# ADDENDUM NUMBER 1 BID NUMBER: IFB 20-008

# ELECTRICAL IMPROVEMENTS EISENHOWER MIDDLE SCHOOL

**ISSUED: March 18, 2020** 

PURCHASING DEPARTMENT UNIFIED SCHOOL DISTRICT 500 2010 N. 59<sup>th</sup> STREET, ROOM 370 KANSAS CITY, KANSAS 66104 (913) 551-3200

Note the following changes to the above-mentioned bid. This information is to be taken into consideration when responding to the original bid document.

- Change to Bids Schedule: The bid due date is hereby extended to March 23, 2020 at 2:00 PM Central. At that time, buds will be publicly open and read aloud. Bids that have already been submitted may be withdrawn by written request.
- **2. Changes to Specifications:** See Attachment A to this Addendum Number 1 for further requirements.
- **3. Delete and Replace:** The Bid Form on physical page 7, is hereby deleted and replaced in its entirety with Attachment B to this Addendum Number 1. All bids submitted are to be submitted on this form.
- **4. No Other Changes:** No other changes or modifications intended by this Addendum. All other terms and conditions of the solicitation remain in effect.

WE HEREBY ACKNOWLEDGE AND UNDERSTAND THE ABOVE NOTED CHANGES TO THE ORIGINAL BID DOCUMENET AND AGREE TO FURNISH THE ITEMS ON WHICH PRICES ARE QUOTED IN ACCORDANCE WITH ALL TERMS AND CONDITIONS PREVIOUSLY LISTED AND ANY ATTACHED SPECIFICATIONS AND AMENDMENTS.

BY:	DATE:	
TITLE:	PHONE:	
FIRM		



## Addendum 1 - Attachment A

March 12, 2020 PKMR – 19.576

PROJECT: KCKPS Eisenhower Middle School 2901 North 72nds Street – Kansas City, KS

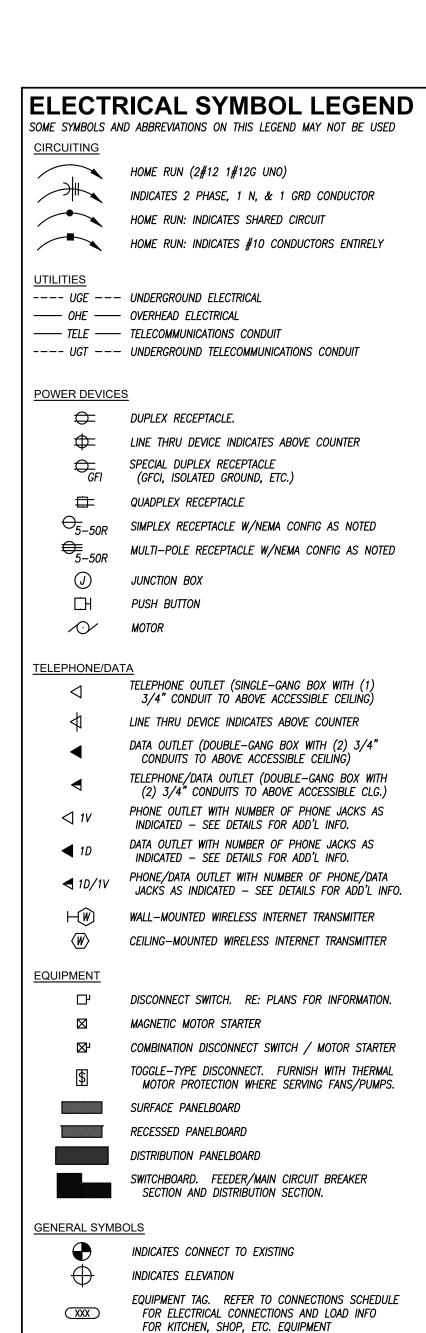
Notice to Contractor:

The following described changes, corrections, clarifications, deletions, additions and approvals for the Contract Documents, which comprise of Addendum No. 1, are hereby made a part of the Contract Documents dated February 06, 2020, and shall govern in the performance of the Work. The contractor shall acknowledge receipt of this Addendum.

## Bids

- 1. Provide, as part of bid, a separate line item cost for temporary power. Cost shall be a unit price per day and shall include rental generator, fuel and all connections and provision for same. Basis shall be 275 kW generator.
- 2. Provide, as part of bid, proposed estimated construction schedule with start date, end date and duration. Schedule is for evaluation by the District. Final schedule will be established upon award of contract.

**END OF ADDENDUM** 



# REFER TO SHEET E1 FOR WORK IN THIS AREA. — Parker



## SHEET INDEX

- E0 COVER SHEET
- E1 ELECTRICAL - FLOOR PLAN
- ELECTRICAL SCHED./DETAILS

# **GENERAL ELECTRICAL NOTES**

- 1. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE,
- LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ. 2. COORDINATE LOCATIONS OF RECEPTACLES, SWITCHES, ETC. WITH ARCHITECTURAL CASEWORK AND ELEVATIONS.
- 3. REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF ALL DEVICES NOT INDICATED OTHERWISE.
- 4. PROVIDE ALL EMPTY CONDUITS WITH PULL STRINGS AND BUSHED
- 5. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.

## COORDINATION NOTES

- 1. COORDINATE REQUIREMENTS FOR INSTALLATION OF SYSTEMS AND EQUIPMENT WITH ALL OTHER TRADES.
- 2. THE CONTRACTOR SHALL COORDINATE THE ROUTING AND PATH OF ALL SYSTEMS, CONDUITS, PIPES, DUCTS, ETC WITH THE POSITION AND LAYOUT OF THE STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY OFFSETS, TURNS, RISES AND DROPS FOR SYSTEMS AND COMPONENTS AS NEEDED TO INSTALL THE MEP SYSTEMS TO CLEAR STRUCTURE, CEILINGS, ETC AND OTHER SYSTEMS IN POTENTIAL CONFLICT WITH ROUTING.
- 3. COORDINATE WORK WITH OTHER TRADES TO INSTALL SYSTEMS ABOVE CEILING HEIGHTS INDICATED ON ARCHITECTURAL PLANS.
- 4. CHECK SPACE REQUIREMENTS WITH OTHER TRADES AND STRUCTURE/CONSTRUCTION TO ENSURE THAT ALL MATERIALS AND EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED INCLUDING FINISHED SUSPENDED CEILINGS AND OTHER SPACES, CHASES, ETC WITHIN THE BUILDING. MAKE MODIFICATIONS THERETO AS REQUIRED AND APPROVED.
- 5. TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION.
- 6. WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO ENSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND
- 7. COORDINATE, PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN
- ACCORDANCE WITH THE CONSTRUCTION SEQUENCE. 8. DRAWINGS SHOW THE GENERAL RUNS OF CONDUITS, PIPING AND DUCTWORK AND APPROXIMATE LOCATION OF OUTLETS. ANY SIGNIFICANT CHANGES IN LOCATION OF ITEMS NECESSARY IN ORDER TO MEET FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER AND RECEIVE HIS APPROVAL BEFORE SUCH ALTERATIONS ARE MADE. ALL SUCH MODIFICATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- 10. ADJUST LOCATION OF PIPING, DUCTWORK, ETC. TO PREVENT INTERFERENCES, BOTH ANTICIPATED AND ENCOUNTERED, DETERMINE THE EXACT ROUTE AND LOCATION OF EACH ITEM PRIOR TO FABRICATION. MAKE OFFSETS, TRANSITIONS AND CHANGES IN DIRECTION IN SYSTEMS AS REQUIRED TO MAINTAIN ADEQUATE CLEARANCES AND HEADROOM.
- 11. WHEREVER THE WORK IS OF SUFFICIENT COMPLEXITY, PREPARE ADDITIONAL COORDINATION DRAWINGS AND ORGANIZE ON-SITE MEETINGS WITH ALL RELATED SUBCONTRACTORS TO COORDINATE THE WORK BETWEEN TRADES . DRAWINGS SHALL CLEARLY SHOW THE WORK AND ITS RELATION TO THE WORK OF OTHER TRADES, AND BE SUBMITTED FOR REVIEW PRIOR TO COMMENCING SHOP FABRICATION OR ERECTION IN THE FIELD.
- 12. COORDINATE WITH LOCAL UTILITY PROVIDERS FOR THEIR REQUIREMENTS FOR SERVICE CONNECTIONS AND PROVIDE ALL NECESSARY PAYMENTS, MATERIALS, LABOR AND TESTING TO ACCOMPLISH THE WORK.
- 13. COORDINATE THE MOUNTING OF SUSPENDED LIGHT FIXTURES UTILIZING INDIRECT LIGHT SO THAT CONDUIT, DUCTWORK, STRUCTURAL MEMBERS, ETC. ARE NOT LOCATED DIRECTLY ABOVE THE LIGHT FIXTURE. MAINTAIN A MINIMUM OF 24" CLEARANCE FROM THESE ITEMS WHENEVER POSSIBLE.

## **DEMOLITION NOTES**

- WORK SHOWN LIGHT IS EXISTING TO REMAIN.
- 2. REFER TO ARCHITECTURAL PLANS FOR FURTHER EXTENT OF DEMOLITION REQUIREMENTS.
- THE FLOOR PATCHED TO MATCH SURROUNDING FLOOR. 4. COORDINATE ALL DEMOLITION WORK WITH OWNER.
- UTILITIES BELOW GRADE.
- THE SCOPE OF THE PROJECT IN WORKING ORDER. AS REQUIRED FOR CONSTRUCTION WHERE NEEDED PRIOR TO DEMOLITION AND REPLACE SAME AFTER CONSTRUCTION. EXISTING CONDUITS ABOVE CEILINGS SHALL BE RELOCATED AND/OR
- 8. THE OWNER SHALL REMOVE ALL ITEMS THEY DESIRED TO SALVAGE PRIOR TO CONSTRUCTION BEGINNING.
- THE SITE AND MAY NOT INDICATE ALL ITEMS. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE SITE AND THE SCOPE OF WORK FOR THE CONTRACT PRIOR TO BID. ANY EXISTING CONDITION WHICH IS APPARENT OR COULD BE REASONABLY INFERRED FROM A VISIT TO THE SITE SHALL NOT BE THE BASIS FOR A CHANGE IN THE CONTRACT AMOUNT.
- A "CLEAN" SPACE FOR THE OWNER.
- 13. PROTECT ALL EXISTING SURFACES AND EQUIPMENT DURING CONSTRUCTION. EXISTING ITEMS TO REMAIN SHALL BE ADEQUATELY PROTECTED FROM DEMOLITION AND NEW CONSTRUCTION WORK, AS REQUIRED. ANY ITEMS DAMAGED OR MARRED SHALL BE ADEQUATELY CLEANED OR REPLACED TO THE OWNERS SATISFACTION
- 14. PATCH ANY HOLES IN STRUCTURE CREATED BY REMOVAL OF
- 16. SAW CUT FLOOR FOR THE INSTALLATION OF NEW SANITARY PIPING.

## **GENERAL NOTES**

- 1. SOME ROOM NAMES MAY NOT BE SHOWN FOR PURPOSE OF CLARIFYING PLAN. REFER TO ARCHITECTURAL PLANS FOR
- REFERENCE TO ROOM NAMES NOT SHOWN. 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP AT THE JOB SITE, AN UP TO DATE SET OF "RECORD DRAWINGS" SHOWING ALL CHANGES FROM THE ORIGINAL PLANS. THE CONTRACTOR SHALL DELIVER THE "RECORD DRAWINGS" TO THE ENGINEER AT THE CONCLUSION OF THE PROJECT
- 3. THESE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS (NEW AND EXISTING), DIMENSIONS, AND CLEARANCES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL INCLUDE ALL COSTS, EQUIPMENT, MATERIAL, ACCESSORIES, ETC. REQUIRED FOR A FULLY COMPLETE,
- FUNCTIONAL AND CODE COMPLIANT INSTALLATION. 4. FINAL LOCATIONS OF ALL DEVICES, LIGHT FIXTURES, EQUIPMENT ETC SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS. ALL DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM ARCHITECTURAL PLANS. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM MEP DRAWINGS.
- 5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS. APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE INSTALLATION AND PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THIS.

## **GEN. RENOVATION NOTES**

- 1. DISCONNECT AND REMOVE ANY EQUIPMENT. PIPING OR DUCTWORK THAT WAS INSTALLED AS PART OF THE BUILDING SHELL THAT IS NOT NEEDED OR CONFLICTS WITH THIS BUILD OUT.
- 2. EXISTING UNDERGROUND PIPING LOCATIONS ARE ESTIMATED BASED UPON ANTICIPATED ROUTINGS. FIELD VERIFY EXACT LOCATIONS DURING CONSTRUCTION AND PROVIDE ALL NECESSARY MODIFICATIONS. 3. SAWCUT GRADE FLOOR SLABS TO INSTALL NEW PIPING. MECHANICAL

4. SAWCUT AND CORE DRILL OPENINGS AS REQUIRED FOR ABOVE

GRADE SLAB PENETRATIONS. X-RAY SLABS TO ASCERTAIN STEEL

- SYSTEMS, ELECTRICAL FLOOR BOXES AND ALL ASSOCIATED CONDUIT, ETC. PATCH FLOOR TO MAKE LIKE NEW AFTER INSTALLATION. TAKE CARE TO LOCATE EXISTING CONDUIT, ETC AND AVOID CUTTING EXISTING CONDUITS BY NOT OVER-CUTTING SLAB DEPTH.
- AND EXISTING CONDUIT PENETRATIONS PRIOR TO CUTTING. VERIFY OPENINGS WITH STRUCTURAL ENGINEER PRIOR TO CUTTING. 5. HOMERUN CIRCUITS TO 20 AMP, SINGLE POLE BREAKERS IN PANELBOARDS INDICATED. UTILIZE SPARE BREAKERS MADE
- AVAILABLE BY DEMOLITION, IF NO SPARE BREAKER IS AVAILABLE, PROVIDE NEW BREAKER. 6. EXISTING CIRCUITING MAY BE RE-USED WHERE POSSIBLE.
- 7. CONCEAL NEW CIRCUITING IN WALLS WHERE POSSIBLE. FOR NEW DEVICES INSTALLED ON EXISTING SOLID WALLS. CONCEAL CIRCUITING IN WIREMOLD. COORDINATE FINISH AND GENERAL ROUTING OF WIREMOLD WITH ARCHITECT TO BE AS CONCEALED AND/OR ROUTED IN A NEAT AND ORGANIZED CONSISTENT MANNER.
- 8. ALL LIGHTING FIXTURES THAT ARE RELOCATED OR OTHERWISE AFFECTED BY THE SCOPE OF WORK SHALL BE CLEANED AND RELAMPED.

## **ABBREVIATIONS**

- A/E ARCHITECT / ENGINEER AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE
- AG ABOVE GRADE AHJ AUTHORITY HAVING JURISDICTION AHU AIR HANDLING UNIT
- BLDG BUILDING BMS BUILDING MANAGEMENT SYSTEM CONDUIT
- CANDELA CM

- 1. ALL WORK SHOWN DARK AND DASHED IS TO BE DEMOLISHED.
- 3. ALL EXISTING PIPING SCHEDULED FOR DEMOLITION THAT ROUTES BELOW SLAB SHALL BE GROUND FLUSH WITH FLOOR, PLUGGED AND
- 5. CONTACT UTILITY LOCATING SERVICE TO LOCATE EXACT LOCATION OF
- 6. MAINTAIN ALL EXISTING DEVICES, EQUIPMENT, ASSOCIATED CIRCUITS ETC. SHOWN AS EXISTING TO REMAIN OR OTHERWISE UNRELATED TO
- 7. CONTRACTOR SHALL REMOVE LAY-IN CEILINGS, LIGHT FIXTURES, ETC. TEMPORARILY REMOVED TO FACILITATE THE INSTALLATION OF NEW
- 9. NOTES AND DRAWINGS ARE BASED UPON A FIELD EXAMINATION OF
- 10. REFER TO NEW WORK PLANS FOR ANY ITEMS THAT MAY REQUIRE RELOCATION AFTER DEMOLITION. 11. PROPERLY DISPOSE OF ALL DEMOLISHED ITEMS OFF SITE.
- 12. REMOVE ALL MISCELLANEOUS CONDUITS, PIPES, ETC, THOUGH NOT SPECIFICALLY SHOWN ON PLAN, THAT ARE EITHER UNUSED OR WILL BECOME UNUSED DUE DEMOLITION ACTIVITIES, IN ORDER TO PROVIDE
- TO ORIGINAL CONDITION BEFORE CONSTRUCTION.
- DUCTWORK, CONDUITS, PIPES, ETC. 15. REMOVE ALL ITEMS SHOWN IN WALLS TO BE DEMOLISHED. ALL ELECTRICAL CONDUIT AND WIRING SHALL BE REMOVED BACK TO PANELBOARDS AND PROPERLY TERMINATED.
- REFER TO PLUMBING PLANS SHOWING NEW WORK. 17. SAVE, CLEAN, AND RE-LAMP ALL LIGHT FIXTURES NOTED AS BEING RELOCATED. REFER TO NEW WORK PLANS AND LIGHT FIXTURE SCHEDULE FOR DESCRIPTIONS, QUANTITIES, AND LOCATIONS OF FIXTURES TO BE RE-USED.

- ARCH ARCHITECT BFP BACKFLOW PREVENTER BG BELOW GRADE
- COORDINATE MOUNTING HEIGHT CO CLEAN OUT
- CTE CONNECT TO EXISTING DDC DIRECT DIGITAL CONTROLS DF DRINKING FOUNTAIN
- DIAMETER DN DOWN E/C ELECTRICAL CONTRACTOR
- ELEV ELEVATION EM EMERGENCY FIXTURE/DEVICE EWT ENTERING WATER TEMPERATURE
- EXISTING ITEM FFA FROM FLOOR ABOVE FFB FROM FLOOR BELOW
- FLR FLOOR FIRE PROTECTION FPM FEET PER MINUTE
- FWCO FLUSH WALL CLEAN OUT GROUND / GANG G/C GENERAL CONTRACTOR
- GFI GROUND FAULT CIRCUIT INTERUPTER GFIP GFI-PROTECTED DEVICE
- GPM GALLONS PER MINUTE HD HOT DECK HTG HEATING
- ISOLATED GROUND JUNCTION BOX LED LIGHT EMITTING DIODE M/C MECHANICAL CONTRACTOR
- MCB MAIN CIRCUIT BREAKER MECH MECHANICAL MLO MAIN LUGS ONLY NFA NET FREE AREA
- NIGHT LIGHT P/C PLUMBING CONTRACTOR PSI POUNDS PER SQUARE INCH PVC POLYVINYLCHLORIDE
- RE/REF REFER / REFERENCE RELOCATED ITEM RESTROOM
- SPD SURGE PROTECTIVE DEVICE SHUNT TRIP TFA TO FLOOR ABOVE TFB TO FLOOR BELOW
- *TAMPERPROOF* TYP TYPICAL UNO UNLESS NOTED OTHERWISE
- WG WIRE GUARD WP WEATHERPROOF





PEARSON KENT MCKINLEY RAAF ENGINEERS LLC 13300 W 98TH STREET LENEXA, KS 66215 WWW.PKMRENG.COM 913.492.2400

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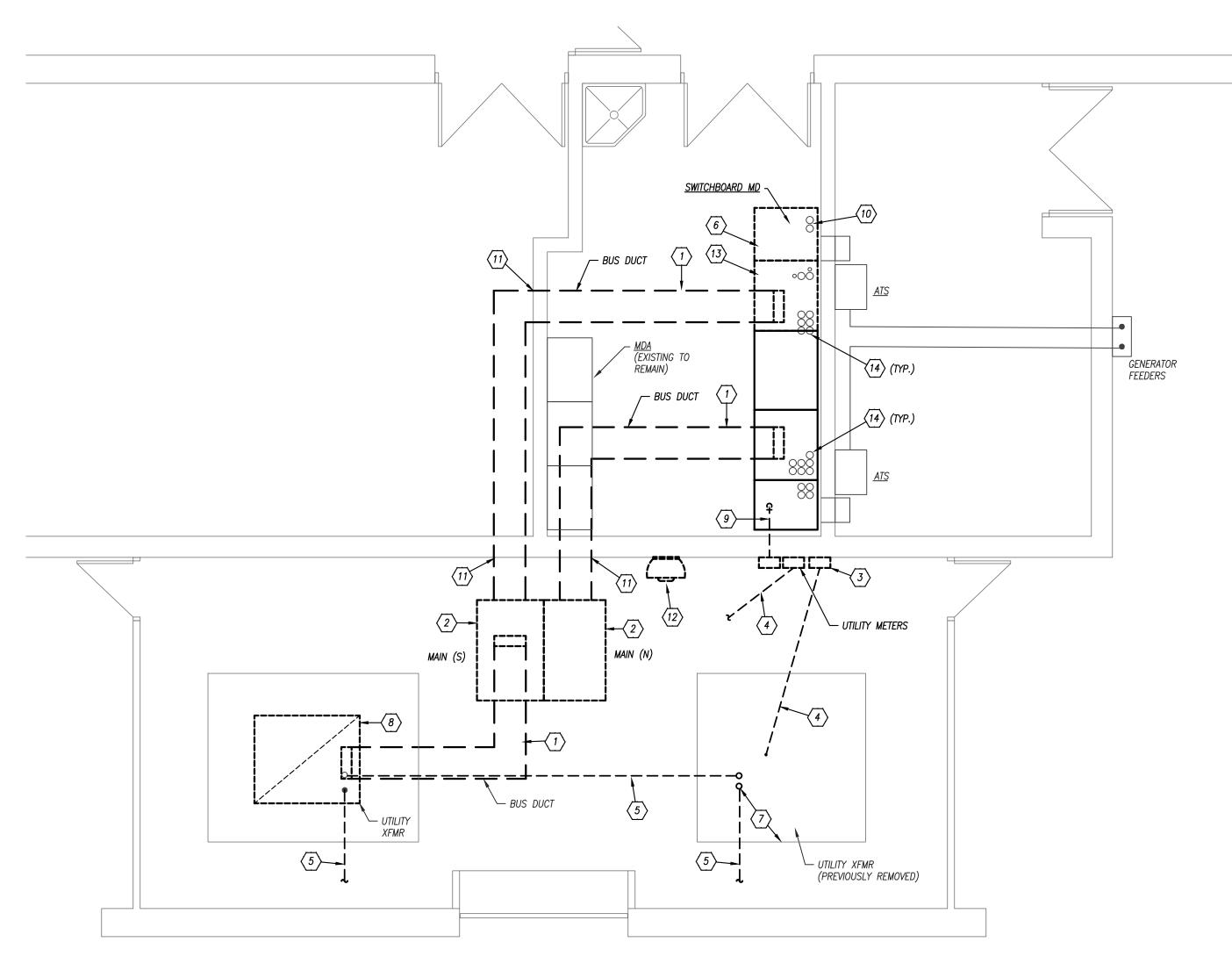
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© PEARSON KENT MCKINLEY RAAF ENGINEERS, LLC							
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**COVER SHEET** 

PKMR PROJECT: 02-06-20

SHEET NUMBER:

19.576





**FLOOR PLAN - DEMOLITION - POWER** 

# **GENERAL DEMOLITION NOTES**

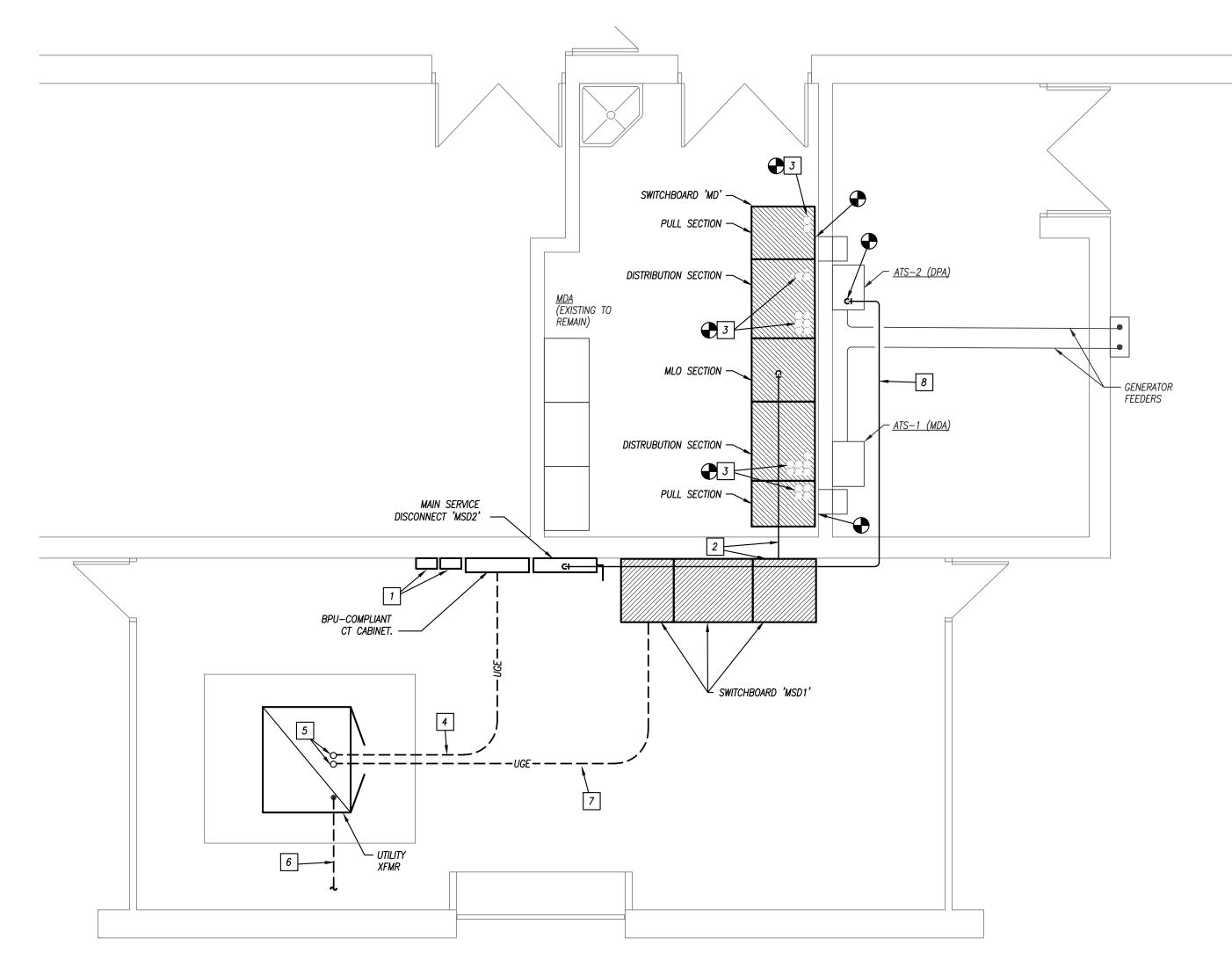
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

# **DEMOLITION PLAN KEYED NOTES**

- $\langle 1 \rangle$  REMOVE EXISTING BUS DUCT.
- 2 REMOVE EXISTING MAIN EXTERIOR SERVICE DISCONNECTS (NORTH AND
- 3 EXISTING UTILITY METERS TO BE REMOVED / RELOCATED AS REQUIRED. UTILITY METER FOR SOUTH UTILITY TRANSFORMER SERVICE TO BE RELOCATED. UTILITY METER FOR GYM TO BE RELOCATED. UTILITY METER FOR NORTH UTILITY TRANSFORMER (PREVIOUSLY REMOVED) TO BE REMOVED.
- 4 EXISTING UNDERGROUND METERING CONDUIT TO BE REMOVED.
- 5 COORDINATE LOCATION AND REMOVAL OF EXISTING LOOP FED PRIMARY WITH BPU PRIOR TO BEGINNING WORK.
- REMOVE SWITCHBOARD 'MD' AND DISCONNECT ASSOCIATED BRANCH CIRCUIT WIRING, FEEDERS, ETC. TO BE RECONNECTED TO NEW SWITCHBOARD. REFER TO RISER DIAGRAM FOR MORE INFORMATION.

  7 CAP EXISTING PRIMARY FEEDERS PER BPU UTILITY CONSTRUCTION
- STANDARDS. REMOVE PAD AS REQUIRED BY BPU AND NEW WORK CONDITIONS.
- 8 EXISTING UTILITY TRANSFORMER TO BE REMOVED AND PREPARED FOR NEW UNDERGROUND SECONDARY FEEDERS. COORDINATE ALL WORK WITH BPU
- 9 SUBTRACTIVE METER CONDUIT TO EXTERIOR METER TO BE REMOVED AND RELOCATED.
- (10) EXISTING FEEDERS THAT EXTEND TO BELOW SLAB SHALL REMAIN. NEW SWITCHGEAR SHALL HAVE CUSTOM PULL SECTION THAT ALLOWS THESE FEEDERS TO REMAIN IN PLACE. REFER TO RISER DIAGRAM FOR MORE INFORMATION.
- PATCH WALL AS REQUIRED TO MATCH EXISTING. COORDINATE WITH SCHOOL
- 12 REMOVE EXISTING FAN. PATCH WALL AS REQUIRED. COORDINATE WITH SCHOOL DISTRICT.
- UTILITY COMPANY CT'S FOR THE REC CENTER BUILDING TO BE REMOVED.

  DISCONNECT AND REMOVE ALL ASSOCIATED EQUIPMENT, WIRING, ETC. NOT REQUIRED TO REMAIN.
- 214 EXISTING UNDERGROUND FEEDERS TO BE MAINTAINED FOR RECONNECTION TO



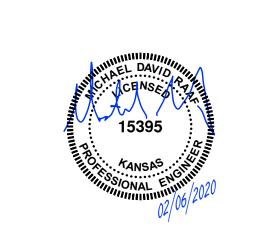


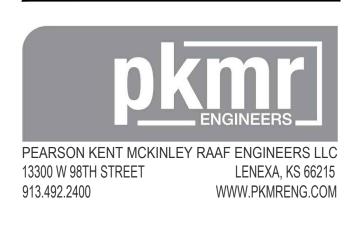
# **GENERAL POWER NOTES**

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

## POWER PLAN KEYED NOTES

- 1 UTILITY METERS FOR SCHOOL SERVICE AND RECREATION BUILDING SERVICE. COORDINATE ALL WORK WITH BPU.
- 2 EXTERIOR SERVICE DISCONNECT (BREAKER) AND CT SECTION AND PULL SECTION. STUB CONDUITS OUT OF PULL SECTION OF EXTERIOR GEAR AND INTO BUILDING ABOVE INTERIOR SWITCHBOARD (IN PULL SECTION ABOVE SWITCHBOARD) AND DOWN INTO MLO SECTION OF SWITCHBOARD.
- 3 EXISTING FEEDERS THAT EXTEND TO BELOW SLAB SHALL REMAIN. EXISTING FEEDERS SHALL CONNECT TO NEW BREAKERS AS REQUIRED. REFER TO RISER DIAGRAM FOR MORE INFORMATION.
- 4 SERVICE LATERALS FOR 'DPA' RECREATION CENTER ELECTRICAL SERVICE.
  REFER TO RISER DIAGRAM FOR MORE INFORMATION.
- 5 STUB UP NEW SECONDARY FEEDERS INTO TRANSFORMER AND COORDINATE WITH BPU TO ENSURE A FINAL WORKING CONNECTION TO TRANSFORMER. COORDINATE ALL WORK WITH BPU.
- 6 COORDINATE ANY PRIMARY WORK WITH UTILITY COMPANY.
- 7 SERVICE LATERALS FOR SCHOOL ELECTRICAL SERVICE. REFER TO RISER DIAGRAM FOR MORE INFORMATION.
- 8 PROPOSED ROUTING OF UTILITY FEED TO ATS-2.





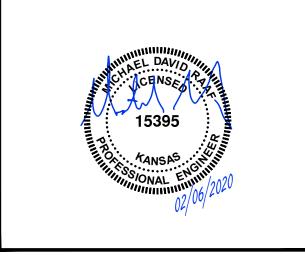
# ELECTRICAL SERVICE EQUIPMENT REPLAC 2901 NORTH 72ND STREET KANSAS CITY - KANSAS

# DESCRIPTION DATE DESCRIPTION DATE PERSON KENT MCKINLEY RAAF ENGINEERS, LLC DRAWN BY: JR CHECKED BY: MR CHECKED BY: MR

DATE: PKMR PROJECT: 02-06-20
SHEET NUMBER:

# RISER DEMOLITION KEYED NOTES

- DISCONNECT EXISTING FEEDER CONNECTION FROM LOAD SIDE OF SWITCH.
  MAINTAIN EXISTING FEEDER FOR RECONNECTION TO NEW GEAR. MAINTAIN AND PROTECT FEEDER DURING CONSTRUCTION.
- $\langle 2 \rangle$  disconnect existing feeders and maintain for connection to New
- (3) MAINTAIN EXISTING CONCRETE PAD.





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	PRAWN BY:	JR
CHECKED BY:		MR

ELECTRICAL -SCHED./DETAILS

02-06-20

19.576 SHEET NUMBER:

**ELECTRICAL RISER DIAGRAM - NEW WORK** 

## **ELECTRICAL RISER DIAGRAM - DEMOLITION** NO SCALE

EQUIPMENT FEEDER SCHEDULE										
FEEDER	EQUIPMENT		LOAD			FEEDER				
NO.	LQUIFWLINT	(AMPS)	SETS	# OF WIRES	SIZE	GROUND	MATERIAL	SIZE		
F1	MAIN SERVICE DISCONNECT "MSD1"	3,200	9	4	500 MCM	-	COPPER	3.5"		
F2	MAIN SWITCHBOARD "MD"	3,200	9	4	500 MCM	#3/0	COPPER	3.5"		
F3	MAIN SERVICE DISCONNECT "MSD2"	800	2	4	500 MCM	_	COPPER	3.5"		
F4	ATS-2 / BUILDING RECREATION PANEL "DPA"	800	2	4	500 MCM	#3/0	COPPER	3.5"		

GROUNDING ELECTRODE CONDUCTOR SCHEDULE							
GROUND	EQUIPMENT	NO. GROUND		TOR	CONDUIT		
DESIG.	EQUIPMENT			MATERIAL	SIZE		
1 <i>G</i>	MAIN SERVICE DISCONNECT "MSD1"	1	#3/0	COPPER	1"		
2G	MAIN SERVICE DISCONNECT "MSD2"	1	#3/0	COPPER	1"		

NO SCALE

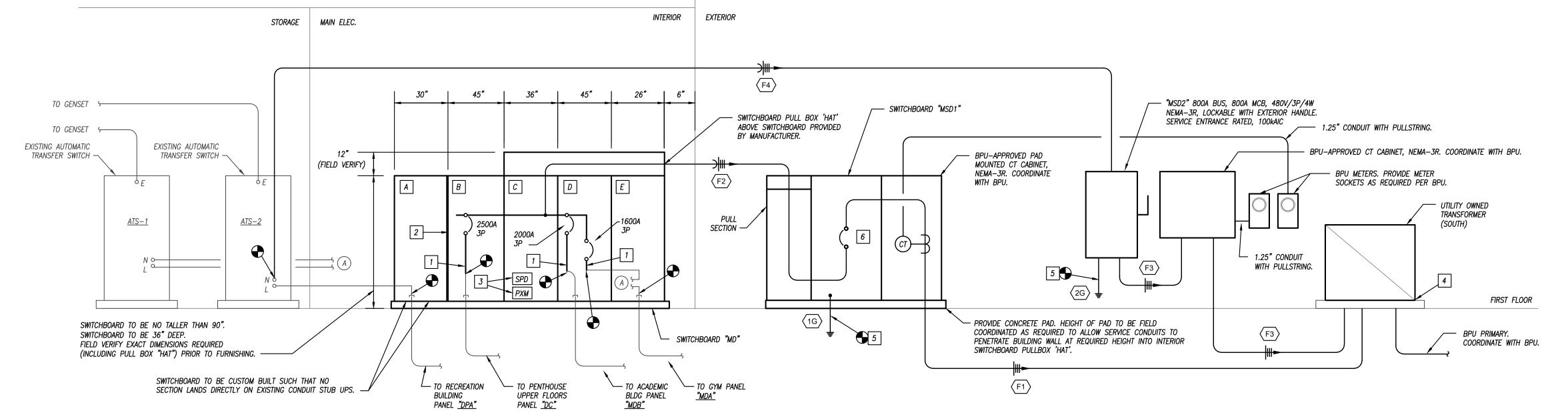
EXTERIOR MAIN SWITCHBOARD SCHEDULE						
PANEL DE	SIGNATION	MAIN BUS AMPS: 4000	VOLTAGE: 480/277		480/277	MOUNTING: CONCRETE PAD
MS	SD1	SCCR RATING (AIC): 100,000	PHASE/WIRE: <b>30, 4W</b> 0		3Ø, 4W	LOCATION: <i>EXTERIOR</i>
BREAKER	DDEALED DECIGNATION		CIRC	UIT BREA	KER	
NO.	NO. BREAKER DESIGNATION		POLE	FRAME	TRIP	
1	1 MAIN BREAKER		3	4000	3200	

- 1. CUTLER HAMMER POW-R-LINE C SWITCHBOARD OR EQUAL.
- 2. ALL BREAKERS LARGER THAN 1200 AMPS SHALL BE PROVIDED WITH ARC FLASH MAINTENANCE REDUCTION SWITCHES (ARMS).
- 3. ALL BREAKERS LARGER THAN 1000 AMPS SHALL BE PROVIDED WITH GROUND FAULT PROTECTION.
- 4. ALL BREAKERS SHALL BE 100% RATED.
- 5. PROVIDE WITH UTILITY CT COMPARTMENT (BPU COMPLIANT). 6. PROVIDE WITH LOAD SIDE PULL SECTION.

INTERIOR MAIN SWITCHBOARD SCHEDULE							
PANEL DI	EL DESIGNATION MAIN BUS AMPS: 4000 VOLTAGE: 480/2		480/277	MOUNTING: FLOOR			
N	/ID	MAIN BREAKER AMPS: <i>M.L.O.</i> SCCR RATING (AIC): 100,000	PHASE/WIRE: 30, 4W		3Ø, 4W	LOCATION: MAIN ELEC	
BREAKER	BDEVKED DE	BREAKER DESIGNATION		UIT BREA	KER		
NO.	BILLANLIN DE			FRAME	TRIP		
1	PENTHOUSE UPPER FLOORS PANEL DC		3	2500	2500		
2	ACADEMIC BUILDING MDB		3	2000	2000		
3	GYM PANEL MDA		3	1600	1600		
3	3 GYM PANEL MDA		3				

## <u>REMARKS:</u>

- 1. CUTLER HAMMER POW-R-LINE C SWITCHBOARD OR EQUAL.
- 2. PROVIDE SWITCHBOARD WITH POWER DEMAND / KWH METER. 3. PROVIDE SWITCHBOARD WITH SURGE SUPPRESSION, 250KA.
- 4. ALL BREAKERS SHALL BE 100% RATED.
- 5. ALL BREAKERS LARGER THAN 1200 AMPS SHALL BE PROVIDED WITH ARC FLASH MAINTENANCE REDUCTION SWITCHES (ARMS).
- 6. ALL BREAKERS TO BE INSULATED CASE BREAKERS.
- 7. ALL BREAKERS LARGER THAN 1000 AMPS SHALL BE PROVIDED WITH GROUND FAULT PROTECTION.



# RISER DIAGRAM KEYED NOTES

- 1 MANUFACTURER TO EXTEND LUGGING DOWN AS REQUIRED TO ATTACH EXISTING FEEDERS. CONTRACTOR TO FIELD VERIFY REQUIRED LENGTH ABOVE FINISHED FLOOR AND COORDINATE WITH MANUFACTURER.
- 2 PROVIDE BARRIER BETWEEN THE PULL SECTION AND BREAKER SECTION.
- | 3 | PROVIDE SURGE PROTECTIVE DEVICE AND POWER DEMAND / KWH METER
- PER SWITCHBOARD SCHEDULE. 4 MODIFY EXISTING PAD AND TERMINATION POINTS AS REQUIRED FOR NEW
- TRANSFORMER. COORDINATE WORK WITH BPU. 5 CONNECT GROUNDING ELECTRODE TO MAIN BUILDING GROUNDING ELECTRODE (WATER PIPE AHEAD OF METER, EXISTING GROUND ROD, EXISTING CONTCRETE ENCASED ELECTRODE). ADD NEW CONNECTIONS AS REQUIRED WHERE EXISTING CONNECTIONS ARE NOT VERIFIABLE. ADD NEW 8'-0" GROUND ROD WHERE ANY OF THESE CANNOT BE FIELD VERIFIED. PROVIDE
- #3/0 GROUND BOND JUMPER BETWEEN EACH SERVICE GROUND. 6 MAIN BREAKER.
- 7 DISCONNECT EXISTING FEEDER CONNECTION FROM ATS-2 LOAD SIDE FEEDER SERVING THE REC CENTER BUILDING AS REQUIRED TO REMOVE EXISTING SWITCHBOARD AND INSTALL NEW SWITCHBOARD. RECONNECT UPON INSTALLATION OF NEW SWITCHBOARD.

## **SWITCHBOARD NOTES**

- A PULL SECTION FOR REC CENTER BUILDING FEEDER SPLICE. FULLY COMPARTMENTALIZED. NO BUSSING.
- B DISTRIBUTION SECTION.
- C MAIN TERMINATION SECTION.
- D DISTRIBUTION SECTION. 2000A BREAKER STACKED ABOVE 1600A BREAKER.
- E PULL SECTION. NO BUSSING.

## Attachment B - Addendum 1

Electrical Service Main Replacement – Eisenhower Middle School

## **BID FORM**

Electrical Upgrade – Eisenhower MS				
Pricing				
Labor	\$			
Materials/Installation	\$			
Cost for Temporary Power (Cost Per Day)	\$ / <sub>Day</sub>			
Total Cost	\$			

Construction Schedule			
Proposed Construction Start Date (MM/DD/YYYY)			
Proposed Construction End Date (MM/DD/YYYY)			
<b>Duration of Project in Calendar Days</b>	Days		

WE HEREBY ACKNOWLEDGE AND UNDERSTAND THE ABOVE NOTED CHANGES TO THE ORIGINAL BID DOCUMENET AND AGREE TO FURNISH THE ITEMS ON WHICH PRICES ARE QUOTED IN ACCORDANCE WITH ALL TERMS AND CONDITIONS PREVIOUSLY LISTED AND ANY ATTACHED SPECIFICATIONS AND AMENDMENTS.

BY:	DATE:	
TITLE:	PHONE:	
FIRM		