

- PRELIMINARY
- FOR BID
- FOR CONSTRUCTION
- FOR RECORD
- "AS BUILT"
- REFERENCE

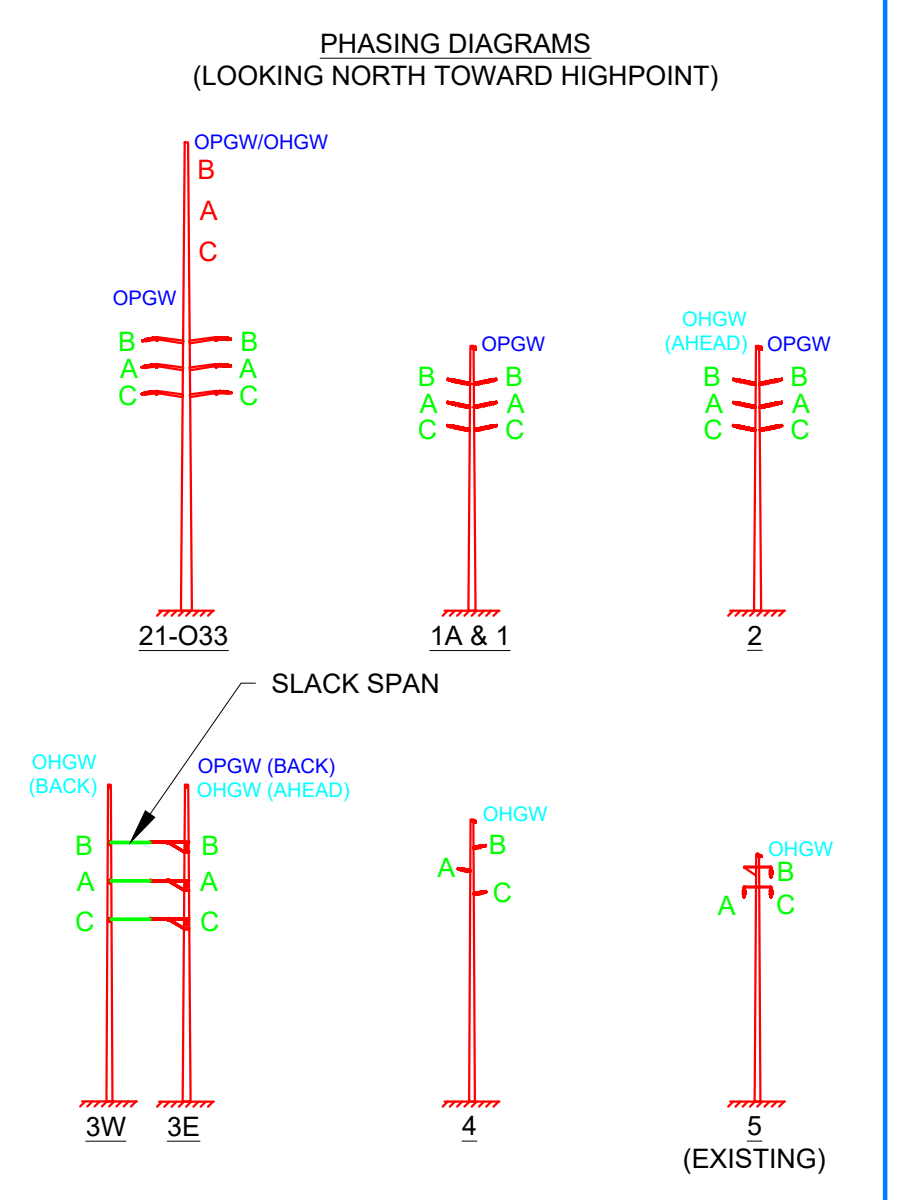
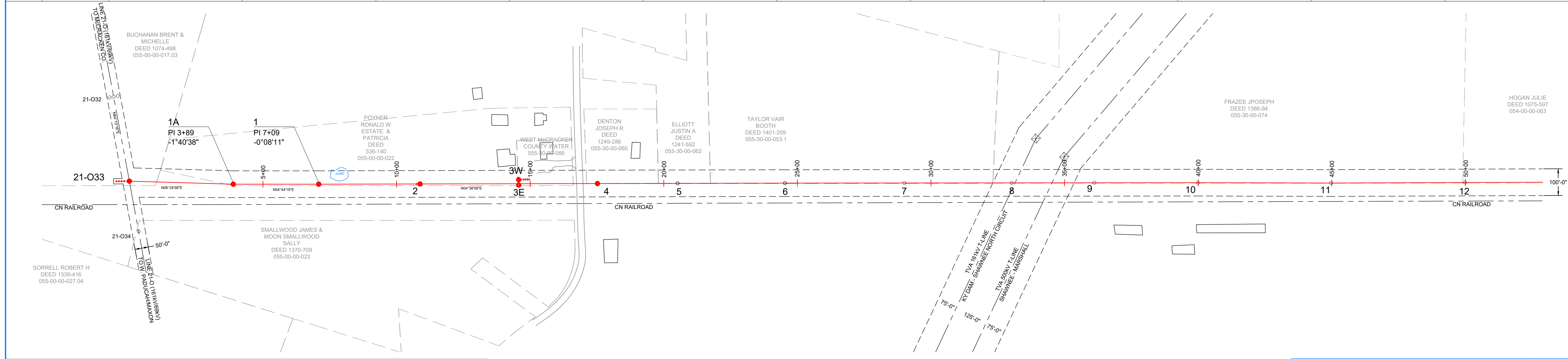
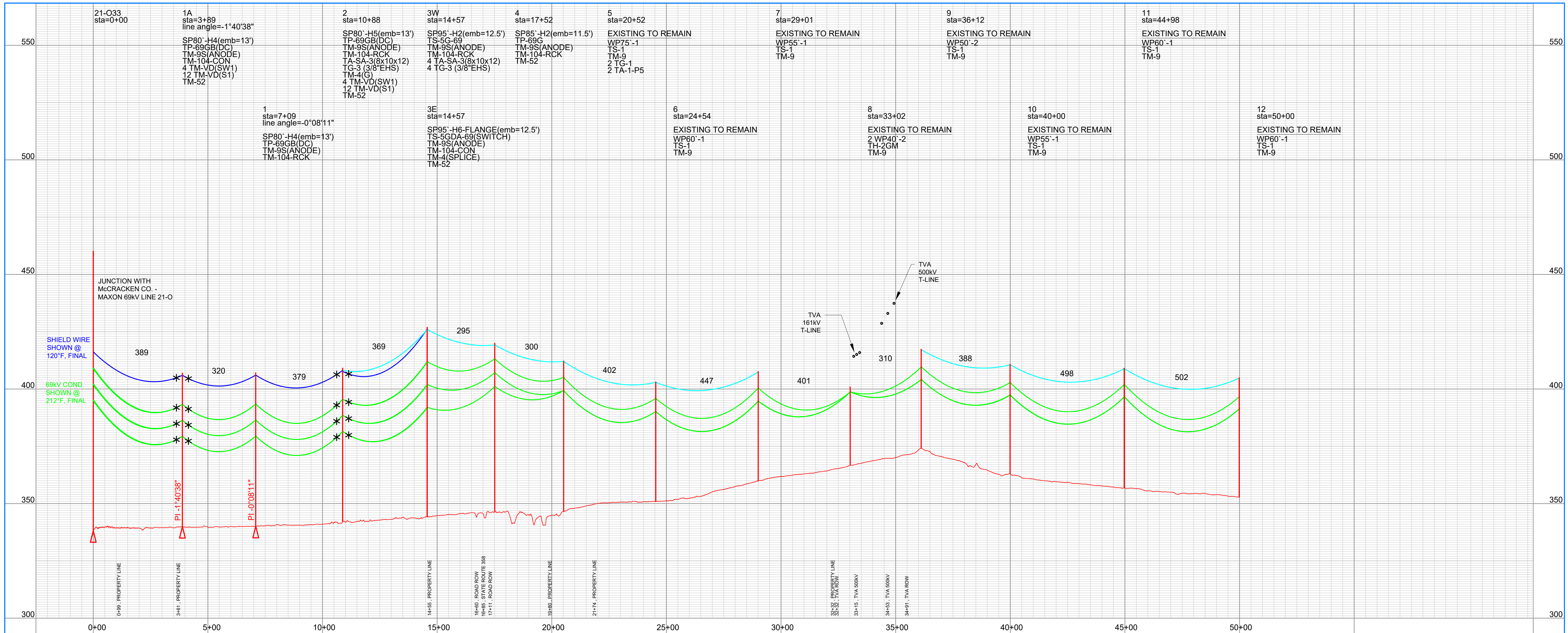


LEGEND
 - - - EXISTING TRANSMISSION LINE
 — ROAD
 — RAILROAD
 - - - PROPOSED TRANSMISSION LINE

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	06/08/22		ABG	ISSUED FOR REFERENCE

**WEST PADUCAH 161KV PROJECT
OVERVIEW MAP**

W.O.	DRAWING REVIEW	DATE	
SCALE: 1"=1000'	ENGINEER	ABG (P&D ENGINEERS)	06-08-2022
	DRAWN		SHEET 1 of 1



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0°F)	
STR. 21-033 TO STR. 3E/3W	STR. 3W TO STR. 5
OHGW: 3/8" EHS 7-STRAND STEEL	INSTALL (STR. 2 TO 3E), R.S. = 368' D.T. = 2,250W @ NESC 250B, INITIAL
OPGW: 48 FIBER, OD 0.602"	INSTALL (STR. 21-033 TO 3E), R.S. = 367' D.T. = 4,230W @ NESC 250B, INITIAL (BALANCE TENSION ON POLE W/HEAD SPAN TO STR. 4)
69kV CONDUCTOR: 336 KCMIL 26/7 ACSR "LINNET"	INSTALL (STR. 21-033 TO 3W), R.S. = 367' D.T. = 4,230W @ NESC 250B, INITIAL
	TRANSFER (STR. 33 TO 3E), R.S. = 368' D.T. = 4,230W @ NESC 250B, INITIAL (BALANCE TENSION ON POLE W/HEAD SPAN TO STR. 4)
	TRANSFER, R.S. = 378' MAINTAIN EXISTING TENSION
	TRANSFER, R.S. = 384' MAINTAIN EXISTING TENSION

PRELIMINARY
 FOR BID
 FOR CONSTRUCTION
 FOR RECORD
 AS BUILT

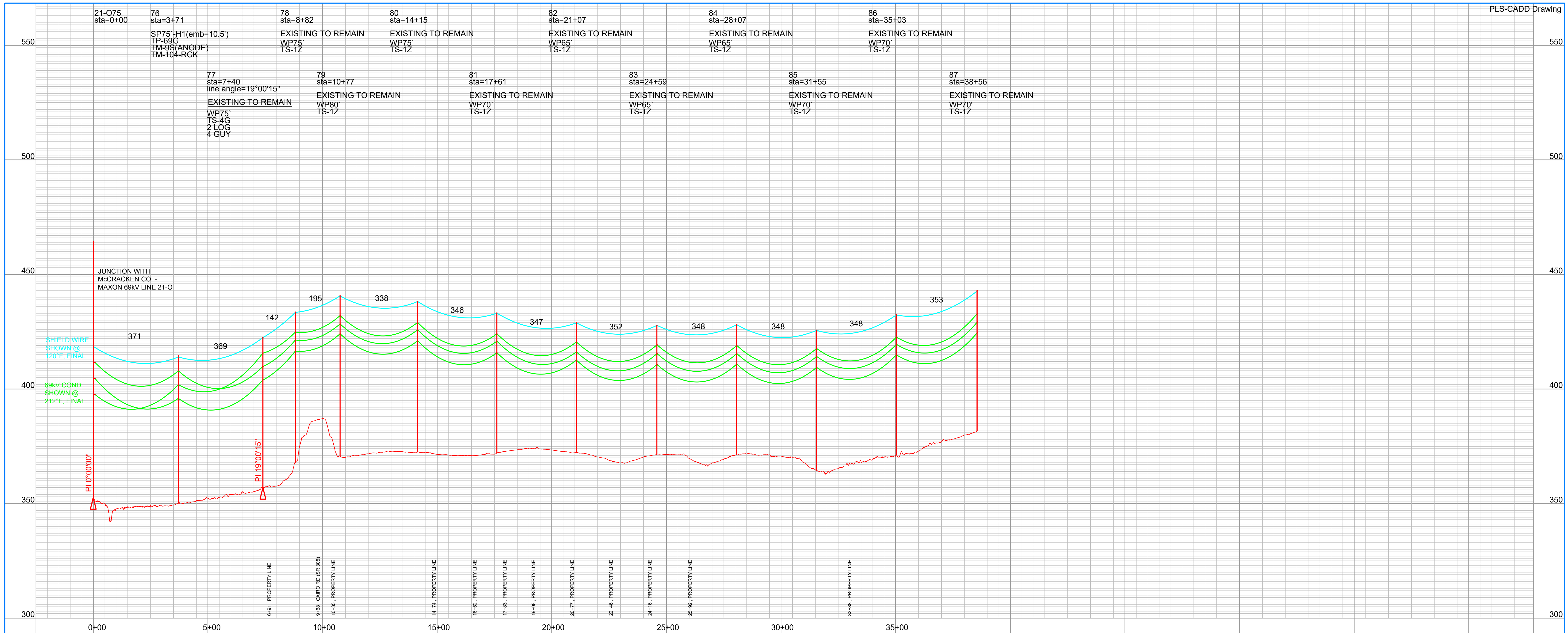
LEGEND
● NEW POLE
— DOWN GUY
○ EXISTING POLE
--- EXISTING OH LINE
--- FENCE
--- EASEMENT
--- PROPERTY LINE
--- DITCH/STREAM
* VIBRATION DAMPER

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021	ABG	ABG	PRELIMINARY DESIGN
B	03/30/2021	ABG	ABG	FINAL DESIGN

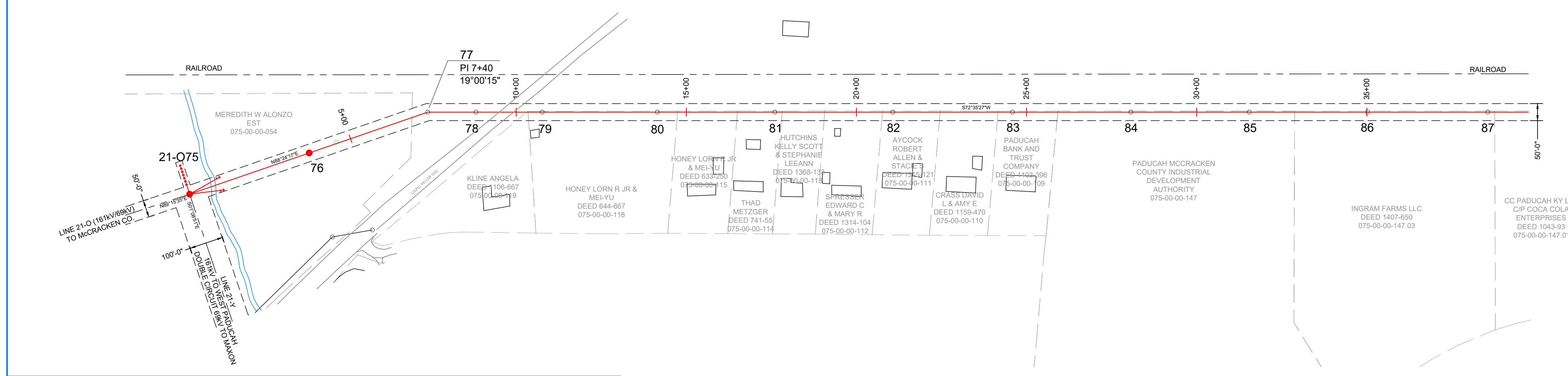
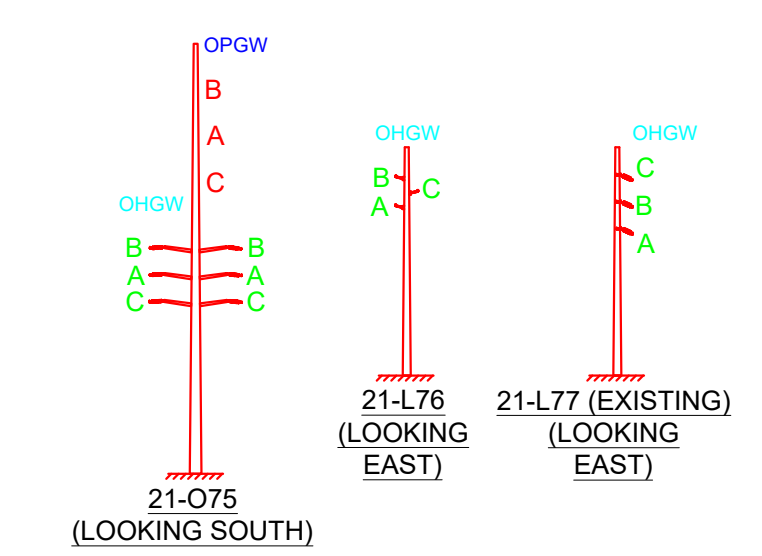
Big Rivers
 ELECTRIC CORPORATION

HIGHPOINT TAP 69KV LINE 21 - J

W.O.	DRAWING REVIEW	DATE	21 - J
SCALE: 1" = 200' HORIZ 1" = 20' VERT	ENGINEER ABG (P&D ENGINEERS)	10/01/2021	
	DRAWN		SHEET 1



PHASING DIAGRAMS



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0°F)	
STR. 21-075 TO STR. 77	TRANSFER, R.S. = 340'
OHGW: 3/8" HS 7-STRAND STEEL	MAINTAIN EXISTING TENSION
69kV CONDUCTOR: 266 KCMIL 26/7 ACSR "PARTRIDGE"	TRANSFER, R.S. = 340'
	MAINTAIN EXISTING TENSION

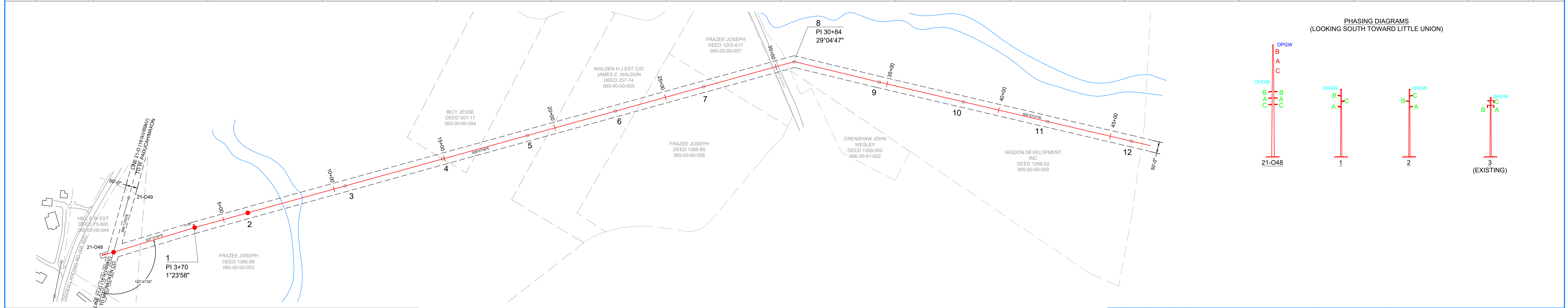
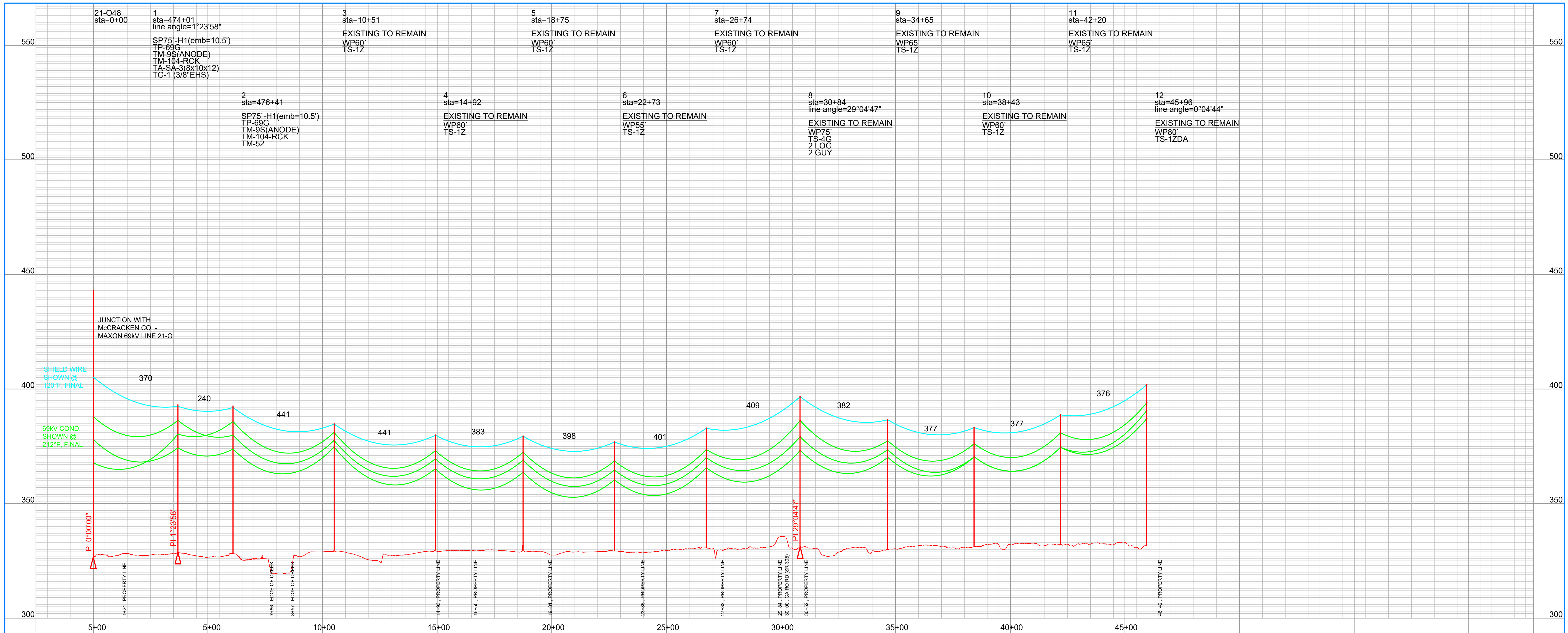
- PRELIMINARY
- FOR BID
- FOR CONSTRUCTION
- FOR RECORD
- "AS BUILT"

- LEGEND**
- NEW POLE
 - DOWN GUY
 - EXISTING POLE
 - EXISTING OH LINE
 - x- FENCE
 - - - EASEMENT
 - - - PROPERTY LINE
 - - - DITCH/STREAM
 - * VIBRATION DAMPER

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

MAXON - COLMAN ROAD 69KV LINE 21 - L

W.O.	DRAWING REVIEW	DATE	21 - L
SCALE: 1" = 200' HORZ 1" = 20' VERT	ENGINEER: ABG (P&D ENGINEERS)	10/01/2021	
DRAWN		SHEET 1	



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0'F)	
STR 21-048 TO STR. 3	TRANSFER, R.S. = 391'
OHGW: 3/8" HS 7-STRAND STEEL	MAINTAIN EXISTING TENSION
69kV CONDUCTOR: 266 KCMIL 26/7 ACSR "PARTRIDGE"	TRANSFER, R.S. = 391'
	MAINTAIN EXISTING TENSION

PRELIMINARY
 FOR BID
 FOR CONSTRUCTION
 FOR RECORD
 "AS BUILT"

LEGEND
 ● NEW POLE
 ○ DOWN GUY
 ○ EXISTING POLE
 --- EXISTING OH LINE
 --- FENCE
 --- EASEMENT
 --- PROPERTY LINE
 --- DITCH/STREAM
 * VIBRATION DAMPER

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

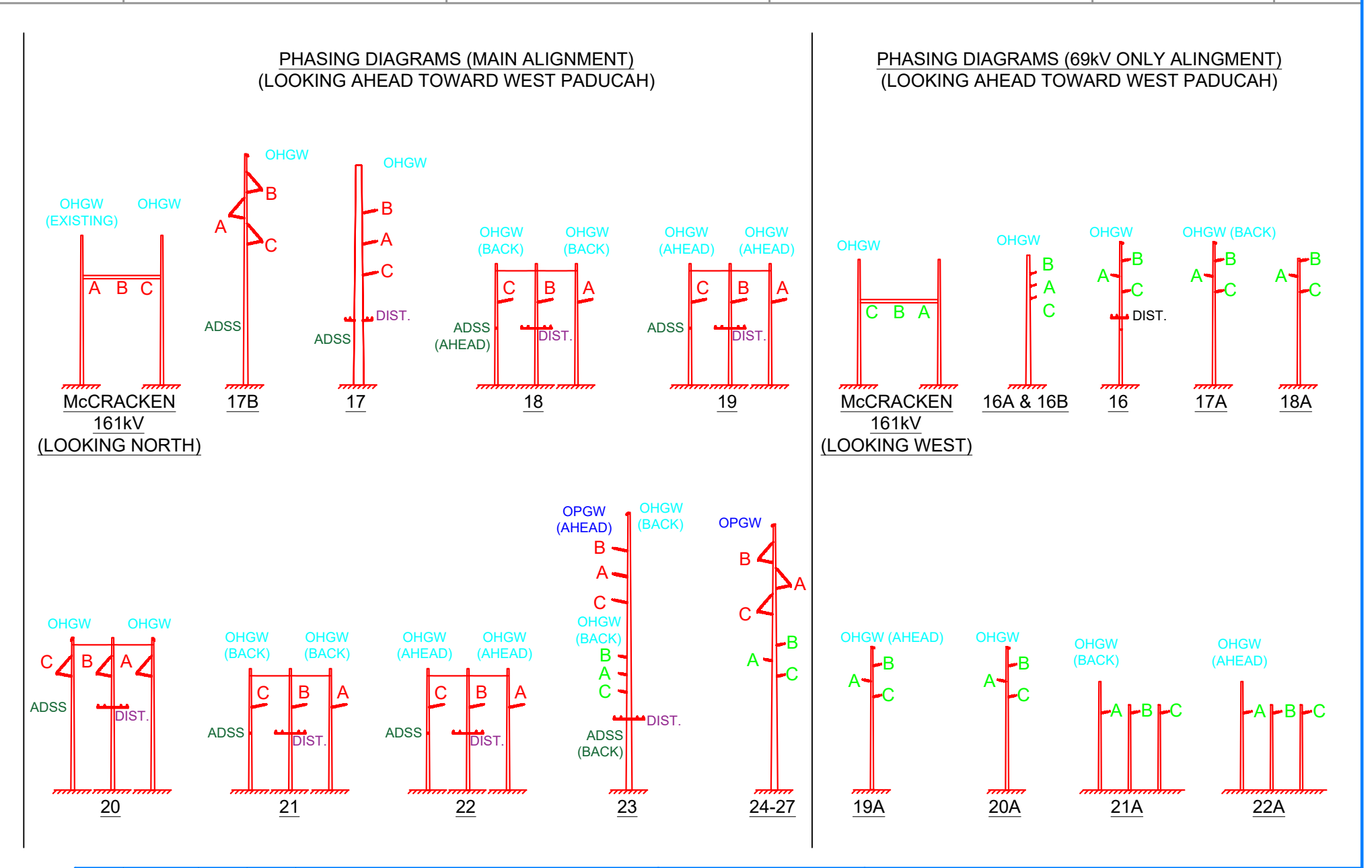
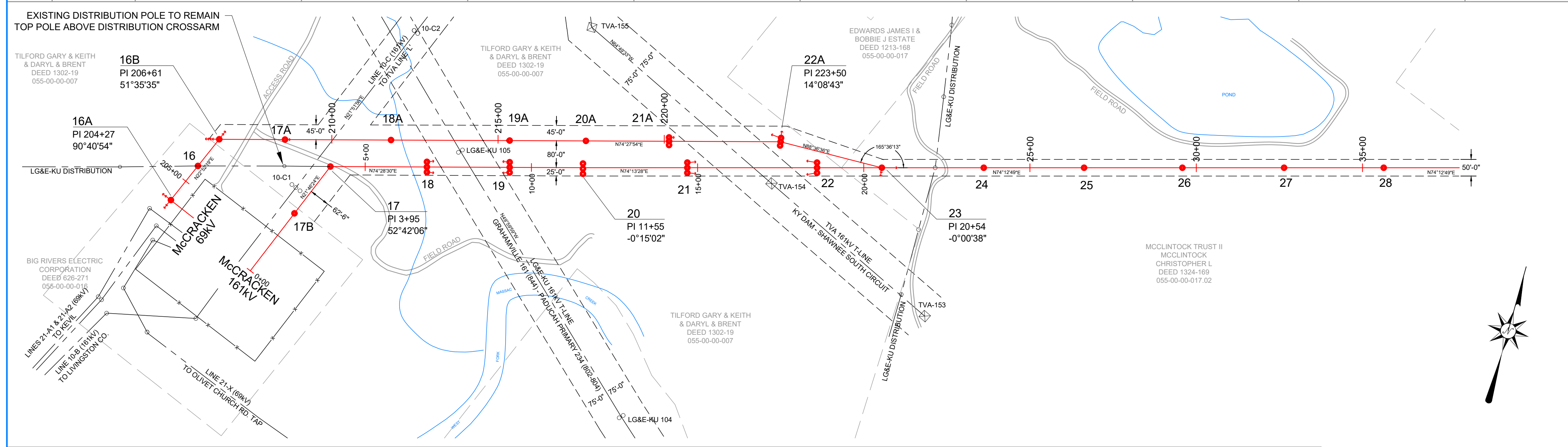
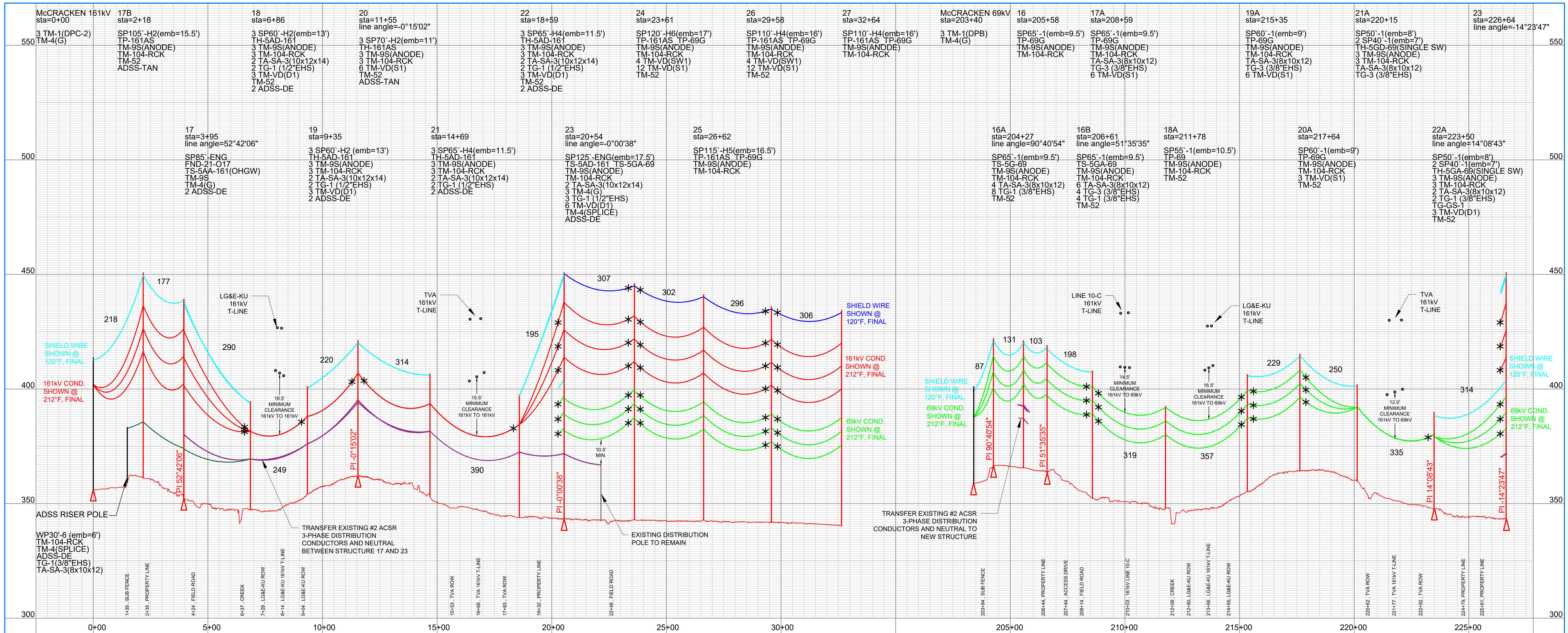
W.O. _____
 SCALE: 1" = 200' HORIZ
 1" = 20' VERT

Big Rivers
 ELECTRIC CORPORATION

LITTLE UNION TAP 69kV
 LINE 21 - N

ENGINEER	ABG (P&D ENGINEERS)	DATE	10/01/2021
DRAWN			

21 - N



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0°F)												
	McCRACKEN 161KV TO STR. 17	STR. 17 TO STR. 18	STR. 18 TO STR. 19	STR. 19 TO STR. 21	STR. 21 TO STR. 22	STR. 22 TO STR. 23	McCRACKEN 69KV TO STR. 16A	STR. 16A TO STR. 16B	STR. 16B TO STR. 21A	STR. 21A TO STR. 22A	STR. 22A TO STR. 23	STR. 23 TO STR. 31
OHGW: 3/8" EHS 7-STRAND STEEL	INSTALL, R.S. = 199' D.T. = 1,000# @ NESC 250B, INITIAL	(2X) INSTALL, R.S. = 288' D.T. = 2,250# @ NESC 250B, INITIAL		(2X) INSTALL, R.S. = 278' D.T. = 3,000# @ NESC 250B, INITIAL		(2X) INSTALL, R.S. = 188' D.T. = 2,800# @ NESC 250B, INITIAL	INSTALL, R.S. = 85' D.T. = 750# @ NESC 250B, INITIAL	INSTALL, R.S. = 119' D.T. = 2,800# @ NESC 250B, INITIAL	INSTALL (STR. 16B TO 17A & 19A TO 21A) D.T. = 2,250# @ NESC 250B, INITIAL		INSTALL, R.S. = 315' D.T. = 2,250# @ NESC 250B, INITIAL	
OPGW: 48 FIBER, OD 0.602" ADSS: T.B.D.	ADSS UNDERBUILD FROM ADSS POLE T.B.D.	ADSS UNDERBUILD T.B.D.	ADSS UNDERBUILD T.B.D.	ADSS UNDERBUILD T.B.D.	ADSS UNDERBUILD T.B.D.	ADSS UNDERBUILD T.B.D.					INSTALL, R.S. = 305' D.T. = 4,500# @ NESC 250B, INITIAL	
161KV CONDUCTOR: 795 KCMIL 26/7 ACSR "DRAKE"	INSTALL, R.S. = 199' D.T. = 1,400# @ NESC 250B, INITIAL	INSTALL, R.S. = 287' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 248' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 278' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 278' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 190' D.T. = 7,875# @ NESC 250B, INITIAL					INSTALL, R.S. = 305' D.T. = 7,875# @ NESC 250B, INITIAL	
69KV CONDUCTOR: 336 KCMIL 26/7 ACSR "LINNET"						INSTALL, R.S. = 82' D.T. = 1,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 119' D.T. = 1,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 289' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 335' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 313' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 305' D.T. = 4,230# @ NESC 250B, INITIAL	

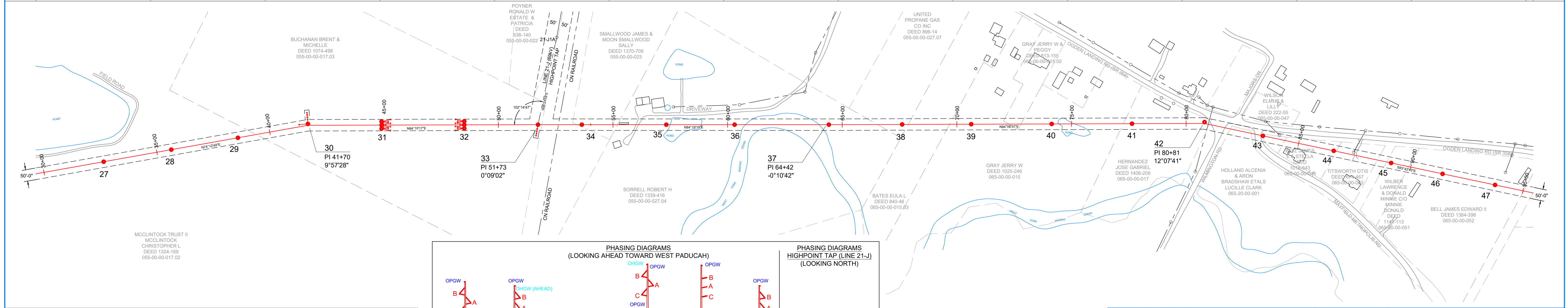
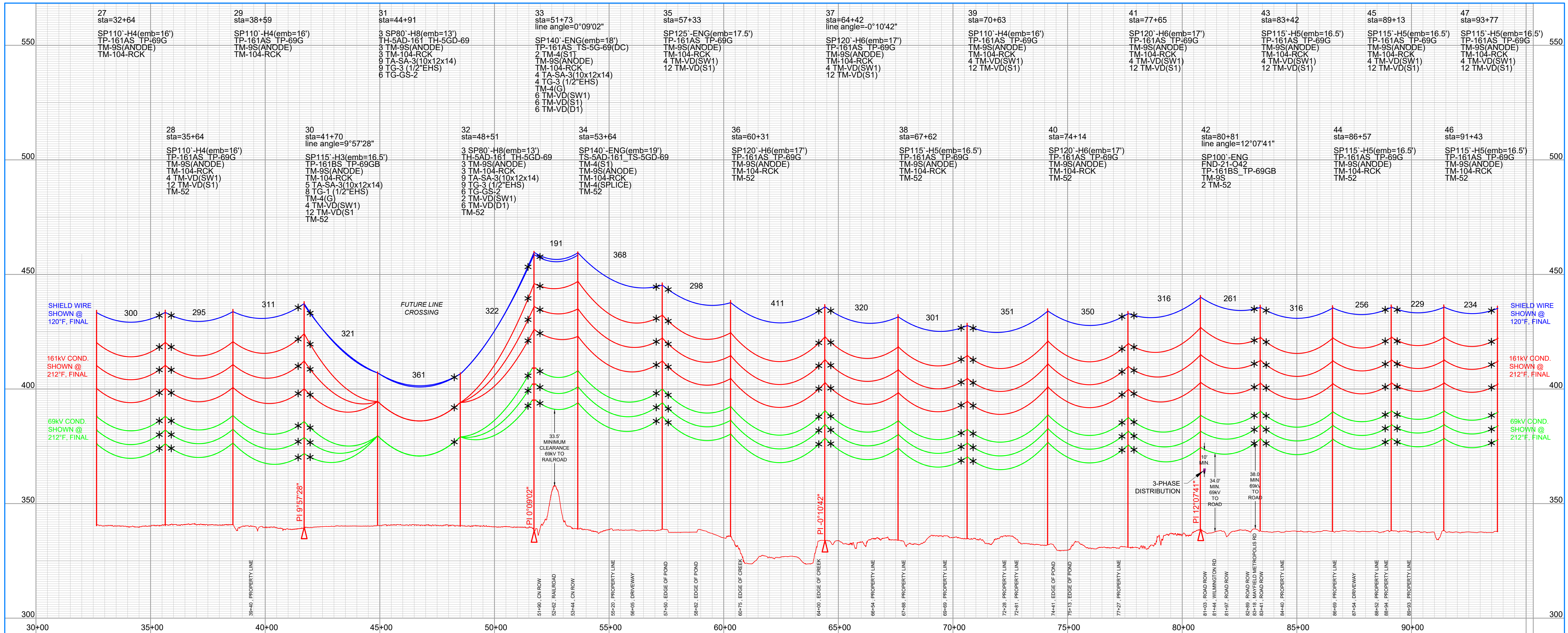
- LEGEND**
- NEW POLE
 - DOWN GUY
 - EXISTING POLE
 - EXISTING OH LINE
 - - - FENCE
 - - - EASEMENT
 - - - PROPERTY LINE
 - - - DITCH/STREAM
 - * VIBRATION DAMPER
 - PRELIMINARY
 - ☒ FOR BID
 - FOR CONSTRUCTION
 - FOR RECORD
 - *AS BUILT*
 -

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

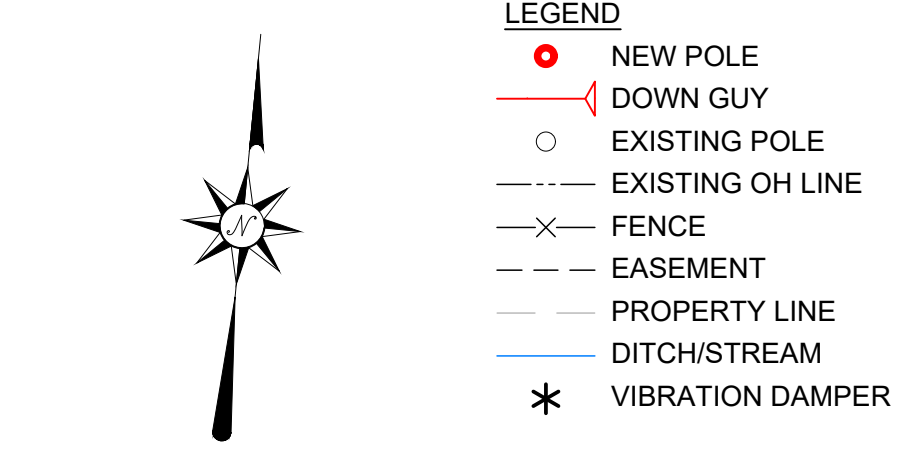
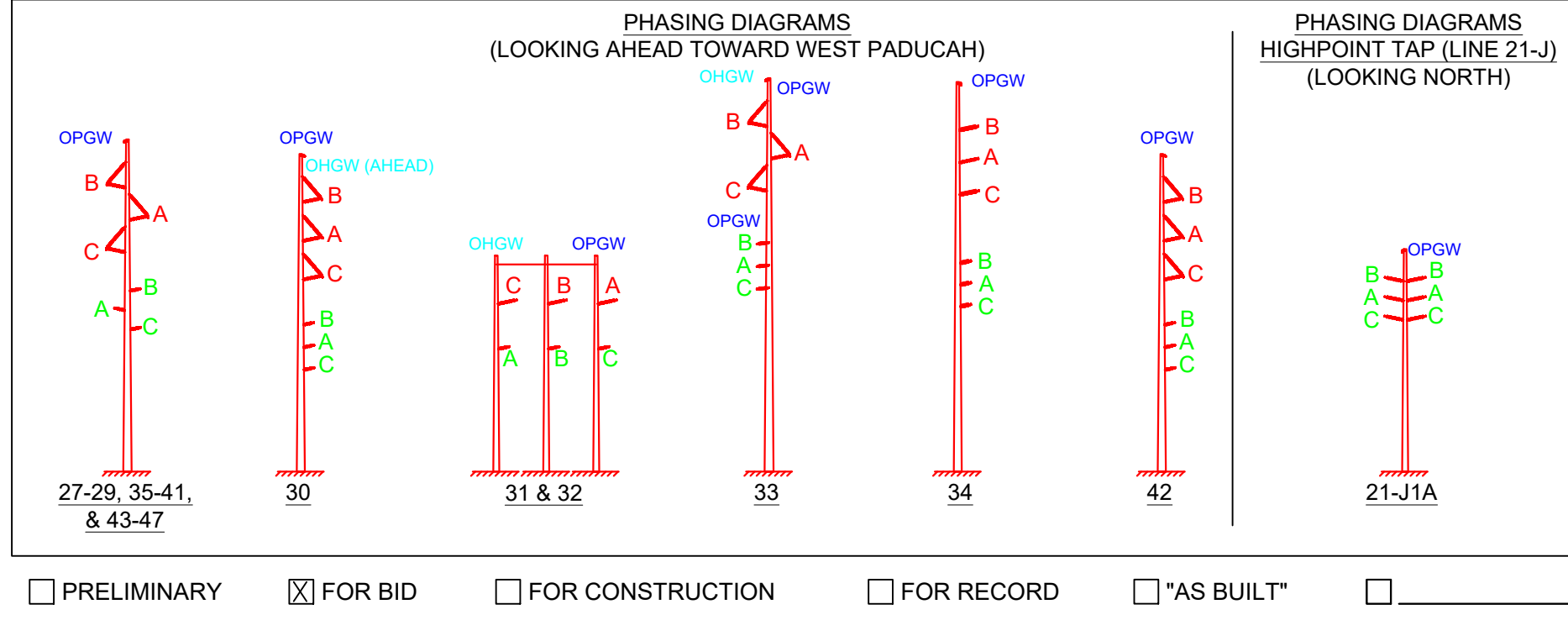
Big Rivers
ELECTRIC CORPORATION

McCRACKEN CO. - WEST PADUCAH 161KV
McCRACKEN CO. - MAXON 69KV
LINE 21 - O

W.O.	DRAWING REVIEW	DATE	21 - O SHEET 1 of 4
SCALE: 1" = 200' HORZ 1" = 20' VERT	ENGINEER ABG (P&D ENGINEERS)	10/01/2021	



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4 LBS WIND @ 0°F)					
	STR. 23 TO STR. 31	STR. 31 TO STR. 32	STR. 32 TO STR. 33	STR. 33 TO STR. 34	STR. 34 TO STR. 48
OHGW: 3/8" EHS 7-STRAND STEEL	INSTALL (STR. 30 TO 31), R.S. = 319' D.T. = 3,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 360' D.T. = 3,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 317' D.T. = 3,000# @ NESC 250B, INITIAL		
OPGW: 48 FIBER, OD 0.602"	INSTALL, R.S. = 305' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 360' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 317' D.T. = 4,000# @ NESC 250B, INITIAL	(2X) INSTALL, R.S. = 190' D.T. = 3,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 324' D.T. = 4,500# @ NESC 250B, INITIAL
161KV CONDUCTOR: 795 KCMIL 26/7 ACSR 'DRAKE'	INSTALL, R.S. = 305' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 360' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 317' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 278' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL (STR. 34 TO STR. 61A), R.S. = 312' D.T. = 7,875# @ NESC 250B, INITIAL
69KV CONDUCTOR: 336 KCMIL 26/7 ACSR 'LINNET'	INSTALL, R.S. = 305' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 360' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 312' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 182' D.T. = 3,600# @ NESC 250B, INITIAL	INSTALL, R.S. = 324' D.T. = 4,230# @ NESC 250B, INITIAL

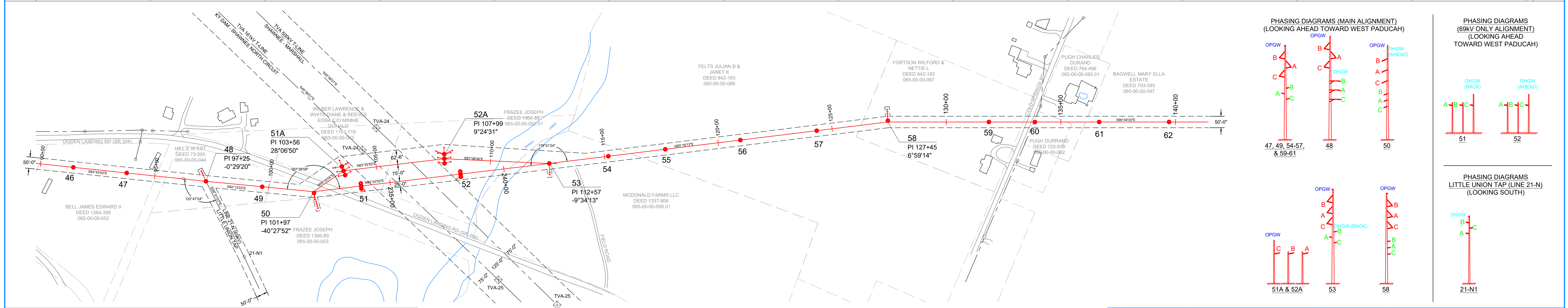
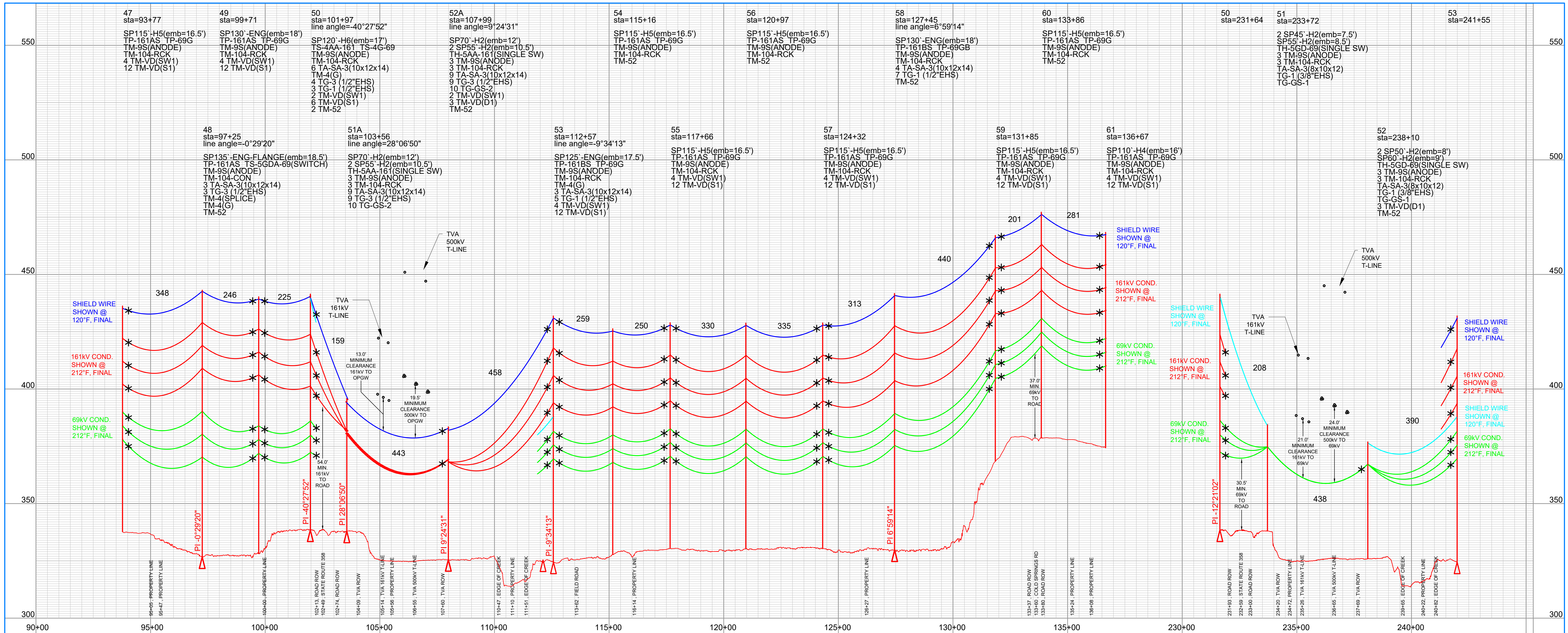


REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

Big Rivers
ELECTRIC CORPORATION

McCRACKEN CO. - WEST PADUCAH 161KV
McCRACKEN CO. - MAXON 69KV
LINE 21 - O

W.O.	DRAWING REVIEW	DATE	21 - O SHEET 2 of 4
SCALE: 1" = 200' HORIZ 1" = 20' VERT	ENGINEER: ABG (P&D ENGINEERS) DRAWN: ABG	10/01/2021	



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0°F)

STR. 34 TO STR. 48	STR. 48 TO STR. 51/51A	STR. 51A TO STR. 52A	STR. 51 TO STR. 52	STR. 52/52A TO STR. 75
OHGW: 3/8" EHS 7-STRAND STEEL	INSTALL (STR. 50 TO 51), R.S. = 199' D.T. = 1,500# @ NESC 250B, INITIAL	INSTALL (STR. 51A TO STR. 52A), R.S. = 389' D.T. = 2,250# @ NESC 250B, INITIAL	INSTALL (STR. 52 TO STR. 53), R.S. = 199' D.T. = 1,500# @ NESC 250B, INITIAL	INSTALL (STR. 52 TO STR. 75), R.S. = 345' D.T. = 4,500# @ NESC 250B, INITIAL
OPGW: 48 FIBER, OD 0.602"	INSTALL, R.S. = 324' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 449' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL (STR. 48 TO 51A), R.S. = 219' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL (STR. 52A TO STR. 75), R.S. = 345' D.T. = 4,500# @ NESC 250B, INITIAL
161kV CONDUCTOR: 795 KCMIL 26/7 ACSR 'DRAKE'	INSTALL (STR. 34 TO 51A), R.S. = 312' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 442' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL (STR. 52A TO STR. 75), R.S. = 345' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL (STR. 52A TO STR. 75), R.S. = 345' D.T. = 7,875# @ NESC 250B, INITIAL
69kV CONDUCTOR: 336 KCMIL 26/7 ACSR 'LINNET'	INSTALL, R.S. = 324' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL (STR. 48 TO 51), R.S. = 228' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 437' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL (STR. 52 TO STR. 75), R.S. = 339' D.T. = 4,230# @ NESC 250B, INITIAL

LEGEND

- NEW POLE
- DOWN GUY
- EXISTING POLE
- - - EXISTING OH LINE
- - - FENCE
- - - EASEMENT
- - - PROPERTY LINE
- - - DITCH/STREAM
- * VIBRATION DAMPER

PHASING DIAGRAMS (MAIN ALIGNMENT) (LOOKING AHEAD TOWARD WEST PADUCAH)

PHASING DIAGRAMS (69KV ONLY ALIGNMENT) (LOOKING AHEAD TOWARD WEST PADUCAH)

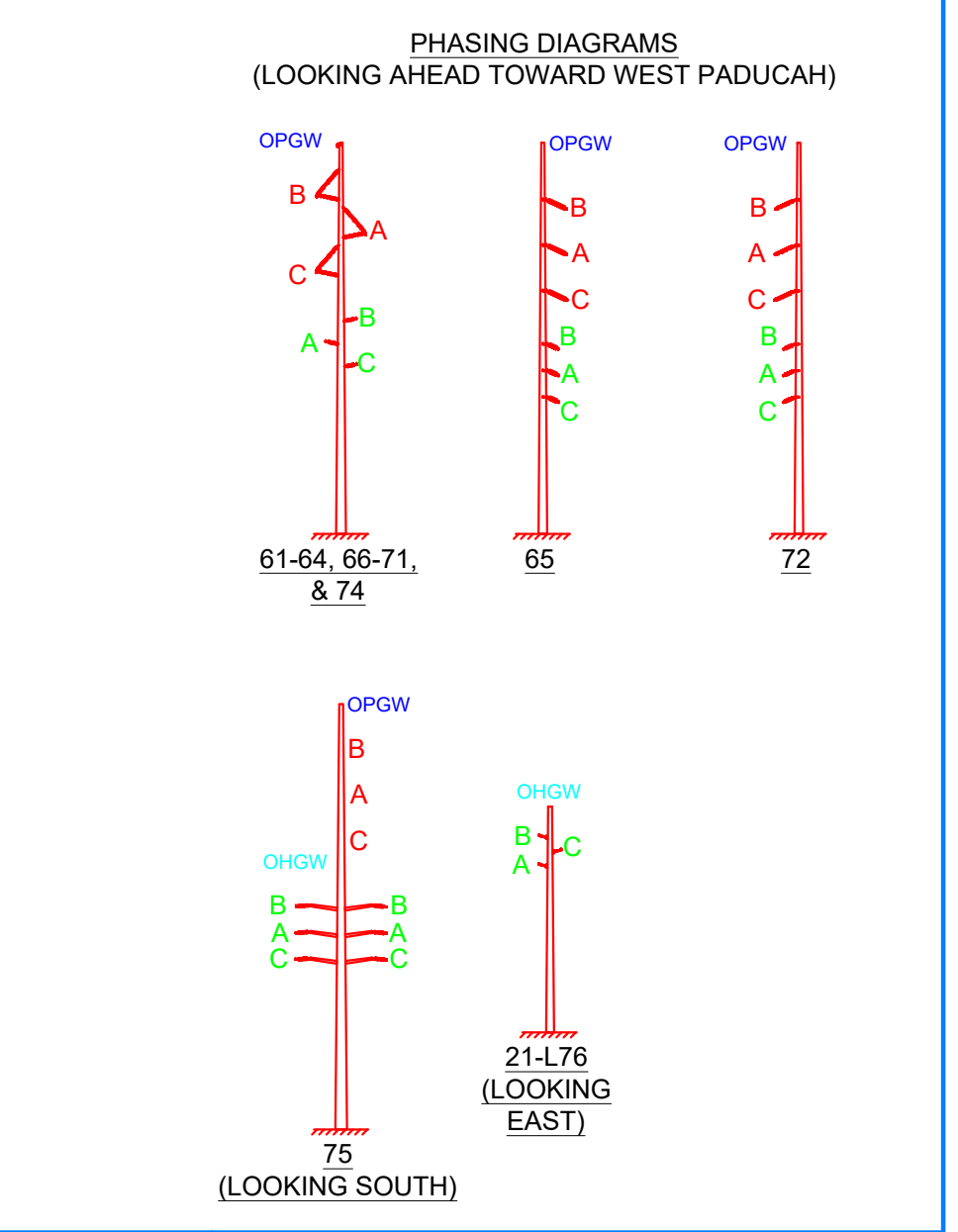
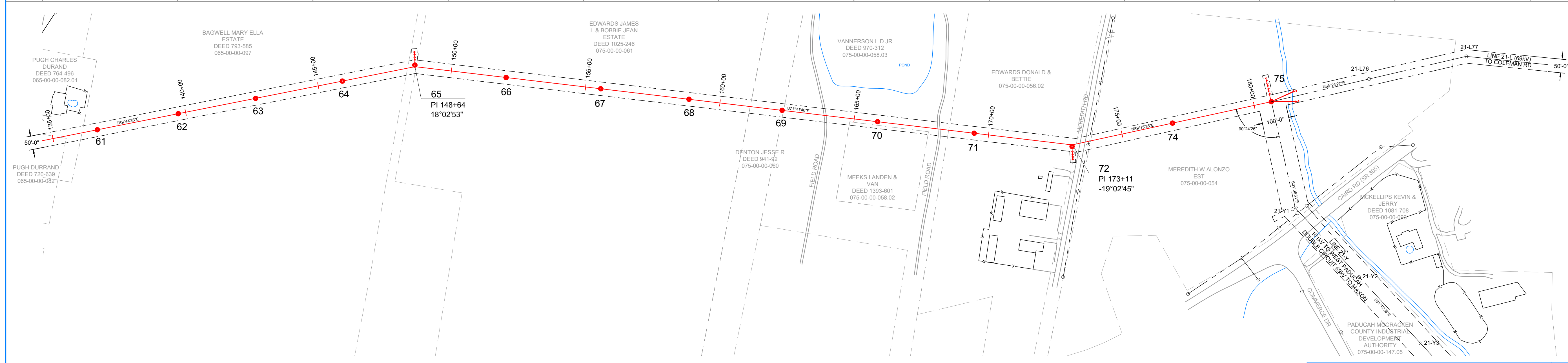
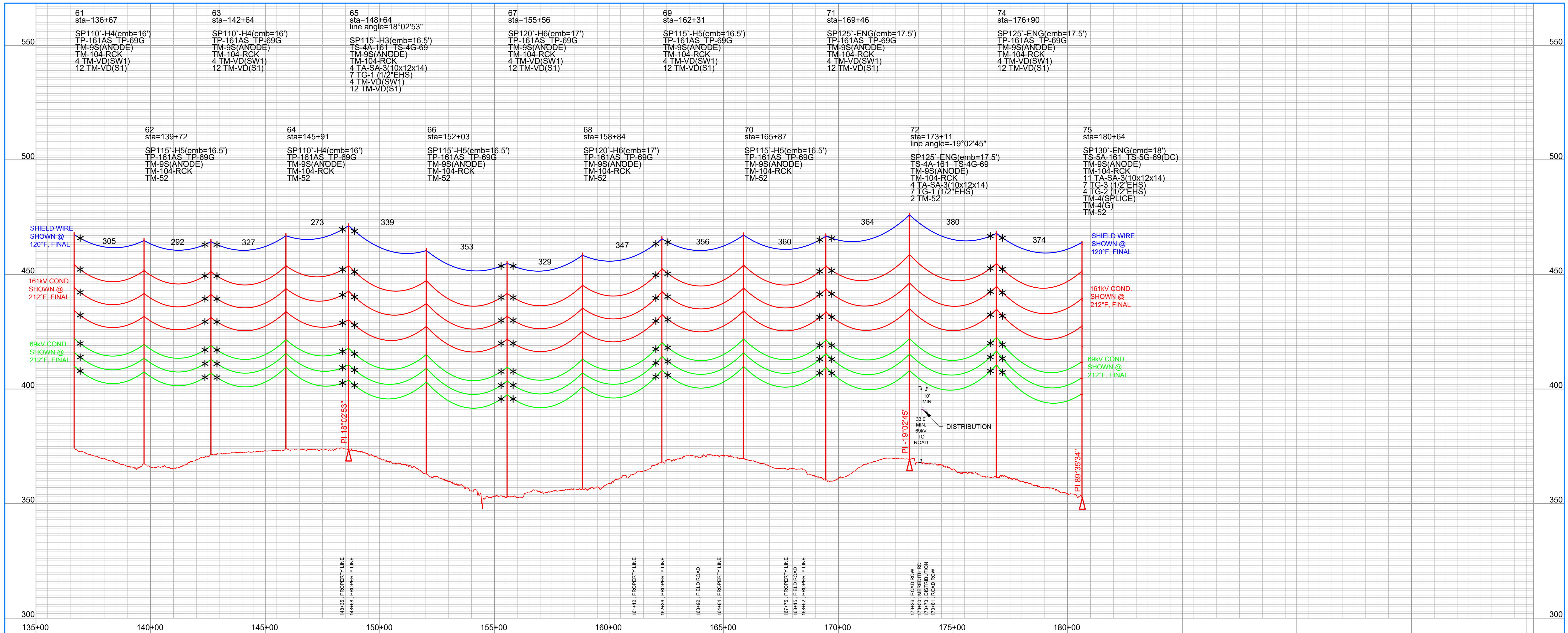
PHASING DIAGRAMS LITTLE UNION TAP (LINE 21-N) (LOOKING SOUTH)

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

Big Rivers ELECTRIC CORPORATION

McCRACKEN CO. - WEST PADUCAH 161KV
McCRACKEN CO. - MAXON 69KV
LINE 21 - O

W.O. _____ DATE 10/01/2021
SCALE: 1" = 200' HORIZ
1" = 20' VERT
DRAWN _____ ENGINEER ABG (P&D ENGINEERS)
DATE 10/01/2021
SHEET 3 of 4



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0°F)

STR 52/52A TO STR. 75	
OHGW: 3/8" EHS 7-STRAND STEEL	INSTALL (STR. 52 TO STR. 53), R.S. = 389' D.T. = 2,250W @ NESC 250B, INITIAL
OPGW: 48 FIBER, OD 0.602"	INSTALL (STR. 52A TO STR. 75), R.S. = 345' D.T. = 4,500W @ NESC 250B, INITIAL
161KV CONDUCTOR: 795 KCMIL 26/7 ACSR "DRAKE"	INSTALL (STR. 52A TO STR. 75), R.S. = 345' D.T. = 7,875W @ NESC 250B, INITIAL
69KV CONDUCTOR: 336 KCMIL 26/7 ACSR "LINNET"	INSTALL (STR. 52 TO STR. 75), R.S. = 339' D.T. = 4,230W @ NESC 250B, INITIAL

PRELIMINARY
 FOR BID
 FOR CONSTRUCTION
 FOR RECORD
 AS BUILT

LEGEND
● NEW POLE
○ DOWN GUY
○ EXISTING POLE
--- EXISTING OH LINE
--- FENCE
--- EASEMENT
--- PROPERTY LINE
--- DITCH/STREAM
* VIBRATION DAMPER

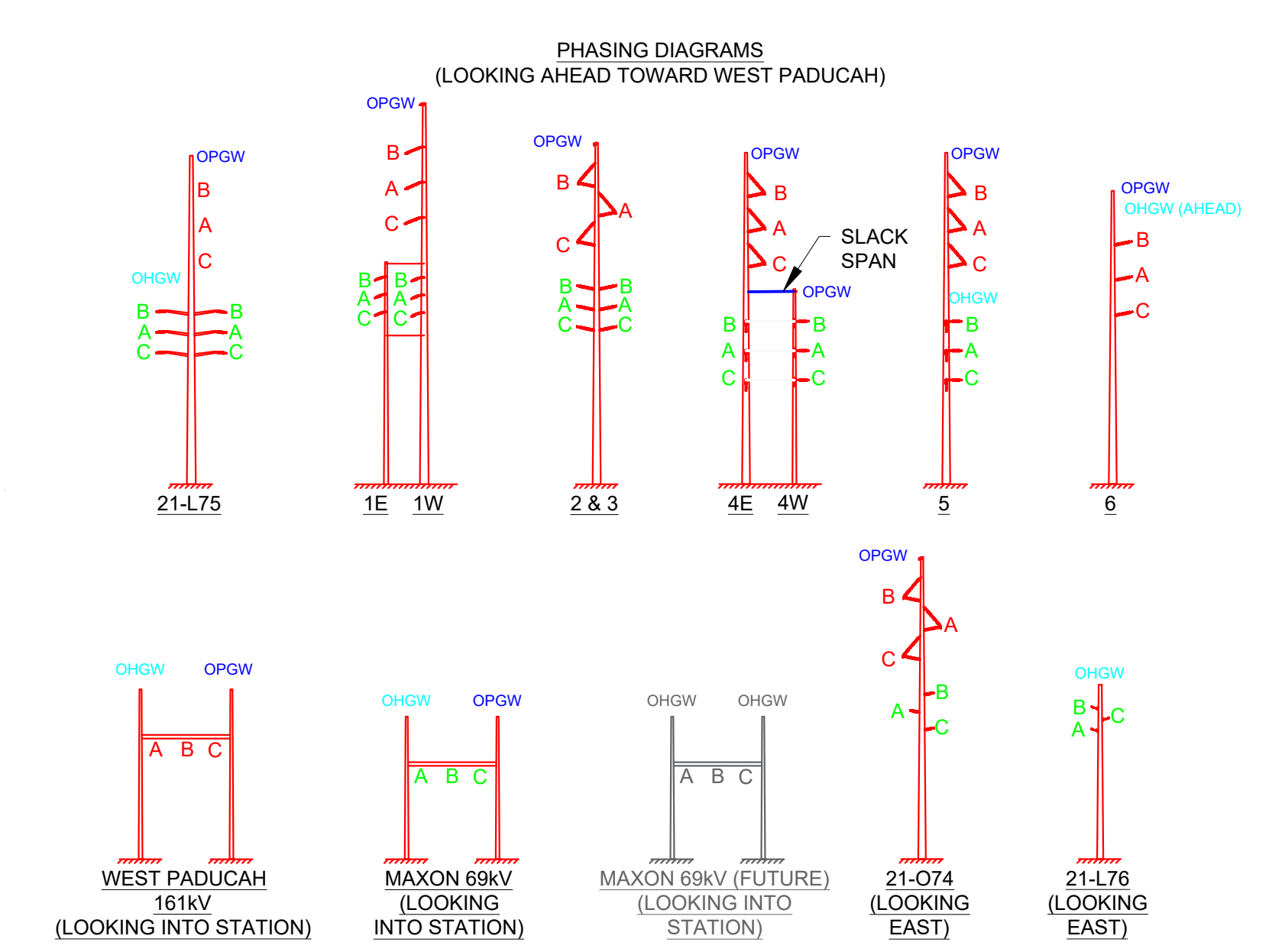
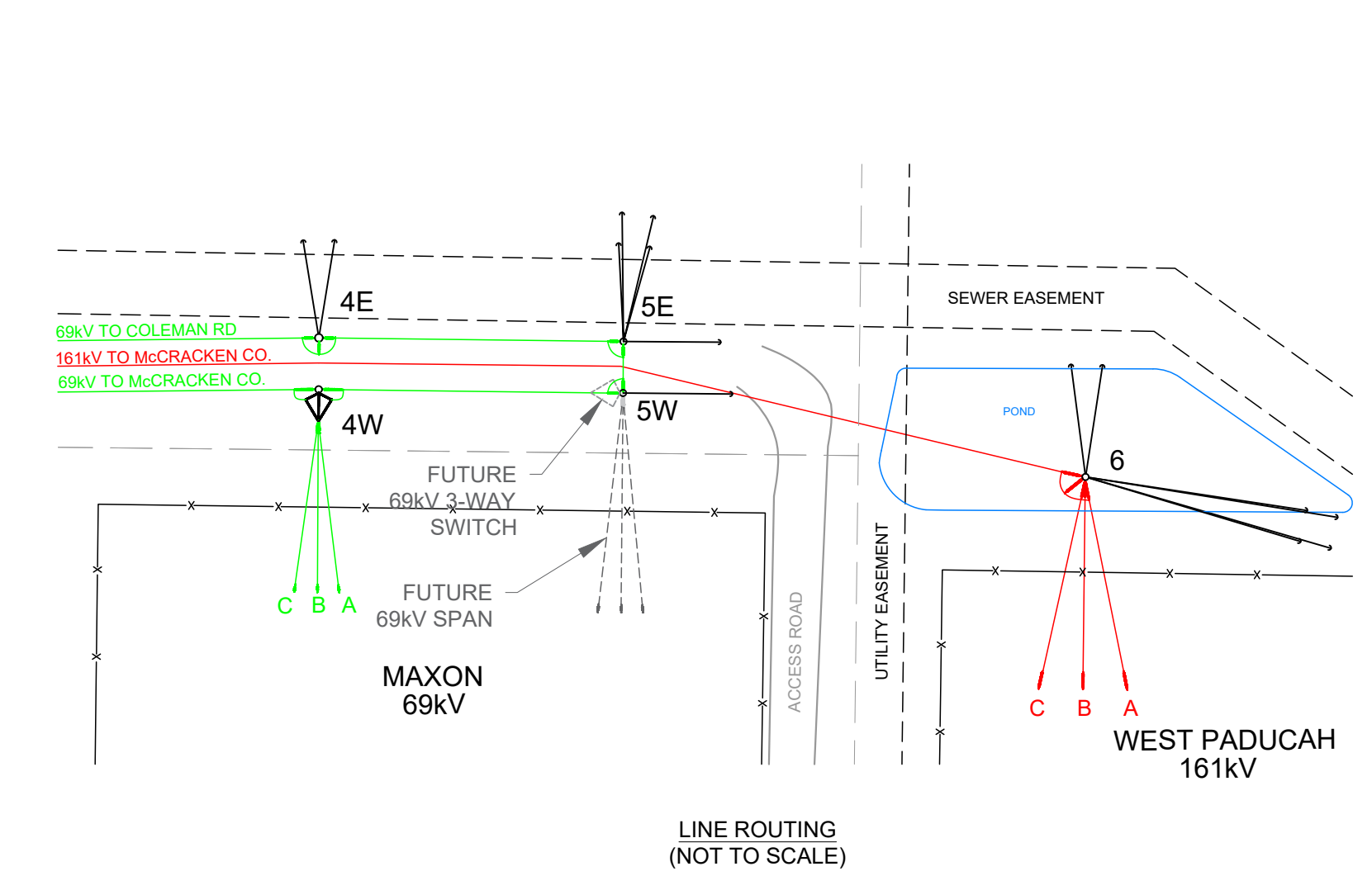
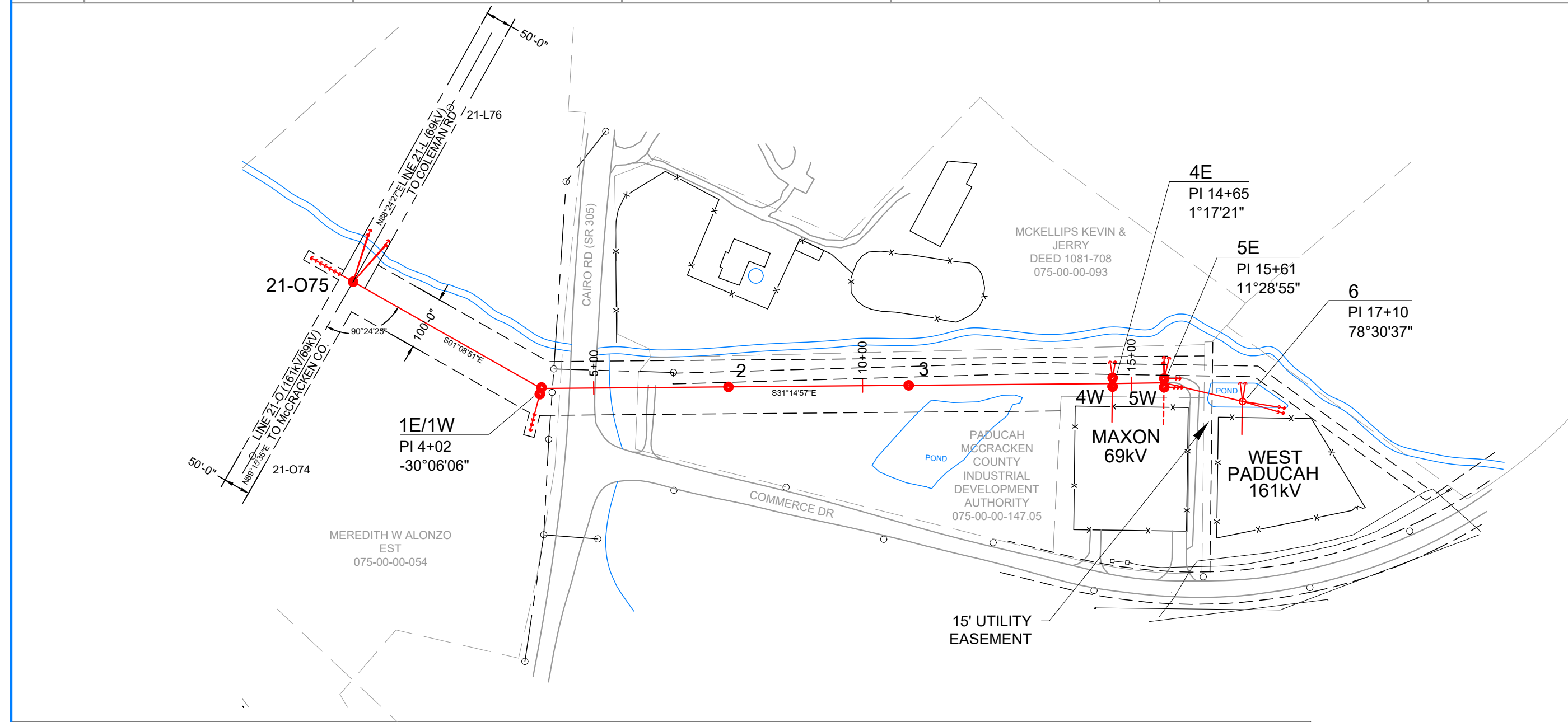
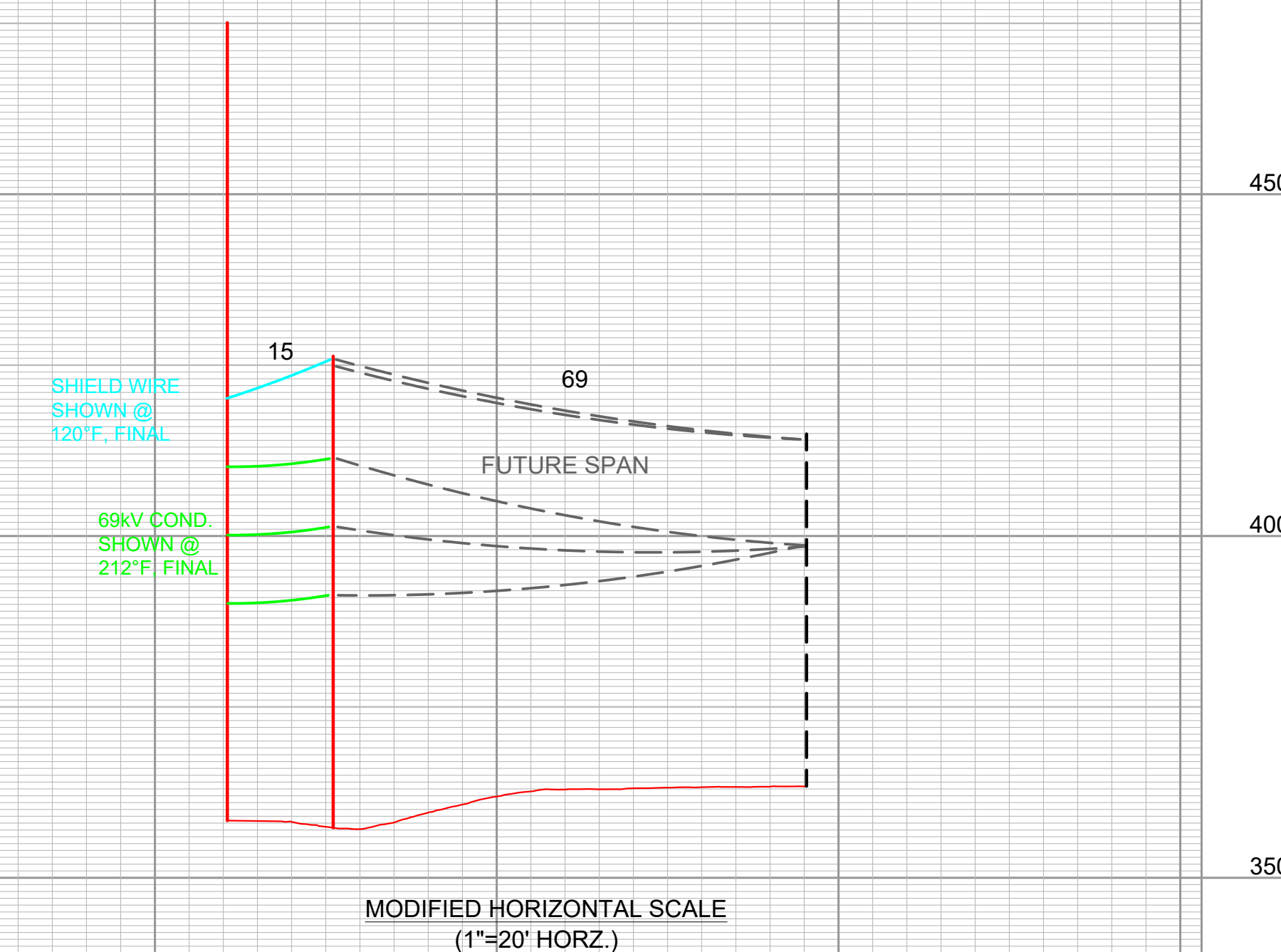
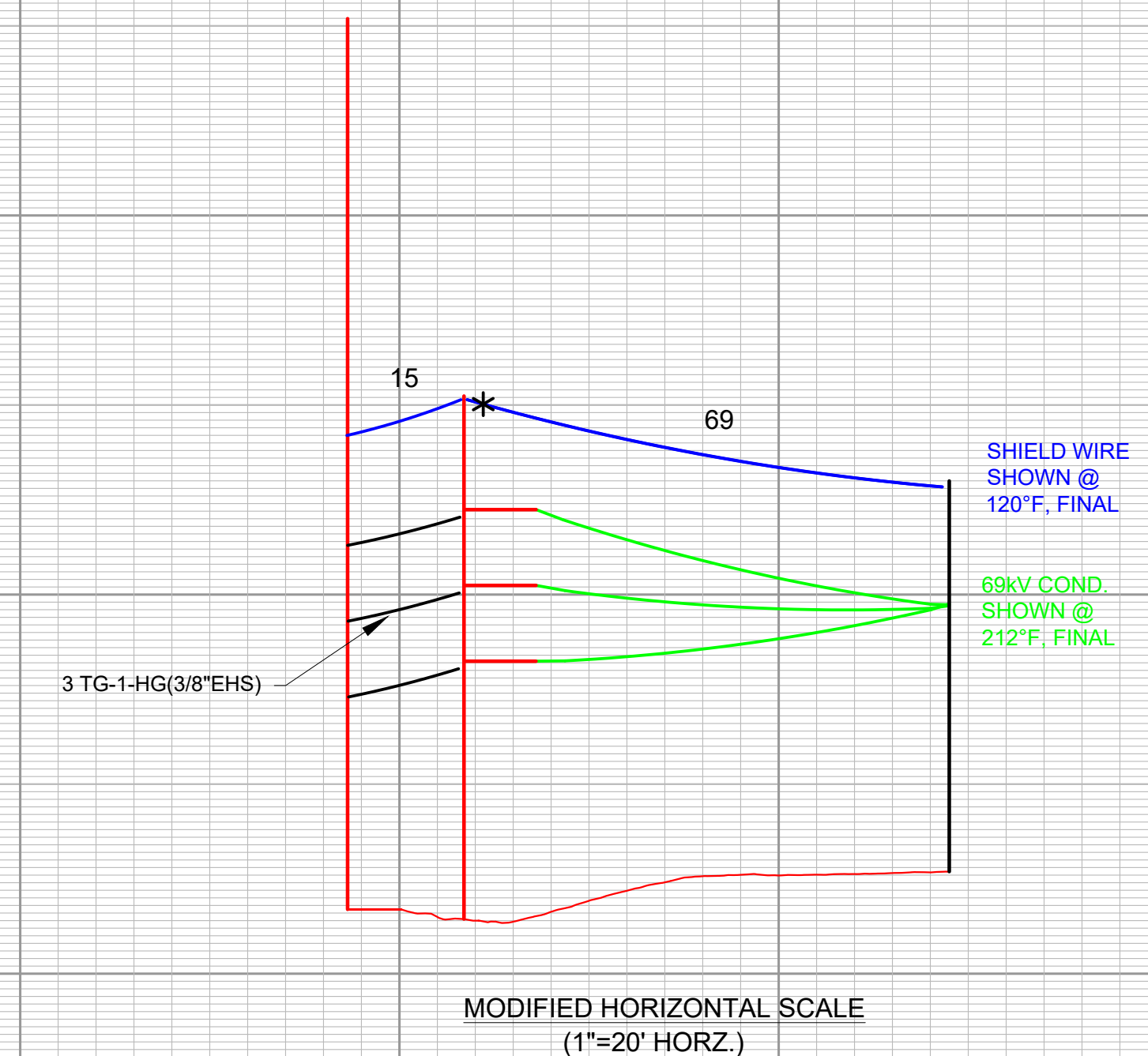
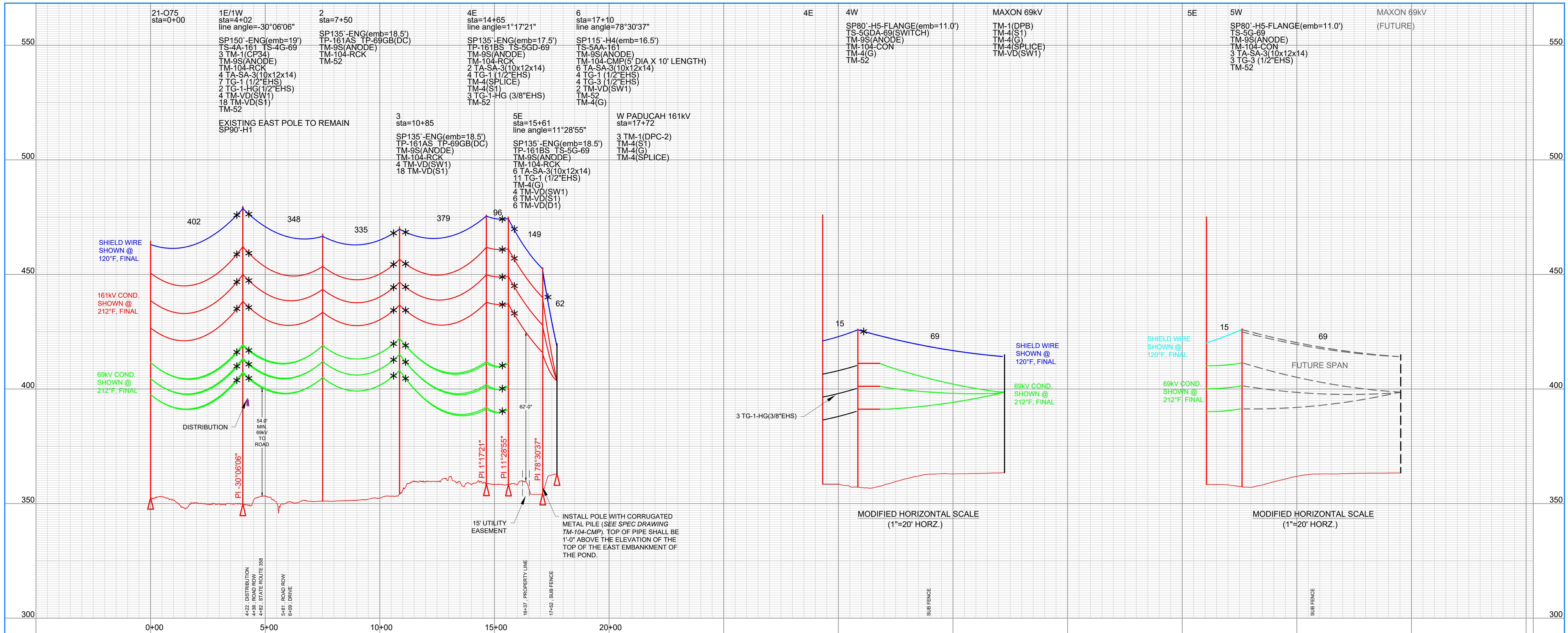
REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

Big Rivers
ELECTRIC CORPORATION

McCRACKEN CO. - WEST PADUCAH 161KV
McCRACKEN CO. - MAXON 69KV
LINE 21 - O

W.O. _____ DATE 10/01/2021
SCALE: 1" = 200' HORIZ
1" = 20' VERT
DRAWN _____ DATE _____
ENGINEER _____ DATE _____
DRAWING REVIEW _____ DATE _____
ABG (P&D ENGINEERS)

21 - O
SHEET 4 of 4



CABLE DATA (LOADING: HEAVY DISTRICT 1/2" ICE, 4LBS WIND @ 0°F)					
STR. 21-075 TO STR. 4E/4W	STR. 4E/4W TO STR. 5E/5W	STR. 5 TO STR. 6	STR. 4W TO STR. 4E	STR. 4E TO MAXON 69KV	STR. 5E TO STR. 5W
OHGW: 3/8" EHS 7-STRAND STEEL		INSTALL, R.S. = 62' D.T. = 1,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 62' D.T. = 1,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 63' D.T. = 750# @ NESC 250B, INITIAL	INSTALL SLACK SPAN
OPGW: 48 FIBER, OD 0.602"	INSTALL (STR. 21-075 TO STR. 4E), R.S. = 370' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 129' D.T. = 4,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 62' D.T. = 1,500# @ NESC 250B, INITIAL	INSTALL, R.S. = 63' D.T. = 750# @ NESC 250B, INITIAL	
161KV CONDUCTOR: 795 KCMIL 26/7 ACSR 'DRAKE'	INSTALL (TWO CIRCUITS), R.S. = 369' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 346' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 62' D.T. = 2,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 54' D.T. = 1,000# @ NESC 250B, INITIAL	INSTALL SLACK SPAN
69KV CONDUCTOR: 336 KCMIL 26/7 ACSR 'LINNET'	INSTALL (TWO CIRCUITS), R.S. = 369' D.T. = 4,230# @ NESC 250B, INITIAL	INSTALL, R.S. = 346' D.T. = 7,875# @ NESC 250B, INITIAL	INSTALL, R.S. = 62' D.T. = 2,000# @ NESC 250B, INITIAL	INSTALL, R.S. = 54' D.T. = 1,000# @ NESC 250B, INITIAL	

LEGEND

- NEW POLE
- DOWN GUY
- EXISTING POLE
- - - EXISTING OH LINE
- - - FENCE
- - - EASEMENT
- - - PROPERTY LINE
- - - DITCH/STREAM
- * VIBRATION DAMPER

FOR RECORD PRELIMINARY FOR BID FOR CONSTRUCTION "AS BUILT"

REV	DATE	DRFT	ENGR	REVISION DESCRIPTION
A	10/01/2021		ABG	PRELIMINARY DESIGN
B	03/30/2022		ABG	FINAL DESIGN

Big Rivers Electric Corporation

McCRACKEN CO. - WEST PADUCAH 161KV
McCRACKEN CO. - MAXON 69KV
LINE 21 - Y

W.O. _____
SCALE: 1" = 200' HORZ
1" = 20' VERT

DRAWING REVIEW: _____ DATE: 10/01/2021
ENGINEER: ABG (P&D ENGINEERS)
DRAWN: _____

21 - Y
SHEET 1 of 1