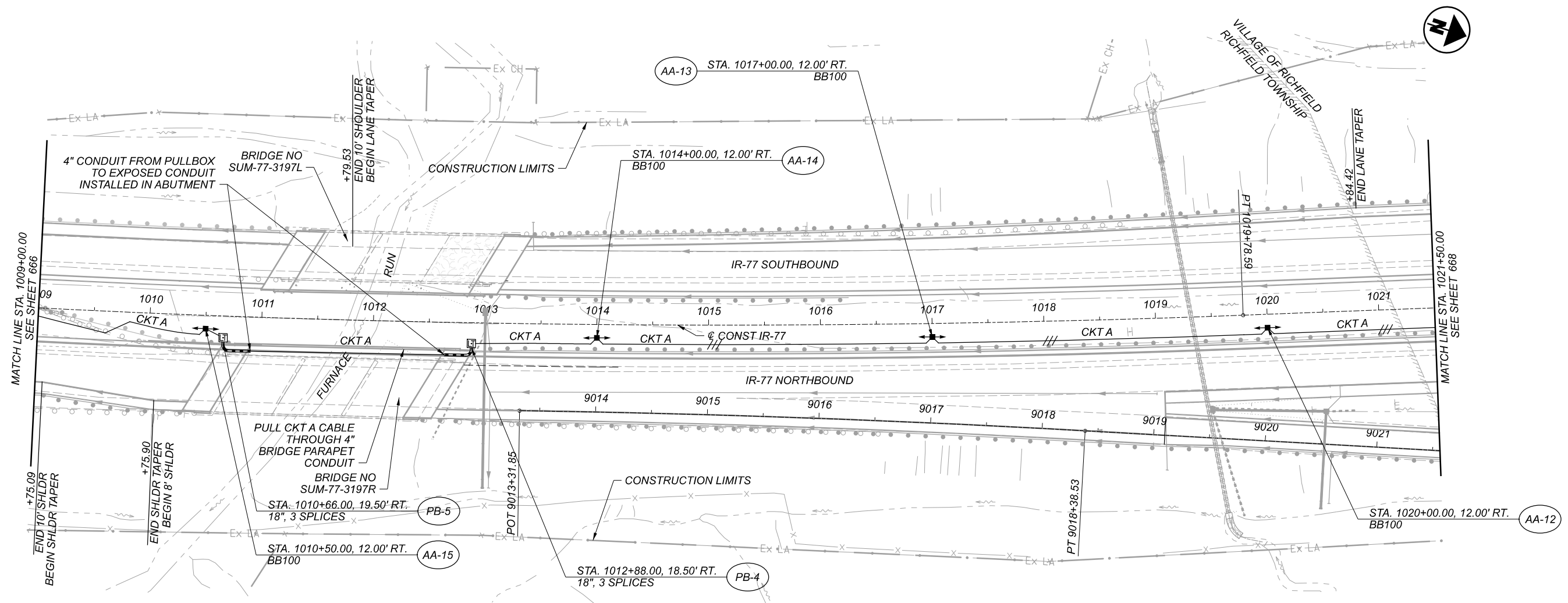
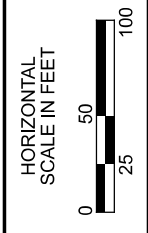


- NOTES:
1. OFFSETS TO LIGHT POLES AND TOWERS ARE FROM NEAREST BASELINE OR CENTERLINE.
 2. OFFSETS TO PULL BOXES ARE FROM NEAREST BASELINE OR CENTERLINE.
 3. EXISTING LIGHT CIRCUITS TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

FOR LEGEND, SEE SHEET 658

Reference
Information provided to
provide background and
basis of design.
 10/05/2022 (Wed, 10am)
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PID 111405 STAGE 3 LIGHTING PLANS
This is an excerpt of the in-progress lighting plans provided to allow contractors bidding 104983 the opportunity to ascertain the type and extent of lighting coordination needed at and around the SR-21 ramps and bridge.
Details are subject to change.

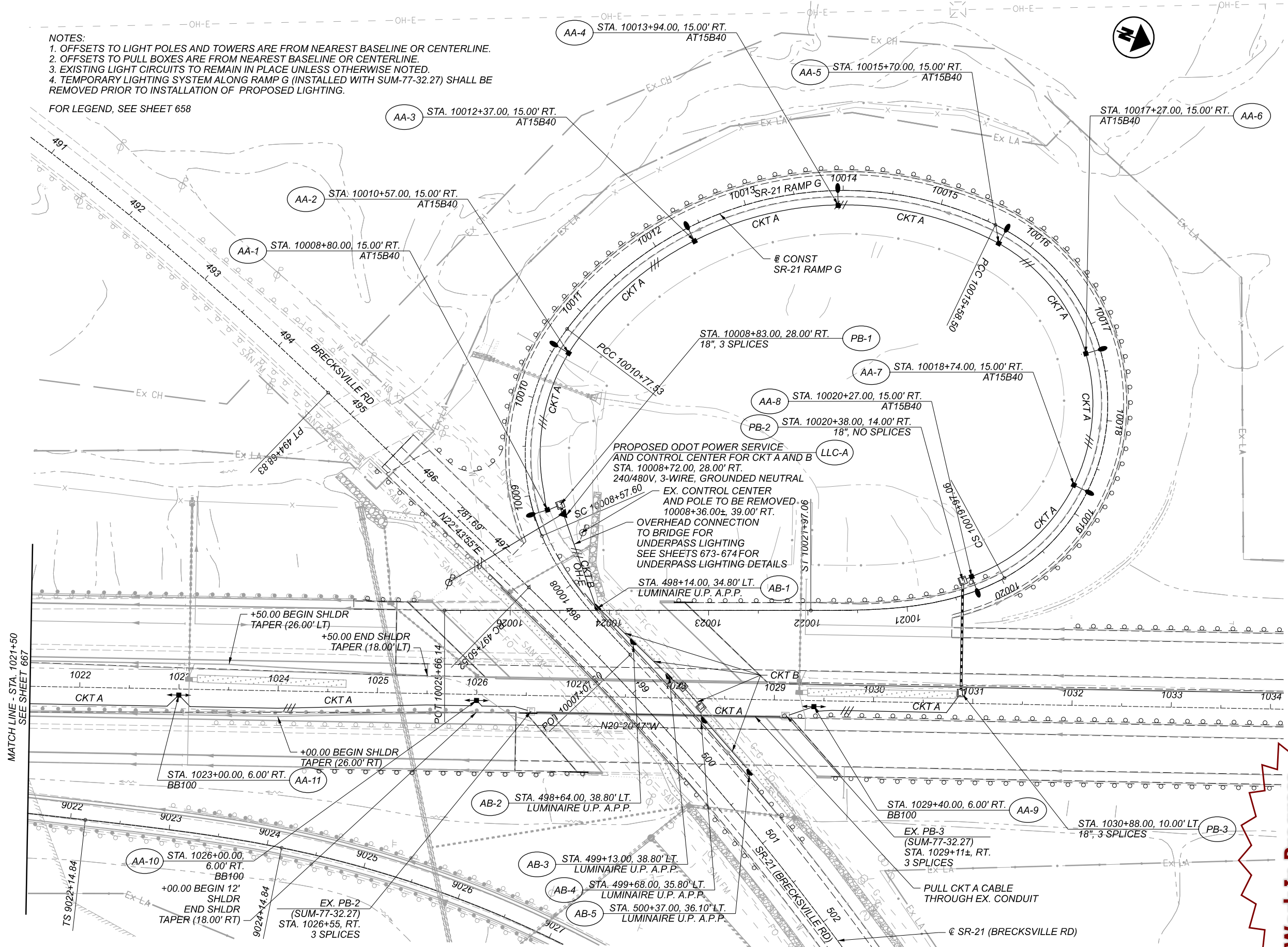
Work In Progress
Details Subject to Change
 10/05/2022 (Wed, 10am)
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LIGHTING PLAN
 IR-77 STA 1009+00 TO STA 1021+50

DESIGN AGENCY	
ARCADIS	
222 SOUTH MAIN STREET SUITE 200 ANN ARBOR, MI 48106 (313) 434-1985 www.arcadis.com	
DESIGNER	EJT
REVIEWER	MJB
PROJECT ID	111405
SHEET	TOTAL
667	870

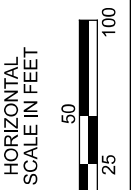
NOTES:
1. OFFSETS TO LIGHT POLES AND TOWERS ARE FROM NEAREST BASELINE OR CENTERLINE.
2. OFFSETS TO PULL BOXES ARE FROM NEAREST BASELINE OR CENTERLINE.
3. EXISTING LIGHT CIRCUITS TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
4. TEMPORARY LIGHTING SYSTEM ALONG RAMP G (INSTALLED WITH SUM-77-32.27) SHALL BE REMOVED PRIOR TO INSTALLATION OF PROPOSED LIGHTING.

FOR LEGEND, SEE SHEET 658



Work In Progress
Details Subject to Change

10/05/2022 (Wed, 10am)
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LIGHTING PLAN
SR-21 (BRECKSVILLE ROAD) - RAMP G

DESIGN AGENCY	ARCADIS
DESIGNER	EJT
REVIEWER	MJB
PROJECT ID	111405
SHEET	668
TOTAL	870

VOLTAGE DROP CALCULATIONS

HIGHWAY LIGHTING
 SUPPLY VOLTAGE: 240/480V, 2 WIRE PLUS GROUND

NO. OF WIRES FOR CALCULATION PURPOSES: 2

NO. 2 AWG: 0.19 PER NEC CH. 9, TABLE 8
 570W LED LINE AMPS = 1.1875
 135W LED LINE AMPS = 0.28
 50W LED LINE AMP = 0.104

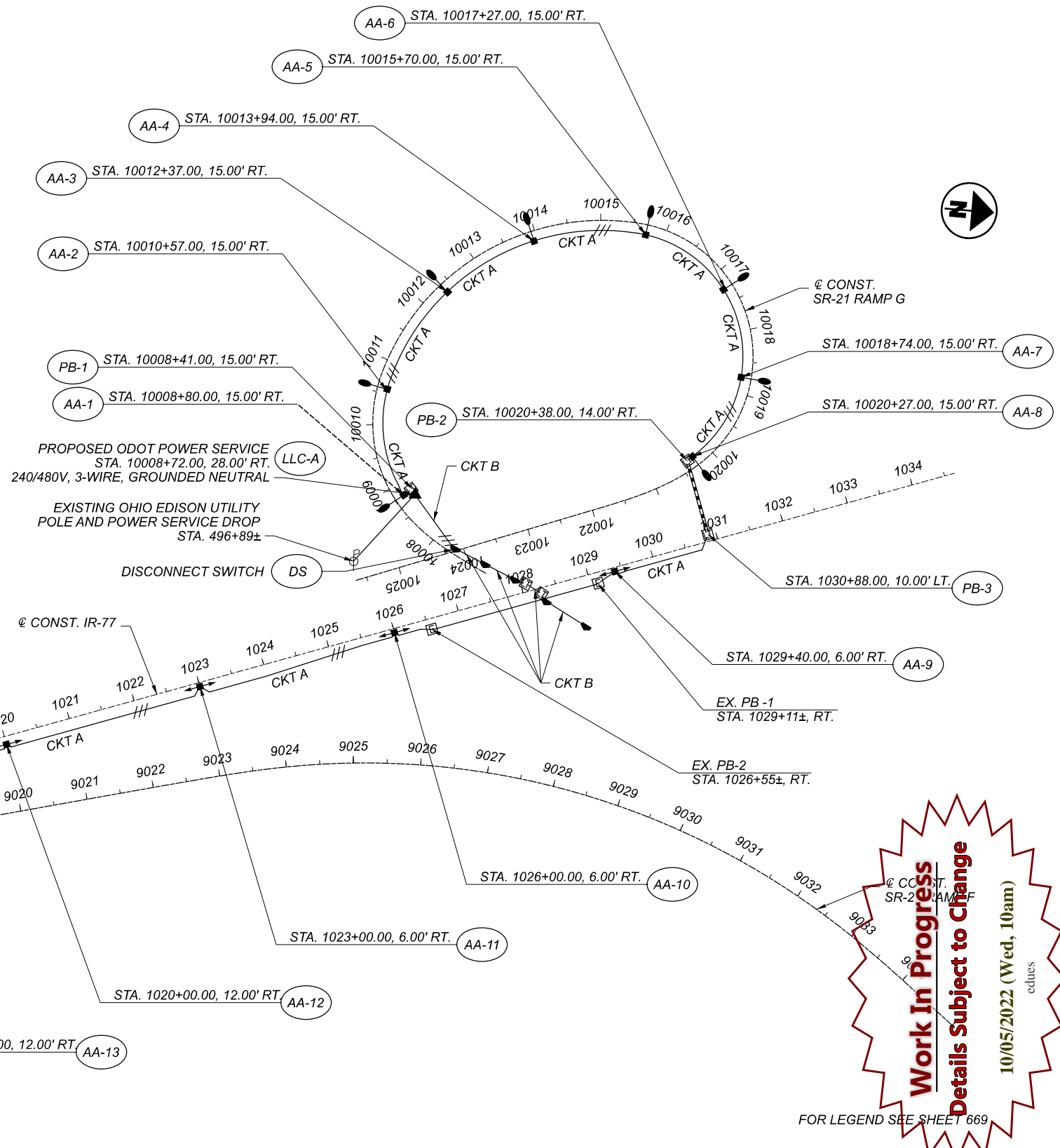
WIRE FACTOR USED: TWO NO. 2 AWG WIRES:

0.38 OHMS/MF/1000

SECTION			AMPERES		AMPERE-	WIRE	VOLTAGE DROP			
FROM	TO	FEET	AT POINT	ACCUM.	FEET	AWG	IN SECTION	ACCUM.	% DROP	AT POINT
AA-16	AA-15	287	2.375	2.375	682	2	0.259	18.428	3.84	AA-16
AA-15	PB-7	17	2.375	4.75	81	2	0.031	18.169	3.79	AA-15
PB-5	PB-4	110	0.000	4.75	523	2	0.199	18.138	3.78	PB-5
PB-4	AA-14	114	0.000	4.75	542	2	0.206	17.940	3.74	PB-4
AA-14	AA-13	305	2.375	7.125	2173	2	0.826	17.734	3.69	AA-14
AA-13	AA-12	305	2.375	9.5	2898	2	1.101	16.908	3.52	AA-13
AA-12	AA-11	308	2.375	11.875	3658	2	1.390	15.807	3.29	AA-12
AA-11	AA-10	308	2.375	14.25	4389	2	1.668	14.417	3.00	AA-11
AA-10	EX. PB-2	58	2.375	16.625	964	2	0.366	12.749	2.66	AA-10
EX. PB-2	EX. PB-1	255	0.000	16.625	4239	2	1.611	12.383	2.58	EX. PB-2
EX. PB-1	AA-9	30	0.000	16.625	499	2	0.190	10.772	2.24	EX. PB-1
AA-9	PB-3	152	2.375	19	2888	2	1.097	10.582	2.20	AA-9
PB-3	PB-2	130	0.000	19	2470	2	0.939	9.485	1.98	PB-3
PB-2	AA-8	10	0.000	19	190	2	0.072	8.546	1.78	PB-2
AA-8	AA-7	142	0.280	19.28	2738	2	1.040	8.474	1.77	AA-8
AA-7	AA-6	136	0.280	19.56	2660	2	1.011	7.434	1.55	AA-7
AA-6	AA-5	146	0.280	19.84	2897	2	1.101	6.423	1.34	AA-6
AA-5	AA-4	169	0.280	20.12	3400	2	1.292	5.322	1.11	AA-5
AA-4	AA-3	151	0.280	20.4	3080	2	1.171	4.030	0.84	AA-4
AA-3	AA-2	172	0.280	20.68	3557	2	1.352	2.860	0.60	AA-3
AA-2	AA-1	165	0.280	20.96	3458	2	1.314	1.508	0.31	AA-2
AA-1	PB-1	14	0.280	21.24	297	2	0.113	0.194	0.04	AA-1
PB-1	LLC A	10	0.000	21.24	212	2	0.081	0.081	0.02	PB-1
DS	LLC A	50	0.520	0.52	26	2	0.010	0.010	0.00	DS

CONTROL CENTER DATA

CONTROL CENTER DESIGNATION	LINE VOLTS	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR SIZE - AWG	ENCLOSURE RATING (AMPS)	CIRCUIT NO.	CIRCUIT LOAD AMPS	CIRCUIT FUSE SIZE AMPS	CIRCUIT CABLE SIZE AWG	MAINTAINING AGENCY
A	480	10.4	2	60	A	21.24	30	2	ODOT
					B	0.52	10	4	
-	-	-	-	-	-	-	-	-	-



LIGHTING CIRCUIT PLAN

Work In Progress
Details Subject to Change
 10/05/2022 (Wed, 10am)
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SUM-77-28.75

MODEL: Sheet PAPER: 17x11 (in.) DATE: 10/4/2022 TIME: 8:56:38 PM USER: EThaller
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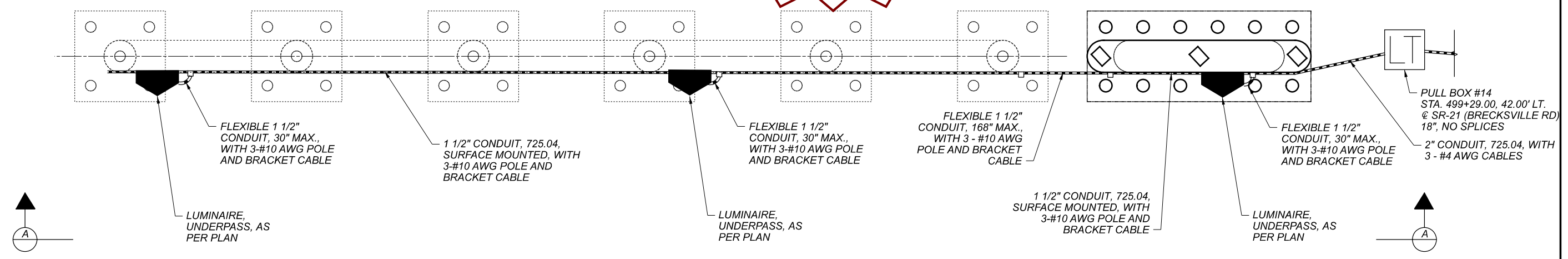
DESIGN AGENCY	ARCADIS
DESIGNER	EJT
REVIEWER	MJB
PROJECT ID	111405
SHEET	670
TOTAL	870

FOR LEGEND SEE SHEET 669

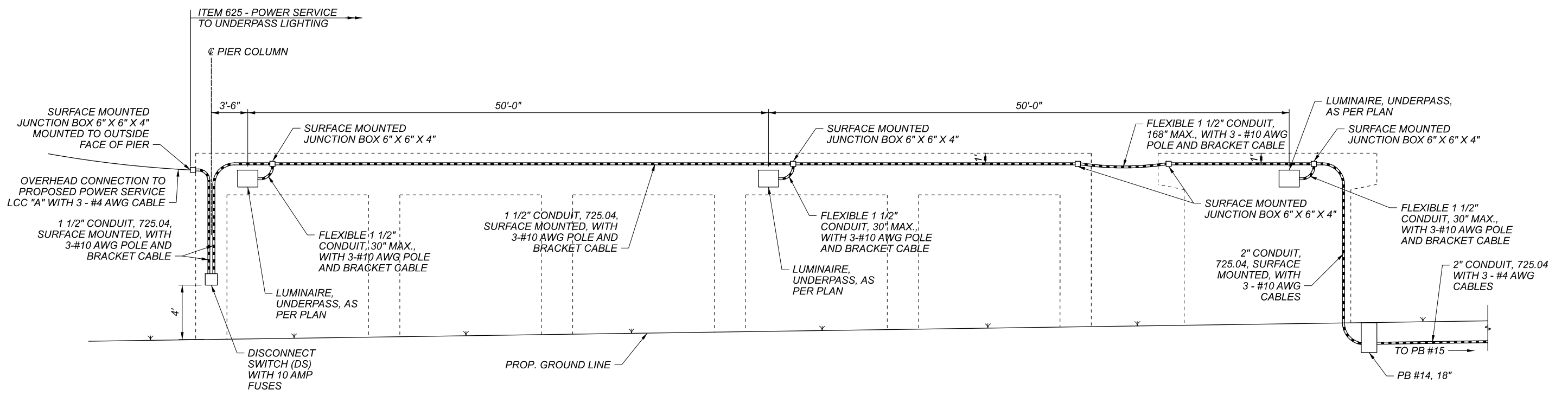
Work In Progress Details Subject to Change

10/05/2022 (Wed, 10am)

edues



PLAN



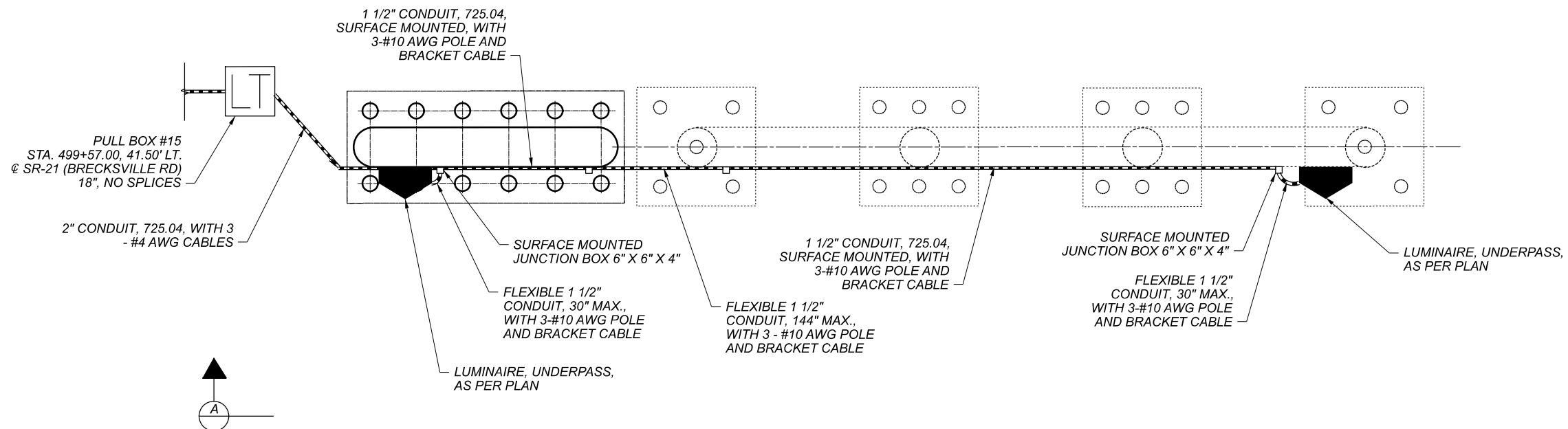
SECTION A-A

SUM-77-28.75

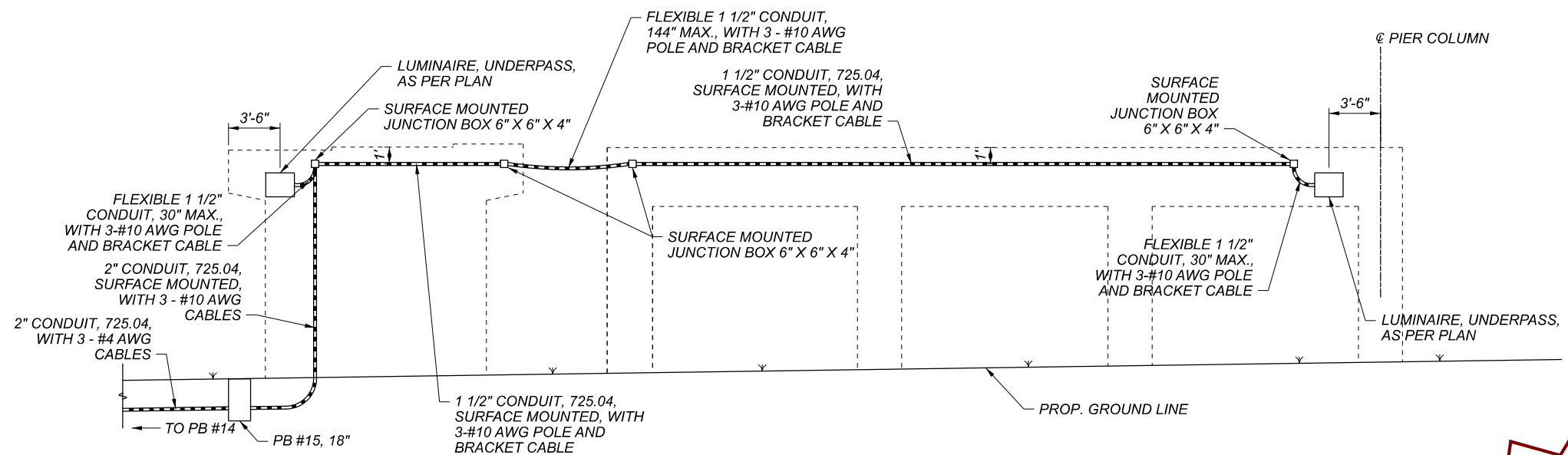
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UNDERPASS LIGHTING DETAILS - SFN 7704712

DESIGN AGENCY	
<small>222 SOUTH MAIN STREET SUITE 200 ANN ARBOR MI 48106 PH: (313) 434-1955 www.arcadis.com</small>	
DESIGNER	EJT
REVIEWER	MJB
PROJECT ID	111405
SHEET	TOTAL
673	870



PLAN



SECTION A-A

Work In Progress
Details Subject to Change

10/05/2022 (Wed, 10am)
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