

LIMITED ACCESS

OCT 1 1975

MICROFILMED
JUL 19 1979
REPRODUCTION

STATE OF OHIO DEPARTMENT OF HIGHWAYS

| FED. RD. | STATE | PROJECT |
|----------|-------|-----------|
| 2 | OHIO | U-19 (10) |

1
465

SUM - 8 - 14.06

This improvement is especially designed for through traffic and has been declared a Limited Access or Freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

SUM - 8 - 14.06

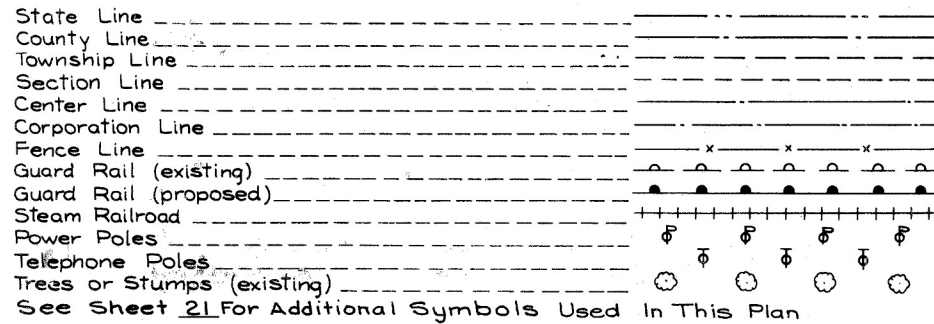
CITIES OF AKRON & CUYAHOGA FALLS
SUMMIT COUNTY

*Sheets 271, 272, 278, 280, 292, 293, 297, 316, 327, 331, 332, & 333 revised 6-23-72 EBL
Added sheets 303A, 303B, 303C, 303D, 303E, 303F, 303G, 303H, 303I, 303J, 303K, 303L 1-30-73 JDR
Revised sheets 316, 324, 325 1-30-73 JDR*

Sheets 1X to 63X inclusive, 56 AX, 57 AX, & 61 AX of 63 added 4-24-73 C.W.

U - 19 (10)

Sheets 303A, 303B, 303F, 303L Revised, sheet 303G Deleted, 303M & 303N Added 4-24-73 J.D.R.



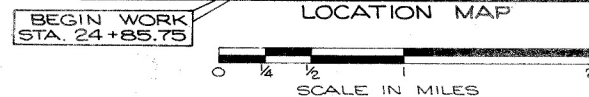
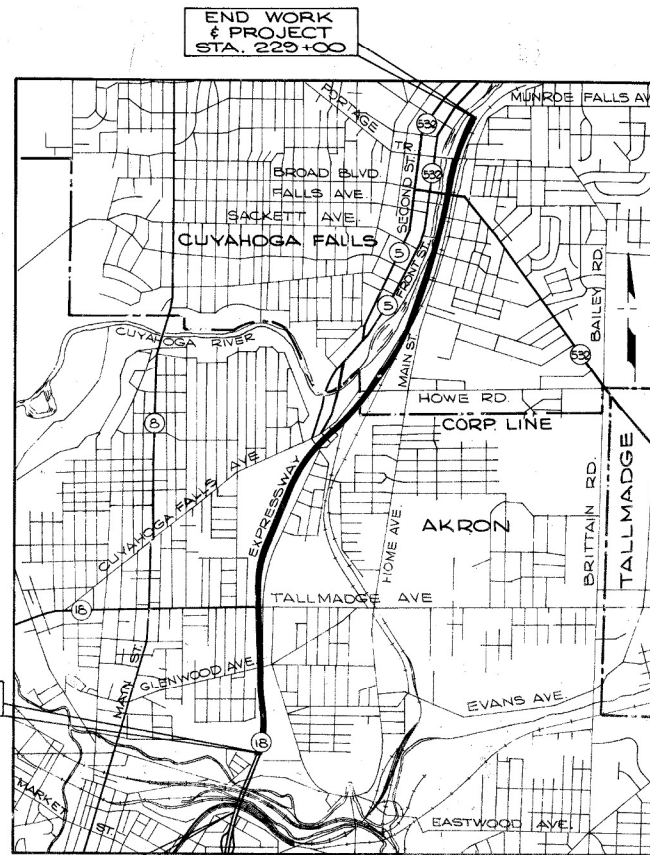
LINE DATA

| | AKRON | CUYAHOGA FALLS |
|---|---------------------------------|--------------------------------|
| BEGIN WORK S. R. 8 | 24 + 85.75 | 149 + 13.52 |
| END WORK S. R. 8 | 149 + 13.52 | 229 + 80 |
| BEGIN PROJECT S. R. 8 | 40 + 68.86 | 149 + 13.52 |
| END PROJECT S. R. 8 | 149 + 13.52 | 229 + 00 |
| EQUATION: 40 + 68.50 BK = 40 + 68.86 AHD. | | |
| DEDUCT FOR EQUATION (FROM WORK ONLY) | 0.36 LIN. FT. | |
| LENGTH OF WORK | 12,427.41 LIN. FT. 2.353 MI. | 8,066.48 LIN. FT. 1.527 MI. |
| LENGTH OF PROJECT | 10,844.66 LIN. FT. 2.053 MI. | 7,986.48 LIN. FT. 1.512 MI. |
| NET LENGTH OF WORK = 20,493.89 LIN. FT., 3.881 MI. | | |
| NET LENGTH OF PROJECT = 18,831.14 LIN. FT., 3.566 MI. | | |

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| RIGHT OF WAY | 434-465 |

* PROFILES OF OHIO EDISON SPUR (LINES A & B)



| | | |
|---------------------|-------|-------|
| Plan | ----- | = 50' |
| Profile: Horizontal | ----- | = 50' |
| Profile: Vertical | ----- | = 5' |
| Cross Sections | ----- | = 10' |

| | |
|------------------------|-------|
| Portion to be improved | ----- |
| State Roads | ----- |
| Other Roads | ----- |

| SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS | | | | | | | | | | | |
|---|---------|------------|---------|---------|---------|------|---------|------------------------------|---------|--|--|
| AS-1-67 | 6-12-69 | CB-2-342-4 | 6-1-65 | GR-3 | 11-9-71 | I-1 | 6-1-65 | MH-1 | 10-1-68 | | |
| BP-1 | 6-1-65 | F-1 | 3-10-69 | GR-4 | 11-9-71 | I-2A | 6-6-69 | MH-1A | 10-1-68 | | |
| BP-2 | 12-1-68 | F-3 | 3-10-69 | GR-5 | 1-1-71 | L-1 | 6-1-65 | MH-2 | 10-1-68 | | |
| BP-3 | 1-1-71 | F-2 | 1-1-71 | GR-6 | 1-1-71 | | | MH-2A | 10-1-68 | | |
| BP-4 | 1-1-71 | F-5 | 3-10-69 | HW-E | 6-1-65 | I-2 | 6-6-69 | BP-9 | 1-1-71 | | |
| BP-5 | 1-1-71 | | | | | MC-1 | 6-13-69 | | | | |
| BP-7 | 1-1-66 | | | HL-1 | 11-1-65 | MC-3 | 6-20-69 | BR-1-65 Sh. 142, 11-24-65 | | | |
| CB-2-2A+B | 6-1-65 | FACI-1 | 4-20-71 | HL-2 | 11-1-65 | MC-4 | 6-13-69 | RB-1-55 | 2-2-59 | | |
| CB-3 | 6-1-65 | FACI-2 | 4-20-71 | HL-3 | 11-1-65 | MC-5 | 6-1-65 | SD-1-69 Sh. 12, 344, 6-12-69 | | | |
| CB-3A | 6-1-65 | | | HL-4 | 1-1-66 | MC-7 | 10-1-68 | | | | |
| CB-5 | 9-1-69 | GR-2A | 1-1-71 | CB-458A | 6-6-68 | | | | | | |
| CB-6 | 6-1-65 | GR-2B | 11-9-71 | | | | | | | | |

| SUPPLEMENTAL SPECIFICATIONS | | |
|-----------------------------|----------|--------------|
| 801 | 1-1-69 | 939 12-15-69 |
| 808 | 1-1-71 | |
| 1001 | 1-1-69 | |
| 814 | 1-1-69 | |
| 815 | 1-1-69 | |
| 816 | 1-1-69 | |
| 830 | 11-25-70 | |
| 934 | 1-1-69 | |
| 806 | 1-1-69 | |
| 927 | 1-1-71 | |
| 836 | 1-1-71 | |
| 941 | 11-25-70 | |
| 932 | 1-1-69 | |

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ENGINEER
DATE _____

Rev. 3-16-72 Rev. 1-18-72

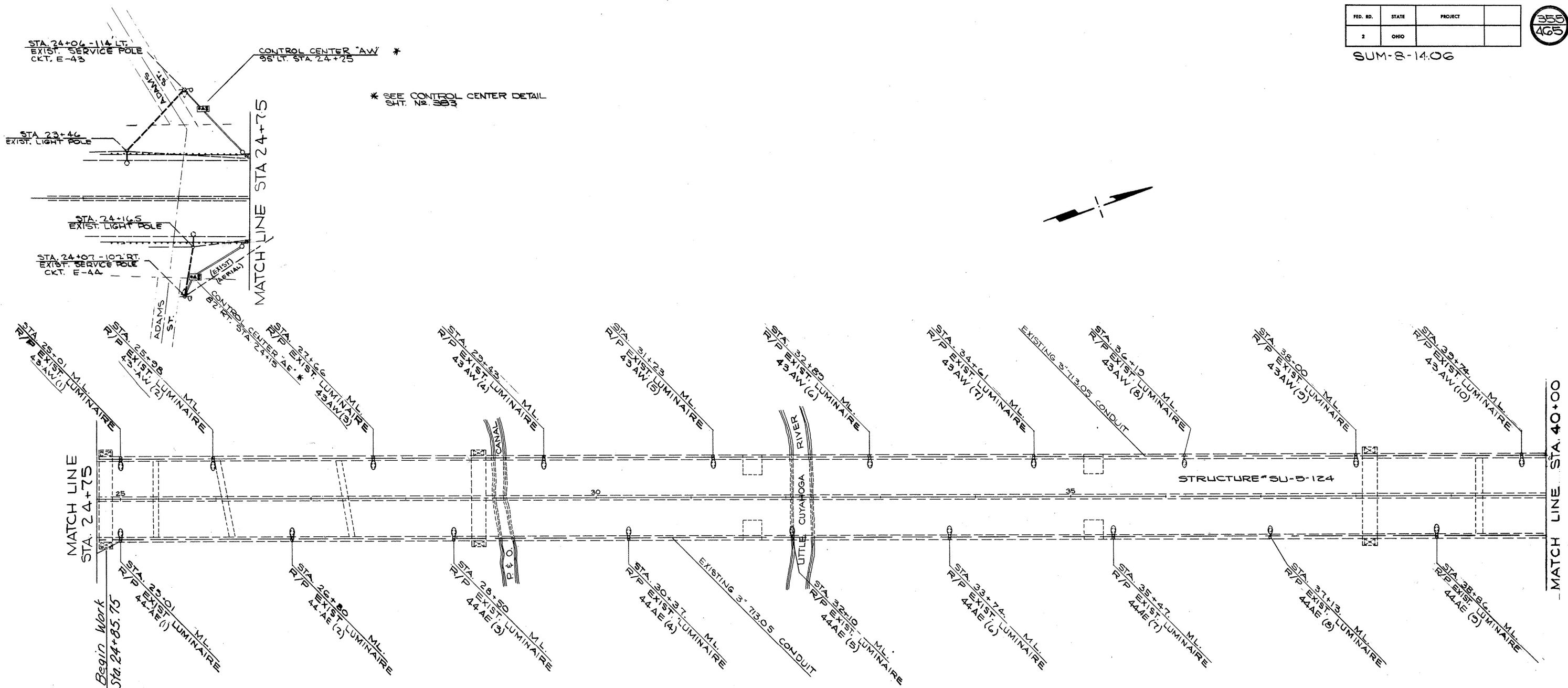
PREPARED AND RECOMMENDED BY
DALTON-DALTON ASSOCIATES, INC.
AKRON OHIO CLEVELAND

File No Summit County Sum-8-14.06
Date of Letting _____ 19____
Contract No _____

| | | |
|----------|-------|---------|
| FED. RD. | STATE | PROJECT |
| 2 | OHIO | |

350
405

SUM-8-14.06



* SEE CONTROL CENTER DETAIL
SHT. NO. 383

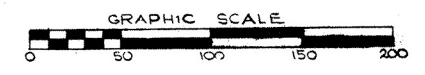


- ON EXIST. POLES
 - 40' M.H. MIN. ○
 - 40' M.H. MIN. □
 - 32.5' M.H. MIN. ○
 - 32.5' M.H. MIN. □
 - 15' M.H. MAX. ○
 -
 -
- REPLACE EXIST. LUMINAIRE WITH 400 WATT MERCURY VAPOR-TYPE III DISTRIBUTION
 - LIGHT POLE AND LUMINAIRE W/DUAL BRACKET ARMS. 700 WATT MERCURY VAPOR-TYPE III DISTRIBUTION.
 - LIGHT POLE AND LUMINAIRE W/SINGLE BRACKET ARM. 700 WATT MERCURY VAPOR-TYPE III DISTRIBUTION.
 - LIGHT POLE AND LUMINAIRE W/SINGLE BRACKET ARM. 400 WATT MERCURY VAPOR-TYPE II DISTRIBUTION.
 - LIGHT POLE AND LUMINAIRE W/SINGLE BRACKET ARM. 400 WATT MERCURY VAPOR-TYPE III DISTRIBUTION.
 - UNDERPASS LUMINAIRE. 250 WATT-ASYMETRIC DISTRIBUTION.
 - NOTCH BACK SLOPE FOR PLAN FOUNDATION OFFSET AND EXCAVATE FOR MINIMUM MOUNTING HEIGHT.
 - INDICATES GLARE SHIELD

LEGENDS

- 8' ARM
6.5' SBR(4)
- OFFSET AND LIGHT POLE IDENTIFICATION:
THE FIRST NUMBER (65) INDICATES THE OFFSET FROM EDGE OF PAVEMENT. THE NUMBER (8) INDICATES THE CIRCUIT NUMBER. THE LETTERS (BR) IDENTIFIES THE CONTROL CENTER. THE NUMBER (4) INDICATES THE POLE NUMBER WITHIN THE CIRCUIT.
(8) BRACKET ARM LENGTH
DUCT CABLE.
- CONDUIT
- 4" PVC CONDUIT FOR P & F SIGNAL
- 4" 713.04 CONDUIT FOR P & F SIGNAL

- 18" CIRCULAR 713.09 PULL BOX
- CONDUIT OR CABLE MARKER.
- 16" x 12" x 6" STRUCTURE JUNCTION BOX.
- GUARDRAIL.
- ▲ LIGHTING CONTROL CENTER
- CANTILEVER SIGN
- OVERHEAD SIGN
- 24" CIRCULAR 713.09 PULL BOX
- P & F. SIGNAL PULL BOX
- P & F SIGNAL FOUNDATION
- EXISTING DRAINAGE
- PROPOSED STRUCTURES

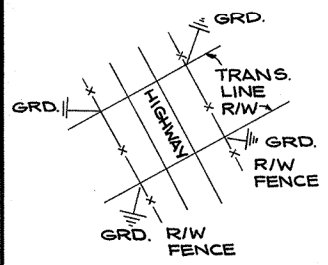
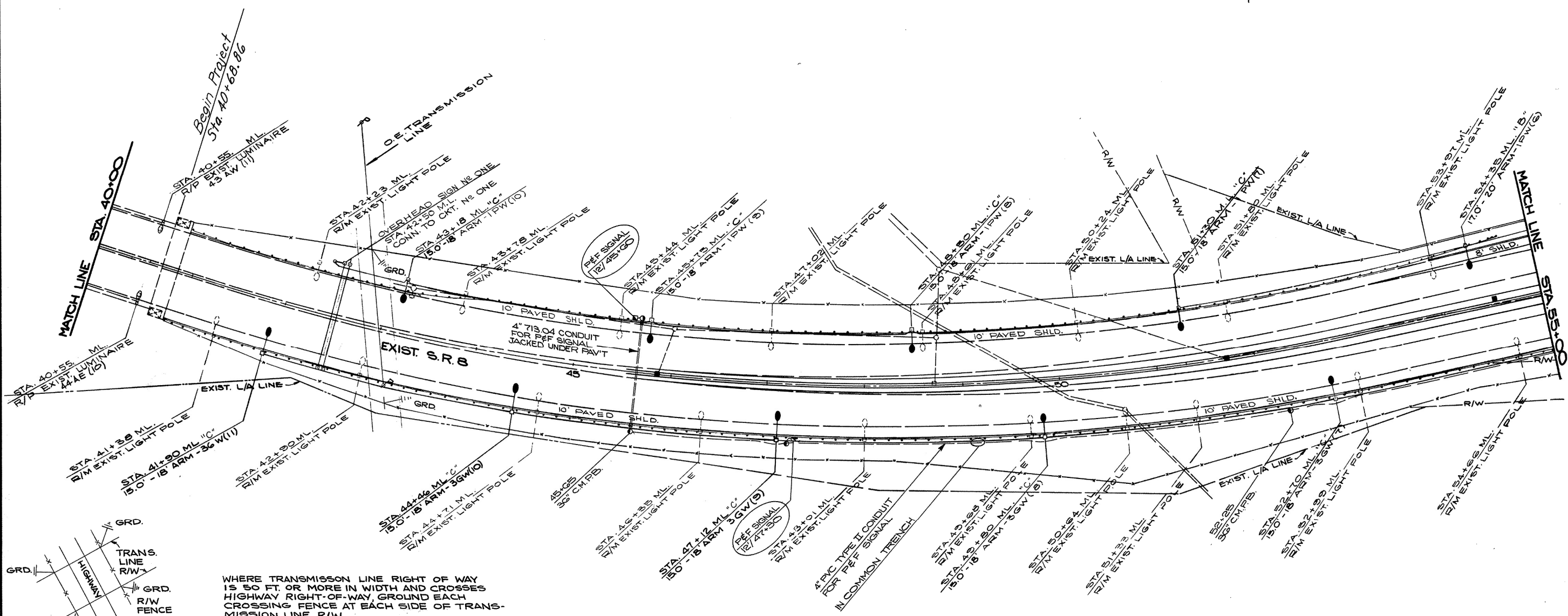
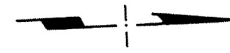


STA. 24+00 to STA. 40+00
LIGHTING PLAN Rev. 1-18-72

| | | |
|----------|-------|---------|
| FED. RD. | STATE | PROJECT |
| 2 | OHIO | |

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465

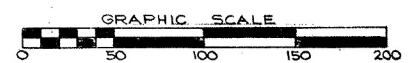
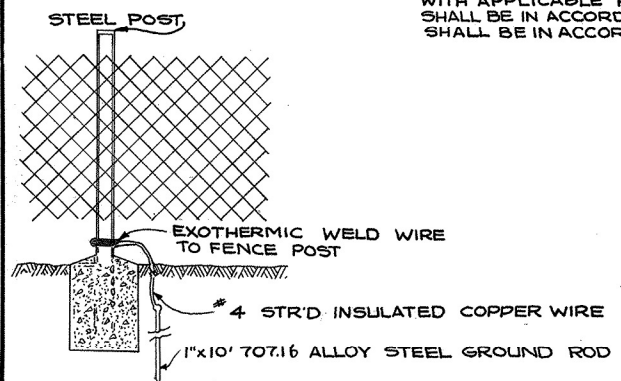
SUM-8-14.06



WHERE TRANSMISSION LINE RIGHT OF WAY IS 50 FT. OR MORE IN WIDTH AND CROSSES HIGHWAY RIGHT-OF-WAY, GROUND EACH CROSSING FENCE AT EACH SIDE OF TRANSMISSION LINE R/W

WHERE ELECTRIC POWER LINES ARE RATED LESS THAN 110 KV AND CROSS FENCES, DIRECTLY BELOW THE POINT WHERE ELECTRIC LINES CROSS.

INSTALLATION SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF G25.10. TESTING SHALL BE IN ACCORDANCE WITH G25.22. PAYMENT SHALL BE IN ACCORDANCE WITH G25.24(h) AND G25.25

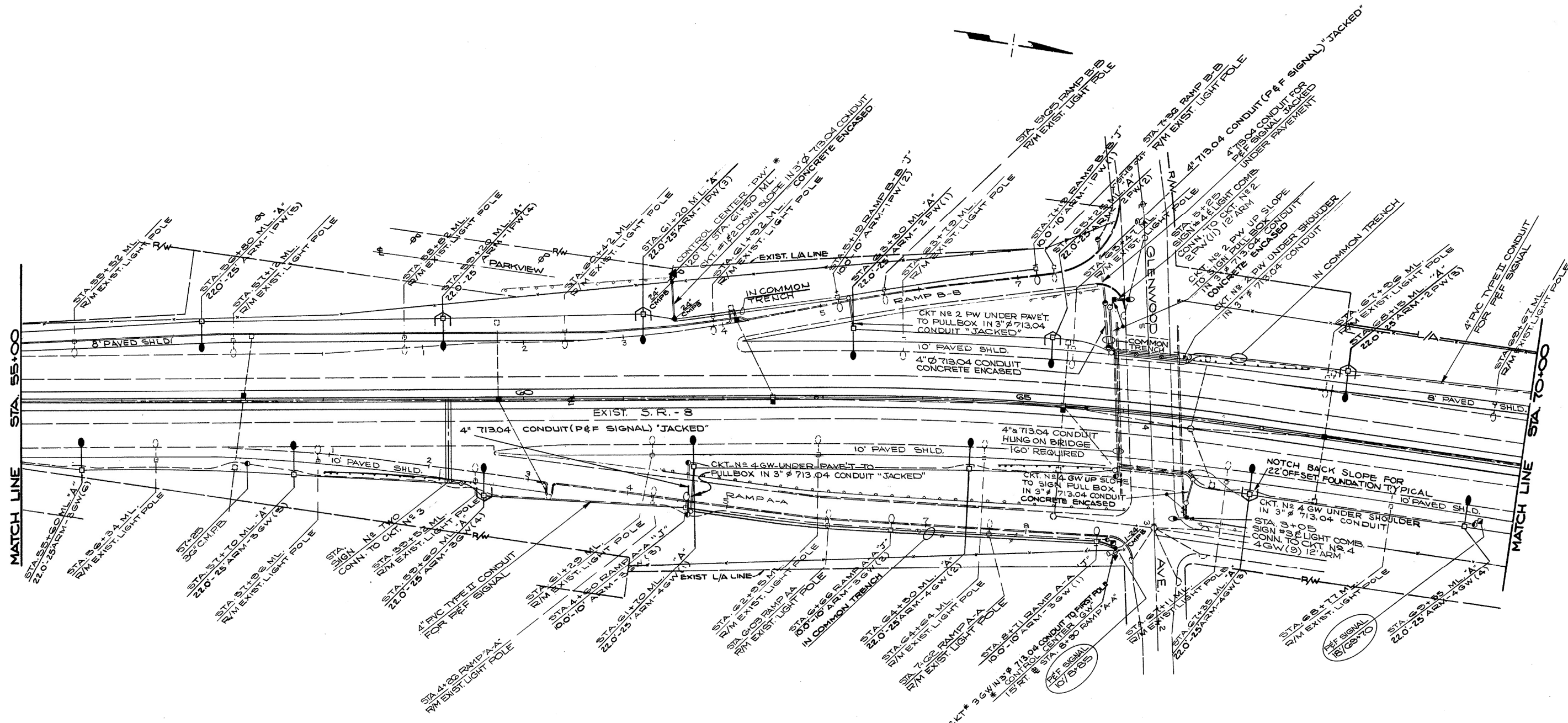


STA. 40+00 to STA. 55+00
LIGHTING PLAN Rev. 1-18-72

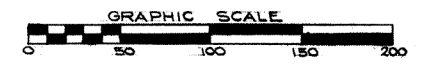
| | | |
|----------|-------|---------|
| FED. RD. | STATE | PROJECT |
| 2 | OHIO | |

357
465

SUM-8-14.06



* SEE CONTROL CENTER DETAIL SHEET NO. 382

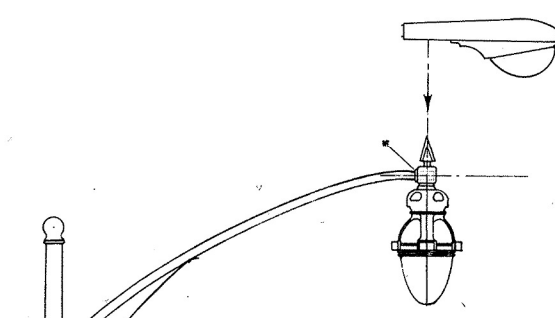


STA. 55+00 to STA. 70+00
LIGHTING PLAN

| | | |
|---------|-------|---------|
| FED. RD | STATE | PROJECT |
| 2 | OHIO | |

372
AGS

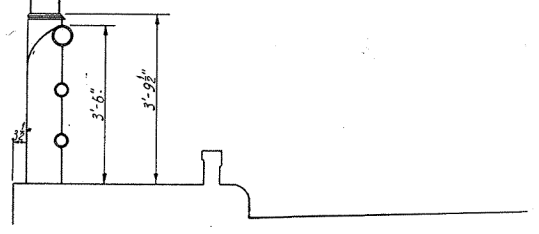
SUM-8-14.06



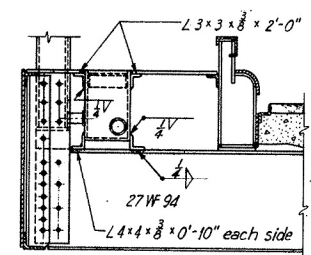
EXIST. INCANDESCENT PENDENT LUMINAIRE SHALL BE REPLACED WITH 400 WATT MERCURY VAPOR TYPE III LUMINAIRE.
 * REMOVE 90° END FITTING BY UNTHREADING IF POSSIBLE; OTHERWISE CUT OFF USING A PIPE CUTTER.
 DO NOT BURN OFF!

EXIST. MOUNTING HEIGHT SHALL BE MAINTAINED

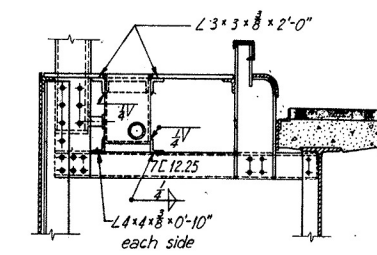
EXIST. POLE



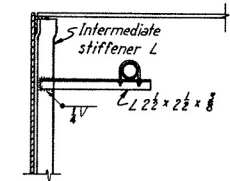
LIGHTING STANDARD
 Scale: 1/2" = 1'-0"
 21 INSTALLED



GIRDER SPANS

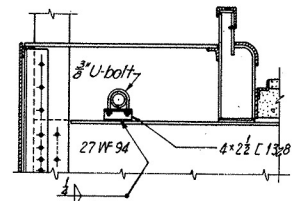


TRUSS SPANS

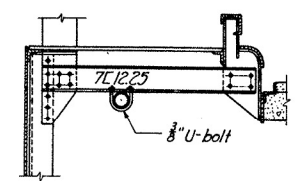


CONDUIT SUPPORTS BETWEEN HANDRAIL POSTS

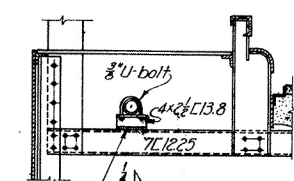
JUNCTION BOX SUPPORTS
 Scale: 1/2" = 1'-0"



GIRDER SPANS AT FLOORBEAMS

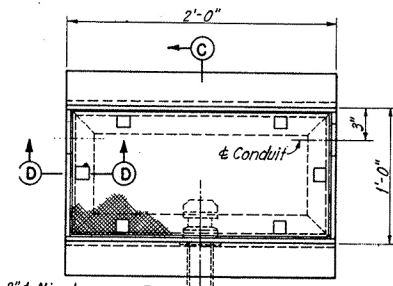


GIRDER SPANS BETWEEN FLOORBEAMS

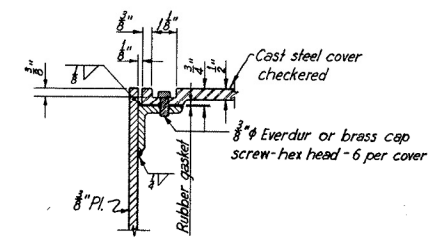


TRUSS SPANS

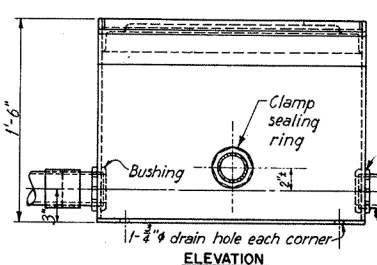
INTERMEDIATE CONDUIT SUPPORTS
 Scale: 1/2" = 1'-0"



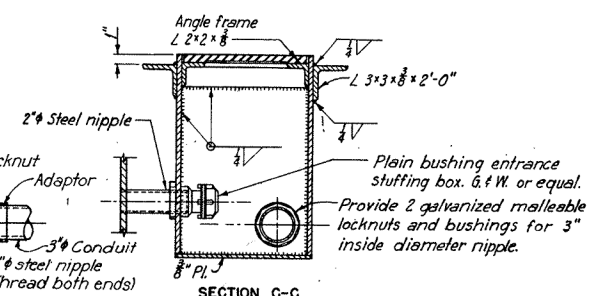
PLAN
 2" Nipple threaded into light pole base.



SECTION D-D
 Scale: 3" = 1'-0"

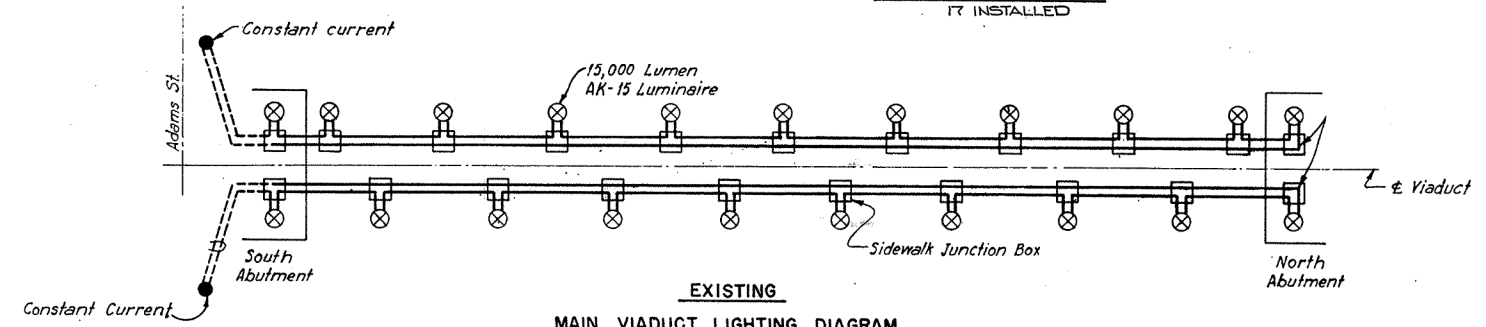


ELEVATION
 Scale: 1 1/2" = 1'-0"



SECTION G-G
 Scale: 1 1/2" = 1'-0"

JUNCTION BOX DETAILS
 IT INSTALLED



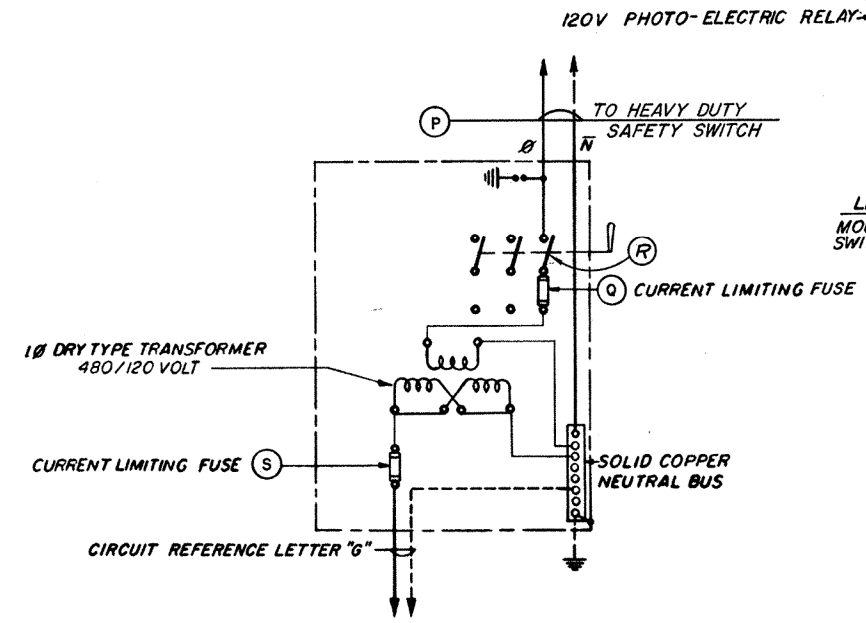
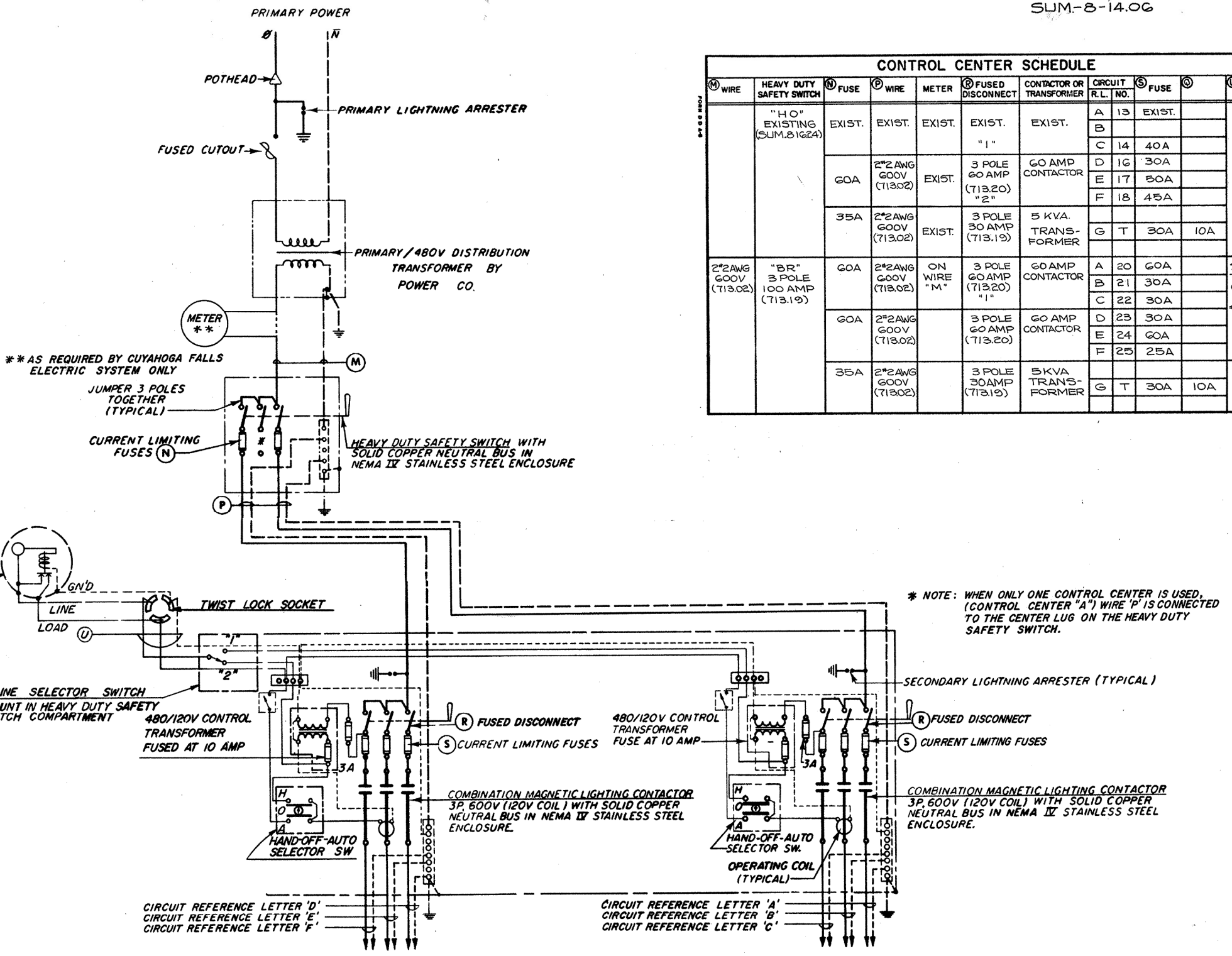
EXISTING MAIN VIADUCT LIGHTING DIAGRAM
 No Scale

NOTES:
 THE ALIGNMENT OF THE CONDUIT CHANGES GRADUALLY FROM THE EAST JUNCTION BOX AT EACH END OF THE SUPERSTRUCTURE TO MATCH THE CONDUIT IN THE ABUTMENTS.
 ALL JUNCTION BOXES ARE GALVANIZED.
 THERE IS ONE JUNCTION BOX AT EACH LIGHT POLE.
 CONDUIT IS SUPPORTED AT EACH SIDEWALK SUPPORT AND MIDWAY BETWEEN.
 CONDUIT SUPPORTS ARE GALVANIZED.
 CONDUIT EXPANSION COUPLINGS ARE LOCATED AT A MAXIMUM OF 40 FEET APART AND AT EACH ROADWAY JOINT.
 THE LIGHTING STANDARDS WERE MADE AIR TIGHT BETWEEN JUNCTION BOXES AND LUMINAIRE. FINAL CAP, BRACKET ATTACHMENTS, BASES, ETC. WERE GASKETED OR OTHERWISE SEALED.
 CONDUITS ARE 3" O ASBESTOS-CEMENT PIPE.
 ALL NOTES WERE ACCORDING TO PLAN.
 PAVEMENT FOR REMOVAL OF OLD LUMINAIRES & WIRING SHALL BE INCLUDED IN THE COST OF THE NEW LUMINAIRES & NEW WIRING AS PER PLAN.

EXISTING LIGHTING
 SU 5 124

| CONTROL CENTER SCHEDULE | | | | | | | | | | |
|-------------------------|-----------------------------|------|----------------------|-------|----------------------------|--------------------------|------------------------|------|------|---|
| WIRE | HEAVY DUTY SAFETY SWITCH | FUSE | WIRE | METER | FUSED DISCONNECT | CONTACTOR OR TRANSFORMER | CIRCUIT R.L. NO. | FUSE | WIRE | |
| 2*2AWG 600V (713.02) | "AW" 3 POLE 60 AMP (713.19) | 60A | 2*2AWG 600V (713.02) | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A N/R B 43 C N/R | 25A | | 3*10AWG TO PHOTO-CELL ON TRANS. ENCLOSURE |
| 2*2AWG 600V (713.02) | "AE" 3 POLE 60 AMP (713.19) | 60A | 2*2AWG 600V (713.02) | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A N/R B 44 C N/R | 25A | | 3*10AWG TO PHOTO-CELL ON TRANS. ENCLOSURE |
| 2*2AWG 600V (713.02) | "PW" 3 POLE 60 AMP (713.19) | | | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A 1 B N/R C 2 | 30A | | 3*10AWG TO PHOTO-CELL ON SERVICE POLE |
| 2*2AWG 600V (713.02) | "GW" 3 POLE 60 AMP (713.19) | | | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A 3 B N/R C 4 | 30A | | 3*10AWG TO PHOTO-CELL ON SERVICE POLE |
| 2*2AWG 600V (713.02) | "TE" 3 POLE 60 AMP (713.19) | 60A | 2*2AWG 600V (713.02) | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A 5 B N/R C 6 | 30A | | 3*10AWG TO PHOTO-CELL ON POLE #5 TE (1) |
| 2*2AWG 600V (713.02) | "GB" 3 POLE 60 AMP (713.19) | 60A | 2*2AWG 600V (713.02) | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A 7 B N/R C 8 | 30A | | 3*10AWG TO PHOTO-CELL ON POLE #8 GW (1) |
| 2*2AWG 600V (713.02) | "GO" 3 POLE 60 AMP (713.19) | 60A | 2*2AWG 600V (713.02) | N/R | 3 POLE 30 AMP (713.20) "1" | 30 AMP CONTACTOR | A 9 B N/R C 10 | 30A | | 3*10AWG TO PHOTO-CELL ON POLE #9 GO (1) |
| | | 60A | 2*2AWG 600V (713.02) | N/R | 3 POLE 30 AMP (713.20) "2" | 60 AMP CONTACTOR | D 11 E N/R F 12 | 50A | | |

| CONTROL CENTER SCHEDULE | | | | | | | | | | |
|-------------------------|------------------------------|--------|----------------------|-------------|----------------------------|--------------------------|----------------------|-------------------|------|--|
| WIRE | HEAVY DUTY SAFETY SWITCH | FUSE | WIRE | METER | FUSED DISCONNECT | CONTACTOR OR TRANSFORMER | CIRCUIT R.L. NO. | FUSE | WIRE | |
| | "HO" EXISTING (SUM.81624) | EXIST. | EXIST. | EXIST. | EXIST. | EXIST. | A 13 B C 14 | EXIST. 40A | | EXIST. |
| | | 60A | 2*2AWG 600V (713.02) | EXIST. | 3 POLE 60 AMP (713.20) "2" | 60 AMP CONTACTOR | D 16 E 17 F 18 | 30A 50A 45A | | |
| | | 35A | 2*2AWG 600V (713.02) | EXIST. | 3 POLE 30 AMP (713.19) | 5 KVA TRANSFORMER | G T | 30A 10A | | |
| 2*2AWG 600V (713.02) | "BR" 3 POLE 100 AMP (713.19) | 60A | 2*2AWG 600V (713.02) | ON WIRE "M" | 3 POLE 60 AMP (713.20) "1" | 60 AMP CONTACTOR | A 20 B 21 C 22 | 60A 30A 30A | | 3*10AWG TO PHOTO-CELL ON POLE #21 BR (1) |
| | | 60A | 2*2AWG 600V (713.02) | | 3 POLE 60 AMP (713.20) | 60 AMP CONTACTOR | D 23 E 24 F 25 | 30A 60A 25A | | |
| | | 35A | 2*2AWG 600V (713.02) | | 3 POLE 30 AMP (713.19) | 5 KVA TRANSFORMER | G T | 30A 10A | | |



TRAFFIC SIGNAL SERVICE CENTER
SEE TRAFFIC CONTROL FOR LOCATION AND PAYMENT
REQUIRED ONLY AT CONTROL CENTER "HO" & "BR"

TYPICAL LIGHTING CONTROL CENTER "2"

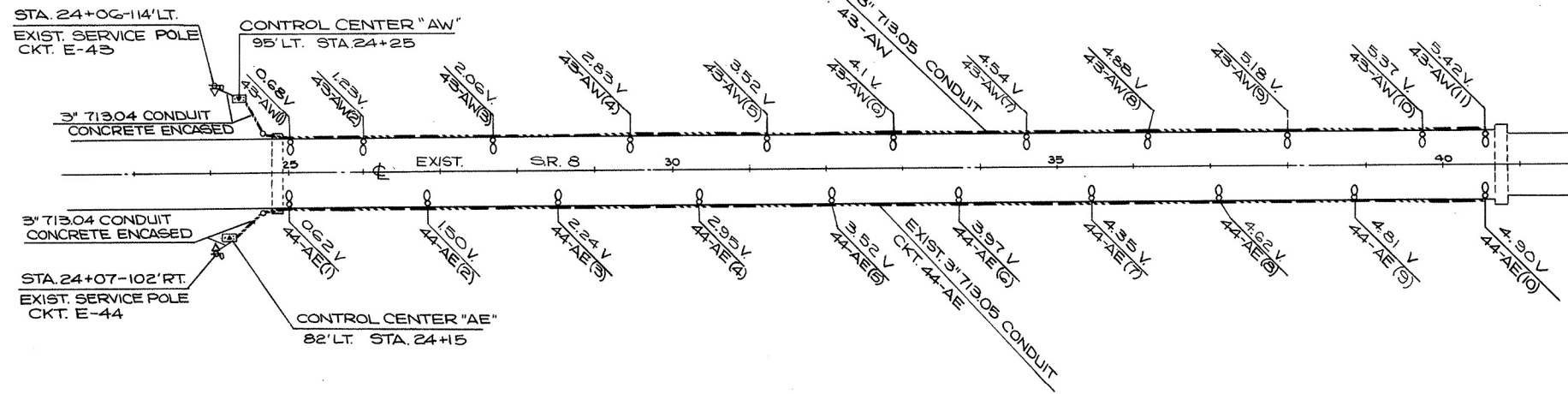
TYPICAL LIGHTING CONTROL CENTER "1"

* NOTE: WHEN ONLY ONE CONTROL CENTER IS USED, (CONTROL CENTER "A") WIRE "P" IS CONNECTED TO THE CENTER LUG ON THE HEAVY DUTY SAFETY SWITCH.

| | | |
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| FED. RD. | STATE | PROJECT |
| 2 | OHIO | |



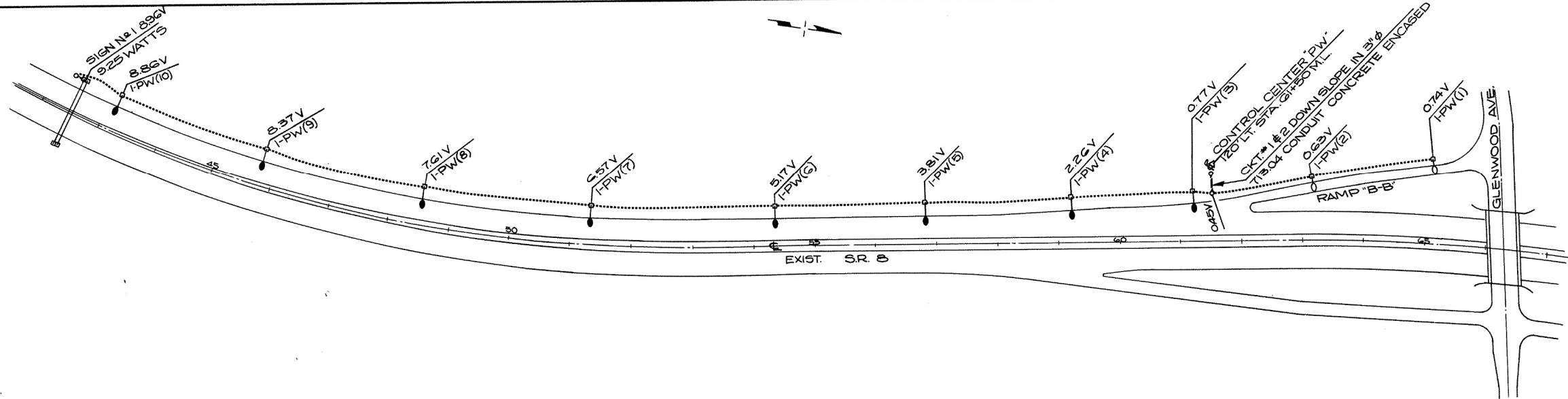
SUM - 8 - 14.06



CIRCUIT No 43-AW
 PLAN SHEET No 355 & 356
 CONNECTED LOAD 3.28KVA
 VOLTAGE DROP 5.02V

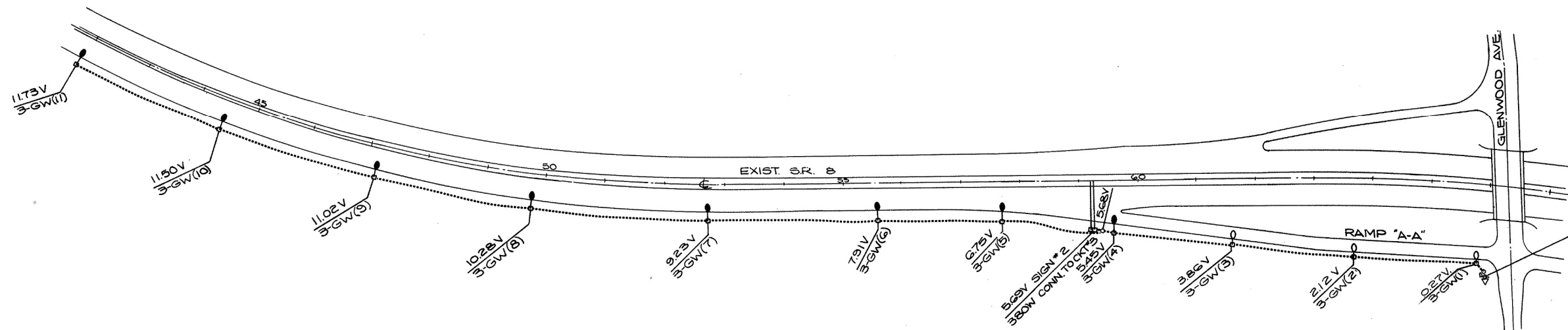
CIRCUIT No 44-AE
 PLAN SHEET No 355 & 356
 CONNECTED LOAD 4.8KVA
 VOLTAGE DROP 4.57V

USE #4 AWG 713.02 ELECTRIC CABLE
 IN EXISTING 3" 713.05 CONDUIT
 AND REWIRE POLE & BRACKET WITH #10 AWG



CIRCUIT No 1PW
 PLAN SHEET No 356 & 357
 CONNECTED LOAD 9.4 KVA
 VOLTAGE DROP 8.96V

USE #4 AWG 713.02
 ELECTRIC CABLE THROUGHOUT
 AND #10 AWG POLE & BRACKET CABLE



CKT #3-GWIN 3" 713.04 CONDUIT TO FIRST POLE
 CONTROL CENTER "GW"
 15' RT. @ STA. 8+90 RAMP "A-A"

USE #4 AWG 713.02
 ELECTRIC CABLE THROUGHOUT
 AND #10 AWG POLE & BRACKET CABLE

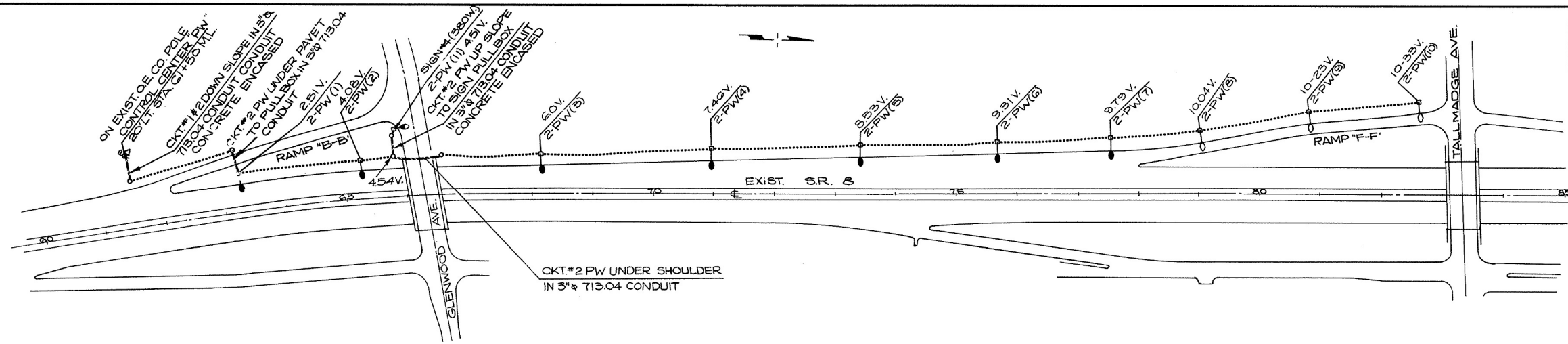
CIRCUIT No 3GW
 PLAN SHEET No 356 & 357
 CONNECTED LOAD 8.5KVA
 VOLTAGE DROP 11.73 V

CIRCUIT DIAGRAMS

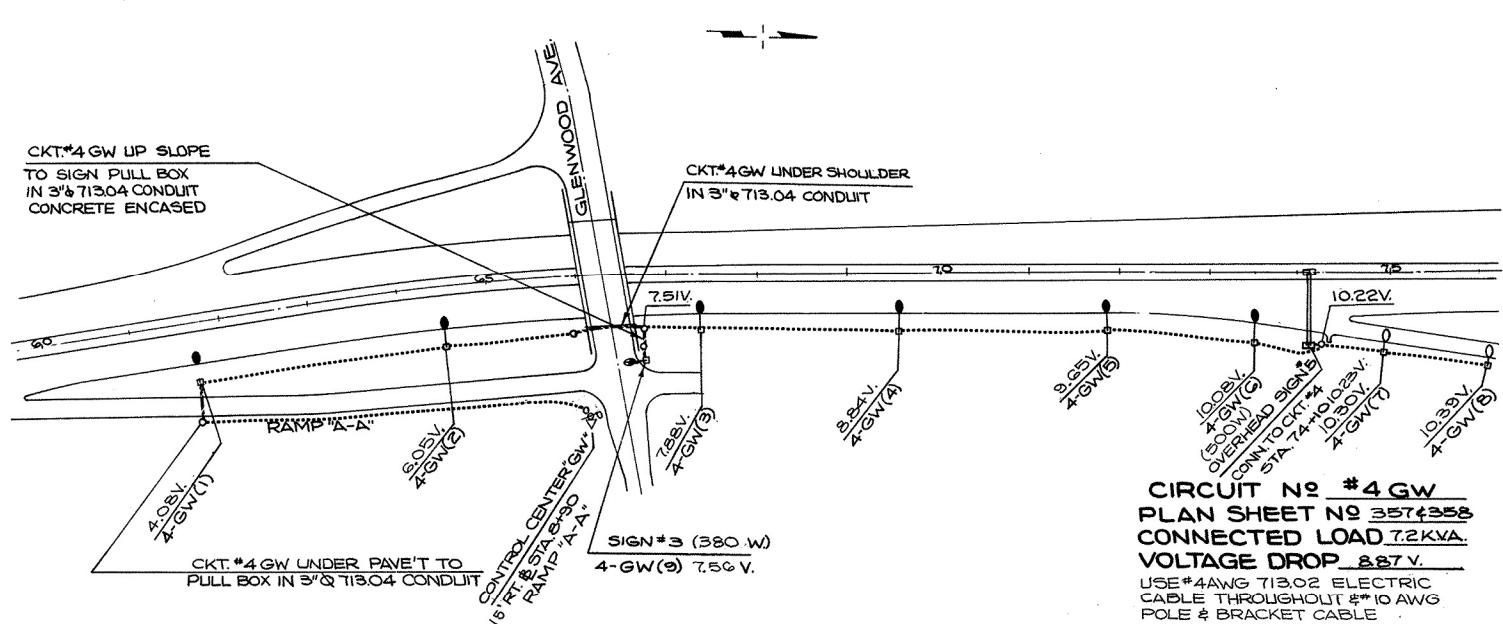
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| FED. RD. | STATE | PROJECT |
| 2 | OHIO | |



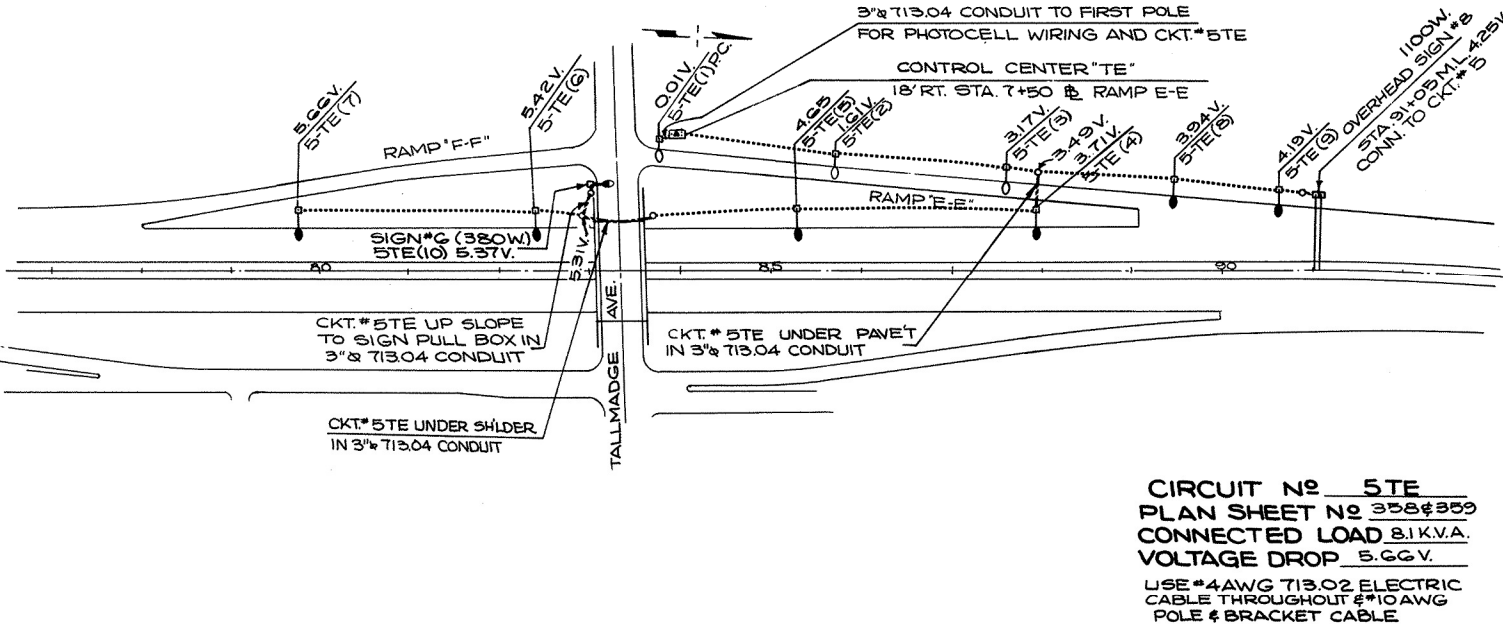
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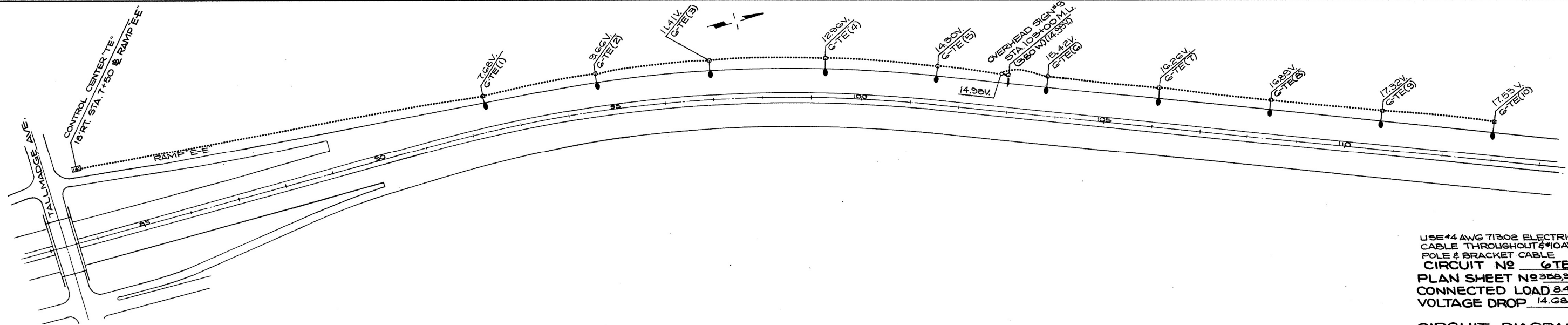
CIRCUIT NO. 2 PW
PLAN SHEET NO. 357#358
CONNECTED LOAD 7.9 KVA.
VOLTAGE DROP 10.33 V.
 USE #4 AWG 713.02 ELECTRIC CABLE THROUGHOUT #10 AWG POLE & BRACKET CABLE



CIRCUIT NO. 4 GW
PLAN SHEET NO. 357#358
CONNECTED LOAD 7.2 KVA.
VOLTAGE DROP 8.87 V.
 USE #4 AWG 713.02 ELECTRIC CABLE THROUGHOUT #10 AWG POLE & BRACKET CABLE



CIRCUIT NO. 5 TE
PLAN SHEET NO. 358#359
CONNECTED LOAD 8.1 KVA.
VOLTAGE DROP 5.66 V.
 USE #4 AWG 713.02 ELECTRIC CABLE THROUGHOUT #10 AWG POLE & BRACKET CABLE



USE #4 AWG 713.02 ELECTRIC CABLE THROUGHOUT #10 AWG POLE & BRACKET CABLE
CIRCUIT NO. 6 TE
PLAN SHEET NO. 358, 359 & 360
CONNECTED LOAD 8.4 KVA.
VOLTAGE DROP 14.68 V.

CIRCUIT DIAGRAMS

REVISED 4-26-71 BY EDR.