66

Chabot-Las Positas Community College District

CHANGE ORDER

OWNER:	Chabot-Las Positas Community College District	Contract No.	19/20-12
ARCHITECT:	ATI Architects + Engineers	Project No.	562300
CONTRACTOR:	Rodan Builders Inc.		
PROJECT:	MPOE Replacement – Bldg 300 Learning Skills Testing Relocation – Bldg 100	CHANGE ORDER NO. INITIATION DATE	001 May 11, 2021
TO (Contractor):	Rodan Builders Inc. 3486 Investment Blvd, Suite B Hayward, CA 94545	CONTRACT FOR CONTRACT DATE	Bid No. 19/20-17 July 27, 2020

Not valid until signed by both the Owner and Architect. Signature of the Contractor indicates his agreement herewith, including any adjustment in the Contract Sum or Contract Time.

ORIGINAL CONTRACT SUM	$ 1,812,000.00
Net change by previously authorized Change Orders was	$ 00.00
The Contract Sum prior to this Change Order was	$ 1,812,000.00
The Contract Sum will be (**decreased**) by this Change Order	$ -17,733.88
The new Contract Sum including this Change Order will be	$ 1,794,266.12

CONTRACT TIME	128 Calendar Days
Contract Completion Date	October 7, 2020
The Contract Time will change: Add (+)	216 Calendar Days
The Date of Completion as of the date of this Change Order therefore is:	May 11, 2021

AUTHORIZED:

Architect:
ATI Architects + Engineers
4750 Willow Rd, #250
Pleasanton, CA 94588

By Anna Win

Date 6/1/2021

Contractor:
Rodan Builders Inc.
3486 Investment Blvd, Suite B
Hayward, CA 94545

By Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2021.06.01 15:23:03-07'00'

Date 06/01/2021

Owner:
Chabot-Las Positas
Community College District
7600 Dublin Boulevard
Dublin, CA 94568

By _____

Date _____

Project Manager:
CCM/STV JV
Peter Espinosa

By _____

Date 6/2/21

Project Planner/Manager:
Facilities/Bond Program
Michael Garr

By _____

Date 06/10/2021

Vice Chancellor: Facilities
Bond Program and Operations
Owen Letcher

By _____

Date _____

Change Order #: 001 Project #: 562300

Pursuant to the General Conditions, this Change Order Form shall be used for all Change Orders associated with the Work. No additions or deletions to this form shall be allowed, except with permission of the District.

You are hereby directed to provide the extra work necessary to comply with this Change Order.

1. DESCRIPTION OF CHANGE: Credit for unused Owner's Allowance
   a. Requested by: District
   b. Reason: Contract stipulation is for the Contractor to credit back to the Owner any unused Allowance amount at the end of the Project.

2. TOTAL COST OF CHANGE: **(CREDIT)** $ 17,733.88

3. SUMMARY OF CHANGES (see attached back-up documents)

SUMMARY OF CHANGES - MPOE REPLACEMENT PROJECT			
PCO #	**Description**	**Reason**	**Cost**
1r1	Alternative routing for underground conduits	Conduits rerouted due to numerous obstructions	$ (3,058.00)
3r1	Repair existing damaged sewerline	Contractor found damaged existing sewerline	$ 881.43
4	Revised painting for MPOE Room	Delete paint from MPOE Room ceiling, extend wall paint to ceiling	$ (870.75)
5	Add power center for FCUs	Not shown in Plans but required for function	$ 7,070.28
6	FS system modifications	Design did not pass hydraulic calculations	$ 7,509.84
7	Revised electrical breaker size	Existing panel too small to accept new breakers	$ (1,557.68)
8	Add card reader & other hardware	Not shown in Plans but required for function	$ 2,940.00
9	Base plate credit	Base plates deleted by ITS request	$ (2,462.00)
10r1	Revised fire sprinkler route	Route per Plans unworkable due to existing conditions	$ (1,573.00)
11r1	Revised location of Clean Agent Tank	Plan location conflicts with future ATT landing spot	$ 4,759.00
12	Fiber strand terminations	District ITS standards not in Specs	$ 3,991.00
13	Panel expansion	Existing panel does not have the capacity to incorporate new work	$ 587.00
14	Reroute condensate lines	Existing drainline shown in Plan does not exist	$ 1,613.00
15	Extension of Time & Overhead	Due to multiple delays	$ 53,002.00
16	Pre-Action Cabinet/FA System tie-in	Not called for in Plans	$ 5,658.00
17	Refrigerant drip pans	Not called for in Plans	$ 2,839.00
18	Weather seal for wall penetrations	Wall penetrations were not sealed per Plans	$ 828.00
19r1	Demo urinal (on T&M)	Plan dimensions did not match existing dimensions	$ 2,957.00
20	Fire barrier duct wrap for FSDs	FSD needed to be installed out of plane due to existing obstructions	$ 1,423.00
21	Furnish fiber patch cords (material only)	Requested by ITS	$ 3,402.00
22	Furnish & install air transfer grill for UPS room	Not shown in Plans but required for function	$ 1,187.00
23R1	FS Pre-Action activation and manual UPS EPO button	Not shown in Plans but required for function	$ 3,517.00
24	Furnish fiber patch cords (material only)	Requested by ITS	$ 3,048.00
25	Install fire pillows at wall penetrations	Not shown in Plans but required for function	$ 4,575.00
		Total cost incurred	$102,266.12
		Owner's Allowance Amount	$120,000.00
		Amount to Credit Back to the Owner	$ 17,733.88

SUMMARY OF CHANGES - MPOE REPLACEMENT PROJECT								Cost	
PCO #	Description	Reason	Type	RFI #	CCD #	ASI #	Status	Initial	Final
1	Alternative routing for underground conduits	Conduits rerouted due to numerous obstructions	CR	1, 1.1, 1.2			Rejected	$ -	
1r1	Alternative routing for underground conduits	Conduits rerouted due to numerous obstructions		1, 1.1, 1.2			Accepted	$ (3,058.00)	$ (3,058.00)
2	Add BETs and fuse modules	Items were called for in the Specs, but not shown in Plans	CR	5, 5.1			Rejected	$ 76,545.00	
3	Repair existing damaged sewerline	Contractor found damaged existing sewerline	OR	10			Rejected	$ 1,342.00	
3r1	Repair existing damaged sewerline	Contractor found damaged existing sewerline	OR	10			Accepted	$ 881.43	$ 881.43
4	Revised painting for MPOE Room	Delete paint from MPOE Room ceiling, extend wall paint to ceiling	OR	17			Accepted	$ (870.75)	$ (870.75)
5	Add power center for FCUs	Not shown in Plans but required for function	E&O	11		1	Accepted	$ 7,070.28	$ 7,070.28
6	FS system modifications	Design did not pass hydraulic calculations	E&O	15			Accepted	$ 7,509.84	$ 7,509.84
7	Revised electrical breaker size	Existing panel too small to accept new breakers	E&O	30			Accepted	$ (1,557.68)	$ (1,557.68)
8	Add card reader & other hardware	Not shown in Plans but required for function	E&O	14			Accepted	$ 2,940.00	$ 2,940.00
9	Base plate credit	Base plates deleted by ITS request	OR	26	1		Accepted	$ (2,462.00)	$ (2,462.00)
10	Revised fire sprinkler route	Route per Plans unworkable due to existing conditions	E&O	36	2		Rejected	$ (1,123.00)	
10r1	Revised fire sprinkler route	Route per Plans unworkable due to existing conditions	E&O	36	2		Accepted	$ (1,573.00)	$ (1,573.00)
11	Revised location of Clean Agent Tank	Plan location conflicts with future ATT landing spot	OR			2	Rejected	$ 4,761.00	
11r1	Revised location of Clean Agent Tank	Plan location conflicts with future ATT landing spot	OR			2	Accepted	$ 4,759.00	$ 4,759.00
12	Fiber strand terminations	District ITS standards not in Specs	OR				Accepted	$ 3,991.00	$ 3,991.00
13	Panel expansion	Existing panel does not have the capacity to incorporate new work	E&O	48			Accepted	$ 587.00	$ 587.00
14	Reroute condensate lines	Existing drainline shown in Plan does not exist	E&O	50, 54			Accepted	$ 1,613.00	$ 1,613.00
15	Extension of Time & Overhead	Due to numerous delays	CR				Accepted	$ 53,002.00	$ 53,002.00
16	Pre-Action Cabinet/FA System tie-in	Not called for in Plans	E&O	55			Accepted	$ 5,658.00	$ 5,658.00
17	Refrigerant drip pans	Not called for in Plans	E&O			3	Accepted	$ 2,839.00	$ 2,839.00
18	Weather seal for wall penetrations	Wall penetrations were not sealed per Plans	E&O	65			Accepted	$ 828.00	$ 828.00
19	Demo urinal	Plan dimensions did not match existing dimensions	E&O		3		Rejected	$ 3,521.00	
19r1	Demo urinal (on T&M)	Plan dimensions did not match existing dimensions	E&O		3		Accepted	$ 2,957.00	$ 2,957.00
20	Fire barrier duct wrap for FSDs	FSD needed to be installed out of plane due to existing obstructions	E&O		4		Accepted	$ 1,423.00	$ 1,423.00
21	Furnish fiber patch cords (material only)	Requested by ITS	OR				Accepted	$ 3,402.00	$ 3,402.00
22	Furnish & install air transfer grill for UPS room	Not shown in Plans but required for function	E&O			5	Accepted	$ 1,187.00	$ 1,187.00
23	FS Pre-Action activation and manual UPS EPO button	Not shown in Plans but required for function	E&O				Rejected	$ 5,667.00	
23R1	FS Pre-Action activation and manual UPS EPO button	Not shown in Plans but required for function	E&O	71.1			Accepted	$ 3,517.00	$ 3,517.00
24	Furnish fiber patch cords (material only)	Requested by ITS	OR				Accepted	$ 3,048.00	$ 3,048.00
25	Install fire pillows at wall penetrations	Not shown in Plans but required for function	E&O			5	Accepted	$ 4,575.00	$ 4,575.00
			E&O	Errors & Omissions					$ 39,573.44
			OR	Owner's Request					$ 12,748.68
			CR	Contractor's Request					$ 49,944.00
				Date	6/2/21			To-date cost	$ 102,266.12

Allowance Amount	$ 120,000.00
Balance	$ 17,733.88
Contract Amount	$ 1,812,000.00
Final Contract Amount	$ 1,794,266.12

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 9/2/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Alt. Routing from Existing Com. Vault 200D to Bldg.300/Add. Direction Boring R1
PCO#: 01R1

Dear Peter,

Below is the cost to provide cost impact per RFI 1.2 (attahced). Credit is being given to eliminate one (1) 4'x6' vault, one (1) 3'x5' vault, 520LF of 4" PVC conduit and all associated labor, markup and sales tax. Includes the added directional bornig as detailed in RFI. Cost breakdown is detailed in the attached. Cost will indicate a NET add, upon resolution with electrical contractor Beci Electric they have agree to a NET zero add to their contract.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
Alternative Routing for (18) 4-inch Conduits	$ -	$ -	$ (2,845)	$ (2,845)
				$ -
SUBTOTAL				**$ (2,845)**
Markup - Subontractor				$ (142)
Insurance - 1%				$ (28)
Bonds - 1.5%				$ (43)
TOTAL COST				**$ (3,058)**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2020.09.02 11:21:47-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 01R1

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 1
Date: 6.30.20
Description: RFI 01.2 Response - Alternative Routing for (18) 4-inch Conduits

Drawing Number: **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1	4' x 6' Vault	-1	EA	$ 9,120.00	$ (9,120.00)
2	3' x 5' Vault	-1	EA	$ 3,014.00	$ (3,014.00)
3	4" PVC Conduit	-520	LF	$ 1.46	$ (759.20)
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
11					$ -
12					$ -
13					$ -
14					$ -
15					$ -
16					$ -
17					$ -
18					$ -
19					$ -
20					$ -
				Materials Subtotal:	$ (12,893.20)

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1	Journeyman	-16	HR	$ 117.11	$ (1,873.76)
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
				Labor Subtotal:	$ (1,873.76)

Summary:

Materials before tax Subtotal:		$ (12,893.20)
Sales Tax:		$ (1,192.62)
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ (1,873.76)
Materials, Rental Equipment, Labor Subtotal:		$ (15,959.58)
Overhead and Profit (Materials & Equipment)	15%	$ (1,933.98)
Overhead and Profit (Labor)	15%	$ (281.06)
Subcontractors Subtotal:		$ (18,175.00)

Item	SubTier Contractors	Quote
1	Additional Boring	$ 14,600.00
2		$ -
3		$ -

Second Tier Subcontractor(s) Subtotal:		$ 14,600.00
Profit at 5.00%:		$ 730.00
Subtotal:		$ 15,330.00
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ (2,845.00)
Total this Page:		$ (2,845.00)
Total from Previous Pages		
Proposal Grand Total:		$ (2,845.00)

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 01R1

NORTHERN
DIRECTIONAL DRILLING

Change Order #1

Name:	Chad Dillashaw	Date:	June 29, 2020
Contractor:	BECI Electric, Inc.		
Description:	Additional Crew, Equipment, Off Haul due to increased bore length		
Project:	MPOE Replacemnt Bldg. 300, Chabot Callege		

Description

The increase in bore length has increased our crew and equipment time and increased materials. This includs the following.

- Upsize of drill rig to accommodate the increase in length
- Additional crew and equipment time for directional boring
- Additional 4" conduit to account for doubling of bore length
- Additional vacuum truck time for drill mud handling
- Additional disposal costs at disposal site

Compensation:

Original Contract:	$18,600.00
Change Order #1	$14,600.00
Total:	$33,200.00

Exclusions:

Excavations
Vaults

Details:

Submitted by:

Tommy Demus

Tommy Demus

Acceptance of Change Order #1

Signature: _____ Date: _____

Print Name: _____ Company Name: _____

PO Box 128 Oakley, CA 94561 (925) 522-8880 phone (925) 522-8822 fax
CA License #915332 DIR#: 1000009798

Bid No. 19/20-17
Change Order #01
PCO 01R1

JENSEN PRECAST EST. 1968

4915A E. ANNADALE AVENUE
FRESNO, CA 93725
PH: (559) 248-0270
FAX: (559) 248-0271

3430 PACHECO BLVD.
MARTINEZ, CA 94553
PH: (925) 222-3471
FAX: (925) 229-2235

5400 RALEY BLVD
SACRAMENTO, CA 95838-1700
PH: (916) 991-8800
FAX: (916) 991-8810

12101 BRANDT ROAD
LOCKEFORD, CA 95237-9701
PH: (209) 727-5573
FAX: (209) 727-5833

QUOTATION

Project Name: NEW MPOE AT CHABOT CAMPUS BLDG 300
Project Location: HAYWARD, CA
Customer Name: Beci Electric, Inc.
Attn To
Phone:

Quote Number: Q-00049525
Quoted Date: 4/09/2020
Quoted By: Robert Pool

ITEM	QTY	DESCRIPTION	PRICE EACH	EXT PRICE
1	2.00	Custom Utility Pull Box INCLUDES 4'X6'-6" X 4' TALL ELECTRICAL PULLBOX, (1) GALVANIZED STEEL LEVEL 4 TWO DOOR HATCH WITH SPECIAL LABELS (4) RECESSED PULLING IRONS IN FLOOR, (1) 12" DIA. FLOOR SUMP, GALVANIZED CABLE RACKING AND TERMINATORS PER PROVIDED PROJECT DRAWINGS T-505 DATED 3-16-20 Ship Code: DELIVERED & SET	$9,120.00	$18,240.00
2	1.00	35 AT&T-48 A/G ENCL TRF ASSY 600072 Qty / Includes 1.00 — 3X5-48 PULL BOX AT&T 1.00 — COVER 3660 ADJ HINGED INC TRAX GALV 2.00 — 1" X 14.5' CS-102 CONSEAL Ship Code: DELIVERED & SET	$3,014.00	$3,014.00

DELIVERY		NET PRICE
Number of Trucks	1.00	$900.00
Freight		

GRAND TOTAL: $22,154.00

Includes: 2.00 Special truck(s), Please allow minimum 72 hours from request for delivery to receipt of goods. This is in addition to the time required for manufacturing of the product, which will be determined upon receipt of purchase order. Delivery includes 1.00 hours of offload & set time per truck. If the material is loaded and subsequently cancelled by the customer, a minimum restocking fee of $300.00 will apply to each load.

ALL ORDERS ARE SUBJECT TO CREDIT APPROVAL AND ACCEPTANCE BY SELLER.
QUOTED PRICES DO NOT INCLUDE SALES TAX ON PRECAST ITEMS.
A 3% CREDIT CARD SERVICE FEE MAY BE ADDED FOR ALL CREDIT CARD PAYMENTS.
DELIVERY TRIPS, SETTING TIME, OR MATERIALS NOT NOTED ABOVE WILL BE BILLED ACCORDINGLY.
OFFER TO SELL SUBJECT TO JENSEN PRECAST'S COMPANY POLICIES, TERMS AND CONDITIONS.
PLEASE REFER TO https://www.jensenprecast.com/legal/Terms-And-Conditions-California.pdf FOR COMPLETE TERMS AND CONDITIONS WHICH ARE HEREBY INCORPORATED BY REFERENCE
ALL SPECIALIZED PRODUCT MAY BE SUBJECT TO A DEPOSIT PRIOR TO SUBMITTALS AND/OR PRODUCTION
QUOTATION IS VALID FOR 30 DAYS. THANK YOU FOR CHOOSING JENSEN PRECAST!

Bid No. 19/20-17
Change Order #01
PCO 01R1

RFI 0001.2 Alternative Routing for (18) 4-inch Conduits

Status: Sent to reviewer

Due Date: Jun 20, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Jun 4, 2020 at 2:59 PM PDT

RFI #1.2 Revised per conversation during our OAC meeting held 6/10/2020:

See attached C-101 Utility Plan marked-up to show alternative routing for the (18) 4" Underground Conduits. We believe this to be a more direct and clear pathway. Please review and confirm this is acceptable.

In addition, there is an existing 6" water line that is obstructing the pathway per plans and per the alternate layout proposed. See utility locating photos and report attached. Please review and advise.

Note, Rodan Builders is pot holing this general area on Monday 6/15/20 and will provide additional supporting information to this RFI.

RFI #1.1 Revised to include utility locating information:

In addition to RFI #1 below, please review the mark-up attached showing located utilities near and around vault 200-D. Please review and advise noting pathway around the 6" DW line.

RFI #1:

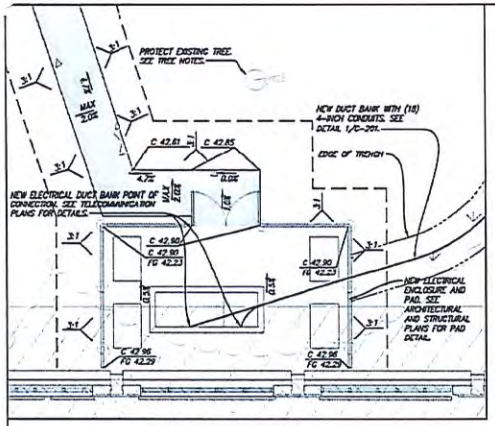
See attached C-101 Utility Plan marked-up to show alternative routing for the (18) 4" Underground Conduits. We believe this to be a more direct and clear pathway. Please review and confirm this is acceptable. Note, Rodan Builders is underground locating on Monday 6/8/20 and will provide additional supporting information to this RFI.

RFI 001 - Alternative Routing for (18) 4-inch Conduits.pdf (See page 2)

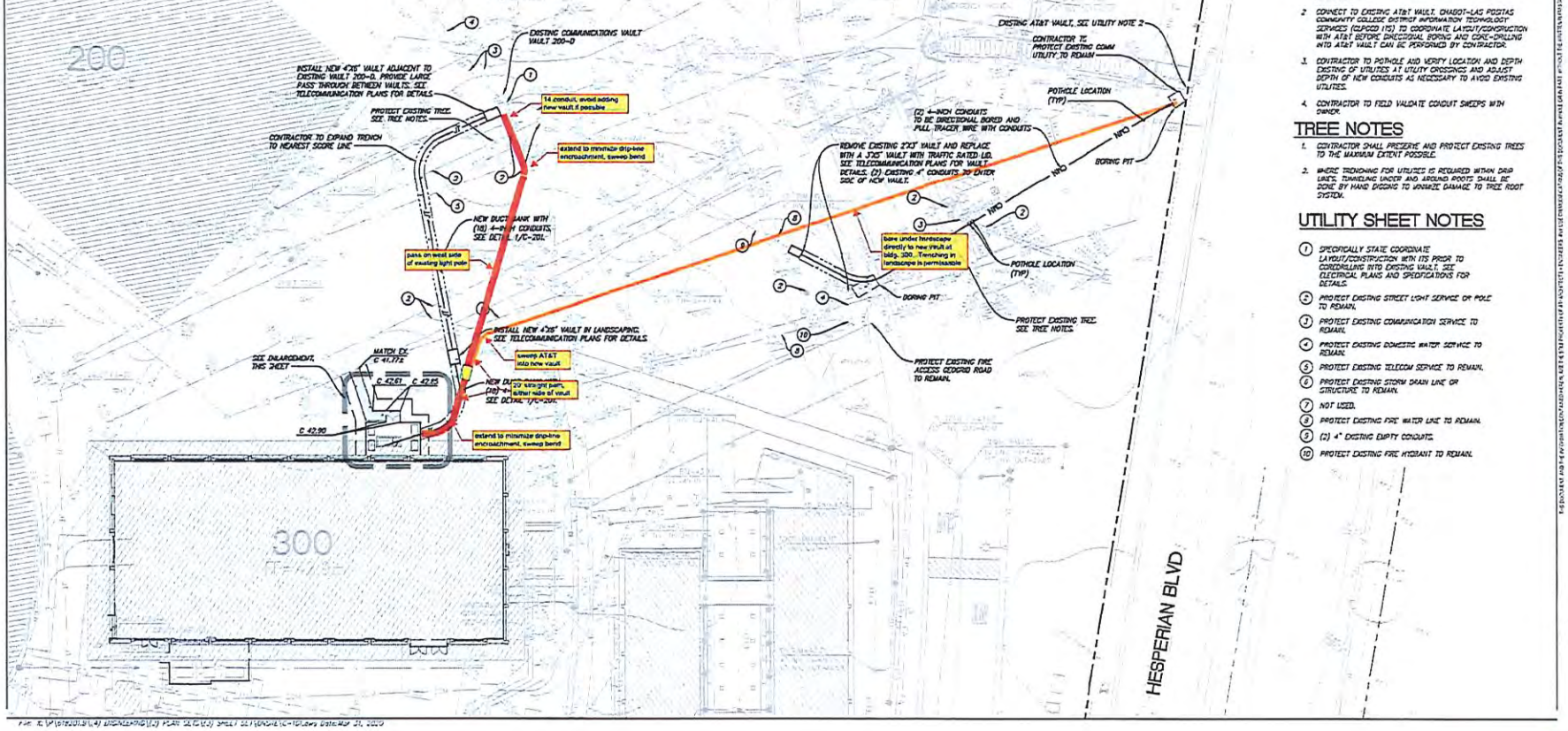
RFI_01.1_RBI_Alternative Routing for (18) 4-inch Conduits.pdf (See page 4)

The alternate route proposed by the contractor is acceptable with the attached revisions and at no cost to the District. The final design and layout is the contractor's responsibility. The contractor is to verify existing conditions to avoid conflicts with any and all existing utilities. This proposed solution should result in a credit of at least one, possibly two vaults that will be omitted depending on how the new work connects to the existing Bldg. 200 vault. - Luke Shiras, ATI 6/19/20

Bid No. 19/20-17
Change Order #01
PCO 01R1



ENLARGEMENT
1"=5'



SANDIS
EAST BAYSIDE
SCALE: 1"=20

LEGEND

- PROPERTY LINE
- SAWCUT LINE
- LIMIT OF TRENCH
- CMK — COMM LINE
- JT — JOINT TRENCH
- UTILITY BOX
- CONCRETE SIDEWALK (2 / C-201)
- CONCRETE TRENCH SURFACE RESTORATION (3 / C-201)
- LANDSCAPE SURFACE RESTORATION (4 / C-201)
- POTHOLE LOCATION, SEE UTILITY NOTES 3

GENERAL NOTES

1. PROJECT SHALL PHOTOGRAPH AND MATCH ALL LANDSCAPING AT THE END OF WORK.

UTILITY NOTES

1. SEE ELECTRICAL PLANS AND SPECIFICATIONS FOR DETAILS PERTAINING TO ELECTRICAL CONNECTIONS, CONDUITS, AND STRUCTURES.
2. CONNECT TO EXISTING AT&T VAULT. CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT INFORMATION TECHNOLOGY SERVICES (CLPCCD ITS) TO COORDINATE LAYOUT/CONSTRUCTION WITH AT&T BEFORE DIRECTIONAL BORING AND CORE-DRILLING INTO AT&T VAULT CAN BE PERFORMED BY CONTRACTOR.
3. CONTRACTOR TO POTHOLE AND VERIFY LOCATION AND DEPTH EXISTING OF UTILITIES AT UTILITY CROSSINGS AND ADJUST DEPTH OF NEW CONDUITS AS NECESSARY TO AVOID EXISTING UTILITIES.
4. CONTRACTOR TO FIELD VALIDATE CONDUIT SWEEPS WITH OWNER.

TREE NOTES

1. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING TREES TO THE MAXIMUM EXTENT POSSIBLE.
2. WHERE TRENCHING FOR UTILITIES IS REQUIRED WITHIN DRIP LINES, TUNNELING UNDER AND AROUND ROOTS SHALL BE DONE BY HAND DIGGING TO MINIMIZE DAMAGE TO TREE ROOT SYSTEM.

UTILITY SHEET NOTES

1. SPECIFICALLY STATE COORDINATE LAYOUT/CONSTRUCTION WITH ITS PRIOR TO CORE/DRILLING INTO EXISTING VAULT. SEE ELECTRICAL PLANS AND SPECIFICATIONS FOR DETAILS.
2. PROTECT EXISTING STREET LIGHT SERVICE OR POLE TO REMAIN.
3. PROTECT EXISTING COMMUNICATION SERVICE TO REMAIN.
4. PROTECT EXISTING DOMESTIC WATER SERVICE TO REMAIN.
5. PROTECT EXISTING TELECOM SERVICE TO REMAIN.
6. PROTECT EXISTING STORM DRAIN LINE OR STRUCTURE TO REMAIN.
7. NOT USED.
8. PROTECT EXISTING FIRE WATER LINE TO REMAIN.
9. (2) 4" EXISTING EMPTY CONDUITS.
10. PROTECT EXISTING FIRE HYDRANT TO REMAIN.

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 01-118445, INC:
REVIEWED FOR
SS ☑ PLS ☑ ACS ☑
DATE: 05/28/2020

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:
DATE 05/21, 2020
MICHAEL A. HUNKENDALL
R.C.E. NO. 70870
EXPIRES 6-30-21

CONSULTANT:
SANDIS
CIVIL ENGINEERS
SURVEYORS
PLANNERS

SILICON VALLEY | TRI-VALLEY
CENTRAL VALLEY | EAST BAY/SF

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	04/21/2020

KEY PLAN

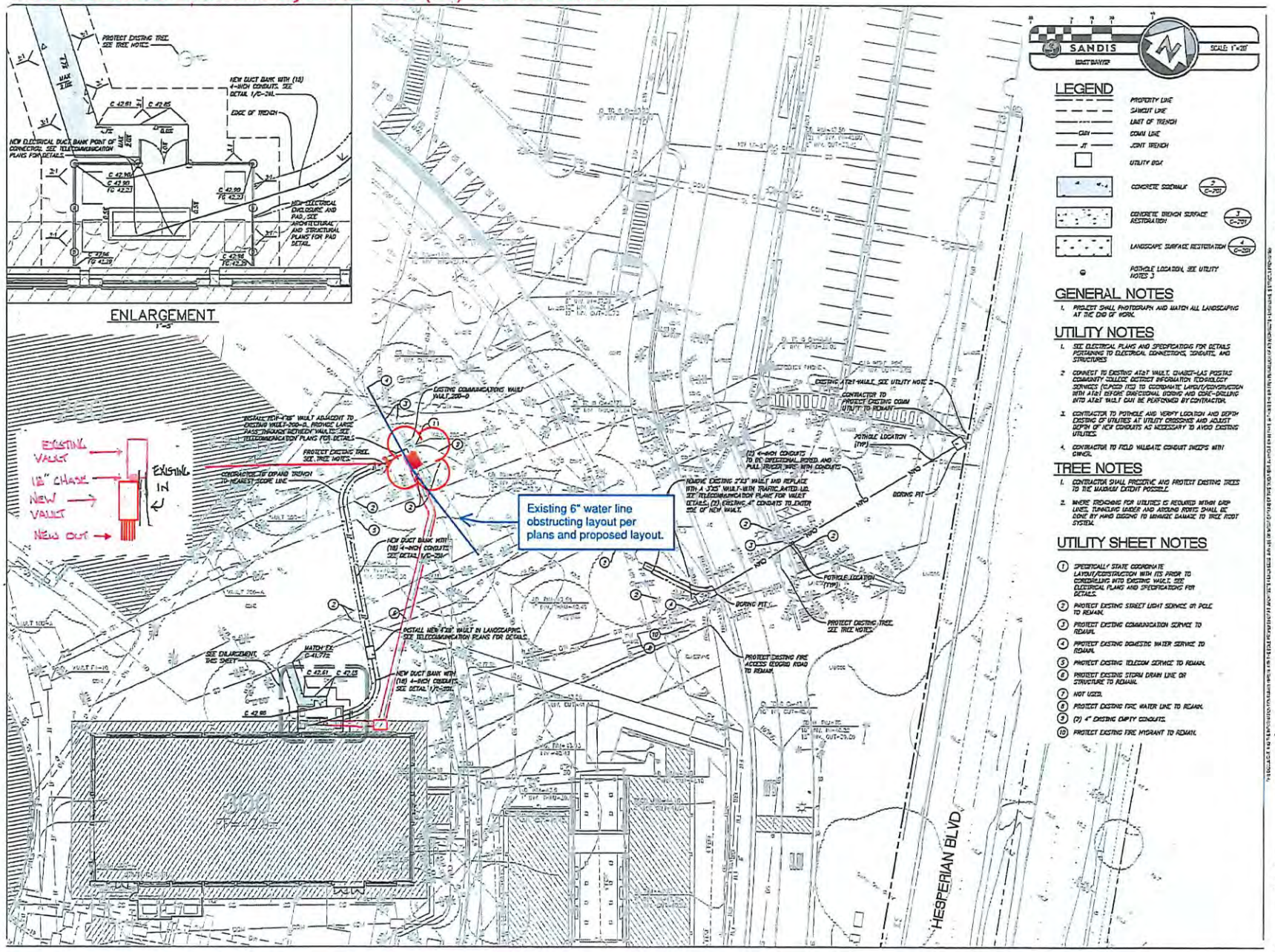
UTILITY PLAN

DRAWN BY: CL | CHECKED BY: MA
DATE: 11/17/2019 | PROJECT NO: 61
SHEET NO:

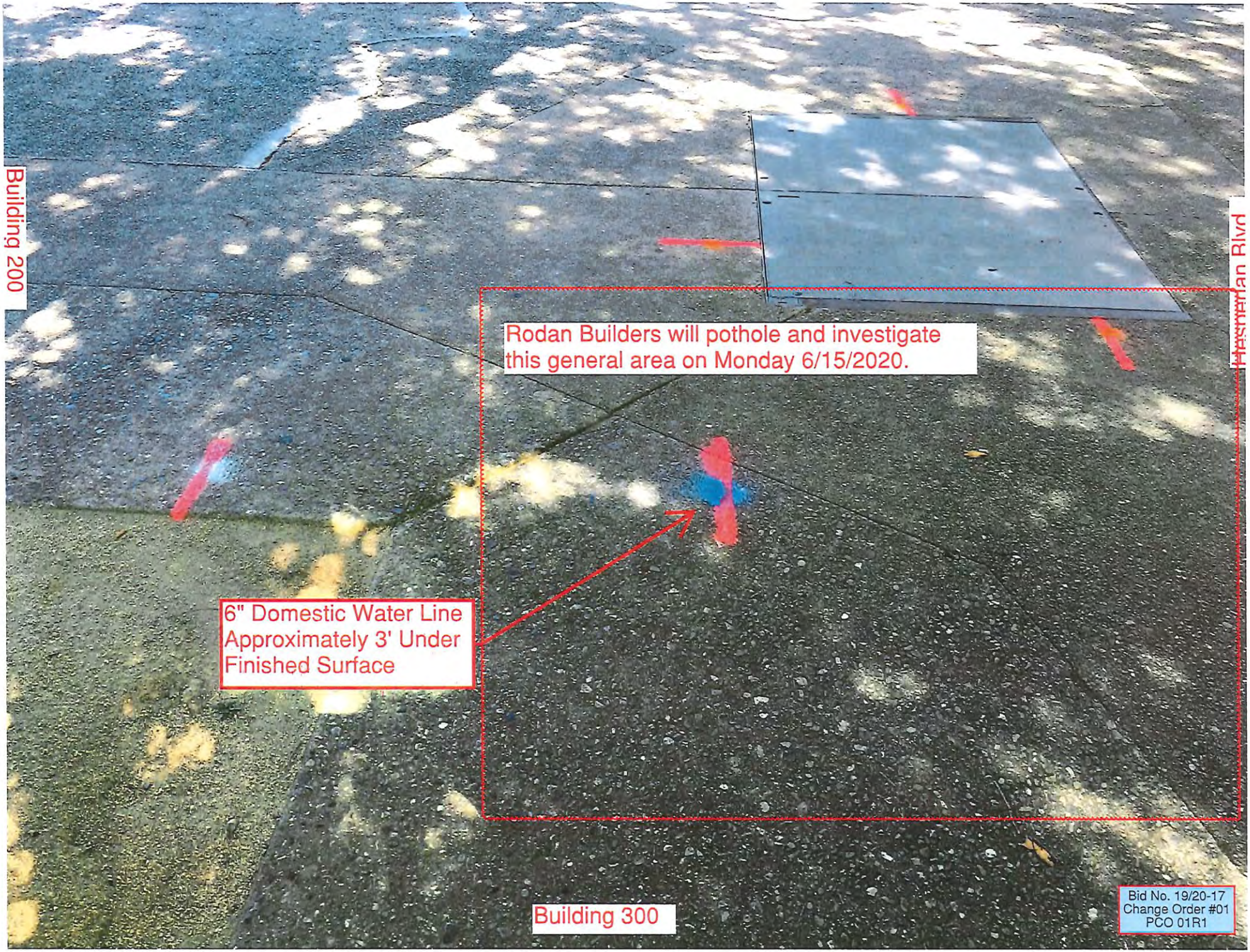
C-101

Bid No. 19/20-17
Change Order #01
PCO 01R1

Rodan Builders alternate layout for new (18) 4-inch conduits



Bid No. 19/20-17
Change Order #01
PCO 01R1


Building 200
Hesperian Blvd
Rodan Builders will pothole and investigate this general area on Monday 6/15/2020.
6" Domestic Water Line Approximately 3' Under Finished Surface
Building 300
Bid No. 19/20-17
Change Order #01
PCO 01R1

BESS UTILITY SOLUTIONS 2463 Tripaldi Way, Hayward, CA 94545 Tel (408) 988-0101 - Fax (408) 988-0103 www.besstestlab.com
GPR Concrete Scanning - Utility Locating - Potholing - Mobile LiDar 3D Scanning - 3D GPR Imaging

UTILITY LOCATING & GPR UTILITY SCANNING

REPORT FOR

Rodan Builders

PROJECT SITE:
CHABOT COLLEGE
HAYWARD, CA

JUNE 10, 2020

Bid No. 19/20-17
Change Order #01
PCO 01R1

BESS UTILITY SOLUTIONS 2463 Tripaldi Way, Hayward, CA 94545 Tel (408) 988-0101 - Fax (408) 988-0103 www.besstestlab.com
GPR Concrete Scanning - Utility Locating - Potholing - Mobile LiDar 3D Scanning - 3D GPR Imaging

Attention: Alex Tellez

June 10,2020

Reference: 23-0-1459

Scope of Work

BTL was contracted to provide utility locating and GPR utility scanning services on site in Hayward, CA. All utilities were requested to be marked by their appropriate designated utility color. Any unknown utilities are to be marked in pink and marked as "unknown".

RF Utility Locating and GPR Utility Scanning Approach

BTL Crew

SUE Foreman: Jesse Cardenas

Equipment

BTL Locating Crews use RF (Radio Frequency) utility locators combined with GPR (Ground Penetrating Radar) to locate known and unknown underground utilities.

Marking Materials

Markings are done with water based pink paint, pink metal wire flags (bio degradable flags available upon request) and/or wooded laths.

Technical Approach

BTL crews uses the direct connect method when locating underground utilities. Horizontal accuracy of our locators are 6"on each side of markings, although industry standards by law in California allows for 2 feet on each side of markings. Vertical accuracy "Electronic depths" are strictly an estimate. Our Equipment standards suggest our locators are fall with-in 5% of actual depths. Our GPR equipment for utility scanning consist of a 400 MHz and 200MHz antennas.

Results

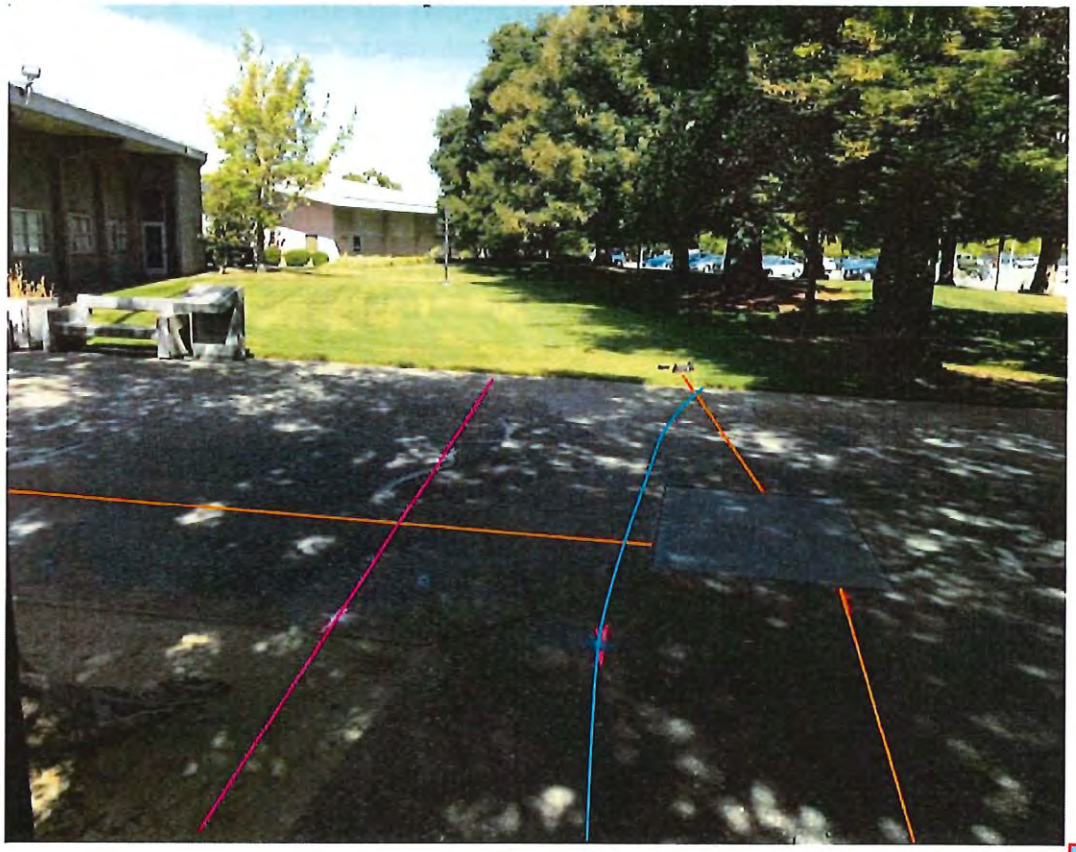
Designated area was marked and located, our technicians ran GPR to see potential unknown utilities or anomalies that could be threats during excavation work. The following utilities have been located and marked. Electrical, Gas, Water, Communication, and GPR Unknown.

Standard report was put together to display the utilities on images taken in the field. Images are to be used as visual reference, they are not to scale and should not be used for measurements or anything else than their intended purpose. During preparation of report, the job site was reviewed. Special attention was taken to make sure no other utilities were missed as apart of our quality control procedure.

BESS
UTILITY SOLUTIONS

Extract from Bess Utility Solutions locating report dated 6/10/2020

SD/SS Water Elec Gas Unkn Comm



Bid No. 19/20-17
Change Order #01
PCO 01R1

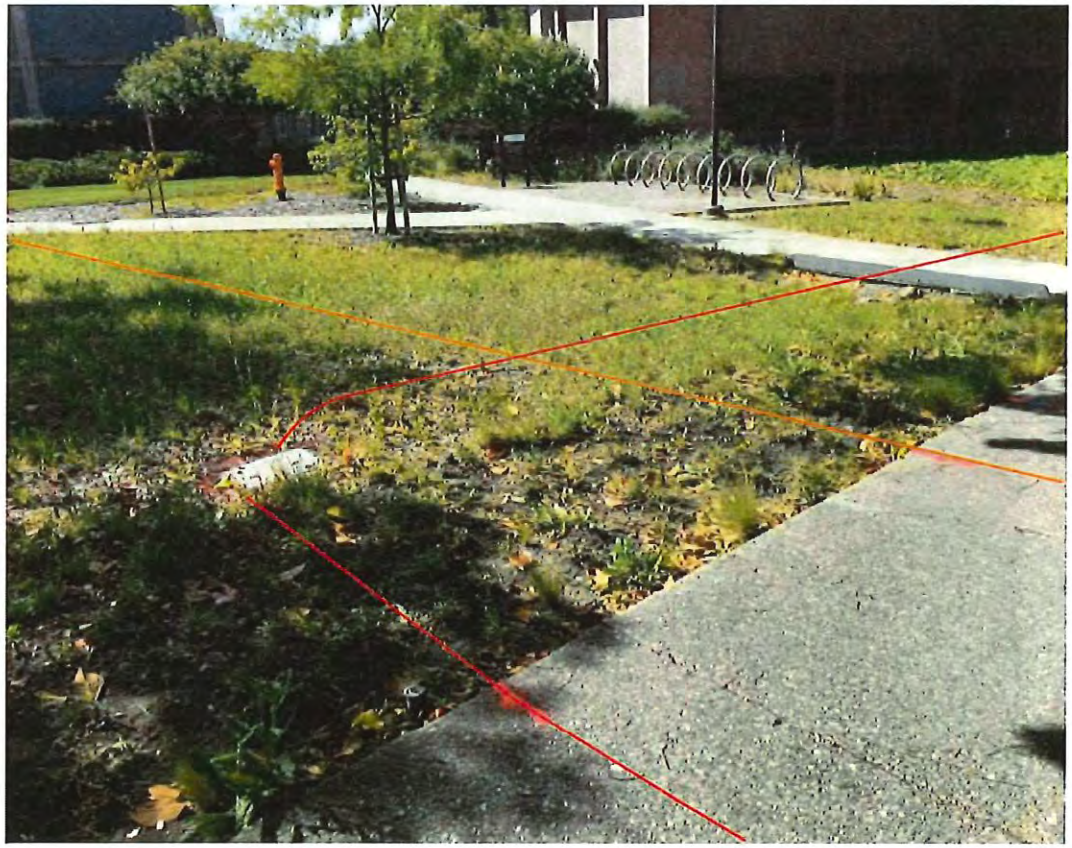
BESS
UTILITY SOLUTIONS

Extract from Bess Utility Solutions locating report dated 6/10/2020

SD/SS Water Elec Gas Unkn Comm

Bid No. 19/20-17
Change Order #01
PCO 01R1

SD/SS Water Elec Gas Unkn Comm



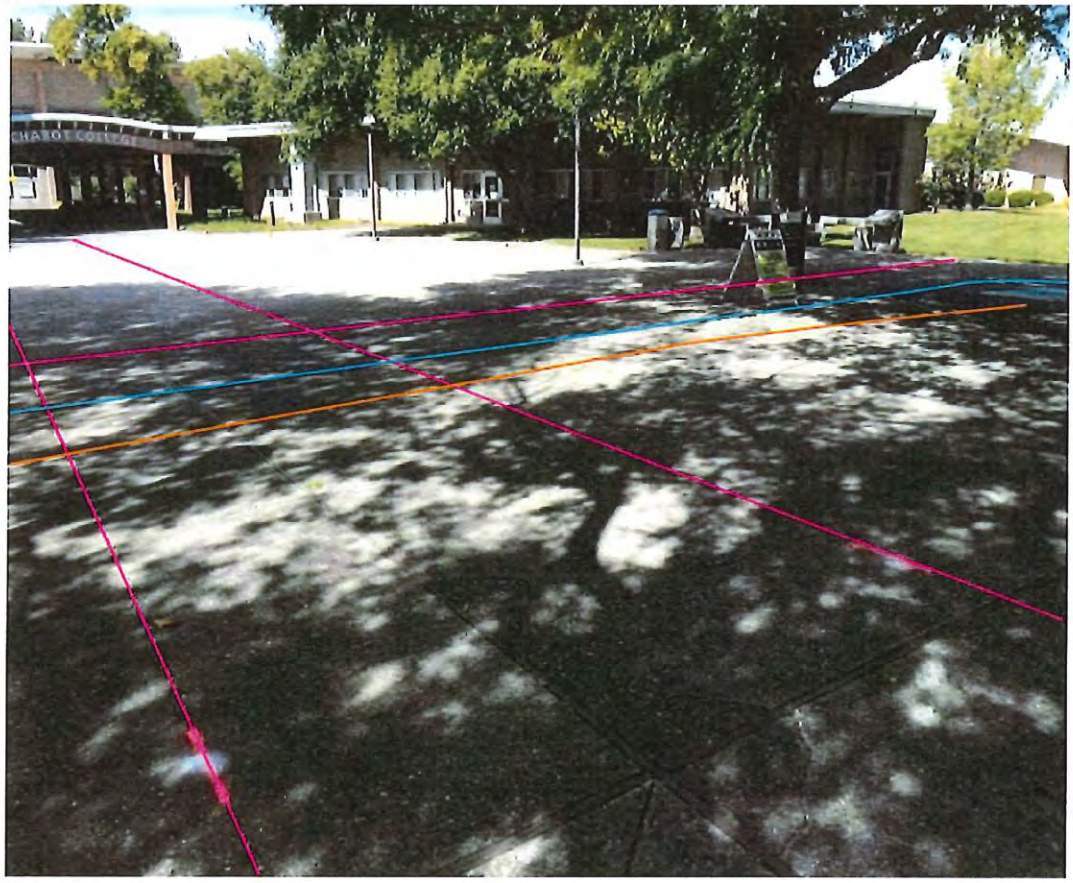
Bid No. 19/20-17
Change Order #01
PCO 01R1

BESS
UTILITY SOLUTIONS

Extract from Bess Utility Solutions locating report dated 6/10/2020

SD/SS Water Elec Gas Unkn Comm

Bid No. 19/20-17
Change Order #01
PCO 01R1



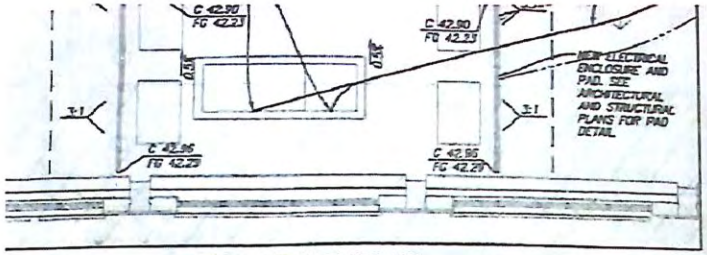
SD/SS Water Elec Gas Unkn Comm

BESS
UTILITY SOLUTIONS

Extract from Bess Utility Solutions locating report dated 6/10/2020

SD/SS Water Elec Gas Unkn Comm

Bid No. 19/20-17
Change Order #01
PCO 01R1



ENLARGEMENT
1"=5'

ATI ARCHITECTS AND ENGINEERS
4750 Willow Road, Suite 250, Pleasanton, CA 94588
Submitted Plans Pending Review
NO EXCEPTIONS TAKEN
Checking is only for general conformance with the design concept of the project and general compliance with the information given and the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and corrected at the job site. Fabrication process and techniques of construction, Coordination of his/her work with that of all other trades, and the satisfactory performance of his/her work.

200

INSTALL NEW 4'X6' VAULT ADJACENT TO EXISTING VAULT 200-D. PROVIDE LARGE PASS THROUGH BETWEEN VAULTS. SEE TELECOMMUNICATION PLANS FOR DETAILS.

EXISTING COMMUNICATIONS VAULT VAULT 200-D

PROTECT EXISTING TREE. SEE TREE NOTES.

CONTRACTOR TO EXPAND TRENCH TO NEAREST SCORE LINE

14 conduit, avoid adding new vault if possible

extend to minimize drip-line encroachment, sweep bend

NEW DUCT BANK WITH (16) 4" PVC CONDUITS. SEE DETAIL 1/C-201.

pass on west side of existing light pole

INSTALL NEW 4'X6' VAULT IN LANDSCAPING. SEE TELECOMMUNICATION PLANS FOR DETAILS.

sweep AT&T into new vault

20' straight path, either side of vault

extend to minimize drip-line encroachment, sweep bend

MATCH EX. C 41.77±

SEE ENLARGEMENT, THIS SHEET

C 42.61

C 42.85

C 42.90

300

EXISTING AT&T VAULT, SEE UTILITY NOTE 2

CONTRACTOR TO PROTECT EXISTING COMM UTILITY TO REMAIN

POTHOLE LOCATION (TYP)

(2) 4-INCH CONDUITS TO BE DIRECTIONAL BORED AND PULL TRACER WIRE WITH CONDUITS

BORING PIT

REMOVE EXISTING 2'X3' VAULT AND REPLACE WITH A 3'X5' VAULT WITH TRAFFIC RATED LID. SEE TELECOMMUNICATION PLANS FOR VAULT DETAILS. (2) EXISTING 4" CONDUITS TO ENTER SIDE OF NEW VAULT.

bore under hardscape directly to new vault at bldg 300. Trenching in landscape is permissible

POTHOLE LOCATION (TYP)

BORING PIT

PROTECT EXISTING TREE. SEE TREE NOTES.

PROTECT EXISTING FIRE ACCESS GEOGRID ROAD TO REMAIN

HESPERIAN BLVD

Bid No. 19/20-17
Change Order #01
PCO 01R1

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 7/30/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Repair Existing Damaged SD Line per RFI #10
PCO#: 03

Dear Peter,

Below is the cost to furnish and install a repair sleeve on the existing damaged 8" SD line per RFI response #10.

DESCRIPTION	Material	Labor	Sub	Total Cost
Rodan Builders, Inc.				
Repair Existing Damaged SD Line per RFI #10	$ 358	$ 392		$ 750
SUBTOTAL				**$ 750**
Markup - Contractor				$ 113
Insurance - 1%				$ 8
Bonds - 1.5%				$ 11
TOTAL COST				**$ 881**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds

Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN="Keith Reynolds"
Date: 2020.07.30 09:23:46-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 03R1

COST ANALYSIS

PROJECT: MPOE Replacement Bldg. 300
ARCHITECT: ATI Architects + Engineers
QUANTITIES: Breakdown Below
OWNER: CLPCCD
PRICE BY: KR/AT

SHEET NO. 1 of 1
ESTIMATE NO. PCO 03
DATE 7/30/2020

DESCRIPTION	QUANTITY	UNIT	MATERIAL UNIT	MATERIAL TOTAL	LABOR UNIT	LABOR TOTAL	TOTAL COST UNIT	TOTAL COST TOTAL
Rodan Builders, Inc.								
Labor X1 Journeyman Carpenter								
- Furnish and Install a Repair Sleeve on the Existing Damaged 8" SD	4.0	HRS			97.94	$ 391.76		$ 391.76
Materials X1 Repair Sleeve	1.0	EA	$ 358.39	$ 358.39				$ 358.39
Total				$ 358.39		$ 391.76		$ 750.15

Bid No. 19/20-17
Change Order #01
PCO 03R1

R & B COMPANY - RWC
A CORE & MAIN COMPANY
939 BROADWAY
REDWOOD CITY, CA 94063
Phone 650 366-3833
Fax 650 366-1134

Quotation

EXPIRATION DATE	QUOTE NUMBER
08/20/2020	S1955868

R & B COMPANY - RWC
A CORE & MAIN COMPANY
939 BROADWAY
REDWOOD CITY, CA 94063
Phone 650 366-3833
Fax 650 366-1134

PAGE NO. 1 of 1

QUOTE TO:

RODAN BUILDERS, INC.
3486 INVESTMENT BLVD. SUITE B
HAYWARD, CA 94545

SHIP TO:

RODAN BUILDERS, INC.
3486 INVESTMENT BLVD. SUITE B
HAYWARD, CA 94545

CUSTOMER NUMBER	CUSTOMER PO NUMBER	JOB NAME / RELEASE NUMBER	SALESPERSON
5587			Jim Sockol

WRITER	SHIP VIA	TERMS	SHIP DATE	FREIGHT ALLOWED
Jake Perez	WC WILL CALL	Net 30 Days	08/18/2020	Yes

ORDER QTY	DESCRIPTION	UNIT PRICE	EXT PRICE
1ea	8 ROMAC SS1-9.70X16 FC REP CLAMP **RANGE 9.30-9.70** Pn: 92174	328.050/EA	328.05

Price are firm for 30 days. Subject to change without notice after 30 days. Applicable taxes extra.

Subtotal	328.05
S&H Charges	0.00
Amount Due	328.05

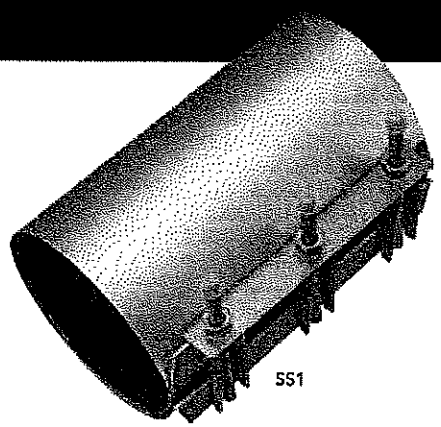
Bid No. 19/20-17
Change Order #01
PCO 03R1

+ Tax @9.25% = 358.39

Printed By: JPEREZ on 7/21/2020 2:56:43 PM PDT

SS1, SS2, & SS3 STAINLESS-SEAL PIPE REPAIR CLAMP

SUBMITTAL INFORMATION



MATERIALS

SHELL
304 Stainless Steel 18 to 26 gauge depending on size.

SIDEBARS
Heavy gauge 304 Stainless Steel, GTAW welded to form permanent fusion with shell.

LUGS
304 Stainless Steel, fused to sidebars by GMAW welding.

BOLTS
304 Stainless Steel, 4 inch clamps and smaller use 1/2" UNC rolled thread, 6 inch clamps and larger use 5/8" UNC rolled thread. Bolts are GMAW welded to sidebar.

NUTS
Heavy hex, 304 Stainless Steel, 4 inch clamps and smaller uses 1/2" UNC threads, 6 inch clamps and larger uses 5/8" UNC threads. Nuts coated to prevent galling.

WASHERS
5/8" 304 Stainless Steel flat washers. SS1's 13.55 and larger, SS2's 13.50 and larger and all SS3's receive Stainless Steel flat washer. 1/2" or 5/8" Plastic washer prevents galling between nut or stainless steel washer and lifter bar, on all sizes.

ARMORS
Heavy gauge 304 Stainless Steel, bonded to gasket to bridge gap at lug area.

LIFTER BARS
304 Stainless Steel, lip curved to hold position while tightening. Heavy gauge serves as bearing surface for nuts.

GASKETS
Virgin SBR rubber compounded for water and sewer service in accordance with ASTM D 2000 MAA 610. Other compounds available for petroleum or high temperature service, or other special applications.

WELDS

GMAW & GTAW
308L Stainless Steel filler wire used as appropriate. All welds fully passivated for enhanced corrosion resistance.

STANDARD
Complies with ANSI/AWWA Standard C230 Stainless-Steel Full-encirclement Repair and Service Connection Clamps 2" – 12".

SIZES & RANGES

See catalog.

1/17
Document # 10-8-0014

This information is based on the best data available at the date printed above. Please check with Romac for any updates or changes.

ROMAC INDUSTRIES, INC.

Bid No. 19/20-17
Change Order #01
PCO 03R1

www.romac.com
21919 20th Avenue SE • Suite 100 • Bothell, WA 98021
Phone (425) 951-6200 • 1-800-426-9341 • Fax (425) 951-6201

RFI 0010 - Existing SD Line

Status: Sent to reviewer

Due Date: Jul 22, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Jul 7, 2020 at 11:16 AM PDT

Please see attached photo of the existing SD line exposed during excavation. This SD line has a small leak that drips once every few minutes. The pipe leak is existing not caused during our excavation. Please confirm if any action is required on the leak prior to backfilling the trench.

RFI_10_RBI_Existing SD Line.pdf (See page 2)

SANDIS REPSONSE: DATE RESPONDED: 7/8/2020

The SD pipe appears to be ACP (asbestos cement pipe) so the ideal answer would be to remove a section of the pipe and replace it with a non-ACP material. The campus may not want to spend the money to do that but that would the preferred fix.

Alternately, the pipe can be 'repaired' with a clamped on fitting. These come in a range of sizes and styles depending on the pipe material and what the pipe is carrying. Here is one manufacturer of them:

https://www.jcmindustries.com/product-category/repair-fittings/

Have the Campus Representative review and provide direction on which solution the campus would want to take.

TONY VILLALOBOS
SANDIS ENGINEERS

Bid No. 19/20-17
Change Order #01
PCO 03R1

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 7/29/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Extend Paint at Int. Walls/Delete Clg. Paint Per, RFI 17
PCO#: 04

Dear Peter,

Below is the added cost, $911.00 to extend paint coverage to full height at ineterior walls of MPOE room. Cost impact includes credit ($1,721.00) to eliminate ceiling painting scope as detaile via RFI 17

DESCRIPTION	Material	Labor	Sub	Total Cost
KBI Painting				
Extend Paint at Int. Walls/Delete Clg. Paint			$ (810)	$ (810)
				$ -
SUBTOTAL				**$ (810)**
Markup - Contractor				$ (41)
Insurance - 1%				$ (8)
Bonds - 1.5%				$ (12)
TOTAL COST				**$ (871)**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN="Keith Reynolds" Date: 2020.07.29 10:40:09-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 04

KBI Painting Quote Sheet

Painting Contractors
License #944475

PROJECT: MPOE Building Replacement Bldg 300

Quote #	001
PCO #	
Date Issued	7/29/2020
KBI Job #	20-062
GC Job #	20-1102

Submitted To	
GC:	**Rodan Builders, Inc**
PM:	Alex Tellez
PE:	
SUPER:	

Submitted By
KBI Painting Inc.
Todd Guidi
Senior Estimator / PM
(707) 800-2427

Subject
Delete Ceiling Scope in MPOE

Item #	DESCRIPTION OF WORK	Amount
1	Delete ceiling painting in the MPOE/DAS room	
	15 hrs @ $101.41 per hr	($1,521)
	Material	($200)
	TOTAL	**($1,721)**

We will proceed with this pricing change request upon written approval via email or receipt of change order to contract.

Bid No. 19/20-17
Change Order #01
PCO 04

KBI Painting Quote Sheet

PROJECT: MPOE Building Replacement Bldg 300

Painting Contractors
License #944475

Quote #	002
PCO #	
Date Issued	7/29/2020
KBI Job #	20-062
GC Job #	20-1102

Submitted To	
GC:	**Rodan Builders, Inc**
PM:	Alex Tellez
PE:	
SUPER:	

Submitted By
KBI Painting Inc.
Todd Guidi
Senior Estimator / PM
(707) 800-2427

Subject
Extend Custom White full height walls

Item #	DESCRIPTION OF WORK	Amount
1	Extend custom "white" paint from submittal #38 full height walls in MPOE/DAS room	
	8 hrs @ $101.41 per hr	$811
	Material	$100
	TOTAL	**$911**

We will proceed with this pricing change request upon written approval via email or receipt of change order to contract.

Bid No. 19/20-17
Change Order #01
PCO 04

RFI 0017 - Painting MPOE Room Ceiling

Status: Sent to reviewer

Due Date: Jul 31, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Jul 16, 2020 at 4:32 PM PDT

Per the response to our paint submittal, the Owner has indicated they do not want any paint on the ceiling of the new MPOE room #307. Please review extracts from submittal response #38 and confirm.

RFI_17_RBI_Painting MPOE Room Ceiling.pdf (See page 2)

Confirmed, do not paint the ceiling in the MPOE/DAS room.
Extend custom "white" paint from submittal #38 full height of walls in MPOE/DAS room. - Luke Shiras, ATI 7/17/20

Bid No. 19/20-17
Change Order #01
PCO 04

KELLY-MOORE PAINTS™

SPECIFICATION SUBMITTAL

MPOE REPLACEMENT
BUILDING 300
25555 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA 94945

Submitted for: Carbon paint color no longer needed

KBI Painting, Inc.
P.O. Box 750397
Petaluma, CA 94975
(707) 795-4955
nickie@kbipaint.com

ATI ARCHITECTS AND ENGINEERS
4750 Willow Road. Suite 250, Pleasanton, CA 94588

Submittal/Shop Drawing Review

MAKE CORRECTIONS NOTED

Checking is only for general conformance with the design concept of the project and general compliance with the information given and the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the job site; Fabrication process and techniques of construction; Coordination of his/her work with that of all other trades; and the satisfactory performance of his/her work.

Sign LISA LIM Date 07/16/2020

Submitted by:

Rich Hoey
Sales Representative
Kelly-Moore Paint Company, Inc.
601 Francisco Boulevard - East
San Rafael, CA 94901-4006
(415) 595-9315
rhoey@kellymoore.com

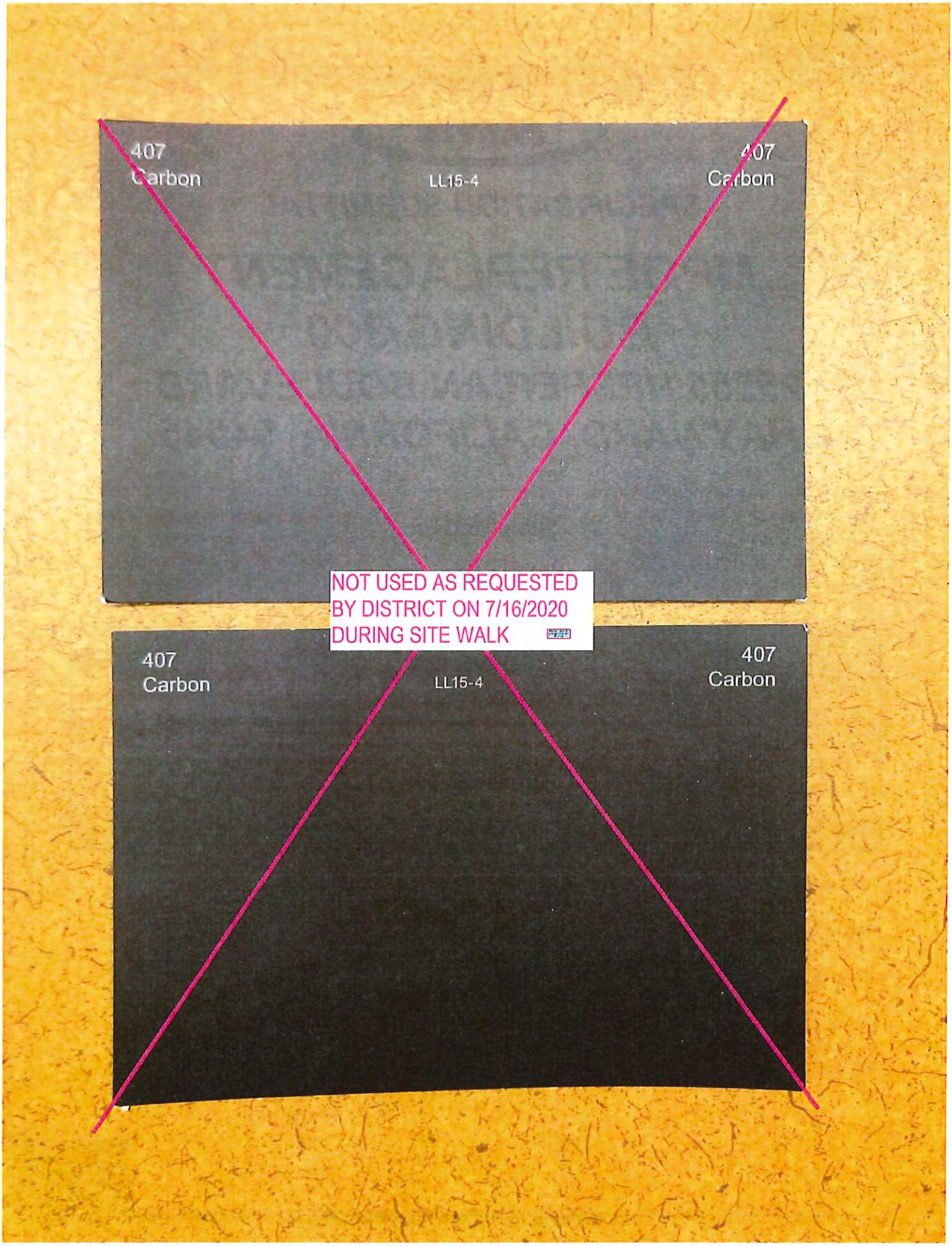
Architect:

ATI Architects + Engineers
4750 Willow Road, Suite #250
Pleasanton, CA 94588

General Contractor:

Rodan Builders, Inc.
3486 Investment Boulevard, Suite B
Hayward, CA 94545

Bid No. 19/20-17
Change Order #01
PCO 04


407
Carbon
LL15-4
407
Carbon
NOT USED AS REQUESTED
BY DISTRICT ON 7/16/2020
DURING SITE WALK
407
Carbon
LL15-4
407
Carbon

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 8/3/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Mini Power Centers For Fan Coil Units per RFI #11 and ASI #001
PCO#: 05

Dear Peter,

Below is the cost to furnish and install two (2) mini power centers that are to power the fan coil units per RFI Response #11 and ASI #001. ASI #001 drawings show panel 31LC feeds one of the new mini power centers with (1) 20A/2P CB, there is also another 20/2P CB added for spare. The second mini power center is fed by panel 31LD however that panel schedule is not shown. Our cost proposal assumes panel 31LD will have the same breakers mentioned above.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric, Inc.				
Mini Power Centers For Fan Coil Units per RFI #11 and ASI #001			$ 6,577	$ 6,577
SUBTOTAL				**$ 6,577**
Markup - Contractor				$ 329
Insurance - 1%				$ 66
Bonds - 1.5%				$ 99
TOTAL COST				**$ 7,070**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2020.08.03 12:40:54-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 05

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #:	3
Date:	7/30/20
Description:	ASI 001

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1	(2) Mini Power Centers with (2) 15A/2 Pole Breakers Each	1	Lot	$ 3,320.00	$ 3,320.00
2	3/4" EMT	65	LF	$ 0.72	$ 46.80
3	3/4" EMT Coupling	6	EA	$ 2.85	$ 17.10
4	3/4" Strap	4	EA	$ 0.76	$ 3.04
5	No 12 THHN	250	LF	$ 0.13	$ 32.50
6	Simpston Strong Bold 1/2"	8	EA	$ 1.35	$ 10.80
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ 3,430.24

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1	Journeyman	16	Hours	$ 117.11	$ 1,873.76
2	General Foreman	1	Hours	$ 139.38	$ 139.38
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ 2,013.14

Summary:

The ASI drawings show panel 31LC feeds one of the new mini power centers with (1) 20A/2P CB, there is also another 20/2P CB added for spare. The other mini power center is fed by panel 31LD however that panel schedule is not shown. We assume this panel we have the same breakers mentioned above.

Materials before tax Subtotal:		$ 3,430.24
Sales Tax:		$ 317.30
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ 2,013.14
Materials, Rental Equipment, Labor Subtotal:		$ 5,760.68
Overhead and Profit (Materials & Equipment)	15%	$ 514.54
Overhead and Profit (Labor)	15%	$ 301.97
Subcontractors Subtotal:		$ 6,577.00

Item	SubTier Contractors	Quote	
1			
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ -
Profit at 5.00%:		$ -
Subtotal:		$ -
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ 6,577.00
Total this Page:		$ 6,577.00
Total from Previous Pages		
Proposal Grand Total:		***$ 6,577.00***

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 05

Detail Bill of Material

Project Name:	CHABOT COLLEGE BLDG 300	**Negotiation No:**	N2620408X0K2
General Order No:	SSF1107044	**Alternate No:**	0001

Item No.	Qty	Product	Description
	2	Dry Type Transformers	Transformer Type: Mini Power Centers

1 Phase, 5 KVA,
1 K-Factor
480 Primary Volts
120/240 Secondary Volts
Temperature Rise 115C
Aluminum Winding Material
Sound Reduction : 0
NEMA ST-20 Audible Sound Level: 45
UL Listed : Y
Enclosure Type: NEMA 3R Encapsulated
Operating Frequency: 60 HZ

Catalog No P48G11S0512
Designation PC-C,PC-D

Qty	List of Materials
1	1 Phase, 5 KVA, 480 Primary Volts, 120/240 Secondary Volts, 115C Temperature Rise, Aluminum Winding Material, 60 HZ

Item No.	Qty	Product	Description
	2	BR RESIDENTIAL BREAKERS	Type BR Breaker 15A/2 Pole 120/240V 10

Catalog No BR215
Designation PC-C, PC-D

Qty	List of Materials
2	Type BR Breaker 15A/2 Pole 120/240V 10

Total Quote Price **$3,320.00**

No specs provided

Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof.

All sales transactions are subject to credit approval. Any quotation and all transactions with Rexel are conditioned upon Rexel's Terms and Conditions of Sale located at http://www.rexelusa.com/terms. Quotation is valid for 30 days after the date of issue unless otherwise specified. Items subject to governmental tariffs effective on or after quotation will be price in effect at time of shipment unless otherwise specified. Quotation for commodity items is valid for the day of the quote only unless otherwise specified. All amounts quoted do not include state, local or municipal taxes. Taxes are added at time of sale.

Mike Angiola Rexel Oakland Ca 07/31/2020 9:33 AM

Bid No. 19/20-17
Change Order #01
PCO 05

RFI 0011 - Power Voltage for Fan Coil Units

Status: Sent to reviewer

Due Date: Jul 24, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Jul 9, 2020 at 11:21 AM PDT

Attached are submittals of the specified Mitsubishi unit and the submitted Samsung unit. Both are only offered in 208-230V. Both should require same electrical service/breaker size/wire gauge. Electrical and mechanical equipment schedules show the fan coils being 460V. Please review and advise with any impacts to the mechanical or electrical plans.

AM096FNHDCH+SUBMITTAL_HSP_012017A.pdf (See page 2)

PEFY-P96NMHSU-E_Submittal.pdf (See page 4)

"See ASI #001".
LS 7/17/20

Bid No. 19/20-17
Change Order #01
PCO 05

CITY MULTI®

Model: PEFY-P96NMHSU-E

MITSUBISHI ELECTRIC

Job Name:

Schedule Reference: | Date:

GENERAL FEATURES

- Single phase
- Dual set point functionality
- DC Motor
- Static Pressure Features
  - Adjustable up to 1"
  - No change in static pressure with voltage change
- Side access control panel
- Flexibility In duct configuration
- Choice of fan speed

OPTIONS

- ☐ Joint Adapter (Port Connector).....CMY-R160C-J
- ☐ Drain pump.....PAC-KE05DM-F
- ☐ External Heater Adapter.....CN24RELAY-KIT-CM3
- ☐ Filter Box (With 4" MERV 13 filter).....FBH4-4

SPECIFICATIONS

Capacity*
Cooling.....96,000 Btu/h
Heating.....108,000 Btu/h

Power
Power Source.....208 / 230V, 1-phase, 60 Hz

Power Consumption
Cooling.....0.82 kW
Heating.....0.82 kW

Current
Cooling.....4.89/4.43 A
Heating.....4.89/4.43 A
Minimum Circuit Ampacity (MCA).....8.2 A
Maximum Overcurrent Protection (MOCP) Fuse.....15 A

External Finish.....Galvanized-steel Sheet

External Dimensions
Inches.....18-9/16 H x 49-1/4 W x 44-1/8 D
mm.....470 H x 1,250 W x 1,120D

Net Weight
Unit.....221 lbs / 100 kg

Coil Type.....Cross Fin
(Aluminum Plate Fin and Copper Tube)

Fan
Type x Quantity.....Sirocco Fan x 2
Airflow Rate (Low-Mid-High).....2,048 - 2,507 - 2,966 CFM
External Static Pressure..... 0.20-0.40-0.60-0.80-1.00 "WG
(External static pressure is factory set to 0.60"WG)

Motor
Type.....DC Brushless Motor

Refrigerant Piping Dimensions
Liquid (High Pressure).....3/8" / 9.52 mm (Brazed)
Gas (Low Pressure).....7/8" / 22.22 mm (Brazed)

Drainpipe Dimension.....O.D. 1-1/4" / 32 mm

Sound Pressure Levels (Low-Mid-High)
Low-Mid-High.....39 - 42 - 46 dB(A)

* Cooling / Heating capacity indicated at the maximum value at operation under the following conditions:
Cooling: Indoor 80°F (27°C) DB / 67°F (19°C) WB, Outdoor 95°F (35°C) DB
Heating: Indoor 70°F (21°C) DB, Outdoor 47°F (8°C) DB / 43°F (6°C) WB

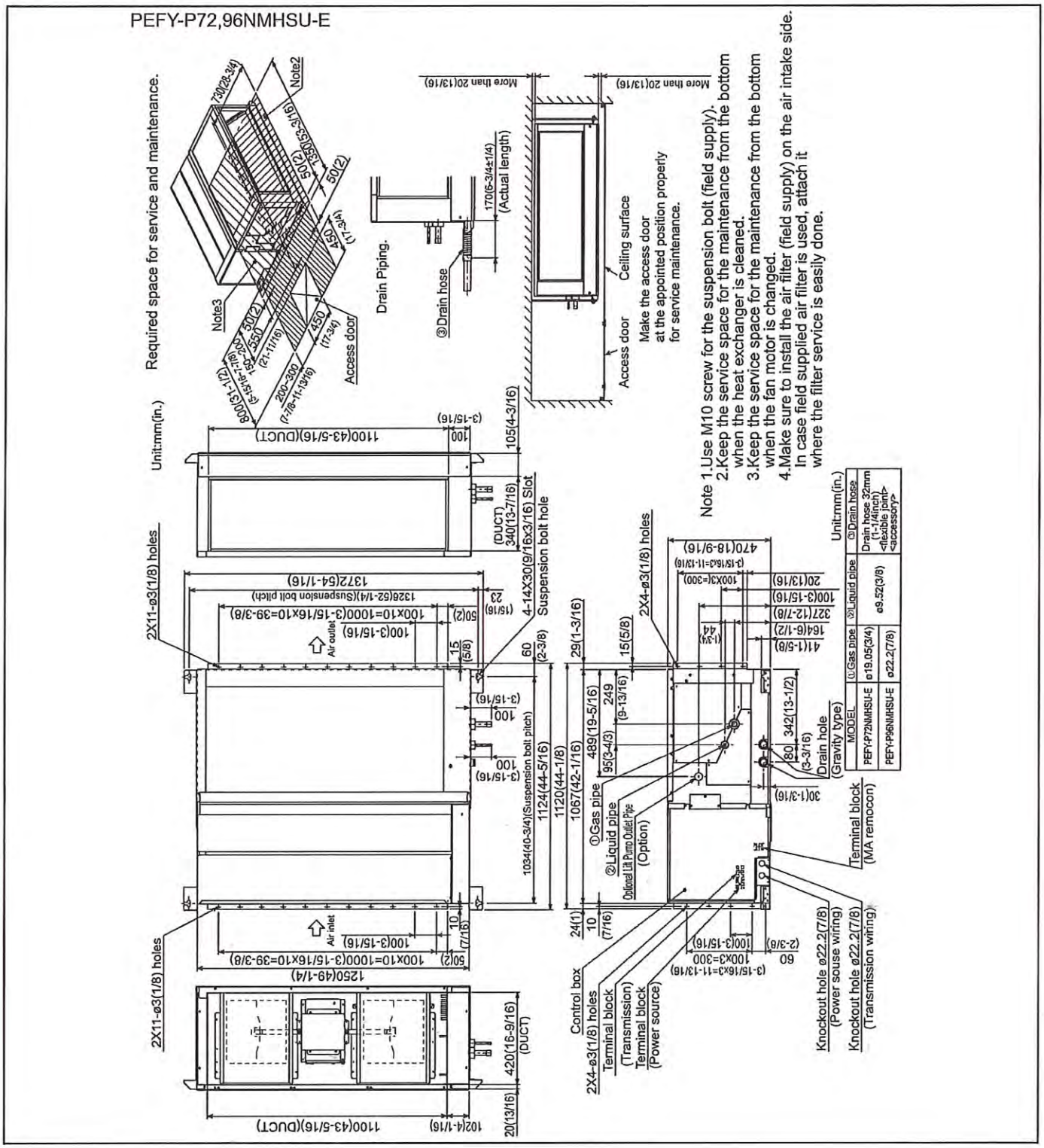
Notes:

R410A

Bid No. 19/20-17
Change Order #01
PCO 05

Model: PEFY-P96NMHSU-E – DIMENSIONS

PEFY-P72,96NMHSU-E



Intertek

FORM# PEFY-P96NMHSU-E - 201405
Specifications are subject to change without notice.

MITSUBISHI ELECTRIC
COOLING & HEATING

1340 Satellite Boulevard
Suwanee, GA 30024
Toll Free: 800-433-4822
www.mehvac.com

Bid No. 19/20-17
Change Order #01
PCO 05

SAMSUNG

SUBMITTAL AM096FNHDCH/AA

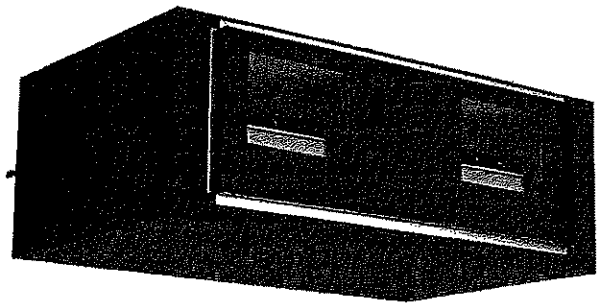
Samsung DVM S Series, HSP (High Static) Ducted Unit

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____



Specifications

Performance	Nominal Capacity [1]	Cooling (Btu/h)	96,000 (74,000 SH)
		Heating (Btu/h)	108,000
	Condensate	Pints/Hour	24.3 (on high fan)
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Nominal Running Current (A)		5.9
Fan	Type		Sirocco (2)
	Motor	Type	BLDC (1)
		Output (W)	400
Airflow	CFM (UL)	H/M/L	2,543 / 2,296 / 2,048
	Total CFM Range [2]		1,894 - 2,645
External Static Pressure	Standard	"WC	0.59
	Min. / Max.	"WC	0.20 - 1.10
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
Piping Connections	Liquid (flare)	Inches	3/8
	Suction (flare)	Inches	7/8
	Drain	Inches	OD 1 1/4, ID 1
Unit Dimensions	W X H X D	Inches	48 13/16 X 18 1/2 X 40 15/16
	Weight	lbs.	196
	Duct Connections (inches)	Supply	46 3/4 X 15 5/32
		Return	46 3/4 X 15 1/16
Sound Level	H / M / L	dB	48 / 46 / 43
Accessories	Filter Box		☐ FB-H7696
	Condensate Pump		☐ MDP-N047SNC1D
	External Contact Control		☐ MIM-B14
	Wireless Receiver Kit		☐ MRK-A10N
	External Temperature Sensor		☐ MRW-TA
	CN83 Pigtail (for 12VDC VENT output)		☐ DB39-01263A
Safety Certifications			ETL & ETLc

- Compatible with Samsung DVM S, DVM S Water, and DVM Eco systems (AM*********/AA).
- High-voltage terminal block temperature sensor to disable unit in the event overheating of power connection.
- Discharge air temperature sensor with target discharge temperature control capability

Construction
The unit shall be constructed of insulated, galvanized steel

Heat Exchanger
The heat exchanger shall be mechanically bonded fin to copper tube

Indoor Fan
Indoor fan is a centrifugal type with a single fan motor

Three fan speed settings and auto setting

Fan output can be configured during commissioning for various external static pressure ranges

Controls
The unit shall be operated via a wireless or wired remote control with DDC type signal

The unit shall integrate with the Samsung NASA Controls Network Solution

Controls shall integrate with a BMS system

Control wiring shall be 2 X 16 AWG shielded wire

Air Filtration

Pressure drop across the filter must be factored into the total ESP.

[1] Nominal cooling capacities are based on: Indoor temperature: 80 °F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB.
Nominal heating capacities are based on: Indoor temperature: 70 °F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB.

[2] Refer to technical data book for fan performance details and settings

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

www.SamsungHVAC.com
888-699-6067

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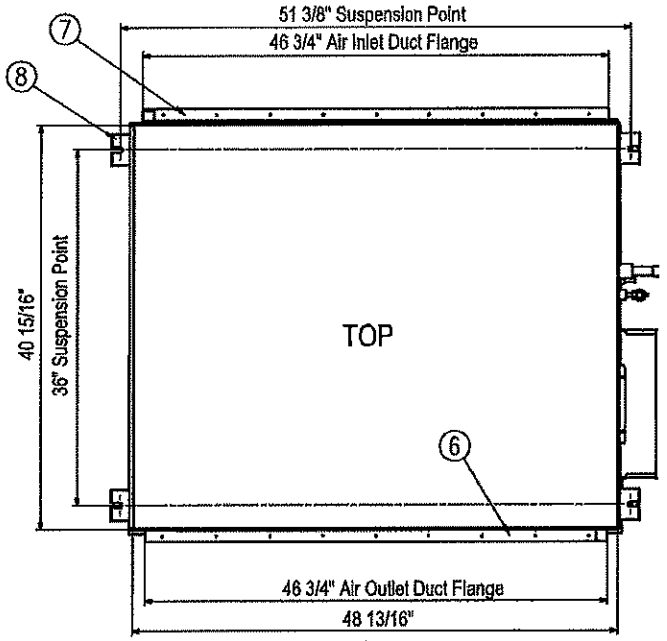
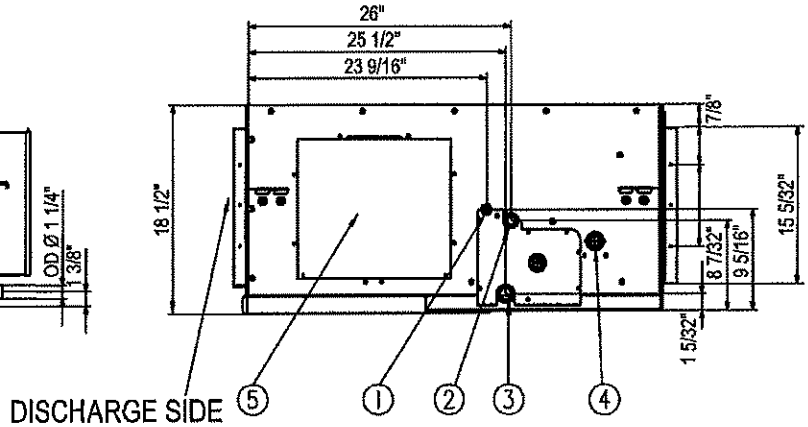
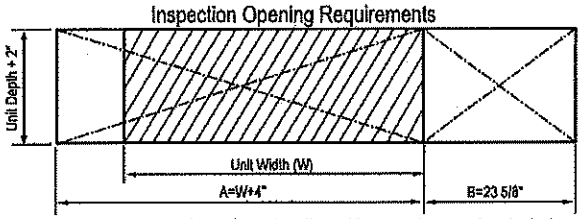
PCO 05



No.	Name	Description
①	Liquid pipe connection	Ø3/8" flare
②	Gas pipe connection	Ø7/8" braze
③	Drain pipe connection	OD Ø1 1/4", ID 1"
④	Drain connection for optional drain pump	OD Ø1 1/4", ID 1"
⑤	Control box, power/com. connection	-
⑥	Supply air flange	-
⑦	Return air flange	-
⑧	Support hook	3/8"

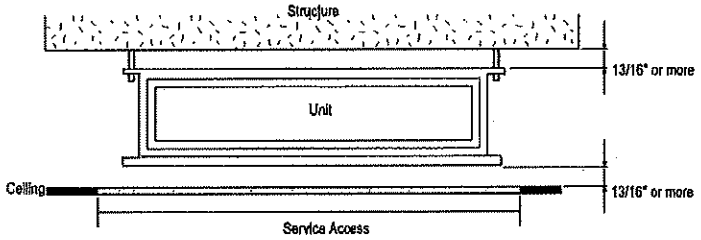


Inspection Opening Requirements

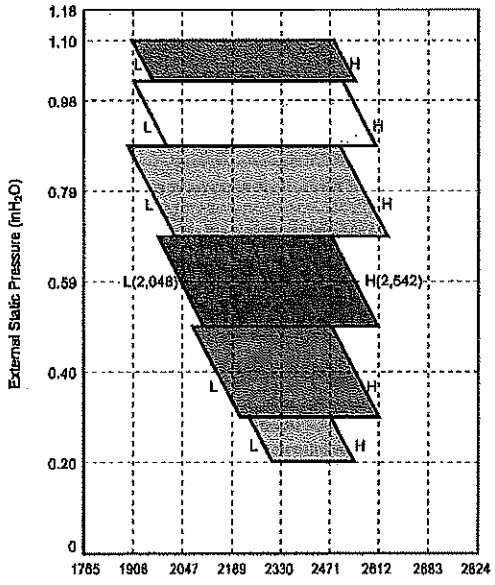


In applications where there is not a tile ceiling, an inspection hole is required.
If height between ceiling and structure is 3.25' or more, inspection opening "B" is recommended.
If height between ceiling and structure is less than 3.25', inspection opening "A" and "B" is recommended.
(verify state and local codes).

Unit Clearance From Structure



Fan Performance Data



Bid No. 19/20-17
Change Order #01
PCO 05

ATI
ARCHITECTS
+
ENGINEERS

Chabot-Las Positas Community College District
MPOE REPLACEMENT PROJECT

ASI#001
ATI Project No: C9506
Date: 7/17/2020
DSA File No: 1-C2
DSA App No.: 01-118445

A History of Innovation

The following changes, deletions, additions, and/or alterations in, on and to the drawings and specifications shall apply to proposals made for and to the execution of the various parts of the work affected thereby.

Careful Note of this Addendum shall be taken by all parties of interest so that the proper allowance may be made in all computations, estimates and contracts, and all trades affected shall be fully advised in the performance of the work which will be required of them.

In case of conflict between the drawings, specifications, and this Addendum, this Addendum shall govern. This Addendum supersedes all previous drawings, specifications, and instructions pertaining to these items.

A. REVISED DRAWINGS:

1. Sheet E-311 - BLDG 300 FLOOR PLAN-POWER & SIGNAL
2. Sheet E-400 - BLDG 300 SINGLE LINE DIAGRAM
3. Sheet E-401 - PANEL BOARD SCHEDULES

B. REVISED SPECIFICATIONS:
Not Applicable

D. NEW SPECIFICATIONS:
Not Applicable

E. ATTACHMENTS:

DRAWINGS (3 sheets)
E-311
E-400
E-401

SPECIFICATIONS
Not Applicable

END OF ASI-1

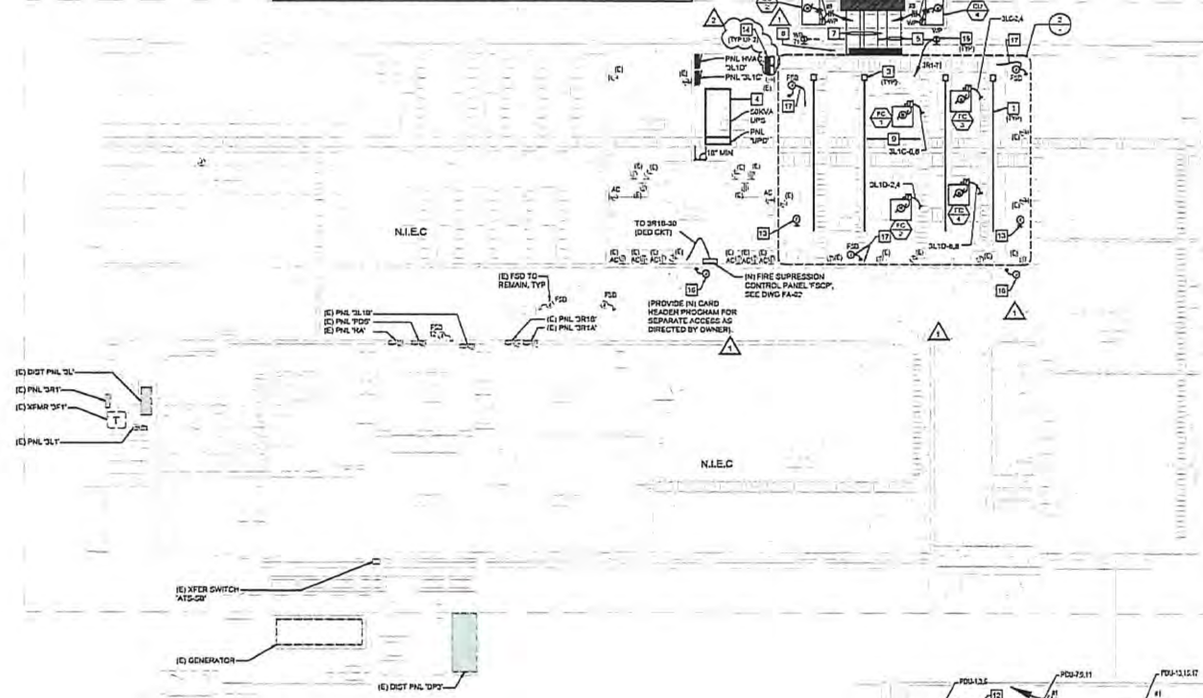
4750 Willow Road, Suite 250
Pleasanton, CA 94588
T: 925 - 648 - 8800

www.atiae.com

Bid No. 19/20-17
Change Order #01
PCO 05

UPS SAFETY PROVISIONS:

1. UPS AS POWERED BY BUILDING SERVICE. WHEN INTERRUPTED THE SEALED BATTERIES WILL SUPPLY THE ENERGY REQUIRED (VIA INVERTER) TO SUPPORT THE COMPUTER LOADS.
2. LEAD ACID BATTERIES ARE CONTAINED IN MECHANICAL ENCLOSURE PROVIDED BY EQUIPMENT VENDOR. BATTERIES ARE WITH FLAME RETARDENT CASES IN ACCORDANCE WITH UL94V2, STANDARD SAFETY OF FLAMMABILITY OF PLASTIC MATERIALS RELEASED BY UL REQUIREMENTS.
3. BATTERIES ARE MAINTAINED, SERVICED AND TESTED PERIODICALLY BY VENDOR CERTIFIED TECHNICIAN.
4. BATTERY REPLACEMENT IS INDICATED BY UPS (REPLACE BATTERY) INDICATOR



① LEVEL 1- POWER & SIGNAL

MISCELLANEOUS EQUIPMENT SCHEDULE

TAG	DESCRIPTION	LOAD	VOLT Ø	CONTROL	STARTER	Disc. DISC.	Motor TD FUSE ⓖ	REMARKS
CU 1	CONDENSING UNIT 1	32 MCA	460/3	BY MECH	INTEG	60/3	50	SEE MECH FOR CONTROL
CU 2	CONDENSING UNIT 2	32 MCA	460/3	BY MECH	INTEG	60/3	50	SEE MECH FOR CONTROL
CU 3	CONDENSING UNIT 3	32 MCA	460/3	BY MECH	INTEG	60/3	50	SEE MECH FOR CONTROL
CU 4	CONDENSING UNIT 4	32 MCA	460/3	BY MECH	INTEG	60/3	50	SEE MECH FOR CONTROL
FC 1	FAN COIL UNIT 1	8.2 MCA	240/1	BY MECH	INTEG	30/2	15	SEE MECH FOR CONTROL
FC 2	FAN COIL UNIT 2	8.2 MCA	240/1	BY MECH	INTEG	30/2	15	SEE MECH FOR CONTROL
FC 3	FAN COIL UNIT 3	8.2 MCA	240/1	BY MECH	INTEG	30/2	15	SEE MECH FOR CONTROL
FC 4	FAN COIL UNIT 4	8.2 MCA	240/1	BY MECH	INTEG	30/2	15	SEE MECH FOR CONTROL

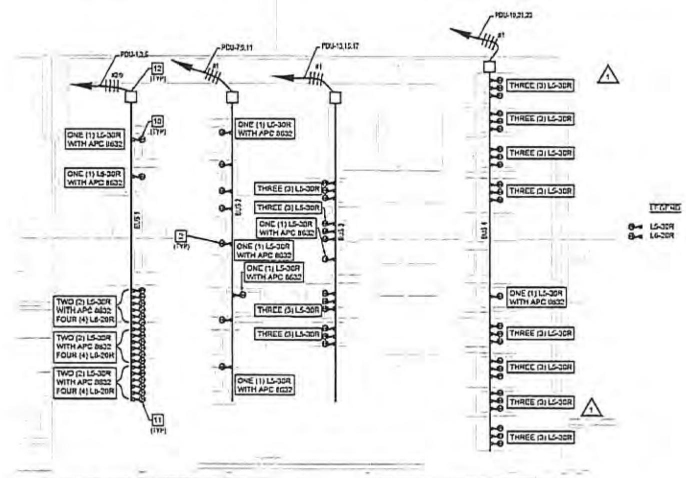
ⓖ VERIFY FUSE SIZE WITH EQUIPMENT MANUF PRIOR TO INSTALLATION.

GENERAL NOTES:

1. COORDINATE LOCATION OF WIRING DEVICES AND POWER BUS FEEDER FOR THE MPOE/DAS EQUIPMENT WITH OWNER PRIOR TO ROUGH-IN.
2. NEW UPS, MAIN BYPASS, INTEGRAL K13 RATED TRANSFORMER, BATTERY CAB AND ACCESSORIES, AS MANUFACTURED BY EATON 93PM (LATEST MODEL). SEE SPECIFICATIONS FOR RELATED SUPPORT AND IMMEDIATE ASSISTANCE INCLUDING TURNKEY SOLUTIONS.
3. PROVIDE NEW CABLE TRAY AS SHOWN. COORDINATE MOUNTING HEIGHT OF ELECTRICAL FIXTURES AND WIRING ASSOCIATED WITH POWER CONDUIT. MAINTAIN CLEAR SEPARATION AS DIRECTED BY IT GROUP
4. SEE DWG T-012 FOR BONDING OF IT EQPT.

KEY NOTES:

1. PROVIDE OVERHEAD STARLINE PLUG IN BUS DUCT WITH DROP DOWN OUTLET ASSEMBLY. PRODUCT AS MANUF BY "STARLINE" #225T3 SYSTEM, PLUG IN RACEWAY, TYP, UON. LOCATE AS DIRECTED BY ITS GROUP. SEE PART POWER PLAN DETAIL 2 BELOW.
2. SPECIAL OUTLET AS SHOWN, COORDINATE LOCATION WITH ITS GROUP.
3. TERMINAL BOX FOR POWER BUS, SEE DETAIL 7/E-600 (UF 225T3C45-LTL2000CSTD6.M43RLLY)
4. PROVIDE 4" THK CONCRETE HOUSEKEEPING PAD (25D)
5. PROVIDE 30"W X 72"L X 6"H WIRING GUTTER NEMA 4 BY HOFFMAN #63072G4WT.
6. ELEC ENCLOSURE, NEMA 3R, 90"Hx76"Wx36"D AS MANUF BY HOFFMAN. (SINGLE DOOR ENCLOSURE IS 90"Hx38"Wx36"D). COORDINATE WITH VENDOR, (925)-557-30000
7. SAME AS NOTE 6 EXCEPT (2) SECTIONS.
8. BLOCKOUT FOR COMBINED WIRE THROUGH ENTRY, VIF, SEAL AS REQUIRED
9. SEE ENLARGED PLAN THIS SHEET FOR REQUIRED POWER OUTLETS SERVING DATA EQUIPMENT.
10. SPECIAL NEMA OUTLET L5-30R WITH APC 8632, TYP, UON.
11. SAME AS ABOVE EXCEPT L6-20R, TYP, UON.
12. STARLINE PLUG IN BUS DUCT (US 225T3C45-2000C.STD.0), SEE SPECS, TYP.
13. PROVIDE CEILING MOUNTED IP CAMERA, TYP. LOCATION AND ANGLE PER OWNER. PRODUCT AS MANUF. BY AXIS #P3375 LV NETWORK CAMERA. PROVIDE 2D CONNECTORS AS REQUIRED
14. MINI POWER CENTER, "PC". SEE SINGLE LINE DIAGRAM, E-400.
15. PROVIDE WP HEAVY DUTY LOCKABLE METALLIC COVER AS MANUF BY HUBBELL OR APPROVED EQUAL.
16. PROVIDE (N) CARD READER WITH "RX" BUTTON AS DIRECTED BY OWNER.
17. CONNECT TO (E) FSD CKT #12 IN PNL 3R1B. FIELD VERIFY EXACT LOCATION.



② ENLARGED POWER PLAN

DSA

ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

METRO POWER ENGINEERS, INC

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	
2	ASI-001 FAN COIL REV	

KEY PLAN:

CHABOT COLLEGE

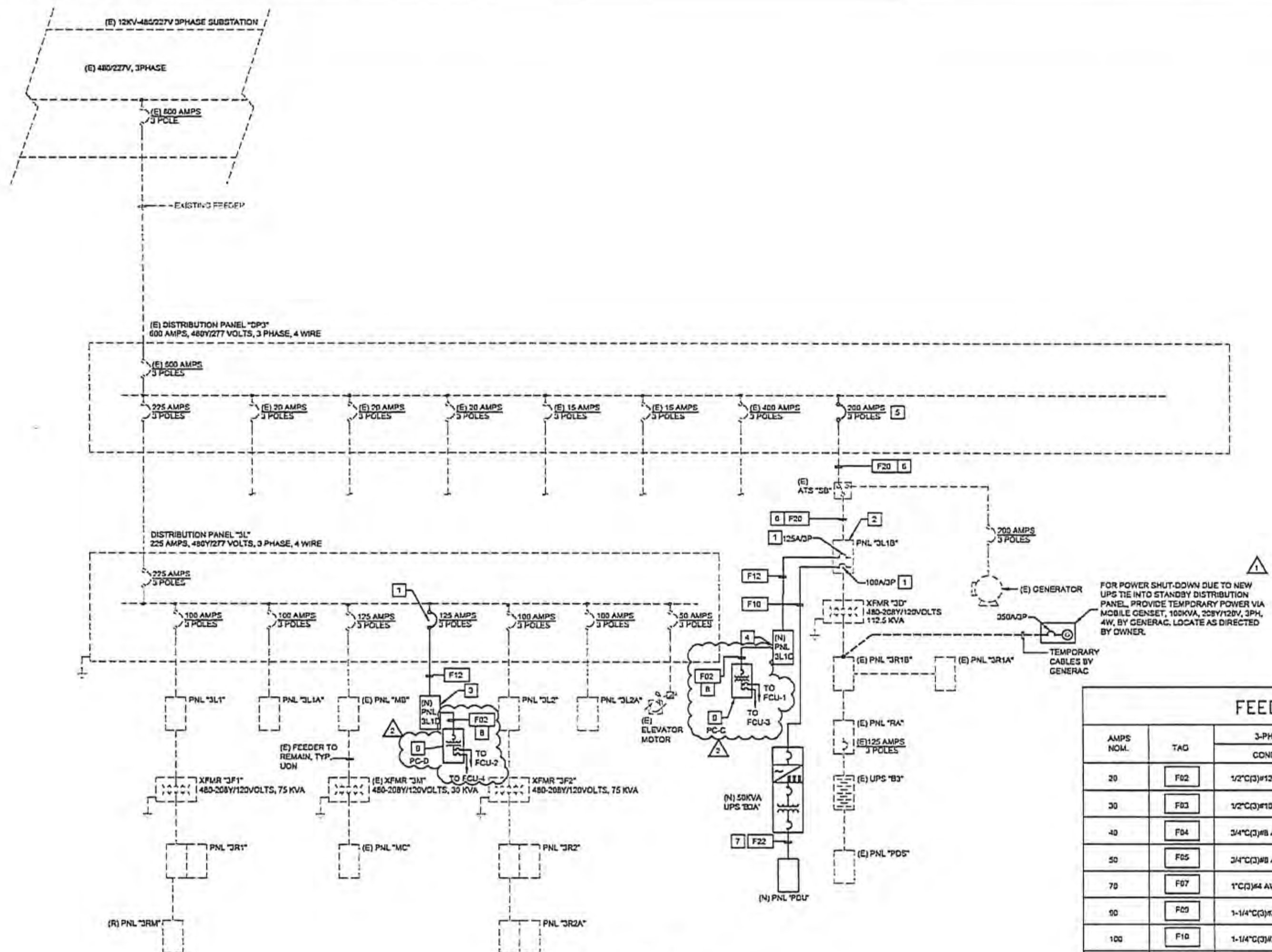
MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

BLDG 300
FLOOR PLAN-
POWER & SIGNAL

DRAWN BY: CHECKED BY:
DATE: 11/7/2019 PROJECT NO:
SHEET NO:

E-311



BUILDING 300
1 SINGLE LINE DIAGRAM

NOT TO SCALE

KEY NOTES

1. PROVIDE (N) CIRCUIT PROTECTION AS SHOWN WITH TYPE/KAIC RATING TO MATCH (E).
2. SEE SCHEDULE OF AFFECTED PANELBOARDS. THIS PANEL TO REPLACE (E) MAIN CB WITH (N) AS SCHEDULED.
3. PROVIDE (N) NORMAL POWER PANEL FOR HVAC UNITS CU-2 & 4, FC-2 & 4, UON.
4. PROVIDE (N) STANDBY POWER PANEL FOR HVAC UNITS CU-1 & 3, FC-1 & 3, UON.
5. REMOVE/REPLACE CB WITH (N) AS SHOWN. TYPE & KAIC RATING TO MATCH (E).
6. REMOVE/REPLACE FEEDER CONDUCTORS WITH (N) USING (E) CONDUIT.
7. PROVIDE 200% NEUTRAL CONDUCTOR.
8. PROVIDE SINGLE PHASE FEEDER IN LIEU OF 3-PHASE SHOWN.
9. PROVIDE (N) MINI POWER CENTER AS MANUF BY EATON 4P48G11S0512, COMPLETE WITH PRIMARY/SECONDARY PROTECTION AND (2) 15/2P CBS FOR THE INDICATED FAN COILS.

FEEDER SCHEDULE

AMPS NOM.	TAG	3-PHASE 3W CONDUCTOR	3-PHASE 4W CONDUCTOR	EQUIPMENT GROUND
20	F02	1/2"C(3)#12 AWG	1/2"C(4)#12 AWG	#12
30	F03	1/2"C(3)#10 AWG	1/2"C(4)#10 AWG	#10
40	F04	3/4"C(3)#8 AWG	3/4"C(3)#8 AWG	#10
50	F05	3/4"C(3)#8 AWG	1"C(4)#8 AWG	#10
70	F07	1"C(3)#4 AWG	1-1/4"C(4)#4 AWG	#6
90	F09	1-1/4"C(3)#3 AWG	1-1/4"C(4)#3 AWG	#8
100	F10	1-1/4"C(3)#2 AWG	1-1/4"C(4)#2 AWG	#6
125	F12	1-1/2"C(3)#1 AWG	1-1/2"C(4)#1 AWG	#6
150	F15	1-1/2"C(3)#1/0 AWG	2"C(4)#1/0 AWG	#6
175	F17	2"C(3)#2/0 AWG	2"C(4)#2/0 AWG	#6
200	F20	2"C(3)#3/0 AWG	2"C(4)#3/0 AWG	#6
225	F22	2"C(3)#4/0 AWG	2-1/2"C(5)#4/0 AWG	#4
250	F25	2-1/2"C(3)#250 KCMIL	2-1/2"C(4)#250 KCMIL	#4
300	F30	2-1/2"C(3)#350 KCMIL	3"C(4)#350 KCMIL	#4
400	F40	3-1/2"C(3)#500 KCMIL	4"C(4)#500 AWG	#3

DSA

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

MPE
METRO POWER ENGINEERS, INC

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	
2	ASI-001 FAN COIL REV	

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

BLDG 300 SINGLE LINE DIAGRAM

DRAWN BY: CHECKED BY:
DATE: 11/2019 PROJECT NO:
SHEET NO:

E-400

TYPE: BOLT-ON
SERVICE: 120/208Y, 3PH, 4W
BUS: 225A

PANEL "PDU"
LOCATION UPS RM 305B

MAIN: 225A
MTG: SURFACE
AIC: 10KAIC

LOAD SERVED	LCL	KVA	BREAKER TRIP	POLE	NO.	PHASE	NO	BREAKER POLE	TRIP	KVA	LCL	LOAD SERVED
NEW POWER BUS 1	X	8.0	150	3	1	A	2	1	20			SPARE
— @MPOE	X	8.0			3	B	4	1	20			SPARE
—	X	8.0			5	C	6	1	20			SPARE
NEW POWER BUS 2	X	5.0	125	3	7	A	8	1				SPACE
— @MPOE	X	5.0			9	B	10	1				SPACE
—	X	5.0			11	C	12	1				SPACE
NEW POWER BUS 3	X	8.0	150	3	13	A	14	1				SPACE
— @DAS	X	8.0			15	B	16	1				SPACE
—	X	8.0			17	C	18	1				SPACE
NEW POWER BUS 4	X	5.0	125	3	19	A	20	1				SPACE
— @DAS	X	5.0			21	B	22	1				SPACE
—	X	5.0			23	C	24	1				SPACE
				1	25	A	26	1				
				1	27	B	28	1				
				1	29	C	30	1				
				1	31	A	32	1				
				1	33	B	34	1				
				1	35	C	36	1				
				1	37	A	38	1				
				1	39	B	40	1				
				1	41	C	42	1				

SUB TOTAL CONN. LOAD KVA

		TOTAL CONN. LOAD=			78.0	
PHASE A	26.0					
PHASE B	26.0	25% LCL =.25(	63.0	KVA):	15.75	
PHASE C	26.0	TOTAL:	93.8	KVA	225.8	AMPS *

*WITHOUT DEMAND; 30KVA WITH DEMAND APPLIED (83.3A)

TYPE: BOLT-ON
SERVICE: 277/480V, 3PH, 4W
BUS: 225 A

PANEL: (E)3L1B'
LOCATION: CORRIDOR 305

MAIN: (N)200A/3P
MTG: RECESSED
AIC: 35 KAIC

LOAD SERVED	LCL	KVA	BREAKER TRIP	POLE	NO.	PHASE	NO	BREAKER POLE	TRIP	KVA	LCL	LOAD SERVED
EXSTG EMERG LTG		1.9	20	1	1	A	2	3	175	37.5		EXIST XFMR '3D'
SPACE				1	3	B	4			37.5		—
SPACE				1	5	C	6			37.5		—
SPACE				1	7	A	8	3	125	19.6		(N) PNL '3L1C'
SPACE				1	9	B	10			17.8		— (HVAC)
SPACE				1	11	C	12			17.8		—
SPACE				1	13	A	14	3	100	16.0		(N) UPS 'B3A' / 'UPD'
SPACE				1	15	B	16			16.0		—
SPACE				1	17	C	18			16.0		—
SPARE			20	1	19	A	20	1				SPACE
SPARE			20	1	21	B	22	1				SPACE
SPARE			20	1	23	C	24	1				SPACE
				1	25	A	26					
				1	27	B	28					
				1	29	C	30					
				1	31	A	32					
				1	33	B	34					
				1	35	C	36					
				1	37	A	38					
				1	39	B	40					
				1	41	C	42					

SUB TOTAL CONN. LOAD KVA

		TOTAL CONN. LOAD=			217.6	
PHASE A	75.0					
PHASE B	71.3	25% LCL =.25(	100.0	KVA):	25	
PHASE C	71.3	TOTAL:	242.6	KVA	291	AMPS *

* WITHOUT DEMAND; 142.3KVA WITH DEMAND APPLIED (170.8A)

TYPE: BOLT-ON
SERVICE: 277/480V, 3PH, 4W
BUS: 225 A

PANEL: (N)3L1C'
LOCATION: (N) UPS RM 305B

MAIN: MLO
MTG: SURFACE
AIC: 22 KAIC

LOAD SERVED	LCL	KVA	BREAKER TRIP	POLE	NO.	PHASE	NO	BREAKER POLE	TRIP	KVA	LCL	LOAD SERVED
(N) CONDENSER UNIT 1		8.0	50	3	1	A	2	2	20	2.5		MINI POWER CENTER
—		8.0	/	/	3	B	4	/	/	2.5		—
—		8.0	/	/	5	C	6	2	20			SPARE
(N) CONDENSER UNIT 3		8.0	50	3	7	A	8	/	/			—
—		8.0	/	/	9	B	10	1				SPACE
—		8.0	/	/	11	C	12	1				SPACE
SPACE				1	13	A	14	1				SPACE
SPACE				1	15	B	16	1				SPACE
SPACE				1	17	C	18	1				SPACE
SPACE				1	19	A	20	1				SPACE
SPACE				1	21	B	22	1				SPACE
SPACE				1	23	C	24	1				SPACE
				1	25	A	26	1				
				1	27	B	28	1				
				1	29	C	30	1				
				1	31	A	32	1				
				1	33	B	34	1				
				1	35	C	36	1				
				1	37	A	38	1				
				1	39	B	40	1				
				1	41	C	42	1				

SUB TOTAL CONN. LOAD KVA

		TOTAL CONN. LOAD=			53.0	
PHASE A	18.5					
PHASE B	18.5	25% LCL =.25(		KVA):	0	
PHASE C	16.0	TOTAL:	53	KVA	63.6	AMPS

SIMILAR LOADING FOR PNL 3L1D EXCEPT FOR NON-STANDBY LOADS, CU-2 & 4, FC-2 & 4

DSA

ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

MPE

METRO POWER ENGINEERS, I

ITEM	REVISION / ISSUE	DATE
1	ASI-001 FAN COIL REV	07/13/2020

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

PANEL BOARD SCHEDULES

DRAWN BY: | CHECKED BY:
DATE: 04/30/2019 | PROJECT NO:
SHEET NO:

E-401

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 8/13/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: FS System Modifications per RFI #15 and Revised Plans Received 8/10/20
PCO#: 06

Dear Peter,

Below is the cost to furnish and install six (6) additional sprinklers to MPOE Room, upsize 150ft of main piping from 2" to 2.5", and reroute 78ft of 1-1/4" piping. This proposal is per RFI response #15 and revised fire sprinkler plans received on 8/10/2020.

DESCRIPTION	Material	Labor	Sub	Total Cost
Walschon Fire Protection				
FS System Modifications per RFI #15 and Revised Plans Received 8/10/20			$ 6,675	$ 6,675
SUBTOTAL				**$ 6,675**
Markup - Contractor				$ 668
Insurance - 1%				$ 67
Bonds - 1.5%				$ 100
TOTAL COST				**$ 7,510**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.08.13 09:17:05-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 06

Walschon Fire Protection, Inc.

2178 Rheem Drive, Suite A, Pleasanton, CA 94588 • LIC. #568438 • tel. (650) 594-1588 • fax (650) 594-1613 • EEO

QUOTATION ....: AUTOMATIC FIRE SPRINKLERS

TO:	Alex Tellez	DATE: 8/11/20
COMPANY:	Rodan Builders	ESTIMATE # 200358CO1
PROJECT NAME:	MPOE Replacement Bldg 300	
PROJECT LOCATION:	25555 Hesperian Blvd., Hayward	
Estimate Prepared by	Jason Hudgins Cell: (925) 580-0053	
PRICE BASED ON	Current Revised Fire Protection Drawings	
TYPE OF WORK	Modification	
PRICE INCLUDES	Union labor and materials *(tax included)*	

We propose to provide all labor & materials to perform the following scope of work at the above referenced project in the amount of

SCOPE OF WORK

1. Add (6) more sprinklers to MPOE room; (12) total
2. Upsize (150ft) Main Piping; from 2" to 2.5"
3. Reroute (78ft) 1-1/4" Piping as requested

CLARIFICATIONS

1. **This is a change order (CO1) from the original approved scope**
2. **This proposal is valid for 30 days and void thereafter.**
3. **All work to be performed during regular BUSINESS HOURS (8 Hrs. between 5:00AM to 5:00PM M-F)**
4. Methods to be of current minimum NFPA13 and local AHJ standards.
5. All asbestos that employees may be exposed to shall be abated prior to Walschon commencing work.
6. ***Proposal based upon acceptance of attached Walschon Fire Protection insurance coverages/limits (additional coverage can be provided at additional costs). Please see the attached evidence of coverage.***

EXCLUSIONS

1. PERMIT FEES
2. 3-D Design & Drawings
3. Special Safety Training
4. Payment and Performance Bonds – Add 1.08% to contract $, If required
5. Electrical Wiring or Alarm Work
6. Cleaning, Priming, Painting or Insulation of Pipe
7. Cutting and Patching
8. Structural Calculations (if required)
9. Coring and/or Fire Stopping (if required)
10. Modification of Existing System other than Specified
11. Upgrade of Existing Hangers and Bracing
12. Title 19 Five-Year Test & Inspection
13. Relocation of Existing Piping to Accommodate other MEP Trades / Structural Upgrades
14. Repair of Existing System Due to (But Not Limited to) Damage Caused by Demo / Construction

Due to strict environmental requirements, it will be the owner's responsibility to ensure any fire sprinkler / system drainage is discharged to a proper location. Water in the fire sprinkler systems cannot go directly into the storm drains in California.

Please sign below, attach PO/Contract and return by fax or email for authorization to proceed with this project.

Signature	Print Name/Title	Date
Billing Information		P.O. # (if required):

We look forward to working with you on this project. Please contact me at the office with any questions.

Bid No. 19/20-17
Change Order #01
PCO 06

Walschon Fire Protection, Inc.

2178 Rheem Dr. Suite A, Pleasanton, CA 94588 Phone: 650-594-1588 Fax: 650-594-1613 License # 568438- C16

PROPOSED ESTIMATE

JOB NAME: Chabot College, MPOE Room	JOB #	200358	DATE:	8/12/2020
GC: Rodan Builders	PCO #	1		

DESCRIPTION: Add (6) additional sprinklers to MPOE Room. Upsize 150ft of Main piping from 2" to 2.5". Reroute 78ft of 1-1/4" piping

Labor Rate $0.00

TAKE OFF QUANTITY	DESCRIPTION	UOM	PRICE	LABOR UNIT	LABOR HOURS	LABOR EXTENSION	MATERIAL EXTENSION	EQUIPMENT EXTENSION
6	TYC TY-B 1/2 K5.6 155F BR UPSR TY315	EA	$13.44	0	0.00	$0.00	$80.64	$0.00
60	PIPE 1 X 10'6 S40 PE BLK DOM	FT	$1.00	0	0.00	$0.00	$60.00	$0.00
78	PIPE 1-1/4 X 21' S40 PE BLK DDOM	FT	$7.11	0	0.00	$0.00	$554.58	$0.00
150	PIPE 2-1/2 X 21' S10 RG BLK DDOM	FT	$150.00	0	0.00	$0.00	$225.00	$0.00
9	TYC 577 RIGID CPLG PTD 1-1/4W/P-LUBE EPDM/	EA	$19.20	0.07	0.63	$0.00	$172.80	$0.00

DESCRIPTION	UOM	RATE	# HRS	LABOR EXT	MATERIAL	EQUIPMENT
Labor	HR	$131.28	32	$4,200.96	$0	$510.72
				$4,200.96	$1,093.02	$510.72

TOTAL DIRECT COSTS		$ 5,804.70
OVERHEAD AND PROFIT MARKUP	15%	$ 870.71
TOTAL COST FOR THIS CHANGE		$ 6,675.41

PRICING VALID FOR THIRTY (30) DAYS. SUBJECT TO CHANGE PRIOR TO ACCEPTANCE.

By signing below, you acknowledge that the above described work shall modify the terms and conditions of the contract and that you are directing Walschon Fire Protection, Inc. to proceed with the work as described above.

You further agree to issue a valid change order within 10 working days of the completion of the above described work. In the absence of a valid change order being issued, you acknowledge that the total cost of this change will be added to the next billing cycle as a valid claim.

Authorized Signature _____ Date _____

Bid No. 19/20-17
Change Order #01
PCO 06

Walschon Fire Protection Inc.

2178 Rheem Drive, Suite A, Pleasanton, CA 94588 • LIC. #568438 • tel. (650) 594-1588 • fax (650) 594-1613

Labor Rates_Contract PCO Rates

Effective: August 3, 2020 - August 1, 2021

Updated 7/17/2020

	PM / Superintendent /General Foreman			Foreman			Journeyman			Apprentice *5			Piping Shop / Safety Coordinator			Project Manager (non union)			Professional Engineer			Designer / BIM Coordinator			Admin		
	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2	Straight	Premium 1½	Premium 2
BASE RATE	77.31	115.97	154.62	75.31	112.97	150.62	68.31	102.47	136.62	36.85	55.28	73.70	65.00	97.50	130.00	90.00	135.00	180.00	130.00	195.00	260.00	78.00	117.00	156.00	52.00	78.00	104.00
BENEFITS	37.22	37.22	37.22	37.14	37.14	37.14	36.86	36.86	36.86	26.78	26.78	26.78	8.02	8.02	8.02	10.95	10.95	10.95	16.03	16.03	16.03	9.62	9.62	9.62	6.41	6.41	6.41
(EMPLOYER PAID) Health & Welfare	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*	*10.18*															
Pension	*20.30*	*20.30*	*20.30*	*20.30*	*20.30*	*20.30*	*20.30*	*20.30*	*20.30*	*12.10*	*12.10*	*12.10*															
Trainning/Promo	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.03	3.03	3.03															
Time Off (office only)													5.42	5.42	5.42	7.35	7.35	7.35	10.83	10.83	10.83	6.50	6.50	6.50	4.33	4.33	4.33
OTHERS (I&D) 4.00%	3.09	3.09	3.09	3.01	3.01	3.01	2.73	2.73	2.73	1.47	1.47	1.47	2.60	2.60	2.60	3.60	3.60	3.60	5.20	5.20	5.20	3.12	3.12	3.12	2.08	2.08	2.08
PAYROLL TAXES	12.56	18.84	25.13	12.24	18.36	24.48	11.10	16.65	22.20	5.99	8.98	11.98	10.56	15.84	21.13	14.63	21.94	29.25	21.13	31.69	42.25	12.68	19.01	25.35	8.45	12.68	16.90
FICA - SS 6.20%	4.79	7.19	9.59	4.67	7.00	9.34	4.24	6.35	8.47	2.28	3.43	4.57	4.03	6.05	8.06	5.58	8.37	11.16	8.06	12.09	16.12	4.84	7.25	9.67	3.22	4.84	6.45
FICA - MC 1.45%	1.12	1.68	2.24	1.09	1.64	2.18	0.99	1.49	1.98	0.53	0.80	1.07	0.94	1.41	1.89	1.31	1.96	2.61	1.89	2.83	3.77	1.13	1.70	2.26	0.75	1.13	1.51
*FUTA 2.40%	1.86	2.78	3.71	1.81	2.71	3.61	1.64	2.46	3.28	0.88	1.33	1.77	1.56	2.34	3.12	2.16	3.24	4.32	3.12	4.68	6.24	1.87	2.81	3.74	1.25	1.87	2.50
SUTA 6.20%	4.79	7.19	9.59	4.67	7.00	9.34	4.24	6.35	8.47	2.28	3.43	4.57	4.03	6.05	8.06	5.58	8.37	11.16	8.06	12.09	16.12	4.84	7.25	9.67	3.22	4.84	6.45
INSURANCES	6.76	9.38	12.00	6.59	9.14	11.69	5.97	8.29	10.61	3.22	4.47	5.72	4.61	4.61	4.61	4.68	4.68	4.68	4.81	4.81	4.81	4.65	4.65	4.65	4.57	4.57	4.57
Worker' Comp.-Foreman&Journey& Apprentice 3-10 1.97%	1.52	1.52	1.52	1.48	1.48	1.48	1.34	1.34	1.34	0.72	0.72	0.72															
Worker' Comp. - Apprentice 1 & 2 5.71%																											
Worker' Comp.-Office 0.308%													0.20	0.20	0.20	0.28	0.28	0.28	0.40	0.40	0.40	0.24	0.24	0.24	0.16	0.16	0.16
GL / Prop. Lia, Umbrella 6.78%	5.24	7.86	10.48	5.11	7.66	10.21	4.63	6.95	9.26	2.50	3.75	5.00															
Group Insurance $ 4.41													4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41
INSURANCE DEDUCT																											
SUBTOTAL	133.86	181.41	228.97	131.28	177.60	223.93	122.25	164.27	206.29	72.84	95.51	118.18	88.19	125.97	163.75	120.26	172.57	224.88	171.97	247.53	323.09	104.94	150.28	195.62	71.43	101.66	131.88
Over Head and 10%	15.75	21.34	26.94	15.44	20.89	26.34	14.38	19.33	24.27	8.57	11.24	13.90	10.37	14.82	19.26	14.15	20.30	26.46	20.23	29.12	38.01	12.35	17.68	23.01	8.40	11.96	15.52
Profit 5%	7.87	10.67	13.47	7.72	10.45	13.17	7.19	9.66	12.13	4.28	5.62	6.95	5.19	7.41	9.63	7.07	10.15	13.23	10.12	14.56	19.01	6.17	8.84	11.51	4.20	5.98	7.76
	157.48	213.43	269.38	154.44	208.94	263.45	143.82	193.26	242.69	85.70	112.37	139.04	103.75	148.20	192.65	141.48	203.02	264.57	202.31	291.21	380.11	123.46	176.80	230.14	84.04	119.59	155.15
Billable Rates	158.00	214.00	270.00	155.00	209.00	264.00	144.00	194.00	243.00	86.00	113.00	140.00	104.00	149.00	193.00	142.00	204.00	265.00	203.00	292.00	381.00	124.00	177.00	231.00	85.00	120.00	156.00

Notes:

1) Time Off (or PTO) includes 10 vacation days and 10 holidays

2) Group Insurance includes company portion of costs only

3) Company vehicle expenses or personal vehicle allowance - excludes fuel and toll

(4) This rate does not apply for Prevailing Wage project

(5) Other I&D: interest & depreciation

Bid No. 19/20-17
Change Order #01
PCO 06

RFI 0015.1 - Fire Sprinklers

Status: Sent to reviewer

Due Date: Jul 28, 2020

Returned Message:

Alex Tellez (Rodan Builders Inc.) on Jul 30, 2020 at 8:04 AM PDT

Creating a revision to this RFI

Question

Alex Tellez (Rodan Builders Inc.) on Jul 13, 2020 at 2:57 PM PDT

RFI #15.1:
Please review and respond to item #2 on the RFI from our fire sprinkler Subcontractor. Confirm the hazard occupancy of the MPOE room.

RFI #15:
Please review attached RFI from our fire sprinkler Subcontractor and advise.

RFI_15_RBI_Fire Sprinklers.pdf (See page 2)

Answer

Alex Tellez (Rodan Builders Inc.) on Jul 30, 2020 at 8:04 AM PDT

Please see attached RFI response #15 Fire Sprinklers.

RFI_15_IEI_Fire Sprinklers.pdf (See page 8)

Bid No. 19/20-17
Change Order #01
PCO 06

Walschon Fire Protection Inc.

2178 Rheem Dr. Suite A
Pleasanton, CA 94588
Ph: (650) 594-1588
Fax: (650) 594-1613
Email:cyrus@walschon.com
From:Cyrus Lugtu

TO: Rodan Builders FAX:	DATE: 7.10.20	RFI NO: 01
	JOB NAME: MPOE Replacement Bldg 300	
ATTN: Jeff Lovitt	JOB # 200358	

REQUEST FOR INFORMATION

DRAWING REF: FP-201	COST IMPACT? Yes
SPECIFICATION REF:	TIME IMPACT? Yes
SHOP DRAWING REF: FP-1.1	RESPOND BY: ASAP

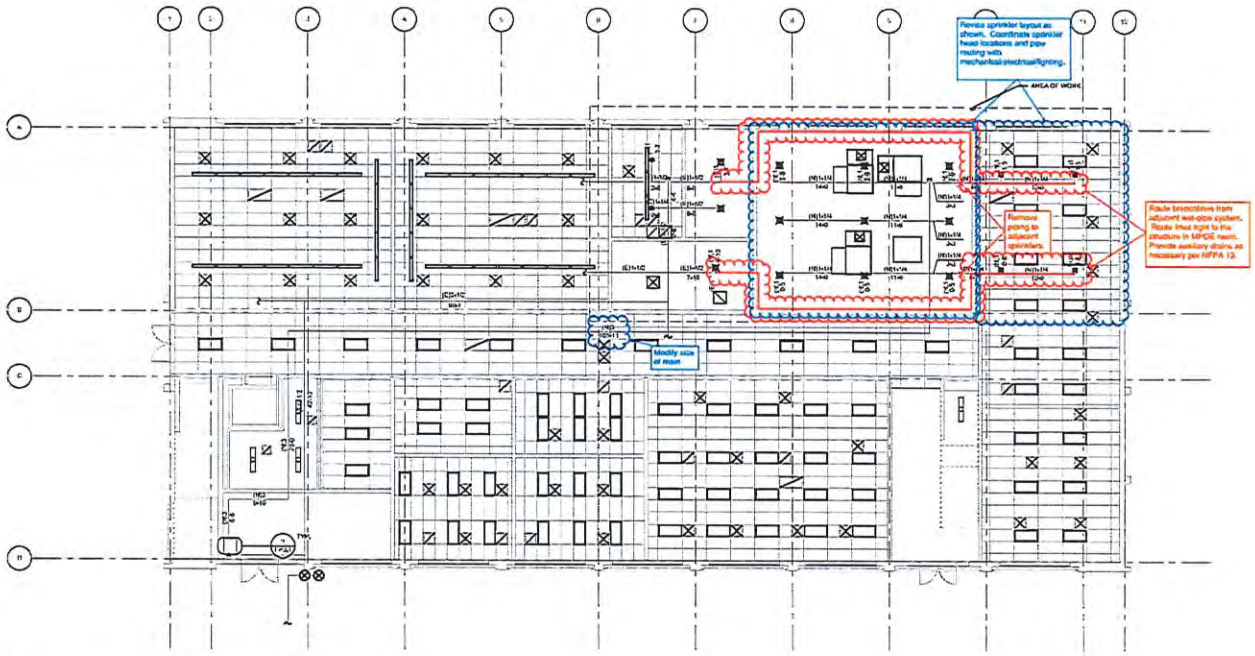
1. **Design provided by EOR did not pass hydraulic calculations as you can see in the hydraulic information found in the shop drawing FP-1.1. A solution that I recommend in order for the system to work would be to upsize the main from 2" to 3" and relocate the main that enters the MPOE room to the middle of the room.**
2. **The MPOE room would be considered Ordinary Hazard Group 1 with 130 ft2 coverage for each sprinkler. The sprinkler heads in the design provided by the EOR does not meet spacing requirement for Ordinary Hazard Group 1. A solution that I recommend would be to add (4) additional heads in the room to meet spacing requirement.**
3. **The sprinkler heads in RM 308 have a spacing of 15'-8" between sprinkler heads, which can be seen on FP-201. I would recommend that we relocate the sprinkler heads to be within the 15'.**

REPLY: RFI 15: The following revised floor plan with sketch will be provided as part of a CCD revising the fire protection design. 7/22/20

RFI 15.1: The mpoe ROOM should be considered Ordinary Hazard Group I. 8/3/20

ANSWERED BY: Ethan T. Brown, MEngFPE, EIT	DATE: 8/3/20

Bid No. 19/20-17
Change Order #01
PCO 06



1 FLOOR PLAN - FIRE PROTECTION

1/8" = 1'-0"

ATI ARCHITECTS & ENGINEERS

PROFESSIONAL STAMP

CONSULTANT

INTERFACE ENGINEERING

CHABOT COLLEGE

NEW MPOE AT CHABOT CAMPUS BLDG. 300

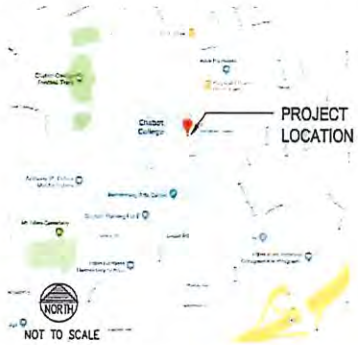
25555 Hesperian Blvd
Hayward, CA 94545

FLOOR PLAN - FIRE PROTECTION

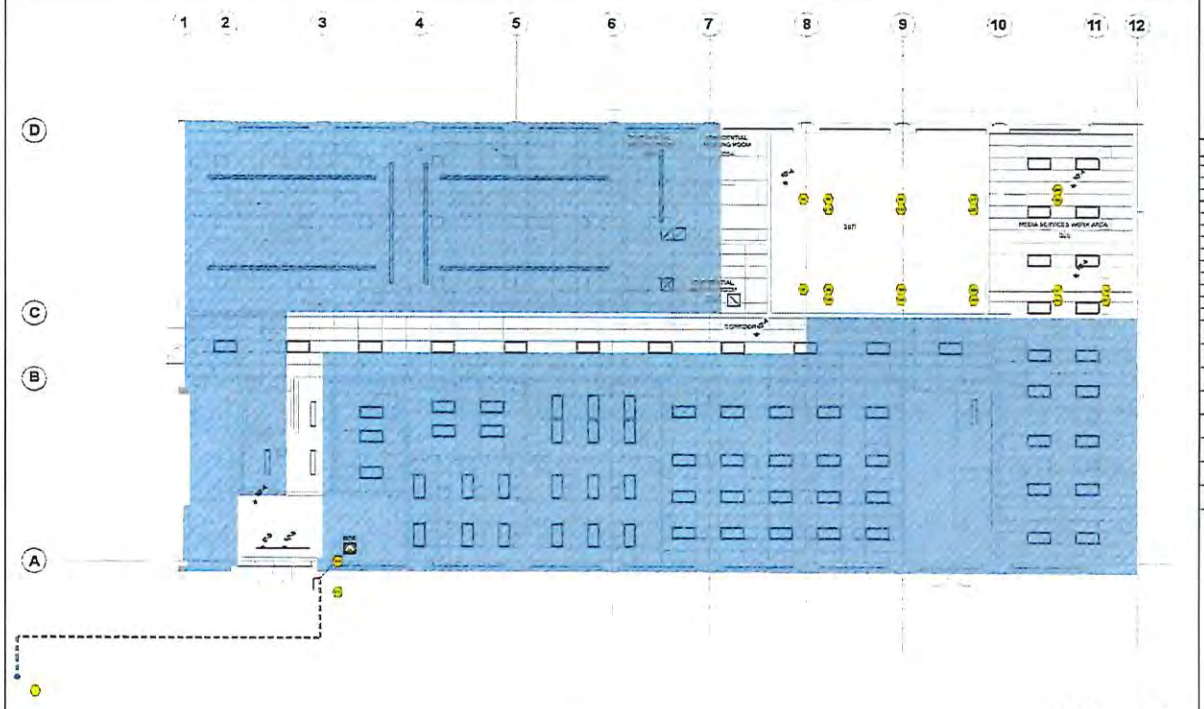
FP2.1

MPOE Replacement Bldg 300
CHABOT COLLEGE
25555 HESPERIAN BLVD, HAYWARD, CA 94545

VICINITY MAP



CONTEXT MAP



SCALE: 1/8" = 1'-0"

OVERALL SITE PLAN

SCOPE OF WORK

1. INSTALL NEW PRE-ACTION SYSTEM IN MPOE RM 307, EXTENDING TO RM 308.

2. DEMO EXISTING BRANCHLINES IN MPOE RM 307, AND PART OF RM 308.

3. ALL EXISTING PENDENT SPRINKLERS IN THE AREA OF WORK ARE QUICK RESPONSE

SHEET INDEX

SYMBOL LEGEND

(E)	= EXISTING
(N)	= NEW
(R)	= RELOCATED
	= EXISTING SPRINKLER PIPING
	= NEW SPRINKLER BRANCHLINE
	= NEW SPRINKLER MAIN
MT	= MECHANICAL TEE
-54'-2¼ FFL	= PIPE ELEVATION DIMENSION
	= HANGER RODS <6" IN LENGTH NO LIKE RESTRAINTS REQ.
	= HANGER TO WOOD
	= HANGER TO STEEL
	= HANGER TO CONCRETE
	= HANGER TO STRUT
(N) 4-WAY	= NEW 4-WAY BRACE
(N) SB-2	= NEW LONGITUDINAL BRACE — NOTE: ALL LONGITUDINAL BRACES WILL BE EVEN NUMBERS. RUNNING "AWAY BY" BRACE TYPE (NFW DETAILS)
(N) SB-1	= NEW LATERAL BRACE — NOTE: ALL LATERAL BRACES WILL BE ODD NUMBERS. RUNNING "AWAY BY" BRACE TYPE (NFW DETAILS)
(E)4WAY	= EXISTING 4-WAY BRACE
(E)SB-2	= EXISTING LONGITUDINAL BRACE
(E)SB-1	= EXISTING LATERAL BRACE
	= BRANCHLINE RESTRAINT
	= FLEXIBLE SPRINKLER DROP (SYMBOL SHAPE MAY

SEE SPRINKLER LEGEND IN TITLEBLOCK FOR PROJECT SPRINKLER SYMBOLS

GENERAL NOTES

1. IT IS THE RESPONSIBILITY OF THE OWNER TO MAINTAIN THE INTEGRITY OF THE SPRINKLER SYSTEM.
2. ALL MATERIALS AND DEVICES SHALL BE NEW AND U.L. LISTED AND FM APPROVED IN CONFORMANCE WITH NFPA 13, 2019 , NFPA 14, NFPA 20, AND NFPA 24, AND SHALL BE LISTED WITH THE CITY FIRE MARSHALL FOR USE IN AUTOMATIC SPRINKLER SYSTEMS.
3. ALL LOW POINTS OF THE SYSTEM SHALL HAVE PROVISIONS FOR DRAINAGE IN ACCORDANCE TO NFPA 13, 2019.
4. AN APPOINTMENT SHALL BE MADE A MINIMUM 24 HOURS IN ADVANCE WITH THE APPROPRIATE FIRE PREVENTION OFFICE FOR ALL INSPECTIONS.
5. A SET OF APPROVED PLANS SHALL BE MAINTAINED AT ALL TIMES ON THE JOB SITE.
6. SPRINKLER PLANS SHALL BE APPROVED PRIOR TO THE INSTALLATION OF ANY PIPE.
7. ALL VALVES SHALL HAVE A PERMANENTLY AFFIXED SIGN INDICATING FUNCTION AND BUILDING PROTECTED.
8. THE INSTALLER SHALL PERFORM ALL REQUIRED ACCEPTANCE TESTS IN THE PRESENCE OF FIRE INSPECTOR.
9. PIPE:
   A. ALL PIPING 1" THROUGH 2" USED FOR THREADED BRANCH LINES SHALL BE BLACK, SCHEDULE 40 AND IN COMPLIANCE WITH ASTM A135/A795 AND NFPA 13, 2019.
   B. ALL PIPING 2" THROUGH 6" USED FOR WELDED MAIN OR BRANCH LINES SHALL BE SCHEDULE 10 AND IN COMPLIANCE WITH ASTM A135/A795 AND NFPA 13, 2019.
   C. ALL EXTERIOR PIPING SHALL BE GALVANIZED FITTINGS:
   FITTINGS:
   A. SCREWED FITTINGS SHALL BE STANDARD MALLEABLE, DUCTILE IRON, OR CAST IRON AND IN CONFORMANCE WITH ANSI B2.1 AND ANSI B16.4.
10. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER SPECIFICATION.

CODE COMPLIANCE

1. THIS AUTOMATIC FIRE PROTECTION SYSTEM SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13, 2019.
2. THE INSTALLATION OF ALL HANGERS, BRACING, AND RESTRAINTS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF NFPA 13, 2019 AND REQUIREMENTS OF ASCE 7-16.
3. NFPA 13, 2019 - 7.1.1 MATERIALS AND DEVICES SHALL BE LISTED FOR USE IN FIRE SPRINKLER SYSTEMS.
4. NFPA 13, 2019 - 16.2.7 A STOCK OF SPARE SPRINKLER HEADS OF EACH TYPE, STYLE, AND TEMPERATURE RATING ALONG WITH A SPRINKLER HEAD WRENCH SHALL BE PROVIDED.
5. NFPA 13, 2019 - 7.5.2.5 ALL WELDING SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF ANSI B2.1/B2.1M.
6. NFPA 13, 2019 - 28.1 THE INSTALLING CONTRACTOR SHALL COMPLETE AND SIGN THE APPROPRIATE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE.
7. NFPA 13, 2019 - 28.2.1 THE FIRE SPRINKLER SYSTEM SHALL BE HYDROSTATICALLY TESTED AT 200 PSI AND SHALL MAINTAIN THAT PRESSURE FOR 2 HOURS WITHOUT LOSS THIS TEST SHALL BE WITNESSED BY THE INSPECTOR.
8. AUTHORITY HAVING JURISDICTION IS THE CITY OF HAYWARD
9. THIS AUTOMATIC FIRE PROTECTION SYSTEM SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH SECTION 5.508.1 OF THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE.

PIPING NOTES

1. ALL NEW PIPE SHALL MATCH EXISTING PIPE, SCHEDULE 40 STEEL
2. ALL ARM-OVERS GREATER THAN 2'-0" IN LENGTH SHALL RECIEVE A HANGER
3. ALL NEW HANGERS AND SEISMIC BRACING SHALL BE INSTALLED PER NFPA 13 REQ.
4. ALL RELOCATED SPRINKLERS SHALL RECIEVE A NEW SPRINKLER HEAD

BUILDING INFORMATION

CLIENT: JEFF LOWITT - ROGAN BUILDERS

CONSTRUCTION TYPE: V-N

OCCUPANCY: B3

AREA OF WORK: RM 305C, RM 305B, CORRIDOR, RM 307, RM 308, RM 305B, AND RM 308.

FIRE PROTECTION: FULLY SPRINKLERED

BUILDING PERMIT #:

NUMBER OF STORIES: 2

DESIGN REQUIREMENTS

EXISTING SPRINKLER SYSTEM DESIGN CRITERIA

HAZARD CLASSIFICATION:

LIGHT HAZARD
- RM 308

ORDINARY HAZARD GROUP I
- RM 307 MPOE

MAX SPRINKLER SPACING (SQ.FT.) :
-225 SQ.FT. - RM 308
-130 SQ.FT. - RM 307 MPOE

Coordination Sign-off		
Contractor	Signature	Date
Aechanical		
Electrical		
Plumbing		

North & Scale

Sprinkler Head Information

	Brand / SIN #	Model	Symbol	Type	Size	Temperature	K	Finish	Escutcheon	Quantity
(E) SSP				QR	1/2"	155 deg F	5.6			
(E) SSU				QR	1/2"	155 deg F	5.6			
(E) SSUWSP				QR	1/2"	155 deg F	5.6			
(N) SSU	GLOBE/GL-6601	GL-QR		QR	1/2"	155 deg F	5.6	BRASS	NONE	10
(N) SSP SEMI-RECESSED	GLOBE/GL-6601	GL-QR		QR	1/2"	155 deg F	5.6	WHITE	WHITE	4
(N) SSUWSP SEMI-RECESSED		GL-QR		QR	1/2"	155 deg F	5.6			
									Total Added or Modified	14

SPRINKLER HEAD SYMBOLS

- (E) UPRIGHTS
- (E) PENDENTS
- (N) PENDENT
- (E) PENDENTS (CONCEALED)

Standard Symbols

- Hanger Location
- Lateral Brace
- Longitudinal Brace
- Four Way Brace
- Hydraulic Rels. Points
- End of Line Restraint
- Existing Piping
- New Piping

REVISIONS	DATE
ISSUE FOR PERMIT	7/1/20

Walsohn Fire Protection, Inc.
2178 RHEEM DRIVE, PLEASANTON, CA 94588
LIC. # C-16 568436
TELEPHONE : (650) 594-15
FAX : (650) 594-1613
Email: ryan@walsohn.com

Job No.	230308
Date	7/10/20
Designer	CL
Checked	CH
Scale	AS NOTED

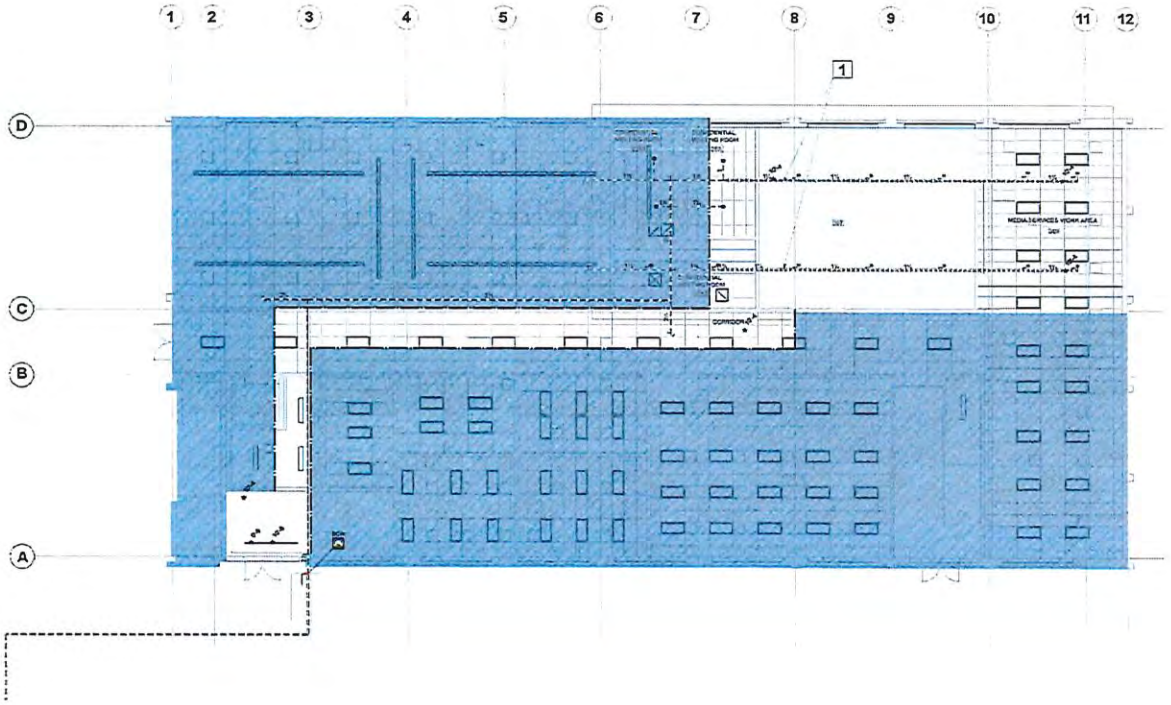
MPOE REPLACEMENT BLDG 300
CHABOT COLLEGE
25555 HESPERIAN BLVD., HAYWARD, CA 94545
COVER SHEET & NOTES

FP-0.0

1 of 5

NOTES:

1. DEMO (E) BRANCH LINES IN RM 307 AND RM 308



1 EXISTING RCP AND PIPING PLAN - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

Coordination Sign-off		
Contractor	Signature	Date
Mechanical		
Electrical		
Plumbing		

North & Scale: 0 4' 8' 16'

Sprinkler Head Information

	Brand / SIN #	Model	Symbol	Type	Size	Temperature	K	Finish	Escutcheon	Quantity
(E) SSP				CR	1/2"	155 deg F	5.6			
(E) SSU				CR	1/2"	155 deg F	5.6			
(E) SSU/SSP				CR	1/2"	155 deg F	5.6			
(N) SSU	GLOBE/GL-5601	GL-CR		CR	1/2"	155 deg F	5.6	BRASS	HONE	10
(N) SSP SEMI-RECESSED	GLOBE/GL-5601	GL-CR		CR	1/2"	155 deg F	5.6	WHITE	WHITE	4
(N) SINGSP SEMI-RECESSED		GL-CR		CR	1/2"	155 deg F	5.6			
									Total Added or Modified	14

SPRINKLER HEAD SYMBOLS

- (E) UPRIGHTS
- (E) PENDENTS
- (N) PENDENT
- (E) PENDENTS (CONCEALED)

Standard Symbols

- Hanger Location
- Lateral Brace
- Longitudinal Brace
- Four Way Brace
- Hydraulic Refs. Points
- End of Line Restraint
- Existing Piping
- New Piping

REVISIONS	DATE
1 ISSUE FOR PERMIT	7/10/20

Walschon Fire Protection, Inc.
2178 RHEEM DRIVE, PLEASANTON, CA 94588
LIC. # C-16 568438
TELEPHONE : (650) 594-15
FAX : (650) 594-1613
Email: cyrus@walschon.com

Job No.	200304
Date	7/10/20
Designer	CL
Checked	CN
Scale	AS NOTED

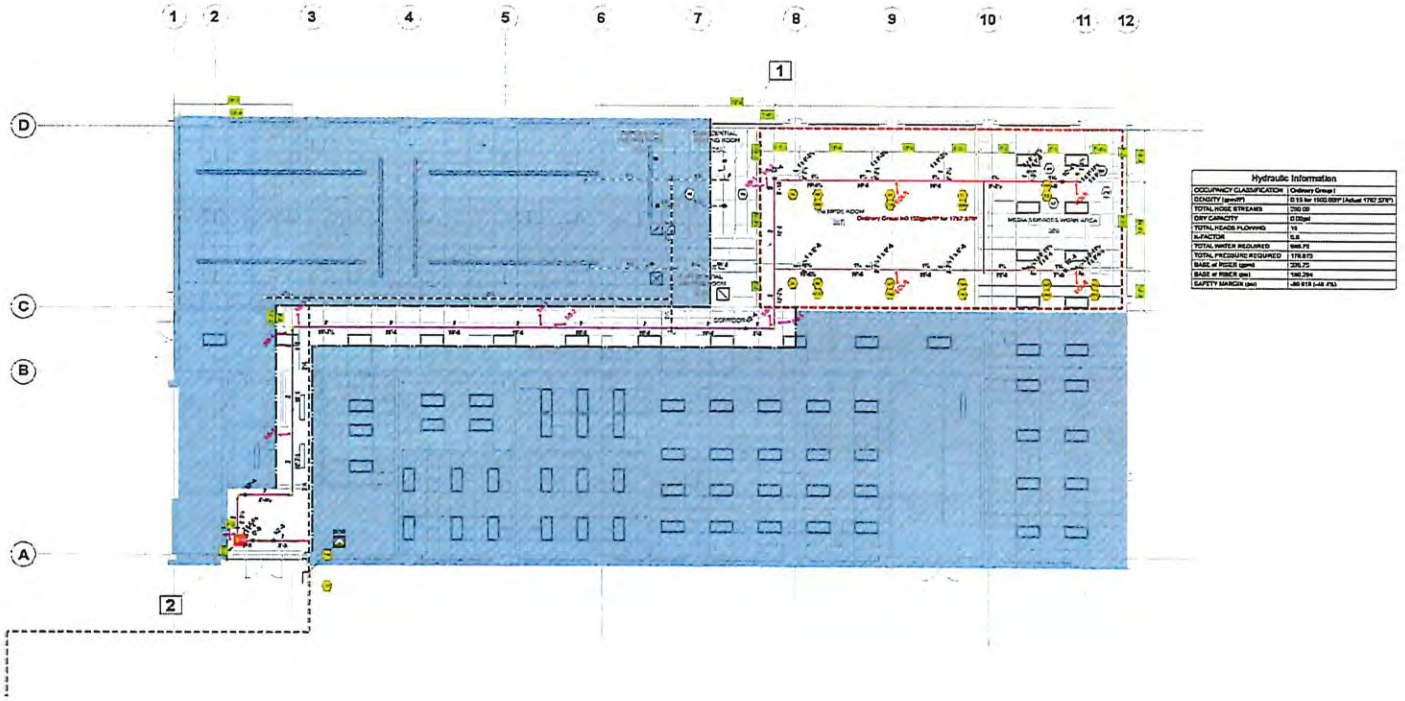
MPOE REPLACEMENT BLDG 300
CHABOT COLLEGE
25555 HESPERIAN BLVD., HAYWARD, CA 94545
EXISTING RCP & PIPING PLAN

FP-1.0

2 of 5

NOTES:

1. PLUG (E) BRANCH LINE
2. PRE-ACTION CABINET



Hydraulic Information	
OCCUPANCY CLASSIFICATION	Ordinary Group I
DENSITY (gpm/ft²)	0.15 for 1500.00ft² (Actual 1767.37ft²)
TOTAL HOSE STREAMS	250 GD
DRY CAPACITY	0 (Dry)
TOTAL HEADS FLOWING	15
K-FACTOR	5.6
TOTAL WATER REQUIRED	595 PS
TOTAL PRESSURE REQUIRED	178.873
BASE of RISER (psi)	126.75
BASE of RISER (psi)	140.294
SAFETY MARGIN (psi)	-38.919 (-48.4%)

1 NEW RCP AND PIPING PLAN - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

Coordination Sign-off		
Contractor	Signature	Date
Mechanical		
Electrical		
Plumbing		

North & Scale: 0 4' 8' 16'

Sprinkler Head Information										
	Brand / S/N #	Model	Symbol	Type	Size	Temperature	K	Finish	Escutcheon	Quantity
(E) SSP				OR	1/2"	155 deg F	5.6			
(E) SSU				OR	1/2"	155 deg F	5.6			
(E) SSU/SSP				OR	1/2"	155 deg F	5.6			
(N) SSU	GLOBE/GL-6401	GL-GR		OR	1/2"	155 deg F	5.6	BRASS	NONE	10
(N) SCP SEMI-RECESSED	GLOBE/GL-6601	GL-GR		OR	1/2"	155 deg F	5.6	WHITE	WHITE	4
(N) SSU/SSP SEMI-RECESSED		GL-GR		OR	1/2"	155 deg F	5.6			
									Total Added or Identified	14

SPRINKLER HEAD SYMBOLS

- (E) UPRIGHTS
- (E) PENDENTS
- (N) PENDENT
- (E) PENDENTS (CONCEALED)

Standard Symbols

- Hanger Location
- Lateral Brace
- Longitudinal Brace
- Four Way Brace
- Hydraulic Refs. Points
- End of Line Restraint
- Existing Piping
- New Piping

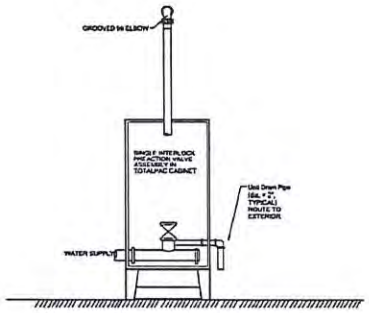
REVISIONS	DATE
ISSUE FOR PERMIT	7/10/20

Walsehon Fire Protection, Inc.
2178 RHEEM DRIVE, PLEASANTON, CA 94588
LIC. # C-16 568438
TELEPHONE : (650) 394-15
FAX : (650) 394-1913

Job No.	200358
Date	7/10/20
Designed	CL
Checked	CN
Scale	AS NOTED

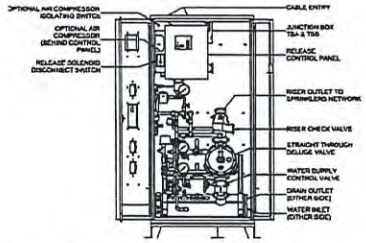
MPOE REPLACEMENT BLDG 300
CHABOT COLLEGE
25555 HESPERIAN BLVD., HAYWARD, CA 94545
NEW RCP & PIPING PLAN

FP-1.1



1 PRE-ACTION CABINET

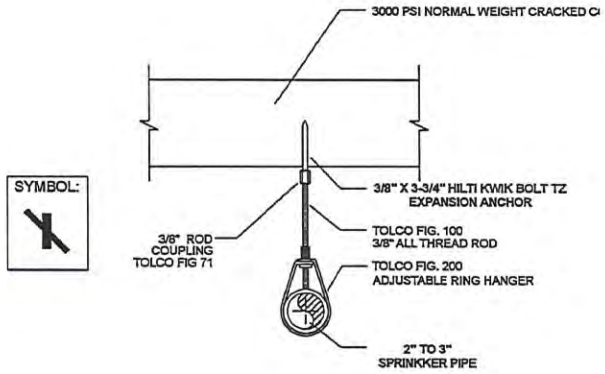
NOT TO SCALE



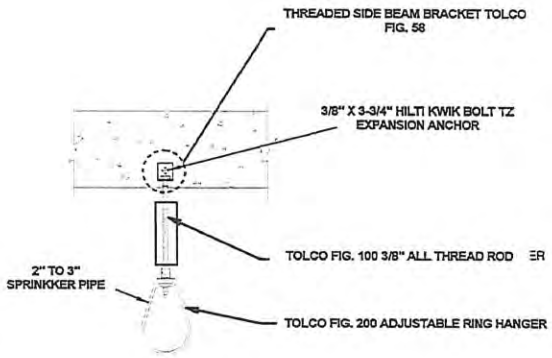
2 PRE-ACTION CABINET INETERIOR

NOT TO SCALE

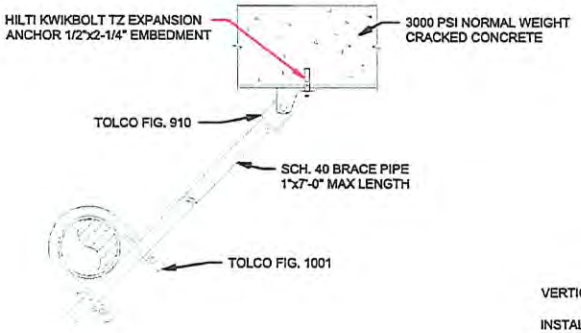
1 PRE-ACTION CABINET DETAILS NTS



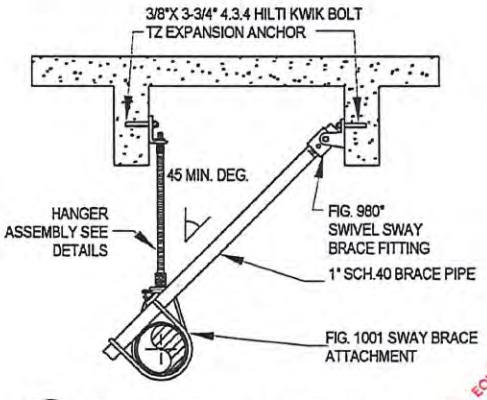
2 HANGER DETAILS NTS



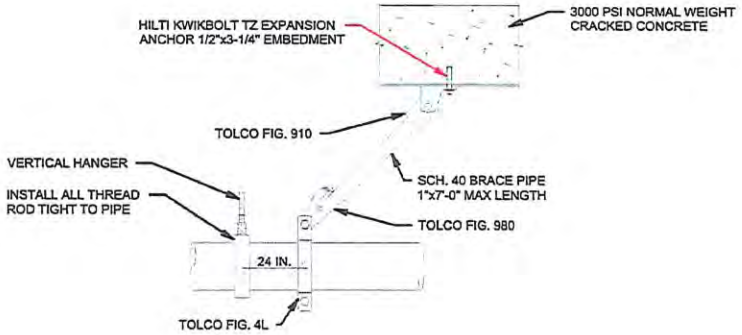
3 HANGER DETAILS NTS



5 LATERAL SWAY BRACE SB-1 NTS



4 CONCRETE ATTACHMENT END OF LINE RESTRAINT EOLR NTS



6 LONGITUDINAL SWAY BRACE SB-2 NTS

Coordination Sign-off			North & Scale
Contractor	Signature	Date	
Mechanical			
Electrical			
Plumbing			

Sprinkler Head Information											
	Brand / SIN #	Model	Symbol	Type	Size	Temperature	K	Finish	Escutcheon	Quantity
(E) SSP				OR	1/2"	155 deg F	5.6			
(E) SSU				OR	1/2"	155 deg F	5.6			
(E) SSU/SSP				OR	1/2"	155 deg F	5.6			
(N) SSU	CLOSE/CL-0851	CL-QR		OR	1/2"	155 deg F	5.6	BRASS	NONE	10
(N) SSP SEMI-RECESSED	CLOSE/CL-0801	CL-QR		OR	1/2"	155 deg F	5.6	WHITE	WHITE	4
(N) SSU/SSP SEMI-RECESSED		CL-QR		OR	1/2"	155 deg F	5.6			
									Total Added or Modified	14

SPRINKLER HEAD SYMBOLS
(E) UPRIGHTS
(E) PENDENTS
(N) PENDENT
(E) PENDENTS (CONCEALED)

Standard Symbols
Hanger Location
Lateral Brace
Longitudinal Brace
Four Way Brace
Hydraulic Rats. Points
End of Line Restraint
Existing Piping
New Piping

REVISIONS	DATE
ISSUE FOR PERMIT	7/10/20

Walsehon Fire Protection, Inc.
2178 RHEEM DRIVE, PLEASANTON, CA 94588
LIC. # C-16 568438
TELEPHONE : (650) 594-15
FAX : (650) 594-1613

Job No.	200304
Date	7/10/20
Designed	CL
Checked	Ck
Scale	AS NOTED

MPOE REPLACEMENT BLDG 300
CHABOT COLLEGE
25555 HESPERIAN BLVD., HAYWARD, CA 94545
DETAILS

FP-2.0

TOLBrace™ Seismic Bracing Calculations

Project Address: Chabot College Bldg 300, 25555 Hesperian Blvd, Hayward, CA — Job # 200358

Contractor: WALSCHON FIRE PROTECTI — Address: 2178 RHEEM DRIVE, PLEASANTON, CA 94588 — Phone: 925-426-4817 — License:

EATON

Brace Information

Maximum Brace Length	7'0" (2.134 m)
Diameter of Brace	1" Sch.40
Type of Brace	Sch. 10
Angle of Brace	45° Min.
Least Rad. of Gyration	0.42" (11 mm)
L/R Value	200
Max Horizontal Load	1310 lbs (594 kg)

TOLCO™ Brace Components

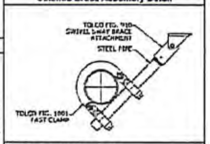
TOLCO™ Component	Listed Load	Adjusted Load
Fig. 1001 Clamp	2015 lbs (914 kg)	1425 lbs (646 kg)
Fig.910 Threaded Swivel	1600 lbs (726 kg)	1131 lbs (513 kg)
See Fastener Information		

Fastener Information

Orientation to Connecting Surface: NFPA Type B

Type	POWERS POWER-STUD +SD2
Diameter	3/4in.
Length	3 3/4in.
Maximum Load	929 lbs (421 kg)
Prying Factor	1.158

Seismic Brace Assembly Detail



Brace Identification on Plans: SB-1

Brace Type: Lateral [X] Longitudinal [ ] 4-Way [ ]

Sprinkler System Load Calculation (Fpw = Cp*Wp)

Diameter	Type	Length	Total Length	Weight Per Unit Length	Total Weight
2" (54 mm)	Sch. 10	[illegible]	[illegible]	[illegible]	106 lbs [illegible]
2" (54 mm)	Sch. 10	[illegible]	[illegible]	4.22 lb/ft [illegible]	544 lbs [illegible]

TOLBrace™ Seismic Calculations

Chabot College Bldg 300 — Job # 200358 — 25555 Hesperian Blvd

Brace Identification	SB-1
Brace Type (Per NFPA 13)	NFPA Type B
Braced Pipe (ft)	2" Sch 10 Steel Pipe
Spacing of Brace	25' 0" (7.62 m)
Orientation of Brace	Lateral
Bracing Material	1" Sch.40
Maximum Brace Length	7' 0" (2.13 m)
Slenderness Ratio used for Load Calculation	200
True Angle of Brace for Calculation	45°
Type of Fastener	POWERS POWER-STUD +SD2 3/4in. x 3 3/4in. (3,000 PSI Normal Weight)
Length of Fastener	3 3/4in.

Summary of Pipe within Zone of Influence

Allowance for Heads and Fittings: 15%

Conclusions

Total Adjusted Load of Pipe in Zone of Influence	765 lbs (347 kg)
Material Capacity	1310 lbs (594 kg)
Fastener Capacity	929 lbs (421 kg)
Fig. 1001 Clamp	1425 lbs (646 kg)
Fig.910 Threaded Swivel	1131 lbs (513 kg)
Structural Member	3000 PSI NORMAL WEIGHT CRACKED CONCRETE

Calculations prepared by: Cyrus Logis

TOLBrace™ Seismic Bracing Calculations

Project Address: Chabot College Bldg 300, 25555 Hesperian Blvd, Hayward, CA

Contractor: WALSCHON FIRE PROTECTI — Address: 2178 RHEEM DRIVE, PLEASANTON, CA 94588

EATON

Brace Information

Maximum Brace Length	7'0" (2.134 m)
Diameter of Brace	1" Sch.40
Type of Brace	Sch. 10
Angle of Brace	45° Min.
Least Rad. of Gyration	0.42" (11 mm)
L/R Value	200
Max Horizontal Load	1310 lbs (594 kg)

TOLCO™ Brace Components

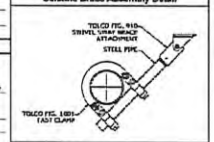
TOLCO™ Component	Listed Load	Adjusted Load
Fig. 1001 Clamp	2015 lbs (914 kg)	1425 lbs (646 kg)
Fig.910 Threaded Swivel	1600 lbs (726 kg)	1131 lbs (513 kg)

Fastener Information

Orientation to Connecting Surface: NFPA Type B

Type	POWERS POWER-STUD +SD2
Diameter	3/4in.
Length	3 3/4in.
Maximum Load	644 lbs (292 kg)
Prying Factor	1.158

Seismic Brace Assembly Detail



Brace Identification on Plans: SB-1

Brace Type: Lateral [X] Longitudinal [ ] 4-Way [ ]

TOLBrace™ Seismic Calculations

Chabot College Bldg 300 — Job # 200358 — 25555 Hesperian Blvd

Brace Identification	SB-1
Brace Type (Per NFPA 13)	NFPA Type B
Braced Pipe (ft)	3" Sch 10 Steel Pipe
Spacing of Brace	40' 0" (12.19 m)
Orientation of Brace	Lateral
Bracing Material	1" Sch.40
Maximum Brace Length	7' 0" (2.13 m)
Slenderness Ratio used for Load Calculation	200
True Angle of Brace for Calculation	45°
Type of Fastener	POWERS POWER-STUD +SD2 3/4in. x 3 3/4in. (3,000 PSI Light Weight)
Length of Fastener	3 3/4in.

Allowance for Heads and Fittings: 15%

Total Adjusted Load of Pipe in Zone of Influence	325 lbs (147 kg)
Material Capacity	1310 lbs (594 kg)
Fastener Capacity	644 lbs (292 kg)
Fig. 1001 Clamp	1425 lbs (646 kg)
Fig.910 Threaded Swivel	1131 lbs (513 kg)
Structural Member	3000 PSI NORMAL WEIGHT CRACKED CONCRETE

Calculations prepared by: Cyrus Logis

TOLBrace™ Seismic Bracing Calculations

Project Address: Chabot College Bldg 300, 25555 Hesperian Blvd, Hayward, CA — Job # 200358

Contractor: WALSCHON FIRE PROTECTI — Address: 2178 RHEEM DRIVE, PLEASANTON, CA 94588

EATON

Brace Information

Maximum Brace Length	7'0" (2.134 m)
Diameter of Brace	1" Sch.40
Type of Brace	Sch. 10
Angle of Brace	45° Min.
Least Rad. of Gyration	0.42" (11 mm)
L/R Value	200
Max Horizontal Load	1310 lbs (594 kg)

TOLCO™ Brace Components

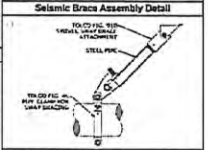
TOLCO™ Component	Listed Load	Adjusted Load
Fig. 4L Clamp	2015 lbs (914 kg)	1425 lbs (646 kg)
Fig.910 Threaded Swivel	1600 lbs (726 kg)	1131 lbs (513 kg)

Fastener Information

Orientation to Connecting Surface: NFPA Type B

Type	POWERS POWER-STUD +SD2
Diameter	3/4in.
Length	3 3/4in.
Maximum Load	1147 lbs (520 kg)
Prying Factor	1.158

Seismic Brace Assembly Detail



Brace Identification on Plans: SB-2

Brace Type: Lateral [ ] Longitudinal [X] 4-Way [ ]

TOLBrace™ Seismic Calculations

Chabot College Bldg 300 — Job # 200358 — 25555 Hesperian Blvd

Brace Identification	SB-2
Brace Type (Per NFPA 13)	NFPA Type B
Braced Pipe (ft)	3" Sch 10 Steel Pipe
Spacing of Brace	70' 0" (21.34 m)
Orientation of Brace	Longitudinal
Bracing Material	1" Sch.40
Maximum Brace Length	7' 0" (2.13 m)
Slenderness Ratio used for Load Calculation	200
True Angle of Brace for Calculation	45°
Type of Fastener	POWERS POWER-STUD +SD2 3/4in. x 3 3/4in. (4,000 PSI Normal Weight)
Length of Fastener	3 3/4in.

Allowance for Heads and Fittings: 15%

Total Adjusted Load of Pipe in Zone of Influence	1130 lbs (513 kg)
Material Capacity	1310 lbs (594 kg)
Fastener Capacity	1147 lbs (520 kg)
Fig. 4L Clamp	1425 lbs (646 kg)
Fig.910 Threaded Swivel	1131 lbs (513 kg)
Structural Member	3000 PSI NORMAL WEIGHT CRACKED CONCRETE

Calculations prepared by: Cyrus Logis

Coordination Sign-off		
Contractor	Signature	Date
Mechanical		
Electrical		
Plumbing		

North & Scale: 0 4' 8' 16'

Sprinkler Head Information

	Brand / SIN #	Model	Symbol	Type	Size	Temperature	K	Finish	Escutcheon	Quantity
(E) SSP				QR	1/2"	155 deg F	5.6			
(E) SSU				QR	1/2"	155 deg F	5.6			
(E) SSU/SSP				QR	1/2"	155 deg F	5.6			
(N) SSU	GLOBE/GL-5601	GL-QR		QR	1/2"	155 deg F	5.6	BRASS	NONE	10
(N) SSP SEMI-RECESSED	GLOBE/GL-5601	GL-QR		QR	1/2"	155 deg F	5.6	WHITE	WHITE	4
(N) SSU/SSP SEMI-RECESSED		GL-QR		QR	1/2"	155 deg F	5.6			
									Total Added or Modified	14

SPRINKLER HEAD SYMBOLS
- (E) UPRIGHTS
- (E) PENDENTS
- (N) PENDENT
- (E) PENDENTS (CONCEALED)

Standard Symbols
- Hanger Location
- Lateral Brace
- Longitudinal Brace
- Four Way Brace
- Hydraulic Refs. Points
- End of Line Restraint
- Existing Piping
- New Piping

REVISIONS	DATE
ISSUE FOR PERMIT	7/10/20

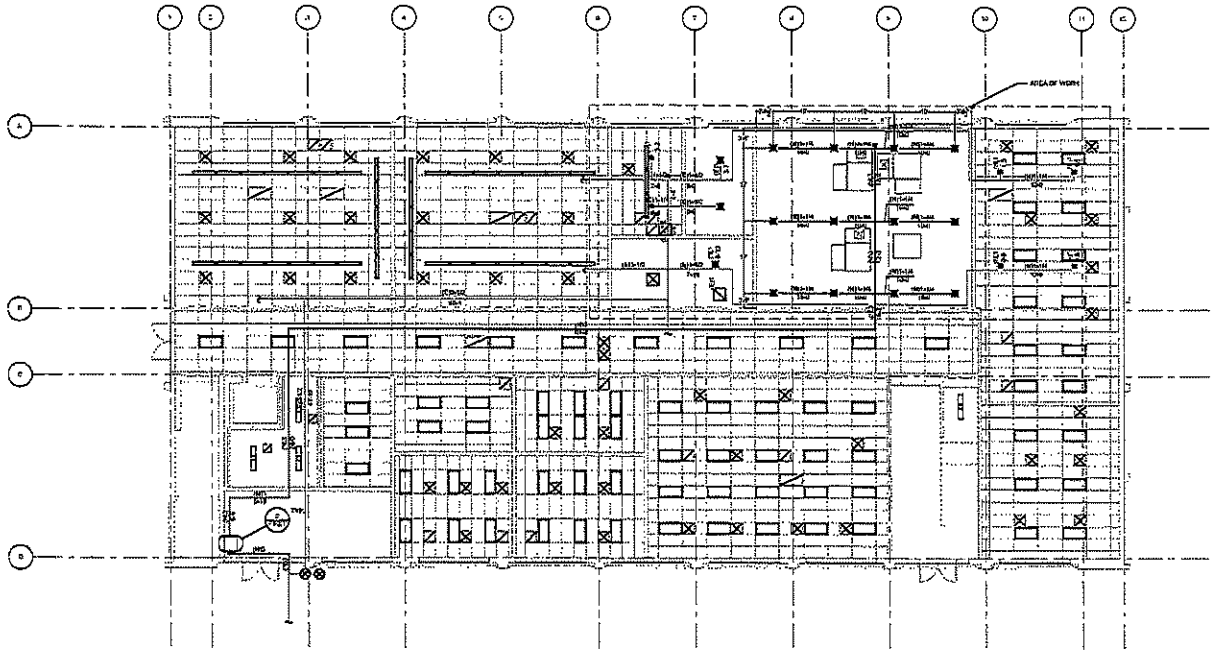
Walschon Fire Protection, Inc. — 2178 RHEEM DRIVE, PLEASANTON, CA 94588 — LIC. # C-16 566438 — TELEPHONE: (650) 594-15[illegible] FAX: (650) 594-1813

Job No.	200358
Date	7/10/20
Designer	CL
Checked	CH
Scale	AS NOTED

MPOE REPLACEMENT BLDG 300
CHABOT COLLEGE
25555 HESPERIAN BLVD., HAYWARD, CA 94545
SEISMIC BRACING CALCS

FP-2.1

5 OF 5



1 FLOOR PLAN - FIRE PROTECTION

ATI ARCHITECTS & ENGINEERS

INTERFACE ENGINEERING

CHABOT COLLEGE

NEW MPOE AT CHABOT CAMPUS BLDG. 300

25555 Hesperian Blvd
Hayward, CA 94545

FLOOR PLAN - FIRE PROTECTION

FP2.1

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 8/24/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Revised Electrical Breaker Size per RFI #30
PCO#: 07

Dear Peter,

Below are the cost impacts to furnish and install a new 100A breaker In liue of 125A breaker on panels "3L" and "3L1B" per RFI response #30.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric, Inc.				
Revised Electrical Breaker Size per RFI #30			$ (1,449)	$ (1,449)
SUBTOTAL				**$ (1,449)**
Markup - Subcontractor				$ (72)
Insurance - 1%				$ (14)
Bonds - 1.5%				$ (22)
TOTAL COST				**$ (1,558)**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2020.08.24 11:02:04-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 07

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 4
Date: 8/20/20
Description: Credit Per RFI 30

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1	125A 3P Breaker (FD3125)	-2	EA	$ 810.00	$ (1,620.00)
2	100A 3P Breaker (FD3100)	2	EA	$ 535.00	$ 1,070.00
3	#1 THHN (to panel 3L1C)	-320	LF	$ 1.18	$ (377.60)
4	#2 THHN (to panel 3L1C)	320	LF	$ 0.48	$ 153.60
5	#1 THHN (to panel 3L1D)	-560	LF	$ 1.18	$ (660.80)
6	#2 THHN (to panel 3L1D)	560	LF	$ 0.48	$ 268.80
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ (1,166.00)

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ (1,166.00)
Sales Tax:		$ (107.86)
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ (1,273.86)
Overhead and Profit (Materials & Equipment)	15%	$ (174.90)
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ (1,449.00)

Item	SubTier Contractors	Quote	
1			
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ -
Profit at 5.00%:		$ -
Subtotal:		$ -
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ (1,449.00)
Total this Page:		$ (1,449.00)
Total from Previous Pages		
Proposal Grand Total:		***$ (1,449.00)***

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 07

ELECTRICAL SOLUTIONS - NOW
bay power

Quote# QT1-7931

Bay Power San Jose
1095 N. 7th Street
San Jose CA 95112

Phone: 408-998-2980
Fax: 408-998-2982

Customer No.: #125

Quote To:

Beci Electric, Inc.
8108 Capwell Drive
Oakland CA 94621

Ship To:

Beci Electric, Inc.
8108 Capwell Drive
Oakland CA 94621

Date	Lead Time	Customer PO#	Contact	Shipping Method	Sales Person
08/5/2020			Chad		Evan Ewings

Qty	Item No.	Description	Condition	Unit Price	Amount
1	FD3200	CH CB 3P 200A 600V 35K @ 480V	NEW	$985.00	$985.00
2	FD3125	CH CB 3P 125A 600V 35K @ 480V	NEW	$810.00	$1,620.00
1	FD3100	CH CB 3P 100A 600V 35K @ 480V	NEW	$535.00	$535.00
1	SFHA36AT0250	GE CB 3P 250A 600V 35K	NEW	$625.00	$625.00
1	SRPF250A200	GE RATING PLUG 200A	NEW	$65.00	$65.00
1	SFAPNB	BP HARDWARE GE 250A APN-B SFHA SFLA SFDA	NEW	$396.00	$396.00
1	SFFP	BPI HARDWARE GE APN-B SFD1K KIT	NEW	$195.00	$195.00
				Subtotal	$4,421.00
				Shipping Estimate	
				Tax (9.25%)	$408.94
				Total	**$4,829.94**

NOTES
Chabot Breaker

PRINT NAME:_____ **SIGNATURE:**_____ **DATE:**_____

ALL QUOTES VALID FOR 30 DAYS, Subject To Prior Sale. RETURN POLICY: All returns are subject to a minimum 25% restocking fee (depending on order) plus all freight charges. RGA's must be requested within 30 days of invoice date. NO RETURNS AFTER 30 DAYS WITHOUT PRIOR APPROVAL. Claims for shortages or damage must be submitted in writing within 5 days from receipt of material. Our liability is limited to replacing defective material or refunding invoice value. ONE YEAR REPLACEMENT WARRANTY UNLESS OTHERWISE STATED.

Bid No. 19/20-17
Change Order #01
PCO 07

RFI 0030 - New 125A Branch Breakers

Status: Sent to reviewer

Due Date: Aug 22, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Aug 7, 2020 at 1:40 PM PDT

See attached RFI from our electrical Subcontractor regarding the 125A branch breakers. Please review and advise.

RFI_30_RBI_New 125A Branch Breakers.pdf (See page 2)

Bid No. 19/20-17
Change Order #01
PCO 07

Beci Electric, Inc. ■ 8137 Capwell Dr.. ■ Oakland CA 94621 ■ 510.635.1477 ■ Fax 510.

TITLE: New 125A Branch Breakers

REQUEST FOR INFORMATION
NO. 12

PROJECT: 20-1538
Chabot MPOE Replacement

DATE: 08/07/2020

TO:

Rodan Builders
859 Cowan Rd
Burlingame, CA 94010
Phone:650 508-1700 Fax:650-508-1705

REQUEST: **Scheduling Impact:** ☐ **Monetary Impact:** ☐

Per the single line diagram we are to install a new 125A branch breaker in panels "3L" & "3LB" to feed each of our new panels. After field verification of both existing panels it has been determined that the largest breakers these panels can accept would be 100A. There is slot in each panel that will accept a 125A subfeed breaker however those spaces are currently occupied with breakers that are being used.

The possible solutions are to either downsize the branch breakers to 100A or replace the 2 existing panels. This is a potential cost impact RFI.

Please advise.

ANSWER:

USE 100A SUB FEED BREAKER WITH CORRESPONDING 100A FEEDER TO EACH NOTED PANELBOARD. PROVIDE DUE CREDIT TO OWNER.

Requested By: **Date:** 08/08/20

Signed: _____

Bid No. 19/20-17
Change Order #01
PCO 07

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 9/2/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 14 Added Card Reader at 307A
PCO#: 08

Dear Peter,

Per direction of RFI 14, below is the cost to furnish and install additional card reader at door 307A.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
RFI 14 Added Card Reader at 307A			$ 2,735	$ 2,735
				$ -
SUBTOTAL				**$ 2,735**
Markup - Contractor				$ 137
Insurance - 1%				$ 27
Bonds - 1.5%				$ 41
TOTAL COST				**$ 2,940**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.09.02 11:50:45-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 08

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #:	5
Date:	8/28/20
Description:	Card Reader at Door 307A

Drawing Number:	Description of Work:

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1	Cut In Box	1	EA	$ 5.89	$ 5.89
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ 5.89

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1	Journeyman	4	Hours	$ 117.01	$ 468.04
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ 468.04

Summary:

Materials before tax Subtotal:		$ 5.89
Sales Tax:		$ 0.54
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ 468.04
Materials, Rental Equipment, Labor Subtotal:		$ 474.47
Overhead and Profit (Materials & Equipment)	15%	$ 0.88
Overhead and Profit (Labor)	15%	$ 70.21
Subcontractors Subtotal:		$ 546.00

Item	SubTier Contractors	Quote	
1	Electrical Innovations	$ 2,085.00	
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ 2,085.00
Profit at 5.00%:		$ 104.00
Subtotal:		$ 2,189.00
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ 2,735.00
Total this Page:		$ 2,735.00
Total from Previous Pages		
Proposal Grand Total:		$ 2,735.00

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 08

ELECTRONIC INNOVATIONS
AUTOMATED ENTRY CONTROL

21
Parr
Boulevard
RICHMOND
CALIFORNIA
94801
FACSIMILE:
510.232.3205
TELEPHONE:
510.233.2795

August 28, 2020

Mr. Chad Dillashaw
Project Manager
Beci Electric
8108 Capwell Drive
Oakland, CA 94621

Re: Chabot College Building 300 – AMAG Card Access System Additions and Changes

Dear Chad,

Electronic Innovations is pleased to have the opportunity to submit our proposal for your review and consideration regarding the subject project.

Electronic Innovations is a full-service organization. Since 1980, we have been engineering contractors specializing in the design, installation and maintenance of automatic entry control systems. Our professionalism, expertise, and technical support make the difference.

In the past, Electronic Innovations has worked at Chabot College on the AMAG system and we are also a certified installing dealer of the AMAG access control products.

I have reviewed the e-mail chain and photos you sent over and have created the following scope of work per location.

Door 305C: Remove existing proximity card reader and replace it with a proximity/keypad card reader and reprogram the AMAG software for the card reader type change for this door.

Door 307B: At this location, this door needs to operate independently of 307A. We will run new card reader and door control cable from the new card reader/keypad to the AMAG panel in the building and create a new card reader location in the door schedule of the AMAG software. The information provided describes only an electric strike present. We will provide all necessary accessories to make this a functional access control door.

Door 307A: Remove existing proximity card reader and replace it with a proximity/keypad card reader and reprogram the AMAG software for the card reader type change for this door.

Our price to provide the above is as follows:

Door 307A is $2,085.00

Our pricing is based upon prevailing wage and certified payroll.

Bid No. 19/20-17
Change Order #01
PCO 08

This pricing is based upon the following:

1. AMAG software having the reader capacity to add more readers
2. AMAG access control node having available port for Door 307B
3. Existing electric door hardware being functional with working power supply

Should any work not described above be necessary to comply with the District standards, this work will be considered a change order.

These prices include all necessary labor, materials, and applicable state and federal taxes to complete this installation.

The prices quoted are valid for 60 days from the date of this proposal. Terms: Work completed within a month will be billed at the end of the month (Progressive Billing). Progressive Billing will include invoicing of material staged at Electronic Innovations or its subcontractors for engineering or programming prior to on-site installation. Payment due upon receipt of invoice.

Electronic Innovations certifies that all equipment and material furnished shall carry a one-year warranty on parts and labor. Warranty begins upon beneficial use of system and/or components, or completion of system, whichever comes first. Damage to equipment or materials caused by negligence, misuse, vandalism, or acts of God, is not covered by this warranty statement. Buyer agrees to assume responsibility for equipment when delivered or installed at the site.

Your interest in Electronic Innovations is sincerely appreciated. If I may be of further assistance, please feel free to call upon me at any time.

Very truly yours,

Electronic Innovations, Inc.

EJB;ras

Bid No. 19/20-17
Change Order #01
PCO 08

RFI 0014 - New Card Readers in Building 300

Status: Sent to reviewer

Due Date: Jul 25, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Jul 10, 2020 at 2:56 PM PDT

Sheet note 16 on E-311 provides direction to "Provide (N) Card Reader with 'RX' Button as directed by the owner".

There is no information provided in the plans and specs. as to the manufacturer or model of card reader. please advise.

In addition, there is no information as to new electrified hardware on doors 305C and 307B. Please advise.

Note, room 307 has existing key fob readers.

History

Question drafted and sent to reviewer

Alex Tellez (Rodan Builders Inc.) on Jul 10, 2020 at 2:56 PM PDT

- **Question added:**
  Sheet note 16 on E-311 provides direction to "Provide (N) Card Reader with 'RX' Button as directed by the owner".

  There is no information provided in the plans and specs. as to the manufacturer or model of card reader. please advise.

  In addition, there is no information as to new electrified hardware on doors 305C and 307B. Please advise.

  Note, room 307 has existing key fob readers.
- **Title added:**New Card Readers in Building 300
- **Submitter added:**Alex Tellez (Rodan Builders Inc.)
- **Manager added:**Alex Tellez (Rodan Builders Inc.)
- **Number added:**0014
- **Reviewer added:**Peter Espinosa (STV Inc.)
- **Due date added:**Jul 25, 2020

RESPONSE:
Door 305C - provide card reader/key pad.
Door 307B - provide card reader/key pad, door position switch, REX motion detector and door strike.
Door 307A - provide card reader/key pad.
All products can be "or equal" as long as the card reader/key pad are compatible with the existing AMAG system.

Bid No. 19/20-17
Change Order #01
PCO 08

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 10/2/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 26/CCD 1 Base Plate Credit
PCO#: 09

Dear Peter,

Per RFI 26/CCD1, below is the credit presented for elmination of six (6) base plates on T18 4 - post racks.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
RFI 26/CCD 1 Base Plate Credit			$ (2,290)	$ (2,290)
SUBTOTAL				**$ (2,290)**
Markup - Contractor				$ (115)
Insurance - 1%				$ (23)
Bonds - 1.5%				$ (34)
TOTAL COST				**$ (2,462)**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.10.02 15:13:05-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 09

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 6
Date: 9/29/20
Description: Credit for Base Plates on 4-Post Racks

Drawing Number:	Description of Work:

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ -

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ -
Sales Tax:		$ -
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ -
Overhead and Profit (Materials & Equipment)	15%	$ -
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ -

Item	SubTier Contractors	Quote	
1	Sasco	$ (2,181.04)	
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ (2,181.04)
Profit at 5.00%:		$ (109.00)
Subtotal:		$ (2,290.04)
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ (2,290.04)
Total this Page:		$ (2,290.04)
Total from Previous Pages		
Proposal Grand Total:		$ ***(2,290.04)***

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 09

Sasco
598 Gibraltar Dr.
Milpitas, CA 95035

Proposal for Change Order #02

TO: BECI Electric Inc
8108 Capwell Dr
Oakland, CA 94621

DATE: 09/28/2020

Re: Chabot MPOE Metal Plate Credit

Attn: Chad Dillashaw

JOB# D-CHMPOE
JOB NAME D-Chabot MPOE Replacement

MATERIAL EXPENSES:

1.	Material Expense					$1,330.00	
2.	Material Mark-Up	@	15.00%				$199.50
3.	Sales Tax	@	9.75%			$129.68	
4.	Subtotal					$1,459.68	
5.	Total Material						**$1,459.68**

LABOR EXPENSES:

6.	General Foreman	3.5	hrs	@	$98.49 /hr	$344.72	
7.	Installer	3.5	hrs	@	$80.73 /hr	$282.56	
8.	Total Labor						$627.27
9.	Labor Mark-Up	@	15.00%				$94.09
10.	Total Labor						**$721.36**
11.	Grand Total						$2,181.04

CHANGE ORDER TOTAL: **$2,181.04**

DESCRIPTION:

Credit (14) Metal Mounting Plates that were not needed.

CHANGE ORDER TOTAL AMOUNT: $2,181.34

Sincerely,

Mike Cimino
Sr Project Manager
Sasco
408-649-4867

Bid No. 19/20-17
Change Order #01
PCO 09

ESTIMATE SHEET

Chabot MPOE Metal Plate Credit

ESTIMATED BY: Mike Climo | **CHECKED BY** | **DATE: 9/28/2020**

					MATERIAL					LABOR		
	Description	Color	MFG	Part Number	Quantity	Unit Price	Unit	B/B	Amount	MH	Unit	Amount
	3/8" x 2ft 2-5/16" x 36" Metal Plate w-4ea 5/8" Holes		Signal	METAL PLATE	14	$ 95.00	ea		$ 1,330.00	0.5		7.00
						$ 4.7900	ea		$ -			0.00
						$ -	ea		$ -			0.00
						$ -	ea		$ -			0.00
						$ -	ea		$ -			0.00
						$ -	ea		$ -			0.00
						$ -	ea		$ -			0.00
1	**Termination & Testing:**								$ -			
2					1	$ -	ea		$ -			0.00
3					0	$ -	ea		$ -			0.00
4					0	$ -			$ -			0.00
5					0	$ -			$ -			0.00
6						TOTAL			$ 1,330.00			7.00

Bid No. 19/20-17
Change Order #01
PCO 09

SIGNAL ENGINEERING & SUPPLY INC.

"The Silicon Valley's Most Trusted Provider of Telecommunications, Audio/Video, and Electrical Products."

Quotation

Project
Metal Plates

Date	Quote #
8/12/2020	200812MB01

Company Name
Sasco and Sasco Data Systems 2750 Moore Avenue Fullerton, CA 92833 Attn: A/P

Ship To
Sasco and Sasco Data Systems 598 Gibraltar Drive Milpitas, CA 95035

Item	Description	Quantity	Cost	Availability	Total
Metal Plate	3/8" x 2ft 2-5/16" x 36" Metal Plate w-4ea 5/8" Holes	14	95.00	2-3 Day Lead	1,330.00T
	Sales Tax		9.00%		119.70

QUOTE IS VALID FOR 30 DAYS

Total $1,449.70

1917 Old Middlefield Way, Suite 7, Mountain View, CA 94043
Phone (650) 988-1849 | Fax (650) 988-1876

Bid No. 19/20-17
Change Order #01
PCO 09

RFI 0026 .1 T18 4-Post Rack Base Plates

Status: Sent to reviewer

Due Date: Aug 19, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Aug 4, 2020 at 2:24 PM PDT

RFI 26.1:

Please see attached RFI #26.1 that includes additional information regarding the loads for the racks.

RFI 26:

Please see attached RFI from our communications Subcontractor regarding the T18 4-post rack base plates per detail 11/S-501.

RFI_26_RBI_T18 4-Post Rack Base Plates.pdf (See page 2)

see attached DSA Approved CCD 1

Bid No. 19/20-17
Change Order #01
PCO 09

SASCO

RFI # 03

Sasco
598 Gibraltar Drive
Milpitas, CA 95035

Project: Chabot MPOE Repl
Address: 25555 Hesperian Blvd
Hayward, CA 94545

Date:	**August 4, 2020**
Submitted To:	**BECI Electric** **8108 Capwell Dr** **Oakland, CA 94621**
Contact Person:	**Chad Dillashaw**
Phone/Email:	209-559-5689

Respond By:	**August 3, 2020**	**Direct Response To:**	**Mike Cimino**
Reference:	**Drawing T-400 Detail 2 & S-501**	**Cost Impact:**	No
Originator:	Mike Cimino - Sasco	**Schedule Impact:**	No
Subject:	T18 4-Post Rack Base Plates		

Statement:

Drawing S-501 Detail 11 calls out for base plates to be installed on T18 4-post racks.

Question:

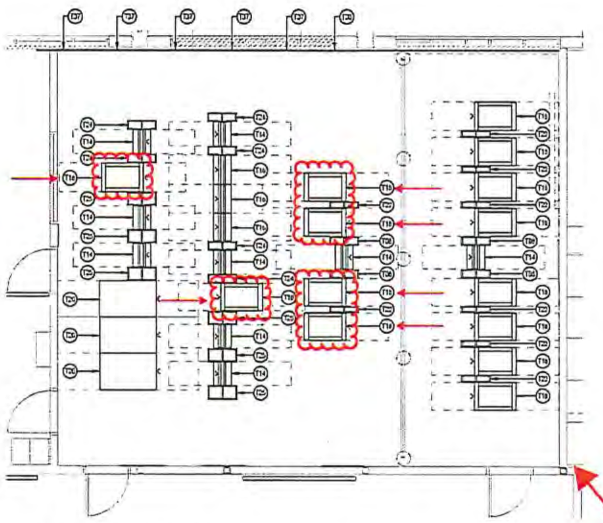
Are these "Base Plates" requires on the six (6) T18 4-post racks as indicated on attached drawing outside of the DAS aisle? These will have standard communications cabling and equipment.

Proposed Solution:

"Base Plates" are not required outside of the DAS Aisle.

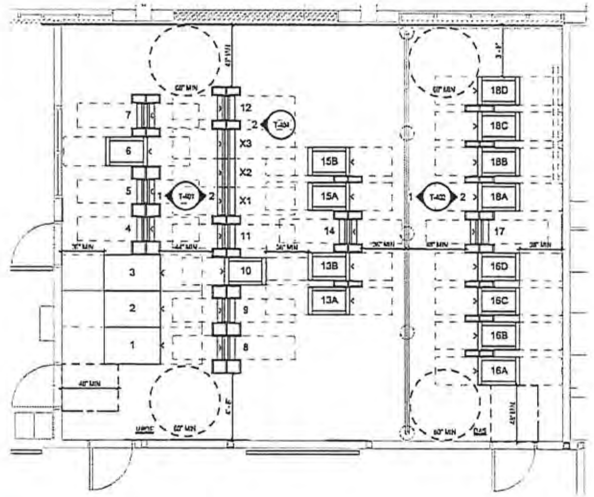
4-Aug

Bid No. 19/20-17
Change Order #01
PCO 09



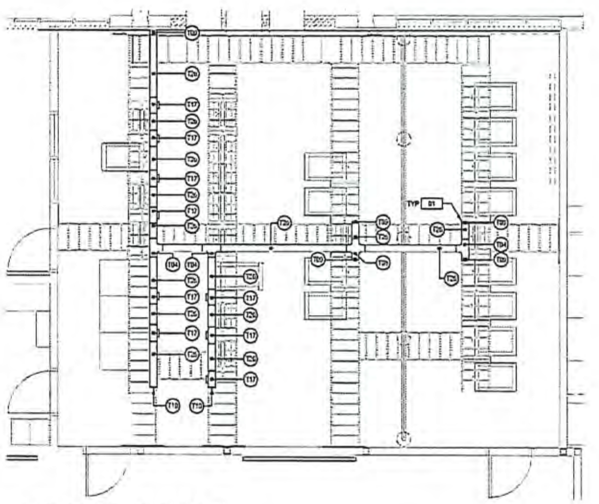
2 EQUIPMENT PLAN

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



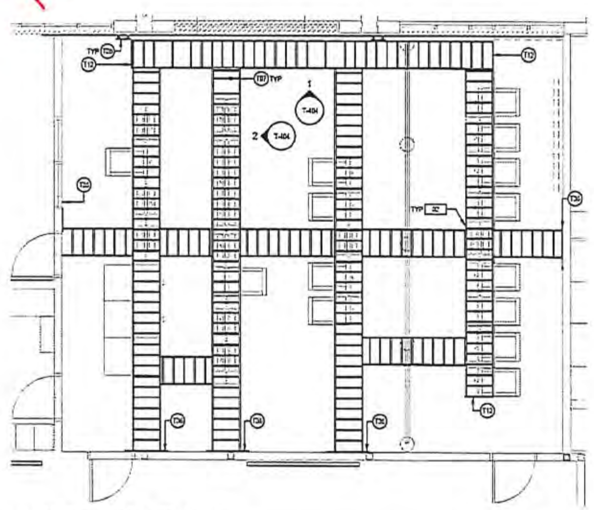
1 REFERENCE PLAN

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



4 OVERHEAD PLAN 2

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



3 OVERHEAD PLAN 1

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

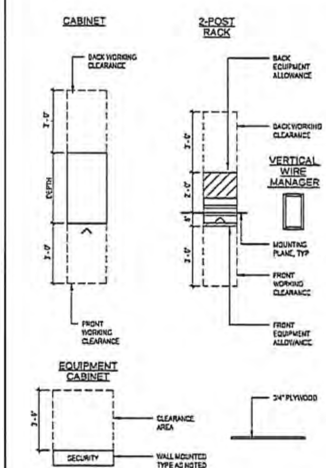
SHEET NOTES

1. PROVIDE BACKBOARDS ON WALLS OF ROOM AS SHOWN, STARTING AT 6" AFF TP 8'-6" AFF. MASK FIRE RATING STAMP PRIOR TO PAINTING. USE FLUSH FASTENERS FOR MOUNTING PLYWOOD.
2. PROVIDE RADIUS DROP OUTS WHERE CABLES TRANSITION DOWNWARD FROM OVERHEAD HORIZONTAL CABLE TRAY.
3. LABEL RACKS AND PATCH PANELS.
4. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CIRCUITS/OUTLETS AND LIGHTING REQUIREMENTS.
5. PATHWAYS SHOWN ARE DEDICATED FOR TELECOMMUNICATIONS CABLING ONLY, UON.
6. NEATLY BUNDLE (DRESS CABLE LONGITUDINALLY) AND SUPPORT (USING FASTENERS AND TIES DESCRIBED IN SPECS AND DRAWINGS) TELECOMMUNICATIONS CABLES ONTO OVERHEAD CABLE TRAY OR RUNWAY. NEATLY BUNDLE AND SUPPORT TELECOMMUNICATIONS CABLES ONTO VERTICALLY MOUNTED CABLES RUNWAY WHEN RISING FROM FLOOR SLEEVES OR DESCENDING FROM CEILING SLEEVES USING APPROVED TIES. NEATLY BUNDLE TELECOMMUNICATIONS CABLES INTO THE BACK OF THE VERTICAL CABLE MANAGEMENT SECTIONS USING APPROVED TIES. DRESS TELECOMMUNICATIONS CABLES FROM THE VERTICAL MANAGEMENT SECTIONS TO THE TERMINATION POSITION. MAXIMUM BUNDLE SIZE: 24 CABLES.
7. RACK LAYOUTS SHALL BE REVIEWED AND APPROVED BY CLPCCD DISTRICT ITS AND TEECOM PRIOR TO ANY DRILLING OF CONCRETE FOR THE ANCHORING OF RACKS.
8. REFER TO STRUCTURAL DRAWINGS S4LL/S-501 FOR RACK AND CABINET ANCHORAGE DETAILS.
9. REFER TO STRUCTURAL DRAWINGS S4S/S-502 FOR OVERHEAD RUNWAY BRACING DETAILS.

NUMBERED NOTES

01	ALIGN FRONT OF FIBER RUNNER WITH FRONT OF OVERHEAD RUNWAY.
02	ALIGN FRONT OF OVERHEAD RUNWAY WITH FRONT OF VERTICAL WIRE MANAGER.

SYMBOL LEGEND



TR EQUIPMENT LIST

ID	DESCRIPTION
T04	FIBER RUNNER 6X4 TEE
T07	24"W X 1-1/2"H OVERHEAD CABLE RUNWAY
T08	FIBER RUNNER 6X4 CROSS
T09	FIBER RUNNER 6X4 SPILL-OUT
T10	FIBER RUNNER 6X4 END CAP
T12	24"W RUNWAY END KIT
T14	2-POST RACK, 19"W X 3"D X 84"H
T16	2-POST RACK, XLBET, 23"W X 6"D X 84"H
T17	FIBER RUNNER VERTICAL TEE
T19	4-POST RACK, 19"W X 30"D X 84"H
T20	SERVER CABINET, 31.5"W X 48"D X 84"H
T22	6" DOUBLE SIDED VERTICAL WIRE MANAGER
T24	8" DOUBLE SIDED VERTICAL WIRE MANAGER
T25	12" DOUBLE SIDED VERTICAL WIRE MANAGER
T26	6"W X 4"H FIBER RUNNER, MOUNTED ABOVE OVERHEAD RUNWAY
T29	GROUND BUSBAR AT 100" TO CENTER AFF
T35	36"W X 12"H X 3/4" D FIRE RATED PLYWOOD AT 92" TO CENTER AFF
T36	36"W X 24"H X 3/4" D FIRE RATED PLYWOOD AT 92" TO CENTER AFF
T37	4' W X 8'D X 3/4"D FIRE RATED PLYWOOD WITH BOTTOM AT 6" AFF
T38	3' W X 8'D X 3/4"D FIRE RATED PLYWOOD WITH BOTTOM AT 6" AFF

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP: C 23260

CONSULTANT: TEECOM

ITEM	REVISION / ISSUE	DATE
	3/16/2020 - BID SET, NOT FOR CONSTRUCTION	

KEY PLAN:

CHABOT COLLEGE

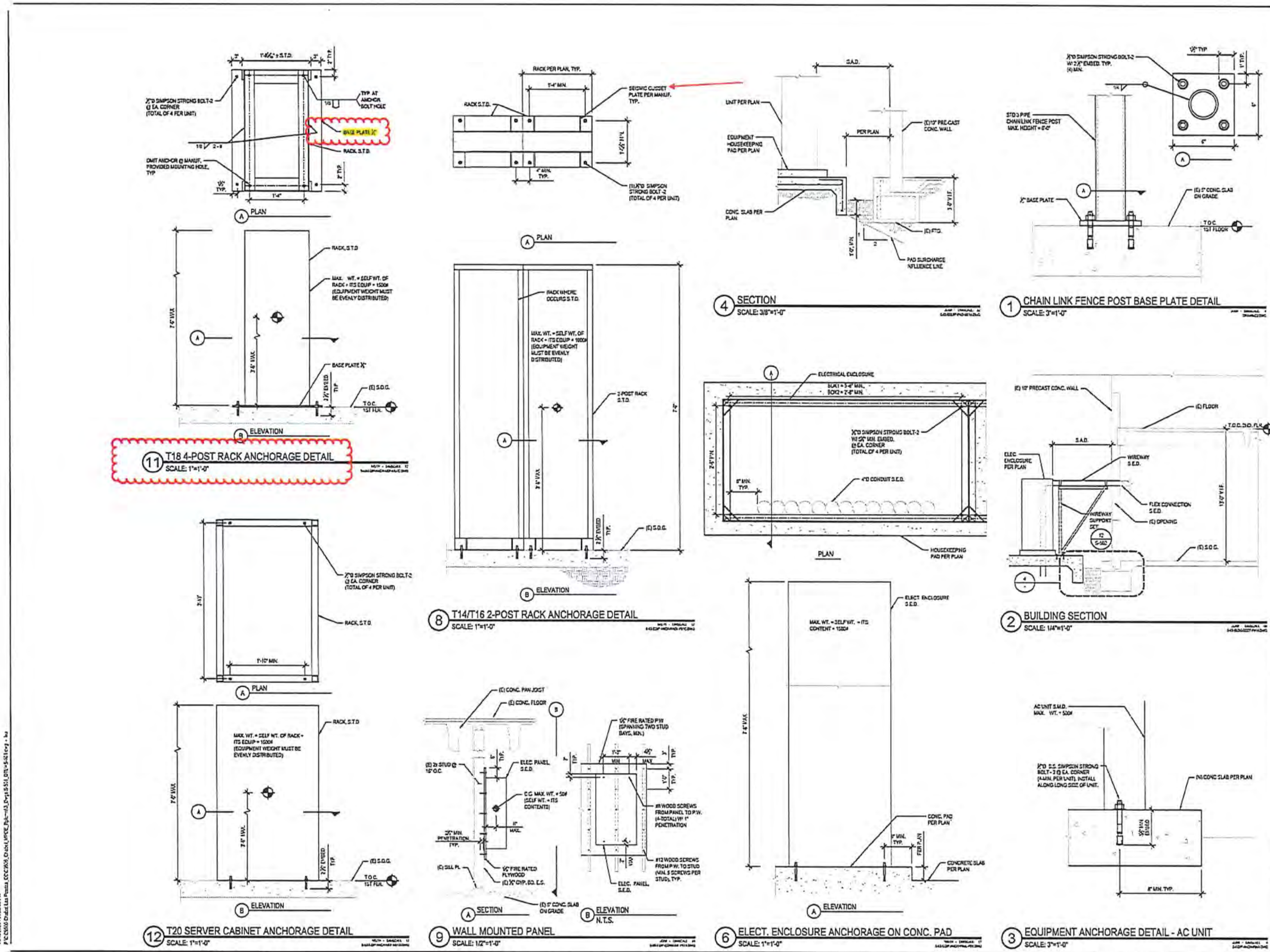
NEW MPOE AT CHABOT CAMPUS BLDG. 300

25555 Hesperian Blvd
Hayward, CA 94545
VOLUME 1

ENLARGED ROOM PLAN - MPOE

DRAWN BY: JA
CHECKED BY:
DATE: 11/07/2019
PROJECT NO:
SHEET NO:

T-400



ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

ISSUE: 3/16/2020 - BID SET, NOT FOR CONSTRUCTION

KEY PLAN:

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

EQUIPMENT ANCHORAGE DETAILS

DRAWN BY: marquez | CHECKED BY: grg
DATE: 11/7/2019 | PROJECT NO: C9C
SHEET NO:

S-501

SASCO

RFI # 03 Sup #01

Sasco
598 Gibraltar Drive
Milpitas, CA 95035

Project: Chabot MPOE Repl
Address: 25555 Hesperian Blvd
Hayward, CA 94545

Date:	**August 5, 2020**		
Submitted To:	**BECI Electric** **8108 Capwell Dr** **Oakland, CA 94621**		
Contact Person:	**Chad Dillashaw**		
Phone/Email:	209-559-5689		
Respond By:	**August 3, 2020**	**Direct Response To:**	**Mike Cimino**
Reference:	**Drawing T-400 Detail 2 & S-501**	**Cost Impact:**	No
Originator:	Mike Cimino - Sasco	**Schedule Impact:**	No
Subject:	T18 4-Post Rack Base Plates		

Statement:

Additionally please see attached maximum weight to be in a T-18 Rack.

Question:

Are these "Base Plates" requires on T18 4-post racks now that the "Max" weight has been determined?

Proposed Solution:

"Base Plates" are not required.

4-Aug

Bid No. 19/20-17
Change Order #01
PCO 09

TYPICAL MAXIMUM WEIGHT FOR A DAS 5G DEPLOYMENT RACK

QTY	MAN	DESCRIPTION	RU	WEIGHT EACH	TOTAL WEIGHT
2	GE	Infinity NES Flex DIN 4U Power System #NE075AC48ATEZ Infinity Rectifier	4U	94.0	188.0
1	TRIMM	747 Series Fuse Panel #7479104001	2U	5.0	5.0
1	Nokia	7705 SAR-8 (8-Slot Router)	4U	16.0	16.0
1	Ericsson	Ericsson Baseband 6630 KDU137848/11	1U	14.6	14.6
1	Ciena	3930 Service Delivery Switch	1U	11.0	11.0
2	GPS Antenna	NCD 901 56/1	1U	5.0	10.0
12	Ericsson	2203 Radios		9.9	118.8
1	Cisco	ASR 901 Router	1U		
1		Misc Hardware		40.0	40.0
				TOTAL WEIGHT	**403.39**

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TOTAL WEIGHT IS 15LBS + .5LBS + 78LBS = 94 LBS
(Pages 2, 7 & 8)

GE
Critical Power

Infinity S-Flex DIN Power System

48V DC Power System

Overview

The Infinity S-FLEX DIN Rail DC power system is a modular power plant that supports -48V operation through the use of a comprehensive range of advanced rectifiers. The Infinity S-Flex Power System can support an output capacity up to 27kW and be equipped with one or two distribution heads.

Shelf / Bay Options

Infinity S-Flex DIN Rail systems may be equipped in a 7ft 19" or 23" relay rack; a half height rack for mounting on battery stands; indoor or outdoor power cabinets; or mounting rails for field install applications. Each distribution module is 3U (133mm) tall and accommodates up to 26 load DIN breaker positions and up to 8 battery DIN breaker positions. A secondary distribution panel can be added to extend accommodate an additional 30 breaker positions. Universal shelves are 1U tall with three slots that accept any Infinity series rectifier. This allows the available slots to be filled with the mix of power modules desired. The only restriction is whether AC power or solar power is applied to each position. This gives the user the flexibility to provision the system with ECO sourced rectifiers now or in the future.

Infinity Rectifier Family

The Infinity S-Flex DIN Rail system currently supports -48V rectifiers only. For easy module selection, the rectifiers are color coded to quickly identify voltage, module type and input voltage type (AC or Solar). Please see our other Infinity DC power system products for dual voltage applications.

Galaxy Pulsar* Family Controller

The Galaxy Pulsar family controller is used throughout many of the GE DC Power products including GPS, Infinity, CP, CPS and SPS with the only differentiator being the form factor which is scaled to meet the nature of the application. The controller utilizes standard network management protocols allowing for advanced network supervision with secure SNMP communications to deliver extensive monitoring and control features with both local and remote access.

Advantages

- ECO Priority Source* ready
- Multi-voltage power systems with ultimate flexibility
- -48V up to 27kW (500A)
- DIN rail distribution with optional critical load bus
- High availability wireless telecom applications
- Telecom service providers
- Efficiency approaching 97%

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PCO 09

Infinity Recifiers

- Compact – 1RU form factor providing high power density (24 W/in³)
- Plug and Play – installation of the rectifier in a shelf connected to a compatible system controller initializes all set up parameters automatically. No adjustments are needed.
- Extended service life – parallel operation with automatic load sharing ensures that parallel units are not unduly stressed even when a unit fails or is removed.
- Monitoring / control – the built in microprocessor controls and monitors all critical rectifier functions and communicates with the system controller using the built in Galaxy Protocol serial interface.
- Fail safe performance – hot insertion capabilities allow for converter replacement without system shutdown; soft start and inrush current protection prevent nuisance tripping of upstream breakers.

Applications

- Telecommunications Networks
- Digital Subscriber Line (DSL)
- Indoor/Outdoor Wireless
- Routers/Switches
- Fiber in the Loop
- Transmission
- Off-Grid/On-Grid Renewable Energy Sites
- Data Networks
- Distributed Antenna Systems

Key Features

- Extended temperature range
- Redundant fan cooling
- Front panel LED indicators
- 1U height, hi power density
- 220/110V AC input
- Digital load sharing
- Direct solar input (no inverter required)
- Hot pluggable
- RoHS compliant

Specifications

(3) @ 5.05 =15lbs

INPUT	NE050AC48ATEZ / NE050ECO48ATEZ	NE075AC48ATEZ
Voltage Range	95-275Vac	95-305Vac
Input Current	15-12A @100-120Vac 15-12A @ 200-240Vac	15-12A @ 100-120Vac 22-18A @ 200-277Vac
Input Frequency	45 – 66Hz	45 - 66Hz
Power Factor	0.98 @ >50% load	0.98 at>50% load
Efficiency	> 96% (Peak 96.5%)	> 95% (Peak 95.7%)
Total Harmonic Distortion	< 5% @ loads over 50%	<5% @loads over 50%

OUTPUT	2725 WATTS	4085 WATTS
Voltage Adjust Range	42-58Vdc	42-58Vdc
Voltage Nominal	54.5V	54.5V
Regulation (with controller)	±0.5%	±0.5%
Ripple	100mVrms	100mVrms
Output Current - High-Line - Low-Line	 57A @48V 50A @54.5V 22A @54.5V	 85A @48V 75A @54.5V 22A @54.5V
Heat Dissipation @ max out	158W / 539 BTU/hr	249W / 850 BTU/hr

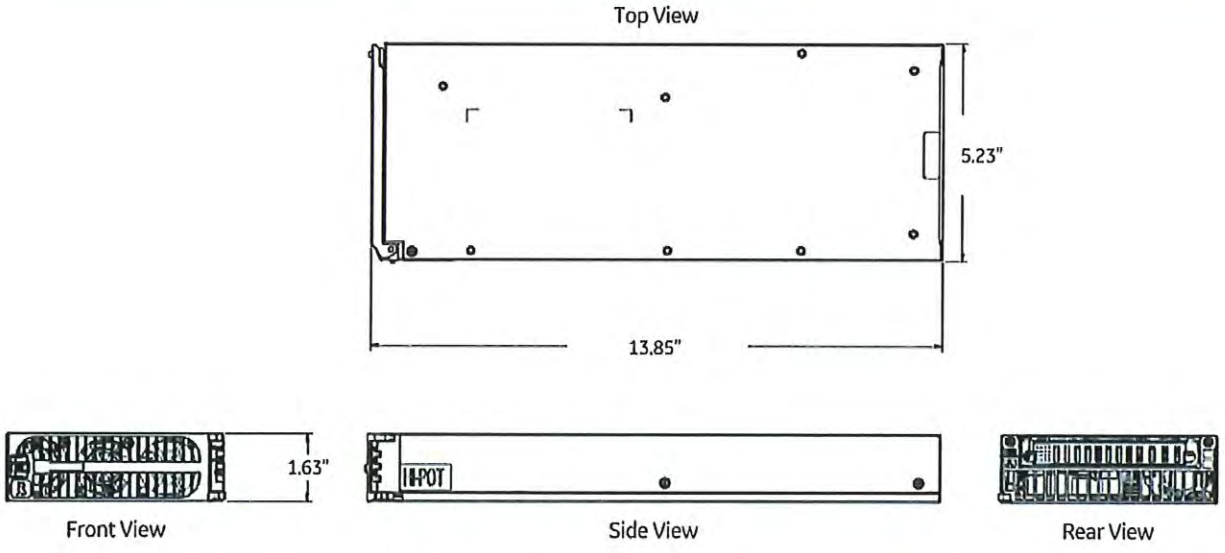
Specifications (Cont.)

ENVIRONMENTAL	
Operating Temperature	-40°C to +75°C (-40°F to 167°F) Full capacity up to 55°C; output derates 2%/°C from 55°C to 75°C
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Humidity	< 95% non-condensing
Altitude	4000M (for altitudes above 2000M, peak operating temperature de-rates 0.656[C /100M; 4000M peak temperature rating is 62[C)

MECHANICAL	
Length (in. /mm)	13.85 / 351.8
Width (in. /mm)	5.23 / 133
Height (in. /mm)	1.63 / 42
Weight (lb / Kg)	5.05 / 2.2 x 3 = 15 lbs

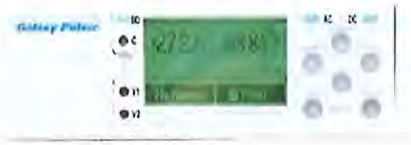
SAFETY AND STANDARDS COMPLIANCE	
NEBs Level 3	Evaluated by independent NRTL test lab to Telcordia GR63, Issue 3 & GR 1089, Issue 5
Safety	CE mark to Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/E (Rectifiers only) UL 60950-1, 2nd Ed. Recognized CSA C22.2 No. 60950-1-03 Certified
RoHS	Compliant to RoHS EU Directive 2002/95/EC; RoHS 6/6 models with Z suffix (RoHS 5/6 all other models)
EMC	European Directive 2004/108/EC; EN55022, Class A; EN55024; FCC, Class A; GR1089-CORE, Issue 5
ESD	EN61000-4-2, Level 4

OUTLINE DRAWING



Bid No. 19/20-17
Change Order #01
PCO 09

Pulsar Plus Controller



The Pulsar Plus family of controllers provides system monitoring and control features for Infinity, CP, and other power systems. These controllers monitor and control system components including rectifiers, converters, and distribution modules via a multi-drop RS485 digital communications bus. System status, parameters, settings, and alarm thresholds can be viewed and configured from the controller's front panel display. Assignment and configuration of alarm inputs and output relays can be performed from a laptop computer connected to a local RS-232 or Ethernet port, or by remote access is through a secure network connection to the World Wide Web (internet) or your enterprise network (intranet). An optional modem is also available.

This controller utilizes standard network management protocols allowing for advanced network supervision. The GE Galaxy Manager* software is the centralized visibility and control component of a comprehensive power management system designed to meet engineering, operations and maintenance needs. The Galaxy Manager client-server architecture enables remote access to system controllers across the power network, featuring ECO Priority advanced monitoring features which provides detailed energy source analysis to help better customize your renewable energy resources.

Applications

- Telecommunications Networks
- Digital Subscriber Line (DSL)
- Indoor/Outdoor Wireless
- Routers/Switches
- Fiber in the Loop
- Transmission
- Off-Grid/On-Grid Renewable Energy Sites
- Data Networks
- PBX

Key Features

Remote Access and Features

- Integrated 10/100Base-T Ethernet Network
  - TCP/IP with IPV6 Capability
  - SNMP V3 for management
  - SMTP for email
  - Telnet for command line interface
  - DHCP for plug-n-play
  - FTPS for rapid backup and upgrades
  - HTTPS for standard web pages and browsers
  - Compatible with Galaxy Manager and other management packages
  - Shielded RJ-45 interface referenced to chassis ground
- Password protected security levels: User, Super-User, Administrator for all access
- Ground-referenced RS232 system port
- ANSI T1.317 command-line interface
- Modem access support
  - Remote via external modem
  - Callback security
- EasyView2, Windows-based GUI software for local terminal or Modem access
- ECO Priority controls and features
  - Advanced generator controls to help minimize fuel consumption for off grid applications
  - ECO Energy Management allowing for non-ECO sources outputs to be minimized while ECO resources are available
  - Source and load trend logging

Standard System Features

- Monitor and control of more than 40 connected devices
  - Robust RS485 system bus
- Standard and user defined alarms
  - Alarm test
  - Assignable alarm severity: Critical, Major, Minor, Warning, and record-only
  - 10 alarm relays (7 user assigned)
- Rectifier management features
  - Automatic rectifier restart
  - Active Rectifier Management ARM (energy efficiency)
  - Remote rectifier (on/off)
  - Reserve Operation
  - Automatic rectifier sequence control
  - N + X redundancy check
- Multiple Low Voltage Load and Low Voltage Battery Disconnect thresholds
- Configuration, statistics, and history
  - All stored in non-volatile memory
  - Remote/local backup and restore of configuration data
- Industry standard defaults
  - Customer specific configurations available
- Remote/local software upgrade
- Basic, busy hour, and trend statistics
- Detailed event history
- User defined events and derived channels

Standard Battery Management Features

- Float/boost mode control
  - Manual boost
  - Manual timed boost locally, T1.317, and remotely initiated
  - Auto boost terminated by time or current
- Battery discharge testing
  - Manual (local/remote)
  - Periodic
  - Plant Battery Test (PBT) input driven

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Change Order #01
PCO 09

Key Features (Cont.)

- Configurable threshold or 20% algorithm
- Graphical discharge data
- Rectifiers on-line during test

- Slope thermal compensation
  - High temperature
  - Low temperature
  - Step temperature
  - STC Enable/Disable, low temperature Enable/Disable
  - Configurable mV/°C slopes

- State of charge indication
- High temperature disconnect setting
- Reserve-time prediction
- Recharge current limit
- Emergency Power-Off input

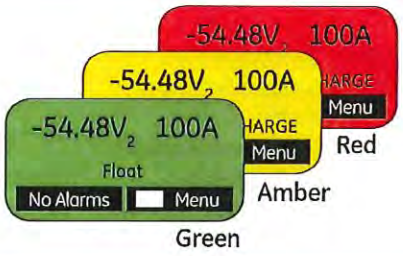
Integrated Monitoring Inputs/Outputs

- System plant voltage (accuracy ±0.5%, resolution 0.01V)
- One system shunt (accuracy ±0.5% full scale, resolution 1A)
  - Battery or load
  - Mounted in the return side of DC bus
- Up to 15 binary inputs
  - 6 inputs close/open to battery
  - 9 input close/open to return
  - User assignable
- Up to 7 Form-C output alarms (60VDC @ .5A)
  - User assignable
- 1-Wire™ bus devices
  - Up to 16 temperature probes (QS873)
  - Up to 6 mid-string monitors (ES771)

Galaxy Manager Compatible

- Centralized web server and database with multiple user access to live or managed data with drill down to problem details
- Monitor and control of more than 40 connected devices
- Management information from polling or alarms received from alarm traps from multiple sites are available on one screen via the inter/intranet
- Trend user selected data over time
- Automatic or manual report generation
- Standard engineering tools like reserve time calculators and cable voltage drop analyzer

Specifications

GENERAL		
Operating Voltage	±24 Vdc, ±48 Vdc (Range: ±18 to ±60 Vdc)	
Input Power	Less than 7W	
Operating Temperature Range	-40°C to +75°C (-40°F to 167°F)	
Operating Relative Humidity	0 - 95% (non-condensing)	
Storage Temperature Range	-40°C to +85°C (-40°F to 185°F)	
Physical Specifications	Sizes vary by packaging option	
Display	8-line by 40-character with alarm context sensitive backlit LCD	

SAFETY AND STANDARDS COMPLIANCE	
NEBs	Evaluated by independent NRTL test lab to Telcordia GR63, Issue 3 and GR1089-CORE, Issue 5
Safety	CSA C22.2 No. 60950-1-03 Certified for Canada and U.S.; UL60950-1 1st Ed.
RoHS	Compliant to RoHS EU Directive 2002/95/EC RoHS 5/6
EMC	European Directive 2004/108/EC; EN55022, Class A, EN55024; FCC, Class A; GR1089-CORE, Issue 5

AGENCY CERTIFICATIONS	
NEBs Level 3	Evaluated by independent NRTL test lab to Telcordia GR63, Issue 3 and GR1089-CORE, Issue 5
EMC	European Directive 2004/108/EC; EN55022, (CISPR22) Class A, EN55024 (CISPR24)
Safety	Underwriters Laboratories (UL) Listed per Subject Letter 1801: Power Distribution Center for (CSA 22.2 950): Safety of Information Technology Equipment

Bid No. 19/20-17
Change Order #01
PCO 09

Pulsar Edge Controller

The SPS Pulsar Edge controller delivers large system intelligence in a small system form factor. This family of controllers functionsas network interface cards (NIC) and as a full-featured battery plant controller. Its thin modular plug-in form factor minimizes shelf space consumption allowing maximum power module and distribution capabilities.

The controller is utilized in bulk power applications in data centers and enterprise applications. Ethernet connectivity with SNMP V3 facilitates secure remote network management. Access through its front-accessible RS232 or USB port and aided by the EasyView2 graphical enables full user interface locally. Optional 1U display version allows convenient access to all controller functions without requiring external cable connections. The display also features alarm context sensitive backlighting for at-a-glance system status.

As a battery plant controller, it provides a complete set of features to monitor and control rectifiers, batteries, and distribution. A flexible set of configurable inputs allow the Pulsar Edge controller to monitor a wide variety of system equipment and incorporate appropriate state information enabling a centralized point of management . The controller utilizes standard network management protocols allowing for advanced network supervision. GE Galaxy Manager* software is the centralized visibility and control component of a comprehensive power management system designed to meet engineering, operations and maintenance needs. The Galaxy Manager client-server architecture enables remote access to system controllers across the power network.

Applications

- Telecommunications Networks
- Digital Subscriber Line (DSL)
- Indoor/Outdoor Wireless
- Routers/Switches
- Fiber in the Loop
- Transmission
- Data Networks
- PBX

Key Features

Remote Access and Features

- Integrated 10/100Base-T Ethernet Network
  - TCP/IP with IPV6 Support
  - SNMP V3 for management
  - SMTP for email
  - Telnet for command line interface
  - DHCP for plug-n-play
  - FTPS for rapid backup and upgrades
  - HTTPS for standard web pages and browsers
  - Compatible with Galaxy Manager and other management packages
  - Shielded RJ-45 interface referenced to chassis ground
- Password protected security levels: User, Super-User, Administrator for all access
- Ground-referenced RS232 system port
- ANSI T1.317 command-line interface
- Modem access support
  - Remote via external modem
  - Callback security
- EasyView2, Windows-based GUI software for local terminal or Modem access
- Optional 1U display with alarm indicating backlight feature

Standard System Features

- Monitor and control of more than 40 connected devices
  - Maximum of 32 rectifiers
  - Maximum of 6 distribution control cards
  - Robust RS485 system bus
- Standard and user defined alarms
  - Alarm test
  - Assignable alarm severity: Critical, Major, Minor, Warning, and record-only
- Rectifier management features
  - Automatic rectifier restart
  - Adaptive Rectifier Management (energy efficiency)
  - Remote rectifier (on/off)
  - Reserve Operation
  - Automatic rectifier sequence control
  - N + X redundancy check
- Multiple Low Voltage Load and Low Voltage Battery Disconnect thresholds (4)
- Configuration, statistics, and history
  - All stored in non-volatile memory
  - Remote/local backup and restore of configuration data
- Industry standard defaults
  - Customer specific configurations available
- Remote/ local software upgrade
- Basic, busy hour, and trend statistics
- Detailed event history
- User defined events and derived channels

Bid No. 19/20-17
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PCO 09

Key Features (Cont.)

Standard Battery Management Features

- Float/boost mode control
  - Manual boost
  - Manual timed boost locally, T1.317, and remotely initiated
  - Auto boost terminated by time or current
- Battery discharge testing
  - Manual (local/remote)
  - Periodic
  - Plant Battery Test (PBT) input driven
  - Configurable threshold or 20% algorithm
  - Graphical discharge data
  - Rectifiers on-line during test
- Slope thermal compensation
  - High temperature
  - Low temperature
  - Step temperature
  - STC Enable/Disable, low temperature Enable/Disable
  - Configurable mV/°C slopes
- State of charge indication
- High temperature disconnect setting
- Reserve-time prediction
- Recharge current limit
- Emergency Power-Off input

Integrated Monitoring Inputs/Outputs

- System plant voltage (accuracy ±0.5%, resolution 0.01V)
- One system shunt (accuracy ±1% full scale, resolution 1A)
  - Battery or load
  - Mounted in the return side of DC bus
- Up to 15 binary inputs
  - 6 inputs close/open to battery
  - 9 input close/open to return (number is dependent upon number of output alarms)
  - User assignable
- Up to 6 user assignable Form-C output alarms (50VDC @.3A)
- 1-Wire™ bus devices
  - Up to 16 temperature probes (QS873)
  - Up to 6 mid-string monitors (ES771)

Galaxy Manager Compatible

- Centralized web server and database with multiple user access to live or managed data with drill down to problem details
- Monitor and control of more than 40 connected devices
- Management information from polling or alarms received from alarm traps from multiple sites are available on one screen via the inter/intranet
- Trend user selected data over time
- Automatic or manual report generation
- Standard engineering tools like reserve time calculators and cable voltage drop analyzer

Specifications

GENERAL	
Operating Voltage	±24 Vdc, ±48 Vdc (Range: ±18 to ±60 Vdc)
Input Power	Less than 7W
Operating Temperature Range	-40°C to +70°C (-40°F to 167°F)
Operating Relative Humidity	0 - 95% (non-condensing)
Storage Temperature Range	-40°C to +85°C (-40°F to 185°F)
Physical Specifications	1.75 in. H, 0.75 in. W, 8.00 in. D; 0.5lb
Display	8-line by 40-character backlit LCD
EMC	FCC/EN55022 Class A, CISPR22 Level A

AGENCY CERTIFICATIONS	
Electrostatic Discharge	EN 61000-4-2 level 4
Radiated Emissions	FCC, Class A; EN 55022, Class A
Safety	UL listed Component as Part of CPL or SPS Power System

Bid No. 19/20-17
Change Order #01
PCO 09

Infinity S-Flex System

Infinity S-Flex can be configured as a -48V voltage power system. Infinity S-Flex is configurable from 150A with a single rectifier shelf and single distribution (22 Load / 8 Battery) up to 500A with four rectifier shelves and two distributions (52 Load / 8 Battery). The system includes optional low voltage battery disconnect, low voltage load disconnect, and low voltage load disconnect with critical load bus for load shedding to maintain critical loads.

Applications

- Wireless Telecom Networks
- Central Office
- Indoor/Outdoor Wireless
- Remote Radio Sites
- Data Networks
- Off-Grid/On-Grid Renewable Energy Sites

Key Features

- Redundant fan cooling
- Front panel LED indicators
- 1U height, hi power density
- 277/220/110 V AC input
- Digital load sharing
- Hot pluggable
- RoHS 6 compliant
- ECO Priority ready

Specifications

INPUT	MIN	TYP	MAX
Voltage Range - High-Line - Low-Line	 175Vac 85Vac	 220Vac 110Vac	 305Vac 140Vac
Frequency	45Hz	60Hz	66Hz
Power Factor	98%	99.5%	
Total Harmonic Distortion	5%		

PRIMARY OUTPUT	
Nominal Voltage	-48Vdc
Output (Power/Current)	500A / 27kW
Vo Setpoint (Factory)	-54.5Vdc±1%
Vo Range	-42Vdc to -58Vdc
Regulation	±0.5%

MECHANICAL	
Height (in. /mm)	17.5 / 445 (Full system with 4 power shelves) 7 / 178 (Basic system with single distribution and one rectifier shelf)
Width (in. /mm)	19 / 484 (System Only) 23 / 584 (Mounted in Frame)
Depth (in. /mm)	16.75 / 425 (No AC Cover) 18.75 / 476 (With AC Cover)
Weight (lb / Kg)	78 / 35 (Base System with 4 power shelves) 190 / 86 (Base System in zone 4 7ft frame)

Bid No. 19/20-17
Change Order #01
PCO 09

Specifications (Cont.)

ENVIRONMENTAL	
Operating Temperature	-40°C to +75°C (-40°F to 167 °F)
Storage Temperature	-40°C to +85°C (-40°F to 185 °F)
Relative Humidity	95% max, non-condensing
Altitude	4000M (for altitudes above 2000M, peak operating temperature de-rates 0.656| C /100M; 4000M peak temperature rating is 62| C)

SAFETY AND STANDARDS COMPLIANCE	
NEBs	Evaluated by independent NRTL test lab to Telcordia GR63, Issue 3 and GR1089-CORE, Issue 5
Safety	CSA C22.2 No. 60950-1-03 Certified for Canada and U.S.; UL60950-1 1st Ed.
RoHS	Compliant to RoHS EU Directive 2002/95/EC RoHS 5/6
EMC	European Directive 2004/108/EC; EN55022, Class A; EN55024; FCC, Class A; GR1089-CORE, Issue 5

AGENCY CERTIFICATIONS	
CSA	CSA C22.2 No 60950-1-03 and UL 60950-1 1st Ed
EMI/EMC	European Directive 2004/108/EC; EN55022 (CISPR22) Class A; EN55024 (CISPR24)
NEBS LEVEL 3	GR1089-CORE, Issue 5

Bid No. 19/20-17
Change Order #01
PCO 09

ERICSSON

RADIO 2203

The micro Radio 2203 is part of the Ericsson Radio System portfolio. Radio 2203 has best in class design, superior radio performance and power efficiency when it comes to medium range 3GPP radio products.

Radio 2203 has, by use of its small and smart dimensions, support for a wide range of mounting scenarios and has a pioneering flexibility within its product segment. With the Radio 2203, Ericsson evolves the micro radio portfolio to become even more flexible thus making it easier than ever to make small and efficient single and multi-band micro radio installations.

The Radio 2203 support installations with integrated or external antenna systems and can by use of the versatile optical CPRI interface be connected to any of the efficient Ericsson Baseband WCDMA or LTE modules by use of star or cascade configurations supporting multi sector and multi band.

Radio 2203 support WCDMA and LTE with two duplex TX/RX branches. The Radio 2203 support up to 4 WCDMA carriers or 40 MHz LTE as well as WCDMA and LTE mixed mode configurations.

Bid No. 19/20-17
Change Order #01
PCO 09

On the right side you see a picture of the Radio 2203 mounted on a lamp pole. The picture beside it shows the back part of the Radio 2203, the support system in which the wall mount and pole mount are integrated.

Technical Specifications Radio 2203

FREQUENCY BANDS

Bands:	3GPP Bands B1 (W/L), B3 (L), B3C (W/L), B8 (W/L), B66A (W/L), B5 (W/L), B2/B25 (W/L), B12 (L), B13 (L) and B7 (L)

HW CAPACITY

Carrier capacity WCDMA:	Up to 4 carriers
Carrier capacity LTE:	Up to 40 MHz
IBW:	B1, B3 and B66A 45 MHz. B2/B25 and B7 40 MHz. B3C, B8, B5, B12 and B13 Full band
MIMO:	Yes, 2T/2R
Output power:	Up to 2 x 5 W

INTERFACE SPECIFICATIONS

Antenna Ports:	2 x 4.3-10 (f)
CPRI:	2 x 2.5/5/10 Gbps (exchangeable SFP modules)
Optical indicators	6
External alarms	2
Field ground	1

MECHANICAL SPECIFICATIONS

W x H x D:	200 mm x 200 mm x 100 mm, including mounting bracket and esthetic front cover
Weight:	< 4.5 kg = 9.9lbs
Volume:	4 l
Mounting:	Wall and pole mount

ELECTRICAL SPECIFCATIONS

Power Supply:	-48 VDC or 100 - 250 VAC

ENVIRONMENTAL SPECIFICATIONS

Normal operating temp.:	-40 °C to +55 °C (cold start at -40 °C)
Relative Humidity	5 - 100%
Environment:	Outdoor class with IP65

Bid No. 19/20-17
Change Order #01
PCO 09

Telefonaktiebolaget LM Ericsson
SE-126 25 Stockholm, Sweden
Telephone +46 8 719 0000
www.ericsson.com

DSA 140

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☐)

Deferred Submittal	Addendum Number:	Revision Number:	CCD Number: 001	Category A ☑ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Chabot Las Potias Community College District	DSA File Number: 1 C2
Project Name/School: CHABOT MPOE Replacement	DSA Application Number 01 118445

3. APPLICANT INFORMATION:

Date Submitted: 08/18/20	Attached Pages? No ☐ Yes ☑ Number of pages? 2		
Firm Name: ATI Archtiects and Engineers	Contact Name: Donna Foster		
Work Email: 925-648-8800	Work Phone: (925) 648-8980		
Firm Address: ATI Architectss and Engineers	City: Pleasenton	State: CA	Zip Code: 94588

4. REASON FOR SUBMITTAL: (Check applicable boxes)

For revision or addendum prior to construction.	✓ For a project currently under construction.
For a project that has a form *DSA 301-N: Notification of Requirement for Certification*, *DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.	
To obtain DSA approval of an existing uncertified building or buildings.	
For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).	

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Luke Shira

Professional License Number: C31985 | Discipline: Architecture

Design Professional In General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: _____

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals*, and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

The district decided to reduce the T18 rack capacity to 600 lbs and eliminate the base plate for the T18 rack anchorage.
The rack anchorage design was revised. T18 rack anchorage detail is modified per attached SKS-1 (Detail 11S-501).

List of DSA-approved drawings affected by this post-approval document:

DETAIL 11/S-501

DSA USE ONLY

SSS SA Date 8/21/2020 (Approved) Disapproved Not Required

Comments: _____

FLS _____ Date _____ Approved Disapproved (Not Required)

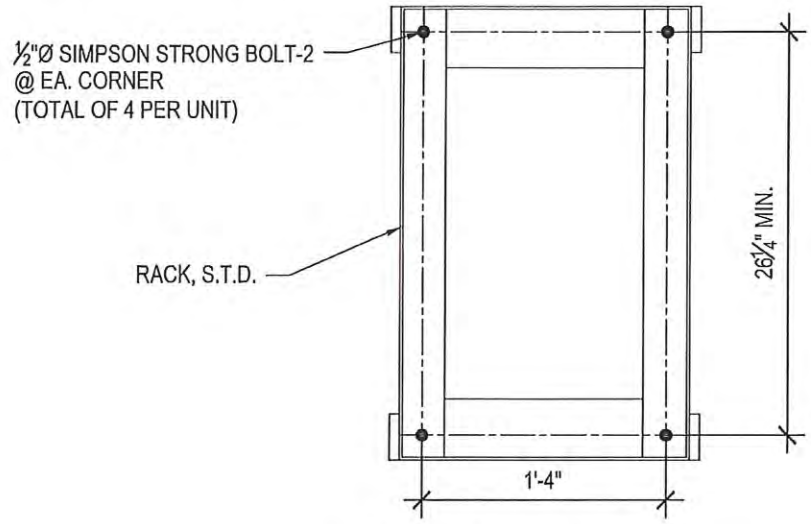
Comments: _____

ACS _____ Date _____ Approved Disapproved (Not Required)

Comments: _____

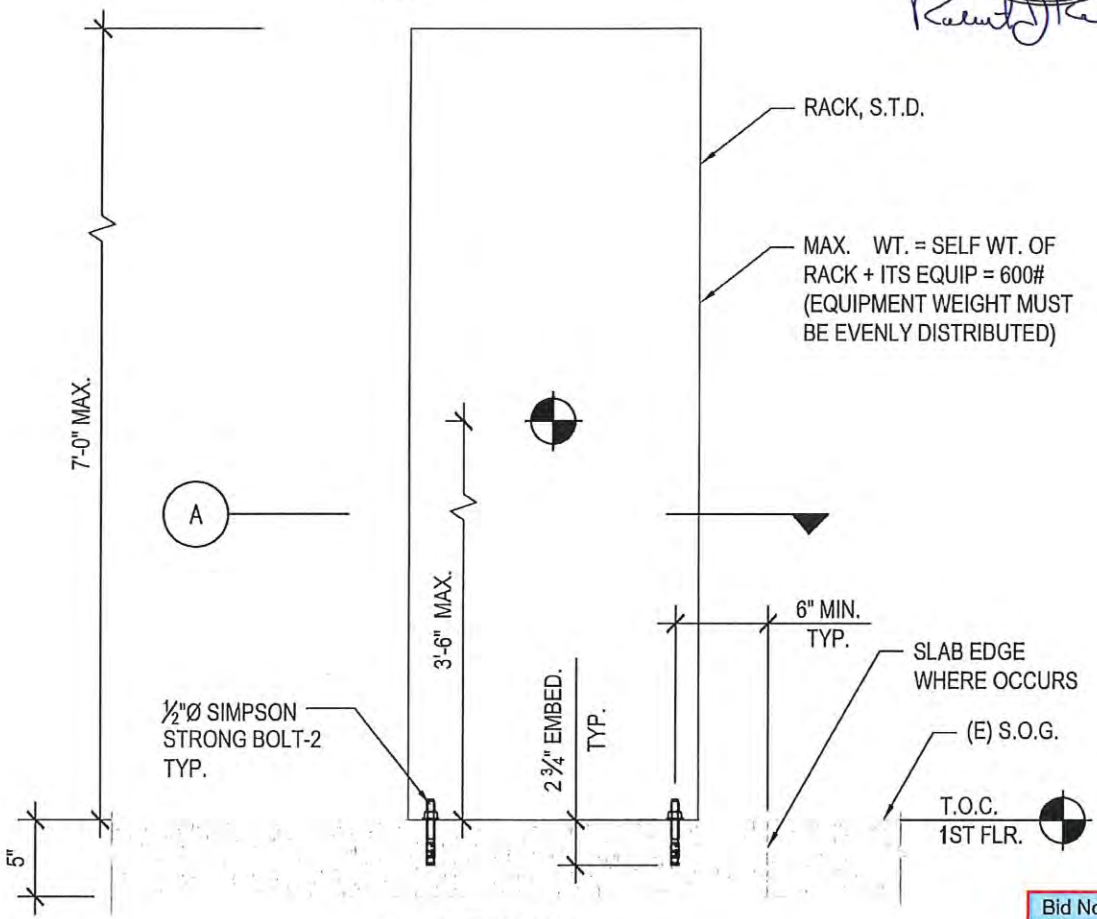
Returned	DSA STAMP
Date:	
By:	

Bid No. 19/20-17
Change Order #01
PCO 09



A PLAN

REGISTERED PROFESSIONAL ENGINEER
ROBERT J. RIEGEL
SE 2677
12/31/2020
RENEWAL DATE
STRUCTURAL
STATE OF CALIFORNIA



B ELEVATION

Bid No. 19/20-17
Change Order #01
PCO 09

ATI ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY
4750 WILLOW RD. #250
PLEASANTON, CA 94588
TEL. 925.648.8800

CHABOT COLLEGE - MPOE REPLACEMENT
25555 HESPERIAN BLVD., HAYWARD, CA 94545

SHEET TITLE: T18 4-POST RACK ANCHORAGE DETAIL

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

SKETCH NO.	SKS-001
REF. SHT. NO.	11/S-501
PROJECT NO.	C9506
DATE:	08/13/20

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 10/14/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Revised Fire sprinkler Route per RFI #36/CCD2 Rev. 1
PCO#: 10R1

Dear Peter,

Below is the cost to update the fire sprinkler design to accommodate movement of pre-action cabinet and revised route per RFI response #36. This includes addition of six (6) additional sprinklers to MPOE Room, credit for 150ft of main piping, rerouting of 78ft of 1-1/4" piping. Update to sprinkler design to accommodate movement of pre-action cabinet; hydraulic calculations, bracing calculations and submittal preperation. Proposal includes scanning and coring of exterior wall for new drain line.

DESCRIPTION	Material	Labor	Sub	Total Cost
CWS				
Scan/Core Exterior Wall X1; 2"	$ -	$ -	$ 600	$ 600.00
Walschon Fire Protection				
RFI 36 Revised Fire Sprinkler Route	$ -	$ -	$ (2,064)	$ (2,064)
SUBTOTAL				**$ (1,464)**
Markup - Subcontractor - 5%				$ (73.18)
Insurance - 1%				$ (15)
Bonds - 1.5%				$ (22)
TOTAL COST				**$ (1,573)**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.10.14 14:34:22-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 10R1

Walschon Fire Protection, Inc.

2178 Rheem Dr. Suite A, Pleasanton, CA 94588 Phone: 650-594-1588 Fax: 650-594-1613 License # 568438- C16

PROPOSED ESTIMATE

JOB NAME: Chabot College, MPOE Room	JOB #	200358	DATE: 9/29/2020
GC: Rodan Builders	PCO #	2	

DESCRIPTION: Add (6) additional sprinklers to MPOE Room. Credit for 150ft of Main piping. Reroute 78ft of 1-1/4" piping. Update Sprinkler Design to accommodate movement of Pre-Action Cabinet; Hydraulic Calculations, Bracing Calculations and Preparing Submittals

Labor Rate $0.00

TAKE OFF QUANTITY	DESCRIPTION	UOM	PRICE	LABOR UNIT	LABOR HOURS	LABOR EXTENSION	MATERIAL EXTENSION	EQUIPMENT EXTENSION
6	TYC TY-B 1/2 K5.6 155F BR UPSR TY315	EA	$13.44	0	0.00	$0.00	$80.64	$0.00
60	PIPE 1 X 10'6 S40 PE BLK DOM	FT	$1.00	0	0.00	$0.00	$60.00	$0.00
78	PIPE 1-1/4 X 21' S40 PE BLK DDOM	FT	$7.11	0	0.00	$0.00	$554.58	$0.00
150	PIPE 2-1/2 X 21' S10 RG BLK DDOM	FT	$3.93	0	0.00	$0.00	-$589.50	$0.00
9	TYC 577 RIGID CPLG PTD 1-1/4W/P-LUBE EPDM/	EA	$19.20	0.07	0.63	$0.00	$172.80	$0.00

DESCRIPTION	UOM	RATE	# HRS	LABOR EXT	MATERIAL	EQUIPMENT
Labor	HR	$131.28	16	$2,100.48	$0	$255.36
Design / Egineering / Coordination	HR	$86.00	16	$1,376.00	$0	$0.00
				$3,476.48	$278.52	$255.36

TOTAL DIRECT COSTS		$ 4,010.36
OVERHEAD AND PROFIT MARKUP	15%	$ 601.55
TOTAL COST FOR ALL CHANGES		$ 4,611.91
PREVIOUS APPROVED CO1		$ 6,675.41
DEDUCTIVE CHANGE ORDER AMOUNT		$ (2,063.50)

PRICING VALID FOR THIRTY (30) DAYS. SUBJECT TO CHANGE PRIOR TO ACCEPTANCE.

By signing below, you acknowledge that the above described work shall modify the terms and conditions of the contract and that you are directing Walschon Fire Protection, Inc. to proceed with the work as described above.

You further agree to issue a valid change order within 10 working days of the completion of the above described work. In the absence of a valid change order being issued, you acknowledge that the total cost of this change will be added to the next billing cycle as a valid claim.

Authorized Signature _____ Date _____

Bid No. 19/20-17
Change Order #01
PCO 10R1

Core Drilling - Wall Sawing
Center Wall Seismic Drilling
Wet or Dry
Slab Sawing
Wire Sawing
Special Demo and Removal

PO Box 2419, San Leandro, CA 94577
(510) 483-8440 (510) 278-8822 (FAX)

800-CWS-8440
Concrete Wall Sawing Company, Inc.
C.L. # 253173

PROPOSAL

80604

10/05/20 0

Customer Information

RODAN BUILDERS INC.
3486 INVESTMENT BLVD.
SUITE B
HAYWARD ,CA 94545
(650) 508-1700 **Fax:** **(650) 508-1705**

Job Information

Ordered By: Keith Reynolds
Estimated Hours: 0.00 **$** 600.00
PO #:
Date of Proposal: 10/05/20
Estimator: JIM

Job Site Information

Job Address:

Chabot College
25555 Hesperian Blvd.

Hayward, CA
(650) 867-0103 (C)

Map Code:

Jobsite: None **Foreman:**

Elevation: 0 ft. **Distance To Site:** 0

Needed At Site

Water on Site

Details

Quantity	Description	Unit	Price

Gpr Scanning + Core Drilling
1ea. 2" x 8" exterior concrete wall
- quote based on 1 move on + straight time work
- exclusions: layout, soft demo, patching, scaffolding or working platforms, re-drills, protection of existing surfaces, barricades, overtime, stand by time
- please note additional conditions + exclusions at the bottom of this proposal

Directions

EXCLUSIONS: Layouts, permits, patching, shoring, soft demo, excavation, all liability for any damage to concealed objects within the cutting, drilling, demolition or excavation depths requested, water or dust barriers, protection of existing surfaces, hazardous materials, stand-by-time, barricades, traffic control, water control, scaffolding or working platforms, core catching, re-drills, lane closures.
Any damage claim made, without exception, must be reported to our office within 48 hours after the damage was done and CWS reserves the exclusive right to inspect, repair or sublet repairs prior to accepting any back charges.
Any steel encountered in excess of #5 rebar both ways on 12" centers will result in additional charges.
Data obtained during radar scanning (GPR) can be inconclusive or inaccurate due to many factors such as vertical obstructions, too many metallic targets, targets that are too close together, radio interference, moisture content or concrete that is not fully cured.
CWS cannot guarantee that there are not any targets in the areas that are not marked out.
All insurance premiums have been paid for in advance; no credits will be provided for CCIP/OCIP participation.
Our liability and responsibility shall be limited strictly and solely to acts of omissions of our direct employees, anything in any pur order or contract notwithstanding.

Bid No. 19/20-17
Change Order #01
PCO 10R1

DSA **140**

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☐)

Deferred Submittal ☐	Addendum Number:	Revision Number:	CCD Number: 2	Category A ☑ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Chabot Las Positas Community College	DSA File Number: 1 C2
Project Name/School: Chabot College MPOE Replacement	DSA Application Number 01 118445

3. APPLICANT INFORMATION:

Date Submitted: 09/25/20	Attached Pages? No ☑ Yes ☐ Number of pages? 2		
Firm Name: ATI Architects & Engineers	Contact Name: Donna Foster		
Work Email: dfoster@atiae.com	Work Phone: (925) 648-8800		
Firm Address: 4750 Willow Road Suite 250	City: Pleasanton	State: CA	Zip Code: 94588

4. REASON FOR SUBMITTAL: (Check applicable boxes)

☐ For revision or addendum prior to construction.

☑ For a project currently under construction.

☐ For a project that has a form *DSA 301-N: Notification of Requirement for Certification*, *DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.

☐ To obtain DSA approval of an existing uncertified building or buildings.

☐ For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Anna Win

Professional License Number: C23260 | Discipline: Architecture

Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: Anna Win

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX ☐ to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals*, and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

Relocation of pre-action fire system cabinet and fire sprinkler lines

List of DSA-approved drawings affected by this post-approval document:

FP2.1

DSA USE ONLY

SSS SA Date 9/30/2020 ☐Approved ☐Disapproved ☐Not Required

Comments:

FLS RCadotte Date 9/30/2020 ☒Approved ☐Disapproved ☐Not Required

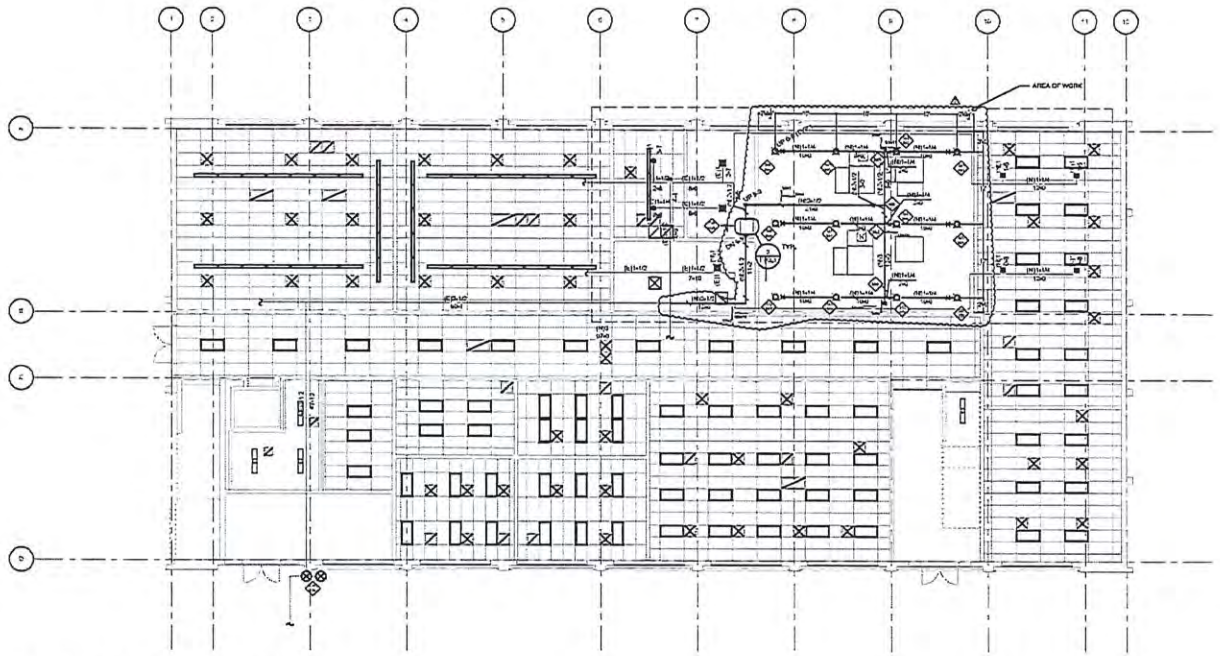
Comments:

ACS Date ☐Approved ☐Disapproved ☐Not Required

Comments:

Returned	DSA STAMP
Date:	APPROVED DIV. OF THE STATE ARCHITECT APP: 01-118445 INC: REVIEWED FOR SS ☑ FLS ☑ ACS ☐ DATE: 09/30/2020
By:	

Bid No. 19/20-17
Change Order #01
PCO 10R1



1 FLOOR PLAN - FIRE PROTECTION

1/8" = 1'-0"

Bid No. 19/20-17
Change Order #01
PCO 10R1

ATI ARCHITECTS ENGINEERS

INTERFACE ENGINEERING

CHABOT COLLEGE

NEW MPOE AT CHABOT CAMPUS BLDG. 300

25555 Hesperian Blvd
Hayward, CA 94545

FLOOR PLAN - FIRE PROTECTION

FP2.1

RFI 0036 - Fire Sprinkler Routing

Status: Sent to reviewer

Due Date: Sep 17, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Sep 2, 2020 at 3:24 PM PDT

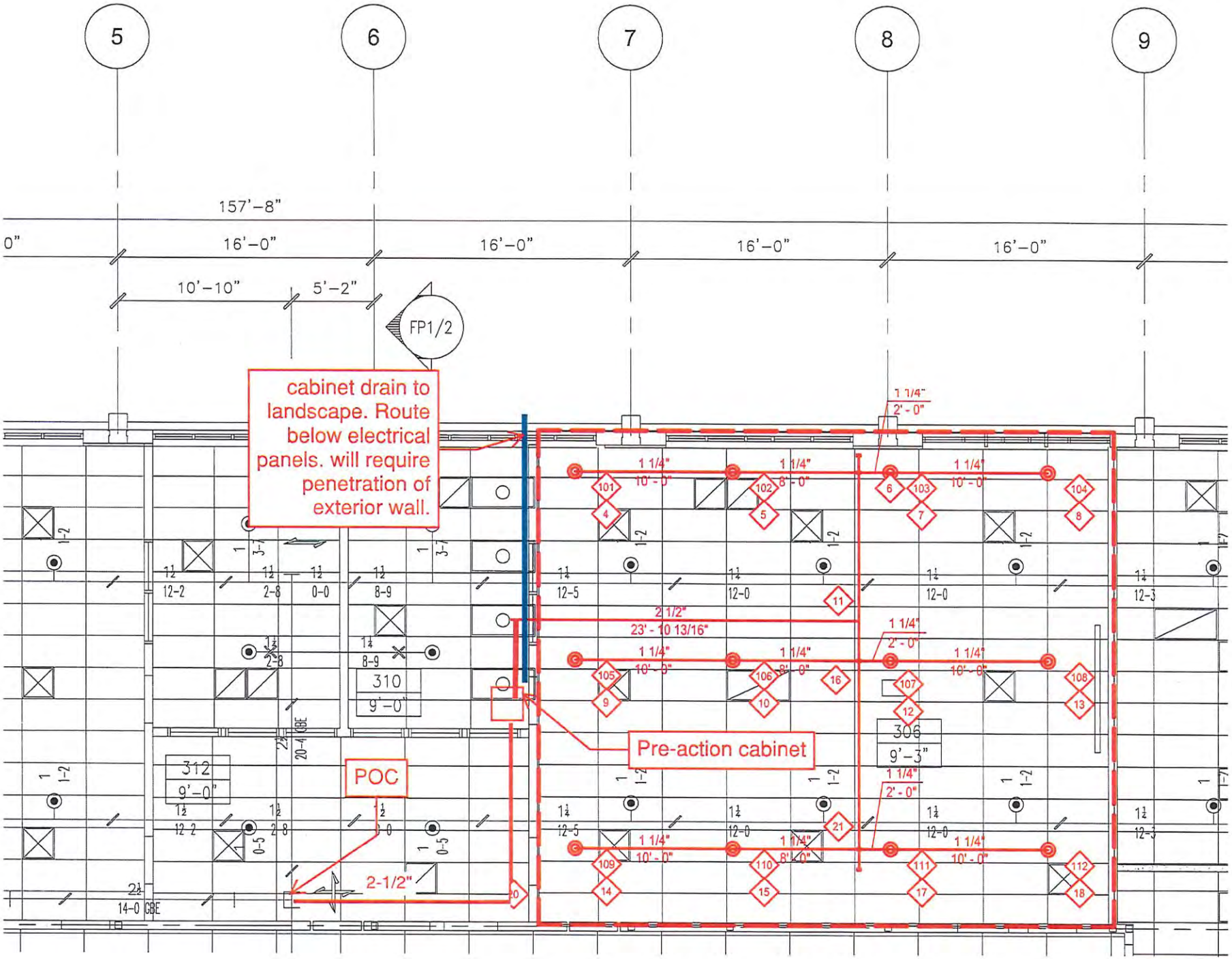
After inspecting above the main corridor ceiling it was noticed that the fire sprinkler line can not be routed through the main corridor as per design. This is due to many obstructions by existing MEP systems. Attached is a mark-up showing conditions above ceiling in the main corridor and in potential new route areas. Also in the mark-up we provide possible alternative routs for the new fire sprinkler system. We request an onsite meeting with the EOR to collaborate on an alternative route. Please advise.

RFI_36_RBI_Fire Sprinkler Routing.pdf (See page 2)

The option accepted by the district is to locate the cabinet in the UPS room. See the attached sketch for the location. The pre-action cabinet can be connected to the existing 2-1/2" sprinkler line, no separate riser and main required. A CCD will be provided showing layout matching the sketch.

Jared Doescher, PE
Ethan Brown
IEI 9/21/20

Bid No. 19/20-17
Change Order #01
PCO 10R1



Bid No. 19/20-17
Change Order #01
PCO 10R1

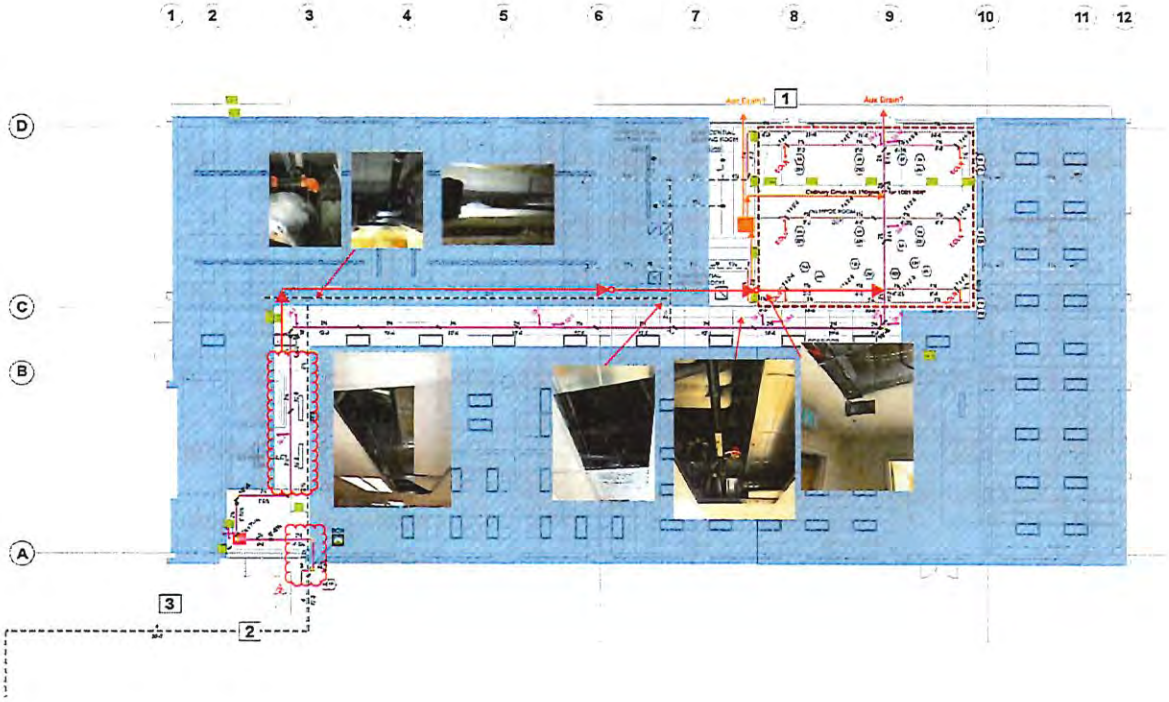
Potential new route

Potential preaction cabinet reloactation

NOTES:

1. (N) 1-1/4" PIPE TIED INTO (E) WET SPRINKLER SYSTEM
2. (N) 2-1/2" PIPE FROM PRE-ACTION SPRINKLER SYSTEM TIED INTO (E) MANIFOLD
3. (N) PRE-ACTION CABINET

Hydraulic Information	
OCCUPANCY CLASSIFICATION	Ordinary Group I
DENSITY (gpm/ft²)	0.15 for 1500.00ft² (Actual 1061.66ft²)
TOTAL HOSE STREAMS	250.00
DRY CAPACITY	59.50gal
TOTAL HEADS FLOWING	12
K-FACTOR	5.6
TOTAL WATER REQUIRED	490.32
TOTAL PRESSURE REQUIRED	66.207
BASE of RISER (gpm)	240.32
BASE of RISER (psi)	59.462
SAFETY MARGIN (psi)	+27.337 (29.2%)



1 NEW RCP AND PIPING PLAN - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

Coordination Sign-off		
Contractor	Signature	Date
Mechanical		
Electrical		
Plumbing		

North & Scale: 0 4' 8' 16'

Sprinkler Head Information											
	Brand / S/N #	Model	Symbol	Type	Side	Temperature	K	Finish	Escutcheon	Quantity
(E) SSP				OR	1/2"	155 deg F	5.6			
(E) SSU				OR	1/2"	155 deg F	5.6			
(E) SSMUP				OR	1/2"	155 deg F	5.6			
(N) SSU	CLOSED/GL-6491	GL-CR		CP	1/2"	155 deg F	5.6	BRASS	NONE	12
									Total Added or Modified	12

SPRINKLER HEAD SYMBOLS

- (E) UPRIGHTS
- (E) PENDENTS
- (N) PENDENT
- (E) PENDENTS (CONCEALED)

Standard Symbols

- Hanger Location
- Lateral Brace
- Longitudinal Brace
- Four Way Brace
- Hydraulic Refs. Points
- End of Line Restraint
- Existing Piping
- New Piping

REVISIONS	DATE
ISSUE FOR PERMIT	7/10/20
RESUBMITTAL	8/11/20
RESUBMITTAL	9/24/20

Walschon Fire Protection, Inc.
2178 RHEEM DRIVE, PLEASANTON, CA 94588
LIC. # C-16 568438
TELEPHONE : (650) 594-15
FAX : (650) 594-1613
E-mail: spnk@walschon.com

Job No.	200308
Date	7/10/20
Designer	CL
Checked	CH
Scale	AS NOTED

MPOE REPLACEMENT BLDG 300
CHABOT COLLEGE
25555 HESPERIAN BLVD., HAYWARD, CA 94545
NEW RCP & PIPING PLAN

FP-1.1

3 of 5

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 10/19/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Revised Location of Clean Agent Tank per ASI 02
PCO#: 11R1

Dear Peter,

Below is the cost to update the clean agent fire suppression design to accommodate movement of the clean agent tank to the revised location per ASI 02. This includes addition of a new 360 degree nozzle, piping, hangers, and bracing to relocate the clean agent tank. Flow calculations and shop drawings will be revised for agent storage cylinder relocation as indicated on ASI 02. Additional fire alarm rough in materials are also included.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
Revised Location of Clean Agent Tank per ASI 02	$ -	$ -	$ 4,427	$ 4,427
SUBTOTAL				**$ 4,427**
Markup - Subcontractor				$ 221
Insurance - 1%				$ 44
Bonds - 1.5%				$ 66
TOTAL COST				**$ 4,759**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.10.19 13:50:59-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 11R1

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 7
Date: 10/5/20
Description: ASI 02

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1	3/4" EMT	30	LF	$ 0.72	$ 21.60
2	3/4" EMT Couplings	4	EA	$ 2.85	$ 11.40
3	3/4" One Hole Strap	3	EA	$ 0.76	$ 2.28
4	3/4" LB	2	EA	$ 5.85	$ 11.70
5	Wood Screws	1	Lot	$ 5.00	$ 5.00
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ 51.98

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1	General Foreman	1	Hr	$ 139.38	$ 139.38
2	Journeyman	4	Hr	$ 117.11	$ 468.44
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ 607.82

Summary:

Materials before tax Subtotal:		$ 51.98
Sales Tax:		$ 4.81
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ 607.82
Materials, Rental Equipment, Labor Subtotal:		$ 664.61
Overhead and Profit (Materials & Equipment)	15%	$ 7.80
Overhead and Profit (Labor)	15%	$ 91.17
Subcontractors Subtotal:		$ 764.00

Item	SubTier Contractors	Quote	
1	Battalion One	$ 3,488.91	
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ 3,488.91
Profit at 5.00%:		$ 174.00
Subtotal:		$ 3,662.91
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ 4,426.91
Total this Page:		$ 4,426.91
Total from Previous Pages		
Proposal Grand Total:		***$ 4,426.91***

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 11R1

RE: MPOE Replacement
Chabot College
25555 Hesperian Blvd Hayward CA
BECI Electric, INC
8108 Capwell Drive
Oakland, CA 94621

10/01/2020
Estimate # SPN100120-CO01

- **Scope of work / Clarifications/ Change Order #01**

  - This change order provides the following in addition to the base scope of work.
    - Revised flow calculations due to clean agent storage cylinder relocation as indicated on F-121
    - Revise shop drawings.
    - Supply one 360-degree nozzle
    - Supply and install additional suppression piping, hangers, and bracing

ITEM	MATERIAL/LABOR	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	360 Degree Nozzle	1	$335.00	$335.00
2	2.5 PIPE SINGLE 10' LENGTH	1	$85.00	$85.00
3	SEISMIC BRACING	2	$50.00	$100.00
4	PIPE FITTINGS	1	$20.00	$20.00
4	PIPE HANGERS	3	$25.00	$75.00
	MATERAL SUBTOTAL			$615.00
1	RECALC SERVICE	1	$235.20	$235.20
2	DESIGN/SHOP DRAWINGS	3	$159.57	$478.71
3	FITTER LABOR	12	$180.00	$2,160.00
	LABOR SUBTOTAL			$2,873.91
	TOTAL			$3,488.91

Total Price Change Order 01 (Price is in addition to Original Quote)	**$3,488.91**
(Three Thousand Four Hundred Eighty Eight Dollars 91/100 cents)	

INITIALS

Bid No. 19/20-17
Change Order #01
PCO 11R1

RE: MPOE Replacement
Chabot College
25555 Hesperian Blvd Hayward CA

10/01/2020
Estimate # SPN100120-CO01

Exclusions:

- Additional time required at submittal and/or repeat trips to the building department due to any issues beyond the scope of this proposal. Permit and fees allowance includes 3 hours for submittal and plan review. Any additional time required to resolve the issues before receiving approval of the AHJ that results in exceeding 3 hours will be billed according to our normal rate schedule and may be subject to overtime and/or double time charges.
- Quality of performance of the specified and/or designed system rests solely with the AHJ and installing contractor. Battalion One Fire Protection holds no liability for whether the protection of the installed and approved system is adequate and assumes no responsibility for loss of property and/or lives within the space due to a fire.
- The discovery of corrosion (microbiological type or otherwise) requires the affected pipe to be flushed and/or replaced. If corrosion is discovered within pipe and/or other system components not already being replaced as part of this project, all parties will be notified promptly. Flushing/repair/replacement will be subject to additional costs.
- California Title 19 requires regular inspection of sprinkler systems to be performed and documented, both on inspection report forms and by the use of certification stickers indicating the type of inspection and date performed (placed when/if the system or systems pass inspection). If the work being performed under this proposal requires a permit, lack of documentation of passing regular inspections may delay the closing of the permit until documentation is provided and/or the necessary inspection(s) performed.
- During the process of performing inspections, repairs and/or modifying fire sprinkler and standpipe systems it may be necessary to flow water for testing, draining and/or refill of the systems(s), and the points where water flows from the system(s) may be located outside, on the roof and/or inside the building. The building owner and/or management is/are responsible for ensuring that any drainage system(s) that will be needed to carry away the water discharged is/are maintained and capable of handling the quantity and flow rate of the water. Battalion One Fire Protection is not responsible for damages and/or losses due to leakage or failure of any drainage system(s) and/or building structures affected by pooling water due to failure of any drainage system(s).
- Any work not specifically included in the project scope
- Fire caulking of any required penetrations through fire-rated assemblies
- Third party inspections or inspection costs
- Capturing and/or treating any water that may be discharged during flushing, draining, etc. if required or requested by the AHJ
- Repair of any leaks, damages and/or faulty equipment found during or caused by the work being performed by Battalion One or any others during the execution of the work outlined in the project scope above.
- Fire Watch
- Acts of God
- Any unforeseen condition in concealed location i.e. behind walls or underground that are above and beyond our scope of originally quoted work
- Fire service water supply and any associated fees
- Backflow preventer reduced pressure principal or otherwise, unless specifically included in the project scope.
- Central station alarm service and associated materials
- Structural calculations of any nature
- Cutting and/or patching of any new or existing structure or finished surfaces required
- Ceiling removal or replacement
- Protection or covering of items located in the workspace
- Repair or repair costs of damages to walls, ceilings, carpeting, fixtures, furniture, etc. due to the customer's neglect of properly protecting these items within the workspace.
- Bonding
- Insulation or heat protection of piping or valves
- Freeze protection of any portion of the system
- Debris container rental or associated fees, unless specifically included in the project scope
- Temporary water or associated fees
- Overtime, holiday, weekend or shift work, unless specifically included in the project scope
- "Time is of the essence" requirements
- Project specification requirements
- Requirements of insurance underwriters

INITIALS

Bid No. 19/20-17
Change Order #01
PCO 11R1

ATI ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	ASI NO.: 02

PROJECT:	Chabot College MPOE Replacement 25555 Hesperian Blvd. Hayward, CA 94545	**DATE:** **ATI PROJECT NO.:**	10/2/2020 C9506
OWNER:	Chabot Las Positas CCD 7600 Dublin Blvd. Dublin, CA 94568	**DSA FILE NO.:** **DSA APP. NO.:**	1-C2 01-118445

[innovative architecture ENGAGING MINDS]

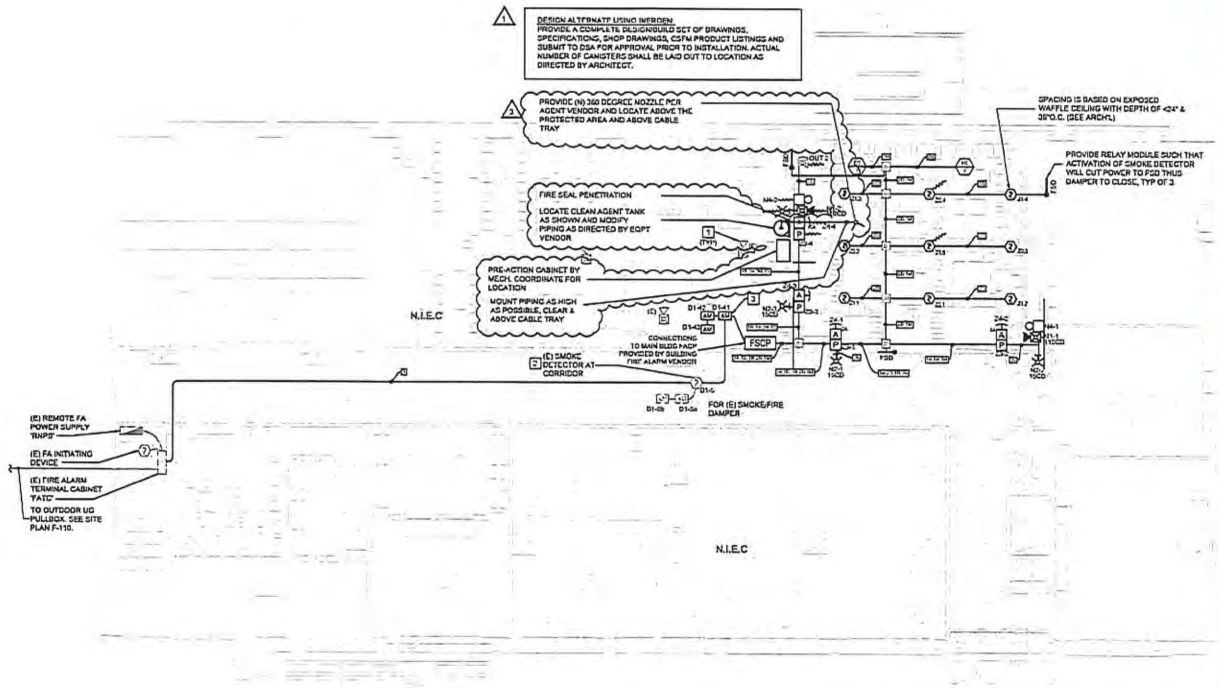
The Work shall be carried out in accordance with the following supplementary instructions issued in accordance with the Contract Documents. If a change in Contract Sum or Contract Time is anticipated, submit a proposal for the work before proceeding with the change. Proposal shall be submitted within 5 days from the date of this document.

DESCRIPTION	REFERENCE
1. Revise location of clean agent tank to UPS Room, modify piping and placement of nozzle as depicted Blg. 300 Fire Alarm Plan. Fire Alarm vendor to provide piping pressure calcs.	Sht. F-121

4750 Willow Road, Suite 250
Pleasanton, CA 94588
T: 925 - 648 - 8800

www.atiae.com

Bid No. 19/20-17
Change Order #01
PCO 11R1



1 LEVEL 1

NFPA 17.7.3.2.4.2 (2):

FOR CEILINGS WITH BEAM DEPTHS EQUAL TO OR GREATER THAN 10 PERCENT OF THE CEILING HEIGHT (0.1 H), THE FOLLOWING SHALL APPLY:

(a) WHERE BEAM SPACING IS EQUAL TO OR GREATER THAN 40 PERCENT OF THE CEILING HEIGHT (0.4 H), SPOT-TYPE DETECTORS SHALL BE LOCATED ON THE CEILING IN EACH BEAM POCKET.

(b) WHERE BEAM SPACING IS LESS THAN 40 PERCENT OF THE CEILING HEIGHT (0.4 H), THE FOLLOWING SHALL BE PERMITTED FOR SPOT DETECTORS:

i. SMOOTH CEILING SPACING IN THE DIRECTION PARALLEL TO THE BEAMS AND AT ONE-HALF SMOOTH CEILING SPACING IN THE DIRECTION PERPENDICULAR TO THE BEAMS.

ii. LOCATION OF DETECTORS EITHER ON THE CEILING OR ON THE BOTTOM OF THE BEAMS.

GENERAL NOTES:

1. INSTALLATION SHALL BE SUPERVISED BY A FIRE ALARM CERTIFIED TECHNICIAN FROM MANUFACTURER OR ITS AUTHORIZED REPRESENTATIVE.
2. EXISTING DEVICES IN ROOMS OTHER THAN SHOWN ARE EXISTING TO REMAIN,UON.
3. UTILIZE (E) TERMINAL CABINET FOR CONNECTION TO BUILDING FA PANEL FOR COMMUNICATION OR MONITORING PURPOSES.
4. FA WIRING SHALL BE IN CONDUIT. SEE SPECS.
5. COORDINATE LOCATION OF DEVICES SUCH THAT NO ADDRESSABLE INITIATING DEVICES IS WITHIN 3' OF AIR DIFFUSER, UON.
6. ALL FA INITIATING DEVICES ARE ADDRESSABLE, TYP, UON.
7. (N) FA EQUIPMENT AND DEVICES SHOWN ARE EXCLUSIVE FOR CLEAN AGENT SYSTEM ONLY, UON. SYSTEM MONITORING FOR ALARM/TROUBLE & SUPERVISORY SHALL BE BY BLDG FIRE ALARM CONTRACTOR. COORDINATE INSTALLATION AS REQUIRED.

KEY NOTES:

1. (E) FA INDICATING DEVICE TO REMAIN, UON.
2. (E) FA INITIATING DEVICE TO REMAIN, UON.
3. ADDRESSABLE MONITOR DEVICES SHALL BE PROVIDED BY BLDG FIRE ALARM CONTRACTOR. SEE GENERAL NOTE 7 ABOVE.

SPACING CRITERIA:

DEPTH OF JOIST/BEAM = 16" (OR 1'-4" TO TOP OF 2ND FLR SLAB FROM BOTTOM OF JOIST BELOW).

JOIST SPACING = 30" O.C.

VERTICAL HEIGHT; FLOOR TO BOTTOM OF BEAM - 11'-4"
FLOOR TO CEILING (SLAB) = 11'-4" + 1'-4" = 12'-8" (OR 152")

(DIRECTION PERPENDICULAR TO THE BEAM) AND MOUNTED AT SOFFIT OF BEAM.

RATIO OF BEAM SPACING WIDTH TO CEILING HEIGHT
1'-4" / 12'-8" = 16" / 152" = 0.105 < 0.4; DEVICE @ BOTTOM OF BEAM

System Current Draw

GF506R Fire Alarm Control Panel

Total Standby: 0.155 A — Total Alarm: 1.566 A

Device	Qty		Draw	Standby	Qty		Draw	Alarm
1. System								
Main Circuit Board	1	x	[illegible]	[illegible]	1	x	[illegible]	[illegible]
2. Annunciators								
GFANN-RLY	1	x	0.01500	0.01500	1	x	[illegible]	[illegible]
3. Resettable Power								
Number of IDC's Used Minus 1	4				4	x	[illegible]	[illegible]
[illegible]	9	x	[illegible]	[illegible]				
4. NAC #1								
P2W1S	2	x	[illegible]	[illegible]	2	x	[illegible]	[illegible]
NAC #1 Totals				[illegible]				[illegible]
5. NAC #2								
Novec 1230 Solenoid	1	x	[illegible]	[illegible]	1	x	[illegible]	[illegible]
NAC #2 Totals				[illegible]				[illegible]
6. NAC #3								
[illegible]	4	x	[illegible]	[illegible]	4	x	[illegible]	[illegible]
NAC #3 Totals				[illegible]				[illegible]
7. NAC #4								
STAD4-8	2	x	[illegible]	[illegible]	2	x	[illegible]	[illegible]
NAC #4 Totals				[illegible]				[illegible]
TB8 Resettable Power (Term 1+2)	6	x	[illegible]		3	x	[illegible]	
TB9 Resettable Power (Term 3+4)	0	x	[illegible]		5	x	[illegible]	
Total Standby Load				0.155 A	Total Alarm Load			1.566 A

System Power Requirements

GF506R Fire Alarm Control Panel

Secondary Load Requirements 4.93 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (Hours)	Total (AH)
Secondary Standby Load 0.155 A	x	Required Standby Time 24 hours	3.72
Secondary Alarm Load 1.566 A	x	Required Alarm Time 0.250 hours	0.39
		Total Secondary Load	4.11
		Derating factor	x 1.20
		Secondary Load Requirements	4.93 AH

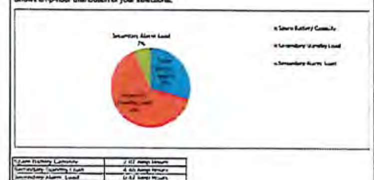
Battery Selection 7.00 Amp Hours

Select batteries from the list below.

7.0 AH BAT-1270 Battery (12 volt)

Battery Distribution Chart

Shows amp-hour distribution of your selections.



Notes:
1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements

RELEASING PANEL BATTERY CALCULATION

SYMBOL LEGEND

SYMBOL	DESCRIPTION
FSCP	FIRE SUPPRESSION CONTROL PANEL
F	MANUAL RELEASE STATION
(circle)	TWO WIRE SMOKE DETECTOR WITH BASE
A	CLEAN AGENT ABORT SWITCH
(horn strobe)	CLEAN AGENT HORN STROBE - WALL MOUNT
(strobe)	CLEAN AGENT STROBE - WALL MOUNT
(bell)	CLEAN AGENT 6" BELL - WALL MOUNT
(square)	EMERGENCY POWER OFF SWITCH (EPO) PROVIDED BY OTHERS
(tank)	NOVEC 1230 CLEAN AGENT SUPPRESSION TANK
<	NOVEC 1230 - 90 DEGREE SIDEWALL DISCHARGE NOZZLE
(damper)	FIRE SMOKE DAMPER - FSD

SEE WIRING SCHEDULE ON F-002.

BATTALION ONE FIRE PROTECTION
14577 CATALINA ST.
SAN LEANDRO, CA 94577
510-653-6075
CSLB #: 919683
Gamewell FCI Authorized Distributor

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT
METRO POWER ENGINEERS, INC

ITEM	REVISION ISSUE	DATE
1	DSA Addendum #1	[illegible]
2	ASI-002 CANCEL/REV	[illegible]

KEY PLAN:

CHABOT COLLEGE

MPOE REPLACEMENT LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

BLDG 300 FIRE ALARM PLAN

DRAWN BY: — CHECKED BY:
DATE: 11/20/19 — PROJECT NO: [illegible]
SHEET NO:

F-121

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 10/9/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 44 District Standard Fiber Strand Fusion Terminations
PCO#: 12

Dear Peter,

Per RFI 44 response, spec. section 27 1323.2.04.5, calls out for fiber to be terminated on commscope P6001B-Z-125 SC type fiber connectors. Typical campus fiber termination method is fusion splicing the fiber onto pre-terminated LC SM pigtails. Below is the cost to install SM SC pigtails, Ccommscope #ACGSFUCNC. All fiber strands of backbone cable shall be fusion spliced to these pigtails.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
RFI 44 District Standard Fiber Strand			$ 3,713	$ 3,713
				$ -
SUBTOTAL				**$ 3,713**
Markup - Subcontractor				$ 186
Insurance - 1%				$ 37
Bonds - 1.5%				$ 56
TOTAL COST				**$ 3,991**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.10.09 10:12:56-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 012

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 8
Date: 10/7/20
Description: Pricing Per RFI 44 - Fiber Terminations

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ -

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ -
Sales Tax:		$ -
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ -
Overhead and Profit (Materials & Equipment)	15%	$ -
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ -

Item	SubTier Contractors	Quote	
1	Sasco	$ 3,712.88	
2		$ -	
3		$ -	
		Second Tier Subcontractor(s) Subtotal:	$ 3,712.88
		Profit at 5.00%:	$ 186.00
		Subtotal:	$ 3,898.88
		Subcontractor + 2nd tier Subcontractor(s) Subtotal:	$ 3,898.88
		Total this Page:	$ 3,898.88
		Total from Previous Pages	
		Proposal Grand Total:	$ 3,898.88

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 012

Sasco
598 Gibraltar Dr.
Milpitas, CA 95035

Proposal for Change Order #03

TO: BECI Electric Inc
8108 Capwell Dr
Oakland, CA 94621

DATE: 10/07/2020

Re: Chabot MPOE RFI_44 Fiber Terminations

Attn: Chad Dillashaw

JOB# D-CHMPOE
JOB NAME D-Chabot MPOE Replacement

MATERIAL EXPENSES:

1.	Material Expense					$2,105.68	
2.	Sales Tax	@	9.75%			$205.30	
3.	Subtotal					$2,310.98	
4.	Material Mark-Up	@	15.00%			$346.65	
5.	Total Material						**$2,657.63**

LABOR EXPENSES:

6.	General Foreman	5.1	hrs	@	$98.49 /hr	$504.27	
7.	Installer	5.1	hrs	@	$80.73 /hr	$413.34	
8.	Total Labor						$917.61
9.	Labor Mark-Up	@	15.00%				$137.64
10.	Total Labor						**$1,055.25**
11.	Grand Total						$3,712.88

CHANGE ORDER TOTAL: **$3,712.88**

DESCRIPTION:

01) Remove field polished SC Fiber connectors for both ends of the (2) 96 str fibers & labor from SOW
02) Add SC pigtails and fusion splicing for both ends of the (2) 96 strand fibers and labor to SOW

CHANGE ORDER TOTAL AMOUNT: $3,712.88

Sincerely,

Mike Cimino
Sr Project Manager
Sasco
408-649-4867

Bid No. 19/20-17
Change Order #01
PCO 012

ESTIMATE SHEET

Chabot MPOE RFI_44 Fiber Terminations

ESTIMATED BY: Mike Cimino **CHECKED BY** **DATE: 10/7/2020**

					MATERIAL					LABOR		
	Description	Color	MFG	Part Number	Quantity	Unit Price	Unit	B/B	Amount	MH	Unit	Amount
	SC SM blue boot fiber connector P6001B-Z-125	Blue	Systimax	760007112	-384	$ 2.50	ea		$ (960.00)	0.20		-76.80
	12F SM SC Terminated Pigtail Kit, 3 Meter		Systimax	FAWSCUC0C-XXM003	32	$ 82.60	ea		$ 2,643.20	0.25		8.00
	24 Fiber Splice Trays				16	$ 5.59	ea		$ 89.44	0.10		1.60
	Splice Protectors (50) Pack				8	$ 41.63	ea		$ 333.04	0.08		0.64
	384 Fusion Splices - (2) 96 strands both sides		Sasco	Labor Only	384	$ -	ea		$ -	0.20		76.80
						$ -	ea		$ -			0.00
						$ -	ea		$ -			0.00
1	**Termination & Testing:**								$ -			
2					1	$ -	ea		$ -			0.00
3					0	$ -	ea		$ -			0.00
4					0	$ -			$ -			0.00
5					0	$ -			$ -			0.00
6						TOTAL			$ 2,105.68			10.24

Bid No. 19/20-17
Change Order #01
PCO 012

RFI 0044 - Fiber Terminations

Status: Sent to reviewer

Due Date: Oct 7, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Sep 22, 2020 at 10:26 AM PDT

See attached RFI from Sasco regarding fiber termination procedures. Please review and confirm the requirements.

RFI_44_RBI_Fiber Terminations.pdf (See page 2)

Bid No. 19/20-17
Change Order #01
PCO 012

SASCO

RFI # 04

Sasco
598 Gibraltar Drive
Milpitas, CA 95035

Project: Chabot MPOE Repl
Address: 25555 Hesperian Blvd
Hayward, CA 94545

Date:	**September 22, 2020**
Submitted To:	**BECI Electric**
	8108 Capwell Dr
	Oakland, CA 94621
Contact Person:	**Chad Dillashaw**
Phone/Email:	209-559-5689

Respond By:	**September 25, 2020**	**Direct Response To:**	**Mike Cimino**
Reference:	**Spec Section 27 1323.2.04.5.a**	**Cost Impact:**	Yes
Originator:	Mike Cimino - Sasco	**Schedule Impact:**	No
Subject:	Fiber Terminations		

Statement:

Spec Section 27 1323.2.04.5.a calls out for the fiber to be terminated on Commscope P6001B-Z-125 SC Type fiber connectors but the typical campus fiber termination method is fusion splicing the fiber onto pre-terminated LC SM pigtails.

Question:

Please confirm if the fiber is to be field terminated onto SC fiber connectors or fusion spliced onto SC SM pigtails?

Proposed Solution:

Fusion splice the fiber onto the SC SM pigtaisl to maintain campus fiber termination methodology.

TEECOM

RFI #: 00044 By: Dave Main Date: 09/29/2020

RESPONSE:
1 - LC SM Pigtails have been used for the campus fire alarm fiber connectivity. The owner wants these to be SM SC Pigtails, Commscope #ACGSFUCNC. All fiber strands of backbone cable shall be fusion spliced to these pigtails.
Product Link:
https://www.commscope.com/product-type/cable-assemblies/fiber-cable-assemblies/fiber-pigtails/acgsfucnc/

Bid No. 19/20-17
Change Order #01
PCO 012

system, under access flooring, and through overhead ceiling space (in basketway, cable tray, conduit, and/or hangers).

2. Optical transmission performance shall not be significantly affected by environmental fluctuations, installation, or aging.
3. Materials shall not evolve hydrogen in quantities that will increase light attenuation.

B. Singlemode fiber strands shall meet or exceed the following geometry criteria:
1. Core diameter = 8.3 μm
2. Mode field diameter = 8.8 μm, ±0.5 μm
3. Cladding diameter = 125 μm, ±1.0 μm
4. Core/Cladding Concentricity = ≤ 0.8 μm
5. Minimum Tensile Strength = 100,000 psi

C. Singlemode fiber strands shall meet or exceed the following performance criteria:
1. Attenuation = 0.5 dB/km at 1310 nm and 0.5 dB/km at 1550 nm wavelengths, maximum
2. Cutoff wavelength = 1260 nm
3. Dispersion = 3.5 ps/nm•km at 1285-1330 nm and 18 ps/nm•km at 1550 nm

D. Primary Coating:
1. Each fiber shall be completely covered with a "primary coating" (acrylate material).
2. Coating diameter = 250 μm, ±5 μm

E. Buffering:
1. Each coated fiber shall be fully covered with a material extruded over and directly onto the coating. This shall be the tight buffer. Tight buffer diameter = 900 μm, ±5 μm. Material = PVC, or equivalent flame retardant thermoplastic.
2. Buffered strands shall be individually color-coded to meet the requirements of ANSI/TIA/EIA-598-A-1995. (Also, ref. ANSI/ICEA S-83-596-1994, and EIA-230)

F. Cable Sheath:
1. Strength Element: The cable shall have an internal strength element such as aramid yarn (e.g., Kevlar).
2. Inner Jacket: The cable shall have a seamless inner jacket (material = PVC, or equivalent) applied to and completely covering the internal components (fiber strands, strength element, other).
3. Armor: The cable shall have an interlocking metallic armor applied spirally and longitudinally to and completely covering the cable.
4. Outer Jacket: The cable shall have a seamless outer jacket (material = PVC, or equivalent) applied to and completely covering the armor.
5. Tensile Strength: The cable shall have a 150-lb, minimum, rated load.
6. Flame Rating: NEC (Article 770) rated as OFCP, and UL listed as such.

G. Manufacturer:
1. CommScope SYSTIMAX
   a. #P-096-DZ-8W-FMUYL; 96 strand, singlemode, interlock armor, yellow, OFCP rated

2.03 TERMINATION APPARATUS – FIBER OPTIC PATCH PANELS

A. Application:
1. Fiber optic patch panels shall be an enclosed housing for protecting, storing and organizing the termination of fiber cable(s) and fiber strands, shall provide means to strain relieve and support of the specified cables, shall contain facilities to store fiber slack, and shall provide patch cord management.
2. Fiber optic patch panels shall be passive physical equipment and apparatus used

in terminating, interconnecting, and cross-connecting fiber optic cabling, shall possess a minimum fire resistant rating of UL94V-1, and shall conform to existing OSHA Health and Safety Laws.

3. Fiber optic patch panels shall be rack-mountable.

B. Fiber optic patch panels shall come equipped with safety labels such as laser identification or warning labels as required by system considerations.

C. Manufacturer:

1. CommScope SYSTIMAX
   a. #760209965; "HD-4U" type patch panel, sliding, 4U, retains 16 "360G2" modules
   b. #760109413; "360G2 Singlemode Distribution Adapter Pack w/6 SC Blue (non-shuttered)

2.04 FIBER OPTIC CONNECTORS

A. Singlemode Fiber Optic Connectors – SC Type

1. Materials:
   a. Ferrule: ceramic (zirconia or alumina) with pre-radiused finish/face.
   b. Connector housing: plastic.
2. Connector shall meet or exceed Ultra PC performance (LC-UPC).
3. Connector shall have an integral strain relief feature, including a bend limiting rear boot.
4. Connector shall be installable via either epoxy or anaerobic method.
5. Manufacturer:
   a. CommScope SYSTIMAX
      1) #P6001B-Z-125; SC type connector, SM, zirconia ceramic, blue boot, for 0.9 mm buffered fiber

2.05 LABELS

A. Labels shall be machine printable with a laser printer, ink jet printer, thermal transfer printer, or hand-held printer.

B. Labels for Cables

1. Labels shall be adhesive-backed and have a self-laminating feature
2. Labels shall fit the backbone cables listed above (i.e., shall fully wrap around the cable's jacket).
3. Printable area should be 1 inch wide x 0.5 inch high, or larger
4. Printable area color shall be white
5. Manufacturer:
   a. Commscope

2.06 MISCELLANEOUS

A. Fiber Slack Storage Reel: Leviton #48900-OFR, or equal

B. Velcro Cable Ties

1. Width: .75".
2. Color: Velcro cable ties the same color as the cable to which it is being applied.
3. Manufacturers:
   a. Panduit
      1) #HLS-15R-0 Black, 15' roll, cut to length.
   b. Or equal

PART 3 - EXECUTION

3.01 GENERAL

A. Comply with Execution requirements of Section 270000.

3.02 EXAMINATION AND PREPARATION

A. Pathways: Prior to installation verify pathways (conduits, etc.) and supporting devices,

Bid No. 19/20-17
Change Order #01
PCO 012

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 10/9/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 48 Panel Expansion to Add 2DBC Board Control
PCO#: 13

Dear Peter,

Per RFI 48, the AMAG panel in bldg. 300 does not have the capacity to add the card reader for door 307B. Since no door port is available the panel could be expanded to add a 2DBC board to control (2) more card. this would leave one spare door port available for the future. Below is the cost to The cost to add this 2DBC. This expansion board will allow the card reader for door 307B to be addressed to the system

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
RFI 48 Panel Expansion to Add 2DBC Board Control			$ 546	$ 546
				$ -
SUBTOTAL				**$ 546**
Markup - Subcontractor				$ 27
Insurance - 1%				$ 5
Bonds - 1.5%				$ 8
TOTAL COST				**$ 587**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.10.09 14:45:38-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 013

Time and Material Change Order Pricing

Company:

Company:	Rodan Builders
Contact:	Keith Reynolds
Address:	3486 Investment Blvd. Suite B
City, State Zip:	Hayward, CA 94545
Telephone:	650-508-1700
Fax:	

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 9
Date: 10/9/20
Description: AMAG Panel Capacity

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1					
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ -

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ -
Sales Tax:		$ -
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ -
Overhead and Profit (Materials & Equipment)	15%	$ -
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ -

Item	SubTier Contractors	Quote	
1	Electronic Innovations	$ 520.00	
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ 520.00
Profit at 5.00%:		$ 26.00
Subtotal:		$ 546.00
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ 546.00
Total this Page:		$ 546.00
Total from Previous Pages		
Proposal Grand Total:		$ ***546.00***

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 013

RFI 0048 - AMAG Panel Capacity

Status: Sent to reviewer

Due Date: Oct 17, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Oct 2, 2020 at 5:06 PM PDT

See attached RFI from Electronic Innovations regarding the AMAG panel capacity for the new card readers to be installed. Please review and advise.

RFI_48_RBI_AMAG Panel Capacity.pdf (See page 2)

Bid No. 19/20-17
Change Order #01
PCO 013

ELECTRONIC INNOVATIONS RFI FORM 1

ELECTRONIC INNOVATIONS
PARR BLVD
RICHMOND CA, 94801

REQUEST FOR INFORMATION

E.I. RFI#	DATE: 10/2/2020	PROJECT: Chabot CCD Bldg. 300

TO:	Beci Electric	**FROM:**	Eric Bledsoe
ATTN:	Chad Dillashaw	**TITLE:**	President
PHONE:		**PHONE:**	510-233-2795 X 11
EMAIL:		**EMAIL:**	ebledsoe@electronicinnovations.com
FAX:		**FAX:**	510-232-3205

QUESTION

BY:		**DRWNG/REF.:**	None
SUBJECT:	AMAG Panel Capacity	**LOCATION:**	

QUESTION:

The AMAG panel in Building 300 does not have the capacity to add the card reader for door 307B. Our proposal to Beci Electric dated 8-28-20 "states that this proposal is based upon the Access Control Node aka panel having available port for door 307B."
Since no door port is available the panel could be expanded to add a 2DBC board to control (2) more card reader doors. This expansion board will allow the card reader for door 307B to be addressed to the system leaving one spare door port available for the future. The cost to add this 2DBC is $520.00.

Please direct us on how you want us to procede.

RESPONSE

BY:

RESPONSE:

Please add a 2DBC board as recommended.

ACCEPTED: _____ Tony Q. Mortera Digitally signed by Tony Q. Mortera DN: C=US, E=tony@metropoweengineers.com, O="Metro Power Engineers, Inc.", OU=Electrical Engineer, CN=Tony Q. Mortera Date: 2020.10.05 15:29:31 -07'00' _____

Y/N **SIGNATURE** **DATE**

Bid No. 19/20-17
Change Order #01
PCO 013

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 10/19/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 50; 54 Reroute of Primary/Secondary Condensate Lines
PCO#: 14

Dear Peter,

Per RFI 50 and 54, contractor has received approval via RFI 50 to route primary condensate line to exterior of building. Additionally contractoer has receved confirmation from MEOR to route secondary secondary drain to above the doorway at MPOE room entrance 307A. RFI 54 furhter details the installation requiremets of the secondary condensate drain line at the MPOE entrance 307A.

DESCRIPTION	Material	Labor	Sub	Total Cost
Norther Services Inc.				
RFI 50; 54 Reroute of Primary/Secondary Condensate Lines			$ 1,500	$ 1,500
SUBTOTAL				**$ 1,500**
Markup - Subcontractor				$ 75
Insurance - 1%				$ 15
Bonds - 1.5%				$ 23
TOTAL COST				**$ 1,613**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.10.19 15:08:44-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 014

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Oct 15, 2020

Rodan Builders
3486 Investment Blvd
STE. B
Hayward, CA

Change Order 3

This is proposal to re-route the existing drain to extend to outside going outside, this also includes re-routing drain on 2nd to over the door

Total Cost $1500.00

This price includes Material, Labor, Sales Tax

Material Cost $350

Sales Tax $34.13

Labor $1115.87

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9205 Office
(925) 525-6447 Cell
C-4, C-20, C-38
Serving California Since 2005

BIM, Design Build, Construction Service

Bid No. 19/20-17
Change Order #01
PCO 014

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C-4, C-20, C-36

Oct 15, 2020

Rodan Builders
3486 Investment Blvd
STE B
Hayward, CA
94545

Drains Run outside and 2nd Secondary Over Door

Run drains outside of wall from all 4 coils run 1" line and run outside concrete and add hangers

Run secondary drain over door for emergency detection

Sincerely
Andrew Osborne

President and Estimator
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C-4, C-20, C-36

Oct 15, 2020

Rodan Builders
3486 Investment Blvd STE B,
Hayward, CA 94545

This is rate sheet on work for the Boilers, Air Conditioning, Refrigeration that will include 1yr of service and parts mark up from NSI below are the rates:

Boilers, Air Conditioning, Refrigeration:

Service Rates

$180 per hour

Overtime Rates

$270 per hour 3hr min

Trip Charge

$95 per service call

Mark Up Rates

Parts up to $1000 are 1.67% mark up

Over $1000 1.43% mark up

Bid No. 19/20-17
Change Order #01
PCO 014

NORTHERN SERVICES INC

C-4, C-20, C-36

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Sincerely
Andrew Osborne

President and Estimator
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Bid No. 19/20-17
Change Order #01
PCO 014

RFI 0050 - FC Unit Condensate Lines

Status: Sent to reviewer

Due Date: Oct 21, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Oct 6, 2020 at 8:11 AM PDT

Per keynote 2/M301 the condensate lines for the new FCU are to drain into an existing indirect waste inside the West wall of the MPOE room. We are unable to locate this waste line at the location noted on the plans.

Please review attached RFI and recommendations from our Mechanical Subcontractor regarding the condensate drain route for the new FC units in the MPOE room. Advise on how we are to proceed.

Bid No. 19/20-17
Change Order #01
PCO 014

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Oct 5, 2020

Rodan Builders
3486 Investment Blvd
Suite B
Hayward, CA
94545

RFI 2

Due to condensate line not being able to tie in the building, Northern Services Inc. plan was to run the condensate outside into the dirt/lawn the condensate copper line can be anchored to the building with Unistrut and run 10ft till we are 6" from the ground.

No exceptions to proposed routing of primary condensate drains. Per owner direction, route secondary drain to above the doorway (see purple clouded area on next page), confirm location with district representative.
Jared Doescher, PE
IEI 10/8/20

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9205 Office
(925) 525-6447 Cell
C-4, C-20, C-38
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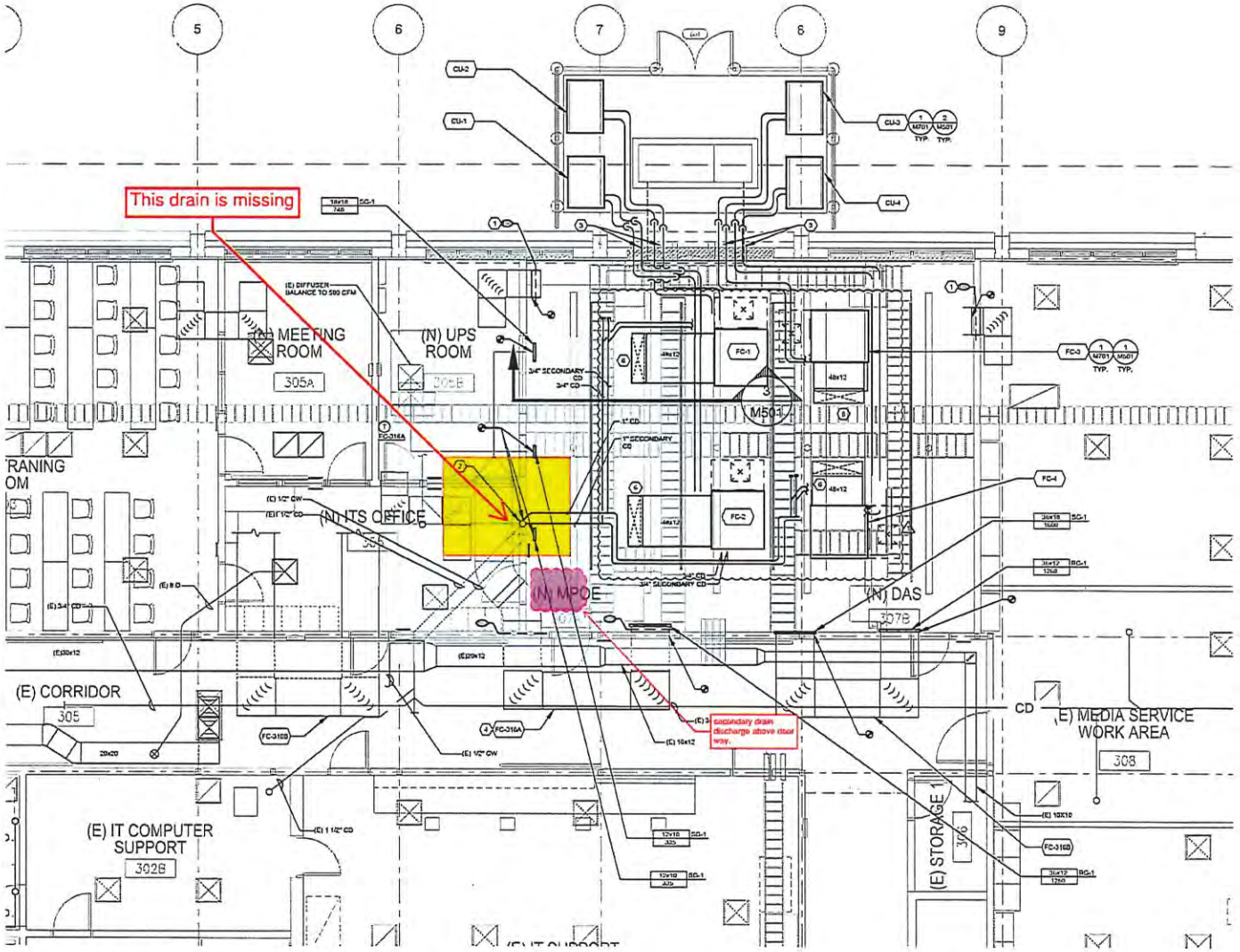
BIM, Design Build, Construction Service

Bid No. 19/20-17
Change Order #01
PCO 014



1 ENLARGED PLAN - MECHANICAL

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

SHEET KEYNOTES

1. FSD CONTROLLED BY CLEAN AGENT CHEM. FIRE SUPPRESSION SYSTEM TO CLOSE WITH ACTIVATION OF SYSTEM.
2. DAYLIGHT TO (E) INDIRECT WASTE FIXTURE
3. REFRIGERANT LINES ROUTED INTO BUILDING UNDER TELECOM CASLING IN THE SAME WALL PENETRATION.
4. (E) FC-316A SET TO 166 CFM.
5. (N) FIRE SMOKE DAMPER IN (E) DUCT.
6. TURN DUCT DOWN AND PROVIDE SCREEN MESH AT OUTLET. LOCATE IN "HOT AISLE."

DSA

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 01-118445 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/28/2020

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER JARED P. DOESCHER STATE OF CALIFORNIA

Date Signed: 4/1/20

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	04/17/2020

KEY PLAN:

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

ENLARGED PLAN - MECHANICAL

DRAWN BY:	CHECKED BY:
DATE: 04/3/2020	PROJECT NO: C20
SHEET NO:	

M301

Bid No. 19-20-17
Change Order #01
FCO 014

INTERFACE ENGINEERING

FILE: M301.DWG — XREF | LAST: 4/1/2020 2:49 PM BY JARED | PLOT: 4/1/2020 2:50 PM BY JARED DOESCHER

RFI 0054 - Fan Coil Secondary Drains

Status: Sent to reviewer

Due Date: Oct 24, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Oct 9, 2020 at 10:11 AM PDT

See attached RFI from our mechanical Subcontractor regarding the secondary drain pan and drains for the new fan coil units. As per RFI #50 the POC shown for the condensate lines on sheet M301 does not exist. Please review and provide details showing how the secondary drains should be routed inside the MPOE room.

Bid No. 19/20-17
Change Order #01
PCO 014

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Oct 8, 2020

Rodan Builders
3486 Investment Blvd
STE. B
Hayward, CA

RFI 6

The original plans we show no condensate pans, We are installing these as secondary drain we show these being tied together on primary side on the fan coil.

Our understanding is that the secondary drains will be run above a door to alert someone of the drainage block on the primary side, this is not on our original plans as shown. Please explain exactly how you would like this

The first paragraph I believe is stating that no secondary drain pan is being provided by the mechanical contractor, claiming that no secondary pan is shown on the drawings. However, a secondary drain pan is shown per detail 1/M5.01.

Combined secondary drain lines to a single 1" CD line, elbow down 12-18" from the door highlighted on the following floor plan. Confirm with maintenance staff.
Jared Doescher, PE
IEI 10/12/20

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9205 Office
(925) 525-6447 Cell
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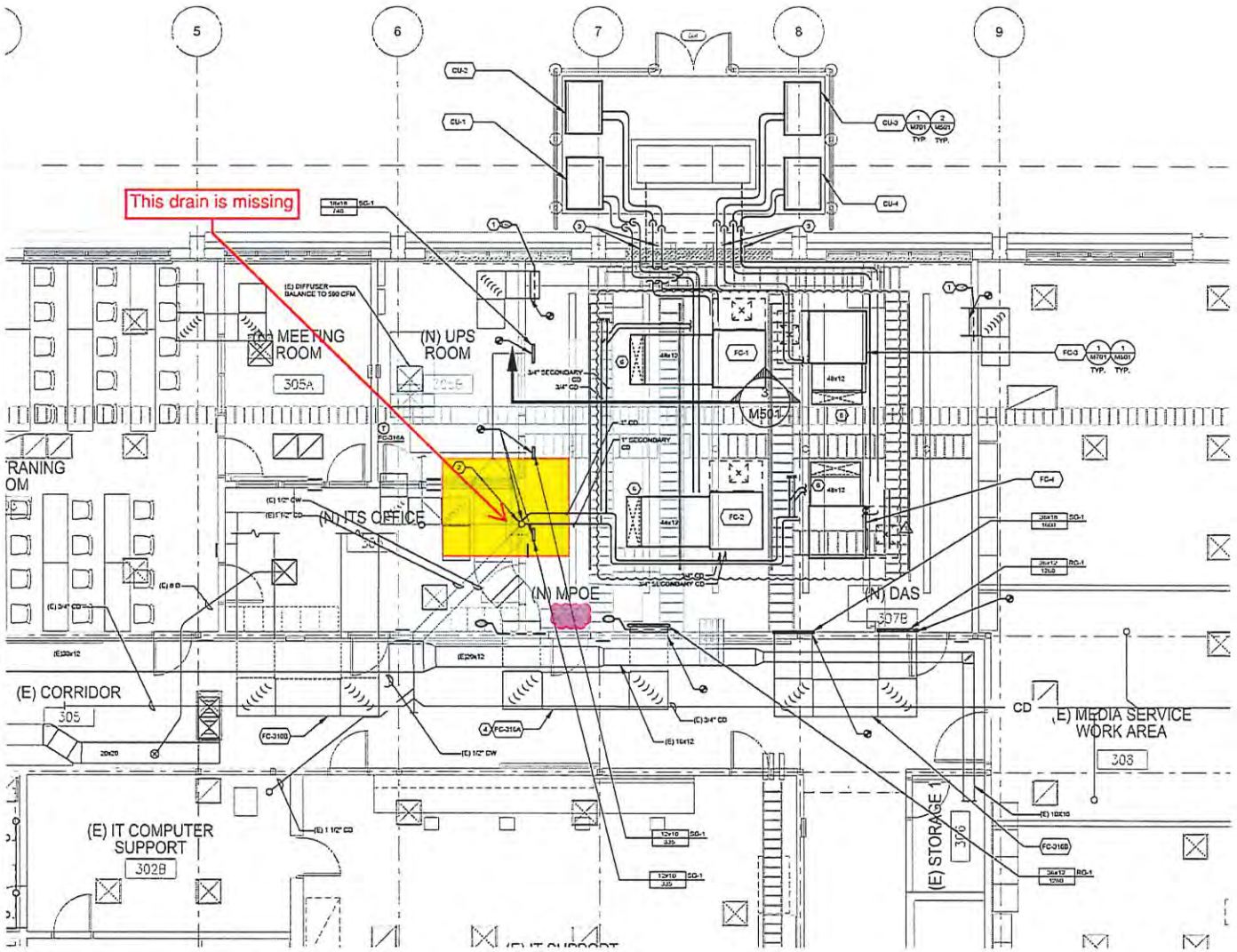
BIM, Design Build, Construction Service

Bid No. 19/20-17
Change Order #01
PCO 014



SHEET KEYNOTES

1. FSD CONTROLLED BY CLEAN AGENT CHCM, FIRE SUPPRESSION SYSTEM TO CLOSE WITH ACTIVATION OF SYSTEM.
2. DAYLIGHT TO (E) INDIRECT WASTE FIXTURE
3. REFRIGERANT LINES ROUTED INTO BUILDING UNDER TELECOM CABLING IN THE SAME WALL PENETRATION.
4. (E) FC-316A SET TO 160 CFM.
5. (N) FIRE SMOKE DAMPER IN (E) DUCT.
6. TURN DUCT DOWN AND PROVIDE SCREEN MESH AT OUTLET. LOCATE IN "HOT" AISLE.

1 ENLARGED PLAN - MECHANICAL

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

APPROVED
DIV. OF THE STATE ARCHITECT
APP:01-118445 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/26/2020

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

JARED T. DOESCHER — No. 30330 — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

Date Signed: 4/1/20

MARK	REVISION / ISSUE	DATE
1	DSA Submittal #1	04/17/20

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

ENLARGED PLAN - MECHANICAL

DRAWN BY:	CHECKED BY:
DATE: 04/03/2020	PROJECT NO: 0252
SHEET NO:	

M301

INTERFACE ENGINEERING

FILE: M301.dwg — XREF | DATE: 4/17/2020 3:49 PM BY JARED D | PLOT: 4/17/2020 3:50 PM BY JARED DOESCHER

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 5/18/2021

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Project Extension of Time and Overhead
PCO#: 15R1

Dear Peter,

Per the October 2020 schedule update (attached). Rodan Builders, Inc. required an extension of time to the base contract final completion date of October 07, 2020. The proposed revised final completion date was November 20, 2020. The extension of project duration extended the overhead costs allotted. Critical path activity has been heavily jeopardized due to design issues and submittal review periods directly impacting material procurement timeframes and subsequent installation activities. These delays have resulted in additional field and office overhead costs to support the project to completion. Please reference below and attached for cost impact. The agreed substantial completion date is June 11, 2021. The cost impact below remains the same as previsuly documented due to careful time management of the delays documented within and captures the overall and final cost impact requested.

DESCRIPTION	Material	Labor	Sub	Total Cost
Rodan Builders, Inc.				
Supervision	$ -	$ 33,472.00	$ -	$ 33,472
Project Management	$ -	$ 5,358.64	$ -	$ 5,359
Project Engineer	$ -	$ 6,277.60	$ -	$ 6,278
SUBTOTAL				**$ 45,108**
Markup - Contractor				$ 6,766
Insurance - 1%				$ 451
Bonds - 1.5%				$ 677
TOTAL COST				**$ 53,002**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2021.06.03 13:08:52-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 15R1

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

June 3, 2021

Peter Espinosa, CCM
Senior Construction Manager
Construction Management Division
510-301-3416

Peter:

Below is the summary of schedule items that caused an impact to the critical path and or caused an activity to go critical, based on submittal/RFI review times and owner driven delays. These activities are the basis of the requested extension of time/overhead.

Submittal 24 - Utility Enclosure
RFI 29 - Chain Link Posts and Ametco Fence
RFI - 43.1 - Site Enclosure Pad

Submittal 24 substitution was proposed 06/23/2020, due to communicated lead time concerns regarding the specified Ametco enclosure. Submittals, procurement and installation of Ametco could not meet the project schedule. Submittal 24 substitution was rejected. RFI 29 was issued as the contract drawings detailed the specified Ametco fence such that it did not continue to the building and therefore does not provide security. Layout is required to be finalized prior to fabrication. RFI 29 response received from the design team increased the size of the exterior slab such that the posts are now integral to the increased pad size. This caused the fence post placement to become critical as they would have needed to be placed in advance of the slab. This delayed mounting of equipment to exterior slab. RFI 43.1 requests to leave the pad as designed in base contract drawings thus making the fence posts not critical. The design of the enclosure has yet to be finalized, reviewed and approved as owner has requested contractor conduct a VE exercise.

<u>Interior Delays</u>

RFI 15 - Fire Sprinklers/RFI 36 - Fire Sprinkler Routing/CCD 002:

RFI 15 was issued 07/13/2020 and resolution was not received until issuance of an additional RFI, RFI 36 and subsequent CCD 02 on 09/02/2020. This resulted in 49 calendar days of delay due to design issues. The result of design review time caused the fire life safety scope to go critical as it exceeds base contract timeframe. This work was completed 10/19/2020. 12 Day extension required.

Submittal 03 – Submittal 03.1 – Mechanical Equipment and Controls
Submittal 39 Mechanical Shop Drawing Submittal Design Team Review/Approval Turnaround
RFI 11 – ASI 01 - Power Voltage for Fan Coil Units

Submittal 03 for the mechanical equipment and controls was issued 06/11/20 and review comments were received on 06/18/2020. A revised mechanical equipment and controls submittal was promptly resubmitted 06/25/20 with final approval received from the EOR 08/19/20. As submittal 03.1 was in review, RFI 11 was issued which inquired clarification of the electrical voltage requirements for the fan coil units to be installed. RFI 11 was issued 07/09/20 and the ASI 01 response was received on 07/17/20. After receipt of ASI 01 our mechanical contractor was able to proceed with finalizing the

mechanical shop drawings. Submittal 39 include the mechanical shop drawings was issued for review 07/20/20 final approval from the EOR was not received until 09/30/20.

ASI 002 – Owner Driven Revised Clean Agent Tank Location to UPS Room

Refer to meeting minutes item 4 dated 09/20/20. On 09/16/20, owner initiated the request for the design team to relocate the clean agent tank away from the location shown on the bid documents. This direction yielded ASI 02 received 10/2/20 which provides formal direction to proceed with the new location for the clean agent tank.

Please let me know if you have any questions.

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2021.06.03 11:29:36-07'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 15R1

COST ANALYSIS

PROJECT: Chabot College MPOE Replacement

ARCHITECT: ATI Architects + Engineers | OWNER: Chabot-Las Positas Community College District

QUANTITIES: Breakdown Below | PRICE BY: KR

SHEET NO. 1 of 1
ESTIMATE NO. 15
DATE 10/21/2020

DESCRIPTION	QUANTITY	UNIT	MATERIAL UNIT	MATERIAL TOTAL	LABOR UNIT	LABOR TOTAL	TOTAL COST UNIT	TOTAL COST TOTAL
Project Overhead Extension				$ -		$ -		$ -
Rodan Builders, Inc.								
- Superintendent 5 Day Per Week -130.75/hr. x 256hrs.	256	HR		$ -	130.75	$ 33,472.00		$ 33,472.00
-Project Manager 1 Day Per Week -95.69/hr. x 56hrs.	56	HR		$ -	95.69	$ 5,358.64		$ 5,358.64
Project Engineer 2 Day Per Week -56.05/hr. x 112hrs.	112	HR		$ -	56.05	$ 6,278		$ 6,277.60
Total Cost				**$ -**		**$ -**		**$ 45,108.24**

Bid No. 19/20-17
Change Order #01
PCO 15R1

MPOE Replacement Building 300
Job No: RBI 20-1102, CLPCCD B19/20-12

	Oct-20																								Nov-20																			
ACTIVITY	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
MPOE Replacement Building 300																																													
Rodan Builders Inc.																																													
Superintendent 5 Day Per Week -130.75/hr. x 256hrs.		X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X
Project Manager 1 Day Per Week -95.69/hr. x 56hrs.		X						X							X							X						X							X							X		
Project Engineer 2 Day Per Week -56.05/hr. x 112hrs.		X	X					X	X						X	X						X	X						X	X					X	X						X	X	

Bid No. 19/20-17
Change Order #01
PCO 15R1

	Rate	Mod Rate
W/C rates not Incl. Exper.Mod of 68% as of 10/1/19		
6220	Laborer	**0.04430**
8742	PM	**0.00460**
8810	Clerical	**0.00340**
5205	Concrete	**0.05260**
5403	Carp <$32	**0.14810**
5432	Carp Jrny	**0.05400**

LABOR RATES WITH BURDEN

Union Wage Rates ***July 2020***

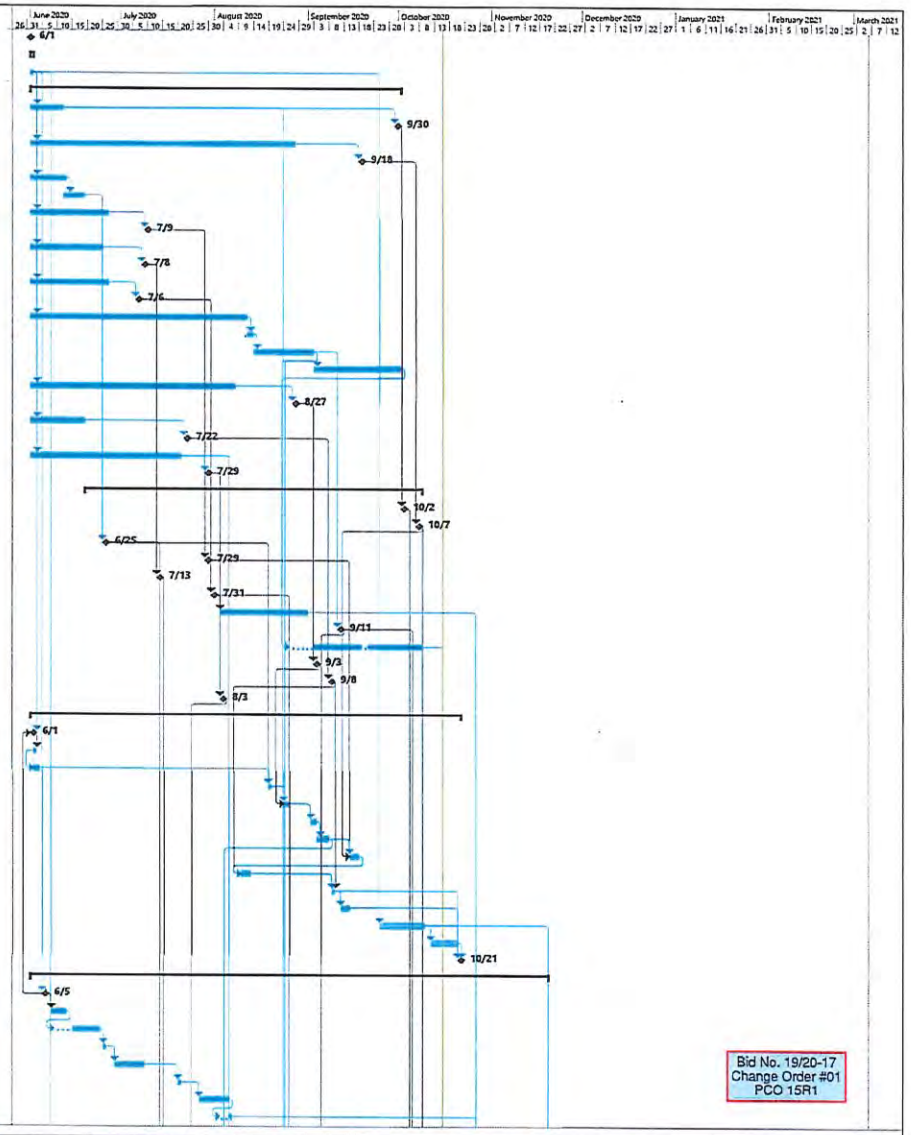
Classification	< < < HOURLY WAGE > > > Base Wage	Vac	Total Rate	< < < < < < HOURLY BURDEN Bal of Fringe	FICA 0.0765	FUTA 0.008	SUTA 0.062	> > > > > > W/C Above	INS 0.045	Total Burden	TOTAL ST Rate	OT Rate	DT Rate
Rate increase July 1st													
CARPENTERS													
Appr-1st (60%)	31.59	2.14	33.73	13.12	2.58	0.27	2.09	5.00	1.52	24.57	58.30	79.83	101.35
Appr-4th (75%)	39.49	5.09	44.58	15.37	3.41	0.36	2.76	2.41	2.01	26.31	70.89	96.11	121.33
Appr-5th (80%)	42.12	5.09	47.21	26.02	3.61	0.38	2.93	2.55	2.12	37.61	84.82	111.68	138.53
Appr-6th (85%)	44.75	5.09	49.84	26.02	3.81	0.40	3.09	2.69	2.24	38.26	88.10	116.59	145.08
Appr-8th (95%)	50.02	5.09	55.11	26.02	4.22	0.44	3.42	2.98	2.48	39.55	94.66	126.43	158.21
Journeyman	52.65	5.09	57.74	26.02	4.42	0.46	3.58	3.12	2.60	40.20	97.94	131.35	164.76
Foreman(J+10%)	57.92	5.09	63.01	26.02	4.82	0.50	3.91	3.40	2.84	41.49	104.49	141.18	177.88
General (F+20%)	69.50	5.09	74.59	26.02	5.71	0.60	4.62	4.03	3.36	44.33	118.92	162.82	206.73
Foreman overscale	65.92	5.09	71.01	26.02	5.43	0.57	4.40	3.83	3.20	43.45	114.46	156.13	197.80
Superintendent	79.00	5.09	84.09	26.02	6.43	0.67	5.21	4.54	3.78	46.66	130.75	180.58	230.40
LABORERS - AREA 1		**Rate incr June 29th**											
Group 1	32.80	3.05	35.85	22.74	2.74	0.29	2.22	1.59	1.61	31.19	67.04	87.67	108.30
Group 2	32.65	3.05	35.70	22.74	2.73	0.29	2.21	1.58	1.61	31.16	66.86	87.39	107.93
Group 3	32.55	3.05	35.60	22.74	2.72	0.28	2.21	1.58	1.60	31.13	66.73	87.21	107.68
Constr Specialist	33.50	3.05	36.55	22.74	2.80	0.29	2.27	1.62	1.64	31.36	67.91	88.97	110.03
Constr Specialist +	34.28	3.05	37.33	22.74	2.86	0.30	2.31	1.65	1.68	31.54	68.87	90.41	111.95
OPERATING ENGINEER		**Rate incr June 29th**											
Foreman (under 7)	49.89	4.77	54.66	26.86	4.18	0.44	3.39	2.42	2.46	39.75	94.41	125.80	157.19
Foreman overscale	65.09	4.77	69.86	26.86	5.34	0.56	4.33	3.09	3.14	43.33	113.19	153.97	194.76
OTHER RATES													
Project Manager	80.00	0.00	80.00	0.00	6.12	0.64	4.96	0.37	3.60	15.69	95.69	143.53	191.38
Project Super Non-L	85.00	0.00	85.00	0.00	6.50	0.68	5.27	4.59	3.83	20.87	105.87	158.80	211.74
Project Super Non-L	75.00	0.00	75.00	0.00	5.74	0.60	4.65	4.05	3.38	18.41	93.41	140.12	186.83
Project Engineer	45.00	0.00	45.00	0.00	3.44	0.36	2.79	2.43	2.03	11.05	56.05	84.07	112.10
Administrative	40.00	0.00	40.00	0.00	3.06	0.32	2.48	0.14	0.00	6.00	46.00	68.99	91.99
Misc	50.00	0.00	50.00	0.00	3.83	0.40	3.10	0.17	0.00	7.50	57.50	86.24	114.99

NOTES:

********SAN FRANCISCO JOBS SHOULD INCLUDE A PAYROLL TAX OF 1.5%********

Bid No. 19/20-17
Change Order #01
PCO 15R1

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		MPOE Replacement Building 300	0 days	Mon 6/1/20	Mon 6/1/20	
2		General Conditions	1 day	Mon 6/1/20	Mon 6/1/20	
3		Sign Contract and Receive NTP	1 day	Mon 6/1/20	Mon 6/1/20	
4		Submittals	91 days	Mon 6/1/20	Thu 10/1/20	
5		Prepare Mechanical Submittal	9 days	Mon 6/1/20	Thu 6/11/20	3
6		Approve Mechanical Submittal	80 days	Thu 6/11/20	Wed 9/30/20	5
7		Prepare Electrical Submittals	64 days	Mon 6/1/20	Thu 8/27/20	3
8		Approve Electrical Submittals	17 days	Thu 8/27/20	Fri 9/18/20	7
9		Prepare Electrical Commodity Submittals	10 days	Mon 6/1/20	Fri 6/12/20	3
10		Approve Electrical Commodity Submittals	5 days	Fri 6/12/20	Thu 6/18/20	9
11		Prepare Lighting Submittals	20 days	Mon 6/1/20	Fri 6/26/20	3
12		Approve Lighting Submittals	9 days	Fri 6/26/20	Thu 7/9/20	11
13		Prepare Fire Alarm Submittal	18 days	Mon 6/1/20	Wed 6/24/20	3
14		Approve Fire Alarm Submittal	10 days	Wed 6/24/20	Wed 7/8/20	13
15		Prepare Communications/Data Submittals	20 days	Mon 6/1/20	Fri 6/26/20	3
16		Approve Communications/Data Submittals	6 days	Fri 6/26/20	Mon 7/6/20	15
17		RFI 15 - 15.1 - Fire Sprinkler Design Issues (Delay)	52 days	Mon 6/1/20	Tue 8/11/20	3
18		Furnished Revised Fire Sprinkler Shop Drawing Based on RFI 15.1 Response (Delay)	2 days	Tue 8/11/20	Thu 8/13/20	17
19		Review/Approve Fire Sprinkler Shop Drawing Based on RFI 15.1 Response (Delay)	14 days	Fri 8/14/20	Wed 9/2/20	18
20		RFI 36/CCD 002 - Fire Sprinkler Design Issues (Delay)	22 days	Thu 9/3/20	Thu 10/1/20	19
21		Prepare Finishes Submittals	50 days	Mon 6/1/20	Fri 8/7/20	3
22		Approve Finishes Submittals	14 days	Fri 8/7/20	Thu 8/27/20	21
23		Prepare DFH Submittal	14 days	Mon 6/1/20	Thu 6/18/20	3
24		Approve DFH Submittal	24 days	Thu 6/18/20	Wed 7/22/20	23
25		Prepare Site Submittals	36 days	Mon 6/1/20	Mon 7/20/20	3
26		Approve Site Submittals	36 days	Wed 6/10/20	Wed 7/29/20	25
27		Material/Equipment Procurement	82 days	Fri 6/19/20	Thu 10/8/20	
28		Mechanical	21 days	Sat 9/5/20	Fri 10/2/20	6
29		Electrical; Equipment Anticipated Delivery 10/19/20;Delayed Due to Pad Installation	14 days	Thu 8/27/20	Wed 10/7/20	8
30		Electrical; Rough Materials	5 days	Fri 6/19/20	Thu 6/25/20	10
31		Electrical; Lighting	14 days	Fri 7/10/20	Wed 7/29/20	12
32		Fire Alarm	3 days	Thu 7/9/20	Mon 7/13/20	14
33		Communications/Data	19 days	Tue 7/7/20	Fri 7/31/20	16
34		Communications/Data; DAMAC Server Cabinets	21 days	Mon 8/3/20	Mon 8/31/20	33
35		Fire Sprinkler Commodity Material (Pipe, Fitings, FS Heads etc.) Delay	7 days	Thu 9/3/20	Fri 9/11/20	19
36		Fire Sprinkler Pre Action Cabinet (Ship date 09/30/20; 5-7 Day Transit) Delay	27 days	Wed 8/26/20	Thu 10/8/20	19,20
37		Finishes	5 days	Fri 8/28/20	Thu 9/3/20	22
38		Doors, Frames, Hardware	34 days	Thu 7/23/20	Tue 9/8/20	24
39		Site	3 days	Thu 7/30/20	Mon 8/3/20	26
40		Building 100 Construction	105 days	Mon 6/1/20	Wed 10/21/20	
41		Mobilization	1 day	Mon 6/1/20	Mon 6/1/20	5655,3
42		Salvage Items	1 day	Tue 6/2/20	Tue 6/2/20	41
43		Demolition	2 days	Tue 6/2/20	Wed 6/3/20	4255
44		Rough Electrical	1 day	Wed 8/19/20	Wed 8/19/20	43,30
45		Patch and Paint	2 days	Mon 8/24/20	Tue 8/25/20	44,37
46		Vinyl Tack Board Panels	2 days	Wed 9/2/20	Thu 9/3/20	45
47		Install Salvaged Items (white board)	2 days	Fri 9/4/20	Mon 9/7/20	46
48		Finish Electrical (light fixtures)	3 days	Tue 9/15/20	Thu 9/17/20	47,31,29
49		Install Door Frame	3 days	Mon 8/10/20	Wed 8/12/20	38,48
50		Install Solid Wood Door	1 day	Wed 9/9/20	Wed 9/9/20	38,49
51		Clean Floor and Finish Coat	2 days	Sat 9/12/20	Mon 9/14/20	50
52		RFI 47 - Acc. Clear. At Mens Rft 102 - Delay; CCD Forthcoming (Delay)	11 days	Fri 9/25/20	Fri 10/9/20	3
53		Mens Restroom 102 SOW (Delay)	7 days	Mon 10/12/20	Tue 10/20/20	52
54		Punch List at Wing 100 (Delay)	1 day	Wed 10/21/20	Wed 10/21/20	51,50,52,53
55		Building 300 Construction	126 days?	Mon 6/1/20	Thu 11/19/20	
56		Mobilization	5 days	Mon 6/1/20	Fri 6/5/20	3
57		Salvage Items	5 days	Mon 6/8/20	Fri 6/12/20	56
58		Demolition	7 days	Tue 6/9/20	Tue 6/23/20	57
59		Window Film	1 day	Thu 6/25/20	Thu 6/25/20	58
60		Window/Door Infill Framing	8 days	Mon 6/29/20	Wed 7/8/20	59
61		UPS Room Concrete Maint. Pad	1 day	Mon 7/20/20	Mon 7/20/20	60
62		Flooring and Base	8 days	Mon 7/27/20	Wed 8/5/20	61
63		Telecom Backboards (Sasco)	1 day	Mon 8/3/20	Thu 8/6/20	62

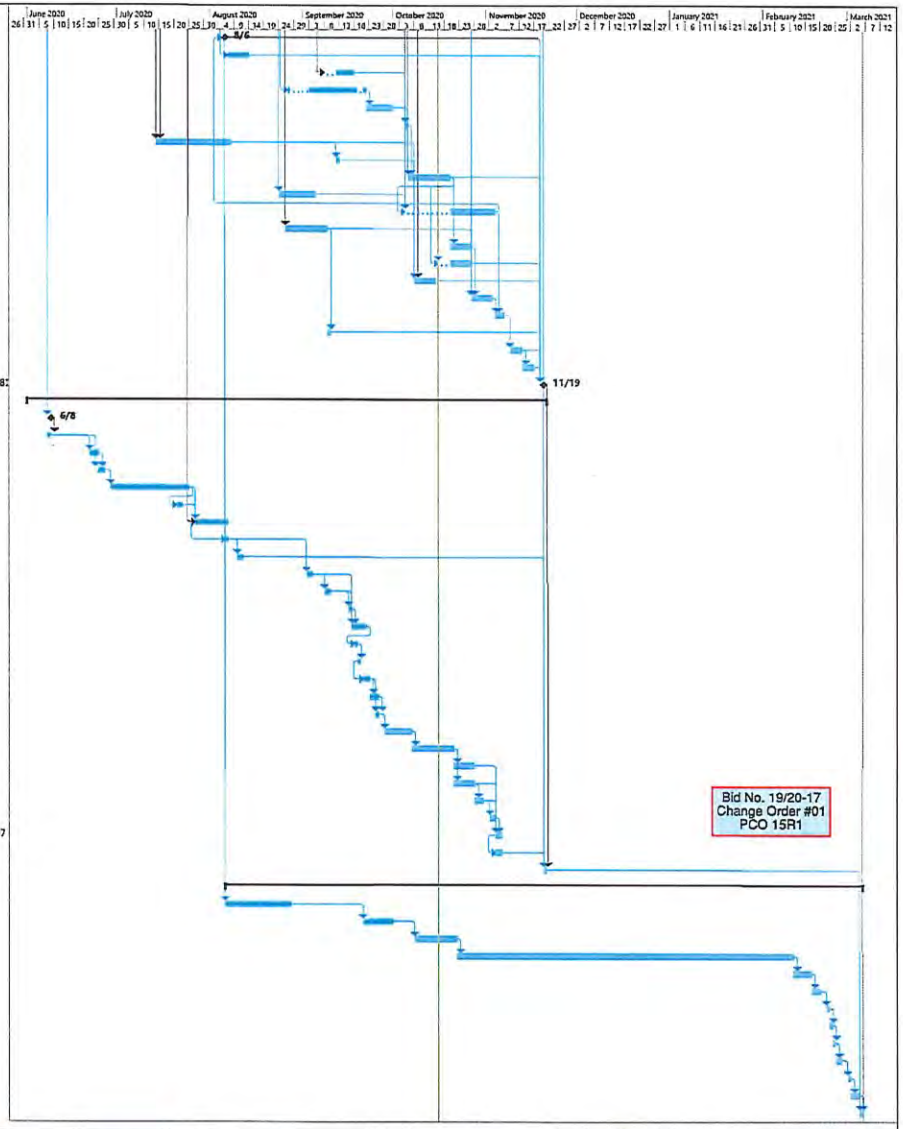


Bid No. 19/20-17
Change Order #01
PCO 15R1

Project: 20-1102 MPOE Replace
Date: Fri 10/16/20

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Progress | Manual Progress

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
64		Paint	0 days	Thu 8/6/20	Thu 8/6/20	74
65		Replace Damaged Ceiling Tiles Room 301 w/ Salvaged Stock	5 days	Fri 8/7/20	Thu 8/13/20	47
66		Fire Sprinkler Demo.	5 days	Tue 9/8/20	Thu 9/17/20	35
67		Fire Sprinkler Site Visit Yielding RFI 36 - Fire Sprinkler Routing (Delay)	14.99 days	Thu 8/27/20	Mon 9/21/20	19
68		Review/Approve Fire Sprinkler Shop/RFI Drawing Based on RFI 36 Response Including Potential CCD	7 days	Tue 9/22/20	Wed 9/30/20	67
69		PCO 010 - Revised Fire sprinkler Route per RFI #36. Approval not received as of 10/12/2020	1 day?	Mon 10/5/20	Mon 10/5/20	68
70		Electrical / Fire Alarm Rough-In	19 days	Tue 7/14/20	Fri 8/7/20	30,32
71		Electrical Shutwown for Tie In of New MPOE Elec. Panels (7AM -5PM)	1 day	Sat 9/12/20	Sat 9/12/20	70
72		Fire Sprinkler Install	10 days	Tue 10/6/20	Mon 10/19/20	35,68,69
73		RFI 34 - Mechanical Lines and FCU Suspension (Delay)	10 days	Mon 8/24/20	Fri 9/4/20	5
74		Mechanical Rough - In (Delayed)	11 days	Mon 10/5/20	Tue 11/3/20	73,72,66,28
75		Communications/Data Rough-In	10 days	Wed 8/26/20	Tue 9/8/20	33
76		Unistrut and Cable Trays	5 days	Tue 10/20/20	Mon 10/26/20	72
77		Finish Fire Sprinkler, Install PreAction Cabinet, Connect Piping	5 days	Fri 10/16/20	Mon 10/26/20	72,36
78		Finish Electrical	5 days	Thu 10/8/20	Wed 10/14/20	29,70,71
79		Finish Low Voltage	5 days	Tue 10/27/20	Mon 11/2/20	76,34,75,63
80		Finish Mechanical (Delayed)	3 days	Wed 11/4/20	Fri 11/6/20	79,74
81		Misc. Accessories/Signage	1 day	Wed 9/9/20	Wed 9/9/20	75
82		Chain Link Fence	4 days	Mon 11/9/20	Thu 11/12/20	80
83		Final Cleaning	2 days	Fri 11/13/20	Mon 11/16/20	82
84		Building 300 Punch List	3 days	Tue 11/17/20	Thu 11/19/20	83,72,82,78,77,81
85		Site Construction/Exterior	127 days	Mon 6/1/20	Fri 11/20/20	
86		Mobilization	6 days	Mon 6/1/20	Mon 6/8/20	3
87		Utility Locating	1 day	Mon 6/8/20	Mon 6/8/20	86FS-5 days
88		Hard Demo	3 days	Mon 6/22/20	Wed 6/24/20	87
89		Excavation New Duct Bank To AT&T Directional Boar Intersection	2 days	Wed 6/24/20	Fri 6/26/20	87,88
90		Install Conduit New Duct Bank to Directional Boring Intersection	20 days	Mon 6/29/20	Fri 7/24/20	89
91		Excavation of Boring Pits	2 days	Tue 7/21/20	Wed 7/22/20	90
92		Backfill and Compact New Duct Bank to Directional Boring Intersection	9 days	Mon 7/27/20	Thu 8/6/20	90,39,91
93		Directional Boring	1 day	Thu 8/6/20	Thu 8/6/20	92SS
94		Backfill and Compact Boring Pits	2 days	Mon 8/10/20	Tue 8/11/20	93
95		Install Conduit New Duct Bank from Boring Intersection to Utility Pad	2 days	Wed 9/2/20	Thu 9/3/20	93
96		Set Vault at Building 300	2 days	Tue 9/8/20	Wed 9/9/20	95FS+2 days
97		Concrete Encasement at Wing 300 Vault	1 day	Wed 9/16/20	Wed 9/16/20	96
98		Backfill and Compact New Duct Bank from Boring Intersection to Utility Pad	3 days	Thu 9/17/20	Mon 9/21/20	95,96,97
99		Survey and Stake New Enclosure Pad	1 day	Fri 9/18/20	Fri 9/18/20	98
100		Fine Grade and Compact New Pad	1 day	Sat 9/19/20	Sat 9/19/20	99
101		Forms New Pad	2 days	Mon 9/21/20	Tue 9/22/20	100SS
102		Reinforcement New Pad	3 days	Wed 9/23/20	Fri 9/25/20	101
103		Concrete Pour New Pad	1 day	Fri 9/25/20	Fri 9/25/20	101,102
104		Mechanical/Electrical Equipment Install at Exterior	7 days	Mon 9/28/20	Tue 10/6/20	103
105		Electrical/Mechanical Ductway	10 days	Wed 10/7/20	Tue 10/20/20	104
106		Electrical Wire Pull	5 days	Wed 10/21/20	Tue 10/27/20	105
107		Repair Concrete Surfaces	5 days	Wed 10/21/20	Tue 10/27/20	105
108		Landscape Repairs	3 days	Wed 10/28/20	Fri 10/30/20	107
109		Clean-up	2 days	Mon 11/2/20	Tue 11/3/20	108
110		Site Punch List	2 days	Wed 11/4/20	Thu 11/5/20	109,108,106,107
111		Demobilization/Cleanup	2 days	Wed 11/4/20	Thu 11/5/20	110SS
112		Project Substantial Completion/Occupancy	1 day	Fri 11/20/20	Fri 11/20/20	84,111,52,94
113		Ametco Fencing Exterior Fencing Enclosure Installation	154 days	Thu 8/6/20	Fri 3/5/21	
114		RFI 29 - Chain Link Posts and Ametco Fence (Delay)	16 days	Thu 8/6/20	Thu 8/27/20	25
115		Furnished Enclosure Shop Drawing Based on RFI 29 Response	8 days	Mon 9/21/20	Wed 9/30/20	114
116		Review/Approve Enclosure Shop Drawing Based on Email Correspondece and VE Exercise w/Cyclone	10 days	Thu 10/8/20	Wed 10/21/20	115
117		Procure Ametco Fence Materials	80 days	Thu 10/22/20	Wed 2/10/21	116
118		Auger/Rebar Enclosure Posts	4 days	Thu 2/11/21	Tue 2/16/21	117
119		Pour Enclosure Posts/Set Posts	3 days	Wed 2/17/21	Fri 2/19/21	118
120		Survey and Stake New Sidewalk and Added Mowband	1 day	Mon 2/22/21	Mon 2/22/21	119
121		Fine Grade and Compact New Pad ew Sidewalk and Added Mowband	1 day	Tue 2/23/21	Tue 2/23/21	120
122		Form New Sidewalk and Added Mowband	1 day	Wed 2/24/21	Wed 2/24/21	121
123		Reinforcement New Sidewalk and Added Mowband	2 days	Thu 2/25/21	Fri 2/26/21	122
124		Concrete Pour New Sidewalk and Added Mowband	1 day	Mon 3/1/21	Mon 3/1/21	123
125		Install Ametco Fencing	3 days	Tue 3/2/21	Thu 3/4/21	124
126		Project Final Completion	1 day	Fri 3/5/21	Fri 3/5/21	125,112



Project: 20-1102 MPOE Replace
Date: Fri 10/16/20

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Progress | Manual Progress

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 11/5/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 55 Pre-Action Cabinet Electrical/FA Panel Tie In
PCO#: 16

Dear Peter,

Per response to RFI 55, below is the cost to furnish and install electrical rough to connect pre action control panel to existing panel 3R1B-39, provide lock on device and connect compressor to existing panel 3R1B-41. Includes adding of FA cable and three, Gamewell/FCI monitor modules, for the campus FA system activation by the Bldg. 300 MPOE Pre-Action System.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
RFI 55 Pre-Action Cabinet Electrical/FA Panel Tie In			$ 5,264	$ 5,264
				$ -
SUBTOTAL				**$ 5,264**
Markup - Subcontractor				$ 263
Insurance - 1%				$ 53
Bonds - 1.5%				$ 79
TOTAL COST				**$ 5,658**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2020.11.05 17:10:59-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 016

Time and Material Change Order Pricing

Company:

Company: Rodan Builders
Contact: Keith Reynolds
Address: 3486 Investment Blvd. Suite B
City, State Zip: Hayward, CA 94545
Telephone: 650-508-1700
Fax:

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 10
Date: 11/3/20
Description: RFI 055 Pre-Action Cabinet Control Panel Tie-In.

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1	3/4" LB w/Covers	4	EA	$ 14.35	$ 57.40
2	3/4" Chase Nipples	2	EA	$ 1.20	$ 2.40
3	3/4" EMT	100	LF	$ 0.78	$ 78.00
4	3/4" Steel Compression Connectors w/Insulated Throats	12	EA	$ 1.92	$ 23.04
5	3/4" Steel Compression Couplings	12	EA	$ 2.95	$ 35.40
6	3/4" EMT Strut Straps	3	EA	$ 3.00	$ 9.00
7	3/4" EMT One Hole Straps	15	EA	$ 0.32	$ 4.80
8	4 SQ Deep Combo Boxes	4	EA	$ 1.28	$ 5.12
9	4 SQ Blank Covers	4	EA	$ 0.66	$ 2.64
10	3/4" Steel Flex	3	LF	$ 0.48	$ 1.44
11	3/4" Jakes	2	EA	$ 1.22	$ 2.44
12	#12 THHN	500	LF	$ 0.13	$ 65.00
13					$ -
14					$ -
				Materials Subtotal:	$ 286.68

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1	Journeyman	24	Hours	$ 117.11	$ 2,810.64
2	General Foreman	4	Hours	$ 139.38	$ 557.52
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ 3,368.16

Summary:

Materials before tax Subtotal:		$ 286.68
Sales Tax:		$ 26.52
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ 3,368.16
Materials, Rental Equipment, Labor Subtotal:		$ 3,681.36
Overhead and Profit (Materials & Equipment)	15%	$ 43.00
Overhead and Profit (Labor)	15%	$ 505.22
Subcontractors Subtotal:		$ 4,230.00

Item	SubTier Contractors	Quote	
1	Sound & Signal	$ 984.50	
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:		$ 984.50
Profit at 5.00%:		$ 49.00
Subtotal:		$ 1,033.50
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ 5,263.50
Total this Page:		$ 5,263.50
Total from Previous Pages		
Proposal Grand Total:		$ 5,263.50

Submitted by: Chad Dillashaw

Bld No. 19/20-17
Change Order #01
PCO 016

Sound & Signal Inc.
277 Rickenbacker Circle
Livermore, Ca. 94551
(925) 455-1778
(925) 455-6153 FAX
DIR Public Works Reg #1000000276
California Contractors Lic. # 494676

Chabot College Bldg. 300 MPOE RFI# 0055

Date: 11/2/20

To: Chad Dillashaw

Company: Beci Electric

From: **Steve Ackermann**

Total Number of Pages: 1

Please see the below pricing, per the RFI# 0055 response, to add FA cable and three, Gamewell/FCI monitor modules, for the campus FA system activation by the Bldg. 300 MPOE Pre-Action System:

Materials:	$275.00
Labor:	$620.00
Subtotal	$895.00
10% O/P	$89.50
Total Price:	**$984.50**

Respectfully,
Steve Ackermann
Sound & Signal

Price includes programming and 100% testing of devices.

Does not include installation of electrical back boxes, conduit or any FA devices or wiring, directly connected to, and for the use of, activating the Pre-Action System.

Bid No. 19/20-17
Change Order #01
PCO 016

RFI 0055 - Pre-Action Cabinet Control Panel Tie In

Status: Sent to reviewer

Due Date: Oct 28, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Oct 12, 2020 at 5:49 PM PDT

Per Fire Sprinkler product submittal #50.1 attached, two 120V electrical circuits are required to power the FS Control Panel as well as the compressor. In addition, the pre-action cabinet will need to tie in to the fire alarm system. These connections to the pre-action cabinet are not shown on either the Electrical or Fire Alarm drawings. Please review and provide detailed wiring plans for the fire sprinkler pre-action cabinet.

For the (2) dedicated 120v circuits:
1- Connect the Pre Action Control Panel to existing panel '3R1B'-39. Provide a lock-on device.
2-Connect the Compressor to existing panel '3R1B-41.

For Fire Alarm tie-in of the Pre Action Panel,the FS contractor to coordinate the tie-in of the new Pre Action Panel to Building Fire Alarm Contractor for the required monitoring and supervision of this panel.

Response by:

Tony Q. Mortera

Digitally signed by Tony Q. Mortera
DN: C=US, E=tony@metropowerengineers.com, O="Metro Power Engineers, Inc.", OU=Electrical Engineer, CN=Tony Q. Mortera
Date: 2020.10.13 09:57:08-07'00'

Per specification 211319-3.01-R Provide alarm, supervisory and trouble relay output connections to the building fire alarm system along with associated power and control wiring, conduit, and terminations. No additional cost to the owner is anticipated. Coordinate termination locations with equipment installation manual wiring diagrams.
Jared Doescher, PE
IEI 10/28/20

Bid No. 19/20-17
Change Order #01
PCO 016

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 11/5/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: ASI 003 Refrigerant Piping Drip Pans
PCO#: 17

Dear Peter,

Per ASI 003, below is the cost to furnish drip pans under refrigerant piping per owner request.

DESCRIPTION	Material	Labor	Sub	Total Cost
Norther Services Inc.				
ASI 003 Refrigerant Piping Drip Pans	$ -	$ -	$ 2,641	$ 2,641
SUBTOTAL				**$ 2,641**
Markup - Subcontractor				$ 132
Insurance - 1%				$ 26
Bonds - 1.5%				$ 40
TOTAL COST				**$ 2,839**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds
Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2020.11.05 17:30:18-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 017

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Oct 23, 2020

Rodan Builders
3486 Investment Blvd
Ste B
Hayward, CA
94545

Change Order 6

This is proposal for drip pan for the line set that is going from Fan Coils to the wall this will be mounted to the Unistrut and will be hung below, NSI will perform the following work:

- Measure and install drain pan for line set
- Install and hang at a slop to end the drain

Total Cost $2641.30

This price includes Material, labor, Sales Tax,

Labor $721

Material $1850

Sales Tax 9.75% $70.30

Bid No. 19/20-17
Change Order #01
PCO 017

ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	ASI NO.: 03

PROJECT:	Chabot College MPOE Replacement 25555 Hesperian Blvd. Hayward, CA 94545	**DATE:** **ATI PROJECT NO.:**	10/2/2020 C9506
OWNER:	Chabot Las Positas CCD 7600 Dublin Blvd. Dublin, CA 94568	**DSA FILE NO.:** **DSA APP. NO.:**	1-C2 01-118445

[innovative ENGAGING architecture MINDS]

The Work shall be carried out in accordance with the following supplementary instructions issued in accordance with the Contract Documents. If a change in Contract Sum or Contract Time is anticipated, submit a proposal for the work before proceeding with the change. Proposal shall be submitted within 5 days from the date of this document.

DESCRIPTION

1. Sheet M301
   a. Added drip pan under refrigerant piping.
   b. Rerouted refrigerant piping for FC-2 and FC-4 so that they run over the drip pan.
   c. Showed condensate drain piping for FC-2.

2. Sheet M501
   a. Added Detail 4 Drip Pan Detail.

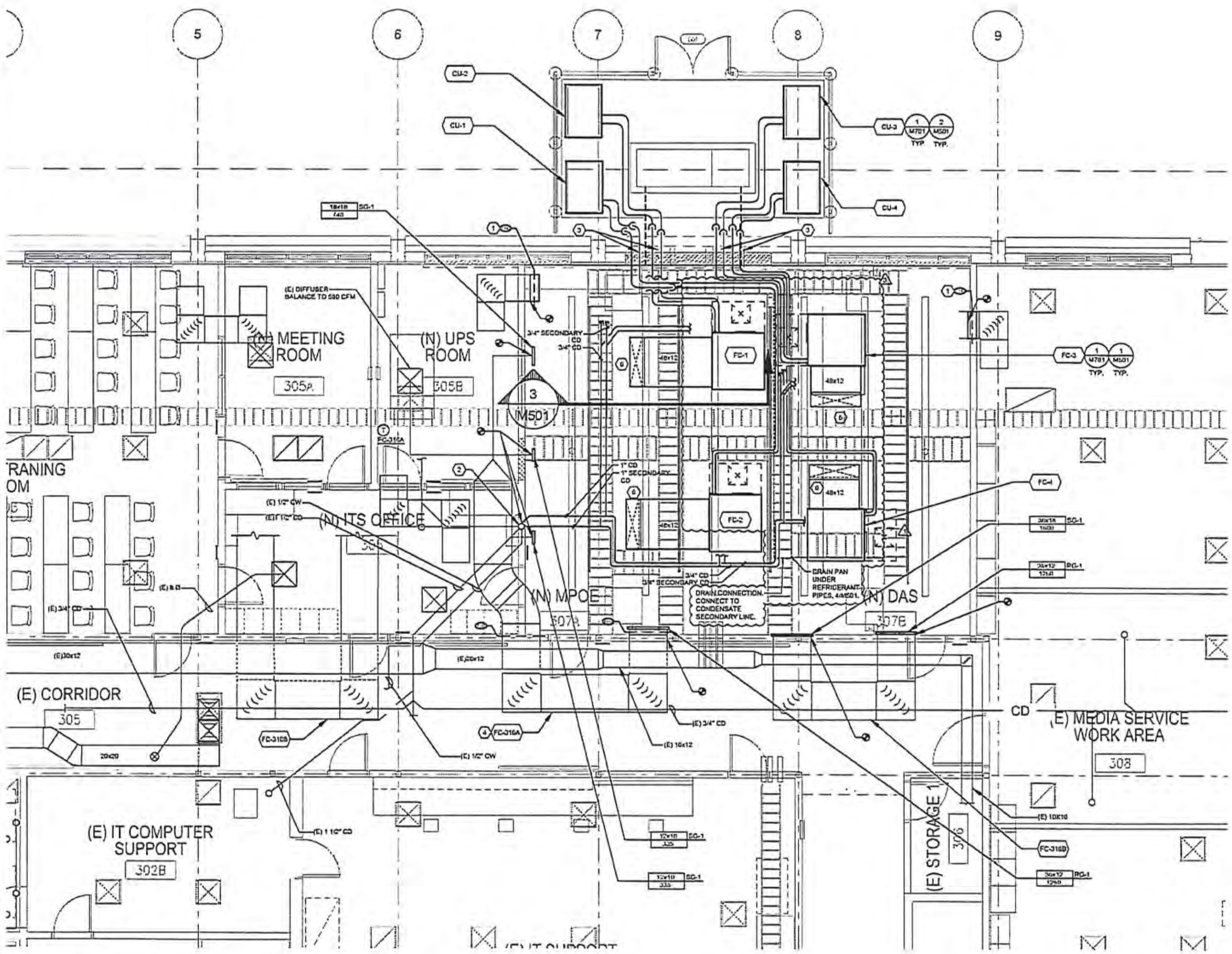
4750 Willow Road, Suite 250
Pleasanton, CA 94588
T: 925 - 648 - 8800

www.atiae.com

Bid No. 19/20-17
Change Order #01
PCO 017

○ SHEET KEYNOTES

1. FSD CONTROLLED BY CLEAN AGENT CHEM. FIRE SUPPRESSION SYSTEM TO CLOSE WITH ACTIVATION OF SYSTEM.
2. DAYLIGHT TO (E) INDIRECT WASTE FIXTURE.
3. REFRIGERANT LINES ROUTED INTO BUILDING UNDER TELECOM CABLING IN THE SAME WALL PENETRATION.
4. (E) FC-316A SET TO 160 CFM.
5. (N) FIRE SMOKE DAMPER IN (E) DUCT.
6. TURN DUCT DOWN AND PROVIDE SCREEN MESH AT OUTLET. LOCATE IN "HOT" AISLE.



1 ENLARGED PLAN - MECHANICAL

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

ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

Date Signed: 11/3/20

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	
2	CCD 2	
3	ASI 3	

KEY PLAN:

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

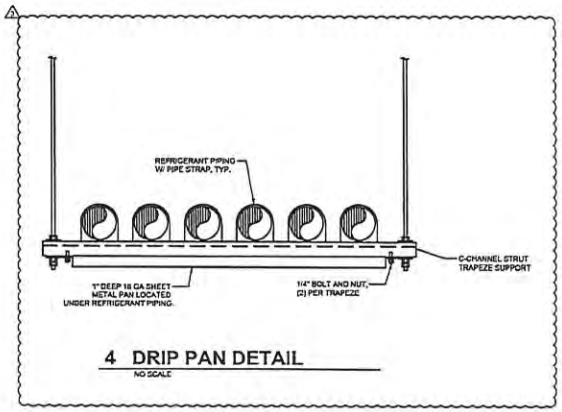
25555 HESPERIAN BLVD
HAYWARD, CA 94545

ENLARGED PLAN - MECHANICAL

DRAWN BY: | CHECKED BY:
DATE: 04/23/2020 | PROJECT NO:
SHEET NO

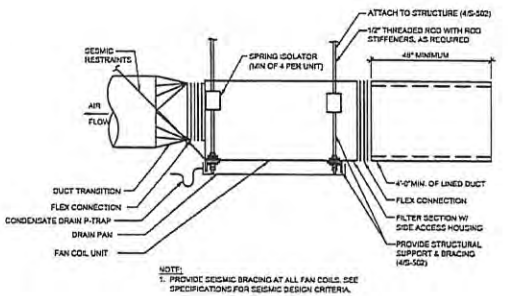
M301

INTERFACE ENGINEERING



4 DRIP PAN DETAIL

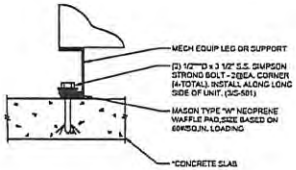
NO SCALE



NOTE:
1. PROVIDE SEISMIC BRACING AT ALL FAN COILS. SEE SPECIFICATIONS FOR SEISMIC DESIGN CRITERIA.

1 FAN COIL UNIT HANGING DETAIL

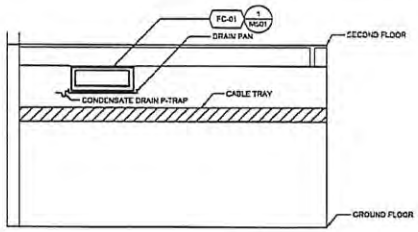
NO SCALE



* BY OTHERS

2 EQUIPMENT ATTACHMENT W/O ISOLATORS

NO SCALE



3 SECTION VIEW - MECHANICAL

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

INTERFACE ENGINEERING

BIA

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT

Date Signed: 11/3/20

ITEM	REVISION / ISSUE	DATE
1	BIA Addendum #1	04/16/2020
2	ASI 2	07/24/2020
3	ASI 3	11/3/2020

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT/
LEARNING SKILLS
TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

DETAILS AND SECTION VIEW- MECHANICAL

DRAWN BY	CHECKED BY
DATE: 04/03/2020	PROJECT NO: C0[illegible]

SHEET NO

M501

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 11/16/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 65, Weather Seal Detail fro Exterior Penetration
PCO#: 18

Dear Peter,

Per response and detail received via RFI 65, below is th cost to furnish and install metal cap to cover installed line sets at exterior wall. Price includes installation and sealing.

DESCRIPTION	Material	Labor	Sub	Total Cost
Norther Services Inc.				
RFI 65, Weather Seal Detail fro Exterior Penetration	$ -	$ -	$ 770	$ 770
SUBTOTAL				**$ 770**
Markup - Subcontractor				$ 39
Insurance - 1%				$ 8
Bonds - 1.5%				$ 12
TOTAL COST				**$ 828**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2020.11.16 15:04:20-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 018

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Nov 16, 2020

Rodan Builders
3486 Investment Blvd
Suite B
Hayward, CA
94545

Change Order 6

This is change order for the sheet metal cap that goes over the line-set, this will include installation and sealing

Total Cost $770.35

This price includes Material, labor, Sales Tax

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9205 Office
(925) 525-6447 Cell
C-4, C-20, C-38
Serving California Since 2005

BIM, Design Build, Construction Service

X_____
Rodan Builders

X_____
Date

X_____
Purchase Order

Bid No. 19/20-17
Change Order #01
PCO 018

RFI 0065 - Weather Seal Detail for Exterior Penetrations

Status: Sent to reviewer

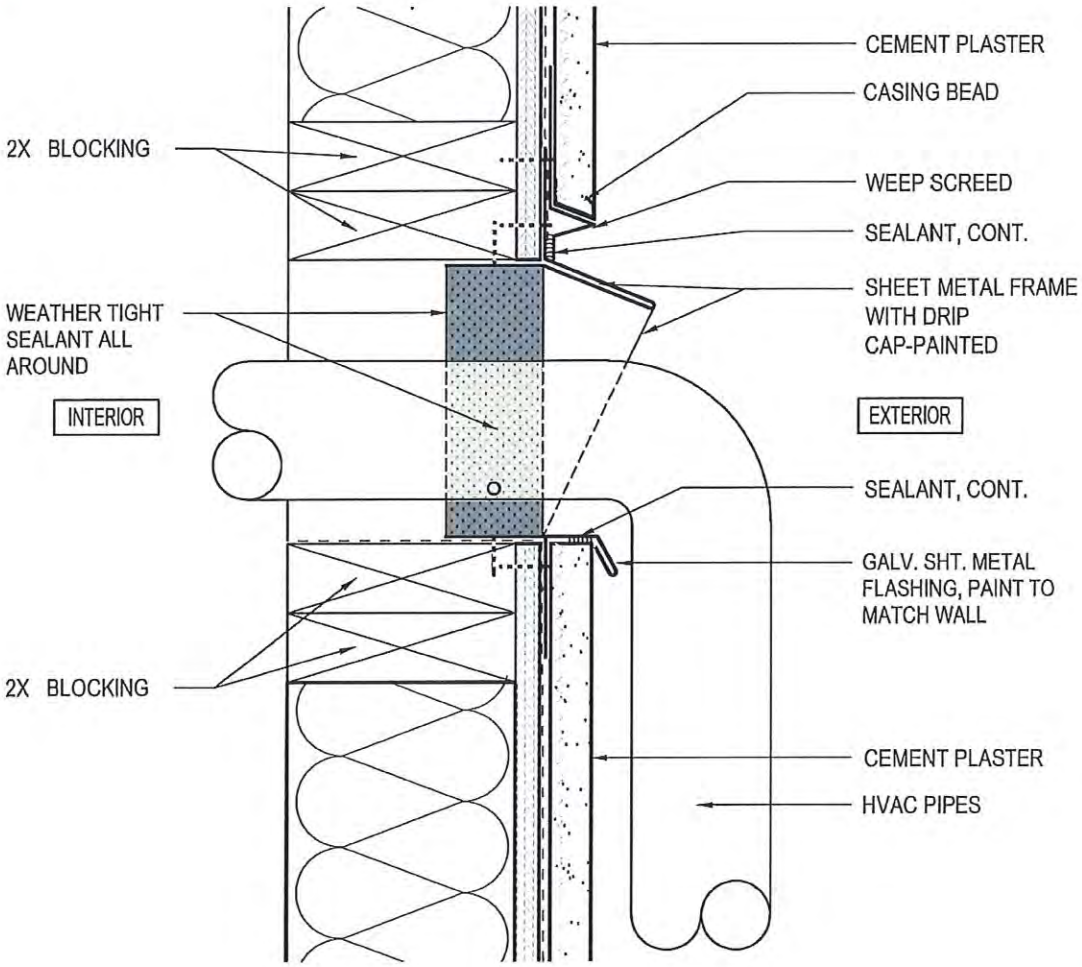
Due Date: Nov 20, 2020

Question

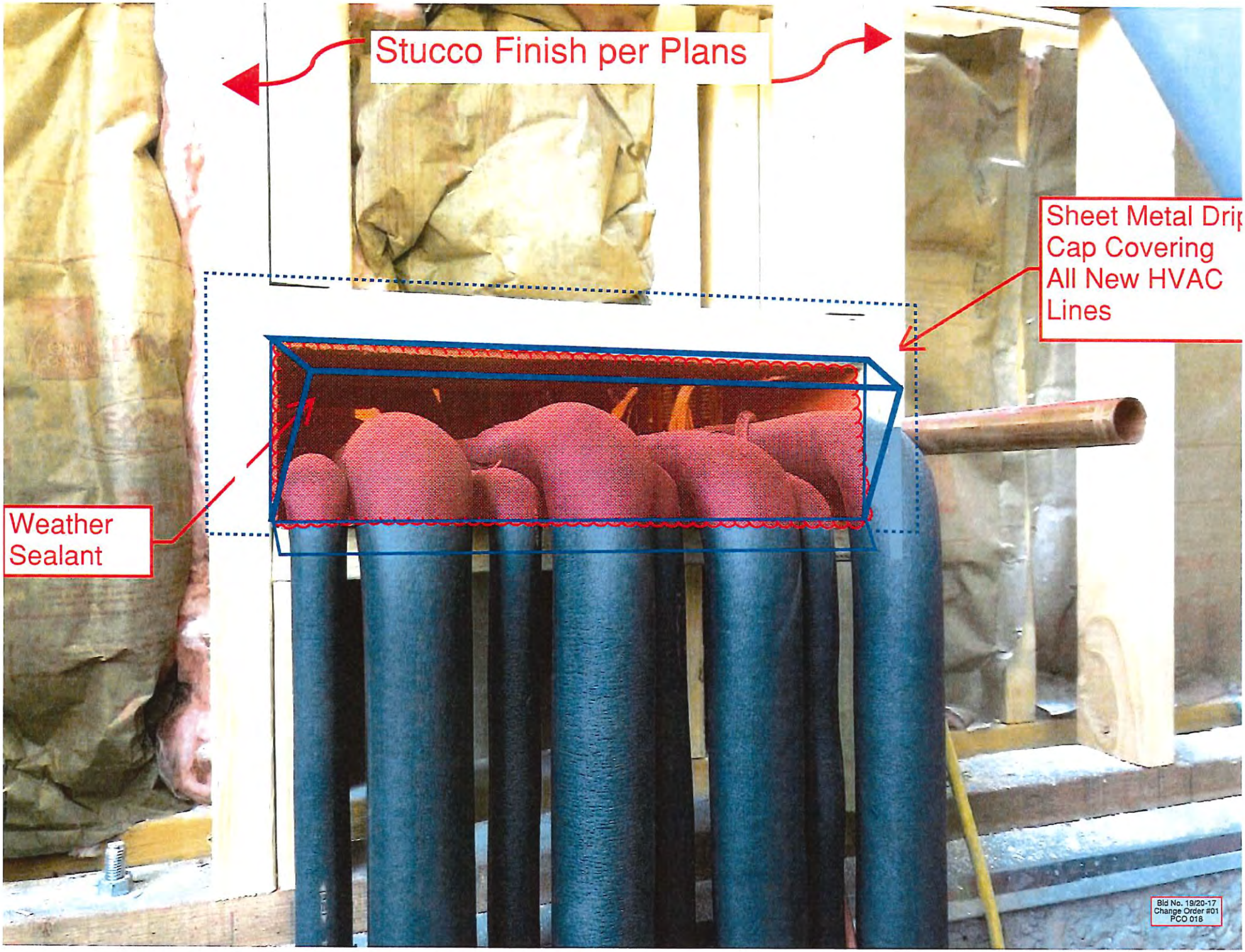
Alex Tellez (Rodan Builders Inc.) on Nov 2, 2020 at 1:59 PM PST

The plans do not provide a detail for weather sealing exterior wall penetration for the HVAC line sets running to the exterior condenser units. Please review the attached mark-up and confirm the proposed sealant and sheet metal cap detail is acceptable.

See below and markups on attached.
A. Win
11/11/2020



Bid No. 19/20-17
Change Order #01
PCO 018


Stucco Finish per Plans
Sheet Metal Drip Cap Covering All New HVAC Lines
Weather Sealant
Bid No. 19/20-17
Change Order #01
PCO 018

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.17

DATE: 12/28/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: CCD 3, Men's Restroom Urinal Demo. and Tile Pach Back
PCO#: 19R1

Dear Peter,

Per CCD3, below is the cost to remove one (1) exisitng urinal at Men's restroom. Once urinal is removed exisitng plumbing will be safed off. Includes disposal of urinal and misc. plumbing materials. Includes minor tile demo and patch back utilizing available attic stock.

DESCRIPTION	Material	Labor	Sub	Total Cost
RG Plumbing				
Plumbing Demo and Safoff			$ 1,022	$ 1,022
DC Tile				
Tile Patching T&M			$ 1,729	$ 1,729
SUBTOTAL				**$ 2,751**
Markup - Subcontractor				$ 138
Insurance - 1%				$ 28
Bonds - 1.5%				$ 41
TOTAL COST				**$ 2,957**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, O="Rodan Builders, Inc.", CN=Keith Reynolds Date: 2020.12.28 15:58:48-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 19R1

R G Plumbing Group, Inc.

Cont. Lic. #802006
461 Todd Road
Santa Rosa, CA 95407
Tel: 707-571-1195

Proposal

Invoice 5191
Date: December 4, 2020
SBE Certified
DIR #1000003935

Proposal Submitted To:
Name: Rodan Builders, Inc.
Street:
City,State,Zip:
Phone:
Fax:

Work Performed At:
Location: Chabot College
City,State,Zip:
Project #
Contract #

We hereby propose to furnish the materials and perform the labor necessary for the completion of:

1) Provide labor and material to remove one (1) existing wall hung urinal & permanently cap waste & water in wall.
2) Work to be complete in one visit.
3) Quote if for regular hours 7:00-3:00
4) Please see below for off hours rate

Does not include:

1) Opening 7 or close of walls, floors or ceiling
2) Removal of demolished plumbing fixtures/utilities from job site

4 Hours Labor: $1000.00
Material: $22.13

Regular Time:$250 per hour
Off Hours: $375.00

All material is guaranteed to be as specified, and the above work to be performed in accordance with the drawings and specifications submitted for above work and completed in a substantial workmanlike manner for the sum of ONE THOUSAND TWENTY TWO Dollars **($1022.00)** with payments to be made as follows: % to be billed each month.

Any alteration or deviation from above specifications involving extra costs, will be executed upon written orders, and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. Owner shall carry fire, tornado, and other necessary insurance upon above work.

Respectfully Submitted By:	Stacy Graniss
Per:	Robert Graniss
State License No.	802006
NOTE:	This proposal may be withdrawn by us if not accepted within 10 days

"NOTICE TO OWNER"
(Section 7018.5 – Contractors License Law) Under the Mechanics' Lien Law, any contractor, subcontractor, laborer, materialman or other person who helps to improve your property and is not paid for his labor, services or material, has a right to enforce his claim against your property.
Under the law, you may protect yourself against such claims by filing, before commencing such work or improvement, an original contract for the work of improvement or a modification thereof, in the office of the county recorder of the county where the property is situated and requiring that a contractor's payment bond be recorded in such office. Said bond shall be in an amount not less than fifty percent (50%) of the contract price and shall, in addition to any conditions for the performance of the contract, be conditioned for the payment in folk of the claims of all persons furnishing labor, services, equipment or materials for the work described in said contract.

ACCEPTANCE OF PROPOSAL
The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above

Signature
Date

Bid No. 19/20-17
Change Order #01
PCO 19R1

D C TILE CO Change Order Request

Change Order Request #: 1

GC Company Name: Rodan Builders
Date: 12/11/20

Project Manager: *Keith Reynolds*

Project: *Chabot College*

Location: *Hayward*

Job No:

Subcontractor: DC TILE CO

Address: 1085 ALPINE WAY - COLFAX, CA 95713

Phone: 530-268-0275
Fax: 866-727-2470

Contact: Ben Riedel

Description of Work: **Reistall Tiles at Restrooms**

Reason for C.O. : **GC Request**

Description	*Qty.*	*Unit*	*Unit/Cost*	*Total*
MATERIALS				
Mastic	1	unit	$45.00	$45.00
Grout	1	unit	$45.00	$45.00
	0	unit	$0.00	$0.00
Tax				$7.88
Subtotal				$97.88
EQUIPMENT				
Subtotal				
LABOR				
JOURNEYMAN	16	HOUR	$87.84	1,405.44
Subtotal				1,405.44

DC TILE CO PROJECT MANAGER SIGNATURE		RECAP	TOTALS
12/11/20		Materials	$97.88
		Equipment	$0.00
Signature	Date	Labor	$1,405.44
Project Manager's Authorization		Subtotal	$1,503.32
		OH & P	$225.50
		Total Change Order	$1,729.00

Bid No. 19/20-17
Change Order #01
PCO 19R1

DC TILE

22118 Trotter Road, Grass Valley, CA 95949
Phone (530) 268-0275 FAX (530) 268-0418
Contractors License CA #693586

EXTRA WORK AUTHORIZATION FORM

DATE: 12-11-2020
CUSTOMER: Radan Construction
JOB NAME: Chabatt College
ADDRESS:
FIELD ORDER NO:
CLIENT ORDER NO:

DESCRIPTION OF WORK: I Certify that I am authorized by subject customer to order the work listed below. Customer agrees to issue an official change order to DC Tile and payment will be made upon submission of the appropriate billing.

Had to float in holes in walls and patch. Back tiles from old tear out and Regrout

LABOR # of Men	Classification	ST TIME	OVERTIME	DOUBLE TIME	TOTAL HOURS ST TIME	OVERTIME	DOUBLE TIME
2	Journeymen	8			16		

MATERIAL	DESCRIPTION	QUANTITY USED
Mastic		1 3gallon
Grout		1 Bag

PAYMENT FOR WORK AUTHORIZED BY: Customer

DATE WORK COMPLETED 12-11-2020 **FOREMAN** Mark Clark

The above described field change is hereby authorized and agreed to. The undersigned has full authority to request the change and commit the company to payment for same or to accept credit for same as set forth above.

WORK AUTHORIZED BY: Alex Tellez

Bid No. 19/20-17
Change Order #01
PCO 19R1

DSA 140

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☐)

Deferred Submittal ☐	Addendum Number:	Revision Number:	CCD Number: 3	Category A ☑ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Chabot Las Positas Community College	DSA File Number: 1 C2
Project Name/School: Chabot College MPOE Replacement	DSA Application Number 01 118445

3. APPLICANT INFORMATION:

Date Submitted: 11/09/20	Attached Pages? No ☐ Yes ☑ Number of pages? 2		
Firm Name: ATI Architects & Engineers	Contact Name: Donna Foster		
Work Email: dfoster@atiae.com	Work Phone: (925) 648-8800		
Firm Address: 4750 Willow Road Suite 250	City: Pleasanton	State: CA	Zip Code: 94588

4. REASON FOR SUBMITTAL: (Check applicable boxes)

☐ For revision or addendum prior to construction.

☑ For a project currently under construction.

☐ For a project that has a form *DSA 301-N: Notification of Requirement for Certification*, *DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.

☐ To obtain DSA approval of an existing uncertified building or buildings.

☐ For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Anna Win

Professional License Number: C23260 Discipline: Architecture

Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: Anna Win

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX ☑ to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals,* and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

Due to structural constraints, remove requirement for ambulatory stall by taking out one (1) existing urinal in Men's room. This complies with CPC 422.0 for minimum fixture count.

List of DSA-approved drawings affected by this post-approval document:

Sheets A220; A302

DSA USE ONLY

Bid No. 19/20-17
Change Order #01
PCO 19R1

SSS SA Date 11/13/2020 ☑Approved ☐Disapproved ☐Not Required

Comments:

FLS Date ☐Approved ☐Disapproved ☑Not Required

Comments:

ACS EB Date 11-19-20 ☑Approved ☐Disapproved ☐Not Required

Comments:

Returned	DSA STAMP
Date:	APPROVED DIV. OF THE STATE ARCHITECT APP: 01-118445 INC: REVIEWED FOR SS ☑ FLS ☐ ACS ☑ DATE: 11/19/2020
By:	

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 12/8/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: CCD 4, 3M Fire Barrier Duct Wrap Installation at FSD's
PCO#: 20

Dear Peter,

Per CCD4, below is the cost to furnish and install 3M fire barrier duct wrap at indicated FSD locations.

DESCRIPTION	Material	Labor	Sub	Total Cost
Norther Services Inc.				
CCD 4, 3M Fire Barrier Duct Wrap Installation at FSD's	$ -	$ -	$ 1,323	$ 1,323
SUBTOTAL				**$ 1,323**
Markup - Subcontractor				$ 66
Insurance - 1%				$ 13
Bonds - 1.5%				$ 20
TOTAL COST				**$ 1,423**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2020.12.08 12:49:45-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 020

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Dec 4, 2020

Rodan Builders
3486 Investment Blvd
Suite B
Hayward, CA
94545

Change Order 7

This is change order to put the 3-M Fire Wrap around the FSD, NSI will provide the following work:

- Install 3-M Fire Wrap around FSD

Total Price $1,323.26

Labor $900

Material $385.66

Sales Tax 9.75 $37.60

This price includes Material, Labor, Sales Tax, Freight

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9405 Office
(925) 525-6447 Cell
C-4, C-20, C-38
Serving California Since 2005

BIM, Design Build, Construction Service

X_____
Rodan Builders

X_____
Date

X_____
Purchase Order

Bid No. 19/20-17
Change Order #01
PCO 020

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Oct 15, 2020

Rodan Builders
3486 Investment Blvd STE B,
Hayward, CA 94545

This is rate sheet on work for the Boilers, Air Conditioning, Refrigeration that will include 1yr of service and parts mark up from NSI below are the rates:

Boilers, Air Conditioning, Refrigeration:

Service Rates

$180 per hour

Overtime Rates

$270 per hour 3hr min

Trip Charge

$95 per service call

Mark Up Rates

Parts up to $1000 are 1.67% mark up

Over $1000 1.43% mark up

Bid No. 19/20-17
Change Order #01
PCO 020

DSA **140**

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☐)

Deferred Submittal ☐	Addendum Number:	Revision Number:	CCD Number: 4	Category A ☑ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Chabot Las Positas Community College	DSA File Number: 1 C2
Project Name/School: Chabot College MPOE Replacement	DSA Application Number 01 118445

3. APPLICANT INFORMATION:

Date Submitted: 11/18/20	Attached Pages? No ☐ Yes ☑ Number of pages? 2		
Firm Name: ATI Architects & Engineers	Contact Name: Donna Foster		
Work Email: dfoster@atiae.com	Work Phone: (925) 648-8800		
Firm Address: 4750 Willow Road Suite 250	City: Pleasanton	State: CA	Zip Code: 94588

4. REASON FOR SUBMITTAL: (Check applicable boxes)

☐ For revision or addendum prior to construction.

☑ For a project currently under construction.

☐ For a project that has a form *DSA 301-N: Notification of Requirement for Certification, DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.

☐ To obtain DSA approval of an existing uncertified building or buildings.

☐ For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Anna Win

Professional License Number: C23260 Discipline: Architecture

Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: Anna Win

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX ☑ to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals*, and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

Due to obstructions on corridor side, fire smoke damper needs to be installed out of plane of the existing 1-hr. fire rated wall. A fire barrier wrap is proposed around the sheet metal extension to maintain continuous fire rating around the damper. 3M Fire Barrier Duct Wrap 615+ will be used as part of a tested 3MU/DI-120-01 system.

List of DSA-approved drawings affected by this post-approval document:

Sheets M301

Bid No. 19/20-17
Change Order #01
PCO 020

DSA USE ONLY

SSS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

FLS AW Date 12/3/2020 ☑Approved ☐Disapproved ☐Not Required

Comments:_____

ACS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

Returned

Date:

By:

DSA STAMP

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 01-118445 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 12/03/2020

20-1102 CLPCCD MPOE Replacement Bldg. 300
25555 Hesperian Boulevard, Hayward, California

RODAN BUILDERS, INC.

To 1 reviewer

From
Alex Tellez
atellez@rodanbuilders.com

3M Fire Barrier Duct Wrap

Nov 16, 2020

Awaiting review - 0/1 reviews complete

Submittal No.	Version	Spec Section	Due date
64	1	23 33 00	Nov 26, 2020

Included Items

Reviewers

0/1 complete

Reviewer	Review Response	Date Reviewed
Peter Espinosa (STV Inc.)	Awaiting Review	-

ATI ARCHITECTS AND ENGINEERS
4750 Willow Road, Suite 250, Pleasanton, CA 94588
Submittal/Shop Drawing Review

NO EXCEPTIONS TAKEN

Checking is only for general conformance with the design concept of the project and general compliance with the information given and the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the job site; for fabrication process and techniques of construction; Coordination of his/her work with that of all other trades; and the satisfactory performance of his/her work.

Sign _____ Date _____

Please see attached Submittal #64 3M Fire Barrier Duct Wrap, MPOE Replacement Bldg. 300, for your review and approval. The 3M fire barrier duct wrap will be installed on both the supply and return ducts for FC-316B. Note, this is a material substitution request to the out of partition sheet metal product received within RFI response #67 FSD Installation Obstructions. The out of partition sheet metal assembly cannot be acquired due to no available material stock.

12/7/20
No Exception Taken see attached DSA Approved CCD 4

Bid No. 19/20-17
Change Order #01
PCO 020

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Nov 16, 2020

Rodan Builders
3486 Investment Blvd
Suite B
Hayward, CA
94545

RFI FSD

The last FSD that will be installed will be installed in the wall wrapped with 3M Fire Barrier Duct Wrap 615+ around the FSD, NSI will provide the following work:

- Install last FSD in the wall
- Wrap the FSD with 3M Fire Barrier Duct Wrap 615+
- Tie strap with metal bands around the FSD

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9205 Office
(925) 525-6447 Cell
C-4, C-20, C-38
Serving California Since 2005

BIM, Design Build, Construction
Service

Bid No. 19/20-17
Change Order #01
PCO 020

3M™ Flexible Wrap Solutions

Fire Protection for critical building systems.

Safeguard air, kitchen extract (grease) and life safety (ventilation air) ducts, critical electrical circuits, fuel lines, structural steel and other crucial components with the advanced technology of 3M's protective wrap systems.

Bid No. 19/20-17
Change Order #01
PCO 020

Zero clearance to combustible throughout the entire enclosure system.

3M™ Fire Barrier Duct Wrap 615+

Provides excellent insulating capabilities and offers a space-saving alternative to traditional bulky fire protection methods such as installing a gypsum wall shaft or enclosure. This wrap is commonly used in commercial kitchen grease ducts, as well as ventilation air ducts. Duct Wrap 615+ protects both air and grease ducts for up to two hours.

- Lightweight (6 lbs per cu ft) and thin (1.5 in*) for easier application
- Up to 2-hour fire protection
- Third party certified to ASTM E2336 (grease duct test standard) and ISO 6944 (air duct test standard)
- Supports maximum temperatures of up to 2192°F (1200°C)
- Apply 2 layers for grease ducts
- Apply 1 layer for air ducts (external fire threat)
- Blanket is adhesively bound to the foil scrim

*In accordance with the tolerances in ASTM C892 Standard Specification for High-Temperature Fiber Blanket Thermal Insulation.

Kitchen Exhaust Ducts

Approved for use on kitchen exhaust ducts, per ASTM E2336 providing 1 and 2 hour protection with a 2-layer system.

Stair Pressurization and Life Safety Ventilation Ducts

Duct Wrap 615+ is tested to ISO 6944 Type A and can be used on stair pressurization ducts and other life safety air ducts, providing 2 hour protection with a 1 layer system.

Bid No. 19/20-17
Change Order #01
PCO 020

Grease Duct Listings for 3M™ Fire Barrier Duct Wrap 615+

Fire Resistive Rating	Enclosure System	Duct System, Intertek	Testing
1 or 2 hours	2 layers of 3M™ Fire Barrier Duct Wrap 615+, 3" (76mm) perimeter and 3" (76mm) longitudinal overlaps	3MU/FRD 120-18 3MU/FRD 120-19	ASTM E2336/ ICC ES AC101.1

Codes and Standards for 615+, Grease Duct*

- NFPA 96, 2017 Edition
- NFPA 96, 2014 Edition
- Uniform Mechanical Code, 2018 Edition, Section 507.4.5
- International Mechanical Code, 2018 Edition, Section 506.3.11
- International Mechanical Code, 2015 Edition, Section 506.3.11

Ventilation Air Duct Listings for 3M™ Fire Barrier Duct Wrap 615+ (tested to ISO 6944 Type A)

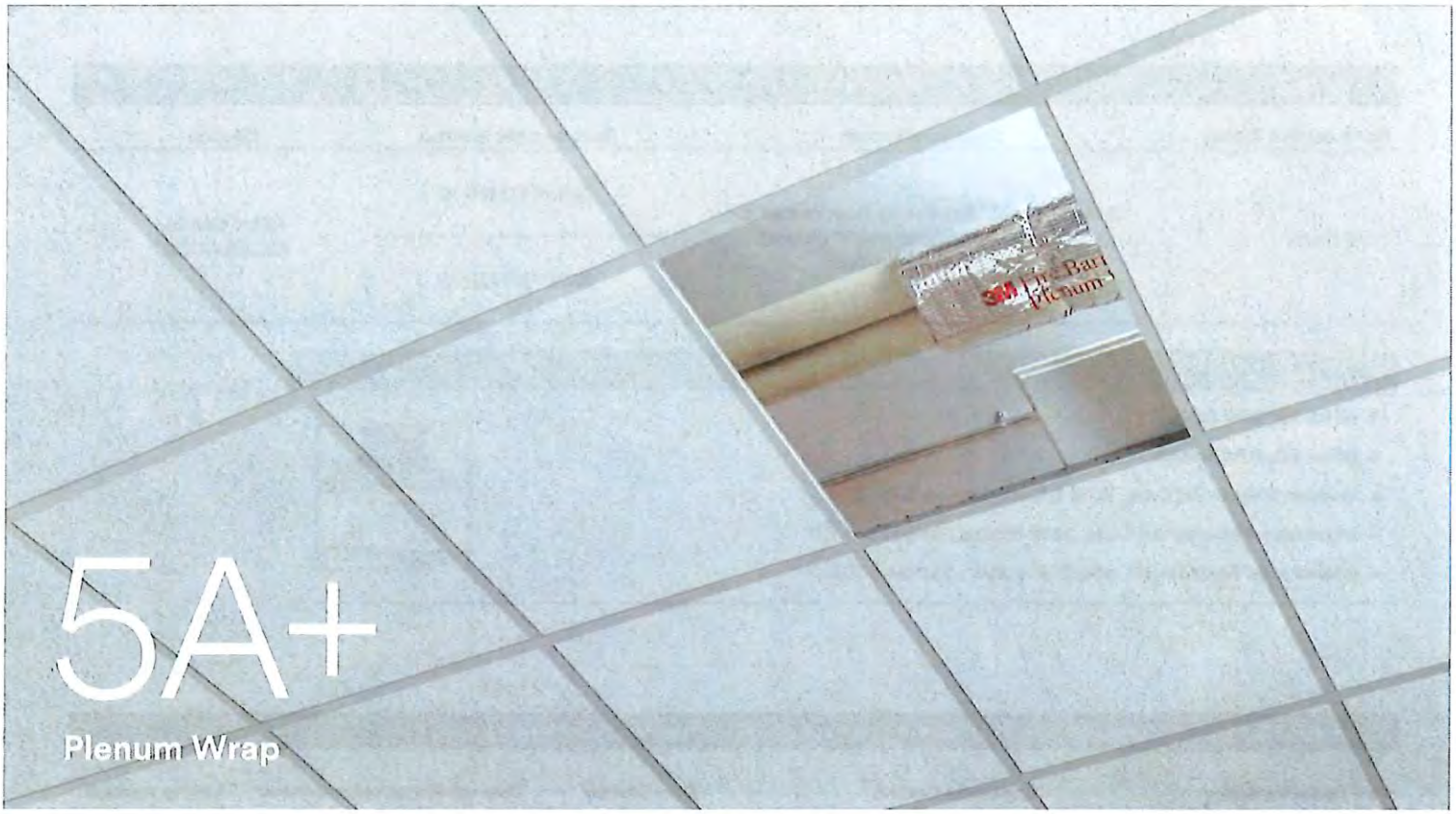
Fire Resistive Rating	Enclosure System	Duct System	Through-Penetration System	Listing Agency
1 or 2 hours	1 layer of 3M™ Fire Barrier Duct Wrap 615+, 3" (76mm) perimeter and longitudinal overlaps	V-27	W-L-7180 W-J-7104 F-C-7054	UL
		V-31	W-L-7180 W-J-7104 F-C-7054	UL
		3MU/FRD 120-15	3MU/PH 60-03 3MU/PV 120-23 3MU/PV 120-25	Intertek

Codes and Standards for 615+, Air Duct*

- NFPA 90A, Standards for the Installation of Air Conditioning and Ventilating Systems, 2018 Ed.
- NFPA 92 Standard for Smoke-Control Systems, 2018 Edition — Section 6.6.2
- NFPA 101 Life Safety Code, 2006 Edition — Section(s) 8.6.7, 18.7.7
- International Mechanical Code, 2018 Edition — Section 513.10.2
- International Building Code, 2018 Edition — Section 909.10.2

*This is only a partial list of codes and standards. Go to 3M.com/firestop or speak to your authorized 3M distributor or sales representative at 1-800-328-1687.

Bid No. 19/20-17
Change Order #01
PCO 020



Keep your plenum areas safe by wrapping plastic pipes and cables.

3M™ Fire Barrier Plenum Wrap 5A+

Creates a fire-resistive enclosure that reduces flame and smoke spread ratings to code compliant levels in return air plenums. The strong, thin and lightweight product is extremely easy to manipulate and install, particularly around pipes and cabling.

- ASTM E84, NFPA 262 (UL 910), and UL 1887
- Strong, lightweight and flexible material for easy installation
- Foil scrim encapsulated blanket

Listings for 3M™ Fire Barrier Plenum Wrap 5A+

Enclosure System: 1 layer of 3M™ Fire Barrier Plenum Wrap 5A+, 1" (25mm) perimeter and longitudinal overlaps

Design Listing Number, Intertek	Protected Item	Testing
3MU/FRD 120-16	Plastic Pipe: PVC, CPVC, ABS, PB, PE, PP and PVDF	UL 1887
3MU/FRD 120-17	Cabling with PVC, CPVC, ABS, PB, PE, PP and PVDF jacketing	NFPA 262 (UL 910)
3MU/BI 120-01	Plastic Pipe: PVC, CPVC, ABS, PB, PE, PP and PVDF	ASTM E84

Surface Burning Characteristics (ASTM E84 for 5A+)

Enclosure System	Flame Spread	Smoke Developed
Foil Encapsulated Blanket	0	0
Blanket	0	0
Foil Encapsulated Blanket around plastic pipes	0	45 (modified E84)

Fire protection designed for wood frame construction.

3M™ Dryer Ventilation Wrap

3M™ Dryer Ventilation Wrap is a fire-resistant wrap that consists of an inorganic fiber blanket encapsulated with a scrim-reinforced foil. This dryer ventilation wrap has been designed as a strong, lightweight and flexible material for easy installation.

This product is engineered to create a fire-resistive enclosure capable of 1-hour ratings to acceptable levels for dryer and kitchen ventilation ducts in wood frame fire rated construction.

- Provides single layer 1-hour rating for dryer, bathroom and domestic kitchen ventilation ductwork
- Strong, lightweight and flexible
- Features foil encapsulated scrim
- Non-asbestos wrap
- Provides equal Fire and Temperature rating (F&T)
- Tested to ASTM E2816, Condition B

Listing for 3M™ Dryer Ventilation Wrap

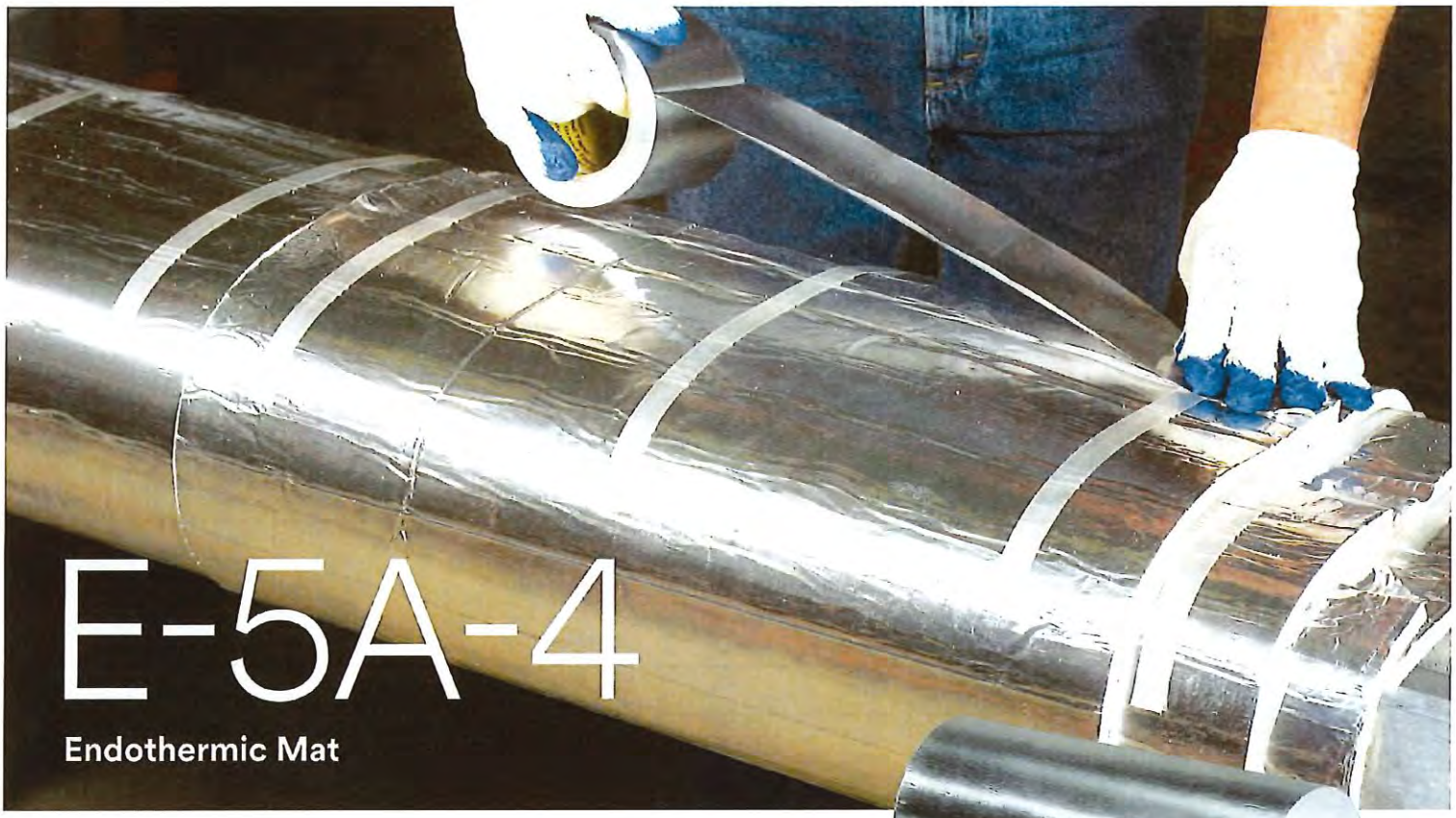
Enclosure System: 1 Layer of 3M™ Dryer Ventilation Wrap, with either 1" (25mm) or tightly butted perimeter and longitudinal overlaps*

Design Listing Number, Intertek	Protected item	Testing
3MU/DI 60-02	Up to 7" Diam. or 4" x 10" Steel Duct	ASTM E2816, Condition B

*See listing for full installation steps and requirements.

1hr Fire Protection

Bid No. 19/20-17
Change Order #0
PCO 020



E-5A-4

Endothermic Mat

Protection that enhances design flexibility.

3M™ Interam™ Endothermic Mat E-5A-4

Tested for a full range of critical applications, E-5A-4 blocks heat by chemically absorbing it — when exposed to extreme heat, it releases chemically bound water that cools the outer surface of the mat. This helps reduce the rate of temperature rise and slows heat transfer even during intense fires. Provides up to 4-hour fire protection for structural steel applications in accordance with ASTM E119, up to 3-hour fire protection for electrical circuit applications in accordance with ASTM E1725 and, when applied to the back and sides of metallic utility boxes, our endothermic mat helps achieve an equal F-rating and T-rating in membrane penetrations of rated walls assemblies. It also protects fuel oil piping.

- Endothermic design releases cooling chemical-bound water when exposed to extreme heat
- Versatile: rated for structural steel, electrical and communication circuitry (i.e., emergency responder DAS — Distributed Antenna Systems), wall opening membranes and fuel oil piping
- Flexible: easy to cut and configure for installation on complex shapes and around corners
- Non-corrosive and requires no maintenance when properly installed
- Provides protection against intense fires including hydrocarbon pool fires and jet fires

Listings for 3M™ Interam™ Endothermic Mat E-5A-4

Protected Building System	Fire Resistive Rating	Enclosure System	Testing	Listing Agency
Structural Steel	Up to 4 hours	X206	ASTM E119	UL
Electrical or Communication	Up to 3 hours	3MU/AF 120-01 >1" Conduit	ASTM E1725 (UL 2196)	Intertek
		System No. 34 >4" Conduit		UL
		3MU/AF 180-02 Cable Bundle		Intertek
		3MU/AF 180-03 Junction Box		Intertek
Large Metallic Membrane Penetration	Up to 2 hours	W-L-7190	ASTM E814 (UL 1479)	UL
Fuel Oil Piping	Up to 3 hours	FP-1, FP-2	UL 1489	UL

For more information including oil and gas applications, visit **3M.com/emat**

Bid No. 19/20-17
Change Order #01
PCO 020

Choose the right wrap for the right application.

Applications	615+	5A+	Dryer Ventilation	E-5A-4
Grease Duct	●			
Ventilation Air Duct	●			
Life Safety Duct (Stair Pressurization, Smoke, Exhaust, etc.)	●			
Plenum Applications		●		
Dryer Ventilation	●		●	
Domestic Kitchen Ventilation			●	
Bathroom Ventilation			●	
DAS/Communication Cables				●
Critical Electrical Circuitry				●
Structural Steel				●
Fuel Oil Piping				●
Large Metallic Membrane Penetration				●

Note: Consult individual project plans for which codes and standards apply.

Performance comparison.

Performance Characteristics	615+	5A+	Dryer Ventilation	E-5A-4
ASTM C518	●	●	●	
ASTM C411	●		●	
ASTM C1338	●	●	●	
ASTM E84	●	●	●	●
ASTM E814 (UL 1479)	●		●	●
ASTM E119	●			●
ASTM E136	●	●	●	●
ASTM E1725				●
ASTM E2336	●			
ASTM E2816			●	
ISO 6944	●			
NFPA 262 (UL 910)		●		
UL 1887		●		
UL 1709				●

Bid No. 19/20-17
Change Order #01
PCO 020

Ordering information.

Product		Roll Size (Width x Length)	Thickness	UPC Number	Packaging	Roll Weight
3M™ Fire Barrier Duct Wrap 615+		24" x 25' (60.9cm x 762cm)	*1.5" (38mm)	000-51115-18799-5	1 roll/case 4 cases/pallet	45 lbs (20 kg)
		48" x 25' (121.9cm x 762cm)	*1.5" (38mm)	000-51115-18800-8	1 roll/case 2 cases/pallet	90 lbs (40 kg)
3M™ Fire Barrier Plenum Wrap 5A+		24" x 50' (60.9cm x 1524cm)	0.5" (12.7mm)	000-51115-16513-9	1 roll/case 8 cases/pallet	45 lbs (20 kg)
		48" x 25' (121.9cm x 762cm)	0.5" (12.7mm)	000-51115-16574-6	1 roll/case 8 cases/pallet	90 lbs (40 kg)
3M™ Interam™ Endothermic Mat E-5A-4		24.5" x 20' (62.2cm x 609.6cm)	0.408" (10.4mm)	000-51115-54913-7	1 roll/case 12 rolls/pallet	74.6 lbs (33.8 kg)
3M™ Fire Barrier Dryer Ventilation Wrap		16" x 25' (40.6cm x 762cm)	0.5" (12.7mm)	006-38060-40469-0	1 roll/case 27 rolls/pallet	13.4 lbs (6.1 kg)
		20" x 25' (50.8cm x 762cm)	0.5" (12.7mm)	006-38060-40495-9	1 roll/case 18 rolls/pallet	16.6 lbs (7.5 kg)
		32" x 25' (81.3cm x 762cm)	0.5" (12.7mm)	006-38060-40496-6	1 roll/case 9 rolls/pallet	25.9 lbs (11.7 kg)

3M's Grease, Chemical Fume and Ventilation Air Duct listings all have affiliated Through-Penetration design listings that comply with ASTM E814.
Go to 3M.com/firestop or speak to your authorized 3M distributor or sales representative at 1-800-328-1687 for more information.

*In accordance with the tolerances in ASTM C892 Standard Specification for High-Temperature Fiber Blanket Thermal Insulation.

To learn more, visit 3M.com/firestop

Industrial Tapes and Adhesives Division
3M Center, Building 225-3S-06
St. Paul, MN 55144 USA

1-800-328-1687
3M.com/firestop

DSA **140**

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

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1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☐)

Deferred Submittal ☐	Addendum Number:	Revision Number:	CCD Number: 4	Category A ☑ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Chabot Las Positas Community College	DSA File Number: 1 C2
Project Name/School: Chabot College MPOE Replacement	DSA Application Number 01 118445

3. APPLICANT INFORMATION:

Date Submitted: 11/18/20	Attached Pages? No ☐ Yes ☑ Number of pages? 2		
Firm Name: ATI Architects & Engineers	Contact Name: Donna Foster		
Work Email: dfoster@atiae.com	Work Phone: (925) 648-8800		
Firm Address: 4750 Willow Road Suite 250	City: Pleasanton	State: CA	Zip Code: 94588

4. REASON FOR SUBMITTAL: (Check applicable boxes)

☐ For revision or addendum prior to construction.

☑ For a project currently under construction.

☐ For a project that has a form *DSA 301-N: Notification of Requirement for Certification*, *DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.

☐ To obtain DSA approval of an existing uncertified building or buildings.

☐ For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Anna Win

Professional License Number: C23260 Discipline: Architecture

Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: Anna Win

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX ☑ to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals*, and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

Due to obstructions on corridor side, fire smoke damper needs to be installed out of plane of the existing 1-hr. fire rated wall. A fire barrier wrap is proposed around the sheet metal extension to maintain continuous fire rating around the damper. 3M Fire Barrier Duct Wrap 615+ will be used as part of a tested 3MU/DI-120-01 system.

List of DSA-approved drawings affected by this post-approval document:

Sheets M301

Bld No. 19/20-17
Change Order #01
PCO 020

DSA USE ONLY

SSS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

FLS AW Date 12/3/2020 ☐Approved ☐Disapproved ☐Not Required

Comments:_____

ACS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

Returned	DSA STAMP
Date:	APPROVED DIV. OF THE STATE ARCHITECT APP: 01-118445 INC: REVIEWED FOR SS ☑ FLS ☑ ACS ☐ DATE: 12/03/2020
By:	

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 12/28/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Furnish Material Only Fiber Patch Cords Per Owner Request
PCO#: 21

Dear Peter,

Per owner request, below is the cost to furnish (material only), sixty (60) Systimax 15 foot, LC-LC, TS fiber patch cords #FEWLCLC42-JXF015 and forty (40) Systimax 5 foot, LC-LC, TS fiber patch cords #FEWLCLC42-JXF005.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
Furnish Material Only Fiber Patch Cords Per Owner Request	$ -	$ -	$ 3,165	$ 3,165
SUBTOTAL				**$ 3,165**
Markup - Subcontractor				$ 158
Insurance - 1%				$ 32
Bonds - 1.5%				$ 47
TOTAL COST				**$ 3,402**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, O="Rodan Builders, Inc.", CN=Keith Reynolds Date: 2020.12.28 16:21:34-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 021

Time and Material Change Order Pricing

Company:

Company: Rodan Builders
Contact: Keith Reynolds
Address: 3486 Investment Blvd. Suite B
City, State Zip: Hayward, CA 94545
Telephone: 650-508-1700
Fax:

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 11
Date: 12/23/20
Description: Fiber Patch Cords

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ -

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ -
Sales Tax:		$ -
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ -
Overhead and Profit (Materials & Equipment)	15%	$ -
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ -

Item	SubTier Contractors	Quote	
1	Sasco	$ ~~3,104.00~~	$3,014.00
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:	$	~~3,104.00~~	$3,014.
Profit at 5.00%:	$	~~155.00~~	$150.77
Subtotal:	$	3,259.00	$3,164.7
Subcontractor + 2nd tier Subcontractor(s) Subtotal:	$	3,259.00	
Total this Page:	$	3,259.00	
Total from Previous Pages			
Proposal Grand Total:	$	~~3,259.00~~	$3,164.

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 021

598 Gibralter Drive
Milpitas, CA 95035
Phone: (408) 970-8300
Fax: (408) 970-8140
License # 583536

Sasco Data
598 Gibraltar Drive
Milpitas, CA 95035

December 17, 2020

Attn: Wendy Pinos

RE: Chabot Fiber Patch Cord Proposal ***#2***

Dear Wendy,

I hereby submit this proposal for your approval.

SCOPE OF WORK

Provide the following patch cords:

- Sixty (60) Systimax 15 foot, LC-LC, TS fiber patch cords #FEWLCLC42-JXF015
- Forty (40) Systimax 5 foot, LC-LC, TS fiber patch cords #FEWLCLC42-JXF005

PRICING

Materials:	$ 3,014.00
Labor:	$ 00.00
TOTAL:	**$ 3,014.00**

Sincerely,

Mike Cimino
Sasco Senior Project Manager

Bid No. 19/20-17
Change Order #01
PCO 021

Keith Reynolds

From: Espinosa, Peter L. <Peter.Espinosa@stvinc.com>
Sent: Tuesday, December 22, 2020 11:22 AM
To: Keith Reynolds
Subject: RE: more fiber patch cords

Also, this is for material only.

PETER ESPINOSA, CCM
Sr. Construction Manager
Construction Management Division
STV
505 14TH Street; Suite 1060 | Oakland, CA 94612-1406
office: (510) 763-1313 | **mobile: (510) 301-3416**
Email: peter.espinosa@stvinc.com
100 Years, PROVIDING QUALITY SERVICE SINCE 1912

From: Keith Reynolds <kreynolds@rodanbuilders.com>
Sent: Tuesday, December 22, 2020 11:11 AM
To: Espinosa, Peter L. <Peter.Espinosa@stvinc.com>
Subject: FW: more fiber patch cords

Hi Peter,

Sasco is a sub of Beci Electric's. I will need to forward this to them so they can prepare a CO to Rodan. Please confirm.

Thanks,

Keith

From: Espinosa, Peter L. <Peter.Espinosa@stvinc.com>
Sent: Tuesday, December 22, 2020 11:06 AM
To: Keith Reynolds <kreynolds@rodanbuilders.com>
Subject: FW: more fiber patch cords

Hi Keith,
Please submit the attached as a PCO, thanks.
Peter

PETER ESPINOSA, CCM
Sr. Construction Manager
Construction Management Division
STV
505 14TH Street; Suite 1060 | Oakland, CA 94612-1406
office: (510) 763-1313 | **mobile: (510) 301-3416**
Email: peter.espinosa@stvinc.com
100 Years, PROVIDING QUALITY SERVICE SINCE 1912

Bid No. 19/20-17
Change Order #01
PCO 021

From: Wendy Pinos <wpinos@clpccd.org>
Sent: Tuesday, December 22, 2020 10:59 AM
To: Espinosa, Peter L. <Peter.Espinosa@stvinc.com>
Subject: more fiber patch cords

Peter,
Here are the additional patch cords I need.
Wendy

Keith Reynolds
Project Manager

3486 Investment Blvd, Suite B, Hayward, CA 94545
P 650.508.1700 **C** 650.740.0560
F 650.508.1708 **Bid Fax** 650.508.1705
E kreynolds@rodanbuilders.com
rodanbuilders.com

HAYWARD + CONCORD

Bid No. 19/20-17
Change Order #01
PCO 021

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 1/5/2020

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Ceiling Transfer Grille per Submittal Response #67
PCO#: 22

Dear Peter,

Below is the cost to furnish and install one (1) 18x30 air transfer grille inside the UPS room as requested within Submittal response #67.1.

DESCRIPTION	Material	Labor	Sub	Total Cost
Northern Services Inc.				
Ceiling Transfer Grille per Submittal Response #67	$ -	$ -	$ 1,104	$ 1,104
SUBTOTAL				**$ 1,104**
Markup - Subcontractor				$ 55
Insurance - 1%				$ 11
Bonds - 1.5%				$ 17
TOTAL COST				**$ 1,187**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds Date: 2021.01.07 09:04:13-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 022

NORTHERN SERVICES INC

P.O. Box 15489
San Francisco, CA 94115
P: (800) 594-9205
F: (510) 842-3105
www.northernserviceinc.com

C-4, C-20, C-36

Dec 24, 2020

Rodan Builders
3486 Investment Blvd
Unit B
Hayward, CA
94545

Change Order 9

This is change order for installation of transfer grill from UPS room to Data Room, there will be only 1 installed and will be 18x30, NSI will provide the following work:

Install 1 transfer grill 18x30

Total Cost $1,104.13

Transfer Grill $350.

Labor $720

Sales Tax $34.13

Sincerely
Andrew Osborne

President and Estimator
(800) 594-9205 Office
(925) 525-6447 Cell
C-4, C-20, C-38
Serving California Since 2005

BIM, Design Build, Construction Service

Bid No. 19/20-17
Change Order #01
PCO 022

INTERFACE ENGINEERING

Interface Engineering
135 Main Street, Suite 400
San Francisco, CA 94105
TEL 415.489.7240
www.interfaceengineering.com

Submittal Review

Project Number	2019-0105	**Date**	December 8, 2020 **December 22, 2020**
Project Name	Chabot College - B200 MPOE/DAS Relocation		
To	Anna Win	**Phone**	(925) 648-8800
	ATI Architects + Engineers	**Ref #:**	067 **067.1**
	4750 Willow Road, Suite 250 Pleasanton, CA 94588		
Reviewed By	Jared Doescher, PE, LEED AP	**@**	Interface Engineering, Inc.

Applies To **Mechanical**

System(s) **HVAC Test and Balance Report**

See disposition codes listed below.

Any action shown below is subject to the requirements of the Contract Documents. Contractor is responsible for the dimensions and quantity which shall be confirmed and correlated at the job site, fabrication processes and techniques of construction, coordination of the work with that of all other trades, and the satisfactory performance of the work.

The disposition code "No Exception Taken" constitutes that our review is for general conformance with the design concept expressed in the Contract Documents for the limited purpose of checking for conformance with information given.

Where a submitted manufacturer differs from the basis of design manufacturer, the Contractor must obtain approval through the Substitution Request process as outlined in the Contract Documents before submitting alternate manufacturer. After receiving approval, additional coordination documents may be required. Reference the Submittals Requirements for specific details.

Incomplete or piecemeal submissions will be returned to the Contractor without review. The Contractor may incur additional charges if submittals are not in compliance with the Contract Documents.

Reference Submittal Requirements in Division 01, General Requirements, as well as the Submittals Requirements in Divisions 21 through 28, Basic Requirements.

The following items were reviewed for conformance with the requirements of the Contract Documents.

Item / Comments	Disposition				
	N	M	R		F
			1	2	
1. FC-1 a. 2500 CFM specified; 2625 CFM provided.	X				
2. FC-2 a. 2500 CFM specified; 2600 CFM provided.	X				

Disposition Code
- N No exception taken.
- M Make corrections noted. Resubmittal not required if installation complies with notes.
- R Revise and resubmit.
  - 1 Manufacturer not approved. Resubmit.
  - 2 Does not meet requirements of Contract Documents. Returned without review. See comments above and Submittal Requirements in the Specifications. Resubmit.
- F Forward specified item above.

Bid No. 19/20-17
Change Order #01
PCO 022

Item / Comments	Disposition				
	N	M	R		F
			1	2	
3. FC-3 a. 2500 CFM specified; 2610 CFM provided.	X				
4. FC-4 a. 2500 CFM specified; 2620 CFM provided.	X				
5. (E) FC-316A					
a. (E) CD (Outlet 1 on air balance report)- *590 CFM specified; none provided. Confirm that outlet was not demolished and if so that it will be replaced.* **Air balance not required but ceiling transfer grilles will need to be located in the UPS room.**		X			
b. 18x18 SG-1 (Outlet 2 on air balance report)/ 740 CFM specified; 620 CFM provided. No exception taken to the final balanced airflow provided. The design air flow was based on as built drawing information, and excess airflow does not alter design intent.	X				
c. 12x10 SG-1 (Outlet 3 on air balance report)/ 335 CFM specified; 675 CFM provided.	X				
d. 12x10 SG-1 (Outlet 4 on air balance report)/ 335 CFM specified; 590 CFM provided. Rebalance outlet to within 10% of the design airflow.	X				
e. 36x12 RG-1/ 1260 *CFM specified, none provided. Provide measured airflow.* **Airflow not required, comment removed**					
6. (E) FC-316B					
a. 36x18 SG-1/ 1600 CFM specified; 1750 CFM provided.	X				
b. 36x12 RG-1/ 1260 CFM specified; 1575 CFM provided.	X				
c. Outside air intake / 160 existing airflow, 175 provided.	X				
7. Room 137					
a. CD (Supply outlet 1 on air balance report)/ 410 CFM existing airflow, 420 CFM provided. Confirm that door operation is not affected by the positive pressurization of the room.		X			
b. CD (Supply outlet 2 on air balance report)/ 350 CFM existing airflow, 360 CFM provided. Confirm that door operation is not affected by the positive pressurization of the room.		X			
c. CD (Supply outlet 3 on air balance report)/ 430 CFM existing airflow, 440 CFM provided. Confirm that door operation is not affected by the positive pressurization of the room.		X			
d. CRG (Return 1 on air balance report)/ 230 CFM existing airflow, 240 CFM provided. Confirm that door operation is not affected by the positive pressurization of the room.		X			
8. Room 138					
a. CD/ 220 CFM existing airflow, 240 CFM provided.	X				
b. CRG/ 170 CFM existing airflow, 180 CFM provided.	X				

Disposition Code

N No exception taken.

M Make corrections noted. Resubmittal not required if installation complies with notes.

R Revise and resubmit.

1 Manufacturer not approved. Resubmit.

2 Does not meet requirements of Contract Documents. Returned without review. See comments above and Submittal Requirements in the Specifications. Resubmit.

F Forward specified item above.

Bid No. 19/20-17
Change Order #01
PCO 022

Item / Comments	Disposition				
	N	M	R		F
			1	2	
9. Testing, Adjusting and Balancing of Environmental System certificates / Reviewed.	X				
10. Abbreviations / Reviewed.	X				
11. Tool Calibration / Reviewed.	X				

T:\2019\2019-0105\Submittals\Mechanical\067.1 - HVAC Test and Balance Report\M20201222 Submittal Review - 067.1.docx

Disposition Code

N No exception taken.

M Make corrections noted. Resubmittal not required if installation complies with notes.

R Revise and resubmit.

1 Manufacturer not approved. Resubmit.

2 Does not meet requirements of Contract Documents. Returned without review. See comments above and Submittal Requirements in the Specifications. Resubmit.

F Forward specified item above.

Bid No. 19/20-17
Change Order #01
PCO 022

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 3/5/2021

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: RFI 71.1 - FS Pre-Action Activations and Manual UPS EPO Button Rev.1
PCO#: 23R1

Dear Peter,

Per RFI 71.1, below is the cost to provide and program 2 relay outputs for the pre-action system. Includes supply and install of cable running from the suppression panel to the pre-action panel. Connect to the pre-action panel, program panel if needed and if possible. Connections will most likely be zone 1 & 2 or zone 1 if single stage. Revise drawings to show connection to pre-action system. Includes fire sprinkler support for new activities from FA alarm contractor noted above. Once FA scope is complete fire sprinkler sub will be present to test the pre-action system.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
RFI 71.1 - FS Pre-Action Activations and Manual UPS EPO Button Rev.1	$ -	$ -	$ 2,594	$ 2,594
Walschon Fire Protection				
RFI 71.1 - FS Pre-Action Activations and Manual UPS EPO Button	$ -	$ -	$ 677	$ 677
SUBTOTAL				**$ 3,272**
Markup - Subcontractor				$ 164
Insurance - 1%				$ 33
Bonds - 1.5%				$ 49
TOTAL COST				**$ 3,517**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds
Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2021.03.05 09:34:20-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 23R1

Time and Material Change Order Pricing

Company:

Company: Rodan Builders
Contact: Keith Reynolds
Address: 3486 Investment Blvd. Suite B
City, State Zip: Hayward, CA 94545
Telephone: 650-508-1700
Fax:

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 12
Date: 2/9/21
Description: Activate FS via FA per RFI 71.1
T&M

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
6					$ -
7					$ -
8					$ -
9					$ -
10					$ -
				Materials Subtotal:	$ -

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ -
Sales Tax:		$ -
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ -
Overhead and Profit (Materials & Equipment)	15%	$ -
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ -

Item	SubTier Contractors	Quote
1	Battalion One	$ 2,470.29
2		$ -
3		$ -

Second Tier Subcontractor(s) Subtotal:		$ 2,470.29
Profit at 5.00%:		$ 124.00
Subtotal:		$ 2,594.29
Subcontractor + 2nd tier Subcontractor(s) Subtotal:		$ 2,594.29
Total this Page:		$ 2,594.29
Total from Previous Pages		
Proposal Grand Total:		$ 2,594.29

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 23R1

FIRE LIFE SAFETY
REPAIR PROPOSAL

Date:	02/09/2021	**Estimate #**	AH 02092021-CO02MMddyy-##
To:	Beci Electric 8108 Capwell Drive Oakland, CA 94621	**Job Site:**	Chabot College
		Site Address:	25555 Hesperian Blvd Hayward, CA
Attention:	**Chad Dillashaw**		
Phone:	209-559-5689	**Email:**	chad@becielectric.com

SCOPE OF WORK:

- **Scope of work / Clarifications/ Change Order #02**
    - This change order provides the following in addition to the base scope of work.
        - Provide and Program 2 relay outputs for the pre-action system
        - Supply and install cable running from the suppression panel to the pre-action panel
        - Connect to the pre-action panel, program panel if needed and if possible. Connections will most likely be zone 1 & 2 or zone 1 if single stage
        - Revise drawings to show connection to pre-action system
        - Supplier of pre-action system must be present to test the pre-action system

9 Hours of labor @ $180 p/hour	$ 1,620.00
Cable and Misc Hardware $ 195.00 Tax $ 19.01	$ 214.01
Shop Drawings	$ 636.28
Total Change Order #02	$ 2,470.29

Bid No. 19/20-17
Change Order #01
PCO 23R1

FA 5612

BATTALION ONE FIRE PROTECTION

Battalion One Fire Protection, Inc.
14755 Catalina St
San Leandro, CA 94577
Phone (510) 653-8075
Fax (510) 653-8078
www.battaliononefire.com

Service Order #:

Date: 02/03/2021

Sales Terms: Invoice to Follow

Sales Representative:

Technician: ISSA SOUSOU

Invoice To:

Product Line:
- [X] Fire Alarm/Electrical
- [ ] Extinguisher
- [ ] Special Hazards
- [ ] Other
- [ ] Sprinkler / Mechanical
- [ ] Kitchen Hood
- [ ] Inspection

Contact Name: RANDY SORENSON (RODAN)

Phone#: Fax#:

Job Location: CHABOT College BLDG 300 HAYWARD, CA. 94545

Agreement Type:
- [X] Time & Material
- [ ] Price Not to Exceed $
- [ ] Lump Sum Fixed Price of $

Site Information:

	Yes	No
Inspection Due?	[ ]	[ ]
Return Trip Required?	[ ]	[ ]
Customer Provided Fire Watch Required?	[ ]	[ ]
Battalion One Sticker Posted?	[ ]	[ ]

Contact Name:

Phone#: Fax#:

Panel Type: GAMEWELL/FCI GFS06R

Work Description:

- TIE INTO POTTER VFC-400 PANEL INSIDE TOTAL PAC #3 UNIT.
- RAN WIRE FROM FCI GFS06R FACU TO TOTAL PAC UNIT. TIED INTO VFC-400 FACU FOR ALARM COND. TO ACTIVATE WF W/ FOLL ALARM CONDITION AND TANK DUMP. TIED INTO UPS E.P.O.
- TESTED SYSTEM, W/ STMX 2 ALARM W/ 2nd SMOKE DET. UPS E.P.O. POWERS DEF, WF FLOWS, AND TANK DUMPED.

Labor/ Material	Product#	Description	Qty	Unit Meas.	Unit Price	Extended Price
L	A&D	ISSA SOUSOU - HRS	4.5	RG1		
L	A&D	RICARDO GERMANN - HRS	4.5	RG3		

Authorized Customer Signature:

Print Name & Title:

Customer PO:

...work is subject to the terms & conditions on the back of this work order. All invoices are due net 10 days (no exceptions)

Date: 02/03/2021

Technician: ISSA SOUSOU

Labor and Other Subtotal	
Material Subtotal	
Tax	
Shipping & Handling	
Total Due	

Bid No. 19/20-17
Change Order #01
PCO 23R1

Walschon Fire Protection, Inc.

2178 Rheem Dr. Suite A, Pleasanton, CA 94588 Phone: 650-594-1588 Fax: 650-594-1613 License # 568438- C16

PROPOSED ESTIMATE

JOB NAME: Chabot College, MPOE Room	JOB #	200358	DATE:	1/12/2021
GC: Rodan Builders	PCO #	3		

DESCRIPTION: Support new activities from Fire Alarm Contractor; "provide and program 2 relay outputs for preaction system & test"

Labor Rate $131.28

TAKE OFF QUANTITY	DESCRIPTION	UOM	PRICE	LABOR UNIT	LABOR HOURS	LABOR EXTENSION	MATERIAL EXTENSION	EQUIPMENT EXTENSION
	DESCRIPTION	UOM	RATE		# HRS	LABOR EXT	MATERIAL	EQUIPMENT
	Labor	HR	$131.28		4	$525.12	$0	$63.84
	Design / Egineering / Coordination	HR	$0.00		0	$0.00	$0	$0.00
						$525.12	$0.00	$63.84

TOTAL DIRECT COSTS		$	588.96
OVERHEAD AND PROFIT MARKUP	15%	$	88.34
TOTAL COST FOR ALL CHANGES		$	677.30

PRICING VALID FOR THIRTY (30) DAYS. SUBJECT TO CHANGE PRIOR TO ACCEPTANCE.

By signing below, you acknowledge that the above described work shall modify the terms and conditions of the contract and that you are directing Walschon Fire Protection, Inc. to proceed with the work as described above.

You further agree to issue a valid change order within 10 working days of the completion of the above described work. In the absence of a valid change order being issued, you acknowledge that the total cost of this change will be added to the next billing cycle as a valid claim.

Authorized Signature _____ Date _____

Bid No. 19/20-17
Change Order #01
PCO 23R1

RFI 0071.1 - FS Pre-Action Activations and Manual UPS EPO Button

Status: Sent to reviewer

Due Date: Dec 14, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Dec 11, 2020 at 12:01 PM PST

RFI #71.1:

Please see attached follow-up RFI from Beci Electric requesting plans and details showing how the fire sprinkler pre-action cabinet system is to be activated.

Pre-action panel will be provided with control monitor relay by Fire Alarm Clean Agent Vendor/Battalion One that would make the pre- action panel a smoke zone, such that when positive smoke and fire still exist in the room, the pre-action will trigger the activation of the sprinkler system. See schematic as attached. T. Mortera/MPE

RFI #71:

This RFI is per the conference meeting held on 12/11/2020 with the design team and contractors to review sequence of operations for fire life safety system. An expedited review and response to this RFI is requested.

Item #1:

The response to RFI 0055 provides direction for the FS contractor to coordinate connection of the pre-action cabinet to the building fire alarm system for "monitoring and supervision", this has been completed. That RFI response does not provide any information or direction on the activation of the pre-action system. ASI 04 does provide a revised sequence of operations that shows the pre-action system being activated by the clean agent system. This is added scope. Please confirm the district is requesting pricing to complete direction provided in ASI 04.

Item #2:

The ASI 04 sequence of operations also includes the shut down of the UPS by the clean agent system, which is also reflected in item C-2 of the Sequence of Operations on drawing F-000. In addition there is a manual EPO shown on the original F-121 drawing with the note F.B.O. (furnished by others), this EPO switch is not shown on the electrical drawings or anywhere else in the project documents. ASI 02 shows the deletion of the EPO switch however per the teleconference on 12/11/20 it was implicated the design team would like it added back in. Is the EPO now to be installed for manual shutdown of the UPS, if so who is to provide under the F.B.O. designation? Installation and connection of the EPO would be added scope after the deletion in ASI 02.

Item #3:

Additionally during the conference meeting, it was mentioned by the sprinkler contractor that when the pre-action sprinkler system is triggered the cabinet will fill the system with water. Sprinkler heads will not release until activated by a fire/heat source. Please review/compare this information with the sequence issued within ASI 04 and confirm this is accurate.

Bid No. 19/20-17
Change Order #01
PCO 23R1

1) Provide pre-action system initiation from the activation of one photoelectric smoke detector per Specification Section 21 13 19. Please clarify "Is the fire out?" on the sequence of operations. The activation of the pre-action system should not require any manual activation/intervention.

Q. System Operation - Single Interlock:

1. Alarm Sequence of Operation:

   a. Activation of one automatic initiating device or manual release station causes system to enter "alarm" mode including following operations:

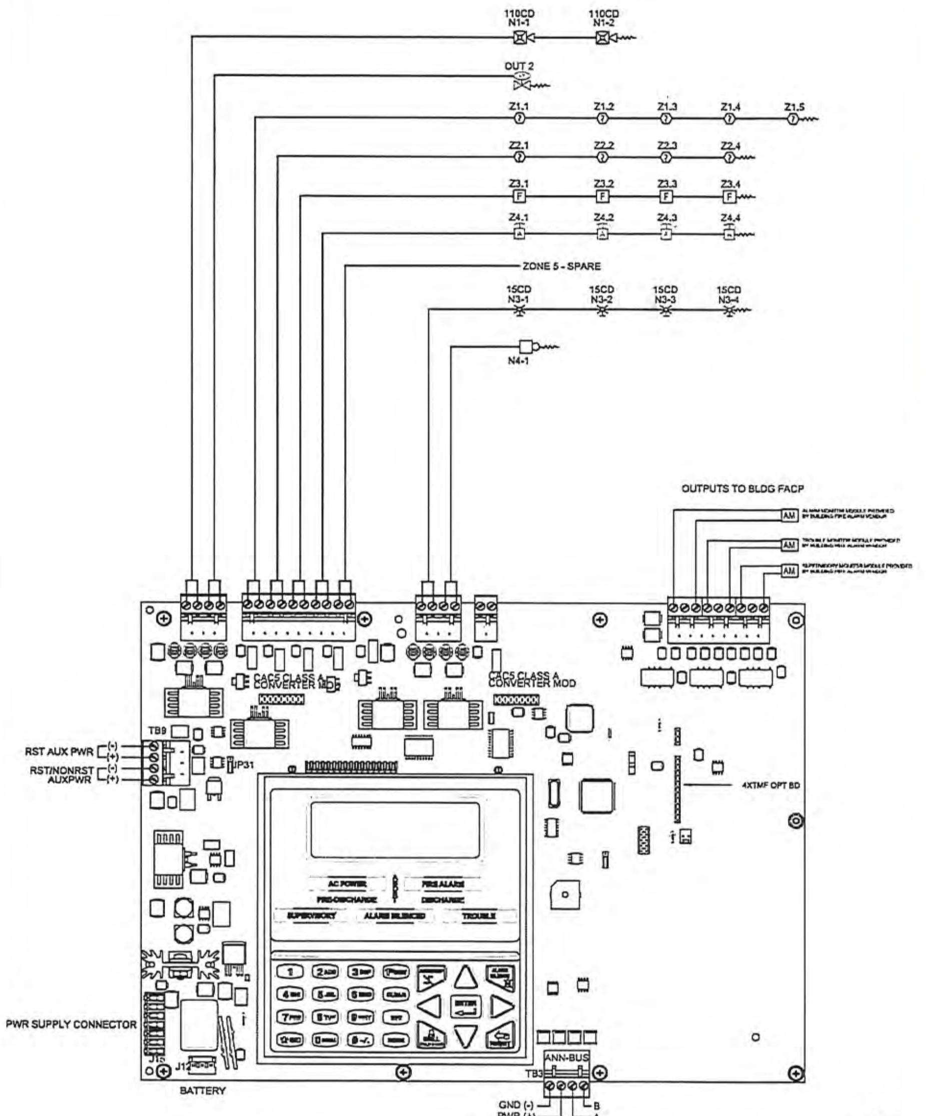
      1) Provide local annunciation of alarm zone and condition and audible and visual alarm signal at control panel.
      2) Provide manual "acknowledge" function at control panel to silence audible alarm signal. Visual signal remains displayed until initiating alarm is cleared.
      3) Transmit "alarm" signal to building fire alarm control panel.
      4) Initiate the alarm bells located in the protected space.
      5) Open solenoid valve thereby operating sprinkler preaction valve and filling the sprinkler pipes with water in the protected space.
      6) Operate emergency power off for the equipment in the protected space.
      7) Operate HVAC fan shutdown and damper closure in the protected space.

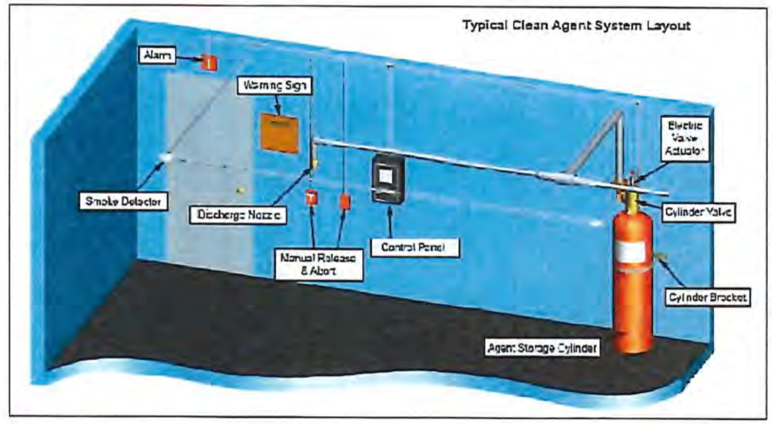
   b. Operation of sprinkler system fusible element in conjunction with automatic initiating device or manual release station discharges water from the operated sprinkler.

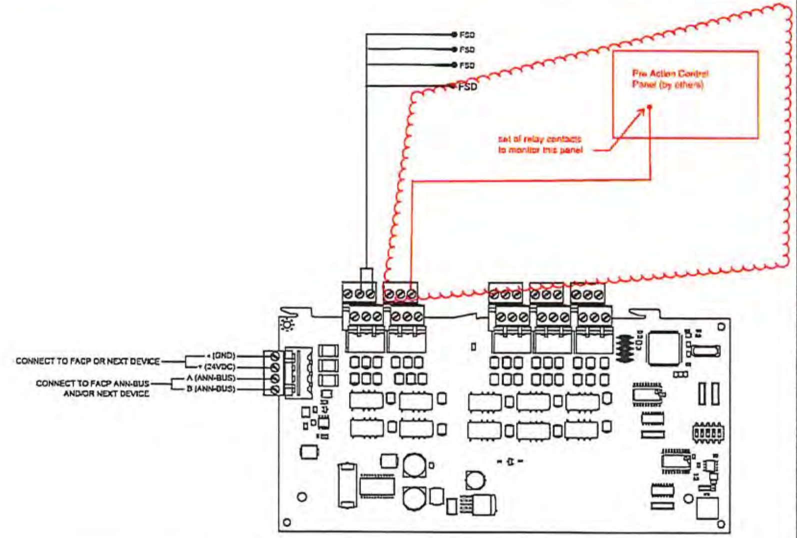
3) This is correct. Upon the activation of a single smoke detector, the pre-action system solenoid will release, allowing water to fill the pre-action system piping. Any sprinkler head on the system will not open and flow water until a sufficient heat source activates the sprinkler head.

Ethan Brown, MEngFPE, EIT 01/08/2020

Bid No. 19/20-17
Change Order #01
PCO 23R1







DESIGN ALTERNATE USING INERGEN:
PROVIDE A COMPLETE DESIGN/BUILD SET OF DRAWINGS, SPECIFICATIONS, SHOP DRAWINGS, CSFM PRODUCT LISTINGS AND SUBMIT TO DSA FOR APPROVAL PRIOR TO INSTALLATION. ACTUAL NUMBER OF CANISTERS SHALL BE LAID OUT TO LOCATION AS DIRECTED BY ARCHITECT.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
FSCP	FIRE SUPPRESSION CONTROL PANEL
F	MANUAL RELEASE STATION
	TWO WIRE SMOKE DETECTOR WITH BASE
	CLEAN AGENT ABORT SWITCH
	CLEAN AGENT HORN STROBE - WALL MOUNT
	CLEAN AGENT STROBE - WALL MOUNT
	CLEAN AGENT 6" BELL - WALL MOUNT
	EMERGENCY POWER OFF SWITCH (EPO) PROVIDED BY OTHERS
	NOVEC 1230 CLEAN AGENT SUPPRESSION TANK
	NOVEC 1230 - 90 DEGREE SIDEWALL DISCHARGE NOZZLE
	FIRE SMOKE DAMPER - PBO

BATTALION ONE FIRE PROTECTION
14077 CATALINA ST.
SAN LEANDRO, CA 94577
510-653-8075
CSLB #: 919983

Gamewell FCI
Authorized Distributor

RELEASING SYSTEM RISER & CONNECTIONS

SCALE: NONE

DSA

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 01-118445 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/26/2020

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

METRO POWER ENGINEERS, INC

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	

KEY PLAN:

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

BLDG 300 FIRE ALARM RISER DIAGRAM

DRAWN BY: | CHECKED BY:
DATE: 11/7/2019 | PROJECT NO:
SHEET NO:

F-200

Beci Electric, Inc. ■ 8137 Capwell Dr.. ■ Oakland CA 94621 ■ 510.635.1477 ■ Fax 510. 635.1478 ■

TITLE: FS Pre-Action Activation

REQUEST FOR INFORMATION

NO. 22

PROJECT: 20-1538
Chabot MPOE Replacement

DATE: 12/15/20

TO:

Rodan Builders
859 Cowan Rd
Burlingame, CA 94010
Phone:650 508-1700 Fax:650-508-1705

REQUEST: **Scheduling Impact:** ☐ **Monetary Impact:** ☒

The response to RFI 71 again only provides direction for the FS pre-action cabinet to provide alarm, supervisory and trouble relay outputs to the FA system, this has already been accomplished. The sequence of operations provided in RFI 71 response still does not specify how the pre-action system is to be activated. Please provide details as to how the system is to be activated.

Requested By: **Date:** _____

Signed: _____

Bid No. 19/20-17
Change Order #01
PCO 23R1

RFI Response #71 FS Pre-Action Activations and Manual UPS EPO Button

Bid No. 19/20-17
Change Order #01
PCO 23R1

RFI 0071 - FS Pre-Action Activations and Manual UPS EPO Button

Status: Sent to reviewer

Due Date: Dec 14, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Dec 11, 2020 at 12:01 PM PST

This RFI is per the conference meeting held on 12/11/2020 with the design team and contractors to review sequence of operations for fire life safety system. An expedited review and response to this RFI is requested.

Item #1:

The response to RFI 0055 provides direction for the FS contractor to coordinate connection of the pre-action cabinet to the building fire alarm system for "monitoring and supervision", this has been completed. That RFI response does not provide any information or direction on the activation of the pre-action system. ASI 04 does provide a revised sequence of operations that shows the pre-action system being activated by the clean agent system. This is added scope. Please confirm the district is requesting pricing to complete direction provided in AS

Per specification 211319-3.01-R Provide alarm, supervisory and trouble relay output connections to the building fire alarm system along with associated power and control wiring, conduit, and terminations. No additional cost to the owner is anticipated. Coordinate termination locations with equipment installation manual wiring diagrams.
Jared Doescher, PE
IEI 12/14/2020

ASI 02 did not request deletion of scope. If there was credit issue; District to reject credit and have switch installed as bid

Item #2:

The ASI 04 sequence o by the clean agent system, which is also reflected in item C-2 of the Sequence of Operations on drawing F-000. In addition there is a manual EPO shown on the original F-121 drawing with the note F.B.O. (furnished by others), this EPO switch is not shown on the electrical drawings or anywhere else in the project documents. ASI 02 shows the deletion of the EPO switch however per the teleconference on 12/11/20 it was implicated the design team would like it added back in. Is the EPO now to be installed for manual shutdown of the UPS, if so who is to provide under the F.B.O. designation? Installation and connection of the EPO would be added scope after the deletion in ASI 02.

Item #3: *EPO is noted on the Fire Alarm plan F-121, to be provided by UPS Vendor and installed by the contractor. See UPS specs 26 3353, part 2.07, E.4. Also, see item 9.5 below as part of the submitted functional test of UPS.*

Additionally during the conference meeting, it was mentioned by the sprinkler contractor that when the pre-action sprinkler system is triggered the cabinet will fill the system with water. Sprinkler heads will not release until activated by a fire/heat source. Please review/compare this information with the sequence issued within ASI 04 and confirm this is accurate.

See attached updated ASI 04.1 per meeting discussion. A. Win 12/15/2020

9. FUNCTIONAL TEST

- 9.1. Test Battery mode
- 9.2. Simulate the loss of bypass when on battery testing
- 9.3. Perform ISBM loss of logic power testing
- 9.4. Emergency transfer testing
- 9.5. Local and Remote Emergency Power Off testing
- 9.6. Mini CSB Failure testing
- 9.7. Fan Failure Test (ONLY PERFORM IF NO LOAD IS APPLIED)
- 9.8. Building Alarms testing
- 9.9. Basic Easy Capacity testing

Bid No. 19/20-17
Change Order #01
PCO 23R1

ATI ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	ASI NO.: 04.1

PROJECT:	Chabot College MPOE Replacement 25555 Hesperian Blvd. Hayward, CA 94545	**DATE:** **ATI PROJECT NO.:**	12/14/2020 C9506
OWNER:	Chabot Las Positas CCD 7600 Dublin Blvd. Dublin, CA 94568	**DSA FILE NO.:** **DSA APP. NO.:**	1-C2 01-118445

The Work shall be carried out in accordance with the following supplementary instructions issued in accordance with the Contract Documents. If a change in Contract Sum or Contract Time is anticipated, submit a proposal for the work before proceeding with the change. Proposal shall be submitted within 5 days from the date of this document.

DESCRIPTION

1. Refer to sequence of operations for Fire Suppression and Pre-Action systems outlined on attached. Additional information is found on Sheet F-000 and Spec. Section 21 1319 - 3.01Q

[innovative architecture ENGAGING MINDS]

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Pleasanton, CA 94588
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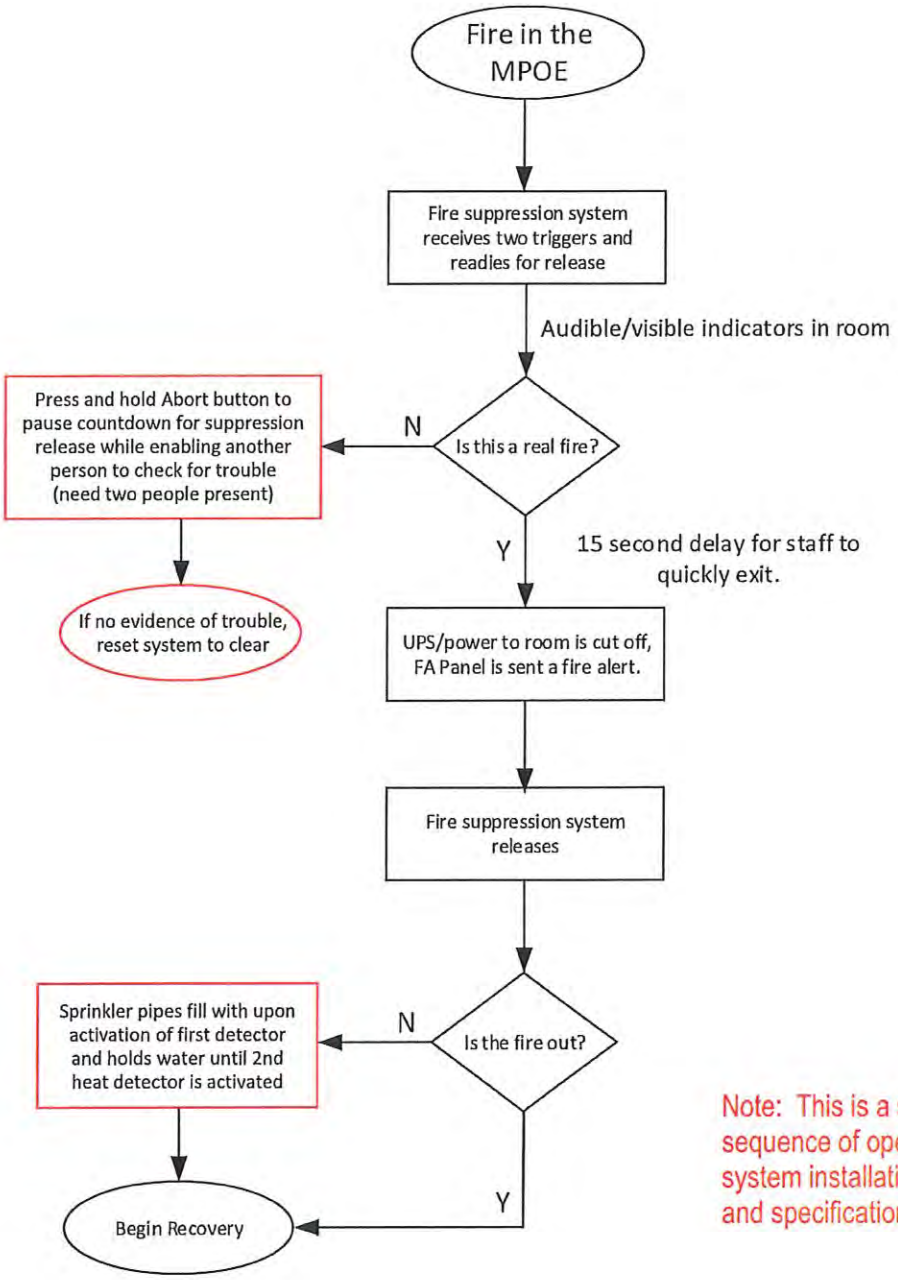
Bid No. 19/20-17
Change Order #01
PCO 23R1



Note: This is a simplified summary of sequence of operations. For technical system installation, refer to drawings and specifications.

SEQUENCE OF OPERATIONS - FIRE SUPPRESSION AND PRE-ACTION SYSTEMS
CHABOT COLLEGE - MPOE REPLACEMENT

Bid No. 19/20-17
Change Order #01
PCO 23R1

RFI 0055 - Pre-Action Cabinet Control Panel Tie In

Status: Sent to reviewer

Due Date: Oct 28, 2020

Question

Alex Tellez (Rodan Builders Inc.) on Oct 12, 2020 at 5:49 PM PDT

Per Fire Sprinkler product submittal #50.1 attached, two 120V electrical circuits are required to power the FS Control Panel as well as the compressor. In addition, the pre-action cabinet will need to tie in to the fire alarm system. These connections to the pre-action cabinet are not shown on either the Electrical or Fire Alarm drawings. Please review and provide detailed wiring plans for the fire sprinkler pre-action cabinet.

For the (2) dedicated 120v circuits:
1- Connect the Pre Action Control Panel to existing panel '3R1B'-39. Provide a lock-on device.
2-Connect the Compressor to existing panel '3R1B-41.

For Fire Alarm tie-in of the Pre Action Panel,the FS contractor to coordinate the tie-in of the new Pre Action Panel to Building Fire Alarm Contractor for the required monitoring and supervision of this panel.

Response by:

Tony Q. Mortera

Digitally signed by Tony Q. Mortera
DN: C=US, E=tony@metropowerengineers.com, O="Metro Power Engineers, Inc.", OU=Electrical Engineer, CN=Tony Q. Mortera
Date: 2020.10.13 09:57:08-07'00'

Per specification 211319-3.01-R Provide alarm, supervisory and trouble relay output connections to the building fire alarm system along with associated power and control wiring, conduit, and terminations. No additional cost to the owner is anticipated. Coordinate termination locations with equipment installation manual wiring diagrams.
Jared Doescher, PE
IEI 10/28/20

Bid No. 19/20-17
Change Order #01
PCO 23R1

ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	ASI NO.: 04

PROJECT: Chabot College
MPOE Replacement
25555 Hesperian Blvd.
Hayward, CA 94545

OWNER: Chabot Las Positas CCD
7600 Dublin Blvd.
Dublin, CA 94568

DATE: 12/7/2020
ATI PROJECT NO.: C9506

DSA FILE NO.: 1-C2
DSA APP. NO.: 01-118445

The Work shall be carried out in accordance with the following supplementary instructions issued in accordance with the Contract Documents. If a change in Contract Sum or Contract Time is anticipated, submit a proposal for the work before proceeding with the change. Proposal shall be submitted within 5 days from the date of this document.

DESCRIPTION

1. Refer to sequence of operations for Fire Suppression and Pre-Action systems outlined on attached. Additional information is found on Sheet F-000 and Spec. Section 21 1319 - 3.01Q

Superseded

[innovative architecture ENGAGING MINDS]

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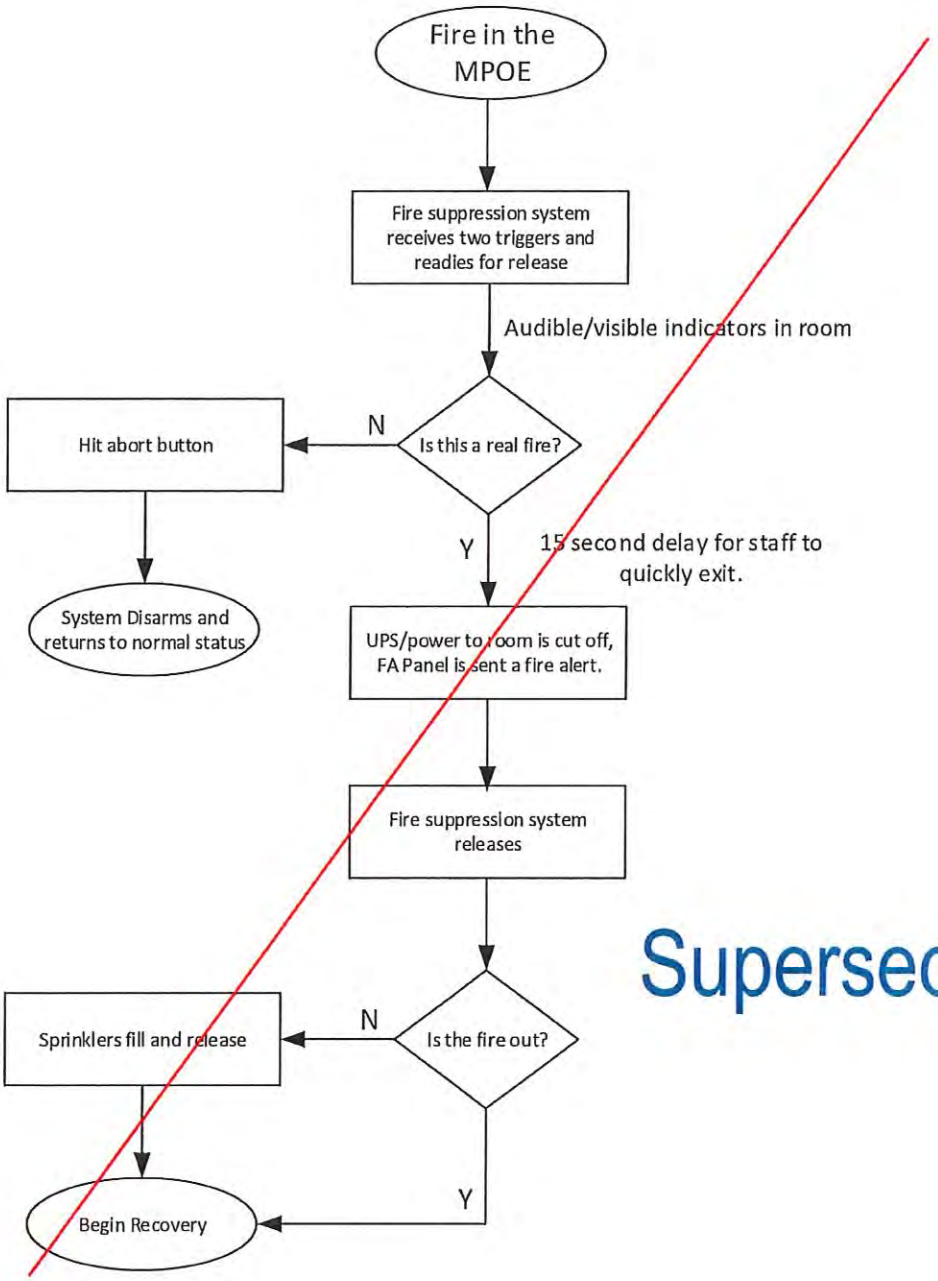
Bid No. 19/20-17
Change Order #01
PCO 23R1



SEQUENCE OF OPERATIONS - FIRE SUPPRESSION AND PRE-ACTION SYSTEMS
CHABOT COLLEGE - MPOE REPLACEMENT

Bid No. 19/20-17
Change Order #01
PCO 23R1

ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	ASI NO.: 02

PROJECT:	Chabot College MPOE Replacement 25555 Hesperian Blvd. Hayward, CA 94545	**DATE:** **ATI PROJECT NO.:**	10/2/2020 C9506
OWNER:	Chabot Las Positas CCD 7600 Dublin Blvd. Dublin, CA 94568	**DSA FILE NO.:** **DSA APP. NO.:**	1-C2 01-118445

[innovative architecture ENGAGING MINDS]

The Work shall be carried out in accordance with the following supplementary instructions issued in accordance with the Contract Documents. If a change in Contract Sum or Contract Time is anticipated, submit a proposal for the work before proceeding with the change. Proposal shall be submitted within 5 days from the date of this document.

DESCRIPTION	REFERENCE
1. Revise location of clean agent tank to UPS Room, modify piping and placement of nozzle as depicted Blg. 300 Fire Alarm Plan. Fire Alarm vendor to provide piping pressure calcs.	Sht. F-121

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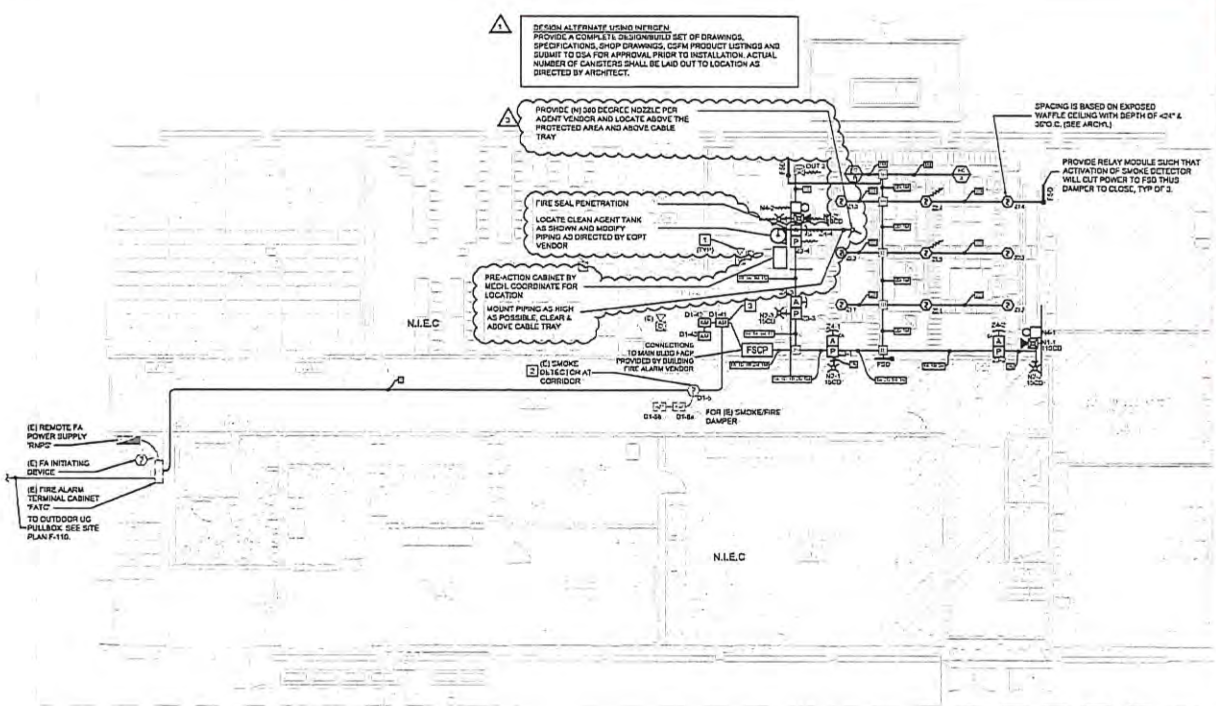
Pleasanton, CA 94588
T: 925 - 648 - 8800

www.atlae.com

Bid No. 19/20-17
Change Order #01
PCO 23R1



1 LEVEL 1

GENERAL NOTES:

1. INSTALLATION SHALL BE SUPERVISED BY A FIRE ALARM CERTIFIED TECHNICIAN FROM MANUFACTURER OR ITS AUTHORIZED REPRESENTATIVE.
2. EXISTING DEVICES IN ROOMS OTHER THAN SHOWN ARE EXISTING TO REMAIN,UON.
3. UTILIZE (E) TERMINAL CABINET FOR CONNECTION TO BUILDING FA PANEL FOR COMMUNICATION OR MONITORING PURPOSES.
4. FA WIRING SHALL BE IN CONDUIT. SEE SPECS.
5. COORDINATE LOCATION OF DEVICES SUCH THAT NO ADDRESSABLE INITIATING DEVICES IS WITHIN 3' OF AIR DIFFUSER, UON.
6. ALL FA INITIATING DEVICES ARE ADDRESSABLE, TYP, UON.
7. (N) FA EQUIPMENT AND DEVICES SHOWN ARE EXCLUSIVE FOR CLEAN AGENT SYSTEM ONLY, UON. SYSTEM MONITORING FOR ALARM/TROUBLE & SUPERVISORY SHALL BE BY BLDG FIRE ALARM CONTRACTOR. COORDINATE INSTALLATION AS REQUIRED.

NFPA 17.7.3.2.4.2 (2):

FOR CEILINGS WITH BEAM DEPTHS EQUAL TO OR GREATER THAN 10 PERCENT OF THE CEILING HEIGHT (0.1 H), THE FOLLOWING SHALL APPLY:

(a) WHERE BEAM SPACING IS EQUAL TO OR GREATER THAN 40 PERCENT OF THE CEILING HEIGHT (0.4 H), SPOT-TYPE DETECTORS SHALL BE LOCATED ON THE CEILING IN EACH BEAM POCKET.

(b) WHERE BEAM SPACING IS LESS THAN 40 PERCENT OF THE CEILING HEIGHT (0.4 H), THE FOLLOWING SHALL BE PERMITTED FOR SPOT DETECTORS:
  - I. SMOOTH CEILING SPACING IN THE DIRECTION PARALLEL TO THE BEAMS AND AT ONE-HALF SMOOTH CEILING SPACING IN THE DIRECTION PERPENDICULAR TO THE BEAMS.
  - II. LOCATION OF DETECTORS EITHER ON THE CEILING OR ON THE BOTTOM OF THE BEAMS.

KEY NOTES:

[1] (E) FA INDICATING DEVICE TO REMAIN, UON.

[2] (E) FA INITIATING DEVICE TO REMAIN, UON.

[3] ADDRESSABLE MONITOR DEVICES SHALL BE PROVIDED BY BLDG FIRE ALARM CONTRACTOR. SEE GENERAL NOTE 7 ABOVE

SPACING CRITERIA:

DEPTH OF JOIST/BEAM = 16" (OR 1'-4" TO TOP OF 2ND FLR SLAB FROM BOTTOM OF JOIST BELOW).

JOIST SPACING = 36" O.C.

VERTICAL HEIGHT; FLOOR TO BOTTOM OF BEAM - 11'-4"
FLOOR TO CEILING (SLAB) = 11'-4" + 1'-8" = 12'-8" (OR 152")

(DIRECTION PERPENDICULAR TO THE BEAM) AND MOUNTED AT SOFFIT OF BEAM.

RATIO OF BEAM SPACING
WIDTH TO CEILING HEIGHT

$\frac{1'\text{-}4"}{12'\text{-}8"} = \frac{16"}{152"} = 0.105 < 0.4$; DEVICE @ BOTTOM OF BEAM

System Current Draw

GF506R Fire Alarm Control Panel

Device	Qty		Draw	Standby	Qty		Draw	Alarm
			Total Standby	0.155 A			Total Alarm	1.565 A
1. System								
Main Circuit Board	1	x	[illegible]	[illegible]	1	x	[illegible]	0.72100
2. Annunciators								
GFANN-RLY	1	x	[illegible]	[illegible]	1	x	[illegible]	[illegible]
3. Resettable Power								
Number of IDC's Used [illegible]	4				4	x	[illegible]	[illegible]
[illegible] 2 Wire Smoke Detector	9	x	[illegible]	[illegible]				
4. NAC #1								
P2W15	2	x	[illegible]	[illegible]	2	x	[illegible]	[illegible]
			NAC #1 Totals (Max 3.0 Amps)	[illegible]				[illegible]
5. NAC #2								
Novec 1230 Solenoid	1	x	[illegible]	[illegible]	1	x	[illegible]	[illegible]
			NAC #2 Totals (Max 3.0 Amps)	[illegible]				[illegible]
6. NAC #3								
[illegible]	4	x	[illegible]	[illegible]	4	x	[illegible]	[illegible]
			NAC #3 Totals (Max 3.0 Amps)	[illegible]				[illegible]
7. NAC #4								
[illegible]	2	x	[illegible]	[illegible]	2	x	[illegible]	[illegible]
			NAC #4 Totals (Max 3.0 Amps)	[illegible]				[illegible]
TB3 (Non-Resettable Power (Terms 1+2))	0	x	[illegible]		0	x	[illegible]	
TB9 Resettable Power (Terms 3+4)	0	x	[illegible]		0	x	[illegible]	
			Total Standby Load	0.155 A			Total Alarm Load	1.565 A

System Power Requirements

GF506R Fire Alarm Control Panel

Secondary Load Requirements 4.93 Amp Hours

Total Secondary Load from the calculations table below

Current Draw		Time (Hours)	Total (AH)
Secondary Standby Load 0.155 A	x	Required Standby Time 24 hours	3.72
Secondary Alarm Load 1.565 A	x	Required Alarm Time 0.250 hours	0.39
		Total Secondary Load	4.11
		Derating factor	x 1.20
		Secondary Load Requirements	4.93 AH

Battery Selection 7.00 Amp Hours

Select batteries from the list below.

7.0 AH BAT-1270 Battery (12 volt)

Battery Distribution Chart

Shows amp-hour distribution of your selections.

Notes:
1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.

RELEASING PANEL BATTERY CALCULATION

SYMBOL LEGEND

SYMBOL	DESCRIPTION
FSCP	FIRE SUPPRESSION CONTROL PANEL
F	MANUAL RELEASE STATION
	TWO WIRE SMOKE DETECTOR WITH BASE
A	CLEAN AGENT ABORT SWITCH
	CLEAN AGENT HORN STROBE - WALL MOUNT
	CLEAN AGENT STROBE - WALL MOUNT
	CLEAN AGENT 6" BELL - WALL MOUNT
	EMERGENCY POWER OFF SWITCH (EPO) PROVIDED BY OTHERS
	NOVEC 1230 CLEAN AGENT SUPPRESSION TANK
	NOVEC 1230 - 90 DEGREE SIDEWALL DISCHARGE NOZZLE
	FIRE SMOKE DAMPER - FSD

SEE WIRING SCHEDULE ON F-000.

BATTALION ONE FIRE PROTECTION
14377 CATALINA ST.
SAN LEANDRO, CA 94577
510-633-6075
CSLB #: 919093

Gamewell FCI Authorized Distributor

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT

METRO POWER ENGINEERS, INC

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	[illegible]
2	ASI 002 OWNER'S REV	[illegible]

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

BLDG 300 FIRE ALARM PLAN

DRAWN BY: CHECKED BY:
DATE: 11/2019 PROJECT NO: [illegible]
SHEET NO:

F-121

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 1/15/2021

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: Furnish Material Only Fiber TS Patch Cords Per Owner Request
PCO#: 24

Dear Peter,
Per owner request, below is the cost to furnish (material only) sixty (60) Systimax 50 foot, LC-SC, TS fiber patch cords #FEWLCSC42-JXF050.

DESCRIPTION	Material	Labor	Sub	Total Cost
Beci Electric				
Furnish Material Only Fiber TS Patch Cords Per Owner Request	$ -	$ -	$ 2,835	$ 2,835
SUBTOTAL				**$ 2,835**
Markup - Subcontractor				$ 142
Insurance - 1%				$ 28
Bonds - 1.5%				$ 43
TOTAL COST				**$ 3,048**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds
Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2021.01.15 12:53:20-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 024

Time and Material Change Order Pricing

Company:

Company: Rodan Builders
Contact: Keith Reynolds
Address: 3486 Investment Blvd. Suite B
City, State Zip: Hayward, CA 94545
Telephone: 650-508-1700
Fax:

Project: Chabot Bldg 300 MPOE Replacement

PCO #: 13
Date: 1/13/21
Description: Fiber Patch Cords Part 2

Drawing Number: | **Description of Work:**

Item	Materials - itemized	Quan.	Unit	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Materials Subtotal:	$ -

Item	Equipment - itemized by equipment				
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Rent of Equipment Subtotal:	$ -

Item	Labor - itemized description	Quan.	UOM	Unit Price	Extension
1					$ -
2					$ -
3					$ -
4					$ -
5					$ -
				Labor Subtotal:	$ -

Summary:

Materials before tax Subtotal:		$ -
Sales Tax:		$ -
Rent of Equipment Subtotal:		$ -
Labor Subtotal:		$ -
Materials, Rental Equipment, Labor Subtotal:		$ -
Overhead and Profit (Materials & Equipment)	15%	$ -
Overhead and Profit (Labor)	15%	$ -
Subcontractors Subtotal:		$ -

Item	SubTier Contractors	Quote	
1	Sasco	$ 2,700.00	
2		$ -	
3		$ -	

Second Tier Subcontractor(s) Subtotal:	$	2,700.00
Profit at 5.00%:	$	135.00
Subtotal:	$	2,835.00
Subcontractor + 2nd tier Subcontractor(s) Subtotal:	$	2,835.00
Total this Page:	$	2,835.00
Total from Previous Pages		
Proposal Grand Total:	$	***2,835.00***

Submitted by: Chad Dillashaw

Bid No. 19/20-17
Change Order #01
PCO 024

598 Gibralter Drive
Milpitas, CA 95035
Phone: (408) 970-8300
Fax: (408) 970-8140
License # 583536

Sasco Data
598 Gibraltar Drive
Milpitas, CA 95035

December 14, 2020

Attn: Wendy Pinos

RE: Chabot Fiber Patch Cord Proposal

Dear Wendy,

I hereby submit this proposal for your approval.

SCOPE OF WORK

Provide sixty (60) Systimax 50 foot, LC-SC, TS fiber patch cords #FEWLCSC42-JXF050

PRICING

Materials:	$ 2,700.00
Labor:	$ 00.00
TOTAL:	**$ 2,700.00**

Sincerely,

Mike Cimino
Sasco Senior Project Manager

Bid No. 19/20-17
Change Order #01
PCO 024

RODAN
BUILDERS, INC.
3486 Investment Blvd., Suite B, Hayward, CA 94545 ▪ P 650.508.1700 ▪ F 650.508.1705

DATE: 3/5/2021

Peter Espinosa, CCM
Sr. Construction Manager
Construction Management Division

ATTN: Peter Espinosa, CCM

SUBJECT: ASI 005 Firestop Pillow Installation
PCO#: 25

Dear Peter,
Per ASI 005, below is the cost to fill all gaps and openings at each end of cable sleeve at exterior wall with firestop pillows as accepted for use under Submittal 52. Includes sealing of indentified remaining small gaps between and around cables with compatible firestop putty. 3" x 6" x 9" pillows estimated, total of approx. 144 pillows required w/ an added 10% as pillows reduce in size once you pack them into each opening.

DESCRIPTION	Material	Labor	Sub	Total Cost
Rodan Builders, Inc.				
ASI 005 Firestop Pillow Installation	$ 3,110	$ 784	$ -	$ 3,894
SUBTOTAL				**$ 3,894**
Markup - Contractor				$ 584
Insurance - 1%				$ 39
Bonds - 1.5%				$ 58
TOTAL COST				**$ 4,575**

Feel free to contact me with any questions or concerns.

Sincerely,

Keith Reynolds Digitally signed by Keith Reynolds
DN: C=US, E=kreynolds@rodanbuilders.com, CN=Keith Reynolds
Date: 2021.03.05 10:12:53-08'00'

Keith S. Reynolds
Project Manager
Rodan Builders, Inc.

Bid No. 19/20-17
Change Order #01
PCO 025

COST ANALYSIS

PROJECT: MPOE Replacement/Learning Skills Testing Relocation
ARCHITECT: ATI
QUANTITIES: Breakdown Below
OWNER: Chabot-Las Positas Community College District
PRICE BY: KR

SHEET NO. 1 of 1
ESTIMATE NO. 25
DATE 3/5/2021

			MATERIAL		LABOR		TOTAL COST	
Added Scope Per ASI 005	QUANTITY	UNIT	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
Rodan Builders, Inc.								
-X1 JM Carp. 8hrs.	8.0	hrs.	$ -	$ -	$ 97.94	$ 783.52		$ 783.52
(Installation of 3"x6"x9" fire pillows, CP25 caulk and 3M Putty Pads)								
Whit Cap Quote #41302488 (attached)	1.0	LS	$ 3,110.25	$ 3,110.25	$ -	$ -		$ 3,110.25
Total				$ 3,110.25		$ 783.52		$ 3,893.77

Bid No. 19/20-17
Change Order #01
PCO 025

WHITE CAP ON ACCOUNT

017 - San Francisco
200 Jennings St
San Francisco, CA, 94124
(415) 821-5500

QUOTE

41302488

THIS IS A QUOTE ONLY DO NOT SHIP OR TENDER FUNDS

Sold To: 60647000
RODAN BUILDERS INC
3486 INVESTMENT BLVD SUITE B
HAYWARD, CA, 94545
650-508-1700

Ship To : CHABOT COLLEGE,10002742342
25555 HESPERIAN BLVD
HAYWARD, CA, 94545
Job Site Contact:
Job Site Phone:
Map #:

05:09 PM **Ordered By:** CLINTON FREED **Contact Phone:**

Quote Number	Quote Date	Valid Until	Request Date	Sales Person
41302488	02/11/2021	03/13/2021	02/11/2021	Scott, D
Terms	**Shipping Method**	**Quote Name**	**Customer PO**	**Created By**
1.510N30	2. Our Truck			Scott, D

SEQ	Part# / H/M	Description	Ord Quantity	U/M / Unit WT	Price / COO	Amount
10	479FBP369	3"X6"X9" FIRE BARRIER PILLOW 3M	160	EA .85 LBS	$16.85	$2,696.00
20	479CP25WB11	10OZ CP25 PLUS WB FIRE BARRIER CAULK 3M	6	EA 1.13 LBS	$10.99	$65.94
30	479MPP4S	7"X7" FIRE PUTTY PAD 3M	16	EA .34 LBS	$4.50	$72.00

Shipped amount		**$2,833.94**
Order charges		**$0.00**
Tax amount		**$276.31**
Lumber Tax rate/amount	**1.00%**	**$0.00**
Quote total		**$3,110.25**

Shipped Weight: **148.22** Customer acceptance signature:_____Date : _____

ALL ITEMS AND QUANTITIES REQUIRE CUSTOMER REVIEW AND APPROVAL
AVAILABILITY AND LEAD TIMES ARE SUBJECT TO CHANGE
SPECIAL ORDERED ITEMS ARE SUBJECT TO MANUFACTURER APPROVAL PRIOR TO RETURN.
QUOTE IS SUBJECT TO EXPIRATION AS INDICATED IN THE ABOVE 03/13/2021 DATE.

Bid No. 19/20-17
Change Order #01
PCO 025

ARCHITECTS + ENGINEERS
AN AC MARTIN COMPANY

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	ASI NO.: 05

PROJECT:	Chabot College MPOE Replacement 25555 Hesperian Blvd. Hayward, CA 94545	**DATE:** **ATI PROJECT NO.:**	2/10/21 C9506
OWNER:	Chabot Las Positas CCD 7600 Dublin Blvd. Dublin, CA 94568	**DSA FILE NO.:** **DSA APP. NO.:**	1-C2 01-118445

[innovative architecture ENGAGING MINDS]

The Work shall be carried out in accordance with the following supplementary instructions issued in accordance with the Contract Documents. If a change in Contract Sum or Contract Time is anticipated, submit a proposal for the work before proceeding with the change. Proposal shall be submitted within 5 days from the date of this document.

DESCRIPTION	REFERENCE
1. Sheet M002 a. Added CD-1 to Diffuser, Register, and Grille Schedule.	M002
2. Sheet MD201 a. Demolished transfer boot, and supply ceiling diffuser in (N) UPS Room.	MD201
3. Sheet M301 a. Added keynote 7. b. Added (2) CD-1 and supply ductwork in (N) UPS Room.	M301
4. Fill all gaps and openings at each end of cable sleeve at exterior wall with firestop pillows as accepted for use under Submittal 52. Seal any remaining small gaps between and around cables with compatible firestop putty. See reference sheets for location.	T200 T403 T404

4750 Willow Road, Suite 250
Pleasanton, CA 94588
T: 925 - 648 - 8800

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Bid No. 19/20-17
Change Order #01
PCO 025

DIFFUSER, REGISTER AND GRILLE SCHEDULE

SYMBOL	TYPE	FACE	FRAME	DAMPER	FINISH	MFR.	MODEL	NOTES
SG-1	SUPPLY WALL GRILLE	LOUVERED	1-1/4" BORDER	NONE	WHITE	TITUS	301	
RG-1	RETURN WALL GRILLE	LOUVERED	1-1/4" BORDER	NONE	WHITE	TITUS	350	
CD-1	CEILING SUPPLY DIFFUSER	PERFORATED	LAY-IN	NONE	WHITE	TITUS	PSS	

NOTES:

CONDENSING UNIT SCHEDULE

SYMBOL	AREA SERVED	BASIS OF DESIGN: MFR	BASIS OF DESIGN: MODEL	ASSOC FAN	AIR SOURCE CONDENSER: NOM TONS	QTY OF COMPRESSORS	COMPRESSOR TYPE	CAP (MBH)	AMBIENT DB (°F)	EER OR SEER	ELECTRICAL: VOLTS	PH	MCA	MOCP	MAX WT (LBS)	NOTES
CU-1	MPOE ROOM	MITSUBISHI	PUHY-P96TLMU-A	FC-1	8	1	INVERTER	96	95	13.1	460	3	32	50	550	
CU-2	MPOE ROOM	MITSUBISHI	PUHY-P96TLMU-A	FC-2	8	1	INVERTER	96	95	13.1	460	3	32	50	550	
CU-3	MPOE ROOM	MITSUBISHI	PUHY-P96TLMU-A	FC-3	8	1	INVERTER	96	95	13.1	460	3	32	50	550	
CU-4	MPOE ROOM	MITSUBISHI	PUHY-P96TLMU-A	FC-4	8	1	INVERTER	96	95	13.1	460	3	32	50	550	

NOTES:

FAN COIL SCHEDULE

SYMBOL	AREA SERVED	BASIS OF DESIGN: MFR	BASIS OF DESIGN: MODEL	ASSOC CU	SUPPLY FAN: TOTAL CFM	MIN OSA CFM	ESP (IN H2O)	DX COOLING COIL: NOM TONS	TOTAL CAP (MBH)	SENS CAP (MBH)	LDB (°F)	HEATING: TOT CAP (MBH)	EAT (°F)	FILTER: EFF MERV	ELECTRICAL: VOLTS	PH	MCA	MOCP	MAX WT (LBS)	NOTES
FC-1	MPOE ROOM	MITSUBISHI	PEFY-P96NMHSU-E	CU-1	2500	NA	0.6	8	96	75	55	NA	NA	8	460	1	8.2	15	250	1,2
FC-2	MPOE ROOM	MITSUBISHI	PEFY-P96NMHSU-E	CU-2	2500	NA	0.6	8	96	75	55	NA	NA	8	460	1	8.2	15	250	1,2
FC-3	MPOE ROOM	MITSUBISHI	PEFY-P96NMHSU-E	CU-3	2500	NA	0.6	8	96	75	55	NA	NA	8	460	1	8.2	15	250	1,2
FC-4	MPOE ROOM	MITSUBISHI	PEFY-P96NMHSU-E	CU-4	2500	NA	0.6	8	96	75	55	NA	NA	8	460	1	8.2	15	250	1,2

NOTES:
1 FAN COILS TO BE USED FOR COOLING ONLY
2 FIRE ALARM TO SHUT OFF FAN COIL DURING FIRE ALARM EVENT.

INTERFACE ENGINEERING

ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

Date Signed: 2/10/21

ITEM	REVISION / ISSUE:	DATE
	DSA Addendum #1	[illegible]
	CCD 2	[illegible]
	ASI 3	[illegible]
	ASI 5	[illegible]

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

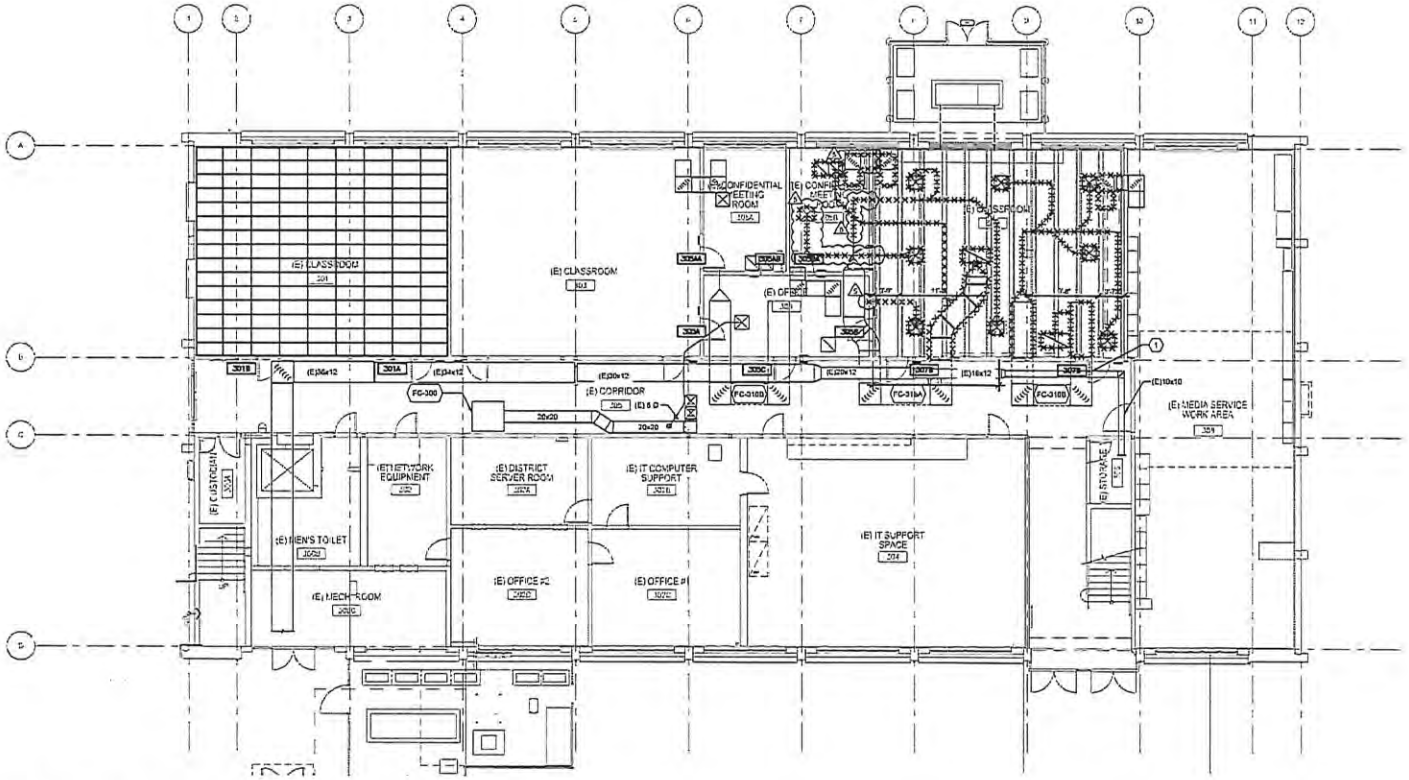
SCHEDULES - MECHANICAL

DRAWN BY: CHECKED BY:
DATE: 04/03/2020 PROJECT NO:
SHEET NO:

M002

SHEET KEYNOTES

1. CAP DSA DUCT TO FC-316B



1 LEVEL 1 DEMOLITION FLOOR PLAN - MECHANICAL

0 4' 8' 16'

SCALE: 1/8"=1'-0"

DSA

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

Date Signed: 3/10/21

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	04/03/2020
2	DSA 2	09/04/2020
3	AD #3	11/02/2020
4	AD #5	02/10/2021

KEY PLAN

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

LEVEL 1 DEMOLITION FLOOR PLAN - MECHANICAL

DRAWN BY: | CHECKED BY:

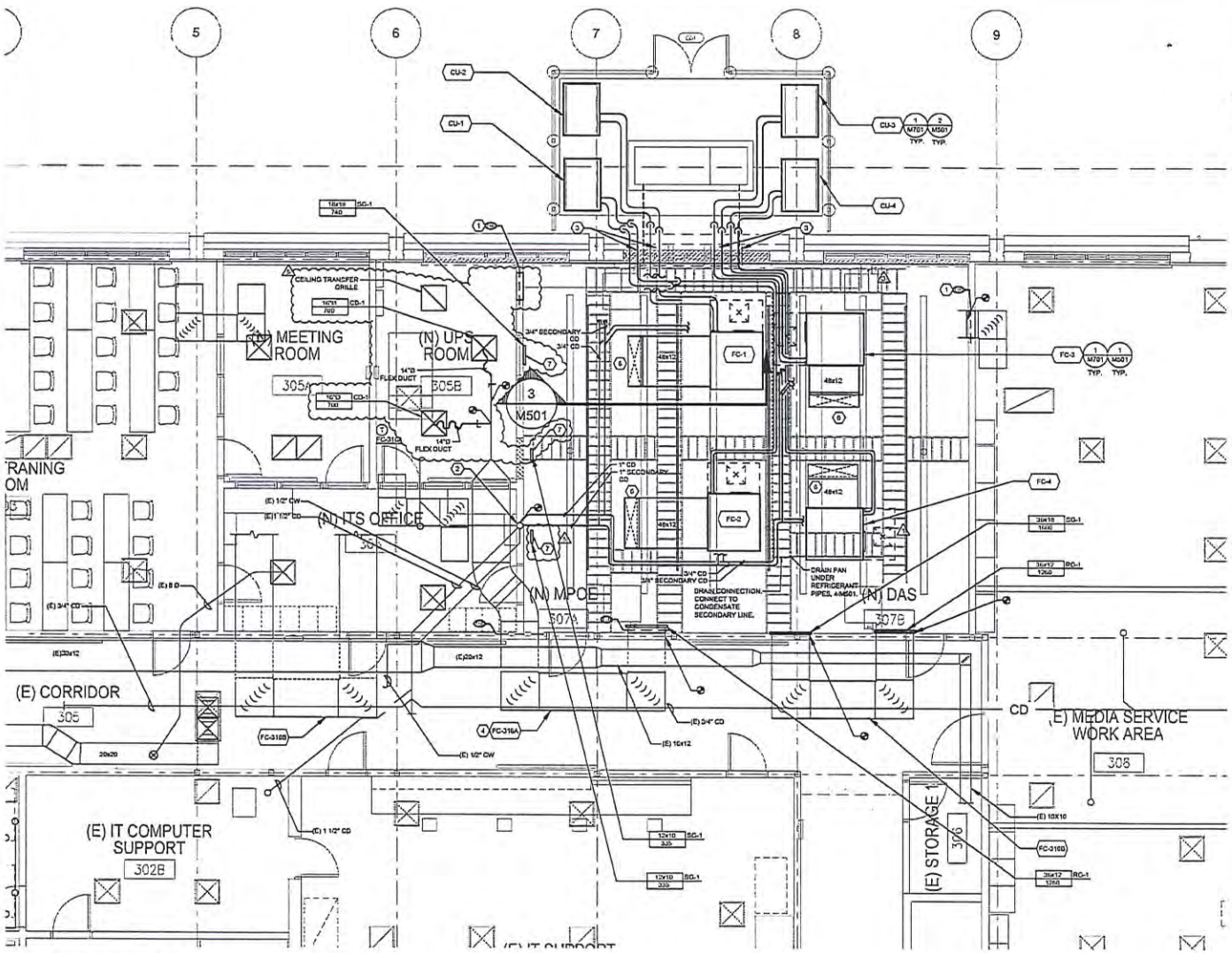
DATE: 04/03/2020 | PROJECT NO: 0362

SHEET NO:

MD201

Bid No. 19-20-17
Change Order #01
PCO 015

INTERFACE ENGINEERING



SHEET KEYNOTES

1. FSD CONTROLLED BY CLEAN AGENT CNDM. FIRE SUPPRESSION SYSTEM TO CLOSE WITH ACTIVATION OF SYSTEM.
2. DAYLIGHT TO (E) INDIRECT WASTE FIXTURE.
3. REFRIGERANT LINES ROUTED INTO BUILDING UNDER TELECOM CABLING IN THE SAME WALL PENETRATION.
4. (E) FC-316A SET TO 160 CFM.
5. (N) FIRE SMOKE DAMPER IN (E) DUCT.
6. TURN DUCT DOWN AND PROVIDE SCREEN MESH AT OUTLET. LOCATE IN 'HOT' AISLE.
7. CAP AND SEAL SUPPLY OPENING AT WALL.

1 ENLARGED PLAN - MECHANICAL

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

ADA

ATI ARCHITECTS & ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

Date Signed: 2/10/21

ITEM	REVISION / ISSUE	DATE
1	DSA Addendum #1	04/02/2020
2	CCD 2	09/04/2020
3	ADD 3	11/02/2020
4	ADD 3	02/10/2021

KEY PLAN:

CHABOT COLLEGE

MPOE REPLACEMENT, LEARNING SKILLS TESTING RELOCATION

25555 HESPERIAN BLVD
HAYWARD, CA 94545

ENLARGED PLAN - MECHANICAL

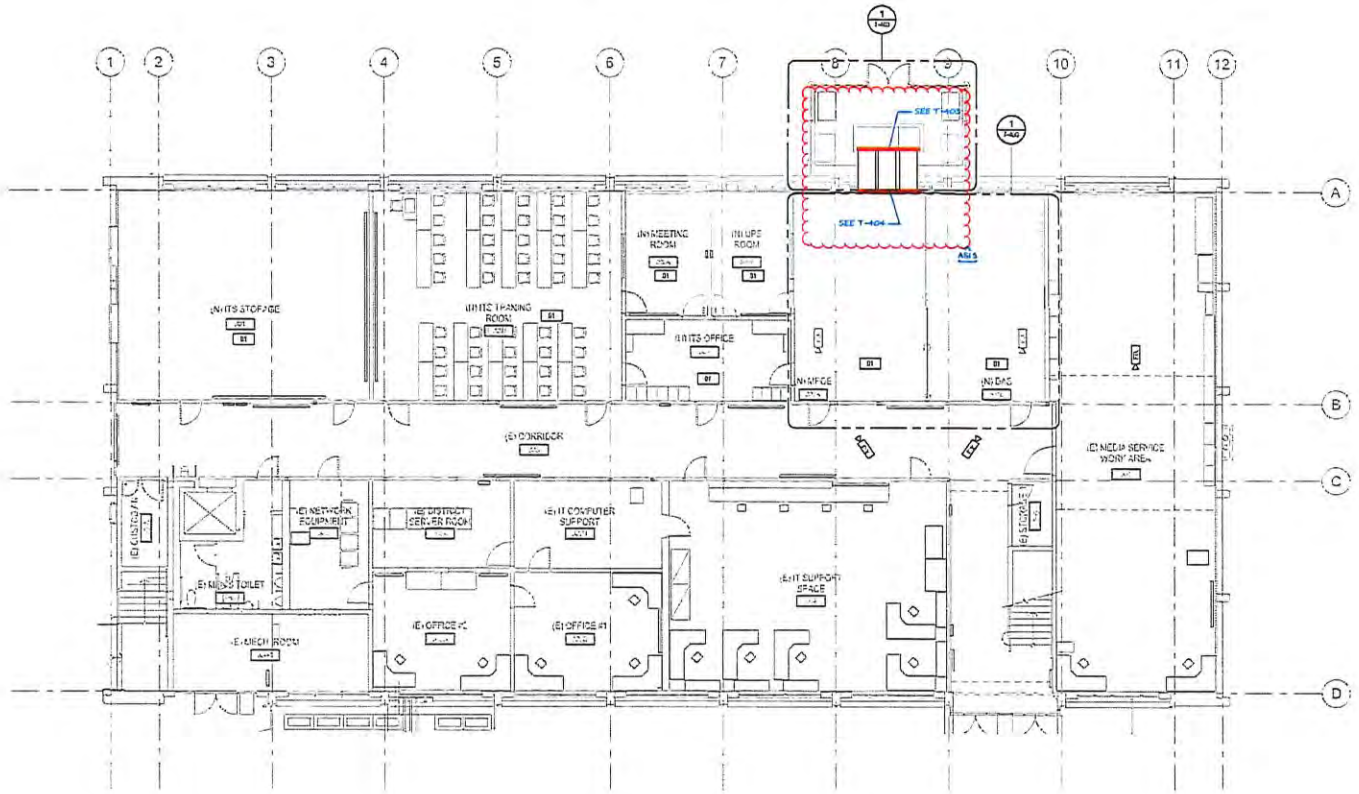
DRAWN BY:
CHECKED BY:
DATE: 04/03/2020
PROJECT NO: CHC
SHEET NO.

M301

INTERFACE ENGINEERING

NUMBERED NOTES

01 EXISTING DATA OUTLETS IN CONSTRUCTION AREAS ARE TO REMAIN IN PLACE AND BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.



DSA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 01-118445 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☐
DATE: 12/19/2019

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

TEECOM

ITEM	REVISION / ISSUE	DATE

KEY PLAN:

CHABOT COLLEGE

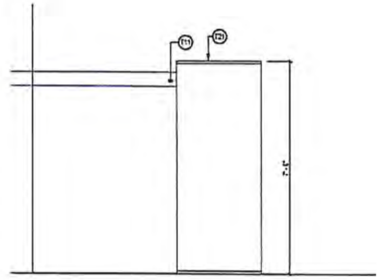
NEW MPOE AT CHABOT CAMPUS BLDG. 300

25555 Hesperian Blvd
Hayward, CA 94545
VOLUME 1

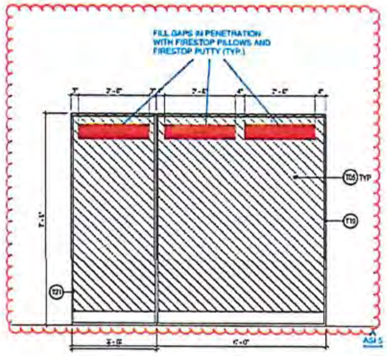
OVERALL FLOOR PLAN - LEVEL 1

DRAWN BY: RM CHECKED BY:
DATE: 11/07/2019 PROJECT NO:
SHEET NO:

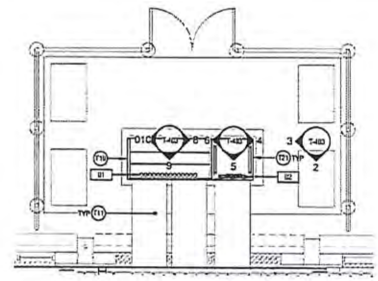
T-200



3 OSP CAN ELEVATION
SCALE: 1/2" = 1'-0"



2 OSP CAN ELEVATION
SCALE: 1/2" = 1'-0"



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

SHEET NOTES

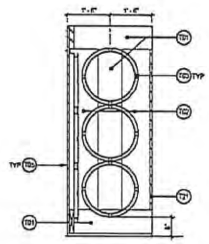
1. PROVIDE BACKBOARDS ON WALLS AND CEILINGS OF BOTH OSP CANS. MASK FIRE RATING STAMP PRIOR TO PAINTING. USE FLUSH FASTENERS FOR MOUNTING PLYWOOD.
2. COORDINATE EXACT LAYOUT OF WIRE BASKET TRAY AND CABLE SERVICE LOOP RINGS WITH TEECOM PRIOR TO PROVISION AND INSTALLATION.
3. ALL WIRE BASKET TRAY SHALL BE INSTALLED WITH THE BOTTOM OF THE TRAY FACING OUTWARDS. ATTACH TOP OF TRAY DIRECTLY TO PLYWOOD.
4. CABLE SERVICE LOOP RINGS SHALL BE INSTALLED TO PLYWOOD THROUGH BASKET TRAY WITH FASTENER.
5. PATHWAYS SHOWN ARE DEDICATED FOR TELECOMMUNICATIONS CABLING ONLY, UON.

NUMBERED NOTES

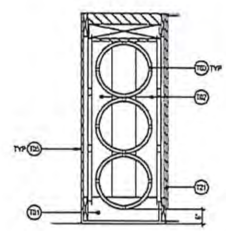
01	(14) 4" CONDUITS TO NEAREST OSP VAULT, FOR OWNER PROVIDED CABLING.
02	(4) 4" CONDUITS TO NEAREST OSP VAULT, FOR SERVICE PROVIDER CABLING.

TR EQUIPMENT LIST

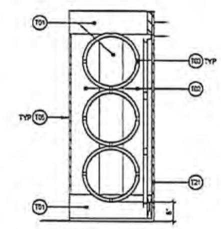
ID	DESCRIPTION
T01	18"W X 2"D WIRE BASKET TRAY
T02	12"W X 2"D WIRE BASKET TRAY
T03	24" CABLE SERVICE LOOP RING
T05	3/4" FIRE RATED PLYWOOD
T06	18"W X 2"D WIRE BASKET TRAY
T11	30"W X 72"L X 6"H CABLE TROUGH, SED FOR DETAILS
T19	72"W X 30"D X 90"H OSP CAN, SED FOR DETAILS
T21	36"W X 30"D X 40"H OSP CAN, SED FOR DETAILS



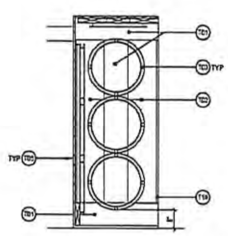
6 36"W OSP CAN WEST ELEVATION
SCALE: 1/2" = 1'-0"



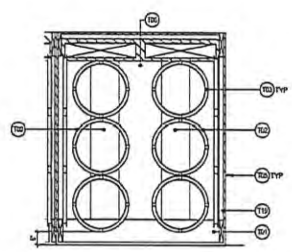
5 36"W OSP CAN SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



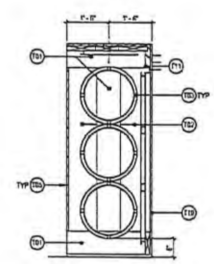
4 36"W OSP CAN EAST ELEVATION
SCALE: 1/2" = 1'-0"



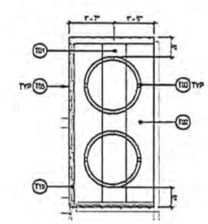
01D 72"W OSP CAN WEST ELEVATION
SCALE: 1/2" = 1'-0"



9 72"W OSP CAN SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



8 72"W OSP CAN EAST ELEVATION
SCALE: 1/2" = 1'-0"



7 72" W OSP CAN CEILING ELEVATION
SCALE: 1/2" = 1'-0"

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DATE: 12/19/2019

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP:

CONSULTANT:

TEECOM

ITEM	REVISION / ISSUE	DATE

KEY PLAN:

CHABOT COLLEGE

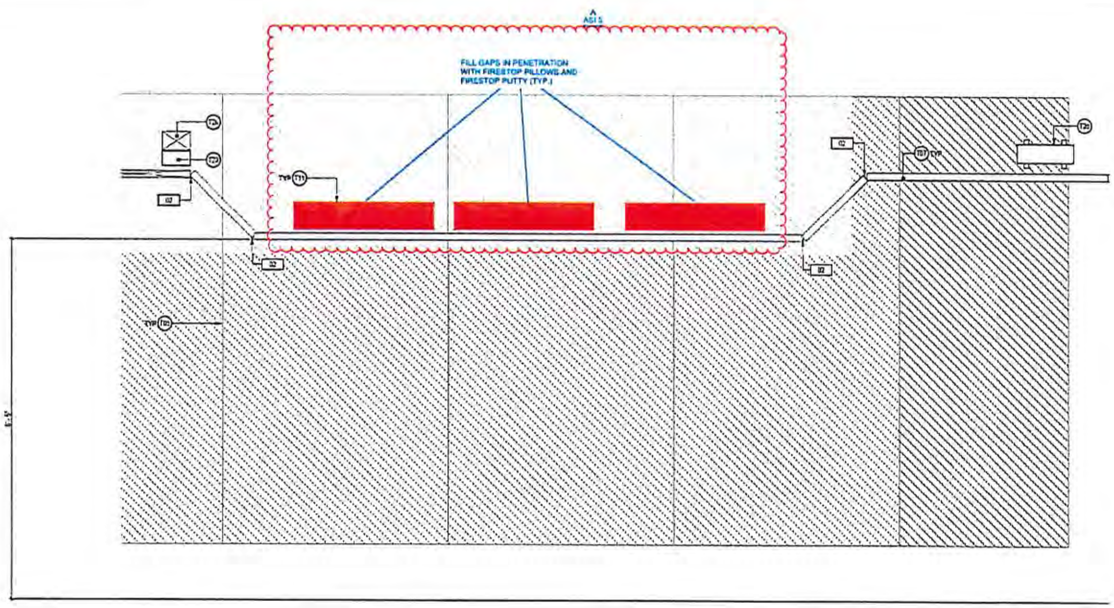
NEW MPOE AT CHABOT CAMPUS BLDG. 300

25555 Hesperian Blvd
Hayward, CA 94545
VOLUME 1

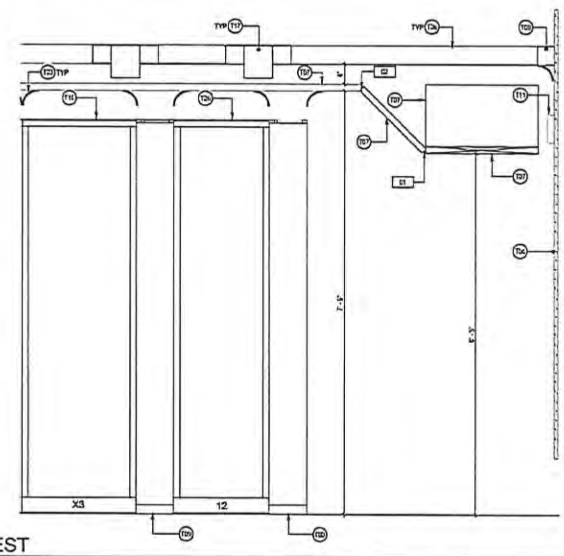
ENLARGED ROOM PLAN & ROOM ELEVATIONS-OSP

DRAWN BY: RW
CHECKED BY:
DATE: 11/2019
PROJECT NO:
SHEET NO:

T-403



MPOE OVERHEAD RUNWAY ELEVATION-NORTH
SCALE: 1" = 1'-0"



MPOE RACK/OVERHEAD RUNWAY-WEST
SCALE: 1" = 1'-0"

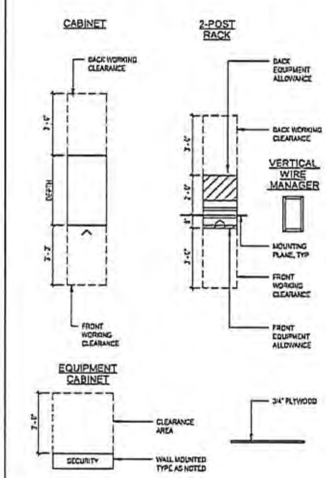
SHEET NOTES

1. PATHWAYS SHOWN ARE DEDICATED FOR TELECOMMUNICATIONS CABLING ONLY, UON.
2. NEATLY BUNDLE (DRESS CABLE LONGITUDINALLY) AND SUPPORT (USING FASTENERS AND TIES DESCRIBED IN SPECS AND DRAWINGS) TELECOMMUNICATIONS CABLES ONTO OVERHEAD CABLE TRAY OR RUNWAY. NEATLY BUNDLE AND SUPPORT TELECOMMUNICATIONS CABLES ONTO VERTICALLY MOUNTED CABLES RUNWAY WHEN RISING FROM FLOOR SLEEVES OR DESCENDING FROM CEILING SLEEVES USING APPROVED TIES. NEATLY BUNDLE TELECOMMUNICATIONS CABLES INTO THE BACK OF THE VERTICAL CABLE MANAGEMENT SECTIONS USING APPROVED TIES. DRESS TELECOMMUNICATIONS CABLES FROM THE VERTICAL MANAGEMENT SECTIONS TO THE TERMINATION POSITION. MAXIMUM BUNDLE SIZE: 24 CABLES.
3. REFER TO STRUCTURAL DRAWINGS SA5/S-502 FOR OVERHEAD RUNWAY BRACING DETAILS.

NUMBERED NOTES

E1	USE JUNCTION-SWIVEL SPLICE
E2	USE BUTT-SWIVEL SPLICE

SYMBOL LEGEND



TR EQUIPMENT LIST

ID	DESCRIPTION
T05	3/4" FIRE RATED PLYWOOD
T07	24"W X 1-1/2"H OVERHEAD CABLE RUNWAY
T09	FIBER RUNNER 6X4 SPILL-OUT
T11	30"W X 72"L X 6"H CABLE TROUGH, SED FOR DETAILS
T16	2-POST RACK, XLBET, 23"W X 6"D X 84"H
T17	FIBER RUNNER VERTICAL TEE
T23	CABLE RUNWAY DROP-OUT
T26	6"W X 4"H FIBER RUNNER, MOUNTED ABOVE OVERHEAD RUNWAY
T28	GROUND BUSBAR AT 100" TO CENTER AFF

IDENTIFICATION STAMP
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SS ☒ FLS ☒ ACS ☒
DATE: 12/19/2019

ATI ARCHITECTS + ENGINEERS

PROFESSIONAL STAMP

CONSULTANT:

TEECOM

ITEM	REVISION / ISSUE	DATE

KEY PLAN

CHABOT COLLEGE

NEW MPOE AT CHABOT CAMPUS BLDG. 300

25555 Hesperian Blvd
Hayward, CA 94545
VOLUME 1

ROOM ELEVATIONS

DRAWN BY: RV
CHECKED BY: C
DATE: 10/07/2019
PROJECT NO: C9

SHEET NO:

T-404