#### LODI UNIFIED SCHOOL DISTRICT

#### Beckman Elementary School Fire Alarm Upgrade

#### PROJECT NUMBER: 0910-8210 DSA #:02-118691 Beckman Elementary School

### ADDENDUM NO. 1

April 5, 2021

Owner:	Lodi Unified School District
	1305 E. Vine Street
	Lodi, CA 95240

- Engineer: The Engineering Enterprise 1125 High Street Auburn, CA 95603
- Project Manager: Capital Program Management, Inc. 1851 Heritage Lane, Suite 210 Sacramento, CA 95815

This Addendum has been prepared to clarify, modify, delete, or add to the drawings and/or specifications for the above referenced project, and revisions to items listed here shall supersede description thereof prior to the above stated date. All conditions not specifically referenced here shall remain the same. It is the obligation of the Prime Contractor to make subcontractors aware of any items herein that may affect submitted bids.

Acknowledge receipt of this addendum by inserting its number and date in the bidding documents. Failure to do so may subject bidder to disqualification.

All addenda items refer to the plans and specifications unless specifically noted otherwise.

TOTAL PAGES IN THIS ADDENDUM (including attachments): 17 Pages

#### Beckman Elementary School Fire Alarm Upgrade

#### PROJECT NUMBER: 0910-8210 DSA #:02-118691 Beckman Elementary School

## ADDENDUM NO. 1

# PART A - BIDDING AND CONTRACT REQUIREMENTS

- 1.1Due to the potential of running a summer school program all work may move to shift work so<br/>an add alternate for that is being requested. Delete Document 00 41 13 Bid Form and<br/>Proposal and Replace it in its entirety with Document 00 41 13 Bid Form and Proposal<br/>Addendum1(attachment1.8)
- 1.2 Delete Document 00 52 13 Agreement and Replace it in its entirety with Document 00 52 13 Agreement Addendum 1 (attachment 1.9)
- 1.3 Delete Document 01 21 00 Allowance and Replace it in its entirety with Document 01 21 00 Allowance Addendum 1 (attachment 1.10)

# PART B - TECHNICAL REQUIREMENTS

1.4 N/A

# PART C - DRAWINGS

- 1.5 Delete drawing sheet FA0.01 in its entirety and replace it with drawing sheet FA0.01 Addendum 1 dated 04/01/21 (attachment 1.13)
- 1.6 Delete drawing sheet FA3.02 in its entirety and replace it with drawing sheet FA3.02 Addendum 1 dated 04/01/21 (attachment 1.14)

# PART D – RESPONSES TO CONTRACTOR QUESTIONS

1.7 N/A

### PART E – List of Attachments

- 1.8 Document 00 41 13 Bid Form and Proposal Addendum 1
- 1.9 Document 00 52 13 Agreement Addendum 1
- 1.10 Document 01 21 00 Allowance Addendum 1
- 1.11 Pre-Bid Sign In Sheet
- 1.12 Pre-Bid Agenda
- 1.13 Drawing sheet FA0.01 Addendum 1 dated 4/1/21
- 1.14 Drawing sheet FA3.02 Addendum 1 dated 4/1/21

#### End of Addendum

Addendum 1 Attachment 1.8

Beckman Elementary School Fire Alarm Upgrade

#### DOCUMENT 00 41 13

#### **BID FORM AND PROPOSAL**

To: Governing Board of the Lodi Unified School District ("District" or "Owner")

From:

(Proper Name of Bidder)

The undersigned declares that Bidder has read and understands the Contract Documents, including, without limitation, the Notice to Bidders and the Instructions to Bidders, and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications of Project Nos. **0910-8210** for the following project known as:

#### Beckman Elementary School Fire Alarm Upgrade

**1**. ("Project" or "Contract") and will accept in full payment for that Work the following total lump sum amount, all taxes included:

#### Beckman Elementary School Fire Alarm Upgrade (Project #0910-8210)

	Dollars	\$
Base Bid	-	

**2.** Additive / Deductive Alternates: ADD ALTERNATE #1 will be used in the event all work must be done as shift work from 3:30pm to11:30pm.

The Bidder's Base Bid shall **NOT** include the following Alternates(s). The District will add some or all of the following Alternate(s) amount(s) to the successful bidder's Contract, at the District's discretion.

#### Add Alternate #1 – Beckman Elementary School

Added cost for work from June 7, 2021 to July 23, 2021 to be done as shift work from 3:30pm to 11:30pm instead of regular hours from 7:00am to 3:30pm.

LODI UNIFIED SCHOOL DISTRICT

BID FORM AND PROPOSAL DOCUMENT 00 41 13-1 **3. Allowances:** The Bidder's Base Bid shall **NOT** include the following potential Allowance(s). The District will add some or all of the following Allowance(s) amount(s) to the successful bidder's Contract, at the District's discretion. Contractor shall be permitted to invoice for Work under an Allowance in the identical structure as a Change Order.

Beckman Elementary School (Project #0910-8210) Allowance #1: Allowance for unforeseen conditions	\$40,000.00
Beckman Elementary School (Project #0910-8210) Allowance #2: Allowance for underground pathway	\$20,000.00
[Remainder of page left intentionally blank]	

#### Additional Detail Regarding Calculation of Base Bid

- 1. <u>Allowance</u>. The Bidder's Base Bid shall not include an allowance any, see Bid Form. The above allowance shall only be allocated for unforeseen items relating to the Work. Contractor shall not bill for or be due any portion of this allowance unless the District has identified specific work, Contractor has submitted a price for that work or the District has proposed a price for that work, the District has accepted the cost for that work, and the District has prepared an Allowance Expenditure Directive incorporating that work. Contractor hereby authorizes the District to execute a unilateral deductive change order at or near the end of the Project for all or any portion of the allowance not allocated.
- 2. **OCIP.** Not used.
- 3. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.
- 4. The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.
- 5. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
- 6. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
- 7. It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.
- 8. The following documents are attached hereto:
  - Bid Bond on the District's form or other security
  - Designated Subcontractors List
  - Site Visit Certification
  - Non-Collusion Declaration
  - Iran Contracting Act Certification
  - DVBE Certificate

9. Receipt and acceptance of the following Addenda is hereby acknowledged:

No, Dated	No, Dated
No, Dated	No, Dated
No, Dated	No, Dated

- 10. Bidder acknowledges that the license required for performance of the Work is a \_\_\_\_\_\_ license.
- 11. Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
- 12. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations.
- 13. Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that Bidder will comply with the provisions of Labor Code section 2810(d) if awarded the Contract
- 14. Not used.
- 15. Not used.
- 16. Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.
- 17. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.
- 18. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Gov. Code, § 12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.
- 19. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the Contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

#### LODI UNIFIED SCHOOL DISTRICT

BID FORM AND PROPOSAL DOCUMENT 00 41 13-4 Furthermore, Bidder hereby certifies to the District that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this o	day of			20
Name of Bidder:				
Type of Organization:				
Signed by:				
Title of Signer:				
Address of Bidder:				
Taxpayer Identification No.	of Bidder:			
Telephone Number:				
Fax Number:				
E-mail:		_ Web Page:		
Contractor's License No(s):	No.:	Class:	Expiration Date:	
	No.:	Class:	Expiration Date:	
	No.:	Class:	Expiration Date:	
Public Works Contractor Reg	gistration No.:			

END OF DOCUMENT

Addendum 1 Attachment 1.9

Beckman Elementary School Fire Alarm Upgrade

#### DOCUMENT 00 52 13

#### **AGREEMENT**

 THIS AGREEMENT IS MADE AND ENTERED INTO THIS \_\_\_\_\_ DAY OF \_\_\_\_\_

 \_\_\_\_\_, 20\_\_\_\_, by and between the Lodi Unified School District ("District") and \_\_\_\_\_\_

 \_\_\_\_\_\_ ("Contractor") ("Agreement").

**WITNESSETH:** That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other, as follows:

1. **The Work**: Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform and complete in a good and workmanlike manner, the work of the following project:

#### Beckman Elementary School Fire Alarm Upgrade

("Project" or "Contract" or "Work")

It is understood and agreed that the Work shall be performed and completed as required in the Contract Documents including, without limitation, the Drawings and Specifications and submission of all documents required to secure funding or by the Division of the State Architect for close-out of the Project, under the direction and supervision of, and subject to the approval of, the District or its authorized representative.

- 2. **The Contract Documents**: The complete Contract consists of all Contract Documents as defined in the General Conditions and incorporated herein by this reference. Any and all obligations of the District and Contractor are fully set forth and described in the Contract Documents. All Contract Documents are intended to cooperate so that any Work called for in one and not mentioned in the other or vice versa is to be executed the same as if mentioned in all Contract Documents.
- 3. **Interpretation of Contract Documents**: Should any question arise concerning the intent or meaning of Contract Documents, including the Drawings or Specifications, the question shall be submitted to the District for interpretation. If a conflict exists in the Contract Documents, valid, written modifications, beginning with the most recent, shall control over this Agreement (if any), which shall control over the Special Conditions, which shall control over any Supplemental Conditions, which shall control over the General Conditions, which shall control over the remaining Division 0 documents, which shall control over Division 1 Documents which shall control over figured dimensions, which shall control over large-scale drawings, which shall control over small-scale drawings. In no case shall a document calling for lower quality and/or quantity material or workmanship control. The decision of the District in the matter shall be final.
- 4. **Time for Completion**: It is hereby understood and agreed that the Work under this Contract shall be completed within Eighty (80) consecutive calendar days ("Contract Time") from the date specified in the District's Notice to Proceed.
- 5. **Completion Extension of Time**: Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due

#### LODI UNIFIED SCHOOL DISTRICT

AGREEMENT DOCUMENT 00 52 13-1 allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on account thereof. The Contractor shall coordinate its Work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the Work of other contractors.

6. **Liquidated Damages**: Time is of the essence for all work under this Agreement. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that the District will sustain in the event of and by reason of Contractor's delay; therefore, Contractor agrees that it shall pay to the District the sum of Five Hundred Dollars (\$500.00) per day as liquidated damages for each and every day's delay beyond the time herein prescribed in finishing the Work.

It is hereby understood and agreed that this amount is not a penalty.

In the event that any portion of the liquidated damages is not paid to the District, the District may deduct that amount from any money due or that may become due the Contractor under this Agreement, and such deduction does not constitute a withholding or penalty. The District's right to assess liquidated damages is as indicated herein and in the General Conditions.

The time during which the Contract is delayed for cause, as hereinafter specified, may extend the time of completion for a reasonable time as the District may grant, provided that Contractor has complied with the claims procedure of the Contract Documents. This provision does not exclude the recovery of damages by either party under other provisions in the Contract Documents.

- 7. **Loss Or Damage**: The District and its agents and authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatsoever; and shall hold the District and its agents and authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatsoever.
- 8. **Insurance and Bonds**: Prior to issuance of the Notice to Proceed by the District, Contractor shall provide all required certificates of insurance, insurance endorsements, and payment and performance bonds as evidence thereof.
- 9. **Prosecution of Work**: If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this Contract, the District, may, pursuant to the General Conditions and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.
- 10. **Authority of Architect, Project Inspector, and DSA**: Contractor hereby acknowledges that the Architect(s), the Project Inspector(s), and the Division of the State Architect ("DSA") have authority to approve and/or suspend Work if the

#### LODI UNIFIED SCHOOL DISTRICT

AGREEMENT DOCUMENT 00 52 13-2 Contractor's Work does not comply with the requirements of the Contract Documents, Title 24 of the California Code of Regulations, and all applicable laws and regulations. The Contractor shall be liable for any delay caused by its non-compliant Work.

- 11. **Assignment of Contract**: Neither the Contract, nor any part thereof, nor any moneys due or to become due thereunder, may be assigned by the Contractor without the prior written approval of the District, nor without the written consent of the Surety on the Contractor's Performance Bond (the "Surety"), unless the Surety has waived in writing its right to notice of assignment.
- 12. **Classification of Contractor's License**: Contractor hereby acknowledges that it currently holds valid Type <u>C-10</u> Contractor's license(s) issued by the State of California, Contractors' State License Board, in accordance with division 3, chapter 9, of the Business and Professions Code and in the classification called for in the Contract Documents.
- 13. **Registration as Public Works Contractor**: The Contractor and all Subcontractors currently are registered as public works contractors with the Department of Industrial Relations, State of California, in accordance with Labor Code section 1771.1.
- 14. **Payment of Prevailing Wages**: The Contractor and all Subcontractors shall pay all workers on all Work performed pursuant to this Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to sections 1770 et seq. of the California Labor Code.
- 15. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and Title 8 of the California Code of Regulations. Contractor specifically acknowledges and understands that it shall perform the Work of this Agreement while complying with all the applicable provisions of Division 2, Part 7, Chapter 1, of the Labor Code, including, without limitation, the requirement that the Contractor and all of its Subcontractors shall timely submit complete and accurate electronic certified payroll records as required by the Contract Documents, or the District may not issue payment.
- 16. **Contract Price**: In consideration of the foregoing covenants, promises, and agreements on the part of the Contractor, and the strict and literal fulfillment of each and every covenant, promise, and agreement, and as compensation agreed upon for the Work and construction, erection, and completion as aforesaid, the District covenants, promises, and agrees that it will well and truly pay and cause to be paid to the Contractor in full, and as the full Contract Price and compensation for

construction, erection, and completion of the Work hereinabove agreed to be performed by the Contractor, the following price:

(\$	)
ions at Beck	man Elementary School
	\$40,000.00
way at Beck	man Elementary School
	\$20,000.00
i	ons at Beck

TOTAL CONTRACT PRICE:

Dollars	(\$	1
	(+	

in lawful money of the United States, which sum to be paid according to the schedule provided by the Contractor and accepted by the District and subject to additions and deductions as provided in the Contract. This amount supersedes any previously stated and/or agreed to amount(s).

- 17. **No Representations:** No representations have been made other than as set forth in writing in the Contract Documents, including this Agreement. Each of the Parties to this Agreement warrants that it has carefully read and understood the terms and conditions of this Agreement and all Contract Documents, and that it has not relied upon the representations or advice of any other Party or any attorney not its own.
- 18. **Entire Agreement:** The Contract Documents, including this Agreement, set forth the entire agreement between the parties hereto and fully supersede any and all prior agreements, understandings, written or oral, between the parties hereto pertaining to the subject matter thereof.
- 19. **Severability**: If any term, covenant, condition, or provision in any of the Contract Documents is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions in the Contract Documents shall remain in full force and effect and shall in no way be affected, impaired, or invalidated thereby.

IN WITNESS WHEREOF, accepted and agreed on the date indicated above:

#### CONTRACTOR

#### LODI UNIFIED SCHOOL DISTRICT

Ву:	Ву:
Title:	Title:
Contractor License No:	
DIR Registration No:	

NOTE: If the party executing this Contract is a corporation, a certified copy of the by-laws, or of the resolution of the Board of Directors, authorizing the officers of said corporation to execute the Contract and the bonds required thereby must be attached hereto.

END OF DOCUMENT

Beckman Elementary School Fire Alarm Upgrade

#### DOCUMENT 01 21 00

#### ALLOWANCE

#### PART 1 GENERAL

#### **1.1 SECTION INCLUDES**

A. Non-specified work.

#### **1.2 RELATED SECTIONS**

A. Document 01 10 00 (Summary of Work)

- B. Document 01 29 00 (Payments and Completion)
- C. Document 01 32 19 (Submittal Procedures)

#### **1.3 ALLOWANCES**

- A. Included in the Contract, a stipulated sum/price of Forty Thousand Dollars (\$40,000) for Beckman Elementary School as allowances for Unforeseen Conditions and Twenty Thousand Dollars (\$20,000) for Beckman Elementary School as allowances for underground pathway within the limits set forth in the Contract Documents. This Allowance shall not be utilized without written approval by the District.
- B. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Allowance Expenditure Directive authorizing expenditure of funds from this Allowance.
- C. Funds will be drawn from Allowance only with District approval evidenced by an Allowance Expenditure Directive.
- D. At Contract closeout, funds remaining in Allowance will be credited to District by Change Order.

#### PART 2 PRODUCTS

Not used.

#### PART 3 EXECUTION

Not used.

END OF DOCUMENT

LODI UNIFIED SCHOOL DISTRICT

#### Addendum 1 Attachment 1.11

Lodi Unified School District PRE-BID CONFERENCE AND SITE VISIT SIGN-IN SHEET FOR PROJECT NO. 0910-8210 Beckman Elementary School Fire Alarm Upgrade Beckman Elementary March 25, 2021 3:00 PM

Company Name & Representative	Company Street Address	Phone #	E-Mail	
Share Brown Electric				
Ted Mayer	16535 County Rd 98. Woodand	916-710-6026	TedM@shanebrownelectric.com	
CA O'Nell Electric	901 Oxford Way Stockton	209-941-3949	chunezochoneill.com	
COLLINS BLOORIC DUSTIN TOARD	3412 MUTEO DE. STOCKTON	(27)466-3691	DTBRAS & COLLIND BLOCTRIC. COM	
BUH ELECTRIC INC TIM FINCH	1122 BLOCK DIDMOND LOU	209 334-6770	timabandhelectric.com	
BRAD BONGLORNO	T T			
STUDEBAK BRANCH	4529 QUALLAKES DRASTOCKTON TR.C. 3237 R.P.P.C.Y. R. OG LOOM 502 GIUTRIME CT #5 ROTRING	KC 520:7/3_ RKG	Martinel CASULAR 12	
MANDENBOS	502 GIUSKIPPE CT #5 ROTAVIL	E 9/6-773-1500	TODO @ VDBELECTRIC, COM	UNELEC
Bockmon & Woody	1528 El pinal stalaton A	209-4644878	gary m@bockmonwoody.	com

#### Lodi Unified School District Project No. 0910-8210 Fire Alarm Upgrade Project Beckman Elementary School

#### PRE-BID CONFERENCE & SITE VISIT AGENDA

**Date:** March 25, 2021

Time: 3:00 p.m.

School:Beckman ElementaryBid Date:April 14, 2021 by 2:00:00 p.m.

#### I. Meeting Called to Order

#### II. Introduction of Project Team

- A. District Representatives, Vickie Brum and Joe Patty, Planning & Facilities
- B. Capital Program Management, Doug McCalla and Mark Rosson
- C. The Engineering Enterprise (TEE), Electrical Engineer , Jesse Wheeler
- III. Bidding Documents: Available from District <u>https://www.lodiusd.net/district/departments/business-</u> services/facilities-and-planning/fp-projects
- **IV. Contracting Format:** (1) Prime Contract
- V. Scope of Work Descriptions: Document 01 11 00 Part 1.02 A Summary of Work and Drawings
- VI. Engineer's Estimated Construction Budget: \$450,000.00

#### VII. Bidding and Contract Award Requirements:

- A. License requirement(s): C-10
- B. Bid Bond or Certified Check, 10% of bid
- C. Prevailing Wages certified payrolls, payroll records and other documents shall be required along with your progress billings: <u>www.dir.ca.gov/dlsr/DPreWageDetermination.htm</u>
- D. DIR Registration of Contractor & Subcontractors (See General Conditions, Section 0072 13)
- E. Disabled Veterans Business Enterprise (DVBE Section 00 45 46.02)
- F. Bond and Insurance Requirements (See General Conditions, Section 00 72 13)
- G. Bid Form (See Bid Form, Section 00 41 13):
  - 1. Completed Forms
  - 2. No exclusions
  - 3. No faxes, phone or email bids
  - 4. Bids good for 90 days
- H. Pre-Qualified Bid Requirements https://pqbids.com/lodi/

#### VIII. Inspection Procedures: DSA Project Inspector: Jason Zachary

- IX. Project Schedule: See General Conditions, Section 00 01 20
  - Construction Start: May 17, 2021
  - Construction Completion: July 23, 2021
- X. Department of Justice (DOJ) Clearance, Badges and Security: District Protocols
- XI. Site Information:
  - A. Contact: Vickie Brum, 209-331-7223
  - B. Site access, temporary facilities, staging areas and parking
  - C. Conduct on school premises: No dialogue or contact with students, no smoking or tobacco and all employees on site are to conduct themselves professionally.
  - D. Contractor's working hours.
  - E. Contractor's supervision: The designated Superintendent must be present at all times when subcontractors or self-performance work is taking place.

#### XII. Owner Meetings:

- A. Weekly meeting day, time and location TBD
- XIII. Questions

#### XIV. Adjournment

**Important note:** Responses to inquiries and discussions occurring at this pre-bid walk-through shall in no way change or modify the bid documents. The bid documents will be affected only by addenda issued prior to the bid date.

Send written inquiries by March 31, 2021 to: Doug McCalla, dougm@capitalpm.com

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RESULT OF OPERATION	SM	WEL CO	SMOKE HE	ATOFIC	51 DEL	OR ATION	ASUL SYS	STEN PESE	ANL ST. OPF	NSHORT POW	FRIOSS N	ATERTION TAM
FACP ALARM	X		X		X	x				<b>X</b>	x	
ANNUNCIATE ALARM	Х		Х		Х	Х					х	
OFF SITE REPORTING ALARM	х		X		х	х					x	
FACP TROUBLE									х	Х		
ANNUNCIATE TROUBLE									х	Х		
OFF SITE REPORTING TROUBLE									х	Х		
AUDIBLE ALARM	Х		X		Х	х					x	
VISUAL ALARM	X		X		х	х					x	
FACP SUPERVISORY		X		Х								Х
ANNUNCIATE SUPERVISORY		Х		Х								Х
OFF SITE REPORTING SUPERVISORY		Х		Х								Х
SOUNDER BASE		X										
DEACTIVATE VISUALS								х				
DEACTIVATE AUDIBLES								x				
HVAC SHUTDOWN				х								Х
SYSTEM NORMAL							Х					Х
DAMPER CLOSURE				X								
ROLL DOWN DOOR												

						JULL
REQUIRED CABLES	CABLE TAG	CABLE	NO. OF CONDUCTORS	COLOR	AWG	CABLE US
Х	А	GENESIS	2(1PR)	RED/BLACK	#18	BUILDING INITIA
Х	В	GENESIS	2(1PR)	RED/BLACK	#12	NOTIFICATION (
Х	S	GENESIS	2(1PR)	RED/BLACK	#16	VOICE NOTIFIC/
Х	D	AQUA SEAL	2(1PR)	GRAY	N/A	UG MULTI-MODI
Х	F	GENESIS	2(1PR)	RED/BLACK	#12	24 VDC POWER
х	н	AQUA SEAL	2(1PR)	RED/BLACK	#12	UG NOTIFICATIO
Х	E	AQUA SEAL	2(1PR)	RED/BLACK	#16	UG VOICE NOTI
X	G	AQUĄSEAL	2(1PR)	RED/BLACK	#12	UG 24 VDQ POW
Х	С	AQUA SEAL	2(1PR)	RED/BLACK	#16	UG BUILDING IN
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NUMBERED SHEET NOTES

1.	MOUNT DOOR HOLDER SMOKE DETECTOR MAXIMUM 3' FROM DOOR AND A MINIMUM OF 1'.				
2.	MAXIMUM DISTANCE BETWEEN SMOKE DETECTORS IS 30' AND 15' FROM WALLS, MAXIMUM DISTANCE FROM A CORNER IS 21' WITH CEILING LESS 10' OR LESS.				
3.	MOUNT SMOKE DETECTOR MINIMUM OF 3' AWAY FROM DIFFUSER VENT.				
4.	MOUNT SMOKE DETECTOR FOR FIRE SMOKE DAMPER (FSD) WITHIN 3' OF SUPPLY VENT.				
5.	DUCT SMOKE DETECTOR SHALL BE MOUNTED 6 TO 10 TIMES THE DIAMETER OF DUCT FROM BEND				
	OR OBSTRUCTION.				
6.	WHERE DUCT SMOKE DETECTORS ARE INSTALLED IN CONCEALED LOCATIONS OR GREATER THAN				
	10' AFF, DETECTORS SHALL BE PROVIDED WITH A REMOTE INDICATOR OR SUPERVISORY INDICATION				
	ACCEPTABLE WITH AUTHORITY HAVING JURISDICTION (AHJ). ALL HVAC GREATER THAN 2000cfm SHALL				
	HAVE A DUCT DETECTOR IN THE SUPPLY AIR DUCT. GREATER THAN 15,000cfm SHALL HAVE ONE IN BOTH				
	SUPPLY AND RETURN AIR DUCTS. HOWEVER SHALL NOT BE REQUIRED WHERE THE ENTIRE SPACE				
	SERVED BY THE AIR DISTRIBUTION SYSTEM IS PROTECTED BY SMOKE DETECTIONES TRIGGER HVAC				
	SGUT-DOWN				
7.	BEAM POCKET SPOT DETECTOR ARE REQUIRED FOR BEAMS GREATER THAN 18" BELOW CEILING				
	AND SPACED MORE THAN 8' ON CENERER BAY FORMED BY BEAM SHALL BE TREATED AS A				
	SEPARATE AREA. BEAMS LESS THAN 12" IN DEPTH AND SPACED LESS THAN 8' ON CENTER SHALL HAVE				
	DETECTORS INSTALLED ON THE BOTTOM OF THE BEAM.				
7.1.	OR, CEILINGS WITH BEAM DEPTHS LESS THAN 10 PERCENT OF THE CEILING HEIGHT, SMOOTH				
	CEILING SPACING IS PERMITTED AND DETECTORS PLACED ON THE BOTTOM OF THE BEAM.				
7.2.	BEAMS EQUAL TO OR GREATER THAN 10 PERCENT OF CEILING HEIGHT WITH BEAM SPACING				
	GREATER THAN 40 PERCENT OF CEILING HEIGHT, SPOT DETECTORS SHALL BE LOCATED IN EACH				
	CELL. NFPA 72 17.7.3.2.4.2				
8.	BEAMS PROJECTING LESS THAN 4" SHALL BE TREATED AS A SMOOTH CEILING.				
9.	SMOKE DETECTORS SHALL BE MOUNTED ON THE CEILING MINIMUM 4" FROM WALL, AND 4" MINIMUM				
	TO 12" MAXIMUM FROM CEILING MOUNTED ON WALL.				
10.	MOUNT MANUAL PULL STATIONS AT 48" TO TOP OF BOX AFF, AND NO GREATER THAN 5' FROM				
	DOOR.				
11.	MOUNT EXTERNAL HORN AT 90" MINIMUM AND 100" MAXIMUM TO THE TOP OF THE DEVICE.				
12.	FOR APPLICATIONS WHERE THE STRUCTURE IS BELOW 90", MOUNT HORN AS HIGH AS WITH A				
	MINIMUM OF 6" CLEARANCEHECTOP OF THE DEVICE.				
13.	MOUNT HORN / SPEAKER STROBE AND STROBE ONLY THE THE ENTIRE LENS IS WITHIN 80" AND 96"				
14.	MOUNT FIRE ALARM CONTROL PANELS AND ANNUNCIATORS AT A MAXIMUM OF 60" TO THE TOP OF				
	THE CONTROL PANEL OR KEY BOARDSI 1028008				
15.	CEILING MOUNTED HORN / SPEAKER STROBE				
16.	MONITOR MODULE				
17.	RATE ANTICIPATOR HEAT DETECTOR, MOUNTED IN ABOVE CEILING / ATTIC SPACE.				
18.	APPROVED WIRE MANAGEMENT, IE J-HOOK OR D-RING.				
19. 20	ABOVE CEILING CIRCUITS ROUTING IN AN ACCESSIBLE ATTIC SPACE.				
20.	NON-ACCESSIBLE CEILINGS MUST USE EITHER EMT OR APPROVED WIREMOLD RACEWAY, AS				
04	SHOWN ON PLANS.				
21.	MULTI-CRITERIA PHOTOELECTRIC SMOKE / CO DETECTOR WITH SOUNDER BASE. MOUNT IN AREAS				
22.	WHERE FOSSIL FUEL IS USED.				
22. 22.1	SMOKE / HEAT DETECTION COVERAGE IS REQUIRED IN ALL COMBUSTIBLE AREAS, UNLESS: CEILING IS ATTACHED DIRECTLY TO T HE UNDERSIDE OF THE SUPPORTING BEAM OR ROOF DECK.				
22.2 22.3					
22.3					
22.4	FACING STUD OR SOLID JOIST IS LESS THAN 6".				
	INACCESSIBLE SPACES THAT DO NOT MEET THIS CRITERIA MUST BE MADE ACCESSIBLE AND DETECTION				
	MUST BE INSTALLED. NFPA72 17.5.3.1.1				
23.	DETECTION FOR CONCEALED ACCESSIBLE SPACES ABOVE SUSPENDED CEILING USED AS A				
23.	DETECTION FOR CONCEALED ACCESSIBLE SPACES ABOVE SUSPENDED CEILING USED AS A				

RETURN PLENUM SHALL BE PROVIDED AT EACH CONNECTION FROM RETURN AIR PLENUM AT CENTRAL AIR HANDLING UNIT. NFPA 72 17.5.3.1.4 WITH EVERY NEW FIRE ALARM SYSTEM A DOCUMENTATION CABINET SHALL BE INSTALLED AT THE 24 FIRE ALARM CONTROL PANEL OR AT ANOTHER LOCATION APPROVED BY AHJ. THE CABINET SHALL BE PROMINENTLY LABELED "SYSTEM RECORD DOCUMENTS".

SCALE: 12" = 1'-0"

X = COMPONENT USED IN CURRENT PROJECT.

N/A = COMPONENT NOT USED IN CURRENT PROJECT.

# FIRE ALARM SYSTEM COMPONENT SCHEDULE

# USE

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INITIATION (SLC)  $\sim$ 

# OF 1'. MUM

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REQUIRED COMPONENTS	SYMBOL	EQUIPMENT/DEVICE	MANUFACTURER	MODEL / PART #	CSFM LISTING YEA
	FACP	FIRE ALARM CONTROL PANEL	GAMEWELL	E-3	6/30/2021
	AMP	AMPLIFIER	GAMEWELL	AM-50	6/30/2021
	BP-X	REMOTE POWER BOOSTER	GAMEWELL	HPF24-S8	6/30/2021
	to the second	INTELLIGENT DUCT DETECTOR	GAMEWELL	XP95	6/30/2021
	٩	INTELLIGENT HEAT DETECTOR	GAMEWELL	ATD-L2F	6/30/2021
	AH ♦	ATTIC HEAT DETECTOR	GAMEWELL	5622	6/30/2021
	() AH	INTELLIGENT ATTIC HEAT DETECTOR 194 FIXED TEMP	GAMEWELL	ATD-L3H	6/30/2021
	3	PHOTO SMOKE DETECTOR	GAMEWELL	ASD-PL3	6/30/2021
	€00	FIRE/CO DETECTOR WITH SOUNDER BASE	GAMEWELL SYSTEM SENSOR	MCS-COF B200S	6/30/2021 6/30/2021
	DM	DUAL MONITOR MODULE	GAMEWELL	AMM-2IF	6/30/2021
	SM	MONITOR MODULE	GAMEWELL	AMM-4F	6/30/2021
	IM	ISOLATION MODULE	GAMEWELL	M500X	6/30/2021
	CR	CONTROL RELAY	GAMEWELL	AOM-2RF	6/30/2021
	F	PULL STATION	GAMEWELL	MS-7	6/30/2021
	8	SPEAKER STROBE (CEILING)	SYSTEM SENSOR	SPSCWL	6/30/2021
	$\otimes$	STROBE (CEILING)	SYSTEM SENSOR	SCWL	6/30/2021
	8	OUTDOOR SPEAKER (CEILING)	SYSTEM SENSOR	SPWK	6/30/2021
		OUTDOOR SPEAKER	SYSTEM SENSOR	SPWK	6/30/2021
	X	SPEAKER STROBE (WALL)	SYSTEM SENSOR	SPSW	6/30/2021
	×	STROBE (WALL)	SYSTEM SENSOR	SW	6/30/2021
	EOLR	END-OF-LINE RELAY	SYSTEM SENSOR	EOLR-1	6/30/2021
	DOC	DOCUMENT BOX	SPACE AGE TECH	SRD-ACE-11	6/30/2021
	LOC	LOCAL OPERATING CONSOLE	GAMEWELL	E-3 SERIES	6/30/2021





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′EAR	CSFM LISTING NO.
	7165-1703:0125
	7165-1703:0125
	7315-1637:0102
	7272-1703:0155
	7270-1703:0115
	7270-1653:0167
	7270-1703:0502
	7272-1703:0501
	7275-1703:0175 7300-1653:0213
	7300-1703:0107
	7300-1703:0102
	7300-1653:0103
	7300-1703:0102
	7150-1703:0119
	7320-1653:0505
	7125-1653:0504
	7320-1653:0201
	7320-1653:0201
	7320-1653:0201
	7125-1653:0156
	7300-1653:0103
	7300-0553:0110
	7165-1703:0125

9.

11.

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# FIRE ALARM NOTES

WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- STATE CALIFORNIA CODE OF REGULATIONS (CCR) 201 9 TITLE 24 CALIFORNIA BUILDING CODE PART 2, 2019 CALIFORNIA BUILDING CODE (CBC), 201 9 IBC. PART 3, 2019 CALIFORNIA ELECTRICAL CODE (CEC), 201 9 NEC. PART 4, 2019 CALIFORNIA MECHANICAL CONDE (CMC), 201 9 UMC.
- PART 5, 2019 CALIFORNIA PLUMBING CODE (CPC), 201 9 UPC. PART 9, 2019 CALIFORNIA FIRE CODE (CFC) BASED ON 201 9 IFC. 2016 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 13, 72, 80, 90A, 99, AND 101.
- INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTATION AND SPECIFICATIONS, INCLUDING STATE FIRE MARSHALL LISTING SHEETS
- FOR EACH COMPONENT OF THE SYSTEM HAS BEEN APPROVED BY DSA. UPON COMPLETION OF INSTALLATION OF THE SYSTEMS, A SATISFACTORY TEST OF THE
- ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
- ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF RECORD.
- DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/ OR TESTING. ALL PENETRATIONS THROUGH RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITHIN THE SPECIFICATION WITHIN THE FIRE ALARM SECTION. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15DECIBLES (Dba) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 Dba ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIED SPACE WITHIN THE BUILDING.
- AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN. THE CONTRACTOR SHALL ADJUST/INSTALL DEVICES TO MAXIMIZE PERFORMANCE AND TO 10. MINIMIZE FALSE ALARMS.
- VISUAL DEVICES SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISUAL DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
- 12. UNDERGROUND AND EXTERIOR CONDUIT TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS. 13. ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY
- BE THHN OR THWN. 14. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
- SMOKE DETECTORS SHALL BE NOT CLOSER THAN 1' FROM SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION OF NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL AREA IS READY TO BE TURNED OVER TO THE OWNER.
- ALL FIRE ALARM CIRCUITS ARE TO BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE THE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON THE DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS. FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING
- 17 SURFACES PER MANUFACTURERS SPECIFICATIONS. NO DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS. 18. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS
- CIRCUIT SHALL BE ENERGIZED FROM A COMMON USE AREA PANEL AND SHALL HAVE OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXPANDERS. 19. THE INSTALLER CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72,
- FIGURE 10.18.2.1.1. 20. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
- SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT 21. SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING 22
- CONTRACT OR PROVISIONS. AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM. SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AND CBC 907.6.5.2. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUIS BY UL OR SHALL MEET THE REQUIREMENTS OF FM STANDARD 3011 BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION THE INSTALLING 23.
- CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT TO THE DSA PROJECT INSPECTOR TO THE EFFECT THAT THE SYSTEM HAS BEEN INSTALLED AND TESTED IN ACCORDANCE WITH THE 6)(2005 PA 72 SECTION 14.4.1. TEST, INSPECTION AND MAINTENANCE SHALL COMPLY WITH NFPA 72 CHAPTER 14
- 24 REQUIREMENTS. ALL DUCT SMOKE DETECTORS SHALL HAVE A KEYED TEST SWITCH MOUNTED AT 42" 25. A.F.F.. FIELD VERIFY LOCATION.

FIRE ALARM SYSTEM DESCRIPTION

SCOPE OF THIS PROJECT IS TO PROVIDE A NEW FIRE ALARM PANEL WITH NEW VOICE EVACUATION PANEL, INCLUDING FACP, VOICE AMPLIFIERS, POWER SUPPLIES, MICROPHONE, INITIATION, NOTIFICATION AND CONTROL DEVICES AS SHOWN ON PLANS AND SPECIFICATIONS. PROVIDE ALL NEW CABLING; CABLING SHALL BE INSTALLED IN CONDUIT OR SURFACE RACEWAY, OR EXPOSED IN ACCESSIBLE CEILING SPACE.

FIRE ALARM SYSTEM: CLASS B IDC: CLASS B SLC CIRCUIT: CLASS B NOTIFICATION CIRCUIT: CLASS B





SCALE: 12" = 1'-0"

3D66 3D69 3D70 3D71 3D72 3D73 3D74 3D65 3D67 3D68 3D84 3D75 3D76 3D77 3D78 3D79 3D80 3D81 3D82 3D83 A / 3D90 3D85 3D86 3D87 3D89 3D91 3D92 3D93 3D94 3D88 **4**−c 3D102 3D103 3D100 3D101 3D104 3D105 3D106 3D107 3D108 3D109 BLDGS. I,H,G,F,E \_\_\_\_ CO AH 3D62 3D63 3D56 3D57 3D55 3D52 3D53 3D54 3D58 3D46 3D4 3D48 3D49 3D50 CO CO 3D40 3D41 3D39 3D43 3D32 3D27 3D25 3D26 3D28 3D12 3D08 3D09 3D10 3D11 3D13 3D14 3D03 B5.1.3 B5.1.4 B5.1.5 30CD 30CD 30CD HX4 HX HX B5.1.6 15CD B5.1.2 30CD ─**+∑⊄**── B5.1.1 15CD 
 A5.1.1
 A5.1.2
 A5.1.3
 A5.1.4
 A5.1.5
 A5.1.6
 A5.1.7

 2 W
 2 W
 2 W
 2 W
 0.25 W
 0.5 W
 0.5 W
 A5.1.8 EOL 0.25 W 
 WP
 WP
 WP
 WP
 B5.2.1
 B5.2.2
 B5.2.3

 O1
 O1
 O1
 O2
 O2
 O3
 D5

 A5.2.1
 A5.2.2
 A5.2.3
 A5.2.4
 A5.2.5
 A5.2.6
 A5.2.7

 2 W
 2 W
 2 W
 2 W
 0.5 W
 0.5 W
 0.25 W
 BLDG. A CO -(?)---2D74 2D73 2D75 2D59 2D60 2D61 2D62 2D63 2D67 2D68 2D69 2D64 2D65 2D66 2D70 AH -O\_\_\_\_ 2D45 2D46 2D47 2D48 2D49 2D50 2D51 2D52 2D53 2D54 2D55 2D56 CO , **↓**\_C -O-**\_\_\_\_** -@----@--\_\_\_\_\_\_ **\_\_ \_\_()**\_ -• **\_\_()**\_ -**()**--(•)-2D41 2D31 2D32 2D33 2D34 2D35 2D36 2D37 2D38 2D39 2D40 2D42 CO CO AH -\_\_\_\_\_ 2D21 2D26 2D27 2D17 2D18 2D19 2D20 2D22 2D23 2D24 2D25 2D28 2D07 2D03 2D04 2D05 2D06 2D08 2D10 2D12 2D13 2D09 2D11 2D14 **C** B4.1.2 30CD B4.1.3 B4.1.4 B4.1.6 B4.1.5 75CD 75CD 75CD 75CD 75CD B4.1.7 75CD 
 Odd
 Odd
 Odd
 EOL

 Odd
 Odd
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 EOL

 A4.1.2
 A4.1.3
 A4.1.4
 A4.1.6
 A4.1.5
 A4.1.7
 A4.1.8
 EOL

 0.25 W
 0.5 W
 0.5 W
 0.5 W
 1 W
 2 W
 0.5 W
 **—** 2D77 2D82 2D76 2D78 2D79 2D80 2D81 2D83 
 A4.2.2
 A4.2.3
 A4.2.4
 A4.2.5
 A4.2.6
 A4.2.7
 EOL

 0.25 W
 0.5 W
 0.5 W
 1 W
 0.5 W
 0.5 W
 B4.3.2 B4.3.3 15CD 15CD B4.3.1 B4.3.4 15CD 15CD A4.3.3 A4.3.1 A4.3.2 0.25 W 0.25 W 0.25 W 0.25 W BLDG. J \_\_\_\_\_ BLDG. B \_\_\_\_\_

