

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

Bruce A. Van Note

October 18, 2024

Subject: Over Height Vehicle Detection

State WIN: 026128.00 Location: Bangor Amendment No. 2

Dear Sir/Ms.:

The following questions have been received:

Question: There are no plan sheets uploaded - is there a plan set available for this project?

Response: The plan has been posted to the Maine DOT website Under Contract Plan Set.

Consider these changes and information prior to submitting your bid on November 6, 2024.

Sincerely,

George M. A. Macdougall P.E. Contracts & Specifications Engineer

Lyon Washingto

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

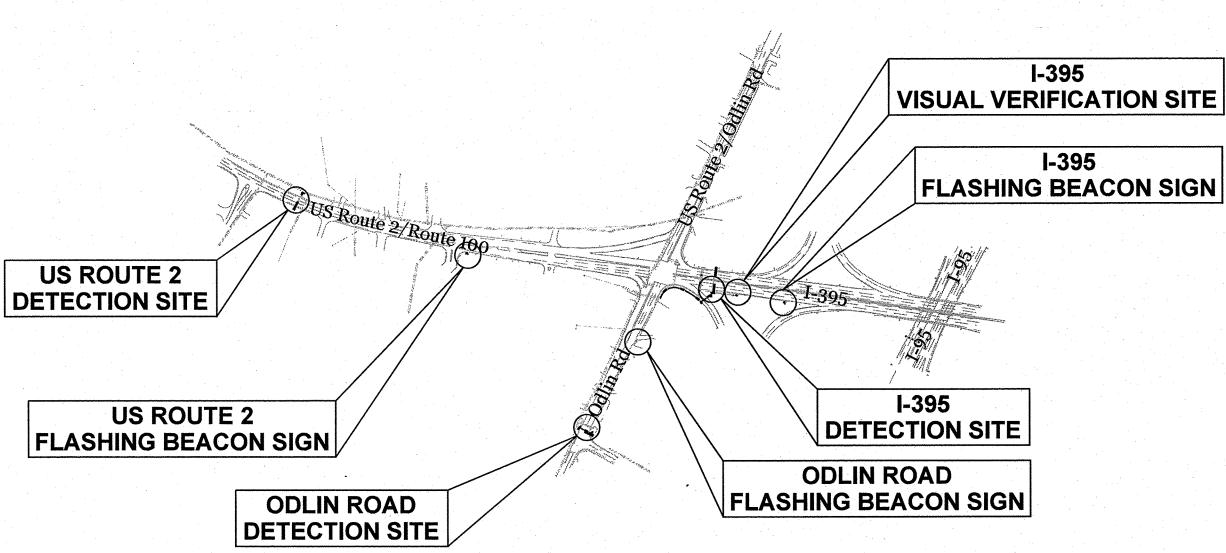
PLAN I	<u>LEGEND</u>
Town, County, State — — — — — — — — — — — — — — — — — — —	Centerline-Existing Centerline-Proposed Travelway-Existing Travelway-Proposed Railroad
Culvert Proposed Curbing Existing Proposed Type 1 Type 3 Type 5	Catch Basins ☐ Existing ☐ Proposed Manholes ○ Existing ☐ Proposed Proposed Underdrain → ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ←
Outline of Bodies of Water Exposed Bedrock	Utility Poles
Tree Line CLL—CLL—Boring	Existing San. Sewer Manhole © Guardrail-Existing Guardrail-Proposed
Existing Overhead Line ————————————————————————————————————	Guardrail-Cable, Other
	Existing Proposed
ITS Conduit	ITSPITS
Electrical Conduit	
Fiber Optic Cable	——————————————————————————————————————
ITS Controller Cabinet	
Wireless Communication	/#
CCTV	
Infrared Detector	
Pullbox	□PB ■PB
Meter Pedestal	
Support Posts Light Pole	



BANGOR

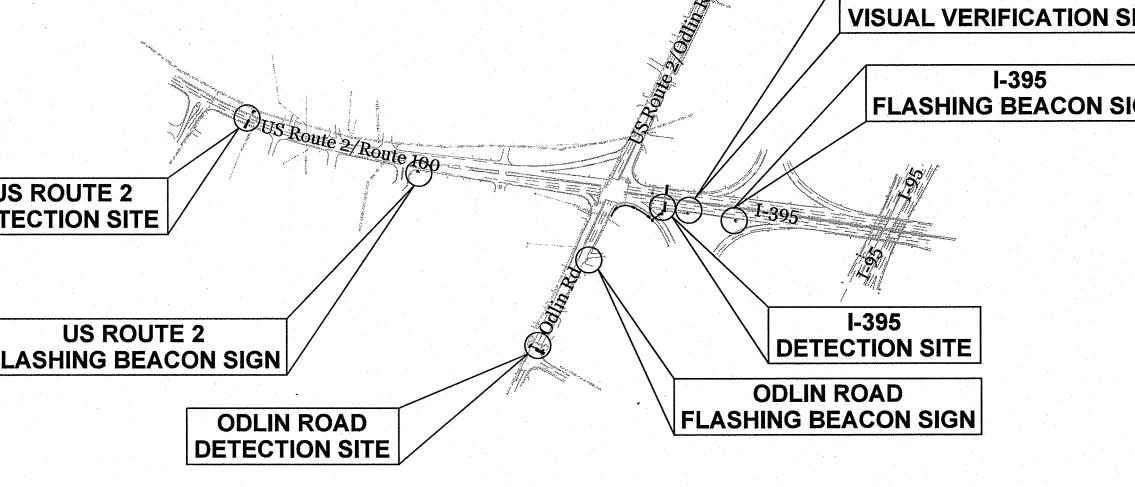
OVERHEIGHT VEHICLE DETECTION SYSTEM

FEDERAL PROJECT NO. 2612800 **STATE WIN 026128.00**



INDEX OF SHEETS

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PROJECT LOCATION:	I-95 and I-395 Interchange (Exit 182)
PROGRAM AREA:	Traffic
OUTLINE OF WORK:	This project will replace the legacy field equipment associated with the existing overheight (OH) detection system west of the I-95 southbound bridge over I-395 eastbound/Route 15 southbound in Bangor.

026128.00

WIN

SHEET NUMBER

OVERHEIGHT

SYSTEM

BANGOR VEHICLE DETECTION

GENERAL NOTES:

- I. ALL WORK SHALL CONFORM TO THE 2020 EDITION OF THE MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) STANDARD SPECIFICATIONS.
- 2. CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE 2020 EDITION OF THE MAINEDOT STANDARD DETAILS AND THE MAINEDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL (LATEST EDITION AND REVISIONS) UNLESS OTHERWISE INDICATED IN THESE PLANS.
- 3. NO FORMAL SURVEY WAS CONDUCTED FOR THE CONSTRUCTION OF THIS PROJECT, CONDUITS AND PULL BOXES WERE NOT ASSIGNED GPS COORDINATES. DESIGN WAS BASED ON AERIAL PHOTOGRAPHY, AND FIELD INVESTIGATION CONDUCTED BY MAINEDOT AND VHB.
- 4. ALL WORK SHALL OCCUR WITHIN THE EXISTING MAINEDOT RIGHTS-OF-WAY. ANY RIGHT-OF-WAY INFORMATION SHOWN ON THESE PLANS IS INTENDED FOR INFORMATIONAL PURPOSES ONLY.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING ACTUAL ELEVATIONS AND MOUNTING HARDWARE FOR THE PROPOSED OVERHEIGHT VEHICLE DETECTION SYSTEM EQUIPMENT INSTALLATIONS.
- 6. ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE DIRECTED BY THE RESIDENT. ALL PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR. COSTS FOR REPAIR OF DISTURBED AREAS SHALL BE INCIDENTAL TO OTHER CONTRACT ITEMS.

TEMPORARY TRAFFIC CONTROL:

- ALL TRAFFIC CONTROL EQUIPMENT, DEVICES, AND TEMPORARY TRAFFIC CONTROLS SHALL CONFORM TO THE 2009 EDITION OF THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CHAPTER 6 AND THE LATEST EDITION OF THE MAINEDOT STANDARD DETAILS.
- 2. ALL TEMPORARY TRAFFIC CONTROL SIGNS, SIGN SUPPORT STRUCTURES. CHANNELIZING DEVICES, FLASHING ARROW PANELS (FAP), PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) AND OTHER TRAFFIC CONTROL FQUIPMENT ALONG THE ROADSIDE SHALL MEET OR EXCEED MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) 2016. TEST LEVEL 3 (TL-3) IF MANUFACTURED AFTER DECEMBER 31.2019. ALL OTHER TRAFFIC CONTROL EQUIPMENT SHALL MEET OR EXCEED NCHRP 350 TL-3.
- 3. ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL HAVE ASTM D4956 TYPE VII, TYPE VIII OR TYPE IX SUPER HIGH INTENSITY OR PRISMATIC FLUORESCENT RETROREFLECTIVE SHEETING AND SHALL BE MAINTAINED IN LIKE-NEW CONDITION, ALL ORANGE CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE WITH TYPE IX SHEETING, PLACEMENT OF CONSTRUCTION SIGNS SHALL BE ADJUSTED TO AVOID OBSTRUCTING EXISTING SIGNS AND TO ENSURE PROPER SIGHT LINES TO THE CONSTRUCTION SIGNS AS DETERMINED BY THE RESIDENT.
- 4. ANY SIGNS, EQUIPMENT, OR DEVICES FOUND TO BE DAMAGED OR UNSERVICEABLE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL SHOULDER AND LANE CLOSURES SHALL REQUIRE APPROVAL OF THE RESIDENT A MINIMUM OF TWO WORKING DAYS IN ADVANCE OF THE CLOSURE.
- 6. IF WORK IS TO BE CONDUCTED AT NIGHT. THE CONTRACTOR SHALL SUBMIT A LIGHTING PLAN FOR NIGHT WORK TO THE RESIDENT FOR APPROVAL.

EXISTING EQUIPMENT:

- I. MAINEDOT SHALL HAVE FIRST RIGHTS TO ALL EQUIPMENT REMOVED OR REPLACED BY THE PROJECT (CONTACT LUKE LORRIMER AT 207-485-8723). THE CONTRACTOR SHALL CAREFULLY REMOVE AND STORE ALL EQUIPMENT CLAIMED BY MAINEDOT NEAR THE EXISTING UTILITY BUILDING FOR RETRIEVAL BY MAINEDOT. ALL EQUIPMENT REMOVED THAT HAS COMPUTER CHIP TECHNOLOGY SHALL BE STORED IN AN INTERIOR HEATED ENVIRONMENT.
- 2. THE CONTRACTOR SHALL TEST EXISTING EARTH TO GROUND RESISTANCE AT EACH HARDWARE AND CABINET LOCATION TO ENSURE A MINIMUM OF 25 OHMS IS MET. IF ANY LOCATION DOES NOT MEET THE MINIMUM GROUNDING REQUIREMENTS. THE CONTRACTOR SHALL INSTALL AND CONNECT ADDITIONAL GROUND RODS TO MEET THE 25 OHMS OR THE MANUFACTURER'S GROUNDING RECOMMENDATION. WHICHEVER IS MORE STRINGENT, GROUND RODS AND CONNECTIONS SHALL FOLLOW ALL NEC GUIDELINES AND SHALL BE INCIDENTAL TO OTHER CONTRACT ITEMS.
- 3. THE CONTRACTOR SHALL CLEAN THE INTERIOR OF ALL EXISTING EQUIPMENT CABINETS TO REMAIN WITHIN THE PROJECT LIMITS. THE CABINET, INCLUDING ALL CABLING AND WIRING, SHALL APPEAR NEAT AND TIDY. THE CONTRACTOR SHALL REPLACE ALL ACCESSORY EQUIPMENT IN EXISTING CABINETS THAT HAS FAILED AND/OR REACHED THE END OF USEFUL LIFE INCLUDING, BUT NOT LIMITED TO, FANS, HEATERS, SURGE PROTECTORS, FILTERS AND LIGHTBULBS.
- 4. THE CONTRACTOR SHALL LEAVE ONE COPY OF AS-BUILT PLANS, WIRING DIAGRAMS, CABINET BLOCK DIAGRAMS, AND EQUIPMENT MANUALS IN EACH EQUIPMENT CABINET.

PROPOSED EQUIPMENT

- I. THE CLOSED CIRCUIT TELEVISION SYSTEM (CCTV) SHALL CONSIST OF TWO TYPES OF CAMERAS, ONE CAMERA TYPE SHALL BE FIXED FOCUS TO RECORD LICENSE PLATE INFORMATION WHEN THE OVERHEIGHT DETECTION SYSTEM IS TRIGGERED. ONE CAMERA TYPE SHALL BE TO RECORD SHORT VIDEO CLIPS TO IDENTIFY VEHICLES THAT TRIGGER THE OVERHEIGHT DETECTION SYSTEM AND VISUALLY VERIFY THE CAUSE OF THE VEHICLE BEING OVERHEIGHT. THIS PROJECT REQUIRES THREE CAMERAS TOTAL.
- 2. THE OVERHEIGHT INFRARED DETECTOR UNITS SHALL BE INSTALLED AT A HEIGHT OF 14-FEET.O-INCHES ABOVE PAVEMENT.MEASURED AT THE EDGE OF TRAVELED WAY. THE OVERHEIGHT INFRARED DETECTOR UNITS SHALL BE FIRMLY AND SECURELY ATTACHED TO THE SUPPORTS INDICATED IN THE PLANS.
- 3. THE CONTRACTOR SHALL WORK WITH SPECTRUM TO OBTAIN A CABLE DROP FROM UTILITY POLE 28DI/262252 ALONG ODLIN ROAD NEAR THE DUNKIN DRIVEWAY. THE CONTRACTOR SHALL INSTALL 3-INCH NON-METALLIC CONDUIT FROM THE UTILITY BUILDING AT THE 1-95 SOUTHBOUND ON-RAMP. THE CONTRACTOR SHALL INSTALL A 3-INCH METALLIC RISER TO 5' ABOVE GROUND AT UTILITY POLE #4. SPECTRUM SHALL BE RESPONSIBLE FOR PULLING CABLE AND COMPLETING THE CABLE COMMUNICATIONS DROP. THE CONTRACTOR SHALL COVER ANY COSTS FROM SPECTRUM THAT ARE ASSOCIATED WITH THE COMMUNICATIONS DROP.
- 4. THE CONTRACTOR SHALL REPLACE EXISTING FLASHING BEACONS WITH NEW FLASHING BEACONS AS SHOWN. WHERE EXISTING FLASHING BEACONS HAVE BEEN PREVIOUSLY REMOVED. THE CONTRACTOR SHALL INSTALL NEW FLASHING BEACONS.
- 5. THE CONTRACTOR SHALL INSTALL NEW SOLAR POWER CONTROL SYSTEMS AND EQUIPMENT CABINET AS SHOWN.

GUARDRAIL PROTECTION:

I. IF THE CONTRACTOR ELECTS TO REMOVE A SEGMENT OF GUARDRAIL FOR ACCESS TO THE WORK AREA, THE CONTRACTOR SHALL RESET THE GUARDRAIL AT THE END OF THE WORKDAY. ALTERNATIVELY. THE CONTRACTOR SHALL PROTECT THE TEMPORARY BLUNT END WITH A SUITABLE CRASH CUSHION. CRASH CUSHIONS INSTALLED FOR THE CONTRACTOR'S CONVENIENCE WILL NOT BE PAID FOR BUT WILL BE CONSIDERED INCIDENTAL TO THE MAINTENANCE OF TRAFFIC CONTROL DEVICES ITEM.



	PROJ. MANAGER	D. LORING	ВҮ	DATE
	DESIGN-DETAILED	CM	JAR	5/2024
	CHECKED-REVIEWED CM	CM	SOW	5/2024
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N 1 1	DESIGN3-DETAILED3			
	REVISIONS 1			
	REVISIONS 2			
	REVISIONS 3			
	REVISIONS 4			

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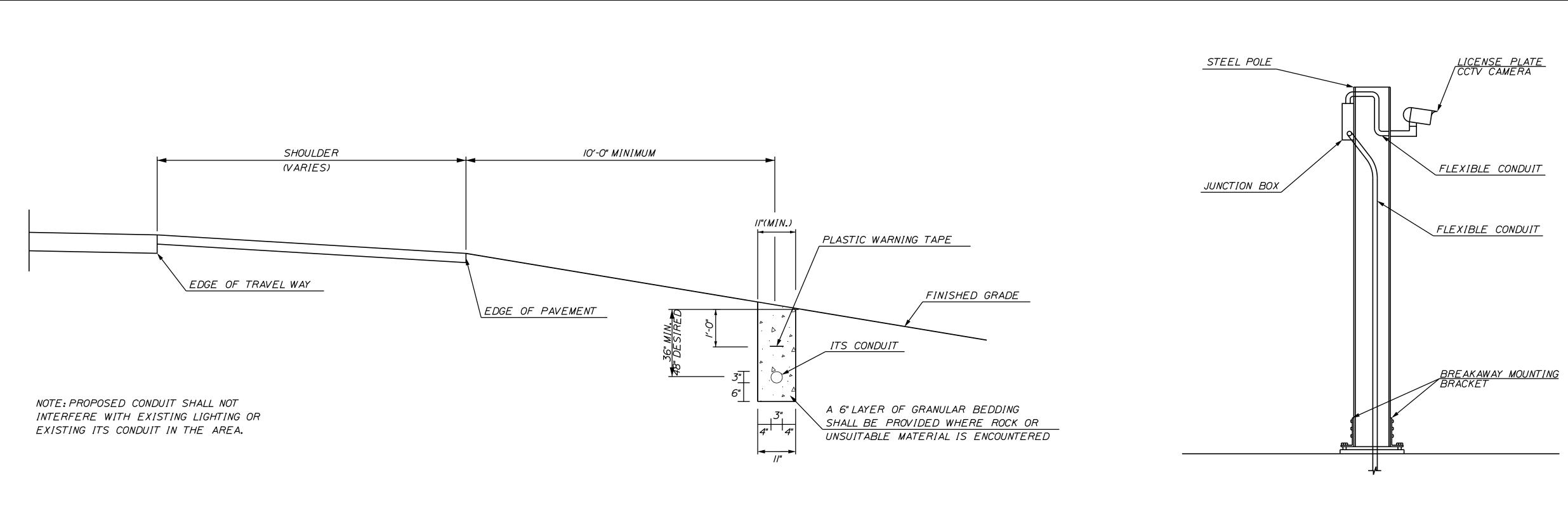


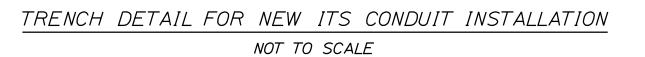
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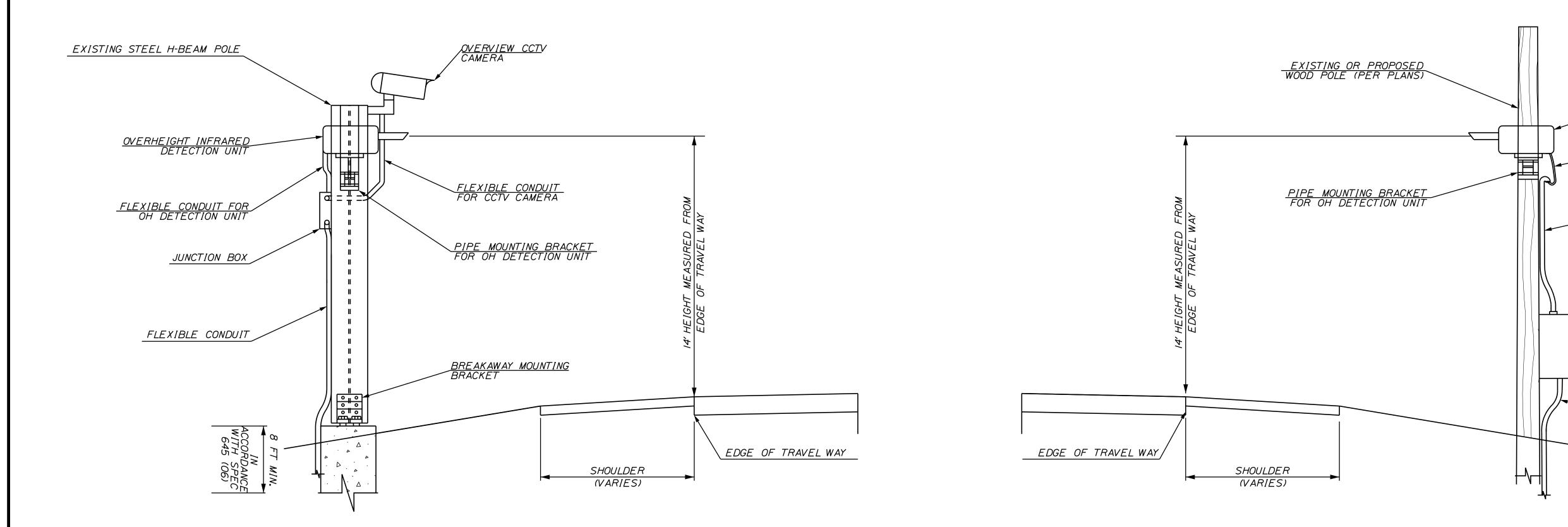












OH DETECTION AND CAMERA MOUNTING DETAIL NOT TO SCALE

OH DETECTION MOUNTING DETAIL

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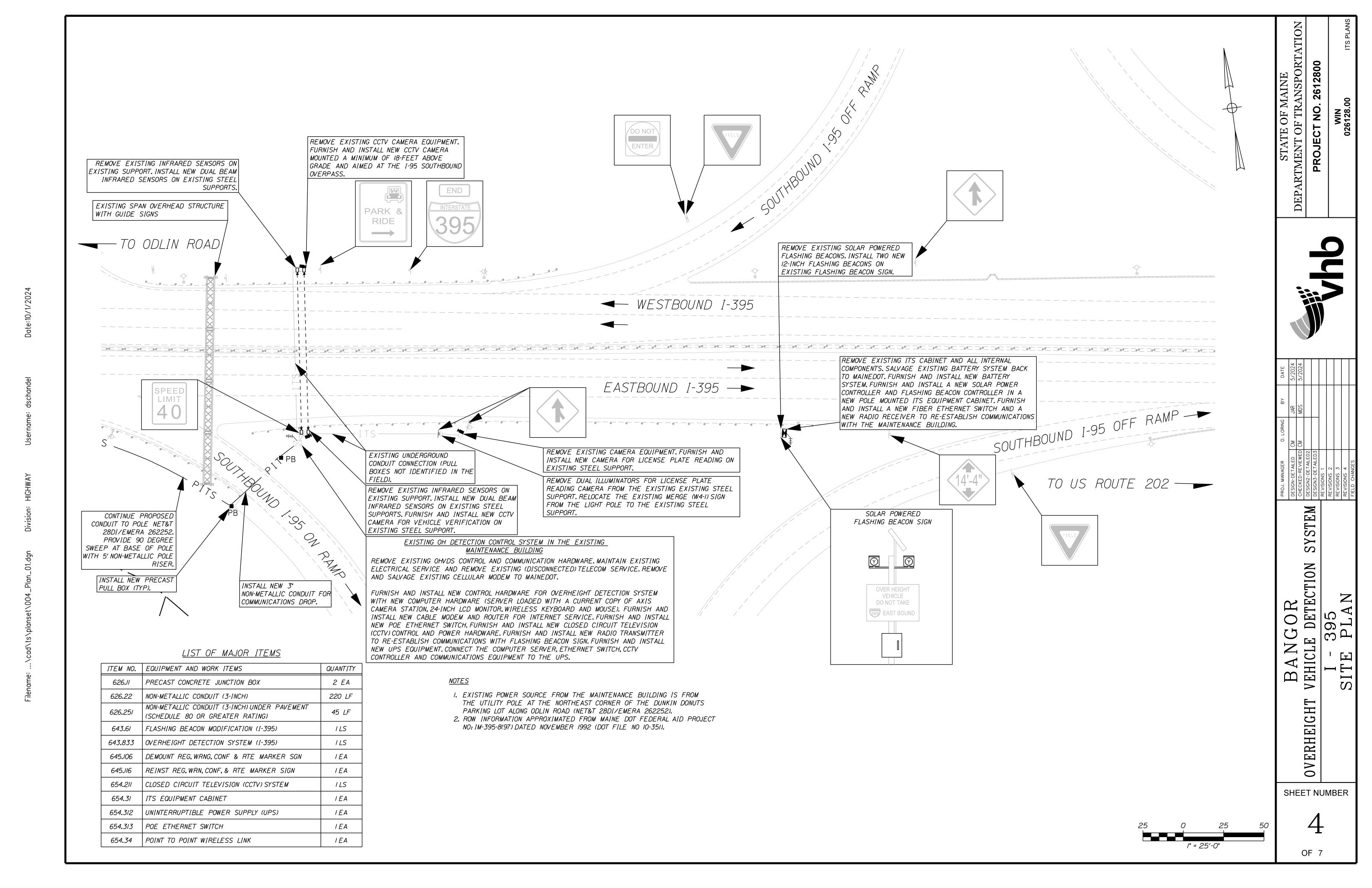
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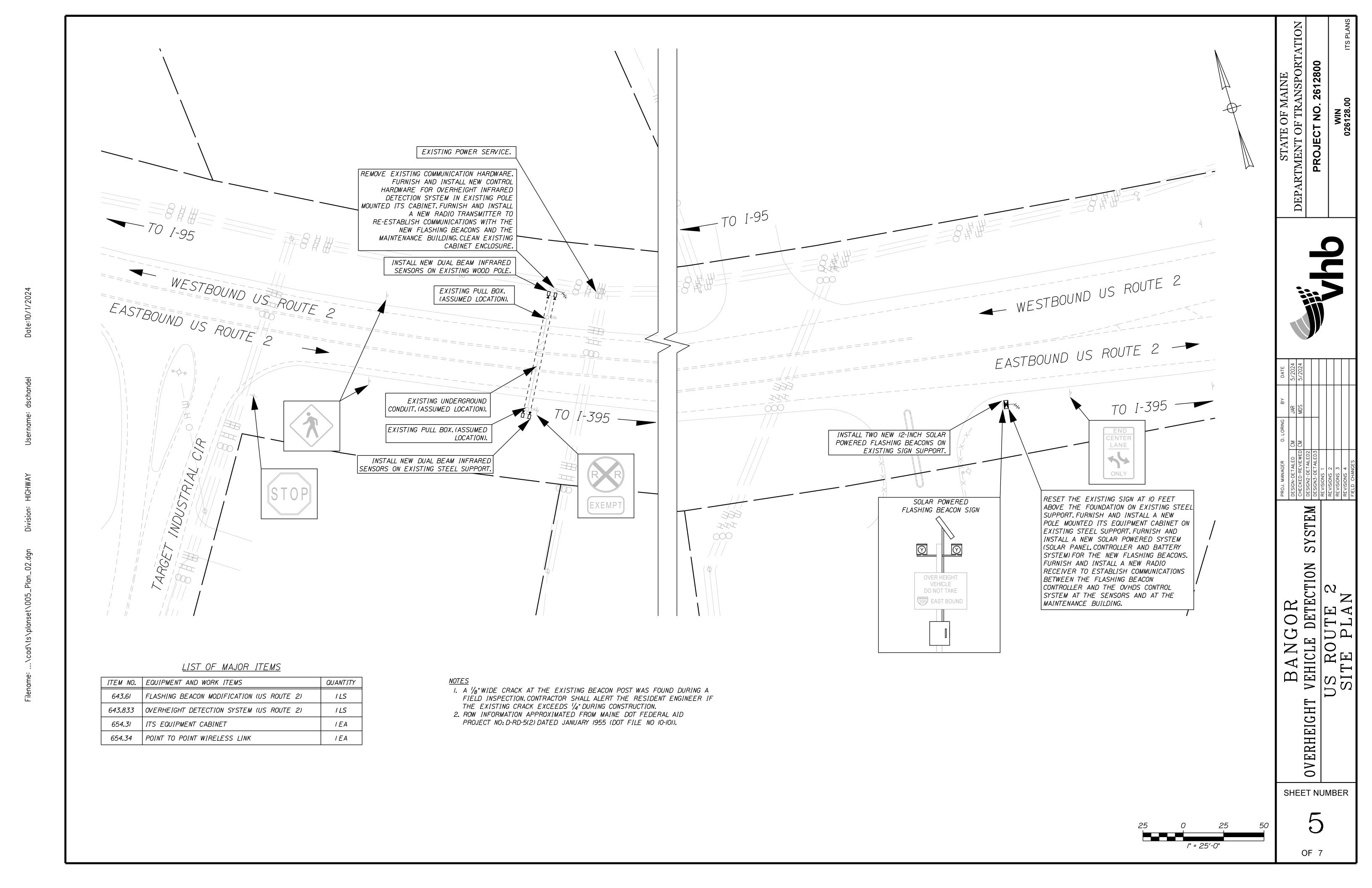
OVERHEIGHT INFRARED
DETECTION UNIT

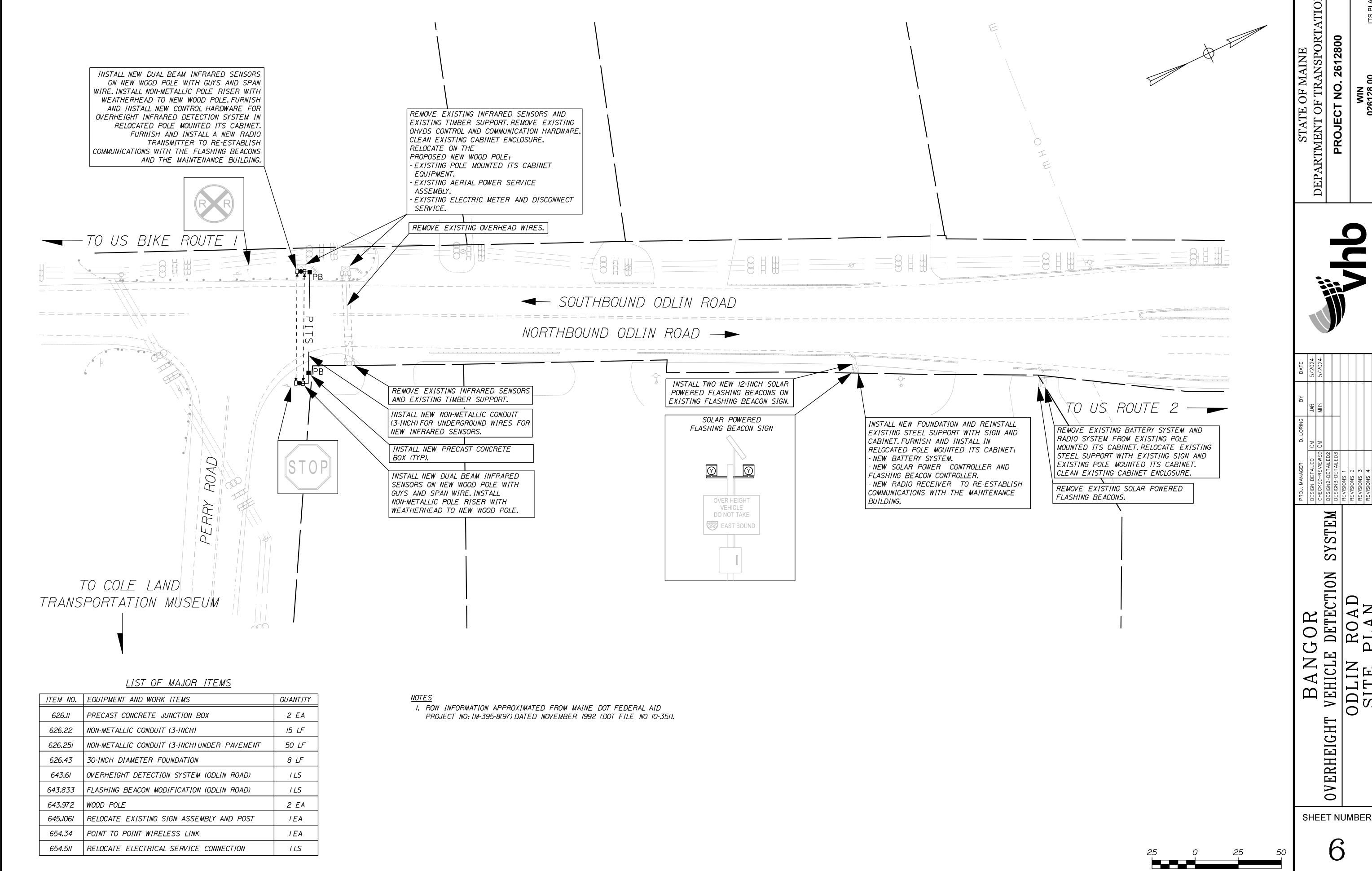
NON-METALIC POLE RISER WITH WEATHERHEAD

POLE MOUNTED CABINET

FLEXIBLE CONDUIT

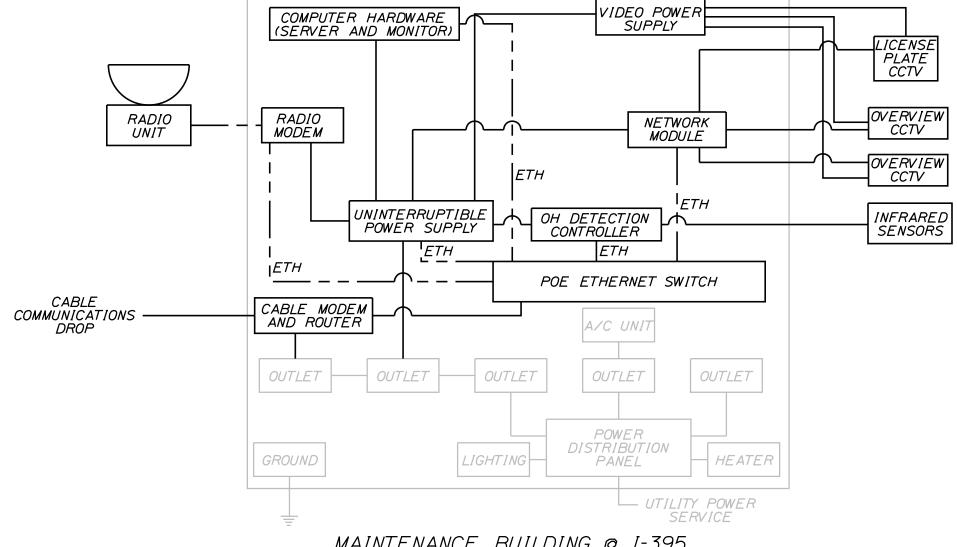




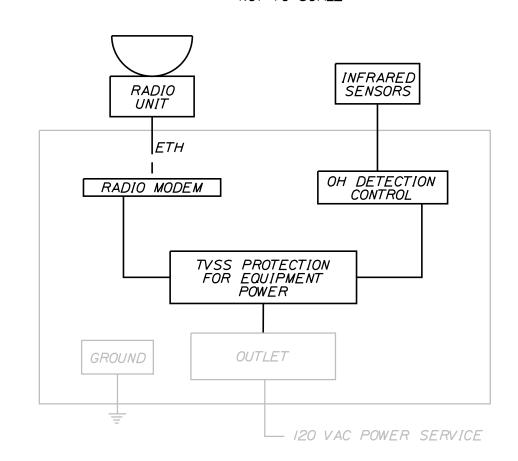


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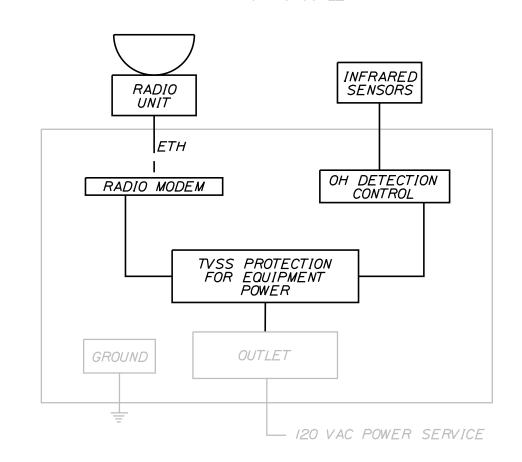
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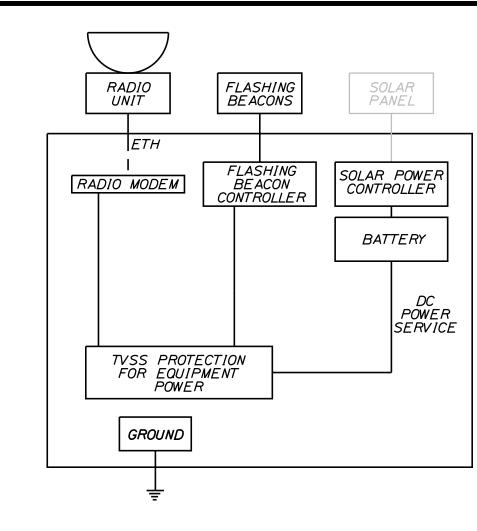
MAINTENANCE BUILDING @ 1-395 NOT TO SCALE



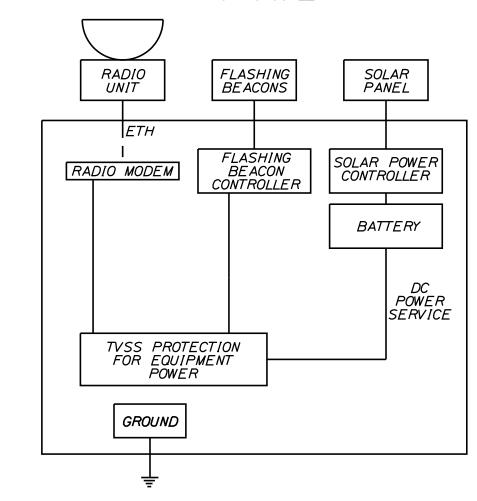
OH DETECTION CABINET @ US ROUTE 2 NOT TO SCALE



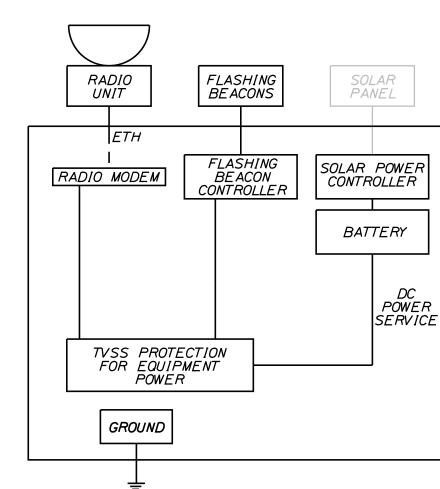
OH DETECTION CABINET @ ODLIN ROAD NOT TO SCALE



FLASHING BEACON CABINET @ 1-395 NOT TO SCALE

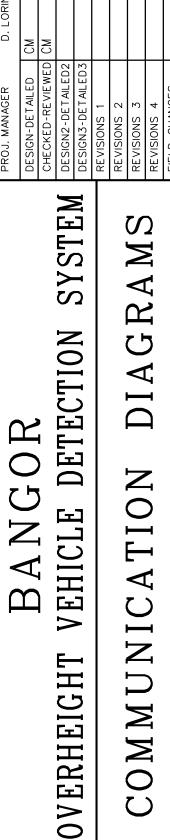


FLASHING BEACON CABINET @ US ROUTE 2 NOT TO SCALE



FLASHING BEACON CABINET @ ODLIN ROAD NOT TO SCALE

ITS CABINET BLOCK DIAGRAMS



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