

Owner Change Order

Change Order Number: 003

City of Norman - North Base Complex Phase 1

Flintco LLC (40-000)

1310-1380 DA Vinci Street

Project # 20136

Amount

Norman, Oklahoma 73069

Date: 9/28/2021

To Owner: City of Norman 201-C West Gray Norman, Oklahoma 73069 Contract Number: K-2021-35 Contract Date: 10/13/2020

The Contract is hereby revised by the following items:

Details

PCO#

Includes Costs for the Following:

- · Revision 7
- Revision 8
- · Revision 9
- · Additional Safety Stripping
- · Additional Security & Access Control
- Tile Change (Excluding Markup)
- Change to Sliding Glass Window
- · Addition of Roof Hydrant Curbs
- · TAC Conduit Sizing Change
- · Addition of Electrical for Lubrication Controller
- · Split Additional Cost of Lubrication Controller (Excluding Markup)
- Additional FRP

Title

- · Additional Backer Board
- Weather Delay Days Thru 09/22/2021***

Items with *** have no cost impact.

003	Change Order No. 003		\$102,609.21
		PCO Total:	\$102,609.21
The origina	al Contract Value		\$8,648,000.00
Sum of cha		\$139,894.63	
The Contra	act Value prior to this Prime Contract Change Order		\$8,787,894.63
The Contra	act Value will be changed by this Prime Contract Change Order in the amou	unt of	\$102,609.21
The new C	Contract Value including this Prime Contract Change Order will be		\$8,890.503.84
The Contra	act duration will be changed by		58 days
The revise	ed Substantial Completion date as of this Prime Contract Change Order		11/24/2021

Flintco, LLC	City of Norman
CONTRACTOR	OWNER
2302 S. Prospect Oklahoma City, Oklahoma 73129	201-C West Gray Norman, Oklahoma 73069
Address	Address
Ву	Ву
SIGNATURE	SIGNATURE
DATE	DATE
GSB, Inc. Architects & Planners ARCHITECT	
3555 NW 58TH Street, Suite 700W Oklahoma City, OK 73112	
Address	
Ву	
SIGNATURE	
DATE	

PROPOSED CHANGE ORDER SUMMARY--- CONSTRUCTION MANAGER

Construction Manager:

Flintco, LLC

THE	CITY	OF	NOR	ЛΔΝ

Proj Name/ #: Norman North Base - Phase 1 / 20136 (Main Job)

PCO No.: #003

REV 7, REV 8, REV 9, Add Safety Stripping, Add Security & Access Control, Tile Change, Add Sliding Glass Window, Add Roof Hydrant Curbs, TAC Conduit Size Change, Add Elec and Cost for Lubrication Controller, Additional FRP and Add Backer Board

PCO Title:

PCO Date: 9/22/2021

1.	Subcontractors' Work (enter amounts from Subcontractor Summary Sheets)	•		
DIV 22/23	Orcutt (REV 7)		\$	2,723.00
DIV 26	DSE (REV 7)		\$	1,078.00
DIV 22/23	Orcutt (REV 8)		\$	7,662.00
DIV 26	DSE (REV 8)		\$	1,560.00
DIV 06	Alpha Omega (REV 8)		\$	3,810.00
DIV 09	Wiljo (REV 8)	_	\$	583.00
DIV 02	Midwest Wrecking (REV 9)		\$	1,140.00
DIV 32	Turning Point (REV 9)	_	\$	10,730.00
DIV 26	DSE (REV 9)		\$	5,951.00
DIV 32	American Fence (REV 9)		\$	15,000.00
DIV 09	Ardor (Add Safety Stripping)		\$	4,760.00
DIV 26	DSE (Add Security & Access Control)	_	\$	833.00
DIV 09	Apex (Tile Change) - Note: Excludes Markup	_	\$	780.50
DIV 08	Tepco (Change to Sliding Glass Window)	_	\$	1,005.00
DIV 22/23	Orcutt (Addition of Roof Hydrant Curbs)		\$	1,980.00
DIV 22/23	Orcutt (TAC Conduit Sizing Change)		\$	676.80
DIV 26	DSE (Addition of Electrical Box for Lubrication Controller)		\$	121.00
DIV 09	Wiljo (RFI #33 - Additional FRP)	_	\$	400.00
DIV 09	Wiljo (RFI #61 - Additional of Backer Board) - Fleet	_	\$	7,350.00
DIV 22/23	Orcutt (Split Additional Cost of Lubrication Controller) - Note: Excludes Markup		\$	2,106.40
	Subtotal for Subcontractors' Work		\$	70,249.70
2.	Itemized Direct Project Management Cost Increases (if any)			
	Field Engineer (Layout): 1 Days @ \$70/HR		\$	560.00
	Labor Foreman: 0 Days @ \$65/HR	_	\$	-
	Burden Rate (58% DPM Costs)		\$	324.80
	Subtotal for Direct Project Management Cost Increases (if any)		\$	884.80
	Subtotal 1. + 2.		\$	71,134.50
3.	Construction Manager's Self Performed Work	_		
DIV 06	Oakridge (REV 8)	_	\$	1,604.71
DIV 05	Oakridge (REV 9)	_	\$	2,745.74
	Clean-Up: 1 Days @ \$45/HR (Incl. Burden Rate @ 58%)		\$	360.00
	Subtotal for Construction Manager's Self Perfrom Work		\$	4,710.45
	Subtotal, Cost of Work and Direct Proj Mgmt Cost		\$	75,844.95
			Ů,	70,011.00
4.	Construction Manager Fee (Percent of Subtotal 1. and 2. above)	10.00%	\$	6,824.76
5.	Construction Manager Overhead (Percent of Subtotal 1. and 2. above)	5.00%	\$	3,412.38
6.	CM's Liability Insurance	0.65%	•	559.53
7.	Subcontractor Default Insurance, if authorized (% of Subcontractor Subtotal)	1.60%	•	1,386.27
8.	CM's Builders Risk Insurance	0.55%		484.15
9.	Project Bonds	0.82%	\$	725.80
	Total Cost of Chan		\$	89,237.84

Approved for	Construction /	Any cost cor	nponent may	be adjusted i	n accordance wit	th the Agreeme	nt for At-Risk	Construction	Managemen
Services.									

Construction Manager	Architect/Engineer	Owner

PROPOSED CHANGE ORDER SUMMARY--- CONSTRUCTION MANAGER Construction Manager: Flintco, LLC THE CITY OF NORMAN Proj Name/#: Norman North Base - Phase 1 / 20146 (Alternate) PCO No.: REV 7, REV 8, REV 9, Add Security & Access Control, Tile Change, Add Roof Hydrant PCO Title: Curbs, TAC Conduit Size Change and Add Backer Board PCO Date: 9/22/2021 1. Subcontractors' Work (enter amounts from Subcontractor Summary Sheets) **DIV 26** DSE (REV 7) \$ 80.00 **DIV 26** DSE (REV 8) \$ 643.00 DIV 22/23 Orcutt (REV 9) 2,981.00 \$ **DIV 26** DSE (REV 9) \$ 436.00 **DIV 26** DSE (Add Security & Access Control) \$ 664.00 **DIV 09** Apex (Tile Change) - Note: Excludes Markup \$ 780.50 DIV 22/23 Orcutt (Addition of Roof Hydrant Curbs) 1.980.00 \$ DIV 22/23 Orcutt (TAC Conduit Sizing Change) \$ 451.20 **DIV 09** Wiljo (RFI #61 - Addition of Backer Board) \$ 3,110.00 Subtotal for Subcontractors' Work 11,125.70 \$ 2. Itemized Direct Project Management Cost Increases (if any) \$ Field Engineer (Layout): 0 Days @ \$70/HR Labor Foreman: 0 Days @ \$65/HR \$ Burden Rate (58% DPM Costs) \$ Subtotal for Direct Project Management Cost Increases (if any) \$ Subtotal 1. + 2. \$ 11,125.70 **Construction Manager's Self Performed Work** DIV 06 Oakridge (REV 8) \$ 221.03 Clean-Up: 0 Days @ \$45/HR (Incl. Burden Rate @ 58%) \$ _ \$ 221.03 Subtotal for Construction Manager's Self Perfrom Work Subtotal, Cost of Work and Direct Proj Mgmt Cost \$ 11,346.73 10.00% \$ Construction Manager Fee (Percent of Subtotal 1. and 2. above) 1,034.52 5. Construction Manager Overhead (Percent of Subtotal 1. and 2. above) 5.00% \$ 517.26 6. 0.65% \$ 83.84 CM's Liability Insurance 1.60% \$ Subcontractor Default Insurance, if authorized (% of Subcontractor Subtotal) 207.72 0.55% \$ 8. CM's Builders Risk Insurance 72.55 9. **Project Bonds** 0.82% \$ 108.75 **Total Cost of Change** 13,371.37 Approved for Construction -- Any cost component may be adjusted in accordance with the Agreement for At-Risk Construction Management Services.

Architect/Engineer

Owner

Construction Manager

Current Delay Days Requested:

Weather: 7 Working Days (9 Calendar Days) from 06/12/2021 - 09/22/2021

Fleet PEMB Roofing: 19 Working Days (27 Calendar Days) from 05/14/2021 - 07/17/2021

Proof Rolling: 6 Working Days (8 Calendar Days) from 08/13/2021 - 08/20/2021

Additional Days Associated with CO# 003: 10 Working Days (14 Calendar Days)

Total Working Days Requested: 42 Working Days (58 Calendar Days)

Requested Revised Substantial Completion Date: 11/24/2021

20136 MAIN JOB

REVISION 7



Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #003: CE #003 - Revision 7 plumbing

	_		
то:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008
PCO NUMBER/REVISION:	003 / 0	CONTRACT:	1 - North Base Fleet Contract Prime Contract
REQUEST RECEIVED FROM:		CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)
STATUS:	Pending - In Review	CREATED DATE:	8/10/2021
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None
FIELD CHANGE:	No		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:	2 days	PAID IN FULL:	No
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:	
		TOTAL AMOUNT:	\$2,723.00

POTENTIAL CHANGE ORDER TITLE: CE #003 - Revision 7 plumbing

CHANGE REASON: Design Development

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

CE #003 - Revision 7 plumbing changes

Revision 7 plumbing changes including addition of solonoid valve and switch for water line in restroom. Modifications to water lines included. Please see breakout (attached).

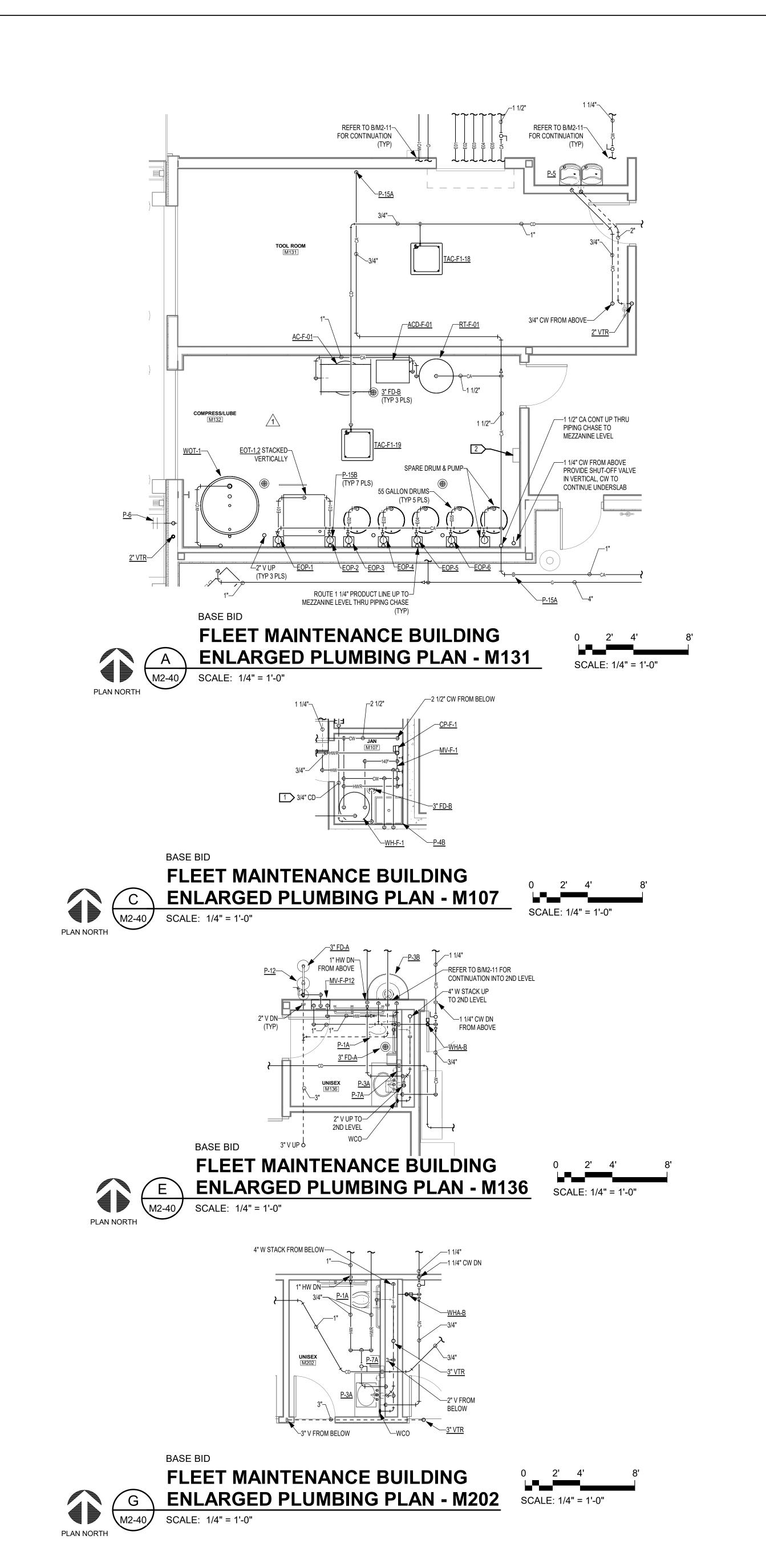
ATTACHMENTS:

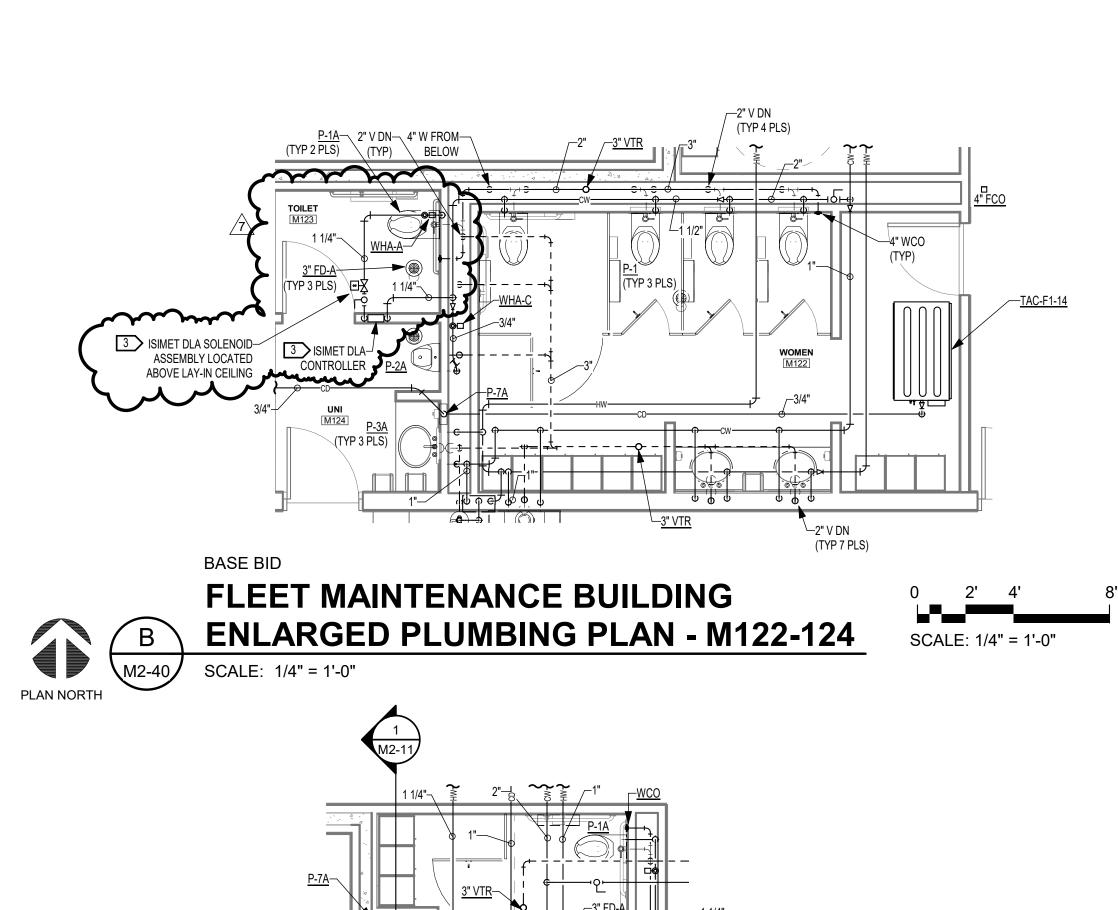
Orcutt CO Form Soloniod switch.xlsx

Flintco Orcutt Mechanical Contractors

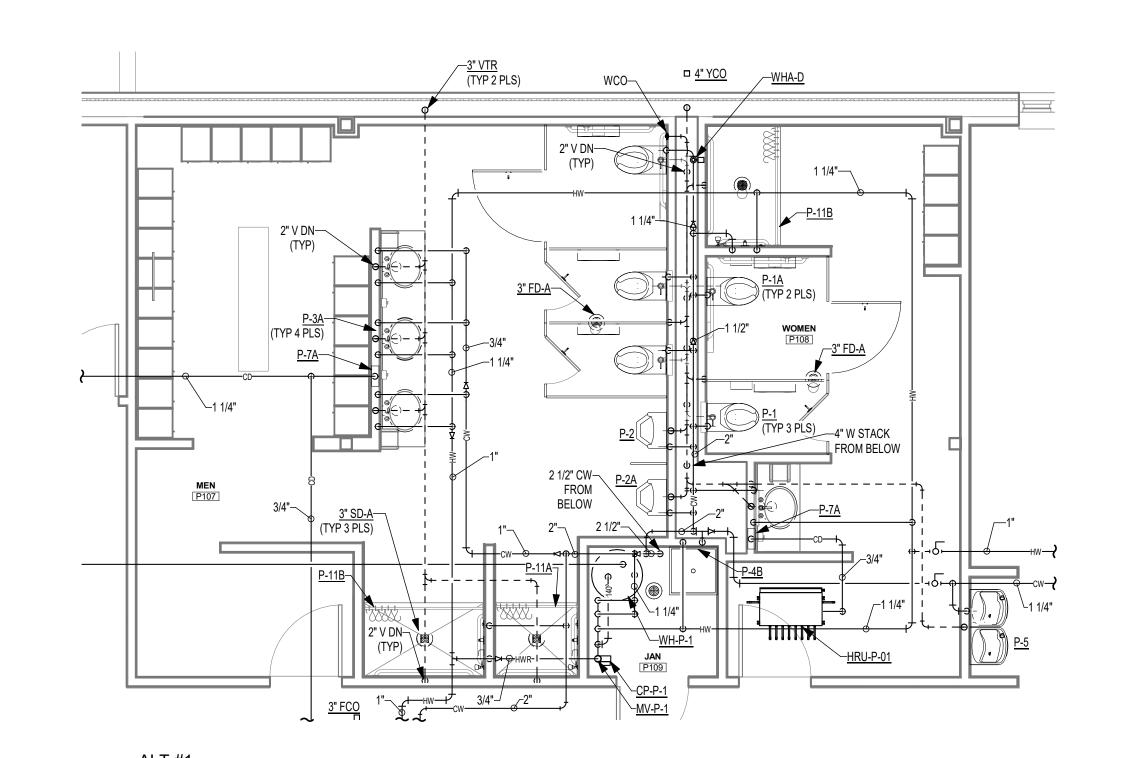
6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE SIGNATURE DATE

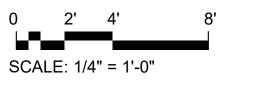














CITY OF NORMAN, OKLAHOMA 201 A WEST GRAY STREET NORMAN, OKLAHOMA 73069 (405) 366-5406 www.NormanOK.gov ARCHITECT

KEYED NOTES: #>

1. ROUTE CONDENSATE DRAIN TO <u>FD-B</u>. PROVIDE SECURE INDIRECT CONNECTION.

2. PROVIDE ALEMITE MODEL #343000 FLUID MANAGEMENT SYSTEM CONTROLLER WITH PRINTER OR PRIOR APPROVED ALTERNATE.

ASSEMBLY, LOCATED ABOVE LAY IN CELING IN ROOM TOILET #M123.

SINGLE RESTROOM USE. CONTROLLER TO BE MOUNTED TO WALL, FACING ROOM UNI

#M124. CONTROLLER TO BE MOUNTED 48" AFF. PROVIDE FACTORY SOLENOID VALVE

GSB, INC 3555 NW 58th Street, Suite 700W Oklahoma City, OK 73112 (405) 848-9549 www/gsb-inc.com

CIVIL ENGINEER JOHNSON & ASSOCIATES 1 EAST SHERIDAN AVE.- STE. 200 OKLAHOMA CITY, OKLAHOMA 73104 (405) 235-8075

www.jaokc.com STRUCTURAL ENGINEER WALLACE ENGINEERING 410 NORTH WALNUT ANE. - STE. 200 OKLAHOMA CITY, OK73104 (405) 236-5858 www.wallacesc.com

M/ P/ FP ENGINEER ALLEN CONSULTING, INC. 110 NORTH MERCEDES DRIVE NORMAN, OK 73069 (405) 928-7702 www.acimep.com

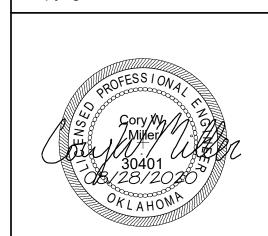
ELECTRICAL ENGINEER HORNER ASSOCIATES ENGINEERS 1306 COMMERCE DRIVE NORMAN, OKLAHOMA 73071 (405) 801-2528 www.haeinc.com

LANDSCAPE ARCHITECT PLANNING DESIGN GROUP 5314 SOUTH YALE AVE - STE. 510 TULSA, OKLAHOMA 74135 (918) 628-1255

www.planningdesigngroup.com



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REVISIONS
 NO.
 DATE
 DESCRIPTION

 1
 9-10-2020
 ADD #1
 7 7-23-2021 REVISION #7

GSB PROJECT NO.

191650

DRAWING TITLE

AUGUST 28, 2020

ALLEN CONSULTING

ISIMET

DLA Series Controller For Institutional Facilities Including Healthcare Facilities and Drug Testing Laboratories



ENCLOSED INDUSTRIAL CONTROL PANEL NO. E-258342 Meets all Standards for Canadian Industrial Control Panels



Application:

The DLA Series Controller is used to operate remotely located 12-vdc latching solenoids for domestic water services in Healthcare Facilities or in a Drug Testing Laboratory.

This unit is provided with ISIMET latching circuit boards that permit a signal to latch the solenoids ON and OFF, controlling the water supply to the restroom facility. In the case of patient rooms in a Healthcare Facility the ON circuit on the primary pcb enables the water to be turned ON and OFF either remotely or locally. For Drug Testing Labs, the unit is intended to control the water flow to the restroom where drug samples are deposited. One board is designated to operate ON-OFF the water supply valves. A secondary board permits solenoids to operate ON when the primary solenoids are OFF, thus allowing for drain-down of the piping. (MAX four solenoids per circuit board)

The unit conforms to all requirements of UL 508-A for Industrial Control Panels.

Features:

Panic Button: Disengages the system; requiring key activation.

Push Button or Key Switch: Activates the system each time a circuit is to be engaged.

Control Switch: Activates a circuit with key activation or deactivates to OFF.

Panel Mounted LEDs: Indicates the circuit is active.

Integrated operating system inputs including building automation.

Integrated notification output circuits.

* All Standard Styles are provided with Panic Button Assembly

Styles 1 & 2 Specifications:

Integral 5 amp rated circuit service switch / j-box / transformer / pcb

Control Panel - Stainless Steel 16 gauge W/ removable concealed hinge and gasket.

Captive screws secure panel to enclosure.

Wall Box Enclosure – 16 gauge powder coated sheet metal

Enclosure Size W/ Pulse - 6.0 X 14.25 X 4

Enclosure Size W/O Pulse - 6.0 X 12.25 X 4

Unit performs as a single circuit Controller of water services W/ monitoring beacon output.

Style 3 Specifications:

Integral 15 amp rated circuit service switch / j-box / transformer / pcb

Control Panel - Stainless Steel 16 gauge

Wall Box Enclosure – 16 gauge powder coated sheet metal

Enclosure size - 16 X 14 X 6 for up to 4 circuits, 18 X 18 X 6 for 6-8 circuits, and 24 X 24 X 6 for Custom Assemblies. Unit performs as a multiple circuit Controller of water services.

DOC # 11003 March 2014

DSE Bidding and Estimating Form

Job: NORTH BASE Page # 12

Area: REVISION 7 FLEET Enter E, C or W in Unit

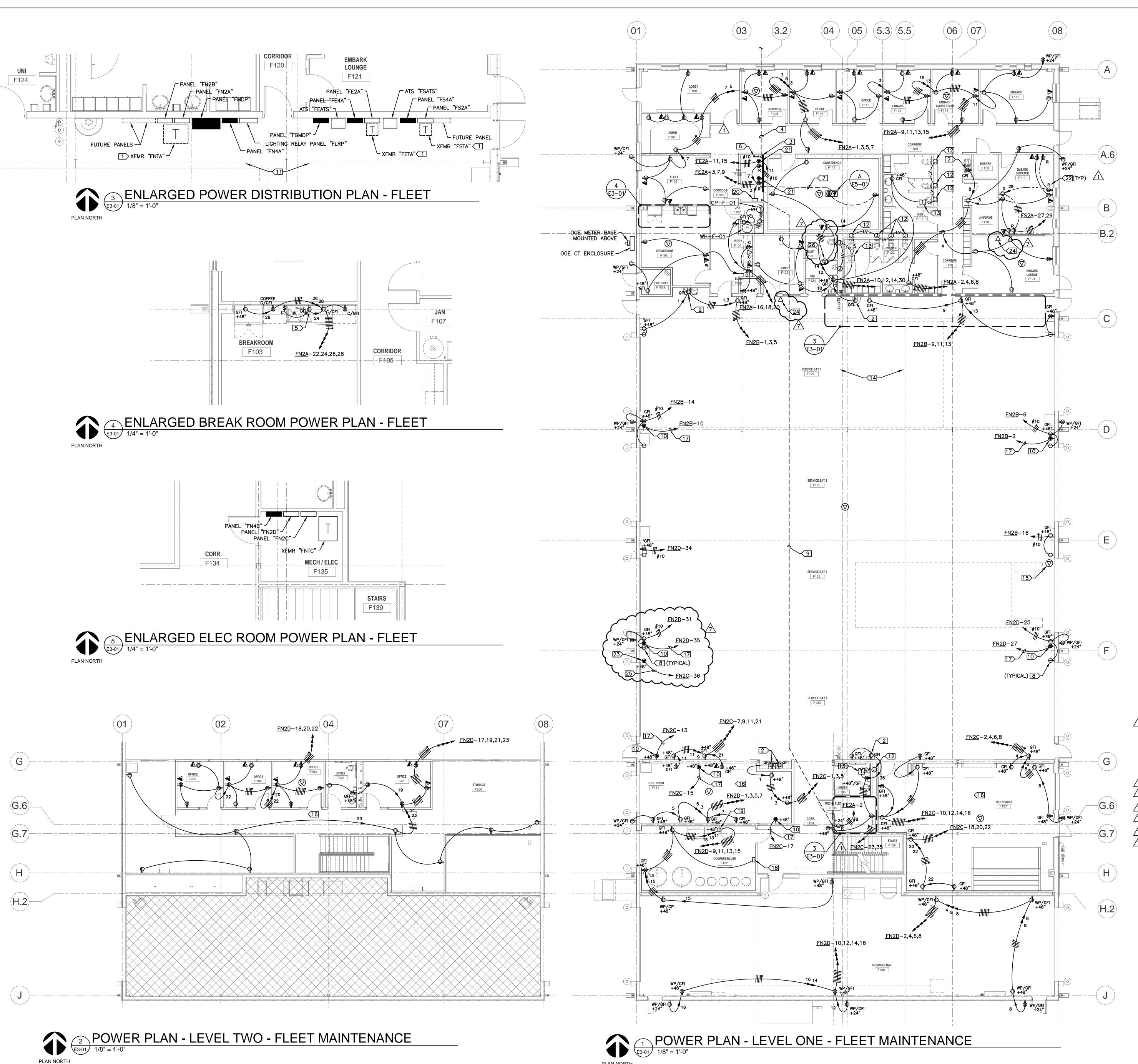
tem	E, C or W Ωty	Unit	Description	Labor Hours	Ext	Material	Evt	∆ nno	F. 4
1		******	added 2 data roughs, circuit for forklift, and			iviateman	<u>Ext</u>	Open	Ext
2			circuit for drug test controller						
3							-		
4	2	е	10' sticks of 3/4" emt for data rough			12.50	25.00		
5	2	e	4sgr for data rough	1	i	5.00	10.00		****
6	2	. 6	2 hours 1 man labor	1	2.00	3.00	10.001		
7									
8	13	е	10' sticks of 3/4" emt for fork tift			12.50	162.50		
9	1	e	3/4" seal off			25.00	25.00		
10	390	ę	130 x 3 of #12 thhn			0.25	97.50		
11	6	e	6 hours labor	1	6.00			-	
12	**********								
13	1.5	e	10' stick of 3/4" emt for drug test station			12.50	18.75		
14	. 2	e	4sqr boxes			5.00	10.00		
15	60	е	20' x 3 of #12 thhn			0.25	15 00		
16	3	е	3 hours 1 man labor	1	3.00				
17								-	
18									
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23									
24									
25									
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27									
28		·							
29			1						
30									
31									
32									

 Labor Hour Rate
 60
 Total Labor
 660

 Tax Rate
 Total Material
 418

 Total Page 12
 Profit
 15.00%
 Total Opening
 0

 Total 1,078
 Total 1,078
 Total Opening
 0



GENERAL NOTES:

- A. ENTIRE INSTALLATION SHALL COMPLY WITH NEC ARTICLE 511 FOR MAJOR REPAIR GARAGE SERVICING GASOLINE AND CNG VEHICLES.
- B. SERVICE BAYS AND AREAS DIRECTLY COMMUNICATING SHALL BE CLASSIFIED CLASS 1, DIV. 2 FROM FINISHED FLOOR TO 18" AFF. ALL CIRCUITING PASSING THROUGH THE HAZARDOUS AREA SHALL BE UNBROKEN RGSC WITH NO FITTINGS. ALL PANELBOARDS, TRANSFORMERS, AND OTHER ELECTRICAL ENCLOSURES INCLUDING WALL OUTLETS IN THIS AREA SHALL BE MOUNTED NOT LOWER THAN 20"
- AFF TO BOTTOM OF BOX, OR AS NOTED. C. THE CNG HAZARDOUS AREA REQUIREMENTS AT THE CEILING SHALL BE MET BY USE OF A VENTILATION SYSTEM TO PROVIDE THE REQUIRED AIR CHANGES PER HOUR IN ACCORDANCE WITH NEC TABLE 511.3(D). NO CNG HAZARDOUS AREA SHALL BE REQUIRED AT THE

OWNER

(405) 366-5406

ARCHITECT

(405) 848-9549

(405) 235-8075 www.jaokc.com

(405) 236-5858

www.wallacesc.com

M/ P/ FP ENGINEER ALLEN CONSULTING, INC.

NORMAN, OK 73069 (405) 928-7702

www.acimep.com

(405) 801-2528

www.haeinc.com

(918) 628-1255

www/gsb-inc.com

CIVIL ENGINEER

GSB, INC

www.NormanOK.gov

CITY OF NORMAN, OKLAHOMA

201 A WEST GRAY STREET

NORMAN, OKLAHOMA 73069

3555 NW 58th Street, Suite 700W

Oklahoma City, OK 73112

JOHNSON & ASSOCIATES

WALLACE ENGINEERING

OKLAHOMA CITY, OK73104

110 NORTH MERCEDES DRIVE

ELECTRICAL ENGINEER

1306 COMMERCE DRIVE

NORMAN, OKLAHOMA 73071

LANDSCAPE ARCHITECT

5314 SOUTH YALE AVE - STE. 510

PLANNING DESIGN GROUP

TULSA, OKLAHOMA 74135

www.planningdesigngroup.com

HORNER ASSOCIATES ENGINEERS

1 EAST SHERIDAN AVE.- STE. 200

STRUCTURAL ENGINEER

410 NORTH WALNUT ANE. - STE. 200

OKLAHOMA CITY, OKLAHOMA 73104

- D. ANY CONDUIT PASSING THROUGH THE HAZARDOUS AREA MUST MEET THE REQUIREMENTS OF NEC ARTICLE 502.
- E. OFFICE AREA SHALL BE PROVIDED WITH POSITIVE PRESSURE HVAC AND SHALL NOT BE CLASSIFIED HAZARDOUS.
- F. PROVIDE DEDICATED NEUTRALS FOR EACH CIRCUIT, UNO. G. HOMERUN CIRCUITS AS SHOWN. DO NOT COMBINE
- HOMERUNS. H. CONTRACTOR MAY USE "MC" CABLE WITHIN MILLWORK AND AS FIXTURE WHIPS ABOVE LAY-IN CEILINGS ONLY. "MC" IS NOT ALLOWED FOR ANY OTHER APPLICATIONS.
- ARCHITECT. J. 20A, 120V CIRCUITS LONGER THAN 100' SHALL BE #10

. COORDINATE EXACT FLOOR BOX LOCATIONS WITH

- K. CONTRACTOR SHALL ENSURE THAT ALL CODE REQUIRED WORKING SPACE CLEARANCES ARE MAINTAINED.
- L. CONDUITS ROUTED EXPOSED SHALL BE ROUTED PERPENDICULAR AND PARALLEL TO BUILDING LINES IN A NEAT AND WORKMANLIKE MANNER. PAINT AS REQUIRED BY ARCHITECT.
- M. PROVIDE 120V GFCI DUPLEX RECEPTACLE AND PIGTAIL CONNECTED TO NEAREST RECEPTACLE CIRCUIT AT EACH P-TRAP PRIMER. RE: MECHANICAL DRAWINGS FOR LOCATIONS.
- N. RE: CONVERGINT DRAWINGS FOR ACCESS CONTROL & CCTV CONDUITS AND ENCLOSURES TO BE PROVIDED UNDER THIS CONTRACT. THIS CONTRACTOR SHALL PROVIDE ALL CONDUIT AND POWER CIRCUITING REQUIRED BY THOSE DRAWINGS.

KEYED NOTES: □

- 1. WALL MOUNTED TRANSFORMER. RE: DETAIL "A" SHEET E3-02.
- 2. RECEPTACLE FOR PLUMBING FIXTURE. MOUNT BEHIND EQUIPMENT SHROUD. COORDINATE WITH EQUIPMENT INSTALLER. DO NOT MOUNT LOWER THAN 20" TO BOTTOM
- 3. TELEPHONE TERMINAL BOARD "TTBF". PROVIDE 4'X8'X 3/4" FIRE RETARDANT PLYWOOD PAINTED WITH FIRE RETARDANT PAINT.
- 4. (4) 4" PVC CONDUITS ROUTED 36" BFG FOR COMMUNICATIONS CABLING. STUB CONDUITS UP 4" AFF AT TELEPHONE TERMINAL BOARD "TTBF". RE: SHEET E1-01 FOR CONTINUATION.
- 5. SPLIT DUPLEX RECEPTACLE (TOP HALF SWITCHED) AND COUNTER MOUNTED SWITCH FOR IN-SINK GARBAGE DISPOSAL AND DISHWASHER. RECEPTACLE MOUNTED BELOW COUNTER. COORDINATE SWITCH AND RECEPTACLE MOUNTING HEIGHTS AND LOCATIONS WITH MILLWORK.
- 6. GROUND BAR MOUNTED 18" AFF. COORDINATE EXACT LOCATION WITH OWNER. RE: ONE-LINE DIAGRAM AND GROUND BAR DETAIL "B", SHEET E5.01.
- 7. STUB 1.25" CONDUIT WITH PULL STRING UP AT TERMINAL BOARD FOR DATA CABLING.
- 8. PROVIDE NEMA 5-15R SIMPLEX RECEPTACLE MOUNTED ADJACENT TO DOCK LIGHT RE: SHEET E2-01. FIXTURE IS PROVIDED WITH PIGTAIL.
- 9. (1) 4" PVC CONDUIT ROUTED 24" BELOW SLAB. STUB-UP IN CORNER OF EACH ROOM FOR
- COMMUNICATIONS CABLING.
- 10. NEMA 14-50R RECEPTACLE.
- 11. ALL CONDUIT STUB-UPS IN THE HAZARDOUS AREA SHALL COMPLY WITH NEC REQUIREMENTS. PROVIDE PVC COATED RGSC CONDUIT STUBBED AT LEAST 19" AFF SO THERE ARE NO FITTINGS WITHIN THE HAZARDOUS AREA.
- 12. PROVIDE JUNCTION BOX FOR AUTOMATIC TOILET/URINAL FLUSH VALVE. COORDINATE EXACT LOCATION WITH
- 13. LOW VOLTAGE TRANSFORMER FOR FLUSH VALVES
- MOUNTED ABOVE CEILING. 14. CONDUIT ROUTED OVERHEAD IN CRANE BAY SHALL BE
- ROUTED 28' AFF OR HIGHER. 15. LOCATED AT ROOF DECK FOR ROOF MOUNTED VIDEO SYSTEM ANTENNA. COORDINATE WITH OWNER'S SYSTEM
- 16. ROUTE ALL COMMUNICATION OUTLET PATHWAYS IN THE SOUTH PORTION OF THE BUILDING TO S.E. CORNER OF MECH/ELEC F135 IN CONDUIT. OWNER MAY PLACE AN
- IDF IN THIS LOCATION. 17.3 #6, 1 #10 GND., 1°C.

- 18. FLUID MANAGEMENT SYSTEM. MAKE ALL REQUIRED ELECTRICAL CONNECTIONS TO SENSORS AND ALARMS. RE MECHANICAL DRAWINGS. 19. RECEPTACLE FOR AIR DRYER ACD-F-01. COORDINATE
- EXACT MOUNTING LOCATION WITH MECHANICAL. 20. BAS CONTROL PANEL(S). COORDINATE EXACT LOCATION
- WITH TEMPERATURE CONTROLS CONTRACTOR. $1\$ 21.NEMA L6-30R RECEPTACLE.
- 1\ 22."R" SUBSCRIPT INDICATES "STANDBY" POWER DUPLEX RECEPTACLE RED IN COLOR.
- $\overline{7}$ 23.RECEPTACLE FOR FORKLIFT. NEMA 15-50R
- 24. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH OWNER.
- 25.3 #8, 1 #10 GND., 3/4°C.√7\ 26. JUNCTION BOX FOR DLA CONTROLLER. COORDINATE EXACT

Homer Associates Engineers, Inc.

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1306 Commerce Dr, Norman, OK 73071 Certificate of Authorization No. CA 3520, Expires 6/30/2021

MOUNTING HEIGHT AND LOCATION WITH MECHANICAL.

Oklahoma City, OK 73112 405.848.9783 Planers® www.gsb-inc.com Copyright © 2020 GSB, Inc

REVISIONS

DATE DESCRIPTION 1 09/18/20 ADD. NO. 2 7 07/23/21 FORKLIFT & TIMECLOCKS

GSB PROJECT NO.

191650

DRAWING TITLE POWER PLAN - FLEET MAINTENANCE

08/28/2020

DRAWING NO.

E3-01

REVISION 8



Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #004: CE #004 - Revision 8						
то:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008			
PCO NUMBER/REVISION:	004 / 0	CONTRACT:	1 - North Base Fleet Contract Prime Contract			
REQUEST RECEIVED FROM:		CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)			
STATUS:	Pending - In Review	CREATED DATE:	8/23/2021			
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None			
FIELD CHANGE:	No					
LOCATION:		ACCOUNTING METHOD:	Amount Based			
SCHEDULE IMPACT:		PAID IN FULL:	No			
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:				
		TOTAL AMOUNT:	\$7,662.00			

POTENTIAL CHANGE ORDER TITLE: CE #004 - Revision 8

CHANGE REASON: Design Development

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

CE #004 - Revision 8

Per revision 8 relocation of sanitary and water lines for ice maker. Addition of air line drop to lift. Concrete cutting removal and replacement by others.

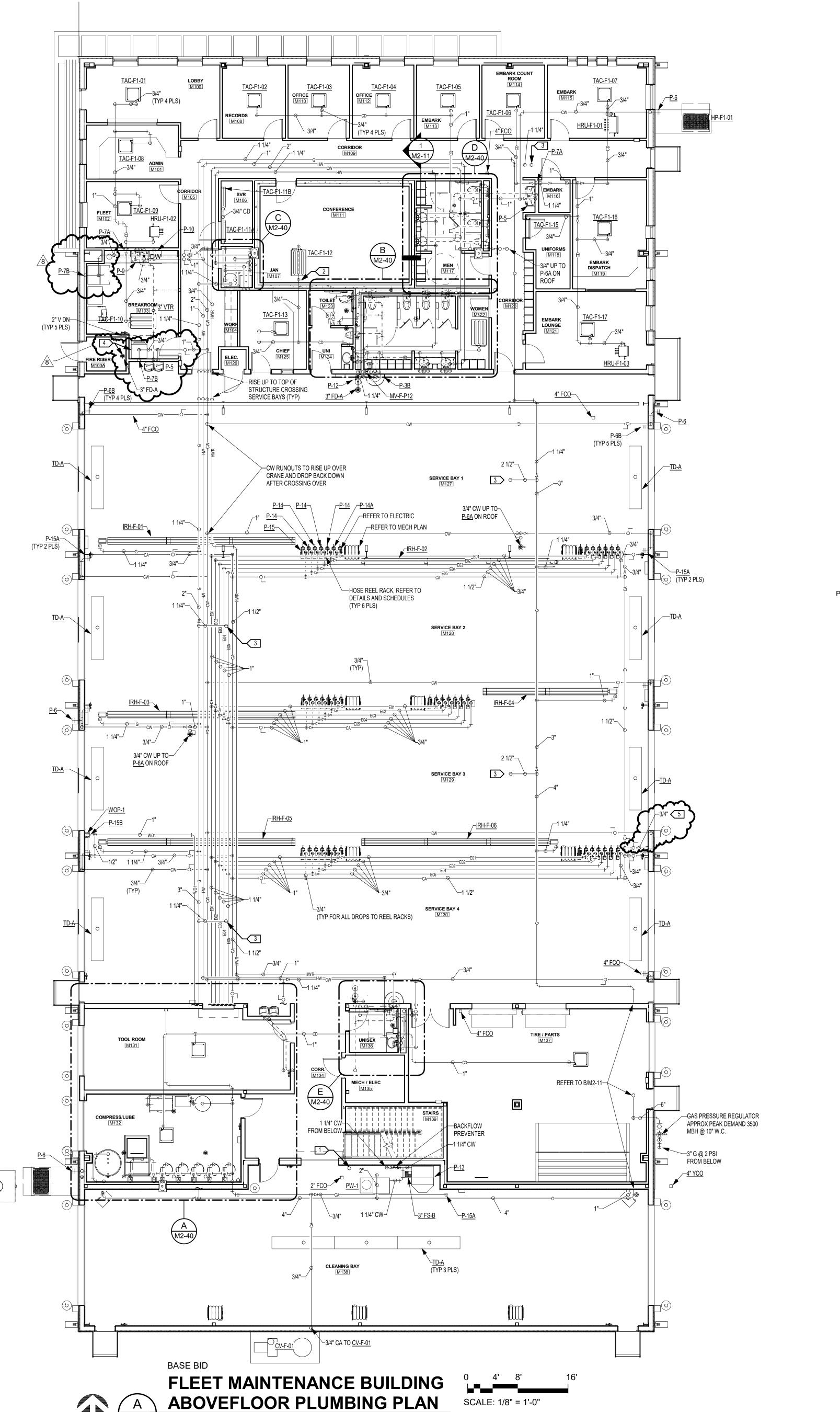
ATTACHMENTS:

Orcutt CO Form Revision 8.xlsx

NOTE: INCLUDES PROVIDE DEDICATED 3/4" COMPRESSED AIR LINE APPROX. 20'-0" TO VEHICLE LIFT CONTROLLER, INSTALLED IN ACCORDANCE WITH LIFT MANUFACTURERS RECOMMENDATIONS.

Flintco
Orcutt Mechanical Contractors
6200 NW 39th Expressway
Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE DATE



GENERAL STORM SHELTER NOTES: 1. ANY PENETRATION EXCEEDING 3 1/2" SQUARE INCHES OR 2 1/16" DIAMETER INTO OR OUT OF STORM SHELTERS SHALL BE PROVIDED WITH

2. ANY PENETRATION OF STORM SHELTER WALLS SHALL HAVE A MINIMUM 2 HR FIRE RATING MAINTAINED.

FEMA AND ICC-500 APPROVED REINFORCING. REF: STRUCTURAL.

CNG BAY NOTES:

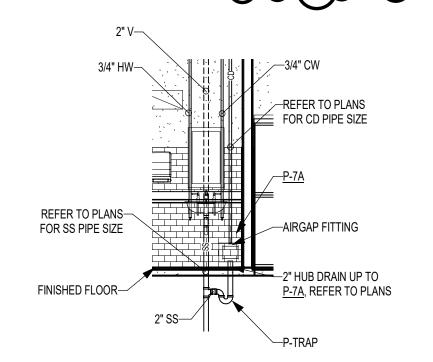
1. ALL PLUMBING FIXTURES LOCATED IN ROOMS M127, M128, M129, AND M130 SHALL HAVE ELECTRICAL ROUGH-IN MINIMUM OF 20" AFF.

KEYED NOTES: #>

- 1. 2" HUB DRAIN TO BE USED FOR PRESSURE WASHER WAND DURING PREEZE PROTECTION
- 2. PROVIDE FEMA 361/ICC-500 COMPLIANT REINFORCING FOR SAFE ROOM/TORNADO SHELTER PENETRATIONS. REFER TO STRUCTURAL.
- 3. GAS UP TO MAU'S THROUGH BASE. TYPICAL ALL ROOFTOP MAU'S. I. ROUTE ICE MAKER DRAIN TO 3" FD-A. PROVIDE IN

PROVIDE DEDICATED 3/4" COMPRESSED AIR LINE DOWN TO VEHICLE LIFT CONTROLLER, INSTALL IN ACCORDANCE WITH LIFT MANUFACTURERS RECOMMENDATIONS.

DIRECT SECURE CONNECTION.



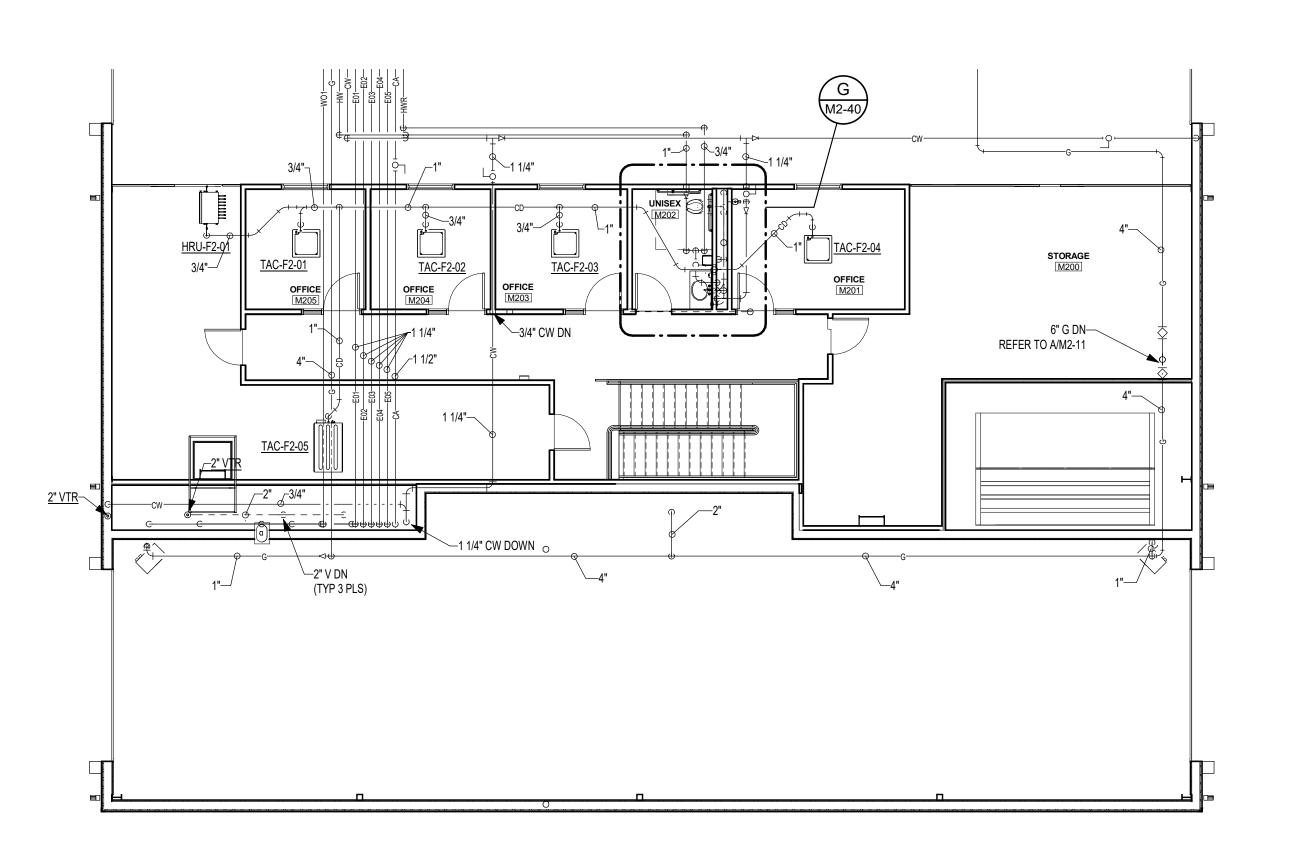


TYP CONDENSATE WASHER BOX DETAIL

GENERAL PIPING NOTES:

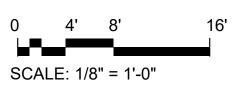
- MECHANICAL SHEETS.
- 2. NEW CONSTRUCTION: IN THE NEW ADDITION, CEILING HEIGHTS ESTABLISHED ON THE DRAWINGS ARE TO BE MAINTAINED. NEW SPRINKLER, ELECTRICAL, PLUMBING AND MECHANICAL PIPING AND EQUIPMENT SHALL BE COORDINATED WITH THE NECESSARY TRADES TO MAINTAIN CEILING HEIGHTS.
- 3. RENOVATION: IN THE EXISTING BUILDING, CEILING HEIGHTS ESTABLISHED ON THE DRAWINGS ARE TO BE MAINTAINED. NEW SPRINKLER, ELECTRICAL, PLUMBING AND/OR MECHANICAL PIPING AND EQUIPMENT SHALL BE COORDINATED TO MAINTAIN SPECIFIED CEILING HEIGHTS. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE NECESSARY TRADES TO MAINTAIN CEILING HEIGHTS. IF CONFLICTS ARISE BETWEEN THE EXISTING STRUCTURE AND NEW CONSTRUCTION, THE CONTRACTOR WILL TAKE THE NECESSARY MEASURES (IE: CORING BEAMS, REROUTING PIPING, ETC.) TO ENSURE THAT THE SPECIFIED CEILING HEIGHTS ARE MAINTAINED. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY AND ALL CONFLICTS AND SUGGESTED SOLUTIONS BEFORE THE CONTRACTOR CORRECTS THE CONFLICT.
- TYPE FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. SUBMIT LOCATIONS OF ACCESS PANELS IN CEILINGS TO ARCHITECT FOR REVIEW AND

- 8. PROVIDE EQUIPMENT CONNECTIONS WITH ISOLATION VALVES AND UNIONS OR
- 9. CONTRACTOR SHALL MAINTAIN FIRE RATING AND WEATHER PROOFING INTEGRITY
- 10. EQUIP VALVES IN INSULATED LINES WITH 2 INCH EXTENSION NECKS.
- 11. INSTALL THERMOMETER WELLS AND TEST PLUGS IN STRAIGHT HORIZONTAL OR
- 12. PROVIDE TEST PLUGS OR THERMOMETER WELLS WITH THERMOMETERS ON WATER LINES AT INLETS AND OUTLETS OF HEAT EXCHANGES OR HEAT TRANSFER DEVICES. POSITION SUCH DEVICES FOR READER CONVENIENCE, ACCESS, AND EASE OF
- 13. CONTRACTOR SHALL MAKE NECESSARY OFFSETS IN PIPING WHERE REQUIRED TO AVOID CONSTRUCTION, DUCTS, OR REQUIRED TO PRESENT A NEAT APPEARANCE, OR NECESSARY TO ALLOW FOR EXPANSION. ESCUTCHEONS SHALL BE INSTALLED ON EXPOSED PIPING WHERE LINES PASS THROUGH BUILDING CONSTRUCTION. PIPING SHALL BE OFFSET TO REMAIN CONCEALED IN FINISHED SPACES, UNLESS DISTINCTLY SHOWN OR OTHERWISE NOTED.
- 14. PROVIDE FLEXIBLE CONNECTIONS BETWEEN PIPING AND ROTATING EQUIPMENT.
- 15. INSTALL MANUAL AIR VENTS AT ALL HIGH POINTS IN PIPING SYSTEM TO ALLOW AUTOMATIC PURGING OF AIR FROM WATER PIPING. PROVIDE VALVE AND PIPE BLOW-OFF TUBING CONNECTION FOR DRAINAGE. VERIFY SERVICE CLEARANCE FOR HIGH POINT AIR VENTS IN HYDRONIC SERVICE. COORDINATE WITH OTHER TRADES TO ENSURE REMOVAL CLEARANCES.
- 16. DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT SHOW ALL OFFSETS, TRANSITIONS, OR ACCESSORIES REQUIRED FOR A COMPLETE SYSTEM.



FLEET MAINTENANCE BUILDING ABOVEFLOOR PLUMBING MEZZANINE PLAN





GSB PROJECT NO. 191650

DRAWING TITLE FLEET MAINTENANCE BUILDING ABOVEFLOOR PLUMBING PLAN

AUGUST 28, 2020 DRAWING NO.

ALLEN CONSULTING INCORPORATED

ACI Project No. 183.19 CA2192 Expires: 6/30/2020
110 N. Mercedes Dr., Suite 100
Norman, Ok 73069-6578
V19 Ph.(405)447-2282, Fax(405)447-2284



CITY OF NORMAN, OKLAHOMA

201 A WEST GRAY STREET

(405) 366-5406

ARCHITECT

(405) 848-9549

(405) 235-8075

www.jaokc.com

(405) 236-5858

www.wallacesc.com

NORMAN, OK 73069

(405) 928-7702

(405) 801-2528 www.haeinc.com

(918) 628-1255

www.acimep.com

www/gsb-inc.com

CIVIL ENGINEER

GSB. INC

www.NormanOK.gov

NORMAN, OKLAHOMA 73069

3555 NW 58th Street, Suite 700W

Oklahoma City, OK 73112

JOHNSON & ASSOCIATES

WALLACE ENGINEERING

M/ P/ FP ENGINEER

ALLEN CONSULTING, INC.

1306 COMMERCE DRIVE

NORMAN, OKLAHOMA 73071

LANDSCAPE ARCHITECT

5314 SOUTH YALE AVE - STE. 510 TULSA, OKLAHOMA 74135

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REVISIONS

8 8-20-2021 REVISION #8

110 NORTH MERCEDES DRIVE

ELECTRICAL ENGINEER HORNER ASSOCIATES ENGINEERS

OKLAHOMA CITY, OK73104

1 EAST SHERIDAN AVE.- STE. 200 OKLAHOMA CITY, OKLAHOMA 73104

STRUCTURAL ENGINEER

410 NORTH WALNUT ANE. - STE. 200

1. UNLESS OTHERWISE NOTED THE FOLLOWING NOTES SHALL APPLY TO ALL

- 4. PROVIDE ACCESS PANELS IN WALLS OR SUSPENDED CEILINGS OTHER THAN LAY-IN
- 5. FOR TYPICAL STEAM, WATER AND REFRIGERANT PIPING CONNECTIONS TO EQUIPMENT SEE STANDARD EQUIPMENT DETAILS.
- 6. UNLESS NOTED OTHERWISE, ALL PIPING RUN-OUTS TO VAV TERMINAL BOXES, FAN COILS, AND UNIT HEATERS SHALL BE A MINIMUM OF 3/4".
- 7. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE TO PROVIDE COUNTER FLOW BETWEEN WATER AND AIR.
- FLANGED CONNECTIONS TO ALLOW FOR REMOVAL WITHOUT A SHUT/DRAIN DOWN
- OF ALL PIPING PENETRATIONS THROUGH ROOFS, WALLS, OR FLOORS.
- VERTICAL SECTIONS OF PIPE ONLY, ALLOWING THREE DIAMETERS UPSTREAM AND DOWNSTREAM OF SUCH DEVICES.

- CONTRACTOR SHALL PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.

DSE Bidding and Estimating Form

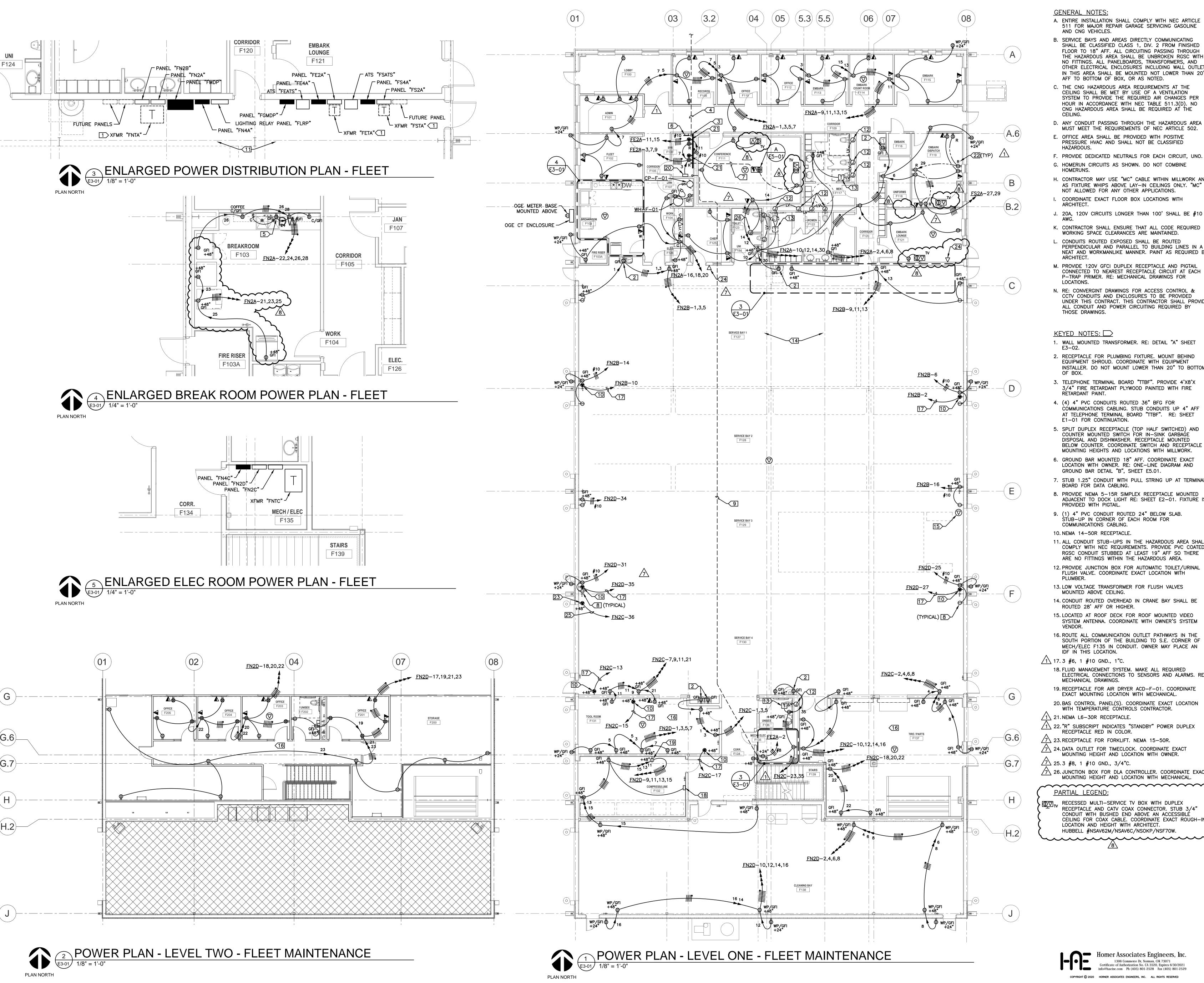
Job: north base Page # 6

Enter	E, C or W	Area	: fleet revision #8	Labor					
Item	Qty	Unit	Description	Hours	Ext	Material	Ext	Open	<u>Ext</u>
1			added total of 2 tv/power boxes	1 3.154.15		I WARREN	<u> </u>	Open	EXI
2			added 3 GFI recepts in break room	-					
3			added 3 circuits to brek room						
4			added 1 data rough in lounge						
5									
6	2	е	hubeli tv/power rough in boxes			215.00	430.00	·	
7	2	e	10' sticks of 3/4" emt for data			12.50	25.00		
8					·	12:00	20,00	····	
9	3	e	GFI's			15.00	45.00		
10	7.5	е	10' sticks of 3/4" emt for FN2A 21,23,25			12.50	93.75		
11	1	е	3/4" seal off			25.00	25.00		
12	525	e	75' x 7 of #12 thhn			0.25	131.25		
13	4	е	4sqr boxes			5.00	20.00		
14						3.00	20.00		·
15	1	e	10' stick of 3/4" emt for data rough			12.50	12.50		
16						12.00	12.301		
17	11	е	11 hours 1 man labor	1	11.00				
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NOTE: INCLUDES APROX. 20'-0" TO VEHICLE LIFT CONTROLLER, INSTALLED IN ACCORDANCE WITH LIFT MANUFACTURERS RECOMMENDATIONS.

Total

1,560



GENERAL NOTES:

- A. ENTIRE INSTALLATION SHALL COMPLY WITH NEC ARTICLE 511 FOR MAJOR REPAIR GARAGE SERVICING GASOLINE AND CNG VEHICLES.
- B. SERVICE BAYS AND AREAS DIRECTLY COMMUNICATING SHALL BE CLASSIFIED CLASS 1, DIV. 2 FROM FINISHED FLOOR TO 18" AFF. ALL CIRCUITING PASSING THROUGH THE HAZARDOUS AREA SHALL BE UNBROKEN RGSC WITH NO FITTINGS. ALL PANELBOARDS, TRANSFORMERS, AND OTHER ELECTRICAL ENCLOSURES INCLUDING WALL OUTLETS IN THIS AREA SHALL BE MOUNTED NOT LOWER THAN 20"
- AFF TO BOTTOM OF BOX, OR AS NOTED. C. THE CNG HAZARDOUS AREA REQUIREMENTS AT THE CEILING SHALL BE MET BY USE OF A VENTILATION SYSTEM TO PROVIDE THE REQUIRED AIR CHANGES PER HOUR IN ACCORDANCE WITH NEC TABLE 511.3(D). NO
- D. ANY CONDUIT PASSING THROUGH THE HAZARDOUS AREA MUST MEET THE REQUIREMENTS OF NEC ARTICLE 502.
- E. OFFICE AREA SHALL BE PROVIDED WITH POSITIVE PRESSURE HVAC AND SHALL NOT BE CLASSIFIED HAZARDOUS.
- F. PROVIDE DEDICATED NEUTRALS FOR EACH CIRCUIT, UNO. G. HOMERUN CIRCUITS AS SHOWN. DO NOT COMBINE
- H. CONTRACTOR MAY USE "MC" CABLE WITHIN MILLWORK AND AS FIXTURE WHIPS ABOVE LAY-IN CEILINGS ONLY. "MC" IS NOT ALLOWED FOR ANY OTHER APPLICATIONS. . COORDINATE EXACT FLOOR BOX LOCATIONS WITH
- J. 20A, 120V CIRCUITS LONGER THAN 100' SHALL BE #10
- K. CONTRACTOR SHALL ENSURE THAT ALL CODE REQUIRED WORKING SPACE CLEARANCES ARE MAINTAINED.
- L. CONDUITS ROUTED EXPOSED SHALL BE ROUTED PERPENDICULAR AND PARALLEL TO BUILDING LINES IN A NEAT AND WORKMANLIKE MANNER. PAINT AS REQUIRED BY
- M. PROVIDE 120V GFCI DUPLEX RECEPTACLE AND PIGTAIL CONNECTED TO NEAREST RECEPTACLE CIRCUIT AT EACH P-TRAP PRIMER. RE: MECHANICAL DRAWINGS FOR LOCATIONS.
- N. RE: CONVERGINT DRAWINGS FOR ACCESS CONTROL & CCTV CONDUITS AND ENCLOSURES TO BE PROVIDED UNDER THIS CONTRACT. THIS CONTRACTOR SHALL PROVIDE ALL CONDUIT AND POWER CIRCUITING REQUIRED BY

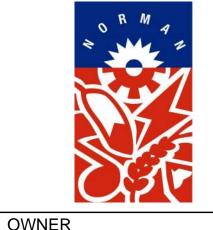
KEYED NOTES: □

- 1. WALL MOUNTED TRANSFORMER. RE: DETAIL "A" SHEET E3-02.
- 2. RECEPTACLE FOR PLUMBING FIXTURE. MOUNT BEHIND EQUIPMENT SHROUD. COORDINATE WITH EQUIPMENT INSTALLER. DO NOT MOUNT LOWER THAN 20" TO BOTTOM
- 3. TELEPHONE TERMINAL BOARD "TTBF". PROVIDE 4'X8'X 3/4" FIRE RETARDANT PLYWOOD PAINTED WITH FIRE RETARDANT PAINT.
- 4. (4) 4" PVC CONDUITS ROUTED 36" BFG FOR COMMUNICATIONS CABLING. STUB CONDUITS UP 4" AFF AT TELEPHONE TERMINAL BOARD "TTBF". RE: SHEET E1-01 FOR CONTINUATION.
- COUNTER MOUNTED SWITCH FOR IN-SINK GARBAGE DISPOSAL AND DISHWASHER. RECEPTACLE MOUNTED BELOW COUNTER. COORDINATE SWITCH AND RECEPTACLE MOUNTING HEIGHTS AND LOCATIONS WITH MILLWORK. GROUND BAR MOUNTED 18" AFF. COORDINATE EXACT
- LOCATION WITH OWNER. RE: ONE-LINE DIAGRAM AND GROUND BAR DETAIL "B", SHEET E5.01.
- 7. STUB 1.25" CONDUIT WITH PULL STRING UP AT TERMINAL BOARD FOR DATA CABLING.
- 8. PROVIDE NEMA 5-15R SIMPLEX RECEPTACLE MOUNTED ADJACENT TO DOCK LIGHT RE: SHEET E2-01. FIXTURE IS PROVIDED WITH PIGTAIL.
- 9. (1) 4" PVC CONDUIT ROUTED 24" BELOW SLAB. STUB-UP IN CORNER OF EACH ROOM FOR COMMUNICATIONS CABLING.
- 10. NEMA 14-50R RECEPTACLE.
- 11. ALL CONDUIT STUB-UPS IN THE HAZARDOUS AREA SHALL COMPLY WITH NEC REQUIREMENTS. PROVIDE PVC COATED RGSC CONDUIT STUBBED AT LEAST 19" AFF SO THERE
- ARE NO FITTINGS WITHIN THE HAZARDOUS AREA. 12. PROVIDE JUNCTION BOX FOR AUTOMATIC TOILET/URINAL FLUSH VALVE. COORDINATE EXACT LOCATION WITH
- MOUNTED ABOVE CEILING. 14. CONDUIT ROUTED OVERHEAD IN CRANE BAY SHALL BE
- ROUTED 28' AFF OR HIGHER. 15. LOCATED AT ROOF DECK FOR ROOF MOUNTED VIDEO SYSTEM ANTENNA. COORDINATE WITH OWNER'S SYSTEM
- 16. ROUTE ALL COMMUNICATION OUTLET PATHWAYS IN THE SOUTH PORTION OF THE BUILDING TO S.E. CORNER OF MECH/ELEC F135 IN CONDUIT. OWNER MAY PLACE AN
- IDF IN THIS LOCATION.

<u>/1\</u> 17. 3 #6, 1 #10 GND., 1"C.

- 18. FLUID MANAGEMENT SYSTEM. MAKE ALL REQUIRED ELECTRICAL CONNECTIONS TO SENSORS AND ALARMS. RE MECHANICAL DRAWINGS. 19. RECEPTACLE FOR AIR DRYER ACD-F-01. COORDINATE
- 20. BAS CONTROL PANEL(S). COORDINATE EXACT LOCATION WITH TEMPERATURE CONTROLS CONTRACTOR.
- 1 21.NEMA L6-30R RECEPTACLE.
- 1\ 22. "R" SUBSCRIPT INDICATES "STANDBY" POWER DUPLEX RECEPTACLE RED IN COLOR.
- 7\ 24. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT
- 25.3 #8, 1 #10 GND., 3/4°C.
- 26. JUNCTION BOX FOR DLA CONTROLLER. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH MECHANICAL.
- RECESSED MULTI-SERVICE TV BOX WITH DUPLEX RECEPTACLE AND CATY COAX CONNECTOR. STUB 3/4" CONDUIT WITH BUSHED END ABOVE AN ACCESSIBLÉ CEILING FOR COAX CABLE. COORDINATE EXACT ROUGH-IN LOCATION AND HEIGHT WITH ARCHITECT. HUBBELL #NSAV62M/NSAV6C/NSOKP/NSF70W

Homer Associates Engineers, Inc. 1306 Commerce Dr, Norman, OK 73071 Certificate of Authorization No. CA 3520, Expires 6/30/2021 HORNER ASSOCIATES ENGINEERS, INC. ALL RIGHTS RESERVED



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ARCHITECT GSB, INC 3555 NW 58th Street, Suite 700W Oklahoma City, OK 73112 (405) 848-9549

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1 EAST SHERIDAN AVE.- STE. 200 OKLAHOMA CITY, OKLAHOMA 73104 (405) 235-8075 www.jaokc.com STRUCTURAL ENGINEER

WALLACE ENGINEERING 410 NORTH WALNUT ANE. - STE. 200 OKLAHOMA CITY, OK73104 (405) 236-5858 www.wallacesc.com

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ELECTRICAL ENGINEER HORNER ASSOCIATES ENGINEERS 1306 COMMERCE DRIVE NORMAN, OKLAHOMA 73071 (405) 801-2528 www.haeinc.com

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REVISIONS

DATE DESCRIPTION 1 09/18/20 ADD. NO. 2 7 07/23/21 FORKLIFT & TIMECLOCKS 8 08/20/21 VENDING MACHINES & TV

GSB PROJECT NO.

DRAWING TITLE POWER PLAN - FLEET MAINTENANCE

08/28/2020

DRAWING NO.

E3-01



Architectural Millwork Bid



ALPHA OMEGA WOODWORKS, LLC

1912 Atchison Drive Norman, OK 73069

(405) 364-0022 (405) 360-4131 Fax

Member of Architectural Woodwork Institute (AWI.)

oh Nome: North Page Compley

Job Name: North Base Complex Norman, Oklahoma

Revision 8

Date: September 9, 2021

Addenda: 2

Plans: GSB INC

8/28/20

We submit a bid for **Custom Grade**, Millwork, to include:

Revision 8: Fleet Maintenance Building

Reduce Solid Surface Tops and Supports @ Chief M125

Increase HPL Clad Base Cabinets with Solid Surface Top, HPL Clad Upper @ Breakroom M103

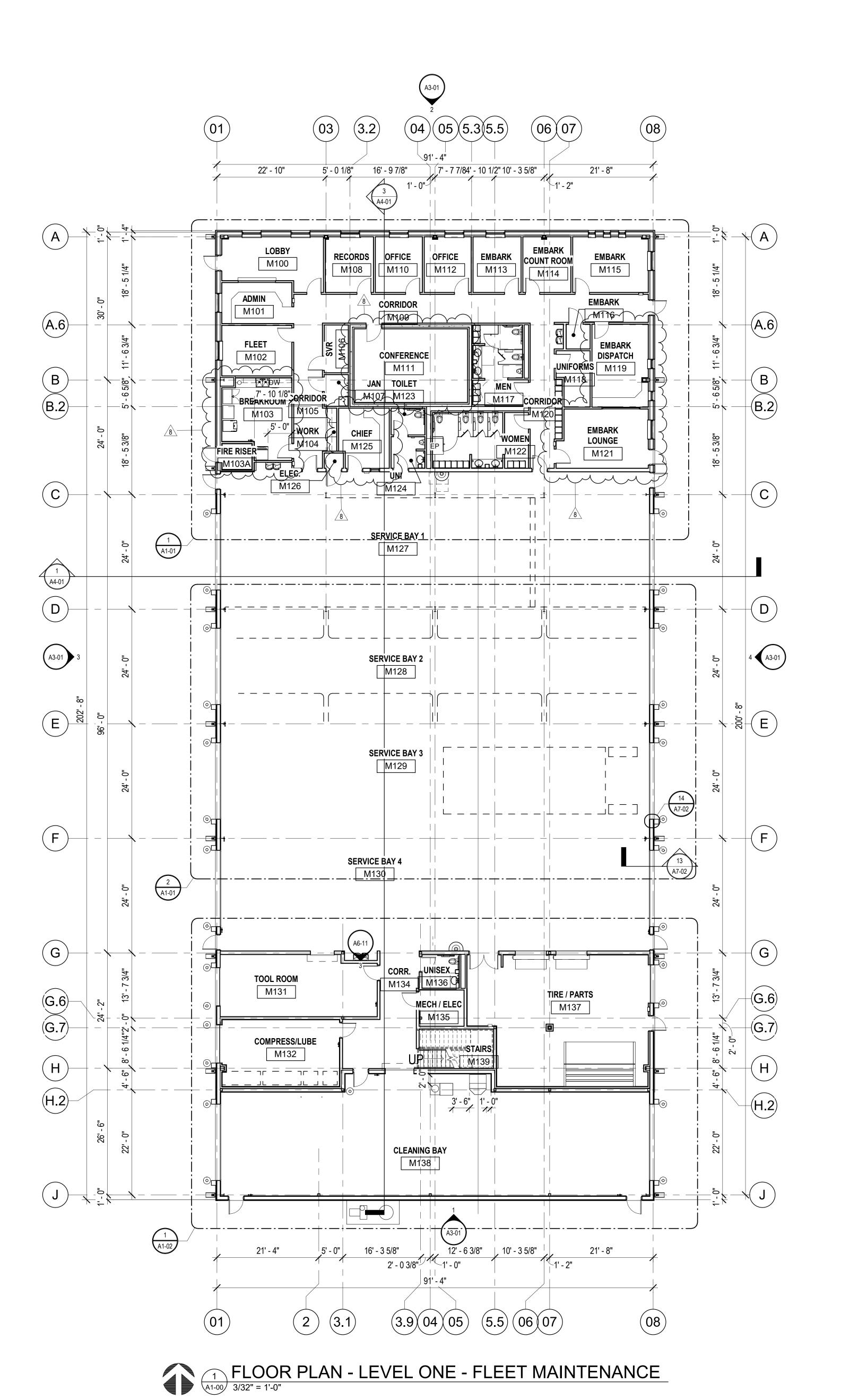
Add Solid Surface Tops and Supports @ Embark Dispatch M119

Excluded in this bid is the following:

• Any other casework or millwork or trim

Add for Revision 8, +\$ 3,810.00

Robert Trammel PJ Pinkerton



FLOOR PLAN LEGEND

ROOM NAME ← ROOM NAME ROOM REFERENCE 101● - ROOM NUMBER 101 DOOR NUMBER (A7-01) (1t) WINDOW NUMBER (A7-01) PARTITION TYPE (S#)

(A6-00)

PARTITION TYPE LEGEND **BASIC MATERIAL:** C CONCRETE M MASONRY (CMU) S STUD 7/8" FURRING CHANNEL 1 5/8" STUD 2 1/2" STUD 3 5/8" STUD 4" CONCRETE, MASONRY OR STUD 6" CONCRETE, MASONRY OR STUD 8" CONCRETE, MASONRY OR STUD APPLIED LAYERS: 1 LAYER 5/8" GYPSUM BOARD 2 LAYERS 5/8" GYPSUM BOARD 1 LAYERS 1/2" GYPSUM BOARD 2 LAYERS 1/2" GYPSUM BOARD RESERVED 1 LAYER 5/8" CEMENTITIOUS BACKER BOARD 1 LAYER 1/2" CEMENTITIOUS BACKER BOARD 1 LAYER 5/8" MOISTURE RESISTANT GYPSUM BOARD 1 LAYER 1/2" MOISTURE RESISTANT GYPSUM BOARD SHAFTWALL CONSTRUCTION **PARTITION TYPE SYMBOL** BASIC MATERIAL BASIC SIZE APPLIED LAYERS CODE-MODIFYING CONDITIONS CODE S3A.1 -1 LETTER = LAYER ON ONE SIDE 2 LETTERS = LAYER ON EACH SIDE— **MODIFYING CONDITIONS:**

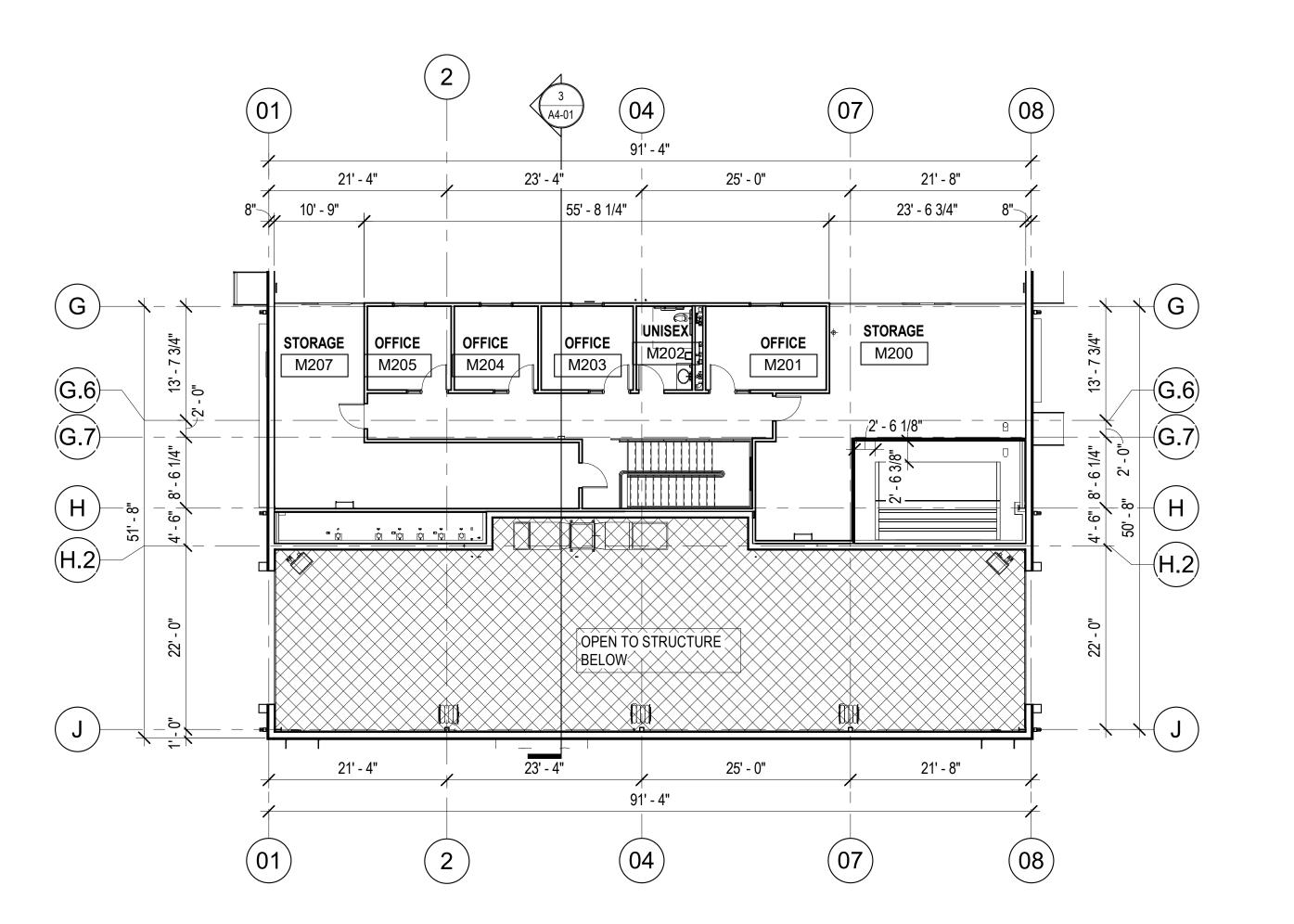
GENERAL NOTE:

- FURNITURE IS NOT IN CONTRACT. INDICATED FOR ELECTRICAL AND AV CONNECTIONS
- REFER TO A2 (ENLARGED FLOOR PLANS) FOR INTERIOR DIMENSIONS.

. 4" SOUND ATTENUATION BLANKETS IN STUD CAVITIES

2. USE 5/8" TYPE "X" GYPSUM BOARD

- PROVIDE ISIMET DLA SERIES WATER CONTROLLER FOR DRUG TESTING LAB FOR SINGLE RESTROOM USE. CONTROLLER TO BE MOUNTED TO WALL, FACING ROOM UNI #M124. CONTROLLER TO BE MOUNTED 48" AFF. PROVIDE FACTORY SOLENIOD VALVE ASSEMBLY, LOCATED ABOVE LAY-IN CEILING IN ROOM TOILET #M123.
- RECEPTACLE FOR FORKLIFT. NEMA 15-50R. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH OWNER.



FLOOR PLAN - LEVEL TWO- FLEET MAINTENANCE

3/32" = 1'-0"



OWNER CITY OF NORMAN, OKLAHOMA 201 A WEST GRAY STREET NORMAN, OKLAHOMA 73069 (405) 366-5406 www.NormanOK.gov

ARCHITECT GSB. INC 3555 NW 58th Street, Suite 700W Oklahoma City, OK 73112 (405) 848-9549 www.gsb-inc.com

CIVIL ENGINEER JOHNSON & ASSOCIATES 1 EAST SHERIDAN AVE.- STE. 200 OKLAHOMA CITY, OKLAHOMA 73104 (405) 235-8075 www.jaokc.com

STRUCTURAL ENGINEER WALLACE ENGINEERING 410 NORTH WALNUT ANE. - STE. 200 OKLAHOMA CITY, OK73104 (405) 236-5858 www.wallacesc.com M/ P/ FP ENGINEER

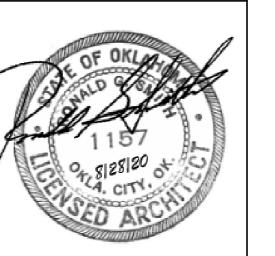
ALLEN CONSULTING, INC. 110 NORTH MERCEDES DRIVE NORMAN, OK 73069 (405) 928-7702 www.acimep.com ELECTRICAL ENGINEER HORNER ASSOCIATES ENGINEERS 1306 COMMERCE DRIVE

NORMAN, OKLAHOMA 73071 (405) 801-2528 www.haeinc.com LANDSCAPE ARCHITECT PLANNING DESIGN GROUP 5314 SOUTH YALE AVE - STE. 510 TULSA, OKLAHOMA 74135

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REVISIONS

NO. DATE DESCRIPTION 7/23/2021 FORKLIFT , TIMECLOCK, DRUG TESTING & DOOR HEIGHT

8/20/2021 Revision 8

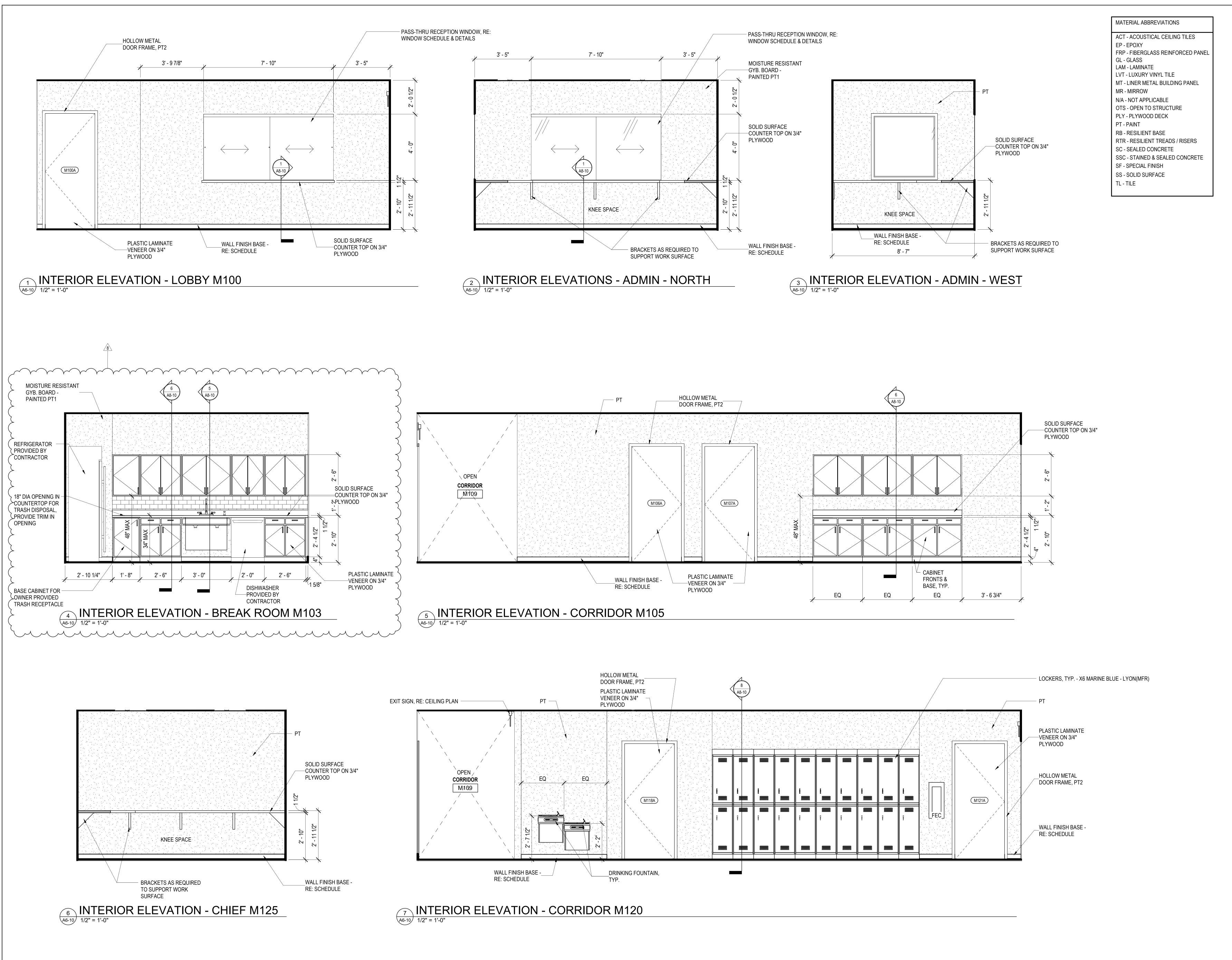
GSB PROJECT NO. 191650

DRAWING TITLE FLOOR PLAN - FLEET MAINTENANCE

8/28/2020

DRAWING NO.

A1-00



OWNER
CITY OF NORMAN, OKLAHOMA
201 A WEST GRAY STREET
NORMAN, OKLAHOMA 73069
(405) 366-5406
www.NormanOK.gov

www.NormanOK.gov

ARCHITECT
GSB, INC
3555 NW 58th Street, Suite 700W

Oklahoma City, OK 73112
(405) 848-9549
www.gsb-inc.com
CIVIL ENGINEER
JOHNSON & ASSOCIATES
1 EAST SHERIDAN AVE.- STE. 200

OKLAHOMA CITY, OKLAHOMA 73104
(405) 235-8075
www.jaokc.com
STRUCTURAL ENGINEER
WALLACE ENGINEERING
410 NORTH WALNUT ANE. - STE. 200
OKLAHOMA CITY, OK73104
(405) 236-5858

www.wallacesc.com

M/ P/ FP ENGINEER

ALLEN CONSULTING, INC.
110 NORTH MERCEDES DRIVE
NORMAN, OK 73069
(405) 928-7702
www.acimep.com

ELECTRICAL ENGINEER
HORNER ASSOCIATES ENGINEERS
1306 COMMERCE DRIVE
NORMAN, OKLAHOMA 73071
(405) 801-2528
www.haeinc.com

LANDSCAPE ARCHITECT
PLANNING DESIGN GROUP
5314 SOUTH YALE AVE - STE. 510
TULSA, OKLAHOMA 74135
(918) 628-1255
www.planningdesigngroup.com

Y OF NORMAN
ASE COMPLEX - PHASE 1
1380 DA VINCI STREET
NORMAN, OK

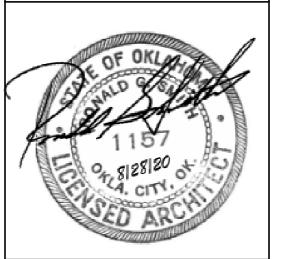
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Suite 700W
Oklahoma City, OK 73112
T: 405.848.9549
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 NO.
 DATE
 DESCRIPTION

 3
 10/21/2020
 Revision 3

 8
 8/20/2021
 Revision 8

GSB PROJECT NO. 191650

DRAWING TITLE
INTERIOR ELEVATIONS FLEET MAINTENANCE

DATE 8/28/2020

DRAWING NO.

A6-10

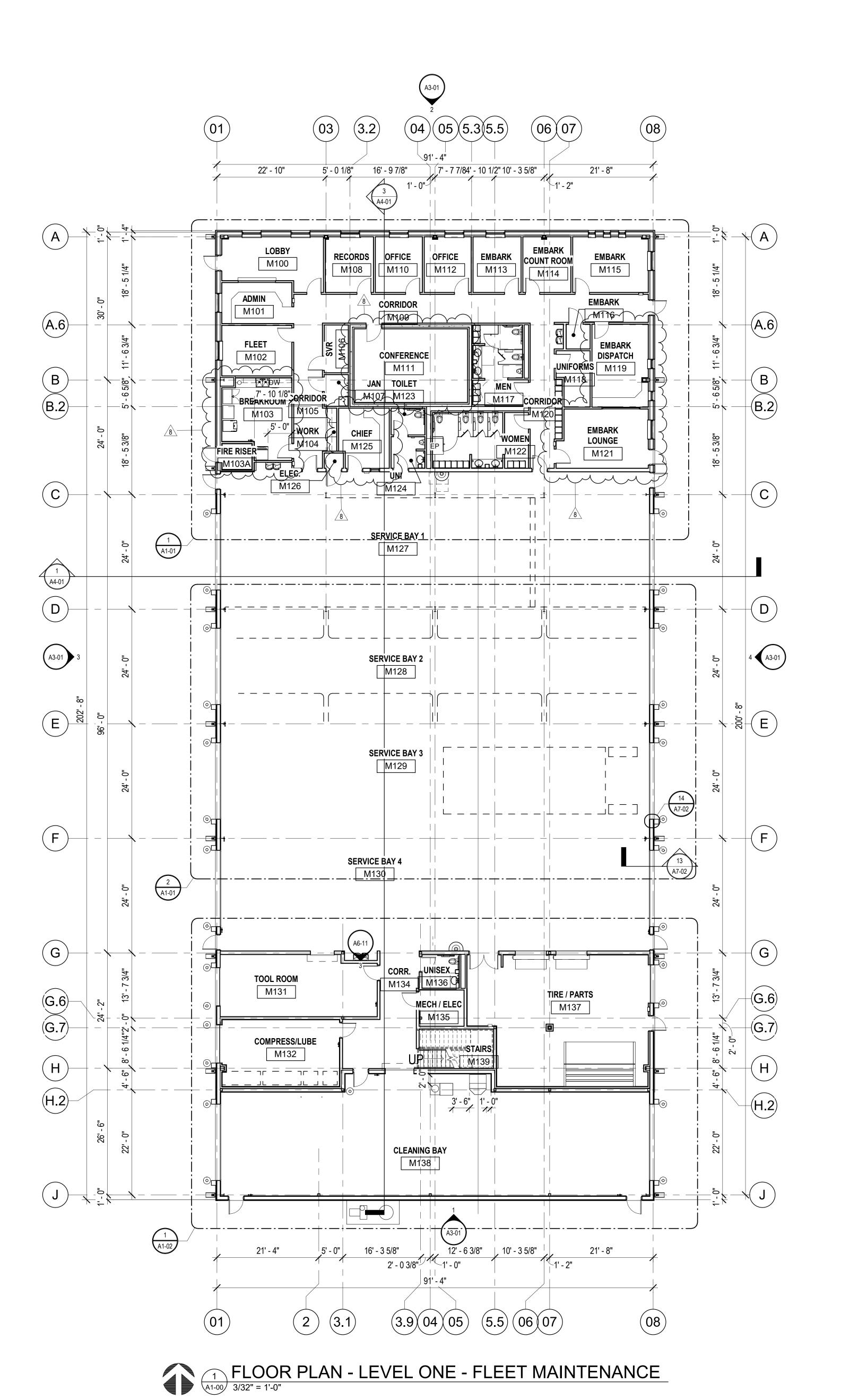


WILJO INTERIORS

109 NE 38th Street Oklahoma City, OK 73105 *Phone:* 405-792-7979

Fax: 405-792-7980 www.wiljointeriors.com

TO: Phillip Gunderson	JOB: City of Norman- North Base Complex	
Flintco		
DATE : 09/07/21	PLAN DATE:	
ADDENDUMS: RFI #33	VOID PRICE AFTER: 30 Days	
SCOPE:		AMOUNT
SCOPE.		AIVIOUNT
08/30/21 - Removed a column to meet a requested dimensi	on in room M103.	\$583
EXCLUSIONS:		
Overtime or nightwork; MEP; sealing of MEP penetrations; f	·	
of doors or door hardware; provide door frames; provide or frames or window frames; provide or install of RR accessories	•	
mullion caps; glazing; tape & bed; paint; EIFS or stucco; text	- ·	
blown-in insulation; engineering; any work not mentioned in	• • • • • • • • • • • • • • • • • • • •	
	TOTAL:	\$583
Respectfully Submitted,		
Frank Snolis		
WILJO INTERIORS, INC.		



FLOOR PLAN LEGEND

ROOM NAME ← ROOM NAME ROOM REFERENCE 101● - ROOM NUMBER 101 DOOR NUMBER (A7-01) (1t) WINDOW NUMBER (A7-01) PARTITION TYPE (S#)

(A6-00)

PARTITION TYPE LEGEND **BASIC MATERIAL:** C CONCRETE M MASONRY (CMU) S STUD 7/8" FURRING CHANNEL 1 5/8" STUD 2 1/2" STUD 3 5/8" STUD 4" CONCRETE, MASONRY OR STUD 6" CONCRETE, MASONRY OR STUD 8" CONCRETE, MASONRY OR STUD APPLIED LAYERS: 1 LAYER 5/8" GYPSUM BOARD 2 LAYERS 5/8" GYPSUM BOARD 1 LAYERS 1/2" GYPSUM BOARD 2 LAYERS 1/2" GYPSUM BOARD RESERVED 1 LAYER 5/8" CEMENTITIOUS BACKER BOARD 1 LAYER 1/2" CEMENTITIOUS BACKER BOARD 1 LAYER 5/8" MOISTURE RESISTANT GYPSUM BOARD 1 LAYER 1/2" MOISTURE RESISTANT GYPSUM BOARD SHAFTWALL CONSTRUCTION **PARTITION TYPE SYMBOL** BASIC MATERIAL BASIC SIZE APPLIED LAYERS CODE-MODIFYING CONDITIONS CODE S3A.1 -1 LETTER = LAYER ON ONE SIDE 2 LETTERS = LAYER ON EACH SIDE— **MODIFYING CONDITIONS:**

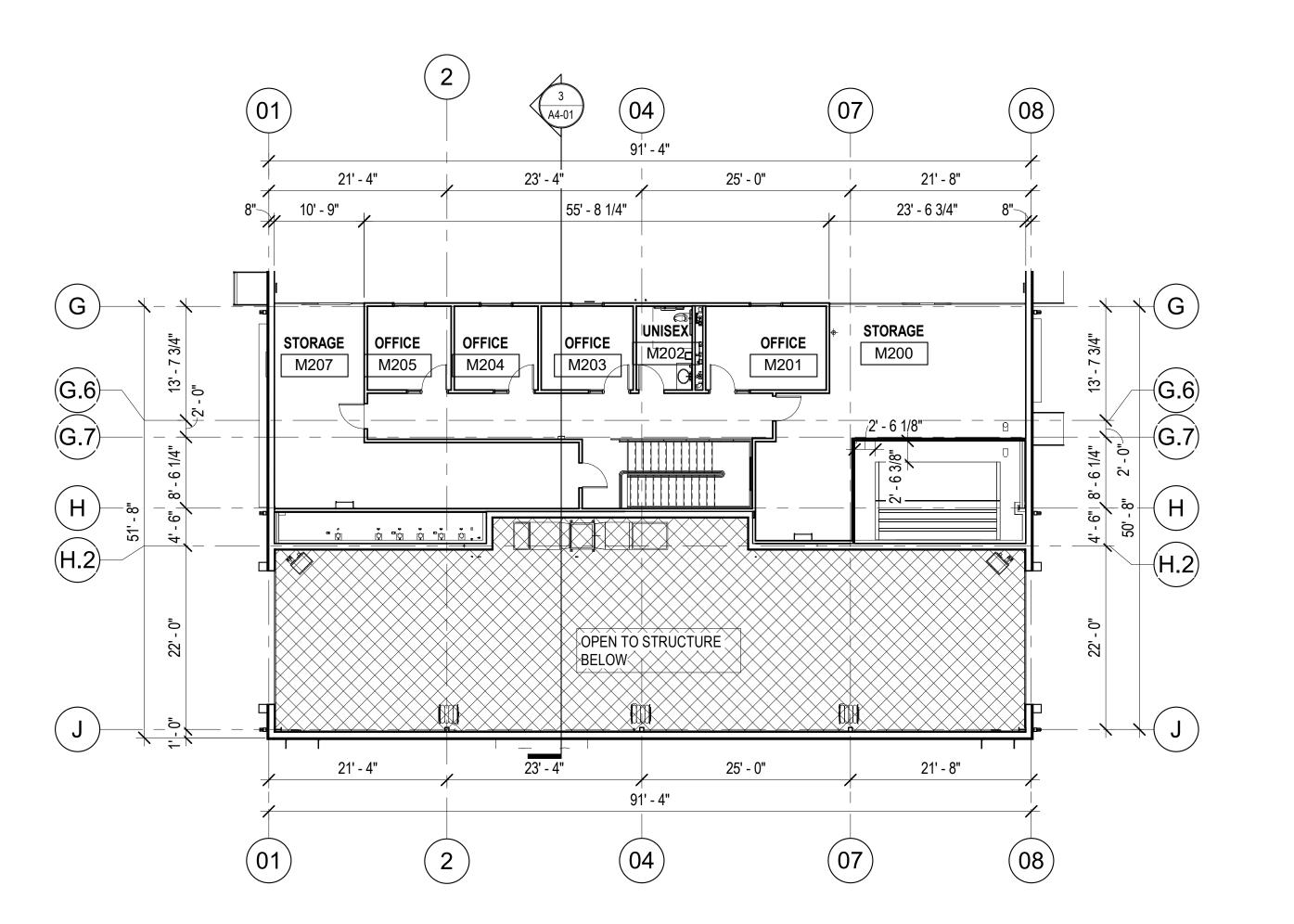
GENERAL NOTE:

- FURNITURE IS NOT IN CONTRACT. INDICATED FOR ELECTRICAL AND AV CONNECTIONS
- REFER TO A2 (ENLARGED FLOOR PLANS) FOR INTERIOR DIMENSIONS.

. 4" SOUND ATTENUATION BLANKETS IN STUD CAVITIES

2. USE 5/8" TYPE "X" GYPSUM BOARD

- PROVIDE ISIMET DLA SERIES WATER CONTROLLER FOR DRUG TESTING LAB FOR SINGLE RESTROOM USE. CONTROLLER TO BE MOUNTED TO WALL, FACING ROOM UNI #M124. CONTROLLER TO BE MOUNTED 48" AFF. PROVIDE FACTORY SOLENIOD VALVE ASSEMBLY, LOCATED ABOVE LAY-IN CEILING IN ROOM TOILET #M123.
- RECEPTACLE FOR FORKLIFT. NEMA 15-50R. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH OWNER.



FLOOR PLAN - LEVEL TWO- FLEET MAINTENANCE

3/32" = 1'-0"



OWNER CITY OF NORMAN, OKLAHOMA 201 A WEST GRAY STREET NORMAN, OKLAHOMA 73069 (405) 366-5406 www.NormanOK.gov

ARCHITECT GSB. INC 3555 NW 58th Street, Suite 700W Oklahoma City, OK 73112 (405) 848-9549 www.gsb-inc.com

CIVIL ENGINEER JOHNSON & ASSOCIATES 1 EAST SHERIDAN AVE.- STE. 200 OKLAHOMA CITY, OKLAHOMA 73104 (405) 235-8075 www.jaokc.com

STRUCTURAL ENGINEER WALLACE ENGINEERING 410 NORTH WALNUT ANE. - STE. 200 OKLAHOMA CITY, OK73104 (405) 236-5858 www.wallacesc.com M/ P/ FP ENGINEER

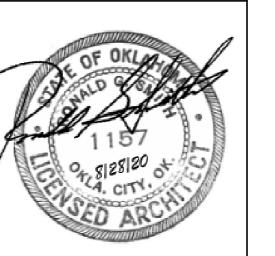
ALLEN CONSULTING, INC. 110 NORTH MERCEDES DRIVE NORMAN, OK 73069 (405) 928-7702 www.acimep.com ELECTRICAL ENGINEER HORNER ASSOCIATES ENGINEERS 1306 COMMERCE DRIVE

NORMAN, OKLAHOMA 73071 (405) 801-2528 www.haeinc.com LANDSCAPE ARCHITECT PLANNING DESIGN GROUP 5314 SOUTH YALE AVE - STE. 510 TULSA, OKLAHOMA 74135

(918) 628-1255 www.planningdesigngroup.com

STRE NORM

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REVISIONS

NO. DATE DESCRIPTION 7/23/2021 FORKLIFT , TIMECLOCK, DRUG TESTING & DOOR HEIGHT

8/20/2021 Revision 8

GSB PROJECT NO. 191650

DRAWING TITLE FLOOR PLAN - FLEET MAINTENANCE

8/28/2020

DRAWING NO.

A1-00

PROPOSED CHANGE ORDER SUMMARY

SUBCONTRACTOR WORK or

X CONSTRUCTION MANAGER SELF PERFORMED WORK

Oakridge Builders a Division of Flintco, LLC

THE CITY OF NORMAN

Project Name/#: Norman North Base - Phase 1 - Main Job

CE No: #003 CE Title: Addition

Additional Blocking for TVs & Millwork

CE Date: 9/13/2021

<u>PCOR</u>			<u>Labor</u>	<u>Material</u>	<u>Equipment</u>			ocontract
Item No	Description	Hours Costs			Type Cost		Cost	
1	Direct Labor (Add Blocking)	14 (@\$45hr)	\$ 630.00)			\$	630.00
2	Direct Materials (Blocking)			\$ 350.00			\$	350.00
3	Expendable Small Tools				Expendable Tools	\$ 50.00	\$	50.00
						1		
				+		+		
				+		+		
Subtotals			\$ 630.00	\$ 350.00		\$ 50.00	\$	1,030.0
	urden (@ 58%)		\$ 365.40		•			
	,							
Total Ra	aw Costs		\$ 1,395.40)				
Overhead *		\$ 104.66	T					
Profit *		\$ 104.66	Total Raw Costs (by contract)					
			T.					
Subcontractor's Insurance (applies to subcontractor work only)		\$ - \$ -		an amount here if CM S				
Subcontractor's Bonds (applies to subcontractor work only)		-	← do not include	an amount here if CM S	eit Performed Work			
				If Subcontractor	work, enter total in Secti	on 1		
atal far O	ubaantraatar ar CM Calf Df	mad Mark	6 4 004 74	of CM Proposed Change Order Summary form.				
Total for <u>Subcontractor</u> or <u>CM Self-Performed</u> Work		\$ 1,604.71	If CM Self-Performed work, enter total in Section 3 of CM Proposed Change Order Summary Form.					
				or Civi Froposei	a Oriange Order Sullilla	ry i Ollii.		

REVISION 9



P O BOX 14668 OKLAHOMA CITY, OK 73113 OFFICE (405) 478-8833 FAX (405) 478-0901

September 13th, 2021

Flintco

Attn: Phillip

Email: phillip.gunderson@flintco.com

Re: City of Norman- North base complex- Revision #9

Norman, OK

We propose and agree to furnish all labor, material, equipment, and insurance necessary to complete subject work as follows:

- 1. Sawcut and remove curb, gutter, and paving.
- 2. All materials will be hauled off site and disposed of, proposal includes all disposal fees.

This work will be completed for the sum of \$1,140.00 (One Thousand One Hundred Forty Dollars).

If you have any questions regar	eding this proposal, please contact me at (405) 478-8833.
Respectfully,	Date:
Bryan Gann	Accepted:
Project Estimator	



Jason Lohaus - Estimator turningpoint.lohaus@gmail.com

Cell: 405-255-3395 Office: 405-579-7663 Fax: 405-579-1693

Federal ID: 71-0913108

PO Box 1805 | Blanchard OK 73010

September 10, 2021

RE: Norman North Base Complex

REVISION 9 CHANGES:

- Add 4" thick sidewalk paving to accommodate bike rack per revised SH C4.0
- Add 7" NR PC Paving per added SH C4.4 and detail C5.0
- Add 32" Curb and Gutter adjacent to new PC paving per added SH C4.4

ITEMIZED AS FOLLOWS:

DESCRIPTION:	QTY:	UNIT:	UNIT COST:	SUB:
4" NR PC Sidewalk on 2" Sand Bed	90.00	SF	6.00	540.00
7' NR PC Paving on 8" Agg Base	930.00	SF	8.00	7440.00
32" Curb and Gutter	110.00	LF	25.00	2750.00

TOTAL: \$10,730.00

Exclusions: Construction Staking, Testing, Site Grading exceeding +/- a 10th,
Erosion Control, Backfill, Location-Relocation or Repair of Utilities,
Utility Lay Out, Sleeves, Storm Water Collection Devices/Work, Demo,
Offsite Washout, Bollard Material, Bike Rack Installation
P&P/Maintenance Bonds, Tax, Dirt work, Landscaping, Etc.

DSE Bidding and Estimating Form

Job: North Base Page # 14

Area: gate relocation Enter E, C or W in t hit

:nter tem	E, C or W Qty	in Unit Unit	Description	Labor					
1	2011	O I ME	added about 500' to run	Hours	<u>Ext</u>	<u>Material</u>	Ext	Open	Ext
2		<u> </u>	lagged about out, to titll						
3	50	e	40° official of 40° of 50°						
4	1500		10' sticks of 1" pvc for power			13.80	690.00		
5	24	e	500' x 3 of thhn #8 wire			0.65	975.00		
_	***************************************	е	2 men 24 hours labor	2	48.00				
6	3	e	quzite j-boxes (due to length of run)			105.00	315.00		
7									
8	50	e	10' sticks of 1" pvc for controls			13,80	690.00		
9									
10									
11									
12			<u> </u>						
13									
14					<u></u>				
15	<u>-</u>								
6									
17						-			
8									
19									
20								· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
21									
2									
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4									
5									
6									
7					-				
8									
9									
0									
1					-	-			
2									

 Labor Hour Rate
 50
 Total Labor
 2,880

 Tax Rate
 Total Material
 3,071

 Total Page 14
 Profit
 15.00%
 Total Opening
 0

 Total 5,951



PROPOSAL/CONTRACT

American Fence 215 N. Cooley Drive Oklahoma City, OK 73127 405-685-4800

americanfenceok.com estimating@americanfenceok.com

DATE: 09/01/2021	
JOB LOCATION:	
North Base Complex	
Revision 9	
Norman, OK	

NOTES:

PO#:

Flintco

CUSTOMER:

Oklahoma City OK

Install approx. 275LF of 8' tall chainlink fence plus 3 strands of barbed wire

TERMS & CONDITIONS

American Fence agrees to guarantee above fence to be free from defects in materials and workmanship for one year.

American Fence shall advise the customer as to local zoning regulations but responsibility for complying with said regulation is the customers. American Fence will assist the customer, upon request, in determining where the fence is to be erected, but under no circumstance does American Fence assume any responsibility concerning property lines or in any way guarantee their accuracy. If property pins cannot be located it is recommended that the customer have the property surveyed.

American Fence will assume the responsibility for having underground public utilities located and marked. However, American Fence assumes no responsibility for unmarked sprinkler lines, or any other unmarked buried lines or objects. The customer will assume all liability for any damage caused by directing American Fence to dig in the immediate vicinity of known utilities.

The final billing will be based on the actual footage of fencing built and the work performed. Partial billing may be sent at weekly intervals. Additional charges for any extra work not covered in this contract that was requested by the customer will also be added. The full amount of this contract along with any additional charges will become payable upon completion of all work whether or not it has been invoiced.

A finance charge of 1 1/2% per month (or a minimum of \$1.00), which is an annual percentage rate of 18%, shall be applied to accounts that are not paid within 10 days after completion of any work invoiced. ALL CREDIT CARD PAYMENTS WILL HAVE A 3% CONVENIENCE FEE THAT

Subtotal\$ 15000.00		Approved & Accepted for Customer:	
Tax\$	0.00	. фр	
Grand Total\$ Down Payment\$	15000.00	Customer	Date
BALANCE DUE \$	15000.00	Customer	Date
		Accepted for American Fence:	
		Salesperson	 Date

PROPOSED CHANGE ORDER SUMMARY

SUBCONTRACTOR WORK or

X CONSTRUCTION MANAGER SELF PERFORMED WORK

Subcontractor	Name	(if ani	olicable):
Jubconti actor	Haine	ויו שף	Ulleable	<i>,</i> ·

Oakridge Builders a Division of Flintco, LLC

THE CITY OF NORMAN

 Project Name/#:
 Norman North Base - Phase 1

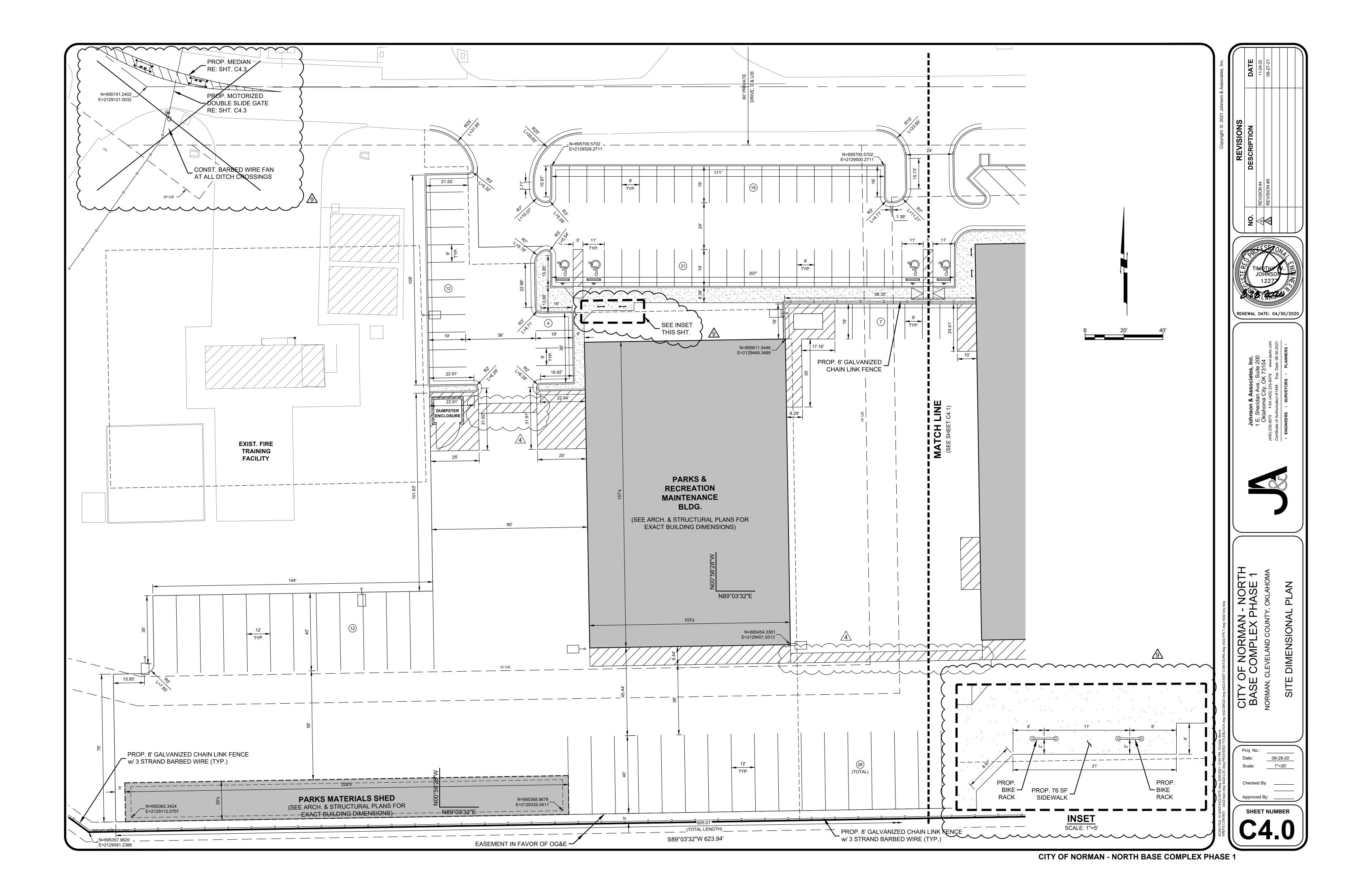
 CE No:
 #003

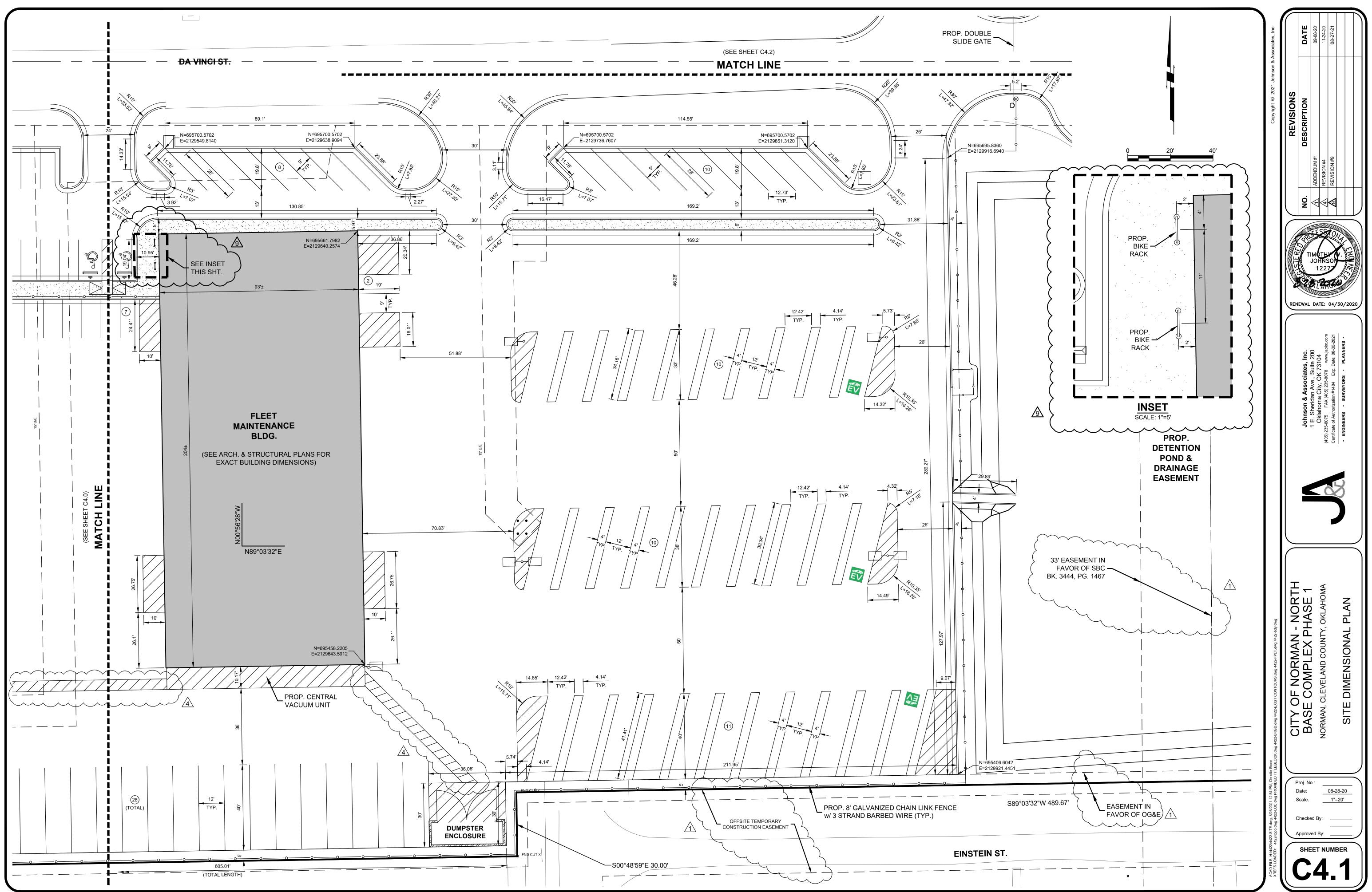
 CE No:
 #003

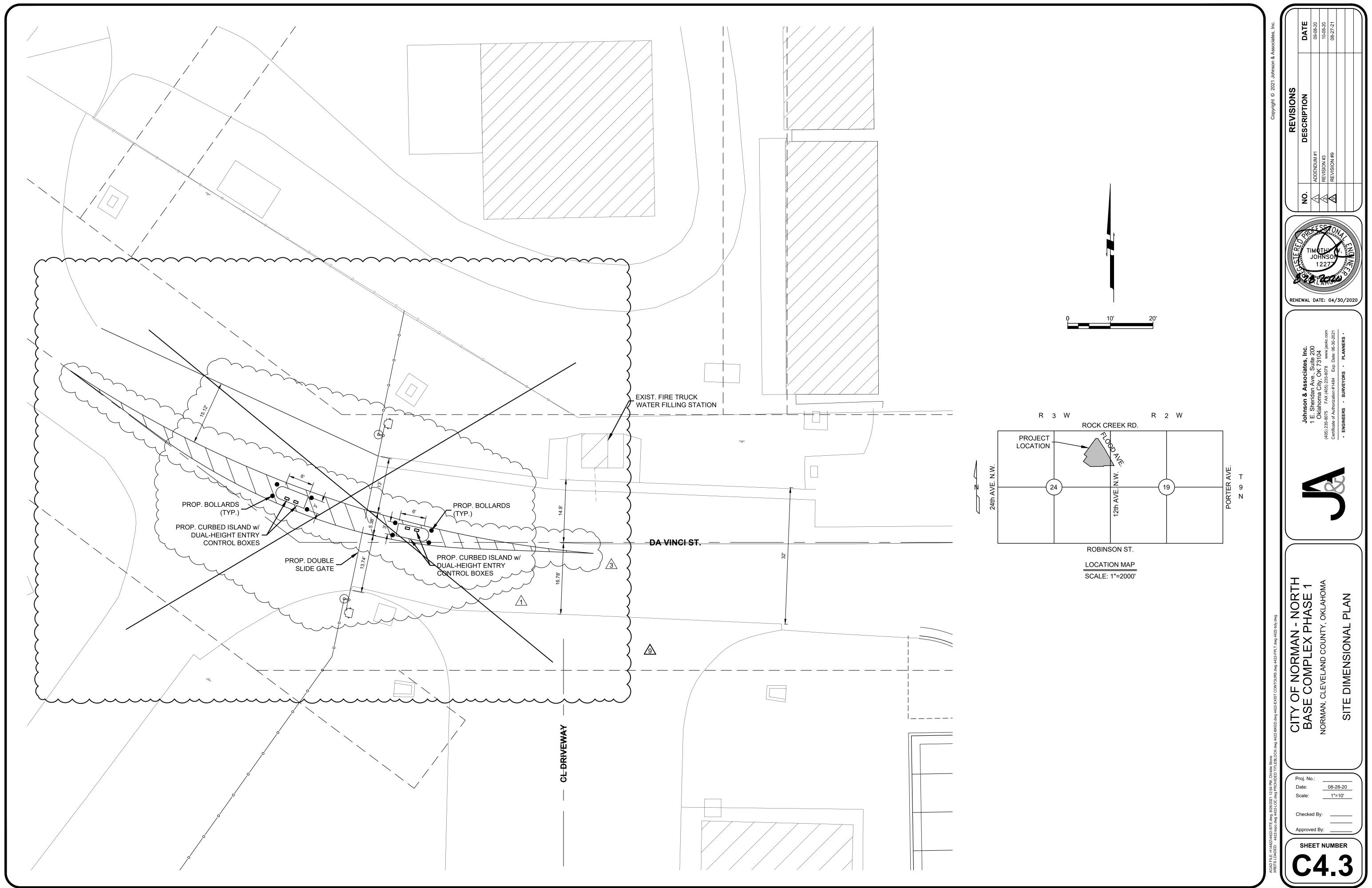
 CE Title:
 Install (4) Bike Racks

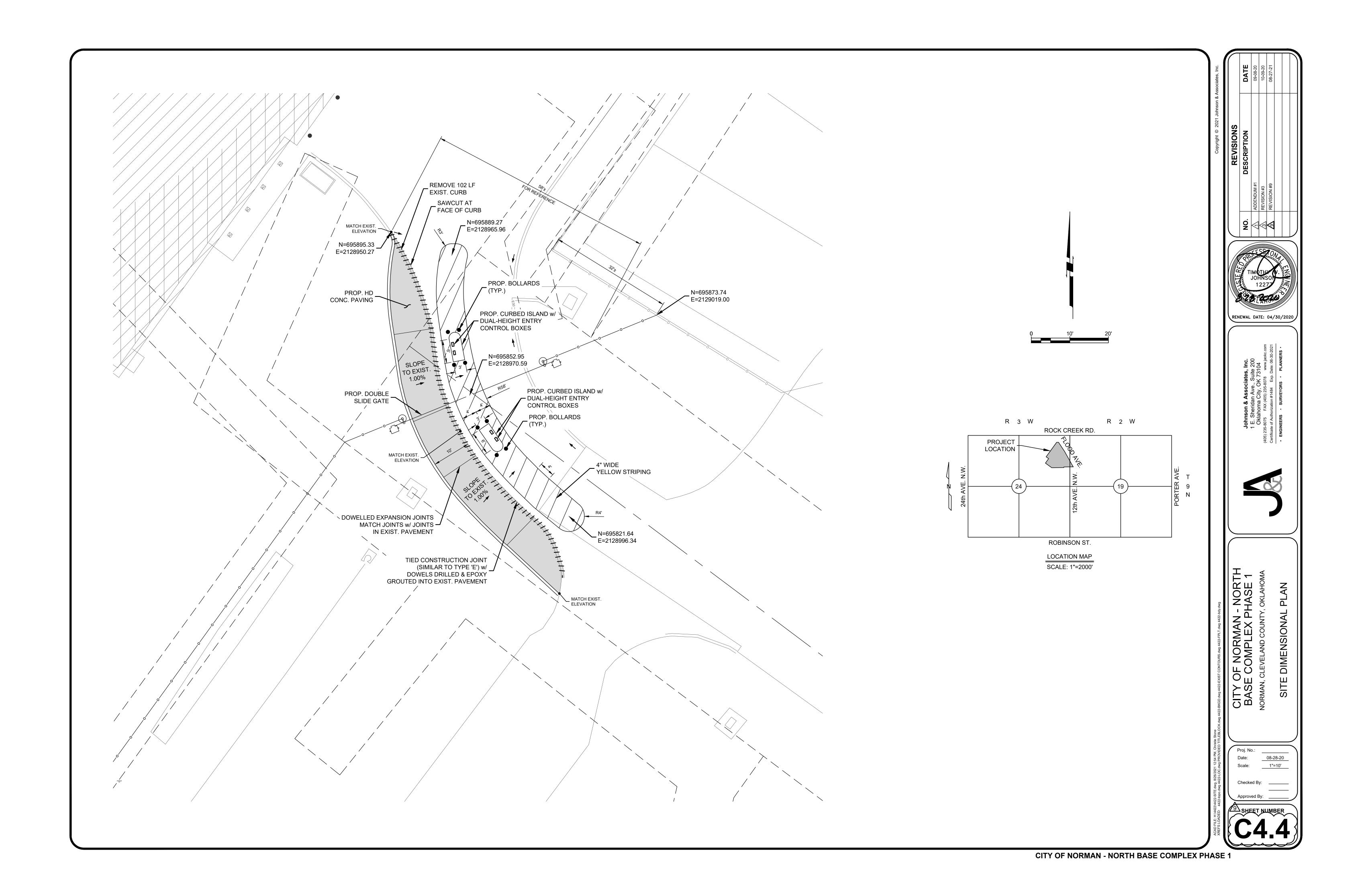
CE Date: 9/13/2021

	<u>PCOR</u>	<u>Labor</u>				<u>iterial</u>	<u>Equipment</u>			Subcontract	
Item No	Description	Hours Costs					Type	Cost		Cost	
1	Direct Labor (Install (4) Bike Racks)	16 (@\$45hr)	\$	720.00					\$	720.00	
2	Direct Materials (Bike Racks)				\$	1,000.00			\$	1,000.00	
3	Expendable Small Tools						Expendable Tools	\$ 250.00	\$	250.00	
Subtotals			\$	720.00	\$	1,000.00		\$ 250.00	\$	1,970.00	
Labor B	urden (@ 58%)		\$	417.60							
Total Ra	Total Raw Costs		\$	2,387.60							
Overhead *		\$	179.07	* Sum of Overhead + Profit limited to < 15% of							
Profit *		\$	179.07	* Sum of Overhead + Profit limited to ≤ 15% of Total Raw Costs (by contract)							
			*	110.01							
Subcontractor's Insurance (applies to subcontractor work only)			\$	-	← do not include an amount here if CM Self Performed Work						
Subcontractor's Bonds (applies to subcontractor work only)			\$	-	← do not include an amount here if CM Self Performed Work						
					14 01		and anti-statelin Conti	4			
							vork, enter total in Sectio Change Order Summar				
Total for <u>Subcontractor</u> or <u>CM Self-Performed</u> Work		\$	2,745.74	If CM Self-Performed work, enter total in Section 3							
					of CN	// Proposed	Change Order Summar	y ⊢orm.			









ADDITIONAL INTERIOR SAFETY STRIPPING - REV 3

For

North Base Complex – Phase 1
Norman, OK

REV 3 Pricing

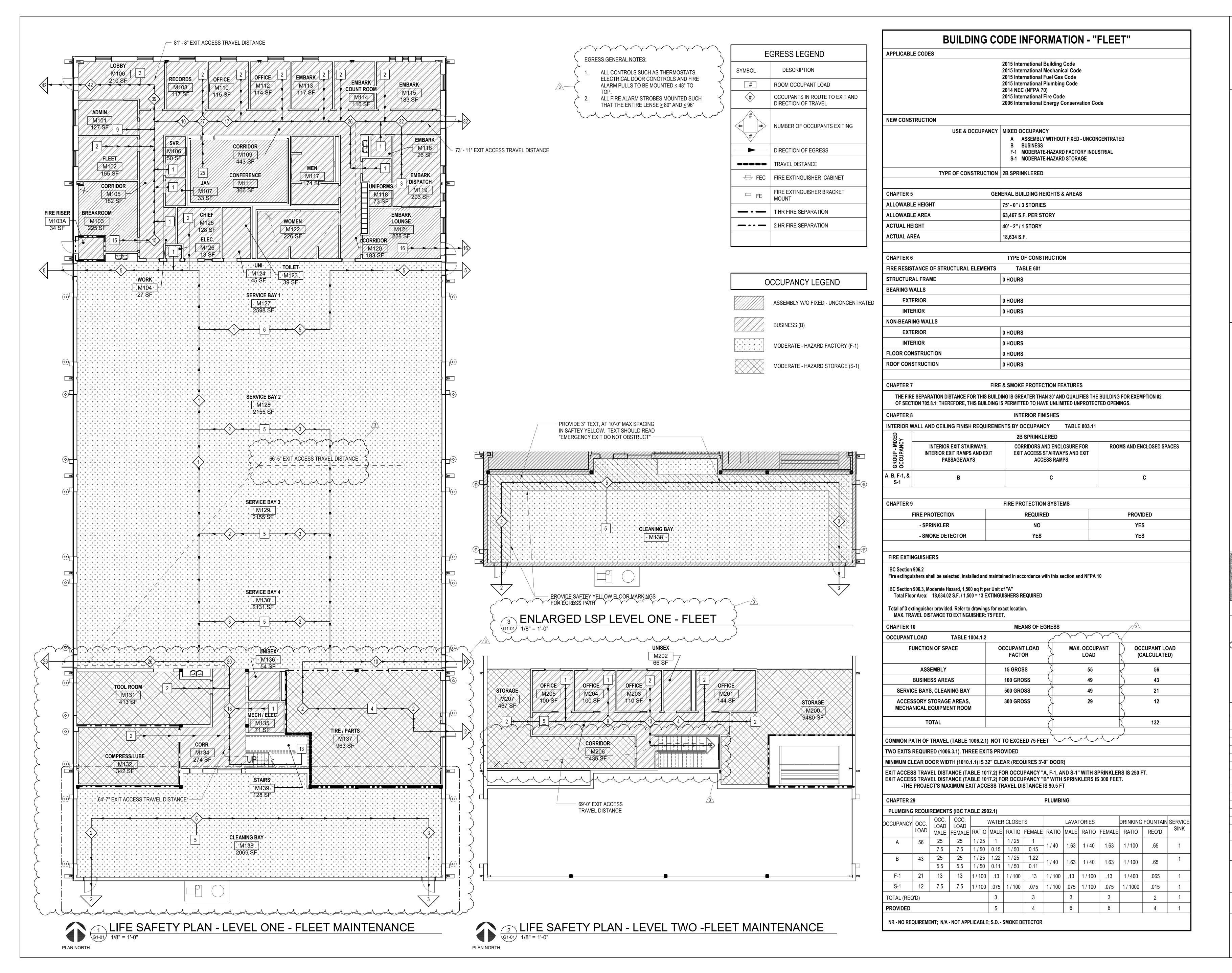


Scope of Work and Recommendations

Safety Markings

Yellow line striping/path – option to create solid yellow patch vs striping 3" lettering no more than 10 feet apart

If Striped with Lettering	\$5,720.00
If Solid Path with Lettering	\$4,760.00





OWNER CITY OF NORMAN, OKLAHOMA 201 A WEST GRAY STREET NORMAN, OKLAHOMA 73069 (405) 366-5406 www.NormanOK.gov

ARCHITECT

3555 NW 58th Street, Suite 700W Oklahoma City, OK 73112 (405) 848-9549 _www.gsb-inc.com_ CIVIL ENGINEER

JOHNSON & ASSOCIATES 1 EAST SHERIDAN AVE.- STE. 200 OKLAHOMA CITY, OKLAHOMA 73104 (405) 235-8075 www.jaokc.com STRUCTURAL ENGINEER

WALLACE ENGINEERING

OKLAHOMA CITY, OK73104 (405) 236-5858 www.wallacesc.com M/ P/ FP ENGINEER ALLEN CONSULTING, INC. 110 NORTH MERCEDES DRIVE NORMAN, OK 73069

410 NORTH WALNUT ANE. - STE. 200

(405) 928-7702 www.acimep.com ELECTRICAL ENGINEER HORNER ASSOCIATES ENGINEERS 1306 COMMERCE DRIVE NORMAN, OKLAHOMA 73071

(405) 801-2528 www.haeinc.com LANDSCAPE ARCHITECT PLANNING DESIGN GROUP 5314 SOUTH YALE AVE - STE. 510 TULSA, OKLAHOMA 74135

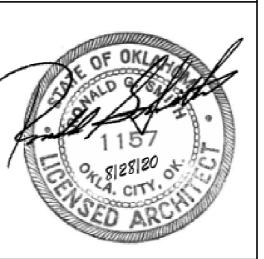
(918) 628-1255 www.planningdesigngroup.com

STRE! \leq

405.848.9783

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REVISIONS NO. DATE DESCRIPTION 10/21/2020 Revision 3

GSB PROJECT NO.

DRAWING TITLE

LIFE SAFETY PLAN - FLEET MAINTENANCE

8/28/2020

DRAWING NO.

G1-01

ADDITIONAL SECURITY & ACCESS CONTROL

DSE Bidding and Estimating Form

Job: north base

Page # 10

Area: rfi 41 fleet Enter E. C or W in Unit

Item	E, C or W Qty	Unit	Description	Labor Hours	Ext	Material	Ext	Open	Ext
1									
2	3	е	10" sticks of 1.25" emt			36.00	108.00		
3	11	е	10' sticks of 2.5" emt			77.00	847.00		
4	15	е	10' sticks of 1" emt			22.00	330.00		
5	18	е	18 hours labor 1 man	1	18.00				
6									
7									
8	1	e	deduct for pipe in drop ceiling			-1,500.00	-1500.00		
9						7,000			
10									
11									
12									
13									
14									
15									
16								_	
17									
18									
19									
20									
21							-		
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
			Totals	1	18.00		-215.00		0.0
				r Hour Rate Tax Rate	60			otal Labor	1,08

| Labor Hour Rate | 60 | Total Labor | 1,080 | | Tax Rate | Total Material | -247 | | Total Page 10 | Profit | 15.00% | Total Opening | 0 | Total | 833 | Total Opening | 1,080 | Total Opening | 0 | Total Opening | 0 | Total Opening | 0 | Total Opening | 1,080 | Total Opening | 0 | Tota



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

	Additional Security & Access Control Conduit									
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Zack Blair Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129							
DATE INITIATED:	06/04/2021	STATUS:	Open							
REFERENCE:		DUE DATE:	06/15/2021							
COST IMPACT:	Yes (Unknown)	SCHEDULE IMPACT:	No							
LINKED DRAWINGS		RECEIVED FROM:	Brandon Reed (Don Schimmel & Electric, Inc.)							

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Geoff Evans (Planning Design Group), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Sarah Hendrickson (ADG), Joseph Hill (City of Norman), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.)

Question from Zack Blair (Flintco, LLC - OKC) at 02:31 PM on 06/04/2021

Reference Electrical, Convergint Drawings, and SK-1

On May 27th, 2021, a coordination meeting was held with FLintco, City of Norman, and Convergint present, with the main topic regarding exposed raceways/cabling in the shop area. In the electrical drawings, general note "N" calls for the electrical contractor to provide all raceways shown on Convergint drawings. The raceways needed for convergint to get their cabling back to the comm room were not shown, and only the conduit required for the door access control was shown in the original Convergint drawings. After talking this through with Convergint, and Paul D'andrea, we all agreed that the access control wiring above dropped ceilings could be eliminated and Convergint's wiring could be free air with J-hooks in thos areas, eliminating the need for conduit above ceiling. The intention was to have a wash between eliminating the aforementioned conduit and adding the conduit across the shop/bay areas as shown in Convergints revised drawings, however, the revised conduit routing exceeds the original quote by approximately \$1500.

Please advise if Flintco should proceed with installing the added conduit per the revised Convergint Drawings at an additional ROM of \$1500.

Attachments:

RFI #041 - SK1.pdf

Official Response

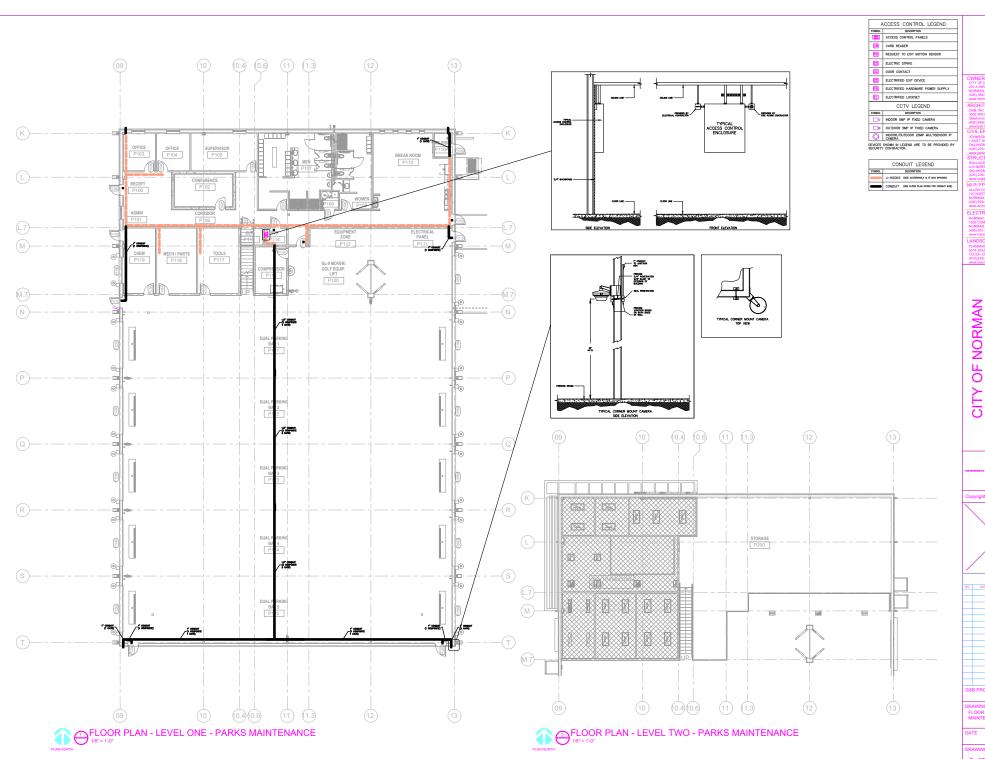
Awaiting an Official Response

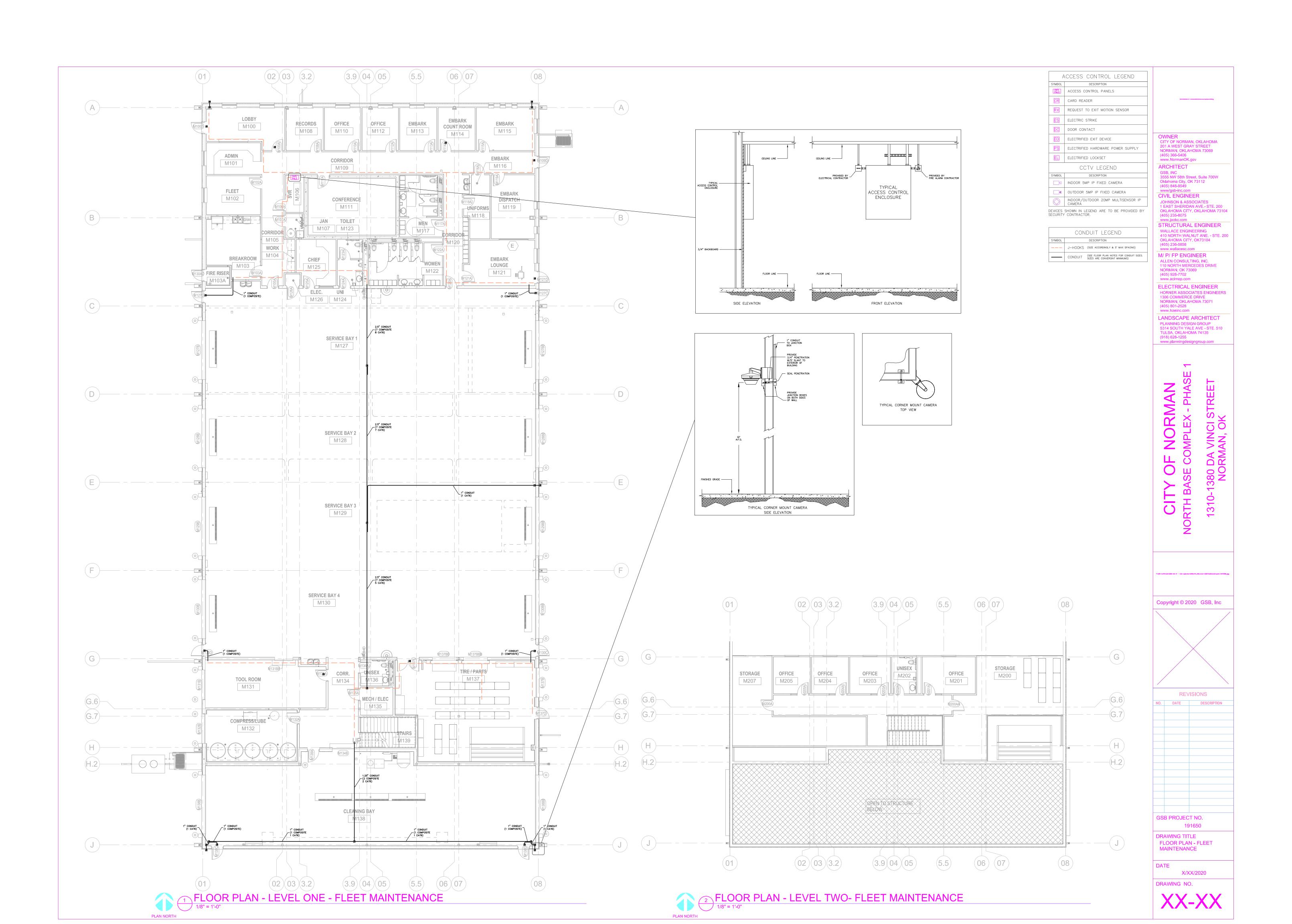
All Replies: ARCHITECT RESPONSE | JULY 20, 2021:

FLINTCO MAY PROCEED WITH THE INSTALLATION OF THE ADDED CONDUIT PER THE REVISED CONVERGINT DRAWINGS FOR THE ADD OF \$1.500.

MICHAEL SEGROVES, AIA / AICP

PROJECT ARHCITECT | GSB, INC. ARCHITECTS & PLANNERS





TILE CHANGE FROM 12x24 TO 18x35

APEX FLOORING

RYAN ELDRIDGE

17885 S Sunnylane Rd Norman, Ok 73071 Cell (405) 606-9416 ryan@apex-flooring.com

September 2, 2021

To: Cory Rackley From: Ryan Eldridge

Project Name: Norman North Base Complex

Sections Included: Ceramic Tiling

Labor and Materials are Included in the Following:

Emser Blue Emotion Dark 18x35 in lieu of specified 12x24 floor tile

Labor	\$ 1,147.00
Thinset	\$ 57.00
Leveling Clips	\$ 357.00

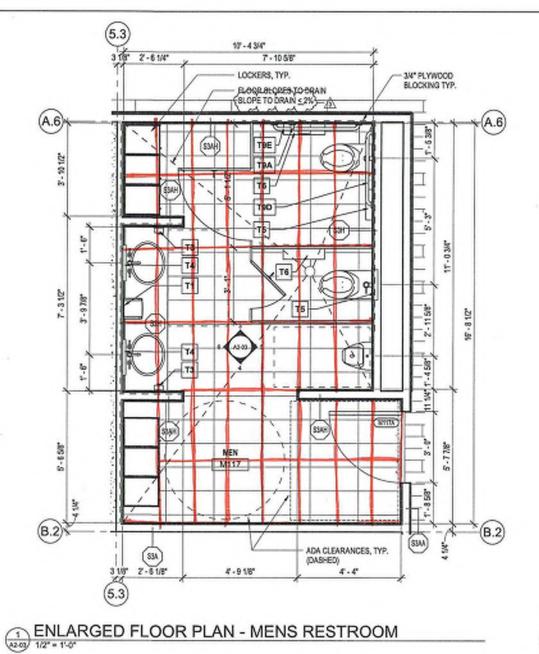
TOTAL ADD for 18x35 in lieu of specified 12x24......\$ 1,561.00

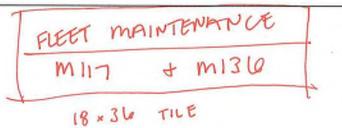
Note: 1/2 Parks, 1/2 Fleet or \$780.50 each

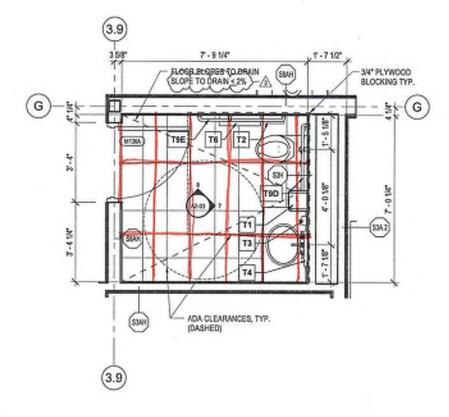
Add On: bonds add 1.5%

<u>Bid Exclusions</u>: Demo, Unforeseen Conditions, Moisture Related Subfloor Failures, cost of any/all subcontract bonds, dumpster, major floor prep, leveling or floating to transitions, furniture moving, final clean, floor protection, hoisting, overtime, mud beds, clean up or any scraping of debris from other trades, cement backer boards, epoxy/stained/sealed concrete.

Notes: This proposal includes standard floor prep(1 bag per 1000sf). Standard floor prep is defined as slab blemishes, minor cracks, and nail holes. Any additional bags will result in a change order and must be approved before any work will be performed. A moisture test will be performed on every job prior to installation to determine moisture and PH level of slab. Moisture remediation if required will be considered a change order. All epoxy grout/mortars and cement backer boards are excluded from bids including ceramic tile. All grouts and setting materials are standard unless otherwise noted above. WARRANTY: 1 year for workmanship only.







MARK	DESCRIPTION	MANUFACTURER	MODEL
T1	PAPER TOWEL DISPENSER - SURFACE MOUNTED	TORK USA	5510202
Tž	SANITARY NAPION DISPOSAL	BOBRICK	B-270
T3	SOAP DISPENSER	DEB STOKO	WRMILDS
T4	VINITY MIRROR	BOBRICK	B-290
T5	SEAT COVER DISPENSER - RECESSED	BOBRICK	8-221
T6	TOILET PAPER DISPENSER - SURFACE MOUNTED	TORK USA	5555200
T9	ACCESSIBLE GRAD BAR 12"	BOBRICK	B-6806.99
TRA	ACCESSIBLE GRAD BAR 18"	BOBRICK	B-6806.99
TSB	ACCESSIBLE GRAD BAR 24"	BOBRICK	B-6806.99
T9C	ACCESSIBLE GRAD BAR 36"	BOBRICK	B-6806.99
TSD	ACCESSIBLE GRAD BAR 42"	BOBRICK	B-6806.99
T9E	ACCESSIBLE GRAD BAR 48"	BOBRICK	B-6806.99
T18	MOP/BROOM HOLDER	BOBRICK	B-224 X 36
T19	COAT HOOK	BOBRICK	B-6707.99
T23	MOP SINK		
T24	SOAP DISH		
T25	CURTAIN ROD, SHOWER CURTAIN, CURTAIL.	BOBRICK	8-6047

PARTITION TYPE LEGE

BASIC MATERIAL: C CONCRETE

M MASONRY (CMU) S STUD

BASIC SIZE: 0 7/6" FURRING CHANNEL 1 15/6" STUD

2 1/2" STUD

3 58" STUD 4" CONCRETE, MASONRY OR STUD 6" CONCRETE, MASONRY OR STUD 8" CONCRETE, MASONRY OR STUD

APPLIED LAYERS;
A 1 LAYER 58" GYPSUM BOARD
B 2 LAYERS 58" GYPSUM BOARD

1 LAYERS 1/2" GYPSUM BOARD 2 LAYERS 1/2" GYPSUM BOARD

RESERVED

1 LAYER 5/6" CEMENTITIOUS BACKER

1 LAYER 1/2" CEMENTITIOUS BACKER

1 LAYER SIS' MOISTURE RESISTANT (1 LAYER 1/2" MOISTURE RESISTANT I

SHAFTWALL CONSTRUCTION

PARTITION TYPE SYMBOL BASIC MATERIAL BASIC SIZE APPLIED LAYERS CODE

MODIFYING CONDITION -1 LETTER = LAYER ON 2 LETTERS = LAYER OF

MODIFYING CONDITIONS:
1. 4° SOUND ATTENUATION BLANKETS IN 1

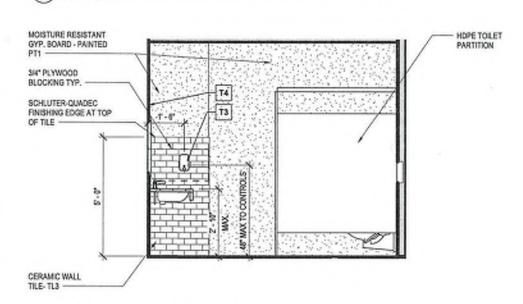
USE 5/6" TYPE "X" GYPSUM BOARD

FLOOR PLAN LEC

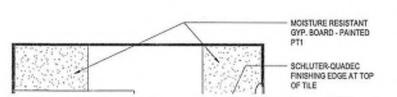
DOOR NUMBER

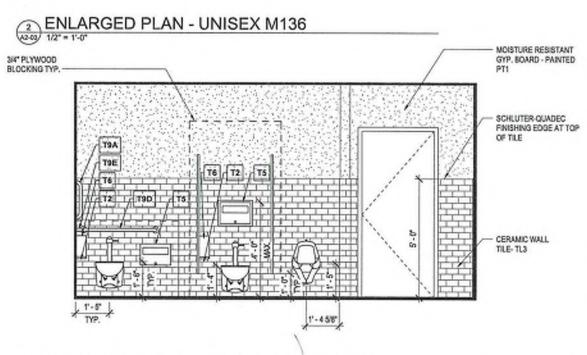
ROOM NAME ROOM REFERENCE 101-(101) (1t) WINDOW NUMBER (9) PARTITION TYPE (A6-00)



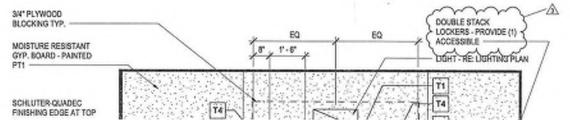


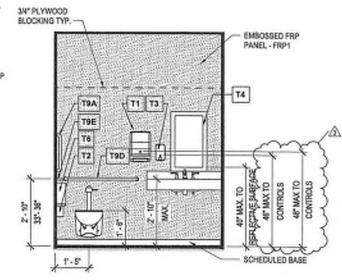


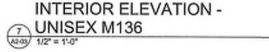




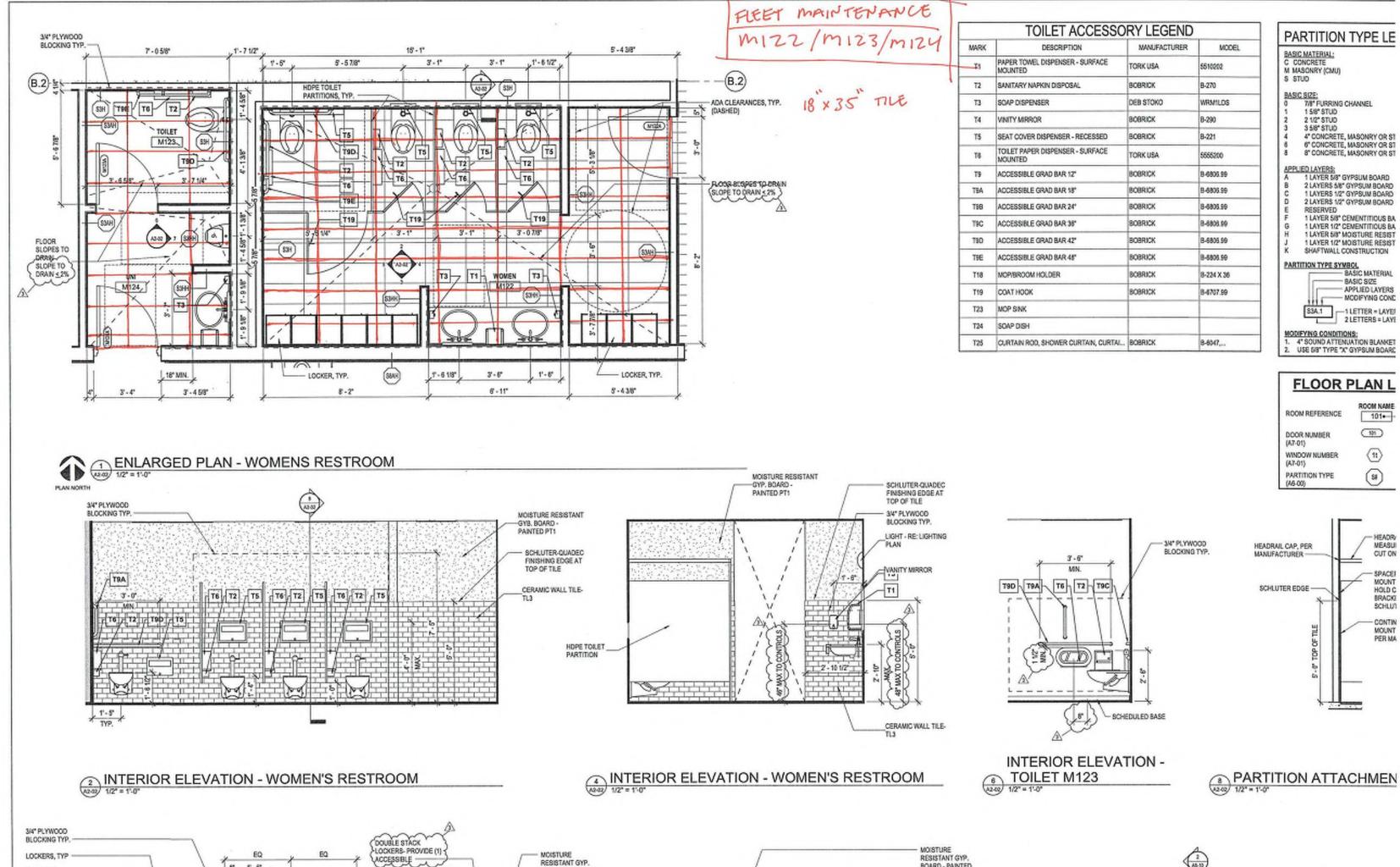












LIGHT - RE: LIGHTING PLAN

T4 T3

BOARD - PAINTED

39" PLYWOOD

8 , 1-6

T4

T3

MOISTURE

RESISTANT GYP.

BOARD - PAINTED

SCHLUTER-QUADEC

FINISHING EDGE AT

PARTITION TYPE LE BASIC MATERIAL: C CONCRETE M MASONRY (CMU) 7/8" FURRING CHANNEL 1 5/8" STUD 2 1/2" STUD 3 5/6" STUD 4" CONCRETE, MASONRY OR ST 6" CONCRETE, MASONRY OR ST 8" CONCRETE, MASONRY OR ST APPLIED LAYERS: A 1 LAYER 5/8" GYPSUM BOARD 2 LAYERS 5/6" GYPSUM BOARD 1 LAYERS 1/2" GYPSUM BOARD 2 LAYERS 1/2" GYPSUM BOARD RESERVED 1 LAYER 5/8" CEMENTITIOUS BA 1 LAYER 1/2" CEMENTITIOUS BA 1 LAYER 5/8" MOISTURE RESIST 1 LAYER 1/2" MOISTURE RESIST SHAFTWALL CONSTRUCTION PARTITION TYPE SYMBOL

BASIC MATERIAL

BASIC SIZE APPLIED LAYERS - MODIFYING COND 1 LETTER = LAYER 2 LETTERS = LAYE 83A.1

FLOOR PLAN L

101-101

(1t)

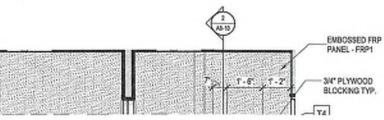
DOOR NUMBER

WINDOW NUMBER

PARTITION TYPE

(3)

MEASU SPACE MOUNT HOLD C BRACKI SCHLU1 CONTIN MOUNT PER MA

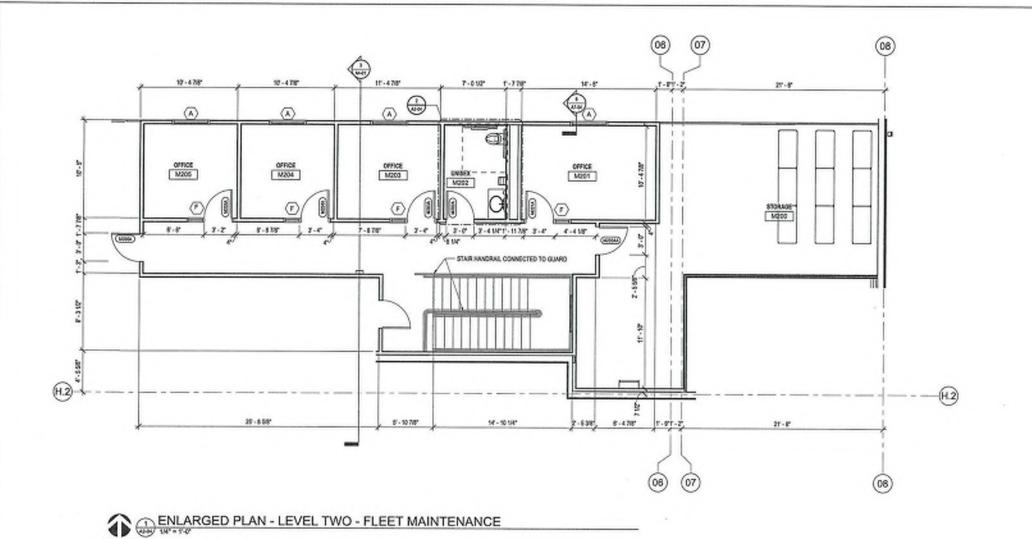


BOARD - PAINTED

SCHLUTER-QUADEC

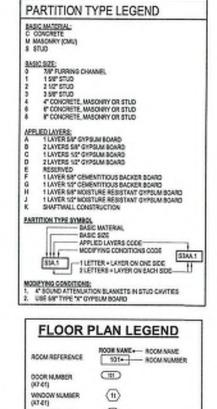
FINISHING EDGE

AT YOP OF TILE



FLEET MAINTENANCE

18 × 36 TILE

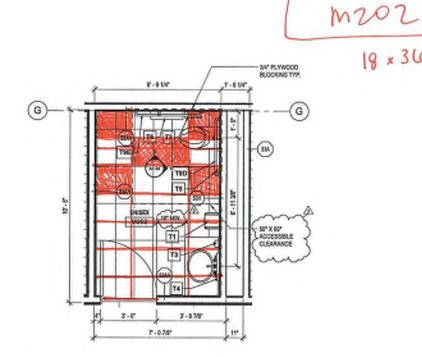


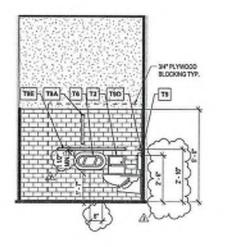
(9)

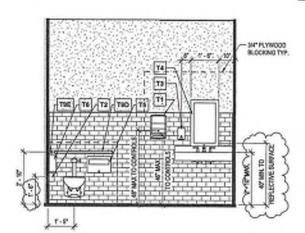
MAK	DESCRIPTION	MANUFACTURER	MODE	
TI	AVPER TOWEL DISPENSER - SURFACE MOUNTED	TORK USA	5610302	
T2	SANITARY NAPKIN DISPOSAL	BOBRICK	8-270	
73	SOAP DISPENSER	рев атоко	WRMILDS	
T4	VINITY MIRROR	BOBRICK	8-200	
TS	SEAT COVER DISPENSER - RECESSED	BOBRICK	8-221	
T6	TOLET PAPER DISPENSER - SURFACE MOUNTED	TORKUSA	5555200	
TB	ACCESSIBLE GRAD BAR 12"	BORROK	8-6806.59	
794.	ACCESSIBLE GRAD BAR 18"	BOBIECK	8-6806.99	
795	ACCESSIBLE GRAD BAR 34"	BOBRICK	8-6806.99	
TSC	ACCESSIBLE GRAD BAR 30"	909RICK	8-6806.99	
TSO	ACCESSIBLE GRAD BAR 42*	808RCX	5-6806.99	
795	ACCESSIBLE GRAD BAR 49"	908RICK	8-6806.99	
TIB	MORRROOM HOLDER	BOBRICK	8-224 X 36	
719	COATHOOK	909RICK	84707.99	
T23	MOP SINK			
TZN	SOAPOSH			
725	CURTAIN ROD, SHOWER CURTAIN, CURTAIL.	80899CX	3-63-67,	

PARTITION TYPE (NO-60)









ENLARGED PLAN - UNISEX M202

INTERIOR ELEVATION - UNISEX M202

INTERIOR ELEVATION - UNISEX M202

CONNER CETYOF NORMAN, OXLAHOMA SHI A WEST GOOT STREET NORMAN, CALAHOMA 73009 (ME 755-5400 Me 755-5400

ANCHITECT
GSS, NC
SSS 16V 500 Street, Suite 700W
Clothern City, Oct 7(112)
(NS) 510-6019
STREET, STREET,
STREET, STREET,
CIVIL ENGINEER

CIVIL ENGINEER
JOHEON A ASSOCIATE
JOHEON A ASSOCIATE
JOHEON A ASSOCIATE
JOHEON AND ASSOCIATE
JOHEON AND ASSOCIATE
JOHEON AND ASSOCIATION
STRUCTURAL ENGINEER
MALIAS ENGINEER
AND ASSOCIATION
JOHN ASSOCIATION
ELECTRICAL ENGINEER
FLORING ASSOCIATION
ELECTRICAL ENGINEER
POWER ASSOCIATION ENGINEER
JOHN ASSOCIATION
JOHN AS

ELECTRICAL ENGINEER
FORMER ASSOCIATES ENGINEERS
IDDI COMMERCE SINV
MORRORO, COLUMNORA 7,507
MORRORO, COLUMNORA 7,507
ELANDE CARDON GROCEP
FORMER ASSOCIATION ASSOCIATION
SOUTHWALE AND -510, 510
TASA, COLUMNORA NIES
(FIELDS 103)
When planninger groups com

NORTH BASE COMPLEX - PHASE 1 1310-1380 DA VINCI STREET NORMAN, OK OF NORMAN CITY

950 1000 NW 50m Street Sale 700Y Chalcone Cay DK 72182 T 405 444 9950 New Service Sale Sale New Service Sale Sale

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	REV	81018
3	10/21/2030	tescurros Ravision 3
=		
GS	B PROJEC	T NO. 1650

ENLANGED FLOOR PLAN FLEET MAINTENANCE DATE

8/28/2020 DRAWING NO.

A2-04

CHANGE TO SLIDING GLASS WINDOW BETWEEN **ROOMS M119 &** M121

Phillip Gunderson

From: Brooke Clevenger <bclevenger@tepcoglass.com>

Sent: Thursday, September 9, 2021 3:31 PM

To: Phillip Gunderson

Cc: Cory Wagoner; Kenneth Rice

FW: Norman North - Change Order Sliding Window **Subject:**

Follow Up Flag: Follow up Flag Status: Flagged

Categories: Green Category

Phillip.

The cost of this window will be \$1005.00. If approved, Ken will send something formal when he returns on Monday.

Let us know, thank you!

Brooke Clevenger TEPCOGLASS, LLC

7915 SW 34th Street | Oklahoma City, OK 73179

C (405) 613-3461

bclevenger@tepcoglass.com

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Please consider your impact on the environment before printing this e-mail

From: Brooke Clevenger

Sent: Thursday, September 9, 2021 10:33 AM

To: David Bell <dbell@tepcoglass.com>; Kenneth Rice <krice@tepcoglass.com>; Roy Williams

<rwilliams@tepcoglass.com> Subject: RE: Norman North

From: David Bell

Sent: Wednesday, September 8, 2021 12:15 PM

To: Kenneth Rice krice@tepcoglass.com; Brooke Clevenger

<bclevenger@tepcoglass.com> Subject: Fwd: Norman North

David Bell | Superintendent

TEPCOGLASS, LLC

7915 SW 34th Street | Oklahoma City, OK 73179

F (405) 227-9105 | **C** (405) 921-6477

dbell@tepcoglass.com | www.Tepcoglass.com [tepcoglass.com]

From: Phillip Gunderson < phillip.gunderson@flintco.com >

Sent: Wednesday, September 8, 2021 12:11:58 PM **To:** dbell@tepcoglass.com < dbell@tepcoglass.com >

Cc: Cory Rackley <crackley@flintco.com>; Zack Blair <zblair@flintco.com>; djames@tepcoglass.com

<<u>djames@tepcoglass.com</u>> **Subject:** RE: Norman North

EXTERNAL EMAIL - Please Handle Cautiously

Good afternoon David,

Wanted to follow up on the pricing request to change the window between rooms M119 & M121 in the Fleet building to a sliding glass window.

We need pricing ASAP (no later than 9/10).

Thank you,

From: Phillip Gunderson

Sent: Wednesday, August 25, 2021 5:43 PM

To: dbell@tepcoglass.com

Cc: Cory Rackley < <u>CRackley@flintco.com</u>>; Zack Blair < <u>zblair@flintco.com</u>>

Subject: FW: Norman North

Importance: High

David,

Wanted to make sure this was on your radar with Kenneth being out.

Can you please provide pricing and shops/details for the requested window change below.

Thank you,

From: Kenneth Rice < krice@tepcoglass.com>

Sent: Friday, August 6, 2021 4:49 PM

To: Phillip Gunderson <phillip.gunderson@flintco.com>

Cc: Zack Blair <<u>zblair@flintco.com</u>>; Cory Rackley <<u>crackley@flintco.com</u>>

Subject: Re: Norman North

Yes Sir this can easily be done.

Get Outlook for Android [aka.ms]

From: Phillip Gunderson <phillip.gunderson@flintco.com>

Sent: Friday, August 6, 2021 4:36:59 PM **To:** Kenneth Rice < krice@tepcoglass.com >

Cc: Zack Blair <zblair@flintco.com>; Cory Rackley <crackley@flintco.com>

Subject: RE: Norman North

EXTERNAL EMAIL - Please Handle Cautiously

Afternoon Kenneth,

Please see the attached RFI. They would like to change the window between rooms M119 & M121 in the Fleet building to a sliding glass window.

We have already install a hollow metal frame, but wanted to see if we could still install the sliding glass window without removing the frame.

Please review, advise and provide cost accordingly.

Thank you,

Phillip Gunderson

From: Kenneth Rice < krice@tepcoglass.com>
Sent: Monday, September 13, 2021 9:49 AM

To: Phillip Gunderson

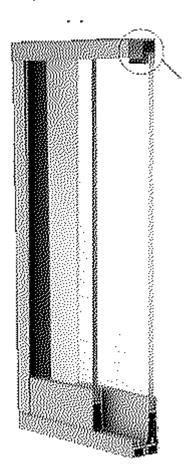
Cc: David Bell Subject: Slider

Follow Up Flag: Follow up Flag Status: Flagged

Phillip,

This is the slider that will work inside the hollow metal frame, Let me know if this is approved.

Thanks,



Kenneth Rice | Project Manager TEPCOGLASS, LLC.

7915 SW 34th Street |Oklahoma City, OK 73179 T (405) 246-9334 |**F** (405) 227-9105 |**C** (512) 585-3024 <u>krice@tepcoglass.com|</u> <u>www.Tepcoglass.com</u>



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Pass Thru Window Change							
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Ethan Treisa Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129				
DATE INITIATED:	08/06/2021	STATUS:	Open				
REFERENCE:		DUE DATE:	08/17/2021				
COST IMPACT:	TBD						
LINKED DRAWINGS: RECEIVED FROM:							

COPIES TO:

Zack Blair (Flintco, LLC - OKC), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Sarah Hendrickson (ADG), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.)

Question from Ethan Treisa (Flintco, LLC - OKC) at 02:43 PM on 08/06/2021

Per attached email correspondence with GSB, Flintco, and ADG regarding the pass thru window between Embark Dispatch M119 and Embark Lounge M121, it was requested that this window be changed from the fixed type E window to a sliding window. Please confirm this change is acceptable.

Attachments:

North Base - RFI #48 - Attachement.pdf

Official Response

Awaiting an Official Response

All Replies: ARCHITECT RESPONSE | 2021 08 06:

CONFIRMED. CHANGE FROM TYPE E FIXED WINDOW TO TYPE G, SLIDING GLASS WINDOW BETWEEN M119 & M121.

MICHAEL SEGROVES, AIA / AICP

PROJECT ARCHITECT | GSB, INC. ARCHITECTS & PLANNERS

Zack Blair Superintendent Flintco, LLC (405) 835-6369 (d) // (405) 605-9303 (c) www.flintco.com



From: Michael Segroves <msegroves@gsb-inc.com>

Sent: Thursday, August 5, 2021 1:40 PM

To: Zack Blair <<u>zblair@flintco.com</u>>; Phillip Gunderson <<u>phillip.gunderson@flintco.com</u>> **Subject:** RE: Fleet Drivers Lounge Window | 191650-City of Norman-North Base Complex (CA)

We need to change that out to a sliding window, same manufacturer as the lobby / admin window

gsb inc www.gsb-

inc.com [gsbinc.com] Michael Segroves | msegroves@gsb-inc.com

From: Zack Blair < <u>zblair@flintco.com</u>>
Sent: Thursday, August 5, 2021 1:39 PM

To: Michael Segroves < msegroves@gsb-inc.com >; Phillip Gunderson < phillip.gunderson@flintco.com >

Subject: RE: Fleet Drivers Lounge Window | 191650-City of Norman-North Base Complex (CA)

We have it as a fixed Type E window.

Zack Blair Superintendent Flintco, LLC (405) 835-6369 (d) // (405) 605-9303 (c)



From: Michael Segroves <msegroves@gsb-inc.com>

Sent: Thursday, August 5, 2021 1:24 PM

To: Phillip Gunderson <phillip.gunderson@flintco.com>

Cc: Zack Blair <zblair@flintco.com>

Subject: Fleet Drivers Lounge Window | 191650-City of Norman-North Base Complex (CA)

Phillip / Zack:

See highlight below – do you have this window down as a slider or fixed



Michael Segroves | msegroves@gsb-inc.com

www.gsbinc.com [gsbinc.com

From: Susan Perkins <sperkins@adgokc.com> Sent: Monday, August 2, 2021 6:48 PM

To: Michael Segroves <msegroves@gsb-inc.com>

Cc: Sarah Margaret Hendrickson <shendrickson@adgokc.com>; Paul D'Andrea

<Paul.Dandrea@NormanOK.gov>; Abigail Vaz <avaz@adgokc.com>

Subject: RE: CAD File | 191650-City of Norman-North Base Complex (CA)

Michael.

I wanted to reach out again about the questions below. We're working quickly on the furniture layouts, and I need to verify any built-in storage in the two spaces mentioned.

Also, today we met with the Embark Tenants. They mentioned that the window between Embark Dispatch M119 and Embark Lounge M121 was a sliding pass-through window. The model I have just shows a 7' - 8'' wide fixed window. Can you let me know if a portion of this is sliding? With the amount and types of furniture they're requesting in the lounge, I will probably need to put some furniture below the window, but I don't want to block the use of the pass-thru.

Please get back to me as soon as you can on these. Furniture lead times seem to be getting longer and longer lately. Thanks for your help!

ADDITION OF CURBS FOR ROOF HYDRANTS



Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #007: CE #008 - Curbs for Roof Hydra

TO:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008
PCO NUMBER/REVISION:	007 / 0	CONTRACT:	1 - North Base Fleet Contract Prime Contract
REQUEST RECEIVED FROM:		CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)
STATUS:	Pending - In Review	CREATED DATE:	9/13/2021
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None
FIELD CHANGE:	No		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:		PAID IN FULL:	No
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:	
		TOTAL AMOUNT:	\$3,960.00

POTENTIAL CHANGE ORDER TITLE: CE #008 - Curbs for Roof Hydra

CHANGE REASON: Client Request

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

CE #008 - Curbs for Roof Hydrants

Fabricate 6 flat roof curbs to hold the roof hydrants. We will ssist in mounting these however the persons installing the other curbs will have to cut them in we will spot the curbs. Roofer will have to seal curbs to maintain their warranty. Cost per curb \$600.00 x 6 = \$3,600.00 x 10% OHP =\$3,960.00

ATTACHMENTS:

\$1,980.00 per building (3 on each roof)

Flintco Orcutt Mechanical Contractors

6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE SIGNATURE DATE



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Roof Hydrant Mounting Detail					
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Zack Blair Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129		
DATE INITIATED:	08/18/2021	STATUS:	Open		
REFERENCE:		DUE DATE:	08/27/2021		
COST IMPACT:	Yes (Unknown)	SCHEDULE IMPACT:	TBD		
LINKED DRAWINGS:	:	RECEIVED FROM:	Matt Orcutt (Orcutt Mechanical Contractors, Inc.)		

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.), Ethan Treisa (Flintco, LLC - OKC)

Question from Zack Blair (Flintco, LLC - OKC) at 03:07 PM on 08/18/2021

Reference attached SK1 which includes the roof hydrant product data and the plumbing fixture schedule from sheet M5-02 P6A Roof Hydrant - The plumbing fixture schedule on sheet M5-02 notes for the roof hydrant to be mounted as indicated on detail, however no detail has been provided. The hydrant that is specified and submitted and approved is made for a roof with a slope less than 2 degrees, which our roof

Flintco proposes to make a curb for each hydrant (6 total). The curb would essentially be a false curb that creates a flat surface to mount the hydrant.

1) Please provide a detail if the curb option is acceptable, including finish requirements.

Attachments:

RFI #054-SK1.pdf

Official Response

Awaiting an Official Response

All Replies:

ACI Response:

Detail was left off sheet in error. Please refer to attached page.

Proposed solution is acceptable. Detail 1 is for the roof hyrdrant. Detail 2 is for the roof curb, with a hydrant as the piece of equipment to be installed on the curb.

Isaac Marrone 8-19-21

MARK	FIXTURE	MANUFACTURER	SIZE/MOUNT	ROUGH-	IN SCHED	ULE			ELECTRICAL	FITTINGS & REMARKS
		MODEL		CW	HW	WASTE	VENT	AIR	CONNECTIO	N
P-1	WATER CLOSET	KOHLER K-4325	WALL HUNG	1"	-	4"	2"	-	Y	PROVIDE PROFLO PETSCOFH2000WH HEAVY DUTY COMMERCIAL SEAT, SLOAN 111 SFSM-1.6 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-1A	WATER CLOSET ADA	KOHLER K-4325	WALL HUNG 18" HIGH	1"	-	4"	2"	-	Y	PROVIDE PROFLO PETSCOFH2000WH HEAVY DUTY COMMERCIAL SEAT, SLOAN 111 SFSM-1.6 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-2	URINAL	KOHLER K-4991-ET	WALL HUNG	3/4"	-	2"	1 1/2*	-	Y	PROVIDE SLOAN 186 SFSM-0.25 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-2A	URINAL ADA	KOHLER K-4991-ET	WALL HUNG	3/4"	-	2"	1 1/2*	-	Y	PROVIDE SLOAN 186 SFSM-0.25 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-3	LAVATORY ADA	KOHLER K-2005	WALL HUNG	1/2"	1/2"	1 1/2"	1 1/2"	-	-	KOHLER K-7404-5A FAUCET WITH BLADE HANDLES, SUPPLY STOPS, SUPPLY LINES, K-7129 GRID STRAINER W/ OFFSET P-TRAP, ACORN MODEL ST70 ASSE 1070 MIXING VALVE, FLOOR MOUNTED CARRIER, AND TRUEBRO LAV SHIELD. MOUNT AT ADA HEIGHT.
P-3A	LAVATORY ADA	KOHLER K-2196	20"x17" COUNTER	1/2*	1/2"	1 1/2"	1 1/2*	-	-	KOHLER K-7404-5A FAUCET WITH BLADE HANDLES, SUPPLY STOPS, SUPPLY LINES, K-7129 GRID STRAINER W/ OFFSET P-TRAP, ACORN MODEL ST70 ASSE 1070 MIXING VALVE, AND TRUEBRO LAV SHIELD. MOUNT AT ADA HEIGHT.
P-3B	SHOP WASHFOUNTAIN ADA	BRADLEY TDB3103	FLOOR 36" SEMI-CIRCLE	1/2*	1/2"	2"	1 1/2*	-	Y	INFRARED SENSOR ACTIVATED FAUCETS, PROVIDE 110V PLUG IN TRANSFORMER, ALL NECESSARY MOUNTING HARDWARE, ASSE 1070 THERMOSTATIC MIXING VALVE, SUPPLY STOPS, SUPPLY LINES, OFFSET TAILPIECE, & P-TRAP.
P-4B	SERVICE SINK (SQUARE)	FIAT TSB3000	FLOOR 24x24x12	3/4"	3/4"	3"	2"	-	-	T&S BRASS MODEL B-0665-BSTP FAUCET, 832-AA HOSE & BRACKET, 889-CC MOP BRACKET, MSG 2424 STAINLESS STEEL WALL GUARD. PROVIDE CHECK VALVES IN HOT AND COLD WATER LINES ABOVE CEILING PRIOR TO FAUCET.
P-5	BI-LEVEL ADA WATER COOLER / BOTTLE FILLER	ELKAY LVRCGRNTL8WSK	WALL HUNG	1/2*	-	1 1/2"	1 1/2*	-	Y	8.0 GPH @ 50 DEGREE WATER, 120V/1PH, 260 WATTS, 4.0 AMP. VANDAL RESISTANT STAINLESS STEEL CABINET, PROVIDE P-TRAP, SUPPLY STOP, & FLOOR MOUNTED IN WALL CARRIER.
P-6	FREEZE PROOF WALL HYDRANT	WOODFORD B67	WALL	3/4"	-	-	-	-	-	MOUNT AT 30" ABOVE GRADE, PROVIDE TWO TEE KEYS TO OWNER. PROVIDE ISOLATION BALL VALVE ON BRANCH LINE.
P-6A	ROOF HYDRANT	WOODFORD SRH-MS	ROOF	3/4*	-	-	-	-	-	MOUNT AS INDICATED ON DETAIL. PROVIDE ISOLATION BALL VALVE ON BRANCH LINE. PROVIDE DECK CLAMP.
P-6B	SHOP HYDRANT	WOODFORD 24	WALL	3/4"	-	-	-	-	-	MOUNT AT 30" ABOVE FLOOR.
P-7	WASHER BOX	GUY GREY	WALL RECESSED	1/2"	1/2"	2"	1 1/2"	-	-	STAINLESS STEEL BOX AND FACEPLATE - 304 S.S., 1/4 TURN BALL VALVE W/ HAMMER ARRESTORS,

The Woodford, ASSE 1057 listed, SRH Roof Hydrant is intended to provide water, in any weather condition, on roofs for window washing, cleaning of condenser coils, cooling towers, green roofs and other types of roof top equipment. The SRH is backflow protected with a field testable ASSE 1052 double check backflow preventer.

The SRH does not require a drain line from the valve body located inside the building.

The SRH-MS with Mounting System allows for installation flexibility. It is not necessary to install hydrant when hydrant support is mounted to the roof. The hydrant support utilizes a 3" diameter opening that allows the hydrant to be installed or easily removed at a later time. All necessary mounting hardware for proper installation on a commercial roof is supplied, including a 2 degree shim for pitch adjustment.

Hydrant Features:

- ASSE 1057 Listed
- No Drain Line Required With the hose removed, a venturi action draws water out of the internal reservoir and discharges out the backflow preventer.
- Superior reservoir evacuation times without removing the backflow preventer.
- Variable flow plunger for longer life is not easily damaged and assures proper shut-off.
- Large easy to open lift handle.
- Adjustable link for easy adjustment and positive lever lock tension.
- All hydrant repairs can be made from top without removing hydrant.

Specifications:

- · Hose Connection Backflow Preventer:
 - Model 50H with 3/4" hose connection
 - ASSE 1052 Listed



- Field Testable Dual Check holds against 125 psi backflow pressure
- 3/4" NPT female inlet connection.
- 1 ½" U.S. made galvanized pipe.
- Maximum Working Pressure: 100 p.s.i.
- Maximum Temperature: 120° F

SRH WARNING	Supply PSI	Run Time
After each use, run hydrant without a	60	5 seconds
hose to ensure proper evacuation.	25	15 seconds

Mounting System: (Can be ordered Separately)

- Cast iron Hydrant Support
- Cast iron Under Deck Flange
 - 4 bolts draw tight against the roof decking and the hydrant support.
 - 3 clamp screws tighten against the hydrant pipe to secure the hydrant's vertical position through the roof.
- Well Seal seals tight between the hydrant support and hydrant pipe.
- EPDM Boot covers well seal and top of hydrant support.
- 2° Shim is supplied, if needed, for installation on pitched roofs.

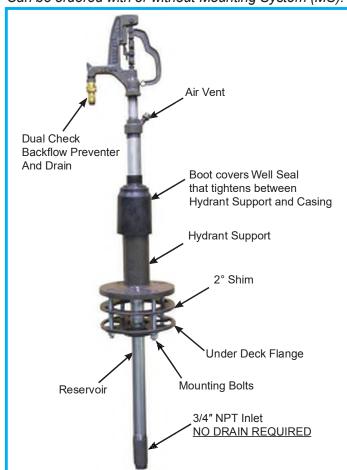
Manufactured under U.S. patent 7,472,718; 7,730,901 and patents pending.

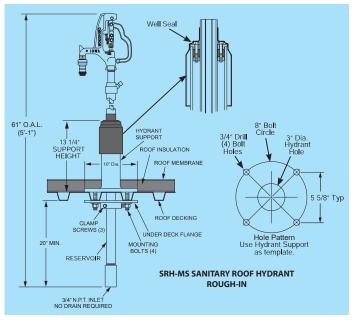
For Installation / Troubleshooting Instructions go to www.woodfordmfg.com or call 1-800-621-6032

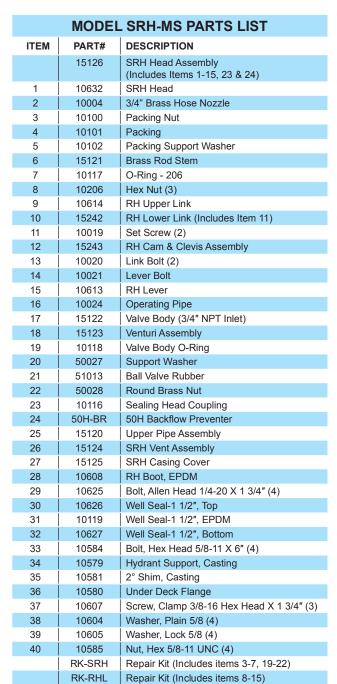
Freezeless Sanitary Roof Hydrant No Drain Line Required!

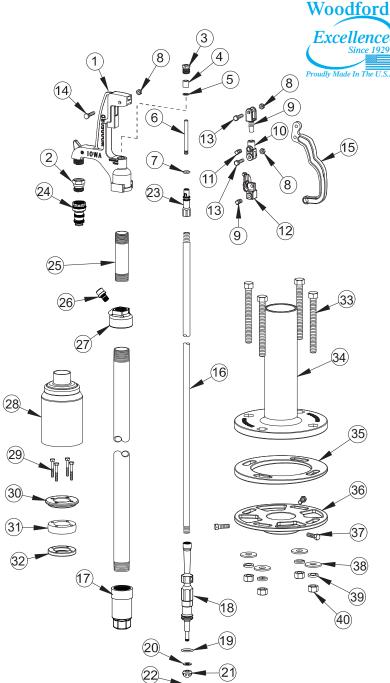
WOODFORD

Can be ordered with or without Mounting System (MS).





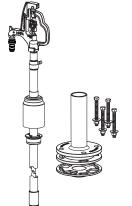




When ordering, specify SRH part number option listed below.

Part# SRH-MS Consists of the complete Roof Hydrant system:
Qty.1 SRH Hydrant shipped in 1 carton.
Qty.1 RH-MS
Mounting System shipped in 1 carton.

Total Shipping Wt. 2 cartons: 50 lbs

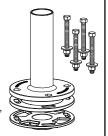


Part# RH-MS

Carton contents consists of: Mounting System/ Rough-In Components (Parts 33-40 above)

- Hydrant Support
- 2° Shim,
- Under Deck Flange
- Mounting Bolts, Nuts, Washers.

Shipped in 1 Carton. Shipping Wt. - 30 lbs



Part# SRH

Carton contents consists of:

- Hydrant Assembly (Parts 1-32 above)
- Well Seal (Parts 28-32 above)
- Boot (Part 28 above)

Shipped in 1 Carton. Shipping Wt. - 20 lbs



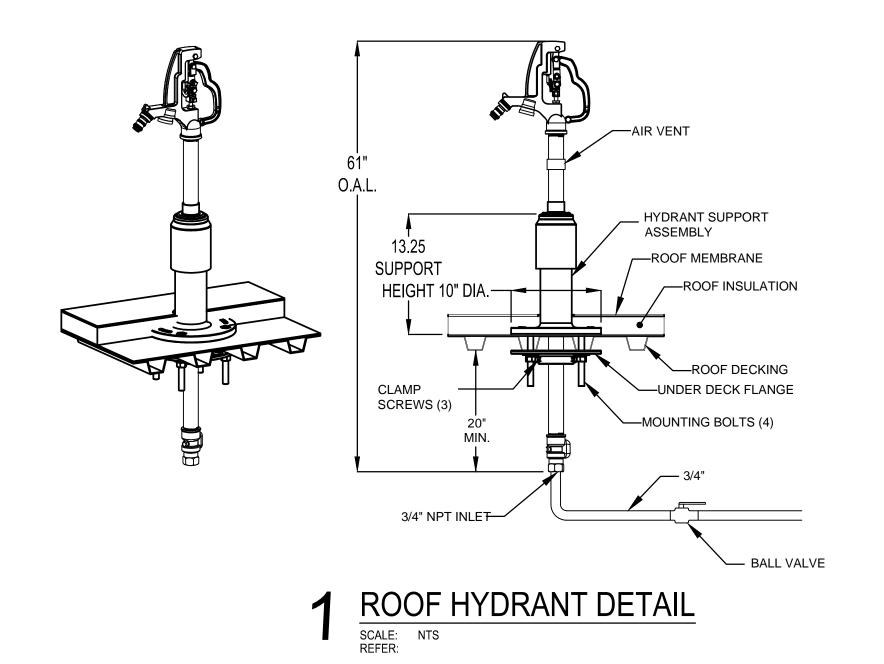
For more information contact...

WOODFORD MANUFACTURING COMPANY

2121 Waynoka Road, Colorado Springs, Colorado 80915 • Phone: (800) 621-6032 • Fax: (800) 765-4115

To view our complete product line visit: www.woodfordmfg.com or email: sales@woodfordmfg.com

A Division Of WCM Industries, Inc.



EXHAUST FAN
OR HOOD

INTEGRAL CRICKET
ON BACK

18 GAUGE GALVANIZED

SHEET METAL 3ib. 1 1/2"
THICK RIGID INSULATION.
ALL WELDED SEAMS

SLOPED METAL ROOF

RPS ROOF CURB FOR SLOPED METAL ROOF

SLOPED METAL ROOF

RPS ROOF CURB FOR SLOPED METAL ROOF

INTERNAL CONFORMING CAP CELLS

2 EQUIPMENT ROOF CURB DETAIL

SCALE: NTS
REFER: NTS

TAC CONDUIT SIZING CHANGE





Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #008: CE #009 - cONDENSATE plPING uP

	piPiNG	5 uP	
TO:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008
PCO NUMBER/REVISION:	008 / 0	CONTRACT:	1 - North Base Fleet Contract Prime Contract
REQUEST RECEIVED FROM	:	CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)
STATUS:	Pending - In Review	CREATED DATE:	9/14/2021
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None
FIELD CHANGE:	No		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:		PAID IN FULL:	No
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:	
		TOTAL AMOUNT:	\$1,128.00
POTENTIAL CHANGE ORDE	R TITLE: CE #009 - cONDENSATE pIPING uP		
CE #009 - cONDENSATE pIPI	R DESCRIPTION: (The Contract Is Changed A. NG uPSIZING ASE DUE TO UPSIZING THE CONDENSATE	/	
ATTACHMENTS:			
		60% Fleet - \$67 40% Parks - \$4	

Flintco

Orcutt Mechanical Contractors

6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE DATE



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Zack Blair Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129
DATE INITIATED:	08/18/2021	STATUS:	Open
REFERENCE:		DUE DATE:	08/27/2021
COST IMPACT:	TBD	SCHEDULE IMPACT:	TBD
DRAWING NUMBER:	M2-11		
LINKED DRAWINGS:		RECEIVED FROM:	Mike Hamilton (Orcutt Mechanical Contractors, Inc.)

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.), Ethan Treisa (Flintco, LLC - OKC)

Question from Zack Blair (Flintco, LLC - OKC) at 03:49 PM on 08/18/2021

Reference sheet M2-11, M2-12, and attached product data for the TAC units.

Question: The condensate piping for the TAC units in both Parks and Fleet is shown to be 3/4" PVC to the units, however, the TAC units are equipped with 1" ports for the condensate, and the manufacturer recommends 1" condensate.

1) Please confirm the condensate piping should be up-sized to 1" (1-1/4" OD) to meet manufacturer requirements.

Attachments:

TAC Unit Cut Sheets.pdf

Official Response

Awaiting an Official Response

All Replies:

ACI Response:

Yes, size condensate line per manufacturers recommended drain size.

Isaac Marrone 8-19-21

ADDITIONAL COST FOR LUBRICATION CONTROLLERS



Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

TO:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008	
PCO NUMBER/REVISION:	009 / 0	CONTRACT:	1 - North Base Fleet Contract Prime Contract	
REQUEST RECEIVED FROM	:	CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)	
STATUS:	Pending - In Review	CREATED DATE:	9/16/2021	
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None	
FIELD CHANGE:	No			
LOCATION:		ACCOUNTING METHOD:	Amount Based	
SCHEDULE IMPACT:		PAID IN FULL:	No	
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:		
		TOTAL AMOUNT:	\$4,212.80	

CHANGE REASON: Design Development

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

CE #010 - Lube Equipment
Changes to lube equipment

ATTACHMENTS:

Note: Per email correspondence with the City of Norman on September 15th, 2021 it was agree the cost would be split between the City of Norman and Flintco.

Total Cost to City of Norman: \$2,106.40

Flintco Orcutt Mechanical Contractors

6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE SIGNATURE DATE

Orcutt Mechanical Contractors Page 1 of 1 Printed On: 9/16/2021 07:34 AM

PO Box 2132 LEXINGTON, OK 73051

Original Costs for **Alemite System**

Fs	ti	m	a	to
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Date	Estimate #	
8/12/2021	2964	

Name / Address		Ship To
ORCUTT MECHANICAL CONTRACTORS MATT WEBER	7	
6200 NW 39TH EXPRESSWAY		
BETHANY, OK 73008 RE: NORTH BASE COMPLEX		

Account #

\$26,908.40

Description Qty Rate Total ELECTRONIC METER HANDLE WITH RIGID EXTENSION 9,360.00 36 260.00 FCS FLUID MANAGEMENT SYSTEM 3 2,618.82 7,856.46 PULSE METER--COOLANT 2 385.81 771.62 PULSE METER--OILS OIL SOLENOID WITH CONNECTOR 240.00 960.00 4 25' PLUG IN CABLE 36 158.21 5,695.56 2,264.76 36 62.91 ***THIS ESTIMATE INCLUDES LISTED EQUIPMENT ONLY--DOES NOT INCLUDE ANY INSTALLATION, FEES OR ***ESTIMATE DOES NOT INCLUDE ANY APPLICABLE SALES TAX **Total**

Phone #	Fax #	E-mail	Web Site
405-464-1646	405-527-1315	kclift@canddservices.net	www.canddservices.net

LUBEQUIP USA, LLC

13249 E. 46TH ST TULSA, OK 74134 US 918-857-2765 joe@lubequipusa.com

New Costs for RAASM System

Estimate

ADDRESS

FLINTCO 2302 S. PROSPECT AVE OKLAHOMA CITY, OK 73129 SHIP TO

FLINTCO

2302 S. PROSPECT AVE OKLAHOMA CITY, OK

73129

ESTIMATE # 1182 **DATE** 09/14/2021

DATE	ITEM NUMBER	DESCRIPTION	QTY	RATE	AMOUNT	
	RAA 39561-55	MASTER KEYPAD FOR INTEGRATED FLO NET SYSTEM	1	2,029.95	2,029.95	
	RAA 39562-55	DISPENSE KEYPAD FOR INTEGRATED FLO NET SYSTEM	1	1,446.25	1,446.25	
	RAA 39560-55	WIRELESS PRE-SET METER FOR FLO NET	24 30	896.50	21,516.00 26,895.00	
	SERVICE WORK	1 DAY ON SITE STARTUP AND TRAINING	1	750.00	750.00	

TOTAL

\$25.742.20

\$31,121.20

Accepted By

Accepted Date



YOUR FLUID MANAGEMENT SYSTEM





What is it?

The RAASM Flo-Net has been designed to control and monitor fluid consumption and inventory balances of automotive fluid products in your facility with minimal installation and programming costs, all with wireless RF communications.

How is it designed?

The fully integrated system hardware consists of one Master Keypad, at least one Dispense Keypad and at least one wireless (RF) electronic preset meter. The Master Keypad handles serial communication between the PC or a host server (ERP system) and RF communication to the Dispense Keypads in the system. The system verifies the operator's pin number and validates the work order number, fluid quantities and the valid dispense point.

What is the scope of the system?

The Master Keypad can communicate with up to 36 Dispense Keypads that can be positioned to best support the workflow of your service facility. Each Dispense Keypad can control up to 24 dispense meters, for a total of 250 dispense meters. The system supports up to 16 tanks / fluids as a part of the system configuration. The system supports 250 unique operators with separate IDs and pin numbers.

SPECIFICATIONS

Power Requirements	100240 V AC 50/60 Hz
RF Communications	2-way, 2.42.5 GHz Direct Sequence Spread Spectrum
RF Network	Self-healing Mesh Network
Operating Temperature	14140 °F (-1060 °C)
Internal Printer	Thermal printer Type FT190 (optional)
External Printer	Epson LX300 or similar (optional)

CERTIFICATION

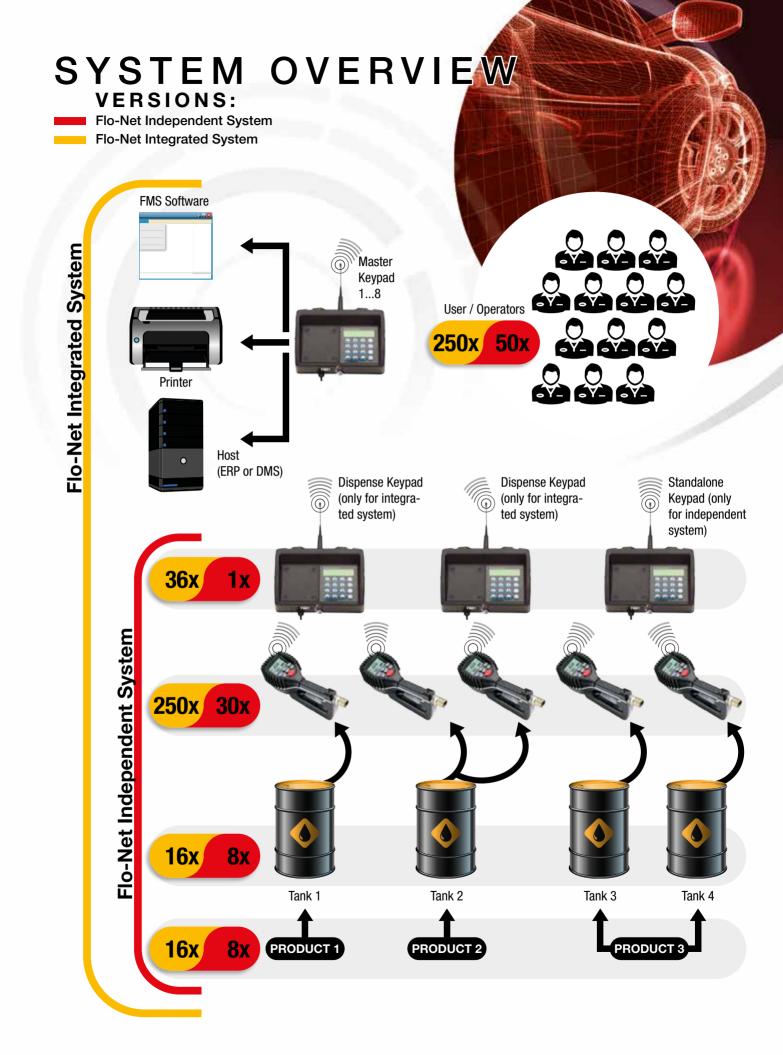
- Contains FCC ID: S4GEM35XB
- Contains IC: 8735A-EM35XB
- FCC CERTIFIED, PART 15, SUB-PART C
- CE0681 EC-R&TTE Certified

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

VERSIONS Two different versions are available with the following characteristics. Please contact our offices for more information.

Main characteristics	Flo-Net Independent System Basic wireless advanced fluid management system for local inventory control.	Flo-Net Integrated System PC based wireless advanced fluid management system for large facility.
USERS	50	250
METERS	30	250
TANKS	8	16
FLUIDS	8	16
STANDALONE KEYPAD	1	-
MASTER ZONE KEYPADS	-	8
DISPENSE KEYPADS	-	36
SOFTWARE	Program directly on keypad	PC software





INNOVATIVE

- World class R&D department
- State of the art manufacturing facility
- Advanced new product development

EFFICIENT

- Skilled manufacturing
- Efficient solutions
- High performing products

RELIABLE

- Quality is our top priority
- Backed by our world-class warranty
- Strong product support

RAASM USA, Inc. 1704 East Blvd, Suite 101 Charlotte, NC 28203 USA

Phone +1 704 370 1906 Fax +1 704 373 2603 Toll free number +1 877 370 1906

info@raasmusa.com www.raasmusa.com Authorized distributor

DSE Bidding and Estimating Form

Job: NORTH BASE

Page #

15

m	E, C or W Qty	Unit	Description	Labor <u>Hours</u>	<u>Ext</u>	<u>Material</u>	Ext	<u>Open</u>	<u>Ext</u>
2	2	E	10' STICKS OF 3/4" EMT			12.50	25.00		
3	1	E	4SQR BOX			5.00	5.00		
4	11	E	RECEPTACLE AND PLATE			8.00	8.00		
5	60	E	20' X 3 OF #12 THHN WIRE			0.25	15.00		
6	11	E	I HOUR 1 MAN LABOR	1	1.00				
7				ja ja					
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32									

Labor Hour Rate **Total Labor** 60 Tax Rate **Total Material** 61 Total Page 15 Profit 15.00% **Total Opening** 0 121

Total



Flintco LLC (40-000) 2302 South Prospect Oklahoma City, Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Location of Fluid Management Controller							
TO:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Phillip Gunderson Flintco, LLC - OKC 2302 S. Prospect Oklahoma City , Oklahoma 73129				
DATE INITIATED:	09/14/2021	STATUS:	Open				
REFERENCE:		DUE DATE:	09/23/2021				
COST IMPACT:	Yes (Unknown)	SCHEDULE IMPACT:	TBD				
DRAWING NUMBER:	M2-11, M2-40						
LINKED DRAWINGS:		RECEIVED FROM:	Phillip Gunderson (Flintco, LLC - OKC)				

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.), Ethan Treisa (Flintco, LLC - OKC)

Question from Phillip Gunderson (Flintco, LLC - OKC) at 01:59 PM on 09/14/2021

During a walk today with Mike White, City of Norman, it was discussed the lubrication controller is currently design to be located in Compress/Lube M132.

Per Mike, the controller should be located in Tire/Parts M137 in the general location either between the overhead doors on in the general vicinity (as this will be where the end user will be operating).

Flintco requests confirmation relocation the controller to the requested location is acceptable as additional power and potentially low voltage will be required.

Official Response

Awaiting an Official Response

All Replies:

ACI Response -

Mechanically there is no issue moving the controller to room M137. Needs to be coordinated with electrical as mentioned above.

Isaac Marrone 9/15/21

ADDITIONAL FRP - RFI #66



WILJO INTERIORS

109 NE 38th Street Oklahoma City, OK 73105 *Phone:* 405-792-7979

Fax: 405-792-7980 www.wiljointeriors.com

TO: Phillip Gunderson Flintco	JOB: City of Norman- North Base Complex	
DATE: 09/21/21	PLAN DATE:	
ADDENDUMS: RFI #33 RFI #66	VOID PRICE AFTER: 30 Days	
SCOPE:		AMOUNT
Proposal to Add frp to additonal two walls in M107		\$400
EXCLUSIONS: Overtime or nightwork; MEP; sealing of MEP penetrations; f of doors or door hardware; provide door frames; provide or frames or window frames; provide or install of RR accessorie mullion caps; glazing; tape & bed; paint; EIFS or stucco; text blown-in insulation; engineering; any work not mentioned in	install of any aluminum doors, door es; install of fire extinguisher cabinets; ure; flooring; transition strips; wall tile;	\$400
Respectfully Submitted,		
Frank Snolis WILJO INTERIORS, INC.		

ADDITIONAL BACKER BOARD - RFI #61



WILJO INTERIORS

109 NE 38th Street Oklahoma City, OK 73105 *Phone*: 405-792-7979

Fax: 405-792-7980 www.wiljointeriors.com

TO: Phillip Gunderson	JOB: City of Norman- North Base Complex Fle	et
Flintco		
DATE: 09/17/21	PLAN DATE:	
ADDENDUMS:	VOID PRICE AFTER: 30 Days	
SCOPE:		AMOUNT
Proposal to cut out drywall and install tile backer board wh (Excludes: Tape and Bed; Paint; Tile) EXCLUSIONS: Overtime or nightwork; MEP; sealing of MEP penetrations;	Materials: Labor: OH&P: Total:	\$2,650 \$3,740 \$960 \$7,350
of doors or door hardware; provide door frames; provide o frames or window frames; provide or install of RR accessor mullion caps; glazing; tape & bed; paint; EIFS or stucco; tex blown-in insulation; engineering; any work not mentioned	ies; install of fire extinguisher cabinets; ture; flooring; transition strips; wall tile;	
	TOTAL:	\$7,350
Respectfully Submitted,		. ,
Frank Snolis		
WILJO INTERIORS, INC.		



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Cementitious Backer Board Clarification								
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Ethan Treisa Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129					
DATE INITIATED:	09/08/2021	STATUS:	Open					
REFERENCE:		DUE DATE:	09/17/2021					
LINKED DRAWINGS	:	RECEIVED FROM	и:					

COPIES TO:

Zack Blair (Flintco, LLC - OKC), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), David Stanton (GSB, Inc.)

Question from Ethan Treisa (Flintco, LLC - OKC) at 02:18 PM on 09/08/2021

REF: Product Data REF: Spec 092900

Page 4 of the referenced spec section notes to install cementitious backer board around the walls of the (3) showers. Please advise if the intent is to provide cementitious backer board at all other locations that are to receive tile.

Attachments:

usg-durock-cement-board-with-edgeguard-submittal-en-CB399EG.pdf 092900.pdf

Official Response

Awaiting an Official Response

All Replies: RESPONSE | GSB | 2021 09 16:

CORRECT - PROVIDE CEMENTITOUS BACKER BOARD AT ALL AREAS THAT ARE TO RECEIVE TILE

MICHAEL SEGROVES, AIA / AICP PROJECT ARCHITECT | GSB, INC. ARCHITECTS & PLANNERS

SECTION 09 29 00

GYPSUM BOARD

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Interior gypsum board.
 - 2. Tile backing panels.
 - Texture finishes.
- B. Related Requirements:
 - 1. Section 05 40 00 "Cold-Formed Metal Framing" for metal framing in exterior walls.
 - 2. Section 09 22 16 "Non-Structural Metal Framing" for non-structural steel framing and suspension systems that support gypsum board panels.

1.3 SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For the following products:
 - 1. Textured Finishes: 24 inches square samples for textured finish indicated and on same backing indicated for Work.

1.4 QUALITY ASSURANCE

- A. Mockup: Build mockup of at least 100 sq. ft. in surface area to demonstrate aesthetic effects and to set quality standards for materials and execution.
 - 1. Build mockups for texture finish indicated.
 - 2. Apply final painting on surface for review of mockup.
 - 3. Simulate finished lighting conditions for review of mockup.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.6 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.

2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.

2.2 INTERIOR GYPSUM BOARD

- A. Manufacturer:
 - 1. American Gypsum.
 - 2. CertainTeed Gypsum
 - 3. Continental Building Products.
 - 4. Georgia-Pacific Gypsum.
 - 5. National Gypsum Company.
 - 6. USG Corporation.
- B. Gypsum Board, Type X: ASTM C1396/C1396M.
 - 1. Thickness: 5/8 inch.
 - 2. Long Edges: Tapered.
- C. Mold-Resistant Gypsum Board: ASTM C1396/C1396M. With moisture- and mold-resistant core and paper surfaces.
 - 1. Core: 5/8 inch, Type X.
 - 2. Long Edges: Tapered.
 - 3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.3 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.
 - Manufacturer:
 - a. C-Cure.
 - b. CertainTeed Corporation.
 - c. Custom Building Products.
 - d. FinPan, Inc.
 - e. James Hardie Building Products.
 - f. National Gypsum Company.
 - g. USG Corporation.
 - Core: 5/8 inch.
 - 3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.4 TRIM ACCESSORIES

- A. Interior Trim: ASTM C1047.
 - 1. Material: Galvanized, aluminum-coated steel sheet, rolled zinc, or plastic.
 - 2. Shapes:
 - a. Cornerbead
 - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - c. Expansion (control) joint.

2.5 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

- B. Joint Tape:
 - 1. Interior Gypsum Board: Paper.
 - 2. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.
 - 1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
 - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping or drying-type, all-purpose compound.
 - 3. Fill Coat: For second coat, use setting-type, sandable topping or drying-type, all-purpose compound.
 - 4. Finish Coat: For third coat, use setting-type, sandable topping or drying-type, all-purpose compound.
- D. Joint Compound for Cementitious Tile Backing Panels: As recommended by backer unit manufacturer.

2.6 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
 - 1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
 - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- C. Acoustical Batt Insulation: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
 - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
- D. Acoustical Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E90.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Franklin International.
 - b. Grabber Construction Products.
 - c. Hilti, Inc.
 - d. Pecora Corporation.
 - e. Specified Technologies, Inc.
 - f. Substitutions: Comply with requirements of Section 01 2501.

2.7 TEXTURE FINISHES

- A. Primer: As recommended by textured finish manufacturer.
- B. Non-Aggregate Finish: Premixed, vinyl texture finish for spray application.
 - 1. Manufacturer: National Gypsum Company.
 - 2. Texture: Orange peel.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- 3.2 APPLYING AND FINISHING PANELS, GENERAL
 - A. Comply with ASTM C840.
 - B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
 - C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
 - D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
 - E. Form control and expansion joints with space between edges of adjoining gypsum panels.
 - F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
 - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. (0.7 sq. m) in area.
 - 2. Fit gypsum panels around ducts, pipes, and conduits.
 - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch-wide joints to install sealant.
 - G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
 - H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

3.3 APPLYING INTERIOR GYPSUM BOARD

- A. Install interior gypsum board and cementitious backer units in the following locations:
 - 1. Mold-Resistant Gypsum Board, Type X: Where indicated on Drawings.
 - Cementitious Backer Units: At shower walls.
 - 3. Type X: Elsewhere.

B. Single-Layer Application:

- 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
- 2. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
 - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
 - b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.
- 3. On Z-shaped furring members, apply gypsum panels vertically (parallel to framing) with no end joints. Locate edge joints over furring members.
- 4. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

C. Multilayer Application:

- On partitions/walls, apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
- 2. Fastening Methods: Fasten base layers and face layers separately to supports with screws.

3.4 APPLYING TILE BACKING PANELS

- A. Comply with manufacturer's installation instructions and ANSI A108.11.
- B. Where tile backing panels abut other types of panels in same plane, shim surfaces to produce a uniform plane across panel surfaces.

3.5 INSTALLING TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.
 - 2. LC-Bead: Use at exposed panel edges.

3.6 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
 - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
 - 2. Level 2: Panels that are substrate for tile.
 - 3. Level 4: At panel surfaces that will be exposed to view (orange peel texture and paint).

- E. Primer and its application to surfaces are specified in Sections 09 91 00.
- F. Tile Backer Units: Finish according to manufacturer's written instructions.

3.7 APPLYING TEXTURE FINISHES

- A. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.
- B. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture matching approved mockup and free of starved spots or other evidence of thin application or of application patterns.
- C. Prevent texture finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If, despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray to prevent damage according to texture-finish manufacturer's written instructions.

3.8 PROTECTION

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

USG Tile & Flooring Solutions



USG DUROCK® BRAND CEMENT BOARD WITH EDGEGUARD™

Backerboard for tile and exterior finish systems

- Enhanced proprietary edge performance prevents spinout and crumbling
- · Easy to cut and fasten
- · Water durable and mold resistant
- · Warranted for interior and exterior applications
- · Exceptional tile bond
- Noncombustible
- Achieved GREENGUARD Gold Certification and qualifies as a low VOC emitting material per California Department of Public Health CDPH/EHLB/Standard Method (CA Section 01350) for school classrooms and private office modeling scenarios, and meets USGBC's LEED* v4 emission requirements for flooring applications.

DESCRIPTION

USG Durock® Brand Cement Board with EdgeGuard™ offers architects, builders and tile contractors a strong, water-durable tile base for tub and shower areas. Also an ideal underlayment for tile on floors and countertops in new construction and remodeling. Board is readily applied over wood or steel framing spaced 16 in. (406 mm) o.c. with corrosion-resistant wood screws, steel screws or hot-dipped galvanized roofing nails. After joints are treated, wall or floor tile is applied using latexfortified mortar or Type I organic adhesive.

USG Durock® Brand Cement Board with EdgeGuard is preferred by many applicators as a base for directly applied finishes, tile, stone and thin brick used in building exteriors.

The 1/2 in. (12.7 mm) and 5/8 in. (15.9 mm) panels are Underwriters Laboratories Inc. (UL) Classified for fire resistance, and may be used in any UL Design where Type DCB panels are listed.

PRODUCT DATA
SIZES AND PACKAGING

Size (thickness x width x length) ¹	Units (pcs) ²				
1/4 in. x 3 ft. x 5 ft. (6.4 mm x 915 mm x 1525 mm)	60				
1/2 in. x 32 in. x 5 ft. (12.7 mm x 813 mm x 1525 mm)	50				
1/2 in. x 3 ft. x 5 ft. (12.7 mm x 915 mm x 1525 mm)	50				
1/2 in. x 4 ft. x 8 ft. (12.7 mm x 1220 mm x 2440 mm)	40				
5/8 in. x 3 ft. x 5 ft. (15.9 mm x 915 mm x 1525 mm)	40				
5/8 in. x 4 ft. x 8 ft. (15.9 mm x 1220 mm x 2440 mm)	32				

- 1. Other lengths available. Contact your USG Sales Representative.
- Shipped in packaging units as shown.

STANDARDS

USG Durock® Brand Cement Board with EdgeGuard exceeds ANSI standards for cementitious backer units (CBU). See ANSI A118.9 for test methods and specifications for CBU and ANSI A108.11 for interior installation of CBU. Exceeds industry standards as an exterior substrate for exterior finishes. Exceeds ASTM C1325 standards for nonasbestos fiber-mat reinforced cementitious backer units.

AVAILABILITY

USG Durock® Brand Cement Board with EdgeGuard is distributed throughout the United States. Contact a USG sales office or sales person for additional information.

COMPOSITION AND MATERIALS

USG Durock* Brand Cement Board with EdgeGuard is formed in a continuous process of aggregated portland cement slurry with polymer-coated, glass-fiber mesh completely encompassing edges, back and front surfaces. The edges are formed smooth with a patented poly-propylene fabric-wrapped edge. The ends are square cut.



DEILIVERY AND STORAGE OF MATERIALS

All materials should be delivered and stored in their original unopened package and stored in an enclosed shelter providing protection from damage and exposure to the elements. Even though the stability and durability of USG Durock® Brand Cement Board with EdgeGuard is unaffected by the elements, moisture and temperature variations may have an effect on the bonding effectiveness of basecoats and adhesives. Store all USG Durock® Brand Cement Board with EdgeGuard panels flat.

ENVIRONMENTAL CONDITIONS

In cold weather and during USG Durock® Brand Cement Board with EdgeGuard panel and tile installation, temperatures within the building shall be maintained within the range of 40 to 100°F (5 to 38°C). Adequate ventilation shall be provided to carry off excess moisture.

INTERIOR APPLICATIONS

The building shall be enclosed and the HVAC system operating so that wood framing shall reach the moisture content it will reach in service. Do not install board when the board is wet.

EXTERIOR APPLICATIONS

In exterior applications, USG Durock® Brand Cement Board with EdgeGuard should not be left uncovered for a period of time exceeding 90 days. Discoloration or staining may occur due to exposure to the elements which will not affect performance of the panel. Finishes, leveling/skim coats and basecoats should not be applied to USG Durock® Brand Cement Board with EdgeGuard panel that is wet or frozen or that contains frost. After application, and for at least 24 hours, finishes, leveling/skim coats and basecoats should be effectively protected from rain and excessive moisture. In cold weather and during finish applications, USG Durock® Brand Cement Board with EdgeGuard panel, skim or basecoat, mortar, finish material and air temperature must be at least 40°F (5°C) and must remain at this temperature or higher for at least 24 hours after application. Hot and dry weather may affect working time of leveling/skim or basecoat and finish materials. Under rapid drying conditions, dampening or light fogging of board, leveling/skim or basecoat surface may be required to improve workability.

PANEL MICROCRACKING

USG Durock® Brand Cement Board with EdgeGuard is formulated to develop fine microcracking (also called multiple cracking) in the panel. The microcracking process helps to evenly relieve the stored strain energy in the product due to handling and installation, external loads and/or panel restrained movement. The presence of microcracks in the panel should not be considered a product defect.

INSTALLATION

- **A.** Install cement board with ends and edges closely abutted, but not forced together. Stagger end joints in successive courses.
- B. For flooring applications over a wood-based substrate, laminate USG Durock® Brand Cement Board with EdgeGuard to subfloor using Type 1 organic adhesive or latex-modified thin-set mortar suitable for bonding cement board. Fasten to subfloor with 1-1/4 in. (32 mm) USG Durock™ Brand Tile Backer Screws for wood framing (or equivalent) or 1-1/2 in. (38 mm) hot-dipped galvanized roofing nails spaced 8 in. (203 mm) o.c. in both directions with perimeter fasteners at least 3/8 in. (10 mm) and less than 5/8 in. (16 mm) from ends and edges. Drive nails and screws so that bottoms of heads are flush with panel surface to ensure firm panel contact with subfloor. Do not overdrive fasteners. Prefill joints with tile-setting mortar or adhesive and then immediately embed USG Durock™ Brand Tile Backer Tape and level joints.
- C. For wall application, fasten USG Durock® Brand Cement Board with EdgeGuard panels to framing with specified fasteners. Drive fasteners into field of panels first, working toward ends and edges. Hold panels in firm contact with framing while driving fasteners. Space fasteners maximum 8 in. (203 mm) o.c. for walls, 6 in. (152 mm) o.c. for ceilings, with perimeter fasteners at least 3/8 in. (10 mm) and less than 5/8 in. (16 mm) from ends and edges. Drive nails and screws so bottoms of heads are flush with panel surface to ensure firm panel contact with framing. Do not overdrive fasteners. Approved fasteners include: USG Durock™ Brand Tile Backer Screws for steel framing (or equivalent), 1-1/4 in. (32 mm) and 1-5/8 in. (41 mm) for 14- to 20-gauge steel framing; USG Durock™ Brand Tile Backer Screws for wood framing (or equivalent), 1-1/4 in. (32 mm), 1-5/8 in. (41 mm) and 2-1/4 in. (57 mm) for wood framing. Nails (1-1/2 in. [38 mm] hot-dipped galvanized roofing nails). Prefill joints with tile-setting mortar or adhesive and then immediately embed USG Durock™ Brand Tile Backer Tape and level joints.

INSTALLATION CONT.

- D. Cement board should be cut to size with a knife and straight edge. A power saw should be used only if it is equipped with a dust-collection device. Installer should wear NIOSH/MSHA-approved dust mask.
- **E.** If waterproofing is desired, use USG Durock™ Brand Liquid Waterproofing Membrane. See *USG Durock™ Brand Liquid Waterproofing Membrane* submittal sheet (CB817) for product information.

Refer to *USG Durock® Brand Cement Board System Guide* (SA932) for complete installation information, including good design practices. For technical assistance, call USG Technical Service at 800 USG.4YOU (874-4968).

LIMITATIONS

- Designed for positive or negative uniform loads up to 60 psf. For complete information on the use of USG Durock® Brand panels in exterior systems, consult uniform load table on Page 4 for applicable positive or negative uniform loads on wall systems.
- 2. Wall applications: Maximum stud spacing: 16 in. (406 mm) o.c. (24 in. [610 mm] o.c. for cavity shaft wall assembly). Framing shall be designed (based on stud properties alone) not to exceed L/360 deflection for tile and thin brick, L/240 for direct-applied exterior finish systems. Maximum fastener spacing: 8 in. (203 mm) o.c. for wood and steel framing; 6 in. (152 mm) o.c. for ceiling applications.
- 5. Floor applications: Maximum joist spacing 24 in. (610 mm) o.c. The subfloor system should be designed with a minimum deflection limit of L/360 for the span. Some finish materials may require a more rigid subassembly (such as large format tile and natural stone products). In these cases, follow the manufacturer's minimum requirements. The subfloor should be APA Span-Rated Plywood or OSB with an Exposure 1 classification or better with tongue and groove or back blocked at the unsupported edges.
- **4.** In exterior applications, USG Durock® Brand Cement Board with EdgeGuard should not be left uncovered for a period of time exceeding 90 days. Discoloration or staining may occur due to exposure to the elements which will not affect performance of the panel.
- 5. Brittle coatings, such as epoxy coatings, are not recommended for use with USG Durock® Brand Cement Board with EdgeGuard. USG Durock® Brand Cement Board with EdgeGuard is intended for use with tile, thin brick and exterior stucco coatings only.
- **6.** Maximum dead load for ceiling system is 7.5 psf.
- 7. Steel framing must be 20-gauge or heavier.
- 8. Do not use drywall screws or drywall nails. Do not use drywall joint tape.
- 9. Do not use 1/4 in. (6.4 mm) USG Durock® Brand Cement Board with EdgeGuard for wall or ceiling applications. 1/4 in. (6.4 mm) USG Durock® Cement Board with EdgeGuard is for use in interior applications only.
- 10. Do not use USG Durock® Brand Cement Board with EdgeGuard with vinyl flooring.
- 11. USG Durock® Brand Cement Board with EdgeGuard is not designed for use as a structural panel.
- 12. Maximum installed weight of the finish system should not exceed 15 psf.
- 13. USG Durock® Brand Cement Board with EdgeGuard panels should not be used in areas where they are exposed to temperatures that exceed 200°F (93°C).
- **14.** In locations close to salt water or other challenging environments, design professionals should consider the use of stainless steel fasteners.
- **15.** Do not use lightweight setting-type joint compounds or ready-mix joint compounds directly over USG Durock* Brand Cement Board with EdgeGuard.

TECHNICAL DATA

Property	Unit of Measure	ASTM Test Method	5/8 in. (15.9 mm) USG Durock* Brand Cement Board with EdgeGuard™	1/2 in. (12.7 mm) USG Durock* Brand Cement Board with EdgeGuard™	1/4 in. (6.4 mm) USG Durock® Brand Cement Board with EdgeGuard™ Underlayment
Flexural strength	psi (MPa)	C947	> 480	> 750	>1000 (6.9)
Indentation strength	psi (MPa)	D2394	> 1250	>1250	>1250 (8.6)
Shear bond strength	psi	ANSI A118.4	> 50	>50	> 50
Nail-pull resistance	lb. (0.375 in. [10 mm] head diameter, wet or dry)	C473	>90	>90	_
Weight	psf (kg/m²)	C473	3	2.4	< 1.9 (1.9)
Freeze/thaw resistance	procedure B, number of cycles with no deterioration	C666	100	100	100
Mold resistance	_	G21	Rating 0, No growth	Rating 0, No growth	Rating 0, No growth
Noncombustibility	D/F-:I	E136	Pass	Pass	Pass
Noncombustibility	Pass/Fail	E136			
Surface-burning characteristics	flame/smoke	E84	0/0	0/0	0/0
Thermal	"R"/k value	C518	.49/1.27	0.39/1.27	_
Standard method for evaluating ceramic floor tile installation systems	Passes cycles 1-6	C627	Light commercial	Light commercial	Light commercial
Minimum bending radius	ft. (requires special framing details available upon request)	_	6	6	_

PRODUCT INFORMATION

See usg.com for the most up-to-date product information.

DANGER

Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause ancer by inhalation of respirable crystalline silica. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use only in a well-ventilated area, wear a NIOSH/MSHA-approved respirator. Wear protective gloves/protective clothing/eye protection. If swallowed, inhaled, or skin irritation occurs get medical attention. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Dispose of in accordance with local, state, and federal regulations. For more information call Product Safety: 800 507-8899 or see the SDS at usg.com

KEEP OUT OF REACH OF CHILDREN.

TRADEMARK

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NOTICE

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

UNIFORM LOAD—1/2 IN. (12.7 MM) USG DUROCK® BRAND CEMENT BOARD WITH EDGEGUARD™

Stud Spacing	Fastener Spacing	Design Wind Load (I/240)	Design Wind Load (I/360)
12 in. (305 mm) o.c.	8 in. (203 mm) o.c.	35 psf	35 psf
	6 in. (152 mm) o.c.	44 psf	44 psf
16 in. (406 mm) o.c.	8 in. (203 mm) o.c.	27 psf	21 psf
	6 in. (152 mm) o.c.	31 psf	21 psf
24 in. (610 mm)	8 in. (203 mm) o.c.	12 psf	8 psf
o.c. (for shaft wall assemblies only)	6 in. (152 mm) o.c.	12 psf	8 psf

SUBMITTAL APPROVALS

Job Name	
Contractor	Date

800 USG.4YOU 800 (874-4968) usg.com

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20146 ALTERNATE JOB

REVISION 7

DSE Bidding and Estimating Form

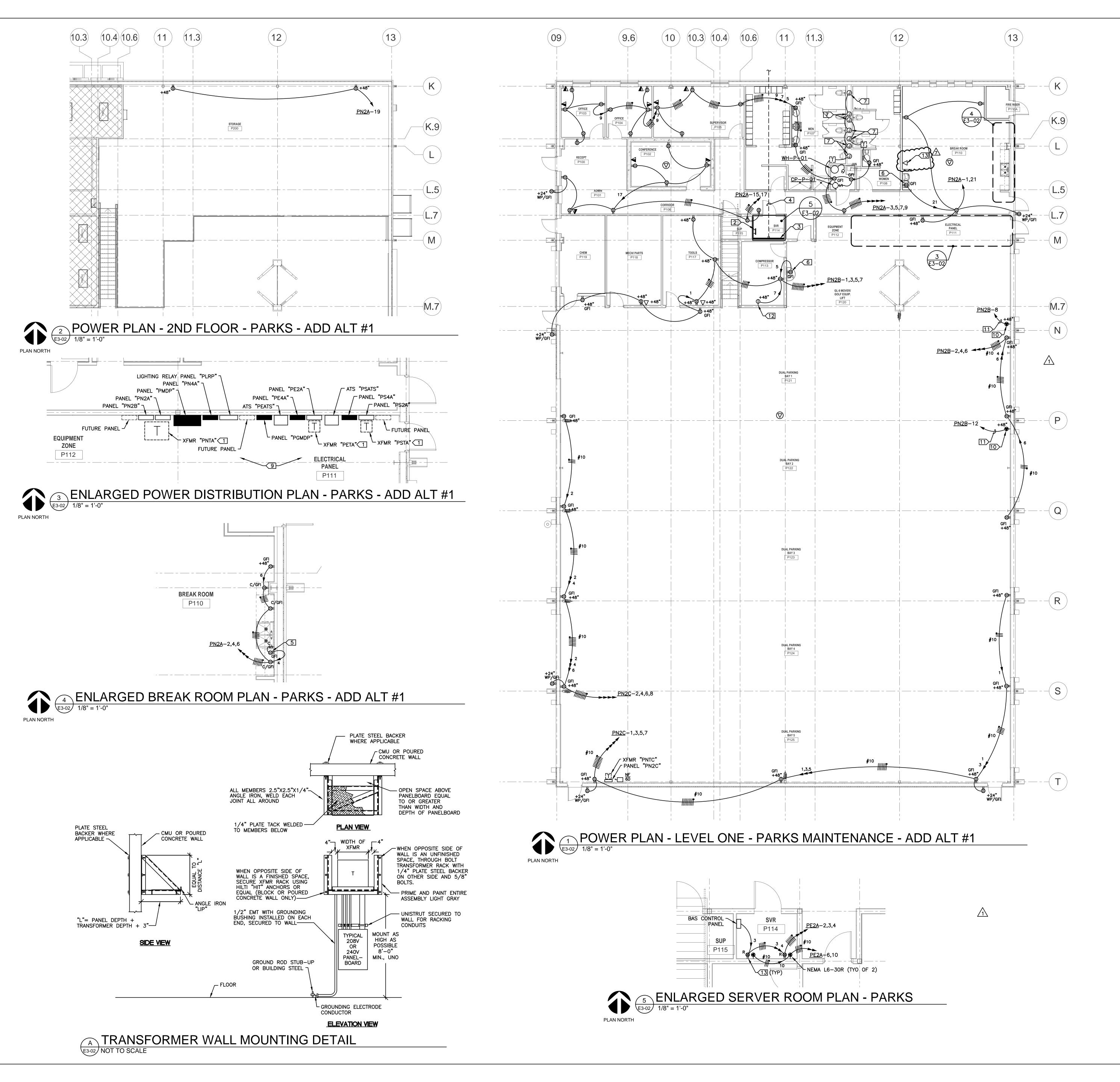
Job: NORTH BASE

Page # 11

Area: REVISIN 7 PARKS

tem	E, C or W Qty	Unit	Description	Labor Hours	Ext	Material	Ext	Open	Ext
1			ADDED DATA ROUGH						
2	1	E	10' 3/4" EMT			12.50	12.50		
3	1	E	4SQR BOX			5.00	5.00		
4	1	E	MAN 1 HOUR LABOR	1	1.00				
5									
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32									

| Labor Hour Rate | 60 | Total Labor | 60 | Total Labor | 60 | Total Material | 20 | Total Page 11 | Profit | 15.00% | Total Opening | 0 | Total | 80 |



GENERAL NOTES:

- A. ENTIRE INSTALLATION SHALL COMPLY WITH NEC ARTICLE 511 FOR MAJOR REPAIR GARAGE SERVICING GASOLINE AND CNG VEHICLES.
- B. SERVICE BAYS AND AREAS DIRECTLY COMMUNICATING SHALL BE CLASSIFIED CLASS 1, DIV. 2 FROM FINISHED FLOOR TO 18" AFF. ALL CIRCUITING PASSING THROUGH THE HAZARDOUS AREA SHALL BE UNBROKEN RGSC WITH NO FITTINGS. ALL PANELBOARDS, TRANSFORMERS, AND OTHER ELECTRICAL ENCLOSURES INCLUDING WALL OUTLETS IN THIS AREA SHALL BE MOUNTED NOT LOWER THAN 20"
- OTHER ELECTRICAL ENCLOSURES INCLUDING WALL OUTLETS
 IN THIS AREA SHALL BE MOUNTED NOT LOWER THAN 20"
 AFF TO BOTTOM OF BOX, OR AS NOTED.

 C. THE CNG HAZARDOUS AREA REQUIREMENTS AT THE
 CEILING SHALL BE MET BY USE OF A VENTILATION
 SYSTEM TO PROVIDE THE REQUIRED AIR CHANGES PER
 HOUR IN ACCORDANCE WITH NEC TABLE 511.3(D). NO
- D. ANY CONDUIT PASSING THROUGH THE HAZARDOUS AREA MUST MEET THE REQUIREMENTS OF NEC ARTICLE 502.
 E. OFFICE AREA SHALL BE PROVIDED WITH POSITIVE PRESSURE HVAC AND SHALL NOT BE CLASSIFIED

CNG HAZARDOUS AREA SHALL BE REQUIRED AT THE

- HAZARDOUS.

 F. PROVIDE DEDICATED NEUTRALS FOR EACH CIRCUIT, UNO.

 G. HOMERUN CIRCUITS AS SHOWN. DO NOT COMBINE
- H. CONTRACTOR MAY USE "MC" CABLE WITHIN MILLWORK AND AS FIXTURE WHIPS ABOVE LAY—IN CEILINGS ONLY. "MC" IS NOT ALLOWED FOR ANY OTHER APPLICATIONS.
- ARCHITECT.

 J. 20A, 120V CIRCUITS LONGER THAN 100' SHALL BE #10

I. COORDINATE EXACT FLOOR BOX LOCATIONS WITH

- K. CONTRACTOR SHALL ENSURE THAT ALL CODE REQUIRED WORKING SPACE CLEARANCES ARE MAINTAINED.
- L. CONDUITS ROUTED EXPOSED SHALL BE ROUTED PERPENDICULAR AND PARALLEL TO BUILDING LINES IN A NEAT AND WORKMANLIKE MANNER. PAINT AS REQUIRED BY ARCHITECT.
- M. PROVIDE 120V GFCI DUPLEX RECEPTACLE AND PIGTAIL CONNECTED TO NEAREST RECEPTACLE CIRCUIT AT EACH P-TRAP PRIMER. RE: MECHANICAL DRAWINGS FOR LOCATIONS.
- N. RE: CONVERGINT DRAWINGS FOR ACCESS CONTROL & CCTV CONDUITS AND ENCLOSURES TO BE PROVIDED UNDER THIS CONTRACT. THIS CONTRACTOR SHALL PROVIDE ALL CONDUIT AND POWER CIRCUITING REQUIRED BY THOSE DRAWINGS.

KEYED NOTES:

HOMERUNS.

- 1. WALL MOUNTED TRANSFORMER. RE: DETAIL "A" THIS SHEET.
- GROUND BAR MOUNTED 18" AFF. COORDINATE EXACT LOCATION WITH OWNER. RE: ONE—LINE DIAGRAM AND GROUND BAR DETAIL "B", SHEET E5.01.
- 3. TELEPHONE TERMINAL BOARD "TTBP". PROVIDE 4'X8'X 3/4" FIRE RETARDANT PLYWOOD PAINTED WITH FIRE RETARDANT PAINT.
- 4. (3) 4" PVC CONDUITS ROUTED 36" BFG FOR COMMUNICATIONS CABLING. STUB CONDUITS UP 4" AFF AT TELEPHONE TERMINAL BOARD "TTBP". RE: SHEET E1-01 FOR CONTINUATION.

5. SPLIT DUPLEX RECEPTACLE (TOP HALF SWITCHED) AND

- COUNTER MOUNTED SWITCH FOR IN—SINK GARBAGE
 DISPOSAL AND DISHWASHER. RECEPTACLE MOUNTED
 BELOW COUNTER. COORDINATE SWITCH AND RECEPTACLE
 MOUNTING HEIGHTS AND LOCATIONS WITH MILLWORK.
- 6. RECEPTACLE FOR PLUMBING FIXTURE. MOUNT BEHIND EQUIPMENT SHROUD. COORDINATE WITH EQUIPMENT INSTALLER. DO NOT MOUNT LOWER THAN 20" TO BOTTOM OF BOX
- 7. PROVIDE JUNCTION BOX FOR AUTOMATIC TOILET/URINAL FLUSH VALVE. COORDINATE EXACT LOCATION WITH PLUMBER
- 8. FLUSH VALVE LOW VOLTAGE TRANSFORMER MOUNTED
- 9. ALL CONDUIT STUB-UPS IN THE HAZARDOUS AREA SHALL COMPLY WITH NEC REQUIREMENTS. PROVIDE PVC COATED RGSC CONDUIT STUBBED AT LEAST 19" AFF SO THERE ARE NO FITTINGS WITHIN THE HAZARDOUS AREA.
- 10. NEMA 6-50R RECEPTACLE.

ABOVE CEILING.

- 11. 2 #6, 1 #10GND,. 3/4"C.
- 12. RECEPTACLE FOR AIR-DRYER ACD-P-01. COORDINATE EXACT MOUNTING LOCATION WITH MECHANICAL.

 13. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH OWNER.

F: 405.848.9783



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3555 NW 58th Street

Oklahoma City, OK 73112

405.848.9549

Suite 700W

REVISIONS

 NO.
 DATE
 DESCRIPTION

 1
 09/18/20
 ADD. NO. 2

 7
 07/23/21
 FORKLIFT & TIMECLOCKS

GSB PROJECT NO. 191650

DRAWING TITLE
POWER PLAN - PARKS
MAINTENANCE

DATE 08/28/2020

DRAWING NO.

E3-02

Horner Associates Engineers, Inc.

1306 Commerce Dr. Norman, OK 73071
Certificate of Authorization No. CA 3520, Expires 6/30/2021
info@haeinc.com Ph (405) 801-2528 Fax (405) 801-2529

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REVISION 8

DSE Bidding and Estimating Form

Job: north base Page # 7

Area: parks revision #8

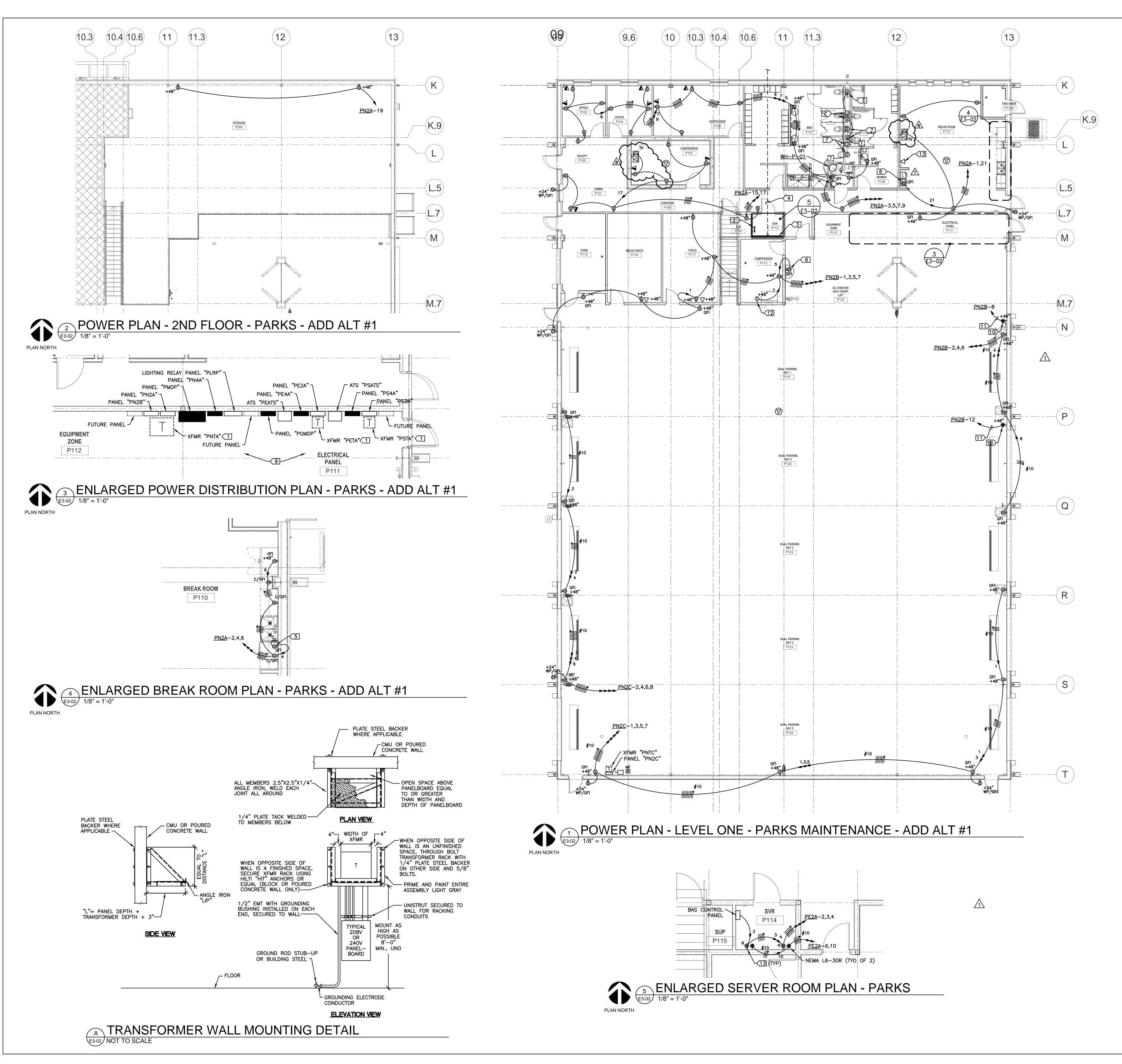
tem	E, C or W Qty	Unit	Description	Labor <u>Hours</u>	<u>Ext</u>	Material	Ext	<u>Open</u>	<u>Ext</u>
1			added 2 tv/power rough in boxes						
2									
3	2	e	hubell tv/power boxes			215.00	430.00		
4	2	е	10' sticks of 3/4" emt			12.50	25.00		
5	2	e	2 hours labor 1 man	-1	2.00				
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32								·	

 Labor Hour Rate
 60
 Total Labor
 120

 Tax Rate
 Total Material
 523

 Total Page 7
 Profit
 15.00%
 Total Opening
 0

 Total
 643



GENERAL NOTES:

A. ENTIRE INSTALLATION SHALL COMPLY WITH NEC ARTICLE 511 FOR MAJOR REPAIR GARAGE SERVICING GASOLINE AND CNG VEHICLES.

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AFF TO BOTTOM OF BOX, OR AS NOTED. C. THE CNG HAZARDOUS AREA REQUIREMENTS AT THE CEILING SHALL BE MET BY USE OF A VENTILATION SYSTEM TO PROVIDE THE REQUIRED AIR CHANGES PER HOUR IN ACCORDANCE WITH NEC TABLE 511.3(D). NO CNG HAZARDOUS AREA SHALL BE REQUIRED AT THE

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HAZARDOUS. F. PROVIDE DEDICATED NEUTRALS FOR EACH CIRCUIT, UNO. G. HOMERUN CIRCUITS AS SHOWN. DO NOT COMBINE HOMERUNS.

H. CONTRACTOR MAY USE "MC" CABLE WITHIN MILLWORK AND AS FIXTURE WHIPS ABOVE LAY-IN CEILINGS ONLY. "MC" IS NOT ALLOWED FOR ANY OTHER APPLICATIONS.

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N. RE: CONVERGINT DRAWINGS FOR ACCESS CONTROL & CCTV CONDUITS AND ENCLOSURES TO BE PROVIDED UNDER THIS CONTRACT. THIS CONTRACTOR SHALL PROVIDE ALL CONDUIT AND POWER CIRCUITING REQUIRED BY THOSE DRAWINGS.

KEYED NOTES: □

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3. TELEPHONE TERMINAL BOARD "TTBP". PROVIDE 4'X8'X 3/4" FIRE RETARDANT PLYWOOD PAINTED WITH FIRE RETARDANT PAINT.

4. (3) 4" PVC CONDUITS ROUTED 36" BFG FOR COMMUNICATIONS CABLING. STUB CONDUITS UP 4" AFF AT TELEPHONE TERMINAL BOARD "TTBP". RE: SHEET E1-01 FOR CONTINUATION.

5. SPLIT DUPLEX RECEPTACLE (TOP HALF SWITCHED) AND COUNTER MOUNTED SWITCH FOR IN-SINK GARBAGE DISPOSAL AND DISHWASHER. RECEPTACLE MOUNTED BELOW COUNTER. COORDINATE SWITCH AND RECEPTACLE MOUNTING HEIGHTS AND LOCATIONS WITH MILLWORK.

6. RECEPTACLE FOR PLUMBING FIXTURE. MOUNT BEHIND EQUIPMENT SHROUD. COORDINATE WITH EQUIPMENT INSTALLER. DO NOT MOUNT LOWER THAN 20" TO BOTTOM

7. PROVIDE JUNCTION BOX FOR AUTOMATIC TOILET/URINAL FLUSH VALVE. COORDINATE EXACT LOCATION WITH

8. FLUSH VALVE LOW VOLTAGE TRANSFORMER MOUNTED

ABOVE CEILING. 9. ALL CONDUIT STUB-UPS IN THE HAZARDOUS AREA SHALL COMPLY WITH NEC REQUIREMENTS. PROVIDE PVC COATED

RGSC CONDUIT STUBBED AT LEAST 19" AFF SO THERE

ARE NO FITTINGS WITHIN THE HAZARDOUS AREA. 10. NEMA 6-50R RECEPTACLE.

11.2 #6, 1 #10GND, 3/4"C.

1 12. RECEPTACLE FOR AIR-DRYER ACD-P-01. COORDINATE EXACT MOUNTING LOCATION WITH MECHANICAL.

13. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH OWNER.

PARTIAL LEGEND:

RECESSED MULTI-SERVICE TV BOX WITH DUPLEX RECEPTACLE AND CATV COAX CONNECTOR. STUB 3/4" CONDUIT WITH BUSHED END ABOVE AN ACCESSIBLÉ CEILING FOR COAX CABLE. COORDINATE EXACT ROUGH-IN LOCATION AND HEIGHT WITH ARCHITECT. HUBBELL #NSAV62M/NSAV6C/NSOKP/NSF70W

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OWNER

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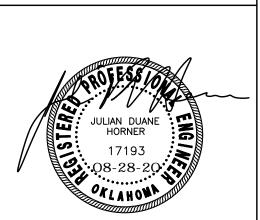
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3555 NW 58th Street Suite 700W Oklahoma City, OK 73112 405.848.9549 : 405.848.9783

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REVISIONS DATE DESCRIPTION

1 09/18/20 ADD. NO. 2 07/23/21 FORKLIFT & TIMECLOCKS 8 08/20/21 VENDING MACHINES & T

GSB PROJECT NO. 191650

DRAWING TITLE POWER PLAN - PARKS MAINTENANCE

DATE 08/28/2020

DRAWING NO.

E3-02

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PROPOSED CHANGE ORDER SUMMARY

Subcontractor Name (if applicable):

Oakridge Builders a Division of Flintco, LLC

SUBCONTRACTOR WORK or X CONSTRUCTION MANAGER SELF PERFORMED WORK

THE CITY OF NORMAN

 Project Name/#:
 Norman North Base - Phase 1 - Alternate

 CE No:
 #003

 CE Title:
 Additional Blocking for TVs

 CE Date:
 9/13/2021

PCOR Itom No. Poscription Hours			<u>Labor</u>		Mate	erial	<u>Equip</u>	ment	Sub	contract
Item No	Description	Hours	Costs				Type	Cost		Cost
1	Direct Labor (Add Blocking)	2 (@\$45hr)	\$	90.00					\$	90.0
	Direct Materials (Blocking)	2 (@\$10111)	*	00.00	\$	50.00			\$	50.0
		-						-		
		<u> </u>						<u> </u>		
Subtotals	•		\$	90.00	\$	50.00		\$ -	\$	140.0
Labor Bu	urden (@ 58%)		\$	52.20						
Total Ra	w Costs		\$	192.20						
		_								
Overhea	d *		\$	14.42			+ Profit limited to ≤ 15% (by contract)	6 of		
Profit *			\$	14.42	TOTAL	aw CUSIS	(by contract)			
Subcent	ractor's Insurance (applies to subcon	straator work only	\$	-	← do not include an amount here if CM Self Performed Work					
	ractor's Bonds (applies to subcontract		\$				amount here if CM Sel			
Cubcont	actor o Dorido (applico lo sabcontract	o. work orny)	<u> </u>		. 40 1101	Jiuuc ai	. acant note ii olvi dei	c.roimed Work		
							ork, enter total in Section			
Total for Si	ubcontractor or CM Self-Perform	med Work	\$	221.03			Change Order Summary			
·· · · <u></u>			l '	•			ned work, enter total in S Change Order Summary			

REVISION 9



Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #005: CE #005 - Revision 9 additiona

TO:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008
PCO NUMBER/REVISION:	005 / 0	CONTRACT:	1 - North Base Fleet Contract Prime Contract
REQUEST RECEIVED FROM:		CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)
STATUS:	Pending - In Review	CREATED DATE:	8/30/2021
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None
FIELD CHANGE:	No		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:		PAID IN FULL:	No
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:	
		TOTAL AMOUNT:	\$2,981.00

POTENTIAL CHANGE ORDER TITLE: CE #005 - Revision 9 additiona

CHANGE REASON: Design Development

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

CE #005 - Revision 9 additional floor drain

Addition of floor drain for ice maker per revised drawings. All concrete cutting removal and replacement by others.

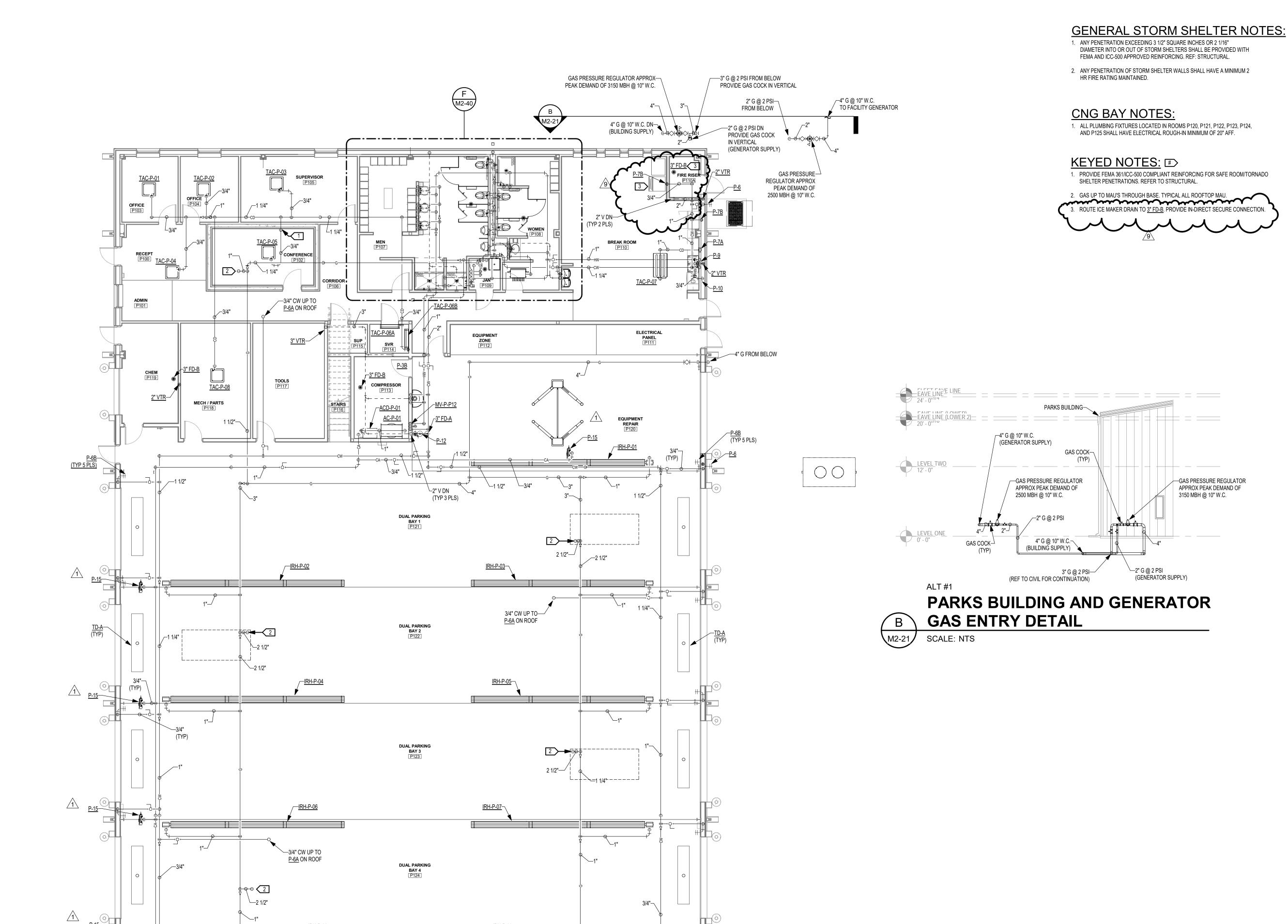
ATTACHMENTS:

Orcutt CO Form Revision 9.xlsx

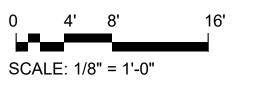
Flintco Orcutt Mechanical Contractors

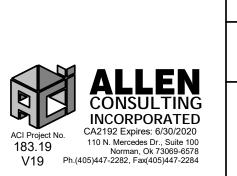
6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE SIGNATURE DATE











OWNER CITY OF NORMAN, OKLAHOMA 201 A WEST GRAY STREET NORMAN, OKLAHOMA 73069 (405) 366-5406 www.NormanOK.gov

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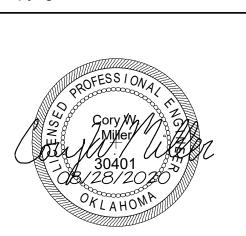
(405) 235-8075 www.jaokc.com STRUCTURAL ENGINEER WALLACE ENGINEERING 410 NORTH WALNUT ANE. - STE. 200 OKLAHOMA CITY, OK73104 (405) 236-5858

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REVISIONS

 NO.
 DATE
 DESCRIPTION

 1
 9-10-2020
 ADD #1
 9 8-27-2021 REVISION #9

> GSB PROJECT NO. 191650

DRAWING TITLE PARKS MAINTENANCE BUILDING ABOVEFLOOR PLUMBING PLAN

AUGUST 28, 2020 DRAWING NO.

DSE Bidding and Estimating Form

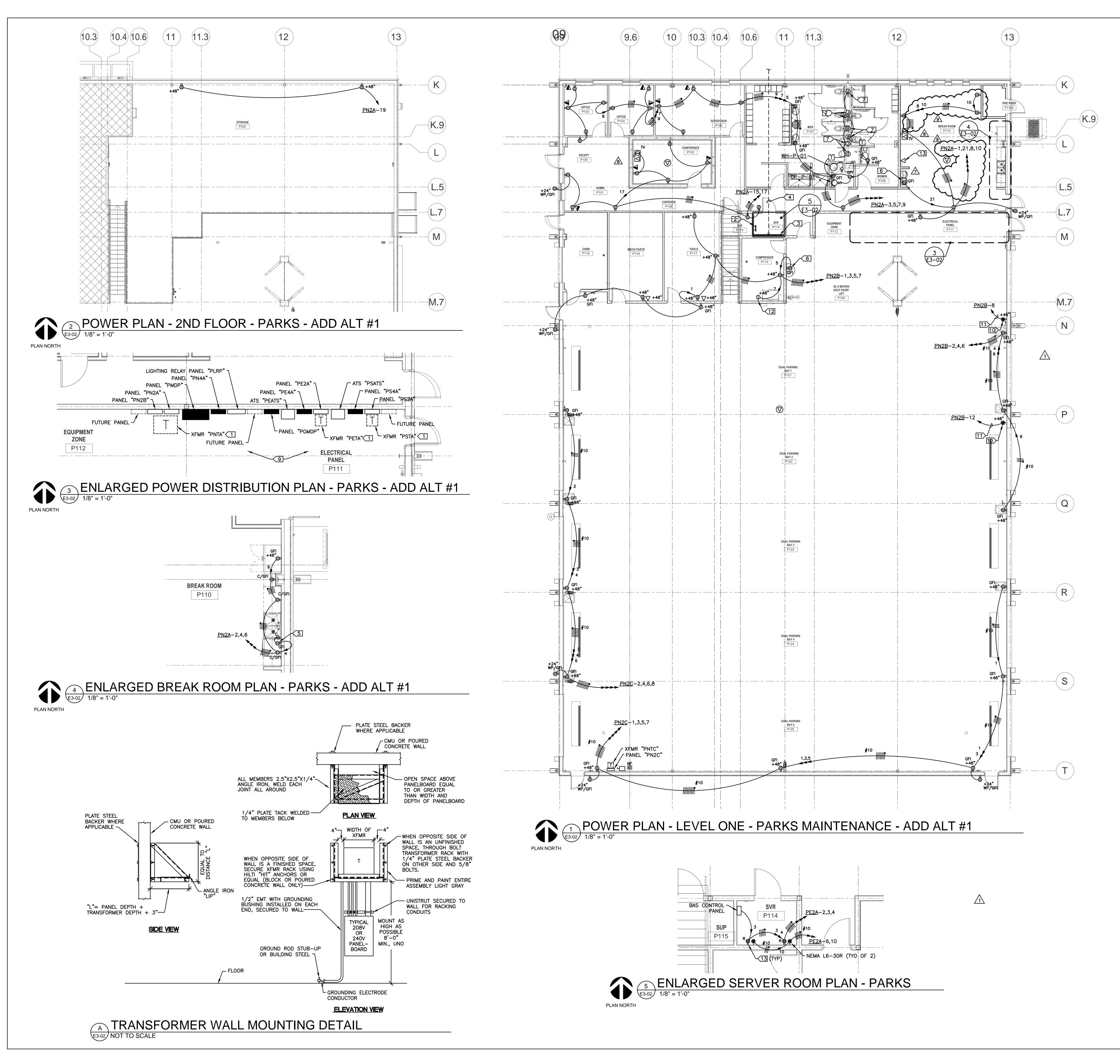
Job: north base

		Area:	revision #9 parks	Labor	<u> </u>	Material	Ext	Open	Ext
nter E	, C or W	n Unit	Description	Hours					
lem	<u>Qty</u>	, O100	added 2 receptacles, and 2 circuits						
1						10.00	20.00		
2			receptacles			12.50	62.50		
3	2	е	10' sticks of 3/4" conduit			25.00	25.00		
4	5	e				0.25	62.50		
5	11	<u>e</u>	3/4" seal off						
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240 Total Labor Labor Hour Rate 196 Total Material Tax Rate 0 **Total Opening** 15.00% Profit Total Page 8 Total 436

8

Page #



GENERAL NOTES:

A. ENTIRE INSTALLATION SHALL COMPLY WITH NEC ARTICLE 511 FOR MAJOR REPAIR GARAGE SERVICING GASOLINE AND CNG VEHICLES.

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COMMUNICATIONS CABLING. STUB CONDUITS UP 4" AFF AT TELEPHONE TERMINAL BOARD "TTBP". RE: SHEET E1-01 FOR CONTINUATION.

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FLUSH VALVE. COORDINATE EXACT LOCATION WITH

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12. RECEPTACLE FOR AIR-DRYER ACD-P-01. COORDINATE

13. DATA OUTLET FOR TIMECLOCK. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH OWNER.

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KEYED NOTES: □

GROUND BAR DETAIL "B", SHEET E5.01.

4. (3) 4" PVC CONDUITS ROUTED 36" BFG FOR

7. PROVIDE JUNCTION BOX FOR AUTOMATIC TOILET/URINAL

RGSC CONDUIT STUBBED AT LEAST 19" AFF SO THERE ARE NO FITTINGS WITHIN THE HAZARDOUS AREA.

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EXACT MOUNTING LOCATION WITH MECHANICAL.

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₩ RECESSED MULTI-SERVICE TV BOX WITH DUPLEX RECEPTACLE AND CATV COAX CONNECTOR. STUB 3/4" CONDUIT WITH BUSHED END ABOVE AN ACCESSIBLÉ CEILING FOR COAX CABLE. COORDINATE EXACT ROUGH-IN LOCATION AND HEIGHT WITH ARCHITECT. HUBBELL #NSAV62M/NSAV6C/NSOKP/NSF70W

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Suite 700W

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REVISIONS

DATE DESCRIPTION 1 09/18/20 ADD. NO. 2 07/23/21 FORKLIFT & TIMECLOCKS 8 08/20/21 VENDING MACHINES & T

GSB PROJECT NO. 191650

DRAWING TITLE POWER PLAN - PARKS MAINTENANCE

DATE 08/28/2020

DRAWING NO.

E3-02

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ADDITIONAL SECURITY & ACCESS CONTROL

DSE Bidding and Estimating Form

Job: north base Page # 9

Area: rfi 041 parks

tem	E. C or W	Unit	Description	Labor <u>Hours</u>	Ext	Material	Ext	Open	Ext
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3	13.5	l e	10' sticks of 1" emt			22.00	297.00		
4	11.5	ę	10' sticks of 1.5" emt			44.00	506.00		
5	16	е	16 hours labor 1 man	1	16.00	47.00	360,00		
6	***************************************	Ì			15.00				·
7						· · · · · · · · · · · · · · · · · · ·		<u> </u>	
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9	1	6	deduct for drop ceiling			-1,060.00	-1060.00		***************************************
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 Labor Hour Rate
 60
 Total Labor
 960

 Tax Rate
 Total Material
 -296

 Total Page 9
 Profit
 15.00%
 Total Opening
 0

 Total
 664



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

	Additional Security & Access Control Conduit					
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Zack Blair Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129			
DATE INITIATED:	06/04/2021	STATUS:	Open			
REFERENCE:		DUE DATE:	06/15/2021			
COST IMPACT:	Yes (Unknown)	SCHEDULE IMPACT:	No			
LINKED DRAWINGS	:	RECEIVED FROM:	Brandon Reed (Don Schimmel & Electric, Inc.)			

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Geoff Evans (Planning Design Group), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Sarah Hendrickson (ADG), Joseph Hill (City of Norman), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.)

Question from Zack Blair (Flintco, LLC - OKC) at 02:31 PM on 06/04/2021

Reference Electrical, Convergint Drawings, and SK-1

On May 27th, 2021, a coordination meeting was held with FLintco, City of Norman, and Convergint present, with the main topic regarding exposed raceways/cabling in the shop area. In the electrical drawings, general note "N" calls for the electrical contractor to provide all raceways shown on Convergint drawings. The raceways needed for convergint to get their cabling back to the comm room were not shown, and only the conduit required for the door access control was shown in the original Convergint drawings. After talking this through with Convergint, and Paul D'andrea, we all agreed that the access control wiring above dropped ceilings could be eliminated and Convergint's wiring could be free air with J-hooks in thos areas, eliminating the need for conduit above ceiling. The intention was to have a wash between eliminating the aforementioned conduit and adding the conduit across the shop/bay areas as shown in Convergints revised drawings, however, the revised conduit routing exceeds the original quote by approximately \$1500.

Please advise if Flintco should proceed with installing the added conduit per the revised Convergint Drawings at an additional ROM of \$1500.

Attachments:

RFI #041 - SK1.pdf

Official Response

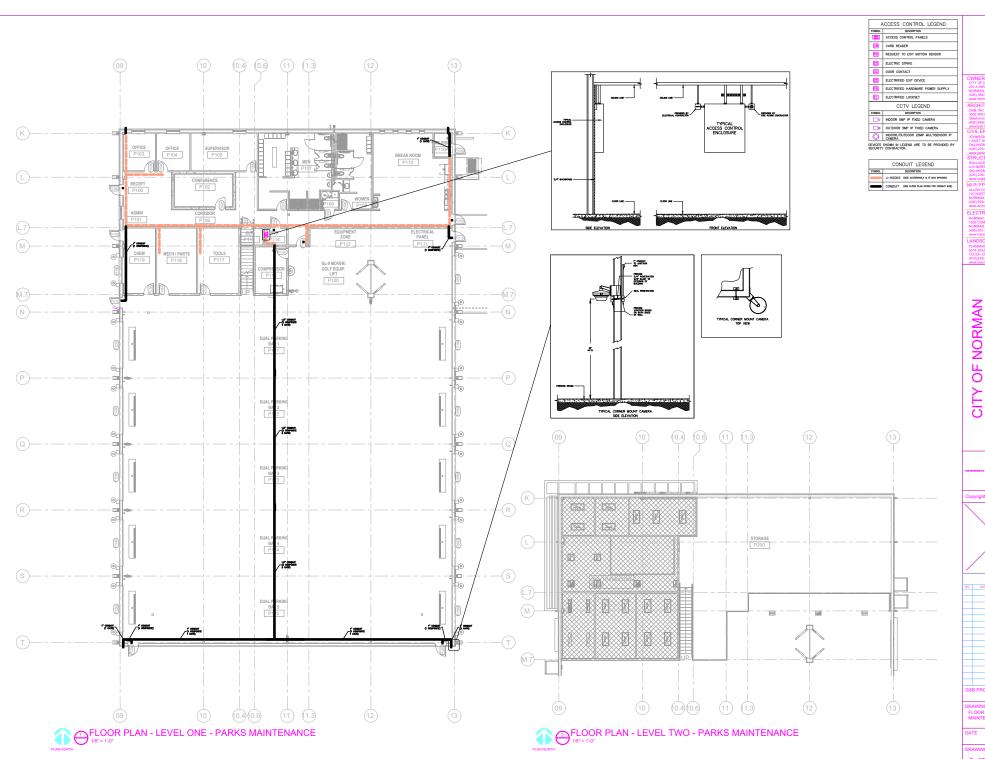
Awaiting an Official Response

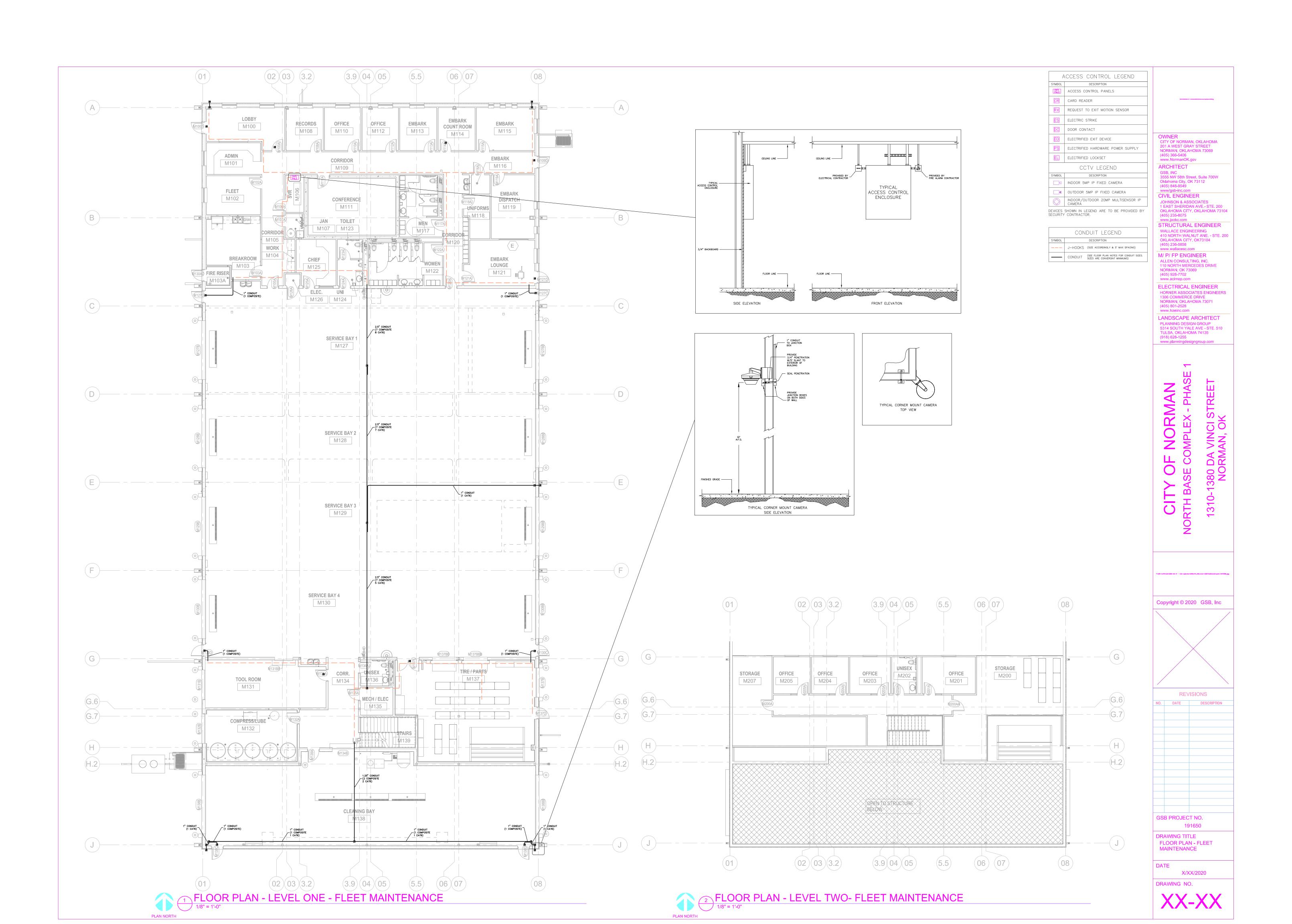
All Replies: ARCHITECT RESPONSE | JULY 20, 2021:

FLINTCO MAY PROCEED WITH THE INSTALLATION OF THE ADDED CONDUIT PER THE REVISED CONVERGINT DRAWINGS FOR THE ADD OF \$1,500.

MICHAEL SEGROVES, AIA / AICP

PROJECT ARHCITECT | GSB, INC. ARCHITECTS & PLANNERS





TILE CHANGE FROM 12x24 TO 18x35

APEX FLOORING

RYAN ELDRIDGE

17885 S Sunnylane Rd Norman, Ok 73071 Cell (405) 606-9416 ryan@apex-flooring.com

September 2, 2021

To: Cory Rackley From: Ryan Eldridge

Project Name: Norman North Base Complex

Sections Included: Ceramic Tiling

Labor and Materials are Included in the Following:

Emser Blue Emotion Dark 18x35 in lieu of specified 12x24 floor tile

Labor	\$ 1,147.00
Thinset	\$ 57.00
Leveling Clips	\$ 357.00

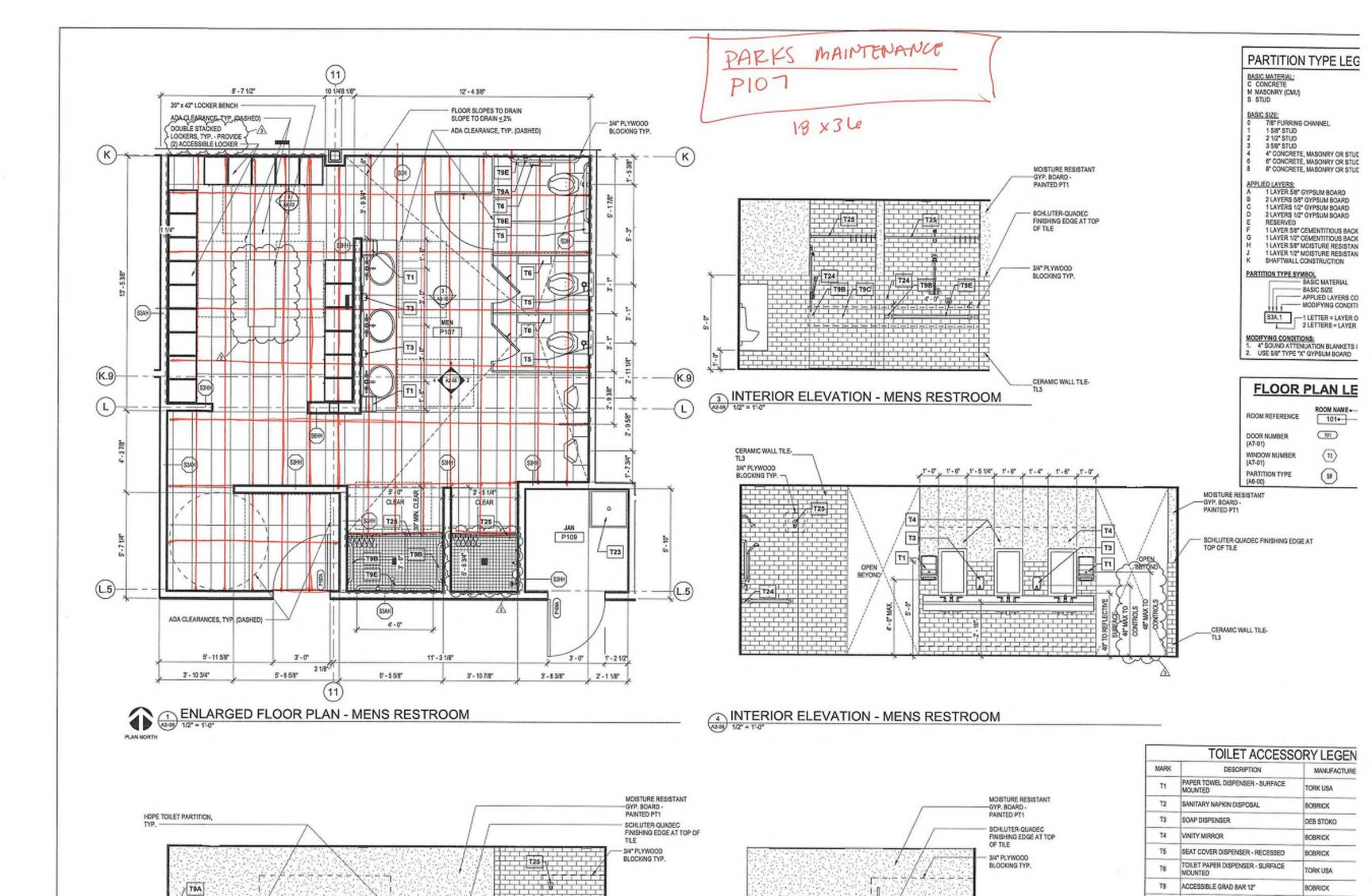
TOTAL ADD for 18x35 in lieu of specified 12x24......\$ 1,561.00

Note: 1/2 Parks, 1/2 Fleet or \$780.50 each

Add On: bonds add 1.5%

<u>Bid Exclusions</u>: Demo, Unforeseen Conditions, Moisture Related Subfloor Failures, cost of any/all subcontract bonds, dumpster, major floor prep, leveling or floating to transitions, furniture moving, final clean, floor protection, hoisting, overtime, mud beds, clean up or any scraping of debris from other trades, cement backer boards, epoxy/stained/sealed concrete.

Notes: This proposal includes standard floor prep(1 bag per 1000sf). Standard floor prep is defined as slab blemishes, minor cracks, and nail holes. Any additional bags will result in a change order and must be approved before any work will be performed. A moisture test will be performed on every job prior to installation to determine moisture and PH level of slab. Moisture remediation if required will be considered a change order. All epoxy grout/mortars and cement backer boards are excluded from bids including ceramic tile. All grouts and setting materials are standard unless otherwise noted above. WARRANTY: 1 year for workmanship only.



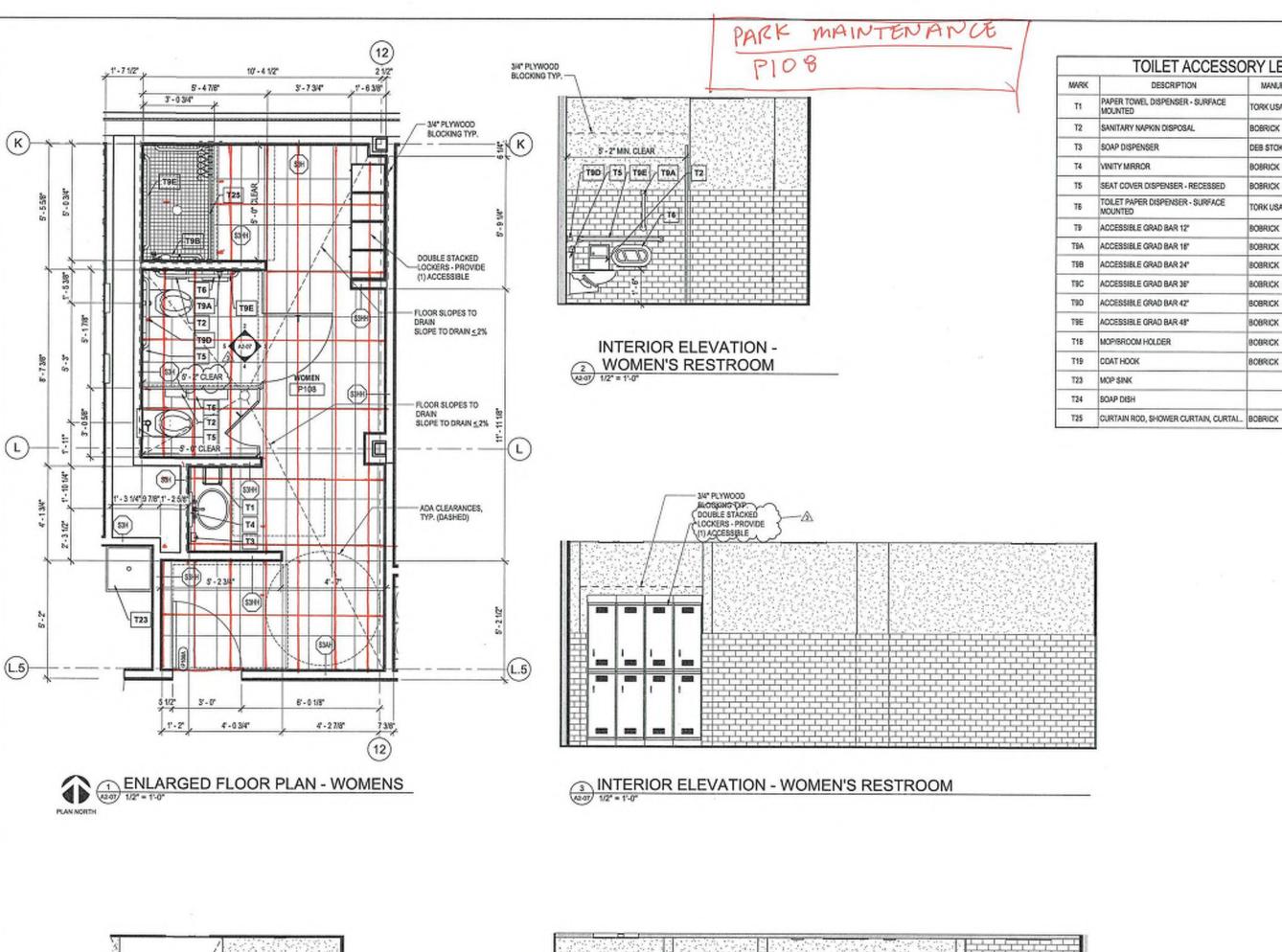
Am

TBA

CERAMIC WALL TILE-

ACCESSIBLE GRAD BAR 18"

BOBRICK



OPEN

BEYOND,

T6 T2

3/4" PLYWOOD

BLOCKING TYP.



PARTITION TYPE LEG

BASIC MATERIAL: C CONCRETE M MASONRY (CMU)

S STUD

BASIC SIZE; 0 7/8* FURRING CHANNEL 15/6" STUD 21/2" STUD

3 5/8" STUD

4" CONCRETE, MASONRY OR STUE 6" CONCRETE, MASONRY OR STUE 8" CONCRETE, MASONRY OR STUD

APPLIED LAYERS:
A 1 LAYER 5/8" GYPSUM BOARD 2 LAYERS 5/6" GYPSUM BOARD 1 LAYERS 1/2" GYPSUM BOARD

2 LAYERS 1/2" GYPSUM BOARD 1 LAYER 5/8" CEMENTITIOUS BACK 1 LAYER 1/2" CEMENTITIOUS BACK

1 LAYER 5/8" MOISTURE RESISTAN 1 LAYER 1/2" MOISTURE RESISTAN.

SHAFTWALL CONSTRUCTION

PARTITION TYPE SYMBOL BASIC MATERIAL

BASIC SIZE

APPLIED LAYERS CC

MODIFYING CONDITI -1 LETTER = LAYER C 2 LETTERS = LAYER

MODIFYING CONDITIONS:

1. 4" SOUND ATTENUATION BLANKETS! USE 5/6" TYPE "X" GYPSUM BOARD

FLOOR PLAN LE

101

(11)

(88)

ROOM REFERENCE 101+

DOOR NUMBER

8-6047,...

(A7-01) WINDOW NUMBER

(A7-01)

PARTITION TYPE (46-00)

MATERIAL ABBREVIATIONS ACT - ACOUSTICAL CEILING TILES

EP - EPOXY

FRP - FIBERGLASS REINFORCED P/

GL - GLASS LAM - LAMINATE

LVT - LUXURY VINYL TILE

MT - LINER METAL BUILDING PANEL

MR - MIRROW

NIA - NOT APPLICABLE

OTS - OPEN TO STRUCTURE

PLY - PLYWOOD DECK

PT-PAINT

RB - RESILIENT BASE

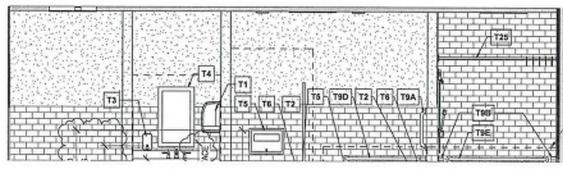
RTR - RESILIENT TREADS / RISERS

8C - SEALED CONCRETE SSC - STAINED & SEALED CONCRET

SF - SPECIAL FINISH

\$8 - SOLID SURFACE

TL-TILE



3/4" PLYW000 BLOCKING TYP.

ADDITION OF CURBS FOR ROOF HYDRANTS



Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #007: CE #008 - Curbs for Roof Hydra

TO:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway
PCO NUMBER/REVISION:	007 / 0	CONTRACT:	Oklahoma City, Oklahoma 73008 1 - North Base Fleet Contract Prime
PCO NUMBER/REVISION:	00770	CONTRACT:	Contract
REQUEST RECEIVED FROM:		CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)
STATUS:	Pending - In Review	CREATED DATE:	9/13/2021
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None
FIELD CHANGE:	No		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:		PAID IN FULL:	No
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:	
		TOTAL AMOUNT:	\$3,960.00

POTENTIAL CHANGE ORDER TITLE: CE #008 - Curbs for Roof Hydra

CHANGE REASON: Client Request

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

CE #008 - Curbs for Roof Hydrants

Fabricate 6 flat roof curbs to hold the roof hydrants. We will ssist in mounting these however the persons installing the other curbs will have to cut them in we will spot the curbs. Roofer will have to seal curbs to maintain their warranty. Cost per curb \$600.00 x 6 = \$3,600.00 x 10% OHP =\$3,960.00

ATTACHMENTS:

\$1,980.00 per building (3 on each roof)

Flintco Orcutt Mechanical Contractors

6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE SIGNATURE DATE



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Roof Hydrant Mounting Detail					
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Zack Blair Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129		
DATE INITIATED:	08/18/2021	STATUS:	Open		
REFERENCE:		DUE DATE:	08/27/2021		
COST IMPACT:	Yes (Unknown)	SCHEDULE IMPACT:	TBD		
LINKED DRAWINGS:	:	RECEIVED FROM:	Matt Orcutt (Orcutt Mechanical Contractors, Inc.)		

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.), Ethan Treisa (Flintco, LLC - OKC)

Question from Zack Blair (Flintco, LLC - OKC) at 03:07 PM on 08/18/2021

Reference attached SK1 which includes the roof hydrant product data and the plumbing fixture schedule from sheet M5-02 P6A Roof Hydrant - The plumbing fixture schedule on sheet M5-02 notes for the roof hydrant to be mounted as indicated on detail, however no detail has been provided. The hydrant that is specified and submitted and approved is made for a roof with a slope less than 2 degrees, which our roof

Flintco proposes to make a curb for each hydrant (6 total). The curb would essentially be a false curb that creates a flat surface to mount the hydrant.

1) Please provide a detail if the curb option is acceptable, including finish requirements.

Attachments:

RFI #054-SK1.pdf

Official Response

Awaiting an Official Response

All Replies:

ACI Response:

Detail was left off sheet in error. Please refer to attached page.

Proposed solution is acceptable. Detail 1 is for the roof hyrdrant. Detail 2 is for the roof curb, with a hydrant as the piece of equipment to be installed on the curb.

Isaac Marrone 8-19-21

MARK	FIXTURE	MANUFACTURER	SIZE/MOUNT	ROUGH-	OUGH-IN SCHEDULE				ELECTRICAL	FITTINGS & REMARKS
		MODEL		CW	HW	WASTE	VENT	AIR	CONNECTIO	N
P-1	WATER CLOSET	KOHLER K-4325	WALL HUNG	1"	-	4"	2"	-	Y	PROVIDE PROFLO PETSCOFH2000WH HEAVY DUTY COMMERCIAL SEAT, SLOAN 111 SFSM-1.6 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-1A	WATER CLOSET ADA	KOHLER K-4325	WALL HUNG 18" HIGH	1*	-	4"	2"	-	Y	PROVIDE PROFLO PETSCOFH2000WH HEAVY DUTY COMMERCIAL SEAT, SLOAN 111 SFSM-1.6 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-2	URINAL	KOHLER K-4991-ET	WALL HUNG	3/4"	-	2"	1 1/2*	-	Y	PROVIDE SLOAN 186 SFSM-0.25 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-2A	URINAL ADA	KOHLER K-4991-ET	WALL HUNG	3/4"	-	2"	1 1/2*	-	Y	PROVIDE SLOAN 186 SFSM-0.25 GPF-HW FLUSH VALVE, EL-451 HARDWIRED TRANSFORMER, AND FLOOR MOUNTED FIXTURE CARRIER.
P-3	LAVATORY ADA	KOHLER K-2005	WALL HUNG	1/2"	1/2"	1 1/2"	1 1/2"	-	-	KOHLER K-7404-5A FAUCET WITH BLADE HANDLES, SUPPLY STOPS, SUPPLY LINES, K-7129 GRID STRAINER W/ OFFSET P-TRAP, ACORN MODEL ST70 ASSE 1070 MIXING VALVE, FLOOR MOUNTED CARRIER, AND TRUEBRO LAV SHIELD. MOUNT AT ADA HEIGHT.
P-3A	LAVATORY ADA	KOHLER K-2196	20"x17" COUNTER	1/2*	1/2"	1 1/2"	1 1/2*	-	-	KOHLER K-7404-5A FAUCET WITH BLADE HANDLES, SUPPLY STOPS, SUPPLY LINES, K-7129 GRID STRAINER W/ OFFSET P-TRAP, ACORN MODEL ST70 ASSE 1070 MIXING VALVE, AND TRUEBRO LAV SHIELD. MOUNT AT ADA HEIGHT.
P-3B	SHOP WASHFOUNTAIN ADA	BRADLEY TDB3103	FLOOR 36" SEMI-CIRCLE	1/2*	1/2"	2"	1 1/2*	-	Y	INFRARED SENSOR ACTIVATED FAUCETS, PROVIDE 110V PLUG IN TRANSFORMER, ALL NECESSARY MOUNTING HARDWARE, ASSE 1070 THERMOSTATIC MIXING VALVE, SUPPLY STOPS, SUPPLY LINES, OFFSET TAILPIECE, & P-TRAP.
P-4B	SERVICE SINK (SQUARE)	FIAT TSB3000	FLOOR 24x24x12	3/4"	3/4"	3"	2"	-	-	T&S BRASS MODEL B-0665-BSTP FAUCET, 832-AA HOSE & BRACKET, 889-CC MOP BRACKET, MSG 2424 STAINLESS STEEL WALL GUARD. PROVIDE CHECK VALVES IN HOT AND COLD WATER LINES ABOVE CEILING PRIOR TO FAUCET.
P-5	BI-LEVEL ADA WATER COOLER / BOTTLE FILLER	ELKAY LVRCGRNTL8WSK	WALL HUNG	1/2*	-	1 1/2"	1 1/2*	-	Y	8.0 GPH @ 50 DEGREE WATER, 120V/1PH, 260 WATTS, 4.0 AMP. VANDAL RESISTANT STAINLESS STEEL CABINET, PROVIDE P-TRAP, SUPPLY STOP, & FLOOR MOUNTED IN WALL CARRIER.
P-6	FREEZE PROOF WALL HYDRANT	WOODFORD B67	WALL	3/4"	-	-	-	-	-	MOUNT AT 30" ABOVE GRADE, PROVIDE TWO TEE KEYS TO OWNER. PROVIDE ISOLATION BALL VALVE ON BRANCH LINE.
P-6A	ROOF HYDRANT	WOODFORD SRH-MS	ROOF	3/4*	-	-	-	-	-	MOUNT AS INDICATED ON DETAIL. PROVIDE ISOLATION BALL VALVE ON BRANCH LINE. PROVIDE DECK CLAMP.
P-6B	SHOP HYDRANT	WOODFORD 24	WALL	3/4"	-	-	-	-	-	MOUNT AT 30" ABOVE FLOOR.
P-7	WASHER BOX	GUY GREY	WALL RECESSED	1/2"	1/2"	2"	1 1/2"	-	-	STAINLESS STEEL BOX AND FACEPLATE - 304 S.S., 1/4 TURN BALL VALVE W/ HAMMER ARRESTORS,

The Woodford, ASSE 1057 listed, SRH Roof Hydrant is intended to provide water, in any weather condition, on roofs for window washing, cleaning of condenser coils, cooling towers, green roofs and other types of roof top equipment. The SRH is backflow protected with a field testable ASSE 1052 double check backflow preventer.

The SRH does not require a drain line from the valve body located inside the building.

The SRH-MS with Mounting System allows for installation flexibility. It is not necessary to install hydrant when hydrant support is mounted to the roof. The hydrant support utilizes a 3" diameter opening that allows the hydrant to be installed or easily removed at a later time. All necessary mounting hardware for proper installation on a commercial roof is supplied, including a 2 degree shim for pitch adjustment.

Hydrant Features:

- ASSE 1057 Listed
- No Drain Line Required With the hose removed, a venturi action draws water out of the internal reservoir and discharges out the backflow preventer.
- Superior reservoir evacuation times without removing the backflow preventer.
- Variable flow plunger for longer life is not easily damaged and assures proper shut-off.
- Large easy to open lift handle.
- Adjustable link for easy adjustment and positive lever lock tension.
- All hydrant repairs can be made from top without removing hydrant.

Specifications:

- · Hose Connection Backflow Preventer:
 - Model 50H with 3/4" hose connection
 - ASSE 1052 Listed



- Field Testable Dual Check holds against 125 psi backflow pressure
- 3/4" NPT female inlet connection.
- 1 ½" U.S. made galvanized pipe.
- Maximum Working Pressure: 100 p.s.i.
- Maximum Temperature: 120° F

SRH WARNING	Supply PSI	Run Time
After each use, run hydrant without a	60	5 seconds
hose to ensure proper evacuation.	25	15 seconds

Mounting System: (Can be ordered Separately)

- Cast iron Hydrant Support
- Cast iron Under Deck Flange
 - 4 bolts draw tight against the roof decking and the hydrant support.
 - 3 clamp screws tighten against the hydrant pipe to secure the hydrant's vertical position through the roof.
- Well Seal seals tight between the hydrant support and hydrant pipe.
- EPDM Boot covers well seal and top of hydrant support.
- 2° Shim is supplied, if needed, for installation on pitched roofs.

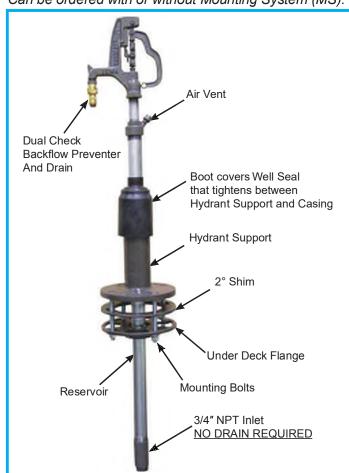
Manufactured under U.S. patent 7,472,718; 7,730,901 and patents pending.

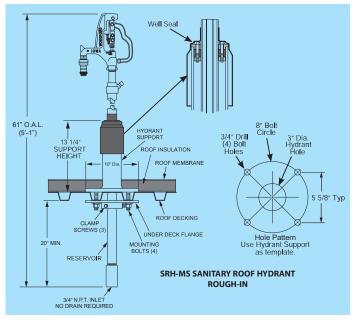
For Installation / Troubleshooting Instructions go to www.woodfordmfg.com or call 1-800-621-6032

Freezeless Sanitary Roof Hydrant No Drain Line Required!

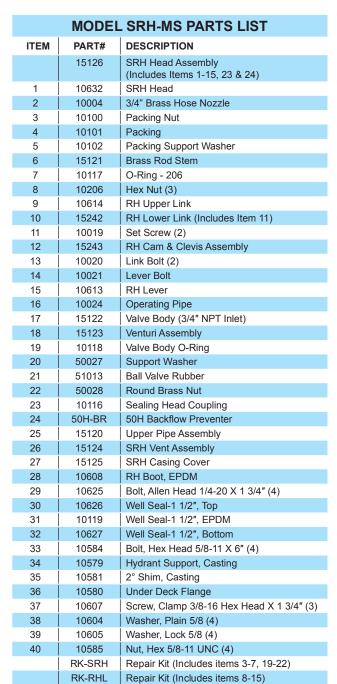
WOODFORD

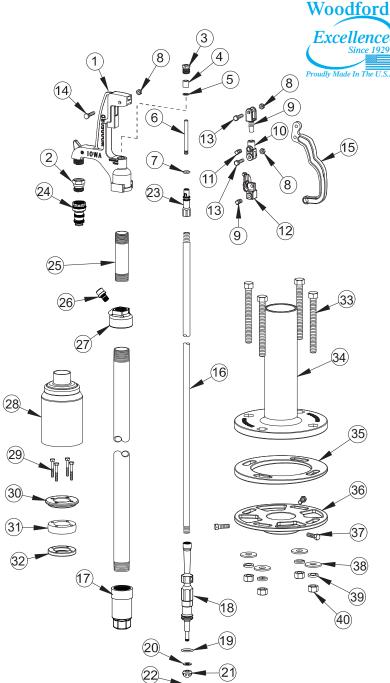
Can be ordered with or without Mounting System (MS).





Rev. 4/11 Form No. SRH-MS.104

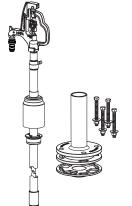




When ordering, specify SRH part number option listed below.

Part# SRH-MS Consists of the complete Roof Hydrant system:
Qty.1 SRH Hydrant shipped in 1 carton.
Qty.1 RH-MS
Mounting System shipped in 1 carton.

Total Shipping Wt. 2 cartons: 50 lbs

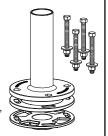


Part# RH-MS

Carton contents consists of: Mounting System/ Rough-In Components (Parts 33-40 above)

- Hydrant Support
- 2° Shim,
- Under Deck Flange
- Mounting Bolts, Nuts, Washers.

Shipped in 1 Carton. Shipping Wt. - 30 lbs



Part# SRH

Carton contents consists of:

- Hydrant Assembly (Parts 1-32 above)
- Well Seal (Parts 28-32 above)
- Boot (Part 28 above)

Shipped in 1 Carton. Shipping Wt. - 20 lbs



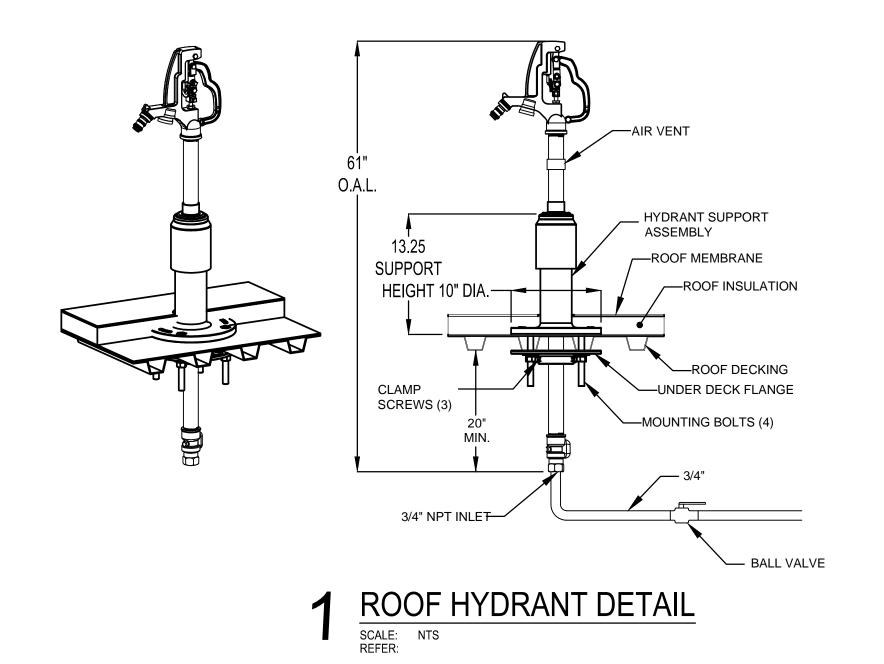
For more information contact...

WOODFORD MANUFACTURING COMPANY

2121 Waynoka Road, Colorado Springs, Colorado 80915 • Phone: (800) 621-6032 • Fax: (800) 765-4115

To view our complete product line visit: www.woodfordmfg.com or email: sales@woodfordmfg.com

A Division Of WCM Industries, Inc.



EXHAUST FAN
OR HOOD

INTEGRAL CRICKET
ON BACK

18 GAUGE GALVANIZED

SHEET METAL 3ib. 1 1/2"
THICK RIGID INSULATION.
ALL WELDED SEAMS

SLOPED METAL ROOF

RPS ROOF CURB FOR SLOPED METAL ROOF

SLOPED METAL ROOF

RPS ROOF CURB FOR SLOPED METAL ROOF

INTERNAL CONFORMING CAP CELLS

2 EQUIPMENT ROOF CURB DETAIL

SCALE: NTS
REFER: NTS

TAC CONDUIT SIZING CHANGE





Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008 Phone: 405 787 5888 ext202 Project: 7080 - North Base Fleet Contract

Prime Contract Potential Change Order #008: CE #009 - cONDENSATE pIPING uP

	piP	ING uP	
TO:	Flintco	FROM:	Orcutt Mechanical Contractors 6200 NW 39th Expressway Oklahoma City, Oklahoma 73008
PCO NUMBER/REVISION:	008/0	CONTRACT:	1 - North Base Fleet Contract Prime Contract
REQUEST RECEIVED FRO	M:	CREATED BY:	Matthew Weber (Orcutt Mechanical Contractors)
STATUS:	Pending - In Review	CREATED DATE:	9/14/2021
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	None
FIELD CHANGE:	No		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:		PAID IN FULL:	No
EXECUTED:	No	SIGNED CHANGE ORDER RECEIVED DATE:	
		TOTAL AMOUNT:	\$1,128.00
POTENTIAL CHANGE ORD	ER TITLE : CE #009 - cONDENSATE pIPIN dequest	IG uP	
CE #009 - cONDENSATE plf	ER DESCRIPTION: (The Contract Is Change PING uPSIZING EASE DUE TO UPSIZING THE CONDENS	/	<i>(</i>
ATTACHMENTS:			
		60% Fleet - \$67 40% Parks - \$4	• • • • • • • • • • • • • • • • • • •

Flintco

Orcutt Mechanical Contractors

6200 NW 39th Expressway Oklahoma City, Oklahoma 73008

SIGNATURE DATE SIGNATURE DATE DATE



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Zack Blair Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129
08/18/2021	STATUS:	Open
	DUE DATE:	08/27/2021
TBD	SCHEDULE IMPACT:	TBD
M2-11		
	RECEIVED FROM:	Mike Hamilton (Orcutt Mechanical Contractors, Inc.)
	GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112 08/18/2021 TBD	GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112 08/18/2021 STATUS: DUE DATE: TBD SCHEDULE IMPACT: M2-11

COPIES TO:

Carolyn Bennett (GSB, Inc.), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), Randy Hill (ADG), Cory Rackley (Flintco, LLC - OKC), David Stanton (GSB, Inc.), Ethan Treisa (Flintco, LLC - OKC)

Question from Zack Blair (Flintco, LLC - OKC) at 03:49 PM on 08/18/2021

Reference sheet M2-11, M2-12, and attached product data for the TAC units.

Question: The condensate piping for the TAC units in both Parks and Fleet is shown to be 3/4" PVC to the units, however, the TAC units are equipped with 1" ports for the condensate, and the manufacturer recommends 1" condensate.

1) Please confirm the condensate piping should be up-sized to 1" (1-1/4" OD) to meet manufacturer requirements.

Attachments:

TAC Unit Cut Sheets.pdf

Official Response

Awaiting an Official Response

All Replies:

ACI Response:

Yes, size condensate line per manufacturers recommended drain size.

Isaac Marrone 8-19-21

ADDITIONAL BACKER BOARD - RFI #61



WILJO INTERIORS

109 NE 38th Street Oklahoma City, OK 73105 *Phone*: 405-792-7979

Fax: 405-792-7980 www.wiljointeriors.com

TO: Phillip Gunderson	JOB: City of Norman- North Base Complex Par	·k
Flintco		
DATE: 09/21/21	PLAN DATE:	
ADDENDUMS:	VOID PRICE AFTER: 30 Days	
SCOPE:		AMOUNT
Proposal to install tile backer board where tile is called out	on finish schedule	
(Excludes: Tape and Bed; Paint; Tile; Shower Areas)	Materials:	\$1,135
	Labor:	\$1,545
	OH&P:	\$430
	Total:	\$3,110
EXCLUSIONS:		
Overtime or nightwork; MEP; sealing of MEP penetrations;	•	
of doors or door hardware; provide door frames; provide of frames or window frames; provide or install of RR accessor	•	
mullion caps; glazing; tape & bed; paint; EIFS or stucco; tex		
blown-in insulation; engineering; any work not mentioned	-	
	·	
	TOTAL:	\$3,110
Respectfully Submitted,		
Frank Snolis		
WILJO INTERIORS, INC.		



Flintco LLC (40-000) 2302 South Prospect Oklahoma City , Oklahoma 73129 Phone: (405) 670-6307 Project: 20136 - City of Norman - North Base Complex Phase 1 1310-1380 DA Vinci Street Norman, Oklahoma 73069

Cementitious Backer Board Clarification						
то:	Michael Segroves GSB, Inc. 3555 NW 58th Street, Suite 700W Oklahoma City, Oklahoma 73112	FROM:	Ethan Treisa Flintco, LLC - OKC 2302 S. Prospect Oklahoma City, Oklahoma 73129			
DATE INITIATED:	09/08/2021	STATUS:	Open			
REFERENCE:		DUE DATE:	09/17/2021			
LINKED DRAWINGS	:	RECEIVED FROM	и:			

COPIES TO:

Zack Blair (Flintco, LLC - OKC), Paul D'Andrea (City of Norman), Phillip Gunderson (Flintco, LLC - OKC), Bill Harrell (ADG), David Stanton (GSB, Inc.)

Question from Ethan Treisa (Flintco, LLC - OKC) at 02:18 PM on 09/08/2021

REF: Product Data REF: Spec 092900

Page 4 of the referenced spec section notes to install cementitious backer board around the walls of the (3) showers. Please advise if the intent is to provide cementitious backer board at all other locations that are to receive tile.

Attachments:

usg-durock-cement-board-with-edgeguard-submittal-en-CB399EG.pdf 092900.pdf

Official Response

Awaiting an Official Response

All Replies: RESPONSE | GSB | 2021 09 16:

CORRECT - PROVIDE CEMENTITOUS BACKER BOARD AT ALL AREAS THAT ARE TO RECEIVE TILE

MICHAEL SEGROVES, AIA / AICP PROJECT ARCHITECT | GSB, INC. ARCHITECTS & PLANNERS

SECTION 09 29 00

GYPSUM BOARD

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Interior gypsum board.
 - 2. Tile backing panels.
 - Texture finishes.
- B. Related Requirements:
 - 1. Section 05 40 00 "Cold-Formed Metal Framing" for metal framing in exterior walls.
 - 2. Section 09 22 16 "Non-Structural Metal Framing" for non-structural steel framing and suspension systems that support gypsum board panels.

1.3 SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For the following products:
 - Textured Finishes: 24 inches square samples for textured finish indicated and on same backing indicated for Work.

1.4 QUALITY ASSURANCE

- A. Mockup: Build mockup of at least 100 sq. ft. in surface area to demonstrate aesthetic effects and to set quality standards for materials and execution.
 - 1. Build mockups for texture finish indicated.
 - 2. Apply final painting on surface for review of mockup.
 - 3. Simulate finished lighting conditions for review of mockup.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.6 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.

2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.

2.2 INTERIOR GYPSUM BOARD

- A. Manufacturer:
 - 1. American Gypsum.
 - 2. CertainTeed Gypsum
 - 3. Continental Building Products.
 - 4. Georgia-Pacific Gypsum.
 - 5. National Gypsum Company.
 - 6. USG Corporation.
- B. Gypsum Board, Type X: ASTM C1396/C1396M.
 - 1. Thickness: 5/8 inch.
 - 2. Long Edges: Tapered.
- C. Mold-Resistant Gypsum Board: ASTM C1396/C1396M. With moisture- and mold-resistant core and paper surfaces.
 - 1. Core: 5/8 inch, Type X.
 - 2. Long Edges: Tapered.
 - 3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.3 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.
 - Manufacturer:
 - a. C-Cure.
 - b. CertainTeed Corporation.
 - c. Custom Building Products.
 - d. FinPan, Inc.
 - e. James Hardie Building Products.
 - f. National Gypsum Company.
 - g. USG Corporation.
 - Core: 5/8 inch.
 - 3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.4 TRIM ACCESSORIES

- A. Interior Trim: ASTM C1047.
 - 1. Material: Galvanized, aluminum-coated steel sheet, rolled zinc, or plastic.
 - 2. Shapes:
 - a. Cornerbead
 - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - c. Expansion (control) joint.

2.5 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

- B. Joint Tape:
 - 1. Interior Gypsum Board: Paper.
 - 2. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.
 - 1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
 - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping or drying-type, all-purpose compound.
 - 3. Fill Coat: For second coat, use setting-type, sandable topping or drying-type, all-purpose compound.
 - 4. Finish Coat: For third coat, use setting-type, sandable topping or drying-type, all-purpose compound.
- D. Joint Compound for Cementitious Tile Backing Panels: As recommended by backer unit manufacturer.

2.6 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
 - 1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
 - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- C. Acoustical Batt Insulation: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
 - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
- D. Acoustical Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E90.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Franklin International.
 - b. Grabber Construction Products.
 - c. Hilti, Inc.
 - d. Pecora Corporation.
 - e. Specified Technologies, Inc.
 - f. Substitutions: Comply with requirements of Section 01 2501.

2.7 TEXTURE FINISHES

- A. Primer: As recommended by textured finish manufacturer.
- B. Non-Aggregate Finish: Premixed, vinyl texture finish for spray application.
 - 1. Manufacturer: National Gypsum Company.
 - 2. Texture: Orange peel.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- 3.2 APPLYING AND FINISHING PANELS, GENERAL
 - A. Comply with ASTM C840.
 - B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
 - C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
 - D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
 - E. Form control and expansion joints with space between edges of adjoining gypsum panels.
 - F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
 - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. (0.7 sq. m) in area.
 - 2. Fit gypsum panels around ducts, pipes, and conduits.
 - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch-wide joints to install sealant.
 - G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
 - H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

3.3 APPLYING INTERIOR GYPSUM BOARD

- A. Install interior gypsum board and cementitious backer units in the following locations:
 - 1. Mold-Resistant Gypsum Board, Type X: Where indicated on Drawings.
 - Cementitious Backer Units: At shower walls.
 - 3. Type X: Elsewhere.

B. Single-Layer Application:

- 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
- 2. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
 - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
 - b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.
- 3. On Z-shaped furring members, apply gypsum panels vertically (parallel to framing) with no end joints. Locate edge joints over furring members.
- 4. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

C. Multilayer Application:

- On partitions/walls, apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
- 2. Fastening Methods: Fasten base layers and face layers separately to supports with screws.

3.4 APPLYING TILE BACKING PANELS

- A. Comply with manufacturer's installation instructions and ANSI A108.11.
- B. Where tile backing panels abut other types of panels in same plane, shim surfaces to produce a uniform plane across panel surfaces.

3.5 INSTALLING TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.
 - 2. LC-Bead: Use at exposed panel edges.

3.6 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
 - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
 - 2. Level 2: Panels that are substrate for tile.
 - 3. Level 4: At panel surfaces that will be exposed to view (orange peel texture and paint).

- E. Primer and its application to surfaces are specified in Sections 09 91 00.
- F. Tile Backer Units: Finish according to manufacturer's written instructions.

3.7 APPLYING TEXTURE FINISHES

- A. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.
- B. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture matching approved mockup and free of starved spots or other evidence of thin application or of application patterns.
- C. Prevent texture finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If, despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray to prevent damage according to texture-finish manufacturer's written instructions.

3.8 PROTECTION

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

USG Tile & Flooring Solutions



USG DUROCK® BRAND CEMENT BOARD WITH EDGEGUARD™

Backerboard for tile and exterior finish systems

- Enhanced proprietary edge performance prevents spinout and crumbling
- · Easy to cut and fasten
- · Water durable and mold resistant
- · Warranted for interior and exterior applications
- · Exceptional tile bond
- Noncombustible
- Achieved GREENGUARD Gold Certification and qualifies as a low VOC emitting material per California Department of Public Health CDPH/EHLB/Standard Method (CA Section 01350) for school classrooms and private office modeling scenarios, and meets USGBC's LEED* v4 emission requirements for flooring applications.

DESCRIPTION

USG Durock® Brand Cement Board with EdgeGuard™ offers architects, builders and tile contractors a strong, water-durable tile base for tub and shower areas. Also an ideal underlayment for tile on floors and countertops in new construction and remodeling. Board is readily applied over wood or steel framing spaced 16 in. (406 mm) o.c. with corrosion-resistant wood screws, steel screws or hot-dipped galvanized roofing nails. After joints are treated, wall or floor tile is applied using latexfortified mortar or Type I organic adhesive.

USG Durock® Brand Cement Board with EdgeGuard is preferred by many applicators as a base for directly applied finishes, tile, stone and thin brick used in building exteriors.

The 1/2 in. (12.7 mm) and 5/8 in. (15.9 mm) panels are Underwriters Laboratories Inc. (UL) Classified for fire resistance, and may be used in any UL Design where Type DCB panels are listed.

PRODUCT DATA
SIZES AND PACKAGING

Size (thickness x width x length) ¹	Units (pcs) ²
1/4 in. x 3 ft. x 5 ft. (6.4 mm x 915 mm x 1525 mm)	60
1/2 in. x 32 in. x 5 ft. (12.7 mm x 813 mm x 1525 mm)	50
1/2 in. x 3 ft. x 5 ft. (12.7 mm x 915 mm x 1525 mm)	50
1/2 in. x 4 ft. x 8 ft. (12.7 mm x 1220 mm x 2440 mm)	40
5/8 in. x 3 ft. x 5 ft. (15.9 mm x 915 mm x 1525 mm)	40
5/8 in. x 4 ft. x 8 ft. (15.9 mm x 1220 mm x 2440 mm)	32

- 1. Other lengths available. Contact your USG Sales Representative.
- Shipped in packaging units as shown.

STANDARDS

USG Durock® Brand Cement Board with EdgeGuard exceeds ANSI standards for cementitious backer units (CBU). See ANSI A118.9 for test methods and specifications for CBU and ANSI A108.11 for interior installation of CBU. Exceeds industry standards as an exterior substrate for exterior finishes. Exceeds ASTM C1325 standards for nonasbestos fiber-mat reinforced cementitious backer units.

AVAILABILITY

USG Durock® Brand Cement Board with EdgeGuard is distributed throughout the United States. Contact a USG sales office or sales person for additional information.

COMPOSITION AND MATERIALS

USG Durock* Brand Cement Board with EdgeGuard is formed in a continuous process of aggregated portland cement slurry with polymer-coated, glass-fiber mesh completely encompassing edges, back and front surfaces. The edges are formed smooth with a patented poly-propylene fabric-wrapped edge. The ends are square cut.



DEILIVERY AND STORAGE OF MATERIALS

All materials should be delivered and stored in their original unopened package and stored in an enclosed shelter providing protection from damage and exposure to the elements. Even though the stability and durability of USG Durock® Brand Cement Board with EdgeGuard is unaffected by the elements, moisture and temperature variations may have an effect on the bonding effectiveness of basecoats and adhesives. Store all USG Durock® Brand Cement Board with EdgeGuard panels flat.

ENVIRONMENTAL CONDITIONS

In cold weather and during USG Durock® Brand Cement Board with EdgeGuard panel and tile installation, temperatures within the building shall be maintained within the range of 40 to 100°F (5 to 38°C). Adequate ventilation shall be provided to carry off excess moisture.

INTERIOR APPLICATIONS

The building shall be enclosed and the HVAC system operating so that wood framing shall reach the moisture content it will reach in service. Do not install board when the board is wet.

EXTERIOR APPLICATIONS

In exterior applications, USG Durock® Brand Cement Board with EdgeGuard should not be left uncovered for a period of time exceeding 90 days. Discoloration or staining may occur due to exposure to the elements which will not affect performance of the panel. Finishes, leveling/skim coats and basecoats should not be applied to USG Durock® Brand Cement Board with EdgeGuard panel that is wet or frozen or that contains frost. After application, and for at least 24 hours, finishes, leveling/skim coats and basecoats should be effectively protected from rain and excessive moisture. In cold weather and during finish applications, USG Durock® Brand Cement Board with EdgeGuard panel, skim or basecoat, mortar, finish material and air temperature must be at least 40°F (5°C) and must remain at this temperature or higher for at least 24 hours after application. Hot and dry weather may affect working time of leveling/skim or basecoat and finish materials. Under rapid drying conditions, dampening or light fogging of board, leveling/skim or basecoat surface may be required to improve workability.

PANEL MICROCRACKING

USG Durock® Brand Cement Board with EdgeGuard is formulated to develop fine microcracking (also called multiple cracking) in the panel. The microcracking process helps to evenly relieve the stored strain energy in the product due to handling and installation, external loads and/or panel restrained movement. The presence of microcracks in the panel should not be considered a product defect.

INSTALLATION

- **A.** Install cement board with ends and edges closely abutted, but not forced together. Stagger end joints in successive courses.
- B. For flooring applications over a wood-based substrate, laminate USG Durock® Brand Cement Board with EdgeGuard to subfloor using Type 1 organic adhesive or latex-modified thin-set mortar suitable for bonding cement board. Fasten to subfloor with 1-1/4 in. (32 mm) USG Durock™ Brand Tile Backer Screws for wood framing (or equivalent) or 1-1/2 in. (38 mm) hot-dipped galvanized roofing nails spaced 8 in. (203 mm) o.c. in both directions with perimeter fasteners at least 3/8 in. (10 mm) and less than 5/8 in. (16 mm) from ends and edges. Drive nails and screws so that bottoms of heads are flush with panel surface to ensure firm panel contact with subfloor. Do not overdrive fasteners. Prefill joints with tile-setting mortar or adhesive and then immediately embed USG Durock™ Brand Tile Backer Tape and level joints.
- C. For wall application, fasten USG Durock® Brand Cement Board with EdgeGuard panels to framing with specified fasteners. Drive fasteners into field of panels first, working toward ends and edges. Hold panels in firm contact with framing while driving fasteners. Space fasteners maximum 8 in. (203 mm) o.c. for walls, 6 in. (152 mm) o.c. for ceilings, with perimeter fasteners at least 3/8 in. (10 mm) and less than 5/8 in. (16 mm) from ends and edges. Drive nails and screws so bottoms of heads are flush with panel surface to ensure firm panel contact with framing. Do not overdrive fasteners. Approved fasteners include: USG Durock™ Brand Tile Backer Screws for steel framing (or equivalent), 1-1/4 in. (32 mm) and 1-5/8 in. (41 mm) for 14- to 20-gauge steel framing; USG Durock™ Brand Tile Backer Screws for wood framing (or equivalent), 1-1/4 in. (32 mm), 1-5/8 in. (41 mm) and 2-1/4 in. (57 mm) for wood framing. Nails (1-1/2 in. [38 mm] hot-dipped galvanized roofing nails). Prefill joints with tile-setting mortar or adhesive and then immediately embed USG Durock™ Brand Tile Backer Tape and level joints.

INSTALLATION CONT.

- D. Cement board should be cut to size with a knife and straight edge. A power saw should be used only if it is equipped with a dust-collection device. Installer should wear NIOSH/MSHA-approved dust mask.
- **E.** If waterproofing is desired, use USG Durock™ Brand Liquid Waterproofing Membrane. See *USG Durock™ Brand Liquid Waterproofing Membrane* submittal sheet (CB817) for product information.

Refer to *USG Durock® Brand Cement Board System Guide* (SA932) for complete installation information, including good design practices. For technical assistance, call USG Technical Service at 800 USG.4YOU (874-4968).

LIMITATIONS

- Designed for positive or negative uniform loads up to 60 psf. For complete information on the use of USG Durock® Brand panels in exterior systems, consult uniform load table on Page 4 for applicable positive or negative uniform loads on wall systems.
- 2. Wall applications: Maximum stud spacing: 16 in. (406 mm) o.c. (24 in. [610 mm] o.c. for cavity shaft wall assembly). Framing shall be designed (based on stud properties alone) not to exceed L/360 deflection for tile and thin brick, L/240 for direct-applied exterior finish systems. Maximum fastener spacing: 8 in. (203 mm) o.c. for wood and steel framing; 6 in. (152 mm) o.c. for ceiling applications.
- 5. Floor applications: Maximum joist spacing 24 in. (610 mm) o.c. The subfloor system should be designed with a minimum deflection limit of L/360 for the span. Some finish materials may require a more rigid subassembly (such as large format tile and natural stone products). In these cases, follow the manufacturer's minimum requirements. The subfloor should be APA Span-Rated Plywood or OSB with an Exposure 1 classification or better with tongue and groove or back blocked at the unsupported edges.
- **4.** In exterior applications, USG Durock® Brand Cement Board with EdgeGuard should not be left uncovered for a period of time exceeding 90 days. Discoloration or staining may occur due to exposure to the elements which will not affect performance of the panel.
- 5. Brittle coatings, such as epoxy coatings, are not recommended for use with USG Durock® Brand Cement Board with EdgeGuard. USG Durock® Brand Cement Board with EdgeGuard is intended for use with tile, thin brick and exterior stucco coatings only.
- **6.** Maximum dead load for ceiling system is 7.5 psf.
- 7. Steel framing must be 20-gauge or heavier.
- 8. Do not use drywall screws or drywall nails. Do not use drywall joint tape.
- 9. Do not use 1/4 in. (6.4 mm) USG Durock® Brand Cement Board with EdgeGuard for wall or ceiling applications. 1/4 in. (6.4 mm) USG Durock® Cement Board with EdgeGuard is for use in interior applications only.
- 10. Do not use USG Durock® Brand Cement Board with EdgeGuard with vinyl flooring.
- 11. USG Durock® Brand Cement Board with EdgeGuard is not designed for use as a structural panel.
- 12. Maximum installed weight of the finish system should not exceed 15 psf.
- 13. USG Durock® Brand Cement Board with EdgeGuard panels should not be used in areas where they are exposed to temperatures that exceed 200°F (93°C).
- **14.** In locations close to salt water or other challenging environments, design professionals should consider the use of stainless steel fasteners.
- **15.** Do not use lightweight setting-type joint compounds or ready-mix joint compounds directly over USG Durock* Brand Cement Board with EdgeGuard.

TECHNICAL DATA

Property	Unit of Measure	ASTM Test Method	5/8 in. (15.9 mm) USG Durock* Brand Cement Board with EdgeGuard™	1/2 in. (12.7 mm) USG Durock* Brand Cement Board with EdgeGuard™	1/4 in. (6.4 mm) USG Durock® Brand Cement Board with EdgeGuard™ Underlayment
Flexural strength	psi (MPa)	C947	> 480	> 750	>1000 (6.9)
Indentation strength	psi (MPa)	D2394	> 1250	>1250	>1250 (8.6)
Shear bond strength	psi	ANSI A118.4	> 50	>50	> 50
Nail-pull resistance	lb. (0.375 in. [10 mm] head diameter, wet or dry)	C473	>90	>90	_
Weight	psf (kg/m²)	C473	3	2.4	< 1.9 (1.9)
Freeze/thaw resistance	procedure B, number of cycles with no deterioration	C666	100	100	100
Mold resistance	_	G21	Rating 0, No growth	Rating 0, No growth	Rating 0, No growth
Noncombustibility	D/F-:I	E136	Pass	Pass	Pass
Noncombustibility	Pass/Fail	E136			
Surface-burning characteristics	flame/smoke	E84	0/0	0/0	0/0
Thermal	"R"/k value	C518	.49/1.27	0.39/1.27	_
Standard method for evaluating ceramic floor tile installation systems	Passes cycles 1-6	C627	Light commercial	Light commercial	Light commercial
Minimum bending radius	ft. (requires special framing details available upon request)	_	6	6	_

PRODUCT INFORMATION

See usg.com for the most up-to-date product information.

DANGER

Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause ancer by inhalation of respirable crystalline silica. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use only in a well-ventilated area, wear a NIOSH/MSHA-approved respirator. Wear protective gloves/protective clothing/eye protection. If swallowed, inhaled, or skin irritation occurs get medical attention. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Dispose of in accordance with local, state, and federal regulations. For more information call Product Safety: 800 507-8899 or see the SDS at usg.com

KEEP OUT OF REACH OF CHILDREN.

TRADEMARK

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NOTICE

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

UNIFORM LOAD—1/2 IN. (12.7 MM) USG DUROCK® BRAND CEMENT BOARD WITH EDGEGUARD™

Stud Spacing	Fastener Spacing	Design Wind Load (I/240)	Design Wind Load (I/360)
12 in. (305 mm) o.c.	8 in. (203 mm) o.c.	35 psf	35 psf
	6 in. (152 mm) o.c.	44 psf	44 psf
16 in. (406 mm) o.c.	8 in. (203 mm) o.c.	27 psf	21 psf
	6 in. (152 mm) o.c.	31 psf	21 psf
24 in. (610 mm)	8 in. (203 mm) o.c.	12 psf	8 psf
o.c. (for shaft wall assemblies only)	6 in. (152 mm) o.c.	12 psf	8 psf

SUBMITTAL APPROVALS

Job Name	
Contractor	Date

800 USG.4YOU 800 (874-4968) usg.com

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DELAY DAYS

Proof Rolling Delay Days

Phillip Gunderson

From: Paul Dandrea < Paul. Dandrea@NormanOK.gov>

Sent: Monday, September 13, 2021 4:36 PM

To: Zack Blair

Cc: Cory Rackley; Phillip Gunderson; Michael Segroves; David Stanton; Randy Hill;

wharrell@adgokc.com

Subject: Re: EXTERNAL EMAIL : Norman North Base - Parking Lot Subgrade Delay

I am fine with providing the 6 additional days for waiting for the subgrade to dry.

Sent from my iPhone

On Sep 13, 2021, at 3:33 PM, Zack Blair <zblair@flintco.com> wrote:

Paul,

Per previous correspondence, the City only felt comfortable with providing additional delay days due to the parking lot subgrade issue. Flintco paid for the remediation work to the soil, but we do also feel that we should be provided with delay days due to this being an unforeseen issue. The parking lot has not seen any standing water since early April, when the drainage ditch was installed. With that said, our second failed proof roll was on 8/13/21 and the final proof roll was passed on 8/20/21, therefore we are requesting (6) additional working days due to the delay.

Feel free to give me a call if you have any questions.

Thanks,

Zack Blair
Superintendent
Flintco, LLC
(405) 835-6369 (d) // (405) 605-9303 (c)
www.flintco.com
<image001.png>

PEMB Metal Roofing Delays for Fleet

NUCOR BUILDING SYSTEMS-TERRELL

600 APACHE TRAIL TERRELL, TEXAS 75160 http://www.nucorbuildingsystems.com PH: 972/524-5407 FAX: 972/524-5417

August 6, 2021

Mr. Aaron Hunter Elite Star Construction 210 W. Chickasha Ave Chickasha OK, 73018

REFERENCE: North Base Complex – Fleet Maintenance (T20E0456B)

North Base Complex – Parks Maintenance (T20E0457B)

RE: VR16II Roof Panel (22GA-Pearl Gray) – Panel Delay

Dear Aaron,

I'm sending this letter as a follow up to help layout the timeline of the material delays that occurred for the roof panel on both of the North Base Projects. The main cause for the material delay was the special 22ga substrate that was needed on the project. Our suppliers as well as most other vendors are under some unprecedented times that date back to late 2020 and has continued well into 2021.

- The roof panel on both projects were originally to deliver on 5/14/21.
- Our purchasing team was told on 4/26/21 from Ternium (Coater) that they had not received the special 22ga substrate from the Mill and that there would be a delay in delivery of the coil.
- We did not receive the first delivery of coil till Wednesday 6/9/21.
- We immediately ran and delivered the Fleet Bldg and a partial for Parks Maintenance on 6/10/21 and 6/11/21.
- Part of the substrate that had been delivered to Ternium (Coater) was rejected for edge wave, so
 the Mill had to go back and reproduce the remaining portion that was needed on the Parks
 Maintenance.
- The last shipment of roof panel for Parks Maintenance was delivered to the site on 7/17/21.

Very truly yours,

Brian Wood

Senior Project Coordinator

600 Apache Trail • Terrell, TX 75160 **Phone:** 972.524.5407 Ext. 2407





Norman North Base - Phase 1: Weather Day Log

Month and Year	Weather Days Incurred	Actual Weather Days Claimed
November-20	3	3
December-20	10	10
January-21	7	7
February-21	12	12
March-21	2	2
April-21	3	3
May-21	2	2
June-21	2	2
July-21	2	2
August-21	3	3
September-21	0 (as of 9/22)	0 (as of 9/22)
October-21		
November-21		
Total (Days)	46	46

	<u>Date</u>	<u>Days</u>	<u>Reason</u>
1	23-Nov-20	1	Wet & Muddy Conditions
2	24-Nov-20	1	Rain, Wet & Muddy Conditions
3	25-Nov-20	1	Wet & Muddy Conditions
4	3-Dec-20	1	Rain, Wet & Muddy Conditions
5	4-Dec-20	1	Wet & Muddy Conditions
6	14-Dec-20	1	Snow, Ice, Wet & Muddy Conditions
7	15-Dec-20	1	Snow, Ice, Wet & Muddy Conditions
8	16-Dec-20	1	Snow, Ice, Wet & Muddy Conditions
9	17-Dec-20	1	Wet & Muddy Conditions
10	18-Dec-20	1	Wet & Muddy Conditions
11	29-Dec-20	1	Rain, Wet & Muddy Conditions
12	30-Dec-20	1	Rain/Snow, Ice, Wet & Muddy Conditions
13	31-Dec-20	1	Rain/Snow, Ice, Wet & Muddy Conditions
14	4-Jan-21	1	Wet & Muddy Conditions
15	5-Jan-21	1	Wet & Muddy Conditions
16	6-Jan-21	1	Wet & Muddy Conditions
17	7-Jan-21	1	Wet & Muddy Conditions
18	8-Jan-21	1	Wet & Muddy Conditions
19	25-Jan-21	1	Rain, Wet & Muddy Conditions
20	26-Jan-21	1	Wet & Muddy Conditions
21	8-Feb	1	Snow, Ice, Wet & Muddy Conditions
22	9-Feb	1	Snow, Ice, Wet & Muddy Conditions
23	10-Feb	1	Snow, Ice, Wet & Muddy Conditions
24	11-Feb	1	Snow, Ice, Wet & Muddy Conditions
25	12-Feb	1	Snow, Ice, Wet & Muddy Conditions
26	15-Feb	1	Snow, Ice, Wet & Muddy Conditions
27	16-Feb	1	Snow, Ice, Wet & Muddy Conditions
28	17-Feb	1	Snow, Ice, Wet & Muddy Conditions
29	18-Feb	1	Snow, Ice, Wet & Muddy Conditions

30	19-Feb	1	Snow, Ice, Wet & Muddy Condition
31	22-Feb	1	Wet & Muddy Conditions
32	23-Feb	1	Wet & Muddy Conditions
33	15-Mar	1	Rain, Wet & Muddy Conditions
34	22-Mar	1	Rain, Wet & Muddy Conditions
35	16-Apr	1	Rain, Wet & Muddy Conditions
36	28-Apr	1	Rain, Wet & Muddy Conditions
37	29-Apr	1	Rain, Wet & Muddy Conditions
38	5-May	1	Rain, Wet & Muddy Conditions
39	24-May	1	Rain, Wet & Muddy Conditions
40	21-Jun	1	Rain, Wet & Muddy Conditions
41	29-Jun	1	Rain, Wet & Muddy Conditions
42	2-Jul	1	Rain, Wet & Muddy Conditions
43	6-Jul	1	Rain, Wet & Muddy Conditions
44	18-Aug	1	Rain, Wet & Muddy Conditions
45	19-Aug	1	Rain, Wet & Muddy Conditions
46	20-Aug	1	Rain, Wet & Muddy Conditions