Tournaments:	\$	58,305.00
Fundraisers:	\$	9,774.00
Snack Bar:	\$	142,793.00
Interest:	\$	135.00
Dues:	\$	-
Miscellaneous Income:	\$	7,025.00
<b>Total Revenue</b>	<b>\$</b>	<b>476,495.00</b>

<b>Beginning Balance:</b>	\$	212,864.00
<i>(Include all accounts, i.e. savings and CDs)</i>		
<b>Revenue:</b>		
Registration:	\$	265,000.00
Tournaments:	\$	60,000.00
Fundraisers:	\$	10,000.00
Snack Bar:	\$	135,000.00
Interest:	\$	-
Dues:	\$	-
Miscellaneous Income:	\$	3,000.00
<b>Total Revenue</b>	<b>\$</b>	<b>473,000.00</b>

**Expenses:**

**Expenses:**

Admin Expense	\$	8,552.00
Advertising	\$	312.00
Awards	\$	5,515.00
Equipment	\$	-
Facility/Field Maint.	\$	31,256.00
Insurance	\$	9,716.00
Internet (online registration)	\$	-
Licensing/Membership	\$	-
Maintenance (field/facility)	\$	66,750.00
Miscellaneous	\$	10,361.00
Paid Staff	\$	-
Professional Services (refs)	\$	53,795.00
Refunds	\$	-
Rentals	\$	30,023.00
School District	\$	-
Snack Bar Resale	\$	99,296.00
Supplies	\$	23,123.00
Tournament Entries	\$	34,181.00
Uniforms	\$	47,359.00
Contingency	\$	(6,017.00)
<b>Total Expense:</b>	<b>\$</b>	<b>414,222.00</b>

Admin Expense	\$	8,500.00
Advertising	\$	500.00
Awards	\$	5,500.00
Equipment	\$	-
Facility/Field Maint.	\$	35,000.00
Insurance	\$	10,500.00
Internet (online registration)	\$	-
Licensing/Membership	\$	-
Maintenance (field/facility)	\$	74,500.00
Miscellaneous	\$	10,500.00
Paid Staff	\$	-
Professional Services (refs)	\$	57,000.00
Refunds	\$	-
Rentals	\$	40,000.00
School District	\$	-
Snack Bar Resale	\$	110,000.00
Supplies	\$	25,000.00
Tournament Entries	\$	35,000.00
Uniforms	\$	52,500.00
Contingency	\$	-
<b>Total Expense:</b>	<b>\$</b>	<b>464,500.00</b>

**Ending Balance:** \$ 212,864.00

**Ending Balance:** \$ 221,364.00

**List Savings/CDs/Investments here:**

Savings Account	\$	_____
CD Account ____ month	\$	_____
CD Account ____ month	\$	_____
Investment Account	\$	_____
Other Account	\$	_____
<b>Total Other Accounts</b>	<b>\$</b>	_____
		_____
Checking + Other	\$	_____

**List Savings/CDs/Investments here:**

Savings Account	\$	_____
CD Account ____ month	\$	_____
CD Account ____ month	\$	_____
Investment Account	\$	_____
Other Account	\$	_____
<b>Total Other Accounts</b>	<b>\$</b>	_____
		_____
Checking + Other	\$	_____

**Lanny Binney**

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**To:** Steve Smith  
**Cc:** Johnny Lovato; cpbaveep@gmail.com; johnny.r.lovato.mil@mail.mil  
**Subject:** RE: 2019-2020 CPBA Annual Update

Thank you Steve and Johnny,

I received your answers regarding the questions I had for the Financial Statement. I just formatted the questions and answers in a single document for your reference.

1. In your Annual Update you state that you have 1050 children in the program and that you project that number to go to 1100. What is the plan to get more children in the program?

That leads to the Financial Statement. Last year in Registration you had \$258,463 and this coming year Registration is projected at \$250,000, a loss of \$8,463. What is the reason for this?

**1. Financial numbers have been updated for registration and related expenses (uniforms, professional services etc).**

2. The Snack Bar last year made a \$142,793. The projection for next year is \$135,000. Why is there a \$7,000 difference?

**2. We look at more than prior year to determine budget for current year. Going back three years, there was a huge spike in 2019 as compared to previous years. While we hope that holds true in 2020, our budget is conservative and shows increase from previous years but not as high as the landmark year of 2019.**

3. Rentals is projected to go up to \$40,000 next year. Are sports lights included in Rentals and the factoring of two new fields with lights? I think I understand, just clarify for me please.

**3. Correct. Increase usage of more fields and associated lights. In addition, there are additional cleanup costs with all tournaments that needs to be factored in.**

4. Snack bar resale was \$99,296 last year and is projected to be \$110,000 this coming year. With the snack bar revenue down by \$7,793 going down this year, why would the Snack Bar Resale go up by \$10,704?

**4. Again, we go back several years in preparing our budget and our historical profit margins are nowhere near the margins of 2019. While we hope these margins hold in 2020, we need to be conservative and temper our expectations. In addition, we don't know if the discounts we received from new vendors and such will continue in 2020 and we expect some capital improvements to occur in the snack bars that are included in this budget.**

5. On Contingency the \$6,017 has a ( ) around it like it was credited. Just explain what that is. If it's a credit, that's great, just state why or how it happened.

**5. Contingency represents pay down of items on the balance sheet at 12/31/2018, that are not included in the P&L but affect the cash balances.**

That's it. Otherwise it is pretty good.

Get back to me with the answers and we can put those in the packet and save you some time during the presentation.

Will you be doing a PowerPoint? If so, I need it e-mailed to me by Thursday, October 30.

Thank you Johnny and Steve.



**Lanny Binney**, *Recreation Supervisor*  
**Pleasant Valley Recreation & Park District**  
1605 E. Burnley St., Camarillo, CA 93010  
805.482.1996 x108 [www.pvrpd.org](http://www.pvrpd.org)





**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
CO-SPONSORED GROUP  
ANNUAL UPDATE**

Date: 10/28/2019

Group: Camarillo Youth Basketball Association

One representative from your organization must attend the following PVRPD Board Meeting on:  
**Thursday, November 7th at 6pm at The City of Camarillo Council Chambers**

OFFICERS	NAME	ADDRESS	DAY PHONE	CELL PHONE
Chairperson	Tony Sheppard	209 Picado Dr Camarillo	805-535-8289	805-535-8289
Program Dir	Mike Willard	381 East Loop Rd Camarillo	n/a	805-302-9993
Treasurer	Mark Schlenbein	1183 Via Carranza Camarillo	805-285-5600	818.383.3977
Secretary	Terri Barton	4948 Via Fresco Camarillo	805-383-3708	805-377-5786
Facilities Dir	Shannon McDonough-Porter	1617 Shepard Dr Camarillo	805-444-1382	209-549-6634
Rules & Refs	Mark Davis	2034 Glennbrook Camarillo	805-218-2942	805-218-2942

Number of Participants Last Year 416  
 Projected number of participants upcoming year: 450

Changes Organization has made from previous year: The previous season witnessed a significant drop in enrollments at 416 players. It is assessed that this drop is in concert with a decline in lower level enrollments at area schools. Notwithstanding, CYBA is increasing advertising for the 2019-2020 season and have already seen an increase in registrations from the same time last year. Unfortunately, due to lower registrations and increased costs, CYBA did have to raise registration fees to \$200 (formerly \$180).

Comments for the PVRPD Board of Directors: We are excited for the upcoming season and our continued partnership with PVRPD and other community organizations!

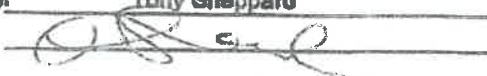
Primary Facility (ies) Used? LC, MV, PVSEA and Boys and Girls Club

What Time are Board Meetings Held? 1st Wednesday of each month (except July) 8:30 - 9:30 PM  
 Where are Board Meetings Held? East Meeting Room - Pleasant Valley Fields complex  
 When are new Board Members Elected? April  
 When are new Board Members Installed? May

Pleasant Valley Recreation and Park District Liaison: Lanny Binney, Recreation Supervisor

Please attach a copy of your By-Laws to this form.

**Please Complete and Return the Annual Update and Financial Statement by October 11, 2019 to:**  
 Lanny Binney  
 1605 E. Burnley Street, Camarillo, CA 93010  
 Phone: 482-1998 x 108  
 Fax: 805-482-3468

Form Completed by (print): Tony Sheppard Date 10/28/2019  
 Sign: 



**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
COMMUNITY SERVICE GROUP - ANNUAL REVIEW  
FINANCIAL STATEMENT**

**NAME OF ORGANIZATION** Camarillo Youth Basketball Association

**Last Year's Financial Statement**

**Proposed Budget**

**Period:** 2018-2019

**Period:** 2019-2020

**CHECKING**  
**Beginning Balance:** \$42,859.18

**CHECKING**  
**Beginning Balance:** \$38,074.28

**Revenue:**

**Registration:** \$80,380.00  
**Tournaments:** \$  
**Fundraisers:** \$  
**Snack Bar:** \$  
**Interest:** \$29.73  
**Dues:** \$  
**Miscellaneous income:** \$1,140.00  
**Total Revenue** \$81,519.73

**Revenue:**

**Registration:** \$81,314.00  
**Tournaments:** \$  
**Fundraisers:** \$  
**Snack Bar:** \$  
**Interest:** \$10.00  
**Dues:** \$  
**Miscellaneous income:** \$1,000.00  
**Total Revenue** \$83,324.00

**Expenses:**

**Admin Expense** \$5,288.13  
**Advertising** \$2,030.22  
**Awards** \$5,284.33  
**Equipment** \$862.88  
**Facility/Field Maint.** \$  
**Insurance** \$4,588.43  
**Internet (online registration)** \$4,498.84  
**Licensing/Membership** \$  
**Maintenance (field/facility)** \$  
**Miscellaneous** \$869.75  
**Paid Staff** \$  
**Professional Services (refs)** \$18,468.20  
**Refunds** \$10,615.00  
**Rentals** \$18,847.80  
**School District** \$  
**Snack Bar Resale** \$  
**Supplies** \$  
**Tournament Entries** \$  
**Uniforms** \$16,981.08  
**Contingency** \$  
**Total Expense:** \$86,304.91

**Expenses:**

**Admin Expense** \$5,744.00  
**Advertising** \$2,850.00  
**Awards** \$5,050.00  
**Equipment** \$900.00  
**Facility/Field Maint.** \$  
**Insurance** \$5,818.00  
**Internet (online registration)** \$4,768.00  
**Licensing/Membership** \$  
**Maintenance (field/facility)** \$  
**Miscellaneous** \$1,404.00  
**Paid Staff** \$  
**Professional Services (refs)** \$19,308.00  
**Refunds** \$12,460.00  
**Rentals** \$18,000.00  
**School District** \$  
**Snack Bar Resale** \$  
**Supplies** \$  
**Tournament Entries** \$  
**Uniforms** \$17,154.00  
**Contingency** \$  
**Total Expense:** \$93,052.00

**Ending Balance:** \$38,074.28

**Ending Balance:** \$37,346.28

**List Savings/CDs/Investments here:**

**Savings Account** \$  
**CD Account \_\_\_month** \$12,918.21  
**CD Account \_\_\_month** \$8,139.04  
**Investment Account** \$  
**Other Account** \$4,191.25  
**Total Other Accounts** \$24,248.50  
**Checking + Other** \$62,322.76

**List Savings/CDs/Investments here:**

**Savings Account** \$  
**CD Account \_\_\_month** \$12,918.21  
**CD Account \_\_\_month** \$8,139.04  
**Investment Account** \$  
**Other Account** \$4,191.25  
**Total Other Accounts** \$24,248.50  
**Checking + Other** \$61,594.76

**Lanny Binney**

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**From:** Tony Sheppard <ts0231@yahoo.com>  
**Sent:** Monday, October 28, 2019 1:18 PM  
**To:** Lanny Binney  
**Cc:** 'Mark Schienbein'  
**Subject:** Re: Annual Update  
**Attachments:** Annual Update CYBA 2020.pdf

Lanny,

This year we are hoping for increased registrations across all leagues. As of this writing, we are 20-30 players ahead of last year. Once the teams are finalized, we are hoping this translates to additional games which means additional referees.

For the same reason we are optimistic in increasing our player pool, there is a chance we won't have sufficient players to field equal teams. In that case, we will be forced to refund players, mostly those who registered after the deadline.

Does that make sense?

Tony

On Monday, October 28, 2019, 10:30:01 AM PDT, Lanny Binney <ldbinney@pvrpd.org> wrote:

Tony,

The attached Excel Sheet was the one I sent you on October 3.

In reviewing the Annual Update, I only see the line for the **Projected number of participants upcoming year**: and not the line for **Number of participants last year**:

Did you take it out or did it not show up?

Please show us the number of participants you had last year.

On the Financial Statement, can you have the cells formatted so that the \$ symbol is left justified?

I have some questions on The Financial Statement.

I see an increase in Professional Services (refs). What factor is causing the increase?

There is an increase in refunds from \$10,515 to \$12,460. What is the cause of the increase?

That's it. Get back to me on those before 9am on Tuesday, October 29, so that we can get it in the Board Packet.

Thank you.



**Lanny Binney, Recreation Supervisor**

**Pleasant Valley Recreation & Park District**

1605 E. Burnley St., Camarillo, CA 93010  
805.482.1996 x108 [www.pvrpd.org](http://www.pvrpd.org)



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From: Tony Sheppard <ts0231@yahoo.com>  
Sent: Monday, October 28, 2019 8:12 AM  
To: Lanny Binney <ldbinney@pvrpd.org>  
Cc: Tony Sheppard <ts0231@yahoo.com>  
Subject: Annual Update

Lanny,

Please find the attached Annual Update for CYBA. I apologize for the delay.

Regards,

**Pleasant Valley Recreation and Park District  
Camarillo City Hall Council Chambers  
Minutes of Regular Meeting  
October 2, 2019**

**1. CALL TO ORDER**

The regular meeting of the Board of Directors of the Pleasant Valley Recreation and Park District was called to order at 5:00 p.m. by Chairman Kelley.

**A. Adjourned to Closed Session**

The Board adjourned to closed session at 5:01 p.m.

**B. Closed Session**

1) Conference with Legal Counsel – Existing Litigation

Pursuant to Government Code Section 54956.9(d)(1), the Board conducted a closed session to confer with legal counsel regarding litigation to which District is a party. The title of such litigation is as follows: *Pleasant Valley Recreation & Park District and Service Employees International Union Local 721*; Public Employment Relations Board Case Number Case No. LA-CE-1378-M.

**C. Regular Meeting Reconvened**

The regular meeting of the Pleasant Valley Recreation and Park District was reconvened at 6:00 p.m. with nothing to report.

**2. PLEDGE OF ALLEGIANCE**

Director Mishler led the pledge.

**3. ROLL CALL**

All present.

Also Present: General Manager Mary Otten, Administrative Services Manager Leonore Young, Park Services Manager Bob Cerasuolo, Recreation Services Manager Eric Storrie, Administrative Analyst/Clerk of the Board Anthony Miller, Customer Service Lead/Recording Board Secretary Karen Roberts, Administrative Analyst Megan Hamlin, Park Supervisors Nick Marienthal and Brandon Lopez, Recreation Supervisors Lanny Binney and Jane Raab, Human Resources Specialist Kathryn Drewry, Administrative Analyst Jessica Puckett, Marketing Specialist Emily Raab, Richard Frank and Josh Hansen.

**4. AMENDMENTS TO THE AGENDA**

Agenda accepted as presented.

**5. PRESENTATIONS**

**A. Pleasant Valley Recreation & Parks Foundation**

Administrative Analyst Megan Hamlin presented the highlights of the past year for the Foundation. The Foundation's Food Truck Fridays at PVRPD's Movies in the Park raised

over \$3000 and a fundraiser at Cronies Restaurant brought in over \$1000. Gross revenue for the 5<sup>th</sup> Annual Party for the Parks held on August 17 was over \$34,000. Upcoming events are Painting with a Twist on November 14 and the Ugly Sweater 5K & Donut Dash 5K on December 14.

**B. Camarillo Girls Softball Association**

Recreation Supervisor Lanny Binney introduced Josh Hansen, president of the Camarillo Girls Softball Association (CGSA) who presented their annual update. The group had 10 all-star teams this past year and just under 300 girls in CGSA. The directors were impressed with the aggressiveness of CGSA's board members in growing their program.

**C. Summer Concert Series**

Recreation Services Manager Eric Storrie presented a report on the Summer Concert Series that the District ran this past summer. Over 10,000 people attended the 4 concerts that were presented – reggae/calypso, country/bluegrass, rhythm & blues and rock & roll. A suggestion was made to include a wider array of food trucks for the concertgoers.

Administrative Services Manager Leonore Young introduced Jessica Puckett as a new Administrative Analyst who will be assisting the Parks Department.

**6. PUBLIC COMMENT**

No comments.

**7. CONSENT AGENDA**

- A. Minutes for Regular Board Meeting of September 4, 2019 and Special Board Meetings of September 9 & 16, 2019
- B. Warrants, Account Payable & Payroll
- C. Financial Reports
- D. Review and Approval of Surplus Supplies and Equipment List
- E. Consideration and Approval of Regular Board Meeting Dates for 2020
- F. Consideration and Approval of Resolution No. 637, Adopting the Injury and Illness Prevention Program Policy

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Dixon to approve the Consent Agenda.

Voting was as follows:

Ayes: Magner, Dixon, Malloy, Mishler, Chairman Kelley

Noes:

Absent:

Motion: Carried

**Motion to  
Approve  
Consent  
Agenda**

**Carried**

**8. PUBLIC HEARING - A Public Hearing on Ordinance No. 10 which amends Board Member Compensation**

**A. Second Reading and Adoption of Ordinance No. 10, an Ordinance of the Board of Directors of the Pleasant Valley Recreation and Park District Setting Board Member Compensation**

Administrative Analyst Megan Hamlin presented *Ordinance No. 10, an Ordinance of the Board of Directors of the Pleasant Valley Recreation and Park District Setting Board Member Compensation* for the document's second reading and adoption.

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Dixon to approve a second reading, by title only, of proposed Ordinance No. 10 and waive further reading of the ordinance.

**Motion to Approve 2<sup>nd</sup> Reading of Ord No. 10**

Voting was as follows:

Ayes: Magner, Dixon, Malloy, Mishler, Chairman Kelley

Noes:

Absent:

**Carried**

Motion: Carried

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Dixon to adopt Ordinance No. 10, revise the first sentence of Section 1 of Resolution No. 583 to increase the amount of the compensation for each Director for each day's attendance at meetings of the Board or for each day's service rendered as a Director by request of the Board to \$105.

**Motion to Adopt Ord No. 10, Setting Board Comp**

Voting was as follows:

Ayes: Magner, Dixon, Malloy, Mishler, Chairman Kelley

Noes:

Absent:

**Carried**

Motion: Carried

**9. NEW ITEMS - DISCUSSION/ACTION**

**A. Consideration and Approval of the Design and Construction Plans for the Aquatic Center Shower and Dressing Room Design Remodel**

Park Services Manager Bob Cerasuolo presented the design and construction plans from Leach Mounce Architects for the Aquatic Center shower and dressing room remodel. Discussion included: Leach Mounce's current design of Valle Lindo's restrooms, timed water valves, thermostat location, lockers and ADA code compliance.

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Dixon to approve the design and construction plans for the Aquatic Center showers and dressing rooms.

Voting was as follows:

Ayes: Magner, Dixon, Malloy, Mishler, Chairman Kelley

Noes:

Absent:

**Motion to  
Approve  
Pool  
Shower  
Design**

Motion: Carried

**Carried**

**B. Consideration and Approval of Resolution No. 638, Adopting a District Social Media Policy**

Recreation Services Manager Eric Storrie presented Resolution No. 638, Adopting a District Social Media Policy.

Discussion included the validation of District posts, Foundation and retention policy.

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Mishler to approve Resolution No. 638, Adopting a District Social Media Policy.

Voting was as follows:

Ayes: Magner, Mishler, Malloy, Dixon, Chairman Kelley

Noes:

Absent:

**Motion to  
Adopt Reso  
638, Social  
Media Policy**

Motion: Carried

**Carried**

**C. Consideration and Approval of Resolution No. 639, Adopting the Updated General Use Policy**

Administrative Analyst Anthony Miller presented a revised General Use Policy to address specific issues noted after recent changes made to Ordinance No. 8. Discussion included: ambiguity of some of the current changes, the refunding process, outside barbeques and /or tables, excessive trash, processes for a community service organization, and the need for further refinement and consistency. Staff was directed to address the questions and submit an updated draft document to the Policy Committee.

**D. Consideration and Approval of the Purchase and Installation of Eighteen LED Lights at the Springville Tennis Courts**

Park Supervisor Brandon Lopez presented a recommendation for the selection of Brite Court Sports Lighting with its bid amount of \$16,370 for the purchase of eighteen LED tennis court lights to replace the current 1000w metal halide lighting at the Springville tennis courts. Discussion included: longevity of sealed optics, parking lot light options at Springville, 10-year warranty period, energy efficiency and savings which will allow the system to pay for itself in about 8 years.

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Mishler to approve and authorize the General Manager to enter into an agreement with Brite Court Sports Lighting for the purchase of eighteen (18) LED tennis court lights to replace the current 1000w metal halide lighting at the Springville tennis courts.

**Motion to Approve LED Tennis Light Agreement**

Voting was as follows:

Ayes: Magner, Mishler, Malloy, Dixon, Chairman Kelley

Noes:

Absent:

Motion: Carried

**Carried**

E. Consideration and Approval of Request for Proposals for a Grant Writer

General Manager Mary Otten presented an RFP to be considered for the grant writer selection process. The District is examining multiple sources of funding for the Senior and Community Recreation Facility and grants and a dedicated grant writer could be an integral part of the funding. Discussion included: initial primary focus with the new facility and with State Proposition 68, consideration of other available grants like with Santa Monica Mountains Conservancy and open space, tight turnaround, high interest level from applicants and question of independent contractor status.

Chairman Kelley called for a motion. A motion was made by Director Magner and seconded by Director Dixon to approve the Request for Proposals (RFP) for the grant writer selection process.

**Motion to Approve RFP For Grant Writer**

Voting was as follows:

Ayes: Magner, Dixon, Malloy, Mishler, Chairman Kelley

Noes:

Absent:

Motion: Carried

**Carried**

**10. INFORMATIONAL ITEMS**

A. Chairman Kelley – nothing to report.

B. Ventura County Special District Association/California Special District Association – Director Magner reported that the VCSDA meeting was attended by Directors Malloy, Mishler and herself along with General Manager Otten. CSDA – Director Magner and Ms. Otten attended the annual CSDA conference in Irvine last week.

C. Ventura County Consolidated Oversight Board – Director Mishler attended a meeting and provided an overview of successor agency funds and the role of the oversight board.

D. Santa Monica Mountains Conservancy – Director Mishler reported that the group acquired grants for tree pruning and fire prevention.

E. Standing Committees – Finance – Director Malloy stated that revenues are waiting for the December payments and that reimbursement for last year's fire damage has been committed. About \$350,000 has to be budgeted for the RDA expenses this year. Liaison –



Director Dixon stated the last meeting was September 16. Long Range Planning – no meeting. Personnel – Director Magner stated that there was a closed session. Policy – Director Magner reported that they will be working on the General Use Policy.

F. Foundation for Pleasant Valley Recreation and Parks – Director Magner mentioned the successful 5<sup>th</sup> Party for the Parks and the upcoming fundraisers.

G. General Manager's Report – General Manager Otten stated that there will be a special meeting on October 24, 2019 to cover financial options for the Senior and Community Recreation Facility project. She provided park updates, upcoming District events and legislative info on independent contractors. Director Mishler and Malloy attended a meeting regarding the Ran Rancho property for the potential park.

#### **11. ORAL COMMUNICATIONS**

Director Magner stated that she will be out of town for the next 7 weeks with about 3 of those weeks in Sacramento. Malloy reported on VCSDA's meeting at Calleguas-Grandsen Water Pump Station in Moorpark, CA. Director Mishler stated that the District is looking to include a dog area, a restroom and other amenities at the new Springville park. Chairman Kelley stated that he was concerned with the way the District Board and staff were treated at the joint City/District meeting of September 16, 2019. The numbers in question from the report had been delivered shortly before the report went to print and were not addressed. Mr. Kelley stated that there could have been acknowledgement of the discrepancies before the meeting. He would like to see the citizens receive what they need, but cooperation will be needed in order for the facility to be built.

#### **12. ADJOURNMENT**

Chairman Kelley adjourned the meeting at 8:53 p.m.

**Respectfully submitted,**

**Approval,**

**Karen Roberts  
Recording Secretary**

**Robert Kelley  
Chairman**

Pleasant Valley Recreation and Park District  
 Finance Report  
 September 2019

	Date	Amount	
Accounts Payables:	9/1/19-9/30/19	\$ 432,202.66	
	<b>Total</b>	<b>\$ 432,202.66</b>	
Payroll (Total Cost):	9/5/2019	\$ 144,793.97	PR 9/5/2019
	9/19/2019	\$ 137,675.48	PR 9/19/2019
	<b>Total</b>	<b>\$ 282,469.45</b>	
Outgoing: Online Payments			
	9/5/2019	\$ 479.55	VSP- 9/2019 Vision Insurance
	9/5/2019	\$ 1,919.73	The Hartford- 9/2019 Life/ADD/STD/LTD Insurance
	9/5/2019	\$ 2,172.84	The Guardian- 9/2019 Dental Insurance
	9/5/2019	\$ 28,460.80	09/2019 CALPERS Health Insurance
	9/5/2019	\$ 14,631.83	CALPERS (Ret.)- PR 09/05/2019
	9/5/2019	\$ 3,749.29	WEX (76) Fuel
	9/5/2019	\$ 221.52	AFLAC
	9/6/2019	\$ 4,336.74	EJ Harrison Trash Bill
	9/10/2019	\$ 58,762.77	City Of Camarillo- Water
	9/10/2019	\$ 88.21	Culligan Water
	9/10/2019	\$ 3,200.11	Southern CA Edison
	9/11/2019	\$ 6,372.37	Southern CA Edison
	9/13/2019	\$ 1,376.40	Southern CA Gas Co.
	9/13/2019	\$ 1,252.26	Southern CA Edison
	9/17/2019	\$ 583.42	Southern CA Edison
	9/17/2019	\$ 14,301.30	CALPERS (Ret.)- PR 09/19/2019
	9/23/2019	\$ 6,679.67	Southern CA Edison
	9/23/2019	\$ 39,765.70	City Of Camarillo- Water
	9/25/2019	\$ 148.59	Southern CA Edison
	9/25/2019	\$ 55.48	Southern CA Gas Co.
	9/25/2019	\$ 16.99	Spectrum Business- Cable Service
	9/26/2019	\$ 142.69	Sprint
	<b>Total</b>	<b>\$ 188,718.26</b>	
	<b>Grand Total</b>	<b>\$ 903,390.37</b>	

# CASH REPORT

	9/30/2019 Balance	9/30/2018 Balance	
<b>Restricted Funds</b>			
Debt Service - Restricted	\$ 242,771.26	\$ 636,529.56	
457 Pension Trust Restricted	\$ 67,131.46	\$ 70,058.34	
Quimby Fee - Restricted	\$ 211,564.33	\$ 301,617.44	
Multi-Bank Securities Restricted	\$ 661,107.82	\$ 660,764.48	
Ventura County Pool - Restricted	\$ 4,072,817.79	\$ 5,056,897.54	
FCDP Checking	\$ 21,004.04	\$ 29,730.35	
<b>Total</b>	<b>\$ 5,276,396.70</b>	<b>\$ 6,755,597.71</b>	
<b>Semi-Restricted Funds</b>			
Assessment	\$ 555,291.64	\$ 14,378.73	
Capital Improvement	\$ 31,028.70	\$ 29,257.50	
Capital - Vehicle Replacement	\$ 50,843.80	\$ 43,343.80	
Capital - Designated Project	\$ 16,397.94	\$ 16,397.94	
LAIF Capital	\$ 2,706,443.03	\$ 2,094,955.79	
Contingency - Dry Period	\$ 271,000.00	\$ 203,500.00	
Contingency - Computer	\$ 10,000.00	\$ 6,250.01	
Contingency - Repair/Oper/Admin	\$ 30,000.00	\$ 7,500.00	
<b>Total</b>	<b>\$ 3,671,005.11</b>	<b>\$ 2,415,583.77</b>	
<b>Unrestricted Funds</b>			
Contingency	\$ 516,197.47	\$ 564,292.73	
Cal Trust	\$ 92,821.77	\$ 129,228.69	
General Fund Checking	\$ 279,797.79	\$ 494,128.68	
<b>Total</b>	<b>\$ 888,817.03</b>	<b>\$ 1,187,650.10</b>	
<b>Total of all Funds</b>	<b>\$ 9,836,218.84</b>	<b>\$ 10,358,831.58</b>	<b>\$ (522,612.74)</b>

	10/9/2019 Balance	10/31/2018 Balance	
<b>Restricted Funds</b>			
Debt Service - Restricted	\$ 242,771.26	\$ 6,516.54	
457 Pension Trust Restricted	\$ 67,131.46	\$ 70,090.68	
Quimby Fee - Restricted	\$ 172,467.67	\$ 239,487.28	
Multi-Bank Securities Restricted	\$ 660,764.48	\$ 660,764.48	
Ventura County Pool - Restricted	\$ 4,072,817.49	\$ 5,090,272.11	
FCDP Checking	\$ 21,004.04	\$ 30,500.04	
<b>Total</b>	<b>\$ 5,236,956.40</b>	<b>\$ 6,097,631.13</b>	
<b>Semi-Restricted Funds</b>			
Assessment	\$ 524,299.47	\$ 12,807.95	
Capital Improvement	\$ 31,028.70	\$ 29,298.25	
Capital - Vehicle Replacement	\$ 50,843.80	\$ 43,343.80	
Capital - Designated Project	\$ 16,397.94	\$ 16,397.94	
LAIF Capital	\$ 2,706,443.03	\$ 2,094,955.79	
Contingency - Dry Period	\$ 271,000.00	\$ 203,500.00	
Contingency - Computer	\$ 10,000.00	\$ 6,250.01	
Contingency - Repair/Oper/Admin	\$ 30,000.00	\$ 7,500.00	
<b>Total</b>	<b>\$ 3,640,012.94</b>	<b>\$ 2,414,053.74</b>	
<b>Unrestricted Funds</b>			
Contingency	\$ 516,197.47	\$ 264,627.52	
Cal Trust	\$ 92,821.77	\$ 129,228.69	
General Fund Checking	\$ 93,432.96	\$ 394,689.21	
<b>Total</b>	<b>\$ 702,452.20</b>	<b>\$ 788,545.42</b>	
<b>Total of all Funds</b>	<b>\$ 9,579,421.54</b>	<b>\$ 9,300,230.29</b>	<b>\$ 279,191.25</b>

Pleasant Valley Recreation & Park District  
 FY18-19 Investments Summary  
 30-Jun-19

	Purchase Date	Maturity Date	Purchase Price	Market Price	Accrued Interest	Est. Annual Income	Est. Yield	Cur. Market Value	Int. Received Since Inception
<b>MBS Investments:</b>									
Firstbank P R Santurce	2/12/2016	2/12/2020	245,000.00	99.6920	199.36	4,042.50	1.65%	244,245.40	13,467.72
Goldman Sachs Bk USA New York CTF Dep A	2/10/2016	2/10/2021	200,000.00	99.8530	1,495.89	3,900.00	1.95%	199,706.00	11,710.69
Everbank Jacksonville Fla	2/12/2016	2/12/2021	200,000.00	99.2170	1,285.48	3,400.00	1.71%	198,434.00	10,209.31
<b>MBS Investments Total</b>			<b>645,000.00</b>			<b>11,342.50</b>		<b>642,385.40</b>	<b>35,387.72</b>

	FY15-16 Interest	FY16-17 Interest	FY17-18 Interest	Q1 Interest	Q2 Interest	Q3 Interest	Q4 Interest	2018-2019 YTD Interest	Int. Received Since Inception
<b>MBS Interest Summary</b>									
YTD Dividends and Interest	1,340.13	11,362.53	11,342.53	4,638.94	1,007.86	4,676.79	1,018.94	11,342.53	35,387.72

	Q1 Interest	Q2 Interest	Q3 Interest	Q4 Interest	Current Qtr. Interest Rate	2018-2019 YTD Interest Earned	Ending Balance Per GL
<b>LAIIF:</b>	\$ 11,589.48	\$ 12,822.64	\$ 15,027.05	\$ 16,679.80	2.55%	\$ 56,118.97	2,767,763.23

	Q1 Interest	Q2 Interest	Q3 Interest	Q4 Interest	Current Qtr. Interest Rate	2018-2019 YTD Interest Earned	Ending Balance Per GL
<b>Ventura County Pool:</b>							
Restricted -0241	\$ 25,038.78	\$ 29,098.42	\$ 31,778.47	-	2.52%	\$ 85,915.67	4,370,235.37
Unrestricted- 0240	\$ 5,038.33	\$ 1,315.76	\$ 3,345.41	-	2.52%	\$ 9,699.50	1,825,381.38
CALTRUST	\$ -	\$ -	\$ 1,240.47	10,152.66	2.37%	\$ 11,393.13	

	Q1 Interest	Q2 Interest	Q3 Interest	Q4 Interest	Current Qtr. Interest Rate	2018-2019 YTD Interest Earned	Ending Balance Per GL
<b>Pacific Western Bank Accounts</b>							
457 Pension	\$ 45.80	\$ 53.00	\$ 51.89	\$ 52.46	0.000%	\$ 203.15	68,655.58
Assessment District	\$ 50.87	\$ 60.32	\$ 312.75	\$ 489.93	0.000%	\$ 913.87	664,785.49
Capital	\$ 54.79	\$ 67.69	\$ 72.37	\$ 74.18	0.000%	\$ 269.03	98,196.60
Contingency	\$ 476.33	\$ 365.69	\$ 797.09	\$ 410.86	0.000%	\$ 2,049.97	765,989.18
Debt Service	\$ 374.17	\$ 115.44	\$ 237.55	\$ 218.30	0.000%	\$ 945.46	365,158.10
Quimby	\$ 193.25	\$ 267.37	\$ 232.15	\$ 101.58	0.000%	\$ 794.35	57,733.62

**Total Invested Balance Including MBS** 11,626,283.95

	Q1 Interest	Q2 Interest	Q3 Interest	Q4 Interest	2018-2019 YTD Interest Earned
<b>Interest Earnings Summary</b>					
Total Dividends and Interest	47,500.74	45,174.19	57,771.99	29,198.71	\$ 179,645.63

### MBS -- Multi Bank Securities

MBS - US Treasury Type	May 10 2018	June 6 2018	July 11 2018	Aug 9 2018	Sept 11 2018	Oct 15 2018	Nov 11 2018	Dec 11 2018	Jan 11 2019
US 3 Month	1.842%	1.900%	1.922%	2.003%	2.095%	2.228%	2.327%	2.344%	2.345%
US 6 Month	2.000%	2.067%	2.085%	2.173%	2.255%	2.395%	2.464%	2.475%	2.437%
US 1 Year	2.175%	2.223%	2.260%	2.343%	2.435%	2.567%	2.637%	2.595%	2.490%
US 2 Year	2.526%	2.520%	2.582%	2.649%	2.744%	2.853%	2.924%	2.754%	2.537%
US 3 Year	2.667%	2.650%	2.672%	2.728%	2.820%	2.941%	2.990%	2.751%	2.504%
US 5 Year	2.526%	2.809%	2.752%	2.811%	2.869%	3.012%	3.039%	2.726%	2.520%
	Feb 11 2019	March 13 2019	April 9 2019	May 8 2019	June 10 2019	July 9 2019	Aug 12 2019	Sept 12 2019	Oct 9 2019
US 3 Month	2.375%	2.388%	2.376%	2.399%	2.215%	2.148%	1.927%	1.870%	1.630%
US 6 Month	2.432%	2.445%	2.375%	2.388%	2.128%	2.065%	1.875%	1.840%	1.635%
US 1 Year	2.458%	2.435%	2.332%	2.295%	1.961%	1.932%	1.702%	1.755%	1.542%
US 2 Year	2.490%	2.463%	2.346%	2.297%	1.904%	1.886%	1.575%	1.720%	1.449%
US 3 Year	2.467%	2.433%	2.294%	2.264%	1.874%	1.835%	1.503%	1.685%	1.402%
US 5 Year	2.475%	2.522%	2.306%	2.287%	1.915%	1.857%	1.484%	1.645%	1.389%

## Ventura County Pool

Investment Name	April 2018	May 2018	June 2018	July 2018	Aug 2018	September 2018	October 2018	November 2018	December 2018
<b>Ventura County Pool</b>	1.781%	1.857%	1.963%	2.072%	2.136%	2.135%	2.293%	2.433%	2.483%
	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019
<b>Ventura County Pool</b>	2.757%	2.669%	2.655%	2.677%	2.686%	2.707%	2.639%	2.563%	2.497%

- Rates are determined at the end of the month

## Local Agency Investment Fund (LAIF)

Investment Name	April 2018	May 2018	June 2018	July 2018	Aug 2018	September 2018	October 2018	November 2018	December 2018
<b>Local Agency Investment Fund (LAIF)</b>	1.661%	1.755%	1.854%	1.944%	1.998%	2.160%	2.144%	2.208%	2.291%
	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019
<b>Local Agency Investment Fund (LAIF)</b>	2.355%	2.392%	2.436%	2.445%	2.449%	2.428%	2.379%	2.341%	2.280%

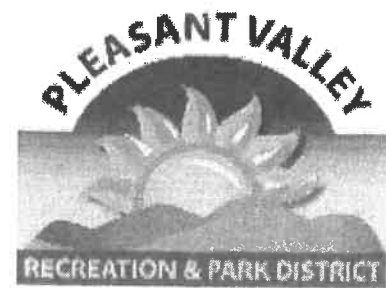
## Cal Trust

Investment Name	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019
<b>Cal Trust</b>	2.54%	2.52%	2.52%	2.58%	2.54%	2.59%	2.38%	2.26%	2.17%

# Bank Reconciliation

## Board Audit

User: fsantos  
 Printed: 10/02/2019 - 1:17PM  
 Date Range: 09/01/2019 - 09/30/2019  
 Systems: 'AP'



Check No.	Vendor/Employee	Transaction Description	Date	Amount
Fund: 10 General Fund				
Department: 00 Non Departmentalized				
0	CONNOR SOUDANI	C.SOUDANI: MILEAGE REIMBUR:	09/26/2019	6.38
0	JANE RAAB	J.RAAB: MILEAGE REIMBURSEM	09/26/2019	12.76
22581	US BANK	US BANK: CALCARD CHARGES- 1	09/04/2019	15,411.69
22591	CAMARILLO STAKE CHURCH OF	CAMARILLO STAKE CHURCH OF	09/12/2019	50.00
22593	CAPRI	CAPRI: 19/20- 2ND QTR. ANNUAL	09/12/2019	59,992.25
22601	CRAIG DAVIS	B.DAVIS/LA VATTON: BAND- SUM	09/12/2019	2,500.00
22608	GOOSETOWN PRODUCTIONS INC	GOOSETOWN PROD.: LIGHTS & A	09/12/2019	4,300.00
22611	KNIGHTS OF COLUMBUS OXNAR	KNIGHTS OF COLUMBUS: PERMI	09/12/2019	200.00
22616	DEBORA NAVES	D.NAVES: PERMIT REFUND	09/12/2019	50.00
22617	PLEASANT VALLEY HISTORICAL	PV HISTORICAL SOCIETY: PERMI	09/12/2019	300.00
22625	TEAM PLAY EVENTS	TEAM PLAY EVENTS: PERMIT RE	09/12/2019	100.00
22633	WILWOOD ENGINEERING	WILDWOOD ENGINEERING: PERI	09/12/2019	100.00
22641	HUB INTERNATIONAL INSURANC	HUN INSURANCE- 08/2019 INSUR.	09/17/2019	1,212.00
22647	ROSIE AGUAYO	R.AGUAYO: PERMIT REFUND	09/26/2019	50.00
22654	GUADALUPE BELTRAN	G.BELTRAN: PERMIT REFUND	09/26/2019	100.00
22670	LEE MAGANA	L.MAGANA: PERMIT REFUND	09/26/2019	50.00
22674	LISA ORTIZ	L.ORTIZ: PERMIT REFUND	09/26/2019	50.00
22676	BECCA PEYTON	PEYTON PRODUCTIONS: PERMIT	09/26/2019	50.00
22679	SAGE OAK	SAGE OAK: PERMIT REFUND	09/26/2019	50.00

Total for Department: 00 Non Departmentalized

84,585.08

Department: 03 Recreation

0	BEVERLY DRANSFELDT	B.DRANSFELDT: MILEAGE REIMI	09/12/2019	3.48
0	JAMES MOORE	J.MOORE: MILEAGE REIMBURSE)	09/12/2019	6.61
0	JAMES MOORE	JAMES MOORE: MILEAGE REIMB	09/26/2019	3.94
0	JOSHUA VARELA	J.VARELA: MILEAGE REIMBURSE	09/12/2019	17.40
0	LANNY BINNEY	L.BINNEY: 8/2019 MILEAGE REIM	09/12/2019	67.28
22582	ADM GROUP INC.	ADM GROUP: INSTRUCTOR FEES.	09/12/2019	572.00
22584	AMERICAN RED CROSS	AMERICAN RED CROSS: ADULT &	09/12/2019	180.00
22589	BINGO WEST #4	BINGO WEST#4: BINGO SUPPLIES	09/12/2019	454.53
22590	PATRICIA J. BOLLAND	P.BOLLAND: INSTRUCTOR FEES/	09/12/2019	838.50
22592	CANON SOLUTIONS AMERICA IN	CANON: VINYL FOR BANNERS	09/12/2019	933.77
22594	CASEY PRINTING	CASEY PRINTING: PV ACTIVITY C	09/12/2019	14,019.45
22598	KERRY A. CLERIC	K.CLERIC: DISTRICT UIC	09/12/2019	250.00
22599	LORENZO J. CRAWFORD JR.	L.CRAWFORD: INST. FEE/FUNK F'	09/12/2019	144.30
22602	DURHAM SCHOOL SERVICES	DURHAM SCHOOL SERVICES: BU	09/12/2019	918.42
22603	ELITE COMMUNICATION	ELITE COMMUNICATION: SOFTB.	09/12/2019	3,389.18
22609	DEBRA GREENWOOD	D.GREENWOOD: INSTRUCTOR FE	09/12/2019	132.60
22610	DANIEL E. HOWARD	D.HOWARD: INSTRUCTOR FEES/J	09/12/2019	247.78
22612	ALISON LITTLE	A.LITTLE: INSTRUCTOR FEES/SP/	09/12/2019	171.60
22613	BRYAN MONKA	B.MONKA: INSTRUCTOR FEES/M/	09/12/2019	760.50
22614	LUCILE B. MOSIER	L.MOSIER: INSTRUCTOR FEES: M	09/12/2019	130.00
22618	TOMLINSON RAUSCHER	T.RAUSCHER: INSTRUCTOR FEES	09/12/2019	126.75
22619	KATIE SHINDEN	K.SHINDEN: INSTRUCTOR FEES/f	09/12/2019	468.00
22621	SPORTS OF ALL SORTS	J.TRACE: INTRUCTOR FEES/BASE	09/12/2019	686.40
22623	SWORDS INC.	SWORDS, INC.: INSTRUCTOR FEE	09/12/2019	293.80
22624	PAMELA ANN TAYLOR	P.TAYLOR: TOTAL FITNESS	09/12/2019	180.18
22628	CAMILLE TORGESON	C.TORGESON: INSTRUCTOR FEES	09/12/2019	327.60



Check No.	Vendor/Employee	Transaction Description	Date	Amount
22631	VENTURA COUNTY STAR	VENTURA COUNTY STAR: SUSBC	09/12/2019	232.84
22632	W & S SERVICES	W&S: SEWER SERVICE- CO-OP BI	09/12/2019	128.96
22635	DUNCAN YOUNG	D.YOUNG: INSTRUCTOR FEES/BE	09/12/2019	715.00
22646	AED SUPERSTORE AN ALLIED 100	AED SUPERSTORE: PROG. MGT R	09/26/2019	130.00
22655	BINGO BUGLE-SANTA BARBARA/	BINGO BUGLE: PROGRAM LISTIN	09/26/2019	315.00
22656	BINGO WEST #4	BINGO WEST#4: BINGO SUPPLIES	09/26/2019	287.75
22669	LINCOLN AQUATICS	LINCOLN AQUATICS: 2- CLASSIC	09/26/2019	2,884.64
22672	BRET NIEDENS	B.NIEDES: INSTRUCTOR FEES/PA	09/26/2019	279.50
22680	JOE SHEA	J.SHEA: UNPAID FORFEIT- 8/15/20	09/26/2019	30.00
22682	DAN SVIKHART	D.SVIKHART: UNPAID FORFEIT- 8	09/26/2019	39.00
22683	NANCE TAPLEY-PECK	PECK FARMS: INSTRUCTOR FEES	09/26/2019	272.30
22684	CAMILLE TORGESON	C.TORGESON: INSTRUCTOR FEES	09/26/2019	653.25
22686	USPS BULK MAILING	USPS: PERMIT# P1109 / MAILING C	09/26/2019	59.45

Total for Department: 03 Recreation

31,351.76

Department: 04 Parks

0	GRAINGER	GRAINGER: BYPASS LOPPER 1.5"	09/12/2019	1,217.85
0	GRAINGER	GRAINGER: TRIMMER LINE/SHO	09/17/2019	162.73
0	JESSE GOMEZ	J.GOMEZ: PANTS REIMBURSEME	09/12/2019	146.38
0	MICHAEL GUERRERO	M.GUERRERO: BOOTS REIMBURS	09/12/2019	134.80
22585	AQUA-FLO SUPPLY	AQUA-FLO: BALL VALVE AND FT	09/12/2019	149.92
22586	ASTRA INDUSTRIAL SERVICES IN	ASTRA IND.: CV/RV RUBBER KIT/	09/12/2019	274.56
22587	B & B DO IT CENTER	B&B: WAND INSECT KILLER/PV P	09/12/2019	794.39
22596	CITY OF CAMARILLO	CITY OF CAM: WATER SERVICE/F	09/12/2019	16,180.50
22600	CRESTVIEW MUTUAL WATER CO.	CRESTVIEW MUTUAL WATER: W	09/12/2019	54.00
22604	EMG HOLDINGS, LLC	EMG HOLDINGS LLC; BAGS AND	09/12/2019	1,400.00
22605	EMPIRE CLEANING SUPPLY	EMPIRE CLEANING SUPPLY: JAN	09/12/2019	785.34
22606	FENCE FACTORY RENTALS	FENCE FACTORY RENTALS: TENS	09/12/2019	58.70
22607	FERGUSON ENTERPRISES INC. #1	FERGUSON: LF BUBLER HD & LF	09/12/2019	230.48
22615	NATURAL GREEN LANDSCAPES	NATURAL GREEN LANDSCAPES:	09/12/2019	1,600.00
22620	SITEONE LANDSCAPE SUPPLY LL	SITEONE: IRRIGATION SUPPLIES/	09/12/2019	312.88
22622	SUPERIOR POOL PRODUCTS LLC	SUPERIOR POOL PRODUCTS: MU	09/12/2019	146.29
22626	THE DETAIL DOCTOR	DETAIL DR.:POWER WASHED BLI	09/12/2019	1,750.00
22627	TONY'S COLLISION SERVICES INC	TONY'S COLLISION SERVICES: RI	09/12/2019	2,828.09
22632	W & S SERVICES	W&S: SEWER SERVICE- CO-OP BI	09/12/2019	900.64
22634	WITHERS & SANDGREN, LTD.	WITHERS & SANDGREN: LS ARCI	09/12/2019	3,394.63
22636	LESLIE S. GILMER III	SG MASONRY/L.GILMER: DRAW#	09/12/2019	28,695.00
22641	HUB INTERNATIONAL INSURANC	HUN INSURANCE- 08/2019 INSUR.	09/17/2019	-60.82
22643	CAMROSA WATER DISTRICT	CAMROSA: WATER SERVICE- 7/31	09/19/2019	23,890.49
22644	CITY OF OXNARD-CITY TREASUR	CITY OF OXNARD: WASTE DISPO	09/19/2019	247.35
22648	AIRWORKS SOLUTIONS INC.	AIRWORKS: INSTALLATION OF N	09/26/2019	23,930.00
22650	ANGEL'S SMOG CHECK TEST ONI	ANGEL'S SMOG CHECK: SMOG CI	09/26/2019	41.75
22651	B & B DO IT CENTER	B&B: PAINT SUPPLIES FOR TABL	09/26/2019	537.41
22652	BAVCO	BAVCO: NEW BACKFLOW FOR AI	09/26/2019	2,059.20
22653	BCI BURKE COMPANY LLC	BCI BURKE: PG PARTS/MISSION C	09/26/2019	107.01
22658	CITY OF OXNARD-CITY TREASUR	CITY OF OXNARD: WASTE DIPOS.	09/26/2019	146.60
22659	COASTAL PIPCO IRRIGATION INC	COASTAL PIPCO: IRRIGATION SU	09/26/2019	632.44
22660	COUNTY OF VENTURA	COUNTY OF VENTURA: 01/2019 C	09/26/2019	25.00
22661	COUNTY OF VENTURA	CTY OF VENTURA AIRPORTS: 19/	09/26/2019	14,235.00
22662	DIAL SECURITY	DIAL SECURITY; SEC. SERVICES :	09/26/2019	100.00
22663	EMPIRE CLEANING SUPPLY	EMPIRE CLEANING SUPPLY: GLA	09/26/2019	671.39
22664	FALCON ROOFING COMPANY	FALCON ROOFING: ROOF REPLA	09/26/2019	4,978.00
22665	FIGUEROA, INC.	FIGUEROA INC.: NEW FENCING/B	09/26/2019	2,500.00
22666	GAMETIME	GAMETIME: SHADE STUCTURE/P	09/26/2019	28,144.30
22667	GAMETIME	GAMETIME: INSTALLATION CHA	09/26/2019	44,490.00
22675	PEACH HILL SOILS INC.	PEACH HILL SOILS: TOP SOIL/PIT	09/26/2019	243.99
22678	RJ THOMAS MFG. CO., INC.	RJ THOMAS/PILOT ROCK: BBQ GI	09/26/2019	2,785.65
22681	SITEONE LANDSCAPE SUPPLY LL	SITEONE: IRRIGATION SUPPLIES/	09/26/2019	515.87
22685	UNITED SITE SERVICES OF CA IN	UNITED SITE SERV: TEMP. RR. RE	09/26/2019	969.39
22688	VISTA FORD OF OXNARD	VISTA FORD: VEHICLE REPAIR #1	09/26/2019	615.45
22689	WEST COAST ARBORISTS INC.	WEST COAST ARBORIST: 8/2019 C	09/26/2019	8,625.00
22690	LPA INC.	LPA: 8/2019 ARCHI SERVICES/PV :	09/27/2019	4,275.00

Total for Department: 04 Parks

225,922.65

Department: 05 Administration

0	CHERYL PETERSON	C.PETERSON: 8/2019 MILEAGE RE	09/12/2019	12.76
0	MEGAN HAMLIN	M.HAMLIN: MILEAGE REIMBURS	09/26/2019	149.64
22583	ALLCONNECTED, INC.	ALLCONNECTED: AGREEMENT C	09/12/2019	2,914.00
22595	CENTERS FOR FAMILY HEALTH	CENTER FOR FAMILY HLTH: EE H	09/12/2019	70.00
22597	CITY OF CAMARILLO- CASHIER	CITY OF CAM: USE OF CHAMBER	09/12/2019	306.18
22630	VCSDA	VCDSA: 2019-2020 ANNUAL DUES	09/12/2019	150.00
22631	VENTURA COUNTY STAR	VENTURA COUNTY STAR: SUSBC	09/12/2019	41.94
22642	ADVANTAGE TELECOM/A+WIREL	ADVANTAGE TELECOM: 8/12-8/31	09/19/2019	1,771.25
22645	KONICA MINOLTA	KONICA MINOLTA: 8/2019 MAINT	09/19/2019	1,160.75
22649	ALESHIRE & WYNDER LLP	ALESHIRE & WYNDER LLP: 8/201	09/26/2019	4,811.92
22668	J. THAYER COMPANY	J.THAYER: MONITOR STAND ,INK	09/26/2019	415.59
22671	MAILFINANCE	MAILFINANCE: POSTAGE MACHI	09/26/2019	271.36
22673	ONSITE MD	ONSITE MD: EE HEALTH SCREEN	09/26/2019	95.00
22677	RINCON CONSULTANTS INC.	RINCON CONS: PHASE I-ENV. SIT	09/26/2019	7,270.00

Total for Department: 05 Administration

19,440.39

Total for Fund:10 General Fund

361,299.88

Check No.	Vendor/Employee	Transaction Description	Date	Amount
Fund: 20 Assessment Fund				
Department: 00 Non Departmentalized				
22657	BRIGHTVIEW LANDSCAPE SERVI	BRIGHTVIEW L/S SERVICES: 9/20	09/26/2019	25,127.50
Total for Department: 00 Non Departmentalized				<u>25,127.50</u>
Total for Fund:20 Assessment Fund				<u>25,127.50</u>

Fund: 30 Park Dedication Fund

Department: 00

			DATE	AMOUNT
22588	BEACON ATHLETICS	BEACON ATHLETICS: BASES FOR	09/12/2019	2,933.64
22629	UNITED CONSTRUCTION & LANE	UNITED CONSTRUCTION: VALLE	09/12/2019	37,800.50
22640	CITY OF CAMARILLO	CITY OF CAM: SEWER PERMIT FF	09/17/2019	4,609.00
22687	VENTURA COUNTY STAR	VC STAR: NOTICE CALLING FOR	09/26/2019	432.14
Total for Department: 00				45,775.28
Total for Fund:30 Park Dedication Fund				45,775.28

Grand Total

432,202.66

P.O. BOX 6343  
FARGO ND 58125-6343



**ACCOUNT NUMBER**  
**STATEMENT DATE** 09-23-2019  
**AMOUNT DUE** \$14,401.83  
**NEW BALANCE** \$14,401.83  
PAYMENT DUE ON RECEIPT

000002315 01 SP 0.560 106481067641370 P  
PLEASANT VALLEY REC PRK  
ATTN LEO YOUNG  
1605 E BURNLEY ST  
CAMARILLO CA 93010-4524

**AMOUNT ENCLOSED**  
\$  
*Please make check payable to "U.S. Bank"*

U.S. BANK CORPORATE PAYMENT SYSTEM  
P.O. BOX 790428  
ST. LOUIS, MO 63179-0428

001440183 001440183

*W5*

lease tear payment coupon at perforation.

**CORPORATE ACCOUNT SUMMARY**

PLEASANT VALLEY REC	Previous Balance	Purchases And Other Charges	Cash Advances	Cash Advance Fees	Late Payment Charges	Credits	Payments	New Balance
Company Total	\$15,411.69	\$14,853.27	\$0.00	\$0.00	\$0.00	\$451.44	\$15,411.69	\$14,401.83

**CORPORATE ACCOUNT ACTIVITY**

PLEASANT VALLEY REC PRK

**TOTAL CORPORATE ACTIVITY**  
\$15,411.69 CR

Post Date	Tran Date	Reference Number	Transaction Description	Amount
09-12	09-09	74798269255000000001788	PAYMENT - THANK YOU 00000 C	15,411.69 PY

**NEW ACTIVITY**

JANE RAAB  
CREDITS \$0.00  
PURCHASES \$392.06  
CASH ADV \$0.00  
TOTAL ACTIVITY \$392.06

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-26	08-24	24231689237837000210089	SMART AND FINAL 400 CAMARILLO CA	20.08
08-26	08-23	24497789235900011800014	CAMARILLO FEED STORE 805-3892929 CA	107.25
08-27	08-26	24692169238100019980281	AMZN MKTP US*MO6QL4M2 AMZN.COM/BILL WA	33.43
08-28	08-26	24453519239030012422854	LAS POSAS CLEANERS CAMARILLO CA	16.00
08-28	08-27	24692169239100614215116	AMZN MKTP US*MO4806H42 AMZN.COM/BILL WA	47.14

**CUSTOMER SERVICE CALL**

800-344-5696

**ACCOUNT NUMBER**

**ACCOUNT SUMMARY**

STATEMENT DATE 09/23/19  
DISPUTED AMOUNT .00

PREVIOUS BALANCE	15,411.69
PURCHASES & OTHER CHARGES	14,853.27
CASH ADVANCES	.00
CASH ADVANCE FEES	.00
LATE PAYMENT CHARGES	.00
CREDITS	451.44
PAYMENTS	15,411.69
<b>ACCOUNT BALANCE</b>	<b>14,401.83</b>

**AMOUNT DUE**

14,401.83

**SEND BILLING INQUIRIES TO:**

U.S. Bank National Association  
C/O U.S. Bancorp Purchasing Card Program  
P.O. Box 6335  
Fargo, ND 58125-6335

Company Name: PLEASANT VALLEY REC PRK

Corporate Account Number:

Statement Date: 09-23-2019

NEW ACTIVITY

Post Date	Tran Date	Reference Number	Transaction Description	Amount
09-09	09-08	24692169251100949383848	AMZN MKTP US*MO2GY1QU0 AMZN.COM/BILL WA	33.97
09-13	09-11	24638589255030046222528	ESTABLOS MEAT MARKET CAMARILLO CA	115.83
09-23	09-20	24445719263300378239267	RALPHS #0741 CAMARILLO CA	18.36

LEONORE YOUNG	CREDITS	PURCHASES	CASH ADV	TOTAL ACTIVITY
	\$0.00	\$1,682.38	\$0.00	\$1,682.38

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-28	08-27	24431069239026956609137	ADOBE *ACROPRO SUBS 800-833-6687 CA	14.99
08-28	08-27	24492159239637126210922	JOB POSTING SUBSCRIP. HTTPSWWW.NEOG CA	900.00
08-30	08-30	24497789242900018562832	CAMARILLO CHAMBER OF COMM 805-4844383 CA	165.00
09-05	09-04	24445009247300356997818	BREAD BASKET CAKE COMPANY CAMARILLO CA	21.60
09-05	09-04	24445719247300356997994	RALPHS #0741 CAMARILLO CA	8.57
09-06	09-04	24000979248224400643972	CRONIES SPORTS GRILL 805-4825900 CA	108.14
09-09	09-08	24692169251100876890823	J2 *METROFAX 888-929-4141 CA	7.95
09-11	09-09	24138299253207299600054	BAJA FRESH 30632 CAMARILLO CA	108.04
09-11	09-09	24431069253975014770938	VONS #1672 CAMARILLO CA	23.68
09-23	09-20	24430999264400810005567	MSFT * E070097JRM 800-642-7676 WA	30.96
09-23	09-20	24430999264400810005575	MSFT * E070097O8M 800-642-7676 WA	281.45
09-23	09-20	24430999264400810005583	MSFT * E070097JRL 800-642-7676 WA	12.00

ANNY RINNEY	CREDITS	PURCHASES	CASH ADV	TOTAL ACTIVITY
	\$0.00	\$271.46	\$0.00	\$271.46

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-29	08-28	24231689241837000121314	SMART AND FINAL 400 CAMARILLO CA	169.64
09-06	09-05	24692169248100226892046	REDBOX *DVDRESERVATION 866-733-2693 IL	1.88
09-12	09-10	24801669254030023312518	PICKLEBALLCENTRAL 253-854-0163 WA	65.30
09-17	09-16	24231689260837000666124	SMART AND FINAL 400 CAMARILLO CA	34.64

ATLYN SIMBER-CLICKENER	CREDITS	PURCHASES	CASH ADV	TOTAL ACTIVITY
	\$0.00	\$669.89	\$0.00	\$669.89

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-27	08-27	24692169239100141585338	AMZN MKTP US*MO0JE85U2 AMZN.COM/BILL WA	25.19
08-27	08-27	24692169239100454051498	AMZN MKTP US*MO51U2VG1 AMZN.COM/BILL WA	41.27
09-06	09-05	24445009249000671167802	DOLLAR TREE CAMARILLO CA	7.51
09-18	09-17	24445009261600081690179	EXPEDIA 7475710076420 EXPEDIA.COM NV	3.42
09-19	09-17	24431069261344900290586	AMERICAN AIR0017457692819 FORT WORTH TX SIMBERCLICKENER/KATL 11-03-19 LAX AA V CLT AA V PIT	265.50
09-19	09-17	24692169261100980547069	UNITED 0167457683978 800-932-2732 TX SIMBERCLICKENER/KATL 11-07-19 PIT UA N DEN UA N LAX	147.00
09-19	09-19	24692169262100220478520	AIRPORT LIMOUSINE SERV 304-232-1175 WV	180.00



Company Name: PLEASANT VALLEY REC PRK
Corporate Account Number:
Statement Date: 09-23-2019

**NEW ACTIVITY**

<b>NICK MARIENTHA</b>		<b>CREDITS</b> \$0.00	<b>PURCHASES</b> \$1,665.39	<b>CASH ADV</b> \$0.00	<b>TOTAL ACTIVITY</b> \$1,665.39
Post Date	Tran Date	Reference Number	Transaction Description	Amount	
08-30	08-29	24015179241003964811770	76 - GSE 76 LAS POSAS CAMARILLO CA	73.99	
08-30	08-28	24639239241900010400011	THORWORKS INDUSTRIES 419-6264375 OH	1,192.20	
09-11	09-10	24015179253001292472039	76 - GSE 76 LAS POSAS CAMARILLO CA	75.70	
09-11	09-11	24692169254100487527779	AMAZON PRIME AMZN.COM/BILL WA	127.63	
09-18	09-17	24692169261100566394654	CAMARILLO ALL OTHER 805-388-5320 CA	118.00	
09-19	09-18	24015179261002378019256	76 - GSE 76 LAS POSAS CAMARILLO CA	77.87	

<b>ERIC STORRIF</b>		<b>CREDITS</b> \$0.00	<b>PURCHASES</b> \$2,757.83	<b>CASH ADV</b> \$0.00	<b>TOTAL ACTIVITY</b> \$2,757.83
Post Date	Tran Date	Reference Number	Transaction Description	Amount	
09-06	09-04	24692169248100107007698	SOUTHWES 5262116434028 800-435-9792 TX SODANI/CONNOR BENJA 01-12-20	344.00	
09-06	09-04	24906049248040100003326	BUR WN P LAS WN P PIT WN G PHX WN G BUR WILSONS LODGE OGLEBAY WHEELING WV 0000810726 ARRIVAL: 09-03-19	692.75	
09-06	09-04	24906049248040100004324	OGLEBAY RESRT ONLINE WHEELING WV 0001030213 ARRIVAL: 09-03-19	1,112.64	
09-09	09-07	24692169250100000404088	AIRPORT LIMOUSINE SERV 304-232-1175 WV	207.00	
09-23	09-19	24138299263709000010414	KMART 7165 CAMARILLO CA	51.44	
09-23	09-20	24492159263894369616054	PAYPAL *EPPLBY 402-935-7733 IN	350.00	

<b>BRANDON LOPEZ</b>		<b>CREDITS</b> \$0.00	<b>PURCHASES</b> \$66.97	<b>CASH ADV</b> \$0.00	<b>TOTAL ACTIVITY</b> \$66.97
Post Date	Tran Date	Reference Number	Transaction Description	Amount	
09-09	09-06	24431069250975011200403	VONS #1672 CAMARILLO CA	37.86	
09-09	09-06	247554292492492496616584	THE MARK IT PLACE CAMARILLO CA	13.41	
09-23	09-19	24610439263010186331578	THE HOME DEPOT #1012 CAMARILLO CA	15.70	

<b>MICHAEL CRUZ</b>		<b>CREDITS</b> \$150.00	<b>PURCHASES</b> \$595.79	<b>CASH ADV</b> \$0.00	<b>TOTAL ACTIVITY</b> \$445.79
Post Date	Tran Date	Reference Number	Transaction Description	Amount	
08-29	08-27	24610439240010186417631	THE HOME DEPOT #1012 CAMARILLO CA	150.79	
09-12	09-10	24610439254010182390587	THE HOME DEPOT #1012 CAMARILLO CA	19.39	
09-13	09-11	74610439255010182432573	THE HOME DEPOT #1012 CAMARILLO CA	150.00 CR	
09-13	09-11	24610439255010182432560	THE HOME DEPOT #1012 CAMARILLO CA	150.00	
09-18	09-16	24610439260010182386033	THE HOME DEPOT #1012 CAMARILLO CA	142.62	
09-20	09-18	24610439262010186371898	THE HOME DEPOT #1012 CAMARILLO CA	132.99	



Company Name: PLEASANT VALLEY REC PRK

Corporate Account Number:

Statement Date: 09-23-2019

NEW ACTIVITY

JOHN FLETCHER CREDITS PURCHASES CASH ADV TOTAL ACTIVITY  
\$130.07 \$1,337.40 \$0.00 \$1,207.33

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-27	08-26	24436549239010590667491	RAINMASTER 650-6222200 CA	508.30
08-29	08-27	24610439240010186419405	THE HOME DEPOT #1012 CAMARILLO CA	29.15
08-30	08-29	24436549242010596228657	RAINMASTER 650-6222200 CA	59.80
09-11	09-09	24610439253010184429632	THE HOME DEPOT #1012 CAMARILLO CA	27.03
09-13	09-11	74610439255010182432607	THE HOME DEPOT #1012 CAMARILLO CA	130.07 CR
09-13	09-11	24692169255100291793368	THE HOME DEPOT 1012 CAMARILLO CA	300.00
09-19	09-17	24692169261100950302834	THE HOME DEPOT 1012 CAMARILLO CA	325.17
09-20	09-18	24692169262100516817886	THE HOME DEPOT 1012 CAMARILLO CA	87.95

MARY OTTEN CREDITS PURCHASES CASH ADV TOTAL ACTIVITY  
\$0.00 \$351.74 \$0.00 \$351.74

Post Date	Tran Date	Reference Number	Transaction Description	Amount
09-02	08-30	24692169242100426608925	MARRIOTT ANAHEIM ANAHEIM CA 005460 ARRIVAL: 09-24-19	211.68
09-18	09-17	24692169260100229454177	PANERA BREAD #202773 P CAMARILLO CA	140.06

TEVE REVELES CREDITS PURCHASES CASH ADV TOTAL ACTIVITY  
\$0.00 \$1,278.09 \$0.00 \$1,278.09

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-26	08-23	24137469235200433123458	BIG BRAND TIRE #5 CAMARIL CARMARILLO CA	270.31
08-26	08-23	24137469235200433123524	BIG BRAND TIRE #5 CAMARIL CARMARILLO CA	52.17
08-29	08-28	24431059241838001012282	O'REILLY AUTO PARTS 3680 CAMARILLO CA	25.72
08-29	08-27	24988949240030032164916	FAST UNDERCAR - VENTURA 516-824-3100 CA	149.13
09-09	09-06	24755429250172507168971	YAMA LAWNMOWER SERVICE OXNARD CA	59.00
09-11	09-09	24755429253162537342974	YAMA LAWNMOWER SERVICE OXNARD CA	55.95
09-12	09-11	24639239254900012400013	BARNETT TOOL & ENGIN 805-6429435 CA	8.12
09-13	09-12	24015179255001550522531	76 - GSE 76 LAS POSAS CAMARILLO CA	115.88
09-18	09-17	24801979260726417401792	WARREN DISTRIBUTING VENT VENTURA CA	187.11
09-20	09-19	24137469262200394557369	BIG BRAND TIRE #5 CAMARIL CARMARILLO CA	354.70

MILY RAAB CREDITS PURCHASES CASH ADV TOTAL ACTIVITY  
\$0.00 \$1,359.29 \$0.00 \$1,359.29

Post Date	Tran Date	Reference Number	Transaction Description	Amount
09-04	09-04	24692169247100155046045	VENTURA COUNTY STAR 805-437-0406 CA	48.00
09-05	09-05	24692169248100076313184	DLX*PS PRINT 800-511-2009 CA	25.90
09-05	09-05	24692169248100076313408	DLX*PS PRINT 800-511-2009 CA	25.90
09-05	09-05	24692169248100076313564	DLX*PS PRINT 800-511-2009 CA	25.90
09-05	09-05	24692169248100076313614	DLX*PS PRINT 800-511-2009 CA	134.00
09-12	09-11	24906419254079390531444	EIG*CONSTANTCONTACT.COM 855-2295506 MA	1,050.00
09-13	09-12	24692169255100375164882	AMZN MKTP US*ZG8H648T3 AMZN.COM/BILL WA	29.50
09-19	09-19	24692169262100234712781	DLX*PS PRINT 800-511-2009 CA	20.09



Company Name: PLEASANT VALLEY REC PRK
Corporate Account Number:
Statement Date: 09-23-2019

**NEW ACTIVITY**

**ROBERT A CERASUOLO**      CREDITS      PURCHASES      CASH ADV      TOTAL ACTIVITY  
    \$0.00                    \$2,424.98                    \$0.00                    \$2,424.98

Post Date	Tran Date	Reference Number	Transaction Description	Amount
08-23	08-21	24323009234200116600037	NJP SPORTS INC 818-247-3914 AZ	2,355.00
09-06	09-05	24391219249761040961410	DICKS SPORTING GOODS OXNARD CA	69.98

**ANTHONY MILLER**      CREDITS      PURCHASES      CASH ADV      TOTAL ACTIVITY  
    \$171.37                    \$0.00                    \$0.00                    \$171.37 CR

Post Date	Tran Date	Reference Number	Transaction Description	Amount
09-16	07-30	24692169211100196044837	SHELL 12634517002 PEORIA AZ	49.82 CR
09-16	07-30	24692169211100301210596	SHELL 57442226205 GLENDALE AZ	27.02 CR
09-16	08-01	24692169213100289144724	SHELL 12634517002 PEORIA AZ	55.01 CR
09-16	08-02	24692169214100864191198	SHELL 57442989802 PHOENIX AZ	39.52 CR

*Fraud charges that were reversed.*

Department: 00000 Total: \$14,401.83  
 Division: 00000 Total: \$14,401.83

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Leonore Young, Administrative Services Manager**

**DATE: November 7, 2019**

**SUBJECT: FINANCE REPORT SEPTEMBER 2019**

**SUMMARY**

Staff is presenting the District's financial report for Fund 10 General Fund, Fund 20 Assessment District Fund and Fund 30 Park Dedication Fund (Quimby Fees) for the month of September 2019 with a prior year comparison.

**ANALYSIS OF COMPARATIVE FINANCIAL THROUGH SEPTEMBER 30, 2019**

Attached you will find the District's Statements of Revenues and Expenditures for the period of July 1, 2019 through September 30, 2019 with a year-to-date comparison for the period of July 1, 2018 through September 30, 2018. The percentage rate used for the 2019-2020 fiscal year budget is 25% for Period 3 of the fiscal year.

**REVENUES**

Total revenue for the 3<sup>rd</sup> month ending September 30, 2019 for Fund 10 (General Fund) has an overall increase of \$210,310. Most of the increase is due to 1) Hill Fire 2018 (\$156,693), 2) Public Fees (\$13,535) and various other revenue accounts.

Total revenue for the 3<sup>rd</sup> month ending September 30, 2019 for Fund 20 (Assessment District) is at 1.96% of budget. The first installment of tax apportionment for fiscal year 2019-2020 will arrive around December 20, 2019. At that time the Assessment District will receive approximately 60% of their budgeted tax apportionment. Until then, the finance reports will reflect minimal activity in the revenue section of the report.

Fund 30 (Park Dedication Fee) is at 221% in revenue, this is due to Aldersgate Construction paying \$92,200 in park dedication fees, which is a revenue that is not budgeted as it is not considered guaranteed revenue.

**EXPENDITURES**

Personnel expenditures have increased by \$90,455 for FY 2019-2020 in comparison to personnel expense for the same time period as last year. This increase will be a constant for the first few months of the fiscal year, as the District paid the CalPERS Unfunded Liability in full for fiscal year 2019-2020; the amount paid to CalPERS was \$349,318. This variance is made primarily up

from two line items: 1) PERS Unfunded Liability has an increase over prior year of \$62,758 and 2) an increase in full-time and part-time wages of \$26,478.

Service and Supply expenditures for Fund 10 have increased \$69,055 in comparison to the same time period as last year. This is due to: 1) Utilities - Water which is showing an increase of \$19,025 2) Airport Assessment Expense \$14,235 3) Insurance Liability \$13,529 and 4) various other accounts.

Fund 20 is at 12.76% in Personnel and 9.07% in Service and Supplies. The Assessment District is staying within budget in all categories.

Fund 30 Services and Supplies is at 0.0% in expenses.

Capital projects for fiscal year 2019-2020 are currently underway and the upcoming finance reports will reflect more activity in the months to come. Currently this fiscal year is ahead of prior year by \$98,743 for Fund 10 and will be starting on the Fund 30 Capital Project of the Pleasant Valley Aquatic Center Restroom and Shower Remodel in the coming months.

#### **FISCAL IMPACT**

Overall the District is over the approved budget for Fund 10 by 1.72%. Fund 20 overall is under budget by 15.83%. Staff is constantly reviewing ways to make the District run effectively and efficiently while staying within the approved budget.

#### **RECOMMENDATION**

It is recommended the Board review and approve the Financial Statements for September 30, 2019 for Fund 10, Fund 20 and Fund 30.

#### **ATTACHMENTS**

- 1) Financial Statement of Revenues and Expenditures as of September 30, 2019 Fund 10  
(2 pages)
- 2) Financial Statement of Revenue and Expenditures as of September 30, 2019 Fund 20  
(1 page)
- 3) Financial Statement of Revenue and Expenditures as of September 30, 2019 Fund 30  
(1 page)



**General Ledger  
Fund 10 General Ledger  
September 2019 25%**

Description	Account	Period Amount	One Year Prior Actual	Year to Date	Budget	Budget Remaining	% of Budget Used
State License Fee	7040	\$ -	\$ 755.00	\$ 852.50	\$ 800.00	\$ (52.50)	106.56%
Professional Services	7100	\$ -	\$ -	\$ -	\$ 20,000.00	\$ 20,000.00	0.00%
Legal Services	7110	\$ 5,561.92	\$ 13,601.50	\$ 13,346.82	\$ 78,000.00	\$ 64,653.18	17.11%
Typeset and Print Services	7115	\$ 14,019.45	\$ 12,169.07	\$ 14,019.45	\$ 40,400.00	\$ 26,380.55	34.70%
Instructor Services	7120	\$ 10,419.34	\$ 30,820.60	\$ 28,019.87	\$ 162,847.00	\$ 134,827.13	17.21%
PERS Admin Fees	7125	\$ -	\$ 259.43	\$ 72.18	\$ 1,550.00	\$ 1,477.82	4.66%
Audit Services	7130	\$ -	\$ -	\$ -	\$ 20,175.00	\$ 20,175.00	0.00%
Medical & Health Svcs (HR)	7140	\$ 165.00	\$ 395.00	\$ 602.50	\$ 9,250.00	\$ 8,647.50	6.51%
Security Services	7150	\$ 100.00	\$ 1,868.35	\$ 225.00	\$ 9,530.00	\$ 9,305.00	2.36%
Entertainment Services	7160	\$ -	\$ 374.99	\$ -	\$ 7,500.00	\$ 7,500.00	0.00%
Business Services	7180	\$ 2,292.97	\$ 43,111.85	\$ 26,106.03	\$ 61,788.00	\$ 35,681.97	42.25%
Umpire/Referee Services	7190	\$ 319.00	\$ 410.00	\$ 419.00	\$ 1,877.00	\$ 1,458.00	22.32%
Subscriptions	7210	\$ 315.00	\$ 238.40	\$ 491.96	\$ 4,712.00	\$ 4,220.04	10.44%
Rents & Leases - Equip	7310	\$ 317.25	\$ 6,032.58	\$ 6,946.79	\$ 41,750.00	\$ 34,803.21	16.64%
Bldg/Field Leases & Rental	7320	\$ -	\$ -	\$ -	\$ 120.00	\$ 120.00	0.00%
Event Supplies	7410	\$ 411.74	\$ 334.46	\$ 391.74	\$ 2,245.00	\$ 1,853.26	17.45%
Supplies	7420	\$ 168.41	\$ 870.80	\$ 370.94	\$ 9,250.00	\$ 8,879.06	4.01%
Bingo Supplies	7430	\$ 742.28	\$ 2,170.95	\$ 1,565.42	\$ 9,600.00	\$ 8,034.58	16.31%
Sporting Goods	7440	\$ 47.17	\$ (106.97)	\$ 106.75	\$ 7,900.00	\$ 7,793.25	1.35%
Arts and Craft Supplies	7450	\$ -	\$ 32.13	\$ 18.85	\$ 2,430.00	\$ 2,411.15	0.78%
Training Supplies	7460	\$ -	\$ -	\$ 210.00	\$ 2,500.00	\$ 2,290.00	8.40%
Camp Supplies	7470	\$ -	\$ -	\$ -	\$ 2,000.00	\$ 2,000.00	0.00%
Small Tools	7500	\$ 1,449.18	\$ 1,683.26	\$ 1,449.18	\$ 6,000.00	\$ 4,550.82	24.15%
Safety Supplies	7510	\$ 3,014.64	\$ 549.72	\$ 3,274.64	\$ 6,855.00	\$ 3,580.36	47.77%
Uniform Allowance	7610	\$ 146.38	\$ 195.09	\$ 496.35	\$ 12,450.00	\$ 11,953.65	3.99%
Safety Clothing	7620	\$ 134.80	\$ 450.00	\$ 531.64	\$ 6,054.00	\$ 5,522.36	8.78%
Conference&Seminar Staff	7710	\$ 2,980.90	\$ 5,635.65	\$ 8,072.90	\$ 27,510.00	\$ 19,437.10	29.35%
Conference&Seminar Board	7715	\$ -	\$ -	\$ 60.00	\$ 4,450.00	\$ 4,390.00	1.35%
Conference&Seminar Travel Exo	7720	\$ 1,800.38	\$ 2,743.44	\$ 1,800.38	\$ 13,117.00	\$ 11,316.62	13.73%
Out of Town Travel Board	7725	\$ -	\$ -	\$ -	\$ 6,556.00	\$ 6,556.00	0.00%
Private Vehicle Mileage	7730	\$ 347.53	\$ 325.83	\$ 411.68	\$ 4,287.00	\$ 3,875.32	9.60%
Buses/Excursions	7750	\$ 918.42	\$ 4,277.54	\$ 4,336.94	\$ 26,700.00	\$ 22,363.06	16.24%
Tuition/Book Reimbursement	7760	\$ -	\$ -	\$ 543.75	\$ -	\$ (543.75)	0.00%
Utilities - Gas	7810	\$ 1,431.88	\$ 4,101.88	\$ 2,892.96	\$ 26,283.00	\$ 23,390.04	11.01%
Utilities - Water	7820	\$ 162,550.17	\$ 202,688.07	\$ 221,712.63	\$ 825,373.00	\$ 603,660.37	26.86%
Utilities - Electric	7830	\$ 18,236.42	\$ 42,931.04	\$ 40,137.17	\$ 240,864.00	\$ 200,726.83	16.66%
Airport Assessment Exo	7840	\$ 14,235.00	\$ -	\$ 14,235.00	\$ 10,000.00	\$ (4,235.00)	142.35%
Awards and Certificates	7910	\$ 3,843.20	\$ 3,365.05	\$ 5,124.53	\$ 20,995.00	\$ 15,870.47	24.41%
Meals for Staff Training	7920	\$ 205.50	\$ 328.15	\$ 279.35	\$ 2,610.00	\$ 2,330.65	10.70%
Employee Morale	7930	\$ 35.48	\$ -	\$ 60.48	\$ 3,000.00	\$ 2,939.52	2.02%
COP Debt - PV Fields	7950	\$ 19,146.67	\$ 60,608.76	\$ 57,440.00	\$ 229,760.00	\$ 172,320.00	25.00%
Reserve Vehicle Fleet	7970	\$ 833.34	\$ 2,500.02	\$ 2,500.02	\$ 10,000.00	\$ 7,499.98	25.00%
Reserve Computer Fleet	7971	\$ 416.67	\$ 1,250.01	\$ 1,250.01	\$ 5,000.00	\$ 3,749.99	25.00%
Reserve Designated Project	7972	\$ -	\$ 5,000.01	\$ -	\$ -	\$ -	-
Reserve Drv Period	7973	\$ 7,500.00	\$ 22,500.00	\$ 22,500.00	\$ 90,000.00	\$ 67,500.00	25.00%
Reserve Repair/Oper/Admin	7975	\$ 1,666.67	\$ 7,500.00	\$ 5,000.01	\$ 20,000.00	\$ 14,999.99	25.00%
<b>Services and Supplies</b>		\$ <b>362,350.79</b>	\$ <b>694,680.98</b>	\$ <b>763,735.79</b>	\$ <b>3,426,776.00</b>	\$ <b>2,663,040.21</b>	<b>22.29%</b>
<b>YTD Comparison</b>			\$ <b>69,054.81</b>				

<b>Capital</b>							
Equip/Facility Replacement	8420	\$ -	\$ -	\$ -	\$ 64,000.00	\$ 64,000.00	0.00%
Sr/Community Rec Facility	8422	\$ 7,270.00	\$ 1,032.00	\$ 7,270.00	\$ -	\$ (7,270.00)	0.00%
Auditorium Restroom Remodel	8435	\$ -	\$ 2,771.41	\$ -	\$ -	\$ -	0.00%
Sorinville Doa Park Wall	8436	\$ -	\$ 630.14	\$ -	\$ -	\$ -	0.00%
Valle Lindo Restroom/Pavilion	8444	\$ 652.14	\$ -	\$ 652.14	\$ -	\$ (652.14)	0.00%
Bob Kildee Restroom Roof	8450	\$ -	\$ 15,613.00	\$ -	\$ -	\$ -	0.00%
Mtr Enclosur-Encht.Fhill.Adolf	8456	\$ -	\$ -	\$ 7,843.00	\$ -	\$ (7,843.00)	0.00%
Arnell Rnch Park Picnic Area	8457	\$ -	\$ 13,600.00	\$ -	\$ -	\$ -	0.00%
Pitts Ranch Park Pavillon	8458	\$ 28,776.74	\$ -	\$ 28,776.74	\$ -	\$ (28,776.74)	0.00%
LPA Architects-CC/Gym/Sr Ctr	8463	\$ 4,275.00	\$ -	\$ 19,448.99	\$ -	\$ (19,448.99)	0.00%
Arnell Ranch Park Renovation	8464	\$ 3,447.13	\$ -	\$ 30,779.13	\$ -	\$ (30,779.13)	0.00%
Lamps/Pole Replacement at M.O.	8465	\$ -	\$ -	\$ -	\$ 53,000.00	\$ 53,000.00	0.00%
L.E.D. Light SorinvilleTennis	8466	\$ -	\$ -	\$ -	\$ 22,000.00	\$ 22,000.00	0.00%
Charter Oaks Irrigation-Trees	8467	\$ -	\$ -	\$ -	\$ 10,000.00	\$ 10,000.00	0.00%
Community Center Marquee	8468	\$ -	\$ -	\$ -	\$ 50,000.00	\$ 50,000.00	0.00%
PVAC Pool Heater	8470	\$ 23,930.00	\$ -	\$ 23,930.00	\$ 23,930.00	\$ -	100.00%
Cam Grove Play Equipment	8471	\$ -	\$ -	\$ -	\$ 34,117.00	\$ 34,117.00	0.00%
Freedom Park ParkingLot&Skyway	8472	\$ -	\$ -	\$ -	\$ 250,000.00	\$ 250,000.00	0.00%
P.V. Fields Painting II	8473	\$ -	\$ -	\$ 13,690.00	\$ 15,000.00	\$ 1,310.00	91.27%
<b>Capital</b>		\$ <b>68,351.01</b>	\$ <b>33,646.55</b>	\$ <b>132,390.00</b>	\$ <b>522,047.00</b>	\$ <b>389,657.00</b>	<b>25.36%</b>
<b>YTD Comparison</b>			\$ <b>98,743.45</b>				

<b>Total Expenses</b>	<b>\$ 307,569.17</b>	<b>\$ 1,181,097.09</b>	<b>\$ 1,271,552.02</b>	<b>\$ 4,758,472.00</b>	<b>\$ 3,486,919.98</b>	<b>26.72%</b>
<b>YTD Comparison</b>			<b>\$ 90,454.93</b>			

**General Ledger**  
**Fund 20 Assesment District**  
**September 2019 25%**

Description	Account	Period Amount	One Year Prior Actual	Year to Date	Budget	Budget Remaining	% of Budget Used
<b>Revenue</b>							
Interest Earnings	5310	\$ (126.19)	\$ (50.87)	\$ (458.48)	\$ (1,078.00)	\$ (619.52)	42.53%
Assessment Revenue	5500	\$ (3,093.62)	\$ (6,127.65)	\$ (22,168.85)	\$ (1,150,444.00)	\$ (1,128,275.15)	1.93%
Staffing Cost Recovery	5563	\$ -	\$ (216.30)	\$ -	\$ -	\$ -	0.00%
<b>Revenue</b>		<b>\$ (3,219.81)</b>	<b>\$ (6,394.82)</b>	<b>\$ (22,627.33)</b>	<b>\$ (1,151,522.00)</b>	<b>\$ (1,128,894.67)</b>	<b>1.96%</b>
<b>YTD Comparison</b>				<b>\$ (16,232.51)</b>			
<b>Expense</b>							
Full Time Salaries	6100	\$ 939.20	\$ 3,626.52	\$ 2,582.80	\$ 21,093.00	\$ 18,510.20	12.24%
Retirement	6120	\$ 144.39	\$ 602.59	\$ 395.90	\$ 3,896.00	\$ 3,500.10	10.16%
Employee Insurance	6130	\$ 215.17	\$ 668.04	\$ 591.75	\$ 3,025.00	\$ 2,433.25	19.56%
Workers Compensation	6140	\$ 90.57	\$ 359.94	\$ 275.13	\$ 2,120.00	\$ 1,844.87	12.98%
<b>Personnel</b>		<b>\$ 1,389.33</b>	<b>\$ 5,257.09</b>	<b>\$ 3,845.58</b>	<b>\$ 30,134.00</b>	<b>\$ 26,288.42</b>	<b>12.76%</b>
<b>YTD Comparison</b>				<b>\$ (19,731.70)</b>			
<b>Services and Supplies</b>							
Incidental Costs - Assess	6709	\$ -	\$ 9,776.34	\$ 10,449.72	\$ 33,346.00	\$ 22,896.28	31.34%
Tree Care - Assess	6719	\$ -	\$ 32,475.00	\$ -	\$ 55,000.00	\$ 55,000.00	0.00%
Contracted LS Services	6720	\$ 25,127.50	\$ 78,927.66	\$ 90,997.58	\$ 489,568.00	\$ 398,570.42	18.59%
Park Amenities - Assess	6722	\$ -	\$ -	\$ -	\$ 20,000.00	\$ 20,000.00	0.00%
ActiveNet Charges	6950	\$ -	\$ -	\$ -	\$ 60.00	\$ 60.00	0.00%
Approp Redev/Collection Fees	6960	\$ -	\$ -	\$ -	\$ 3,000.00	\$ 3,000.00	0.00%
COP Debt - PV Fields	7950	\$ -	\$ -	\$ -	\$ 517,434.00	\$ 517,434.00	0.00%
<b>Expense</b>		<b>\$ 25,127.50</b>	<b>\$ 121,179.00</b>	<b>\$ 101,447.30</b>	<b>\$ 1,118,408.00</b>	<b>\$ 1,016,960.70</b>	<b>9.07%</b>
<b>YTD Comparison</b>				<b>\$ (19,731.70)</b>			
<b>Total Expenses</b>		<b>\$ 26,516.83</b>	<b>\$ 126,436.09</b>	<b>\$ 105,292.88</b>	<b>\$ 1,148,542.00</b>	<b>\$ 1,043,249.12</b>	<b>9.17%</b>
<b>YTD Comparison</b>				<b>\$ (21,143.21)</b>			

**General Ledger**  
**Fund 30 Park Dediction Fee (Quimby)**  
**September 2019 25%**

Description	Account	Period Amount	One Year Prior Actual	Year to Date	Budget	Budget Remaining	% of Budget Used
<b>Revenue</b>							
Interest Earnings	5310	\$ (65.83)	\$ (193.25)	\$ (166.33)	\$ (43,900.00)	\$ (43,733.67)	0.38%
MBS Interest Earnings	5320	\$ (343.34)	\$ (4,638.94)	\$ (4,638.94)	\$ -	\$ 4,638.94	0.00%
Park Dedication Fees	5400	\$ (92,200.46)	\$ -	\$ (92,200.46)	\$ -	\$ 92,200.46	0.00%
<b>Revenue</b>		<b>\$ (92,609.63)</b>	<b>\$ (4,832.19)</b>	<b>\$ (97,005.73)</b>	<b>\$ (43,900.00)</b>	<b>\$ 53,105.73</b>	<b>220.97%</b>
<b>YTD Comparison</b>				<b>\$ (92,173.54)</b>			
<b>Expense</b>							
Advertising Expense	6930	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%
ActiveNet Charges	6950	\$ -	\$ -	\$ 48.00	\$ -	\$ (48.00)	0.00%
<b>Services and Supplies</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 48.00</b>	<b>\$ -</b>	<b>\$ (48.00)</b>	<b>0.00%</b>
<b>YTD Comparison</b>				<b>\$ 48.00</b>			
<b>Capital</b>							
Valle Lindo Restroom/Pavillon	8444	\$ 37,800.50	\$ -	\$ 92,967.03	\$ -	\$ (92,967.03)	0.00%
Nancy Bush Park-Picnic Area	8446	\$ -	\$ 9,450.00	\$ -	\$ -	\$ -	0.00%
Freedom Baseball Fields	8459	\$ 2,933.64	\$ -	\$ 2,933.64	\$ -	\$ (2,933.64)	0.00%
Mel Vincent Park Restrooms	8460	\$ 4,609.00	\$ -	\$ 4,609.00	\$ -	\$ (4,609.00)	0.00%
PVAC Restroom&Shower	8469	\$ 432.14	\$ -	\$ 432.14	\$ 500,000.00	\$ 499,567.86	0.09%
<b>Expense</b>		<b>\$ 45,775.28</b>	<b>\$ 9,450.00</b>	<b>\$ 100,941.81</b>	<b>\$ 500,000.00</b>	<b>\$ 399,058.19</b>	<b>20.20%</b>
<b>YTD Comparison</b>				<b>\$ 91,491.81</b>			

Park Dedication Fees (Quimby) CASH						
Date Received	Amount	Developer	Amount Used	Amount Earmarked	Balance	Sunset Date
7/31/2014	\$615,709.00	AMLI	\$398,308.72	\$615,709.00	\$217,400.28	7/31/2019
1/15/2015	\$2,250,489.00	Fairfield Camarillo L	\$874,950.56	\$1,600,000.00	\$1,375,538.44	1/31/2020
8/8/2016	\$2,649,209.00	Elacora Mission Oak	\$189,887.74	\$-	\$2,459,321.26	8/8/2021
8/10/2016	\$474,353.00	KB Homes	\$142,962.37	\$600,000.00	\$331,390.63	8/10/2021
6/7/2018	\$21,612.25	Crestview	\$-	\$-	\$0.00	6/7/2023
6/29/2018	\$96,391.39	Aldersgate Construc	\$-	\$-	\$0.00	6/29/2023
1/11/2019	\$50,291.16	Aldersgate Construc	\$-	\$-	\$0.00	1/11/2024
3/7/2019	\$35,242.00	Habitat for Humanit	\$-	\$-	\$0.00	3/7/2024
9/12/2019	\$92,200.46	Aldersgate Construction				9/12/2024
<b>Total</b>	<b>\$6,285,497.26</b>		<b>\$1,606,109.39</b>	<b>\$2,815,709.00</b>	<b>\$1,863,678.87</b>	



**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Anthony Miller, Administrative Analyst**

**DATE: November 7, 2019**

**SUBJECT: REVIEW AND APPROVAL OF SURPLUS SUPPLIES  
AND EQUIPMENT LIST**

**RECOMMENDATION**

It is recommended the Board review and approve the items on the Surplus Supplies and Equipment List for disposal.

**BACKGROUND**

On April 4, 2018, Pleasant Valley Recreation and Park District adopted a surplus property disposal policy which outlines how the District disposes of surplus equipment and office supplies.

**ANALYSIS**

Special districts such as PVRPD are not required to maintain a surplus property disposal policy. However, due to recent events within the District such as the office redesign, upgraded IT infrastructure and other capital projects, it has been determined that there is a need to uniformly dispose of surplus personal property owned by the District. In accordance with the Surplus District Property Disposal Policy approved on April 4, 2018, staff has compiled the attached list for board review.

**FISCAL IMPACT**

There is a possible minor positive fiscal impact from this action upon sale of the surplus supplies and equipment.

**RECOMMENDATION**

It is recommended that the Board review and approve the items on the Surplus Supplies and Equipment List for disposal.

**ATTACHMENTS**

- 1) Surplus Supplies and Equipment List (1 page)
- 2) Surplus District Property Disposal Policy (2 pages)



## Pleasant Valley Recreation and Park District

### Surplus Supplies and Equipment List

Equipment	Model	Serial #	Does it work? Y/N	Condition	Date Acquired	Est. Value	Disposed On	Means
Swingline Shredder	DX20-19	B107609H	No	Fair	3/28/2016	\$0.00		



## PLEASANT VALLEY RECREATION AND PARK DISTRICT

### SURPLUS DISTRICT PROPERTY DISPOSAL POLICY Board Approved April 4, 2018

#### PURPOSE

The Pleasant Valley Recreation and Park District (the District) shall establish an administrative policy for the disposition of surplus personal property, equipment, and materials. This policy does not apply to real property and exists to ensure the receipt of all revenues from the disposal of surplus personal property, equipment, and materials.

#### POLICY

The General Manager (or his/her designee) shall develop a "Surplus Supplies and Equipment List" ("personal property" or "property") which is surplus. Prior to disposition, the Board shall be provided with, and approve the "List."

#### DEFINITIONS

- SURPLUS SUPPLIES AND EQUIPMENT LIST - List of property which has been determined "surplus" by the General Manager.
- SURPLUS – Non "real property" has little or no remaining useful life for the District.

#### MEANS OF PROPERTY DISPOSAL AND ACCOUNTING

**The property may be disposed of as follows:**

The first effort shall be to dispose of that property in a manner which is most likely to generate the greatest return to the District. Staff will determine which method of disposal is best. Such methods of disposal include but are not limited to the following:

1. Sale on the open market. The General Manager shall cause to be published at least three days before the sale, in a newspaper circulated throughout the District, and/or by posting on any District website, a notice of sale setting forth a general description of the personal property to be sold, and the day, time and location of the sale. The terms of all such sales shall be cashier's check or money order in the amount of the full purchase price. The District also may conduct a public auction in this manner. The fees for this sale shall be deducted from the proceeds of the sale.
2. Sale by sealed bid. The General Manager may post such property for sale on the District website or on another website for the sale of surplus items (such as eBay) subject to posted rules developed for such sale or the rules of that website.



**PLEASANT VALLEY  
RECREATION AND PARK DISTRICT**

**SURPLUS DISTRICT PROPERTY DISPOSAL POLICY  
Board Approved April 4, 2018**

3. Donation. The General Manager may, when in his/her judgment the sale or auction of surplus personal property is infeasible or will result in minimal return to the District, cause such surplus personal property to be donated to any other governmental organization or non-profit group or corporation exempt from federal taxes pursuant to Internal Revenue Code Section 501(c) (3) located within or serving the District.
4. Selling for Scrap. Surplus property may be sold as scrap if the General Manager deems that the value of its parts exceeds the value of the surplus property as a whole.
5. No Value Item. Where the General Manager determines that property is surplus and of minimal or no value to the District or the cost of disposal of such property would exceed the recovery value, the General Manager shall dispose of the same in such a manner he or she deems appropriate and in the best interest of the District.
6. No employee or Director of the District or his/her immediate family may acquire any District surplus property.

**Accounting for the disposition of personal property, equipment and materials:**

When so authorized to sell, donate, recycle, and scrap District property, the employee directed to undertake such activity shall:

1. Remit the entire proceeds from any such activity to the District's Administrative Manager.
2. Complete receipt documentation form for the disposal of surplus personal property, equipment and materials and submit with proceeds, if any, to the District's Administrative Manager.

Administrative Department shall:

1. Make adjustments to the Surplus Supplies and Equipment List
2. Deposit all proceeds from the disposition of surplus personal property, equipment and materials into the General Fund.
3. Cause licenses and title documents to be executed and transferred upon verification of receipt of funds.
4. Authorize the delivery of the surplus property.

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Bob Cerasuolo, Park Services Manager**

**DATE: November 7, 2019**

**SUBJECT: CONSIDERATION AND APPROVAL OF THE  
REQUEST FOR PROPOSAL AND SPECIFICATIONS  
FOR THE AQUATIC CENTER SHOWER AND  
DRESSING ROOM REMODEL**

**SUMMARY**

The District Board has set aside Quimby funds in the amount of \$500,000 to design and remodel the existing showers at the Aquatic Center. Staff hired an architect firm to re-design the showers, dressing rooms and the restrooms.

**BACKGROUND**

Staff identified this Capital Improvement Project in the FY 2019/2020 budget workshops and the project was funded with the approval of the 2019/20 budget in July 2019. The Board appropriated Quimby funds in the amount of Five Hundred Thousand Dollars (\$500,000) to design and remodel the existing showers and dressing rooms.

On July 29, 2019 a special meeting was held and staff asked the Board to approve the Request for Proposal (RFP) for the Aquatic Center showers and dressing rooms design remodel and to solicit for an architect firm for the initial stage of the project.

On September 4, 2019 staff asked the Board to approve the selected architect to design and draw new construction plans. Leach Mounce Architects was the only bidder, coming in at Sixty-One Thousand Nine Hundred Ninety Dollars (\$61,990). Leach Mounce Architects have previously done work for the District with the last project being the Valle Lindo Restroom remodel.

At the October 2, 2019 Board meeting, staff presented the proposed new drawings for the Aquatic Center design. The Board approved the new layout of the showers and dressing rooms.

**ANALYSIS**

Architectural services firms were asked to prepare design concepts and construction documents for the Aquatic Center showers and dressing rooms. Leach Mounce Architects has redesigned the current showers and dressing rooms to include the following key components:

- 1) Window and door that goes from the dressing rooms to the restrooms and shower
- 2) Showers for privacy stalls
- 3) Metering valves on the showers
- 4) Install new drains to every shower
- 5) Install GFI (ground fault interrupters) into the dressing rooms

- 6) Design a countertop below the GFI's in the dressing rooms
- 7) Remove and replace all the tile in the restrooms and showers
- 8) Move the ADA stalls to the dressing rooms
- 9) Incorporate a new energy efficient heating system

The original design had eight (8) showers with one (1) being ADA. Leach Mounce Architects proposed to include privacy walls between showers as well as add two ADA showers with dressing rooms built within the frame to provide some privacy.

**PROJECT SCHEDULE**

Within ten (10) days of the District's contract award, the contractor shall submit a Preliminary Construction Schedule, outlining the various items of work.

- |  |                            |
|--|----------------------------|
| 1. Request for Proposal Released             | November 8, 2019           |
| 2. Job Walk (Mandatory)                      | November 21, 2019 10:00 am |
| 3. Proposals are Due and must be Received by | December 2, 2019, 2:00 pm  |
| 4. Contract Award                            | December 5, 2019           |
| 5. Start Job                                 | January 8, 2020            |
| 6. Completion of Project                     | April 15, 2020             |

**FISCAL IMPACT**

There is no fiscal impact with this action, however bids will be brought back to the Board at which time there will be a fiscal impact. The engineers' estimate for this project is Three Hundred Ninety-Seven Thousand, Seven Hundred and Eighty-Nine dollars (\$397,789).

**RECOMMENDATION**

It is recommended the Board of Directors review and approve the specifications for the Aquatic Center Showers, Dressing Rooms and Restrooms project and authorize staff to initiate the public bidding process.

**ATTACHMENTS**

- 1) Plans (16 pages)
- 2) Bid Plan Specifications (206 pages)
- 3) Cost Estimate of Construction (1 page)
- 4) Notice Calling for Bids (1 page)
- 5) RFP (6 pages)





**CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL**

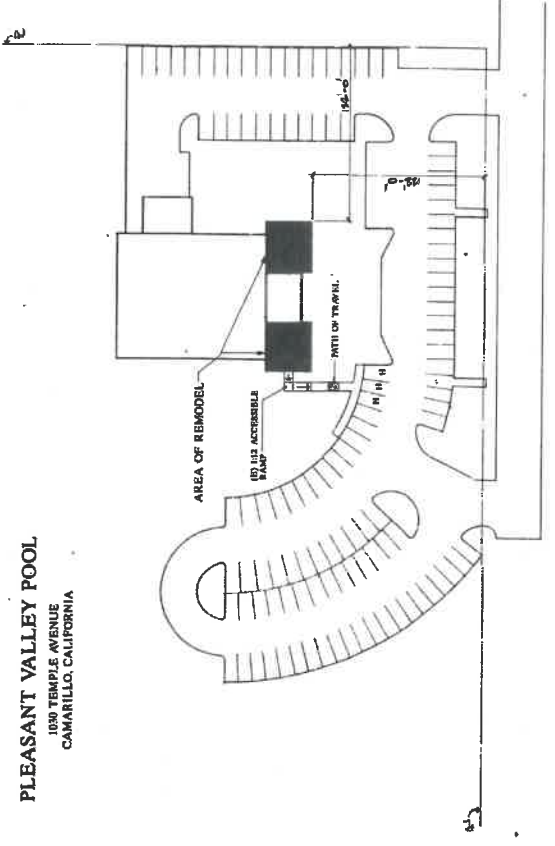
DATE OF THIS PROJECT	DATE
DATE OF LAST REVISION	DATE
DATE OF THIS REVISION	DATE

NO.	DATE	DESCRIPTION

PROJECT NO.	PROJECT NAME

SHEET  
**A 1.00**

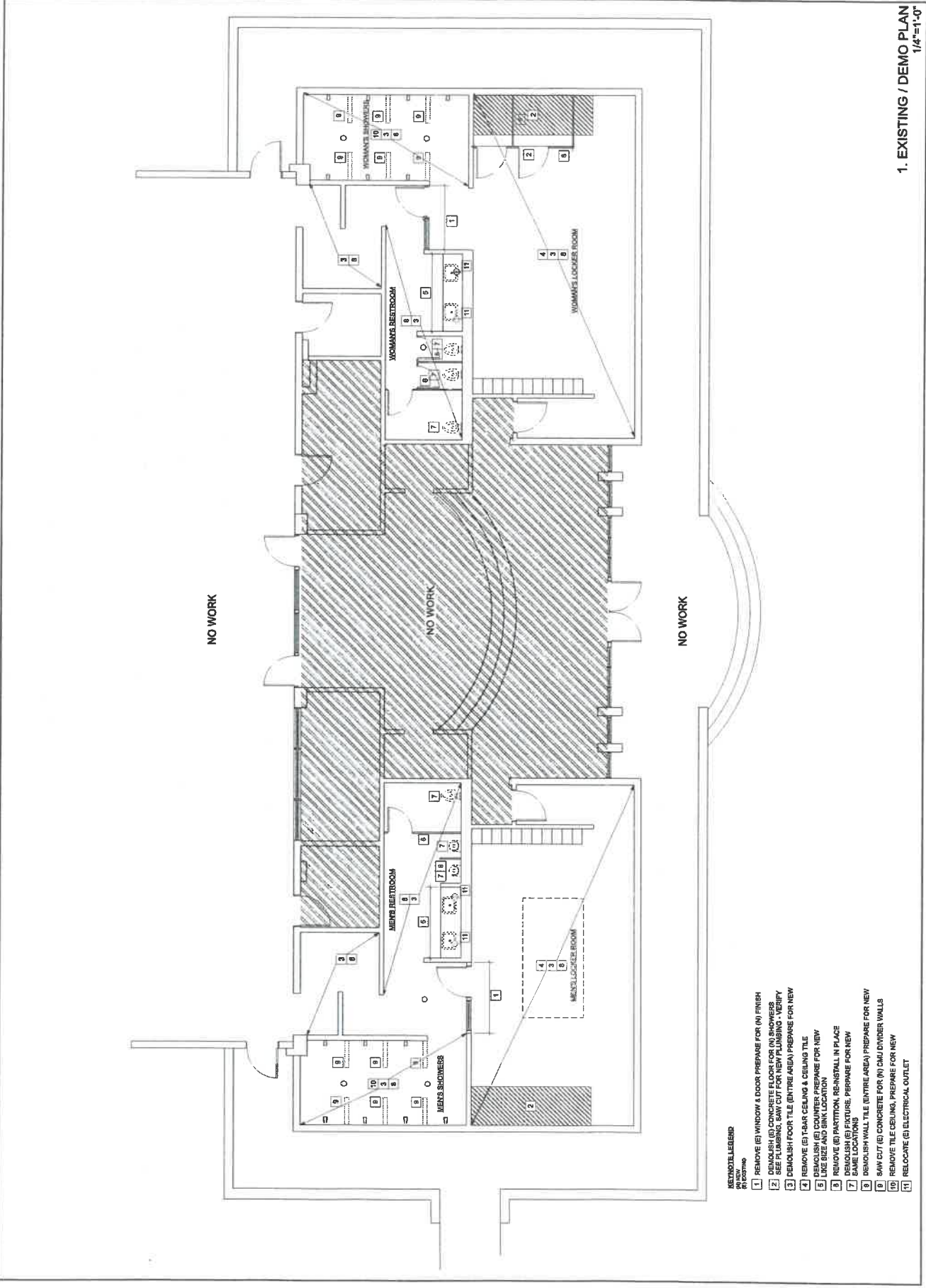
**PLEASANT VALLEY POOL**  
1030 TEMPLE AVENUE  
CAMARILLO, CALIFORNIA



**SITE PLAN**  
1"=10'-0"

1. SITE PLAN  
1"=10'-0"





1. EXISTING / DEMO PLAN  
 1/4"=1'-0"

- KEYNOTE LEGEND**  
 (N) NEW  
 (R) REMOVE  
 (E) EXISTING
- 1 REMOVE (E) WINDOW & DOOR PREPARE FOR (N) FINISH
  - 2 DEMOLISH (E) CONCRETE FLOOR FOR (N) SHOWERS  
SEE PLUMBING, SAW CUT FOR NEW PLUMBING - VERIFY
  - 3 DEMOLISH FLOOR TILE (ENTIRE AREA) PREPARE FOR NEW
  - 4 REMOVE (E) T-BAR CEILING & CEILING TILE
  - 5 DEMOLISH (E) COUNTER PREPARE FOR NEW  
LINE SIZE AND SINK LOCATION
  - 6 REMOVE (E) PARTITION, RE-INSTALL IN PLACE
  - 7 DEMOLISH (E) FIXTURE, PREPARE FOR NEW  
SINK LOCATIONS
  - 8 DEMOLISH WALL TILE (ENTIRE AREA) PREPARE FOR NEW
  - 9 SAW CUT (E) CONCRETE FOR (N) DMU DIVIDER WALLS
  - 10 REMOVE TILE CEILING, PREPARE FOR NEW
  - 11 RELOCATE (E) ELECTRICAL OUTLET



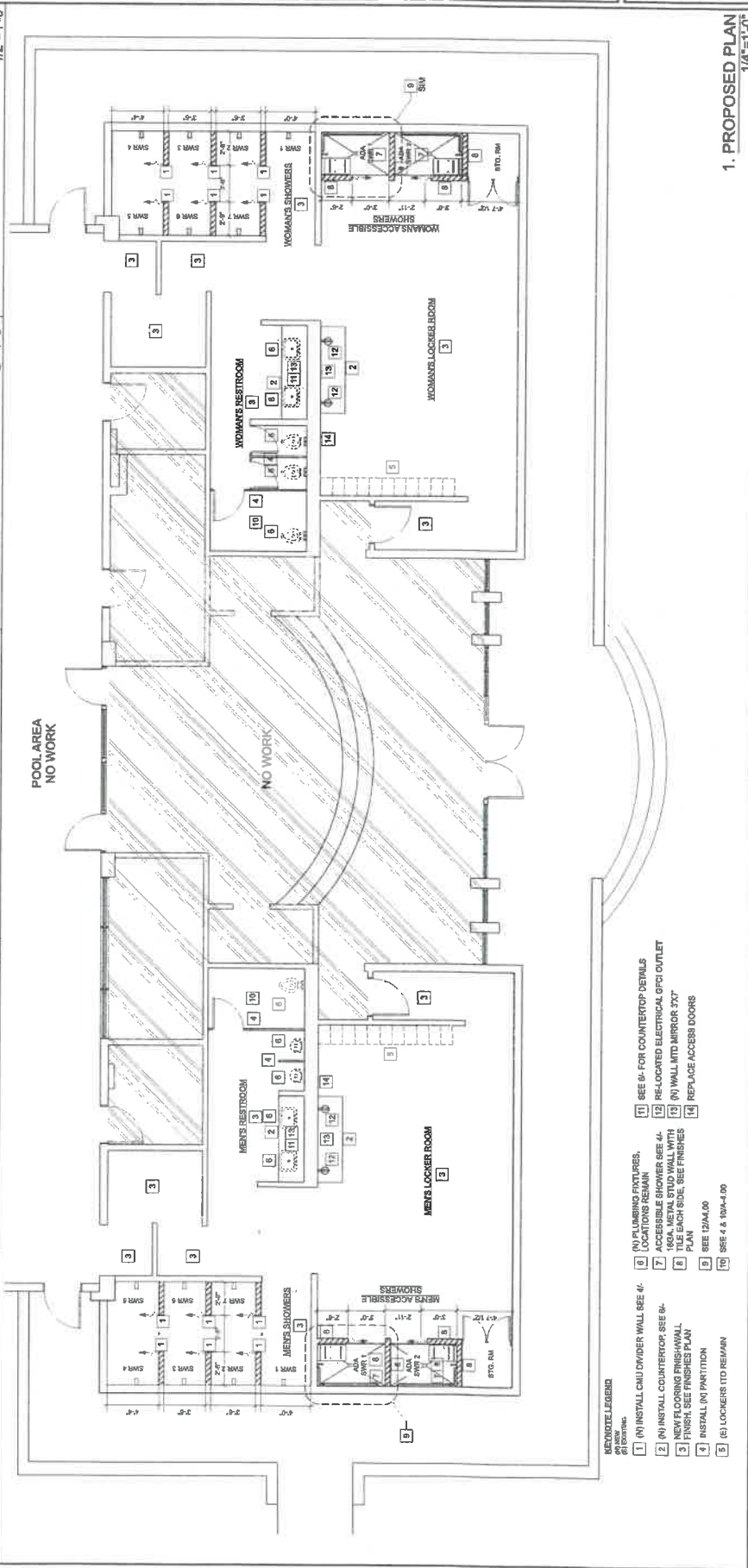
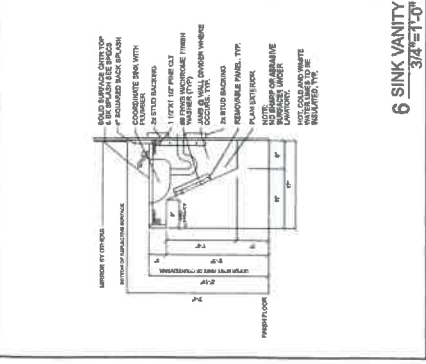
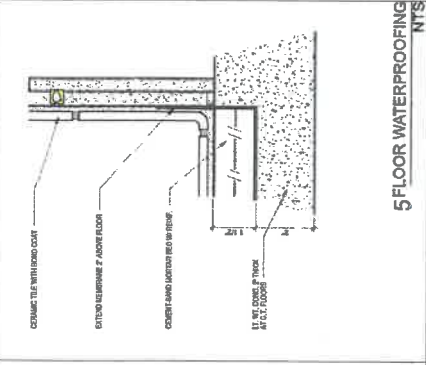
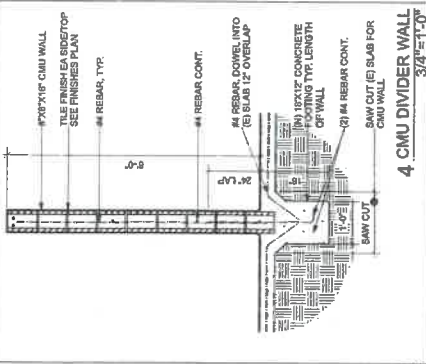
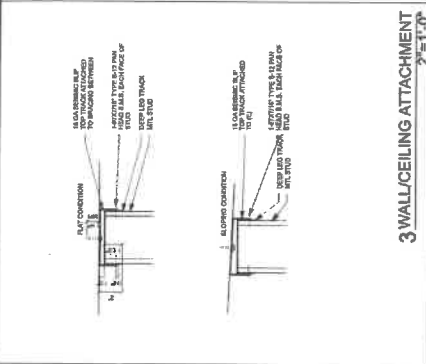
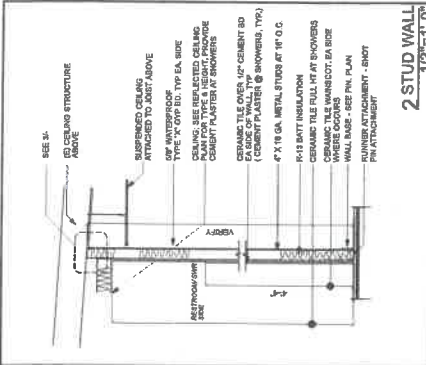
**CITY OF CAMARILLO**  
**AQUATICS CENTER**  
**RESTROOM REMODEL**

**PROPOSED**  
**FLOOR PLAN**

SHEET

**A 2.00**

1. PROPOSED PLAN  
1/4" = 1'-0"



**REVISIONS LEGEND**

- 1 (N) INSTALL CMU DIVIDER WALL SEE 4.
- 2 (N) INSTALL COUNTERTOP SEE 4.
- 3 (N) NEW FLOORING FINISH-WALL.
- 4 (N) PARTITION.
- 5 (E) LOCKERS TO REMAIN.
- 6 (N) FINISHING FIXTURES.
- 7 (N) ACCESSIBLE SHOWER SEE 4.
- 8 (N) ACCESSIBLE STUB WALL WITH TILE GROUND SEE FINISHER PLAN.
- 9 (N) ACCESSIBLE SHOWER SEE 4.
- 10 (N) WALL MTD MIRROR STX7
- 11 (N) WALL MTD MIRROR STX7
- 12 (N) WALL MTD MIRROR STX7
- 13 (N) WALL MTD MIRROR STX7
- 14 (N) WALL MTD MIRROR STX7
- 15 (N) WALL MTD MIRROR STX7
- 16 (N) WALL MTD MIRROR STX7
- 17 (N) WALL MTD MIRROR STX7
- 18 (N) WALL MTD MIRROR STX7
- 19 (N) WALL MTD MIRROR STX7
- 20 (N) WALL MTD MIRROR STX7

SEE 4 - 8 FOR 4-8  
SEE 4 - 8 FOR 4-8



# CITY OF CAMARILLO AQUATICS CENTER RESTROOM REMODEL

TITLE	RESTROOM REMODEL
PROJECT NO.	
DATE	
DRAWN BY	
CHECKED BY	
APPROVED BY	

NO.	DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## PROPOSED FINISHES PLAN

SHEET

# A 2.01

### FINISHES GENERAL NOTES

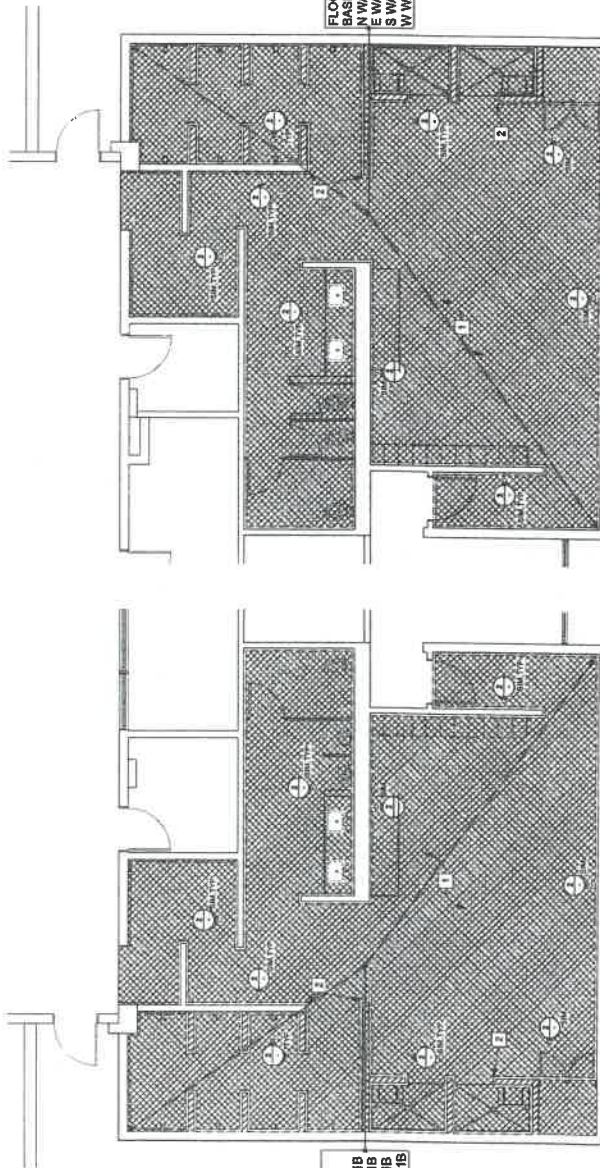
#### FINISH AND MATERIAL SCHEDULE LEGEND

FINISH	DESCRIPTION
1	FIELD WALL TILE - OAL TILE OCEANIC BLUE GRAY 4118
2	ACCENT WALL TILE - OAL TILE WOOD VIOLET GRAY
3	ACCENT WALL TILE - OAL TILE OCEANIC BLUE GRAY 4118
4	ACCENT WALL TILE - OAL TILE WOOD VIOLET GRAY

- FOR CEILING MATERIALS AND FINISHES, SEE CEILING PLAN SHEETS A.1.05
- FOR WALL TYPES, SEE FLOOR PLAN SHEETS A.1.06
- WALL JOINTS AND MATERIALS SHALL NOT EXCEED THE JOINT SPACING CLASSIFICATIONS IN SCHEDULE A.1.07
- ALL DOOR FRAMES TO BE PREPARED FOR PAINT; ALL FRAMES TO BE PAINTED, ADHESIVE TO SELECT COLOR. (ALUMINUM FINISHES NOT PAINTED)
- SELECT COLOR LINE FRAMES, JOINTS TO BE PAINTED. ARCHITECT TO SELECT COLOR.
- ALL GYM HD. CEILING JOINTS TO BE PREPARED & PAINTED. ALL METAL CEILING TO BE PREPARED & PAINTED.
- ALL DOOR TRIM, HUNGERS TO BE PREPARED & PAINTED.
- ALL EXPOSED METAL NOT FACTORY FINISHED TO BE PREPARED & PAINTED / SELECT COLOR. ARCHITECT TO SELECT COLOR.
- ALL EXPOSED METAL, HUNGERS, RAILS, TRIM, JOINTS TO BE PREPARED & PAINTED. ARCHITECT TO SELECT COLOR.
- ALL CORNER INTERSECTIONS ON BASE, RAIL, HUNGERS, JOINTS TO BE PREPARED & PAINTED. ARCHITECT TO SELECT COLOR.
- REFER TO BOTTOM OF THIS SHEET FOR FINISH DETAILS ON PARTITION WALLS, CEILING, AND FLOOR.
- ALL CEILING MATERIALS, HUNGERS, JOINTS TO BE PREPARED & PAINTED. ARCHITECT TO SELECT COLOR.
- ALL CORNER INTERSECTIONS ON PARTITION WALLS, CEILING, AND FLOOR TO BE PREPARED & PAINTED. ARCHITECT TO SELECT COLOR.

### 2. PROPOSED INTERIOR ELEVATIONS

3/8"=1'-0"



**FLOOR:** TILE:2  
**BASE:** TILE:2  
**N WALL:** TILE:1/TILE:4/P:18  
**E WALL:** TILE:1/TILE:4/P:18  
**S WALL:** TILE:1/TILE:4/P:18  
**W WALL:** TILE:1/TILE:4/P:18

- #### KEYNOTE LEGEND
- | KEYNOTE | DESCRIPTION          |
|---------|----------------------|
| 1       | (N) FLOOR TILE - TYP |
| 2       | (N) FLOOR TILE - TYP |
| 3       | (N) TILE TO WAINSCOT |
| 4       | (N) TILE TO WAINSCOT |
| 5       | (N) TILE TO WAINSCOT |

### 1. PROPOSED PLAN

1/4"=1'-0"



**CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL**

DATE	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

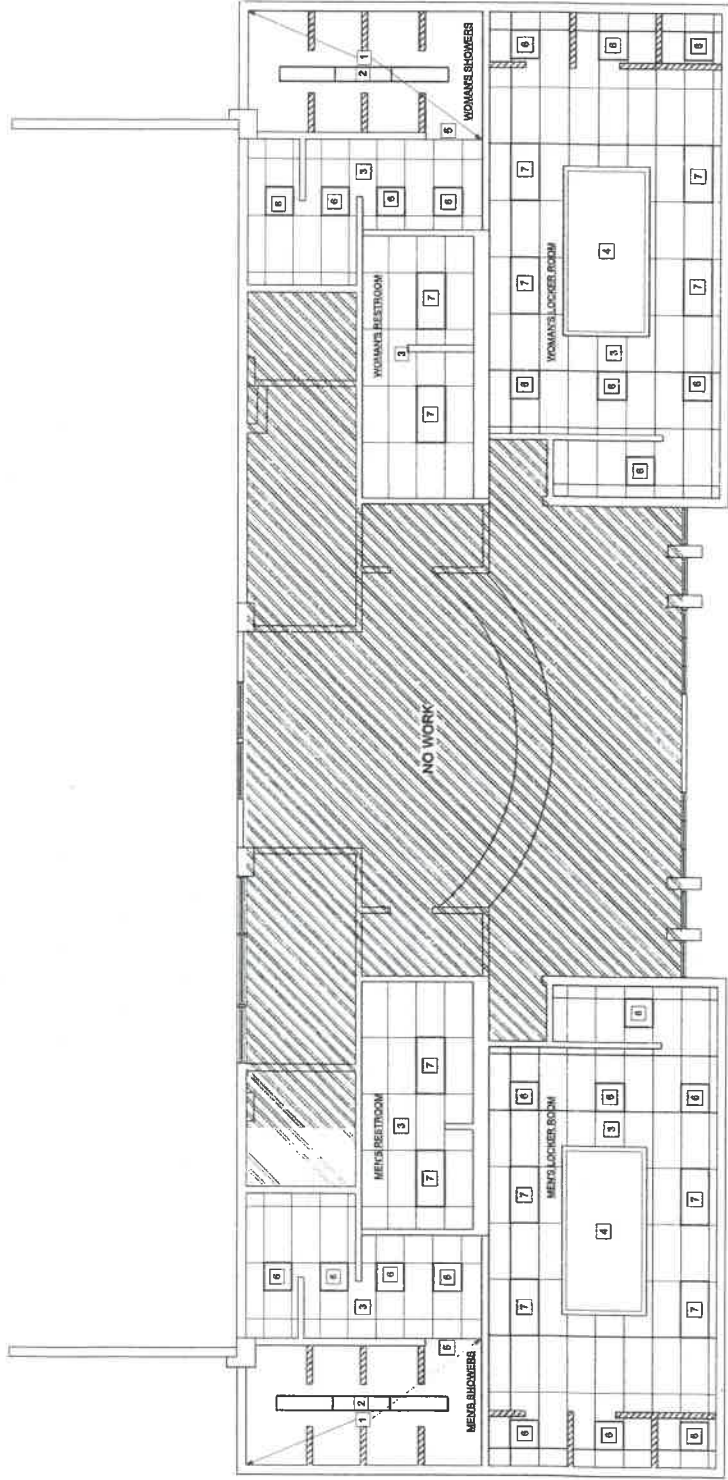
**PROPOSED  
CEILING PLAN**

SHEET

**A 3.00**



**2 CEILING STEP**  
3/4"=1'-0"



**NOTE:**  
ALL LIGHTS TO BE REPLACED IN PLACE  
SOME CIRCUITS AND CONTROLS ARE EXISTING

- KEYNOTE LEGEND**
- 1 (N) 50# WATERPROOF GYP. BD CEILING
  - 2 (N) 1/2" x 1/2" x 1/2" WATERPROOF LIGHT FIXTURE ON THERMOSENSOR RECESSED INTO (N) CEILING
  - 3 (N) WATERPROOF CEILING TILE
  - 4 (E) SKYLIGHT TO REMAIN
  - 5 CEILING STEP, SEE 2-
  - 6 (N) 2X2 WATER PROOF LIGHT SAME LOCATION AND CIRCUIT AS EXISTING, SAME SWITCH
  - 7 (N) 2X2 WATER PROOF LIGHT SAME LOCATION AND CIRCUIT AS EXISTING, SAME SWITCH

**1. PROPOSED REFLECTED CEILING PLAN**  
1/4"=1'-0"



City of Camarillo  
Department of Public Works  
Engineering Division



CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL

DATE	DESCRIPTION

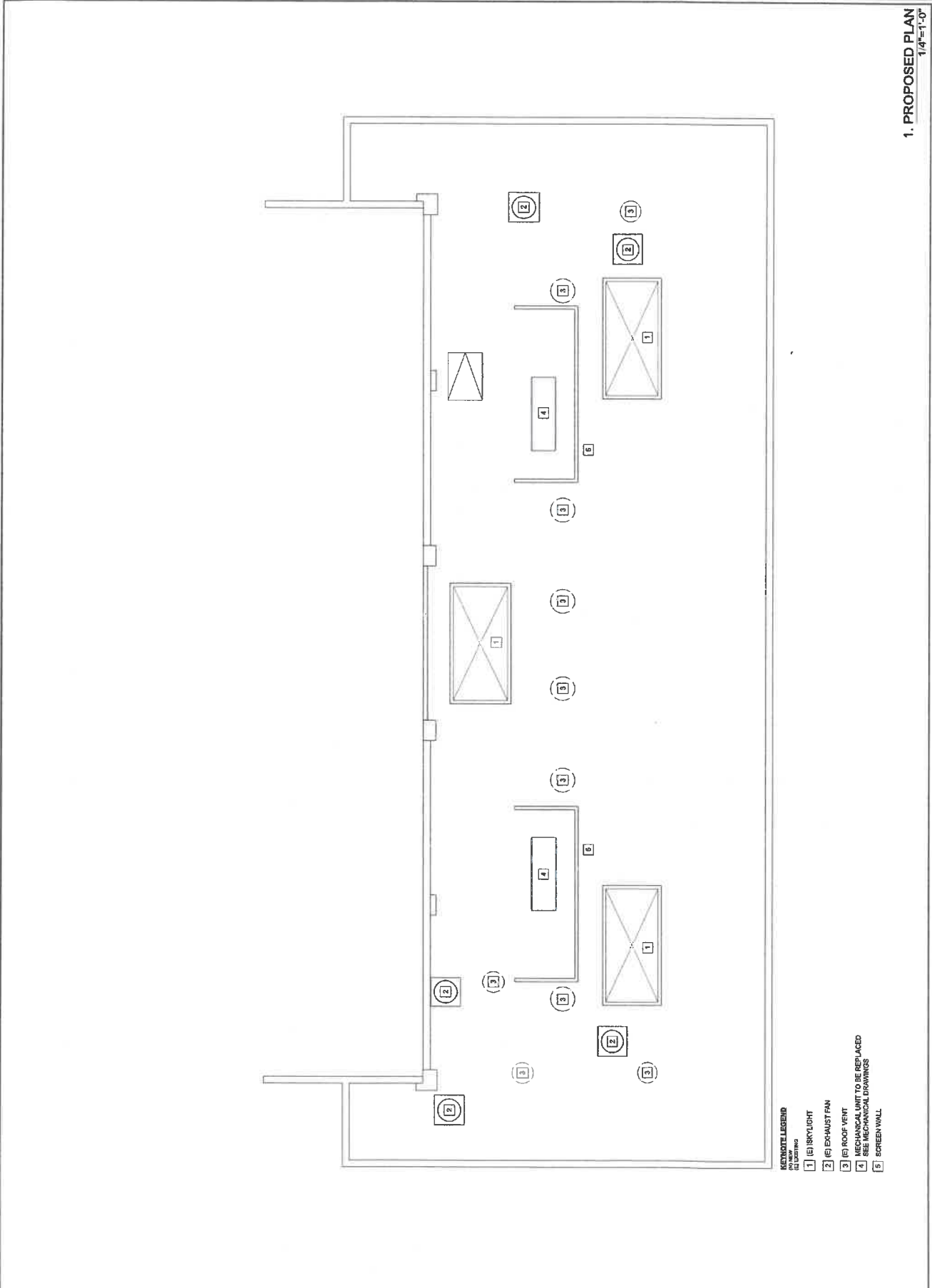
DATE	DESCRIPTION

DATE	DESCRIPTION

DATE	DESCRIPTION

PROPOSED  
ROOF PLAN

SHEET  
A 2.02



1. PROPOSED PLAN  
1/4"=1'-0"

- KEYNOTE LEGEND**
- 1 (E) SKYLIGHT
  - 2 (E) EXHAUST FAN
  - 3 (E) ROOF VENT
  - 4 MECHANICAL UNIT TO BE REPLACED  
SEE MECHANICAL DRAWINGS
  - 5 SCREEN WALL





CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL

NO.	DATE BY	DESCRIPTION

PROJECT NO.	
DATE	
PROJECT NAME	

LEGEND, SCHEDULES  
AND NOTES

SHEET

M1.00



**LEGEND**

SYMBOL	ABBREV	DESCRIPTION
⊗	PCC	POINT OF CONNECTION
⊗		SUPPLY DUCT SECTION
⊗		RETURN DUCT SECTION
⊗		EXHAUST DUCT SECTION
⊗		SQUARE SUPPLY DIFFUSER
⊗		SQUARE RETURN REGISTER
⊗		SQUARE EXHAUST REGISTER
⊗		FLEXIBLE DUCT
⊗		MANUAL VOLUME DAMPER
⊗		ROOM THERMOSTAT

**AIR OUTLET SCHEDULE**

UNIT TAG	LOCATION	MANUFACTURER	GENERAL NOTATION
S1	T-BAR	PRICE PDK W/OBD	S = SUPPLY R = RETURN = RETURNING SUPPLY = EXISTING RETURN
S2	GYP SUM	PRICE SMCD W/OBD	
S3	SIDEWALL	PRICE S200 W/OBD	ITEM NUMBER 3007 AIR QUANTITY (CFM)
R1	T-BAR	PRICE PDK	12 X 12 NECK SIZE
R2	GYP SUM	PRICE S33	NOTE: PROVIDE ALL AIR OUTLETS WITH BLACK BACK PANELS.
R3	GYP SUM	PRICE S33	
R4	T-BAR	PRICE PDK	

**SCOPE OF WORK**

REPLACE EXISTING ROOFTOP HEAT/VENT UNITS AS WELL AS REPLACE EXISTING SUPPLY AND EXHAUST REGISTERS WITH NEW.

**GENERAL NOTES**

- THE CALIFORNIA NON-RESIDENTIAL ENERGY STANDARDS HAVE BEEN REVIEWED AND THE DESIGN DRAWINGS COMPLY SUBSTANTIALLY WITH THESE STANDARDS.
- ALL DUCT JOINTS AND SUPPORTS SHALL COMPLY WITH UL 181 AND 181A. SUPPORT DUCTWORK IN ACCORDANCE WITH CMC, 2016 EDITION.
- VERIFY EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID.
- PROVIDE ACCEPTANCE TESTING PER CAL GREEN CODE 5.714.10.4.
- DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENTS OPENINGS SHALL BE COVERED DURING CONSTRUCTION PER CAL GREEN CODE 5.714.4.3.
- RIGID DUCTING REQUIRED, EXCEPT LAST 5' TO DIFFUSER OR REGISTER. PROVIDE SHEET METAL ELBOW, NO BENDS IN FLEX DUCT AT REGISTER CONNECTION.
- NEW AIR DISTRIBUTION HAS BEEN DESIGNED IN COMPLIANCE WITH 2016 CMC TABLE 1701.1.

**MECHANICAL EQUIPMENT SCHEDULE**

OUTDOOR 100% OUTSIDE AIR HEAT/VENT UNIT, "REZNOCK" RPB-125, 1800 CFM AT 0.5" ESP, 125,000 BTUH INPUT AND 100,000 BTUH OUTPUT HEATING, 1 HP FAN MOTOR, 120 VOLT, 1 PHASE, 80% AFUE, INCLUDE FACTORY DOWNTURN PLENUM, STAINLESS FILTERS, 718 LEAK-CHANGER, 100% OUTSIDE AIR BAFFLED HOOD WITH 2' PLEATED 30% UNIT.

**MECHANICAL SPECIFICATIONS**

ALL MATERIALS AND INSTALLATION SHALL COMPLY WITH THE LATEST EDITIONS OF THE INTERNATIONAL CODES AND ORDINANCES, IN CASE OF CONFLICT BETWEEN THE ABOVE CODES AND ORDINANCES, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

VERIFY ALL SECTIONS AND ELEVATIONS PRIOR TO DUCTWORK FABRICATIONS.

DRAWINGS SHOW PIPE AND DUCTWORK DIAGRAMMATICALLY.

COORDINATE FIELD DETAILS WITH OTHER TRADES TO AVOID CONSTRUCTION DELAYS AND MAINTAIN REQUIRED CLEARANCES.

VARY RUN AND SHAPE OF DUCTWORK, AND MAKE OFFSETS DURING PROGRESS OF WORK AS REQUIRED TO MEET STRUCTURAL AND OTHER INTERFERENCES AS APPROVED BY ARCHITECT.

PAY ALL COSTS OF DESIGN AND INSTALLATION FOR CHANGES RESULTING FROM SUBSTITUTION OF ALTERNATE PRODUCTS. ACCEPTANCE OF ALTERNATE PRODUCTS BY THE ARCHITECT DOES NOT CHANGE THIS REQUIREMENT.

COORDINATE ALL AIR OUTLETS WITH REFLECTED CEILING PLAN.

COORDINATE ACCESS TO ALL DAMPERS, VALVES, AND EQUIPMENT.

CONSTRUCT, BRACE, AND SUPPORT DUCTS AND AIR PLENUMS TO PREVENT SAGGING AND TO MINIMIZE VIBRATION PER SIA/CMAA STANDARDS.

INSTALL MANUAL VOLUME DAMPER AT EACH DIFFUSER BRANCH AND AS INDICATED ON DRAWINGS AND AS FAR FROM THE DIFFUSER AS POSSIBLE. CONSTRUCT WITH COMPACT, RIGID, AND STURDY MATERIALS. PROVIDE DAMPER TO PREVENT NOISE. INSTALL IN ACCESSIBLE LOCATION WITH LOCKING DEVICE AND INDICATING GUARANT.

EXCEPT AS OTHERWISE NOTED ON DRAWINGS, ALL CONCEALED SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED WITH 1" FIBERGLASS BLANKET INSULATION WITH FOIL JACKET. CONDUCTIVITY SHALL BE 0.29 BTU-IN/HR AT 75 DEG. F. FLAME/FUEL/SMOKE MAXIMUM OF 25/50/50. INSTALL PER SIA/CMAA GUIDELINES.

ALL SUPPLY, RETURN, AND EXHAUST TERMINALS SHALL HAVE INTEGRAL VOLUME CONTROL UNLESS OTHERWISE INDICATED.

INSTALL MANUAL VOLUME DAMPER AT EACH DIFFUSER BRANCH AND AS INDICATED ON DRAWINGS AS FAR FROM THE TERMINAL AS POSSIBLE.

INSIDE INTERIOR PORTIONS OF DUCTWORK AND AIR TERMINALS SHALL BE PAINTED FLAT BLACK.

SEAL DUCTWORK JOINTS WITH AIRTIGHT MASTIC.



CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL

NO. DATE BY	DISPOSITION

FIRST FLOOR  
DEMOLITION PLAN

SHEET  
M2.00

GENERAL NOTES

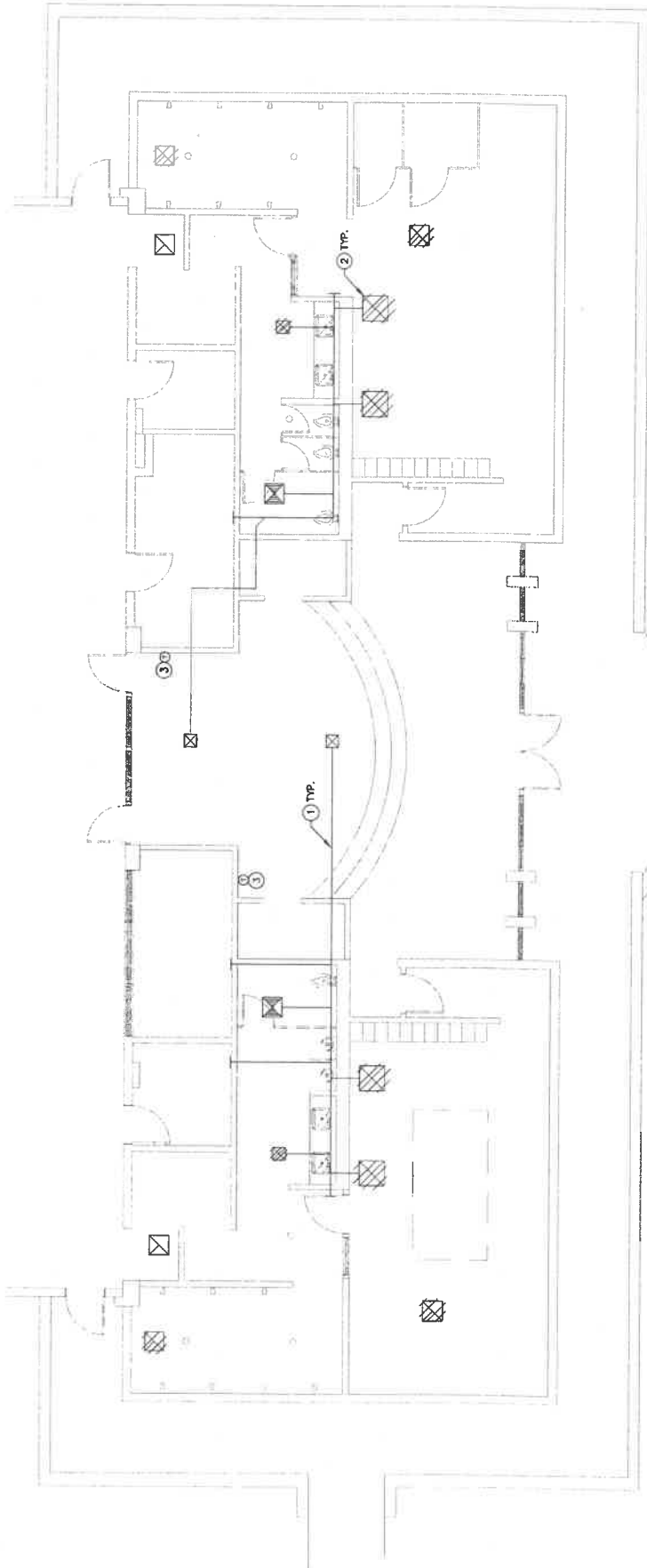
- A OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10' AWAY OR 3' BELOW ALL EXHAUST, VENT AND FLUE TERMINATIONS.
- A EXISTING DUCTWORK TO REMAIN.
- B REMOVE EXISTING REGISTER.
- C REMOVE EXISTING THERMOSTAT AND BYPASS TIMER. SEE SHEET M201 FOR NEW THERMOSTAT.

REFERENCE NOTES

- 1 EXISTING DUCTWORK TO REMAIN.
- 2 REMOVE EXISTING REGISTER.
- 3 REMOVE EXISTING THERMOSTAT AND BYPASS TIMER. SEE SHEET M201 FOR NEW THERMOSTAT.

DEMOLITION FLOOR PLAN

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



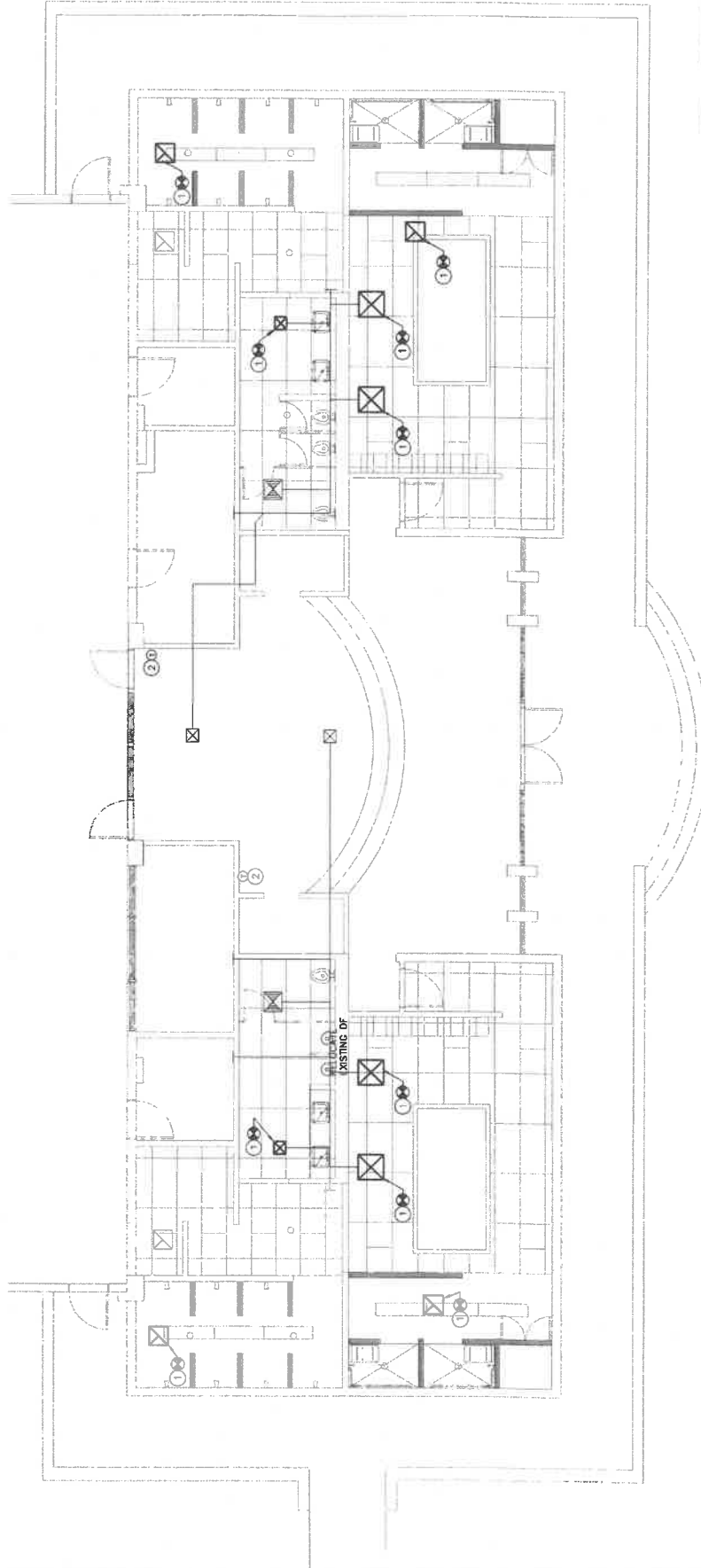


**GENERAL NOTES**

- ① OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10' AWAY OR 3' BELOW ALL EXHAUST, VENT AND FLUE TERMINATIONS.
- ② PROVIDE NEW REGISTER TO MATCH EXISTING AND RECONNECT EXISTING DUCT.
- ③ REPLACE EXISTING THERMOSTAT WITH NEW PROGRAMMABLE TWO STAGE THERMOSTAT TO OPERATE THE TWO STAGES OF HEAT.

**REFERENCE NOTES**

- ①
- ②



**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**W.C. O'NEILL**  
Professional Engineer  
Mechanical  
License No. 18319  
State of California  
08/2008  
Phone: 805-466-4514  
Fax: 805-466-4514  
ME Job No. 18069-00

SHEET

**M2.01**

**FLOOR PLAN**

**CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL**



NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION

# GENERAL NOTES

- ④ OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10' AWAY OR 3' BELOW ALL EXHAUST, VENT AND FLUE TERMINATIONS.

# REFERENCE NOTES

- ① REMOVE EXISTING HEAT/VENT UNIT AND REPLACE WITH SPECIFIED. EXISTING CURB TO REMAIN. ANCHOR NEW UNIT TO CURB ACCORDING TO MFR'S REQUIREMENTS. RECONNECT REFRIG SUPPLY TO UNIT WITH NEW SEDIMENT TRAP. FLEXIBLE PIPE CONNECTOR, AND SOV.

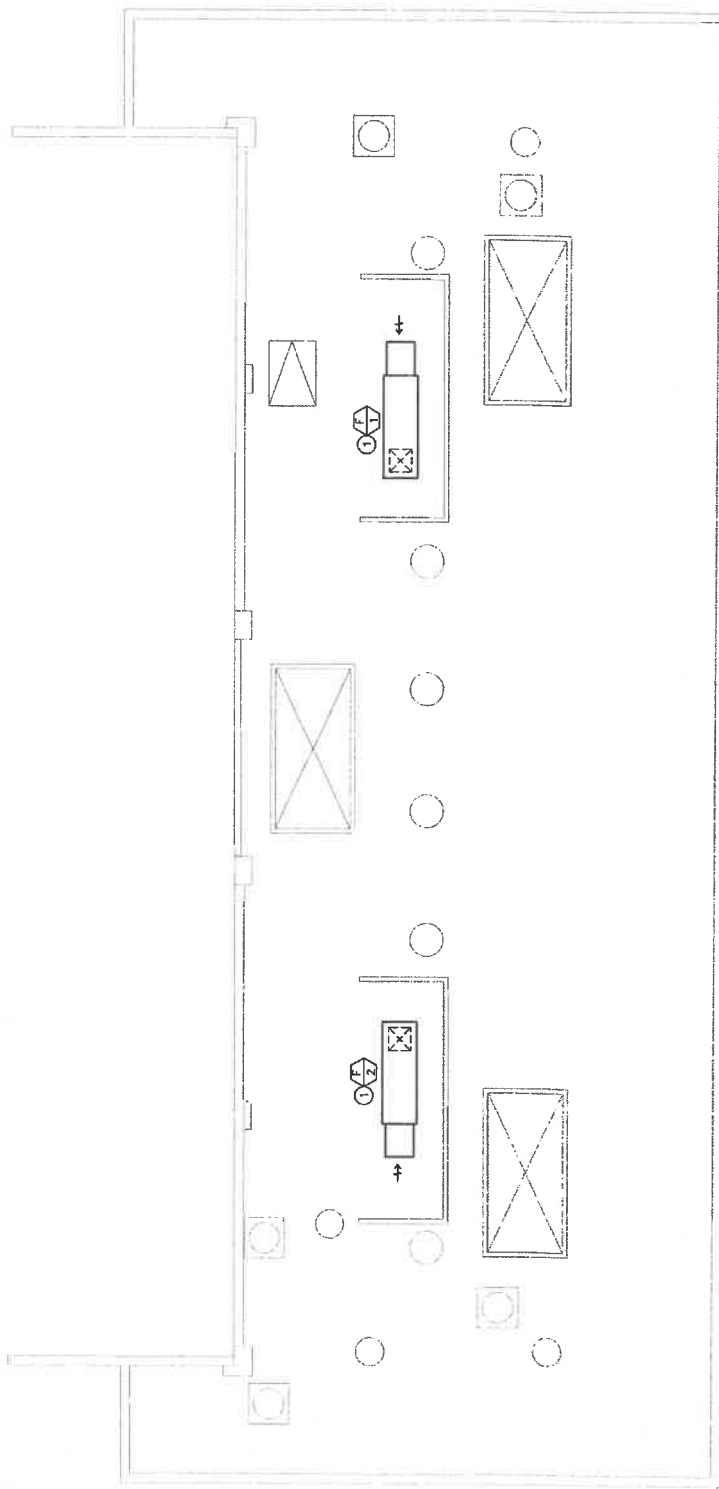


CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL

DATE:	DATE:	DATE:	DATE:
NO. 1:	NO. 2:	NO. 3:	NO. 4:

PROJECT NO. \_\_\_\_\_  
NO. DATE BY: \_\_\_\_\_

SHEET  
M2.02



ROOF PLAN  
SCALE: 1/4" = 1'-0"



## PLUMBING SPECIFICATION

1. OBTAIN AND PAY FOR ALL PERMITS, FEES, CONNECTION CHARGES, AND TEMPORARY SERVICE CHARGES REQUIRED FOR EXECUTION OF WORK.
2. MATERIALS AND INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES.
3. COORDINATE FIELD DETAILS WITH OTHER TRADES TO AVOID CONSTRUCTION DELAYS AND MAINTAIN REQUIRED CLEARANCES.
4. PAY COST OF DESIGN AND INSTALLATION FOR CHANGES RESULTING FROM THE NECESSITY OF CORRECTING FIELD CONDITIONS. ALL CORRECTIVE PRODUCTS BY THE ARCHITECT DOES NOT CHANGE THIS REQUIREMENT. NO PRODUCT WILL BE ACCEPTED ON JOB SITE WITHOUT PRIOR APPROVAL.
5. DRAWINGS SHOW PIPE DIAGRAMMATICALLY.
6. ADHERE TO DRAWINGS AS CLOSELY AS POSSIBLE IN LAYING OUT WORK.
7. VARY SIZE OF SPINGS AND MAKE OFFSETS DURING PROGRESS OF WORK AS REQUIRED TO MEET STRUCTURAL AND OTHER INTERFERENCES AS APPROVED BY ARCHITECT.
8. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
9. VERIFY AND COORDINATE LOCATION OF ALL PLUMBING LINES WITH DUCTWORK AND ELECTRICAL SERVICES.
10. ALL VENTS THROUGH ROOF SHALL BE 10"-0" REMOVED FROM ALL AIR INTAKES, WINDOWS, AND OPENINGS INTO THE BUILDING. THE VENTS TOGETHER SO THAT A MINIMUM NUMBER TERMINATE THROUGH THE ROOF.
11. INSTALL ALL HOT WATER PIPING WITH 1 INCH THICK FIBERGLASS INSULATION WITH THERMAL CONDUCTIVITY 0.022 AND FACTORY JACKET AND "ZELSTON" FITTINGS. PER CBC 1115.B.4.3 ITEM 4, T-24 ENERGY CODE.
12. ROUGH-IN ALL WASTES AND SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURER'S SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED.
13. INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
14. PIPING SHALL NOT PASS THROUGH FOOTINGS. ALL PIPES SHALL BE RUN ABOVE FOOTING, UNLESS OTHERWISE SHOWN ON PLANS. SEE STRUCTURAL DRAWINGS FOR REQUIREMENTS.
15. ALL WATER PIPING BELOW GRADE THAT IS UNDER PRESSURE SHALL HAVE A MINIMUM COVER OF 30".
16. EXTEND ALL CONDENSATE AND INDIRECT DRAIN LINES FROM EQUIPMENT TO FLOOR SINKS OR OTHER APPROVED FIXTURES.
17. TERMINATE ALL WATER AND GAS ROUGH-INS WITH SHUT-OFF VALVES BEFORE CONNECTING TO EQUIPMENT AND FIXTURES.
18. CUTTING, WHEN REQUIRED, SHALL BE SUBJECT TO APPROVAL BY ARCHITECT.
19. BOND SUBMITTAL IN BOOKLET FORM. SUBMIT SHOP DRAWINGS, BROCHURES AS FOLLOWS:
  - A. PIPE FITTINGS AND INSULATION.
  - B. FIXTURES AND EQUIPMENT.
  - C. VALVES.
20. SEAL PIPES PASSING THROUGH FIRE RATED WALLS WITH APPROVED FIRE STOP MATERIAL.
21. PIPE AND FITTINGS SHALL BE AS FOLLOWS:
 

SERVICE GAS	SIZE ALL	SPECIFICATIONS SCHEDULE 40 BLACK SEAMLESS STEEL, ASTM A106 GRADE B, 1/2" TO 1 1/2" DIA. GALVANIZED MALLEABLE IRON, SCREWED, ASTM A338.
VENT	ALL	SCHEDULE 40 GALVANIZED BUTT WELD STEEL, SCREWED. FITTINGS: 150 LB. GALVANIZED SCREWED.
CW, HW	ALL	COPPER TUBING TYPE L ASTM B88. FITTINGS: CAST BRONZE OR WROUGHT COPPER SOLDER.
WASTE, RWL	ALL	HUBLESS CAST IRON SERVICE WEIGHT PIPE AND FITTINGS WITH NEOPRENE COUPLINGS AND ABS DWV PIPE AND FITTINGS WITH SOLVENT WELDED JOINTS.
RWL	ALL	SC40 PVC DWV OR ABS PIPING AND FITTINGS WITH SOLVENT WELDED JOINTS.
22. HANGERS AND SUPPORTS SHALL BE DESIGNED TO SUPPORT WEIGHT OF PIPE, WEIGHT OF FLUID, AND WEIGHT OF PIPE INSULATION.
23. PROVIDE EACH HANGER OR CLAMP WITH AN ISOLATION MATERIAL, HAVING A MINIMUM STRENGTH OF 50 LBS. PER INCH. PROVIDE EACH HANGER OR CLAMP WITH AN ISOLATION MATERIAL, HAVING A MINIMUM STRENGTH OF 50 LBS. PER INCH. ISOLATOR NOT REQUIRED FOR SOIL WASTE, VENT OR FUEL GAS PIPING.

## LEGEND

SYMBOL	ABBREV	DESCRIPTION
	G	GAS PIPE
	CW	COLD WATER PIPE
	HW	HOT WATER PIPE
	W	SANITARY SOIL OR WASTE PIPE
	(C)W	(C)SANITARY SOIL OR WASTE PIPE
	V	VENT PIPE
		EXISTING PIPE TO BE REMOVED
	FCO/WCO	FLOOR/WALL CLEAN OUT
		POINT OF CONNECTION
	SOV	SHUT OFF VALVE

## PLUMBING FIXTURE SCHEDULE

- WATER CLOSET (ACCESSIBLE/TZAACC), "AMERICAN STD", MODEL EVERCLEAN 2294.01, VITREOUS CHINA, WALL HUNG WITH WALL CARRIER, 1.28 GALLON PER FLUSH VALVE WITH BATTERY POWERED SENSOR ACTIVATION, "SLDAN" H700A CONTROL STOP, SCREWDRIVER ADJUSTMENT, "AMERICAN STD" 5901.100.020 OPEN FRONT SEAT (WHITE).
- WATER CLOSET (ACCESSIBLE/TZAACC), "AMERICAN STD", MODEL EVERCLEAN 2294.01, VITREOUS CHINA, WALL HUNG WITH WALL CARRIER, 1.28 GALLON FLUSH, ELONGATED BOWL, 14" RIM HEIGHT, "AMTC" AEF-8001-CI-12 FLUSH VALVE WITH BATTERY POWERED SENSOR ACTIVATION, "SLDAN" H700A CONTROL STOP, SCREWDRIVER ADJUSTMENT, "AMERICAN STD" 5901.100.020 OPEN FRONT SEAT (WHITE).
- URINAL, "AMERICAN STD" TRIMROCK 6561017.020, VITREOUS CHINA, WALL HUNG, 18" RIM HEIGHT, "AMTC" AEF-801-CL-18 FLUSH VALVE WITH BATTERY POWERED SENSOR ACTIVATION, "H700A" H700A CONTROL STOP, SCREWDRIVER ADJUSTMENT.
- LAVATORY (ACCESSIBLE/TZAACC), "AMERICAN STD", DESCRIBE MODEL 0545.000.020, VITREOUS CHINA, UNDERCOUNTER MOUNT, "AMTC" MODEL HYBRID AFO-301, BATTERY POWERED FOR BARBER FREE FAUCET WITH THERMOSTATIC MIXING VALVE, 0.35 GPM FLOW RATE, SUPPLY WITH "ACQUIRE" IFC CO. SAIGUARD 1503AN CHROME CAST BRASS GRID DRAIN "ACQUIRE" MODEL 303, 1/2" CLEANOUT ADJUSTABLE 1-1/4" X 1/2" AND CAST BODY TRAP WITH CLEANOUT ADJUSTABLE 1-1/4" X 1/2" AND LFB903 QUARTER-TURN BRASS BALL VALVE SUPPLY STOPS, AND "BROCAR PRODUCTS, INC." TRAP WRAP KIT 0500R.
- SHOWER (ADA COMPLIANT/TZAACC - BUILT-IN), "ACORN" MODEL #532-ADA, SINGLE TEMPERATURE MIXING VALVE AND ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN, VOLUME CONTROL, WALL/HAND SHOWER WITH 1/2" X 1/2" NPT CONNECTION, 1/2" X 1/2" NPT CONNECTION AND FLANGE, 24" SLIDE BAR FOR HAND SHOWER MOUNTING.
- SHOWER (BUILT-IN), "ACORN" MODEL #515-GX-A, SINGLE TEMPERATURE MIXING VALVE AND ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN, VOLUME CONTROL, AND SHOWER HEAD.
- SHOWER DRAIN, "R SMITH" MODEL 2005, ROUND TOP, SIZE 2". WITH P-TRAP AND TRAP PRIMER FITTING.

## MINIMUM CONNECTION SIZES

FIXTURE	S/W	VENT	DRAIN	COLD WATER	HOT WATER
WATER CLOSET (FY)	4"	1-1/2"	-	1-1/2"	-
LAV/SINK	2"	1-1/2"	-	1/2"	1/2"
SHOWER	2"	1-1/2"	-	-	3/4"

\*NOTE: SHOWER WATER SUPPLY IS TEMPERED WATER FROM (EMIXING VALVE)

## PLUMBING EQUIPMENT SCHEDULE

- INSTANTANEOUS WATER HEATER, "TEKMA" MODEL SF3272, 40F RISE AT 0.5 GPM, 277 VOLT, 1 PHASE, 3.0 KW. INSTALL WITH FLEXIBLE METAL BRAIDED HOSES TO MAKE A COMPLETE SYSTEM AND PER MFR'S REQUIREMENTS.
- TRAP PRIMER, "PIP INC." MODEL PR-500 WITH DISTRIBUTION UNIT AS REQUIRED FOR QUANTITY OF TRAPS SERVED. LOCATE BEHIND ACCESS DOOR IN WALL ADJACENT TO FLOOR DRAIN AT REAR. BUC-BUC WATER HEATING SYSTEM FOR MFR'S USE. SEE SCHEDULE 40 END OF MAINLINE WATER HEATING SYSTEM. ALL OF THE SIZING END OF ROOMS. INSTALL IN PLUG WALL BEHIND LOCKABLE ACCESS DOOR.

## CAL GREEN CODE

FOR ALL NEW EQUIPMENT AN OPERATION AND SYSTEMS MANUAL SHALL BE PROVIDED TO THE FIELD INSPECTOR AT THE TIME OF FINAL PIPING SYSTEM PER 2018 CAL GREEN CODE.

FIXTURE	NON-RESIDENTIAL		
	RESIDENTIAL	FIXTURE FLOW	
WATER CLOSET	1.28 GPF	WATER CLOSET	1.28 GPF
LAVATORY	1.5 GPM	URINAL	0.125 GPF
SINK	1.5 GPM	LAVATORY	0.5 GPM
SHOWER	1.8 GPM	SINK	1.8 GPM
		SHOWER	2.0 GPM

\* MAX. 0.25 DURATION

## GENERAL NOTES

1. FIELD VERIFY EXISTING PIPING SYSTEMS FOR LOCATION, SIZE, AND DEPTH.
2. INSTALL PIPING BELOW GRADE IN TRENCH LAD ON A FIRM BED THRU ITS ENTIRE LENGTH CONFORMING TO CPC, 2016 EDITION SEC. 718.2, 718.3, APPENDIX C.
3. DISINFECT POTABLE WATER PIPING IN ACCORDANCE WITH CPC, 2016 EDITION, SEC. 606.



P1.00

SHEET

LEGEND, SCHEDULES  
AND NOTES

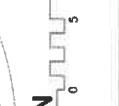
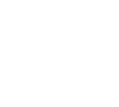
CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL





NO.	DATE	DESCRIPTION

PROJECT NO.	
PROJECT TITLE	
DATE	
DESIGNED BY	
CHECKED BY	
SCALE	

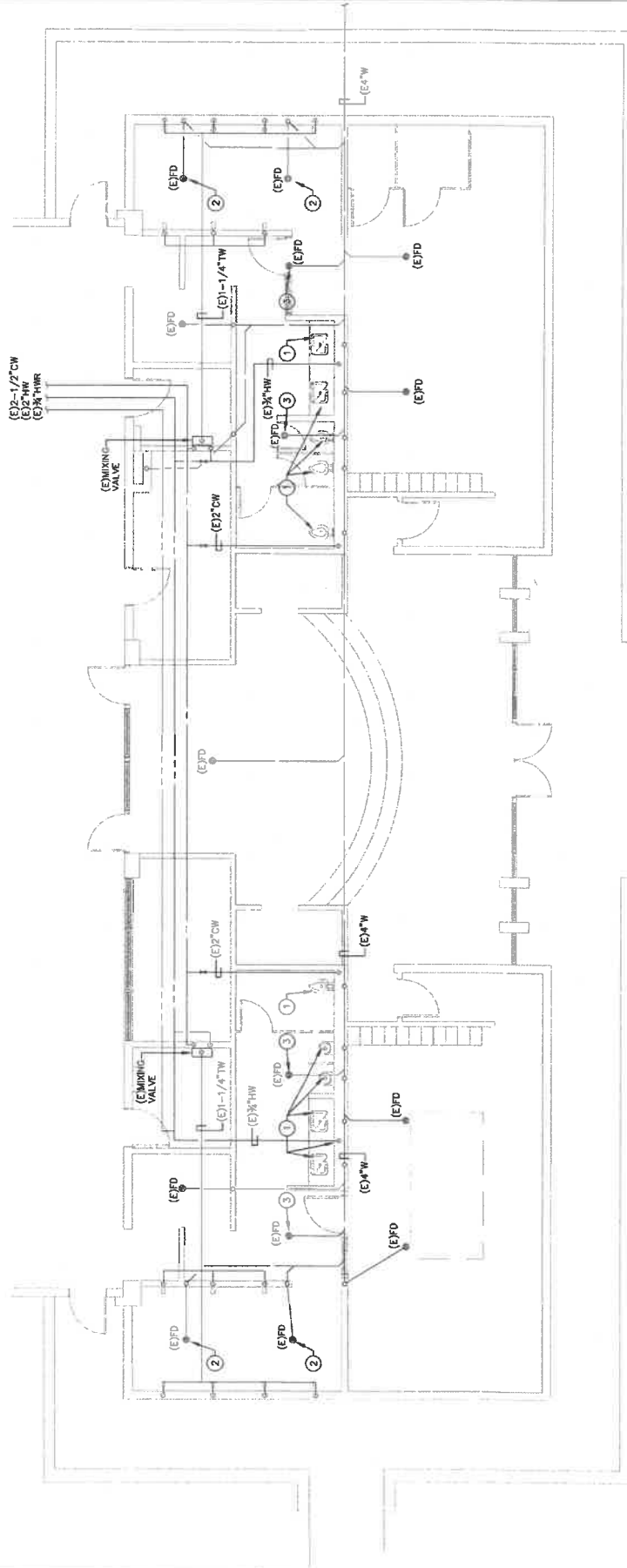


REFERENCE NOTES

- REMOVE ALL EXISTING PLUMB FIXTURES FROM RESTROOMS SHOWN. MODIFY EXISTING ROUGH-IN PIPING AS REQUIRED TO INSTALL NEW FIXTURES TO MEET CLEARANCE REQUIREMENTS AND TO MEET CITY OF CAMARILLO PLUMBING CODES. CAP EXISTING HW PIPING TO LAVATORY AREAS ABOVE CEILING (DUE TO CITY INSTA-HOT ORDINANCE).
- REMOVE EXISTING FLOOR DRAIN AND CAP EXISTING PIPING NOT RELEASED BELOW FLOOR. REFER TO SHEET P-201 FOR LOCATION OF NEW FLOOR DRAINS.
- REMOVE EXISTING FLOOR DRAIN GRATE AND INSTALL NEW GRATE WITH REFINISHING OF FLOOR.

GENERAL NOTES

- REFER TO MINIMUM CONNECTION SIZE TABLE ON SHEET P1.00 FOR INDIVIDUAL FIXTURE PIPE SIZES.
- REFER TO WASTE AND VENT PIPING RISER DIAGRAM FOR PIPE SIZES.



DEMOLITION FLOOR PLAN  
SCALE: 1/4" = 1'-0"



**CITY OF CAMARILLO  
AQUATICS CENTER  
RESTROOM REMODEL**

DATE	NO.	BY	DESCRIPTION

**FLOOR PLAN**

SHEET

**P2.01**



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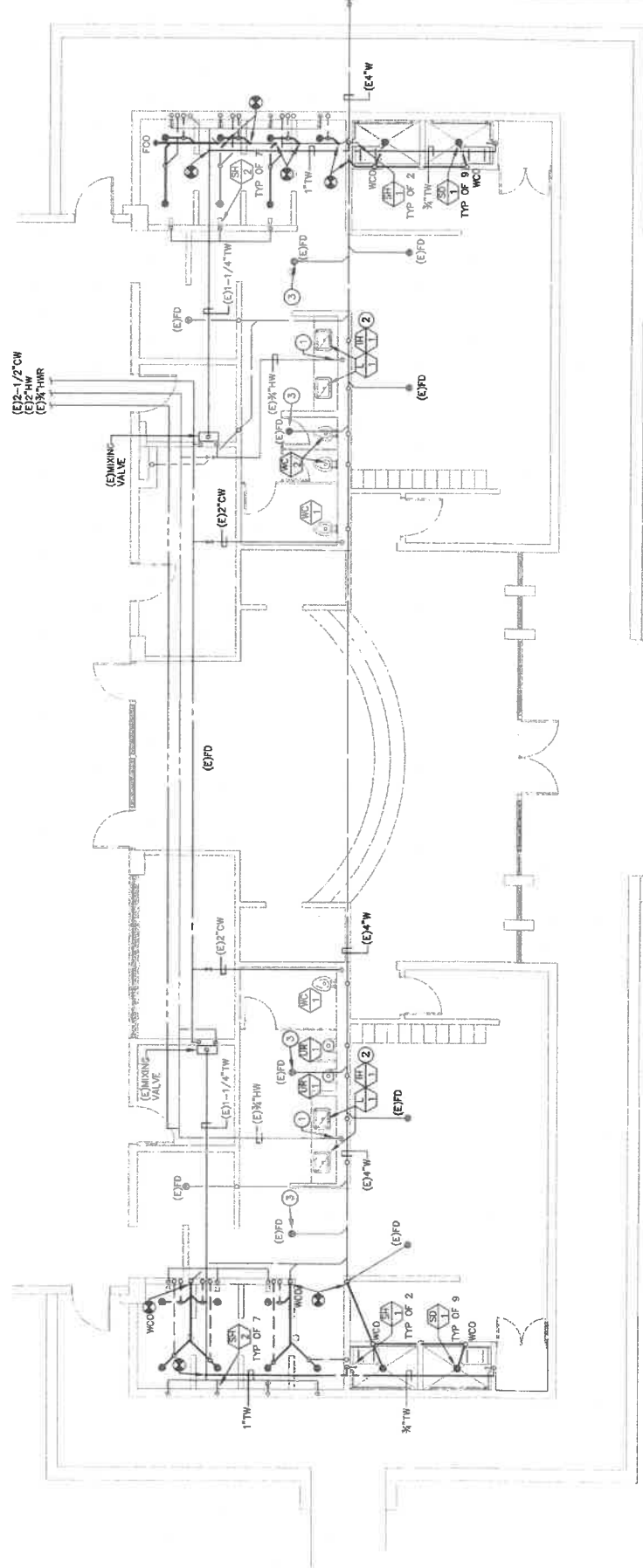
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**GENERAL NOTES**

- REFER TO MINIMUM CONNECTION SIZE TABLE ON SHEET P1.00 FOR INDIVIDUAL FIXTURE PIPE SIZES.
- INSTALL NEW FIXTURES TO MEET CLEARANCE REQUIREMENTS (REFER TO ARCH PLANS FOR EXACT FIXTURE LOCATIONS).
- REFER TO CITY OF CAMARILLO ORDINANCE 10000 FOR LAVATORY AREAS ABOVE CEILING (DUE TO CITY INSTA-HOT ORDINANCE).
- INSTALL INSTA-HOT WATER HEATER AT EACH LAV IN ACCORDANCE WITH MIF'S REQUIREMENTS AND IN ACCORDANCE WITH CITY OF CAMARILLO ORDINANCE.
- INSTALL NEW FLOOR DRAIN GRATE WHEN INSTALLING NEW FLOOR FINISHES.
- RELOCATE EXISTING DRINKING FOUNTAIN AND ALL WATER RECONNECT.

**REFERENCE NOTES**

- REFER TO CITY OF CAMARILLO ORDINANCE 10000 FOR LAVATORY AREAS ABOVE CEILING (DUE TO CITY INSTA-HOT ORDINANCE).
- INSTALL INSTA-HOT WATER HEATER AT EACH LAV IN ACCORDANCE WITH MIF'S REQUIREMENTS AND IN ACCORDANCE WITH CITY OF CAMARILLO ORDINANCE.
- INSTALL NEW FLOOR DRAIN GRATE WHEN INSTALLING NEW FLOOR FINISHES.
- RELOCATE EXISTING DRINKING FOUNTAIN AND ALL WATER RECONNECT.



**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

# Specifications

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**Pleasant Valley Recreation and Park District**

**Aquatics Center Specifications**  
**Spec #AC-3-2019**

**11-7-19**

**Prepared By**



**Leach Mounce Architects**

architecture    planning    interiors  
1885 Knoll Drive, Ventura, CA 93003 P.(805) 656-3522  
www.leachmouncearchitects.com    F.(805) 258-1926

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Not Used

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16460 Transformers  
16470 Panelboards  
16500 Lighting

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## SECTION 01000

### SUMMARY

#### PART 1 GENERAL

##### 1.03 DESCRIPTION OF WORK

- A. Scope of demolition and removal work is shown on drawings.
- B. Not Used
- C. Remodel the Pleasant Valley Aquatics Center Locker Rooms, Showers & Restrooms
- D. Plumbing: new construction
- E. HVAC: New mechanical Units
- F. Electrical Power and Lighting: new construction
- G. Paint and Replace the missing hardware (locks) on the Lockers
- H. Fire Suppression Sprinklers: None
- I. Fire Alarm: None
- J. Telephone: None
- K. Data and Computer Network: None

##### 1.04 WORK BY OWNER

- A. NA

##### 1.05 OWNER OCCUPANCY

- A. The District intends to occupy the Project upon Substantial Completion: "***The stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.***"
- B. Cooperate with the District to minimize conflict and to facilitate the District operations.
- C. Schedule the Work to accommodate the District occupancy.

##### 1.06 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
  - A. GENERAL
    - 1. Contractor shall at all times conduct the work so as to impose no hardship on the District or others engaged in the District's work nor cause any unreasonable delay or hindrance thereto.
    - 2. Construction activities will be scheduled to minimize disruption to the District and to District's users.
    - 3. The Contractor may not interrupt any utilities without prior written permission from the District. Requests for utility shutdowns shall be submitted a minimum of 72 hours in advance of the requested shutdown date.
  - B. PROTECTION OF EXISTING STRUCTURES AND UTILITIES

SUMMARY  
01000 - 1

1. Locate all known existing utility installations before proceeding with construction operations which may cause damage to such installations. The existing utilities shall be protected and maintained in continual service at the Contractor's expense. Where existing utilities cross or are adjacent to the work of this contract, the Contractor shall notify the District's Representative a minimum of 48 hours in advance of commencement of work. The Contractor shall locate the existing utility(s) by exploration; repair of damage to existing utility(s) shall be at the Contractor's expense.
2. In the event that undocumented existing structures or utilities are encountered, the contractor shall immediately notify the District's Representative and request direction concerning how to proceed with the work.
3. Should the Contractor damage any existing structure or utility, the Contractor shall take immediate action to ensure the safety of both persons and property.
4. Contractor shall visit the site and thoroughly familiarize itself with existing conditions.
5. Contractor shall include all necessary pipe offsets, fittings, etc. as required to complete the work in the base bid. No additional costs due to the Contractor's failure to survey existing conditions and review available record drawings will be allowed.
6. Contractor shall note all utility items (utility meters, junction boxes, valve boxes) at or above grade in the vicinity of the project site prior to commencing with trenching operations. These items indicate the presence of underground utilities in the area shall be located and kept in continual service. This requirement shall apply regardless of inclusion of these utilities on existing record documents.
7. When cutting, removal or alteration of existing work is required to form connections with new work or otherwise to meet the requirements of the contract documents, perform such work so as not to damage the work that will remain in place.
8. Contractor shall provide all necessary materials, equipment and labor to adequately protect existing structures, floors, architectural finishes and utilities which may be impacted by the work of this contract.

#### C. ALLOWABLE WORK SCHEDULE

1. Normal construction activities shall be performed Monday through Friday between the hours of 7:00 am and 5:00 pm.
2. Shutdown of existing utilities or other activities which impact District operations shall be scheduled in advance with the District's Representative in accordance with paragraph 1.05.A.3 above, and shall be scheduled during off-hours at the discretion of the District and at no additional cost to the District.
3. Contractor shall submit an "Off-hours work Schedule Request Form" a minimum of 72 hours prior to any anticipated weekend or holiday work. A form must also be submitted for work outside of normal working hours. off hours work shall not be performed without prior approval by the District

#### D. SITE DECORUM

1. Contractor is to control the conduct of labor forces and prevent unwanted interaction initiated by workers with the District staff, Visitors or other individuals other than those associated with the project.

SUMMARY  
01000 - 2

2. In the event that any worker initiates unwanted interaction, utilizes profanity, or (in the opinion of the District's Representative) conducts him/herself in an offensive or unprofessional manner, the Contractor shall immediately remove the worker from the project and replace said worker with another of equivalent technical skill at no additional cost to the District.
3. No smoking is allowed on the job site
4. No radios, other than 2-way communication type, shall be allowed on the project site.

**E. ACCESS PANELS**

1. The contractor is responsible for locating, providing and installing all access panels required by mechanical, electrical and all other systems.
2. Coordinate locations, types and installation of all access panels and supply any not specified under other sections.

**F. CONFLICTS**

1. Should a conflict occur between various drawings or between drawings and specifications or between various specification sections, contractor is deemed to have estimated the most expensive method of construction unless a written decision from the Engineer or Owners Representative has been received which describes an alternate method or materials.

**1.07 WORK SEQUENCE**

- A. Contractor shall substantially complete (see section 1.05 above) the new building
- B. Contractor shall coordinate construction schedule and operations with the District

**END OF SECTION**

**SUMMARY  
01000 - 3**

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**SUMMARY**  
01000 - 4

## SECTION 01045

### CUTTING AND PATCHING

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Contract General Conditions, Drawings and Specifications.

##### 1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for cutting and patching.
- B. Work included in this Section:
  - 1. Cutting and patching not required to be performed as part of the work of other sections.
  - 2. Cutting and patching existing work altered or disturbed to accommodate new construction.
  - 3. Cutting and patching existing work damaged or defaced during new construction as required to restore to previously existing (or better) condition.
  - 4. Cutting and patching required to:
    - a. Install or correct non-coordinated work.
    - b. Remove and replace defective and non-conforming work.
    - c. Remove samples of installed work for testing.
- C. Refer to other Sections and drawings for specific requirements of the extent and limitations applicable to cutting and patching, demolishing, or altering existing work of specific trades and/or divisions.

##### 1.03 SUBMITTALS

- A. Cutting and Patching Proposal: Where approval of procedures for cutting and patching is required before proceeding, submit a proposal describing procedures well in advance of the time cutting and patching will be performed and request approval to proceed. Include the following information, as applicable, in the proposal:
  - 1. Describe the extent of cutting and patching required and how it is to be performed.
  - 2. Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
  - 3. List products to be used and firms or entities that will perform work.

4. Indicate dates when cutting and patching is to be performed.
5. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
6. Where cutting and patching involves addition of reinforcement to structural elements, submit details to show how reinforcement is integrated with the original structure.
7. Approval by the Architect to proceed with cutting and patching does not waive the Architect's right to later require complete removal and replacement of a part of the Work found to be unsatisfactory.
8. Effects on District operations and on concurrent operations construction by other contractors.

#### **1.04 QUALITY ASSURANCE**

- A. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace work cut and patched in a visually unsatisfactory manner.

### **PART 2 - PRODUCTS**

#### **2.01 MATERIALS**

- A. Use materials that are identical to existing materials unless not available. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. **BEFORE PROCEEDING CONTRACTOR SHALL OBTAIN APPROVAL OF THE ARCHITECT.**
- B. Use materials whose installed performance will equal or surpass that of existing materials.



## **PART 3 - EXECUTION**

### **3.01 INSPECTION**

- A. Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.
  - 1. Before proceeding, meet at the site with parties involved in cutting and patching, including asbestos abatement, mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

### **3.02 PREPARATION**

- A. Temporary Support: Provide temporary support of Work to be cut where required.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Take all precautions necessary to avoid cutting existing pipe, conduit or ductwork serving the building, but scheduled to be removed or relocated until provisions have been made to bypass them.

### **3.03 PERFORMANCE**

- A. General
  - 1. Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
  - 2. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
- B. Cutting
  - 1. Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible review proposed procedures with the original installer; comply with the original installer's recommendations.
  - 2. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes

**CUTTING AND PATCHING**  
01045 - 3

and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

3. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
4. Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.
5. By-pass utility services such as pipe or conduit, before cutting, where services are shown or required to be removed, relocated or abandoned. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.
6. Provide fire-safe seals to maintain fire rating at all penetrations.

C. Patching

1. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
2. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
3. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
4. Where removal of walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials if necessary to achieve uniform color and appearance. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken wall section containing the patch, after the patched area has received primer and second coat.
5. Patch, repair or re-hang existing ceilings as necessary to provide an even plane surface of uniform appearance.
6. Replace concrete walkways to nearest construction joint. Any required repair to a portion of a walkway panel shall require full replacement of said panel from joint to joint in both the north-south and east-west direction.

- D. Plaster Installation: Comply with manufacturer's instructions and install thickness and coats as indicated.

**3.04 CLEANING**

- A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

**END OF SECTION 01045**

**CUTTING AND PATCHING  
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## SECTION 01400

### QUALITY REQUIREMENTS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. References and standards.
- B. Mock-ups.
- C. Control of installation.
- D. Tolerances.
- E. Testing and inspection services.
- F. Manufacturers' field services.

##### 1.2 RELATED REQUIREMENTS – Not used

##### 1.3 REFERENCE STANDARDS

- A. ASTM C 1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2001.
- B. ASTM C 1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2006a.
- C. ASTM C 1093 - Standard Practice for Accreditation of Testing Agencies for Unit Masonry; 2006.
- D. ASTM D 3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2004a.

##### 1.4 SUBMITTALS

- A. Testing Agency Qualifications:
  - 1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
  - 2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
- B. Design Data: Submit for the Engineer's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for the City's information.
- C. Test Reports: After each test/inspection, promptly submit two copies of report to the Engineer and to Contractor.
  - 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test/inspection.
    - h. Date of test/inspection.
    - i. Results of test/inspection.

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- j. Conformance with Contract Documents.
  - k. When requested by the Engineer, provide interpretation of results.
- 2. Test report submittals are for the Engineer's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for the City's information.
- D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to the Engineer, in quantities specified for Product Data.
  - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to the Engineer.
- E. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the City's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- F. Manufacturer's Field Reports: Submit reports for the Engineer's benefit as contract administrator or for the City.
  - 1. Submit report in duplicate within 30 days of observation to the Engineer for information.
  - 2. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- G. Erection Drawings: Submit drawings for the Engineer's benefit as contract administrator or for the City.
  - 1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
  - 2. Data indicating inappropriate or unacceptable Work may be subject to action by the Engineer or the City.

## 1.5 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Engineer shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

## 1.6 TESTING AND INSPECTION AGENCIES

- A. Contractor shall employ and pay for services of an independent testing agency for all testing requirements.

## **PART 3 EXECUTION**

### **3.1 CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from the Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

### **3.2 MOCK-UPS**

- A. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mock-ups shall be a comparison standard for the remaining Work.
- D. Where mock-up has been accepted by the Engineer and is specified in product specification sections to be removed, remove mock-up and clear area when directed to do so.

### **3.3 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from the Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

### **3.4 TESTING AND INSPECTION**

- A. Testing Agency Duties:
  - 1. Provide qualified personnel at site. Cooperate with the Engineer and Contractor in performance of services.
  - 2. Perform specified sampling and testing of products in accordance with specified standards.
  - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 4. Promptly notify the Engineer and Contractor of observed irregularities or non-conformance of Work or products.
  - 5. Perform additional tests and inspections required by the Engineer.
  - 6. Submit reports of all tests/inspections specified.
- B. Limits on Testing/Inspection Agency Authority:

1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  2. Agency may not approve or accept any portion of the Work.
  3. Agency may not assume any duties of Contractor.
  4. Agency has no authority to stop the Work.
- C. Contractor Responsibilities:
1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
  2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
  3. Provide incidental labor and facilities:
    - a. To provide access to Work to be tested/inspected.
    - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
    - c. To facilitate tests/inspections.
    - d. To provide storage and curing of test samples.
  4. Notify the Engineer and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
  5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  6. Arrange with the City's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- D. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by the Engineer.
- E. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

### **3.5 MANUFACTURERS' FIELD SERVICES**

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment and systems as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

### **3.6 DEFECT ASSESSMENT**

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of the Engineer, it is not practical to remove and replace the Work, the Engineer will direct an appropriate remedy or adjust payment.

**END OF SECTION**

**QUALITY REQUIREMENTS**  
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**SECTION 01500**  
**TEMPORARY FACILITIES**

**PART 1 GENERAL**

**1.01 BARRIERS**

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.
- C. Provide exiting devices (doors, hardware etc.) as required by the overseeing jurisdiction, Contractor to verify all requirements.

**1.02 INTERIOR ENCLOSURES**

- A. Provide temporary partitions as indicated to separate work areas from Pleasant Valley Aquatics-occupied areas, to prevent penetration of dust and moisture into Pleasant Valley Aquatics-occupied areas, and to prevent damage to existing materials and equipment.
- B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:

**END OF SECTION**

## SECTION 01600

### PRODUCT REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. General product requirements.
- B. Not Used
- C. Re-use of existing products.
- D. Transportation, handling, storage and protection.
- E. Product option requirements.
- F. Substitution limitations and procedures.
- G. Procedures for the District - supplied products.
- H. Spare parts and maintenance materials.

##### 1.02 RELATED REQUIREMENTS

- A. Section 01100 - Summary:
- B. Section 01400 - Quality Requirements: Product quality monitoring.

##### 1.03 REFERENCE STANDARDS

- A. 16 CFR 260 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; current edition.
- B. CAN/CSA Z809 - National Standard for Sustainable Forest Management; CSA International Inc.; 2002.
- C. GreenSeal GS-36 - Commercial Adhesives; Green Seal, Inc.; 2000.
- D. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.
- E. SCAQMD 1168 - South Coast Air Quality Management City Rule No.1168; current edition; [www.aqmd.gov](http://www.aqmd.gov).

#### PART 2 PRODUCTS

##### 2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Do not use products having any of the following characteristics:
  - 1. Made using or containing CFC's or HCFC's.
- C. Where all other criteria are met, Contractor shall give preference to products that:
  - 1. Are extracted, harvested, and/or manufactured closer to the location of the project.
  - 2. Have longer documented life span under normal use.
  - 3. Result in less construction waste.
- D. Regionally-Sourced Products:
  - 1. Specific Product Categories: Provide regionally-sourced products as specified elsewhere.
  - 2. Indicate location of manufacture; in all cases indicate location of final assembly; for harvested products, indicate location of harvest; for extracted (i.e. mined) products,



indicate location of extraction; for products involving multiple manufacturing steps, indicate all locations of manufacture or assembly; provide manufacturer or supplier certification of location information.

- E. Products with Recycled Content:
1. Overall Project Requirement: Provide products with recycled content such that the sum of post-consumer recycled content plus one-half of the post-industrial recycled content constitutes at least 10 percent (2 points) of the total value of all products installed, except mechanical and electrical components.
  2. Specific Product Categories: Provide recycled content as specified elsewhere.
  3. Calculations: Where information about recycled content is required to be submitted:
    - a. Determine percentage of post-consumer and post-industrial content separately, using the guidelines contained in 16 CFR 260.7(e).
    - b. Previously used, reused, refurbished, and salvaged products are not considered recycled.
    - c. Wood fabricated from timber abandoned in transit to original mill is considered reused, not recycled.
    - d. Determine percentage of recycled content of any item by dividing the weight of recycled content in the item by the total weight of all material in the item.
    - e. Determine value of recycled content of each item separately, by multiplying the content percentage by the value of the item.
  4. State unit cost, post-consumer and post-industrial content percentages, quantity installed, total material cost, and total recycled content value; attach evidence of contents from either manufacturer or an independent agency.
- F. Aerosol Adhesives:
1. Provide only products having lower volatile organic compound (VOC) content than required by GreenSeal GS-36.
    - a. Require each installer to certify compliance and submit product data showing product content.
  2. Specific Product Categories: Comply with limitations specified elsewhere.

### 2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

### 2.04 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Provide spare parts, maintenance, and extra products of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

## PART 3 EXECUTION

### 3.01 SUBSTITUTION PROCEDURES

- A. Not used
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution constitutes a representation that the submitter:

PRODUCT REQUIREMENTS  
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1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  2. Will provide the same warranty for the substitution as for the specified product.
  3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to the City.
  4. Waives claims for additional costs or time extension that may subsequently become apparent.
- D. Substitution Submittal Procedure:
1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
  2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
  3. The City will notify Contractor in writing of decision to accept or reject request.

### **3.03 TRANSPORTATION AND HANDLING**

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

### **3.04 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Prevent contact with material that may cause corrosion, discoloration, or staining.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

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**PRODUCT REQUIREMENTS**  
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## SECTION 01700

### EXECUTION REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of the District's personnel.
- I. Closeout procedures, except payment procedures.

##### 1.02 RELATED REQUIREMENTS

- A. Section 01100 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01400 - Quality Requirements: Testing and inspection procedures.
- C. Not Used
- D. Individual Product Specification Sections:
  - 1. Advance notification to other sections of openings required in work of those sections.
  - 2. Limitations on cutting structural members.

##### 1.03 SUBMITTALS

- A. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
  - 1. On request, submit documentation verifying accuracy of survey work.
  - 2. Submit a copy of site drawing signed by the Land Surveyor, licensed in the State of California, that the elevations and locations of the work are in conformance with Contract Documents.
  - 3. Submit surveys and survey logs for the project record.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
  - 1. Structural integrity of any element of Project.
  - 2. Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - 4. Visual qualities of sight exposed elements.
  - 5. Work of the District or separate Contractor.
  - 6. Include in request:
    - a. Identification of Project.
    - b. Location and description of affected work.
    - c. Necessity for cutting or alteration.

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- d. Description of proposed work and products to be used.
- e. Alternatives to cutting and patching.
- f. Effect on work of the District or separate Contractor.
- g. Written permission of affected separate Contractor.
- h. Date and time work will be executed.

C. Project Record Documents: Accurately record actual locations of capped and active utilities.

### **1.05 PROJECT CONDITIONS**

- A. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- B. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- C. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere.
- D. Erosion, Sediment and Pollution Control: Plan and execute in accordance with approved storm water pollution control plan (per section 706)
- E. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- F. Pest Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.

### **1.06 COORDINATION**

- A. Coordinate scheduling, submittals, and work of the various sections of the Specifications to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Coordinate completion and clean-up of work of separate sections.
- E. After the District occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of the District's activities.

## **PART 2 PRODUCTS**

### **2.01 PATCHING MATERIALS**

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

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- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01600.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

#### **3.02 PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

#### **3.03 PREINSTALLATION MEETINGS**

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify the District four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to the District, participants, and those affected by decisions made.

#### **3.04 LAYING OUT THE WORK**

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify the District of any discrepancies discovered.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to the District the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes

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without prior written notice to the District.

- F. Utilize recognized engineering survey practices.
- G. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.
- H. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
  - 2. Grid or axis for structures.
  - 3. Building foundation, column locations, ground floor elevations, and existing walls.
- I. Periodically verify layouts by same means.
- J. Maintain a complete and accurate log of control and survey work as it progresses.

### **3.05 GENERAL INSTALLATION REQUIREMENTS**

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

### **3.06 ALTERATIONS**

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
  - 1. Verify that construction and utility arrangements are as shown.
  - 2. Report discrepancies to the District before disturbing existing installation.
  - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
  - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
  - 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
  - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
  - 2. Remove items indicated on drawings.
  - 3. Relocate items indicated on drawings.
  - 4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary, for successful application of new finish.
  - 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.

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- E. Services (Including but not limited to, Plumbing, Electrical): Remove, relocate, and extend existing systems to accommodate new construction.
  - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
  - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
  - 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
    - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
    - b. See Section 01100 for other limitations on outages and required notifications.
    - c. Provide temporary connections as required to maintain existing systems in service.
  - 4. Verify that abandoned services serve only abandoned facilities.
  - 5. Remove abandoned pipe, ducts, conduits, and equipment, remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
  - 1. Prevent movement of structure; provide shoring and bracing if necessary.
  - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  - 3. Repair adjacent construction and finishes damaged during removal work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
  - 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to the District.
  - 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
  - 3. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for the District review and request instructions.
  - 4. Trim existing wood doors as necessary to clear new floor finish. Refinish trim as required.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Clean existing systems and equipment.
- J. Do not begin new construction in alterations areas before demolition is complete.
- K. Comply with all other applicable requirements of this section.

### **3.07 CUTTING AND PATCHING**

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.

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5. Repair areas adjacent to cuts to required condition.
  6. Repair new work damaged by subsequent work.
  7. Remove samples of installed work for testing when requested.
  8. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
  - E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
  - F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
  - G. Restore work with new products in accordance with requirements of Contract Documents.
  - H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
  - I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07840, to full thickness of the penetrated element.
  - J. Patching:
    1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
    2. Match color, texture, and appearance.
    3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

### **3.08 PROGRESS CLEANING**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

### **3.09 PROTECTION OF INSTALLED WORK**

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is

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necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

### **3.10 SYSTEMS STARTUP**

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- G. Submit a written report that equipment or system has been properly installed and is functioning correctly.

### **3.12 ADJUSTING**

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

### **3.13 FINAL CLEANING**

- A. Execute final cleaning prior to final project assessment.
  - 1. Clean areas to be occupied by the District prior to final completion before the District occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean debris from roofs, gutters, downspouts, and drainage systems.
- F. Clean site; sweep paved areas, rake clean landscaped surfaces.
- G. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

### **3.14 CLOSEOUT PROCEDURES**

- A. Make submittals that are required by governing or other authorities.
  - 1. Provide copies to the District.
- B. Notify the Project Manager when work is considered ready for Substantial Completion.

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- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for the Architects' review.
- D. The District will occupy all of the building as specified in Section 01100.
- E. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to the District - occupied areas.
- F. Notify the District when work is considered finally complete.
- G. Complete items of work determined by the Districts final inspection.

### **3.15 MAINTENANCE SERVICE**

- A. Furnish service and maintenance of the components where indicated in the specification. See individual sections for requirements.
- B. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- D. Maintenance service shall not be assigned or transferred to any agent or Subcontractor without prior written consent of the District.

**END OF SECTION**

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## SECTION 02221

### EXCAVATING, BACKFILLING, AND COMPACTING FOR UTILITIES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS:

- A. Plans and general provisions of the Contract, including General and Special Provisions Specification Sections, apply to this Section.

##### 1.2 SUMMARY:

- A. This Section includes the following:
  - 1. Excavating, backfilling and compacting trenches for utility pipes, water, gas, irrigation and sewer lines, storm drain lines, manholes, vaults, valve boxes, catch basins, underground tanks, thrust blocks, yard boxes, pull boxes and concrete encased electrical conduits.
- B. The following Sections contain requirements that relate to this Section:
  - 1. Section 02050 Demolition Removal
  - 2. Section 02751 Concrete Paving

##### 1.3 DEFINITIONS:

Not Used

##### 1.4 SUBMITTALS:

- A. Product Data: Submit samples of import pipe bedding materials and import fill materials to Engineer or testing laboratory designated by Engineer, for testing and approval prior to importation. Submit name of source location for imported pipe bedding materials and import fill materials for approval by the Engineer prior to importation. Submit certification for import materials indicating presence of organic contaminants, whether or not below EPA action levels, and presence of hazardous and/or regulated wastes and contaminants, whether or not below EPA action levels.

## 1.5 QUALITY ASSURANCE:

- A. Perform all work under the superintendence of competent foreman or superintendent and in conformance with geotechnical report
- B. All grade staking shall be performed by a licensed surveyor registered in the State of California.
- C. Perform materials testing per Standard Specifications for Public Works Construction, Part 2.

Sieve analysis by ASTM C136  
Compaction tests by ASTM D1557  
Sand equivalent tests by California Test 217 or ASTM D2419  
Permeability by ASTM D2434

## 1.6 DELIVERY, STORAGE, AND HANDLING:

- A. Fees: Pay as required by governing authority having jurisdiction over area.
- B. Bonds: Post as required by governing authority having jurisdiction over area.
- C. Hauling Routes and Restrictions: Comply with requirements of the City and any other governing authority having jurisdiction over the area.

## PART 2 - PRODUCTS

### 2.1 FILL AND BACKFILL MATERIALS

- A. The native materials encountered on-site should be acceptable for use as general compacted fill provided:
  - 1. The native materials are free of organics, trash, debris and oversize particles greater than 4 inches in diameter.
  - 2. All native fill materials shall be placed and compacted to at least 90 percent of their laboratory determined maximum dry density, unless otherwise specified.
- B. In addition to the general fill requirements noted above, general fill materials shall have the following characteristics:
  - 1. Expansion index less than 50.
  - 2. Plasticity index less than 15.
  - 3. Percentage between 4 inches and 2 inches is less than 15.
  - 4. Percentage passing the No. 200 sieve is less than 70.
- C. The expansion index of general fill materials placed in the office building subgrade area shall be verified prior to the completion of site grading.
- D. Where fill material exhibits a wide variation in consistency, the Engineer may

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require blending to stabilize and upgrade material.

- E. Imported Fill Material:
1. If amount of suitable earth materials obtained from jobsite excavations is not sufficient to properly construct required fill, furnish imported earth materials as necessary.
  2. Import fill materials shall be free from organic material, hazardous materials, unsuitable fill debris, and other deleterious materials. Select fill material shall not contain rocks, blocky material, lumps over 4 inches in maximum dimension and be primarily granular with fines content of between 40 and 60 percent and have an expansion index (EI) of less than 20 (non-expansive). Rock particles shall not be placed in concentrated pockets and shall be surrounded by sufficient soil material to preclude open interstices. The Soils Engineer shall evaluate and approve the suitability of proposed select fill materials.
- F. Pipe Bedding:
1. Pipe bedding for all utilities shall conform to the City Standards. Pipe bedding for utilities shall consist of sand that has a minimum sand equivalent of 30. The sand shall be placed in a zone that extends to a minimum of 6 inches below and 12 inches above the pipe for the full trench width. The thickness of the bedding sand below the pipe may be decreased to 4 inches for ductile iron pipe materials.
  2. Trench backfill above the pipe bedding may consist of onsite soils or import fill materials, per this specification.

## **PART 3 - EXECUTION**

### **3.1 GENERAL:**

- A. Trenches, ditches, pits, sumps, and similar items which are outside the barricaded working area shall be barricaded to conform to Cal OSHA standards.
- B. Trenches over 5'-0" in depth shall conform to the Construction Safety Orders of the California Division of Industrial Safety.
- C. Backfill excess excavations to the required level with earth, gravel, sand, or concrete as directed by the Engineer and compact thoroughly. Grade ground adjacent to all excavations to prevent entry of water.
- D. No pipe shall be laid lengthwise under concrete walks without approval of the Engineer.
- E. Do not excavate trenches parallel to footings closer than 18 inches from the face of the footing or below a plane having a downward slope of 2 horizontal to one vertical, from a line 9 inches above bottom of footings.
- i. Unless otherwise indicated on Drawings, depth of excavations outside the buildings shall allow for a minimum coverage above top of pipe, tank or conduit measured from adjoining finished grade, as follows:

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Steel Pipe	24" below finished grade
Copper Water Tube	18" below finished grade
Cast-Iron, Pressure Pipe	36" below finished grade
Plastic Pipe (other than waste)	30" below finished grade
Tanks or other structures	36" below finished grade
Soil, sewer & storm drain	minimum 18" below finished grade, and as required for proper pitch and traffic load. (Install polypropylene sewer pipe with not less than 24" coverage)

2. Trench width shall provide ample space for working and joining. Dig holes for bells for all bell and spigot pipe, and for fittings for all pipe.
- G. Excavate trenches for utilities, pipes, concrete encased electrical conduits and fuel tanks, to required depth, as indicated on Drawings. Grade bottom of trenches to a uniform surface to prevent pockets. Remove all loose soil from the excavation before placing 6" layer of sand bedding, compacted to 90 percent of the maximum relative compaction as determined by ASTM D1557. Place pipes, encased conduits and other utilities on a uniformly bearing sand bed. Jetting of bedding material shall not be permitted.
  - H. Keep excavations free of water during installation work. Dispose of water in such a manner as not to endanger public or private property or public health. Remove accumulated water in excavations by pumping, or other approved means.
  - I. Where portions of existing structures, walks, paving, etc. must be removed or cut for pipe or conduit installation, replace the material with equal quality, finished to match adjacent work.
  - J. Provide a minimum space of 2 inches between outer surfaces of buried pipes, including conduits placed in the same trench or, where used, outside surfaces of containers.
  - K. Do not place backfill until the work installed has been inspected, tested and approved by the Engineer.
  - L. Backfill shall be placed in layers not exceeding 4 inches in thickness, moisture conditioned as necessary to at or near optimum moisture content, and compacted to 90 percent of the maximum dry density as determined by ASTM D1557.

### 3.8 INSPECTION AND TESTING:

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- A. Excavation of existing fills, reworking of natural soils and compaction of all required fills shall be inspected and tested by the Geotechnical Engineer.
- B. Imported fill materials, and its sources, shall be subject to approval by the Geotechnical Engineer prior to importation.
- C. Place fills and backfills under supervision of the Geotechnical Engineer.
- D. The Geotechnical Engineer shall inspect all subgrades and excavations prior to placing of fill materials.
- A. Compaction: Test compacted fill in accordance with ASTM D1557 (latest edition).
- F. The Engineer will inspect all utility trenches prior to placement of bedding material and prior to placement of trench backfill.

**3.9 EXCESS MATERIAL DISPOSAL:**

- A. Remove all excess excavated and imported materials, not used for fill or backfill, and all waste from job-site.

**END OF SECTION**



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## SECTION 06100

### ROUGH CARPENTRY

#### PART 1 - GENERAL

##### 1.1. SUMMARY:

- A. Section Includes: Rough carpentry work.

##### 1.2. REFERENCES:

- A. The editions of the specifications and standards referenced herein, published by the following organizations, apply to the work only to the extent specified by the reference. Refer to Special Provisions Specifications for information concerning availability and use of references.
  1. American Plywood Association (APA)
  2. American Society for Testing and Materials (ASTM)
  3. American Wood Preservers Bureau (AWPB)
  4. U.S. Department of Commerce Product Standard (PS)
  5. West Coast Lumber Inspection Bureau (WCLIB)
  6. Western Wood Products Association (WWPA)
  7. Redwood Inspection Service (RIS)

##### 1.3. SUBMITTALS:

- A. Product Data: Submit copies of current ICBO Evaluation Reports for powder driven fasteners.
- B. Wood Treatment Data: Submit chemical treatment manufacturers instructions for handling, storing, installing and finishing of treated materials.
  1. Preservative Treatment: For each type specified, include certification by treating plant stating type of preservative solution and pressure process used, net amount of preservative retained and conformance with applicable standards.
  2. Water Borne Treatment: Include statement that moisture content of treated materials was reduced to levels specified before shipment to project site.
  3. Fire-Retardant Treatment: Include certification by treating plant that treatment material complies with specified standard and other requirements.

##### 1.4. QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies:
  1. Rough carpentry shall conform to the California Code of Regulations (CCR) Title 24 Part 2, California Building Code, and Chapter 25.
  2. Powder driven fasteners shall be furnished and installed in accordance with the manufacturer's current ICBO Evaluation Report.
- B. Grade Marks:

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1. Identify each piece of lumber by the official grade mark of WCLIB, or WWPA.
2. Identify plywood by the official grade mark of APA.
3. Identify pressure preservative treated lumber and plywood with the official grade mark of AWPB. Grade stamp shall state retention: statements on grade stamp such as Aor to refusal@ are not permitted.
4. Identify fire retardant treated lumber with appropriate classification marking of Underwriters Laboratories, Inc., U.S. Testing Timber Products Inspection or other testing and inspecting agency acceptable to the State Fire Marshal.

#### **1.5. DELIVERY, STORAGE AND HANDLING:**

- A. Deliver materials to the site in an undamaged condition.
- B. Store lumber and plywood at the site under cover or otherwise protected against exposure to weather, raised above the ground and out of contact with other damp or wet surfaces. Stack lumber and plywood and provide for air circulation within and around the stacks and under temporary coverings. For pressure treated lumber and plywood, provide spacers between courses to permit air circulation.

#### **1.6 PROJECT CONDITIONS:**

- A. Cooperate with other trades in coordinating their work with the work of this section. Provide wood grounds, blocking and nailers where indicated or as required for integration of work of other trades into the structure.

### **PART 2 - PRODUCTS**

#### **2.1 LUMBER:**

- A. Lumber Standards: Manufacture lumber to comply with PS 20-70 American Softwood Lumber Standard@ and with applicable grading rules of inspection agencies specified herein.
- B. Moisture Content at Time of Placing:
  1. Untreated Lumber: Maximum 19 percent.
  2. Treated Lumber: Maximum 19 percent after pressure treatment.
- C. Sizing and Surfacing: Sizes indicated are nominal; provide actual sizes in accordance with PS 20-70. Provide dressed lumber, S4S, except as otherwise indicated.
- D. Dimension Lumber: Provide lumber of the grades and species listed below for the various purposes, graded in accordance with WCLIB Standard Grading Rules No. 16", 1988 Edition, WWPA Western Lumber Grading Rules 88", or RIS Standard Specifications for Grades of California Redwood Lumber. 1989 Edition.
  1. Cants, Roof Nailers, and Roof Curbs: Standard or better grade Light Framing; No. 2 or better grade Structural Light Framing; or Stud grade of any commercial softwood species, pressure preservative treated.

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2. Blocking, Nailers and Bracing: Standard or better grade Light Framing; No. 2 or better grade Structural Light Framing; or Stud grade of any commercial softwood species.
3. Headers No. 1 or better grade.

## **2.2 PLYWOOD:**

- A. Plywood Standards: Manufacture plywood to comply with PS 1-83 AU.S. Product Standard for Construction and Industrial Plywood.
- B. Plywood Backing Panels: For mounting electrical or telephone equipment, provide fire-retardant treated plywood panels designation, C-D Plugged grade, Exposure I durability classification, 3.4 inch thick unless otherwise indicated.

## **2.3 PRESSURE TREATMENT:**

- A. Where lumber or plywood is indicated or specified herein, or is required by CCR Title 24, to receive pressure preservative treatment, treat materials in accordance with AWPB LP-22. Incising of Douglas fir will be required where necessary to achieve the specified retention. Complete fabrication of treated items before treatment, where possible. Cuts and holes shall be retreated in accordance with AWPA H-84.
- B. Fire-Retardant Treatment: Where fire-retardant treated wood is indicated or required by CCR Title 24, pressure impregnate lumber and plywood with fire-retardant chemicals to meet the requirements of AWPA C20 and C27, respectively; identify fire-retardant-treated wood with appropriate classification marking of Underwriters Laboratories, U.S. Testing, Timber Products Inspection, or other testing and inspecting agency acceptable to State Fire Marshal.

## **2.4 MISCELLANEOUS MATERIALS:**

- A. Building Paper: Fully waterproof Kraft paper conforming to Fed. Spec. UU-B-790A (1), Type I, Grade B (moderate water vapor resistance).
- B. Rough Hardware:
  1. Furnish items of rough hardware, connections, bolts, required to complete the work. Where carpentry work is exposed to weather or in area of high relative humidity, provide nails, bolts, nuts, washers and other fasteners with a hot-dipped zinc coating in accordance with ASTM A 153-82.
  2. Nails: Common wire. Use ring or spiral shank nails for floor sheathing. Special nailing requirements shall be as indicated.
  3. Bolts: Standard mild steel, square or hexagonal head machine bolts with matching nuts and cut washers, or carriage bolts with square or hexagonal nuts and cut washers.
  4. Lag Bolts and Screws: Sizes indicated.
  5. Toggle Bolts: Sizes indicated.

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C. Powder Driven Fasteners: Provide fastener systems complete with all necessary washers, nuts and other appurtenances. Fasteners shall be as follows or approved equal:

1. Hilti, Inc.
2. Powder Power Tool Corp.: ADrive-It
3. Ramset Fastening Systems: ARamset

### **PART 3 - EXECUTION**

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### **3.1 EXAMINATION:**

- A. Before commencing work, check concrete and masonry walls, steel, and other construction supporting rough carpentry work to ensure that they are set to the lines and levels indicated within the specified tolerances. Do not proceed until discrepancies have been corrected or adjusted.

### **3.2 INSTALLATION:**

- A. Install carpentry, making proper provisions for work of other trades. Fit neatly around exposed items, such as outlet boxes, conduit, pipes, and ducts.
- B. Wood Grounds, Nailers, Blocking and Sleepers:
  - 1. Provide wherever indicated and where required for screeding or attachment of other work. Form to shapes as indicated and cut as required for true line and level of work to be attached. Coordinate location with other work involved.
  - 2. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise indicated. Build such items into masonry during erection of masonry. Where possible, anchor to formwork before concrete placement.
  - 3. Provide permanent grounds of dressed, preservative treated, key beveled lumber not less than 1-1/2 inches wide and of thickness required to bring face of ground to exact thickness of finish material involved. Remove temporary grounds when no longer required.

### **3.3 LUMBER FASTENINGS:**

- A. Nailing and bolting of wood members shall conform to the minimum requirements of the CCR Title 24 Part 2, Chapter 25, as specified herein, and as indicated.
- B. Bolting: Bolts shall be standard stock machine bolts as specified. Drill holes in wood member 1/16 inch larger than nominal bolt diameter. Exposed bolts shall be all hexagonal head with matching nuts. Retighten bolted connections before final acceptance or, in the case of bolted connections in concealed locations, immediately before the area is sealed off.
- C. Lag Bolts (or Lag Screws): Provide prebored lead holes for all lag bolts. Drill lead hole for the shank to a depth equal to the length of the unthreaded portion in the main member, using a drill of the same diameter as the lag bolt. Then extend lead hole for the threaded portion with a drill whose diameter is 60 percent of the nominal lag bolt diameter. Insert lag bolt into lead hole by turning with a wrench, and not by driving with a hammer. Use soap, beeswax or other lubricant to facilitate insertion.
- D. Nailing: Connections shall be as indicated in CCR Title 24 Part 2, Table 25-0 where not otherwise indicated. Nails shall be untreated steel. Unless connectors are detailed or steel connectors indicated, nails shall not be driven closer together than 1/2 of their length nor closer to the edge of a member than 1/4 their length. When

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wood tends to split with size of nail used, predrill holes for nails. Penetration of nails or spikes into pieces shall be not less than one-half the length of the nail or spike.

- E. Washers: Provide all bolts and lag screws bearing on wood with cut washers except where malleable iron or plate washers are indicated on the structural drawings.

### **3.4 ROUGH HARDWARE:**

- A. Furnish and install all stock items of rough hardware as indicated or required, including clips, anchors, hangers, bolts, ties, and plates for connecting wood members to wood, concrete, or steel, except as specified to be provided under other Sections.

**END OF SECTION**

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## SECTION 06410

### CUSTOM CABINETS

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS:

- A. Plans and general provisions of the Contract, including General and Special Provisions Specification Sections, apply to this Section.

##### 1.02 SUMMARY:

- A. This Section includes the following:
  - 1. Interior standing and running trim.
  - 2. Wood cabinets (casework).
  - 3. Laminate-clad cabinets (plastic-covered casework).
  - 4. Wood countertops.
  - 5. Plastic-laminate countertops.
  - 6. Interior window sills
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section 09900 "Painting" for field finishing of installed interior architectural woodwork.

##### 1.03 DEFINITIONS:

- A. Interior architectural woodwork includes wood furring, blocking, shims, and hanging strips for installing woodwork items unless concealed within other construction prior to woodwork installation.

##### 1.04 SUBMITTALS:

- A. General: Submit each item in this Article according to the Conditions of the Contract and Special Provisions Specification Sections.
- B. Product data for each type of product and process specified and incorporated into items of architectural woodwork during fabrication, finishing, and installation.
- C. Shop drawings showing location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
  - 1. Show details full size.
  - 2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcing specified in other Sections.
  - 3. Show veneer leaves with dimensions, grain direction, exposed face, and an identification number indicated for each leaf. Identification number shall indicate the flitch and the sequence within the flitch for each leaf.

4. Apply WIC Certified Compliance Label to first page of shop drawings.
- D. Samples for initial selection of the following in the form of manufacturer's color charts consisting of actual units or sections of units showing the full range of colors, textures, and patterns available for each type of material indicated.
1. Plastic laminates.
  2. Thermoset decorative overlays.
- E. Samples for verification of the following:
1. Lumber with or for transparent finish, 50 sq. in. (300 sq. cm), for each species and cut, finished on one side and one edge.
  2. Veneer leaves representative of and selected from flitches to be used for transparent-finished woodwork.
  3. Wood-veneer-faced panel products, with or for transparent finish, 8 by 10 inches (200 by 250 mm), for each species and cut. Include at least one face-veneer seam. Provide to painter for finish sample.
- F. Product certificates signed by woodwork fabricator certifying that products comply with specified requirements.
- G. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with work names and addresses, names and addresses of architects and University's, and other information specified.
- H. Documentation showing that wood veneers and hardwood lumber come from "certified" sustainably managed forestry sources. Acceptable certifiers shall be Smart Wood program, Green Cross, or approved equal. "Sustainably managed" shall mean forests that are being managed through a professionally administered forestry management plan in which timber growth equals or exceeds harvesting rates. Other considerations shall include minimal damage to forest when harvesting.

#### **1.05 QUALITY ASSURANCE:**

- A. Fabricator Qualifications: Firm experienced in producing architectural woodwork similar to that indicated for this Work and with a record of successful in-service performance, as well as sufficient production capacity to produce required units without delaying the Work.
- B. Installer Qualifications: Arrange for interior architectural woodwork installation by a firm that can demonstrate successful experience in installing architectural woodwork items similar in type and quality to those required for this Work.
- C. Single-Source Responsibility: Arrange for production of interior architectural woodwork with sequence-matched wood veneers by a single firm. Include the veneering of wood doors in the single-firm production where veneer matching extends across wood doors.

- D. Single-Source Responsibility for Fabrication and Installation: Engage a qualified woodworking firm to assume undivided responsibility for fabricating, finishing, and installing woodwork specified in this Section.
- E. Quality Standard: Except as otherwise indicated, comply with the following standard:
  - 1. WI Quality Standard: "Manual of Millwork" of the Woodwork Institute of California for grades of interior architectural woodwork, construction, finishes, and other requirements.
    - a. Provide WI Certified Compliance Certificate indicating that woodwork meets requirements of grades specified. All cabinetry and countertops shall be custom grade.
    - b. Provide WI Certified Compliance Certificate for Installation.
    - c. Mark one unit of each elevation of casework and plastic-laminate countertop with WIC Certified Compliance Label indicating quality grade required.
  - 2. The Contract Documents contain selections chosen from options in the Quality Standard as well as additional requirements beyond those of the Quality Standard. Comply with such selections and requirements in addition to the Quality Standard.
- F. Fire-Test-Response Characteristics: Provide materials with the following fire-test-response characteristics as determined by testing identical products per ASTM test method indicated below by UL, Warnock Hersey, or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify fire-retardant-treated material with appropriate markings of applicable testing and inspecting agency in the form of separable paper label or, where required by authorities having jurisdiction, imprint on surfaces of materials that will be concealed from view after installation.
  - 1. Surface-Burning Characteristics: Not exceeding values indicated below, tested per ASTM E 84 for standard time period (10 minutes).
    - a. Flame Spread: 75.
    - b. Smoke Developed: 450.

**1.06 DELIVERY, STORAGE, AND HANDLING:**

- A. Protect woodwork during transit, delivery, storage, and handling to prevent damage, soilage, and deterioration.
- B. Do not deliver woodwork until painting and similar operations that could damage, soil, or deteriorate woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas whose environmental conditions meet requirements specified in "Work Conditions."

**1.07 WORK CONDITIONS:**

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- A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet-work is completed, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where woodwork is indicated to be fitted to other construction, check actual dimensions of other construction by accurate field measurements before fabrication, and show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
  - 1. Verify locations of concealed framing, blocking, reinforcements, and furring that support woodwork by accurate field measurements before being enclosed. Record measurements on final shop drawings.

#### **1.08 COORDINATION:**

- A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that interior architectural woodwork can be supported and installed as indicated.

### **PART 2 - PRODUCTS**

#### **2.01 MATERIALS:**

- A. General: Provide materials that comply with requirements of the WIC quality standard for each type of woodwork and quality grade indicated, unless otherwise indicated.
- B. Formaldehyde Emission Level for Medium-Density Fiberboard: Comply with requirements of NPA 9.
- C. Particleboard: ANSI A208.1, Grade M-2 made with phenol-formaldehyde resins.
- D. High-Pressure Decorative Laminate: NEMA LD 3, grades as indicated, or if not indicated, as required by woodwork quality standard.
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering high-pressure decorative laminates that may be incorporated in the Work include, but are not limited to, the following:
    - a. Formica Corporation.
    - b. Nevamar Corp.
    - c. Westinghouse Electric Corp.; Specialty Products Div.
    - d. Ralph Wilson Plastics Co.
    - e. Or approved equal.
- E. Chemical-Resistant, High-Pressure Decorative Laminate: NEMA LD 3, Grade PF-42, and as follows:

1. Laminate has the following ratings when tested with indicated reagents according to NEMA LD 3 test procedure 3.9.5:

- a. Nitric acid (30 percent): moderate effect.
- b. Sulfuric acid (77 percent): moderate effect.
- c. Hydrochloric acid (37 percent): moderate effect.
- d. Phosphoric acid (75 percent): no effect.
- e. Acetic acid (98 percent): no effect.
- f. Carbon tetrachloride: no effect.
- g. Formaldehyde: no effect.
- h. Ethyl acetate: no effect.
- i. Ethyl ether: no effect.
- j. Phenol (85 percent): moderate effect.
- k. Benzene: no effect.
- l. Xylene: no effect.
- m. Butyl alcohol: no effect.
- n. Furfural: no effect.
- o. Methyl ethyl ketone: no effect.
- n. Sodium hydroxide (25 percent): no effect.
- o. Sodium sulfide (15 percent): no effect.
- p. Ammonium hydroxide (28 percent): no effect.
- q. Zinc chloride: no effect.
- r. Gentian violet: no effect.
- s. Methyl red: no effect.

2. Available Products: Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to, the following:

- a. Lab Grade 840 Black; Formica Corporation.
- b. Pionite Chemguard; Pioneer Plastics Corp.
- c. Chemsurf; Ralph Wilson Plastics Co.
- d. Or approved equal.

F. Thermoset Decorative Overlay: Decorative surface of thermally fused polyester or melamine-impregnated web, bonded to specified substrate and complying with ALA 1992.

1. Substrate: Medium-density particleboard.

## **2.02 CABINET HARDWARE AND ACCESSORY MATERIALS:**

- A. General: Provide cabinet hardware and accessory materials associated with architectural cabinets, except for items specified in Section 08710 "Door Hardware."
- B. Cabinet Hardware Schedule: Refer to schedule at end of this Section for cabinet hardware required for architectural cabinets.
- C. Hardware Standard: Comply with BHMA A156.9 for items indicated by reference to BHMA numbers or referenced to this standard.

**CUSTOM CABINETS**  
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- D. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with BHMA A156.18 for BHMA code number indicated.
  - 1. Satin Stainless Steel, Stainless-Steel Base: BHMA 630.
- E. For concealed hardware provide manufacturer's standard finish that complies with product class requirements of BHMA A156.9.
- F. Clear, Tempered Float Glass for Doors: ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality q3; manufactured by horizontal (roller hearth) process, with exposed edges seamed before tempering, 6 mm thick, unless otherwise indicated.
- G. Clear, Tempered Float Glass for Shelves: ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality q3; with exposed edges seamed before tempering, 6 mm thick, unless otherwise indicated.

### **2.03 INSTALLATION MATERIALS:**

- A. Screws: Select material, type, size, and finish required for each use. Comply with ASME B18.6.1 for applicable requirements.
  - 1. For metal framing supports, provide screws as recommended by metal-framing manufacturer.
- B. Nails: Select material, type, size, and finish required for each use. Comply with FS FF-N-105 for applicable requirements.
- C. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed steel or lead expansion bolt devices for drilled-in-place anchors.

### **2.04 FABRICATION, GENERAL:**

- A. Interior Woodwork Grade: Provide interior woodwork complying with the referenced quality standard and of the following grade:
  - 1. Grade: Custom at all other spaces.
- B. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to relative humidity conditions existing during time of fabrication and in installation areas.
- C. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.
- D. Fabricate woodwork to dimensions, profiles, and details indicated. Ease edges to radius indicated for the following:

1. Corners of cabinets and edges of solid-wood (lumber) members and rails: 1/16 inch (1.5 mm).
- E. Complete fabrication, including assembly, finishing, and hardware application, before shipment to Work site to maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
1. Trial fit assemblies at the fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that various parts fit as intended and check measurements of assemblies against field measurements indicated on approved shop drawings before disassembling for shipment.
- F. Shop-cut openings, to maximum extent possible, to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Smooth edges of cutouts and, where located in countertops and similar exposures, seal edges with a water-resistant coating.

## **2.05 INTERIOR STANDING AND RUNNING TRIM FOR TRANSPARENT FINISH:**

- A. Quality Standard: Comply with WIC Section 10, "Interior Trim."
1. Grade: Premium.
- B. Backout or groove backs of flat trim members and kerf backs of other wide, flat members, except for members with ends exposed in finished work.
- C. Wood Species: Cherry flat sawn
- D. Wood Species: Match species and cut indicated for other types of transparent-finished architectural woodwork located in same area of building, unless otherwise indicated.

## **2.06 LAMINATE-CLAD CABINETS (PLASTIC-COVERED CASEWORK):**

- A. Quality Standard: Comply with WIC Section 15, "Plastic-Covered Casework."
1. Grade: Custom.
- B. WI Construction Style: Style A Frameless.
- C. WI Construction Type: Type II single-length sections to fit access openings.
- D. WI Door and Drawer Front Style: Flush overlay.

- E. WI Door and Drawer Front Style: Flush.
- F. Laminate Cladding for Exposed Surfaces: High-pressure decorative laminate complying with the following requirements:
  - 1. Horizontal Surfaces Other than Tops: GP-50, 0.050 inch (1.270mm) nominal thickness.
  - 2. Postformed Surfaces: PF-42, 0.042 inch (1.067mm) nominal thickness.
  - 3. Vertical Surfaces: GP-50, 0.050 inch (1.270mm) nominal thickness.
  - 4. Edges: GP-50, 0.050 inch (1.270mm) nominal thickness.
- G. Materials for Semi-exposed Surfaces: Provide surface materials indicated below:
  - 1. Surfaces Other than Drawer Bodies: Thermoset decorative overlay.
  - 2. Drawer Sides and Backs: Thermoset decorative overlay.
  - 3. Drawer Bottoms: Thermoset decorative overlay.
- H. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
  - 1. Match Engineer's samples.

## **2.08 COUNTERTOPS:**

- A. Quality Standard: Comply with applicable WI section indicated below:
  - 1. WI Section 14, "Wood Casework" for display casework
  - 2. WI Section 16, "Laminated Plastic Countertops, Splashes and Wall Paneling."
  - 3. Grade: Custom.
- B. Type of Top: High-pressure decorative laminate complying with the following:
  - 1. Grade: GP-50, 0.050 inch (1.270mm) nominal thickness.
  - 2. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
    - a. Match Engineer's samples.
  - 3. Grain Direction: Parallel to cabinet fronts.
  - 4. Edge Treatment: Same as laminate cladding on horizontal surfaces, except where lumber edge indicated.
  - 5. Edge Treatment: Lumber edge for transparent finish matching wood species and cut on cabinet surfaces.
  - 6. Core Material: Medium-density particleboard.



## **PART 3 - EXECUTION**

### **3.01 PREPARATION:**

- A. Condition woodwork to average prevailing humidity conditions in installation areas before installing.
- B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including back priming and removal of packing.

### **3.02 INSTALLATION:**

- A. Quality Standard: Install woodwork to comply with WIC Section 26 for the same grade specified in Products of this Section for type of woodwork involved.
- B. Install woodwork plumb, level, true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm) for plumb and level (including tops).
- C. Scribe and cut woodwork to fit adjoining work and refinish cut surfaces or repair damaged finish at cuts.
- D. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork and matching final finish where transparent finish is indicated. Secure all cabinetry to meet California Essential Facilities Act.
- E. Standing and Running Trim: Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to the greatest extent possible. Do not use pieces less than 36 inches (900 mm) long, except where necessary. Stagger joints in adjacent and related members. Fill gaps, if any, between top of base and wall with plastic wood filler, sand smooth, and finish same as wood base, if finished.
  - 1. Install standing and running trim with no more than 1/8 inch in 96-inch (3mm in 2400mm) variation from a straight line.
- F. Cabinets: Install without distortion so that doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessory items as indicated.
  - 1. Install cabinets with no more than 1/8 inch in 96inch (3mm in 2400mm) sag, bow, or other variation from a straight line.
  - 2. Maintain veneer sequence matching of cabinets with transparent finish.
- G. Tops: Anchor securely to base units and other support systems as indicated. Calk space between backsplash and wall with specified sealant.

1. Install countertops with no more than 1/8 inch in 96-inch (3 mm in 2400-mm) sag, bow, or other variation from a straight line.
2. Secure backsplashes to tops with concealed metal brackets at 16 inches (400 mm) o.c.

H. Refer to Division 9 Sections for final finishing of installed architectural woodwork.

### **3.03 ADJUSTING AND CLEANING:**

- A. Repair damaged and defective woodwork where possible to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- B. Clean, lubricate, and adjust hardware.
- C. Clean woodwork on exposed and semi-exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

### **3.04 PROTECTION:**

- A. Provide final protection and maintain conditions in a manner acceptable to fabricator and Installer that ensures that woodwork is without damage or deterioration at the time of Substantial Completion.

### **3.05 CABINET HARDWARE AND ACCESSORY SCHEDULE:**

- A. BHMA numbers are used below to designate hardware requirements, except as otherwise indicated.
- B. Concealed (European Type) Hinges: B01602.
- C. Pulls: Wire pulls, 4 inches (100 mm) long, 5/16 inches (8 mm) in diameter.
- D. Catches: Magnetic Catches: B03141.
- E. Shelf Rests: B04013.
- F. Drawer Slides: Side-mounted, full-extension, zinc-plated steel drawer slides with steel ball bearings, complying with BHMA A156.9, Grade 1 and rated for the following loads:
  1. Box Drawer Slides: 75 lbs (330 N).
  2. File Drawer Slides: 200 lbs (890 N).
  3. Pencil Drawer Slides: 45 lbs (200 N).
- G. Plastic slides for sliding glass doors: B07063.
- H. Door Locks: E07121.

- I. Drawer Locks: E07041.
- J. Grommets for cable passage through countertops: 1 inch (25 mm) OD brown, molded-plastic grommets with 2 inch (19mm) hole and brown plastic cap with slot for wire passage.
- K. Paper Slots: 12 inches (305 mm) long by 1-3/4 inches (45 mm) wide by 1 inch (25 mm) deep; brown, molded-plastic, paper-slot liner with 1/4-inch (6-mm) lip.

**END OF SECTION 06410**

## SECTION 07920

### JOINT SEALANTS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. This Section includes sealants for the following applications, including those specified by reference to this Section:
- B. This Section includes sealants for the following applications:
  - 1. Exterior joints in the following vertical surfaces and nontraffic horizontal surfaces:
    - a. Control and expansion joints in cast-in-place concrete.
    - b. Joints between architectural precast concrete units.
    - c. Control and expansion joints in unit masonry (CMU).
    - d. Joints between metal panels.
    - e. Joints between different materials listed above.
    - f. Perimeter joints between materials listed above and frames of doors and windows.
    - g. Control and expansion joints in ceiling and overhead surfaces.
    - h. Other joints as indicated.
  - 2. Exterior joints in the following horizontal traffic surfaces:
    - a. Control, expansion, and isolation joints in cast-in-place concrete slabs.
    - b. Joints between architectural precast concrete paving units.
    - c. Joints between different materials listed above.
    - d. Other joints as indicated.
  - 3. Interior joints in the following vertical surfaces and horizontal nontraffic surfaces:
    - a. Perimeter joints of exterior openings where indicated.
    - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows and elevator entrances.
  - 4. Interior joints in the following horizontal traffic surfaces:
    - a. Control and expansion joints in cast-in-place concrete slabs.
    - b. Other joints as indicated.
- C. Related Sections include the following:
  - 1. Division 2 Section Concrete Paving for sealing joints in pavements, walkways, and curbing.
  - 2. Division 4 Section Concrete Masonry Unit for masonry control and expansion joint fillers and gaskets.
  - 3. Division 9 Section "Gypsum Board Assemblies" for sealing perimeter joints of gypsum board partitions to reduce sound transmission.

### **1.3 PERFORMANCE REQUIREMENTS**

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
- B. Provide joint sealants for interior applications that establish and maintain airtight and water-resistant continuous joint seals without staining or deteriorating joint substrates.
- C. Products must meet SCAQMD Rule 1168 VOC limits.

### **1.4 SUBMITTALS**

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Samples for Verification: For each type and color of joint sealant required. Install joint sealants in 1/2-inch- (13-mm-) wide joints formed between two 6-inch- (150-mm-) long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- D. Product Certificates: Signed by manufacturers of joint sealants certifying that products furnished comply with requirements and are suitable for the use indicated.
- E. SWRI Validation Certificate: For each elastomeric sealant specified to be validated by SWRI's Sealant Validation Program.
- F. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- G. Preconstruction Field Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on preconstruction testing specified in "Quality Assurance" Article.
- H. Field Test Report Log: For each elastomeric sealant application. Include information specified in "Field Quality Control" Article.
- I. Compatibility and Adhesion Test Reports: From sealant manufacturer indicating the following:
  - 1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
  - 2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.

- J. Product Test Reports: From a qualified testing agency indicating sealants comply with requirements, based on comprehensive testing of current product formulations.
- K. Warranties: Special warranties specified in this Section.
- L. LEED Submittals:
  - 1. Product Data for Credit IEQ Credit 4.1 – Low Emitting Materials Adhesives & Sealants
  - 2. Product Data for Credit IEQ Credit 4.2 – Low Emitting Materials Paints & Coatings

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has specialized in installing joint sealants similar in material, design, and extent to those indicated for this Project and whose work has resulted in joint-sealant installations with a record of successful in-service performance.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.
- C. Preconstruction Compatibility and Adhesion Testing: Submit to joint sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.
  - 1. Use manufacturers standard test methods to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
    - a. Perform tests under environmental conditions replicating those that will exist during installation.
  - 2. Submit not fewer than nine pieces of each type of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
  - 3. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  - 4. For materials failing tests, obtain joint sealant manufacturer's written instructions for corrective measures, including the use of specially formulated primers.
  - 5. Testing will not be required if joint sealant manufacturers submit joint preparation data that are based on previous testing of current sealant products for adhesion to, and compatibility with, joint substrates and other materials matching those submitted.
- D. Product Testing: Obtain test results for "Product Test Reports" Paragraph in "Submittals" Article from a qualified testing agency based on testing current sealant formulations within a 36-month period.
  - 1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated, as documented according to ASTM E 548.

2. Test elastomeric joint sealants for compliance with requirements specified by reference to ASTM C 920, and where applicable, to other standard test methods.
  3. Test elastomeric joint sealants according to SWRI's Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion-in peel, and indentation hardness.
  4. Test other joint sealants for compliance with requirements indicated by referencing standard specifications and test methods.
- E. Preconstruction Field-Adhesion Testing: Before installing elastomeric sealants, field test their adhesion to joint substrates as follows:
1. Locate test joints where indicated or, if not indicated, as directed by Architect.
  2. Conduct field tests for each application indicated below:
    - a. Each type of elastomeric sealant and joint substrate indicated.
    - b. Each type of nonelastomeric sealant and joint substrate indicated.
  3. Notify Architect seven days in advance of dates and times when test joints will be erected.
  4. Arrange for tests to take place with joint sealant manufacturer's technical representative present.
  5. Test Method: Test joint sealants by hand-pull method described below:
    - a. Install joint sealants in 60-inch- (1500-mm-) long joints using same materials and methods for joint preparation and joint-sealant installation required for the completed Work. Allow sealants to cure fully before testing.
    - b. Make knife cuts from one side of joint to the other, followed by two cuts approximately 2 inches (50 mm) long at sides of joint and meeting cross cut at one end. Place a mark 1 inch (25 mm) from cross-cut end of 2-inch (50-mm) piece.
    - c. Use fingers to grasp 2-inch (50-mm) piece of sealant between cross-cut end and 1-inch (25-mm) mark; pull firmly at a 90-degree angle or more in direction of side cuts while holding a ruler along side of sealant. Pull sealant out of joint to the distance recommended by sealant manufacturer for testing adhesive capability, but not less than that equaling specified maximum movement capability in extension; hold this position for 10 seconds.
    - c. For joints with dissimilar substrates, check adhesion to each substrate separately. Do this by extending cut along one side, checking adhesion to opposite side, and then repeating this procedure for opposite side.
  6. Report whether sealant in joint connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
  7. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.

- F. Mockups: Before installing joint sealants, apply elastomeric sealants as follows to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution:
  - 1. Joints in mockups of assemblies specified in other Sections that are indicated to receive elastomeric joint sealants, which are specified by reference to this Section. Provide sealant for Exterior Wall Mock-up

## **1.6 DELIVERY, STORAGE AND HANDLING**

- A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration date, pot life, curing time, and mixing instructions for multicomponent materials.
- B. Store and handle materials in compliance with manufacturer's written instructions to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

## **1.7 PROJECT CONDITIONS**

- A. Environmental Limitations: Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 40 deg F (4.4 deg C).
  - 2. When joint substrates are wet.
- B. Joint-Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.
- C. Joint-Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

## **1.8 WARRANTY**

- A. General Warranty: Special warranties specified in this Article shall not deprive District of other rights the District may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Special Installer's Warranty: Written warranty, signed by Installer agreeing to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.
- C. Special Manufacturer's Warranty: Written warranty, signed by elastomeric sealant manufacturer agreeing to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: 20 years from date of Substantial Completion.



- D. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:
  - 1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
  - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
  - 3. Mechanical damage caused by individuals, tools, or other outside agents.
  - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

## **PART 2 - PRODUCTS**

### **2.1 PRODUCTS AND MANUFACTURERS**

- A. Products: Subject to compliance with requirements, provide one of the products indicated for each type in the sealant schedules at the end of Part 3.

### **2.2 MATERIALS, GENERAL**

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range for this characteristic.

### **2.3 ELASTOMERIC JOINT SEALANTS**

- A. Elastomeric Sealant Standard: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant in the Elastomeric Joint-Sealant Schedule at the end of Part 3, including those referencing ASTM C 920 classifications for type, grade, class, and uses.
- B. Additional Movement Capability: Where additional movement capability is specified in the Elastomeric Joint-Sealant Schedule, provide products with the capability, when tested for adhesion and cohesion under maximum cyclic movement per ASTM C 719, to withstand the specified percentage change in the joint width existing at the time of installation and remain in compliance with other requirements of ASTM C 920 for uses indicated.
- C. Stain-Test-Response Characteristics: Where elastomeric sealants are specified in the Elastomeric Joint-Sealant Schedule to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

### **2.4 SOLVENT-RELEASE JOINT SEALANTS**

- A. Acrylic-Based Solvent-Release Joint-Sealant Standard: Comply with ASTM C 1311 for each product of this description indicated in the Solvent-Release Joint-Sealant Schedule at the end of Part 3.
- B. Acrylic-Based Solvent-Release Joint-Sealant Standard: Comply with FS TT-S-00230 for each product of this description indicated in the Solvent-Release Joint-Sealant Schedule at the end of Part 3.
- C. Butyl-Rubber-Based Solvent-Release Joint-Sealant Standard: Comply with ASTM C 1085 for each product of this description indicated in the Solvent-Release Joint-Sealant Schedule at the end of Part 3.

## **2.5 LATEX JOINT SEALANTS**

- A. Latex Sealant Standard: Comply with ASTM C 834 for each product of this description indicated in the Latex Joint-Sealant Schedule at the end of Part 3.

## **2.6 JOINT-SEALANT BACKING**

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, of type indicated below and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
  1. Type C: Closed-cell material with a surface skin.
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F (minus 32 deg C). Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and otherwise contribute to optimum sealant performance.
- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

## **2.7 MISCELLANEOUS MATERIALS**

- A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent

nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants with joint substrates.

- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 PREPARATION**

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air. Porous joint surfaces include the following:
    - a. Concrete.
    - b. Masonry.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
    - a. Metal.
    - b. Glass.
- B. Joint Priming: Prime joint substrates where recommended in writing by joint sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged

by such contact or by cleaning methods required to remove sealant smears.  
Remove tape immediately after tooling without disturbing joint seal.

### 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and back of joints.
- E. Install sealants by proven techniques to comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses provided for each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealants from surfaces adjacent to joint.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
  - 4. Provide flush joint configuration, per Figure 5B in ASTM C 1193, where indicated.
  - 5. Provide recessed joint configuration, per Figure 5C in ASTM C 1193, of recess depth and at locations indicated.
    - a. Use masking tape to protect adjacent surfaces of recessed tooled joints.
- G. Installation of Preformed Silicone-Sealant System: Comply with the following requirements:
  - 1. Apply masking tape to each side of joint, outside of area to be covered by sealant system.
  - 2. Apply a bead of silicone sealant to each side of joint to produce a bead of size complying with preformed silicone-sealant system manufacturer's printed schedule and covering a bonded area of not less than a 3/8 inch

- (10 mm). Hold edge of sealant bead inside of masking tape by 1/4 inch (6 mm).
3. Within 10 minutes of sealant application, press silicone extrusion into sealant to wet extrusion and substrate. Use a roller to apply consistent pressure and ensure uniform contact between sealant and both extrusion and substrate.
  4. Complete installation of horizontal joints before installing vertical joints. Lap vertical joints over horizontal joints. At end of joints, cut silicone extrusion with a razor knife.
- H. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping, taking care not to pull or stretch material, to produce seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures where expansion of sealant requires acceleration to produce seal, apply heat to sealant to comply with sealant manufacturer's written instructions.

### 3.4 FIELD QUALITY CONTROL

- A. Field-Adhesion Testing: Field-test joint-sealant adhesion to joint substrates as follows:
1. Extent of Testing: Test completed elastomeric sealant joints as follows:
    - a. Perform 10 tests for the first 1000 feet (300 m) of joint length for each type of elastomeric sealant and joint substrate.
    - b. Perform one test for each 1000 feet (300 m) of joint length thereafter or one test per each floor per elevation.
  2. Test Method: Test joint sealants by hand-pull method described below:
    - a. Make knife cuts from one side of joint to the other, followed by two cuts approximately 2 inches (50 mm) long at sides of joint and meeting cross cut at one end. Place a mark 1 inch (25 mm) from cross-cut end of 2-inch (50-mm) piece.
    - b. Use fingers to grasp 2-inch (50-mm) piece of sealant between cross-cut end and 1-inch (25-mm) mark; pull firmly at a 90-degree angle or more in direction of side cuts while holding a ruler along side of sealant. Pull sealant out of joint to the distance recommended by sealant manufacturer for testing adhesive capability, but not less than that equaling specified maximum movement capability in extension; hold this position for 10 seconds.
    - c. For joints with dissimilar substrates, check adhesion to each substrate separately. Do this by extending cut along one side, checking adhesion to opposite side, and then repeating this procedure for opposite side.
  3. Inspect joints for complete fill, for absence of voids, and for joint configuration complying with specified requirements. Record results in a field adhesion test log.
  4. Inspect tested joints and report on the following:
    - a. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field- adhesion hand-pull test criteria.

- b. Whether sealants filled joint cavities and are free from voids.
  - c. Whether sealant dimensions and configurations comply with specified requirements.
5. Record test results in a field adhesion test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
6. Repair sealants pulled from test area by applying new sealants following same procedures used to originally seal joints. Ensure that original sealant surfaces are clean and new sealant contacts original sealant.

B. Evaluation of Field-Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements, will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

### **3.5 CLEANING**

- A. Clean off excess sealants or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

### **3.6 PROTECTION**

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from the original work.

**END OF SECTION**

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## SECTION 08830

### MIRRORED GLASS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS:

- A. Plans and general provisions of Contract, including General and Special Provisions Specification Sections, apply to this Section.

##### 1.2. SUMMARY:

- A. This Section includes the Safety (vinyl-backed) glass mirrors. For mirrors shown on plans as larger than 24" x 36". For Mirrors 24" x 36" or smaller see Section 10800.

##### 1.3 SUBMITTALS:

- A. General: Submit the following in accordance with Conditions of Contract and Special Provisions Specification Sections.
- B. Product data for each type of product specified including description of materials and process used to produce mirrored glass, including source of glass, glass coating components, edge sealer, and quality control provisions.
- C. Samples, 12 inches square in size, of each type of mirrored glass specified, including edge treatment on 2 adjoining edges of samples.
- D. Product certificates signed by manufacturers of mirrored glass certifying that their products and edge sealers comply with specified requirements.
- E. Mirror mastic glass coating compatibility test reports from organic protective coating manufacturer indicating that mirror mastic has been tested for compatibility and adhesion with organic protective coating. Include organic coating manufacturers' interpretation of test results relative to performance and recommendations for use of mastics with organic protective coating.

##### 1.4 QUALITY ASSURANCE:

- A. Glazing Standards: Comply with recommendations of Flat Glass Marketing Association (FGMA) "Glazing Manual" except where more stringent requirements are indicated. Refer to this publication for definitions of glass and glazing terms not otherwise defined in this Section or referenced standards.
- B. Mirror Manufacturers' Document: Comply with recommendations of National Association of Mirror Manufacturers (NAMM) in its publication "MIRRORS, Handle with Extreme Care, Tips for the Professional on the Care and Handling of Mirrors."
- C. Single-Source Responsibility: Provide products obtained from one source for each type of mirror indicated.

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- D. Preconstruction Mirror Mastic Glass Coating Compatibility Test: Submit mirror mastic products to manufacturer of protective organic coating for testing by coating manufacturer's standard test method to determine compatibility of adhesive with mirrored glass coating.

**1.5 DELIVERY, STORAGE, AND HANDLING:**

- A. Comply with manufacturer's instructions for shipping, storing, and handling mirrored glass; avoid deterioration of silvering, damage to edges, and abrasion of glass surfaces and applied coatings. Store indoors, protected from moisture including condensation.

**1.6 PROJECT CONDITIONS:**

- A. Environmental Conditions: Do not proceed with mirrored glass installation until ambient conditions of temperature and humidity will be continuously maintained at values near those indicated for final occupancy.

**PART 2 - PRODUCTS**

**2.1 MANUFACTURERS:**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
  1. American Mirror Co.
  2. Binswanger Mirror Products
  3. Falconer Glass Industries, Inc.
  4. Or approved equal.

**2.2 GLASS FOR MIRROR PRODUCTION:**

- A. Primary Glass: Float glass complying with ASTM C 1036 requirements for Type I (transparent, flat) and for class and quality indicated below:
  1. Clear Float Glass: Quality q2 (mirror), Class 1 (clear).

**2.3 MİRRORED GLASS PRODUCTION AND FABRICATION:**

- A. Glass Coating: Coat second surface of glass with successive layers of chemically deposited silver, electrically or chemically deposited copper, and manufacturer's standard protective organic coating to produce coating system that complies with FS DD-M-0041, except with salt-spray test period extended to 300 hours and undercutting, discolorations, blackening, and silver impairment at mirror edges not greater than 1/8 inch.
  1. Copper Substitute: In place of electrically or chemically deposited copper layer provide material equivalent in performance to copper.

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- B. Mirror Sizes: After application of glass coating, cut mirrored glass to final sizes and in the following nominal glass thickness as expressed by metric designation/nominal decimal of an inch/(traditional designation):
  - 1. Thickness: 6.0 mm/0.23 inch/(1/4 inch).
- C. Mirror Edge Treatment: Provide forms of edge treatment indicated below, with edges sealed after treatment to prevent chemical or atmospheric penetration of glass coating:
  - 1. Rounded polished edge.
  - 2. Perform edge treatment and sealing in factory immediately after cutting to final sizes.
- D. Vinyl-Backed Safety Glass Mirrors: Apply vinyl backing with pressure-sensitive adhesive coating over glass coating by method recommended by vinyl-backing manufacturer to produce a surface free of bubbles, blisters, or other imperfections. Use adhesives and vinyl backing compatible with glass coating as certified by organic coating manufacturer.

## 2.4 MISCELLANEOUS MATERIALS:

- A. Setting Blocks: Neoprene, 70 - 90 Shore A hardness.
- B. Edge Sealer: A coating that has proven to be compatible with glass coating and approved by mirrored glass manufacturer for use in protecting against silver deterioration at mirror edges.
- C. Mirror Mastic: An adhesive setting compound, produced specifically for setting mirrors by spot application, certified as compatible with glass coating by organic protective coating manufacturer and approved by mirror manufacturer.
- D. Mirror Hardware: Extruded aluminum mirror hardware, of size and profile indicated, in manufacturer's standard finish, complying with description below:
  - 1. Match sample.
- E. Fasteners: Fabricated of same basic metal and alloy as fastened metal and matching it in finished color and texture.
- F. Anchors and Inserts: Provide devices as required for installation of mirror hardware. Provide toothed or lead-shield expansion bolt devices for drilled-in-place anchors. Provide galvanized or cadmium-coated anchors and inserts for applications on inside face of exterior walls and where indicated.

## PART 3- EXECUTION

### 3.1 GLAZING:

- A. General: Install mirrors to comply with printed directions of mirror manufacturer, and with referenced FGMA standard and NAMM document. Mount mirrors in place to avoid distorting reflected images and provide space for air circulation between back of mirror and face of mounting surface.
- B. Mastic Spot Installation System: Install mirrors with mastic as follows:
  - 1. Identify and examine surfaces over which mirror is to be mounted. Comply with manufacturer's printed installation instructions for

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- preparation of mounting surfaces including coating surfaces with mastic manufacturer's special bond coating where applicable.
2. Apply barrier coat to mirror backing where approved by manufacturers of mirror and backing material.
  3. Apply mastic in spots to comply with mastic manufacturer's printed instructions for coverage and to allow air circulation between back of mirror and face of mounting surface.
  4. After mastic is applied, align mirror and press into place while maintaining a minimum air space of 3/16 inch between back of mirror and mounting surface.
  5. For wall-mounted mirrors install permanent means of support at bottom and top edges with bottom support designed to withstand mirror weight and top support to prevent mirror from coming away from wall along top edges.
    - a. Attach mirror hardware securely to mounting surfaces with mechanical fasteners installed with anchors or inserts as applicable.
    - b. For continuous bottom supports, provide 1/8-inch by 4-inch setting blocks at quarter points. For channels or other continuous supports in which water could be trapped, provide two 1/4 inch diameter weeps drilled between setting blocks.
    - c. For metal or plastic clips, place a felt or plastic pad between mirror and each clip to prevent spalling of mirror edges.
    - d. For wall application provide clips along top of mirror.

### **3.2 PROTECTION AND CLEANING:**

- A. Protect mirrored glass from breakage and contaminating substances resulting from construction operations.
- B. Do not permit edges of mirror to be exposed to standing water.
- C. Maintain environmental conditions that will prevent mirror from being exposed to moisture from condensation or other sources for continuous periods of time.
- D. Wash mirrors not more than 4 days prior to date scheduled for inspections intended to establish date for substantial completion. Wash glass by methods recommended in NAMM document and by mirrored glass manufacturer. Use water or glass cleaners free from substances capable of damaging mirror edges or glass coating.

**END OF SECTION**

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**SECTION 09100**  
**METAL FRAMING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Metal partition, ceiling, and soffit framing.
- B. Framing accessories.

**1.02 RELATED SECTIONS**

- A. Section 09260 - Gypsum Board Assemblies: Metal studs for gypsum board partition framing.

**1.03 REFERENCES**

- A. ASTM C 645 - Standard Specification for Nonstructural Steel Framing Members; 2004a.
- B. ASTM C 754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2004.
- C. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2004.

**1.04 SUBMITTALS**

- A. See Section 01300 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings:
  - 1. Indicate prefabricated work, component details, stud layout, framed openings, anchorage to structure, acoustic details, type and location of fasteners, accessories, and items of other related work.
  - 2. Describe method for securing studs to tracks, splicing, and for blocking and reinforcement of framing connections.
- C. Product Data: Provide data describing framing member materials and finish, product criteria, load charts, and limitations.

**1.05 QUALITY ASSURANCE**

- A. Installer Qualifications: Company specializing in performing the work of this section with minimum 5 years experience.

**PART 2 PRODUCTS**

## 2.01 MANUFACTURERS

- A. Metal Framing, Connectors, and Accessories:
1. Clark Steel Framing Systems: [www.clarksteel.com](http://www.clarksteel.com).
  2. Dietrich Metal Framing: [www.dietrichindustries.com](http://www.dietrichindustries.com).
  3. USG.
  4. Substitutions: See Section 01600 - Product Requirements.

## 2.02 FRAMING MATERIALS

- A. Non-Loadbearing Framing System Components: ASTM C 645; galvanized sheet steel, of size and properties necessary to comply with ASTM C 754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf.
1. Studs: C shaped with flat or formed webs with knurled faces.
  2. Runners: U shaped, sized to match studs.
  3. Ceiling Channels: C shaped.
  4. Furring: Hat-shaped sections, minimum depth of 7/8 inch.
- B. Partition Head to Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and fastened as indicated on drawings.
- C. Tracks and Runners: Same material and thickness as studs, bent leg retainer notched to receive studs with provision for crimp locking to stud.
- D. Furring and Bracing Members: Of same material as studs; thickness to suit purpose; complying with applicable requirements of ASTM C 754.
- E. Fasteners: ASTM C 1002 self-piercing tapping screws.
- F. Sheet Metal Backing: 0.036 inch thick, galvanized.
- G. Anchorage Devices: Power actuated.
- H. Acoustic Insulation: As specified in Section 07210.

## PART 3 EXECUTION

### 3.01 INSTALLATION OF STUD FRAMING

- A. Comply with requirements of ASTM C 754.
- B. Extend partition framing to structure where indicated and to ceiling in other locations.
- C. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.
- D. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track using specified mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave studs unattached to track.
- E. Align and secure top and bottom runners at 24 inches on center.
- F. Fit runners under and above openings; secure intermediate studs to same spacing as wall studs.
- G. Align stud web openings horizontally.

- H. Secure studs to tracks using fastener method. Do not weld.
- I. Fabricate corners using a minimum of three studs.
- J. Double stud at wall openings, door and window jambs, not more than 2 inches from each side of openings.
- K. Coordinate installation of bucks, anchors, and blocking with electrical and mechanical work to be placed within or behind stud framing.

### **3.02 CEILING AND SOFFIT FRAMING**

- A. Comply with requirements of ASTM C 754.
- B. Install furring after work above ceiling or soffit is complete. Coordinate the location of hangers with other work.
- C. Install furring independent of walls, columns, and above-ceiling work.
- D. Securely anchor hangers to structural members or embed in structural slab. Space hangers as required to limit deflection to criteria indicated.
- E. Space main carrying channels at maximum 72 inch on center, and not more than 6 inches from wall surfaces. Lap splice securely.
- F. Securely fix carrying channels to hangers to prevent turning or twisting and to transmit full load to hangers.
- G. Place furring channels perpendicular to carrying channels, not more than 2 inches from perimeter walls, and rigidly secure. Lap splices securely.

**END OF SECTION**

## SECTION 09260

### GYPSUM BOARD ASSEMBLIES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Interior gypsum wallboard to be waterproof type typical

##### 1.3 DEFINITIONS

- A. Gypsum Board Terminology: Refer to ASTM C 11 for definitions of terms for gypsum board assemblies not defined in this Section or in other referenced standards.

##### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show locations, fabrication, and installation of control and expansion joints including plans, elevations, sections, details of components, and attachments to other units of Work.
- C. Samples: For the following products:
  - 1. Trim Accessories: Full-size sample in 12-inch- (300-mm-) long length for each trim accessory indicated.

##### 1.5 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: For gypsum board assemblies with fire-resistance ratings, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
  - 1. Fire-Resistance-Rated Assemblies: Indicated by design designations from UL's "Fire Resistance Directory".

##### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.

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- B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat to prevent sagging.

## 1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Gypsum Board and Related Products:
    - a. G-P Gypsum Corp.
    - b. National Gypsum Company.
    - c. United States Gypsum Co.

### 2.2 INTERIOR GYPSUM WALLBOARD

- A. Panel Size: Provide in maximum lengths and widths available that will minimize joints in each area and correspond with support system indicated.
- B. Gypsum Wallboard: ASTM C 36.
  - 1. Type X - waterproof:
    - a. Thickness: 5/8 inch (15.9 mm)
    - b. Long Edges: Tapered
    - c. Location: As indicated

### 2.3 TRIM ACCESSORIES

- A. Exterior Trim: ASTM C 1047.
  - 1. Material: Hot-dip galvanized steel sheet or rolled zinc.
  - 2. Shapes:
    - a. Cornerbead: Use at outside corners.
    - b. LC-Bead: J-shaped; exposed long flange receives joint compound; use at exposed panel edges and at edge of concrete columns and curbs.
- B. Interior Trim:

1. Material: Aluminum Extrusion
2. Shapes:
  - a.. Gyp. Board Reveal : Fry Reglet #DRM-625-75, see interior elevations and details for locations.

## **2.4 JOINT TREATMENT MATERIALS**

- A. General: Comply with ASTM C 475.
- B. Joint Tape:
  1. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
- C. Joint Compound:
  1. Exterior Gypsum Soffit Board: Use setting-type taping and setting-type, sandable topping compounds.
  2. Glass-Mat Gypsum Sheathing Board: As recommended by manufacturer.

## **2.5 AUXILIARY MATERIALS**

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- C. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
  1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
  2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- d. Thermal Insulation: As specified in Division 7 Section "Building Insulation."
- G. Polyethylene Vapor Retarder: As specified in Division 7 Section "Building Insulation."

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.4 APPLYING AND FINISHING PANELS, GENERAL**

- A. Gypsum Board Application and Finishing Standards: ASTM C 840 and GA-216.
- B. Install sound attenuation blankets before installing gypsum panels, unless blankets are readily installed after panels have been installed on one side.
- C. Install ceiling board panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in the central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
- D. Install gypsum panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch (1.5 mm) of open space between panels. Do not force into place.
- E. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- F. Attach gypsum panels to steel studs so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- G. Attach gypsum panels to framing provided at openings and cutouts.
- H. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members using resilient channels, or provide control joints to counteract wood shrinkage.
- I. Form control and expansion joints with space between edges of adjoining gypsum panels.
- J. Cover both faces of steel stud partition framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
  - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. (0.7 sq. m) in area.
  - 2. Fit gypsum panels around ducts, pipes, and conduits.
  - 3. Where partitions intersect open concrete coffers, concrete joists, and other structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by coffers, joists, and other structural members; allow 1/4- to 3/8-inch- (6.4- to 9.5-mm-) wide joints to install sealant.
- K. Isolate perimeter of non-load-bearing gypsum board partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch- (6.4- to 12.7-mm-) wide spaces at these locations, and trim edges with U-bead edge trim where edges of gypsum panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

- L. Floating Construction: Where feasible, including where recommended in writing by manufacturer, install gypsum panels over wood framing, with floating internal corner construction.
- M. Seal construction at perimeters, behind control and expansion joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and manufacturer's written recommendations for locating edge trim and closing off sound-flanking paths around or through gypsum board assemblies, including sealing partitions above acoustical ceilings.
- N. Space fasteners in gypsum panels according to referenced gypsum board application and finishing standard and manufacturer's written recommendations.
  - 1. Space screws a maximum of 12 inches (304.8 mm) o.c. for vertical applications.

### **3.5 PANEL APPLICATION METHODS**

- A. Single-Layer Application:
  - 1. On partitions/walls, apply gypsum panels vertically parallel to framing unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
    - a. Stagger abutting end joints not less than one framing member in alternate courses of board.
    - b. At stairwells and other high walls, install panels horizontally, unless otherwise indicated or required by fire-resistance-rated assembly.
  - 2. Z-Furring Members: Apply base layer vertically (parallel to framing) and face layer either vertically (parallel to framing) or horizontally (perpendicular to framing) with vertical joints offset at least one furring member. Locate edge joints of base layer over furring members.
- B. Single-Layer Fastening Methods: Apply gypsum panels to supports with steel drill screws.

### **3.6 INSTALLING TRIM ACCESSORIES**

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints at locations indicated on Drawings

### **3.7 FINISHING GYPSUM BOARD ASSEMBLIES**

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints rounded or beveled edges and damaged surface areas.

- C. Apply joint tape over gypsum board joints, except those with trim having flanges not intended for tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below, according to ASTM C 840, for locations indicated:
  - 1. Level 3: Embed tape and apply separate first and fill coats of joint compound to tape, fasteners, and trim flanges at storage room and below wall coverings.
  - 2. Level 4: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges at all other walls except below.
  - 3. Level 5: In skylight shafts and walls below skylight at staff entry corridor.

**END OF SECTION**

## SECTION 09300

### TILE

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Tile for floor applications.
- B. Tile for wall applications.

##### 1.02 RELATED REQUIREMENTS

- A. Section 07920 - Joint Sealers.
- B. Section 09260 - Gypsum Board Assemblies: Installation of tile backer board.

##### 1.03 REFERENCE STANDARDS

- A. ANSI A108.1A, 1999 - Specifications for Installation of Ceramic Tile in the Wet-Set Method with Portland Cement Mortar.
- B. ANSI A108.1B, 1999 - Specifications for Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set or Latex Portland Cement Mortar.
- C. ANSI A108.1C, 1999 - Specifications for Contractors Option: Installation of Ceramic Tile in the Wet-Set Method with Portland Cement Mortar -or- Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set or Latex Portland Cement Mortar.
- D. ANSI A108.4, 1999 - Specifications for Ceramic Tile Installed with Organic Adhesives or Water-Cleanable Tile Setting Epoxy Adhesive.
- E. ANSI A108.5, 1999 - Specifications for Ceramic Tile Installed with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar.
- F. ANSI A108.6, 1999 - Specifications for Ceramic Tile Installed with Chemical-Resistant, Water-Cleanable Tile-Setting and -Grouting Epoxy.
- G. ANSI A108.8, 1999 - Specifications for Ceramic Tile Installed with Chemical-Resistant Furan Mortar and Grout.
- H. ANSI A108.9, 1999 - Specifications for Ceramic Tile Installed with Modified Epoxy Emulsion Mortar/Grout.
- I. ANSI A108.10, 1999 - Specifications for Installation of Grout in Tilework.
- J. ANSI A118.1, 1999 - Standard Specification for Dry-Set Portland Cement Mortar.
- K. ANSI A118.3, 1999 - Chemical-Resistant, Water-Cleanable, Tile-Setting and -Grouting Epoxy and Water-Cleanable Tile-Setting Epoxy Adhesive.

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- L. ANSI A118.4, 1999 - Latex-Portland Cement Mortar.
- M. ANSI A118.5, 1999 - Chemical-Resistant Furan Mortar and Grout.
- N. ANSI A118.6, 1999 - Standard Ceramic Tile Grouts.
- O. ANSI A118.7, 1999 - Polymer Modified Cement Grouts
- P. ANSI A118.8, 1999 - Modified Epoxy Emulsion Mortar/Grout.
- Q. ANSI A118.9, 1999 - Test Methods and Specifications for Cementitious Backer Units
- R. ANSI A118.10, 1999 - Load bearing, Bonded, Waterproof Membranes for Thinset Ceramic Tile and Dimensional Stone.
- S. ANSI A118.11, 1999 - Exterior Grade Plywood (EGP) Latex-Portland Cement Mortar.
- T. ANSI A136.1, 1999 - Organic Adhesives for Installation of Ceramic Tile.
- U. ANSI A137.1, 1988 - Specifications for Ceramic Tile.
- V. ASTM C50 - Standard Specification for Portland Cement.
- W. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar.
- X. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes.
- Y. ASTM C241 - Test Method For Abrasion Resistance of Stone Subjected to Foot Traffic.
- Z. ASMT C503 - Specification for Marble Building Stone (Exterior).
- AA. ASTM C615 - Specification for Granite Dimension Stone.
- BB. ASTM C629 - Specification for Slate Dimension Stone.
- CC. ASTM C847 - Standard Specification for Metal Lath.
- DD. ASTM C1028 - Test method for Determining the Static Coefficient of Friction or Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull meter Method.
- EE. ASTM D4397 - Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications.
- FF. TCA (HB) - Handbook for Ceramic Tile Installation; Tile Council of America, Inc.

#### **1.04 SUBMITTALS**

- A. See Section 700 - Administrative Requirements, for submittal procedures.

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- B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- C. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, ceramic accessories, and setting details.
- D. Samples: Mount tile and apply grout on two plywood panels, minimum 18 x 18 inches in size illustrating pattern, color variations, and grout joint size variations.
- E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- F. Maintenance Data: Include recommended cleaning methods, cleaning materials, stain removal methods, and polishes and waxes.

### **1.05 QUALITY ASSURANCE**

- A. Maintain one copy of TCA Handbook and ANSI A108 Series/A118 Series on site.
- B. Installer Qualifications: Company specializing in performing tile installation, with minimum of 5 years of documented experience.

### **1.06 MOCK-UP**

- A. See Section 01400 - Quality Requirements, for general requirements for mock-up.
- B. Construct tile mock-up where indicated on the drawings, incorporating all components specified for the location.
  - 1. Minimum size of mock-up is indicated on the drawings.
  - 2. Approved mock-up may remain as part of the Work.

### **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

### **1.08 FIELD CONDITIONS**

- A. Do not install adhesives in an unventilated environment.

## **PART 2 PRODUCTS**

### **2.01 TILE**

- A. Manufacturers: All products by the same manufacturer.
  - 1. American Olean: [www.americanolean.com](http://www.americanolean.com).
  - 2. Dal-Tile Corporation: [www.daltile.com](http://www.daltile.com).
  - 3. Or approved equal.

### **2.02 SETTING MATERIALS**

- A. Organic Adhesive: ANSI A136.1, thinset bond type; use Type I in areas subject to prolonged moisture exposure.
- B. Epoxy Adhesive: ANSI A118.3, thinset bond type.

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- C. Mortar Bed Materials:
1. Portland cement: ASTM C150, type 1, gray or white.
  2. Hydrated Lime: ASTM C207, Type S.
  3. Sand: ASTM C144, fine.
  4. Latex additive: As approved.
  5. Water: Clean and potable.
- D. Mortar Bond Coat Materials:
1. Dry-Set Portland Cement type: ANSI A118.1.
  2. Latex-Portland Cement type: ANSI A118.4.
  3. Epoxy: ANSI A118.3, 100 percent solids.
- E. Standard Grout: Cement grout, sanded or unsanded, as specified in ANSI A118.6; color as selected.
- F. Polymer modified cement grout, sanded or unsanded, as specified in ANSI A118.7; color as selected.
- G. Epoxy Grout: ANSI A118.8, 100 percent solids epoxy grout; color as selected.
- H. Silicone Sealant: Silicone sealant, moisture and mildew resistant type, white; use for shower floors and shower walls.
- I. Cleavage Membrane:
1. No. 15 (6.9 kg) asphalt saturated felt, ASTM D226, Type 1.
  2. Polyethylene film, ASTM D4397, 4.0 mil thickness.
- J. Waterproofing Membrane at Floors: Membrane in accordance with ANSI A118.10 and as follows:
1. Chlorinated Polyethylene Sheet with polyester fabric reinforcing.
  2. Fabric Reinforced, Fluid-Applied elastomeric membrane.
  3. Un-Reinforced, Fluid-Applied elastomeric membrane.
  4. Polyethylene Sheet Product..
  5. Fabric-Reinforced, Modified-Bituminous Sheet Product.
  6. Urethane Waterproofing and Tile-Setting Adhesive Product.
- K. Membrane at Walls: No. 15 (6.9 kg) asphalt saturated felt, ASTM D226, Type 1.
- L. Membrane at Walls: 4 mil (0.1 mm) thick polyethylene film, ASTM D4397.
- M. Membrane at Walls: Reinforced asphalt paper.
- N. Reinforcing Mesh: 2 by 2 inch (50 by 50 mm) size weave of 16/16 wire size; welded fabric, galvanized.
- O. Metal Lath: ASTM C847, Flat expanded diamond mesh, not less than 2.5 lbs/SY, galvanized finish.
- P. Cementitious Backer Board: ANSI A118.9; High density, cementitious, glass fiber reinforced with 2 inch (50 mm) wide coated glass fiber tape for joints and corners:

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1. Thickness: 1/4 inch (6 mm).
2. Thickness: 1/2 inch (13 mm).
3. Thickness: 5/8 inch (16 mm).

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
- C. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.
- D. Verify that concrete sub-floor surfaces are ready for tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by tile manufacturer and setting materials manufacturer.
- E. Verify that required floor-mounted utilities are in correct location.

### **3.02 PREPARATION**

- A. Protect surrounding work from damage.
- B. Remove any curing compounds or other contaminants.
- C. Vacuum clean surfaces and damp clean.
- D. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- E. Install cementitious backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of dry-set mortar to a feather edge.
- F. Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacturer's instructions.

### **3.03 INSTALLATION - GENERAL**

- A. Install tile and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and TCA Handbook recommendations.
- B. Lay tile to pattern indicated. Arrange pattern so that a full tile or joint is centered on each wall and that no tile less than 1/2 width is used. Do not interrupt tile pattern through openings.
- C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.

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- D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- E. Form internal angles square and external angles bullnosed.
- F. Install ceramic accessories rigidly in prepared openings.
- G. Install non-ceramic trim in accordance with manufacturer's instructions.
- H. Install thresholds where indicated.
- I. Sound tile after setting. Replace hollow sounding units.
- J. Keep expansion joints free of adhesive or grout. Apply sealant to joints.
- K. Allow tile to set for a minimum of 48 hours prior to grouting.
- L. Grout tile joints. Use standard grout unless otherwise indicated.
- M. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.
- N. Apply Heavy duty tile and grout sealer over application of tile.

#### **3.04 INSTALLATION - FLOORS - THIN-SET METHODS**

- A. Over exterior concrete substrates, install in accordance with TCA Handbook Method F102, with standard grout.
- B. Over interior concrete substrates, install in accordance with TCA Handbook Method F113, dry-set or latex-portland cement bond coat, with standard grout, unless otherwise indicated.
  - 1. Where waterproofing membrane is indicated, install in accordance with TCA Handbook Method F122, with latex-portland cement grout.
  - 2. Where epoxy bond coat and grout are indicated, install in accordance with TCA Handbook Method F131.

#### **3.05 INSTALLATION - WALL TILE**

- A. Over cementitious backer units on studs, install in accordance with TCA Handbook Method W244, using membrane at toilet rooms.
- B. Over cementitious backer units install in accordance with TCA Handbook Method W223, organic adhesive.
- C. Over gypsum wallboard on wood or metal studs install in accordance with TCA Handbook Method W243, thin-set with dry-set or latex-portland cement bond coat, unless otherwise indicated.
  - 1. Where mortar bed is indicated, install in accordance with TCA Handbook Method W222, one coat method.
  - 2. Where waterproofing membrane is indicated other than at showers and

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bathtub walls, install in accordance with TCA Handbook Method W222, one coat method.

D. Over interior concrete and masonry install in accordance with TCA Handbook Method W202, thin-set with dry-set or latex-portland cement bond coat.

E. Over wood studs without backer install in accordance with TCA Handbook Method W231, mortar bed, with membrane where indicated.

F. Over metal studs without backer install in accordance with TCA Handbook Method W241, mortar bed, with membrane where indicated.

### **3.06 CLEANING**

A. Clean tile and grout surfaces.

### **3.07 PROTECTION OF FINISHED WORK**

A. Do not permit traffic over finished floor surface for 72 hours after installation.

B. Cover floors with kraft paper and protect from dirt and residue from other trades.

C. Where floor will be exposed for prolonged periods cover with plywood or other similar type walkways

**END OF SECTION**

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## SECTION 09511

### ACOUSTICAL PANEL CEILINGS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS:

- A. Plans and general provisions of the Contract, including General and Special Provisions Specification Sections, apply to this Section.

##### 1.2 SUMMARY:

- B. This Section includes ceilings composed of acoustical panels and exposed suspension systems.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section 09260 "Gypsum Board Assemblies".

##### 1.3 SUBMITTALS:

- A. General: Submit each item in this Article according to the Conditions of the Contract and Special Provisions Specification Sections.
- B. Product data for each type of product specified.
- C. Coordination drawings for reflected ceiling plans drawn accurately to scale and coordinating penetrations and ceiling-mounted items. Show the following:
  - 1. Ceiling suspension system members.
  - 2. Method of attaching suspension system hangers to building structure.
  - 3. Ceiling-mounted items including light fixtures; air outlets and inlets; speakers; sprinklers; and special moldings at walls, column penetrations, and other junctures of acoustical ceilings with adjoining construction.
  - 4. Minimum Drawing Scale: 1/8 inch = 1 foot.
- D. Samples for verification of each type of exposed finish required, prepared on samples of size indicated below. Where finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
  - 1. 6 inch (150mm) square samples of each acoustical panel type, pattern, and color.
  - 2. Set of 12 inch (300mm) long samples of exposed suspension system members, including moldings, for each color and system type required.
- E. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with work names and addresses, names and addresses of engineers and the District, and other information specified.
- F. Product test reports from a qualified independent testing agency that are based on its testing of current products for compliance of acoustical panel ceilings and components with requirements.

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- H. Research reports or evaluation reports of the model code organization acceptable to authorities having jurisdiction that show compliance of acoustical panel ceilings and components with the building code in effect for the Work.

#### **1.4 QUALITY ASSURANCE:**

- A. **Installer Qualifications:** Engage an experienced Installer who has completed acoustical panel ceilings similar in material, design, and extent to that indicated for this Work and with a record of successful in-service performance.
- B. **Fire-Test-Response Characteristics:** Provide acoustical panel ceilings that comply with the following requirements:
  - 1. Fire-response tests are performed by a qualified testing and inspecting agency. Qualified testing and inspecting agencies include Underwriters Laboratories (UL), Warnock Hersey, or another agency that is acceptable to authorities having jurisdiction and that performs testing and follow-up services.
  - 2. Surface-burning characteristics of acoustical panels comply with ASTM E 1264 for Class A materials as determined by testing identical products per ASTM E 84.
- C. **Single-Source Responsibility for Ceiling Units:** Obtain each type of acoustical ceiling panel from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying the Work.
- D. **Single-Source Responsibility for Suspension System:** Obtain each type of suspension system from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying the Work.  
Obtain both acoustical panels and suspension system from the same manufacturer.
- E. **Preinstallation Conference:** Conduct conference at Work site to comply with requirements of the Special Provisions.
- F. **Testing –** The District will test 10% of the installed product

#### **1.5 DELIVERY, STORAGE, AND HANDLING:**

- A. Deliver acoustical panels and suspension system components to Work site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

## **1.6 WORK CONDITIONS:**

- A. Space Enclosure and Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet-work in spaces is completed and dry, work above ceilings is complete, and ambient temperature and humidity conditions are being maintained at the levels indicated for Work when occupied for its intended use.

## **1.7 COORDINATION:**

- A. Coordinate layout and installation of acoustical panels and suspension system components with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system components (if any), and partition assemblies (if any).

## **1.8 EXTRA MATERIALS:**

- A. Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels clearly describing contents.
  - 1. Acoustical Ceiling Units: Furnish quantity of full-size units equal to 2.0 percent of amount installed.
  - 2. Exposed Suspension System Components: Furnish quantity of each exposed component equal to 2.0 percent of amount installed.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS:**

- A. Available Products: Subject to compliance with requirements, acoustical panels that may be incorporated in the Work include, but are not limited to, the following
  - 1. Non-Fire-Resistance-Rated, Water-Felted, Mineral-Base Panels:
    - a. CLEAN ROOM FL 24x48, 24"X24" ; Armstrong World Industries, Inc. or approved equal.

### **2.2 ACOUSTICAL PANELS, GENERAL:**

- A. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectances, unless otherwise indicated.
  - 1. Mounting Method for Measuring Noise Reduction Coefficient (NRC): Type E-400 (plenum mounting in which face of test specimen is 15-3/4 inches [400 mm] away from the test surface) per ASTM E 795.
  - 2. Test Method for Ceiling Attenuation Class (CAC): Where acoustical panel ceilings are specified to have a CAC, provide units identical to those tested per ASTM E 1414 by a qualified testing agency.
- B. Acoustical Panel Colors and Patterns: Match appearance characteristics indicated for each product type.



1. Where appearance characteristics of acoustical panels are indicated by reference to ASTM E 1264 pattern designations and not to manufacturers' proprietary product designations, provide products selected by Engineer from each manufacturer's full range of products that comply with requirements indicated for type, pattern, color, light reflectance, acoustical performance, edge detail, and size.

### **2.3 CEILINGS OF WATER-FELTED, MINERAL-BASE ACOUSTICAL PANELS:**

- A. Panel Characteristics: Type III, Form 2 acoustical panels per ASTM E 1264, with painted finish, complying with pattern and other requirements indicated below:
  1. Pattern: Panels matching pattern indicated by reference to manufacturer's standard product designations in "Manufacturers" Article.
  2. Color/Light Reflectance Coefficient: White/LR 0.82.
  3. Noise Reduction Coefficient: NRC 0.55.
  4. Ceiling Sound Transmission Class: CAC 35.
  5. Edge Detail: Reveal sized-to-fit flange of exposed suspension system members.
  6. Thickness: 5/8"
  7. Size: 24 by 24 inches (610 by 610 mm).
  8. Size: 24 by 48 inches (610 by 1220 mm).  
15/16 heavy duty, steel suspension system.

### **2.4 METAL SUSPENSION SYSTEMS, GENERAL:**

- A. Metal Suspension System Standard: Provide manufacturer's standard metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable ASTM C 635 requirements.
- B. Finishes and Colors: Provide manufacturer's standard factory-applied finish for type of system indicated.
  1. High-Humidity Finish: Comply with ASTM C 635 requirements for "Coating Classification for Severe Environment Performance" where high-humidity finishes are indicated.
- C. Attachment Devices: Size for 5 times the design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.
  1. Fasteners: Fastener system consisting of 12" lengths of #4 rebar with suspension wire wrapped a minimum of three times around rebar. Place rebar in steel deck and punch wire through deck.
  2. Corrosion Protection: Carbon steel components zinc plated to comply with ASTM B 633, Class Fe/Zn 5 (0.005 mm) for Class SC service condition (mild).
- D. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
  1. Zinc-Coated Carbon Steel Wire: ASTM A 641 (ASTM A 641M), Class 1 zinc coating, soft temper.
  2. Size: Select wire diameter so that its stress at 3 times the hanger design load (ASTM C 635, Table 1, Direct Hung) will be less than the yield stress of wire, but provide not less than 0.106-inch- (2.69-mm-) diameter wire.
- E. Hanger Rods: Mild steel, zinc coated, or protected with rust-inhibitive paint.

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- F. Flat Hangers: Mild steel, zinc coated, or protected with rust-inhibitive paint.
- G. Angle Hangers: Angles with legs not less than 7/8 inch (22 mm) wide, formed with 0.0396 inch (1mm) thick galvanized-steel sheet complying with ASTM A 446, G 90 (ASTM A 446M, Z 275) Coating Designation, with bolted connections and 5/16 inch (8mm) diameter bolts.
- H. Sheet-Metal Edge Moldings and Trim: Type and profile indicated, or if not indicated, manufacturer's standard moldings for edges and penetrations that fit acoustical panel edge details and suspension systems indicated; formed from sheet metal of same material and finish as that used for exposed flanges of suspension system runners.
  - 1. For lay-in panels with reveal edge details, provide stepped-edge molding that forms reveal of same depth and width as that formed between edge of panel and flange at exposed suspension member.
  - 2. For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.
- I. Extruded-Aluminum Edge Moldings and Trim: Where indicated, provide manufacturer's extruded-aluminum edge moldings and trim of profile indicated or referenced by manufacturer's product designations, complying with the following requirements:
  - 1. Aluminum Alloy: Alloy and temper recommended by aluminum producer and finisher for type of finish indicated and with not less than the strength and durability properties of aluminum extrusions complying with ASTM B 221 (ASTM B 221M) for alloy and temper 6063-T5.
  - 2. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Apply baked enamel according to paint manufacturer's specifications for cleaning, conversion coating, and applying organic coating.
    - a. Organic Coating: Manufacturer's standard thermosetting coating system with a minimum dry film thickness of 0.8 to 1.2 mil (0.0203 to 0.0305 mm).
    - b. Color: Match color of finish on flanges of suspension system surfaces.
    - c. Available Manufacturers: Subject to compliance with requirements, manufacturers offering aluminum accessories that may be incorporated in the Work include, but are not limited to, the following:
      - 1) Fry Reglet Corporation.
      - 2) Gordon, Inc.
      - 3) MM Systems, Inc.
      - 4) Or approved equal.

**2.5 NON-FIRE-RESISTANCE-RATED, DIRECT-HUNG SUSPENSION SYSTEMS:**

- A. Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from prepainted or electrolytic zinc-coated, cold-rolled steel sheet, with prefinished 15/16-inch- (24-mm-) wide metal caps on flanges; other characteristics as follows:

1. Structural Classification: Heavy-duty system.
  2. End Condition of Cross Runners: Override (stepped) type.
  3. Cap Material and Finish: Steel sheet painted to match color of acoustical unit.
- B. Available Products: Subject to compliance with requirements, suspension systems that may be incorporated in the Work include the following:
- Wide-Face, Capped, Double-Web, Steel Suspension Systems:
1. Prelude 15/16" Exposed Tee System (w/7301 m.r.); Armstrong World Industries, Inc.
  2. Prelude ML 15/16" Exposed Tee System (w/7301 m.r.); Armstrong World Industries, Inc.
  3. Armstrong Drywall Grid System for direct gypsum board attachment.
  4. Or approved equal.

## **2.6 ACOUSTICAL SEALANT:**

- A. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 and the following requirements:
1. Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies per ASTM E 90.
  2. Product has flame-spread and smoke-developed ratings of less than 25 per ASTM E 84.
- B. Acoustical Sealant for Concealed Joints: Manufacturer's standard nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.
- C. Available Products: Subject to compliance with requirements, acoustical sealants that may be incorporated in the Work include, but are not limited to, the following:
1. Acoustical Sealant for Exposed and Concealed Joints:
    - a. AC-20 FTR Acoustical and Insulation Sealant; Pecora Corp.
    - b. SHEETROCK Acoustical Sealant; United States Gypsum Company.
    - c. Or approved equal.
  2. Acoustical Sealant for Concealed Joints:
    - a. BA-98; Pecora Corp.
    - b. Tremco Acoustical Sealant; Tremco, Inc.
    - c. Or approved equal.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION:**

- A. Examine substrates and structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified

in this and other Sections that affect ceiling installation and anchorage. Do not proceed with installation until unsatisfactory conditions have been corrected.

### **3.2 PREPARATION:**

- A. Layouts cast-in-place anchors, clips, and other ceiling.
  - 1. Furnish and install cast-in-place anchors and similar devices well in advance of time needed for coordinating with other work.
- B. Measure each ceiling area and establish the layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and conform to the layout shown on reflected ceiling plans.

### **3.3 INSTALLATION:**

- A. General: Install acoustical panel ceilings to comply with publications referenced below per manufacturer's instructions and CISCA "Ceiling Systems Handbook."
  - 1. Standard for Ceiling Suspension System Installations: Comply with ASTM C 636.
  - 2. CISCA Guidelines for Systems Requiring Seismic Restraint: Comply with CISCA "Guidelines for Seismic Restraint of Direct-Hung Suspended Ceiling Assemblies."
  - 3. U.B.C. Standard for Ceiling Suspension Systems: U.B.C. Standard No. 47-18.
- B. Suspend ceiling hangers from building's structural members and as follows:
  - 1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of the supporting structure or of the ceiling suspension system.
  - 2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
  - 3. Splay hangers only where required, and if permitted with fire-resistance-rated ceilings, to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
  - 4. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with the location of hangers at spacings required to support standard suspension system members, install supplemental suspension members and hangers in the form of trapezes or equivalent devices. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.
  - 5. Secure wire hangers to ceiling suspension members and to supports above with a minimum of 3 tight turns. Connect hangers either directly to structures or to inserts, eye screws, or other devices that are secure, that are appropriate for substrate, and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
  - 6. Secure flat, angle, channel, and rod hangers to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices that are secure and appropriate for both the structure to which hangers are attached and the type of hanger involved. Install

hangers in a manner that will not cause them to deteriorate or fail due to age, corrosion, or elevated temperatures.

7. Secure bracing wires to ceiling suspension members and to supports with a minimum of 4 tight turns. Fasten bracing wires to concrete with cast-in-place or postinstalled anchors.
  8. Do not support ceilings directly from permanent metal forms. Fasten hangers to cast-in-place hanger inserts, powder-actuated fasteners, or drilled-in anchors that extend through forms into concrete.
  9. Do not attach hangers to steel deck tabs.
  10. Space hangers not more than 48 inches (1200 mm) o.c. along each member supported directly from hangers, unless otherwise shown; and provide hangers not more than 8 inches (200 mm) from ends of each member.
- C. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
  2. Screw attach moldings to substrate at intervals not over 16 inches (400 mm) o.c. and not more than 3 inches (75 mm) from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet (3.18 mm in 3.66 m). Miter corners accurately and connect securely.
  3. Do not use exposed fasteners, including pop rivets, on moldings and trim.
- D. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- E. Install acoustical panels with undamaged edges and fitted accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide neat, precise fit.
1. Arrange directionally patterned acoustical panels as follows: In the manner indicated on reflected ceiling plans.
  2. For square-edged panels, install panels with edges fully hidden from view by flanges of suspension system runners and moldings.
  3. For reveal-edged panels on suspension system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
  4. For reveal-edged panels on suspension system members with box-shaped flanges, install panels with reveal surfaces in firm contact with suspension system surfaces and panel faces flush with bottom face of runners.
  5. Paint the cut panel edges remaining exposed after installation; match color of exposed panel surfaces using coating recommended for this purpose by acoustical panel manufacturer.

### **3.4 FIELD QUALITY CONTROL:**

- A. Testing Agency: A qualified independent testing agency employed and paid by the District will perform field quality-control services.
- B. Extent and Testing Frequency: Testing will take place in successive stages in areas of extent described below. Do not proceed with installation of acoustical panel ceilings until test results for previously installed hangers show compliance with requirements.
  - 1. Extent of Each Test Area: When the installation of ceiling suspension systems on each floor has reached 20 percent completion but no panels have been installed.
  - 2. Within each test area, testing agency will select 1 of every 10 powder-actuated fasteners and postinstalled anchors used to attach hangers to concrete and will test them for 200 lbs (890 N) of tension; it will also select 1 of every 2 postinstalled anchors used to attach bracing wires to concrete and will test them for 440 lbs (1957 N) of tension.
  - 3. When testing discovers fasteners and anchors that do not comply with requirements, testing agency will test those anchors not previously tested until 20 consecutively pass, and then will resume initial testing frequency.
- C. Testing agency will report test results promptly and in writing to Contractor and Engineer.
- D. Remove and replace those fasteners and anchors that test results indicate do not comply with requirements.

### **3.5 CLEANING:**

- A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

**END OF SECTION**

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## SECTION 09900

### PAINTS AND COATINGS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. The requirements of the GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, and DIVISION 1, GENERAL REQUIREMENTS, apply to the work of this section.

##### 1.2 SUMMARY

- A. Prepare surfaces, which are to receive finish.
- B. Finish surfaces as indicated herein and/or as shown on the Drawings.
- C. This Section includes the following and scope shall include but is not limited to:
  - 1. Preparation of all surfaces.
  - 2. Painting of all interior surfaces, except as otherwise specified.
  - 3. Painting of all exterior surfaces, except as otherwise specified.
  - 4. Painting of all interior metal door and window frames including mullions.
  - 5. Painting of all gyp. bd surfaces, walls, ceilings, soffits and trim.
  - 6. Preparation and finishing of all wood trim.
  - 7. Painting of all exterior metal including: doors, structural components, sheet metal, railings and exterior door frames etc.
  - 8. Sealing of all interior/exterior exposed CMU block where specified.
- B. Related work not in this Section:
  - 1. Shop prime coats and factory finishes.
  - 2. Painting specified as work of other Sections.
  - 3. Fluoropolymer paint finish.
  - 4. Sealants and caulking.
  - 5. Wall fabrics.
  - 6. Water repellent sealer.
- C. Surfaces not to be painted:
  - 1. Non-ferrous metal work (other than zinc-coated surfaces) and plated metal, unless particular items are specified to be painted.
  - 2. Integrally colored concrete.
  - 3. Integrally colored plaster unless otherwise indicated.
  - 4. Exterior concrete walls and surfaces.
  - 5. Ceramic tile and plastic surfaces.
  - 6. Surfaces indicated not to be painted.
  - 7. Surfaces specified to be finish painted under other Sections

##### 1.3 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry
- B. Section 07920 - Joint Sealants
- C. Section 09260 - Gypsum Wallboard Assemblies



#### **1.4 JOB MOCK-UP**

- A. Before proceeding with paint application, finish one complete surface 24 sq. ft. of each color scheme required, clearly indicating selected colors, finish texture, materials and workmanship. Provide temporary lighting of same intensity, type and color as permanent lights for viewing of sample panels.
- B. Obtain the City's approval at sample area before proceeding.
- C. If approved, sample area will serve as a minimum standard for work throughout work.

#### **1.5 REFERENCE STANDARDS**

- A. All paints shall comply with State of California, Air Resources Board "Organic Solvent Rules Applicable to Architectural Coatings."
  - 1. Where paints specified in this Section do not comply, Contractor shall submit according to Section 01600 an equal product for approval.
- B. Furnish paint materials that conform to the current rules and regulations of all governing Air Quality Management Districts and other public environmental control and protection agencies having jurisdiction. If any paint materials specified herein do not conform to said rules and regulations, paint manufacturer of proposed paint materials shall prepare a list of non-conforming specified painting materials and proposed substitute conforming paint materials: Deliver the list to the Engineer for review.

Products must meet SCAQMD Rule 1168 VOC limits.

#### **1.6 SAMPLES**

- A. Prepare 8 inch x 10 inch samples of finishes. When possible, apply finishes on identical type materials to which they will be applied on job.
- B. Identify each sample as to finish, formula, color name, number, sheen name and gloss units.
- C. Colors to be approved by the City prior to preparing samples.

#### **1.7 MAINTENANCE MATERIALS**

- A. Leave on premises, where directed by City not less than one gallon of each color used.
- B. Containers to be tightly sealed and clearly labeled for identification.

#### **1.8 DELIVERY, STORAGE AND HANDLING**

- A. Deliver paint materials in sealed original labeled containers, bearing manufacturer's name, type of paint, brand name, color designation and instructions for mixing and/or reducing.
- B. Provide adequate storage facilities. Store paint materials at minimum ambient temperature of 45 degrees F. in well ventilated area.
- C. Take precautionary measures to prevent fire hazards and spontaneous combustion.

## 1.9 ENVIRONMENTAL CONDITIONS

- A. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture contents of surfaces are below following maximums.
  - 1. Masonry, Concrete and concrete block: 12%
  - 2. Plaster and Gypsum Wallboard: 12%
  - 3. Exterior located wood: 19%
  - 4. Interior located wood: 15%
- B. Ensure surface temperatures or the surrounding air temperature is above 40 degrees F before applying Finishes. Minimum application temperature for latex paints for exterior work is 50 degrees F. Minimum application temperature for varnish finishes is 65 degrees F.
- C. Provide adequate continuous ventilation and sufficient heating facilities to maintain temperatures above 45 degrees F for 24 hours before, during and 48 hours after application of finishes.
- D. Provide minimum 15-foot candles of lighting on surfaces to be finished.

## 1.10 PROTECTION

- A. Adequately protect other surfaces from paint and damage. Repair damage as a result of inadequate or unsuitable protection.
- B. Furnish sufficient drop cloths, shields and protective equipment to prevent spray or droppings from fouling surfaces not being painted and in particular, surfaces within storage and preparation area.
- C. Place cotton waste, cloths and material which may constitute a fire hazard in closed metal containers and remove daily from site.
- D. Remove electrical plates, surface hardware, fittings and fastenings, prior to painting operations. These items are to be carefully stored, cleaned and replaced on completion of work in each area. Do not use solvent to clean hardware that may remove permanent lacquer finish.

## 1.11 GUARANTEE

- A. Color: Guarantee for one year, as set forth in Section 01700, that the color of all surfaces finished hereunder shall remain free from fading; and that any other variation shall be uniform over the entire surface.
- B. Adhesion: Guarantee all materials applied hereunder for a period of 2 years against failure due to surface conditions, materials, or application. There shall be no evidence of blisters, running, peeling, scaling, chalking, streaks, or stains. Washing with alkali-free soap shall remove surface dirt without producing the above or other deteriorating effects.

## **PART 2 - PRODUCTS**

### **2.1 ACCEPTABLE MANUFACTURERS**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include the following:
  - 1. ICI.
  - 2. Decratrend.
  - 3. Devoe.
  - 4. Dunn-Edwards. (Dunn Edwards Product numbers used as basis of design)
  - 5. Frazee.
  - 6. Glidden.
  - 7. PPG Industries.
  - 8. Sinclair.
  - 9. Tnemec.
  - 10. Or approved equal.

### **2.2 MATERIALS**

- A. Paint, Varnish, Stain, Enamel, Lacquer and Fillers: Type and brand listed herein and approved by the City.
- B. Paint Accessory Materials: (Linseed oil, shellac, turpentine and other materials not specifically indicated herein but required to achieve the finishes specified) of high quality and approved manufacturer.
- C. Paints: Ready-mixed except field-catalyzed coatings. Pigments fully ground maintaining a soft paste consistency, capable of readily and uniformly dispersed to a complete homogeneous mixture.
- D. Paints to have good flowing and brushing properties and be capable of drying or curing free of streaks or sags.

## **PART 3 - EXECUTION**

### **3.1 INSPECTION**

- A. Thoroughly examine surfaces scheduled to be painted prior to commencement of work. Report in writing to the City any condition that may potentially affect proper application. Do not commence until such defects have been corrected.
- B. Correct defects and deficiencies in surfaces that may adversely affect work of this section.

### **3.2 PREPARATION OF SURFACES**

- A. Remove contamination from gypsum wallboard surfaces and prime to show defects, if any. Paint after defects have been remedied.
- B. Remove surface contamination and oils from galvanized surfaces and wash with solvent. Apply coat of etching type primer.
- C. Remove surface contamination and oils from zinc coated surfaces and prepare for priming in accordance with metal manufacturer's recommendations.

- D. Remove dirt, loose mortar, scale, powder and other foreign matter from concrete and concrete block surfaces which are to be painted or to receive a clear seal. Remove oil and grease with a solution of tri- sodium phosphate, rinse well and allow to dry thoroughly. Power wash interior and exterior CMU walls with maximum 46-degree tip to remove contaminants. If efflorescence occurs, power wash with acidic masonry cleaner or etching solution infused water. Perform any necessary repairs prior to applying coatings.
- E. Remove grease, rust, scale, dirt and dust from steel and iron surfaces. Where heavy coatings of scale are evident, remove by wire brushing, sandblasting or any other necessary method. Ensure steel surfaces are satisfactory before paint finishing.
- F. Clean unprimed steel surfaces by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts and nuts are similarly cleaned. Prime surfaces to indicate defects, if any. Paint after defects have been remedied.
- G. Sand and scrape shop primed steel surfaces to remove loose primer and rust. Feather out edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Prime steel including shop primed steels.
- H. Wipe off dust and grit from miscellaneous wood items and millwork prior to priming. Spot coat knots, pitch streaks and sappy sections with sealer. Fill nail holes and cracks after primer has dried and sand between coats. Back prime exterior woodwork.
- I. Masonry: Repair minor holes and cracks with a stiff paste of finish paint and fine sand or vinyl-type block filler. Report major or unsightly defects to the Engineer for correction. Neutralize all alkali and efflorescence according to paint manufacturer's directions.
- J. Enameled Woodwork: Sand smooth with grain and dust clean. After priming, putty nail holes, cracks, or other defects with putty matching color of finish paint. Cover knots and sappy areas with shellac or approved knot sealer. Sand each base coat smooth when dry.
- K. Transparent Finished Woodwork: Sand smooth with the grain, using 150 grit or finer sandpaper, and dust clean. Repair all defects with filler tinted to match stain or wood color, as required, after first coat of sanding sealer and remove all smears.

### **3.3 APPLICATIONS**

- A. Apply each coat at proper consistency. Apply paint to gypsum board with roller, do not spray apply.
- B. Each coat of paint is to be slightly darker than preceding coat unless otherwise approved by the City.
- C. Sand lightly between coats to achieve required finish.
- D. Do not apply finishes on surfaces that are not sufficiently dry.
- E. Allow each coat of finish to dry before following coat is applied, unless directed otherwise by manufacturer.

- F. Where clear finishes are required, ensure tint fillers match wood. Work fillers well into the grain before set. Wipe excess from the surface.
- G. Backprime interior woodwork, which is to receive paint or enamel finish, with enamel undercoater paint.
- H. Backprime exterior woodwork, which is to receive stain and/or varnish finish, with gloss varnish reduced 25% with mineral spirits.
- I. Prime top and bottom edges of metal doors with enamel undercoat when they are to be painted.
- J. Prime top and bottom edges of wood doors with gloss varnish where they are to be stained.
- K. Paint as directed any miscellaneous items not specifically identified by drawings or specifications.

### 3.4 CLEANING

- A. As work proceeds and upon completion, promptly remove paint where spilled, splashed or spattered.
- B. During progress of work, keep premises free from any unnecessary accumulation of tools, equipment, surplus materials and debris.
- C. Upon completion of work, leave premises neat and clean, to the satisfaction of the City.

### 3.5 PAINTING SCHEDULE – SEE FINISH PLAN FOR COLOR SELECTION

- A. Apply the following finishes to the surfaces specified on the finish schedule or on the drawings. Apply all materials in accordance with manufacturer's instructions on properly prepared surfaces and foundation coats. All intermediate undercoats must be tinted to approximate the final color. See Article 3.06 above.

1. The Architect will issue a color schedule prior to start of painting to designate the various colors and locations required for the work.

- B. Concrete Block – CMU

1.

First Coat DUMOND CHEMICAL, WATCH DOG CPU, Masonry Primer/Sealer

Second Coat DUMOND CHEMICAL, WATCH DOG CPU-647, Polyurethane

- C. Interior Systems:

1. Gypsum Board

- a. Flat - Acrylic Copolymer

First Coat PREP-SEAL, Interior Latex Wall Sealer (W 6324)

Second Coat WALLTONE, Interior Latex Flat Paint (W 420V)

Third Coat WALLTONE, Interior Latex Flat Paint (W 420V)

- b. Low Sheen – Acrylic Copolymer /Acrylic

First Coat PREP-SEAL, Interior Latex Wall Sealer (W 6324)

Second Coat SPARTASHEEN, Interior/Exterior Low Sheen Paint (W 7300)

Third Coat SPARTASHEEN, Interior/Exterior Low Sheen Paint (W 7300)

- c. Eggshell – Acrylic Copolymer / Acrylic
    - First Coat PREP-SEAL, Interior Latex Wall Sealer (W 6324)
    - Second Coat SPARTASHELL, Interior/Exterior Acrylic Eggshell Paint (W 7400)
    - Third Coat SPARTASHELL, Interior/Exterior Acrylic Eggshell Paint (W 7400)
  - d. Semi-Gloss - Acrylic Copolymer / Acrylic
    - First Coat PREP-SEAL, Interior Latex Wall Sealer (W 6324)
    - Second Coat SPARTAGLO, Interior/Exterior Acrylic Semi-Gloss Paint (W 7500V)
    - Third Coat SPARTAGLO, Interior/Exterior Acrylic Semi-Gloss Paint (W 7500V)
  - e. Gloss – Acrylic Copolymer / Acrylic
    - First Coat PREP-SEAL, Interior Latex Wall Sealer (W 6324)
    - Second Coat SPARTAGLOSS, Interior/Exterior Acrylic Gloss Paint (W 7600V)
    - Third Coat SPARTAGLOSS, Interior/Exterior Acrylic Gloss Paint (W 7600V)
  - f. Gloss - Waterborne Acrylic / Cycloaliphatic Amine Epoxy
    - First Coat CARBOLINE, CARBOCRYLIC, Waterborne Acrylic Bonding Primer 120
    - Second Coat CARBOLINE, CARBOGUARD, Epoxy 890
    - Third Coat CARBOLINE, CARBOGUARD, Epoxy 890
  - g. Flat - Zero VOC / Modified Copolymer
    - First Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Primer (W 600)
    - Second Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Flat Paint (W 601)
    - Third Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Flat Paint (W 601)
  - h. Low Sheen - Zero VOC / Modified Copolymer
    - First Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Primer (W 600)
    - Second Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Low Sheen Paint (W 602)
    - Third Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Low Sheen Paint (W 602)
  - i. Semi-Gloss - Zero VOC / Modified Copolymer / 100% Acrylic
    - First Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Primer (W 600)
    - Second Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Semi-Gloss (W 603)
    - Third Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Semi-Gloss (W 603)
  - j. Gloss - Zero VOC / Acrylic / Epoxy
    - First Coat RUSTOLEUM, SIERRA GRIPTEC, Multi-Surface Primer S30
    - Second Coat RUSTOLEUM, SIERRA, Industrial Epoxy Enamel S60
    - Third Coat RUSTOLEUM, SIERRA, Industrial Epoxy Enamel S60
2. Wood – Paint Finish
- a. Flat – 100% Acrylic / Acrylic Copolymer
    - First Coat INTER-KOTE, Interior Undercoater (W 6325)
    - Second Coat WALLTONE, Interior Latex Flat Paint (W 420V)
    - Third Coat WALLTONE, Interior Latex Flat Paint (W 420V)
  - b. Low Sheen – 100% Acrylic / Acrylic

- First Coat INTER-KOTE, Interior Undercoater (W6325)  
 Second Coat SPARTASHEEN, Interior/Exterior Low Sheen Paint (W 7300)  
 Third Coat SPARTASHEEN, Interior/Exterior Low Sheen Paint (W 7300)
- c. Eggshell – 100% Acrylic / Acrylic  
 First Coat INTER-KOTE, Interior Undercoater (W 6325)  
 Second Coat SPARTASHELL, Interior/Exterior Acrylic Eggshell Enamel (W 7400)  
 Third Coat SPARTASHELL, Interior/Exterior Acrylic Eggshell Enamel (W 7400)
- d. Semi-Gloss – 100% Acrylic / Acrylic  
 First Coat INTER-KOTE, Interior Undercoater (W 6325)  
 Second Coat SPARTAGLO, Interior/Exterior Acrylic Semi-Gloss Paint (W 7500V)  
 Third Coat SPARTAGLO, Interior/Exterior Acrylic Semi-Gloss Paint (W 7500V)
- e. Gloss – 100 %Acrylic / Acrylic  
 First Coat INTER-KOTE, Interior Undercoater (W 6325))  
 Second Coat SPARTAGLOSS, Interior/Exterior Acrylic Gloss Enamel (W 7600V)  
 Third Coat SPARTAGLOSS, Interior/Exterior Acrylic Gloss Enamel (W 7600V)
- f. Flat - Zero VOC / Modified Copolymer  
 First Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Primer (W 600)  
 Second Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Flat Paint (W 601)  
 Third Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Flat Paint (W 601)
- g. Low Sheen - Zero VOC / Modified Copolymer  
 First Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Primer (W 600)  
 Second Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Low Sheen Paint (W 602)  
 Third Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Low Sheen Paint (W 602)
- h. Semi-Gloss - Zero VOC / Modified Copolymer / 100% Acrylic  
 First Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Primer (W 600)  
 Second Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Semi-Gloss (W 603)  
 Third Coat ECOSHIELD, Low-Order/Zero VOC Interior Latex Semi-Gloss (W 603)

**END OF SECTION**

## SECTION 10155

### SOLID PLASTIC TOILET COMPARTMENTS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Solid plastic toilet compartments urinal screens privacy screens
- B. Related Sections:
  - 1. Division 01: Administrative, procedural, and temporary work requirements.

##### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. A167 - Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
  - 2. B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

##### 1.3 SYSTEM DESCRIPTION

- A. Compartment Configurations:
  - 1. Toilet partitions privacy screens and Floor mounted, overhead braced.
  - 2. Urinal screens: Wall mounted.

##### 1.4 SUBMITTALS

- A. Submittals for Review:
  - 1. Shop Drawings: Include dimensioned layout, elevations, trim, closures, and accessories.
  - 2. Product Data: Manufacturer's descriptive data for panels, hardware, and accessories.
  - 3. Samples: 3x 3 inch samples in each color.

##### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum [5] years experience in manufacture of solid plastic toilet compartments with products in satisfactory use under similar service conditions.
- B. Installer Qualifications: Minimum [5] [years experience in work of this Section.

##### 1.6 WARRANTIES

- A. Provide manufacturer's 25 year warranty against breakage, corrosion, and delamination under normal conditions.



## **PART 2 PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Contract Documents are based on products by Santana Products.

### **2.2 MATERIALS**

- A. Doors, Panels and Pilasters:
1. High density polyethylene (HDPE), fabricated from polymer resins compounded under high pressure, forming single thickness panel.
  2. Waterproof and nonabsorbent, with self-lubricating surface, resistant to marks by pens, pencils, markers, and other writing instruments.
  3. 1 inch thick with edges rounded to 1/4 inch radius.
  4. Color: Black Paisley
- B. Aluminum Extrusions: ASTM B221, 6463-T5 alloy and temper.
- C. Stainless Steel: ASTM A167, Type 304.

### **2.3 HARDWARE**

- A. Hinges:
1. Continuous, fabricated from heavy-duty extruded aluminum with bright dip anodized finish, wrap-around flanges, adjustable on 30-degree increments, through bolted to doors and pilasters with stainless steel, Torx head sex bolts.
  2. Hinges operate on field-adjustable nylon cams, field adjustable in 30 degree increments.
- B. Door Strike and Keeper:
1. 45 inches long, fabricate from heavy-duty extruded aluminum with bright dip anodized finish, with wrap-around flanges secured to pilasters with stainless steel tamper resistant Torx head sex bolts.
  2. Bumper: Extruded black vinyl.
- C. Latch and Housing:
1. Heavy-duty extruded aluminum.
  2. Latch housing: Bright dip anodized finish.
  3. Slide bolt and button: Black anodized finish.
- D. Coat Hook/Bumper:
1. Combination type, chrome plated Zamak.
  2. Equip outswing handicapped doors with second door pull and door stop.
- E. Door Pulls: Chrome plated Zamak.

### **2.4 COMPONENTS**

- A. Doors and Dividing Panels: 55 inches high, mounted 14 inches above

**SOLID PLASTIC TOILET COMPARTMENTS  
10155-2**

finished floor,

- B. Pilasters: 82 inches high, fastened to pilaster sleeves with stainless steel tamper resistant Torx head sex bolt.
  - C. Pilaster Sleeves: 3 inches high, [one-piece molded HDPE,] [20 gage stainless steel,] secured to pilaster with stainless steel tamper resistant Torx head sex bolt.
  - D. Wall Brackets: 54 inches long, Extruded PVC ,fastened to pilasters and panels with stainless steel tamper resistant Torx head sex bolts.
- E. Headrail: Heavy-duty extruded aluminum, anti-grip design, clear anodized finish, fastened to headrail bracket with stainless steel tamper resistant Torx head sex bolt and at top of pilaster with stainless steel tamper resistant Torx head screws.
- F. Headrail Brackets: 20 gage stainless steel, satin finish, secured to wall with stainless steel tamper resistant Torx head screws.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Install compartments in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Install rigid, straight, plumb, and level.
- C. Locate bottom edge of doors and panels 14 inches above finished floor.
- D. Provide uniform, maximum 3/8 inch vertical clearance at doors.
- E. Not Acceptable: Evidence of cutting, drilling, or patching.

### **3.2 ADJUSTING**

- A. Adjust doors and latches to operate correctly.

**END OF SECTION**

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## SECTION 10800

### TOILET AND BATH ACCESSORIES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS:

- A. Plans and general provisions of the Contract, including General and Special Provisions Specification Sections, apply to this Section.

##### 1.2 SUMMARY:

- A. This Section includes toilet and bath accessory items as scheduled.
- B. Ceramic tile accessories are specified in Division 9.
- C. Toilet compartments and related accessories are specified in Division 10.

##### 1.3 SUBMITTALS:

- A. General: Submit the following according to the Contract and Special Provisions Specifications Sections.
- B. Product data for each toilet accessory item specified, including construction details relative to materials, dimensions, gages, profiles, mounting method, specified options, and finishes.
- C. Setting drawings where cutouts are required in other work, including templates, substrate preparation instructions, and directions for preparing cutouts and installing anchorage devices.
- D. Maintenance instructions including replaceable parts and service recommendations.

##### 1.4 QUALITY ASSURANCE:

- A. Inserts and Anchorages: Furnish accessory manufacturers' standard inserts and anchoring devices that must be set in concrete or built into masonry. Coordinate delivery with other work to avoid delay.
- B. Single-Source Responsibility: Provide products of same manufacturer for each type of accessory unit and for units exposed to view in same areas, unless otherwise acceptable to Engineer.

##### 1.5 WORK CONDITIONS:

- A. Coordination: Coordinate accessory locations, installation, and sequencing with other work to avoid interference with and ensure proper installation, operation, adjustment, cleaning, and servicing of toilet accessory items.

## **1.6 WARRANTY:**

- A. Warranty: Submit a written warranty executed by mirror manufacturer, agreeing to replace any mirrors that develop visible silver spoilage defects within warranty period.
- B. Warranty Period: 15 years from date of Substantial Completion.
- C. The warranty shall not deprive the District of other rights the District may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

## **PART 2 - PRODUCTS**

### **2.1 ACCEPTABLE MANUFACTURERS:**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering toilet accessories that may be incorporated in the Work include the following:
  - 1. Bobrick Washroom Equipment, Inc.
  - 2. Or approved equal.

### **2.2 MATERIALS, GENERAL:**

- A. Stainless Steel: AISI Type 302/304, with polished No. 4 finish, 0.034 inch (22 gauge) minimum thickness.
- B. Galvanized Steel Mounting Devices: ASTM A 153, hot-dip galvanized after fabrication.
- C. Fasteners: Screws, bolts, and other devices of same material as accessory unit, or of galvanized steel where concealed.

### **2.4 TOILET TISSUE DISPENSERS:**

- A. Bobrick B-2892 Classic Series

### **2.5 WASTE RECEPTACLE UNITS:**

- A. Bobrick Model B-279

### **2.6 SANITARY RECEPTACLE UNITS:**

- A. Bobrick Model B-270

### **2.7 GRAB BARS:**

- A. **Stainless Steel Type:** Provide grab bars with wall thickness not less than 0.05 inch (18 gage) and as follows:
1. **Mounting:** Concealed, manufacturer's standard flanges and anchorages.
  2. **Clearance:** 1 1/2 inch clearance between wall surface and inside face of bar.
  3. **Gripping Surfaces:** Manufacturer's standard nonslip texture.
  4. **Medium-Duty Size:** Outside diameter of 1 1/4 inches.

## **2.8 FABRICATION:**

- A. **General:** Only a maximum 1 1/2 inch diameter, unobtrusive stamped manufacturer logo, as approved by Engineer, is permitted on exposed face of toilet or bath accessory units. On either interior surface not exposed to view or back surface, provide additional identification by either a printed, waterproof label or a stamped nameplate, indicating manufacturer's name and product model number.
- B. **Surface-Mounted Toilet Accessories, General:** Except where otherwise indicated, fabricate units with tight seams and joints, exposed edges rolled. Hang doors or access panels with continuous stainless steel piano hinge. Provide concealed anchorage wherever possible.
- C. **Keys:** Provide universal keys for access to toilet accessory units requiring internal access for servicing resupply, etc. Provide minimum of six keys to the District's representative.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION:**

- A. Install toilet accessory units according to manufacturers' instructions, using fasteners appropriate to substrate as recommended by unit manufacturer. Install units plumb and level, firmly anchored in locations and at heights indicated.
- B. Install grab bars to withstand a downward load of at least 250 lbs, complying with ASTM F 446.

### **3.2 ADJUSTING AND CLEANING:**

- A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.
- B. Clean and polish all exposed surfaces strictly according to manufacturer's recommendations after removing temporary labels and protective coatings.

**END OF SECTION**

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## SECTION 15010 - BASIC MECHANICAL REQUIREMENTS

### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to this and other sections of Division 15.

#### 1.02 SUMMARY

- A. This Section includes general administrative and procedural requirements for mechanical installations. This section applies to all subsequent Division 15 sections. The following administrative and procedural requirements are included in this Section to supplement or expand upon the requirements specified in Division 1. Specific sections in this Division may have more stringent requirements.
  - 1. Submittals.
  - 2. Product substitutions.
  - 3. Coordination drawings.
  - 4. Record documents.
  - 5. Maintenance manuals.
  - 6. Operating and maintenance instructions.
  - 7. Delivery, storage, and handling.
  - 8. Quality assurance.
  - 9. Rough-in.
  - 10. Mechanical installations.
  - 11. Workmanship.
  - 12. Safety precautions.
  - 13. Cutting and patching.
  - 14. Painting.
  - 15. Demolition.
  - 16. Final cleaning.
  - 17. Start-up service.
  - 18. Warranty.
- B. Related Sections: The following sections contain requirements that relate to this section:
  - 1. Division 15 Section "Electrical Requirements for Mechanical Work", for motors, controllers, accessories, and connections.
  - 2. Division 15 Section "Basic Piping Materials and Methods", for materials and methods common to the remainder of Division 15.

#### 1.03 SUBMITTALS

- A. General: Follow the procedures specified in Division 1 Section "Submittals".
- B. Increase, by the quantity listed below, the number of mechanical related shop drawings, product data, and samples submitted, to allow for required distribution plus two copies of each submittal required, which will be retained by the Architect. Minimum submittal quantity: six copies.
  - 1. Shop Drawings - Initial Submittal: 1 additional blue-line or black-line print.
  - 2. Product Data: 1 additional copy of each item.



3. Shop Drawings - Final Submittal: 1 additional blue-line or black-line print.
- C. Additional copies may be required by individual sections of these Specifications. Refer to subsequent sections for specific submittal requirements. Allow a minimum of two weeks for submittal review by the Architect.
- D. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
1. Provide a space approximately 4" X 5" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
  2. Include the following information on the label for processing and recording action taken.
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect.
    - d. Name and address of Contractor.
    - e. Name and address of subcontractor.
    - f. Name and address of supplier.
    - g. Name of manufacturer.
    - h. Number and title of appropriate Specification Section.
    - i. Drawing number and detail references, as appropriate.
    - j. Equipment tag number of drawing designation.
- E. Shop Drawings: Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Show Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
1. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, and similar drawings. Include the following information:
    - a. Dimensions.
    - b. Identification of products and materials included.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
  2. Sheet Size: Submit Shop Drawings on sheets at least 8-1/2" X 11" but no larger than 30" X 42".
  3. Initial Submittal: Submit 6 blue-line or black-line prints for the Architect's review; three will be returned.
  4. Final Submittal: Submit 6 blue-line or black-line prints and additional prints where required for maintenance manuals, plus the number of prints needed by the Architect for distribution. 3 prints will be retained and the remainder returned.
    - a. One of the prints returned shall be marked up and maintained as a "Record Document".
  5. Do not use Shop Drawings without an appropriate final construction.
- F. Product Data: Collect product data into a single submittal for each element of construction or system. Product data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where product data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".

1. Mark each copy to show applicable choices and options. Where printed product data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
  - a. Manufacturer's printed recommendations.
  - b. Compliance with recognized trade association standards.
  - c. Compliance with recognized testing agency standards.
  - d. Application of testing agency labels and seals.
  - e. Notation of dimensions verified by field measurement.
  - f. Notation of coordination requirements.
2. Do not submit product data until compliance with requirements of the Contract Documents has been confirmed.
3. Submittals: Submit 6 copies of each required submittal; submit additional copies where required for maintenance manuals. The Architect will retain one, and will return the other make with action taken and corrections or modifications required.
  - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
4. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others as required for performance of construction activities. Show distribution on transmittal forms.
  - a. Do not proceed with installation until an acceptable copy of applicable product data is in the installer's possession.
  - b. Do not permit use of unmarked copies of product data in connection with construction.

#### 1.04 PRODUCT SUBSTITUTIONS

- A. General: Changes in products, materials, equipment, and methods of construction required by Contract Documents which are requested by the Contractor after award of the Contract are considered requests for "Substitutions". The following are not considered substitutions:
  1. Revisions to Contract Documents requested by the Owner or Architect.
  2. Specified options of products and construction methods included in Contract Documents.
  3. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.
- B. Substitution Request Submittal: Requests for substitution will be considered if received within 60 days after commencement of the work. Requests received more than 60 days after commencement of the work may be considered or rejected at the discretion of the Architect.
  1. Submit for consideration 3 copies of each request for substitution. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions and include the following information, as appropriate:
    - a. Product data, including Drawings and descriptions of products and fabrication and installation procedures.
    - b. Samples, where applicable or requested.
    - c. Coordination information, including a list of changes or modifications needed to other parts of the work and to construction performed by the Owner and separate Contractors, that will become necessary to accommodate the proposed substitution.
    - d. A statement indicating the substitution's effect on the Contractor's Construction

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Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.

- e. Cost information, including a proposal of the net change, if any in the Contract Sum.
- f. Certification by the Contractor that the substitution proposed is in every significant respect equal to or better than that required by the Contract Documents and that it will perform adequately in the application indicated.

#### 1.05 COORDINATION DRAWINGS

- A. Prepare coordination drawings in accordance with Division 1 Section "Project Coordination", to a scale of 1/4"=1'-0" or larger, detailing major elements, components, and systems of mechanical equipment and materials in relationship with other systems, installations, and building components. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are of importance to the efficient flow of the Work, including but not necessarily limited to the following:
  - 1. Indicate the proposed locations of piping, ductwork, equipment, and materials. Include the following:
    - a. Clearance for installing and maintaining insulation.
    - b. Clearances for servicing and maintaining equipment, including tube removal, filter removal, and space for equipment disassembly required for periodic maintenance.
    - c. Code required clearances.
    - d. Equipment connections and support details.
    - e. Fire-rated wall and floor penetrations.
    - f. Sizes and location of required support pads and bases.
    - g. Valve stem movement.
- B. Prepare floor plans, elevations, and details to indicate penetrations in floors, walls, and ceilings and their relationship to other penetrations and installations.
- C. Prepare reflected ceiling plans to coordinate and integrate installations, air distribution, light fixtures, communication systems components, sprinklers, and other ceiling-mounted items.

#### 1.06 RECORD DOCUMENTS

- A. Prepare record documents in accordance with the requirements in Division 1 Section "Project Closeout". In addition to the requirements specified in Division 1, prepare record prints that indicate, as a minimum, the following installed conditions:
  - 1. Ductwork mains and branches, size and location, for both exterior and interior; locations of dampers and other control devices; filters, boxes, and terminal units requiring periodic maintenance or repair.
  - 2. Mains and branches of piping systems, with valves and control devices located and numbered, concealed unions located, and with items requiring maintenance located (i.e. traps, strainers, expansion compensators, tanks, etc.). Valve locations diagrams, complete with valve tag chart. Refer to Division 15 Section "Mechanical Identification".
  - 3. Equipment locations, cleanouts, valve boxes and access doors, panels and covers, exposed and concealed, dimensioned from prominent building lines.
  - 4. Approved substitutions, contract modifications, and actual equipment and materials installed.
- B. Prepare final record drawings on sepia mylars obtained from the Architect at a nominal cost. Indicate all changes recorded on record prints. Indicate all approved changes to the Contract.

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Submit final record drawings to the Architect for acceptance.

#### 1.07 MAINTENANCE MANUALS

- A. Prepare maintenance manuals in accordance with Division 1 Section "Project Closeout". In addition to the requirements specified in Division 1, include the following information for equipment items:
1. Organize operating and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual heavy-duty 2-inch, 3-ring vinyl-covered information. Mark the appropriate identification on front and spine of each binder. Include the following types of information:
    - a. Emergency instructions.
    - b. Spare parts list.
    - c. Copies of warranties.
    - d. Wiring diagrams.
    - e. Recommended "turn-around" cycles.
    - f. Inspection procedures.
    - g. Shop drawings and product data.
  2. Description of function, normal operating characteristics and limitations, performance curves, engineering data and tests, and complete nomenclature and commercial numbers of replacement parts.
  3. Manufacturer's printed operating procedures to include start-up, break-in, and routine and normal operating instructions; regulation, control, stopping, shutdown, and emergency instructions; and summer and winter operating instructions.
  4. Maintenance procedures for routine preventative maintenance and troubleshooting; disassembly, repair, and reassembly; aligning and adjusting instructions.
  5. Servicing instructions and lubrication charts and schedules.

#### 1.08 OPERATING AND MAINTENANCE INSTRUCTIONS

- A. General: Arrange for each installer of operating equipment which requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in the procedures, provide instruction by the manufacturer's representatives. Include a detailed review of the following items:
1. Maintenance manuals.
  2. Record documents.
  3. Spare parts and materials.
  4. Tools.
  5. Lubricants.
  6. Identification systems.
  7. Control sequences.
  8. Hazards.
  9. Cleaning.
  10. Warranties and bonds.
  11. Maintenance agreements and similar continuing commitments.
- B. As part of instruction for operating equipment, demonstrated the following procedures:
1. Start-up.
  2. Shutdown.
  3. Emergency operations.
  4. Noise and vibration adjustments.

5. Safety procedures.
6. Economy and efficiency adjustments.
7. Effective energy utilization.

#### 1.09 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to the project properly marked with names, model numbers types, grades, compliance labels, and other information needed for identification and adequately packaged and protected to prevent damage during shipment, storage, and handling.
- B. Store equipment and materials in an environmentally controlled area at the site, unless off-site storage is authorized in writing. Protect stored equipment and materials from damage and from exposure to weather and water.
- C. Coordinate deliveries of mechanical materials and equipment to minimize construction site congestion. Limit each shipment of materials and equipment to the items and quantities needed for the smooth and efficient flow of installations.

#### 1.10 QUALITY ASSURANCE

- A. **Manufacturer's Qualifications:** Firms regularly engaged in the manufacture of products, materials, and equipment specified whose finished products have been in satisfactory use in similar service for not less than 5 years. Time in use may be modified in specific subsequent sections; modifications apply only to the specific sections in which they occur.
- B. **Installer's Qualifications:** Firms with at least 3 years of successful installation experience on projects with the products, equipment types, and systems specified.

#### PART 2 - PRODUCTS

NOT APPLICABLE

#### PART 3 - EXECUTION

##### 3.01 ROUGH-IN

- A. Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.
- B. Refer to equipment specifications in Divisions 2 through 16 for rough-in requirements.

##### 3.02 MECHANICAL INSTALLATIONS

- A. **General:** Sequence, coordinate, and integrate the various elements of mechanical systems, materials, and equipment. Comply with the following requirements:
  1. Coordinate mechanical systems, equipment, and materials installation with other building components.
  2. Verify all dimensions by field measurements. Do not use these construction documents as the only reference for shop fabrication.
  3. Arrange for chases, slots, and openings in other building components during progress of construction, to allow for mechanical installations.
  4. Coordinate the installation of required supporting devices and other structural components, as they are constructed.

5. Sequence, coordinate, and integrate installations of mechanical materials and equipment for efficient flow of the work.
6. Where mounting heights are not detailed or dimensioned, install systems, materials, and equipment to provide the maximum headroom possible.
7. Install systems, materials, and equipment to conform with approved submittal data, including coordination drawings, to greatest extent possible. Conform to arrangements indicated by the contract documents, recognizing that portions of the work are shown only in diagrammatic form. Where coordination requirements conflict with individual system requirements, refer conflict to the Architect.
8. Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components. Do not install any diagonal or otherwise irregular work, unless so indicated on the drawings or accepted by Architect.
9. Install mechanical equipment and systems connecting to it so as to facilitate servicing, maintenance, and repair as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations. Extend grease fittings to an accessible location.
10. Install access panel or doors where units are concealed behind finished surfaces. Access panels and doors are specified in Division 8 Section "Access Doors".
11. Install systems, materials, and equipment giving right-of-way priority to systems required to be installed at a specified slope.
12. Follow manufacturer's directions and recommendations in all cases where the manufacturers of articles used on this contract furnish directions covering points not shown on the drawings or covered in these specifications.

### 3.03 WORKMANSHIP

- A. Work shall be performed by journeyman mechanics and shall result in an installation consistent with the best trade practices.

### 3.04 SAFETY PRECAUTIONS

- A. During construction and until final acceptance of this work, under direct responsibility and supervision of Contractor, strict attention shall be given to all matters affecting public safety and safety of the construction workers and complementing personnel. This requirement to exercise strict safety precautions shall apply continuously throughout the course of construction and shall not be restricted to normal working hours.

### 3.05 CUTTING AND PATCHING

- A. General: Perform cutting and patching in accordance with Division 1 Section "Cutting and Patching". In addition to the requirements specified in Division 1, the following requirements apply:
  1. Protection of Installed Work: During cutting and patching operations, protect adjacent installations.
- B. Perform cutting, fitting and patching of mechanical equipment and materials required to :
  1. Uncover work to provide for installation of ill-timed Work.
  2. Remove and replace defective work.
  3. Remove and replace work not conforming to requirements of the Contract Documents.
  4. Remove samples of installed work as specified for testing.
  5. Install equipment and materials in existing structures.
  6. Upon written instructions from the Architect, uncover and restore work to provide for

- Architect/Engineer observation of concealed work.
7. Protect the structure, furnishings, finishes, and adjacent materials not indicated or scheduled to be removed.
  8. Patch existing finished surfaces and building components using new materials matching existing materials and employing experienced Installers. Installers' qualifications refer to the materials and methods required for the surface and building components being patched.
    - a. Refer to Division 1 Section "Definitions and Standards" for definition of "Experienced Installer".

### 3.06 START-UP SERVICE

- A. General: Refer to other Division 15 sections for additional requirements. Prior to start-up, verify that systems are ready, including checking the following:
  1. Proper equipment rotation.
  2. Proper wiring.
  3. Auxilliary connections.
  4. Lubrication.
  5. Venting.
  6. Controls.
  7. Installation and proper setting of relief and safety valves.
- B. Provide services of factory trained technicians for start-up of mechanical equipment installed as part of this work. Certify in writing compliance with this paragraph, stating items and locations of equipment, names of personnel involved, and the date work was performed.

### 3.07 WARRANTY

- A. Provide minimum 1 year warranty from the date of owner acceptance covering all equipment, materials, and systems for leaks, breaks, or failure to perform intended function. Warranty response to be 24 hours from time of Owner notification until technician is on the site.

END OF SECTION 15010

## SECTION 15030

### ELECTRICAL REQUIREMENTS FOR MECHANICAL WORK

#### PART 1 - GENERAL

##### 1.01 SUMMARY

- A. This section specifies the basic requirements for electrical components which are an integral part of packaged mechanical equipment. These components include, but are not limited to, factory installed motors, starters, and disconnect switches furnished as an integral part of packaged mechanical equipment.
- B. This section also specifies the basic requirements for field installed electrical components for mechanical equipment and systems.
- C. Specific electrical requirements (i.e. horsepower and electrical characteristics) for mechanical equipment are specified within the individual equipment specification sections and/or scheduled on the Drawings.

##### 1.02 RELATED DOCUMENTS

- A. Related Sections: Separate electrical components and materials required for field installation and electrical connections are specified in Division 16.

##### 1.03 HEATING, VENTILATING, AIR CONDITIONING, AND PLUMBING - ELECTRICAL INSTALLATION

- A. Division 15 heating, ventilating, air conditioning, and plumbing work furnishes and/or installs electrical equipment for those systems as follows:
  - 1. Furnish and install:
    - a. Motors.
    - b. Low voltage control devices including controls.
    - c. Low voltage transformers.
    - d. Low voltage (under 30 volts) wire as well as connection to devices including control wiring.
    - e. Wire for electronic systems (except line voltage).
    - f. All electrical work under items a. through e., except motors, shall be performed under Division 16 or the controls sections of Division 15 but shall be paid for and coordinated under Division 15.
  - 2. Furnish only:
    - a. Line voltage control equipment.
- B. Division 16 furnishes and/or installs equipment for the Division 15 heating, ventilating, air conditioning, and plumbing work as follows:
  - 1. Furnish and Install:
    - a. Complete line voltage wiring system.
    - b. Line voltage circuit protection devices.
    - c. Line voltage switches for control of small motors, where indicated on the drawing.
    - d. Line voltage disconnect switches as required.
  - 2. Install equipment furnished under Division 15:



- a. Motor starters.
- b. Combination motor starters and disconnects.
- c. Line voltage control equipment and disconnect switches, H.O.A. switches, time switches, control transformers, relays thermostats, etc., that are not installed as part of motor control centers.
- d. Mounting of these devices, except motors, is under Division 16. Connect these devices under Division 16.

C. Install all wiring concealed in walls, above ceilings, or in furred spaces.

#### 1.04 REFERENCES

- A. NEMA Standards MG 1: Motors and Generators.
- B. NEMA Standard ICS 2: Industrial Control Devices, Controllers, and Assemblies.
- C. NEMA Standard 250: Enclosures for Electrical Equipment.
- D. NEMA Standard KS 1: Enclosed Switches.
- E. Comply with National Electrical Code (NFPA 70).

#### 1.05 SUBMITTALS

- A. No separate submittal is required. Submit product data for motors and other electrical components with submittal data required for the equipment for which it serves, as required by the individual equipment specification sections.

#### 1.06 QUALITY ASSURANCE

- A. Electrical components and materials shall be UL labeled.

### PART 2 - PRODUCTS

#### 2.01 MOTORS

- A. The following are basic requirements for simple or common motors. For special motors, more detailed and specific requirements are specified in the individual equipment specifications.
  - 1. Torque characteristics shall be sufficient to satisfactorily accelerate the driven loads.
  - 2. Motor sizes shall be large enough so that the driven load will not require the motor to operate in the service factor range.
  - 3. Temperature Rating: Rated for 40 deg. C environment with maximum 50 deg. C temperature rise for continuous duty at full load (Class A Insulation).
  - 4. Starting capability: Frequency of starts as indicated by automatic control system.
  - 5. Service Factor: 1.15 for poly-phase motors and 1.35 for single phase motors.
  - 6. Motor construction: NEMA Standard MG 1, general purpose, continuous duty, Design "B", except "C" where "F" or better with lower kVA per horsepower.
  - 7. Frames: NEMA Standard No. 48 or 54; use driven equipment manufacturer's standards to suit specific application.
  - 8. Bearings:
    - a. Ball or roller bearings with inner and outer shaft seals.
    - b. Regreasable, except permanently sealed where motor is normally inaccessible for regular maintenance.

- c. Designed to resist thrust loading where belt drives or other drives produce lateral or axial thrust in motor.
- d. For fractional horsepower, light duty motors, sleeve type bearings are permitted.
- 9. Enclosure Type:
  - a. Open drip-proof motors for indoor use where satisfactorily housed or remotely located during operation.
  - b. Guarded drip-proof motors where exposed to contact by employees or building occupants.
  - c. Weather protected Type I for outdoor use, Type II where not housed.
- 10. Overload Protection: Built-in thermal overload protection and, where indicated, internal sensing device suitable for signaling and stopping motor at starter.
- 11. Noise rating: "Quiet".
- 12. Efficiency: "Energy Efficient" motors shall have a minimum efficiency as scheduled in accordance with IEEE Standard 112, test method B. If efficiency is not specified, motors shall have a higher efficiency than "average standard industry motors", in accordance with IEEE Standard 112, test method B.
- 13. Nameplate: Indicate the full identification of manufacturer, ratings, characteristics, construction, special features and similar information.

B. Manufacturers: Century, General Electric, or Lincoln.

## 2.02 DEVICES AND WIRING

A. Disconnect Switches:

- 1. Non-fusible switches: For equipment 2 horsepower and smaller, shall be horsepower rated; toggle switch type; quantity of poles and voltage rating as indicated. For equipment larger than 2 horsepower, switches shall be the same as fusible type.

B. Manufacturers: Allen-Bradley Co. or Square D Co.

## PART 3 - EXECUTION

Not Applicable

END OF SECTION 15030

## SECTION 15400

### PLUMBING SYSTEMS

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. The work includes removing and modifying existing and providing new plumbing systems, as indicated on the drawings and in accordance with rules and regulations of all governing Agencies and with all requirements of this Section of the Specifications.
- B. Work includes, but is not limited to, the following:
  - 1. Drainage, Waste, and Vent Systems.
  - 2. Domestic Water Systems.
  - 3. Plumbing Fixtures and Drains
  - 4. Selective Demolition.
  - 5. Modification to Existing Building Utilities.

##### 1.02 SUBMITTALS

- A. Submit shop drawings, manufacturer's technical data, maintenance data, parts list, and installation instructions for plumbing materials and products in accordance with Section 15010 "Basic Mechanical Requirements".

#### PART 2 -PRODUCTS

##### 2.01 GENERAL

- A. Refer to other Division 15 sections for the following items and include them as part of the work of this section:
  - 1. Hangers and supports.
  - 2. Escutcheon plates, flashings, and sleeves.
  - 3. Identification markers and signs.
  - 4. Expansion compensators and seismic connectors.
  - 5. Seismic requirements.
  - 6. Warranties and guarantees.

##### 2.02 PIPING - ABOVEGROUND

- A. Sanitary Waste and Vent: Service weight cast iron "no-hub" pipe and fittings conforming to CISPI Standard 301-78 with heavy duty stainless steel couplings, "Husky" series 4000 - Anaheim Foundry Company.
- B. Domestic and Industrialized Water Piping: Type "L" hard drawn copper, ASTM B-88 with wrought copper fittings, ANSI B16.22. Joining material shall be 95-5 tin antimony.

##### 2.03 CLEANOUTS

- A. General: In secure areas of the building all exposed screw heads shall be tamper proof "pin-torx" screws.
- B. Cleanout Plugs: Cast-bronze or brass, countersunk head, American Standard tapered threads complying with ANSI B2.1.
- C. Floor Cleanouts: Cast iron body and frame, ASTM A-74, cleanout plug, adjustable nickel bronze top with standard non-slip scored or abrasive finish in finished areas; cast iron top with non-slip scored or abrasive finish in unfinished areas.

##### 2.04 ROOF FLASHING - VENT AND SOIL STACKS

- A. Seamless lead roof flashing assemblies with vandalproof hoods. 4 lb. lead, 8" skirt, cast iron counterflashing and hood, Stoneman Stormite Series.

##### 2.05 ROOF RECEPTOR

- A. Cast iron body and flashing clamp, water dam, underdeck clamp, and sump receiver.

## 2.06 PLUMBING FIXTURES

- A. Provide plumbing fixtures complete with support, carriers, and trim that conform to the requirements on the fixture schedule. Manufacturers shall be as follows:
1. Porcelain fixtures:
    - a. American Standard.
    - b. Kohler.
    - c. Or Equal.
  2. Stainless Steel Sinks:
    - a. Just.
    - b. Elkay.
    - c. Or Equal.
  3. Faucets and Trim:
    - a. Chicago.
  4. Flush Valves:
    - a. Sloan.
    - b. Delaney.
    - c. Or Equal.
  5. Supports and Carriers:
    - a. J. R. Smith.
    - b. Zurn.
    - c. Or Equal.
  6. Shower Assemblies:
    - a. Acorn
    - b. Symmons.
    - c. Or Equal.
  7. Drains and Receptors:
    - a. J. R. Smith.
    - b. Zurn.
  8. Security fixtures:
    - a. Provide stainless steel security fixture. Any exposed screw heads shall be tamper proof "pin-torx" screws.
    - b. Acorn
    - c. Bradley
    - d. Elkay
    - e. Or Equal

## PART 3 - EXECUTION

### 3.01 GENERAL

- A. Install all items specified in this section of the Specification under the full purview of local and State governing agencies.
- B. In secure areas of the building any exposed screw heads shall be tamper proof "pin-torx" screws.

### 3.02 PERFORMANCE OF WORK

- A. Examine areas, physical conditions, and phasing requirements under which materials are to be installed. Lay out the system to suit the different types of construction and equipment as indicated on the drawings.
- B. Coordinate with other trades as necessary to properly interface components of the plumbing system.
- C. Follow manufacturer's directions and recommendations in all cases where the manufacturers of articles used on this Contract furnish directions covering points not shown on the drawings or covered in these Specifications.

- D. The omission from the drawings or Specifications of any details of construction, installation, materials, or essential specialties shall not relieve the Contractor from furnishing the same in place for a complete system.

### 3.03 PIPING INSTALLATION - PLUMBING SYSTEMS

- A. Run piping generally parallel to the axis of the building, arranged to conform to the building requirements, to suit the necessities of clearance for other mechanical ducts, flues, conduits, and work of other trades, and as close to ceiling or other construction as practical, free of unnecessary traps or bends.
- B. Run horizontal sanitary waste and storm drainage at uniform pitch of not less than 1/4-inch per foot, unless otherwise indicated. Pitch horizontal vent piping downward from stack to fixtures.
- C. Run drainage piping as straight as possible with long tee wyes or combination and 1/8 bend. Off-sets shall be made at an angle of 45-degrees or less.
- D. Hot and cold water piping shall be separated by at least 8-inches where possible and every precaution taken to see that the pipes do not come in contact. Where the piping is parallel, ample space shall be provided between piping for the proper thickness of covering.
- E. Provide sufficient elbows, swings, and offsets to permit free expansion and contraction.
- F. Use reducers or increasers. Bushings are not acceptable.
- G. Ream or file each pipe cut to remove burrs. Inspect each length of pipe and each fitting for workmanship and clear passageway.
- H. All fixtures shall be individually trapped and properly vented.
- I. Exposed connections to fixtures and equipment to be installed with special care, showing no tool marks or threads at fittings and piping. No bowed or bent piping to be permitted.
- J. Piping through finished rooms and corridors to be carried in partitions, in chases, or in recesses where same are provided in the walls, through the floors and in furred ceilings; run exposed pipes only as directed.
- K. All ferrous to non-ferrous connections shall be made by means of dielectric fittings.
- L. Soldered Joints: Joints shall be made permanently watertight. Joints in aboveground domestic water piping to be made with a 95-5% tin-antimony solder only.

### 3.04 CLEANOUTS

- A. Cleanouts to be same size as pipe except cleanout plugs larger than 4-inches shall not be required.
- B. Cleanouts on concealed piping to be extended through and terminate flush with the finished wall or floor. Cover plates to be provided on all cleanout plugs in finished areas. Secure all cover plates in secure areas of the building with tamper proof "pin-torx" screws.

### 3.05 DRAINS

- A. Receptors for equipment provided by this Contractor are indicated diagrammatically on the drawings. Prior to installation, Contractor shall verify final location and install receptor clear of equipment structure, and other building systems.

### 3.06 TESTING AND DISINFECTING - PLUMBING SYSTEMS

- A. General: The Contractor to perform all field tests and provide all labor, equipment, and incidentals required for the tests. Owner's Representative to witness all field tests and conduct all field inspections. The Contractor to give the Owner ample notice of the dates and times scheduled for tests. Any deficiencies to be completely retested at no additional cost.

1. **Inspection:** Inspection to continue during installation and testing. Perform a final inspection of the equipment prior to installation to determine conformity to the type, class, grade, size, capacity, and other characteristics specified herein or indicated. Correct or replace all rejected equipment prior to installation.
2. **Water Distribution Piping Test:** Before fixtures are set, subject the entire hot and cold piping system to a hydrostatic pressure test of 100 pounds per square inch with water for not less than 30 minutes in order to permit inspection of all joints with no evidence of leakage. Where a portion of the water distribution piping is to be concealed before completion, test this portion separately as specified for the entire system.
3. **Sanitary, Drainage, and Vent Piping Test:** Before the installation of any fixtures, cap the ends of the system and fill all lines with water, minimum 10 foot head, and allow to stand for at least 30 minutes without leakage. Make tests within building with piping exposed. If the system is tested in sections, tightly plug each opening, except the highest opening of the section under test, and fill each section with water. Test underground piping with a 10 foot head of water.
4. **Test water system for potability.** Testing of water distribution system shall be accomplished by an independent testing laboratory, licensed and certified by the State of California. Test each outlet where water can be drawn. Report results to the Engineer.

END OF SECTION

SECTION 15800  
HVAC EQUIPMENT

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section includes the following types of HVAC equipment:
  - 1. Furnaces.
- B. Related Sections: The following sections contain requirements that relate to this section:
  - 1. Division 15 Section "Electrical Provisions for Mechanical Equipment" for electric motors, connections, and accessories.
  - 2. Division 15 Section "Basic Piping Materials and Methods" for piping to equipment.

1.02 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 15 Section 15010.
- B. Product data including certified performance curves of selected models indicating selected operating point, weights (shipping, installed, and operating), furnished specialties, and accessories.
- C. Shop drawings showing layout and connections for HVAC equipment. Include setting drawings with templates and directions for installation of foundation bolts and other anchorages.
- D. Wiring diagrams detailing wiring for power, signal, and control systems, differentiating between manufacturer-installed wiring and field-installed wiring.
- E. Maintenance data for HVAC equipment for inclusion in Operating and Maintenance Manual specified in Division 1 and in Division 15 Section "Basic Mechanical Requirements".

1.03 QUALITY ASSURANCE

- A. Codes and Standards:
  - 1. AMCA Compliance: Provide fans bearing the AMCA Certified Ratings Seal. Sound rate fans in accordance with AMCA 300 "Test Code for Sound Rating Air Moving Devices."
  - 2. AGA Compliance: Test and certify gas appliances in accordance with American Gas Association Laboratories.
  - 3. National Electrical Code Compliance: Provide components complying with NFPA 70 "National Electrical Code".
  - 4. UL Compliance:
    - a. Design, manufacture, and install HVAC equipment in accordance with UL 564.
    - b. Provide fan electrical components which have been listed and labeled by UL.
    - c. Comply with UL Standards pertaining to safety and performance of air filter units.
  - 5. NEMA Compliance:
    - a. Provide electric motors and components that are NEMA listed and labeled.
  - 6. ARI Compliance:
    - a. Test and rate ac units in accordance with ARI 210/240-89 and 270-89 "Standard for Air Cooled Package Air Conditioning Units".

- b. Comply with provisions of ARI Standard 850 pertaining to testing and performance of air filter units.
  - e. Provide coil ratings in accordance with ARI Standard 410 "Forced-Circulation Air-Cooling and Air-Heating Coils".
7. ASHRAE Compliance:
- a. ASHRAE Compliance: Test and rate centrifugal fans in accordance with ASHRAE 51 (AMCA 210) "Laboratory Methods of Testing Fans for Rating."
  - b. Comply with provisions of ASHRAE Standard 52 for method of testing and for recording and calculating air flow rates.
  - c. Test coils in accordance with ASHRAE Standard 33 "Methods of Testing Forced Circulation Air Cooling and Heating Coils".
- B. Design Criteria: The Drawings indicate sizes, profiles, connections, and dimensional requirements of HVAC equipment and are based on the specific manufacturer types and models indicated. Equipment having equal performance characteristics by other manufacturers may be considered, provided deviations in dimensions and profiles and efficiencies do not change the design concept or intended performance as judged by the Architect.

#### 1.04 DELIVERY, STORAGE, AND HANDLING

- A. Store equipment in a dry location.
- B. Retain shipping flange protective covers and protective coatings during storage.
- C. Protect bearings and couplings against damage from sand, grit, and other foreign matter.
- D. For storage times greater than 5 days, dry internal parts with hot air or a vacuum-producing device to avoid rusting internal parts. Upon drying, coat internal parts with a protective liquid, such as light oil, kerosene, or antifreeze. Dismantle bearings and couplings, dry and coat them with an acid-free heavy oil, and then tag and store in dry location.
- E. Comply with Manufacturer's rigging instructions for handling.

### PART 2 PRODUCTS

#### 2.01 FURNACE UNITS

- A. General: Provide units of sizes and arrangement as indicated, and of capacities and having accessories as scheduled.
- B. Fan: Provide factory assembled and tested fans consisting of housing, wheel, fan shaft, bearings, and support structure. Fans shall be quiet multi-speed, belt-drive indoor blower, direct drive outdoor blower(s).
- C. Cabinet: Constructed of heavy gauge cold rolled steel with surfaces bonded with a baked-on powder paint finish. The cabinet shall be complete with insulated blower section, removable panels for service access. Filters shall be accessible through an access panel. Unit shall have a factory-installed condensate drain connection and sloped condensate pan.
- D. Filter Section: Standard filter section shall consist of factory installed 2-in. thick throwaway fiberglass filters of commercially available sizes.
- E. Thermostat: Provide the manufacturer's fully programmable thermostat, complete with lockable plastic cover. Thermostat shall be in compliance with CEC Title 24 energy requirements for non-residential use.
- F. Manufacturer: Subject to compliance with requirements, provide the following manufacturer to match existing facility maintenance standard:
  - 1. Reznor.
  - 2. Sterling
  - 3. Or equal.



PART 3 EXECUTION

3.01 EXAMINATION

- A. With installer present, examine areas, equipment foundations, and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of HVAC equipment.
- B. Examine rough-in for piping systems to verify actual locations of piping connections prior to installation.
- C. Examine equipment supports for suitable conditions where equipment is to be installed.
- D. Do not proceed until unsatisfactory conditions have been corrected.

3.02 INSTALLATION OF AIR CONDITIONING UNITS

- A. General: Install air conditioning units and fans where indicated, in accordance with manufacturer's installation instructions, and with recognized industry practices, to ensure that fans comply with requirements and serve intended purposes.
- B. Access: Provide access and service space around and over units and fans as indicated, but in no case less than that recommended by manufacturer.
- C. Isolation: Set fans on vibration isolators, fasten in accordance with manufacturer's installation instructions.
- D. Electrical Wiring: Install electrical devices furnished by manufacturer but not specified to be factory mounted. Furnish copy of manufacturer's wiring diagram submittal to Electrical Installer.
  - 1. Verify that electrical wiring installation is in accordance with manufacturer's submittal and installation requirements of Division 16 sections. Ensure that rotation is in direction indicated and intended for proper performance. Do not proceed with fan start-up until wiring installation is acceptable to fan Installer.
- F. Ductwork Connections: Refer to Division 15 "Ductwork" sections. Provide flexible connections on inlet and outlet duct connections.

3.03 PIPING INSTALLATION

- A. Support piping at each change of direction, and at ends of branches, at base of riser pipes and wherever necessary to prevent sagging, bending, or vibration.
- B. Provide pipe support to match existing piping system supports. All pipe supports shall be electro galvanized finish.
- C. Support Spacing:

<u>Pipe Size</u>	<u>Steel Pipe Support Spacing</u>	<u>Copper Pipe Support Spacing</u>
Up to 1-1/4"	8'-0"	6'-0"
1-1/2" & 2"	10'-0"	6'-0"

- D. Run condensate drain piping at uniform pitch of not less than 1/8" per foot, unless otherwise indicated.
- E. Testing Piping Systems (Medium Pressure – 5 psig):
  - 1. Gas Piping: Test with air at a pressure of not less than 60 psig for a minimum of 30 minutes with no perceptible drop in pressure.
- F. Testing Piping Systems (Low Pressure – 14" water column):
  - 1. Gas Piping: Test with air at a pressure of not less than 10 psig for a minimum of 15 minutes with no perceptible drop in pressure.
- G. Testing Piping Systems (Drainage):
  - 1. Drainage Systems: Fill entire waste and vent system with water to level of highest vent. System shall hold water for two hours.

#### 3.04 FIELD QUALITY CONTROL

- A. Upon completion of installation of equipment, and after motor has been energized with normal power source, test equipment to demonstrate compliance with requirements. Where possible, field correct malfunctioning equipment, then retest to demonstrate compliance. Replace equipment which cannot be satisfactorily corrected.

#### 3.05 ADJUSTING AND CLEANING

- A. Start-up, test, and adjust furnaces and fans in presence of manufacturer's authorized representative.

#### 3.06 SPARE PARTS

- A. General: Furnish to Owner, with receipt, 1 spare set of belts for each belt driven fan.

END OF SECTION

## SECTION 15890

### DUCTWORK AND DUCTWORK ACCESSORIES

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections apply to work of this Section.
- B. Division 15 Basic Mechanical Materials and Methods Sections apply to work of this section.

##### 1.02 DESCRIPTION OF WORK

- A. Extent of ductwork is indicated on drawings and in schedules, and by requirements of this section.
- B. Extent of ductwork accessories as requirements of this section.
- C. External insulation of metal ductwork is specified in other Division 15 sections, and included as work of this section.
- D. Refer to other Division 15 sections for exterior insulation required of ductwork; not work of this section.
- E. Refer to other Division 15 sections for fans and air handling units; not work of this section.
- F. Refer to other Division 15 sections for testing, adjusting, and balancing of metal ductwork systems; not work of this section.

##### 1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's technical product data and installation instructions for ductwork materials and products.
- B. Shop Drawings: Submit scaled layout drawings of ductwork and fittings including, but not limited to, duct sizes, locations, elevations, and slopes of horizontal runs, wall and floor penetrations, and connections. Show interface and spacial relationship between ductwork and proximate equipment. Show modifications of indicated requirements, made to conform to local shop practice, and how those modifications ensure that free area, materials, and rigidity are not reduced.
- C. Record Drawings: At project closeout, submit record drawings of installed ductwork, and ductwork products, in accordance with requirements of Division 1.
- D. Maintenance Data: Submit maintenance data and parts lists for ductwork materials and products. Include this data, product data, shop drawings, and record drawings in maintenance manual; in accordance with requirements of Division 1.

##### 1.03 QUALITY ASSURANCE

- A. **Manufacturer's Qualifications:** Firms regularly engaged in manufacturer of ductwork products of types, materials, and sizes required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. **Installer's Qualifications:** Firm with at least 3 years of successful installation experience on projects with ductwork systems work similar to that required for project.
- C. **Codes and Standards:**
  - 1. **SMACNA Standards:** Comply with SMACNA's "HVAC Duct Construction Standards, Metal and Flexible" for fabrication and installation of ductwork.
  - 2. **ASHRAE Standards:** Comply with ASHRAE Handbook, Equipment Volume, Chapter 1 "Duct Construction," for fabrication and installation of ductwork.
  - 3. **NFPA Compliance:** Comply with NFPA 90A "Standard for the Installation of Air Conditioning and Ventilating Systems" and NFPA 90B "Standard for the Installation of Warm Air Heating and Air Conditioning Systems."

#### 1.04 DELIVERY, STORAGE, AND HANDLING

- A. **Protection:** Protect shop fabricated and factory fabricated ductwork, accessories and purchased products from damage during shopping, storage and handling. Prevent end damage and prevent dirt and moisture from entering ducts and fittings.
- B. **Storage:** Where possible, store ductwork inside and protect from weather. Where necessary to store outside, store above grade and enclose with waterproof wrapping.

### PART 2 - PRODUCTS

#### 2.01 DUCTWORK MATERIALS AND HARDWARE

- A. **Exposed Ductwork Materials:** Where ductwork is indicated to be exposed to view in occupied spaces, provide materials which are free from visual imperfections including pitting, seam marks, roller marks, stains and discolorations, and other imperfections, including those which would impair painting.
- B. **Sheet Metal:** Except as otherwise indicated, fabricate ductwork from galvanized sheet steel complying with ASTM A 527, lockforming quality, with G 90 zinc coating in accordance with ASTM A 525; and mill phosphatized for exposed locations.
- C. **Hardware - General:** Provide duct hardware, manufactured by 1 manufacturer for all items on project, for the following:
  - 1. **Test Holes:** Provide in ductwork at fan inlet and outlet, and elsewhere as indicated, duct test holes, consisting of slot and cover, for instrument tests.
  - 2. **Quadrant Locks:** Provide for each damper, quadrant lock device on one end of shaft; and end bearing plate on other end for damper lengths over 12". Provide extended quadrant locks and end extended bearing plates for externally insulated ductwork.
- D. **Hardware Manufacturer:** Subject to compliance with requirements, provide duct hardware of one of the following:
  - 1. Ventfabrics, Inc.

2. Young Regulator Co.

2.02 MISCELLANEOUS DUCTWORK MATERIALS

- A. General: Provide miscellaneous materials and products of types and sizes indicated and, where not otherwise indicated, provide type and size required to comply with ductwork system requirements including proper connection of ductwork and equipment.
- B. Fittings: Provide radius type fittings fabricated of multiple sections with maximum 15 deg. change of direction per section. Unless specifically detailed otherwise, use 45 deg. laterals and 45 deg. elbows for branch takeoff connections. Where 90 deg. branches are indicated, provide conical type tees.
- C. Duct Sealant: Non-hardening, non-migrating mastic or liquid elastic sealant, type applicable for fabrication/installation detail, as compounded and recommended by manufacturer specifically for sealing joints and seams in ductwork.
- D. Duct Cement: Non-hardening migrating mastic or liquid neoprene based cement, type applicable for fabrication/installation detail, as compounded and recommended by manufacturer specifically for cementing fitting components, or longitudinal seams in ductwork.
- E. Ductwork Support Materials: Except as otherwise indicated, provide hot-dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of ductwork.

2.03 FABRICATION

- A. Shop fabricate ductwork in 4, 8, 10 or 12 foot lengths, unless otherwise indicated or required to complete runs. Preassemble work in shop to greatest extent possible, so as to minimize field assembly of systems. Disassemble systems only to extent necessary for shipping and handling. Match mark sections for reassembly and coordinated installation.
- B. Shop fabricate ductwork of gauges and reinforcement complying with SMACNA "HVAC Duct Standards" for the pressure class of air handling system connected.
- C. Fabricate duct fittings to match adjoining ducts, and to comply with duct requirements as applicable to fittings. Except as otherwise indicated, fabricate elbows with center-line radius equal to associated duct width; and fabricate to include turning vanes in elbows where shorter radius is necessary. Limit angular tapers to 30 deg. for contracting tapers and 20 deg. for expanding tapers.
- D. Fabricate ductwork with accessories installed during fabrication to the greatest extent possible. Refer to Division 15 section "Ductwork Accessories" for accessory requirements.
- E. Fabricate ductwork with duct liner in each section of duct where indicated. Laminate liner to internal surfaces of duct in accordance with instructions by manufacturers of lining and adhesive, and fasten with mechanical fasteners.

2.04 FACTORY FABRICATED DUCTWORK

- A. General: At Installer's option, provide factory fabricated duct and fittings, in lieu of shop fabricated duct and fittings.

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- B. Material: Galvanized sheet steel complying with ASTM A 527, lockforming quality, with ASTM A 525, G90 zinc coating, mill phosphatized.
- C. Gauge: 28 gauge minimum for round and oval ducts and fittings, 4" through 24" diameter.
- D. Elbows: One piece construction for 90 deg. and 45 deg. elbows 14" and smaller. Provide multiple gore construction for larger diameters with standing seam circumferential joint.
- E. Divided Flow Fittings: 90 deg. tees, constructed with saddle tap spot welded and bonded to duct fitting body.
- F. Manufacturers: Subject to compliance with requirements, provide factory fabricated ductwork of one of the following:
  - 1. Semco Mfg., Inc.
  - 2. United Sheet Metal Div., United McGill Corp.

## PART 3 - EXECUTION

### 3.01 INSPECTION

- A. General: Examine areas and conditions under which metal ductwork is to be installed. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

### 3.02 INSTALLATION OF DUCTWORK

- A. General: Assemble and install ductwork in accordance with recognized industry practices which will achieve air tight (5% leakage for systems rated 3" and under; 1% for systems rated over 3") and noiseless (no objectional noise) systems, capable of performing each indicated service. Install each run with minimum number of joints. Align ductwork accurately at connections, within 1/8" misalignment tolerance and with internal surfaces smooth. Support ducts rigidly with suitable ties, braces, hangers and anchors of type which will hold ducts true to shape  
  
and to prevent buckling. Support vertical ducts at every floor.
- B. Inserts: Install concrete inserts for support of ductwork in coordination with formwork, as required to avoid delays in work.
- C. Field Fabrication: Complete fabrication of work at project as necessary to match shop fabricated work and accommodate installation requirements.
- D. Routing: Locate ductwork runs, except as otherwise indicated, vertically and horizontally and avoid diagonal runs wherever notations or, if not otherwise indicated, run ductwork in shortest route which does not obstruct usable space or block access for servicing building and its equipment. Hold ducts close to wall overhead construction, columns, and other structural and permanent enclosure elements of building. Limit clearance to 1/2" where furring is shown for enclosure or concealment of ducts, but allow for insulation thickness, if any. Where possible, locate insulated ductwork for 1" clearance outside of insulation. Wherever possible in finished and occupied spaces, conceal ductwork from view, by locating in mechanical shafts, hollow

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wall construction or above suspended ceilings. Do not encase horizontal runs in solid partitions, except as specifically shown. Coordinate layout with suspended ceiling and lighting layouts and similar finished work.

- E. Electrical Equipment Spaces: Do not run ductwork through transformer vaults and their electrical equipment spaces and enclosures.
- F. Penetrations: Where ducts pass through interior partitions and exterior walls, and are exposed to view, conceal space between construction opening and duct or duct insulation with sheet metal flanges of same gauge as duct. Overlap opening on 4 sides by at least 1-1/2". Fasten to duct and substrate.
  - 1. Where ducts pass through fire rated floors, walls, or partitions, provide firestopping between duct and substrate, in accordance with requirements of Division 7 Section "Firestopping"
- G. Coordination: Coordinate duct installations with installation of accessories, dampers, coil frames, equipment, controls and other associated work of ductwork system.
- H. Installation: Install ductwork in accordance with SMACNA "HVAC Duct Construction Standards."

### 3.03 INSTALLATION OF DUCTWORK ACCESSORIES

- A. Install ductwork accessories in accordance with manufacturer's installation instructions, with applicable portions of details of construction as shown in SMACNA standards, and in accordance with recognized industry practices to ensure that products serve intended function.
- B. Coordinate with other work, including ductwork, as necessary to interface installation of ductwork accessories properly with other work.

### 3.04 FIELD QUALITY CONTROL - LEAKAGE TESTS

- A. General: Test all positive and negative ductwork and plenums for air leaks as follows:
  - 1. Use portable high pressure blower and necessary test instruments.
    - a. Provide duct connections required for air flow pressure testing.
  - 2. Conduct tests as follows, and as recommended by AABC: "National Standards for Total System Balance", and ASHRAE: ASHRAE Handbook, 1991 HVAC Applications, Chapter 34, Testing Adjusting, and Balancing.
  - 3. Test before sections are concealed.
  - 4. Furnish signed reports of results of tests to Engineer.
  - 5. Total leakage allowable:
    - a. One percent of total operating CFM of system being tested.
    - b. Total leakage determined by summation of leakage from each section of the system tested.
  - 6. Repair air leaks as required and retest.
  - 7. Visually mark tested sections with certification stamp and initials of field test inspector.

### 3.05 ADJUSTING AND CLEANING

- A. Clean ductwork internally, unit by unit as it is installed, of dust and debris. Clean external surfaces of foreign substances which might cause corrosive deterioration of metal or, where ductwork is to be painted, might interfere with painting or cause paint deterioration.
- B. Temporary Closure: At ends of ducts which are not connected to equipment of air distribution devices at time of ductwork installation, provide temporary closure of polyethylene film or other covering which will prevent entrance of dust and debris until time connections are to be completed.
- C. Adjusting: Adjust ductwork accessories for proper settings.
  - 1. Label access doors in accordance with Division 15 section "Mechanical Identification."
  - 2. Final positioning of manual dampers is specified in Division 15 section "Testing, Adjusting, and Balancing."
- D. Balancing: Refer to other Division 15 section "Testing, Adjusting, and Balancing" for air distribution balancing of ductwork. Not work of this section. Seal any leaks in ductwork that become apparent in balancing process.

END OF SECTION 15890



SECTION 15990

TESTING, ADJUSTING, AND BALANCING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.
- B. Related Sections
  - 1. Other Division 15 Sections specify balancing devices and their installation, and materials and installations of mechanical systems.
  - 2. Individual Division 15 system sections specify leak testing requirements and procedures.

1.02 SUMMARY

- A. This section specifies the requirements and procedures for total mechanical systems testing, adjusting, and balancing. Requirements include measurement and establishment of the fluid quantities of the mechanical systems as required to meet design specifications, and recording and reporting the results.
- B. Test, adjust, and balance the following mechanical systems:
  - 1. All supply, return, outside air, and exhaust air systems.
  - 2. Verify temperature control system operation.

1.03 SUBMITTALS

- A. Agency Data: Submit proof that the proposed testing, adjusting, and balancing agency meets the qualifications specified below:
  - 1. Engineer and Technicians Data: Submit proof that the Test and Balance Engineer assigned to supervise the procedures, and the technicians proposed to perform the procedures meet the qualification specified below.
- B. Procedures and Agenda: Submit a synopsis of the testing, adjusting and balancing procedures and agenda proposed to be used for this project.
- C. Sample Forms: Submit sample forms, if other than those standard forms prepared by the AABC are proposed.
- D. Report Contents: Provide the following minimum information, forms and data:
  - 1. General Information and Summary: Inside cover sheet to identify testing, adjusting, and balancing agency, Contractor, Owner Architect, Engineer, and Project. Include addresses, and contact names and telephone numbers. Also include a certification sheet containing the seal and name, address, telephone number, and signature of the Certified Test and Balance Engineer. Include in this division a listing of the instrumentations used for the procedures along with the proof of calibration.

2. The remainder of the report shall contain the appropriate forms containing as a minimum, the information indicated on the standard report forms prepared by the AABC and NEBB, for each respective item and system. Prepare a schematic diagram for each item of equipment and system to accompany each respective report form.
- E. Calibration Reports: Submit proof that all required instrumentation has been calibrated to tolerances specified in the referenced standards, within a period of six months prior to starting the project.

#### 1.04 QUALITY ASSURANCE

- A. Agency Qualification: Employ the services of an independent testing, adjusting, and balancing agency meeting the qualifications specified below, to be the single source of responsibility to test, adjust, and balance the building mechanical systems identified above, to produce the design objectives. Services shall include checking installations for conformity to design, measurement and establishment of the fluid quantities of the mechanical systems as required to meet design specifications, and recording and reporting the results.
1. The independent testing, adjusting, and balancing agency certified by National Environmental Balancing Bureau (NEBB) or Associated Air Balance Council (AABC) in those testing and balancing disciplines required for this project, and having at least one Professional Engineer registered in the State of California, certified by NEBB or AABC as a Test and Balance Engineer.
- B. Codes and Standards:
1. NEBB: "Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems."
  2. AABC: "National Standards for Total System Balance."
  3. ASHRAE: ASHRAE Handbook, 1991 HVAC Applications, Chapter 34, Testing, Adjusting, and Balancing.

#### 1.05 PROJECT CONDITIONS

- A. Systems Operation: Systems shall be fully operational prior to beginning procedures.

#### PART 2 - PRODUCTS (Not Used.)

#### PART 3 - EXECUTION

##### 3.01 PRELIMINARY PROCEDURES FOR AIR SYSTEM BALANCING

- A. Before operating the system, perform these steps:
1. Obtain design drawings and specifications and become thoroughly acquainted with the design intent.
  2. Obtain copies of approved shop drawings of all air handling equipment, outlets (supply, return, and exhaust) and temperature control diagrams.
  3. Compare design to installed equipment and field installation.
  4. Walk the system from the system air handling equipment to terminal units to

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- determine variations of installation from design.
- 5. Check filters for cleanliness.
- 6. Check dampers (both volume and fire) for correct and locked position, and temperature control for completeness of installation before starting fans.
- 7. Prepare report test sheets for both fans and outlets. Obtain manufacturer's outlet factors and recommended procedures for testing. Prepare a summation of required outlet volumes to permit a cross check with required fan volumes.
- 8. Determine best locations in main and branch ductwork for most accurate duct traverses.
- 9. Place outlet dampers in the full open position.
- 10. Prepare schematic diagrams of system "record drawing" ductwork and piping layouts to facilitate reporting.
- 11. Lubricate all motors and bearings.
- 12. Check fan belt tension.
- 13. Check fan rotation.

### 3.02 MEASUREMENTS

- A. Provide all required instrumentation to obtain proper measurements, calibrated to the tolerances specified in the referenced standards. Instruments shall be properly maintained and protected against damage.
- B. Provide instruments meeting the specifications of the referenced standards.
- C. Use only those instruments which have the maximum field measuring accuracy and are best suited to the function being measured.
- D. Apply instrument as recommended by the manufacturer.
- E. Use instruments with minimum scale and maximum subdivisions and with scale ranges proper for the value being measured.
- F. When averaging values, take a sufficient quantity of readings which will result in a repeatability error of less than 5 percent. When measuring a single point, repeat readings until 2 consecutive identical values are obtained.
- G. Take all reading with the eye at the level of the indicated value to prevent parallax.
- H. Use pulsation dampeners where necessary to eliminate error involved in estimating average of rapidly fluctuation readings.
- I. Take measurements in the system where best suited to the task.

### 3.03 PERFORMING TESTING, ADJUSTING, AND BALANCING

- A. Perform testing and balancing procedures on each system identified, in accordance with the detailed procedures outlined in the referenced standards.
- B. Retest, adjust, and balance systems subsequent to significant system modifications, and resubmit test results.

### 3.04 RECORD AND REPORT DATA

- A. Record all data obtained during testing, adjusting, and balancing in accordance with, and

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on the forms recommended by the referenced standards, and as approved on the sample report forms.

- B. Prepare report of recommendations for correcting unsatisfactory mechanical performances when system cannot be successfully balanced.

END OF SECTION 15990

## SECTION 16010

### ELECTRICAL GENERAL PROVISIONS

#### PART 1 – GENERAL

##### 1.1 SUMMARY

- A. All of the work required to be provided as described in this Division 16, Section 16010 of the specifications shall be provided by sub-contractors skilled in this specialty, holding a valid C-10 California contractor's license and certified by the State of California.

##### 1.2 SCOPE

- A. Provide labor, materials, and accessories required to install, test and place into operation the complete electrical system as called for in the Contract Documents, and in accordance with applicable codes and regulations.
- B. Labor, materials or accessories not specially called for in the Contract Documents, but required to provide complete operating electrical system shall be provided without additional cost to the City.

##### 1.3 SUBMITTALS

- A. General: Submittals shall be furnished by Contractor for each device, equipment, conduits, conductors and cables, intended to be used on the project. Submit material list within 2 weeks of Notice to Proceed and obtain review, prior to submission of manufacturer's data and shop drawings.
- B. Submittals: Piecemeal submittals will not be acceptable. Submit in brochure form with all listings referenced to applicable sections and paragraphs in the specifications. Listing all items "as specified" without both name of manufacturer and model number or type (designation) is not acceptable.
- C. Material List: Contractor shall submit a complete list of materials and equipment proposed for the project including which is exactly as specified. List to contain only one (1) manufacturer's name and reference to applicable sections and paragraphs of the specifications. List shall be submitted within two (2) weeks of issue of Notice to Proceed. Any material or equipment installed without written approval shall be subject to immediate removal.

##### 1.4 QUALITY ASSURANCE AND STANDARDS

- A. Comply with latest editions of applicable codes, ordinances, regulations and standards of:
  - 1. Insulated Cable Engineers Association (ICEA).
  - 2. Institute of Electrical and Electronics Engineers (IEEE).

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3. National Electrical Manufacturers Association (NEMA).
  4. American National Standards Institute (ANSI).
  5. National Bureau of Standards (NBS).
  6. American Society for Testing and Materials (ASTM).
  7. Underwriter's Laboratories (UL).
  8. California Code of Regulations (Titles 8, 19, 22, 24).
  9. National Electrical Code (NEC).
  10. National Electrical Safety Code (NECS).
  11. National Electrical Testing Agency (NETA).
- B. Where requirements differ, the more stringent shall apply. Should any change in drawings or specifications be required to comply with governing regulations, notify the City's Representative prior to submitting bid.
1. Proof of compliance shall be submitted to the City's Representative for approval.
- C. Installer Qualifications: A qualified Installer certified by the State of California
- D. All materials and equipment shall be of new and manufactured within twelve (12) months of installation unless otherwise indicated and supplied by manufacturer's authorized distributors. Reconditioned or used equipment shall not be permitted.
- E. All materials and equipment shall bear the inspection label of the Underwriter's Laboratories (UL) where applicable. Materials and equipment shall be the latest standard product and shall be of the grade indicated by the trade names given.
- F. If a material and equipment with UL listing is not available from any manufacturer, Contractor shall furnish materials and equipment tested and listed by a reputable independent testing organization acceptable to the University.
- G. American made products have been acceptable to the City. If non-domestic products are submitted, notice is hereby given that extensive testing shall be required to insure quality and conformance to the Specifications. Testing shall be done by a recognized lab, acceptable to the University, and all tests shall be witnessed by City personnel. All testing procedures and test results shall be satisfactory to the City.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. General
1. The drawings show general arrangement of equipment and appurtenances. Follow these drawings as closely as the actual construction will permit. Provide all offsets, fittings, and accessories required but not shown on drawings

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2. The locations of panels and other equipment indicated on drawings are approximate location only. Revision and coordination may be necessary at the time the equipment is installed in order to meet field conditions or other coordination. Such revisions will be done with no additional cost to the City and with the approval of City's Representative.
  3. Examine and compare the contract drawings with contract specifications and report any discrepancies to City Representative. Obtain written approval from the City prior to start of work.
- B. **Underground Construction:**
1. The work shall proceed in a systematic manner so that a minimum of inconvenience to facility operations and traffic flow will result during the course of construction. Work crews shall confine operations to as small a length of work area per crew as practical. All parking lots and fire lanes shall be accessible at all times. As part of the construction schedule to be submitted, the Contractor shall submit a schedule that includes when and where work will occur in each area of the park.
- C. **Electrical Phasing and Phase Rotation**
1. The Contractor shall maintain the present phasing and phase rotation at the facility. All new feeders being installed shall be checked and tagged for the proper phasing and phase rotation before connections to existing feeders and facilities.
  2. After phasing and rotation checks, existing and new cables shall be tagged with the proper phase nomenclature.
- D. **Electrical Service outages:**
1. There shall be no interruption of existing electrical service without prior approval by the City's Representative. Written notice of proposed utility outages shall be delivered to the City's Representative at least fourteen (14) days prior to the start of the proposed outage. The interruption of electrical service shall be scheduled outside the normal working hours (scheduled between 5:00 pm - 7:00 am Monday - Friday, or Saturday, Sunday, and Holidays) at a date and time convenient to the City.
  2. The Contractor shall be responsible for all the related work that may be required to provide continued electrical service. The Contractor shall be responsible for the sequencing of all work including, but not limited to, installation of new electrical lines, and interfacing between new and existing lines to ensure uninterrupted service.

### **3.2 SEISMIC ANCHORAGE**

- A. All free standing electrical equipment shall be anchored to withstand seismic forces in this area.
- B. Conduit supports shall be adequately sized and braced to comply with seismic criteria.

### **3.3 CLEANING AND REPAIR**

- A. Vacuum clean the interiors of all panelboards upon completion of all work to remove dust and debris. After cleaning, cover all equipment to prevent any construction dust from recurring. Before equipment is energized, vacuum all interiors a second time to assure clean equipment.

**END OF SECTION**



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## SECTION 16050

### BASIC ELECTRICAL REQUIREMENTS

#### PART 1 - GENERAL

##### 1.1 SCOPE

- A. The provisions of this section are general and are intended to apply to the electrical work in all sections of these specifications to govern quality of design, fabrication, workmanship, operation and function of materials, equipment and appurtenances to be furnished and installed for all the electrical work specified.
- B. The Contractor shall furnish all labor, materials, equipment and appurtenances necessary for the complete and satisfactory installation and operation of the electrical systems as shown on the drawings and specified herein.
- C. The Contractor shall also meet requirements specified in the General Requirements and the Special Provisions for electrical work, such as operating and maintenance manuals, warranty, shop and working drawings, spare parts, etc.
- D. Throughout the specifications, types of materials may be specified by manufacturer's name and catalog number in order to establish standards of quality and performance and not for the purpose of limiting competition. Alternate methods and/or materials may be submitted to the Engineer for consideration. Those judged to be equal to that specified, may receive written approval.
- E. Throughout the specification material identified in singular or plural tense shall be recognized as either singular or plural. Refer to drawings for exact number of items.

##### 1.2 COORDINATION

- A. The Contractor shall examine all other sections of these specifications and drawings to determine the complete scope of the electrical work and coordinate all of the electrical work required for the entire project. The Contractor shall provide the correct electrical service to each piece of electrical equipment whether or not shown on the drawings, and check and coordinate the required electrical service and controls with the actual equipment provided under the other sections of the project.

##### 1.3 INTERPRETATION OF DRAWINGS

- A. The drawings show the general layout of the electrical systems and indicate approximate locations of outlets, apparatus and equipment. The runs of feeders and branches as shown on the drawings are schematic only and are not intended

to show the exact routing and location of conduits and conduit termination. The final determination as to routing, location and termination shall be governed by structural conditions, obstructions and job conditions. This shall not be construed to mean that the design of the system may be changed without written approval of the Engineer; it merely refers to the exact run of raceways and the exact placement of outlets, etc. It shall be the Contractor's responsibility to obtain all shop drawings affecting conduit locations before installation. The Contractor shall consult all contract drawings and specifications which may affect the location of any outlet, piece of equipment or conduit run, to avoid improper locations of such items and to avoid interference with other trades.

#### **1.4 RELATED DOCUMENTS**

- A. The drawings and the general provisions of the Contract, including the General and Supplementary Conditions and other Division 1 Specification Sections, apply to the work of this section.
- B. The related mechanical drawings and Division 15 Specification Sections.
- C. All Division 16 specifications and Electrical drawings and all related drawings.

#### **1.5 QUALITY ASSURANCE**

- A. The Contract Drawings and Specifications establish the "Minimum Standard of Quality" each product and/or system must meet to be considered acceptable. Products of other manufacturers will be considered if the product and/or system meet or exceed the "Minimum Standard of Quality" established by this Contract Document.
- B. All work and materials shall be in full accordance with applicable requirements of public authorities having jurisdiction and utilities furnishing services. Nothing in the plans or specifications shall be construed as permitting work that is not in conformance with any and all applicable codes or regulations. Codes governing this work include but are not limited to the latest approved edition of the following:
  - 1. City of Ventura Electrical Code
  - 2. California Electrical Code (CEC) CCR Title 24 Part 3
  - 3. California Energy Commission – CCR Title 24 Part 6 Energy Code
- C. Requirements of codes and regulations shall be considered a minimum. Where contract documents exceed these minimums without violating code and regulation requirements, the contract documents shall take precedence. Where codes conflict, the more stringent shall apply.
- D. The Contractor shall furnish all materials and labor required for compliance with codes and regulations, even though not specifically mentioned or shown.

- E. Should any changes be necessary in the drawings or specifications to make the work comply with these requirements, the Contractor shall notify the Engineer for review and direction before proceeding with the work.
- F. **Permits and Certificates:** Contractor shall apply for and obtain all necessary permits and certificates, including the certificate of final inspection and approval of the authorities having jurisdiction. All expenses inherent to such permits and inspections shall be borne solely by the Contractor. Upon completion of the entire electrical work, the Contractor shall present to the Owner all certificates of inspection and approval required by the local and national authorities.
- G. **Manufacturer's Certificate:** The Contractor shall furnish the Engineer with the manufacturer's certificate for equipment (indicated in the relevant section) stating that the equipment has been installed under either the continuous or periodical supervision of the manufacturer's authorized representative, that it is operating in accordance with the specified requirement of the manufacturer, and that the equipment warranty is in effect.
- H. **Authorized Representative:** As related to his obtaining the Manufacturer's Certificates, the Contractor shall include in his contract price the cost of furnishing competent and experienced engineers or superintendents who shall represent installers under this contract to assist the Contractor or when required by another section, to install, adjust and test the equipment in conformity with the contract documents. Before the equipment is placed in permanent operation for the Owner, such engineers or superintendents shall make all adjustments and tests as required to prove that such equipment is in proper and satisfactory operating condition, and meets the requirements for issuing the "Manufacturer's Certificates".

## 1.6 REFERENCE STANDARDS

- A. Materials and workmanship shall conform to the editions of the following standards, codes, or specifications in effect on the date of this specification, unless otherwise specified.

### Codes and Regulations of the Jurisdictional Authorities

CEC	California Electrical Code - Latest edition.
NEMA	National Electrical Manufacturers Association - applicable standards
IEEE	Institute of Electrical and Electronics Engineers - applicable standards
ANSI	American National Standards Institute - applicable standards
IES	Illuminating Engineering Society

UL	Underwriter's Laboratories, Inc. - applicable standards
NESC	National Electrical Safety Code
IPCEA	Insulating Power Cable Engineers Association
ASTM	American Society of Testing and Materials.
AASHTO	American Association of State Highway and Transportation Officials.
AWG	American Wire Gauge
EPA	Environmental Protection Agency
CSA	Computer Society of America
FAA	Federal Aviation Administration
FCC	Federal Communication Commission
FM	Factory Mutual Association
FS	Federal Specification
FIPS	Federal Information Processing Standard
ICEA	Insulated Cable Engineers Association
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards

- B. UL Label: All electrical materials and equipment falling within the scope of the underwriter's standards shall bear the UL Label.
- C. Conflicts: Where the requirements of any authorities mentioned above are in conflict with the contract drawings and/or specifications, the matter shall be brought to the attention of the Engineer, who will render a decision to reconcile such conflict.

## 1.7 DEFINITIONS

For the purpose of this contract, the following terms and their derivative forms shall be accorded the meanings assigned below:

- A. Specified: Unless otherwise stated, as required by the specification.

- B. Shown: Unless otherwise specified, as shown on the contract drawings.
- C. Approved: Unless otherwise specified, as approved by the Engineer.
- D. Directed: Unless otherwise specified, as directed by the Engineer.
- E. Engineer: Authorized representative of the owner.
- F. Jurisdictional Authorities: State, Federal and Local authorities or agencies thereof having jurisdiction over work to which reference is made.
- G. Work: Labor, supervision, services, materials, machinery, equipment, tools, supplies and facilities to accomplish the requirements of the contract.
- H. Provided: Furnished installed complete in place and successfully tested to demonstrate satisfactory operation.
- I. Submit: Unless otherwise specified, transmit to the Engineer for approval, information.
- J. Shall: Indicates action that is mandatory on the part of the contractor.
- K. Will: Indicates probable action by the owner or its representatives.
- L. May: Indicates permissible action.
- M. Including: Introduces a partial, representative listing of things or actions.
- N. Consisting of: Introduces a complete listing of things and actions that constitute the whole.
- O. Article: An element of the specifications bearing its own alphanumeric designation.

## **1.8 TECHNICAL REFERENCES**

- A. When reference is made to codes, regulations, reference standards and specifications, the work shall conform to the edition current as of the date of receipt of bids, unless otherwise specified.
- B. Where reference standards and specifications conflict with Contract requirements, the Contract requirements shall govern.

## **1.9 PROJECT CLOSEOUT**

- A. At the completion of the project, and before final payments can be made, the Electrical Contractor shall turn the following items over to the Engineer;

1. Two copies of complete, bound operating and maintenance manuals.
2. Any and all signed off electrical inspection notices.
3. Annotated electrical punch list(s) indicating that all items have been addressed, and completed to the satisfaction of the Electrical Engineer.
4. Copy of a transmittal indicating that spare fuses, lamps, keys, and special tools have been turned over to the owner, in full accordance with the requirements of other following sections of these specifications.
5. Two bound copies of any and all certified test reports prepared by Third Parties (i.e. grounding, GFI tests, light fixture aiming adjustments, etc) as required by other sections of these specifications.

## **1.10 GUARANTEE**

- A. All work shall be guaranteed for a minimum period of one year from either the official date of completion or from the official date of acceptance by the Owner whichever is the later date.
- B. Certain items shall be guaranteed for a longer period, as stated in the specification for those items.
- C. Should any problem occur with the installation during this warranty period due to defective material, faulty workmanship, or noncompliance with plans, specifications, codes, or directions of the Owner, Engineer, Engineer or Inspector the Contractor shall furnish all necessary labor and materials to correct the problem without additional charges.

## **1.11 POSTED OPERATING INSTRUCTIONS**

- A. Furnish approved operating instructions for systems and equipment indicated in the technical sections for use by operation and maintenance personnel. The operating instructions shall include wiring diagrams, control diagrams, and control sequence for each principal system and equipment.
- B. Print or engrave operating instructions and frame under approved laminated plastic. Post instructions as directed. Attach or post operating instructions adjacent to each principal system and item of equipment describing startup, proper adjustment, operation, lubrication, shutdown, safety precautions, procedures in the event of equipment failure, and other items of instruction as recommended by the manufacturer of each system or piece of equipment.
- C. Provide weather-resistant materials or weatherproof enclosures for operating instructions exposed to the weather. Operating instructions shall not fade when exposed to sunlight and shall be secured to prevent easy removal or peeling.

## **1.12 INSTRUCTION TO PERSONNEL**

- A. Where indicated in the technical sections, furnish the services of competent instructors to give full instruction to personnel in the adjustment, operation, and maintenance of systems and equipment, including pertinent safety requirements as required. Each instructor shall be thoroughly familiar with all parts of the installation and shall be trained in operating theory as well as practical operation and maintenance work.
- B. Instruction shall be given during the first regular workweek after the equipment or system has been accepted and turned over the owner for regular operation. The number of man-days (8 hours) of the instruction furnished shall be as specified in each individual section.
- C. User staff and maintenance personnel shall be thoroughly trained (minimum of 4 hours) in the use of each system of major piece of equipment installed. This training shall be provided as a part of the Contractors bid to supply the system or



equipment. Additional training requirements shall be as specified in the subsequent sections of Division 16 specifications.

### **1.13 SEQUENCING AND SCHEDULING OF WORK**

- A. The Contractor shall coordinate his work with the work of the other trades, so that the work may proceed as expeditiously as possible.
- B. The Contractor shall check the drawings against the drawings of other trades to avoid conflicts.
- C. The Contractor shall give ten (10) working days written notice to the Owner or his designated representative for the following stages of work.
  - 1. Above ceiling examination after setting of all interior distributing equipment, luminaries and wiring device outlets.
  - 2. Final examinations after all systems are installed and connected but prior to final field testing and setting of devices.

### **1.14 ELECTRICAL CHARACTERISTICS**

- A. Electrical characteristics for this project are 480Y/277volts, three phase, 4 wire, 60 hertz, with transformation down to 208Y/120 volts, three phase, 4-wire, 60 hertz for associated distribution.

### **1.15 INTERRUPTION OF SERVICE**

- A. Coordinate the interruption of electric service(s) with the utility and the Owner. Provide temporary power where required to continue the electric service during power outage.

### **1.16 JOB CONDITIONS**

- A. Existing Conditions: Prior to submitting the bid, the contractor shall examine the site(s) and existing facilities and compare them with the drawings and specifications with respect to the conditions of the premises, location of and / or connection of existing facilities and any obstructions which may be encountered and conduct its work to minimize disruptions to existing conditions. The costs for making changes to or adjusting to the conditions are the responsibility of the contractor.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. All material shall be new. Material shall be catalogued by the Manufacturer as suitable for its application for this project. All similar items of a specific type or

**BASIC ELECTRICAL REQUIREMENTS**  
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general classification shall be by the same manufacturer to ensure uniformity and consistent standards.

- B. Materials and equipment shall be current products by manufacturers regularly engaged in the production of such products. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The 2-year period shall be satisfactorily completed by a product for sale on the commercial market through advertisements, manufacturers' catalogs, or brochures. Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturers' factory or laboratory tests, is furnished. The equipment items shall be supported by service organizations, which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.
- C. Where installation procedures or any part thereof are required to be in accordance with manufacturer's recommendations, furnish printed copies of the recommendations prior to installation. Installation of the item shall not proceed until recommendations are received. Failure to furnish recommendations shall be cause of rejection of the equipment or material.

## **2.2 NAMEPLATE INSTALLATION**

- A. Nameplates shall describe the motor or equipment functions and give the circuit number, voltage, etc.
- B. All other electrical appurtenances, switches, outlets, fixtures, pull boxes, etc., except conduit shall be labeled with the appropriate circuit number such as L-4 or P-5.
- C. All pilot control switches, indicating lights and other pilot control devices shall be provided with oversized legend plates showing each switch position or device function.
- D. Provide laminated plastic nameplates for each panelboard, equipment enclosure, relay, switch, and device. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 0.125-inch thick, and white with black center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the black core. Minimum size of nameplates shall be 1.0 inch by 2.5 inches. Lettering shall be a minimum of 0.25-inch high normal block style.

## **2.3 WIRE/CONDUCTOR MARKING**

- A. Provide permanent wire markers at both ends of every phase and neutral conductor in all switches, receptacles, pull-box, and junction box. The marker

shall clearly indicate the respective circuit number(s). Markers shall be Brady or approved equal.

#### **2.4 FIRE RESISTANT FOAM SEALANT**

- A. Sealant shall be Chase-Foam CTC PR-855 a silicone fire retardant foam that is waterproof and will prevent the spread of toxic gases and smoke through openings.

B. Sealant characteristics shall be as follows:

Flame Spread Rating	20
Full Contribution Factor	20
Service Temperature Range	-50 degrees to +450 degrees F
Minimum Fire Withstand Temperature	2000 degrees F
Dielectric Strength	160 Volts/mil
Hour Fire Rating Thickness	4 inches

## 2.5 FIRE RATED PATHWAYS

A. Fire-rated pathways shall contain a UL classified built-in fire sealing system sufficient to maintain the hourly fire rating of the barrier being penetrated. The self-contained sealing system shall automatically adjust to the installed cable loading and shall permit cables to be installed, removed, or retrofitted without the need to remove or reinstall firestop materials. The pathway shall meet the requirements of ASTM E814 (UL 1479). Acceptable manufacturers: Specified Technologies, Inc. EZ Path or approved equivalent.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. All work shall be in conformance with recognized practices of the National Electrical Contractors Association (NECA) Standards of Installation.
- B. Each and every penetration through a fire rated floor or wall shall be constructed to maintain the fire resistive nature of the structure. The method shall be UL classified and meet CEC Article 300.21
- C. Openings around pipes or conduits shall be filled with a minimum of 4 Inches of foam sealant. Provide a fiber damming material one (1) inch thick in void spaces as required. Trim the excess foam from openings flush with walls and floors.
- D. Barrier penetrations consisting of open cable bundles for all low voltage systems, including but not limited to telephone, data, intercom, security, card access, energy management, CATV and lighting control networks shall utilize an enclosed fire-rated pathway wherever said cables penetrate fire-rated walls, floors and ceilings. Multiple units shall be ganged where necessary to provide the specified capacity.
- E. The Contractor shall cooperate with all trades in providing information at the proper times regarding openings required in walls, slabs, and footings for conduit and equipment installation.
1. The Contractor shall perform all cutting and patching of construction work, which may be required for the proper installation of the electrical work. All patching shall be of the same materials, workmanship, and finish as, and shall accurately match all surrounding work.

2. All work shall be done under the Owner's instructions, and, when so required, by the trade which performed the original work.
- F. Electric outlets, devices and equipment furnished by disciplines under the scope of this project shall be installed and fully connected to the electric circuits.
1. The Contractor shall furnish the necessary flexible conduit, connectors, cords, and other equipment that may be required for the proper connection of equipment.
  2. The Contractor shall furnish and install conduit, wiring, and connections required by the heating ventilating and air conditioning system for line and low voltage devices as required.

### **3.2 LOCATIONS AND DIMENSIONS**

- A. Install all material and equipment in such a manner as to avoid obstructions, preserve clearances, maintain code spacing and keep openings and passageways clear.
- B. The drawings are diagrammatic to the extent that many offsets, bends, fittings and exact locations are not shown. The Contractor shall determine the best methods, exact locations and routes for his installation and note any conflicts or obstructions. The locations shown for conduits, outlets, materials and equipment may be refined to meet the Engineerural, structural and mechanical conditions with the approval of the Owner. Where dimensions are shown, they shall be adhered to as closely as practicable.
- C. Where apparatus and equipment is shown to scale or dimensioned on the drawings, dimensions have been taken from typical equipment of the general class indicated. The Contractor shall carefully verify that the material and equipment he plans to install will fit into the spaces provided and those proper clearances will be maintained. The Contractor shall assume full responsibility for the fitting of his materials and equipment to other equipment and to the structure.
- D. Mounting heights shown are from finished floor to middle of wall mounted outlet boxes and from finished floor to bottom of suspended fixtures unless otherwise indicated.
- E. Review pertinent drawings and adjust the work to conditions shown. Where discrepancies occur between drawings and specifications notify the Owner immediately for his interpretation prior to submitting bid.

### **3.3 FIELD TEST AND/OR OPERATIONAL CHECK**

- A. General Scope:
1. Perform field tests and operational checks to assure that all electrical equipment, both contractor and Owner supplied, is operational within industry and manufacturer's tolerances and is installed in accordance with design specifications.

2. The tests and operational checks shall determine the suitability for energization.
  3. Schedules test and give a minimum of two weeks advance notice to the Engineer/Owner.
- B. Independent Testing Agency:
1. Where indicated hereinafter in this Specification, the tests and/or operational checks shall be performed by a recognized independent testing agency engaged and paid for by the Contractor.
  2. The testing agency shall meet federal OSHA criteria for accreditation of testing laboratories, Title 29, Part 1907. Membership in the National Electrical Testing Association constitutes proof of meeting such criteria.
  3. The testing agency shall have a calibration program which maintains all applicable test instrumentation within rated accuracy. The accuracy shall be traceable to the National Bureau of Standards in an unbroken chain. Instruments shall be calibrated in accordance with the following frequency schedule.
    - a. Field Instruments: 6 months maximum.
    - b. Laboratory Instruments: 12 months.
    - c. Leased specialty equipment: 12 months. (Where accuracy is guaranteed by leaser, i.e. Doble).
    - d. Dated calibration labels shall be visible on all test equipment.
  4. The testing agency shall be responsible for implementing all final settings and adjustments on protective devices in accordance with the Engineer's specified values, or as recommended in the device coordination study.
- C. Test Reports:
1. Submit three copies of the completed report to the Engineer no later than fifteen (15) days after completion of the tests unless directed otherwise. The test reports shall be bound and its contents certified.
  2. Submit one copy of all reports for review by the Engineer and Owner within 48 hours of test or inspections. If a test fails, indicate on subsequent reports the corrective action taken to meet the requirements of the specification.
  3. The test report shall include the following:
    - a. Summary of project.
    - b. Description of equipment tested.
    - c. Description of test.
    - d. List of test equipment used in calibration and calibration date.
    - e. Test results.
    - f. Conclusions and recommendations.
    - g. Appendix, including appropriate test forms.
    - h. Certification that work meets or exceeds manufacturers standards.
    - i. Certification on cleanliness and tightness.
- D. Failure to Meet Test:
1. Any system material or workmanship, which is found defective on the basis of performance tests, shall be reported directly to the Engineer.

2. Contractor shall replace the defective material or equipment and have tests repeated until the test proves satisfactory, without additional cost to the Owner.
- E. Field test and/or operational checks shall apply to the following Division 16 Sections:
1. Wires and Cables
  2. Receptacles & light switches/circuiting

### **3.4 DEMONSTRATIONS**

- A. All defective material and workmanship discovered as the result of tests required in other portions of these Specifications shall be corrected at no additional cost to the owner.
- B. It shall be shown by demonstration in service that all circuits and devices are in good operating condition. Tests shall be such that each item of control equipment shall be tested not less than five (5) times.
- C. See relevant sections of Division 16 for additional requirements.

### **3.5 PROTECTION**

- A. The Contractor shall protect all work, materials and equipment from damage, and shall provide adequate and proper storage facilities during the progress of the work. The Contractor shall provide for the safety and good condition of all work until final acceptance by the Owner, and shall replace all damaged or defective work, materials, and equipment before requesting final acceptance.
- B. The Contractor shall be held responsible for the protection and correction of the work of all trades from smears, splashes, stains or damages that might occur during the process of his work.

### **3.6 NAMEPLATE MOUNTING**

- A. Mounting shall be cadmium plated machine screws into drilled and tapped holes to meet NEMA 4 standards. Screws shall not protrude more than 1/8 " through the metal surface.

### **3.7 PAINTING OF EQUIPMENT**

- A. Electrical equipment shall have factory-applied painting which shall, as a minimum, meet the requirements of NEMA and ANSI.
- B. Touch up electrical equipment to match factory finish in color and texture.

**END OF SECTION**

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## SECTION 16060

### OPERATION AND MAINTENANCE MANUALS

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. The Contractor shall furnish to the Engineer Operation and Maintenance Manuals as specified herein for each item of the Contract furnished equipment for which O & M Manuals are required.

##### 1.2 QUALITY ASSURANCE

- A. Reference Codes and Specifications: No current commercial specifications or documents will apply or form a part of this specification section.

##### 1.3 SUBMITTALS

1. Within 30 days after approval of specified equipment by the Engineer, the Contractor shall submit two preliminary copies of the O & M manual to the Engineer for approval.
2. Related manuals (covering equipment within a single specification section) may be combined into a common binder.
3. The Engineer will review the Manuals and will return one copy to the Contractor, with such review noted, within 30 days from date of receipt. The returned copy will be identified with the O & M manual number to be used on the final manual.
4. Printing of the final O & M manuals shall be withheld until the preliminary manuals have been approved.
5. When a manual is approved "subject to correction or comments", the manual need not be resubmitted for approval after correction unless the Contractor is specifically so advised.
6. Six copies of each final service manual shall be furnished within 30 days after approval of the preliminary manual.

#### PART 2 - PRODUCTS

##### 2.1 FORMAT

- A. All test sheets in the manual shall be 8-1/2 x 11 inches and shall have the necessary holes punched in the long side to permit correct insertion in the standard binder described. Text sheets shall be printed on white 80 pound offset paper.
- B. The process used for printing all test and drawings shall be such that the final product shall be of a permanent nature. Sepia, ozalid, blueprint, thermofax or a



similar process is not acceptable. All drawings or illustrations shall be black on white paper to facilitate reproduction by standard black and white copiers.

- C. All prints and exploded views of the equipment shall be 11 inches high, with width determined by the information provided. Prints shall be folded length-wise so that they are 8-1/2 x 11-inches in size to match the other sheets of the manual and shall have a reinforced left-hand edge for binding. Reduced size drawings must have one-eighth inch minimum, legible numbers and letters. Prints shall be folded so that the title can be read without unfolding them.
- D. All prints shall be made with a black 8-1/2 inch fly leaf so that the print can be unfolded and read with service manual text pages open. Prints shall be folded so that they may be readily unfolded in the manual without any of the print obscured by the binding.
- E. In the event that the Engineer determines that the required prints cannot practicably be made clear and legible in 8-1/2 x 11 inches format or an 11 inch by reasonable width format, larger drawings shall be provided. These prints shall be folded in a manner so that the document information is visible and identifiable from the outer leaf. Such prints shall have individual insert pockets with reinforced binding attachments, with the document information labeled on the outside of the pocket.

## **PART 3 - EXECUTION**

### **3.1 CONTENTS**

- 1. Unnecessary information, advertising and theoretical data not directly pertaining to the equipment being supplied shall not be included.
- 2. Insertion of entire standard catalogs are not acceptable, but individual catalog sheets, which otherwise meet the requirement of this section, are acceptable.
- 3. O & M manuals shall contain complete and detailed operating, maintenance and repair instructions in sufficient detail to allow journeyman mechanics and Plant operators to adjust, operate, maintain and repair all components of the equipment, and to order all parts, without consultation with the manufacturer or his representative.
- 4. The contents and arrangement of each manual shall be as follows:
  - a. Each section of a manual shall be separated from others by rigid dividers with a projecting tab to identify each.
  - b. The first page of the manual shall be printed with the information and in the same format as shown on the Service Manual First Page included at the end of this Section.
  - c. Page numbers, schedules, tables, etc., shall be typed. Hand lettering is not acceptable. Separate pages are required for each table, schedule, parts list, and preventative maintenance task. Page numbering shall consist of the section number followed by a hyphen and the page number within that section of the manual. Arrows which identify specific items of equipment or referenced

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items shall be made by stamp or be of drafted quality; hand drawn arrows are not acceptable.

- d. The first section of a manual shall include a table of contents which includes identification of text pages by section. Each text page shall be numbered and identified in the table of contents. The table of contents shall also contain a drawing list indicating title, drawing number and page number. The table of contents shall list each page in the manual, numbered in consecutive order.
- e. The first or introductory section of the manual, titled "General Information for O & M, shall include all general instructions, a description of the equipment and how it functions, and shall provide all information necessary for identification and normal operation. This section may include general assembly drawings, sections, and depict and properly identify the equipment. The material provided shall indicate the dimensions, weight, capacity and design conditions for the equipment.
- f. The second section of the manual (or of each section of the manual if the manual covers a multi-component equipment system), titled "Detailed Installation, Maintenance, Calibration and Repair Information", shall contain detailed information, drawings, procedures and guides to allow for the proper installation, calibration, testing, PM and CM maintenance procedures. The installation subsection shall contain all the drawings or schematics necessary to properly assemble and install the equipment including alignment, clearances, tolerances and interfacing equipment requirements. It shall denote by trade the skill level required to install the equipment, any special rigging required to place the equipment in place, and any special test equipment required to place the equipment in service. It shall include a safety subsection which shall address all safety and tag-out procedures necessary to safely operate and maintain the equipment. It shall contain a subsection which shall contain actual operational startup and testing procedures and data obtained, recorded, and submitted, denoting test method, test equipment used and the procedure used. The Contractor shall submit startup and testing forms for the Engineer's approval. The Corrective Maintenance (CM) subsection shall also contain a separate complete list of parts, and the part numbers shall be included with a cross-reference to other manufacturer(s) or supplier(s) of the same type of interchangeable component or product.
- g. The third section of the manual (or of each section of the manual if the manual covers a multi-component equipment system), titled "Diagrams and Schematics", shall cover all necessary diagrammatic wiring diagrams and miscellaneous necessary drawings and equipment. Lettering shall be typed or printed; hand lettering is not acceptable.
- h. The fourth section of the manual (or of the component section), titled "Warranties Guaranties and Spare Parts", shall include all of the construction contractors' warranty information. This shall include effective warranty dates. This section also shall include a list of all spare parts (including stock numbers and parts

numbers), spare equipment, tools, materials, etc., that are turned over to the Owner by the Contractor and shall indicate where these items are located.

- i. The fifth section of the manual shall be set aside for the insertion of all field testing records for the equipment. At the completion of field testing, this information shall be submitted with the appropriate unit I.D. and service manual numbers on each sheet of the test data.
- j. The sixth and final section of the manual shall include all equipment data sheets as required and furnished by owner.
- k. For all service manuals submitted for field assembled equipment such as electrical systems (e.g., control panels), as-built drawings shall be submitted by the Contractor whenever the equipment as finally installed differs from the manner in which it was depicted in the earlier submittals. These drawings shall be in the same format as the original submittals and shall be suitable for insertion into the service manuals as replacement drawings.

**END OF SECTION**

**SECTION 16065**  
**MINOR ELECTRICAL DEMOLITION**

**1.01 WORK INCLUDED**

- A. Minor demolition of electrical systems and equipment as indicated on the drawings.
- B. Removal from the site and proper disposal of all removed material.

**1.02 REMOVAL OF EXISTING WORK**

- A. Remove electrical work within the contract area that is indicated to be removed in the Contract Documents. Existing electrical work that is not indicated to be removed shall remain.
- B. Disconnect circuits, and remove lighting fixtures and electrical equipment in walls, ceilings and other structures to be removed. See architectural demolition plan for areas of demolition.
- C. Where equipment is removed, completely remove exposed mounting devices, boxes, raceways, fittings and accessories. Concealed conduit may remain. Cut off abandoned conduits flush with concrete floor or below the surface of other finishes and plug. Unless otherwise indicated, remove unused wires from conduits, raceways and enclosures.
- D. Material to be reused shall be carefully removed and stored until the time of reinstallation. It shall be cleaned and reinstalled in the condition as found, unless otherwise indicated. Point out to the Architect existing defects in material indicated as being reused. The Contractor is responsible for his damage to or loss of material to be reused. Repair or replace such damaged material with equivalent material acceptable to the Owner.
- E. Remove from the site and dispose of in a lawful manner material and equipment removed that is not indicated as being reused or delivered to the Owner.

**END OF SECTION**

**Minor Electrical Demolition for Remodeling**  
**16060-1**

## SECTION 16110

### CONDUITS

#### 1.01 WORK INCLUDED

Furnish and install conduits required for power lighting communication and control wiring.

#### 1.02 SUBMITTALS

Submittal Items. Submit manufacturer's catalog cuts, data, and certifications which indicate compliance with the requirements specified herein, for the following items:

1. Conduits.
2. Conduit fittings.

#### 1.03 TESTS

Perform tests required Section 16010 of these specifications.

#### 1.04 IDENTIFICATION

Identify conduits as required in Section 16030 of these specifications.

### PART 2- PRODUCTS

#### 2.01 MATERIALS

Material shall be new unless specifically indicated otherwise. Material shall be listed by the Underwriters' Laboratories, Inc., and shall be used for the purpose and in the manner for which it is listed or labeled.

#### 2.02 CONDUIT

- A. Rigid steel conduit shall be galvanized. Threads shall be galvanized after cutting. Conduit shall conform to ANSI Specifications C80.1.
- B. Intermediate metal conduit shall be galvanized. Threads shall be galvanized after cutting. Intermediate metal conduit shall conform to UL Standard 1242.

Conduits  
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- C. Electrical metallic tubing shall be galvanized steel and shall conform to ANSI Specifications C80.3. Fittings shall be compression ring type or setscrew type.
- D. Flexible metal conduit shall be galvanized steel or aluminum.
- E. Liquidtight flexible metal conduit shall be O.Z. Type EFG, Electriflex Type LA or equal.
- F. Rigid nonmetallic conduit shall be Schedule 40 PVC, or Schedule 80 PVC where indicated.
- G. Rigid aluminum conduit shall be 6063 alloy and shall conform to the ANSI Specification C80.5.

### **2.03 CONDUIT USES**

- A. Conduit underground, under concrete slabs on grade, or imbedded in concrete or masonry shall be rigid nonmetallic conduit, rigid galvanized steel or intermediate metal conduit.
- B. Conduit concealed in dry locations shall be electrical metallic tubing, flexible metal conduit, rigid galvanized steel or intermediate metal conduit.
- C. Conduit exposed in dry or damp locations not subject to physical damage shall be electrical metallic tubing, rigid aluminum conduit, rigid galvanized steel or intermediate metal conduit.
- D. Conduit exposed to weather or in wet locations shall be rigid galvanized steel, intermediate metal conduit or rigid aluminum conduit.
- E. Connections to equipment where flexibility is required shall be flexible metal conduit in lengths of not over six feet for lighting fixtures and not over three feet for motors and other equipment. Such connections in damp or wet locations shall be liquidtight flexible metal conduit.
- F. Existing conduits remaining in place may be reused if in good condition and if conforming to current codes.

## **PART 3- EXECUTION**

### **3.01 CONDUIT INSTALLATION, GENERAL**

- A. Unless otherwise indicated, conduit shall be concealed. Conduit may be exposed in mechanical and electrical equipment rooms, inside closets and unfinished interior spaces. Where wiring must be exposed to view in finished rooms, it shall be run in surface metal raceway, Wiremold or equal, of appropriate size and with fittings designed for the raceway system. Conduit and raceways exposed to view shall be installed parallel

**Conduits  
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or perpendicular to structural members or building lines. Where necessary to run surface raceways on finished walls or ceilings, it shall be along the base or top of walls, at the edge of ceiling beams or similarly inconspicuous locations when practical.

- B. Conduit ends shall be capped until wires are pulled. Electrical and telephone service conduits shall have a 1/4-inch diameter, yellow polypropylene, 1100 lb. strength pull rope installed. Other empty conduits shall have a 3/16-inch polypropylene pull rope installed. Empty conduits shall be tagged at each end to indicate the location of the opposite end.
- C. Conduit stubs under switchboards shall not be more than 3 inches nor less than one inch above the floor or pad, including the height of the bushing. Where conduit stubs are indicated as flush with the floor, they shall be provided with a coupling the top edge of which is flush with the finished floor. The coupling shall be closed with a flush threaded brass plug.

### **3.02 CONDUIT INSTALLATION IN STRUCTURE**

- A. Placement of conduit embedded in concrete shall conform to the requirements of the structural drawings and concrete specifications.
- B. Conduits shall be located not less than 6 inches from hot water lines, steam lines or flues.
- C. Conduits shall be securely supported by factory made conduit straps against structural members or shall be suspended by factory made hangers. Perforated metal tape shall not be used to support conduits.
- D. In metal stud construction, conduit may be tied to metal studs with wire providing the wire does not support the weight of the conduit. In metal lath and plaster construction, conduit not larger than 1-inch size may be tied to the ceiling framing channels with wire. Tie wire shall be not less than 16 gauge annealed iron.

### **3.03 COMMUNICATIONS CONDUIT INSTALLATION**

- A. Voice/ Data network conduits shall have not more than the equivalent of two 90-degree bends in a run. If necessary to have more than two 90-degree bends, insert an accessible pull box in the run. Bends in voice/ data network conduits shall have a radius of not less than 10 times the trade size of the conduit.

END OF SECTION

**Conduits  
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## SECTION 16120

### WIRE AND CABLE (600 VOLTS AND BELOW)

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. This section specifies providing wire and cable.
- B. Requirements for single-conductor cables and for multiple-conductor cables as stated apply.
- C. Related Work Specified Elsewhere:
  - 1. Basic Electrical Requirements: Section 16050.
  - 2. Wiring accessories: Section 16130.
  - 3. Grounding and Bonding: Section 16450.

##### 1.2 QUALITY ASSURANCE

- A. Qualifications: Select a manufacturer who is engaged in production of similar wire and cable.
- B. Codes, Regulations, Reference Standards and Specifications:
  - 1. Relevant Codes, Regulations and Reference Standards listed in specification Section 16050.
- C. Wires and Cables: UL-listed or labeled for its intended use.

##### 1.3 SUBMITTALS

Submit the following for approval in accordance with Section 16050 and with the additional requirements as specified for each:

- A. Submit manufacturer's data for approval on all proposed cable to be utilized on the project.
- B. Certification:
  - 1. Certified flame-retardancy test reports and data for tests performed not more than 12 months prior to submittal, for materials which are identical to those of cable furnished.
  - 2. Certified test reports demonstrating that cable complies with specified requirements and those of referenced ICEA Standards.
  - 3. Certificates from manufacturers verifying that products conform to specified requirements. Include certificate with submittal of shop drawings and with each cable shipment.

WIRE AND CABLE (600 VOLTS AND BELOW)  
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#### **1.4 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Mark each single-conductor cable and each multiple-conductor cable to show UL label, size, voltage, manufacturer and number of conductors or phases in accordance with NEC requirements.
- B. Ship each unit securely packaged and labeled for safe handling and shipment.
- C. Store products in a dry and secure facility.

### **PART 2 - PRODUCTS**

#### **2.1 CONDUCTORS**

- A. Wire and cable conductor sizes are designated by American Wire gauge (AWG) and thousand circular mils (kcmil). All conductors shall be copper without exception.
- B. Conductors shall be soft drawn annealed copper, ninety-eight (98%) percent conductivity, continuous from outlet-to-outlet, without welds, splices or joints.
- C. Minimum wire size shall be No.12 AWG in the lighting and power feeders and branch circuits. Minimum wire size for control circuits shall be No.14 AWG, stranded.
- D. Wire smaller than No.8 AWG shall be solid conductor per ASTM B1. No.8 AWG and larger wire shall be stranded conductor per ASTM B8.
- E. Furnish and install the conductors for the various signal systems per the requirements of each of the applicable Sections.
- F. Acceptable Manufacturers: General Electric, Okonite, Southwire or an approved equal.

#### **2.2 INSULATION**

- A. All conductors supplied under the scope of this project shall be insulated for 600 volts minimum. Wires and cable shall meet the applicable requirements of NFPA 70 and UL 83 for the type of insulation, jacket, and conductor specified or indicated. Wires and cables manufactured more than 12 months prior to date of delivery to the site shall not be used.
- B. Branch circuit and feeder cables in all sizes shall have "THHN", or "THWN" insulation unless noted otherwise.
- C. Type "THHN" wire shall be used in all recessed fixtures, continuous fluorescent fixture wiring channels or other locations where subject to abnormally high temperature.

**WIRE AND CABLE (600 VOLTS AND BELOW)**  
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- D. 90°C Rated Type "XHHW" shall be used for feeders installed in areas of direct solar exposure.

## 2.3 COLOR COORDINATION

- A. All insulation in AWG sizes ten (10) and smaller shall be impregnated with color according to the following:

208/120 Volts

Black

Red

Blue

\* White

Green

Isolated Gnd    Green w/Yellow Stripes    Green w/Yellow Stripes    Green w/Yellow Stripes

\*Where individual neutral conductors are provided for each phase, the white or gray neutral shall have a color stripe matching its corresponding phase conductor color for easy identification.

- B. Where color other than black is not an integral part of the insulation use 3M No. 35 tape of the same color code to identify both ends of conductors No. 8 and larger. Use other colors as required to identify control or other special circuits. Ground conductor shall have green insulation for 1/0 and smaller conductors; green tapes on other colors of insulation are NOT acceptable.

## 2.4. BARE CONDUCTORS

- A. Annealed copper conductor 8 AWG and larger unless otherwise shown or specified and in accordance with ASTM B3 or B8.

## PART 3 - EXECUTION

### 3.1 WIRE AND CABLE INSTALLATION

- A. Install cables as specified.
- B. Install single-conductor cables in conduit, underfloor ducts or wireways.
- C. Install motor feeders, service connections and extensions in accordance with referenced codes. Install motor feeders in 18-inch minimum length liquid-tight flexible conduit at each motor conduit box.
- D. Use nylon straps to bundle and secure wire and cable located in panelboards, cabinets, switchboards, motor control centers and switchgear.
- E. No wires and cables shall be pulled until all work which could cause damage to conductors is completed.
- F. Blow out and swab conduits before installing conductors.

WIRE AND CABLE (600 VOLTS AND BELOW)  
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- G. Care shall be exercised when installing wire in conduit so as not to damage the conductor insulation. Mechanical means of pulling shall not be used unless directed by the Owner. Oils, grease or any other damaging type of pulling compound shall be not used. To facilitate pulling cable, use Ideal Yellow #77 wire pulling compound or other lubricant recommended by cable manufacturer.
- H. Unless specifically shown otherwise, provide branch circuit feeder homeruns with not more than 3 phase conductors, one neutral conductor and one ground conductor in a single raceway. The use of gutters or junction boxes to gather several homeruns into a large conduit will not be permitted.
- I. Wire in panels, cabinets, pull boxes and wiring gutters shall be neatly grouped and fanned out to the terminals. DO NOT use gutters of panelboards as raceways, junction boxes or pull boxes for conductors not terminating in panelboards, junction boxes, etc., for future circuits or for wiring installed by others.
- J. Feeders shall be run their entire length as continuous pieces without joints or splices. Joints and splices in branch circuits shall be permitted where circuits divide in junction boxes only.
- K. Provide all empty conduits with a nylon or polyester pull-line having a breaking strength of at least 200 lbs. Leave 24 inches of spare at each end of the pull.
- L. Where shown or as necessary, install cable-seal fittings to prevent entry of water into electrical facilities. Where approved use seal compound.
- M. In damp and dusty indoor or outdoor locations, seal cable at conduit terminations using duct-sealing compound.

### **3.2 CONNECTORS**

- A. Tools for installing compression connectors shall be made by or approved by the manufacturer of the connectors. Tools shall be hydraulically operated, requiring proper compression before release of the tool. Follow manufacturer's instructions for spacing and overlapping of compression areas.
- B. Branch circuit joints or splices shall be made electrically and mechanically secure with pressure connections, nylon insulators, wing nuts, or spring compression connectors, except that screw-on type connectors shall not be used for wire sizes larger than No. 10AWG. The splice area shall be taped to provide equal or greater insulation than the original. Tape run-back over the original insulation shall extend 3 to 5 overall diameters of the insulated wire.
- C. Soldering of connectors or the use of friction tape is prohibited.

### **3.3 CABLE TERMINATION**

- A. Termination of insulated power and lighting cables shall be protected from accidental contact, deterioration of coverings and moisture by the use of terminating devices and materials. Install all terminations of insulated power and lighting cables in accordance with the manufacturer's requirements. Make terminations using materials and methods indicated or specified herein or as designated by the written instructions of the cable manufacturer.
- B. All cable terminations shall occur in locations which are accessible, but only to authorized personnel.

### **3.4 TAGGING**

- A. All branch circuits shall be left tagged in the panelboards and in all ceiling junction boxes for the purpose of identifying the various circuits.
- B. Feeders and mains shall be tagged in switchboards.
- C. The method of tagging shall be accomplished using non-metallic fiberboard tags or plastic labels. Attach tags to cable with slip-free plastic lacing or nylon bundling straps. Use designation shown.
- D. Use of wrap around paper wire markers shall not be acceptable.

### **3.5 GROUNDING**

- A. Provide an effective grounding connection at all panelboards, outlet boxes and junction boxes. Permanently ground conduit, fixtures, motors and other equipment as required.

### **3.6 FIELD QUALITY CONTROL**

- A. Furnish equipment required to perform tests. Prior to insulation and high-potential tests, disconnect instruments and equipment which might be damaged during such tests. Conduct tests in presence of the Engineer.
- B. Submit test procedure for approval and perform approved tests including, but not limited to, the following:
  - 1. Single-conductor cable and multiple-conductor cable:
    - a. Test continuity of cable conductors using ohmmeter.
    - b. Proof-test insulation resistance to ground and between insulated conductors for minimum of one minute using 1,000-volt megger. Insulation resistance: 100,000 ohms minimum.
    - c. When cable shows unsteady insulation resistance of less than 100,000 ohms, perform high-potential test at 80 percent of factory ac test voltage or as recommended by cable manufacturer.
- C. Submit certified test reports.

**END OF SECTION**

**WIRE AND CABLE (600 VOLTS AND BELOW)**  
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**WIRE AND CABLE (600 VOLTS AND BELOW)**  
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## SECTION 16130

### WIRE CONNECTION ACCESSORIES

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. This section specifies wire-connection accessories, such as connectors, terminal lugs and fittings, bundling straps, insulating tape and resin.
- B. Related Work Specified Elsewhere:
  - 1. Basic Electrical Requirements: Section 16050.
  - 2. Wire and Cable (600 Volt and below): Section 16120.

##### 1.2 QUALITY ASSURANCE

- A. Qualifications: Select a manufacturer who is engaged in production of wire connection accessories.
- B. Codes, regulations, Reference Standards and Specification.
  - 1. Relevant Codes, Regulations and Reference Standards listed in Specification Section 16050.
- C. Source Quality Control:
  - 1. Connectors, terminal lugs and fittings shall be UL-listed.
  - 2. Factory testing: Submit certified copies of test reports for cable splices and tap insulation/sealing kits.

##### 1.3 SUBMITTALS

Submit the following for approval in accordance with Section 16050 :

- A. Shop Drawings.

##### 1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Ship each unit securely packaged and labeled for safe handling in shipment and to avoid damage.
- B. Store products in a secure and dry storage facility.

#### PART 2 - PRODUCTS

##### 2.1 CONNECTORS TERMINAL LUGS AND FITTINGS

- A. All connectors shall be UL listed for the intended use.

WIRE CONNECTION ACCESSORIES

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- B. For No. 10AWG and smaller conductor cables: Tin-plated copper pressure connectors with nonflammable, self-extinguishing insulation grip with temperature rating equal to that of conductor insulation.
- C. For No. 8AWG to No. 4/0AWG conductor cables: Tin-plated copper compression connectors and terminal lugs with nylon insulating sleeve for insulation grip.
- D. For 250 kcmil and larger conductor cables: Long-barrel, double-compression tin-plated copper connectors and terminal lugs with two-hole pad.
- E. For multiple-conductor cables: Watertight aluminum fittings with stainless-steel pressure ring and set screws or compression cone for grounding the aluminum sheath of the cable.
- F. Splices in wire No. 10 and smaller shall be made with twist-on splicing connector or insulated pressure type connectors. Connections in wires No.8 and larger shall be made with compression-type and wrapped with insulating tape. Insulating tape shall be applied in a minimum of two layers of half-wrap built up to match the overall thickness of the cable insulation. Push-in wire connectors shall not be acceptable.
- G. Acceptable Manufacturer. Buchanan, Burndy, Ideal, Kearney, Thomas & Betts, O-Z Gedney or approved equal.

## **2.2 BUNDLING STRAPS**

- A. Self-locking type.
- B. For outdoor use: Ultraviolet-resistant.

## **2.3. INSULATING TAPE**

- A. Plastic tape: Vinyl plastic tape with rubber-based pressure-sensitive adhesive, pliable at zero degree F.
- B. Rubber tape: Silicone-rubber tape with silicone pressure-sensitive adhesive.
- C. Arc-proof tape: Flexible and conformable organic fabric tape, coated one side with flame-retardant flexible elastomer, self-extinguishing and noncombustible.
- D. Glass tape: Woven-glass fabric tape with pressure-sensitive thermosetting adhesive.
- E. Acceptable Manufacturers: Minnesota Mining and Minerals Co. (3M) or an approved equal.

## **2.4 EPOXY RESIN**

- A. Suitable for insulating and moisture sealing cable splices.

**WIRE CONNECTION ACCESSORIES**  
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**WIRE CONNECTION ACCESSORIES**  
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## 2.5 CABLE SPLICES AND TAP-INSULATION/SEALING KITS(FOR UNDERGROUND HANDHOLES, MANHOLES)

- A. Suitable for use on 600-volt, 90C cables, material compatible with cable insulation and jacket, meeting the seal test requirements of ANSI.
- B. Heat-shrinkable tubing or wraparound heat-shrinkable sleeve: UL-approved, flame-retardant, corrosion-resistant thick-wall tubing with factory-applied sealant for field installation on in-line splices and taps or wraparound-type sleeve for retrofit installation on existing splices and taps to provide a watertight seal and insulating encapsulation.

## PART 3 - EXECUTION

### 3.1 SPLICES AND TERMINATIONS

- A. Make wire and cable splices in outlet, junction or pull boxes, in cable troughs or in equipment cabinets. Splices in conduit are prohibited.
- B. Secure connectors or terminal lugs to conductors so as to engage all strands equally.
- C. Do not rupture insulation nor expose bare conductors.
- D. Install compression connectors and terminal lugs using tools and pressure recommended by manufacturer. Indent mark connectors and terminal lugs with number of die used for installation.
- E. Apply anticorrosion joint compound to connectors, terminal lugs and bolting pads before installation.
- F. Wrap 1/2-lapped layer of arc-proof glass tape overall on cable splices installed in air tunnels, ducts and shafts.
- G. Install terminal fittings on multiple-conductor cable in accordance with manufacturer's recommendations. Completely seal cable from moisture.
- H. On cable splices, taps and terminations in manholes handholes and outdoor junction and pull boxes, cover connectors with electrical putty, wrapped with three layers of plastic tape and a final layer of rubber tape and then install water-tight encapsulation as follows and under the supervision of the kit manufacturer's representative or using a factory-certified installation technician, proficient in field installation of heat-shrinkable sealing kits.
  - 1. Use heat-shrinkable tubing for encapsulation of new splices, taps and terminations.

### 3.2 INSPECTION

- A. Have splices and taps in manholes, handholes and outdoor junction and pull boxes inspected by the manufacturer's representative.

**WIRE CONNECTION ACCESSORIES**  
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**END OF SECTION**

**WIRE CONNECTION ACCESSORIES**  
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## SECTION 16400

### ELECTRICAL SERVICE AND DISTRIBUTION

#### PART 1 - GENERAL

##### 1.01 SECTION INCLUDES

- A. Externally operated switches
- B. Fuses
- C. Test and inspection

##### 1.02 RELATED SECTIONS

- A. Division 1: GENERAL REQUIREMENTS
- B. Division 16: ELECTRICAL

##### 1.03 REFERENCES

- A. California Building Code (CBC)
- B. California Electric Code (CEC)
- C. National Fire Protection Association (NFPA) Standards
- D. National Electrical Contractors Association (NECA)
- E. American National Standards Institute (ANSI)
- F. Institute of Electrical and Electronics Engineers (IEEE)
- G. National Electric Manufacturer's Association (NEMA)
- H. City, State and other local codes and requirements as applicable

##### 1.04 SUBMITTALS

- A. Section 01300 – Submittals: Procedures for submittals.
- B. Shop Drawings: Furnish shop drawings for equipment, switchboards, pedestals, switches, etc. furnished under this section of specifications.
  - 1. Contractor shall submit a minimum of six (6) copies of detailed, dimensioned shop drawings to the Architect for checking and review.
- C. Submit written report for testing of all circuit breakers and switches as described in this section. Six (6) copies of the report shall be submitted for review at completion of the testing.

##### 1.05 EXISTING SERVICE VOLTAGE

- A. The existing service to the site is from SCE (Southern California Edison Company).

## **1.06 MATERIAL AND EQUIPMENT IN GENERAL**

- A. The materials and equipment herein specified shall be new and furnished in accordance with the specifications of National Electric Manufacturers Association, Institute of Electrical and Electronics Engineers, National Fire Protection Association and the California Electrical Code.

## **1.07 WORK INCLUDED**

- A. The work of this section shall include all services, labor, materials, transportation, equipment, plant and facilities to furnish and install the service and distribution, equipment, and accessory items indicated on the Drawings and specified herein.
- B. All labor, materials, appliances, tools, equipment necessary for and incidental to performing all operations in connection with furnishing, delivery and installation of the work of this Section, complete, as shown on the drawings and/or specified herein. Work includes, but is not necessarily limited to the following:
  - 1. Examine all other sections for work related to those other sections and required to be included as work under this section.
  - 2. General provisions and requirements for electrical work.
  - 3. New Externally Operated Switches.
  - 4. Comply with requirements California Administrative Code Title 24, National Electrical Code and all other codes referenced herein:

## **PART 2 - PRODUCTS**

### **2.01 SECONDARY SERVICE CONDUITS**

- A. The secondary service conduits are existing.

### **2.02 MAIN SWITCHBOARD**

- A. The main switchboard is existing to remain.

### **2.03 EXTERNALLY OPERATED SWITCHES**

- A. Disconnect switches shall be Square "D", Eaton or General Electric externally operated, quick-make, quick-break, 250 volt rating for 240 circuits, fused or non-fused, single throw, two pole, knife switches. All disconnect switches shall be heavy-duty type. General duty switches are not acceptable.
- B. All fused disconnect switches shall have cover interlocked so the cover cannot be opened if the switch is in the "ON" position.
- C. Weatherproof disconnect switches shall have a NEMA Type 3R rain-tight enclosure.
- D. All disconnect switches shall have provisions for padlocking in both the "ON" and "OFF" positions.



**2.05 FUSES**

- A. Provide Bussman Type FRN-R, 250 volt, dual element, rejection type "Fusetrons" Class R of the sizes required for all fused switches on 240-volt circuits.
- B. Provide a warning label on the inside cover of each switch concerning the replacement of fuses with the same type, class and ampacity.

**PART 3 - EXECUTION**

**3.01 INSTALLATION IN GENERAL**

- A. All work shall conform to the latest NECA and NEMA standards for workmanship. All cabinets, conduit, and other equipment shall be installed plumb with building lines in neat vertical manner.
- B. Clean all components of dirt, grease and debris prior to final connections. The exterior of all cabinets shall be thoroughly cleaned and all paint scratches shall be repainted.

**3.02 TORQUE TIGHTENING OF BOLTED CONNECTIONS**

- A. Contractor shall be responsible for all torque tightening after switchboards are installed. Torque tighten all bolted connections of bus bars in all new switchboards. All torque settings shall conform to ASA Standards as follows:

Bolt Size	Setting
1/4"	5 ft. lbs.
3/8"	20 ft. lbs.
1/2"	50 ft. lbs.
5/8"	95 ft. lbs.

All bolts shall be Grade 5. All torque tightening shall be performed in the presence of the Owner's Representative.

**3.03 TEST AND INSPECTION**

- A. All circuit breakers or switches, shall be tested and inspected as follows:
  - 1. All new circuit breakers shall be tested and inspected for proper trip operations on long delay, short delay and instantaneous trip. Test current for long delay tripping shall be 300% of rated trip. All circuit breakers shall have Ductor readings made where possible.
  - 2. All new fused and non-fused switches shall be checked for proper operation. Ductor readings shall be made where possible.
  - 3. All bolted connections in new switchboards shall be checked and tightened for proper torque.
- B. All testing and inspection shall be performed by qualified personnel of one of the following companies:

1. Emerson Network Power / Electrical Reliability Services (formerly Electro-Test, Inc.)
2. Brar Electrical Systems, Inc.
3. Power Systems Testing Company

C A written report showing test results shall be submitted.

**3.04 TESTING - GENERAL**

- A. The Contractor shall furnish all necessary instruments and equipment required for making tests and shall make test of all wiring for shorts, open circuits, grounds, etc., and shall immediately correct any defective work.
- B. When the entire installation has been completed and all equipment is installed, test out all circuits and switching, and demonstrate that the operation of the system is in accordance with the Contract Documents.

**END OF SECTION 06400**

## SECTION 16450

### GROUNDING AND BONDING

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. Extent of electrical grounding and bonding work is indicated by the drawings and schedules and as specified herein. Grounding and bonding work is defined to encompass systems, circuits, and equipment.
- B. Type of electrical grounding and bonding work specified in this section includes the following:
  - 1. Solidly grounded.
- C. Applications of electrical grounding and bonding work in this section includes the following:
  - 1. Electrical power systems.
  - 2. Separately derived systems.
  - 3. Raceways.
  - 4. Enclosures.
  - 5. Equipment.
- D. Related work specified elsewhere:
  - 1. Basic Electrical Requirements: Section 16050
  - 2. Wire and Cables (600 Volts and below): Section 16120
  - 3. Circuit Breakers and Panelboards: Section 16470

##### 1.2 QUALITY ASSURANCE

- A. Codes, Regulations, Reference Standards and Specifications:
  - 1. Relevant Codes, Regulations and Reference Standards listed in Specification Section 16050
- B. Manufacturer's Qualifications: Firms regularly engaged in manufacture of grounding and bonding products, of types, and ratings required, and ancillary grounding materials, including stranded cable, copper braid and bus, grounding electrodes and plate electrodes, and bonding jumpers whose products have been in satisfactory use in similar service for not less than 5 years.
- C. Installer's Qualifications: Firm with at least 3 years of successful installation experience on projects with electrical grounding work similar to that required for project.

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- D. Codes and Standards:
1. Electrical Code Compliance: Comply with applicable local electrical code requirements of the authority having jurisdiction, and CEC as applicable to electrical grounding and bonding, pertaining to systems, circuits and equipment.
  2. UL Compliance: Provide grounding and bonding products which are UL-listed and labeled for their intended usage.
  3. IEEE Compliance: Comply with applicable requirements and recommended installation practices of IEEE Standards 80, 81, 141 and 142 pertaining to grounding and bonding of system, circuits and equipment.

### **1.3 SUBMITTALS**

Submit the following for review and comments and in accordance with Section 16050.

- A. Manufacturer's data on grounding and bonding products and associated accessories, including bare copper conductors, and exothermic welding materials.

### **1.4 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Ship each unit securely packaged and labeled for safe handling and to avoid damage.
- B. Store equipment in secure and dry storage facility.

### **1.5 ACCEPTABLE MANUFACTURERS**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering grounding and bonding products which may be incorporated in the work include, both are not limited to, the following:
1. Adalet-PLM Div; Scott Fetzer Co.
  2. Burndy Corporation.
  3. Cadweld Div; Erico Products Inc.
  4. Crouse-Hinds Div; Cooper Industries.
  5. Ideal Industries, Inc.
  6. Okonite Company.
  7. OZ Gedney Div; General Signal Corp.
  8. Thomas and Betts Corp.

## **PART 2 - PRODUCTS**

### **2.1 GENERAL**

Except as otherwise indicated, provide electrical grounding and bonding systems indicated; with assembly of materials, including, but not limited to, cables/wires, connectors, solderless lug terminals, grounding electrodes and plate electrodes, bonding

**GROUNDING AND BONDING**  
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jumper braid, surge arresters, and additional accessories needed for a complete installation. Where more than one type component product meets indicated requirements, selection is Installer's option. Where materials or components are not indicated, provide products, which comply with CEC, UL, and IEEE requirements and with established industry standards for those applications indicated.

## **2.2 GROUNDING CONDUCTOR**

- A. Grounding electrode conductors:
  - 1. Insulated or bare conductor, as shown, in accordance with the following:
    - a. Insulated conductor: As specified in Section 16120 for single-conductor cable.
    - b. Bare conductor: Section 16120.
  - 2. Size:
    - a. For use in ground grid and for connecting of ground grid to ground bus: #4/0 AWG.
    - b. For connection of ground bus in communication rooms to main ground bus in ac switchboard rooms: #2/0 AWG.
    - c. For other grounding electrode conductors: In accordance with CEC Table 250.66.
  
- B. Equipment grounding conductor:
  - 1. Sized in accordance with CEC Article 250 unless otherwise shown as oversized.
  - 2. Insulated equipment-grounding conductor: Single-conductor cable as specified in Section 16120.
  - 3. Bare equipment grounding conductor integral with multiple-conductor cable: Section 16120.

## **2.3 GROUND BUS BAR**

ASTM B187, 98 percent conductivity copper bus bar, size and length as shown.

## **2.4 TERMINAL LUGS**

- A. For #4/0 AWG and smaller conductors: Copper compression terminal lugs.
- B. For 250 kcmil and larger: Long barrel, copper, double-compression terminal lugs.

## **2.7 BONDING PLATES, CONNECTORS, TERMINALS AND CLAMPS**

- A. Bonding Plates, Connectors, Terminals and Clamps: Provide electrical bonding plates, connectors, terminals, lugs and clamps as recommended by bonding plate, connector, terminal and clamp manufacturers for indicated applications.

## **2.8 JUMPERS**

- A. Copper braided or leaf-type flexible jumper, size as necessary.

## **2.9 BUS BAR INSULATORS**

- A. Fiberglass reinforced polyester insulator with 1/2-inch diameter threaded holes at both ends for bus bar installation.

## **2.10 ELECTRICAL GROUNDING CONNECTION ACCESSORIES**

- A. Electrical Grounding Connection Accessories: Provide electrical insulating tape, heat-shrinkable insulating tubing, welding materials, bonding straps, as recommended by accessories manufacturers for type service indicated.

## **2.11 FIELD WELDING**

- A. Field Welding: Comply with AWS Code for procedures, appearance, and quality of welds; and for methods used in correction welding work. Provide welded connections where grounding conductors connect to underground grounding and plate electrodes.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine areas and conditions under which electrical grounding and bonding connections are to be made and notify Contractor in writing of conditions detrimental to proper completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

### **3.2 INSTALLATION OF ELECTRICAL GROUNDING AND BONDING SYSTEM**

- A. General: Install electrical grounding and bonding systems and applicable portions of CEC, NECA 1 "Standard Practice of Good Workmanship in Electrical Construction" and in accordance with recognized industry practices to ensure that products comply with requirements.
- B. Coordinate with other electrical work as necessary to interface installation of electrical grounding and bonding system work with other work.
- C. Ground each separately derived system neutral to:
  - 1. Effectively grounded metallic water pipe.
  - 2. Effectively grounded structural steel columns as shown.
  - 3. Separate concrete encased grounding made electrodes.
  - 4. Ground rods.
- D. Provide separate 100% rated green ground conductor for each and every branch circuit or group of branch circuits and for each equipment branch circuit. Ground conductor shall be sized in schedules.

**GROUNDING AND BONDING**

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- E. Terminate feeder and branch circuit insulated equipment-grounding conductors with grounding lug, bus or bushing.
- F. Tighten grounding and bonding connectors and terminals, including screws and bolts, in accordance with manufacturer's published torque-tightening values for connectors and bolts. Where manufacturer's torquing requirements are not indicated, specified in UL 486A to assure permanent and effective grounding.
- G. Route grounding connections and conductors to ground and protective devices in shortest and straightest paths as possible to minimize transient voltage rises.
- H. Apply corrosion-resistant finish to field-connections, and places where factory applied protective coatings have been destroyed, which are subjected to corrosive action.
- I. Install clamp-on connectors on clean metal contact surfaces, to ensure electrical conductivity and circuit integrity.
- J. Grounded non-current carrying metal parts of electrical equipment enclosures, frames, conductors raceways or cable trays to provide a low impedance path for line-to-ground fault current and to bond all non-current carrying metal parts together.
- K. In every receptacle and switch outlet box the green insulated grounding conductor(s) shall be spliced together. A separate green insulated bonding jumper shall be provided from the splice to the box body, with attachment using a tapped 10-32 X 3/8" long machine screw. At receptacles, an additional green insulated bonding jumper shall be provided from the splice to the receptacle ground screw (even with self-grounding receptacles).

### **3.3. GROUND BUS BARS**

- A. Install ground bus bar as shown on plans..
- B. Mount ground bus bar on insulators (two) feet above finished floor, unless otherwise shown, using cap screws and expandable threaded anchors.
- C. Provide insulator support at each end of ground bus.
- D. In communications, electrical and mechanical rooms, and other locations shown, connect ground bus to main ground bus in associated main electrical room using 2/0 AWG insulated conductor.

### **3.4 EQUIPMENT GROUNDING CONDUCTORS.**

- A. Provide insulated 100% rated equipment grounding conductors for all feeders and branch circuits operating at 50 volts or greater.

**GROUNDING AND BONDING**  
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### 3.5 ISOLATED GROUNDING CONDUCTOR SYSTEM

- A. Provide a separate grounding conductor insulated from the equipment grounding conductor system including conductor enclosures, equipment frames, distribution equipment and ground buses, cable tray, metallic raceways and other non-current carrying metallic parts of the electrical system.
- B. Connect isolated grounding conductor to ground stud on isolated ground receptacle and to isolated ground bus in panelboard.
- C. Connect isolated ground bus in panelboard to AC power system neutral (i.e. 120 volt source of transformation) feeding the panelboard, or as shown on drawings.
- D. Isolated Ground Verification
  1. Test Equipment: Fluke 87 Multimeter.
  2. Procedure
    - a. Step 1: Coordinate with Owner for the best time to perform this test (early morning, lunch, etc.).
    - b. Step 2: Verify that no plugstrips, copier machines, extraneous power supplies, or other devices are plugged into isolated ground receptacles.
    - c. Step 3: Set Fluke meter to Ohmic scale.
    - d. Step 4: Remove the separately derived ground conductor (i.e. incoming isolated ground conductor) from the IG panel isolated bus.
    - e. Step 5: Connect the Fluke red probe to the isolated ground bus and the black probe to the equipment ground bus. The reading should be infinity or "OL" (overload).
    - f. Step 6: With the separately derived ground conductor still disconnected proceed to the modular furniture system and check each wall outlet and each furniture circuit zone between the IG outlet ground prong and equipment ground (equipment ground may be at a standard duplex prong or direct contact to exposed metal parts of the furniture system). The reading should be infinity or "OL" (overload).
    - g. Step 7: If Step 5 passes and Step 6 results in an ohmic reading; the short is probably the result of an improperly connected isolated ground conductor at the modular furniture system wiring harness connection. Go to the connection at the furniture system and make sure the isolated ground wire is connected to the isolated ground from the furniture. Preview each furniture system wiring harness connection as well. If each of these connections

are correctly done the problem may be within the systems furniture itself. Contact the general contractor to have the system furniture tested for ground continuity.

3. Troubleshooting
  - a. If Step 5 results in an Ohmic reading, the test has failed. Conduct the following trouble shooting procedure with the separately derived ground still disconnected.
  - b. Step 1: Remove one IG branch conductor at a time from the IG panelboard with ohmmeter connected between IG bus and EG bus. (Note: Do not reconnect conductors to bus until all the failed conductors and / or bus have been identified.)
  - c. Step 2: Continue to remove conductors until meter reads infinity or overload.
    - 1) If after all isolated ground conductors have been removed, the meter does not read infinity or overload then the IG bus is shorted to the panel.
  - d. Step 3: Mark and test the isolated grounding conductor(s) which have been removed from the IG bus until all shorts are found and isolated.
  - e. Step 4: Correct the shorted isolated ground conductor. Retest by connecting ohmmeter between the conductor and the equipment ground bus. Reading should be infinity or "OL" (overload)

### **3.6 GROUNDING OF SEPARATELY DERIVED AC SYSTEM**

- A. Ground in accordance with CEC.

### **3.7 GROUNDING FOR PERSONNEL SAFETY**

- A. Bond elevator motor frames, ac equipment enclosures and metallic structures to equipment grounding conductor in ac power feeder. Where feasible, supplement such grounding by a connection to the ground grid using 1/0 AWG insulated grounding conductor.

### **3.8 FIELD QUALITY CONTROL**

- A. Upon completion of installation of electrical grounding and bonding systems, test ground resistance with ground resistance tester. Where tests show resistance-to-ground is over 2 ohms, take appropriate action to reduce resistance to 2 ohms, or less. Then retest to demonstrate compliance.
- B. Test metallic conduit and raceways, equipment enclosures, metallic cable trays for continuity to grounding system.

**END OF SECTION**

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**GROUNDING AND BONDING**  
**16450 -9**

## SECTION 16460

### LOW VOLTAGE TRANSFORMERS

#### PART 1 - GENERAL

##### 1.1 SECTION INCLUDES

- A. Transformers as specified and as indicated.

##### 1.2 RELATED SECTIONS

- A. Division 01: GENERAL REQUIREMENTS
- B. Division 16: ELECTRICAL

##### 1.4 SUBMITTALS

- A. Shop Drawings: Include make, catalog number, dimensions, finish, type, insulation class, design temperature and taps provided. Include regulation at 80% and 100% of full load, no load loss, full load loss, percent efficiency, percent impedance, noise level and continuous capacity rating. Provide a connection schematic.
- B. Test Reports:
  - 1. No-Load Losses
  - 2. Total Losses
  - 3. Applied Voltage
  - 4. Temperature Rise
  - 5. Induced Voltage
  - 6. Sound Level
  - 7. Impulse Test

#### PART 2 - PRODUCTS

##### 2.1 EQUIPMENT

- A. Transformers shall be by Square D, G.E., Westinghouse, Sierra or approved equal.

##### 2.2 DESIGN REQUIREMENTS

- A. Transformers, Dry Type: Distribution transformers shall be constructed and tested in accordance with ANSI, NEMA and IEEE Standards, and shall be wound with copper or aluminum conductors. Performance of transformers shall be equal to or exceed ANSI, NEMA and IEEE published criteria.
- B. Transformers shall be self-cooled type with 220° C. insulation and a maximum temperature rise of 150° C. under continuous full load conditions with an ambient of 40° C.

C. Transformers shall be equipped with four 2-1/2% (2 above and 2 below normal voltage) taps. Windings shall be of fire-resistant type, designed for natural convection cooling through normal air circulation.

D. Core mounting frames and enclosures shall be of welded and bolted construction with sufficient mechanical strength and rigidity to withstand shipping, erection and short circuit stresses.

E. Enclosure cover plates shall be code gage sheet steel, captive bolted to enclosure framework. Enclosure shall have suitable ventilating openings with rodent-proof screens. Enclosure shall be provided with lifting lugs and jacking plates as required. Transformers installed outdoors shall be weatherproof.

F. Transformers shall be furnished complete with mounting channels and mounting bolts. Metal parts, excepting cores and core mounting frames shall be cleaned, rust-proofed and given a heavy coating of an inert primer.

G. Transformer enclosure interior shall be lined with sound insulation to eliminate vibration noise from housing. It shall be provided with vibration dampers consisting of Korfund spring loaded shock mounts and Elastorib sheeting. Size and number of shock mounts shall be in accordance with manufacturer's recommendations.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

A. Transformer core frame shall be installed level on shock absorbing pads within enclosure.

B. Mounting bolts on floor mounted transformers shall be extended into pads only and shall not be in direct contact with building structural members.

C. Flexible jumpers shall be installed for grounding continuity from enclosure to conduits or bus ducts where required.

#### **3.2 VOLTAGE CHECK**

A. Contractor shall set taps on all transformers which are a part of this Contract, as necessary to provide satisfactory operating voltages with all present loads energized, including new loads and any existing loads. A check shall be made in presence of the Inspector at a panel fed from each transformer which is farthest from transformer. Voltages at transformers ranging from 118 to 122 volts inclusive, for 120 volt systems and proportionately equivalent for higher voltage systems, are acceptable.

B. Contractor shall provide instruments and accessories required to perform checks. Voltmeters shall be accurate within 3/4 or 1% and shall have scales permitting voltage readings to be made on upper half of scale. Calibration of the meters shall be satisfactory to the Inspector.

**END OF SECTION 16460**

**LOW VOLTAGE TRANSFORMERS  
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## SECTION 16470

### DISTRIBUTION PANEL BOARDS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes distribution panels.

##### 1.2 SUBMITTALS

- A. Product Data: For each type of distribution panels, over-current protective device, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For each distribution panel and related equipment.
  - 1. Dimensioned plans, elevations, sections, and details. Show tabulations of installed devices, equipment features, and ratings. Include the following:
    - a. Enclosure types and details
    - b. Bus configuration, current, and voltage ratings.
    - c. Short-circuit current rating of distribution panels and over-current protective devices.
    - d. Features, characteristics, ratings, and factory settings of individual over-current protective devices and auxiliary components.

##### 1.3 QUALITY ASSURANCE

- A. Distribution panels, over-current protective devices, and major components shall be from a single manufacturer, manufactured and assembled at the same manufacturing facility within twelve (12) months of installation unless otherwise noted.
- B. Manufacturer shall have ISO 9001 Certification
- C. American made products have been acceptable to the City. If non-domestic products are submitted, notice is hereby given that extensive testing shall be required to insure quality and conformance to the Specifications.
- D. All panel boards shall be of the same manufacturer as other electrical distribution equipment unless otherwise noted.
- E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- F. Comply with NEMA PB 1.

- G. Comply with NFPA 70.

#### **1.4 PROJECT CONDITIONS**

- A. Interruption of Existing Electric Service: Do not interrupt electric service to facilities occupied by City or others unless permitted under the following conditions and then only after arranging to provide temporary electric service according to requirements indicated:
- B. Notify City's Representative no fewer than fourteen (14) days in advance of proposed interruption of electrical service. Do not proceed with interruption of electrical service without City Representative's written permission.

#### **1.5 COORDINATION**

- A. Coordinate layout and installation of distribution panels and components with other construction.

#### **1.6 EXTRA MATERIALS**

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Keys: two (2) spares for each type of panel board cabinet lock. Panel locks shall be keyed alike.
  - 2. Furnish to the City's Representative and obtain a signed receipt.

### **PART 2 - PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following, or equal:
  - 1. Distribution Panels, Overcurrent Protective Devices, and Accessories:
    - a. Square D
    - b. Cutler-Hammer.
    - c. General Electric.

#### **2.2 MANUFACTURED UNITS**

- A. Enclosures: Surface-mounted cabinets as indicated on drawings. NEMA PB 1, Type 1.
  - 1. Rated for environmental conditions at installed location.
    - a. Indoor Locations: NEMA 4X stainless steel. All doors shall be gasketed.
  - 2. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
  - 3. Finish: Manufacturer's standard powder coated finish over corrosion-resistant treatment or primer coat.

**DISTRIBUTION PANEL BOARDS**  
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4. Directory Card: With transparent protective cover, mounted in metal frame, inside distribution board door, type written. Hand written is not acceptable.
- B. Future Devices: Mounting brackets, bus connections, and necessary appurtenances required for future installation of devices.

### **2.3 OVERCURRENT PROTECTIVE DEVICES**

- A. Feeder and branch circuit breakers: Shall be group mounted, front accessible thermal magnetic molded case circuit breakers unless otherwise noted on drawings. The circuit breakers are to be mounted in the distribution board in such a way as to permit the installation, maintenance and testing of the breaker without reaching over any line side busing. Breakers shall have integral thermal and instantaneous trip in each pole. Ampere ratings shall be as shown on drawings.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. Install panel boards and accessories according to NEMA PB 1.1, CEC standard and manufacturer's written instruction.
- B. Mount top of trim 60 inches above finished floor, unless otherwise indicated.
- C. Mount plumb and rigid without distortion of box.

### **3.2 IDENTIFICATION**

- A. Identify field-installed conductors, interconnecting wiring, and components.
- B. Create a directory to indicate installed circuit loads. Obtain approval before installing. Use a computer or typewriter to create directory; handwritten directories are not acceptable.

### **3.5 CLEANING**

- A. On completion of installation, inspect interior and exterior of panelboards. Remove paint splatters and other spots. Vacuum dirt and debris; do not use compressed air to assist in cleaning. Repair exposed surfaces to match original finish.

**END OF SECTION**

**DISTRIBUTION PANEL BOARDS  
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## SECTION 16500

### LIGHTING

#### PART 1- GENERAL

##### 1.01 WORK INCLUDED

- A. Furnish, install, connect, make operable and test all lighting fixtures. Furnish and install all necessary accessories, mounting devices, hardware and lamps required to make a complete operable lighting system.
- B. Furnish and install lighting control systems including lighting control panels and related occupant sensors and devices.

##### 1.02 SUBMITTALS

- A. Submittal Items. Submit manufacturer's catalog cuts, data, and certifications which indicate compliance with the requirements specified herein, for the following items:
  - 1. Lighting fixtures. Include photometric data if the submitted fixture is not the exact fixture specified.
  - 2. Lighting controls and occupant sensors.
- B. Shop Drawings. Submit shop drawings for the following items:

Custom lighting fixtures and linear lighting fixtures in custom lengths and arrangements.

#### PART 2- PRODUCTS

##### 2.01 MATERIALS

Material and equipment shall be new unless specifically indicated otherwise. Material and equipment shall be listed by the Underwriters' Laboratories, Inc., and shall be used for the purpose and in the manner for which they are listed or labeled.

##### 2.02 FIXTURES

Fixtures shall be of the types indicated on the drawings. Fixtures shall be wired with No. 14 type SF2 or SFF2 fixture wire or shall be approved factory prewired fixtures. Fixtures shall be complete with lamps, ballasts, hangers and accessories

Lighting  
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### **2.03 LAMPS**

Lamps shall be manufactured by Sylvania. Lamps shall be of the types indicated on the Lighting Fixture Schedule on the drawings. Lamps shall have a color temperature of 4100° K. The numbers indicating types are Lamp Ordering Codes or ANSI Codes.

### **2.04 FLUORESCENT ELECTRONIC BALLASTS**

Fluorescent electronic ballasts shall be as indicated on the lighting fixture schedule for the lamp types and combinations indicated. Ballasts shall be high power factor, program or rapid start. Ballast input current shall have less than 10% total harmonic distortion. Ballasts shall have a minimum ballast factor of 0.85. Ballasts shall have a maximum lamp current crest factor of 1.7. Ballasts shall Sylvania or Advance.

### **2.05 OCCUPANT SENSORS**

Occupant sensors for lighting control shall be provided for interior spaces in accordance with the schedule on the drawings.

## **PART 3- EXECUTION**

### **3.01 LIGHTING FIXTURE MOUNTING**

- A. Lighting fixture supports shall be secure and shall be of sufficient strength to support at least four times the weight of the fixture but not less than 150 pounds.
- B. For surface or pendant mounted fixtures on suspended ceilings, provide a hanger wire at each point of support. If support occurs between the main runners of the ceiling system, provide in addition to the hanger wire a cross member of 3/4 inch minimum framing channel or equal, fastened to the two adjacent main runners.
- C. For recessed fixtures in suspended ceiling systems, verify the type of system to be used and coordinate fixtures and installation with the ceiling manufacturer's requirements. Recessed fixtures shall be supported directly from the fixture housing to the structure above with a minimum of two 12-gauge wires located at diagonally opposite corners. Leveling and positioning of fixtures may be provided by the ceiling grid. Fixture support wires may be slightly loose to allow the fixture to seat in the grid system. Vertical wires shall be attached to the fixture and to the support above with a minimum of three tight turns in 1 1/2 inches. Connection devices at the supporting construction shall be capable of carrying not less than 100 pounds.

**Lighting  
16500-2**

- D. Fixtures weighing 56 pounds or more in grid ceilings shall be supported directly from the structure above by 12 gauge wires at each of the four corners or by approved hangers.

**END OF SECTION**

**Lighting  
16500-3**

**Aquatics Center**

10/24/19


**LEACH MOUNCE ARCHITECTS**  
 WWW.LEACHMOUNCEARCHITECTS.COM

 1885 KNOLL DRIVE  
 VENTURA, CA 93003

 TEL: (805) 656-3522  
 FAX: (805) 656-1928

<b>Area to be Remodeled</b>	<b>Sf or Quantity</b>	<b>\$ Cost per sf/Qty</b>	<b>Unit</b>	<b>Total</b>
<b>Restroom Remodel</b>				
<b>Demolition</b>				
Removal (Saw Cut) Concrete	200	33.70	sf	\$6,740.00
Remove Plumbing Fixtures	10	525.00	ea	\$5,250.00
Remove Floor Tile	2000	5.00	sf	\$10,000.00
Remove Wall Tile	2400	5.00	sf	\$12,000.00
Remove Glass Partition	2	875.00	ea	\$1,750.00
Remove Ceiling Tiles	2000	2.00	sf	\$4,000.00
Remove Electrical	Allow	2500.00	ea	\$2,500.00
Repair / Prepare floor / walls	Allow	7500.00	ea	\$7,500.00
<b>Total Demolition</b>				<b>\$49,740.00</b>
<b>Construction</b>				
Concrete floor	200	35.00	sf	\$7,000.00
CMU Partition Walls	288	58.35	sf	\$16,804.80
Gyp Bd Walls	500	9.25	sf	\$4,625.00
Install Countertop	32	450.00	lf	\$14,400.00
New Plumbing	Allow	1.00	ea	\$9,500.00
New Plumbing Fixtures	10	1500.00	ea	\$15,000.00
Toilet Partitions	4	1500.00	ea	\$6,000.00
Accessories	Allow	1.00	ea	\$3,500.00
Floor Tile	2000	18.50	sf	\$37,000.00
Wall Tile	2400	18.50	sf	\$44,400.00
Paint	1000	7.25	sf	\$7,250.00
Ceiling Tile	1500	9.55	sf	\$14,325.00
Ceiling Gyp Bd	350	12.33	sf	\$4,315.50
Mechanical Heaters (2) 125 ton	Allow	1.00	sf	\$45,000.00
Electrical	Allow	1.00	ea	\$15,000.00
<b>Total Construction</b>				<b>\$244,120.30</b>
<b>Remodel Total</b>				<b>\$293,860.30</b>
<b>Administrative Costs</b>				
Contractor Overhead and Profit 15%				\$44,079.05
Architectural Fees				\$59,850.00
<b>Administrative Total</b>				<b>\$103,929.05</b>
<b>Project Construction Total</b>				<b>\$397,789.35</b>

NOTICE CALLING FOR BID PROPOSALS FOR  
AQUATIC CENTER REMODEL SPEC NO. AC-3-2019

PUBLIC NOTICE IS HEREBY GIVEN that Pleasant Valley Recreation and Park District (PVRPD) invites sealed bids for the propose to furnish all labor, equipment, tools and incidentals as required in the Plans, Specifications and Contract documents for said Aquatic Center Remodel of Showers, Dressing Rooms SPEC # AC-3-2019. The work will take place at 1030 Temple Ave Camarillo, California 93010 and other related work as described in the Specifications and Contract Documents, by reference, made a part hereof. **Aquatic Center Remodel project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. D.I.R numbers are required for this project at the time of bid award.** Sealed bids will be received at the administrative office of Pleasant Valley Recreation and Parks 1605 E. Burnley St., Camarillo, CA 93010. Bids are due on **December 2, 2019** by 2:00 pm. Late proposals will not be considered. Public opening of bids will take place promptly at 2:00 pm. There is a Mandatory site walk to be held on **November 21, 2019** at 10:00 am at 1030 Temple Ave Camarillo, California 93010. A full set of contract documents are available for inspection on the Districts web site. **CLASSIFICATION OF CONTRACTORS' LICENSES** – In accordance with Public Contract Code Section 3300, a Contractor submitting a proposal for performance of the Work shall possess a classification of **"B"** License. A Contractor shall certify that the license(s) specified herein is/are the classification(s) of contractor's license(s) required by law to perform the Work contemplated by the Contract Documents, and submission of a bid shall be deemed certification thereof by the bidder. A Contractor shall provide District with its Contractor's license number and expiration date as provided in its bid and shall present to the District satisfactory evidence that ~~the contractors~~ licensed and is in good standing. The successful bidder shall maintain its license in good standing throughout the course of the Work. The work shall be done in accordance with the instructions to bidders that comprise the bid package. Bids must be prepared on the approved bid proposal forms and placed in a sealed envelope plainly marked on the outside in conformance with the instructions to bidders. Bidders are hereby notified they must meet all State and Federal Labor requirements, including the State Prevailing Wage rates shall apply. In addition, and Equal Employment Opportunity regulations shall apply.

**Bid Specifications for  
Remodeling Showers and  
Dressing Rooms at the  
Aquatic Center and  
Installation of a New  
Heating System**

**Request for Proposal:  
Due December 2, 2019, 2:00 pm**



**www.pvrpd.org • 805-482-1996**

**Submit Proposals to:**  
**Bob Cerasuolo**  
**Park Services Manager**  
Pleasant Valley Recreation  
and Park District, Camarillo, CA  
805-482-5396  
bobc@pvrpd.org  
www.pvrpd.org

## **INVITATION TO BID**

The Pleasant Valley Recreation and Park District (PVRPD) is seeking bids for the remodeling of the Aquatic Center Showers, Dressing Rooms, and Restrooms and installation of a new Heating System.

The Aquatic Center is located at 1030 Temple Ave, Camarillo, CA 93010 and is the current location of the District's only public pool. The Aquatic Center is an invaluable resource and is one of the District's best used and enjoyed facilities due to the pool and a water slide. The District envisions this renovation will improve upon the restrooms, changing areas and the heating system for this facility.

There will be a mandatory job walk on November 21, 2019 at 10:00 am.

## **SCOPE OF SCOPE:**

### **DESCRIPTION OF WORK**

- A. Scope of demolition and removal work is shown on drawings
- B. Not Used
- C. Remodel the Pleasant Valley Aquatics Center Locker Rooms, Showers & Restrooms
- D. Plumbing: new construction
- E. HVAC: New mechanical Units
- F. Electrical Power and Lighting: new construction
- G. Paint and replace the missing hardware (locks) on the Lockers
- H. Fire Suppression Sprinklers: None
- I. Fire Alarm: None
- J. Telephone: None
- K. Data and Computer Network: None

### **WORK BY OWNER**

- A. NA

### **OWNER OCCUPANCY**

- A. The Pleasant Valley Recreation and Park District ("District") intends to occupy the Project upon Substantial Completion: *"The stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use."*
- B. Cooperate with the District to minimize conflict and to facilitate the District operations.
- C. Schedule the Work to accommodate the District occupancy.

### **CONTRACTOR USE OF SITE AND PREMISES**

- A. Construction Operations: Limited to areas noted on Drawings.



A. GENERAL

1. Contractor shall at all times conduct the work so as to impose no hardship on the District or others engaged in the District's work nor cause any unreasonable delay or hindrance thereto.
2. Construction activities will be scheduled to minimize disruption to the District and to District's users.
3. The Contractor may not interrupt any utilities without prior written permission from the District. Requests for utility shutdowns shall be submitted a minimum of 72 hours in advance of the requested shutdown date.

B. PROTECTION OF EXISTING STRUCTURES AND UTILITIES

1. Locate all known existing utility installations before proceeding with construction operations which may cause damage to such installations. The existing utilities shall be protected and maintained in continual service at the Contractor's expense. Where existing utilities cross or are adjacent to the work of this contract, the Contractor shall notify the District's Representative a minimum of 48 hours in advance of commencement of work. The Contractor shall locate the existing utility(s) by exploration; repair of damage to existing utility(s) shall be at the Contractor's expense.
2. In the event that undocumented existing structures or utilities are encountered, the contractor shall immediately notify the District's Representative and request direction concerning how to proceed with the work.
3. Should the Contractor damage any existing structure or utility, the Contractor shall take immediate action to ensure the safety of both persons and property.
4. Contractor shall visit the site and thoroughly familiarize itself with existing conditions.
5. Contractor shall include all necessary pipe offsets, fittings, etc. as required to complete the work in the base bid. No additional costs due to the Contractor's failure to survey existing conditions and review available record drawings will be allowed.
6. Contractor shall note all utility items (utility meters, junction boxes, valve boxes) at or above grade in the vicinity of the project site prior to commencing with trenching operations. These items indicate the presence of underground utilities in the area shall be located and kept in continual service. This requirement shall apply regardless of inclusion of these utilities on existing record documents.
7. When cutting, removal or alteration of existing work is required to form connections with new work or otherwise to meet the requirements of the contract documents, perform such work so as not to damage the work that will remain in place.
8. Contractor shall provide all necessary materials, equipment and labor to adequately protect existing structures, floors, architectural finishes and utilities which may be impacted by the work of this contract.

C. ALLOWABLE WORK SCHEDULE

1. Normal construction activities shall be performed Monday through Friday between the hours of 7:00 am and 5:00 pm.

2. Shutdown of existing utilities or other activities which impact District operations shall be scheduled in advance with the District's Representative in accordance with paragraph 1.05.A.3 above and shall be scheduled during off-hours at the discretion of the District and at no additional cost to the District.
3. Contractor shall submit an "Off-hours work Schedule Request Form" a minimum of 72 hours prior to any anticipated weekend or holiday work. A form must also be submitted for work outside of normal working hours. off hours work shall not be performed without prior approval by the District.

**D. SITE DECORUM**

1. Contractor is to control the conduct of labor forces and prevent unwanted interaction initiated by workers with the District staff, Visitors or other individuals other than those associated with the project.
2. In the event that any worker initiates unwanted interaction, utilizes profanity, or (in the opinion of the District's Representative) conducts him/herself in an offensive or unprofessional manner, the Contractor shall immediately remove the worker from the project and replace said worker with another of equivalent technical skill at no additional cost to the District.
3. No smoking is allowed on the job site.
4. No radios, other than 2-way communication type, shall be allowed on the project site.

**E. ACCESS PANELS**

1. The contractor is responsible for locating, providing and installing all access panels required by mechanical, electrical and all other systems.
2. Coordinate locations, types and installation of all access panels and supply any not specified under other sections.

**F. CONFLICTS**

1. Should a conflict occur between various drawings or between drawings and specifications or between various specification sections, contractor is deemed to have estimated the most expensive method of construction unless a written decision from the Engineer or Owners Representative has been received which describes an alternate method or materials.

**WORK SEQUENCE**

- A. Contractor shall substantially complete (see section 1.05 above) the new building
- B. Contractor shall coordinate construction schedule and operations with the District

**END OF SECTION**

## **BASIC SPECIFICATIONS ASSUMPTIONS/PROJECT UNDERSTANDING:**

- A. Building, Installing and Waterproofing of the Privacy walls in the shower's areas
- B. Install metering valves
- C. Add electrical service to dressing rooms (GFI) and under counter for instant hot water heaters
- D. Install floor drains to every shower
- E. Install counter tops for the dressing rooms
- F. Remove and Replace all the existing tile in restrooms, dressing rooms and showers
- G. Move ADA showers to the dressing room with privacy stalls (see plans)
- H. Replace the heating system to include energy efficiency
- I. Incorporate a trough sink for both restrooms as an alternative option
- J. Project to be prevailing wage
- K. Remove and Install all new T-Bar Ceilings and Waterproof Ceiling Tiles
- L. Paint Lockers and Replace all missing locking hardware

## **PROPOSAL PROCESS:**

The prospective Respondent shall submit three (3) copies of the proposal to the Pleasant Valley Recreation and Park District. The proposals shall be signed by an authorized official of the firm. The District reserves the right to reject all proposals. The following shall be included in your written proposal:

1. A breakdown of the work to be done.
2. History of similar projects completed within the last five years, including cost and client contact information.
3. Provide a minimum of three (3) references including service provided, name of agency, contact person, phone number and email.
4. Description of the proposed schedule and the approach that will be used to organize and prepare for the work to be done.

## **EVALUATION OF PROPOSALS**

District staff will review the proposals. The selected Contractor will be contacted to let them know they have been awarded the bid.

The evaluation of proposal will be based on the following:

- Completeness and thoroughness of information provided and adherence to deliverables.
- Ability to meet budget, although cost will not be the sole factor.
- Ability to comply with all State, Federal and local regulations.
- Ability to possess a California State Contractor License with a classification of a "B" and a City of Camarillo business license and the proper insurance and bonding.
- Ability to possess a D.I.R number.

# Request for Proposal: Due December 2, 2019 2:00 pm

## RESPONSIVENESS TO SUBMITTAL REQUIREMENTS

The successful Respondent to whom work is awarded shall, within Seven (7) days of Board approval, enter into a contract with the District for the work in accordance with the specifications and shall furnish all required documents necessary to enter into said contract.

Failure to comply with the terms of these provisions may disqualify any proposal. Late submissions after the deadline will not be accepted. The District reserves the right to reject any proposal based upon the firm's prior documented history with the District or with any other party, which documents, without limitation, unsatisfactory performance, adversarial or contentious demeanor, significant failures to meet contract milestones or other contractual failures.

The Pleasant Valley Recreation and Park District Board of Directors will make the final award. No other officer or agent may obligate or bind the District.

## PROJECT SCHEDULE

- |  |                             |
|--|-----------------------------|
| 1. Request for Proposal Released             | November 8, 2019            |
| 2. Job Walk (Mandatory)                      | November 21, 2019 10:00am   |
| 3. Proposals are Due and must be Received by | December 2, 2019, 2:00 p.m. |
| 4. Contract Award                            | December 5, 2019            |
| 5. Start Job                                 | January 8, 2020             |
| 6. Completion of Project                     | April 15, 2020              |

**NOTE: THIS PROJECT IS ON A TIGHT SCHEDULE**

## PROPOSAL DEADLINE:

The deadline for the proposal is **Monday December 2, 2019 at 2:00 p.m.** Proposal must be submitted in a sealed envelope marked ***RFP Aquatic Center Showers and Dressing Rooms Remodel*** by the deadline. Proposal must be signed by an authorized individual to bind the firm and be valid for at least 90 days. Late submissions after the deadline will not be accepted. **FAXED or ELECTRONIC RESPONSES WILL NOT BE ACCEPTED.**

Please submit three (3) copies of the proposal to:

**Bob Cerasuolo,  
Park Services Manager  
Pleasant Valley Recreation and Park District  
1605 E. Burnley Street  
Camarillo, CA 93010**

For questions contact: **Bob Cerasuolo**, Park Services Manager  
805-482-5396 ext. 301  
[bobc@pvrrpd.org](mailto:bobc@pvrrpd.org)

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Brandon Lopez, Park Supervisor**

**DATE: November 7, 2019**

**SUBJECT: APPROVAL OF THE PURCHASE OF TWO  
REPLACEMENT FLEET VEHICLES**

**SUMMARY**

The Board appropriated funds in the amount of \$64,000 to purchase new fleet vehicles. The two new vehicles will be 2019 Ford Rangers. The trucks will replace two older vehicles which both have well over 150,000 miles and are more than seventeen years old. The new Ford trucks will serve as safer, more fuel-efficient replacements to the outdated fleet.

**BACKGROUND**

At the May 16, 2019 budget workshop meeting, park staff presented to the Board their budget and capital improvement plans. On July 3, 2019 the Board of Directors approved the FY 2019/2020 budget. Park staff allocated for two (2) fleet vehicles to replace aging vehicles in the fleet. The District has twelve (12) fleet vehicles that are driven daily. The vehicles range from 1989 to 2017, with mileage from 30,000 up to nearly 250,000 miles. Staff has met the required vehicle maintenance schedule and has made a number of repairs and replaced parts to keep the fleet in service. The two new vehicles are smaller and a more practical alternative to the larger Ford F-150.

**ANALYSIS**

The purchase of these vehicles will assist the District in moving forward in both fleet management and economization. The typical usable life of a gasoline engine is around 150,000 miles with accelerated maintenance cost beginning around 100,000 miles. Introducing two new vehicles to the fleet should improve fuel consumption, improve safety, as well as reduce rising maintenance costs in comparison to the older fleet vehicles.

After receiving approval of the vehicle specification from the Board of Directors, staff solicited bids from local dealerships. The District received three (3) bids. The following vendors replied with bids for the two (2) Ford Ranger XL: Ford of Ventura, DCH Ford of Thousand Oaks, and Vista Ford of Oxnard. Vista Ford of Oxnard came in with the lowest bid.

<b>Vendor</b>	<b>Bid Per Vehicle</b>	<b>Total</b>
Vista Ford of Oxnard	\$25,931	\$51,862
DCH Ford of T.O.	\$26,021	\$52,042
Ford of Ventura	\$28,804	\$57,608

**FISCAL IMPACT**

Funding in the FY 2019-2020 Capital Projects budget in the amount of \$64,000 was allocated to the purchase of new vehicles. The bid from Vista Ford of Oxnard totaled \$51,862 for two (2) vehicles.

**RECOMMENDATION**

It is recommended the Board of Directors authorize the General Manager to enter into an agreement with Vista Ford of Oxnard for the purchase of two (2) Ford Ranger XL vehicles not to exceed \$51,862.

**ATTACHMENTS**

- 1) Bid Abstract (1 page)

**Pleasant Valley Recreation and Park District**

**Fleet Vehicles - Ford Ranger XL**

Date: November 7, 2019  
Prepared By: Brandon Lopez

	1	2	3
Company:	Vista Ford of Oxnard	DCH Ford of T.O.	Ford of Ventura
Phone Number:	805-983-6511	805-491-7000	805-642-6701
Fax Number:	805-485-8474	805-495-2341	
City:	Oxnard, CA	Thousand Oaks, CA	Ventura, CA
Quoted By:	Lance Bryson	Chris Lewis	Rebecca Ruiz
Payment Terms:			
License Number:	N/A	N/A	N/A

U/M	Equipment Information	YES	YES	YES
	EcoBoost 270hp 2.3L I-4 Engine	Yes	Yes	Yes
	6' Bed Length	Yes	Yes	Yes
	10 Speed automatic transmission	Yes	Yes	Yes
	4 Wheel ABS Disc Brakes	Yes	Yes	Yes
	Rear Back Up Camera	Yes	Yes	Yes
	Seating for 4	Yes	Yes	Yes
	Vinyl Bucket Seats	Yes	Yes	Yes
	Electric Powered Assisted Steering	Yes	Yes	Yes
	Trailer Tow Package	Yes	Yes	Yes
	Driver and Passenger Airbags	Yes	Yes	Yes
	Total cost of each vehicle	\$ 55,931.00	\$ 26,021.00	\$ 28,804.00
	Total of two (2) vehicles	\$ 111,862.00	\$ 52,042.00	\$ 57,608.00

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**

**DATE: November 7, 2019**

**SUBJECT: MIRACLE LEAGUE 805, INC. OPTIONS AND DISCUSSION**

**SUMMARY**

Pleasant Valley Recreation and Park District ("District") owns and operates twenty-eight (28) parks throughout the District. The District Liaison Committee has been meeting with Pleasant Valley School District "PVSD" to attempt to find a location for their use. Out of the twenty-eight park sites staff will be presenting three different parks with four potential options for a Miracle League field.

**BACKGROUND**

On March 28 and May 9, 2019, the District's Liaison Committee as well as Pleasant Valley School District's Liaison Committee met to discuss the current joint use agreements as it related to the former Los Altos Middle School property and a permanent location for Miracle League 805. As part of the site exploration, Freedom Park West, Woodcreek Park, Pitts Ranch Park, and University Preparation Charter School/Community Center park locations were examined. It was initially determined at the May 9, 2019 meeting that each agency would further explore the use of University Preparation Charter School located at 1099 Bedford Drive which is adjacent to the Community Center Park with Miracle League to operate a baseball program.

At the September 3, 2019 District Board meeting, the District Board entered into an agreement with Miracle League 805. The parties desired to enter into this agreement whereby the District would grant Miracle League, a Use and Maintenance Agreement located at 1605 E. Burnley Street for the use of the following related amenities: restrooms, sidewalk, and parking lot, and all District properties whose use is reasonably anticipated as part of this agreement.

On October 3, 2019 the District's Liaison Committee as well as Pleasant Valley School District's Liaison Committee met to discuss the progress regarding a permanent location for Miracle League 805. District staff provided an update regarding the agreement that the District Board approved on September 3, 2019. During that meeting, PVSD provided information that the University Preparation Charter School site would not be an eligible site due to Proposition 39. At the conclusion of the meeting, it was agreed upon that each agency would respectfully go back to their full boards to discuss other potential location sites which could house Miracle League 805.



## **ANALYSIS**

District staff has identified four (4) proposed options between three (3) different park sites. Each option comes with a unique set of challenges and opportunities listed below.

### **Option 1: Freedom Park (West End)**

This proposed option would allow a field to be placed close to the parking lot and restrooms located at the west end of Freedom Park.

#### **Challenges**

1. Removing Pavilion
2. Displacing Reservations – 7 from Calendar Year 2018
3. Upgrading Restrooms to meet ADA

#### **Opportunities**

1. Inclusive location
2. Restrooms already in place
3. Large Parking Area

### **Option 2: Woodcreek Park 1 (Southeast)**

This proposed option would allow a field to be placed close to the parking lot and close to Woodcreek Road.

#### **Challenges**

1. Displacing Programming – 227 reservations in 2018
2. Field Maintenance
3. Limited Public use
4. PVRPD doesn't have a Restroom or Parking available
5. Potentially breaks up Park Space

#### **Opportunities**

1. Current Joint Use Agreement
2. Maintenance of fields by the District could be reduced

### **Option 3: Woodcreek Park 2(Southwest)**

This proposed option would allow a field to be placed close to the parking lot.

#### **Challenges**

1. Displacing Programming – 227 reservations in 2018
2. Field Maintenance
3. Limited Public use
4. PVRPD doesn't have a Restroom or parking available

#### **Opportunities**

1. Current Joint Use Agreement
2. Maintenance of fields by the District could be reduced
3. Retains Park Space as it is at the same end as the new well site

**Option 4: Pitts Ranch Park**

This proposed option would allow a field to be placed on a current baseball field in the middle of the park.

**Challenges**

1. Displacing Programming – 336 Reservations 2018
2. Small Parking lot with limited ADA
3. Field Maintenance – current fields would need to be upgraded as well as regraded due to slope of current fields

**Opportunities**

1. Reduce Maintenance Cost by placing a turf with a rubberized surface
2. Retain a large portion of green/park space
3. Retains Park Space as it is at the same end as the new well site

**FISCAL IMPACT**

There is currently no fiscal impact from this action at this time, however, depending on the location it could require an appropriation of funds yet to be determined.

**RECOMMENDED ACTION**

It is recommended the Board review the options for a location for Miracle 805 and provide direction to staff.

**ATTACHMENTS**

- 1) Site Maps (7 pages)

# Freedom Park



805.482.1996

[www.pvrpd.org](http://www.pvrpd.org)

# Analysis – Freedom Park



- **Challenges:**
  - Facility Items
  - Displacing Reservations
    - 7 Reservations\*
- **Opportunities:**
  - Inclusive

\*2018 Calendar Year



805.482.1996

www.pvrpd.org

# Woodcreek Park



805.482.1996

[www.pvrpd.org](http://www.pvrpd.org)

# Analysis – Woodcreek Park 1



- **Challenges:**
  - Displacing Programming
    - 227 Reservations\*
  - Field Maintenance
  - Limited Public Use
- **Opportunities:**
  - Current Joint Use Agreement
  - Maintenance

\*2018 Calendar Year



805.482.1996

www.pvrpd.org

# Analysis – Woodcreek Park 2



- **Challenges:**
  - Displacing Programming
    - 227 Reservations\*
  - Field Maintenance
- **Opportunities:**
  - Current Joint Use Agreement
  - Maintenance
  - Retains Park Space



\*2018 Calendar Year

805.482.1996

www.pvrpd.org





# Analysis – Pitts Ranch Park



- **Challenges:**
  - Facility Items
  - Displacing Programming
    - 336 Reservations\*
  - Field Maintenance
- **Opportunities:**
  - Maintenance
  - Retains Park Space

\*2018 Calendar Year



805.482.1996

[www.pvrpd.org](http://www.pvrpd.org)

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Eric L. Storrie, Recreation Services Manager**

**DATE: November 7, 2019**

**SUBJECT: FREEDOM GYM PROGRAMMING OPTIONS AND  
DISCUSSION**

**SUMMARY**

The Pleasant Valley Recreation and Park District (“District”) has utilized Freedom Gym since 1985 as part of a Facility Use Agreement with the Oxnard Union High School District (“OUHSD”). OUHSD had designated this property as “surplus” and it was sold on September 11, 2019 to Mr. Erick Kuskie. Mr. Kuskie has expressed interest in wanting to work with the District regarding maintaining current levels of programming.

**BACKGROUND**

The Pleasant Valley Recreation and Park District (“District”) has utilized Freedom Gym since 1985 as part of a Facility Use Agreement (“Agreement”) with the Oxnard Union High School District (“OUHSD”). This Agreement may be terminated by either party upon thirty (30) days written notice.

On November 7, 2018, OUHSD adopted a resolution which authorized the solicitation of proposals for sale, lease, or exchange of Freedom Gym. OUHSD preference is to accommodate the highest and best price for Freedom Gym. An updated appraisal determined the Stearman Street property’s value to be \$595,000.

On February 6, 2019, staff brought five options to the District Board for consideration and direction, with guidance to negotiate with OUHSD regarding lease options and to look at logistics and placement of a tent structure at the Community Center Park location. Lease options were limited due to OUHSD’s desire to accommodate the highest price and best use in selling the property and not wanting to enter into an extended lease.

On April 15, 2019, staff identified five proposed options between two different proposed size tent structures with the Board providing direction to explore a “larger” tent (100-120’ long by 48-52’ wide by 20-24’ high) in size.

With Freedom Gym having been sold on September 11, 2019, staff requests guidance on direction on current programming options.

**ANALYSIS**

Current programming at Freedom Gym includes badminton, table tennis, open play basketball, open play pickleball, and various rentals throughout the year.

District staff have identified five (5) options for consideration and guidance:

**Option 1 – Rent Freedom Gym from New Owner**

Initial conversations with Mr. Kuskie indicate a monthly rental price of \$0.70-\$1.00 per square foot (\$4,200.00-\$6,000.00). Mr. Kuskie will maintain the exterior of the property with the interior (paper product, cleaning, annual upkeep, etc) being the responsibility of the District.

This monthly rental would allow the District to currently continue current programming. Analysis on whether these programs will continue to be drop-in and without charge is ongoing.

Additionally, Mr. Kuskie is in negotiations with the Airport to determine monthly rental fees for use of the parking lot in front of Freedom Gym. It is unknown at this time if this expense will be passed on to the District.

It is important to note the District has traditionally spent \$10,000 annually on maintenance at Freedom Gym which may offset some of this expense.

**Option 2 – Use Other District Facilities**

The District could partially move current programming to other locations, with importance given to the programming, rentals, and general maintenance operations. This option includes both indoor and outdoor locations available for use.

<b>Program</b>	<b>Location Option</b>
Badminton	Community Center Auditorium
Table Tennis	Community Center Auditorium
Basketball	Mel Vincent, Pitts Ranch and Lokker Park
Pickleball	Bob Kildee Community Park
Rentals	TBD - case by case if the District can support this

There are logistical considerations in relation to use of the Auditorium for Badminton and Table Tennis in the storage of equipment as well as the additional maintenance and repair of the floor.

**Option 3 – Joint-Use Agreements for Similarly Situated Space**

District staff have had discussions with local agencies to show availability for sport programming (basketball, pickleball) at these non-District owned/managed locations between 8:00am and 1:00pm; however, programming times and schedules are not guaranteed to remain as-is for our current user groups and renters.

**Option 4 – Request for Proposals for Tent Structure**

The District could purchase a tent structure and place it on District-owned property. Staff research indicates the purchase price of a 49’W x 115’L x 24’H truss arch structure to be between \$48,000 and \$200,000. As part of this option, there would be additional expenses to make the tent

programmable, including laying of a sports court surface (estimated \$15,000), fans and lighting (estimated \$10,000), and the purchase of basketball standards (estimated \$6,000).

The District is exploring this option with the City and County on understanding permit requirements, conditional use permits, and fire code requirements for anything longer than a 6-month period.

Additionally, the District estimates an additional \$30,000 for facility improvements, including moving perimeter fencing, pouring reinforced concrete slabs, removal of benches, lighting, and trees, and relocation of exercise equipment to accommodate the tent structure.

**FISCAL IMPACT**

The fiscal impact could range from \$10,000 to \$250,000, depending on direction from the Board of Directors.

**RECOMMENDATION**

It is recommended that the Board provide direction regarding Freedom Gym programming options.

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Kathryn Drewry, Human Resources Specialist**

**DATE: November 7, 2019**

**SUBJECT: APPROVAL OF 2020 PART TIME SALARY SCHEDULE  
WITH MINIMUM WAGE IMPACT**

**BACKGROUND**

The Pleasant Valley Recreation and Park District staff completes an annual review of the upcoming State of California minimum wage increase and how it relates to our positions and salary schedule. The State of California is currently in the fifth year of a seven year plan to gradually increase minimum wage. Minimum wage will increase to \$13.00 per hour on January 1, 2020, this range started at \$10.00 in 2016 and is projected to increase to \$15.00 in 2022.

**ANALYSIS**

In 2020 the following classifications will be impacted by the change in the state's minimum wage:

2019 CURRENT RATES			2020 PROPOSED RATES		
OFFICE ASSISTANT	\$12.00	\$14.64	OFFICE ASSISTANT	\$13.00	\$14.64
HUMAN RESOURCES GENERALIST	\$14.25	\$16.97	HUMAN RESOURCES GENERALIST	\$14.25	\$16.97
ADMINISTRATIVE SERVICE WORKER	\$12.00	\$50.00	ADMINISTRATIVE SERVICE WORKER	\$13.00	\$50.00
RECREATION LEADER	\$12.00	\$14.03	RECREATION LEADER	\$13.00	\$14.03
SENIOR LEADER	\$12.60	\$18.30	SENIOR LEADER	\$13.65	\$18.30
LIFEGUARD	\$12.60	\$15.75	LIFEGUARD	\$13.65	\$15.75
AQUATIC CENTER ASSISTANT MANAGER	\$13.89	\$18.27	AQUATIC CENTER ASSISTANT MANAGER	\$15.03	\$18.27
PARK RANGER	\$23.12	\$27.54	PARK RANGER	\$23.12	\$27.54
LANDSCAPE/CUSTODIAN I	\$12.00	\$13.37	LANDSCAPE/CUSTODIAN I	\$13.00	\$13.37
LANDSCAPE/CUSTODIAN II	\$12.00	\$15.82	LANDSCAPE/CUSTODIAN II	\$13.00	\$15.82

**FISCAL IMPACT**

In FY 2017/2018 we had 100 employees working in a classification that fell under the proposed 2020 Part Time Salary Schedule; classifications included Recreation Leader, Lifeguard, Aquatic Center Assistant Manager and Landscape Custodian II. These one hundred employees worked approximately 28,500 hours with a cost of \$375,000. Using these numbers, staff estimates an increase in wages to result in a difference of \$27,000.

**RECOMMENDATION**

It is recommended that the Board review and approve the 2020 Part Time Salary Schedule with minimum wage impact.

**ATTACHMENTS**

- 1) 2020 PT Salary Schedule (1. page)



## PART TIME SALARY SCHEDULE

(TEMPORARY, SEASONAL, AND RESTRICTED)

<b>OFFICE ASSISTANT</b>	<b>\$13.00</b>	<b>\$14.64</b>
<b>HUMAN RESOURCES GENERALIST</b>	<b>\$14.25</b>	<b>\$16.97</b>
<b>ADMINISTRATIVE SERVICE WORKER</b>	<b>\$13.00</b>	<b>\$50.00</b>
<b>RECREATION LEADER</b>	<b>\$13.00</b>	<b>\$14.03</b>
<b>SENIOR LEADER</b>	<b>\$13.65</b>	<b>\$18.30</b>
<b>LIFEGUARD</b>	<b>\$13.65</b>	<b>\$15.75</b>
<b>AQUATIC CENTER ASSISTANT MANAGER</b>	<b>\$15.03</b>	<b>\$18.27</b>
<b>PARK RANGER</b>	<b>\$23.12</b>	<b>\$27.54</b>
<b>LANDSCAPE/CUSTODIAN I</b>	<b>\$13.00</b>	<b>\$13.37</b>
<b>LANDSCAPE/CUSTODIAN II</b>	<b>\$13.00</b>	<b>\$15.82</b>

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Eric L. Storrie, Recreation Services Manager**

**DATE: November 7, 2019**

**SUBJECT: CONSIDERATION OF A 3-YEAR COMMUNITY EVENT  
FUNDING AGREEMENT BETWEEN THE CITY OF  
CAMARILLO AND THE PLEASANT VALLEY  
RECREATION AND PARK DISTRICT TO PRODUCE  
THE SUMMER CONCERT SERIES**

**SUMMARY**

In February 2019, the City of Camarillo (“City”) and the Pleasant Valley Recreation and Park District (“District”) entered into an agreement to co-produce the 2019 Summer Concert Series. With the success of the series, the City and District staff are proposing to enter into a three (3) year agreement to produce the Summer Concert Series.

**BACKGROUND**

The Camarillo Arts Council (“CAC”), a 501(c)3, had produced the Summer Concert Series at Constitution Park for over 35 years. As a partnership between the CAC and the City, the City contributed \$50,000 cash and another \$19,191 of in-kind support to produce this event. In 2018, the CAC produced seven (7) concerts and two (2) movies as part of the series, for a combined event expense of \$117,191.

In 2019, the City and District produced a 4-part series, with the City contributing \$60,000 (including contingency) plus in-kind City services. The 2019 Summer Concert Series financials are as follows:

**2019 Summer Concert Series Financials**

**Revenue**

City of Camarillo Event Funding	\$	60,000.00	
Food Truck Fees	\$	3,155.00	
Sponsorships	\$	1,500.00	
Donations	\$	946.45	
<b>TOTAL REVENUE</b>			<b>\$ 65,601.45</b>

**Expenses**

Event Management	\$	6,510.00
------------------	----	----------



Operations	\$	7,175.00	
Marketing	\$	3,360.00	
Sponsorships	\$	924.00	
Performers	\$	9,378.20	
Lighting	\$	6,000.00	
Sound	\$	11,200.00	
Security	\$	3,360.00	
Marketing & Advertising	\$	3,299.83	
Signage	\$	1,485.62	
Unbudgeted Operational	\$	2,862.81	
		<b>TOTAL EXPENSE</b>	<b>\$ 55,555.46</b>

**Net Income** **\$ 10,045.99**

These figures do not account for \$1,500.00 of in-kind advertising.

**ANALYSIS**

While staff recognizes this event was supported monetarily by both the City and the CAC, staff also recognizes the importance of this event to the community. District staff have been working with City Manager Dave Norman on the full scope of continuing this partnership in 2020, 2021, and 2022.

The City is currently proposing an annual funding agreement of up to, but not to exceed, \$60,000 cash, plus in-kind City services (fencing, lights, staff, portables) for a 4-part Summer Concert Series. This financial consideration will cover the same items listed above.

District staff analyzed the following items related to the production of this event:

1. Programming Responsibilities. Current staffing levels and experience, as well as special event workloads during June-September, lend the ability for the District to produce this event without significant detriment to District programming, service levels, or staff burnout based on one concert a month. The draft Agreement outlines specific responsibilities between the City and District.
2. Revenues. Staff is actively working with food trucks and community partners as it relates to sponsorship of the series. Any revenues will be used as follows:
  - a. Defray District's unforeseen and necessary expenditures above the \$60,000 being made available to District by City;
  - b. Defray City's cash outlay to District;
  - c. Any excess funding shall be held in reserve by the District for the subsequent Summer Concert Series (i.e. 2021 and 2022). If the District decides not to organize, manage, market and produce the 2023 Summer

Concert Series, any sponsorship and donation funds held in reserve shall be given to the City for such use.

3. Expenses. The District shall account for and provide a report of expenses within sixty (60) days after the last Summer Concert Series performance.
4. Insurance. District staff have worked with the California Association for Park & Recreation Indemnity (CAPRI) regarding insurance requirements and risk management best-practices for this event as alcohol has typically been present (brought by event attendees). Currently, the City has a Social Host Ordinance (“SHO”). The event will have a police presence as well as additional uniformed security, and both agencies seek to “act with reasonable care” regarding monitoring of the event to ensure that public safety is paramount. CAPRI believes the District would not be negligent nor liable for liability claims resulting for any guests’ consumption of alcohol on the event grounds.
5. Marketing and Sponsorships. District staff will take the lead on marketing options and branding of the Summer Concert Series to represent being presented by both agencies. The marketing of the event will include social media, District’s Activity Guide publication (May-August 2020 issue), press releases, banners, email marketing, and providing information at District-hosted (Easter Eggstravaganza, Food Truck Festival, Rummage Sale, National Trails Day) and other community events.
6. Blanket/Chair Policy. The City’s policy previously allowed for guests to leave blankets and chairs at the Constitution Park site as early as 5:00pm the Thursday of the concert. The CAC and City would provide volunteers to supervise and guard the guest’s possessions through the start of the event. The City Council has provided guidance that blanket and chair placement by guests will be available starting at 5:00pm on Friday with no supervision. Should guests leave items prior to 5:00pm on Friday, the City will collect and place these items to the side of the stage. Guests are still authorized to stay with their items throughout the day Friday, a common practice in previous years. This policy update will be incorporated in all messaging and advertising of the Summer Concert Series.
7. Proposed Event Dates. District and City staff have worked to analyze available dates that would not conflict with other major events in the area, including Camarillo Fiesta, Wings Over Camarillo Air Show, Party for the Parks, and the Movies in the Park series. Proposed event dates shall be coordinated between the Parties each year, with performances taking place in June and July with every attempt made to establish a consistent and easily remembered schedule (i.e. “the second and fourth Saturday of the month”).

The proposed event dates are:

- a. Saturday, June 13, 2020
- b. Saturday, June 27, 2020

- c. Saturday, July 11, 2020
- d. Saturday, July 25, 2020

Mr. Norman is taking (will have taken) this item to the Camarillo City Council for action on Wednesday, November 6 (yesterday). City Council and Board of Directors approval will enable the District to timely hire the musical acts and production contractors for the season.

**FISCAL IMPACT**

The funding agreement is up to, but not to exceed, \$60,000 cash, plus in-kind City services for a for a 4-part Summer Concert Series.

**RECOMMENDATION**

It is recommended the Board of Directors authorize the General Manager to enter into a three (3) year agreement between the City of Camarillo and the Pleasant Valley Recreation & Park District to produce the Summer Concert Series.

**ATTACHMENT**

- 1) Summer Concert Series Community Event Funding Agreement (9 pages)

## COMMUNITY EVENT FUNDING AGREEMENT

This Community Event Funding Agreement ("Agreement") is between the City of Camarillo ("City") and Pleasant Valley Recreation and Park District ("District"). The City and Organization shall be referred to herein collectively as "Parties". The Parties agree as follows:

### BACKGROUND

- A. For over 35 years, the Camarillo Arts Council ("CAC") organized, managed, and produced, the Summer Concert Series in Constitution Park, a City-owned park located at the corner of Carmen Drive and Paseo Camarillo.
- B. For the 2018 Summer Concert Series, the City of Camarillo paid the CAC \$50,000 in cash to hire one band, to pay for stage lighting, sound, and some of the cost of private security for the seven (7) concert and two (2) movie series which ran from June through September 2018. The City also provided \$19,191 in direct support and in-kind staffing support to provide porta-potties, security fencing, and safety lighting, electrical connections, lighting tower set-up and take down, movie screen installation and take down, and stage preparation. The CAC provided approximately \$48,000 in cash for the balance of funding needed to produce the 2018 series.
- C. Following the November 5, 2018 General Election, the CAC informed the City that they would no longer organize, manage, and produce the summer concert series.
- D. In late November and early December 2018, the City Manager and District's General Manager held preliminary discussions regarding feasibility of partnering together to organize, manage and produce the Summer Concert Series to consist of four (4) concerts for the 2019 summer season using \$50,000 from the City, and approximately \$19,191 in direct, City staff in-kind and residual cash (approximately \$10,000) support.
- E. On December 12, 2018, the City Council directed its City Manager to explore a partnership leading to a funding agreement with the District to produce a limited summer concert series (musical acts only, no movies) for 2019, based on the general terms in recital D above.
- F. On January 2, 2019, the District's Board of Directors directed its General Manager to work with the City to refine the program budget to include contingency, determine programming, event permitting, event space, financial responsibilities, develop marketing collateral, and draft a funding agreement for the 2019 Summer Concert Series.
- G. On February 13, 2019, The City Council adopted a one-year Community Event Funding Agreement for a four-concert series, one concert each for the months of June, July, August and September, 2019 for a total not-to-exceed cost of \$60,000 and approximately \$8,330 in City-provided direct services and in-kind support.
- H. District has provided a post-event accounting of revenues and expenses for the series showing \$5,601.45 in food truck revenue, sponsorships and donations, and \$55,555.46 in program and personnel expenses, for a total net expense of \$49,954.01.
- I. As a result of the success of the 2019 Summer Concert Series, the Parties wish to enter into a multi-year Agreement for years 2020, 2021 and 2022, to provide management continuity and assurance to the public of the continuation of the Summer Concert Series.

## RECITALS

### A. Event Details.

1. The Parties agree that the Summer Concert Series shall be held at Constitution Park, located at 601 Carmen Drive, Camarillo, CA. in 2020, 2021, and 2022. See Exhibit A for Site Plan.
2. The Parties agree that the District will produce a four (4) concerts per year. If sufficient sponsorships, donations or other revenues allow, additional concerts may be scheduled for the 2020, 2021 and 2022 seasons.
3. The dates and times of the concerts for each Summer Concert Series shall be coordinated between the Parties each year within the months of June, July, August and September, with the majority of the events happening within June, July, and August. All reasonable attempts will be made to establish a consistent and easily remembered concert schedule (i.e., "The second and fourth Saturday of the month, in June and July").
4. The Parties agree that back of house ("BOH")/"green room" space shall be provided and located at City Hall within the staff lounge and restroom, which is located at 601 Carmen Drive, Camarillo, CA.
5. The Parties agree that the name of the event shall be "Summer Concert Series presented by the Pleasant Valley Recreation and Park District and the City of Camarillo."

### B. Responsibilities of the District.

1. Event Management. District agrees to provide staffing and oversight for the following items:
  - a. Book and manage performers/bands, to include contract negotiations, site tours and logistics, technical items, performance riders, local and regional permits, and settlement.
  - b. Book and manage food truck and/or other vendors, to include local and regional permits, site logistics, and settlement.
  - c. Manage event staffing, to include District staff, volunteers, vendors, and contractors.
2. Operations. District agrees to provide staffing and oversight for the following items:
  - a. Event setup and breakdown, to include but not limited to, signage, cones, chalking of grounds, power requirements, and rentals.
  - b. Pre- and Post-event cleaning of event spaces, to include but not limited to BOH area(s), parking lots (City Hall, The Church of Latter-Day Saints, Community Center Park), Paseo Camarillo (street/road/drive), and stage/grounds.
3. Marketing and Advertising. District agrees to provide marketing staffing and support for the following items:

a. Develop a multi-faceted marketing strategy, to include press releases, email marketing, social media (Facebook/Twitter/Instagram), website, paid and un-paid advertising, and event photography.

b. Provide crowdsourcing support for the public to determine the genre of music to be played at the event. This activity shall consist of online and hard-copy polls. The top four to six (4-6) genres shall be the music-type for the Summer Concert Series, with specific performers/bands being selected by District.

c. Design all creative and branding for the event, to include banners, posters, flyers with final approval to be determined jointly by the City's City Manager and District's General Manager.

d. Signage shall be removed at the conclusion of each night of the event.

e. It is the responsibility of the District to set/hang and store banners and other related signage.

4. Sponsorships and Donations. Any sponsorships or donations received by either Party for the Summer Concert Series shall be used in the following order to:

a. Defray District's unforeseen and necessary expenditures above the \$60,000 being made available to District by City;

b. Defray City's cash outlay to District;

c. Any excess funding shall be held in reserve by the District for the subsequent Summer Concert Series (i.e. 2021 and 2022). If the District decides not to organize, manage, market and produce the 2023 summer concert series, any sponsorship and donation funds held in reserve shall be given to the City for such use.

5. Budget Tracking and Reporting. District agrees to track all expenses and provide a detailed report on all expenditures in accordance with Section 1.2 of this Agreement.

C. Responsibilities of the City.

1. Operations. City agrees to provide staffing and operational support for the following items:

a. Rent and manage porta-potties for guest use, to include placement on City property, scheduling of servicing.

b. Rent and manage security fencing, to include scheduling of delivery/pickup and setup/breakdown.

c. City shall have safety lighting (defined as parking lot, park, and porta-potty lighting) available during the events.

d. Provide technical assistance for all power requirements by the performers/bands and event.

- e. Provide the set-up and break-down of the lighting tower for event, if needed
- f. Provide stage cleaning.
- g. All operational items shall be coordinated in conjunction with the District's Event Manager.

2. Marketing. City agrees to provide staffing and operational support for the following items:

- a. Insert approved marketing material into resident water bill mailers.
- b. Permit the District to hang banners and other signage related to the event. Signage can be set/hung the Thursday before the event.
- c. Permit the District use of the digital marquee at Constitution Park for marketing and advertising of the event.

### TERMS

#### 1. FUNDING.

1.1 Amount of funding. For organizing, managing, marketing and producing four (4) free to the public concerts, the City will provide cash funding to the District of up to, but not to exceed, \$60,000 (sixty thousand dollars) annually, and approximately \$10,660 annually in direct services and in-kind event staffing support, as needed, in accordance with subsection 1.2 below. District may request disbursement of up to \$60,000 upon execution of this agreement, and then every October 1st of each subsequent year.

1.2 Use of funding. District warrants that it will spend the up to \$60,000 granted by and received through this Agreement only for the purpose of organizing, managing, marketing and producing four (4) free to the public concerts in accordance with the Program Budget as found in Exhibit B. Annually, within 60 days following the final concert of each Summer Concert Series, District will provide City an expense report with copies of receipts or cancelled checks attached and remittance of unused funds. The approximately \$10,660 in direct services and in-kind event staff support provided by City are found in Exhibit C.

2. INDEMNIFICATION. City shall indemnify, defend and hold harmless District and its directors, officers, employees and agents from and against any and all liability, loss, damage, claims, demands, expenses, costs (including without limitation reasonable attorney's and expert's fees and costs in connection with litigation) of any kind or nature (including without limitation personal injury, death, or property damage), arising out of (i) a dangerous condition of the City facilities to be used for the Summer Concert Series, (ii) the negligence or willful misconduct of the City, or the (iii) failure of City to comply with any of its obligations of this Agreement, or anyone directly or indirectly employed by them or anyone for whose acts any of them may be liable, except where caused by the sole or active negligence or willful misconduct of District.

District shall indemnify, defend and hold harmless City and its directors, officers, employees and agents from and against any and all liability, loss, damage, claims, demands, expenses, costs (including without limitation reasonable attorney's and expert's fees and costs in connection with litigation) of any kind or nature (including without limitation personal injury, death, or property

damage), arising out of the failure of District to comply with any of its obligations of this Agreement, or anyone directly or indirectly employed by them or anyone for whose acts any of them may be liable, except where caused by the sole or active negligence or willful misconduct of City.

3. EFFECTIVE DATE. This Agreement is effective as of the date that it is fully executed by all parties after approval by the Camarillo City Council and the District's Governing Board ("Effective Date").

4. NOTICES. All notices shall be sent by U.S. Mail and by email to the below listed addresses, or to such other addresses as may be designated by written notice. These addresses may be used for delivery of service of process.

CITY: City of Camarillo  
Attn: Carmen Nichols, Administrative Services Director  
601 Carmen Drive, Camarillo, CA 93010  
cvnichols@cityofcamarillo.org

ORGANIZATION: Pleasant Valley Recreation and Park District  
Attn: Mary Otten, General Manager  
1605 E. Burnley Street, Camarillo, CA 93010  
motten@pvrpd.org

5. AUTHORITY TO EXECUTE. The person or persons executing this Agreement on behalf of each party warrants and represents that the person or persons have the authority to execute this Agreement on behalf of their party (whether the party is a corporation, partnership, or business entity) and warrants and represents that they have the authority to bind all parties to the performance of its obligations hereunder.

6. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

7. SEVERABILITY. In case any part, term, portion or provision of this Agreement is determined to be illegal, invalid or unenforceable, the remaining parts, terms, portions and provisions shall remain valid, enforceable, and in full force and effect.

8. AMENDMENT. This Agreement may only be amended by written instrument, executed by all parties.

9. CALIFORNIA LAW. This Agreement will be construed and interpreted pursuant to the laws of the State of California. Venue for any litigation concerning this Agreement shall be in the Superior Court for the County of Ventura, California.

10. RECITALS. The foregoing recitals are incorporated herein by reference into this Agreement.

11. COMPLIANCE WITH ALL LAWS. Each Party warrants that it will comply with all federal, state, and local laws in the performance of this Agreement.

12. INTEGRATION. This Agreement reflects the entirety of the terms and understandings between the parties and shall supersede all prior or contemporaneous oral or written



understandings, statements, representations or promises between the parties concerning the matters contained herein. This Agreement has been negotiated in good faith and each party warrants and represents that in executing this Agreement, they are not relying upon any representation, promise, inducement or statement made in negotiation that has not been included in the terms of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as set forth below.

**“DISTRICT”**

Date: \_\_\_\_\_

\_\_\_\_\_  
Robert Kelley, PVRPD Board President

ATTEST

\_\_\_\_\_  
Anthony Miller, PVRPD Clerk of the Board

**“CITY”**

Date: \_\_\_\_\_

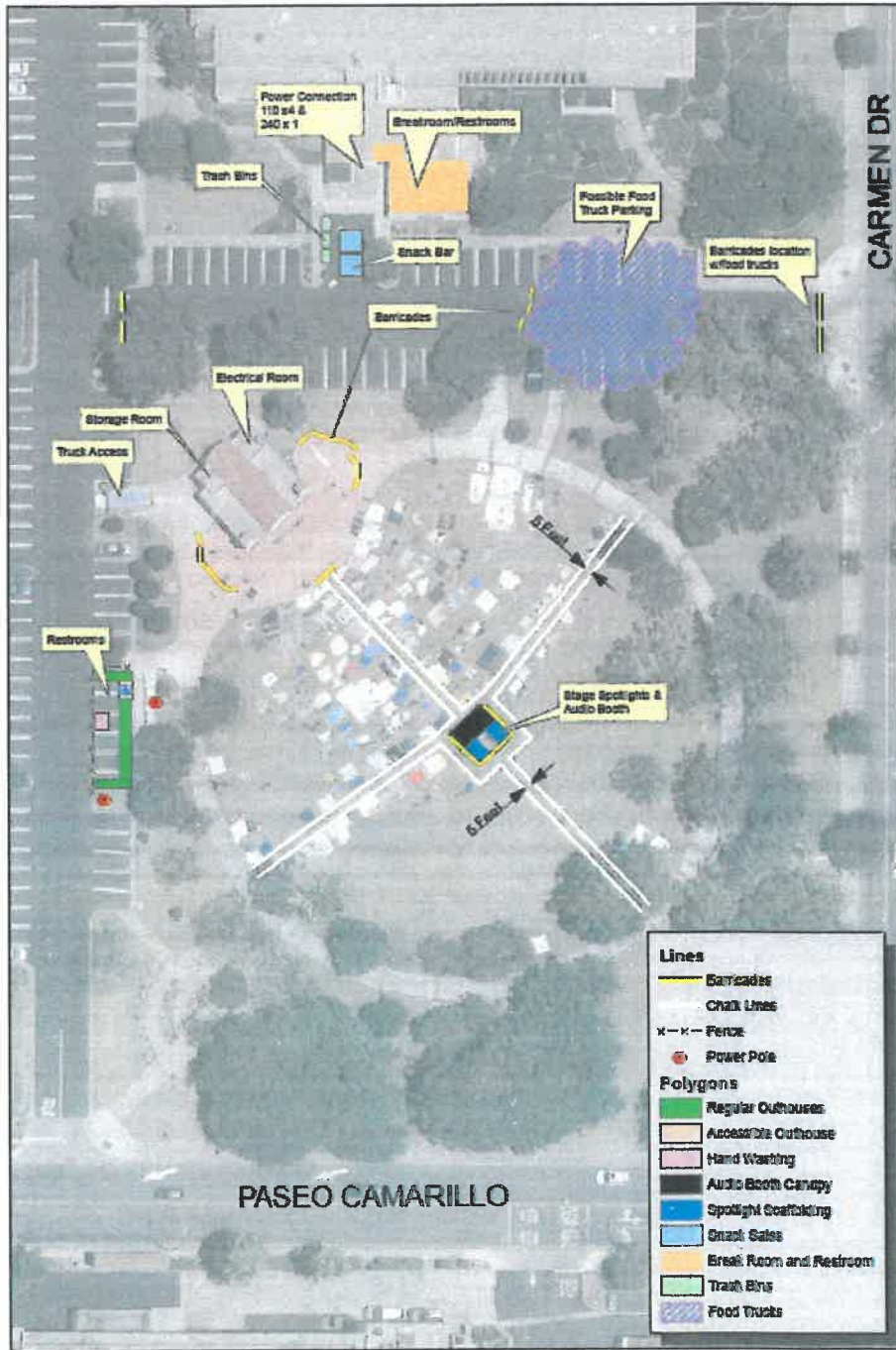
\_\_\_\_\_  
Kevin Kildee, Mayor

ATTEST

\_\_\_\_\_  
Jeffrie Madland, City Clerk

# EXHIBIT A

## Site Plan (Subject to minor changes)



**Constitution Park Concert Setup**

1 inch = 40 feet

# EXHIBIT B

## Budget

### Summer Concert Series Expense Comparison

	Camarillo Arts Council	2019 PVRPD		2020 PVRPD
<b>Personnel</b>				
	2017 Actual	4-Part Series Budgeted	Actual	4-Part Series Estimated
Event Management	\$ -	\$ 4,032.00	\$ 6,510.00	\$ 5,040.00
Operations	\$ 355.00	\$ 7,200.00	\$ 7,175.00	\$ 9,000.00
Marketing	\$ -	\$ 2,016.00	\$ 3,360.00	\$ 2,520.00
Community Partnerships	\$ -	\$ 1,008.00	\$ 924.00	\$ 840.00
<b>TOTAL</b>	<b>\$ 355.00</b>	<b>\$ 14,256.00</b>	<b>\$ 17,969.00</b>	<b>\$ 17,400.00</b>
<b>Service &amp; Supplies</b>				
Performers Expenses	\$ 39,234.05	\$ 14,000.00	\$ 9,378.20	\$ 14,000.00
Lighting	\$ 11,375.00	\$ 6,400.00	\$ 6,000.00	\$ 5,000.00
Sound	\$ 21,110.00	\$ 11,600.00	\$ 11,200.00	\$ 20,000.00
Security	\$ 4,278.00	\$ 2,400.00	\$ 3,360.00	\$ 3,360.00
Marketing & Advertising	\$ 1,056.74	\$ 2,000.00	\$ 3,299.83	\$ 4,000.00
Signage	\$ -	\$ 750.00	\$ 1,485.62	\$ 1,000.00
Operations	\$ -	\$ -	\$ 2,862.81	\$ 850.00
Contingency	\$ -	\$ 10,000.00	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 77,053.79</b>	<b>\$ 47,150.00</b>	<b>\$ 37,586.46</b>	<b>\$ 48,210.00</b>
<b>TOTAL</b>	<b>\$ 77,408.79</b>	<b>\$ 61,406.00</b>	<b>\$ 55,555.46</b>	<b>\$ 65,610.00</b>
<b>AVERAGE PER EVENT</b>	<b>\$ 11,058.40</b>	<b>\$ 15,351.50</b>	<b>\$ 13,888.87</b>	<b>\$ 16,402.50</b>
		Per 4-Part Event		Per 4-Part Event

#### Notes:

1. 2017 Camarillo Arts Council ("CAC") expenses are based on CAC P&L statement for CY2017
2. 2019 sound & lighting expenses were provided at a heavy discount by RCS
3. \$2,800 light tower cost savings in 2019. 2020 RCS is proposing providing that as part of the package
4. 2019 SCS does not account for management time for tracking and accounting. This will be tasked to the Event Manager in 2020.
5. Items with "\$ - " indicate a zero value. There is no record of Camarillo Arts Council information in red.

## EXHIBIT C

### Direct Services and In-Kind Staff Support (Provided by City)

City will provide the following direct services and in-kind staffing services at its expense:

Estimated Cost  
(based on City's actual 2019 costs)

#### Direct Services (contracted)

1.	Porta-Potties/Fencing/Safety Lighting	\$ 3,620.00
2.	Storage Container Relocations	\$ 460.00
3.	Sheriff Overtime (four concerts)	\$ 2,761.00
		<u>\$ 6,841.00</u>

In-Kind Staff Support (approx. 58 hours) \$ 3,819.00

**TOTAL Estimated Direct Services and In-Kind Staff Support \$10,660.00**

**PLEASANT VALLEY RECREATION AND PARK DISTRICT  
STAFF REPORT / AGENDA REPORT**

**TO: BOARD OF DIRECTORS**

**FROM: MARY OTTEN, GENERAL MANAGER**  
**By: Nick Marienthal, Park Supervisor**

**DATE: November 7, 2019**

**SUBJECT: CONSIDERATION AND APPROVAL OF BID AWARD  
FOR FREEDOM PARK PARKING LOT RE-PAVING  
PROJECT TO J&H ENGINEERING**

**SUMMARY**

Freedom Park is a 34-acre park which was developed in 1976. Since that time the parking lots have only received minimal repair and maintenance. By performing a complete re-pavement, the District will be able to start to implement a preventative maintenance standard to maximize the life expectancy of the refurbished parking lots.

**BACKGROUND**

This parking lot has had no preventative maintenance measures taken to date. Asphalt parking lots, like any improvement, have a projected service life based on construction methods, maintenance levels, and several other factors. The District is responsible for the maintenance and upkeep of over five acres of parking lots throughout the District properties. All the lots require maintenance and repair ranging from cleaning and seal coat applications to removing or replacing alligator sections or to complete failures.

This Capital Improvement Project was identified and funded in the FY 2019-2020 Capital Improvement Budget. The funding and project are designed to repair and maintain asphalt parking lots, pathways, and surfaces throughout the Park District. Freedom Park sees over 200,000 visitors which range from roller hockey, RC track, dog shows, rentals and baseball.

**ANALYSIS**

Asphalt parking lots require a number of treatments to maintain the integrity of the surfacing. Treatments range from a fog seal, or slurry seal application to simply replacing the degraded oil binders in the asphalt, to a complete regrinding or rebuild of the asphalt, or asphalt overlay. This parking lot will need to be completely rebuilt. This project will complete the repair and maintenance at this site and set a starting point for scheduled preventative maintenance practices in future years.

To address the current needs of the parking lot located at Freedom Park, the following items will be addressed: 1) pulverize approximately 100,000 square (sq.) feet (ft.) of existing asphalt, 2) grade using existing pulverized asphalt for base at a compaction of 93% or greater, 3) use hot asphalt for finish 3 inches (3") compacted, and 4) re-stripe to match existing patterns to include red curbs and blue handicap parking stalls.

The Request for Proposals was opened on September 6, 2019 and closed on Wednesday, October 16, 2019 at 2:00 pm. There was a mandatory job walk on September 25<sup>th</sup> and five contractors attended with three companies submitting bids. J&H Engineering was the lowest responsible bidder at \$231,800. The expected project start date would be December 9<sup>th</sup> with an approximate completion date of the first week in January.

**FISCAL IMPACT**

Funding for this project will come from the FY 2019-2020 capital budget. The total expense breakdown is a J&H Engineering cost of \$231,800 plus a 5% contingency of \$11,590, to bring the total to \$243,390. The District allocated \$250,000 from the capital budget for this project.

**RECOMMENDATION**

It is recommended the Board of Directors authorize and approve the General Manager to enter into agreement with J&H Engineering in the amount of \$231,800, plus a 5% contingency bringing the total to \$243,390 for the Freedom Park re-paving project.

**ATTACHMENT**

- 1) Bid Abstract (1 page)
- 2) Agreement (34 pages)



## AGREEMENT

### Freedom Park Parking Lots

THIS AGREEMENT, made and entered into on November 7, 2019 by and between Pleasant Valley Recreation & Park District, a public entity, hereinafter referred to as "Owner," and

J&H Engineering General Contractors, Inc.

---

Hereinafter referred to as "Contractor."

The parties hereto mutually covenant and agree as follows:

1. The Contract Documents, as that term is defined in Article 1.1 of the General Conditions, are hereby incorporated in and made a part of this Agreement as though fully set forth herein. If there exist any provisions of local, state or federal laws, ordinances or regulations which are required to be expressly set forth in the Contract Documents and have not been included therein, such provisions are incorporated herein as if expressly set forth.
2. For and in consideration of the payments and agreements to be made and performed by the Owner as set forth in said Contract Documents, the Contractor agrees with the Owner to perform the Work contemplated under this project is furnishing all materials, labor, equipment, tools, services, transportation, utilities, supervision and other necessary items and facilities (and including payment of all taxes, insurance, bonds, license and permit fees, and other costs incidental to the Work. (the "Work") Required for pulverizing approximately 100,000 square feet (sq. ft) of existing asphalt, grade using existing pulverize asphalt for base at a compaction of 93% or greater, use hot asphalt three inches (3") compacted for finish and re-stripe to match existing patterns to include red curbs and blue handicap stalls located at the Freedom Park, 275 E. Pleasant Valley Road, Camarillo, California 93010, at the Pleasant Valley Recreation & Park District's (District), to furnish at its own proper cost and expense all plant, labor, services, materials, tools, equipment, supplies, transportation, utilities, and all other items and facilities necessary therefore, as provided in the Contract Documents, and to do everything required therein. In accordance with the provisions of Section 3700 of the Labor Code, the Contractor will secure payment of compensation of its employees by acquisition of workers' compensation insurance or by qualification as a self-insurer. Contractor shall perform the Work in accordance with any local, state and federal ordinances, laws and regulations applicable to the Work, including but not limited to those pertaining to the safety of workers performing the Work, payment of prevailing wages to workers employed on the Work, and compliance with all provisions of the California Labor Code, applicable to the Work, which (consistent with Section 1 hereto) are incorporated by reference hereto as if specifically set forth.
3. The Contractor shall provide for payments on all required insurance policies, and shall obtain all necessary permits and licenses for performance of the Work. The Contractor shall furnish and remove all plant, temporary work or structures, tools, and equipment necessary to accomplish the Work contemplated by this Agreement and the Contract Documents, and shall be responsible for all loss and damage arising out of the nature of the Work during its progress and prior to Owner's acceptance, from the action of the elements and from any unforeseen difficulties which may arise or be encountered in the prosecution of



the Work, and for all other risks of any description connected with the Work. The Contractor shall also be responsible for all expenses incurred by or in consequence of the suspension or discontinuance of Work, except where the Contract Documents expressly stipulate otherwise. In consideration of the foregoing, and for well and faithfully completing the Work within the stipulated time and in the manner shown and described in the Contract Documents and in accordance with any requirements of the Engineer, the Owner shall pay, and the Contractor shall receive as full compensation therefore, the prices set forth in the accepted Bid Schedule (Proposal). The total compensation to be paid to Contractor shall be computed on the basis of the units of work actually performed in accordance with the requirements of the Contract Documents and paid for at the prices stated by the Contractor in the Bid Schedule for completion of the Work.

4. The Work shall commence within five (5) days after the date specified in the Notice to Proceed issued by the Owner, and shall be fully completed no later than Sixty (60) calendar days from the date specified in the Notice to Proceed. Time is of the essence for completion of the Work. If the Work is not completed in the time specified herein, plus any extension of time as allowed, the parties recognize: (a) that Owner will suffer financial damages which are, and will continue to be, impracticable and extremely difficult to ascertain; and (b) the delay, expense and difficulty involved in proving the actual damages suffered by Owner as a result of such delay. Accordingly, instead of requiring such proof, the parties agree that as authorized by California Government Code section 53069.85, Contractor shall pay to Owner as liquidated damages, and not as a penalty, the sum of Two Hundred and Fifty Dollars (\$250.00) for each calendar day that expires after the time specified for completion of the Work. The parties hereby incorporate by reference the provisions of Section 3.1 of the Special Conditions into these Contract Documents, and they further agree that this Section 4 of this Agreement complies with Public Contract Code Section 7203.

5. The Owner promises and agrees to employ, and does hereby employ, Contractor to provide the materials and to do the Work according to the terms and conditions herein contained and referred to, for the price aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth in the Contract Documents; and the parties for themselves, their heirs, executors, administrators, successors and assigns do hereby agree to the full performance of the covenants herein contained in this Agreement.

6. No work, services, material, or equipment shall be performed or furnished under this Agreement unless and until a Notice to Proceed has been given to the Contractor by the Owner, in accordance with the Contract Documents. The Work under this Agreement shall be completed to the approval and entire satisfaction of the District.

7. To the fullest extent permitted by law, the Contractor shall assume the defense of and indemnify and hold harmless the District and its respective directors, officials, officers, employees, representatives, consultants, agents and volunteers, and each of them (collectively herein "Indemnitees") from and against:

a. Any and all claims, demands, causes of action, actions, proceedings, damages, costs, expenses (including costs of defense and attorney's fees), losses or liabilities, in law or in equity, of every kind or nature whatsoever for, but not limited to, injury to or death of any person, including the Indemnitees, and damages to or destruction of property of any person, including the Indemnitees', arising out of or in any manner directly or indirectly connected with the Work to be performed under this Agreement, caused in whole or in part by any negligent act or omission of the Contractor, or any subcontractor, supplier, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence or willful

misconduct of the Indemnitees;

- b. Any and all claims, demands, causes of action, actions, proceedings, damages, costs, expenses (including costs of defense and attorney's fees), penalties or liabilities, in law or in equity, of every kind or nature whatsoever, arising out of, resulting from or on account of the violation of any existing governmental law, ordinance or regulation relating to the Work, specifically including but not limited to the safety of workers, compliance with which is the responsibility of Contractor, any subcontractor, supplier, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- c. Contractor shall defend, at the Contractor's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind arising out of or connected with the Work that may be brought or instituted against the Indemnitees.
- d. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the Indemnitees in any such suit, action or other legal proceeding.
- e. Contractor shall reimburse the Indemnitees for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.
- f. Contractor agrees to carry insurance for this purpose as set out in the specifications. See Article 12 of the General Conditions, entitled INSURANCE, for insurance specifications and coverage. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Indemnitees.

8. If any provision of this Agreement or any of the Contract Documents is found by a court of competent jurisdiction to be invalid, void or unenforceable for any reason, the remaining provisions shall continue in full force and effect without being impaired or invalidated in any way. If the court finds that any provision of this Agreement is invalid or unenforceable, but that by limiting such provision it would then become valid and enforceable, then such provision shall be deemed written, construed and enforced as so limited taking into account the intent of the parties at the time of executing this Agreement.

9. In employing Contractor to perform the Work contemplated under the Contract Documents, the Owner has relied on the experience, expertise and integrity of the Contractor. The rights and obligations of the Contractor under this Agreement shall therefore not be assignable without the prior express written consent of the Owner.

10. This Agreement constitutes the entire Agreement of the parties with respect to the subject matter, and no amendment, modification or alteration of the terms hereof shall be binding unless the same is in writing, dated subsequent to the date hereof and duly approved and executed by each of the parties. No oral understanding or agreement not incorporated herein shall be binding on any of the parties.

11. This Agreement, and the application or interpretation hereof, shall be governed exclusively by its terms and by the laws of the State of California. Venue for all purposes shall be deemed to lie within Ventura County, California, and any action to enforce this Agreement or for any remedies, damages, or other relief shall only be brought in either the state courts of the State of California in and for the County of Ventura or in the United States District Court, Central District of California.

12. The individuals executing this Agreement on behalf of Owner and Contractor hereby warrant that they possess the legal authority to sign this Agreement on behalf of their respective party.

IN WITNESS WHEREOF: The parties hereto have caused this Agreement to be executed as of the day and year first above written.

"OWNER"

"CONTRACTOR"

By: \_\_\_\_\_

License No(s). \_\_\_\_\_

Its: \_\_\_\_\_  
[TITLE]

Expiration Dates(s) \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_  
[TITLE]

Its: \_\_\_\_\_  
[TITLE]

Address: For Giving Notice to Owner

\_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_

Its: \_\_\_\_\_  
[TITLE]

NOTE: Contractor shall furnish, to the satisfaction of Owner's Attorney, verification that the persons signing this Agreement as Contractor or on behalf of the Contractor have authority and legal authorization to bind the Contractor. Where such verification is a Power of Attorney, it shall be an unrevoked power, and Contractor shall provide an original or certified copy of the original

## PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, \_\_\_\_\_ hereinafter referred to as "Contractor," as principal, and \_\_\_\_\_ as Surety, are held and firmly bound unto Pleasant Valley Recreation & Park District, hereinafter referred to as "Owner," in the sum of \$\_\_\_\_\_, lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and/or assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that,

WHEREAS, said Contractor has been awarded and is about to enter into a contract with Owner for performance of Work generally described as all materials, labor, equipment, tools services, transportation, utilities, supervision and other necessary items and facilities (and including payment of all taxes, insurance, bonds, license and permit fees and other costs incidental to the Work) Required for pulverizing approximately 100,000 square feet (sq. ft) of existing asphalt, grade using existing pulverize asphalt for base at a compaction of 93% or greater, use hot asphalt three inches (3") compacted for finish and re-stripe to match existing patterns to include red curbs and blue handicap stalls located at the Freedom Park, 275 E Pleasant Valley Road, Camarillo, California 93010, at the Pleasant Valley Recreation & Park District's (District), as specifically set forth in said Contract Document entitled Freedom Park, and is required under the terms of the Contract Documents to give this bond in connection with the execution of said contract:

NOW, THEREFORE, if Contractor or any of its subcontractors, fails to pay for any materials, equipment, or other supplies, or for rental of same used in connection with the performance of work contracted to be done or for work or labor thereon of any kind, or fails to pay any of the persons named in Section 9100, California Civil Code or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant or for any amounts required to be deducted, withheld and paid to the Employment Development Department from the wages of employees of the Contractor and its subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work and labor and all other applicable laws of the State of California and rules and regulations of its agencies, then said Surety will pay for the same in an amount not exceeding the sum specified above. This bond shall inure to the benefit of any persons named in Civil Code Section 9200, so as to give a right of action to them or their assigns in any suit brought upon this bond. This bond shall be subject to and include all of the provisions of Part 4 of Division 3 of the Civil Code of the State of California relating to Payment Bond for Public Works, including but not limited to Civil Code Sections 8152-8154 and 9550-9560, inclusive.

PROVIDED, that any alterations in the work to be done, or the material to be furnished, which may be made pursuant to the terms of said contract, shall not in any way release either the Contractor or the Surety thereunder, nor shall any extensions of time granted under the provisions of said contract release either the Contractor or the Surety, and notice of such alteration or extensions of the contract is hereby waived by the Surety.

WITNESS our hands \_\_\_\_\_ day of \_\_\_\_\_, 20

Contractor:

By: \_\_\_\_\_

Title: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

SEAL

Surety:

By: \_\_\_\_\_

Title: \_\_\_\_\_

Home Office Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Attorney-in-Fact \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

## FAITHFUL PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

Bond No. \_\_\_\_\_

That we \_\_\_\_\_ hereinafter referred as "Contractor," as principal, and as Surety, are held and firmly bound unto Pleasant Valley Recreation & Park District, hereinafter referred to as "Owner," in the sum of \$\_\_\_\_\_, lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and/or assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that,

WHEREAS, said Contractor has been awarded and is about to enter into a contract with Owner for performance of the Work generally described as all materials, labor, equipment, tools services, transportation utilities, supervision and other necessary items and facilities (and including payment of all taxes, insurance, bonds license and permit fees and other costs incidental to the Work) ) Required for pulverizing approximately 100,000 square feet (sq. ft) of existing asphalt and, grade using existing pulverize asphalt for base at a compaction of 93% or greater, use hot asphalt three inches (3") compacted for finish and re-stripe to match existing patterns to include red curbs and blue handicap stalls located at the Freedom Park, 275 E pleasant Valley Road, Camarillo, California 93010, at the Pleasant Valley Recreation & Park District's (District), as specifically set forth in said Contract Document entitled Freedom Park, and is required under the terms of the Contract Documents to give this bond in connection with the execution of said contract:

NOW THEREFORE, if said Contractor shall well and truly do and perform all of the covenants and obligations of said contract on its part to be done and performed at the times and in the manner specified herein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect;

PROVIDED, that any alterations in the work to be done, or the material to be furnished, which may be made pursuant to the terms of said contract, shall not in any way release either the Contractor or the Surety thereunder, nor shall any extensions of time granted under the provisions of said contract release either the Contractor or the Surety, and notice of such alterations or extensions of the contract is hereby waived by the Surety.

FURTHER PROVIDED, that, as provided in Article 15 of the General Conditions entitled "Termination of Contract," and upon termination in accordance with said Article 15, if the direct and indirect costs of completing the Work, including, but not limited to, all costs to Owner arising from professional services and attorneys' fees and all costs generated to insure or bond the work of substituted contractors or subcontractors utilized to complete the Work, exceed the balance due the Contractor, on failure of Contractor to pay, the Surety shall pay on demand by Owner. Any portion of such difference not paid by Surety within thirty (30) days following the mailing of a demand for such costs by Owner shall earn interest at the rate of ten percent (10%) per annum or the maximum rate authorized by California law, whichever is lower.

## GENERAL CONDITIONS

### ARTICLE 1 CONTRACT DOCUMENTS

#### 1.1 CONTRACT DOCUMENTS

1.1.1 The Contract Documents, which jointly forms the contract, consists of the Notice Inviting Bids, Instructions To Bidders, all of the Proposal forms (including the Bid Form, Bid Schedule of Work and Prices, Designation/List of Subcontractors, Addendum and Affidavit of Non-Collusion), the Award of Contract, the Agreement (Contract), the Performance and Payment bonds and insurance documentation to be provided by the Contractor to the District, the Notice To Proceed, these General Conditions, the Special Conditions, the Specifications and Drawings, bid addenda, and any change orders or directives or addenda and the Specifications and Drawings listed therein, all of which documents are on file in the District Office and are hereby referred to and made a part of these General Conditions.

1.1.2 The District and the Contractor are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if each were of the singular number and masculine gender.

1.1.3 The word *District* refers to the PLEASANT VALLEY RECREATION AND PARK DISTRICT, 1605 Burnley St., Camarillo, CA 93010. The District is sometimes referred in the Contract Documents as the "Owner."

1.1.4 The Governing Body of the District is the Board of Directors of said District, hereinafter called the Board. The Board will act for the District in all matters pertaining to the Contract.

1.1.5 The term *Subcontractor* as employed herein, includes only those having a direct contract with the Contractor. It includes one who furnished material worked to a special design according to the Plans and Specifications of this work but does not include one who merely furnishes material not so worked.

1.1.6 The term *Project* refers to the Work described in Section 1 of the Instructions to Bidders and in the Bid Form, i.e. the Work to be undertaken by the Contractor.

1.1.7 The Inspector is the duly authorized representative of the District at the Project. The words "directed" or "approved" shall be understood to be followed by the words "by the District."

1.1.8 The term *Work* (or sometimes *work*) includes all labor necessary to produce the construction, and all materials and equipment to be incorporated in the construction, for the Project.

1.1.9 The word *Materials* shall include all raw materials, fabricated materials, equipment, apparatus, fixtures, appliance, and substances which are a component part



of, or which are contributory to the work of the Contractor, unless specifically provided otherwise.

1.1.10 The word *Satisfactory* shall be understood to be followed by the words and acceptable to the District.

1.1.11 The term *Building Code* in the specifications or on the drawings shall be construed to mean the California Building Code. 2015

1.1.12 The words required, necessary, or proper shall be understood to be followed by the words to complete the work satisfactory and acceptable to the District.

1.1.13 The words *directed* or *approved* shall be understood to be followed by the words *by the District*.

1.1.14 The term *Architect* shall mean California Licensed Architect.

1.1.15 The masculine gender shall include the feminine and neuter; the singular number shall include the plural, and the plural, the singular; and the term "person" shall include a person, firm, corporation or association.

1.1.16 The initials N.I.C. shall indicate that the article referred to on the drawings is to be furnished by the District. If the item is to be installed by the Contractor, it shall be so stated in the plans or specifications.

1.1.17 Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm, or to an officer of the corporation for whom it is intended or if delivered at or sent by registered mail to the last business address known to him who gives notice.

1.1.18 All time limits stated in the Contract Documents are of the essence of the Contract. The term "days" refers to consecutive calendar days, unless otherwise provided.

## **1.2 EXECUTION OF CONTRACT**

1.2.1 The Contractor to whom the work is awarded, shall, within five (5) days after being notified of such award, enter into a Contract with the District for the work in accordance with the drawings and the specifications, and provide the District with bonds and evidence of insurance coverage as provided in Article 10 of the Instructions to Bidders.

## **1.3 DRAWINGS AND SPECIFICATIONS**

1.3.1 The specifications, for convenience, are arranged in the several sections indicated, but such separation shall not be considered as the limits of the work required of any separate trade. The terms and conditions of such limitations are wholly between the Contractor and the Subcontractors.

1.3.2 In general, the drawings will show dimensions; position and kind of construction, and the specifications will show qualities and methods. Any work indicated on the drawings and not mentioned in the specifications, or vice versa, shall be performed as though fully set forth in both. Work not particularly detailed, marked, or specified, shall be the same as similar parts that are detailed, marked or specified.

1.3.3 In the case of differences between the specifications and the drawings, the specifications shall govern. Should an error appear in the drawings or specifications, or in the work done by others affecting this work, the Contractor shall notify the District at once and the District will issue instructions as to procedure. If the Contractor proceeds with the work so affected without instructions from the District, he shall make good any resulting damage or defects. This includes typographical errors in the specifications and notational errors on the drawings where doubtful of interpretation. Figured dimensions on the scale drawings shall govern.

1.3.4 The general character of the detail work is shown on the contract drawings, but minor modifications may be made in the large scale or full size drawings. The District will furnish additional details to explain the work more fully and the same shall be considered a part of the Contract. Any work performed before receipt of such details, if not in accordance with them shall be removed and replaced or adjusted as directed, without expense to the District. Should any details submitted later than the Contract drawings and specifications, in the opinion of the Contractor, be more elaborate than the drawings and specifications warrant, written notice thereof shall be given to the District within five (5) days of receipt of such details. The District will then consider the claim and if justified, said detail drawings shall be amended or the extra work authorized. Non-receipt of such notice shall relieve the District of any claims.

1.3.5 Where, on any drawings, a portion of the work is drawn out and the remainder is indicated in outline, the drawn-out part shall also apply to all other like portions of the work. When ornament or other detail is indicated by starting only, such detail shall be continued throughout the courses of parts in which it occurs and shall also apply to all other similar parts in the work, unless otherwise indicated.

#### **1.4 COPIES FURNISHED**

1.4.1 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of drawings and specifications reasonably necessary for the execution of the work. All drawings, specifications and copies thereof furnished by the District are and shall remain his property. They are not to be used on any other project and are to be returned to the District on request at the completion of the work.

**ARTICLE 2  
DISTRICT**

**2.1 ADMINISTRATION OF THE CONTRACT**

2.1.1 The District will provide general administration of the construction contract, including performance of the functions hereinafter described. The District has authority to stop work whenever such stoppage may be necessary to insure the proper execution of the Contract.

2.1.2 The District shall, within a reasonable time, make decisions on all claims of the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents. The District shall have the right to accept or reject materials and workmanship. His decisions in matters relating to artistic effect shall be final.

2.1.3 The District is the interpreter of the conditions of the Contract and the judge of its performance; The District shall use his powers under the Contract to enforce its faithful performance.

2.1.4 The Districts Park Services Manager will make periodic visits to the site to familiarize himself generally with the progress and quality of the work and to determine in general if the work is proceeding in accordance with the Contract Documents. On the basis of his on-site observations, the District will endeavor to guard against defects and deficiencies in the work of the Contractor. The District will not be required to make continuous on-site inspections to check the quality or quantity of the work. The District will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work, and he will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents.

2.1.5 Based on such observations and the contractor's Applications for Payment, the District will determine the amounts owing to the contractor and will issue Certificates for Payment.

2.1.6 The District will not be responsible for the acts or omissions of the Contractor, any subcontractors, or any of their agents or employees, or any other person performing any of the work.

**ARTICLE 3  
INSPECTOR**

**3.1 INSPECTOR**

995354.1

3.1.1 The District may assign one or more inspectors to the Work. Substitutes may be used during absence of the assigned Inspector. The Inspector has the following authority:

3.1.2 To view the Work, sample and test components (at the site, off-site and at manufacturing locations), and discuss the Work with the Contractor's field representative.

3.1.3 To determine compliance with the Plans and Specifications and other Contract Documents. The Inspector may issue warnings of non-compliance.

3.1.4 To issue stop work notices in the following two instances only:

a. Where a safety hazard exists that has an immediate potential for serious injury or death.

b. Where the operation in progress, if continued, could be averse to the District's interest.

## **ARTICLE 4 CONTRACTOR**

### **4.1 CONTRACTOR**

4.1.1 The Contractor shall not be deemed or construed to be an employee of the District but shall always be deemed to be an independent Contractor and shall have all the privileges and rights and be charged with all duties and obligations accorded to and placed by law on independent contractors.

### **4.2 SUPERVISION AND CONSTRUCTION PROCEDURES**

4.2.1 The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work

under the Contract.

4.2.2 The Contractor warrants to the District that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the Contract Documents.

4.2.3 Whenever any materials, apparatus, equipment, or process is indicated or specified by patent or proprietary name, and/or by the name of the manufacturers, the name so indicated or specified shall be deemed and construed to be followed by the words "or equivalent in quality and utility." Within thirty (30) days after the award of the Contract the Contractor may submit to the District for approval proposed substitutions for items specified with all data required to make a complete analysis. If a substitute offered by the Bidder shall not be deemed by the District to be equal to that so indicated or specified, then the successful bidder, as Contractor, shall furnish, erect, or install the material, apparatus, equipment, or process indicated or specified by name.

#### **4.3 COMPLIANCE WITH LAWS; NOTICES; PERMITS AND FEES**

4.3.1 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work, especially those relating to the safety of workers and all persons who may come into contact with the Work. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the District in writing, and any necessary changes shall be adjusted by appropriate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the District, he shall assume full responsibility therefore and shall bear all cost and liabilities attributable thereto.

4.3.2 The Contractor shall make application for and secure the General Building Permit from the City or County, in which the work is located, if such permit is required. The Contractor shall pay all other fees and secure all other permits required and necessary to complete the work.

#### **4.4 CASH ALLOWANCES**

4.4.1 [Deleted].

#### **4.5 RESPONSIBILITY FOR THOSE PERFORMING THE WORK**

4.5.1 The Contractor shall be responsible to the District for the acts, errors and omissions of all his employees and all Subcontractors and their work under a contract with the Contractor.

## **4.6 PROGRESS SCHEDULE**

4.6.1 Immediately after being awarded the Contract, the Contractor shall prepare and submit for the District's approval an estimated progress schedule for the work. The progress schedule shall relate to the entire Project to the extent required by the Contract Documents. This schedule shall indicate the dates for the starting and completion of the various stages of construction and shall be revised as required by the conditions of the work, subject to the District's approval.

## **4.7 SHOP DRAWINGS AND SAMPLES**

4.7.1 Shop drawings are drawings, diagrams illustrations, schedules, performance charts, brochures and other data which are prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, and which illustrate some portion of the work.

4.7.2 Samples are physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the work will be judged.

4.7.3 The Contractor shall review, stamp with his approval and submit, with reasonable promptness and in orderly sequence so as to cause no delay in the work or in the work of any other Contractor, all shop drawings and samples required by the Contract Documents or subsequently by the District. Shop drawings and samples shall be properly identified as specified. At the time of submission, the Contractor shall inform the District in writing of any deviation in the shop drawings or samples from requirements of the Contract Documents.

4.7.4 By approving and submitting shop drawings and samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials catalogue numbers and similar data, or will do so, and that he has checked and coordinated each shop drawing and sample with the requirements of the work and of the Contract Documents.

4.7.5 The District will review and approve shop drawings and samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the project and with the information given in the Contract Documents. The District's approval of a separate item shall not indicate approval of an assemblage in which the item functions.

4.7.6 The Contractor shall make any corrections required by the District and shall resubmit the required number of corrected copies of shop drawings or new samples until approved. The Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections requested by the District on previous submissions.

4.7.7 The District's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the

Contract Documents, unless the Contractor has informed the District in writing of such deviation at the time of submission and the District has given written approval to the specific deviation, nor shall the District's approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

4.7.8 No portion of the work requiring a shop drawing or sample submission shall be commenced until the submission has been approved by the District. All such portions of the work shall be in accordance with approved shop drawings and samples.

4.7.9 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work he shall remove all his waste materials and rubbish from and about the project as well as all his tools, construction equipment, machinery and surplus materials, and shall clean all glass surfaces and leave the work "Broom Clean," or its equivalent, except as otherwise specified.

4.7.10 The Contractor fails to clean up, the District may do so and the cost thereof shall be charged to the Contractor.

#### **4.8 INDEMNIFICATION**

4.8.1 To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the District and its agents, directors, officials, officers, employees, representatives, consultants, agents and volunteers from and against all claims, demands, damages, losses, causes of action, proceedings, liabilities, expenses and other costs (including but not limited to attorney's fees and costs of defense) arising out of or resulting from the performance of the work, in accordance with the provisions of Section 7 of the Agreement (Contract) between the District and Contractor. The Contractor's obligations herein shall not be abridged, reduced or discharged by the maintenance of insurance by the Contractor.

#### **4.8.2**

In any and all claims against the District or any of their agents directors, officers or employees, by any employee of the Contractor, or any Subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation in the Agreement (Contract) shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's compensation acts, disability benefits acts or other employee benefit acts.

4.9.2 The obligations of the Contractor shall NOT extend to the liability of the District, its agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, Designs or Specifications, or (2) the giving of or the failure to give directions or instructions by the District, its agents or employees provided such giving or failure to give is the

primary cause of the injury or damage.

4.9.3 Consistent with Public Contract Code Section 9201, the District shall timely notify Contractor if it receives any third-party claims attributable to the Work, and Contractor shall reimburse District for its reasonable costs in connection therewith. Contractor shall also timely notify District in the event Contractor receives such notice of third-party claims attributable to the Work.



## **ARTICLE 5 SUBCONTRACTORS**

### **5.1 SUBCONTRACTORS**

5.1.1 A Subcontractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative.

5.1.2 Nothing contained in the Contract Documents shall create any contractual relation between the District and any Subcontractor.

### **5.2 SUBCONTRACTS**

5.2.1 Subcontracting or subletting any part of the Contract shall be made only in accordance with the provisions of Sections 4100 to 4113 inclusive, of the Public Contract Code of the State of California.

5.2.2 The District will deal only through the Contractor who shall be responsible for the proper execution of the entire work.

### **5.3 RELATION OF CONTRACTOR AND SUBCONTRACTOR**

5.3.1 The Contractor shall be bound to each of his subcontractors by the provision of the Contract and shall bind each of his Subcontractors to comply with and be governed by the provisions of the Contract and to assume all the obligations there-under which the Contractor has assumed in his contract with the District, insofar as said provisions and obligations are applicable to the work which the Subcontractor agrees to perform for the Contractor.

5.3.2 The Contractor shall cause appropriate provisions to be inserted in all Subcontracts relative to the work to bind Subcontractor to the Contractor by the same terms of the Contract insofar as applicable to the work of Subcontractor and to give the Contractor the same power as regards terminating any Subcontract that the District may exercise over the Contractor under any provision of the contract.

### **5.4 PAYMENTS TO SUBCONTRACTORS**

5.4.1 Contractor shall promptly and timely pay each Subcontractor, upon receipt of payment from the District, an amount equal to the percentage of

completion allowed to the Contractor on account of such Subcontractor's work. The Contractor shall also require each Subcontractor to make similar prompt and timely payments to his employees and any other Subcontractors.

5.4.2 If the District fails to issue a Certificate for Payment for any because which is the fault of the Contractor and not the fault of a particular Subcontractor, the Contractor shall pay that Subcontractor on demand, made at any time after the Certificate for Payment should otherwise have been issued, for his work to the extent completed, less the retained percentage.

5.4.3 The Contractor shall pay each Subcontractor a just share of any insurance moneys received by the Contractor and he shall require each Subcontractor to make similar payments to his Subcontractors.

5.4.4 The District may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding percentages of completion certified to the Contractor on account of work done by such Subcontractors.

5.4.5 The District shall not have any obligation to pay or to see to the payment of any moneys to any Subcontractor except as may otherwise be required by law.

## **ARTICLE 6 SEPARATE CONTRACTS**

### **6.1 DISTRICT'S RIGHT TO AWARD SEPARATE CONTRACTS**

6.1.1 The District reserves the right to award other contracts in connection with other portions of the Project under these or similar Conditions of Contract.

### **6.2 MUTUAL RESPONSIBILITY OF CONTRACTORS**

6.2.1 The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate his work with theirs.

6.2.2 If any part of the Contractor's work depends for proper execution or results upon the work of any other separate contractor, the Contractor shall inspect and promptly report to the District any apparent discrepancies or defects in such work that render it unsuitable for such proper execution of their work, and shall properly connect and coordinate his work with theirs.

6.2.3 Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such other contractor by agreement or arbitration.

## ARTICLE 7

### MISCELLANEOUS PROVISIONS

#### 7.1 SUCCESSORS AND ASSIGNS

7.1.1 The District and the Contractor each binds himself, his partners, directors, officers, successors, assigns and legal representatives to the other party hereto and to the partners, directors, officers, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder, without the previous written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder, without the previous written consent of the District.

#### 7.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK

7.2.1 If the Contractor defaults or neglects to carry out the work in accordance with the Contract Documents or fails to perform any provision of the Contract, the District may, after seven (7) days written notice to the Contractor and without prejudice to any other remedy District may possess, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including the cost of the District's additional services made necessary by such default, neglect or failure. The District must approve both such action and the amount charged to the Contractor. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the District.

#### 7.3 ROYALTIES AND PATENTS

7.3.1 The Contractor shall pay all royalties and license fees, shall defend all suits or claims for infringement of any patent rights, and shall indemnify and save the District harmless from loss on account thereof.

#### 7.4 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

7.4.1 Simultaneously with the execution of the Contract, the Contractor shall furnish and file a Faithful Performance Bond in an amount equal to one hundred percent (100%) of the Contract price and a Labor and Material Bond in an amount of not less than one hundred percent (100%) of the Contract price.

7.4.2 The Labor and Material Bond shall provide for amounts due under the Unemployment and Insurance Act with respect to such work or labor.

7.4.3 Contractor shall use the forms provided with these specifications or which are otherwise satisfactory to the District in form and substance. The bonds shall be secured by a surety company authorized to conduct business within the State of California and satisfactory to the District.

## **7.5 OCCUPANCY**

7.5.1 The District, subject to the Contractor's approval, may occupy a portion of the Work prior to its completion. The District will, prior to such partial occupancy, give notice to the Contractor thereof, and such occupancy shall be based on the following terms:

7.5.2 The one-year (1) guarantees shall not begin to run until the final acceptance of all work under the Contract.

7.5.3 The occupancy of any portion of the Work shall not constitute an acceptance of work not performed in accordance with the Contract Documents or relieve the Contractor of liability to perform any work required by the Contract but not completed at time of occupancy.

7.5.4 The Contractor shall not be required to furnish heat, light, or water used in the occupied portion of the Work without proper remuneration therefore.

7.5.5

## **7.6 GUARANTEE**

7.6.1 The Contractor shall be held responsible for and must make good any defects, through faulty, improper or inferior workmanship or materials, arising or discovered in any part of his Work for a minimum of one-year (1), or longer if specified or required elsewhere, after completion and acceptance of his work. The Bond for Faithful Performance, furnished by the Contractor, shall cover such defects and protect the District against them.

7.6.2 The Contractor shall be responsible for all damage to any part of the project Work caused by leaks, breaks, or other failure due to faulty material or workmanship within a period of one-year (1) after completion and final acceptance.

7.6.3 All guarantees must be submitted to the District before the final installment of the Contract will be approved for payment.

## **7.7 TESTS**

7.7.1 The District shall select the testing laboratory to perform required

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inspections and tests.

7.7.2 When additional inspections and tests become necessary because of the manner in which the Contractor executes his work, such as inspections and tests at transit-mix concrete plants, test of materials substituted for previously accepted materials, and retest(s) made necessary by failure of work or materials to comply with the requirements of the Contract Documents, then the cost of these tests will be paid for by the Contractor.

## **7.8 DISPUTE RESOLUTION**

7.8.1 All public works claims, disputes and other matters in question in the amount of Three Hundred Seventy-Five Thousand Dollars (\$375,000) or less arising out of, or relating to, this Contract or the breach hereof, shall be resolved in accordance with Public Contract Code Section 20104 et seq. Any disputes in excess of said amount shall be resolved through arbitration between the parties held in accordance with Code of Civil Procedure Section 1280 et seq. Any dispute proceedings shall be held in the County of Ventura.

## **ARTICLE 8**

### **TIME**

#### **8.1 TIME**

8.1.1 The contract Time is the period of time allotted in the Contract Documents for completion of the Work.

8.1.2 The date of commencement of the Work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Agreement or such other date as may be established therein.

8.1.3 Date of Substantial Completion of Work or designated portion thereof, is the Date certified by District when construction is sufficiently complete, in accordance with Contract Documents, so District may occupy the work or designated portion thereof for the use for which it is intended.

#### **8.2 PROGRESS AND COMPLETION**

8.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

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8.2.2 The Contractor shall carry the work forward expeditiously with adequate forces and shall complete it within the contract Time specified in the Notice to Proceed.

### **8.3 DELAYS AND EXTENSIONS OF TIME**

8.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the District or by any officer, director or employee of the District, or by any separate contractor employed by the District, or by changes ordered in the work or by labor disputes, fire, unusual delay in transportation, unavoidable casualties or any causes beyond the Contractor's control, or by delay authorized by the District pending arbitration, or by any cause which the District determines may justify the delay, then the Contract Time shall be extended by Change Order for such reasonable time as the District may determine.

8.3.2 All claims for extension of time shall be made, in writing; to the District no more than ten (10) days after the occurrence of the cause of delay; only one claim is necessary.

## **ARTICLE 9 PAYMENTS AND COMPLETION**

### **9.1 SCHEDULE OF VALUES**

9.1.1 Before the first Application for Payment, the Contractor shall submit to the District a Schedule of Values of the various portions of the Work, aggregating the total Contract Sum, divided so as to facilitate payments to Subcontractors. Each item in the Schedule of Values shall include its proper share of overhead and profit. This schedule, when approved by the District, shall be used only as a basis for the Contractor's Applications for Payment.

### **9.2 PROGRESS PAYMENTS**

On or about the first day of each month, the Contractor shall submit to the District an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the District may require, for ninety-five percent (95%) of all work performed during the preceding month. Retention proceeds withheld by the District shall not exceed five percent (5%) of the Contract payment price.

9.2.1 If payments are to be made on account of materials or equipment not incorporated in the work but delivered and suitably stored at the site, such payments shall be conditioned upon submission by the Contractor of Bills of Sale or such

other procedures satisfactory to the District to establish the District's title to such materials or equipment or otherwise protect the District's interest including applicable insurance and transportation to the site. Consistent with Section 8 of the Special Conditions, Contractor is responsible for the security of materials, equipment and items stored at the site of the Work.

9.2.2 The Contractor warrants and guarantees that title to all work, materials and equipment covered by an Application for Payment, whether incorporated in the Project or not, will pass to the District upon the receipt of such payment by the Contractor, free and clear of all liens, claims security interests or encumbrances. No work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor; or by any person performing the work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

9.2.3 Review and payment of progress payments are subject to the provisions of Public Contract Code Section 20104.50.

#### **CERTIFICATES FOR PAYMENT**

9.3.1 The issuance of a Certificate for Payment will constitute a representation by the District, based on the Inspectors observations at the site and the data comprising the Application for Payment that the work has progressed to the point indicated; that to the best of his knowledge, information and belief, the quality of the work is in accordance with the Contract Documents, and that the as-built drawings are being currently maintained.

9.3.2 After the Certificate for Payment has been received and processed, the District shall make payment in the manner provided in the Agreement. Retention proceeds are subject to the provisions of Public Contract Code Sections 7107 and 7201.

9.3.3 No Certificate for a Progress Payment, or any progress payment nor any partial or entire use or occupancy of the Project by the District, shall constitute an acceptance of any work not in accordance with the Contract Documents.

#### **9.4 PAYMENTS WITHHELD**

9.4.1 The District may decline to approve any Applications for Payment or, because of subsequently discovered evidence or subsequent inspections, may nullify the whole or any part of any Certificate for Payment previously issued to such extent as may be necessary in its opinion to protect the District from loss, because of defective work not remedied, failure of the Contractor to make payments properly to Subcontractors or for labor, materials, or equipment or unsatisfactory prosecution of the work by the Contractor. In the event of a dispute between the District and the Contractor, the District may withhold from the final payment any amounts authorized by law.

## **9.5 SUBSTANTIAL COMPLETION**

9.5.1 Upon receipt of written notice that the work is ready for final inspection and acceptance and upon receipt of a final Allocation for Payment, the District will promptly make such inspection and, when the Inspector finds the work acceptable under the Contract Documents and the Contract fully performed, he will promptly issue a final Certificate for Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations and inspections the work has been completed in accordance with the terms and conditions of the Contract Documents and that ninety five percent (95%) of the Contract amount is due and payable. The District shall then file the Notice of Completion.

### **FINAL PAYMENT**

9.5.2 The five percent (5%) retention payment, called the Final Payment, shall be paid when all work of the Contractor on all construction on which he is required to perform any of said work is fully accepted by the District, but not less than 35 days after the Notice of Completion has been recorded. Such payments shall be of an amount equal to the balance of the Contract Price. Release of the final payment is also subject to the provisions of Public Contract Code Section 7107.

## **9.6 LIENS**

9.6.1 Neither the Final Payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the District a complete release of all liens, arising out of this Contract and an affidavit that so far as he has knowledge or information the releases and receipts include all the labor and material for which a lien could be filed; but the Contractor may, if any Subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the District, to indemnify it against any lien. Contractor shall refund to the District all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

## **ARTICLE 10 EMPLOYMENT AND WAGES**

### **10.0 EMPLOYMENT QUALIFICATIONS**

10.1.1 No person under the age of sixteen (16) years and no person currently serving sentence in a penal or correctional institution, and no inmate of any institute for mental defectives, shall be employed to perform any work under this Contract. No person whose age or physical condition is such as to make his employment dangerous as to his health or safety of others shall be employed to perform any work on the Project under this Contract, provided that this sentence shall not operate against the employment of physically handicapped persons otherwise employable, where such persons may be safely assigned to work which they can ably perform.



The Contractor and Subcontractor shall comply with all the provisions of the California Labor Code relating to the employment of aliens.

## **WAGE RATES**

Pursuant to Articles 1 and 2, Chapter 1, Part 7, Division 2 of the California Labor Code, the District has ascertained the general prevailing rate of hourly wages in the locality in which the work on the project is to be performed for each craft or type of workman or mechanic needed to execute the Contract. The prevailing wages so determined are stipulated in the specifications.

The Contractor shall forfeit to the District, as a penalty the sum of Fifty Dollars (\$50.00) for each laborer, workman or mechanic employed for each calendar day or portion thereof that such laborer, workman or mechanic is paid less than the said stipulated prevailing rates for any work done under this Contract by him or by any Subcontractor under him. [Labor Code Section 1775]

Eight (8) hours of labor shall constitute a legal day's work and forty (40) hours a legal week's work, upon all work done hereunder. The Contractor shall comply with Article 1 and 3 of Chapter 1, Part 7, and Division 2 of the California Labor Code relative to working hours. It is further expressly stipulated that the Contractor shall forfeit to the District as a penalty Twenty-five Dollars (\$25.00) for each workman employed in the execution of this Contract, or by any Subcontractor under this Contractor, for each calendar day during which said workman is required or permitted to labor more than eight (8) hours a day or forty (40) hours a week in violation of the provisions of said Article 1 and 3 of the California Labor Code. [Labor Code Section 1813]

Contractor's attention is hereby directed to the provisions of SB 854 (2014). Among other requirements, Contractors and Subcontractors must be registered with the California Department of Industrial Relations ("Department") before they may bid on or be listed on a bid proposal for a public works project, or perform work on the project. Contractor is also hereby notified that the Work is subject to prevailing wage compliance monitoring and enforcement by the Department. The Contractor shall post job site notices at the site of the Work in accordance with Department regulations.

## **ARTICLE 11 PROTECTION OF PERSONS AND PROPERTY SAFETY OF PERSON AND PROPERTY**

The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to, all employees on the work site and all other persons who may be affected.

The Contractor shall comply with all applicable laws, ordinances, regulations and orders of any public authority having jurisdiction for the safety of persons. (Including personnel of Contractor and any subcontractor(s) or property or to protect them from damage, injury or loss. He shall erect and maintain as required by existing conditions and progress of the

work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities. Unless designated otherwise by Contractor, Contractor's Superintendent shall serve as Contractor's safety officer at the Site the Contractor shall furnish and erect temporary fences around the Work areas (as indicated on the drawings or otherwise), and elsewhere where required for protection of the Work and any persons, and shall prevent unauthorized persons from entering the construction area. Fences shall be 6' high above grade. Necessary gates for access to any buildings shall be placed where directed by the District.

All damage or loss to any property caused in whole or in part by the Contractor, any Subcontractor, and Sub-subcontractor, or anyone directly or indirectly employed by an of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damage or loss attributable to faulty Drawings or Specifications or to the acts or omissions of the District or anyone employed by the District which are not attributable to the fault or negligence of the Contractor.

The Contractor shall not load or permit any part of the work to be performed so as to endanger the safety of its personnel or the personnel of Subcontractor(s).

The provisions of Public Contract Code Section 7104 (relating to notice of latent or hazardous conditions) and Labor Code Section 6705 (relating to trench excavation plans for worker safety) are incorporated herein by reference as if set forth in full.

## **ARTICLE 12 INSURANCE**

### **LIABILITY INSURANCE**

During the performance of the work of the Contract and until completion thereof and its acceptance by the District, the Contractor at his own cost, shall provide and maintain such General Liability (including operations, products and completed operations), Automobile, Property Damage Insurance, and Extended Coverage (all as specified herein) as shall protect Contractor, and the District, from all claims for personal injury, including accidental death, as well as from all claims for property damage arising from all operations under this Contract. The Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

The Contractor and all Subcontractors shall each provide and maintain the following minimum amounts of insurance:

General Liability Insurance (including operations, products and completed operations): Two Million Dollars (\$2,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this Work/location or the general aggregate limit shall be twice the required occurrence limit.

Automobile Liability: Two Million Dollars (\$2,000,000) per accident for bodily injury and property damage.

Workers' Compensation: As required by the State of California.

Employers' Liability: Two Million Dollars (\$2,000,000) per accident for bodily injury or disease.

If Contractor maintains higher limits than the minimums shown herein, the District shall be entitled to coverage for the higher limits.

Coverage shall be at least as broad as:

- a. Insurance Services Office Commercial General Liability coverage (Occurrence Form CGOO 01)
- b. Insurance Services Offices Form No. CA 00 01 covering Automobile Liability, code 1 (any auto)
- c. Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance.

Any deductibles or self-insured retentions must be declared to and approved by the District. At District's option, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, directors and employees; or Contractor shall provide a financial guarantee satisfactory to District guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- a. The District, and its officers, directors and employees are to be covered as insureds with respect to liability arising out of or automobiles owned, leased, hired or borrowed on behalf of Contractor; and with respect to 1
- b. liability arising out of work or operations performed by or on behalf of the Contractor including parts, equipment or materials furnished in connection with such work or operations. General Liability coverage shall be provided in the form of an Additional Insured endorsement (CG 20 11 85 or equivalent) to the Contractor's insurance policy, or as a separate owner's policy.
- c. For any claims related to this Project (Work), the Contractor's insurance coverage shall be primary insurance as respects the District, and its officers, directors and employees. Any insurance or self-insurance maintained by the District or its officers, directors or employees shall be in excess of Contractor's insurance and shall not contribute with it.
- d. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days prior written notice has been provided to the district. Contractor hereby agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsements that may be necessary to effectuate this waiver of subrogation.
- e. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the District for all work performed by the Contractor, and its

employees, agents and subcontractors.

- f. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A: VII unless otherwise acceptable to the district.
- g. Contractor shall furnish District with original certificates and endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the District or on forms otherwise acceptable to the District, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received and approved by the District before work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. The District reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.
- h. Contractor's compliance with these provisions does not modify or eliminate in any way Contractor's indemnity and defense obligations as set forth elsewhere in these Contract Documents.

## **ARTICLE 13**

### **Changes in the work**

The District, without invalidating the Contract, may order Changes in the work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such Changes in the work shall be authorized by Change Orders and shall be executed under the applicable conditions of the Contract Documents.

A Change Order is a written order to the Contractor signed by the Owner and the District issued after the execution of the Contract, authorizing a Change in the work or an adjustment in the Contract Sum or the Contract Time.

### **COST DETERMINATION**

The value of any such extra work or change shall be determined by estimate and acceptance in a lump sum, by unit prices named in the Contract, or by cost and percentage. For any item involved in the changes for which unit prices have not been duly established the Contractor shall proceed on a time and material basis and shall keep an accurate account of the cost of such work and present it in such form, at such time and substantiated by such supporting papers and information as the District may require. To such items of cost there shall be added, for extra work performed, the following allowance for overhead and profit combined:

Fifteen percent (15%) of the net extra cost of labor and items incidental to labor, whether furnished by the Contractor or Subcontractor.

Eight percent (8%) of the net extra cost of material delivered to the site, including local sales taxes if any, whether furnished by the Contractor or Subcontractor.

Six percent (6%) of the net extra cost (including any overhead and profit allowed by the Contractor to the Subcontractor within the percentages above prescribed) to the Contractor

of all subcontracted work involved in the change.

The cost shall include all direct and necessary production costs of the work itself, i.e. labor and items incidental to labor (such as general liability and workers' compensation insurance, old age and unemployment insurance, social security), pro-rata charges for foremen, material, and the use of power tools and equipment. Among the items to be considered as overhead and not as cost are supervisor, superintendents, timekeepers, clerks, watchmen, small tools, incidental job burdens and general office expense.

#### **MINOR CHANGE IN THE WORK**

The District shall have authority to order minor changes in the work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the District and the Contractor.

#### **CLAIMS FOR EXTRA COST**

If the Contractor claims that any instructions by drawings or otherwise involve extra cost or extension of time, he shall within ten days (10) after the receipt of such instructions, and in any event before proceeding to execute the work, submit his proposal thereto in writing to the District, stating clearly and in detail the basis of his objections. No such claim shall be valid unless so made.

### **ARTICLE 14**

#### **CORRECTION OF WORK**

##### **UNCOVERING OF WORK**

If any work should be covered contrary to the request of the District, it must, if required by the District, be uncovered for his observation and replaced at the Contractor's expense.

If any other work has been covered which the District has not specifically requested to observe prior to being covered, the District may request to see such work and it shall be uncovered by the Contractor. If such work were found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the District. If such work were found not in accordance with the Contract Documents, the Contractor shall pay such costs.

##### **CORRECTION OF WORK**

The Contractor shall promptly correct all work rejected by the District as defective or as failing to conform to the Contract Document whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the District's additional services thereby made necessary.

If, within one year (1) after the Date of Substantial Completion any of the work is found to be defective or to in accordance with the Contract Documents, the Contractor shall correct it

promptly after receipt of a written notice from the District to do so unless the District has previously given the Contractor a written notice of such condition. The District shall give such notice promptly after discovery of the condition.

## **ARTICLE 15 TERMINATION OF CONTRACT**

### **STOPPAGE OF WORK**

Should the Contractor be adjudged a bankrupt, or should a petition in bankruptcy be filed against him, or should he make a general assignment for the benefit of his creditors or should an attachment or execution be levied upon the property of the Contractor, or should a receiver be appointed because of his insolvency, or should he persistently or repeatedly fail or refuse to supply enough properly skilled workmen and proper material, or should he fail to make prompt payment to his employees, suppliers, and subcontractors, or should he persistently disregard laws and ordinances and the instructions of the Districts, or should he fail, neglect or refuse to conform to all provisions of the Contract, the District, without prejudice to any other right or remedy it may otherwise have, may thereupon after giving the Contractor and his Sureties seven (7) days written notice, terminate the Contract, enter upon the site of work, take possession of all materials, tools, apparatus, equipment and appliances and complete the work of the Contractor by whatever method it shall determine most advantageous to the District. The Contractor and his sureties shall be liable to the District for any excess cost occasioned to the District thereby.

The foregoing provisions for termination of the Contract are in addition to and not in limitation of the right of the District under any other provisions of the Contract or at law.

Attention is directed to the provisions of Section 4410 of the Government Code of the State of California which is as follows: "In the event a national emergency occurs, and public work, being performed by the Contract is stopped, directly or indirectly because of the freezing or diversion of materials, equipment or labor, as a result of an order or a proclamation of the President of the United States, or of an order of any Federal Authority, and the circumstances or conditions are such that it is impractical within reasonable time to proceed with a substantial portion of the work, then the District and the Contractor may, by written agreement, terminate said Contract."

If the work should be stopped under an order of any court or other public authority, for a period of three (3) months, through no act or fault of the Contractor or of anyone employed by him, or if the District should fail to issue any Certificate for Payment within seven (7) days after it is due, or if the District should fail to pay to the Contractor within fifteen (15) days after its maturity and presentation, any sum certified by the District or awarded by arbitrators, then the Contractor may, upon seven (7) days' written notice to the District stop work or terminate this contract and recover from the District payment for all work executed and any loss sustained upon any plant or materials and reasonable profit and damage.

## ARTICLE 16

### MISCELLANEOUS PROVISIONS

#### ADDITIONAL MISCELLANEOUS PROVISIONS

Payroll Records. Contractor shall maintain an accurate payroll record for employees and otherwise comply with all applicable provisions of Labor Code Section 1776; all provisions of the Labor Code relating to apprentices, as set forth in Labor Code Section 1777.5; and any other Labor Code provisions applicable to the Work.

Incorporation of Other Statutory Provisions. Any statutory provision required be including, but not otherwise actually including, within these Contract Documents is incorporated herein by reference as if set forth in full.

#### END OF SECTION

#### SPECIAL CONDITIONS

##### 1.1 SCOPE OF WORK

The work contemplated under this project is furnishing all materials, labor, equipment, tools services, transportation, utilities, supervision and other necessary items and facilities (and including payment of all taxes, insurance, bonds, license and permit fees and other costs incidental to the work) Required for pulverizing approximately 96,800 square feet (sq. ft) of existing asphalt and, grade using existing pulverize asphalt for base at a compaction of 93% or greater, use hot asphalt three inches (3") compacted for finish and re-stripe to match existing patterns to include red curbs and blue handicap stalls at the Pleasant Valley Recreation & Park District's (District) Freedom Park (Site), located at 275 E. Pleasant Valley Road, Camarillo, California 93010.

##### 2.1 TIME OF COMPLETION

The work shall start on December 9, 2019, and completion will be thirty (30) days from Notice to Proceed.

##### 3.1 LIQUIDATED DAMAGES AND EXTENSION OF TIME

Notwithstanding any liquidated damages provisions as specified in the Agreement, the Contractor and his surety shall not be charged liquidated damages because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the contractor, (including but not restricted to) Acts of God, or of the Public Enemy, Acts of the Government, Acts of the District, or Acts of another contractor in the performance of a contract with the District, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delay of subcontractors due to such causes. The Contractor shall within ten (10) days from the beginning of any such delay (unless the District shall grant a further period of time to the date of final settlement of the contract) notify the

District, in writing, of the cause of delay, whereupon the District may extend the time for completing the work when in its judgement the findings of fact justify such an extension, and its findings of fact thereon shall be final and conclusive on the parties hereto.

#### 4.1 SURVEY OF EXISTING CONDITIONS

Prior to starting work the Contractor or his representative shall make a thorough survey of the site, approaches thereto, and condition of said project Site. The Contractor shall notify the District prior to starting the work if any existing condition is unacceptable. The Contractor shall assume all responsibility if any work proceeds without such notification. Start of the work by the Contractor indicates his acceptance and approval of all existing conditions.

#### 5.1 WATER AND ELECTRIC SERVICE

All water and electrical service used on the site of the Work shall be paid for by the District. The Contractor shall furnish the necessary piping from the distribution point to the locations on the site where water is necessary to carry on the work. Upon completion of the work the Contractor shall remove all temporary piping.

The Contractor, at his own expense, shall furnish and install all temporary power equipment, and wiring, and piping necessary to perform the work and shall remove the same upon completion of the work.

#### 6.1 TEMPORARY FENCING

The Contractor shall provide all materials, equipment, tools, and labor as necessary to secure the site with temporary fencing to ensure the safety and security of the personnel, equipment, supplies, and work in progress. Temporary fencing shall be a six-foot-high chain link fence. Exact location of security fence must be approved by the District.

A temporary lay down area shall be established on the existing asphalt parking lot. The Contractor, with the District's approval, shall define this lay down area in the field and secure with a fence.

#### 7.1 TOILET FACILITIES

The Contractor shall install temporary toilet facilities for use by the workmen during the entire construction period.

#### 8.1 WATCHMAN SERVICES

The Contractor shall provide such watchman services, as he may deem necessary to properly safeguard materials, tools, appliances, and work during all hours that operations under the Contract are not being actively prosecuted. The District will not assume any responsibility for the loss of, or damage to, materials, tools,

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appliances, or surfacing work, arising from acts of theft, vandalism, malicious mischief, weather, or other causes.

## 9.1 ENUMERATION OF DRAWINGS

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## 10.1 ENUMERATION OF SPECIFICATIONS

The specifications (Project Manual) comprise sheets marked "Grading, AC Paving and Striping, Freedom Park' dated September 6, 2019, Inclusive of Division 1-General Requirements with assembly section numbers as listed:

DESCRIPTION	SPECIFICATION SECTION
Grading	31 22 00
Excavation	31 23 16
Fill	31 23 23
Asphalt Paving	32 12 16
Parking Bumpers	32 17 13
Painted Pavement	32 17 23
Tactile Warning Surfacing	32 17 26

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## 11.m PLANS, SPECIFICATIONS, AND DETAILS

A component in one part applies as if appearing in each. The parts are complementary and describe and provide for a complete work.

If a discrepancy exists, the governing ranking is:

1. Written numbers and notes on a drawing govern over graphics.
2. A detail drawing governs over a general drawing.
3. A detail specification governs over a general specification.
4. A specification in a section governs over a specification referenced by that section.

If a discrepancy is found or confusion arises, submit an RFI.

## 12.1 SURVEYS

The District will provide only the location of the horizontal and vertical control. These will be set prior to the commencement of construction. The Contractor shall employ professional engineers or surveyors to perform adequate surveys and staking necessary to construct the Work to the lines, elevations, and grades shown on the Plans and Specifications.

END OF SPECIAL CONDITIONS

**9. INFORMATIONAL ITEMS, which do not require action, will be reported by members of the Board and staff:**

- A. Chairman Kelley
- B. Ventura County Special District Association/California Special District Association
- C. Ventura County Consolidated Oversight Board
- D. Santa Monica Mountains Conservancy
- E. Standing Committees – Finance, Liaison, Long Range Planning, Personnel and Policy
- F. Ad Hoc Committees – Journey; Ran Rancho
- G. Foundation for Pleasant Valley Recreation and Parks
- H. General Manager’s Report