

USH 41 & VELP AVENUE INTERCHANGE
ROUNDAABOUT LIGHTING - 240V
VILLAGE OF HOWARD, BROWN COUNTY

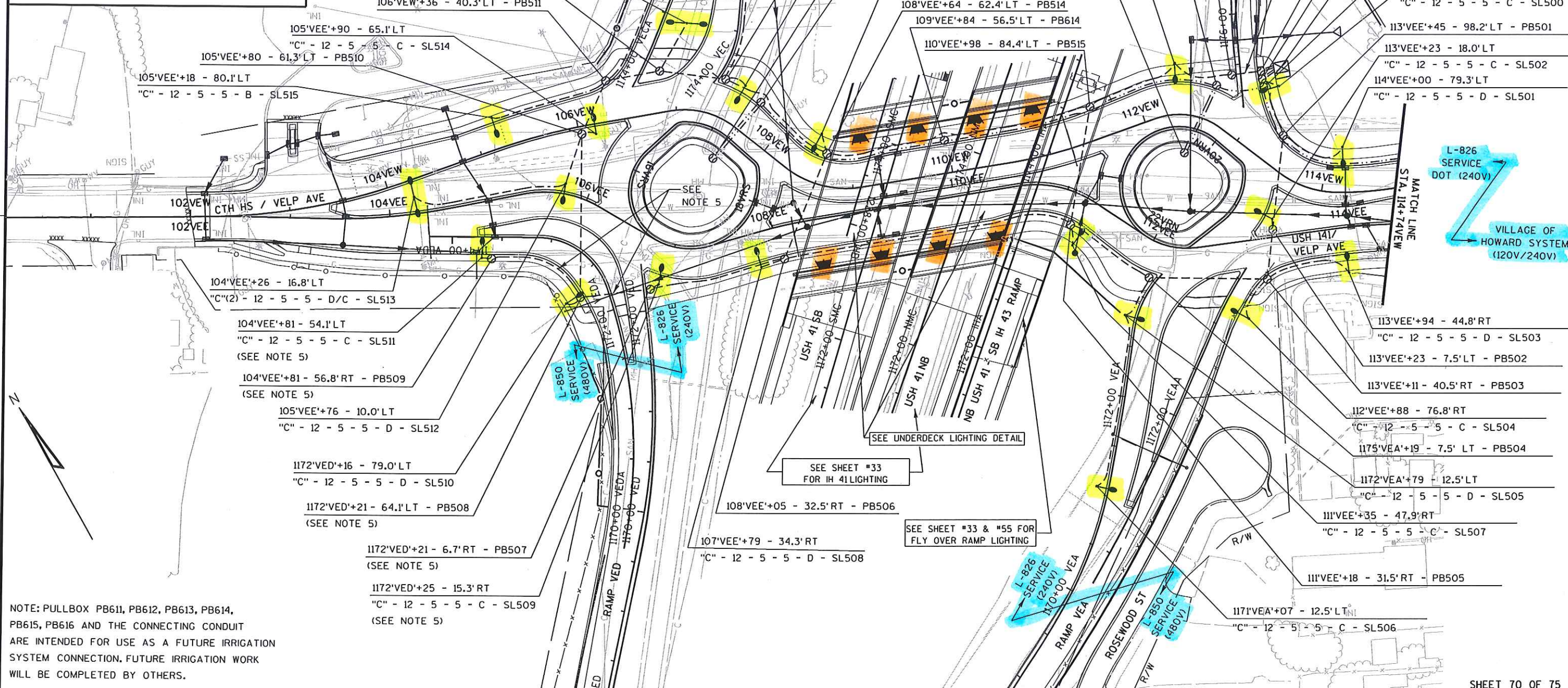
LIGHTING NO. L0826

L-826

DESIGNER: KL ENGINEERING, INC.

DATE: 8-01-2014

SHEET 10 OF 1



NOTE: PULLBOX PB611, PB612, PB613, PB614, PB615, PB616 AND THE CONNECTING CONDUIT ARE INTENDED FOR USE AS A FUTURE IRRIGATION SYSTEM CONNECTION. FUTURE IRRIGATION WORK WILL BE COMPLETED BY OTHERS.

PROJECT NO: 1133-10-75

HWY: USH 41

COUNTY: BROWN

LIGHTING PLANS

SHEET

584

E

FILE NAME : G:\WDOT\N\WNE30-0739\BROWN COUNTY - 02\1133-10-77 (USH 41 - IH 43 - Velp) \DGN\PLAN SHEETS\023519_1p.dgn

PLOT DATE : 12/15/2014

PLOT BY : KL Engineering

PLOT NAME :

PLOT SCALE :

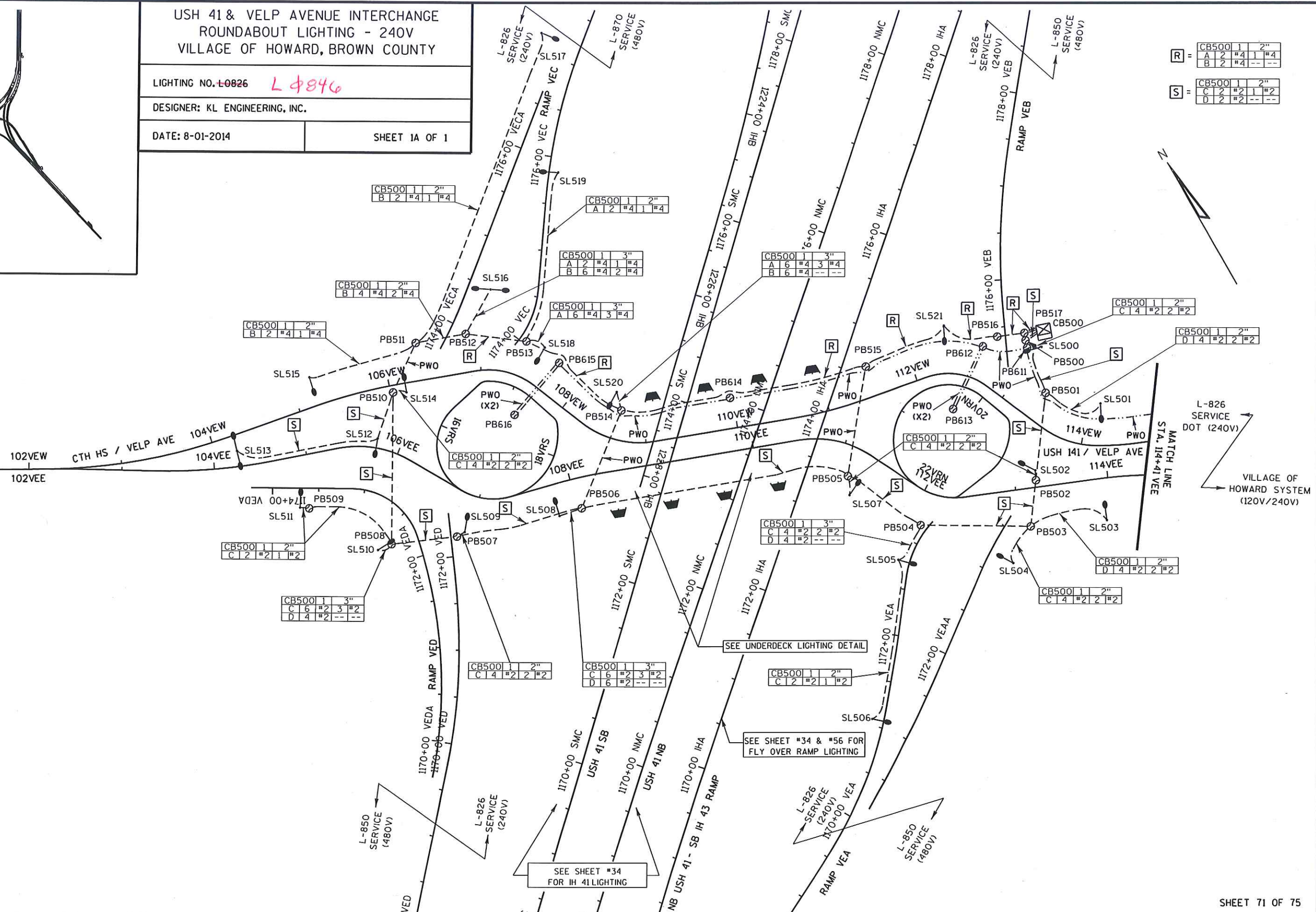
WISDOT/CADDs SHEET 42

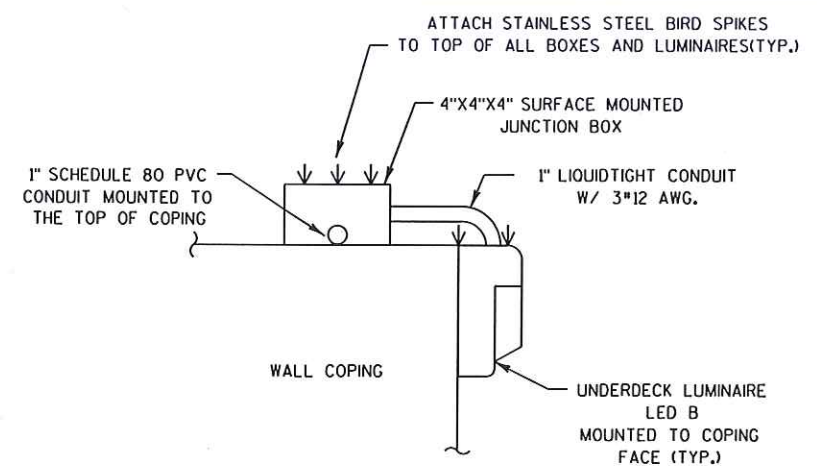
SHEET 70 OF 75



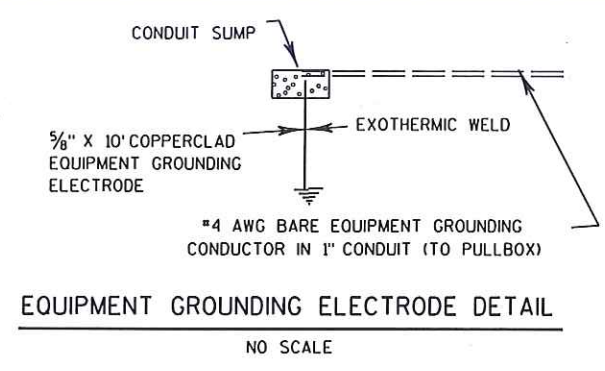
SHEET 1A OF 1

$$S = \begin{array}{|c|c|c|c|} \hline \text{CB500} & 1 & 2 & \\ \hline C & 2 & \#2 & 1 \\ \hline D & 2 & \#2 & -- \\ \hline \end{array}$$





TYPICAL LUMINAIRE MOUNTING ON RETAINING WALLS
NO SCALE

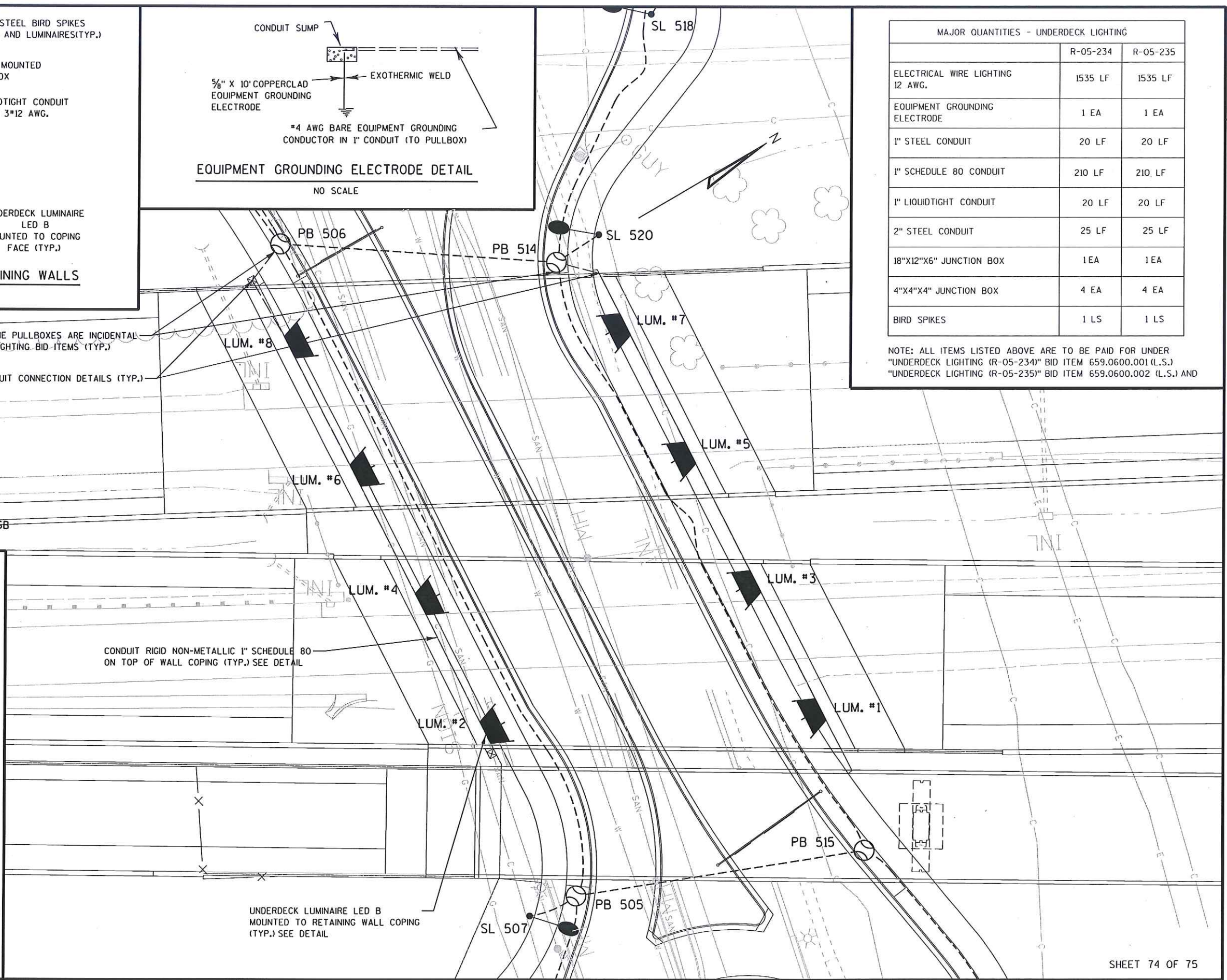


EQUIPMENT GROUNDING ELECTRODE DETAIL
NO SCALE

MAJOR QUANTITIES - UNDERDECK LIGHTING		
	R-05-234	R-05-235
ELECTRICAL WIRE LIGHTING 12 AWG.	1535 LF	1535 LF
EQUIPMENT GROUNDING ELECTRODE	1 EA	1 EA
1" STEEL CONDUIT	20 LF	20 LF
1" SCHEDULE 80 CONDUIT	210 LF	210 LF
1" LIQUIDTIGHT CONDUIT	20 LF	20 LF
2" STEEL CONDUIT	25 LF	25 LF
18"x12"x6" JUNCTION BOX	1 EA	1 EA
4"x4"x4" JUNCTION BOX	4 EA	4 EA
BIRD SPIKES	1 LS	1 LS

NOTE: ALL ITEMS LISTED ABOVE ARE TO BE PAID FOR UNDER "UNDERDECK LIGHTING (R-05-234)" BID ITEM 659.0600.001 (L.S.) "UNDERDECK LIGHTING (R-05-235)" BID ITEM 659.0600.002 (L.S.) AND

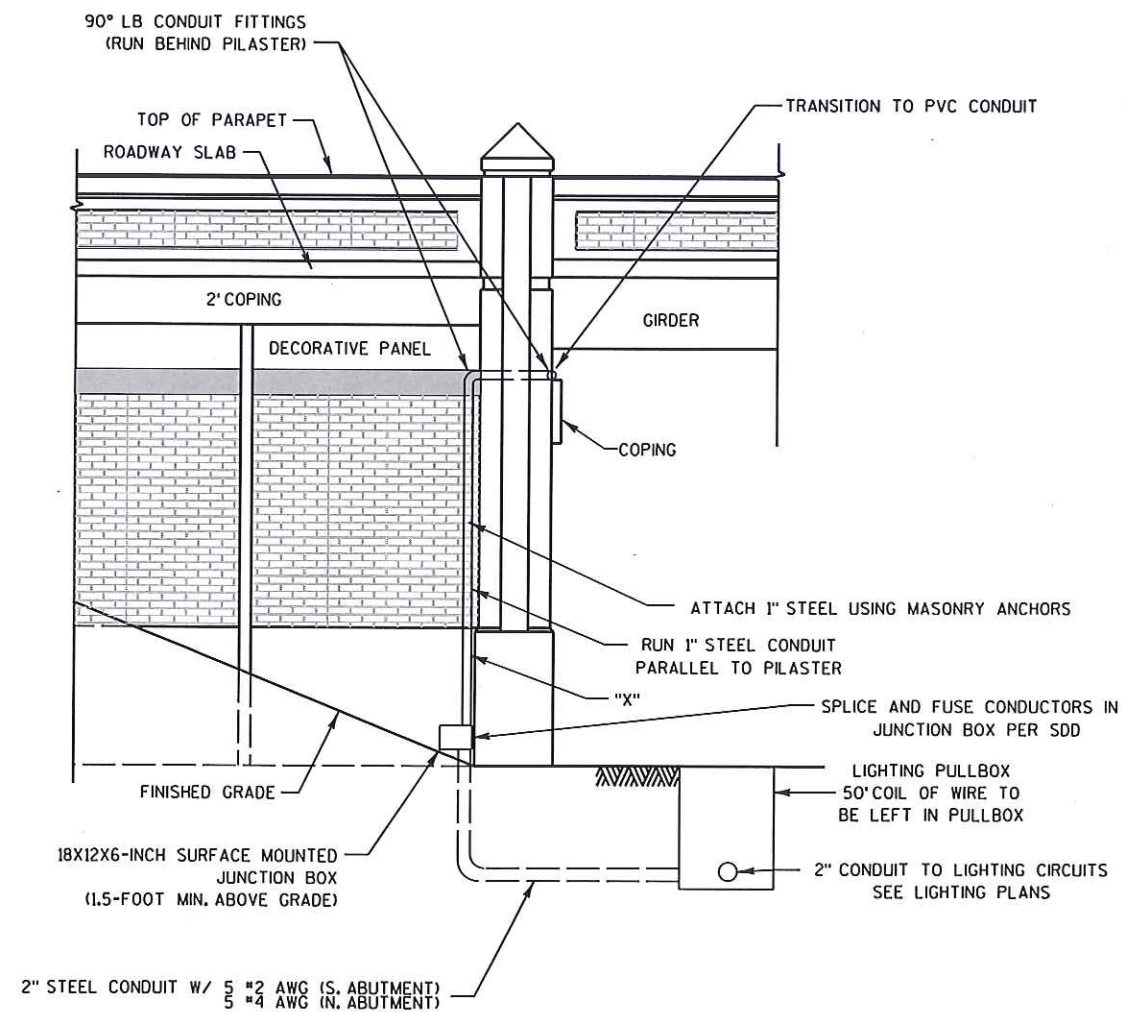
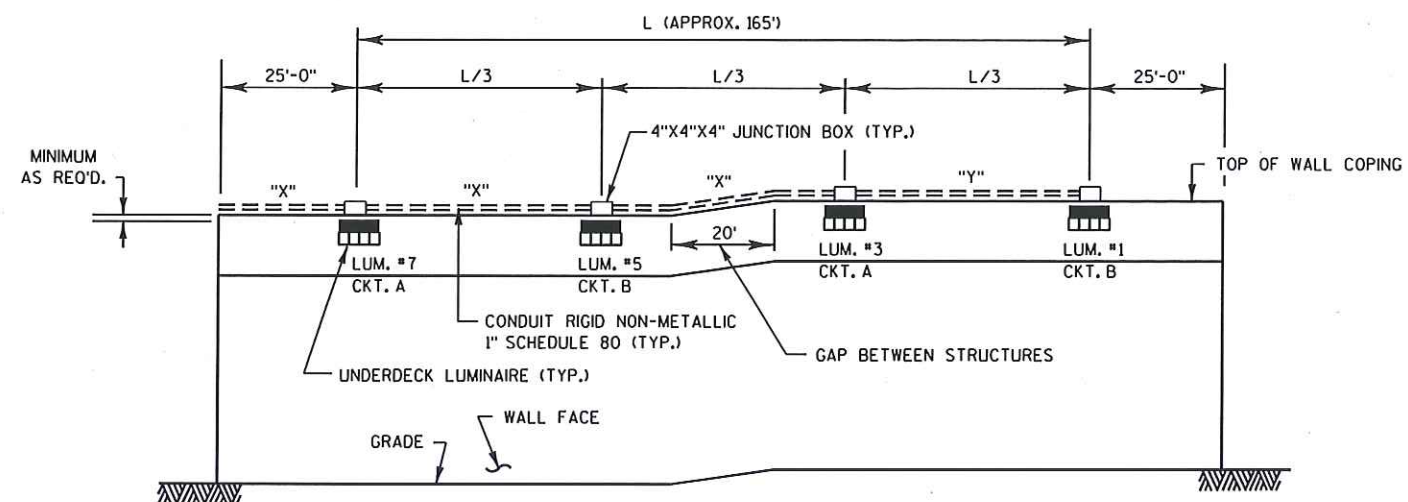
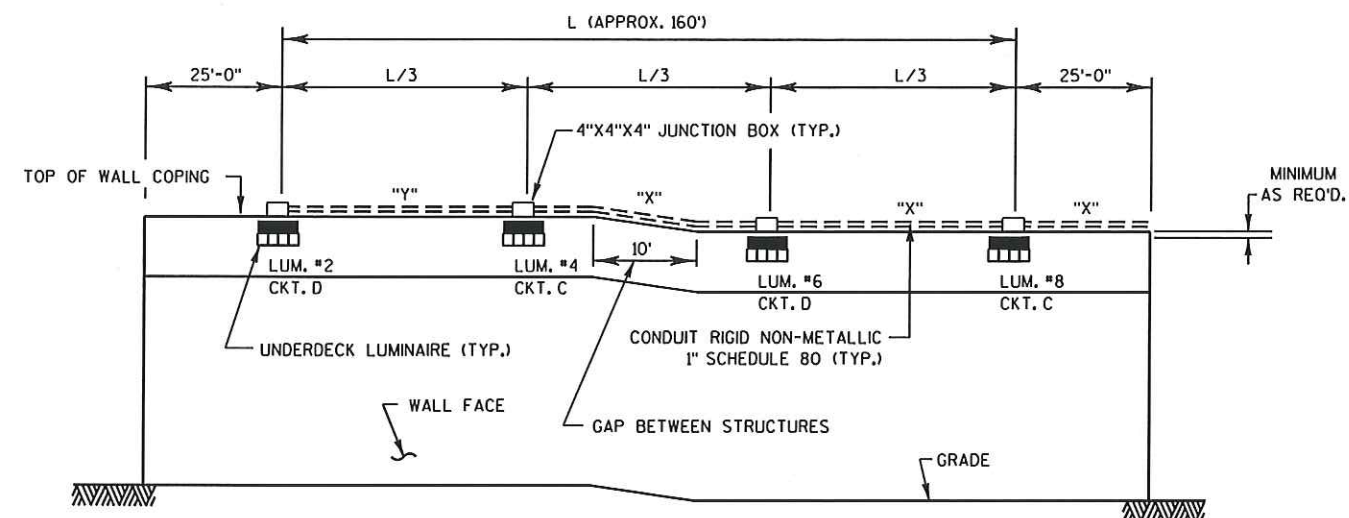
- NOTES:
- 1) SEE STRUCTURE PLANS FOR ADDITIONAL INFORMATION.
 - 2) ALL WORK MUST CONFORM TO THE NATIONAL ELECTRIC CODE.
 - 3) REFER TO STANDARD DETAIL DRAWING "ELECTRICAL DETAILS UNDERDECK LIGHTING" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL.
 - 4) ALL CONDUIT, BOXES AND FITTINGS SHALL BE RATED WATERTIGHT.
 - 5) UNDERDECK LIGHT CIRCUITS SHALL BE 240 VAC. WIRING SHALL BE 12 AWG MIN. FUSE IN JUNCTION BOX.
 - 6) LUMINAIRES ON WALL R-05-234 SHALL BE ON CIRCUITS C & D. LUMINAIRES ON WALL R-05-235 SHALL BE ON CIRCUITS A & B.
 - 7) USH 41 STREET LIGHTING SYSTEM IS NOT SHOWN ON THIS SHEET.
 - 8) LUMINAIRE SHALL BE BLACK IN COLOR AND FEATURE A WIRE VANDAL GUARD. FURNISH AND INSTALL STAINLESS STEEL BIRD SPIKES AS SHOWN. VANDAL GUARDS AND BIRD SPIKES SHALL BE INCIDENTAL TO THE UNDERDECK LIGHTING BID ITEM.
 - 9) ALL WIRING FROM JUNCTION BOXES IS INCLUDED IN THE UNDERDECK LIGHTING ITEM.
 - 10) ATTACH BIRD SPIKES WITH REMOVABLE FASTENERS FOR FUTURE MAINTENANCE ACCESS TO JUNCTION BOXES & LUMINAIRES.



WIRING LEGEND

"X" = 5 - #12 AWG

"Y" = 3 - #12 AWG

FACING USH 41
NO SCALEFACING NORTH ABUTMENT (R-05-235)
NO SCALEFACING SOUTH ABUTMENT (R-05-234)
NO SCALE

2

1

A/G - BLACK
B/H - RED
C/I - BLUE
D/J - BROWN
E - ORANGE
F - YELLOW

480V PHASE TO PHASE

- L05-0850 / USH 41 & IH 43 System Interchange South Leg - Velp Avenue / Village of Howard / Brown County
- CB 200 / Northeast Quadrant of NB USH 41 Roundabout / Next to CB500 (240V)
- 240/480 Volt Single Phase / 200 Amp Service
- Main Lugs Only Meter Pedestal
- Circuit Descriptions
Ckt A/B - USH 41 Mainline from Velp Ave. to SB 41 Entrance Ramp & SB USH 41 Entrance Ramp
Ckt C/D - NB USH 41 Exit Ramp
Ckt E/F - SB USH 41 from Velp Ave. to Duck Creek
Ckt G/H - NB USH 41 from Velp Ave. to Beginning of R-05-258
Ckt I/J - NB USH 41 Entrance Ramp

2

2

A/G - BLACK
B/H - RED
C - BLUE
D - BROWN
E - ORANGE
F - YELLOW

480V PHASE TO PHASE

- L05-0870 / USH 41 & IH 43 System Interchange North Leg - East Deerfield Culde Sac / Village of Howard / Brown County
- CB 300 / Southeast Quadrant of East Deerfield Culde Sac
- 240/480 Volt Single Phase / 200 Amp Service
- Main Lugs Only Meter Pedestal / Shared Power Source with ITS
- Circuit Descriptions
Ckt A/B - SB USH 41 from East Deerfield Culde Sac to end of B-05-682 & NB USH 41 from East Deerfield Culde Sac to end of B-05-681
Ckt C/D - NB IH 43 - NB USH 41 from East Deerfield Culde Sac to Beginning of Flyover
Ckt E/F - SB USH 41 Exit Ramp from East Deerfield Culde Sac to Velp Ave.
Ckt G/H - USH 41 Mainline from East Deerfield Culde Sac to North Project Limits

3

3

A/G - BLACK
B/H - RED
C - BLUE
D - BROWN
E - ORANGE
F - YELLOW

480V PHASE TO PHASE

- L05-0867 / USH 41 & IH 43 System Interchange East Leg - Hurlbut Court Culde Sac / Village of Howard / Brown County
- CB 400 / Northeast Quadrant of Hurlbut Court Culde Sac
- 240/480 Volt Single Phase / 200 Amp Service
- Main Lugs Only Meter Pedestal
- Circuit Descriptions
Ckt A/B - IH 43 Mainline from Hurlbut Court Culde Sac to South Project Limits
Ckt C/D - SB USH 41 - SB IH 43 from Hurlbut Court Culde Sac to End of Ramp
Ckt E/F - NB USH 41 - SB IH 43 from Hurlbut Court Culde Sac to End of Flyover
Ckt G/H - NB IH 43 - SB USH 41 from Hurlbut Court Culde Sac to End of Flyover

4

4

A - BLACK
B - RED
C - BLUE
D - BROWN
E - ORANGE
F - YELLOW

480V PHASE TO PHASE

- L-866 / USH 41 & STH 29 Interchange / USH 41 Mainline, Shawano Ave. - Lone Grove Ave. / Village of Howard / Brown County
- EXCB 200 / Southwest Quadrant of Memorial Drive and Vincent Road Intersection
- 240/480 Volt Single Phase / 200 Amp Service
- Main Lugs Only Meter Pedestal
- Circuit Descriptions
Ckt A/B - USH 41 Mainline from Box Culvert to SB 41 Entrance Ramp from Velp Ave.
Ckt C/D - USH 41 NB C-D Roadway from Memorial Drive to EN Flyover
Ckt E/F - USH 41 SB C-D Roadway from Memorial Drive to SW System Ramp

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A - BLACK
B - RED
C - BLUE
D - BROWN

240V PHASE TO PHASE

L4846
- L0826 / USH 41 & Velp Avenue Interchange - Roundabout Lighting / Village of Howard / Brown County
- CB 500 / Northeast Quadrant of NB USH 41 Roundabout / Next to CB200 (480V)
- 120/240 Volt Single Phase / 200 Amp Service
- Meter Breaker Pedestal / Shared Power Source with ITS
- Circuit Descriptions
Ckt A/B - North Side of NB and SB Roundabout / R-05-235 Underdeck
Ckt C/D - South Side of NB and SB Roundabout / R-05-234 Underdeck

WISDOT SYSTEMS

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A - BLACK
B - RED
C - BLUE
D - BROWN

240V PHASE TO PHASE

- CB 600 / Memorial Drive Roundabout Lighting
- 120/240 Volt Single Phase / 200 Amp Service
- Electrical Service Meter Breaker Pedestal Special
- Village of Howard / Brown County
- Circuit Descriptions
Ckt A/B - Street Lights (240V) North and East Sides of Roundabout
Ckt C/D - Street Lights (240V) South and West Sides of Roundabout
Ckt E/F - Receptacles (120V) North and East Sides of Roundabout
Ckt G/H - Receptacles (120V) South and West Sides of Roundabout

NON-WISDOT SYSTEMS

