

Bid 669 Portable Foundation & Site Alterations for Frontier High School

BID CLARIFICATION ADDENDUM #1

Dated: August 30th, 2022

All interested parties seeking to submit responses to the Oxnard Union High School District's Bid #669 shall execute the certification at the end of this addendum and shall attach the addendum to the documents submitted to the District.

The Oxnard Union High School District hereby amends Bid 669 Portable Foundation & Site Alterations for Frontier High School as follows:

- 1) Pre-qualification and PLA Requirements: Pre-qualification and PLA requirements are no longer applicable for this project since it is being funded through Routine Restricted Maintenance (RRM) and not Measure A. Please see Attachment A for Revised Bid Form.
- 2) Please refer to <u>Attachment B</u> for Foundation Sheets
- 3) Please refer to *Attachment C* for conditions of existing photos in and around Admin building
- 4) Please refer to Attachment D for Architect's Addendum 01

BIDDER'S CERTIFICATION I acknowledge receipt of the foregoing Addendum # 1 and accept all conditions contained herein.

Dated:

BIDDER: _________(company/entity)

By	:
•/	

Printed Name:

(authorized representative signature)

Title:

Bid Clarification Addendum #1 Attachment A Revised Bid Form

OUHSD Addendum #1 Bid 669 Portable Foundation & Site Alterations for Frontier High School

DOCUMENT 00 41 13

BID FORM AND PROPOSAL

To: Governing Board of the Oxnard Union High 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

Bid No. 669 for the following project known as:

Portable Foundation & Site Alterations for Frontier High School

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

_____dollars \$_____ BASE BID Bidder acknowledges and agrees that the Base Bid accounts for any and all costs, including Allowance(s), Total Cost for Unit Prices, and OCIP excluded costs.

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.

- A. 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.
- B. 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.
- C. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
- D. 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.
- E. The following documents are attached hereto:

- Bid Bond on the District's form or other security (**original due in hard copy by the bid due date and time**)
- Designated Subcontractors List
- Site Visit Certification
- Non-Collusion Declaration
- Iran Contracting Act Certification
- F. Receipt and acceptance of the following Addenda is hereby acknowledged:

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

- G. Bidder acknowledges that the license required for performance of the Work is a _____ license.
- H. 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.
- I. 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.
- J. Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local or state 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
- K. 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.
- L. 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.
- M. 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.
- N. 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.

O. Bidder Acknowledges:

- Contractor acknowledges and will comply with all contract requirements and the District's assigned project management team "Bernards"
- Campus is occupied each weekday from 8:00am to 5:00pm. Please review the campus calendar for weekends, holidays, and special event conflicts.
- Contractor to saw cut and remove and depose all asphalt, shrubs, trees and vegetation within the immediate work zone for the installation of new scope.
- Contractor to over-excavate area where shrubs or other debris are removed, off haul excess dirt as needed, re-compact area on removal to accept new concrete curbing, asphalt, base rock, foundations and pole stabilization.
- Contractor to provide all fill soil and grade to meet required elevation to complete scope of work.
- Contractor to provide and install all noted utilities both wet and dry as shown.
- Contractor to provide all site electrical noted.
- Contractor to provide a base line schedule clearly indicating contract duration and all activities associated with plans and specifications.
- Contractor to provide a \$50,000 dollars allowance for unforeseen conditions found or required during duration of the project. If found to be un-used, refunded to the District all un-used portions.
- Contractor to repair all existing irrigation, irrigation control wiring, irrigation boxes, irrigation valves encountered or damaged throughout fence installation.
- Contractor to provide and required materials for curbing, asphalt, sport court asphalt, striping, back boards, pole and hoops, fencing concrete foundations, ramps, electrical, fire and data.
- Contractor to provide and maintain street cleaning associated with work.
- Contractor to place curbing continuously as shown under all fence and gates including all walk and in drive paths.
- Contractor to remove all asphalt and concrete necessary to install new fencing. Replace all asphalt and concrete like for like.
- Contractor to provide and maintain SWPPP, BMPs and Dust control as needed. Contractor to also provide straw wattles, silt fencing on slopes when and where required to protect from run-on/run-off.
- Contractor to provide task lighting when and where required.
- Contractor to touchup fencing panels, poles and gates where damage may occur during construction per manufacturer requirements.

- Contractor to provide eight feet (8') high temporary security fencing, gates, locks and must be maintained throughout the project.
- Contractor to verify new security fencing location, survey for verification.
- <u>Contractor to verify all existing dimensions prior to procuring the materials.</u>
- <u>Contractor to verify all existing circuit/utility panels adequate feed and breaker</u> <u>capacity.</u>
- <u>Contractor to verify accessibility and school schedule with Owner's Representative</u> prior to beginning any work.
- <u>Special Requirements:</u> Contractor shall avoid any excessive noise or vibration adjacent to occupied classrooms. This will not be tolerated and must occur off normal school hours.
- <u>Contractor shall provide adequate procedures for the COVID-19 PANDEMIC.</u> Contractor shall provide procedures within their submitted IIPP addressing such issue. See attached Exhibit A for further information.
- The contractor will be responsible for loading, unloading, protecting and securing the materials on—site.

• REQUIRED CONTRACTOR'S CORE CREW

<u>CONTRACTOR shall provide</u>, at a minimum, the following core management personnel:

- Project Manager (PM) CONTRACTOR shall provide, at a minimum, One (1) competent English-speaking PM. The PM shall represent the CONTRACTOR and any communications given to the PM shall be as binding as if given to the CONTRACTOR. The PM shall be authorized to sign documents on behalf of the Contractor including, but not limited to, Change Orders. The PM shall have a proven track record of successful accomplishments on previous projects of similar complexity and scope to this Project. The PM shall attend all weekly construction meetings. The PM shall be appointed & available from Notice to Proceed through Start of construction, then <u>on- site full-time from Start of construction through Substantial Completion and Closeout period.</u>
- Full Time Project Superintendents (PS) CONTRACTOR shall provide, at a minimum, One (1) assigned to the Project competent and qualified English-speaking PS with the appropriate number of years supervising all trades and coordinating projects of this scope and complexity as evidenced by submitted background information. This person shall be physically present at the Project site while any aspect of the Work is being performed and shall have the responsibility of directing and coordinating all aspects of the Work. The PS shall be retained at this capacity for the duration of the Work. PS is responsible for QA/QC at a minimum, the PS shall be <u>on-site</u> full-time from Start of Construction through the completion of the Substantial Completion.

Furthermore, Bidder hereby certifies to the District that all representations, certifications, and OUHSD Addendum #1 Bid 669 Portable Foundation & Site Alterations for Frontier High School statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated thisd	lay of			_20				
Name of Bidder:	Name of Bidder:							
Type of Organization:								
Signature:								
Title of Signer:								
Address of Bidder:								
Taxpayer Identification No.	of Bidder:							
Telephone Number:								
E-mail:								
Contractor's License No(s):	No.:	_Class:	_Expiration Date:					
	No.:	_Class:	_Expiration Date:					
	No.:	_Class:	_Expiration Date:					
Public Works Contractor Registration No.:								
END OF DOCUMENT								

Bid Clarification Addendum #1 Attachment B Foundation Sheets

OUHSD Addendum #1 Bid 669 Portable Foundation & Site Alterations for Frontier High School





	KEY NOTES	
	#5 REBAR	
	#4 REBAR @ 24" O.C.	
	REBAR CAGE – (4) #5 [] VERTICALS WITH #5 HORIZONTAL REBAR (90' BENDS AT EACH END) SPACED 12" OC MAX	
	REBAR - (2) #5 CONTINUOUS TOP AND BOTTOM, MIN. 1 1/2" APART	
	REBAR - (1) #5 CONTINUOUS TOP AND BOTTOM	
	REBAR - (1) #3 VERT @ 24" OC (CENTERED IN STEM WALL)	
	REBAR - (1) #5 CONTINUOUS AT BOTTOM	
	NOT USED	А
•	STEEL PERIMETER FRAME – END CHANNEL	
).	STEEL PERIMETER FRAME – SIDE CHANNEL	NO
1.	REBAR – #4 TIES @ 8" OC	12(CH PH
2.	REBAR - (2) #4 🗍 TIES AT TOP 5", MIN. 1 1/2" APART.	FA) WE
3.	REBAR – $\#5$ EA WAY (SEE SCHEDULE ON FOUNDATION PLAN FOR AMOUNT)	THI GLC
4.	REBAR – (4) #5 VERT	DIS PAF INF
5.	FELT EXPANSION JOINT (NOT BY BUILDING MANUFACTURER)	THE MO WIT
5.	MOW STRIP/CONCRETE SIDEWALK (NOT BY BUILDING MANUFACTURER)	
7.	22 GA GALVANIZED SHEET METAL FLASHING EXTEND 6" BELOW PERIMETER FRAME	PR
3.	ANCHOR PLATE PER DETAIL #6, FO.0.	
э.	22 GA. GALV. SHEET METAL FLASHING EXTEND 6" BELOW PERIMETER FRAME (NOT BY MODULAR MANUFACTURER)	
0.	22 GA. GALV. SHEET METAL FLASHING EXTENDED 6" ABOVE FLOOR, BEHIND SIDING AND DOWN PERIMETER FRAME 5" MIN. APPLY SEALANT AS SHOWN.	SH
1.	REBAR – (4) #4 AT TOP STEMWALL AT EACH SIDE OF BOLT SPACED $1-1/2$ " CLR OF EACH REBARS	F
2.	WHEN STEM WALL HEIGHT ABOVE FOOTING EXCEEDS 24", PROVIDE (1) ADDITIONAL #5 REBAR AT MID-HEIGHT OF STEM WALL	
3.	L-4" X 6" X 3/8" THICK STEEL EMBEDMENT PLATE	
4	5/8" MIN ALL THREAD (SEE SHEET SO O FOR ANCHOR BOLT MIN GRADE)	1

24. 5/8" MIN ALL THREAD (SEE SHEET SO.0 FOR ANCHOR BOLT MIN GRADE) WELDED TO STEEL PLATE AT ONE END AND DOUBLE NUT WITH 1/4" THICK WASHER AT THE OTHER END

25. (3) #3 HAIR PIN TIES GRADE 60 ANCHOR REINFORCING, MIN 24" LAP AT EACH HAIR PIN

PROJECT SPECIFIC STATE AGENCY APPROVAL GLOBAL CONTRACTORS LICENSE #837357 N SOUTHERN CALIFORNIA DIVISON 1660 CHICAGO AVE., SUITE #M-21 RIVERSIDE, CA 92507 PHONE: (951) 686-3633 FAX: (951) 686-3662 WEBSITE: <u>WWW.GDVI.NET</u> ORTHERN CALIFORNIA DIVISON 200 AIRPORT DRIVE HOWCHILLA, CA 93610 HONE: (559) 665-5800 AX: (559) 665-5700 BSITE: WWW.GDVI.NET IS DRAWING AND THE MATERIAL CONTAINED THERE-IN ARE THE PROPERTY OF OBAL MODULAR, INC. AND SHALL NOT BE REPRODUCED, COPED OR OTHERWIS POSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN RT TO ASSIST IN THE MAKING OF OR FOR THE PURPOSE OF FURNISHING ANY FORMATION FOR THE MAKING OF DRAWINGS, PRINTS APPARATUS OR PARTS FORMATION FOR THE MAKING OF DRAWINGS, PRINTS APPARATUS OR PARTS FEREOF WITHOUT THE FULL KNOWLEDGE AND WRITTEN CONSENT OF GLOBAL ODULAR, INC. ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATIN 1TH GLOBAL MODULAR, INC, SHALL BE THE PROPERTY OF GLOBAL MODULAR, ROJECT NAME: HEET TITLE: FLUSH TO GRADE CONCRETE FOUNDATION DETAILS MFR. STRUCTURAL ENGINEER OF RECORD ON PC DATE SIGNED DEC 1 1 2018 MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD ARCHITECT OF RECORD PRE-CHECK (PC) DOCUMENT CODE: 2016 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT PC 02-116677 FILE #: PC-72 AC ______ FLS _____ SS 3 DATE: _____ DEC __1 4_2018 REVISIONS PROJECT NO .: 00-000 DRAWN BY: 00 SCALE: AS NOTED DATE: 00-00-00 SHEET NUMBER **F3.0**



NOTE:

THE SCHEDULE BELOW TAKES AN ACCOUNT OF (1) ACCESS VENT. TO ACHIEVE THE MIN NUMBER OF VENTS, THE DESIGN PROFESSIONAL CAN USE DIFFERENT COMBINATION OF BOTH ACCESS VENTS AND TYPICAL VENTS TO MEET THE REQUIRED VENTILATION

REQUIRED VENTILATION				
BUILDING SIZE	VENTILATION REQUIRED	MIN # VENTS		
24'×40'	6.4 SF	2		
36'×40'	9.6 SF	3		
48'x40'	12.8 SF	4		
60'×40'	16.0 SF	15		
72 ' ×40'	19.2 SF	6		
84'x40'	22.4 SF	7		
96'×40'	25.6 SF	B		
108'x40'	28.8 SF	9		
120'x40'	32.0 SF	10		
ACCESS VENT CAN BE USED IN PLACE OF A TYPICAL VENT AS NECESSARY				

SAMPLE VENTILATION FORMULA (24X40) BUILDING SQUARE FOOTAGE: 24' X 40' = 960 SF REQUIRED VENTILATION: 1 SF / 150 SF (ALLOWED BY CODE)

960 SF / 150 SF = 6.4 SF "NET" VENTILATION REQUIRED

NUMBER OF ACCESS VENTS TO BE USE: 1 TOTAL VENTILATION: (1) VENT X 4.8 = 4.8SF

NUMBER OF TYP VENTS TO BE USE: TOTAL VENTILATION: (1) TYP VENT X 3.2 = 3.2 SF

OVERALL VENTILATION: $4.8 \times 3.2 = 8.0 \text{SF}$

 $B \circ SF \ge 6.4$ SF VENTILATION REQUIREMENT = <u>OK</u>

REBAR SCHEDULE					
FLOOR LOAD	PLYWOOD FLOOR	CONCRETE FLOOR			
50	3	4			
50+15	3	4			
100	3	4			
125	4	6			
FOR INTERIOR PADS @ MODLINE AND ADJACENT BUILDINGS (#5 REBAR EACH WAY)					

-		FLUSH TO GRADE FOUN			
	· · · · · · · · · · · · · · · · · · ·	PLYWOOD FLOOR			
	FLOOR LIVE LOAD PSF	50 50+15 100 12			125
Α	STEM WALL	8"(W)	8"(W)	8"(W)	8"(W)
В	SIDE WALL FOOTING	12"(W)	12"(W)	12"(W)	14"(W)
C	END WALL FOOTING	18"(W)	20"(W)	20"(W)	22"(W)
D	INTERIOR PAD FOOTING x12" DEEP	3'-4" SQ	4'-0" SQ	4'-0" SQ	4'-6" SC
Ε	ADJACENT PAD FOOTING ×12" DEEP	3'—9" SQ	4'-3" SQ	4'-3" SQ	4'-8" SC
F	ADJACENT PAD FOOTING SPACING	13'-4"	13'-4"	10'-0"	10'—0"
			-		

PROJECT SPECIFIC STATE AGENCY APPROVAL ANCHOR PLATE AT CORNERS AND MODLINES ANCHOR PLATE AT PIERS - SEE #6/F0.0 NOT USED ANCHOR PLATES REQUIRED AT RETURN STEMWALL FOOTING AND/OR BLDG SEP STEMWALL FOOTING TYP GLOBAL AUFORA" MODITECH STRUCTURES CONTRACTORS LICENSE #837357
 NORTHERN CALIFORNIA DIVISON
 SOUTHERN CALIFORNIA DIVISON

 1200 AIRPORT DRIVE
 1660 CHICAGO AVE., SUITE #M-21

 CHOWCHILLA, CA 93610
 RIVERSIDE, CA 92507

 PHONE:
 (559) 665-5800
 PHONE:

 FAX:
 (559) 665-5700
 FAX:

 WEBSITE:
 WWW.GDVI.NET
 WEBSITE:
 THIS DRAWING AND THE MATERIAL CONTAINED THERE-IN ARE THE PROPERTY OF GLOBAL MODULAR, INC. AND SHALL NOT BE REPRODUCED, COPED OR OTHERWISI DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN PART TO ASSIST IN THE MAKING OF OR FOR THE PURPOSE OF FURNISHING ANY INFORMATION FOR THE MAKING OF DRAWINGS, PRINTS APPARATUS OR PARTS 12" GROSS FREE THEREOF WITHOUT THE FULL KNOWLEDGE AND WRITTEN CONSENT OF GLOBAL MODULAR, INC. ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH GLOBAL MODULAR, INC, SHALL BE THE PROPERTY OF GLOBAL MODULAR, VENT 24" GROSS FREE VENT PROJECT NAME: TYPICAL VENT ACCESS VENT ACCESS VENT: 36"x24" PROVIDES 6.0 SF GROSS FREE VENTILATION VENT: 48"x12" PROVIDES 4.0 SF GROSS VENTILATION SHEET TITLE: 4.8 SF NET FREE VENTILCATION 3.2-SF NET VENTILCATION FLUSH TO GRADE CONCRETE FOUNDATION F0.0 F0.0 、F0.0人F0.0 PLAN TYPICAL VENT & ACCESS VENT DETAILS MFR. STRUCTURAL ENGINEER OF RECORD ON PC GENERAL NOTES THE LOCATION OF VENTS SHOWN HERE IS FOR REFERENCE ONLY AS THE LOCATIONS OF VENTS WILL VARY FROM JOB TO JOB. DATE SIGNED THE OPENINGS SHALL BE LOCATED AS CLOSE TO THE CORNER AS PRACTICAL AND SHALL PROVIDE CROSS VENTILATION. THE OPENINGS SHALL DEC 1 1 2018 BE EQUALLY DISTRIBUTED ALONG THE LENGTH OF AT LEAST (2) OPPOSITE ENDS MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD UNDER FLOOR VENTILATION SHALL BE PROVIDED AT A NET AREA OF NOT 2. LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF UNDER FLOOR AREA PER SECTION 1203.4.2 EXCEPTION 2, THE TOTAL AREA OF VENTILATION 3. OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 OF THE UNDER-FLOOR AREA WHERE THE GROUND SURFACE IS COVERED WITH A CLASS I VAPOR RETARDER MATERIAL AND THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED TWO SETS OF ANCHOR BOLTS OR ANCHOR PLATES REQUIRED AT BUILDING CORNERS TYP ALL FLOOR LOAD CONDITIONS (CONCRETE AND PLYWOOD FLOORS) ARCHITECT OF RECORD PRE-CHECK (PC) DOCUMENT CODE: 2016 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT PC 02-116677 FILE #: PC-72 -----5 _____ FLS _____ SS ____/ DATE: DEC 1 4 2018 REVISIONS TOTAL FOUNDATION FOS TO FOS 24'x40' 24'-2" NDATION 36'-2 1/4" 36'x40' CONCRETE FLOOR 48'-2 1/2" 48'x40' 50 125 50 + 15100 8"(W) 8"(W) 8"(W) 8"(W) 60'x40' 60'-2 3/4" PROJECT NO .: 00-0000 DRAWN BY: 00 12"(W) 12"(W) 12"(W) | 14"(W) 72'-3" G 72'x40' SCALE: AS NOTED 84'-3 1/4" 25"(W) 27"(W) 27"(W) | 29"(W) 84**'**x40' DATE: 00-00-00 SHEET NUMBER 96'-3 1/2" 3'-11" SQ4'-5" SQ 5'-0" SQ 5'-5" S 96**'**x40' **F3.**] 4'-3" SQ|4'-9" SQ|5'-3" SQ|5'-9" S(108'-3 3/4' 108'x40' 13'-4" 13'-4" 10'—0" 10'-0" 120'x40' 120'-4"

Bid Clarification Addendum #1 <u>Attachment C</u> <u>Existing Photos in &</u> <u>around Admin Bldg.</u>

OUHSD Addendum #1 Bid 669 Portable Foundation & Site Alterations for Frontier High School



		SITE ALTERATION KEY NOTES
IRPORT WAY		 FUTURE (N.I.C.) APPROXIMATE 6,000 SF GYM BUILDING. NEW ASPHALT PAVING MINIMUM 3 INCH THICK OVER 6 INCH AGGREGATE BASE TYP. SEE SOILS REPORT FOR FURTHER INFORMATION. FOLLOW ALL SOILS REPORT REQUIREMENTS. NEW BASKETBALL COURT WITH 2 INCH WIDE WHITE PAINTED LINES. PROVIDE 2- BASKETBALL POSTS, BACKBOARDS, RINGS & NETS. SEE SPECIFICATIONS FOR FURTHER INFORMATION TYP. REUSE PC 48 FOOT BY 40 FOOT PORTABLE BUILDING SET ON WOOD FOUNDATIONS OVER ASPHALT PAVING +/- 14-INCHES AB FINISH SURFACE TO TOP OF SHEATHING TYP. EXISTING ADA PARKING STALL AND VAN STALL WITH SIDE LOADI AREA TYP. DSA APPROVED A# 03=121160. EXISTING ADA PARKING SIGN WITH \$250.00 PARKING FINE SIGN V POLE AND FOOTING TYP. DSA APPROVED A# 03-121160. EXISTING ADA PARKING SIGN WITH \$250.00 PARKING FINE SIGN V POLE AND FOOTING TYP. DSA APPROVED A# 03-121160. EXISTING ADA PARKING SIGN WITH \$250.00 PARKING FINE SIGN V POLE AND FOOTING TYP. DSA APPROVED A# 03-121160. NEW BUILDING SIGNAGE AND ADDRESS LETTERS MINIMUM 12 II HIGH FOR BUILDING LETTERS AND 9 INCHES HIGH FOR ADDRESS USE HELVETICA BOLD LETTERS AND 9 INCHES HIGH FOR ADDRESS USE HELVETICA BOLD LETTERS. CONTRACTOR TO OBTAIN ADDRESS FROM THE DISTRICT. NEW 6 FOOT WIDE BY EXISTING CHAIN LINK FENCE HEIGHT GATI LATCH TYP. CUT AND REMOVE PORTIONS OF THE EXISTING CHA FENCE TO INSTALL NEW CHAIN LINK GATE, POSTS AND FOOTING GATE IS INSTALLED RE-CONNECT THE CHAIN LINK MESH TO THI POST. NEW 8 FOOT HIGH CHAIN LINK FENCE WITH 4 INCH THICK BY 12 WIDE CONCRETE MOW STRIP WITH SMOOTH TROWEL FINISH. PF 1/4" WIDE BY 1 INCH DEEP SCORE UNE CENTERED TO FACH FEN ACH THE AND A DEPENDENT ADDREST AND A DOREST FINISH. PF
€ (E)-TYP.		 NEW 6 FOOT WIDE BY 8 FOOT HIGH CHAIN LINK GATE WITH LEVE HANDEL AND KICK PLATE BOTH SIDES TYP. EXISTING ADA CURB RAMP WITH TRUNCATED DOMES TYP. DSA APPROVED A# 03-121160. NEW CONCRETE WALKWAY 5 INCHES THICK OVER 4 INCHES OF BASE. PROVIDE MEDIUM BROOM FINISH. PROVIDE # 3 BARS AT 2 ON CENTER EACH WAY TYP. NEW CONCRETE CURB. SEE CIVIL DRAWINGS FOR FURTHER INFORMATION TYP. NEW CONCRETE CURB. SEE CIVIL DRAWINGS FOR FURTHER INFORMATION TYP. EXISTING STANDARD PARKING STALLS WITH 3 INCH WIDE WHITE STRIP TYP. EXISTING ASPHALT PAVING TO REMAIN AND PROTECT IN PLACE EXISTING CONCRETE CURB AND WALKWAY TO REMAIN AND PROTECT IN PLACE EXISTING CONCRETE CURB AND WALKWAY TO REMAIN AND PROTECT IN PLACE EXISTING CONCRETE CURB AND WALKWAY TO REMAIN AND PROTECT IN PLACE EXISTING STOP SIGN TO REMAIN AND PROTECT IN PLACE TYP. EXISTING PARKING AREA TO REMAIN AND PROTECT IN PLACE TYP. EXISTING PARKING AREA TO REMAIN AND PROTECT IN PLACE TYP. EXISTING SINCH WIDE WHITE PAINTED LINES 3 FOOT ON CENTE SPACING WITH LETTERS 12 INCHES HIGH COLOR WHITE STATING PARKING". USE HELVETICA BOLD LETTERING TYP. DSA APPROVE 03-121160. ADA FREE STAINLESS STEEL FREE STANDING DRINK DRINKING F WITH SIDE GUARD RAILING TYP. EXISTING AIRPORT PARKING TO REMAIN. PROTECT IN PLACE. AT EXISTING PARKING STALLS STRIPING AND PAINTED LINES SH
ORT WAY		BE MARKED WITH VEHICLE TIRE MARKS OR MARKS IN GENERAL. 25. INSTALL NEW 12 INCH HI X 48 INCH LONG UNDER-FLOOR VENT F AROUND BUILDING PERIMETER PER MANUFACTURER PLANS AND DETAILS. 26. 12 INCH WIDE BY 6 INCHES DEEP CONCRETE MOW STRIP AROUN PORTABLE BUILDING AND VENTS. PROVIDE MEDIUM BROOM FIN PROVIDE CONTROL JOINTS AT 10 FOOT INTERVALS AND CORNEL 27. CRAWL SPACE ACCESS VENT PER MANUFACTURER DRAWINGS & SITE LEGEND / NOTES LOCATION OF 48 FOOT BY 40 FOOT PORTABLE BUILD FUTURE (N.I.C.) MULTI-USE BUILDING ASPHALT PAVED AREAS CONCRETE WALKWAYS SITE PLAN KEY NOTES SYMBOL ^{PT} ADA PATH OF TRAVEL SYMBOL GENERAL SCOPE OF WORK
AIRP		 PLACEMENT OF ONE PC 48 FOOT BY 40 FOOT PORTABLE ON A WOOD FOUNDATIONS, COMMON TMP LANDING WE SITE GRADING & OVEREXCAVATION, NEW PAVEMENT, 2 BASKETBALL COURTS & STRIPING, NEW SIGNAGE, NEW FENCING & GATE. NEW UNDERGROUND UTILITIES TO BE CONNECTED TO THE PORTABLE BUILDING. GENERAL CONSTRUCTION NOTES SEE ATTACHED AS-BUILT DOCUMENTS INDICATING WH ALL UNDERGROUND UTILITIES ARE SHOWN. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL UNE UTILITY LOCATIONS AND POINTS OF CONNECTIONS. AT ALL TIMES DURING THE CONSTRUCTION PROCESS A GRUBBING/GRADING, THE CONTRACTOR SHALL USE A METHODS NECESSABY TO CONTBOL DUST/DEBBIS. AT
6 (A-1.3) (E)-TYP.		 AREA. CONTRACTOR SHALL CONTROL AND KEEP CLEAN ALL OUTSIDE THE SITE AND ALL ROAD WAYS USE TO HALL NON-USE MATERIAL UP TO THE MAIN ROAD PLEASANT MAKE USE OF A STREET SWEEPER OR OTHER MEANS OF METHODS TO KEEP ALL PAVED AREAS CLEAN OF DEBE DUST LADEN MATERIAL ON A DAILY BASIS. CONTRACTOR TO PROVIDE AND PAY FOR ALL WATER MI WATER USED FOR THE SITE AND COORDINATE FOR TH METER, CONNECTIONS AND FEES WITH THE LOCAL WA COMPANY TYPICAL.
z	OVERALL DEMO SITE PLAN 1" = 20'-0" 1	



Bid Clarification Addendum #1 <u>Attachment D</u> <u>Architect's Addendum 01</u>

OUHSD Addendum #1 Bid 669 Portable Foundation & Site Alterations for Frontier High School

ADDENDUM NO. 01

FRONTIER CHS PLACEMENT OF 40X48 PORTABLE BUILDING AND SITE WORK DCA #2021-010

DSA A# 03-122207

OXNARD UNION HIGH SCHOOL DISTRICT OXNARD, CALIFORNIA

August 29, 2022

DC ARCHITECTS 1490 N. CLAREMONT BLVD., SUITE 201 CLAREMONT, CALIFORNIA 91711

incan

RICHARD D. DUNCAN, AIA, LICENSE #C-21818

- 1. PART 1 GENERAL
- 1.1 THE FOLLOWING REVISIONS AND/OR CLARIFICATIONS SHALL BE MADE TO THE BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS. REVISE AND AMEND THE DOCUMENTS FOR THE ABOVE-NAMED PROJECT IN ACCORDANCE WITH THIS ADDENDUM. THE BID SHALL REFLECT THESE ADDENDUM CHANGES AND EACH BIDDER SHALL MAKE REFERENCE IN THEIR BID TO THIS ADDENDUM.
- 1.2 ALL BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS SHALL APPLY TO THIS ADDENDUM AS ORIGINALLY INDICATED IN THE APPLICABLE PORTIONS OF THE CONTRACT DOCUMENTS, UNLESS OTHERWISE MODIFIED BY THIS ADDENDUM.
- 1.3 GENERAL CLARIFICATIONS
 - 1.3.1 The following items are issued as responses to Pre-Bid Requests for Clarification submitted by the bidders:
 - 1.3.1. Q: The FF shown on the grading plan gives an elevation for the portable building, but nothing is shown for the pad grade inside the stem walls. Details on page F3.0 only call out a minimum of 18" and a maximum of 30". Please provide clarification on the elevation we are supposed to leave the pad? We will need that to figure how deep the over-ex is as well.
 - A: The stem wall shall be 18-inches high on all 4-sides.
- 2. PART 2 PLANS
 - 2.1 The following Items are modifications to the plans as directed by the Architect and/or V.V.U.S.D.
 - 2.1.1 The existing temp fencing will be removed by the district. Contractor shall provide their own temp fencing around the entire perimeter of the site. Temp fencing shall be minimum 6 foot in height and cover entire fence with a fabric material securely fasten to the temp fence. Secure temp fencing so the temp fence will not be blown over by high winds or topple over by its own weight. If necessary, place the fence post by driving post into firm soil. Provide wide enough gate access (12-foot) for construction vehicles, equipment and personnel to access the site. The temp fence shall be maintained on a daily basis. Any tears to the fabric shall be fixed. Any graffiti/spray paint applied to the temp fence fabric shall be removed or painted over in a solid color.

- 2.1.2 The attached Addendum # 1 electrical drawings dated 2022-08-19 as noted in the title sheet revision block, sheets E-0.0, E-0.1, E-0.2, E-0.3, E-0.4, E-1.0, E-1.1, E-2.1, E-3.1 & E-3.2 shall not be used for this bid an replace any corresponding electrical sheets in the bid set. Attached are the light fixtures and mounting pole cut sheets for the lighting product to be used which are EW1-Ligman Vekter 2 UVK-30003-10FT AFF, EW2-Ligman Vekter 2 UVK-30004-10FT AFF, EW5-Ligman Mustang 41 UMA-90292 & EW5 Pole-4in x 4in x 18ft Square pole UAPC-SSA-4012-18-4-.125.
- 2.1.3 Contractor shall provide a 3-inch thick 3-sack slurry mix rat slab under the entire building pad. Provide smooth trowel finish. Top of the rat slab shall be set at 18 inches for the top of the building foundation stem wall. Slope the rat slab at minimum 1% to the two catch basins. The two catch basins shall be 12-inch square by 18 inches deep placed center to the 48-foot width of the building and equally space from east to west direction. Provide parkway grate for each catch basin. Connect the two catch basins with 4-inch diameter PVC pipe and then connect the 4-inch PVC pipe to the existing storm drain pipe located westerly of the building pad. Contractor shall provide in his bid an additional bid allowance amount of \$15,000.00. Any unused portion of the bid allowance will credit back to the district through the change order process. If the cost for this work exceeds the stated bid allowance for this bid item an additive change order will be issued. Contractor shall provide in his schedule of value a line item for the \$15,000.00 allowance.
- 3. PART 3 PROJECT MANUAL
 - 3.1 The following Items are modifications to the project manual as directed by the Architect and/or V.V.U.S.D.
 - 3.1.1 NONE.

END OF ADDENDUM NO. 01 INCLUDING REFERENCED ENCLOSURES

Total Number of Addendum Pages:	<u>2</u> Pages
ENCLOSURES:	
<u>New Drawings</u> :	<u>10</u>
New Specifications:	NO
Previous Addendums:	No previous Addendums

37w LED 5073 Lumens IP65 • Suitable For Wet Locations IK08 • Impact Resistant (Vandal Resistant) Weight 10.8 lbs

9.9" **Mounting Detail**

Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity

The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.

Construction

Aluminum Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint

A step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket

Memory Retentive -Silcon Casket Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management

I M6 Aluminum is used for its excellent mechanical strength and LWb Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Standard 10kv surge suppressor provided with all fixtures.

BUG Rating B3 - U0 - G0

Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Lignan products can ithstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes

The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using $% \left({{{\mathbf{x}}_{i}}} \right)$ special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized owen. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

 Resistance to salt-acid room, accelerated aging Boiling water, lime and condensed water resistant Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch Super durable (UV resistant) TGIC free (non-toxic)

Hardware Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED Precise optic design provides exceptional light control and precise distribution of light, LED CRI > 80

Lumen - Maintenance Life L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Flexible wall-mounted floodlighting and area luminaires. Sleek, angular, technical and powerful professional lighting solutions.

A wedge shaped range of small profile wall mounted luminaires, with no visible external hardware for use in uplight or downlight applications. This product is provided with a range of high powered LEDs with a selection of optics.

The Vekter is unique as it is available with Type II, III, IV & V light distribution options that facilitates wider spacing and even light distribution between the light fixtures. Wide spacings of up to 40' on center can be achieved using a type II optic with uniformity that complies to path of egress requirements. This provides higher energy saving and reduced installation costs. The Vekter can be manufactured using different type beam optics to achieve custom distribution, e.g using type II and type IV optics inside the same luminaire.

Integral electronic control gear is housed in a special waterproof box that can be detached from the optical chamber for easy installation. Mounting plate for 3" and 4" junction box is provided with the fixture. Matching surface mount conduit boxes are available as an option.

The Vekter is suitable for lighting footpaths, building facades, building entrances and parking areas around buildings.

This luminaire can be mounted in downward or upward positions.

Additional Options (Consult Factory For Pricing)

SCDT Surface Conduit Decorative Trim

LIGMAN VEKTER 2 UVK-30003-37WLED-T4-W40-120/27 7V-F-EMR-BS1

LOAD: 37W (<40W & <24' NO MOTION SENSORS)

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits

UVK-30003

Vekter 2 Large Surface

Vekter Product Family

54w LED 6879 Lumens IP65 • Suitable For Wet Locations IK08 • Impact Resistant (Vandal Resistant) Weight 10.8 lbs

Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity

The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.

Construction

Aluminum Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint

A step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket

Memory Retentive -Silcon Casket Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management

LM6 Aluminum is used for its excellent mechanical strength and LMG Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Standard 10kv surge suppressor provided with all fixtures.

<u>BUG Rating</u> B3 - U0 - G0

Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can ithstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes

The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits

 Resistance to salt-acid room, accelerated aging Boiling water, lime and condensed water resistant Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch Super durable (UV resistant) TGIC free (non-toxic)

Hardware

Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

Lumen - Maintenance Life L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Flexible wall-mounted floodlighting and area luminaires. Sleek, angular, technical and powerful professional lighting solutions.

A wedge shaped range of small profile wall mounted luminaires, with no visible external hardware for use in uplight or downlight applications. This product is provided with a range of high powered LEDs with a selection of optics.

The Vekter is unique as it is available with Type II, III, IV & V light distribution options that facilitates wider spacing and even light distribution between the light fixtures. Wide spacings of up to 40' on center can be achieved using a type II optic with uniformity that complies to path of egress requirements. This provides higher energy saving and reduced installation costs. The Vekter can be manufactured using different type beam optics to achieve custom distribution, e.g using type II and type IV optics inside the same luminaire.

Integral electronic control gear is housed in a special waterproof box that can be detached from the optical chamber for easy installation. Mounting plate for 3" and 4" junction box is provided with the fixture. Matching surface mount conduit boxes are available as an option.

The Vekter is suitable for lighting footpaths, building facades, building entrances and parking areas around buildings.

This luminaire can be mounted in downward or upward positions.

Additional Options (Consult Factory For Pricing)

SCDT Surface Conduit Decorative Trim

LIGMAN VEKTER 2 UVK-30004-54WLED-T4-W40-120/27 7V-F-OCC-EMR-BS1

LOAD: 54W (>40W & <24' REQ'D MOTION SENSORS)

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice

UVK-30004

Vekter 2 Large Surface

Vekter Product Family

UAPC-SSA-4012-18'-4" SQR - .125"

Square Straight Aluminum Pole

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UAPC-SSA-4012-18'-4" SQR - .125"

Square Straight Aluminum Pole

Inspired by Nature Finishes The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguish able from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

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Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits • Resistance to salt-acid room, accelerated aging

- Boiling water, lime and condensed water resistant Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
 Super durable (UV resistant)
 TGIC free (non-toxic)

Adding banners will affect the EPA of the pole and should be taken into consideration before installing Incorrect pole loading of any type voids pole warranty

LIGMAN

More Custom Finishes Available Upon Request Consult factory for pricing and lead times

Example: Inspired by Nature Finish

INSTALLATION AND SERVICE MANUAL

Anchor Bolt Installation for Poles

Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.

Construction

Aluminum

Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

<u>Pre paint</u>

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket

Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management

LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

<u>BUG Rating</u> B3 - U0 - G0

<u>Finishing</u>

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

<u>Paint</u>

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments.

<u>Hardware</u>

Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Rated for use in natatoriums.

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED

Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Rectangular, adjustable area-lighting column fixture family. Timeless angular form factor with a multitude of output choices to suit all area applications.

A slim pole mount area light with a variety of different distributions to suit all lighting designer's requirements. The Mustang can be utilized to suit specific light patterns using the asymmetrical type II, III, IV and symmetrical lens optics, as well as variations of these for precise light distribution requirements. An example of this is using a combination of Type II & Type IV distribution optics inside the same fixture.

This luminaire is suitable for most applications and complies to dark sky requirements. Designed for lighting private roadways, car parks, exhibition areas, service stations and truck stops. Internal house side shields are available as an option. This luminaire is provided prewired with power cord to the handhole to simplify installation.

Available with a selection of integral electronic drivers and dimming electronic drivers as well as a provision to install wireless lighting controls to integrate with building management systems, as well as integrated occupancy sensors

[contact the factory for more information] Easy access to the luminaire for maintenance.

LIGMAN MUSTANG 41 UMS-90292-2x54WLED-T4-W40-120/ 277V-F-FSIR

LOAD: 108W (2x54<u>W)</u> (>40W & <24' REQ'D MOTION SENSORS)

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice

UMS-90292

Mustang 41 Double Head Streetlight

ADDITIONAL OPTIONS

DIM - 0-10v Dimming NAT - Natatorium Rated

F - Frosted Lens

AMB - Turtle Friendly Amber LED

OS - FSP Occupancy Sensor [See last page]

FSIR - Occupancy Sensor Remote Programmer [See last page]

HSS - House Side Shield

Mustang Product Family

Mustang 37

• UMS-91131-38w-4917lm

• UMS-91132-54w-6666lm

• UMS-31191-38w-4917lm • UMS-31192-54w-6666lm

• UMS-91161-38w-4917lm • UMS-91162-54w-6666lm

• UMS-91181-38w-4917lm • UMS-91182-54w-6666lm

• UMS-90281-38w-4917lm

• UMS-90282-54w-6666lm

• UMS-90291-2x38w-2x4917lm • UMS-90292-2x54w-2x6666lm

HIGH/LOW/OFF PIR OUTDOOR PHOTO/MOTION SENSOR IP66 - **Diegrand**° Integrated photocell

Ligman provides integrated photocell control using the wattstopper legrand FSP-211B. These units are installed inside the fixture housing with only the external lenses being visible

FSP-211B

Dimensions of Lens Options

Product Overview

The FSP-221B is a family of passive infrared (PIR) outdoor sensors that raise or lower the electric lighting level to high, low or off based on motion and/or daylight contribution. Typically, once the sensor stops detecting movement and the time delay elapses, lights will first fade to low mode, and eventually switch off. When motion is detected, the sensor ramps the light level to high mode unless the daylight contribution is sufficient.

The integral photocell can also switch the lights on and off for dusk to dawn control, so that lighting remains on overnight even without motion detection.

The sensors control 0-10VDC or nondimming LED drivers or ballasts.

The low voltage FSP-201B may be used with dim-to-off drivers or ballasts.

Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of sensor parameters including high/low mode, sensitivity, time delay, cut off and more.

The FSIR-100 can read current parameter settings, and stores up to six sensor parameter profiles to speed commissioning of multiple sensors.

Models

FSP-211B, 120-277 VAC FSP-221B, 100-347 VAC

Specifications and Features

Three interchangeable lenses for mounting between 8' and 40'

Remote setup and adjustment with handheld wireless configuration tool

Adjustable high and low modes (high: 0 to 10V, low: off, 0 to 9.8V)

Adjustable time delay (30 seconds, 1 to 30 minutes)

Adjustable cut off delay (none, 1 to 59 minutes, 1 to 5 hours)

Adjustable sensitivity/service mode (low, med, max; on-fix, off-fix)

Adjustable setpoints: hold off setpoint (none, 1 to 250 fc, auto); photocell on/ off setpoint (1 to 250 fc)

Adjustable ramp and fade times (1 to 60 seconds)

Operating temperature: -40°F to +167°F (-40°C to +75°C)

IP66 rated

Five year warranty

Factory Defaults

High mode:	10V
Low mode:	1V
Time delay:	5 minutes
Cut off:	1 hour
Setpoint:	Disabled
Sensitivity:	Max
Ramp up time:	Disabled
Fade down time:	Disabled
Photocell On/Off:	Disabled

The FSIR-100 is a convenient handheld remote tool for sensor setting. Adjustable settings can be changed as needed for specific applications.

Cat	alog #	Color	Description
	FSP-L2	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 48′ diameter from 8′ height
	FSP-L3	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color, e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 40′ diameter from 20′ height
	FSP-L7	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 100' diameter from 40' height
	FSIR-100	Black	Remote Handheld Configuration Tool

	SYMBOLS					
	SWITCHES & CONTROLS		POWER		LIGHTING/CEILING	
\$	SWITCH, SINGLE POLE +48' *		SERVICE DISCONNECT, FUSED OR NON FUSED PER DRAWING	- <u></u>	LIGHT, WALL MOUNTED, HEIGHT PER DRAWING, DETAILS PER FIXTURE SCHEDULE,	
\$ _{DH}	SWITCH, DIMMER, SIZE PER LOAD OR SPECIFICATION +48" *	M	SERVICE DISCONNECT, MAGNETIC STARTER		LIGHT, WALL MOUNTED, HEIGHT PER DRAWING, DETAILS PER FIXTURE SCHEDULE, EMERGENCY LIGHT IF FILLED CENTER	
\$_00	SWITCH, DIMMER 0-10V +48" *	VFD	SERVICE DISCONNECT, VFD	- (-	LIGHT, CEILING MOUNTED, DETAILS PER FIXTURE SCHEDULE	
\$3	SWITCH, 3 WAY, SINGLE POLE +48" *	φ	DUTLET, SINGLE, 120∨ +18″ * SIZE PER CIRCUIT AND LOCATION REQUIREMENTS		LIGHT, CEILING MOUNTED, DETAILS PER FIXTURE SCHEDULE EMERGEN LIGHT IF FILLED CENTER	
\$4	SWITCH, 4 WAY +48" *	φ	DUTLET, DUPLEX, 120∨ +18″ ≭ SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	-ф-	LIGHT, CEILING MOUNTED, PENDANT, DETAILS PER FIXTURE SCHEDUL	
\$_	SWITCH, KEY +48" *	•	DUTLET, HALF HDT, HALF SWITCHED, 120∨ +18″ * SIZE PER CIRCUIT AND LDCATION REQUIREMENTS		LIGHT, CEILING MOUNTED, PENDANT, DETAILS PER FIXTURE SCHEDUL EMERGENCY LIGHT IF FILLED CENTER	
\$	SWITCH, PILOT LIGHT, SINGLE POLE +48" *	#	DUTLET, DDUBLE DUPLEX, 120V +18" * SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	0	FLUSH MOUNTED DOWN LIGHT, DETAILS PER FIXTURE SCHEDULE	
\$	SWITCH, TIMER, 2 HR. NO HOLD MANUEL TYPE UNLESS NOTED OTHERWISE +48" *		DUTLET, DDUBLE DUPLEX, HALF HDT, HALF SWITCHED, 120∨ +18″ ★ SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	0	FLUSH MOUNTED WALL WASH/ADJUSTABLE, DETAILS PER FIXTURE SCHEDULE	
V	SWITCH, VACANCY DETECTOR +48" *	•	DUTLET, SINGLE, 240V SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	\otimes	IN-GRADE RECESSED UP-LIGHT, DETAILS PER FIXTURE SCHEDULE	
W _{I1}	DCCUPANCY SENSOR SINGLE CIRCUIT WALL SWITCH +48" *	\$	DUTLET, SINGLE, 120/240V SIZE PER CIRCUIT AND LOCATION REQUIREMENTS		FLUSH MOUNTED DOWN LIGHT, SQUARE CAN, DETAILS PER FIXTURE SCHEDULE	
W _{I2}	DCCUPANCY SENSOR DUAL CIRCUIT WALL SWITCH +48" *		DUTLET, SINGLE, 3 PHASE SIZE AND TYPE PER CIRCUIT REQUIREMENTS DR SPECIFICATION		FLUSH MOUNTED WALL WASH/ADJUSTABLE, SQUARE CAN, DETAILS PE FIXTURE SCHEDULE	
₩ DH	DCCUPANCY SENSOR SINGLE CIRCUIT DIMMER 120∨ WALL SWITCH - LIKE LUTRON +48″ ≭	ф	DUTLET, DUPLEX, 120∨, GFCI +18″ * SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	•	LIGHT, xxxxxx, DETAILS PER FIXTURE SCHEDULE	
	DCCUPANCY SENSOR SINGLE CIRCUIT DIMMER 0-10∨ WALL SWITCH - LIKE LUTRON +48″ *	#	DUTLET, DDUBLE DUPLEX, 120V, GFCI +18' * SIZE AND TYPE PER CIRCUIT REQUIREMENTS DR SPECIFICATION	•	LIGHT, xxxxxx, DETAILS PER FIXTURE SCHEDULE	
Ş	CEILING MOUNTED MOTION SENSOR, ULTRA SOUND		DUTLET, DUPLEX, 120∨, FLOOR MOUNT SIZE PER CIRCUIT AND LOCATION REQUIREMENTS		LIGHT, xxxxxx, DETAILS PER FIXTURE SCHEDULE	
\bigcirc_{I}	CEILING MOUNTED MOTION SENSOR, INFRARED		DUTLET, DOUBLE DUPLEX, 120V, FLOOR MOUNT SIZE PER CIRCUIT AND LOCATION REQUIREMENTS		LIGHT, xxxxx, DETAILS PER FIXTURE SCHEDULE	
\$U/I	CEILING MOUNTED MOTION SENSOR, COMBINATION ULTRA SOUND / INFRARED		DUTLET, PEDDC, DUPLEX, 120V, GFCI * SIZE PER CIRCUIT AND LOCATION REQUIREMENTS		VANITY WALL LIGHT, DETAILS PER FIXTURE SCHEDULE	
R	CEILING MOUNTED RELAY / POWER PACK FOR LOW VOLTAGE MOTION SENSORS, SIZE PER CIRCUIT AND SENSOR REQUIREMENTS		DUTLET, PEDDC, DDUBLE DUPLEX, 120V, GFCI * SIZE AND TYPE PER CIRCUIT REQUIREMENTS DR SPECIFICATION	<u> </u>	TRACK LIGHT, DETAILS PER FIXTURE SCHEDULE	
Ø	CEILING MOUNTED RELAY SLAVE PACK FOR LOW VOLTAGE MOTION SENSOR, SIZE PER CIRCUIT AND SENSOR REQUIREMENTS		DUTLET, PEDDC, SINGLE, 120/240∨, GFCI ≭ SIZE PER CIRCUIT AND LDCATION REQUIREMENTS	_ <u>XX</u>	COVE LIGHT, DETAILS PER FIXTURE SCHEDULE	
1	THERMOSTAT, +48" *		DUTLET, SINGLE/2-PORT USB COMBO, 120∨ * SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	6	LIGHT, POLE-ARM, DETAILS PER FIXTURE SCHEDULE	
Ē	TIME CLOCK, POLES AND VOLTAGE AS NEEDED OR SPECIFIED		DUTLET, 4-PORT USB * SIZE PER CIRCUIT AND LOCATION REQUIREMENTS	(ϕ)	LIGHT, POLE-CENTER, DETAILS PER FIXTURE SCHEDULE	
Ø	EXTERIOR=PHOTO CELL, SIZE AND VOLTAGE PER CIRCUIT OR AS SPECIFIED INTERIOR=0-10V PHOTO SENSOR RE. DAYLIGHT CONTROLLER		DUTLET, DUPLEX EM CIRCUIT, 120∨ +18″ * SIZE PER CIRCUIT AND LDCATION REQUIREMENTS		LIGHT, BOLLARD SQUARE, DETAILS PER FIXTURE SCHEDULE	
Ē	EM LIGHTING INVERTER RELAY SWITCH		JUNCTION BOX	\bigotimes	LIGHT, BOLLARD ROUND, DETAILS PER FIXTURE SCHEDULE	
				8	LANDSCAPE UP OR DOWN LIGHT, DETAILS PER FIXTURE SCHEDULE	
			COMMUNICATIONS/CONTROLS		EXIT SIGN, DARK SPOT INDICATES DIRECTION THE LIGHTED FACE IS BE VISIBLE FROM, ARROWS INDICATE DIRECTION OF ARROWS ON THE SIGN FACE	
	NDTES & MISC.	1	THERMOSTAT, +48" *		EXIT SIGN, DARK SPOTS INDICATE DIRECTION THE LIGHTED FACES A TO BE VISIBLE FROM, ARROWS INDICATE DIRECTION OF ARROWS ON SIGN FACE	
?	INDICATES PLAN KEYED NOTE	\oplus	HUMIDITY SENSOR		COMBINATION EXIT SIGN, EMERGENCY LIGHT WITH BATTERY BACK UP	
	INDICATES PLAN KEYED NOTE	S	SPEAKER AND BOX PROVIDED BY OTHERS, BOX PIPED AND INSTALLED BY E. C.	$\overline{\checkmark}$	EMERGENCY LIGHT, BATTERY POWERED	
7	INDICATES PLAN KEYED NOTE		TELEPHONE OUTLET, +18″ *		STEP/NICHE LIGHT, DETAILS PER FIXTURE SCHEDULE	
?	INDICATES REVISION		COMPUTOR OUTLET, +18″ *		LIGHT, WALL SMALL UP/DN-LIGHT, HEIGHT PER DRAWING, DETAI PER FIXTURE SCHEDULE	
?	INDICATES FIXTURE TYPE		CABLE DUTLET, +18" *		ALL LIGHT FIXTURES ABD∨E ARE EMERGENCY LIGHT IF FILL CENTER	
FC ?	INDICATES MECHANICAL FIXTURE TYPE		TELEPHONE OUTLET, FLOOR		FIRE	
E0.1 1	INDICATES DETAIL		COMPUTOR OUTLET, FLOOR	I	FIRE DUCT SMOKE DETECTOR	
	PANEL, MOUNTING ACCORDING TO PLACEMENT ON PLANS		CABLE DUTLET, FLOOR		FIRE DUCT DAMPENER	
Z	PANEL, CONTROL-LRG, MOUNTING ACCORDING TO PLACEMENT ON PLANS		COMBINATION TELEPHONE & COMPUTER OUTLET, +18" *		FIRE MINI STROBE	
	PANEL, CONTROL-SML, MOUNTING ACCORDING TO PLACEMENT ON PLANS	\square	TELEVISION OUTLET, +18" *	С	FIRE ALARM CHIME	
	VALVE, ALARM CONTACT OR SOLENDID OPERATOR DEPENDING ON APPLICATION	B	DOOR BELL PUSH BUTTON	50	FIRE STROBE & HORN	
	EYS FITTING. SIZE PER CONDUIT, LOCATE PER N.E.C.	B	DOOR BELL CHIME	F	FIRE ALARM PULL BOX	
•	SMOKE DETECTOR, CEILING OR WALL MOUNTED PER PLANS	T	DOOR BELL TRANSFORMER		WIRE TYPES	
<u></u>	COMBINATION SMOKE DETECTOR AND CO SENSOR		NURSES CALL LIGHT		HOME RUN IN CABLE OR CONDUIT (PER SPECIS AND CODE), CIRCUIT CIRCUIT & CONDUCTOR SIZE AS NOTED, CONDUIT PER NEC OR AS NO	
	EXHAUST FAN	N	NURSES CALL SWITCH WITH PULL CORD		EXISTING WIRING TO REMAIN	
	CEILING FAN	E	ELECTRIC DOOR STRIKE RELEASE		EXISTING WIRING TO BE REMOVED	
S	MOTOR	(AP)	WIRELESS ACCESS POINT		NEW ABOVE FLOOR WIRING	
PS	POWER SUPPLY		INTERCOM	 	NEW UNDER FLOOR WIRING	
	PDWER CENTER	KEY	KEY PAD	 	STUB UP TO OR DOWN FROM NEXT FLOOR LEVEL	
	CURRENT LIMITER			 •	STUB DOWN TO OR UP FROM THE NEXT FLOOR LEVEL	
	* STANDARD HEIGHT TO MEET STATE HANDICAP REQUIREMENTS AND PROVI 48" FOR DUTLETS, HEIGHT SHOWN IN SYMBOL LIST IS PREFERRED HEIGHT	 ISIONS TO BF	 F THE ADA IS 36" – 48" AFF FOR SWITCHES AND THERMOSTATS, 15" – CHANGED ONLY IF PHYSICAL REQUIREMENTS OF THE STRUCTURE OR			
	CASEWORK REQUIRE. CHANGES MUST MEET STANDARDS IF OUTLET OR SWIT WHEN SPECIAL PURPOSE.	CH IS F	OR GENERAL USAGE. DUTLET TO BE MOUNTED AT HEIGHT SHOWN ON PLAN			
					SYMBOLS SCALE: NONE	

LIGHTING/CEILING

SIGN, DARK SPOT INDICATES DIRECTION THE LIGHTED FACE IS TO ISIBLE FROM, ARROWS INDICATE DIRECTION OF ARROWS ON THE

FACE SIGN, DARK SPOTS INDICATE DIRECTION THE LIGHTED FACES ARE E VISIBLE FROM, ARROWS INDICATE DIRECTION OF ARROWS ON THE

T, WALL SMALL UP/DN-LIGHT, HEIGHT PER DRAWING, DETAILS FIXTURE SCHEDULE

FIRE

- ALARM CHIME

RUN IN CABLE OR CONDUIT (PER SPECIS AND CODE), CIRCUIT AND UIT & CONDUCTOR SIZE AS NOTED, CONDUIT PER NEC OR AS NOTED GENERAL

- . ALL WORK IS TO BE PERFORMED PER THE 2019 ISSUE OF THE CALIFORNIA ELECTRICAL CODE AND THE 2019 CALIFORNIA ENERGY CODE AS ACCEPTED BY THE CALIFORNIA STATE FIRE MARSHAL, DSA, AND ALL OTHER APPLICABLE NATIONAL, STATE AND LOCAL CODES AND LAWS PERTAINING TO ELECTRICAL WORK.
- 2. ALL WORK IN HAZARDOUS LOCATIONS SHALL COMPLY WITH CEC ART. 500 THROUGH 516 AS APPLICABLE.
- 3. NOTHING IN THESE NOTES SHALL BE CONSTRUED AS CIRCUMVENTING ANY MORE STRINGENT SPECIFICATION OR REQUIREMENT OF THE CONTRACT DOCUMENTS.
- 4. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BIDDING WORK AND INCLUDE IN HIS BID THE NECESSARY COSTS REQUIRED TO COMPLETE THIS PROJECT ACCORDING TO THE INTENT OF THE DRAWINGS.
- 5. ANY DISCREPANCIES BETWEEN SITE CONDITIONS AND DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT COORDINATOR OR ARCHITECT PRIOR TO BID IF POSSIBLE
- 6. ELECTRICAL WORK UNDER THIS CONTRACT SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE INSTALLATION COVERED UNDER THE CONTRACT INCLUDING CONTROL CONDUIT AND WIRING AS DOCUMENTED OR INFERRED IN THE MECHANICAL DRAWINGS.
- 7. ALL MATERIAL AND EQUIPMENT FURNISHED AND DR INSTALLED UNDER THIS CONTRACT SHALL BE NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY PROBLEMS DEVELOP DURING THIS WARRANTY PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL DEFECTS OR EQUIPMENT DEFECTS OR FAILURE, THE ELECTRICAL CONTRACTOR SHALL CORRECT THE PROBLEM AND REPAIR OR REPLACE EQUIPMENT OR MATERIAL WITHOUT COST TO THE OWNERS. ALL WORK SHALL BE EXECUTED IN A ORKMANLIKE MANNER AND SHALL BE NEAT IN APPEARANCE AS WELL AS FUNCTIONAL WHEN COMPLETED.
- 8. UNLESS NOTED OTHERWISE OR COORDINATED WITH THE GENERAL CONTRACTOR, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION, CUTTING, AND PATCHING RELATING TO ELECTRICAL WORK.
- 9. STATE HANDICAP REQUIREMENTS ARE TO BE MET PER STANDARDS LISTED IN 'SYMBOL LIST'.
- 10. CUT SHEETS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT PROVIDED WITHIN CONTRACT SCOPE OF WORK.

MATERIAL AND INSTALLATION

- . ALL ELECTRICAL MATERIALS AND EQUIPMENT ARE TO BE UNDERWRITER'S LABORATORY LISTED OR LISTED BY AN EQUIVALENT NATIONALLY RECOGNIZED TESTING LABORATORY ACCEPTED BY THE CALIFORNIA STATE FIRE MARSHAL AND DSA. ALL MATERIALS SHALL BE APPROVED FOR THE INTENDED PURPOSE AND USED FOR SUCH PURPOSE.
- 2. ALL 600-VOLT INSULATED WIRE IN CONDUITS SHALL BE COPPER TYPE THHN/THWN-2 UNLESS NOTED OTHERWISE.
- 3. ALL CONDUCTORS SIZE AWG #12 AND SMALLER SHALL BE SOLID, ALL CONDUCTORS SIZE #10 AND LARGER SHALL BE STRANDED.
- 4. ALL JUNCTION BOXES SHALL BE MARKED (IN INK) WITH THE PANEL NUMBER, CIRCUIT NUMBERS, AND SYSTEM VOLTAGE CONTAIN WITHIN, ("MAGIC MARKERS" ARE ACCEPTABLE). I.E. 'LA'-1,3,5 277/480V DR 'RA'-2,4,6 120/208V ETC.
- 5. WHEN CONDUIT MUST CROSS TRAFFIC AREAS, THE CONDUIT SHALL CROSS PERPENDICULAR TO THE NORMAL TRAFFIC PATTERN.
- 6. ALL BALLASTS ARE TO BE CEC LISTED.
- 7. ALL DUTDOOR LIGHTING FIXTURES ARE TO BE LISTED FOR WET OR DAMP LOCATION DEPENDING ON TYPE OF EXPOSURE.
- 8. ALL DEVICES SHALL BE GROUNDED BY MEANS OF A SEPARATE GROUNDING CONDUCTOR AND EITHER A WIRE BOND FROM THE DEVICE STRAP TO THE BOX OR A SELF-GROUNDING SCREW.
- 9. EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES. (CEC 210.4(B))
- 10. THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGINATION. (CEC 210.4(D))
- 11. ALL NEW DVERCURRENT DEVICES INSTALLED IN EXISTING PANELS/SWITCHBOARDS SHALL MATCH OR EXCEED THE MAKE, MODEL AND INTERRUPTING CAPACITY OF THE EXISTING OVERCURRENT DEVICES.
- 12. A BONDED COMMON GROUNDED ELECTRODE SHALL BE PROVIDED FOR EACH METAL BUILDING, EXPOSED METAL FRAME, RAMP, STAIR AND THE ELECTRICAL SYSTEM PER DSA IR E-1: GROUNDING DF BUILDINGS FABRICATED DFF-SITE: 2016, 2013, 2010 AND 2007 CEC.

COMPLETION

- 1. UPON COMPLETION OF WORK, ELECTRICAL CONTRACTOR SHALL INSURE THE INSTALLATION TO BE FREE FROM SHORT CIRCUITS, PHASE GROUNDS AND NEUTRAL GROUNDS.
- 2. ALL FEEDERS SHALL HAVE INSULATION TESTED PRIOR TO ENERGIZATION.
- 3. ALL PANELS, TRANSFORMERS, DISTRIBUTION BOARDS, SWITCHES, ETC. SHALL BE LABELED PER SINGLE LINE DIAGRAM USING PLASTIC PLATES WITH 3/8" HIGH WHITE LETTERS ON BLACK BACKGROUNDS, LABEL SHALL INCLUDE ITEM NAME AND VOLTAGE PRESENT, TRANSFORMER LABEL SHALL INCLUDE BOTH PRIMARY AND SECONDARY VOLTAGES, LABEL SHALL BE PERMANENTLY ATTACHED USING AT LEAST (2) ROUND HEAD STAINLESS STEEL MACHINE SCREWS WITH MINIMUM THREAD SIZE 8-32.
- 4. ELECTRICAL CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO ARCHITECT UPON COMPLETION OF VORK.
- 5. ELECTRICAL CONTRACTOR SHALL BE AVAILABLE FOR NIGHT INSPECTION AND APPROVAL OF COMPLETED WORK.
- 6. PRIOR TO FINAL ENERGIZATION, NEUTRAL FEED SHALL BE DISCONNECTED FROM THE PANEL AND BUS WITH ALL LOAD NEUTRALS CONNECTED SHALL BE TESTED IN THE PRESENCE OF THE ELECTRICAL ENGINEER FOR FAULTS TO GROUND.
- 7. ALL CIRCUIT BREAKER, NEUTRAL AND GROUND LUG CONNECTIONS SHALL BE TORQUED PER MANUFACTURER'S SPECIFICATIONS IN THE PRESENCE OF THE ELECTRICAL INSPECTOR.
- 8. THE ISSUANCE OF A PERMIT SHALL NOT PREVENT FROM REQUIRING THE CORRECTION OF ERRORS ON THESE PLANS OR FROM PREVENTING ANY VIOLATION OF THE CODES ADOPTED BY THE CITY, RELEVANT LAWS, ORDINANCES, RULES AND/OR REGULATIONS.

NOTES SCALE: NONE

Engineous Group, Inc 898 N. Fair Oaks Ave. Suite E Pasadena, CA 91103 Phone: (626) 696-3850 898 N. Fair Oaks Ave. Suite E Pasadena, CA 91103 Phone: (626) 696-3850

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		4z	2.0			BUS AMPS: 400A MAIN SIZE/TYPE: 400A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1
V=AxLxXxZ/C.M.	VOLTAGE DROI FORMULA IS	42	2.0 ONS Z=1+y(T-75)			SWITCH SWITCH PANELBOARD: DBMP (N BUS AMPS: 400A MAIN SIZE/TYPE: 400A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1 CKT DESCRIPTION NO.
V=AxLxXxZ/C.M. V=volts dropped A=current of load in amps L=length of run one way of C.M.=size of wire in circul T=operating temp of wire	VOLTAGE DROI FORMULA IS WHERE Sonly lar mils. in Celsius	<u>P CALCULATI</u>	2.0 ONS Z=1+y(T-75) =.00323 for copper wire .00330 for aluminum wire (=21.6 for 1 PH copper wire 35.4 for 1 PH aluminum wi 18.7 for 3 PH copper wire 30.7 for 3 PH aluminum wi	ire ire		-38.0 SWITCH PANELBOARD: DBMP (N BUS AMPS: 400A MAIN SIZE/TYPE: 400A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1 CKT DESCRIPTION NO. 1 3 PANEL 'MP1' 5 7 PANEL 'MP1' 5 7 PANEL 'MP2' 9 11 SPARE 13 15 17 OUTDOOR LIGHTING VIA TC
V=AxLxXxZ/C.M. V=volts dropped A=current of load in amps L=length of run one way of C.M.=size of wire in circul T=operating temp of wire FEEDER TO 'DBMP' (2) (N) EMT/PVC + (N) THWN CU AT 100% CAP	VOLTAGE DROI FORMULA IS WHERE Sonly lar mils. in Celsius A L X T y C.M. V	200.0 83.5 18.7 75 0.00323 167800 1.9	2.0	ire ire M L X T y C.M. V	125.0 47.5 21.6 75 0.00323 105600 1.2	SWITCH SWITCH SUBJECTIVE: 400A MCB MAIN SIZE/TYPE: 400A MCB MAIN SIZE/TYPE: 400A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1 CKT DESCRIPTION NO. 1 3 PANEL 'MP1' 5 7 PANEL 'MP2' 9 11 SPARE 13 15 17 OUTDOOR LIGHTING VIA TC SUBTOTAL TOTAL PHASE A - VA 11,184 AMPS 93 TOTAL PHASE B - VA 6,192 AMPS 62 TOTAL PHASE C - VA 5,733 AMPS 48 TOTAL PHASE C - VA 5,733 AMPS 48 TOTA
V=AxLxXxZ/C.M. V=volts dropped A=current of load in amps L=length of run one way of C.M.=size of wire in circul T=operating temp of wire FEEDER TO 'DBMP' (2) (N) EMT/PVC + (N) THWN CU AT 100% CAP WIRE SIZE BELOW 3/0 FEEDER TO 'MP2' (L3) (N) EMT (N) THWN CU AT 100% CAP	VOLTAGE DROI FORMULA IS WHERE Sonly lar mils. in Celsius A L X T y C.M. V SYS. V % DROP A L X T y C.M. V SYS. V % DROP	200.0 83.5 18.7 75 0.00323 167800 1.9 208 0.89% 125.0 28 21.6 75 0.00323	2.0 ONS Z=1+y(T-75) =.00323 for copper wire .00330 for aluminum wire (=21.6 for 1 PH copper wire 35.4 for 1 PH aluminum wi 18.7 for 3 PH copper wire 30.7 for 3 PH aluminum wi 18.7 for 3 PH aluminum wi 18.7 for 3 PH aluminum wi S.4 for 1 PH aluminum wi 18.7 for 3 PH aluminum wi 20.7 for 3 PH aluminum wi 18.7 for 3 PH aluminum wi	ire ire A L X T y C.M. V SYS. V % DROP	125.0 47.5 21.6 75 0.00323 105600 1.2 208 0.58% 10.0 167 21.6 75 0.00323 16510	SWITCH SWITCH PANELBOARD: DBMP (N BUS AMPS: 400A MAIN SIZE/TYPE: 400A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1 CKT DESCRIPTION 1 3 PANEL 'MP1' 5 7 PANEL 'MP2' 9 11 SPARE 13 15 17 OUTDOOR LIGHTING VIA TC SUBTOTAL TOTAL PHASE A - VA 11,184 AMPS 93 TOTAL PHASE A - VA 11,184 AMPS 93 TOTAL PHASE A - VA 5,733 AMPS 48 TOTAL PHASE C - VA 5,73
V=AxLxXxZ/C.M. V=volts dropped A=current of load in amps L=length of run one way of C.M.=size of wire in circul T=operating temp of wire FEEDER TO 'DBMP' (2) (N) EMT/PVC + (N) THWN CU AT 100% CAP WIRE SIZE BELOW 3/0 FEEDER TO 'MP2' (L3) (N) EMT (N) THWN CU AT 100% CAP WIRE SIZE BELOW 0	VOLTAGE DROI FORMULA IS WHERE sonly lar mils. in Celsius A L X T y C.M. V SYS. V % DROP A L X T y C.M. V SYS. V % DROP	200.0 83.5 18.7 75 0.00323 167800 1.9 208 0.89% 125.0 28 21.6 75 0.00323 105600 0.7 208 0.34% 16.0 21.6	2.0 ONS Z=1+y(T-75) =.00323 for copper wire .00330 for aluminum wire (=21.6 for 1 PH copper wire 35.4 for 1 PH aluminum wi 18.7 for 3 PH copper wire 30.7 for 3 PH aluminum wi 18.7 for 3 PH copper wire 30.7 for 3 PH aluminum wi FEEDER TO 'MP1' (L2) (N) EMT (N) THWN CU AT 100% CAP WIRE SIZE BELOW 0 CIRCUIT DBMP-17 (N) EMT/PVC (N) THWN CU AT 80% CAP FOR OUTDOOR LIGHT WIRE SIZE BELOW 8	ire A L X T y C.M. V SYS. V % DROP A L X T y C.M. V SYS. V % DROP A L X T y C.M. V SYS. V % DROP	125.0 47.5 21.6 75 0.00323 105600 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 208 0.58% 10.0 1.2 21.6 75 0.00323 105600 1.2 208 0.58% 10.00323 10.500 2.1.6 75 0.00323 10.500 1.2 208 0.58% 1.2 2.1.6 75 0.00323 10.500 2.1.6 75 0.00323 10.5600 1.2 208 0.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.1.6 75 0.00323 10.58% 1.2 2.2 1.20 1.20 1.20 1.20 1.20 1.20	-38.0 SWITCH PANELBOARD: DBMP (N BUS AMPS: 400A MAIN SIZE/TYPE: 400A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1 CKT DESCRIPTION NO. 1 PANEL 'MP1' 5 7 PANEL 'MP2' 9 11 SPARE 13 15 17 OUTDOOR LIGHTING VIA TC SUBTOTAL TOTAL PHASE A - VA 11,184 AMPS 93 TOTAL PHASE A - VA 11,184 AMPS 93 TOTAL PHASE A - VA 11,184 AMPS 93 TOTAL PHASE B - VA 6,192 AMPS 52 TOTAL PHASE B - VA 6,192 AMPS 48 TOTAL PHASE B - VA 6,192 AMPS 48 TOTAL PHASE B - VA 6,192 AMPS 48 TOTAL PHASE D - VA 23,109 AMPS 64

Outdoor Lighting NRCC-LTO-E	CALIFORNIA ENERGY COMMISSION	Outdoor Lighting NRCC-LTO-E		CALIFORNIA ENERGY COMMISSION	Outdoor Lighting NRCC-LTO-E		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE Project Name: Frontier HS MPR Portable Report Page:	NRCC-LTO-E (Page 1 of 7)	CERTIFICATE OF COMPLIANCE Project Name: Fro	rontier HS MPR Portable Report Page:	NRCC-LTO-E (Page 2 of 7)	CERTIFICATE OF COMPLIANCE Project Name:	Frontier HS MPR Portable Report Page:	NRCC-LTO-E (Page 3 of 7)
Project Address: 280 Skyway Dr. Date Prepared:	8/3/2022	Project Address:	280 Skyway Dr. Date Prepared:	8/3/2022	Project Address:	280 Skyway Dr. Date Prepared:	8/3/2022
01 Project Location (city) Camarillo 04 Total Illuminated Hardscape	e Area (ft²) 1106	C. COMPLIANCE RESULTS Results in this table are automatically calculated from data input and co	calculations in Tables F through I. Note: If any cell on this table says '	COMPLIES with Exceptional Conditions" refer	F. OUTDOOR LIGHTING FIXTURE SCHEDULE For new or altered lighting systems demonstrating compliance w	ith <u>§140.7</u> all new luminaires being installed and any existing lun	ninaires remaining or being moved within the spaces
02 Climate zone 0 03 Outdoor Lighting Zone per Title 24 Part 1 §10.114 or as designated by Authority Having Jurisdiction (AHJ): III IIIZ-0: Very Low - Undeveloped Parkland IIIZ-2: Moderate - Bural Areas	ed by CA Energy Commission for Approval	to Table D. Exceptional Conditions for guidance or see applicable Table Calculations of Total Allowed Lighting Power (Wa	referenced below. atts) <u>§140.7</u> or <u>§141.0(b)2L</u>	Compliance Results	covered by the permit application are included in the Table below replacement luminaires being installed as part of the project sco Designed Wattage:	v. For altered lighting systems using the Existing Power method pe pe are included (ie, existing luminaires remaining or existing lumii	r <u>§141.0(b)2L</u> only new luminaires being installed and naires being moved are not included).
LZ-0. Very Low - Ondeveloped rankand LZ-2. Moderate - Ruhar Areas LZ-4. High - Must be review LZ-1: Low - Developed Parkland LZ-3: Moderately High - Urban Areas		01 02 03 04 General Per Sales Ornament	tal Per Specific Power 00 07		01 02	03 04 05 06	07 08 09 10
B. PROJECT SCOPE This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance	using the prescriptive path outlined in 5140.7 or	Hardscape+Application+Frontage+SintainenAllowance $\underline{\$140.7(d)2}$ $\underline{\$140.7(d)2}$ $\underline{\$140.7(d)2}$ $\underline{\$140.7(d)2}$ (See Table K)(See Table K)	$\frac{1}{2} + Area \\ \frac{5140.7(d)2}{(See Table M)} = \frac{OR}{Allowance} = Total Allowed (Watts)$	≥ Total Actual (Watts) 07 must be >= 08	Name or Item Tag Complete Luminaire Description	Watts per uminaire1, 2How is WattageTotal numberLuminaireExcluUminaire1, 2WattageIuminaires 2Status3§14	ded per Design Watts 6,200 initial Inspector 10.7(a) Iumen output Inspector
<u>§141.0(b)2L</u> for alterations. My Project Consists of:		(See Table I) (See Table 3) (See Table 4) 453.4 +	(See Table N) (See Table N) + OR = 453.4	≥ 381 COMPLIES	EW1 EW1 - 37W LED WP Linear	37 Mfr. Spec 3 New	§130.2(b) 4 Pass Fail Image: Description of the second secon
01 02 Image: New Lighting System Must Comply with Allowances from <u>§140.7</u>		Cutoff Complia Controls Complia	nce (See Table G for Details) nce (See Table H for Details)	N/A COMPLIES	EW2 EW2 - 54W LED WP Linear	54 Mfr. Spec 3 New	Iumens Iumens 162 NA: < 6200
Altered Lighting System Is your alteration increasing the connected lighting load (Water 03) 03 04	ts)? • Yes • No 05	D. EXCEPTIONAL CONDITIONS	a made or data entered in tables throughout the form		EW5 - 108W Dual LED 18'	108 Mfr. Spec 1 New	□ 108 NA: < 6200 lumens □ □
% of Existing Luminaires Being Altered1Sum Total of Luminaires Being Added or Altered \Box < 10%	Calculation Method	E. ADDITIONAL REMARKS	s made of data entered in tables throughout the jorm.		* NOTES: Selections with a * require a note in the space below explaining	Total Desig	n Watts: 381
Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires. ¹ FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires withi	n the Scope of the Permit Application) x 100.	This table includes remarks made by the permit applicant to the Author	rity Having Jurisdiction.		EX: Luminaire is lighting a statue; EXCEPTION 2 to <u>\$130.2(b)</u> ¹ FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sh ² For linear luminaires, wattage should be indicated as W//f instead of W	neets to confirm wattage used for compliance per <u>§130.0(c)</u>	d of number of luminaires
					³ Select "New" for new luminaires in a new outdoor lighting project, or for for existing luminaires within the project scope that are not being altered.	or added luminaires in an alteration. Select "Altered" for replacement lun d and are remaining. Select "Existing Reinstalled" for existing luminaires	ninaires in an alteration. Select "Existing to Remain" which are being removed and reinstalled as part of
					the project scope. ⁴ Compliance with mandatory cutoff requirements is required for lumina	ires with initial lumen output >= 6,200 unless exempted by <u>§130.2(b)</u>	
					G. CUTOFF REQUIREMENTS (BUG) This section does not apply to this project.		
Registration Number: Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00	CA Building Energy Efficiency Standards - 2019 Nonresidential Complia	nce Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00
state of california Outdoor Lighting		state of California Outdoor Lighting			state of california Outdoor Lighting		
NRCC-LTO-E CERTIFICATE OF COMPLIANCE Exercise US MDB Destable Benert Bases	CALIFORNIA ENERGY COMMISSION NRCC-LTO-E	NRCC-LTO-E CERTIFICATE OF COMPLIANCE Designed Names	Parties US MDD Destable Desert Deser	CALIFORNIA ENERGY COMMISSION NRCC-LTO-E	NRCC-LTO-E CERTIFICATE OF COMPLIANCE Dreiget Normage	Evention US MDD Device la Depart Depart	CALIFORNIA ENERGY COMMISSION NRCC-LTO-E
Project Address: 280 Skyway Dr. Date Prepared:	(rage 4 017) 8/3/2022	Project Address:	280 Skyway Dr. Date Prepared:	(Page 5 017) 8/3/2022	Project Address:	280 Skyway Dr. Date Prepared:	8/3/2022
H. OUTDOOR LIGHTING CONTROLS		I. LIGHTING POWER ALLOWANCE (per <u>§140.7</u>)			N. EXISTING CONDITIONS POWER ALLOWANCE (alteration	ns only)	
existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this the permit application.	table even if they are within the spaces covered by	Allowance is per Table 140.7-A while "Use it or lose it" Allowances are p Indicate which allowances are being used to expand sections for user in	per Table 140.7-B . Seneral "Use it or lose it" Allowance put. Luminaires Hardscape Der	e (select all that apply) (select all that apply)	O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALL	ATION	
When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compl "DOES NOT COMPLY" if the notes are left blank.	iance Summary Table on the first page will show	that qualify for one of the "Use it or lose it" allowances shall not qualify it or lose it" allowance.	y for another "Use Allowance Application Table I (below) Table J	ontage 🗌 Ornamental Area K Table L Table M	Selections have been made based on information provided in thi Additional Remarks. These documents must be provided to the b	s document. If any selection have been changed by permit applica uilding inspector during construction and can be found online at	int, an explanation should be included in Table E.
01 02 03	04 05	Calculated General Hardscape Lighting Power Allowance per Table 140. Calculated General Hardscape Lighting Power Allowance per Table 140.	.7-A (LZ 0, 1 & 4) .7-A (LZ 2 & 3)		https://www.energy.ca.gov/title24/2019standards/2019_compl	iance_documents/Nonresidential_Documents/NRCI/ Form/Title	Field Inspector
Area DescriptionShut-Off §130.2(c)1Auto-Schedule §130.2(c)2	Motion Sensor Field Inspector §130.2(c)3 Page	02 03	04050607Area Wattage Allowance (AWA)Area Watta	08 9 10 ge Allowance (AWA) Total General	NRCI-LTO-01-E - Must be submitted for all buildings	or for an Energy Management Control System (EMCS) to be rece	Pass Fail
Path of Travel Astronomical Timer Yes * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved	Yes	Area Description Surface Type	IluminatedAllowedArea AllowancePerimeterArea (ft2)Density (W/ft2)(Watts)Length (If)De	Allowed Linear AWA + LWA Allowance (Watts) (W/atts)	compliance.	or for an Energy Management Control System (ENCS), to be reco	
EX: Not permitted by health & safety to be turned off; EXCEPTION 1 to <u>\$130.2(c)</u>		P.O.T. & Refuge Zone Asphalt	1106 0.025 27.6 303	0.2 75.8 103	P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTA Selections have been made based on information provided in thi	NCE s document. If any selection have been changed by permit applica	ant, an explanation should be included in Table E.
			Total General H	ardscape Allowance (Watts): 453	Additional Remarks. These documents must be provided to the b Provider (ATTCP). For more information visit: http://www.energy	uilding inspector during construction and must be completed thro ca.gov/title24/attcp/providers.html	ugh an Acceptance Test Technician Certification
		J. LIGHTING ALLOWANCE: PER APPLICATION This section does not apply to this project.			Form/Ti NRCA-LTO-02-A - Must be submitted for all outdoor lighting cont	tle crois except for alterations where controls are added to <=	Verified Pass Fail
		K. LIGHTING ALLOWANCE: SALES FRONTAGE			20 luminaires.		
		L. LIGHTING ALLOWANCE: ORNAMENTAL					
		This section does not apply to this project.					
		M. LIGHTING ALLOWANCE: PER SPECIFIC AREA This section does not apply to this project.					
Registration Number: Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00	CA Building Energy Efficiency Standards - 2019 Nonresidential Complia	nce Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00
state of california Outdoor Lighting							
NRCC-LTO-E CERTIFICATE OF COMPLIANCE	CALIFORNIA ENERGY COMMISSION NRCC-LTO-E						
Project Name: Frontier HS MPR Portable Report Page: Project Address: 280 Skyway Dr. Date Prepared:	(Page 7 of 7) 8/3/2022						
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT							
Documentation Author Name: Documentation Author Name: Gilbert Dilanchian Documentation Author Signature:	m. Foster						
Company: Signature Date: 2022-08-03							
Address: CEA/ HERS Certification Identification (if application application) 898 N Fair Oaks Ave. Suite E E-21308 City/State/Zip: Phone:	ble):						
Pasadena CA 91103 (626) 696-3850 RESPONSIBLE PERSON'S DECLARATION STATEMENT							
 I certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Compliance is true and correct. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of the State of Compliance is true and correct. 	rtificate of Compliance (responsible designer)						
 The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified of Title 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other system design features identified on this Certificate of Compliance are consistent with the information provided on other system design features identified on this Certificate of Compliance are consistent with the information provided on other system design features identified on this Certificate of Compliance are consistent with the information provided on other system design features identified on this Certificate of Compliance are consistent with the information provided on other system design features identified on the certificate of Compliance are consistent with the information provided on other system design features identified on the certificate of Compliance are consistent with the information provided on other system design features identified on the certificate of Compliance are consistent with the information provided on other system design features identified on the certificate of Compliance are consistent with the information provided on other system design features identified on the certificate of Compliance are consistent with the information provided on other system design features identified on the certificate of Compliance are consistent with the information provided on other system design features are consistent with the information provided on other system design features of the certificate of Compliance are consistent with the information provided on other system design features of the certificate of the cert	ied on this Certificate of Compliance conform to the requirements r applicable compliance documents, worksheets, calculations.						
plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, a inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder	nd made available to the enforcement agency for all applicable provides to the building owner at occupancy.						
Responsible Designer Name: Shane Foster Company:	m. Foster						
Company. Date Signed: Engineous Group, Inc. 2022-08-03 Address: License:							
898 N Fair Oaks Ave Suite EE-21308City/State/Zip:Phone:Pasadena CA 91103(626) 606 3850							
Registration Number: Registration Date/Time:	Registration Provider: Energysoft						
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-03 12:46:00						

Engineous Group, Inc. 898 N. Fair Oaks Ave. Suite E Pasadena, CA 91103 Phone: (626) 696-3850

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\sim	EXISTING CONCRETE STRUCTURE BELOV GRADE.
8	NEW PATH OF TRAVEL TO A NEW DISPOSAL AREA.
9	NEW 24'X20' (480SF) DISPOSAL AREA.
10	NEW 'EW5' +18' AFG POLE MOUNTED LIGHT FIXTURE TO ILLUMINATE NEW PATH OF TRAVEL TO NEW DISPOSAL ZONE, REFER TO SHEET E-3.1.
11	NEW 'EW2' +10' AFG SURFACE MOUNTED LIGHT FIXTURE TO ILLUMINATE NEW PATH OF TRAVEL AROUND THE PORTABLE MPR BUILDING. REFER TO SHEET E-3.1.
12	NEW 'EW1' +10' AFG SURFACE MOUNTED LIGHT FIXTURE TO ILLUMINATE NEW PATH OF TRAVEL AROUND THE PORTABLE MPR BUILDING. REFER TO SHEET E-3.1.
13) NEW NEMA-3R JUNCTION BOX TO BE MOUNTED ON THE NORTH FACE, WEST CORNER TO PROVIDE] 120V UNDERGROUND FEED TO FIXTURE 'EV'5' POLE LIGHT. REFER TO SHEET E-0.1 FOR DETAILS.
14	NEW UNDERGROUND PULL-BOX FOR INCOMING AND OUTGOING CONDUCTOR TO THE NEW POLE LIGHT. THIS UGPB SHALL BE BOLTED SHUT, FLUSHED WITH GRADE, AND MARKED 'ELECTRIC' PER E-3.1

6 CONTRACTOR SHALL COORDINATE WITH SCE TO UPGRADE THE EXISTING XFRMR AS NEEDED. 7 CONTRACTOR SHALL UPGRADE THE EXISTING PRECAST CONCRETE BOX LID PER SCE'S REQUIREMENTS WHILE MAINTAINING/CLEANING/CAPPING OF ALL PENETRATIONS WITHIN THE

POWER GENERAL SITE PLAN NOTES

4 CONDUITS AND ROUTING FOUND OBJECTIONABLE BY THE ARCHITECT WILL BE REWORKED AT ELECTRICAL CONTRACTORS EXPENSE. 5 ELECTRICAL CONTRACTOR SHALL PROVIDE APPROVED SEISMIC STRUCTURAL SUPPORTS AS CURRENTLY ADOPTED BY IBC OR CBC WHERE APPLICABLE FOR ALL FIXTURES, BOXES AND OTHER ELECTRICAL EQUIPMENT. 6 ELECTRICAL CONTRACTOR SHALL VERIFY LOCATIONS AND MOUNTING HEIGHTS OF ALL DUTLETS AND EQUIPMENT WITH ARCHITECTURAL SITE PLANS, ELEVATIONS AND DETAILS. POWER SITE PLAN KEYED NOTES (NOT ALL MAY APPLY) (N) N3R DISTRIBUTION BOARD 'DBMP', 400A, 208Y/120V, 30-4W, WITH MCB, SEE SINGLE LINE DIAGRAM ON SHEET E-0.1 FOR RATINGS. 2 (E) (4) 4" DB-120 SCE SECONDARY CONDUITS, (2) CONDUCTOR FILLED AND (2) SPARES WITH PULL-STRINGS. 3 (E) N3R MAIN SERVICE 'MS', 1600A, 208Y/120V, 3Ø-4W, <u>A#67878</u>, SEE SINGLE LINE DIAGRAM DN SHEET E-0.1 FDR FURTHER DETAILS. (E) INTERMEDIATE PULL BOX FOR UNDERGROUND CONDUITS <u>A#67878</u>, CONTRACTORS SHALL VERIFY LOCATION PRIOR BID/CONSTRUCTION. 5 (E) SOUTHERN CALIFORNIA EDISON TO CONFIRM ADEQUATE FACILITIES TO SERVE THE ADDED LOAD DUE TO THE ADDITION OF NEW MPR PORTABLE.

1 ALL CONDUITS SHALL BE RUN NEATLY AND PARALLEL OR PERPENDICULAR TO STRUCTURAL MEMBERS. CONDUIT ROUTING SHOWN ON SITE PLAN IS DIAGRAMMATIC AND IS INTENDED TO SHOW POSSIBLE FUNCTIONAL ROUTE OF CONDUITS AND CONDUCTORS. IN SOME CASES THE DRAVING SHOWS ROUTING WHICH MAY NOT BE PARALLEL OR PERPENDICULAR TO BUILDING STRUCTURAL MEMBERS, THIS IS FOR CLARITY OF CIRCUITING AND NOT INTENDED TO APPROVE ANY DEVIATIONB FROM NEAT WORKMANSHIP. COMBINING OF HOMERUNS AND OTHER CIRCUITS OTHER THAN WHAT IS SHOWN ON SITE PLAN WILL NOT BE APPRO∨ED. 3 COMBINING OF EMERGENCY CIRCUITS WITH OTHER CIRCUITS IN CONDUITS AND/OR JUNCTION BOXES VILL NOT BE APPROVED.

Engineous Group, Inc. 898 N. Fair Oaks Ave. Suite E Pasadena, CA 91103 Phone: (626) 696-3850

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3	COMBINING OF EMERGENCY CIRCUITS WITH OTHER CIRCUITS IN CONDUITS AND/OR JUNCTION BE WILL NOT BE APPROVED.
4	CONDUITS AND ROUTING FOUND OBJECTIONABLE BY THE ARCHITECT WILL BE REWORKED AT ELECTRICAL CONTRACTORS EXPENSE.
5	ELECTRICAL CONTRACTOR SHALL PROVIDE APPROVED SEISMIC STRUCTURAL SUPPORTS AS CURRENTLY ADOPTED BY IBC OR CBC WHERE APPLICABLE FOR ALL FIXTURES, BOXES AND OTH ELECTRICAL EQUIPMENT.
6	ELECTRICAL CONTRACTOR SHALL VERIFY LOCATIONS AND MOUNTING HEIGHTS OF ALL OUTLETS AND EQUIPMENT WITH ARCHITECTURAL SITE PLANS, ELEVATIONS AND DETAILS.
POVE	R SITE PLAN KEYED NOTES (NOT ALL MAY APPLY)
1	(N) N3R DISTRIBUTION BOARD 'DBMP', 400A, 208Y/120V, 30-4W, WITH MCB. SEE SINGLE LINE DIAGRAM ON SHEET E-0.1 FOR RATINGS.
2	(E) (4) 4" DB-120 SCE SECONDARY CONDUITS, (2) CONDUCTOR FILLED AND (2) SPARES WITH PULL-STRINGS.
3	(E) N3R MAIN SERVICE 'MS', 1600A, 208Y/120V, 3Ø-4W, <u>A#67878</u> . SEE SINGLE LINE DIAGRAM SHEET E-0.1 FOR FURTHER DETAILS.
4	(E) INTERMEDIATE PULL BOX FOR UNDERGROUND CONDUITS <u>A#67878</u> , CONTRACTORS SHALL VER LOCATION PRIOR BID/CONSTRUCTION.
5	(E) SOUTHERN CALIFORNIA EDISON TO CONFIRM ADEQUATE FACILITIES TO SERVE THE ADDED I DUE TO THE ADDITION OF NEW MPR PORTABLE.
6	CONTRACTOR SHALL COORDINATE WITH SCE TO UPGRADE THE EXISTING XFRMR AS NEEDED.
7	CONTRACTOR SHALL UPGRADE THE EXISTING PRECAST CONCRETE BOX LID PER SCE'S REQUIREMENTS WHILE MAINTAINING/CLEANING/CAPPING DF ALL PENETRATIONS WITHIN THE EXISTING CONCRETE STRUCTURE BELOW GRADE.
8	NEW PATH OF TRAVEL TO A NEW DISPOSAL AREA.
9	NEW 24'X20' (480SF) DISPOSAL AREA.

POWER GENERAL SITE PLAN NOTES

PUWE	R GENERAL SITE PLAN NUTES
1	ALL CONDUITS SHALL BE RUN NEATLY AND PARALLEL DR PERPENDICULAR TO STRUCTURAL MEMBERS. CONDUIT ROUTING SHOWN ON SITE PLAN IS DIAGRAMMATIC AND IS INTENDED TO SHOW POSSIBLE FUNCTIONAL ROUTE OF CONDUITS AND CONDUCTORS. IN SOME CASES THE DRAWING SHOWS ROUTING WHICH MAY NOT BE PARALLEL DR PERPENDICULAR TO BUILDING STRUCTURAL MEMBERS, THIS IS FOR CLARITY OF CIRCUITING AND NOT INTENDED TO APPROVE ANY DEVIATIONB FROM NEAT WORKMANSHIP.
2	Combining of homeruns and other circuits other than what is shown on site plan will not be approved.
3	COMBINING OF EMERGENCY CIRCUITS WITH OTHER CIRCUITS IN CONDUITS AND/OR JUNCTION BOXES WILL NOT BE APPROVED.

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SITE POWER PLAN NOTES SCALE:NONE

Statistics								
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min		
POT	+	6.0 fc	20.9 fc	1.0 fc	20.9:1	6.0:1		

Schedule										
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
	EW1	3	LIGMAN	VK-30003-T4-W40	Vekter 2 Wall luminaires	1	3444	0.7	40.3	Max: 1846cd
	EW2	3	LIGMAN	VK-30004-T4-W40	Vekter 2 Wall luminaires	1	4477	0.7	55.7	Max: 2399cd
	EW5	2	LIGMAN	MS-90292-T4-W40	Mustang 41 street and area lighting luminaire LED	1	5063	0.7	58.1	Max: 2718cd

Lun	Luminaire Locations											
Location								Aim				
No.	Label	х	Y	Z	МН	Orientation	Tilt	х	Y	Z		
1	EW1	60.40	289.93	10.00	10.00	270.00	0.00	60.40	289.93	0.00		
4	EW1	60.40	307.12	10.00	10.00	270.00	0.00	60.40	307.12	0.00		
5	EW1	60.40	329.67	10.00	10.00	270.00	0.00	60.40	329.67	0.00		
1	EW2	62.73	330.55	10.00	10.00	0.00	0.00	62.73	330.55	0.00		
2	EW2	68.85	332.67	10.00	10.00	0.00	0.00	68.85	332.67	0.00		
5	EW2	74.34	332.67	10.00	10.00	0.00	0.00	74.34	332.67	0.00		
2	EW5	51.05	390.48	18.00	18.00	180.00	0.00	51.05	390.48	0.00		
3	EW5	51.05	392.15	18.00	18.00	0.00	0.00	51.05	392.15	0.00		

PHOTOMETRIC STATISTICS SCALE:NONE

