



James R. Morrissey
Attorney

VIA ELECTRONIC MAIL AND FedEx

August 25, 2016

Mr. Robert Stein
Chairman
The Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: **PETITION NO. 1189** – The United Illuminating Company Petition for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Modifications to the Existing Mix Avenue Substation Located at 690 Mix Avenue, Hamden, Connecticut and Related Improvements to Existing Electric Transmission Line Circuits from Mix Avenue Substation to Glen Lake Junction and from June Street Substation to Pease Road

Dear Chairman Stein:

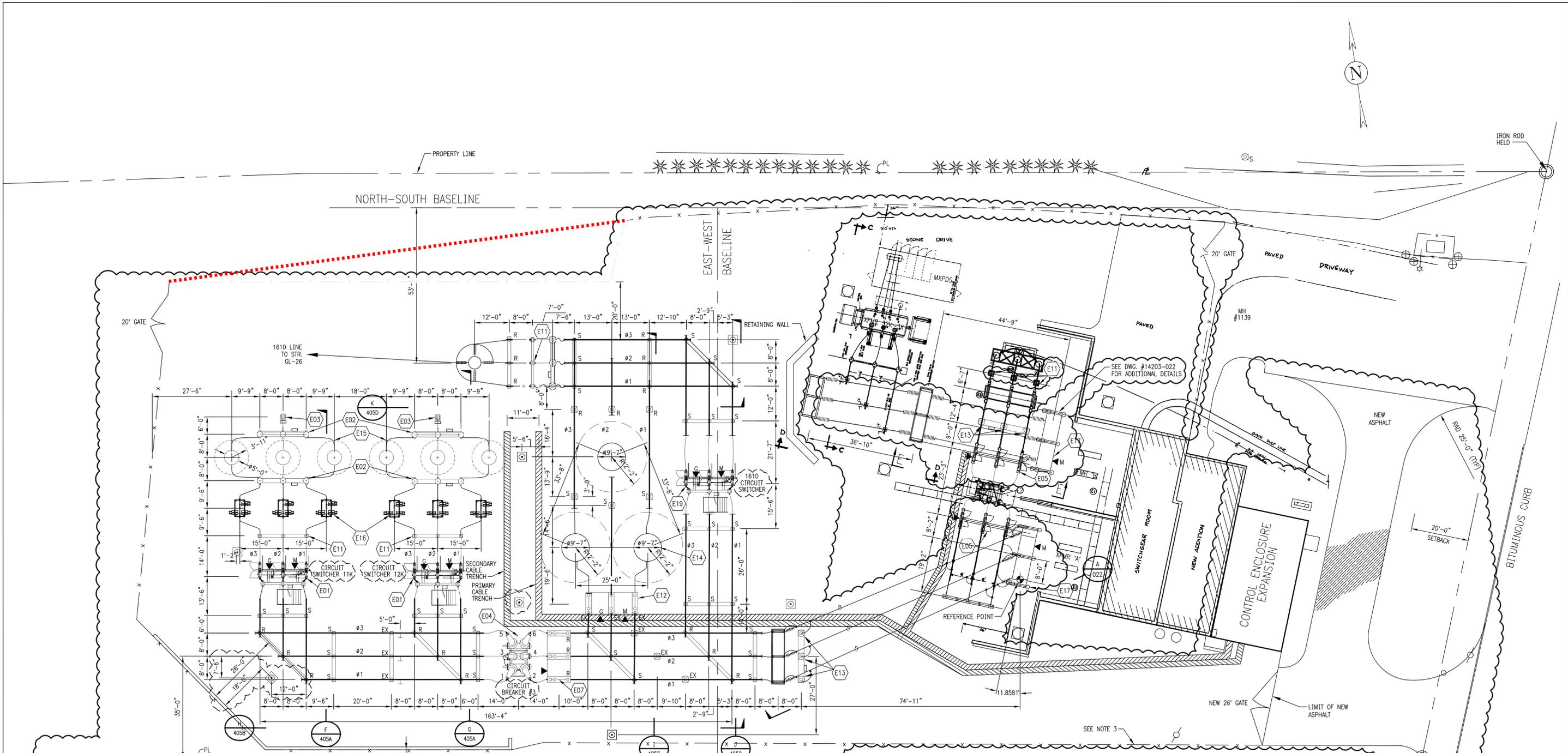
Several drawings The United Illuminating Company (“UI”) submitted with the above captioned Petition for modifications to the existing Mix Avenue substation depicted installing a concave perimeter fence in the northwest portion of the substation yard. However, UI plans to modify the fence line as shown on the attached drawing in order to provide improved accessibility to and within the substation yard. I submit the revised drawings for your review.

If you have any questions concerning this submittal, please contact me at your convenience.

Respectfully submitted,

By: *James R. Morrissey*
James R. Morrissey
Attorney
UIL Holdings Corporation
Counsel for The United Illuminating Company

Enclosure



CONSTRUCTION NOTES

- SUBSTATION CONSTRUCTION CONTRACTOR (180592.73.0601) SHALL MAINTAIN THE FOLLOWING ELECTRICAL CLEARANCES AND SHALL NOTIFY BVCI IMMEDIATELY FOR ANY VIOLATIONS OF THESE CLEARANCES.

	11.5KV	13.8KV
MINIMUM PHASE TO GROUND	47 INCHES	10 INCHES
MINIMUM PHASE TO PHASE	53 INCHES	12 INCHES
- SUBSTATION CONTRACTOR (180592.73.0601) SHALL DRILL 1/8" DIA. DRAIN HOLES IN THE BOTTOM OF RIGID BUS CONDUCTOR EVERY 6'-0".
- SUBSTATION CONTRACTOR (180592.71.0201) SHALL REMOVE EXISTING FENCE AND INSTALL NEW FENCE (SEE DWG #15238-417C).
- SUBSTATION CONTRACTOR (180592.73.0601) SHALL RELOCATE EXISTING METERING UNITS.

GENERAL NOTES

- SEE DWG 15238-499 MATERIAL LIST FOR DESCRIPTIONS OF EQUIPMENT, STRUCTURES, AND FITTINGS.
- 795 KCMIL ACSR SHALL BE INSTALLED AS VIBRATION DAMPER INSIDE THE THE 5" RIGID BUS FOR EACH HORIZONTAL RUN OF TUBULAR BUS LONGER THAN 15 FEET.

REFERENCE DRAWINGS

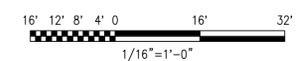
- | | |
|--------------|---------------------------|
| 15238-405SHA | SUBSTATION SECTIONS F & G |
| 15238-405SHB | SUBSTATION SECTION H |
| 15238-405SHC | SUBSTATION SECTIONS I & J |
| 15238-405SHD | SUBSTATION SECTION K |
| 15238-405SHE | SUBSTATION DETAILS |
| 15238-499 | MATERIAL LIST |
| 15238-499A | MATERIAL LIST 2 |
| 14203-022 | 115 KV STATION (EXISTING) |

LEGEND

- HIGH BUS (FOR 180592 PROJECT ONLY)
- LOW BUS
- R RIGID (FIXED) BUS CONNECTION
- S SLIP BUS CONNECTION
- EX EXPANSION BUS CONNECTION
- BUS GROUNDING STUD
- LIGHTNING MAST
- LIGHT POLE (WITH LIGHTNING ROD)
- MOBILE SUB TAP
- NEW FENCE
- M DISCONNECT SWITCH MOTOR OPERATOR
- G DISCONNECT SWITCH GROUNDING SWITCH OPERATOR
- DISCONNECT SWITCH MANUAL OPERATOR
- E# SUBSTATION ELECTRIC OPERATIONS EQUIPMENT. E# INDICATES ITEM NO. ON THE SUBSTATION MATERIAL LIST.
- YS# MAJOR SUBSTATION STRUCTURAL COMPONENTS OR ASSEMBLY. YS# INDICATES ITEM NO. ON THE SUBSTATION MATERIAL LIST.
- C# BUS CONDUCTOR AND FITTINGS

BACKCIRCLED CHANGES PER ECN-180592-0006

AREA ON DRAWING INDICATES WORK ASSOCIATED WITH PROJECT 180592



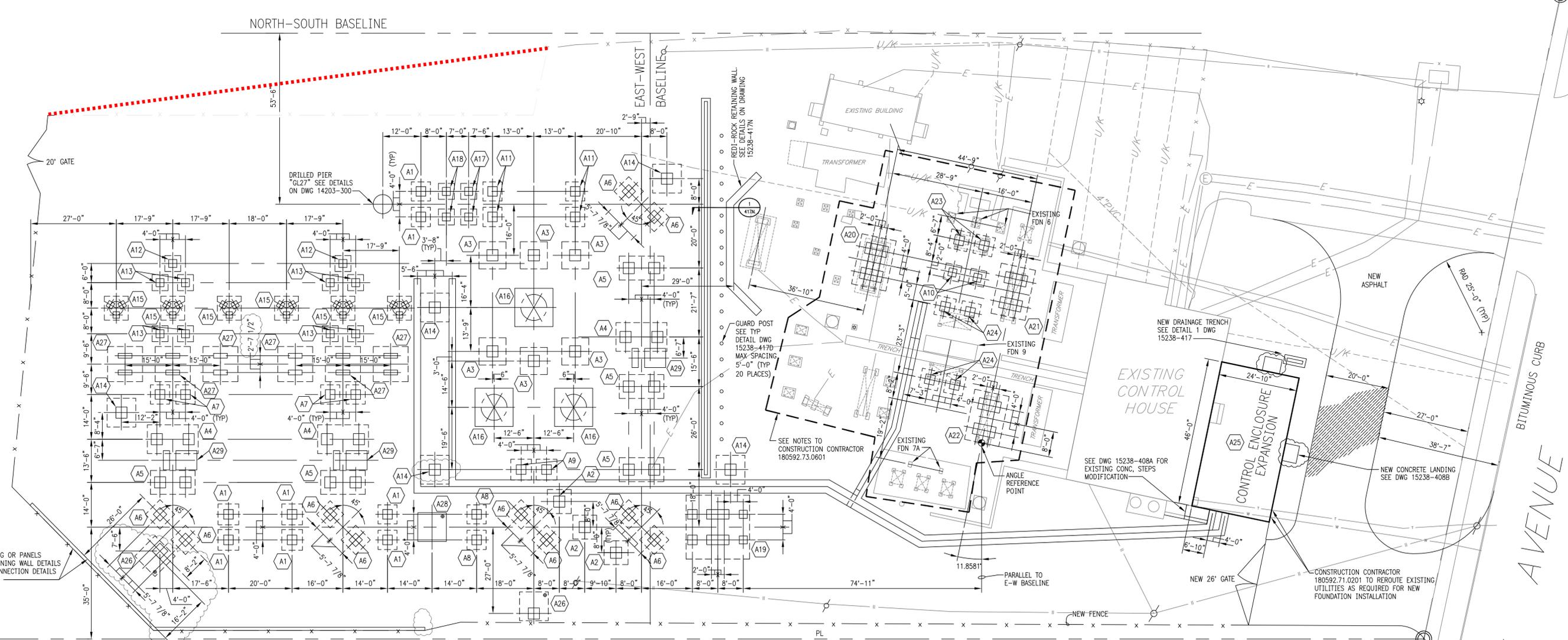
APPROVED FOR CONSTRUCTION

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.



BLACK & VEATCH Building a world of difference®		H 05/12/2016	REVISED PER ECN-180592-0006-PROJECT 180592-CAP BANK AND REACTOR	TDP	RH	ASV	MAV
		G 04/01/2016	APPROVED FOR CONSTRUCTION-PROJECT 180592-CAP BANK AND REACTOR	TDP	MIS	BLH	MAV
		F 02/29/2016	ISSUED FOR UT 90% REVIEW-PROJECT 180592-CAP BANK AND REACTOR	CRE/TDP	-	ZRM	MAV
		E 08/05/2015	ISSUED FOR BID-PROJECT 180592-CAP BANK AND REACTOR	TDP	-	ZRM	MAV
		D 05/22/2015	ISSUED FOR UT 30% REVIEW-PROJECT 180592-CAP BANK AND REACTOR	WDS	-	BLH	MAV
		C 05/05/2015	ISSUED FOR PERMITTING SUPPORT - PROJECT 180592	ADL	-	BLH	MAV
		B 02/24/2015	ISSUED FOR UT REVIEW - PROJECT 180592	ADL	-	BLH	MAV
		A 10/24/2013	ISSUED FOR UT REVIEW - PROJECT 180592	BJF	-	RSG	ALL
		NO	DATE	REVISION	DRN	CHKD	DESN

				ELECTRICAL SITE PLAN CAPACITOR - REACTOR ADDITION			
				MIX AVENUE SUBSTATION			
1	2/2016	CAPACITOR BANK AND REACTOR ADDITION	TDP	-	BLH	MAV	Drawn
No	Date	Revision	By	Chkd.	Engr.	Supr.	Chkd.
			Date		Scale: 1/16"=1'-0"		CAD FILE NAME
			Design Engr.		Design Supv.		SEQUENCE No.
							DRAWING NUMBER
							15238-405



NOTES TO CONSTRUCTION CONTRACTOR 180592.73.0601

- CONSTRUCTION CONTRACTOR 180592.73.0601 SHALL USE AN EARLY HIGH STRENGTH CONCRETE MIX DESIGN (MINIMUM $f_c=4000\text{psi}$ AT 3 DAYS) FOR ALL NEW FOUNDATIONS WORK WITHIN EXISTING 115KV YARD. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO RESPONSIBLE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. THE FOLLOWING TEST CYLINDER QUANTITIES SHALL BE PERFORMED EACH DAY CONCRETE IS PLACED AND BREAK RESULTS SUBMITTED FOR REVIEW:
 - TWO (2) 1-DAY BREAKS
 - TWO (2) 3-DAY BREAKS PLUS ONE (1) SPARE
- ENTRAINED AIR CONTENT TESTS AND SLUMP TESTS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH U.I. GENERAL SUBSTATION CONSTRUCTION SPECIFICATIONS TSS 5.1. REFER TO SECTION 16803 OF TSS 5.1 FOR ADDITIONAL REQUIREMENTS.
- CONSTRUCTION CONTRACTOR 180592.73.0601 SHALL EXERCISE CAUTION WHEN EXCAVATING AROUND AND NEAR EXISTING ADJACENT STRUCTURES AND AVOID UNDERMINING EXISTING ADJACENT FOUNDATIONS.
- SEE SKETCH 15238-SK-01 AND 15238-SK-02 FOR EXISTING FOUNDATION DEMOLITION PLAN.
- NEW FOUNDATION LOCATIONS WITHIN EXISTING YARD ARE DIMENSIONED OFF EXISTING FOUNDATION LOCATIONS BASED ON SURVEY PERFORMED BY FUSS & O'NEILL ON 06/28/2013. THE CONSTRUCTION CONTRACTOR 180592.73.0601 SHALL FIELD VERIFY EXISTING FOUNDATION LOCATIONS PRIOR TO ESTABLISHING NEW FOUNDATION LOCATIONS. ANY DISCREPANCIES NOTED FROM FIELD VERIFICATION IN DIMENSIONAL OFFSETS SHALL BE COMMUNICATED TO THE ENGINEER OR RECORD PRIOR TO INSTALLING NEW FOUNDATIONS. SEE DRAWING 15238-417E FOR EXISTING SURVEY INFORMATION.

REFERENCE DRAWINGS

ELECTRICAL SITE PLAN
 SUBSTATION SECTIONS G & G
 SUBSTATION SECTION H
 SUBSTATION SECTIONS I & J
 SUBSTATION SECTION K
 SUBSTATION DETAILS
 CONTROL HOUSE ADDITION FOUNDATION PLAN AND DETAILS
 CONTROL HOUSE ADDITION SECTIONS AND DETAILS
 FOUNDATION PLANS SECTIONS AND DETAILS
 FOUNDATION DETAILS
 FOUNDATION TOP OF CONCRETE EL PLAN
 FOUNDATION PLANS SECTIONS AND DETAILS
 FUSS & O'NEILL SURVEY
 MATERIAL LIST
 MATERIAL LIST 2
 MATERIAL LIST 3
 115 KV STATION (EXISTING)

15238-405
 15238-405A
 15238-405B
 15238-405C
 15238-405D
 15238-405E
 15238-408A
 15238-408B
 15238-408C
 15238-408D
 15238-408E
 15238-408F
 15238-408G
 15238-408H
 15238-408I
 15238-408J
 15238-408K
 15238-408L
 15238-408M
 15238-408N
 15238-408O
 15238-408P
 15238-408Q
 15238-408R
 15238-408S
 15238-408T
 15238-408U
 15238-408V
 15238-408W
 15238-408X
 15238-408Y
 15238-408Z
 14203-022

BACKCIRCLED CHANGES PER ECN-180592-0006

APPROVED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

GENERAL NOTES

- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, UNLESS NOTED OTHERWISE: A) 180592.71.0201: BELOW GRADE CONSTRUCTION (WITH ASSOCIATED U.I. TECHNICAL REQUIREMENTS FOR STANDARD SUBSTATION CONSTRUCTION).
- DIMENSIONS ARE TO THE CENTERLINE OF THE FOUNDATION UNLESS NOTED OTHERWISE.
- MINIMUM STRENGTH OF CONCRETE AT 28 DAY TESTING (f_c) SHALL BE 4,000 PSI.
- ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
- SEE DRAWING 15238-408F FOR NEW FOUNDATION TOP OF CONCRETE ELEVATIONS.
- SEE DRAWING 15238-408D FOR FOUNDATION LIST.

--- AREAS ON DRAWING INDICATE WORK ASSOCIATED WITH ABOVE GRADE CONSTRUCTION CONTRACTOR (180592.73.0601)



BLACK & VEATCH Building a world of difference®	
DESIGNER JZ	DRAWN BD
CHECKED CRS	DATE 04/01/2016
PROJECT # 180592	

NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.
E	05/12/2016	REVISED PER ECN-180592-0006-PROJECT 180592-CAP BANK AND REACTOR	BD	CRS	JZ	MAV
D	04/01/2016	APPROVED FOR CONSTRUCTION-PROJECT 180592-CAP BANK AND REACTOR	BD	CRS	JZ	MAV
C	02/29/2016	ISSUED FOR UI 90% REVIEW-PROJECT 180592-CAP BANK AND REACTOR	BD	CRS	JZ	MAV
B	08/05/2015	ISSUED FOR BIDS-PROJECT 180592-CAP BANK AND REACTOR	BD	-	JZ	MAV
A	05/22/2015	ISSUED FOR UI 30% REVIEW-PROJECT 180592-CAP BANK AND REACTOR	BD	-	JZ	MAV

16' 12' 8' 4' 0' 16' 32'
 1/16"=1'-0"

NEW DRAWING

No	Date	Revision	By	Chkd.	Engr.	Supv.
1	2/2016	CAPACITOR BANK AND REACTOR ADDITION	BD	-	JZ	MAV

ui
The United Illuminating Company

Drawn _____ Date 10/20/2014 Scale: 1/16"=1'-0"
 Chkd. _____ Design Engr. _____ Design Supv. _____

FOUNDATION PLAN PLAN AND GENERAL NOTES		
MIX AVENUE SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
086382	086382	15238-408