All Bidders
June 10, 2026

June 10, 2026 **2025-CRW-1019**

To: All Bidders of Record

Re: Addendum No. Two (2)
Snow Removal Equipment (SRE) Building
3-54-0003-087-2025 (Design)
3-54-0003-XXX-2026 (Construction)
West Virginia International Yeager Airport (CRW)

Dear Bidders:

This Addendum is hereby made part of the Contract Documents for the above reference project. All other requirements of the original documents shall remain in effect in their respective order.

We wanted to provide a few clarifications based on some initial feedback from Addendum No. 1.

Division 3 - Please include the Contractors Certification of Eligibility, Non-Collusive Bidding Certification, Certification of Bidder Regarding Equal Employment Opportunity, Subcontractor and Suppliers list, and the Buy American Certificate List along with the new Division 3 sheets in Addendum No.1.

Division 3 - REPLACE the Bid Forms with the new Bid Forms provided in this Addendum.

Add/Deduct Alternates – Specification 011000 & 012300 refer to the Add and Deduct Alternates as just Alternatives. The Scope of Work (Division 2) provides the specific scope of work for each Add Alternate and Deduct Alternate. Please utilize the numbering system for the Add/Deduct Alternates listed in the Scope of Work.

- Add Alt No. 1 – IMP Wall/Roof Panel Substitution
- Add Alt No. 2 – Existing Generator Relocation
- Deduct Alt No. 1 – Omit Translucent Clerestory Panels
- Deduct Alt No. 2 – Single-Colo wall Panel Economy

Ductbank – The layout has been revised and will tie into existing primaries on either side of the roadway. AEP will install all cable and make all connections between the primary, transformer and the meter. The contractor will need to install the ductbank from the primary to the transformer pad and then from the transformer pad to the building/meter.

Items from Addendum No. 1 (Changes are shown in bold)

- Item 1.25 – Revise text to read: Replace Drawing No. E200 with new **E200** attached to this Addendum No. One (1)
- A30 – Revise answer: For bidding purposes, provide Avigilon-compatible cameras and access control components capable of integration with the Airport's existing Avigilon ACC7 system. Final hardware selections shall be submitted for approval prior to procurement
- A49 – Revise answer: **Perimeter drainage and** below grade **wall** waterproofing is not required.
- A59 – Additional information: For bidding purposes, **perimeter footing** foundations will need to be excavated to the shale bedrock layer (approximately 2' of over excavation) and then backfilled with flowable fill (500 psi). **This will be approximately 260 cubic yards of over excavation and flowable fill.** This shall be incidental to the cost of the foundations.

AEP Requirements – Attachment No.2 contains the AEP standard details for the transformer pad and the CT Cabinet.

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DRAWINGS
REPLACE Drawing No. S001 with new S001 attached to this Addendum No. Two (2).

LIST OF ATTACHMENTS

1. Drawings (S001) (1 Page)
2. AEP Requirements for the Transformer Pad and CT Cabinet (3 Pages)
3. Division 3 Bid Forms

– END OF ADDENDUM NO. TWO (2) –

If you should have any questions regarding this matter, please do not hesitate to contact our office.

Sincerely,

Rebecca McDonald, PE
Project Engineer

RM

Cc: West Virginia International Yeager Airport (CRW)

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June 10, 2026

ATTACHMENT NO. 1

PART 1 - GENERAL REQUIREMENTS AND DESIGN CRITERIA

1.1 SPECIFICATIONS
A. THE WORK OF THESE DRAWINGS ADDRESSES STRUCTURAL INFORMATION ONLY. THE STRUCTURAL DOCUMENTS INCLUDE THESE S-SERIES DRAWINGS AND GENERAL NOTES. THERE ARE NO TECHNICAL SPECIFICATIONS IN ADDITION TO THESE GENERAL NOTES.

1.2 ELEVATIONS & DIMENSIONS
A. ALL ELEVATIONS AND DIMENSIONS SHOWN FOR NEW CONSTRUCTION ARE BASED ON THE ARCHITECTURAL DRAWINGS. COORDINATE ALL ELEVATIONS AND DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION.

1.3 GOVERNING BUILDING CODES
A. THE FOLLOWING BUILDING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT.
1. 2018 WEST VIRGINIA STATE BUILDING CODE
2. "INTERNATIONAL BUILDING CODE - 2018", INTERNATIONAL CODE COUNCIL
3. "MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES", (ASCE/SEI 7-16, 2016), AMERICAN SOCIETY OF CIVIL ENGINEERS.
B. ADDITIONAL CODES FOR MATERIALS SHALL BE FOUND IN THE APPROPRIATE SECTIONS THAT FOLLOW. SEE THOSE SECTIONS FOR THE APPLICABLE CODES.

1.4 DESIGN LOADS
A. RISK CATEGORY: II

B. FLOOR LIVE LOADS:

1. TYPICAL FLOOR AREAS 200 PSF

C. ROOF LIVE LOADS:
1. MINIMUM LIVE LOAD: 20 PSF

D. ROOF SNOW LOAD DATA: (PLUS DRIFTING AND SLIDING WHERE APPLICABLE)
a. Pg = 20 PSF
b. Ps = 20 PSF
c. Ce = 1.0
d. Is = 1.0
e. Ct = 1.0

E. DEAD LOADS: ALL PERMANENT STATIONARY CONSTRUCTION. SEE PART 13 ON S001 FOR PEMB COLLATERAL LOAD.

F. WIND DESIGN DATA:
1. BASIC WIND SPEED (3-SECOND GUST), V = 110 MPH, Vasd = 86 MPH
2. EXPOSURE CATEGORY: C
3. INTERNAL PRESSURE COEFFICIENT: GC(PI) = +/- 0.18
4. COMPONENTS AND CLADDING:
a. PRESSURE VALUES LISTED BELOW ARE FOR At = 10 FT2:
(i) MAXIMUM PRESSURE ON VERTICAL FACE: END ZONE: -36 PSF; INTERIOR ZONE: -30 PSF
(ii) MAXIMUM PRESSURE ON ROOF: CORNER ZONE: -66 PSF; INTERIOR ZONE: -62 PSF

G. EARTHQUAKE DESIGN DATA: NOTE-PARAMETERS SHOWN FOR THE DESIGN OF THE PRE-ENGINEERED METAL BUILDING BY OTHERS
1. SEISMIC IMPORTANCE FACTOR, Ie = 1.0
2. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:
a. S(S) = 0.154
b. S(1) = 0.064
3. SITE CLASS: C
4. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
a. S(DS) = 0.133
b. S(D1) = 0.064
5. SEISMIC DESIGN CATEGORY = A

H. EARTH PRESSURE PARAMETERS:
1. LATERAL EQUIVALENT FLUID PRESSURE:
a. PASSIVE SYSTEM PRESSURE: 240 PSF/FOOT OF DEPTH
b. SOIL FRICTION FACTOR: 0.3
c. FRICTION ANGLE: 32°
d. Kp: 3.25
e. Ka: 0.31

I. ROOF RAIN LOAD DATA:
1. RAIN INTENSITY, i(15) = 5.40 in/hr
2. RAIN INTENSITY, i(60) = 2.60 in/hr

J. COLUMN REACTIONS: PRELIMINARY BUILDING REACTIONS HAVE NOT BEEN PROVIDED BY BUILDING MANUFACTURER. FINAL REACTIONS FOR ALL COLUMNS SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
1. THE FOLLOWING PRELIMINARY REACTIONS WERE USED FOR PRELIMINARY FOOTING AND HAIRPIN DESIGN (KIPS):

A-1:	AXIAL: D=12, Lr=8, S=18, W=-27, E=-3	SHEAR: D=7, Lr=4, S=10, W=11, E=2
A-2:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-3:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-4:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-5:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-6:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-7:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-8:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
A-9:	AXIAL: D=18, Lr=11, S=27, W=-41, E=-4	SHEAR: D=9, Lr=6, S=15, W=16, E=2
I-1:	AXIAL: D=12, Lr=8, S=18, W=-27, E=-3	SHEAR: D=7, Lr=4, S=10, W=11, E=2
I-2:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-3:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-4:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-5:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-6:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-7:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-8:	AXIAL: D=36, Lr=22, S=53, W=-82, E=-7	SHEAR: D=19, Lr=12, S=30, W=31, E=2
I-9:	AXIAL: D=18, Lr=11, S=27, W=-41, E=-4	SHEAR: D=7, Lr=6, S=30, W=31, E=2

1.5 GENERAL
A. INSPECTIONS AND CLOSEOUT: OWNER OR CONTRACTOR ARRANGED 3RD PARTY INSPECTIONS/ SPECIAL INSPECTIONS SHALL CONFORM TO LOCAL JURISDICTION REQUIREMENTS AND INSPECTION REQUIREMENTS SHOWN ON THESE DOCUMENTS. FINAL CERTIFICATION FROM THE ENGINEER OF RECORD, IF REQUIRED BY THE AUTHORITY HAVING JURISDICTION OR OWNER, WILL BE PROVIDED ONCE TEC RECEIVES A THIRD PARTY INSPECTION REPORT CONFIRMING THE STRUCTURE WAS INSTALLED PER THE CONTRACT DOCUMENTS. TEC DOES NOT PROVIDE THIRD PARTY INSPECTIONS, AND OUR SITE OBSERVATIONS ARE FOR GENERAL CONFORMANCE, NOT INSPECTION.
B. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES AND DETAILS THE MOST RIGID SHALL GOVERN.
C. ALL DETAILS, SECTIONS, AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE NOTED.
D. WORK NOT INCLUDED ON THE DRAWINGS BUT IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING LOCATIONS ELSEWHERE ON THE DRAWINGS SHALL BE REPEATED.
E. DO NOT SCALE DRAWINGS.
F. NO PART OF THE BUILDING SHALL BE USED AS A STAGING AREAS RESULTING IN A LOAD (UNDER THE LIMITED LOADED AREA) THAT EXCEEDS THE DESIGN LOADS.
G. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE WEIGHTS OF MATERIALS, FOR THE SUPERIMPOSED LOADS INDICATED IN THE DESIGN LOAD CRITERIA ABOVE, AND FOR LOADS INDICATED ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSE WORK, STAGING, BRACING, SHEETING AND SHORING, ETC.
H. DEVELOPING AND IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
I. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING AND NEW UTILITIES AND SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE DURING CONSTRUCTION.
J. NO CHANGE IN SIZE, DIMENSION, OR POSITION OF STRUCTURAL ELEMENTS SHALL BE MADE, NOR SHALL ANY OPENINGS OR SLEEVES BE PERMITTED THROUGH ANY STRUCTURAL ELEMENT, WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD, UNLESS DETAILED AND SPECIFICALLY NOTED AND APPROVED ON THE SHOP DRAWINGS. PROVIDE SEPARATE SHOP DRAWINGS INDICATED ALL PENETRATIONS THROUGH STRUCTURAL ELEMENTS FOR APPROVAL, PRIOR TO THE SUBMISSION OF THE SHOP DRAWINGS FOR THE AFFECTED STRUCTURAL ELEMENTS.
K. ALL COSTS OF INVESTIGATION AND REDESIGN, DUE TO THE CONTRACTOR MIS-LOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.
L. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, DRAWINGS FOR SIZE AND LOCATION OF OPENINGS, SLEEVES, CHASES, CONCRETE HOUSEKEEPING PADS, INSERTS, DEPRESSIONS, REVEALS, DRIPS, FINISHES, DOORS AND OTHER SUCH PROJECT REQUIREMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS. ANY SUCH ITEMS SHOWN ON STRUCTURAL DRAWINGS ARE INDICATED FOR INFORMATION ONLY. APPEARANCE OF SAME ON STRUCTURAL DRAWINGS IS NOT MEANT TO CONVEY ACTUAL LOCATION OR EXTENT OF WORK.
M. SEE ARCHITECTURAL DRAWINGS FOR DETAILED INFORMATION REGARDING FINISHES, WATERPROOFING, FIREPROOFING, ETC.
N. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF NON-LOAD BEARING MASONRY AND DRYWALL PARTITIONS AND PROVIDE SLIP CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE HEADS OF ALL SUCH PARTITIONS. UNLESS SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL BE DESIGNED TO LATERALLY BRACE THE TOPS OF THE WALLS FOR THE CODE REQUIRED LATERAL LOAD. PROVIDE COMPRESSIBLE FIRE-SAFING AT THE TOP OF RATED WALLS AS SPECIFIED BY THE ARCHITECTURAL DRAWINGS.
O. PROVIDE ANY ADDITIONAL COMPONENTS NEEDED TO ACCOMMODATE THE INSTALLATION OF EQUIPMENT OF ANY NATURE. COORDINATE SUCH WORK WITH THE EQUIPMENT SUPPLIER. INCORPORATE SUCH REFINEMENTS ON THE SHOP DRAWINGS, AND OBTAIN THE EQUIPMENT SUPPLIER'S APPROVAL (CLEARLY DISPLAYED ON THE DRAWINGS) PRIOR TO SUBMITTING THE SHOP DRAWINGS TO THE ARCHITECT AND ENGINEER FOR APPROVAL.

1.6 SHOP DRAWINGS
A. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS ARE REQUIRED TO BE SUBMITTED BY THE CONTRACTOR AND REVIEWED BY THE STRUCTURAL ENGINEER. IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, TARANTINO ENGINEERING CONSULTANTS (TEC) WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT.
B. UNAUTHORIZED REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RE-SUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
C. SHOP DRAWINGS FOR HANGER LAYOUT ABOVE MECHANICAL ROOMS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.
D. SHOP DRAWINGS SUBMITTED FOR STRUCTURAL REVIEW SHALL CONSIST OF ELECTRONIC DRAWINGS. ONLY ONE MARKED UP SET OF ELECTRONIC DRAWINGS WITH THE STRUCTURAL ENGINEER'S COMMENTS WILL BE RETURNED TO THE CONTRACTOR.
E. AT THE TIME OF SHOP DRAWINGS SUBMISSION, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DRAWINGS.
F. ALLOW 10 BUSINESS DAYS FOR STRUCTURAL REVIEW OF SHOP DRAWINGS. THIS TIME SHOULD BE ALLOTTED IN THE CONTRACTOR'S SCHEDULE.
G. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT THEY HAVE VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA AND HAVE CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.
H. DELEGATED DESIGN: THE CONTRACTOR SHALL SUBMIT FOR REVIEW, SIGNED AND SEALED DRAWINGS AND CALCULATIONS PREPARED BY A SPECIALTY STRUCTURAL ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION FOR THE FOLLOWING ASSEMBLIES. THIS REVIEW SHALL BE FOR GENERAL CONFORMANCE WITH THE PROJECT'S PARAMETERS AS INDICATED ON THE DRAWINGS, SPECIFICATIONS AND GENERAL NOTES. THE DESIGN OF THESE ASSEMBLIES IS THE RESPONSIBILITY OF THE CONTRACTOR'S ENGINEER WHO HAS SIGNED AND SEALED THESE DRAWINGS AND CALCULATIONS. THESE SUBMISSIONS SHALL BE MADE AVAILABLE IN CONJUNCTION WITH OR PRIOR TO THE SHOP DRAWING FOR THE PRIMARY BUILDING STRUCTURE THAT SUPPORT THESE ASSEMBLIES.
1. CFMF AND CURTAIN WALL SYSTEMS AND RELATED CONNECTIONS:
a. DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES. BACK-UP SYSTEMS AND CURTAIN WALLS SHALL BE DESIGNED FOR A MAXIMUM LATERAL DEFLECTION OF L/600 OF THE SPAN IN INCHES OR 3/8" WHICHEVER IS LESS FOR THE APPLICABLE DESIGN WIND LOAD. THE SUBMITTED DRAWINGS AND CALCULATIONS SHALL CLEARLY SHOW THE LOAD PATH AND THE REACTIONS AS APPLIED TO THE MAIN BUILDING STRUCTURE.
2. RAILINGS AND GUARDRAILS:
a. DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES, INCLUDING LIVE LOAD OF 50 PLF AND 200# CONCENTRATED LOAD. WHERE RAILINGS WILL BE EMBEDDED IN THE TOP OF A CONCRETE WALL, A STEEL SLEEVE MUST BE USED.
3. PRE-ENGINEERED METAL BUILDING:
a. DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES INCLUDING ALL MOMENT AND AXIAL EFFECTS. STEEL SHOP DRAWINGS SHOWING THE CONNECTIONS SHALL BE DESIGNED, SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE JURISDICTION.
4. METAL STAIRS AND LADDERS:
a. DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES. WHERE HEADERS OR OTHER TYPES OF STRUCTURAL MEMBERS HAVE BEEN DESIGNATED BY THE STRUCTURAL ENGINEER OF RECORD TO SUPPORT STAIRS OR LADDERS, THE CONNECTIONS FROM THE STAIRS OR LADDER SHALL BE DESIGNED SO THAT NO ECCENTRIC OR TORSIONAL FORCES ARE INDUCED INTO THESE MEMBERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING EMBEDS AND HARDWARE AS REQUIRED BY THE STAIR DESIGN.
I. CONTRACTOR SHALL FURNISH DIMENSIONED SHOP DRAWINGS LOCATING FLOOR AND ROOF EDGES FOR REVIEW BY THE ARCHITECT AND STRUCTURAL ENGINEER.
J. CONTRACTOR SHALL FURNISH DIMENSIONED SHOP DRAWINGS SHOWING LOCATIONS OF ALL SLEEVES AND OPENINGS REQUIRED BY ALL TRADES FOR REVIEW BY THE MEP, ARCHITECT AND STRUCTURAL ENGINEER.

PART 3 - CONCRETE

3.1 STANDARD SPECIFICATIONS AND REFERENCE STANDARDS:
A. "ACI MANUAL OF CONCRETE PRACTICE - PARTS 1 THROUGH 5", AMERICAN CONCRETE INSTITUTE."MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE.
B. FOLLOW THE LATEST RECOMMENDATIONS AND SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE:
1. ACI 301 SPECIFICATION OF STRUCTURAL CONCRETE
2. ACI 302 GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION
3. ACI 304 GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE
4. ACI 305 GUIDE TO HOT WEATHER CONCRETING
5. ACI 306 GUIDE TO COLD WEATHER CONCRETING
6. ACI 315 GUIDE TO DETAILING REINFORCING STEEL
7. ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
8. ACI 347 GUIDE TO FORMWORK FOR CONCRETE
9. ACI 117 STANDARD SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS

3.2 CONCRETE MIX PROPERTIES:

A.	ELEMENT (NORMAL WEIGHT UNO)	28-DAY STRENGTH	W/CM MAX(b)	AIR CONTENT(a)	EXPOSURE CATEGORIES
1.	FOOTINGS & SLAB ON GRADE:	5,000 PSI	0.40	6%	F3, S0, W0, C2

a. AIR CONTENT OF TROWEL FINISHED FLOORS SHALL NOT EXCEED 3%
b. PUMP MIXES: MAXIMUM WATER/CEMENTITIOUS MATERIAL (W/CM) RATIO MUST BE MAINTAINED. IF ADDITIONAL WORKABILITY IS REQUIRED FOR PUMPED PLACEMENT, THE HIGH OR MID-RANGE WATER REDUCERS SHALL BE USED IN LIEU OF ADDITIONAL WATER.
c. ELEVATED DECKS THAT ARE EXPOSED TO FREEZING TEMPERATURES, I.E. PLAZA DECKS, THAT DO NOT RECEIVE A TROWEL FINISH SHALL HAVE AN AIR CONTENT OF 6%
d. MAXIMUM SLUMP WITHOUT ADMIXTURES = 4"
e. AIR CONTENT INDICATED AS TARGET, +- 1 1/2%

B. PORTLAND CEMENT: ASTM C150, TYPE I OR III.
C. CEMENT SUBSTITUTES: ASTM C595, TYPE LS (LIMIT TO 50% MAX OF CEMENTITIOUS CONTENT BY WEIGHT)
D. AGGREGATES / DENSITY: MAXIMUM COARSE AGGREGATE SIZE = 3/4" TYPICAL
ASTM C33 / 145 PCF - NORMAL WEIGHT
E. AIR-ENTRAINMENT: ASTM C260 (ALL CONCRETE EXPOSED TO WEATHER AND WITHIN 4'-0" OF FINISHED GRADE).
F. SHOP DRAWINGS: CONCRETE MIX DESIGNS SHALL BE MADE BY AN APPROVED LABORATORY FOR ALL CONCRETE AND SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR APPROVAL BEFORE USE. THE MIX MUST CLEARLY NOTE WHERE THE CONCRETE IS INTENDED TO BE USED.
G. CALCIUM CHLORIDE SHALL NOT BE PERMITTED IN CONCRETE IN ANY MANNER.

3.3 BASE PLATE GROUT: 6,000 PSI 28-DAY COMPRESSIVE STRENGTH, NON-METALLIC, NON-SHRINK.

3.4 STEEL REINFORCEMENT:
1. DEFORMED REINFORCING BARS: ASTM A615 GRADE 60
2. WELDABLE DEFORMED REINF. BARS: ASTM A706 OR APPROVED EQUAL.
3. WELDED WIRE REINFORCEMENT (WWR): ASTM A1064 (FLAT SHEETS ONLY)

3.5 CONCRETE COVER:

A. MILD REINFORCED CONCRETE
1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 IN.
2. CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 BAR OR LARGER 2 IN.
#5 BAR OR SMALLER 1½ IN.
3. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS AND JOISTS: #14 BAR OR LARGER 1½ IN.
#11 BAR OR SMALLER ¾ IN.

3.6 GENERAL REQUIREMENTS:
A. PROVIDE (2) #4 X 4'-0" AT SLAB MID DEPTH AT ALL RE-ENTRANT CORNERS OF FLOOR SLAB (BOTH ELEVATED AND SLAB ON GRADE).
B. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. HOPPERS, VERTICAL CHUTES, OR TRUNKS SHALL BE USED IN SUFFICIENT NUMBERS SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED SIX FEET AND TO ENSURE CONCRETE IS KEPT LEVEL AT ALL TIMES.
C. EXISTING SURFACE TREATMENT: PRIOR TO PLACING FRESH CONCRETE AGAINST CONCRETE IN PLACE, THE CONTACT SURFACES SHALL BE CLEANED. ALL LAITANCE SHALL BE REMOVED, AND A CHEMICAL BONDING COMPOUND APPLIED. WHERE NOTED, ROUGHEN EXISTING CONCRETE SURFACES COMMON WITH NEW CONCRETE TO AMPLITUDE OF 1/4 INCH.
D. FORMWORK, SHORING AND RESHORING: SHALL BE DESIGNED AND SUBMITTED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION WITH ALL SUBMISSIONS BEARING THE ENGINEER'S SEAL AND SIGNATURE.
E. ALL KEYS SHALL BE 3" DEEP UNLESS NOTED OTHERWISE.
F. INSERTS AND SLEEVES: CONTRACTOR SHALL FURNISH DIMENSIONED SHOP DRAWINGS AT ALL LEVELS SHOWING LOCATIONS OF ALL CAST-IN-PLACE SLEEVES, INSERTS AND OPENINGS REQUIRED BY ALL TRADES FOR REVIEW BY THE MEP, ARCHITECT AND STRUCTURAL ENGINEER, IN THAT ORDER. NO SLEEVE SHALL BE PLACED THROUGH ANY CONCRETE ELEMENT UNLESS SHOWN ON THE APPROVED SHOP DRAWINGS OR SPECIFICALLY AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD.
G. CORES AND DRILLED FASTENERS:
1. DRILLED OR POWDER DRIVEN FASTENERS WILL BE PERMITTED WHEN PROVEN TO THE SATISFACTION OF THE STRUCTURAL ENGINEER THAT THE FASTENERS WILL NOT SPALL THE CONCRETE OR DAMAGE EXISTING REINFORCEMENT.
2. CORE DRILLING OF FOUNDATIONS SHALL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.
3. WHEN INSTALLING EXPANSION OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. ALL BOLTS AND ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
H. FLOOR SLABS SHALL BE FINISHED TO A MINIMUM FLATNESS F-NUMBER FF=20 AND A MINIMUM LEVELNESS F-NUMBER F1=17 IN ANY DIRECTION. ALL CONCRETE SHALL BE CURED WITH LIQUID SEALING COMPOUND CONFORMING TO ASTM C-309, TYPE 1 AND FEDERAL SPECIFICATION TT-C-00800 OR OTHER APPROVED METHOD WHICH IS COMPATIBLE WITH FLOORING ADHESIVES AND OTHER TREATMENTS. (ALL CONCRETE LEFT EXPOSED AT THE COMPLETION OF THE PROJECT SHALL BE TREATED WITH A CLEAR, PENETRATING ACRYLIC BASED POLYMER CAPABLE OF PREVENTING INFILTRATION OF WATER BORNE CHLORIDES SUCH AS CONSPEC #1 BY CONSPEC MARKETING AND MANUFACTURING COMPANY OR APPROVED EQUAL.)
I. ALL INTERIOR CONCRETE SHALL RECEIVE A STEEL TOWELED FINISH. EXTERIOR SLABS ON GRADE TO RECEIVE A BROOM FINISH, UNLESS NOTED OTHERWISE. SUBMIT FINISHED SCHEDULE TO ARCHITECT FOR APPROVAL.
J. CHAMFER ALL EXPOSED CONCRETE CORNERS,3/4 IN. X 3/4 IN. MINIMUM, UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
K. WATERSTOPS: AS SPECIFIED ON THE ARCHITECTURAL DRAWINGS, PROVIDE CONTINUOUS WATERSTOPS AT ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN ALL BELOW GRADE FOUNDATION WALLS, ELEVATOR PITS AND OTHER PIT WALLS.
L. CONCRETE QUANTITIES: THE CONCRETE SLABS SHALL BE FINISHED, WITHIN TOLERANCE AND FLOOR FLATNESS REQUIREMENTS, TO THE ELEVATIONS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE AT THEIR COST, ADDITIONAL CONCRETE AS REQUIRED DUE TO FORMWORK DEFLECTION TO ACHIEVE THIS FINISHED TOP OF SLAB ELEVATION. REFER TO PART 5B FOR CONCRETE PLACEMENT AT SLABS ON DECK.
M. LOADS GREATER THAN THE DESIGN LIVE LOADS SHALL NOT BE PLACED ON THE STRUCTURE. A CONCRETE STRUCTURE MAY NOT SUPPORT ITS DESIGN LIVE LOAD UNTIL IT HAS REACHED ITS SPECIFIED STRENGTH. CONTRACTOR SHALL SUPPORT ADJACENT STRUCTURES, UTILITIES, AND EXCAVATIONS AS REQUIRED FOR COMPLETION OF WORK.
N. IT IS NOT PERMISSIBLE TO DELAY THE APPLICATION OF CURING COMPOUND UNTIL THE MORNING AFTER THE CONCRETE IS CAST.
O. CONCRETE CAST ON SLOPED SURFACES SHALL BEGIN AT THE LOWEST ELEVATION AND CONTINUE MONOLITHICALLY TOWARD THE HIGHER ELEVATION UNTIL THE INTENDED POUR IS COMPLETED.
P. CONDUITS IN CONCRETE SLABS SHALL BE SPACED SUCH THAT THE CENTER TO CENTER DISTANCE BETWEEN CONDUITS IS A MINIMUM OF THREE TIMES THE OUTSIDE DIAMETER OF THE LARGEST CONDUIT.
Q. CONDUITS IN CONCRETE SLAB HAVING OUTSIDE DIAMETER LARGER THAN ONE THIRD OF THE SLAB THICKNESS SHALL NOT BE PERMITTED. CONDUITS THAT CROSS EACH OTHER WITHIN THE SLAB SHALL NOT CONSUME MORE THAN ONE THIRD OF THE SLAB THICKNESS AT THE POINT OF INTERSECTION. FOR ELEVATED SLABS WHICH ARE ON A DECK, THICKNESS SHALL BE DEFINED AS THE CLEAR DIMENSION ABOVE THE RIBS.
R. ALUMINUM CONDUITS WILL NOT BE PERMITTED IN CONCRETE ELEMENTS.
S. ALL WELDING OF REINFORCING SHALL BE COMPLETED WITH E90XX ELECTRODES IN ACCORDANCE WITH AWS SPECIFICATION D1.4 (LATEST EDITION).

3.7 SPLICING AND PLACEMENT OF REINFORCEMENT:
A. NO SPLICES OF REINFORCEMENT SHALL BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. MAKE BARS CONTINUOUS AROUND CORNERS. WHEN PERMITTED, SPLICES SHALL BE MADE BY CONTACT TENSION LAP SPLICE, UNLESS NOTED OTHERWISE.
B. SPLICE WELDED WIRE REINFORCEMENT TWO FULL MESH LENGTHS AND WIRE TOGETHER.
C. SPLICE BARS AS SHOWN ON DRAWINGS BUT NOT LESS THAN 50 BAR DIAMETERS FOR SLABS AND BEAM BOTTOM BARS, AND NOT LESS THAN 65 BAR DIAMETERS FOR WALLS AND BEAM TOP STEEL.
D. NO WELDING OF REINFORCING SHALL BE PERMITTED UNLESS SPECIFICALLY CALLED FOR OR APPROVED BY THE STRUCTURAL ENGINEER.
E. WELDED WIRE REINFORCING SHALL HAVE ENDS LAPPED ONE FULL PANEL AND SPLICE LACED WITH WIRE.
F. ANY MECHANICAL SPLICES USED, MUST BE "TENSION-COMPRESSION" TYPE AND SHALL COMPLY WITH ACI 318 UNLESS OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER. SHOP DRAWINGS SUBMITTED FOR THE ENGINEER'S APPROVAL MUST INDICATE THE USE AND THE TYPE OF ANY MECHANICAL SPLICES USED.
G. PROVIDE #4 CHAIR BARS, HIGH CHAIRS, TIES, CLIPS, SLAB BOLSTERS AND OTHER ACCESSORIES WHERE NOT SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE OR DETAILING REINFORCING CONCRETE STRUCTURES ACI 315 OR CRSI MANUAL OF STANDARD PRACTICE. USE PLASTIC TIPS ON ALL CHAIRS PLACED ON THE SIDES OF CONCRETE FORMWORK.
H. PROVIDE PLASTIC TIPPED BOLSTERS AND CHAIRS AT ALL LOCATIONS WHERE THE CONCRETE SURFACE IS IN CONTACT WITH THE BOLSTERS OR CHAIRS IS EXPOSED.

3.8 REINFORCEMENT SHOP DRAWINGS:
A. SUBMIT FOR APPROVAL, COMPLETE BENDING AND PLACING DETAILS OF ALL REINFORCEMENT INCLUDING WELDED WIRE REINFORCEMENT, INDICATING POSITION OF SPLICES. INCLUDE ACCESSORY DRAWINGS. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315 AND ACI 318.
B. UNAUTHORIZED REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RE-SUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.

3.9 HOUSEKEEPING PADS AND CURBS:
A. PADS AND CURBS MAY BE SHOWN ON PLAN IN CERTAIN INSTANCES FOR REFERENCE ONLY. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS AND COORDINATE WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS. USE SAME CONCRETE AS BASE SLAB, UNLESS DETAILED OTHERWISE.
B. PROVIDE 4" CONCRETE PADS REINFORCED WITH #3 REBAR AT 12" E.W. AT MID DEPTH AT ALL EQUIPMENT SUPPORTED ON SLABS ON GRADE OR ON FRAMED FLOORS UNLESS NOTED OTHERWISE. USE LIGHTWEIGHT CONCRETE FOR ALL PADS ON FRAMED FLOORS. PAD SHALL EXTEND 6" MINIMUM ON ALL SIDES OF THE EQUIPMENT.

3.10 CONSTRUCTION JOINTS:
A. SUBMIT SHOP DRAWINGS INDICATING JOINT LAYOUT FOR ARCHITECT/ENGINEER APPROVAL.
B. CONSTRUCTION JOINTS FOR MILD-REINFORCED CONCRETE SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE SPAN. PROPOSED CONSTRUCTION JOINT LOCATIONS SHALL BE SHOWN ON THE REINFORCING STEEL SHOP DRAWINGS. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS INDICATED OTHERWISE. FOUNDATIONS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE UNLESS DETAILED OTHERWISE

All Bidders
June 10, 2026

ATTACHMENT NO. 2

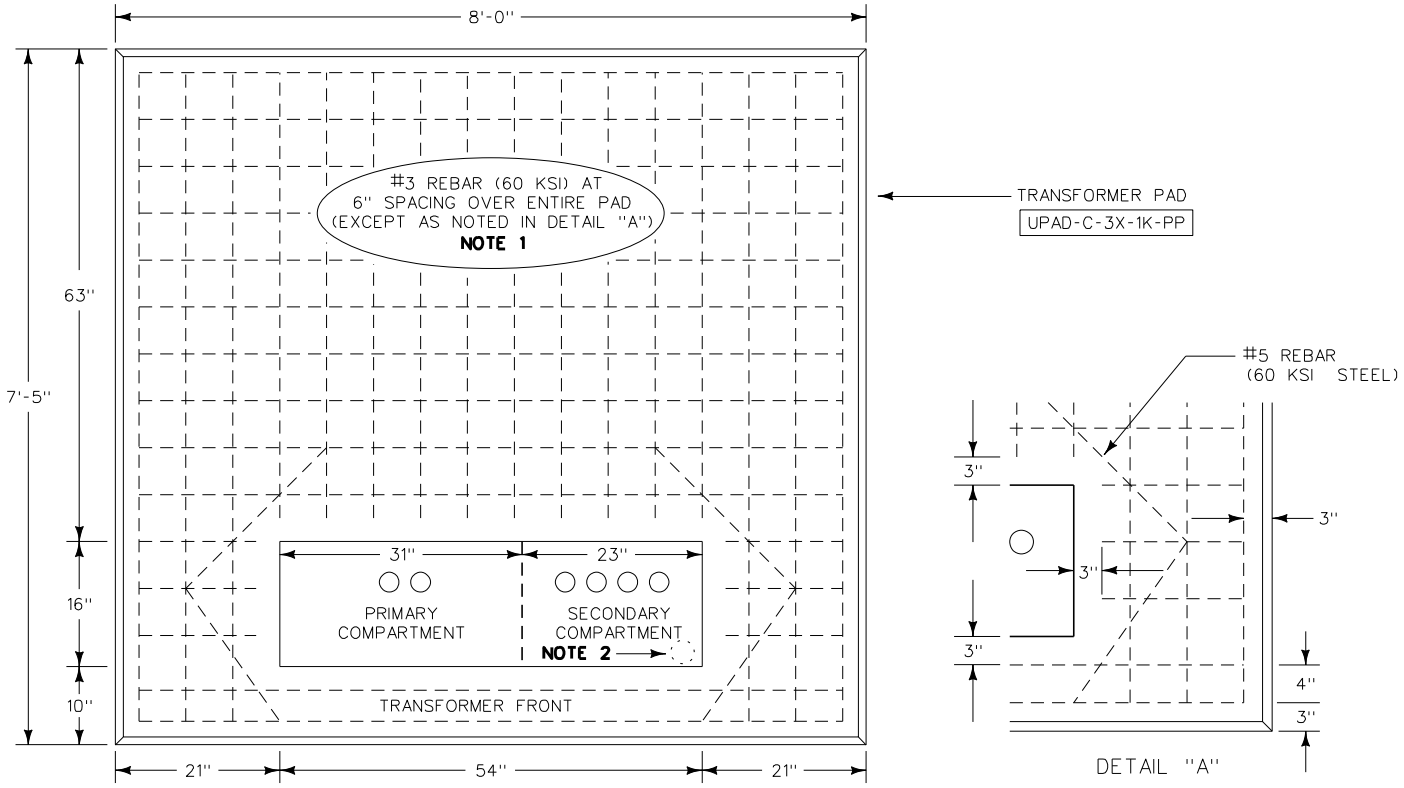

FIGURE 1
TOP VIEW

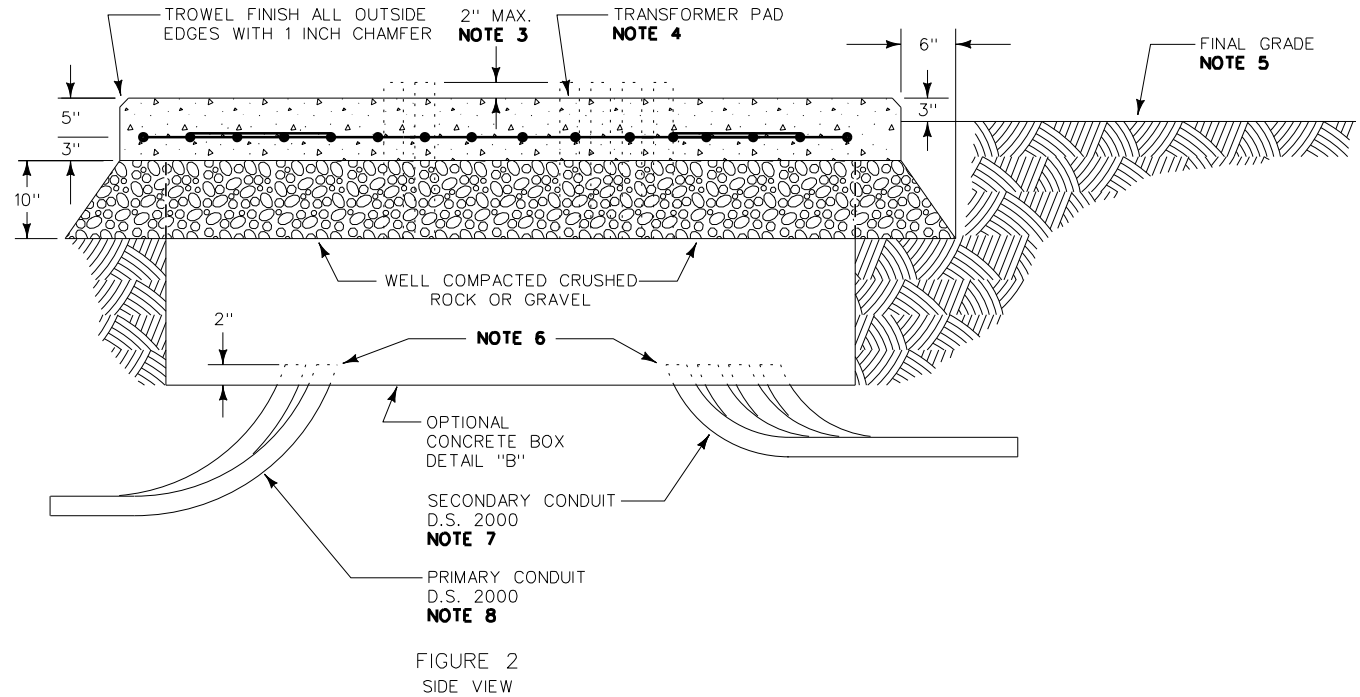

FIGURE 2
SIDE VIEW

CONCRETE PAD FOR THREE PHASE PAD-MOUNT TRANSFORMERS

112.5 kVA - 1000 kVA, 120/208 VOLT
112.5 kVA - 750 kVA, 277/480 VOLT
25 kV AND BELOW

DECEMBER 15, 2022

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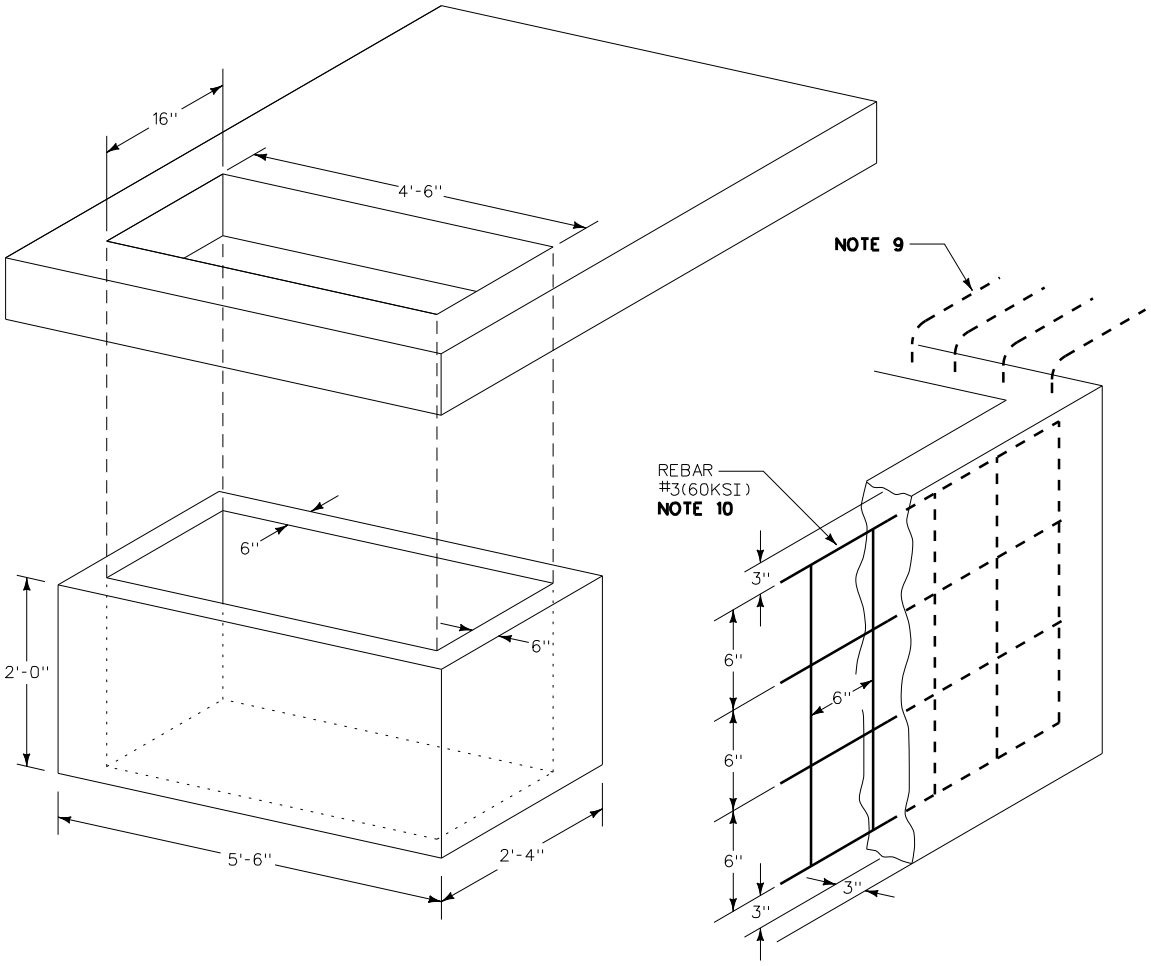

DETAIL "B"
CONCRETE BOX INSTALLATION

NOTES:

1. PROVIDE 3,500 PSI CONCRETE WITH A 3 INCH NOMINAL COVER OVER ALL REBAR. WIRE MESH WITH A MINIMUM CROSS SECTIONAL AREA OF 0.176 SQUARE INCHES PER FOOT OF PAD WIDTH MAY BE USED IN PLACE OF REBAR.
2. FOR GUIDELINES ON THE INSTALLATION OF AN INSTRUMENT TRANSFORMER REFER TO THE METER AND SERVICE GUIDE.
3. IF ONLY THE CONCRETE PAD IS BEING USED, CONDUIT SHALL EXTEND AT LEAST 1 INCH ABOVE CONCRETE PAD BUT NO MORE THAN 2 INCHES.
4. FINAL PAD INSTALLATION SHALL BE LEVEL AS MEASURED BY CARPENTER'S LEVEL FOR ALL DIRECTIONS.
5. FINAL GRADE SHALL BE ESTABLISHED BEFORE INSTALLATION OF PAD.
6. IN ORDER TO ACHIEVE CABLE FLEXIBILITY CONDUIT EXTENDING INTO CONCRETE BOX IS TO BE CUT AS SHOWN.
7. THE NUMBER AND PLACEMENT OF SECONDARY/METERING CONDUITS AND SIZE OF SERVICE CABLES TO BE DETERMINED BY CUSTOMER'S ENGINEER AND LOCAL POWER COMPANY. SECONDARY CONDUIT MAY EXTEND IN ANY DIRECTION AS REQUIRED BY THE CUSTOMER.
8. PRIMARY CONDUIT NUMBER, SIZE, LOCATION AND DIRECTION TO BE SPECIFIED BY LOCAL POWER COMPANY. CONDUIT CAN BE FLEXIBLE, TYPE EB OR DB PVC CONDUIT WITH 90 DEGREE, 36 INCH RADIUS BENDS TO AVOID DISTURBING THE GROUND UNDER THE REAR OF THE PAD AND TO MINIMIZE SETTLING, BRING CONDUITS TO THE FRONT OR SIDES WHENEVER POSSIBLE AND MARK THE CONDUIT END LOCATIONS.
9. IF CUSTOMER WISHES TO CONNECT BOX TO TRANSFORMER PAD EXTEND REBAR ON REAR OF BOX AS SHOWN. REBAR CAN BE ATTACHED TO TRANSFORMER PAD REBAR.
10. REBAR TO BE SPACED AS SHOWN AND USED ON ALL FOUR SIDES OF BOX.

CONCRETE PAD FOR THREE PHASE PAD-MOUNT TRANSFORMERS

112.5 kVA - 1000 kVA, 120/208 VOLT
112.5 kVA - 750 kVA, 277/480 VOLT
25 kV AND BELOW

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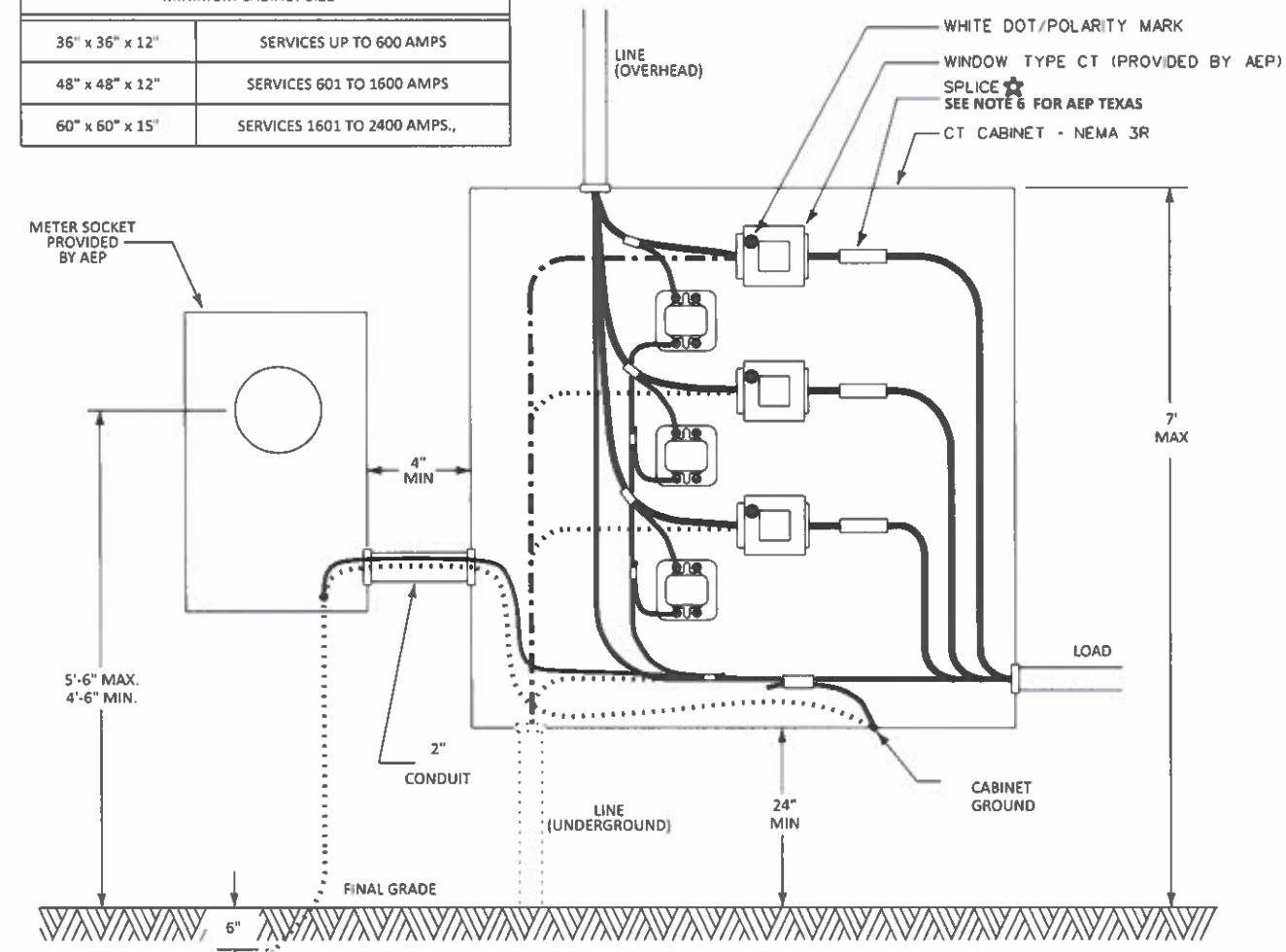
MINIMUM CABINET SIZE	
36" x 36" x 12"	SERVICES UP TO 600 AMPS
48" x 48" x 12"	SERVICES 601 TO 1600 AMPS
60" x 60" x 15"	SERVICES 1601 TO 2400 AMPS.,



NOTES:

1. CT CABINET, FURNISHED AND INSTALLED BY CUSTOMER, SHALL BE OF SUBSTANTIAL STRENGTH WITH CORROSION PROTECTION, SUCH AS PAINTED GALVANIZED STEEL NEMA 3R. ALUMINUM OR FIBER REINFORCED POLYESTER ENCLOSURES MUST BE USED IN CORROSIVE AREAS. IT SHALL BE FITTED WITH HINGED DOORS(s) AND SHALL HAVE PROVISIONS FOR INSTALLING AN COMPANY PADLOCK AND SEAL THE INSIDE BACK OF THE CABINET SHALL BE ENTIRELY COVERED BY 3/4" TREATED PLYWOOD FOR MOUNTING THE CURRENT TRANSFORMERS OR (AEP TEXAS) SUITABLE MOUNTING BRACKETS MAY BE PROVIDED. A GROUNDING LUG SHALL BE PROVIDED TO GROUND THE CABINET.
2. THE WHITE DOT POLARITY MARK ON THE CT SHALL BE TOWARD THE ENERGY SOURCE OR LINE SIDE.
3. CUSTOMER SHOULD MOUNT THE METER SOCKET OR CABINET NEXT TO THE CT CABINET AND INSTALL 2" CONDUIT BETWEEN THE TWO. IF THE METER SOCKET CANNOT BE INSTALLED NEXT TO THE CT CABINET, IT MAY BE LOCATED UP TO 20 FEET AWAY WITH COMPANY METER SERVICES APPROVAL. 2" CONDUIT SHALL CONNECT THE SOCKET AND CT CABINET.
4. THE CT CABINET AND METER SOCKET SHALL BE GROUNDED. THE METER SOCKET AND CT CABINET SHALL BE BONDED THROUGH A SEPARATE EQUIPMENT-GROUNDING CONDUCTOR CONNECTED TO THE GROUNDED SERVICE CONDUCTOR (USUALLY THE NEUTRAL). IF A GROUNDED SERVICE CONDUCTOR DOES NOT EXIST THEN GROUNDING AND BONDING OF METERING EQUIPMENT MUST BE ESTABLISHED THROUGH A GROUNDING ELECTRODE SYSTEM ESTABLISHED AT THE POINT OF SERVICE. IN SOME JURISDICTIONS THE GROUNDING OF THE METER SOCKET AND INSTRUMENT TRANSFORMER ENCLOSURE WILL BE SUPPLEMENTED WITH THE USE OF A DRIVEN GROUND ROD IN ADDITION TO BONDING TO THE GROUNDED SERVICE CONDUCTOR.
5. COMPANY WILL INSTALL THE SECONDARY WIRING BETWEEN THE CT AND THE METER SOCKET.
6. THE CONDUCTOR SPLICE SHALL BE MADE WITH BOLTED CONNECTIONS FURNISHED AND INSTALLED BY CUSTOMER WHERE REQUIRED. **IN AEP TEXAS WHEN THE CUSTOMER OWNS AND INSTALLS BOTH THE LINE AND LOAD CONDUCTORS, THE CONDUCTOR SHALL PASS THROUGH THE CT'S CABINET WITHOUT SPLICES.**
7. FOR CT CABINET CLEARANCES REFERENCE FIGURE 20A
8. FOR CT CABINET CLEARANCES ON CATWALK INSTALLATIONS REFERCE FIGURE 21A

☆ SPLICE IS REQUIRED IN AEP: KENTUCY, OHIO, OKLAHOMA.

CURRENT TRANSFORMER CABINETS OVERHEAD OR UNDERGROUND SERVICE WINDOW TYPE CT'S AND VT'S 277/480 VOLT

FIGURE 11

JULY 09 2020

All Bidders
June 10, 2026

ATTACHMENT NO. 3

BASE BID						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
1	133419-1	PRE-ENGINEERED METAL BUILDING	LS	1	$	$
2	033000-1	FOUNDATIONS	LS	1	$	$
3	081113-1	INTERIOR CONSTRUCTION (PARTITIONS, CEILINGS, FINISHES, ETC)	LS	1	$	$
4	210000-1	FIRE PROTECTION SYSTEM	LS	1	$	$
5	220000-1	PLUMBING	LS	1	$	$
6	230000-1	MECHANICAL	LS	1	$	$
7	260000-1	ELECTRICAL	LS	1	$	$
8	280000-1	FIRE ALARM	LS	1	$	$
9	101423-1	EQUIPMENT AND SPECIALTY SYSTEMS	LS	1	$	$
10	207001-1	UNCLASSIFIED EXCAVATION	CY	1,180	$	$
11	211001-1	UNCLASSIFIED BORROW EXCAVATION	CY	2,900	$	$
12	639001-1	CONSTRUCTION LAYOUT	LS	1	$	$
13	P-101-5.1	PAVEMENT REMOVAL (ASPHALT AND CONCRETE)	SY	4,870	$	$
14	P-101-5.2	PIPE REMOVAL	LF	55	$	$
15	P-101-5.3	TIE DOWN REMOVAL	EA	22	$	$

BASE BID						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
16	342100-1	BOLLARDS	EA	12	$	$
17	307001-1	6” CRUSHED AGGREGATE BASE COURSE CLASS 3	SY	2,150	$	$
18	311001-1	6” NO. 2 CRUSHED AGGREGATE BASE	SY	710	$	$
19	401001-1	SUPER PAVE ASPHALT BASE COURSE 19MM, TABLE 401.4.2B	TON	790	$	$
20	401002-1	SUPER PAVE ASPHALT WEARING COURSE 12.5MM, TABLE 401.4.2B	TON	340	$	$
21	408001-1	ASPHALT TACK COAT	GAL	640	$	$
22	604052-1	18” HIGH DENSITY POLYETHYLENE (HDPE) PIPE	LF	230	$	$
23	604052-2	24” HIGH DENSITY POLYETHYLENE (HDPE) PIPE	LF	420	$	$
24	604071-1	24” HEADWALL	EA	1	$	$
25	605001-1	INLET DRAINAGE STRUCTURE	EA	5	$	$
26	605001-2	BAFFLE WALL INLET	EA	1	$	$
27	608001-1	8’ RIGHT-OF-WAY FENCE, CHAIN LINK	LF	335	$	$
28	608004-1	PEDESTRIAN GATE	EA	2	$	$
29	608005-1	VEHICULAR GATE, MOTORIZED SLIDE GATE, GATE OPERATOR AND ACCESSORIES	EA	1	$	$
30	609001-1	CONCRETE SIDEWALK	SY	220	$	$

BASE BID						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
31	610001-1	PLAIN CONCRETE CURBING	LF	420	$	$
32	642000-1	18 INCH SILT SOCK	LF	60	$	$
33	642000-2	STABILIZED CONSTRUCTION ENTRANCE	SF	1200	$	$
34	642000-3	TEMPORARY INLET PROTECTION	EA	3	$	$
35	642000-4	BELTED SILT FENCE OR SUPER SILT FENCE	LF	475	$	$
36	642000-5	SLOPE MATTING	SF	10,250	$	$
37	642000-6	STONE RING	EA	1	$	$
38	642000-7	CONCRETE WASHOUT	EA	1	$	$
39	651001-1	FURNISHING AND PLACING TOPSOIL (INCLUDING SEEDING)	CY	400	$	$
40	657019-1	STOP SIGN INCLUDING POST AND SHEET METAL	EA	6	$	$
41	663005-1	PAVEMENT MARKING	SF	410	$	$
42	670004-1	6” DUCTILE IRON PIPE, TYPE II, CLASS 350 WATERLINE	LF	25	$	$
43	670007-1	PLASTIC PIPE FOR NATURAL GAS	LF	55	$	$
44	675008-1	6” CAST IRON SEWERLINE WITH HUB&SPIGOT CONNECTIONS	LF	320	$	$
45	L-108-5.1	1-1/C NO. 6 AWG BARE COPPER COUNTERPOISE WIRE IN TRENCH, INCLUDING 3/4" X 10' GROUND RODS	LF	280	$	$

BASE BID						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
46	L-110-5.1	2 WAY-4" CONCRETE ENCASED PVC DUCTBANK IN PAVED AREAS	LF	40	$	$
47	L-110-5.2	2 WAY-4" PVC DUCTBANK IN UNPAVED AREAS	LF	100	$	$
48	L-110-5.3	4 WAY-4" CONCRETE ENCASED PVC DUCTBANK IN PAVED AREAS	LF	30	$	$
49	L-110-5.4	4 WAY-4" PVC DUCTBANK IN UNPAVED AREAS	LF	150	$	$
50	L-115-5.1	3X3X3 HANDHOLE	EA	1	$	$
51	260519-5.1	3-1/C NO. 1/0 AWG, 600V, XHHW COPPER CABLE AND 1/C NO.6 AWG, 600V XHHW GROUND IN CONDUIT	LF	350	$	$
52	260519-5.2	2 SETS 4-1/C 3/0 AWG, 600V, XHHW COPPER CABLE AND 1/C NO.2 AWG, 600V XHHW GROUND IN CONDUIT	LF	110	$	$
53	281300-1	CARD READER AND ACCESSORIES	EA	2	$	$
54	X-2-1	UTILITY MANAGEMENT AND CONSTRUCTION ALLOWANCE (WATER)	ALLOW	1	$200,000.00	$
55	X-2-2	UTILITY MANAGEMENT AND CONSTRUCTION ALLOWANCE (ELECTRICAL)	ALLOW	1	$60,000.00	$
SUBTOTAL A (Total of Bid Item No. 1 through 55)		$				
56	636001-1	TEMPORARY CONSTRUCTION ITEMS (SHALL NOT EXCEED 5% OF SUBTOTAL A)	LS	1	$	$

BASE BID						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
SUBTOTAL B (Total of Subtotal A through 56)		$				
57	204001-1	MOBILIZATION/DEMOBILIZATION (SHALL NOT EXCEED 5% OF SUBTOTAL B)	LS	1	$	$
SUBTOTAL C (Total of Subtotal A through 57)		$				
58	X-1-5.1	SECURITY REQUIREMENTS DURING CONSTRUCTION (SHALL NOT EXCEED 3% OF SUBTOTAL C)	LS	1	$	$
BASE BID TOTAL (Subtotal C through 58)		_____Dollars				$

DEDUCT ALTERNATE NO. 1						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
1A	133419-2	DEDUCT TRANSLUCENT CLERESTORY PANELS AND PROVIDE STANDARD INSULATED METAL PANELS	LS	1		
SUBTOTAL A (Total of Item No. 1A)		$				
2A	636001-1	TEMPORARY CONSTRUCTION ITEMS (SHALL NOT EXCEED 5% OF SUBTOTAL A)	LS	1	$	$
SUBTOTAL B (Total of Subtotal A through 2A)		$				
3A	204001-1	MOBILIZATION/DEMOBILIZATION (SHALL NOT EXCEED 5% OF SUBTOTAL B)	LS	1	$	$
SUBTOTAL C (Total of Subtotal B through 3A)		$				
4A	X-1-5.1	SECURITY REQUIREMENTS DURING CONSTRUCTION (SHALL NOT EXCEED 3% OF SUBTOTAL C)	LS	1	$	$
DEDUCT ALTERNATE NO. 1 TOTAL (Subtotal C through 4A)		_____Dollars				$

DEDUCT ALTERNATE NO. 2						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
1B	133419-2	OMIT THE MULTI-COLOR PANEL LAYOUT, PREMIUM COLOR CHOICES AND ASSOCIATED FIELD TRANSITION TRIMS.	LS	1		
SUBTOTAL A (Total of Item No. 1B)		$				
2B	636001-1	TEMPORARY CONSTRUCTION ITEMS (SHALL NOT EXCEED 5% OF SUBTOTAL A)	LS	1	$	$
SUBTOTAL B (Total of Subtotal A through 2B)		$				
3B	204001-1	MOBILIZATION/DEMOBILIZATION (SHALL NOT EXCEED 5% OF SUBTOTAL B)	LS	1	$	$
SUBTOTAL C (Total of Subtotal B through B)		$				
4B	X-1-5.1	SECURITY REQUIREMENTS DURING CONSTRUCTION (SHALL NOT EXCEED 3% OF SUBTOTAL C)	LS	1	$	$
DEDUCT ALTERNATE NO. 2 TOTAL (Subtotal C through 4B)		_____Dollars				$

ADD ALTERNATE NO. 1						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
1C	133419-2	SUBSTITUDE THE SINGLE-SKIN METAL PANELS AND INTERIOR CAVITY LINEAR INSULATION SYSTEM WITH AN INSULATED METAL PANELS (IMPs) SYSTEM	LS	1		
SUBTOTAL A (Total of Item No. 1C)		$				
2C	636001-1	TEMPORARY CONSTRUCTION ITEMS (SHALL NOT EXCEED 5% OF SUBTOTAL A)	LS	1	$	$
SUBTOTAL B (Total of Subtotal A through 2C)		$				
3C	204001-1	MOBILIZATION/DEMOBILIZATION (SHALL NOT EXCEED 5% OF SUBTOTAL B)	LS	1	$	$
SUBTOTAL C (Total of Subtotal B through 3C)		$				
4C	X-1-5.1	SECURITY REQUIREMENTS DURING CONSTRUCTION (SHALL NOT EXCEED 3% OF SUBTOTAL C)	LS	1	$	$
ADD ALTERNATE NO. 1 TOTAL (Subtotal C through 4C)		_____Dollars				$

ADD ALTERNATE NO. 2						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**UNIT**	**APPROX. QUANTITY**	**UNIT PRICE WRITTEN**	**TOTAL PRICE**
1D		RELOCATE EXISTING GENERATOR TO THE MAINTENANCE BUILDING, INSTALL A CONCRETE PAD AND COMPLETE ALL ELECTRICAL CONNECTIONS	LS	1		
SUBTOTAL A (Total of Item No. 1D)		$				
2D	636001-1	TEMPORARY CONSTRUCTION ITEMS (SHALL NOT EXCEED 5% OF SUBTOTAL A)	LS	1	$	$
SUBTOTAL B (Total of Subtotal A through 2D)		$				
3D	204001-1	MOBILIZATION/DEMOBILIZATION (SHALL NOT EXCEED 5% OF SUBTOTAL B)	LS	1	$	$
SUBTOTAL C (Total of Subtotal B through 3D)		$				
4D	X-1-5.1	SECURITY REQUIREMENTS DURING CONSTRUCTION (SHALL NOT EXCEED 3% OF SUBTOTAL C)	LS	1	$	$
ADD ALTERNATE NO. 2 TOTAL (Subtotal C through 4D)		_____Dollars				$