<u>SPECIAL PROVISION</u>

Signal and Light Supports

(Signal, Combination Signals, Pedestal and Light Supports Material Only Contract)

C-R-S: ROS-159-0.41

PID: 113013

Date: 1/17/2025

<u>Comment</u> – this Special Provision includes the bid documents used for the Material Only contract to acquire certain supports (poles) for the ROS-159-0.41 (113013) project so that they would be available for the installation by the Highway contractor. Also included are the approved shop drawings for the supports. Highway contractor shall coordinate delivery of supports from the support vendor with and perform all inspections of the supports upon delivery and also unload all materials delivered.

Support Vendor

Ohio Traffic and Lighting Solutions, Inc. 2688 Sawbury Blvd., Columbus, OH 43235 **Phone:** 614-219-7341 **Fax:** 614-219-7346

Web: www.OhioTLS.com Email: Mark@OhioTLS.com

Contact: Mark Minic

REQUIREMENTS/ SPECIFICATIONS

Section 1: Intent

The purpose of this Invitation is to procure materials in advance of a construction project, in which ODOT will hire a Highway Contractor to install the materials. The procurement is in advance to minimize delay, due to lead times. Various designs and styles of signal poles, combination signal poles, light poles and pedestals are to be furnished in accordance with the Department's requirements and specifications.

Section 2: Contract Duration

The contract shall be a one (1) time award for the services requested.

Section 2.1 OhioBuys

Vendors must submit their Bid Responses electronically in OhioBuys before the published deadline date & time, Columbus, Ohio local time on the Proposal due date. Vendors will not be able to submit Bid Responses, or unsolicited Proposal amendments after the deadline.

Vendors must allow adequate time for uploading a Bid Response prior to the due date and time. ODOT recommends that vendors submit Bid Responses as early as possible. If a second round is issued for any reason, vendors must resubmit their bid if they had already submitted in a previous round, as the previously submitted Bid Responses do **NOT** carry over to the new round.

The Signature process takes place after the award now. The email will come from documents@esign.ohio.gov and will go to the signatory that was identified in the bid submission. The subject line will be the bid # Signature Request, (example: 101G-25 Signature Request).

No contract can be issued to your company until we receive your signature to complete the process. And you must have an OAKS Payor ID before a contract can be issued. To obtain that, you will need to go into https://ohiopays.ohio.gov.

Section 3: Free on Board (F.O.B.) Destination

All deliveries shall be Free on Board (F.O.B.) to Chillicothe, Ohio 45601. The Department will not accept any additional charges for deliveries. The Department intends to contract with a Highway Contractor in February 2025 and will require the Highway Contractor to receive and take delivery of the materials purchased by this contract. The Highway Contractor will coordinate with this VENDOR to facilitate delivery, inspection, acceptance and unloading of the materials. The exact location of the delivery point in Chillicothe, Ohio will be determined by the Highway Contractor.

Section 4: Delivery

Delivery of the materials shall be made by or after the dates listed below once a written notification of a valid State of Ohio Purchase Order (PO) is provided to the VENDOR. Delivery is not anticipated until the Highway Contractor is hired and ready for the materials, which is not likely to occur until mid to late March 2025. However, based upon the highway construction work anticipated at the beginning of the project, the materials supplied by this VENDOR will need to be ready for delivery by March 17, 2025. The Highway Contractor will determine the exact delivery date and it will be on or after March 17, 2025.

4.1: Delivery Hours

All deliveries shall be coordinated to ensure proper storage and hand-off methods are in place. Deliveries must be between the hours of 8:00 a.m. and 3:30 p.m., Monday through Friday,

excluding State of Ohio holidays, unless special permission is granted by the Department to temporarily waive or adjust this requirement.

The awarded VENDOR shall also adhere to the following schedule for shop drawings:

- Shop Drawings shall be submitted to ODOT for review within 4 weeks upon written or verbal notification of a valid State of Ohio Purchase Order (PO), and the VENDOR shall anticipate a two-week period for ODOT to return any comments and grant approval.
- Shop Drawings shall be released by the VENDOR to begin fabrication within 2 weeks after receiving approval from ODOT.

Section 5: Specifications and Procedures for Signal, Combination Signals, Pedestal and Light Supports

5.1: Specifications

These specifications and procedures have been compiled in part from the Ohio Department of Transportation 2023 Construction and Material Specifications Manual (C&MS), which can be found here:

https://www.dot.state.oh.us/Divisions/ConstructionMgt/OnlineDocs/Pages/2023-OnlineSpec-Book.aspx.

Additionally, all supports furnished shall conform to the following Standards unless otherwise stated: C&MS 625, 630, 632, 725, 730, and 732, as well as Standard Construction Drawings TC-9.11, TC-9.31, TC-10.11, TC-10.12, TC-10.13, TC-12.31, TC-15.116, TC-16.22, TC-17.11, TC-20.11, TC-21.11, TC-21.21, TC-22.10, TC-81.11, TC-81.22, TC-83.20, TC-85.10, TC-85.20, HL-10.11, HL-10.12, HL-10.13, HL-10.31, HL-20.11 and HL-20.21 which can be found here: https://www.dot.state.oh.us/SCDs/Pages/traffic.aspx.

The furnished supports/poles shall include the associated hardware as shown on all applicable SCDs, which includes but is not limited to bracket arms, transformer bases, arm support bolts, damping device (if mast arm length requires), foundation anchor bolts, hand hole covers, pole caps, lightning arrestor, and plugs for blind half couplings washers, leveling nuts and steel hex nuts. If shown on the attached plans from the bid requestor, furnish bracket arms with all attachment hardware.

All supports shall be permanently marked as to ODOT design type, height, and arm length (if applicable) (e.g. TC-81.22, DES 12; 25' HT., 45' ARM) on the bottom of the anchor base plates. The manufacturer's catalog numbers, or other identifying codes may remain on the supports, but they will not fulfill this requirement. Anchor bolt sets shall be identified by permanently marked waterproof tags. If delivered parts are not easily identified on the bottom of the anchor base for supports or by waterproof tags for anchor bolt sets as to design type and length, the parts will be returned to the bidder at his or her expense. No unidentified parts will be accepted.

The supports shall be pre-drilled and shipped with plugs at all powered device locations noted in the detailed design in Attachment A which is the applicable plan sheets. Supports without plugs will not be accepted.

The fabricators must adhere and be listed as required on Supplement 1091 and 1094, which can be found here:

https://www.dot.state.oh.us/Divisions/ConstructionMgt/Pages/ProposalNotesSupplementalSpecificationsandSupplements.aspx.

All materials (except bolts, washers and nuts) shall be supplied in gloss black finish in accordance with ODOT Supplemental Specification 916. For field touch-up by the Highway

Contractor, provide 1.0 qt. of the coating per 4 supports ordered. The coated supports shall adhere to Supplemental Specification 916, which can be found here: http://www.dot.state.oh.us/Divisions/ConstructionMgt/Pages/ProposalNotesSupplementalSpecificationsandSupplements.aspx.

All materials shall comply with ODOT Supplemental Specifications 800, 809 and 913, as applicable.

5.2: Procedures

The submittal of a unit bid price does not guarantee that ODOT will purchase the materials from the VENDOR. A specific Purchase Order (PO) will be sent to the VENDOR and at that time, the Delivery Dates noted in Section 4 will begin.

The ODOT requestor shall supply the VENDOR with applicable details (see bid spreadsheet and Attachment A) that include but are not limited to the Support Type, Design Number, Support Height, Arm/Structure Attachment Height, Arm/Structure Length, Arm Device Locations, Cable Entrance Distance from the top, and Index Line Angles as well as Pole Item Orientation Angles.

At the time of the bid, the bidder shall file all detailed plans, drawings, photographs, specifications, etc. on the proposed items. If further clarification is needed by the bidder due to issues or design errors before the bid opening date, the bidder shall submit all pre-bid questions to the Office of Contracts. Any deviations from the specifications indicated herein must be clearly pointed out. Otherwise, it will be considered that items offered are in strict compliance with these specifications herein and the successful bidder will be held responsible, therefore. If more than one catalog number, style or type is listed on one sheet the item to be furnished must be identified clearly by circling, underlining, or other marking. Discovery of details not meeting specifications may result in disqualification of the bid.

Approval of these detailed plans, drawings, etc. shall not relieve the bidder of the responsibility for erroneous or inconsistent dimensions, notations, omissions, or other errors in the design of the delivered product.

The unit bid price shall include delivery charges.

Each unit delivered shall be guaranteed against faulty material and workmanship for a period as stated by the bidder in the proposal (this guarantee period shall be not less than that usually granted) and, if during this period such faults develop, the bidder agrees to replace the unit or the part affected without cost to ODOT, with all replacement charges paid for by the VENDOR.

Anchor bolts shall be delivered in bundles. A bundle shall consist of four (4) same size anchor bolts. Each bolt shall have two (2) nuts and two (2) flat washers. The nuts and washers shall be installed on each bolt when delivered.

The supplier shall notify the point of delivery date and time at least five (5) days in advance of the day of delivery or at the time of loading prior to shipment, whichever is sooner. An itemization of all delivered parts shall be provided with each shipment.

Section 6: Storage of Materials

VENDORs are required to store materials at no additional cost until no later than April 18, 2025 and await notification by the Highway Contractor and ODOT of the location that delivery is to be made (See Sections 1 through 4). After April 18,2025, any cost related to storage of materials, shall be negotiated between the VENDOR and the Highway Contractor.

Section 7: Steel Specification: Ohio Revised Code (Section 153.011) and CM&S 106.09 - Steel & Iron Products Made in the United States

To be noted, all requirements stated in CM&S 106.09 shall be adhered to.

State of Ohio, Department of Transportation (ODOT) Office of Contract Sales, Purchasing Services OhioBuys

Terms and Conditions for Submitting Excel Pricing File in Bid Package If an Excel File is Present in OhioBuys

- 1. SUBMISSION OF EXCEL PRICING FILE: Bidders should submit the pricing page in the original excel format.
- **2. UNAPPROVED ALTERATIONS TO EXCEL PRICING FILE**: Bidders who materially alter the original content of the Excel pricing file (e.g. specifications, formulas, etc.) issued by the Department may be found non-responsive and ineligible for award of this procurement.
- **3. CHANGES TO EXCEL PRICING FILE**: The Department will only make modifications to the Excel pricing file by written addendum only. Where changes are necessary to the Excel pricing page, the Department will issue a new Excel pricing page indicating the revisions made and a revision date for the changes.

It is the sole responsibility of the bidder to check for issued addenda prior to submitting a bid package to ensure the most updated Excel pricing file is being utilized.

4. DESCRIPTIVE LITERATURE: Bidders may electronically provide any descriptive literature (e.g. brochures, spec/cut sheets, drawings, MSDS, etc.) regarding the products and/or services offered by the bidder. As this literature may be publicly posted for viewing by purchasers, bidders must not submit any literature electronically in which they consider to be a trade secret, proprietary, or confidential in any way.

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State of Ohio, Department of Transportation (ODOT) Office of Contract Sales, Purchasing Services

INSTRUCTIONS, TERMS AND CONDITIONS FOR BIDDING

(Last revised 11/2/2023)

- 1. BIDDER REGISTRATION: The Department requires awarded bidder(s) to successfully register as a State of Ohio Supplier with the Department of Ohio Shared Services and successfully obtain an OAKS vendor identification number (OAKS ID) within fourteen (14) calendar days from the date of contract award and execution. The Department cannot utilize awarded Contracts to purchase from a bidder who cannot obtain an OAKS ID from Ohio Shared Services. In the event an awarded bidder is unable to obtain an OAKS ID, the Department shall reserve the right to revoke its award to the bidder and immediately cancel any resulting Contract.
 - a. A Supplier Information Form and W-9 must be completed and sent back directly to Ohio Shared Services in order to register and apply for an OAKS ID. The following website can be accessed by bidders to obtain both the forms and specific instructions for obtaining an OAKS ID:
 - b. http://ohiosharedservices.ohio.gov/SupplierOperations/Forms.aspx
 - c. It is strongly recommended that all interested bidders not already registered with Ohio Shared Services submit the above paperwork prior to the bid submission deadline.
- 2. **HOW BIDS MUST BE SUBMITTED**: Vendors must submit their Bid Responses electronically in OhioBuys before the published deadline date & time, Columbus, Ohio local time on the Proposal due date. Vendors will not be able to submit Bid Responses, or unsolicited Proposal amendments after the deadline.
 - Vendors must allow adequate time for uploading a Bid Response prior to the due date and time. ODOT recommends that vendors submit Bid Responses as early as possible. If a second round is issued for any reason, vendors must resubmit their bid if they had already submitted in a previous round, as the previously submitted Bid Responses do **NOT** carry over to the new round.
- 3. PREBID QUESTIONS, DISCREPANCIES, AND CLARIFICATIONS: Any discrepancies, omissions, ambiguities, or conflicts in or among the bidding documents or doubts as to the meaning shall be brought to the Department's attention by the bidder no less than three (3) business days prior to the bid submission deadline. All questions, discrepancies, clarifications, etc. must be submitted electronically in OhioBuys. During the competitive bidding process, bidders (and their agents) are prohibited from contacting any ODOT office, including District offices, other than the Office of Contract Sales, Purchasing Services section to obtain responses to any questions. The Department may find a bidder non-responsive for failing to adhere to any of the above requirements.
- 4. **MODIFICATIONS TO THE BIDDING DOCUMENTS:** When it is deemed necessary to modify these bidding documents, the Department will only do so by written addendum. The issuance of an addendum is dependent upon the information received and the impact on the competitive bid process. All issued addenda will be posted to the OhioBuys website.
- 5. PRE-BID CONFERENCES: The Department reserves the right to hold mandatory or optional pre-bid conferences at its discretion. Conferences may be held either in-person or via webinar/phone conference formats. Bidders will be required to sign-in at all pre-bid conferences. The sign-in sheet for all pre-bid conferences is considered a public record, will be kept in the bid file, and will be shared with any requesting party. Additionally, any business cards collected during any pre-bid conference shall be considered public records and may be distributed out to all conference attendees. Any changes to the requirements or specifications of a procurement, as a result of the pre-bid conference content, will be made by written addendum and publicly posted.
 - a. For mandatory pre-bid conferences, the Department requires that those companies intending on submitting a bid be in attendance for the entire duration of the pre-bid conference. Mandatory prebid conferences will officially begin five (5) minutes after the scheduled date and start time at the location specified in the Special Terms and Conditions. Those bidders not in attendance at that time will be considered ineligible to submit a bid. The conference will be considered adjourned and

complete when a representative of the Office of Contract Sales, Purchasing Services section indicates so. To be considered in attendance and eligible to bid, a bidder must have at least one representative of the company in attendance. A single representative cannot be present on behalf of two or more companies (bidders). Each company (bidder) must send its own representative on behalf of their organization. It is the sole responsibility of the bidder to ensure that the representative follows the sign-in procedures to properly document the bidder's attendance. The Department shall not be held responsible for a bidder's failure to arrive at the meeting on time, properly sign-in, or failure to stay for the entire duration of the meeting.

- 6. **LATE BIDS:** A bid received after 1:00 p.m. eastern time, on the bid submission deadline. The system will not allow a bid after the closing date and time.
- 7. **BIDS FIRM**: Once opened, all bids are firm and cannot be altered by the bidder. Once a Contract is awarded and executed, the Vendor shall deliver all products and/or services at the bid prices and terms contained in the Contract. All submitted bids shall remain valid for a period of sixty (60) calendar days after the date of the public bid opening. Beyond sixty (60) calendar days, bidders will have the option to either honor their submitted bid or make a written request to withdraw their bid from consideration. The Ohio Department of Transportation shall receive the benefit of any decrease in price during the sixty (60) day period.
- 8. **WITHDRAWAL OF BIDS**: A bidder may withdraw their bid in OhioBuys prior to opening. If after opening a vendor wishes to withdraw their bid, they may do so in writing to the Ohio Department of Transportation.
- 9. **MODIFICATION OF SUBMITTED BIDS PRIOR TO BID OPENING**: A bidder may modify their bid response prior to the scheduled date and time set for the public bid opening in OhioBuys.
- 10. UNIT BID PRICES: The unit bid price(s) submitted shall govern the award of this procurement unless otherwise specified in the bid evaluation criteria. The unit bid price should be entered for each required bid item on the Department's pricing page. Use of ditto marks, arrows, or other markings in lieu of the actual unit price may result in a non-responsive bid determination. Lot or group prices listed in the unit bid price area shall be considered as the unit price unless clearly identified as the lot price. Unless specifically allowed in the contract's terms and conditions, requests to change or alter unit bid prices after the public bid opening are prohibited.
 - a. The following requirements also apply to unit bid prices:
- 11. **DECIMAL POINT**: Bidders should not insert a unit cost of more than two (2) digits to the right of the decimal point. Digit(s) beyond two (2) will be dropped and not recognized by the Department for the purposes of bid evaluation or contract award.
- 12. **CREDIT CARD FEES**: Bidders must incorporate into their unit bid price(s) submitted all costs and fees associated with the State's use of a payment (credit) card.
- 13. **DISCOUNTS**: While bidders may offer to the Department discounts for prompt payment and other similar incentives, discounts and incentives these will not be used to alter the submitted unit bid price(s) for purposes of bid evaluation and contract award. This section only applies to bids awarded to the lowest responsive and responsible bidder either by individual bid item or group of bid items and does not include bids which are awarded to all responsive and responsible bidders (i.e. Multiple Award Contracts).
- 14. **MULTIPLE AWARD CONTRACTS**: Pursuant to Ohio Revised Code 5513.02, the Department may award Contracts to all responsive and responsible bidders for articles (i.e. bid items) meeting the general specifications provided. These are referenced by the Department as 'Multiple Award Contracts'. Unit bid prices submitted for Multiple Award Contracts shall be considered by the Department as an amount-not-to-exceed unit bid price for the entire duration of the Contract. These awarded, amount-not-to-exceed bid prices often do not reflect potential quantity discounts, freight discounts, nor other similar discounts/incentives offered periodically by a distributor, manufacturer, or supplier. Where like or similar bid items are being offered by two or more awarded Vendors (bidders) on the awarded Contract, the Department reserves the right to obtain quotes from all awarded bidders on the Contract in order to achieve the best and most up-to-date pricing available to the Department at the time of ordering.
- 15. **UNBALANCED BIDS**: The Department will not accept unit bid prices that are deemed to be either materially or mathematically unbalanced. The final determination of an unbalanced unit bid price shall be at the Department's sole discretion.

- 16. **TIE BID PROCESS**: If two or more responsive bids offer the same unit bid price, ODOT may break the tie as follows: during the bid evaluation process, the bidders that submitted tie bids will be contacted and given up to three (3) business days to submit a written revised unit price for the affected item or items. Bidders are not required to submit a revised unit price. In the event a tie still exists after the above-prescribed deadline has passed, ODOT will schedule a coin flip to be conducted in the presence of both bidders. The winner of the coin flip will be deemed awarded the affected bid item(s).
- 17. **PREFERENCE FOR OHIO/BORDER STATE PRODUCTS**: The bid award for this procurement <u>may</u> be subject to the domestic preference provisions of the Buy America Act, 41 U.S.C.A., 10a-10d, as amended, and to the preference for Ohio products under O.R.C. Sections 125.09 and 125.11 and Ohio Administrative Code Rule 123:5-1-06.
- 18. **RESPONSIVE BIDDER**: A bidder is responsive if its bid responds to the bid specifications in all material respects and contains no irregularities or deviations from the specifications that would affect the amount of the bid or otherwise give the bidder an unfair competitive advantage.
- 19. **MINOR INFORMALITIES OR IRREGULARITIES IN BIDS:** A minor informality or irregularity is one that is merely a matter of form and not of substance. It also pertains to some immaterial defect in a bid or variation of a bid from the exact requirements of the invitation that can be corrected or waived without being prejudicial to other bidders. The defect or variation is immaterial when the effect on price, quantity, quality, or delivery is negligible when contrasted with the total cost or scope of the supplies or services being acquired. The Department either shall give the bidder an opportunity to cure any deficiency resulting from a minor informality or irregularity in a bid or waive the deficiency, whichever is to the advantage of the Department.
- 20. **BIDDER RESPONSIBILITY**: The Department will only award this procurement to what it deems to be a responsible bidder. The Department's determination of a bidder's responsibility includes, but is not limited to, the following factors:
 - i. experience of the bidder;
 - ii. bidder's financial condition;
 - iii. bidder's conduct and performance on previous contracts;
 - iv. the bidder's facilities:
 - v. the bidder's management skills;
 - vi. the bidder's employees;
 - vii. past experience and/or quality of bidder's proposed subcontractors;
 - viii. the bidder's ability to execute the contract;
 - ix. review of Federal and Department debarment lists;
 - x. bidder has history of successful performance on contracts of similar size and scope; and
 - xi. current or impending legal actions against a bidder.
- 21. **APPARENT CLERICAL MISTAKES**: Clerical mistakes apparent on the face of the bid may be corrected, at the Department's discretion, before contract award. The Department first shall obtain from the bidder a verification of the information intended and will attach written verification of the mistake by the bidder in the contract file and award documents. Example of apparent clerical mistakes are:
 - 1. Obvious misplacement of a decimal point or comma;
 - 2. Obvious incorrect discount factor; or
 - 3. Transcription error in Part Number.
- 22. **ADDITIONAL INFORMATION**: The Department reserves the right to request additional information to evaluate a bidder's responsiveness to the procurement's requirements and/or to evaluate a bidder's overall responsibility. These requests may require the bidder's submission of confidential materials (e.g. financial statements). If a bidder does not provide all of the requested information within the prescribed timeframe, the Department may find the bid non-responsive and ineligible for award.
- 23. **PRODUCT SAMPLES**: The Department may require bidders, by procurement or by request during bid evaluation, to provide sample supplies or equipment or examples of work, at the Bidder's expense. Samples must clearly identify the Bidder, the bid number, and the item the sample represents in the bid. The

Department will return samples that are not destroyed by testing, at the Bidder's expense, upon the Bidder's timely request. The Department may keep the samples of the Bidder awarded the contract until the completion of the contract. Unsolicited samples submitted in response to this procurement will not be evaluated and the Department may dispose of them in any way it chooses.

- 24. **SPECIFICATIONS:** The Department is authorized by Sections 5513 and/or 125.02(B) of the Ohio Revised Code to prepare specifications and establish contracts to obtain the supplies, equipment, and/or services referenced within this procurement. The purpose of the provided specifications is to describe the supplies, equipment, and/or services to be purchased and will serve as a fair and equitable basis for comparison of submitted bids. The Department may use any form of specification it determines to be in the best interest of the Department and that best describes the supplies or services to be purchased. Specifications may be in the form of a design specification or a combination thereof. If the department determines that a design, performance or a combination specification is not in the best interest of the Department, it may use brand name or equal specifications.
 - a. Unless otherwise specified in this procurement, all products, equipment, supplies, etc. offered by bidders must be in a new condition. A 'new' product is one that will be first used by the Department after it has been manufactured or produced. Used, reconditioned, or previously titled products, supplies, or equipment will not be considered for award of this procurement.
 - b. The Department uses qualified products list (QPL) and/or approved products lists (APL) developed by either itself or other qualified institutions to specify acceptable products and supplies that have been through proper application and testing procedures to verify conformance with technical and/or performance specifications. Where the Department requires products and supplies to be included on a specific QPL/APL listing, the Department will not accept bids for products/supplies that are not included on a specified QPL/APL at the time of public bid opening.
 - c. A bidder may not be compensated for damages arising from inaccurate or incomplete information in the procurement specifications or from inaccurate assumptions based upon the specifications.
- 25. **USE OF BRAND NAMES**: Unless otherwise provided in this solicitation, the name of a certain brand, make, or manufacturer does not restrict bidders to the specific brand, make, or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the Department, in its sole discretion, determines to be the equivalent of that specified, considering quality, workmanship, economy of operation, or suitability for the purpose intended, may be accepted. The bidder is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the Department to determine if the product offered meets the requirements of the solicitation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid nonresponsive. Unless the bidder clearly indicates in its bid that the product being offered is an equivalent product, such bid will be considered to offer the exact brand, make, or manufacturer name referenced in the bid solicitation.
- 26. **DEVIATIONS**: Statements or modifications made by a bidder in their submitted bid package that deviate from this procurement's terms, conditions, specifications and requirements may render a bid non-responsive and ineligible for award.
- 27. **ESTIMATED QUANTITIES**: Any purchase estimates indicated for bid item(s) are to be considered as estimates only. The Department makes no representation or guarantee as to the actual amount of item(s) to be purchased by the Department or Political Subdivisions.
- 28. **OVERLAPPING CONTRACT ITEMS**: The products and/or services included in this solicitation may be available from other State of Ohio contracts and/or other contracts made available for the Department's use. The existence of these contracts containing like or similar products and/or services could be either known or unknown to the Department at the time this procurement has been published. Unless otherwise stated in this contract, the Department may acquire these products and/or services from any available source. The Department will make purchases from sources that are deemed to be in the best interest of the Agency.
- 29. **REJECTION/PARTIAL AWARD OF BIDS**: The Department reserves the right to reject any or all bid responses, award partial contracts, or choose to rebid when:
 - 1. Product, supplies and/or services are not in compliance with the requirements, specifications, and terms and conditions set forth in this procurement; or

- 2. Pricing offered is determined to be excessive in comparison with existing market conditions, or exceeds the available funds of the Department; or
- 3. Only one bid is received, and the Department cannot determine the reasonableness of the bid prices submitted; or
- 4. It is determined that the award of any or all items would not be in the best interest of the Department; or
- 5. The Department, in its opinion, did not achieve the desired amount of competition amongst qualified bidders for the products, supplies, and/or services being offered in the bid solicitation; or
- 6. Inadequate or ambiguous specifications were cited in the bidding documents; or
- 7. The Department determines that specifications and/or requirements were missing from the bidding documents; or
- 8. A bidder imposes additional terms and conditions against the Department.
- 30. **NOTICE TO BIDDERS OF REJECTED BIDS:** When the Department deems it necessary to reject a bid, the Department will notify each affected bidder and the reasons for such actions.
- 31. **BID PROTESTS**: Any apparent low bidder either deemed not responsible or whose bid has been deemed non-responsive shall be notified by the Department of that determination and the reasons for it. The notification will be provided by the Department in writing and sent by U.S. mail and at the email address provided on the front cover of the bidder's bid. The bidder will have five (5) calendar days after receipt (by mail or email confirmation) of this notification to file a written, valid protest of the Department's determination. A valid written protest must contain substantive information and evidence so as to refute the Department's asserted claims against either the bid's responsiveness or bidder's responsibility, whichever apply. The Department will only review and respond to valid written protests containing substantive information and evidence. After review of the valid written protest, the Department will either affirm or reverse its original determination.
 - a. If a valid written protest is not received by the Department within five (5) calendar days of receipt, the Director of ODOT will move forward awarding the Contract and the affected bidder will have effectively waived its right to protest the Department's decision. For the purposes of this paragraph, "receipt" shall be defined as verification (via either certified mail return receipt or electronic read or delivery receipt) that the apparent low bidder has received the Department's written determination against the affected bidder. Upon the bidder's receipt, the five (5) calendar day response deadline shall commence.
- 32. **DELAYS IN CONTRACT AWARD**: Delays in the award of this procurement beyond the anticipated Contract start date may result in a change in the contract period as indicated in the Special terms and conditions of this bid solicitation. In these instances, ODOT shall reserve the right to award a contract covering a period equal to or less than the initial contract term than originally specified in this bid solicitation.
- 33. **CONTRACT AWARD AND FORMATION**: Successful bidder(s) will receive via U.S. regular mail and/or email a Notice of Contract Award letter as well as a photocopy version of the Signature Page executed by both Parties. These documents shall serve to form the Contract between the Parties. The Signature Page must be executed by both the bidder and the Director of ODOT for the Contract to be deemed valid and enforceable. The Department will maintain in the Contract file the Signature Page document containing each parties' original signature(s).
 - a. Upon award of a procurement, the bid invitation number (e.g. Invitation No. 999-16) will subsequently become the number assigned to the resulting Contract (e.g. ODOT Contract number 999-16) and will be referenced by the Department in all matters and documents related to said Contract.
 - b. Upon award of a procurement, successful bidders will thereafter be referenced as "Vendor" or "Contractor" by the Department in all matters and documents related to the resulting Contract.

34. **PUBLIC POSTING OF AWARDED CONTRACTS**: All Contracts awarded by the Office of Contract Sales, Purchasing Services section are posted to the Ohio Buys website and open for public review. Successful bidders and awarded Contract pricing can be found via the following website:

https://ohiobuys.ohio.gov/page.aspx/en/ctr/contract_browse_public

- 35. **PUBLIC RECORD:** All opened bids and their contents are subject to the Public Records Law, Section 149.43 of the Ohio Revised Code. Copies of bid responses must be requested and will be provided within a reasonable period of time and at a fee established by the Director of ODOT. To expedite and properly respond to such public records requests, a written request must be submitted to the Department. To prevent delays in evaluating bids and awarding contracts, such requests for recently opened bids, will be honored after a Contract has been executed.
 - a. Bidders may request that specific information, such as trade secrets or proprietary data, be designated as confidential and not considered as public record. Material so designated shall accompany the bid and be in a sealed container duly marked, and shall be readily separable from the bid in order to facilitate public inspection of non-confidential portion. Prices, makes, models, catalog numbers of items offered, deliveries and terms of payment cannot be considered as confidential. The decision as to whether or not such trade secrets or proprietary data shall be disclosed at the bid opening rests solely with the Department.
 - Requests to view previously submitted bids must be submitted in writing to either of the following addresses:

Contracts.Purchasing@dot.ohio.gov

Ohio Department of Transportation Office of Contract Sales, Purchasing Services 1980 West Broad St. Mail Stop 4110 Columbus, OH 43223

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State of Ohio, Department of Transportation (ODOT) Office of Contract Sales, Purchasing Services

GENERAL DEFINITIONS

(Last revised 11/30/2020)

When used in this procurement or any ensuing contract, the following definitions shall apply. If a conflict exists between these definitions and any definition listed in the bid specifications, the bid specifications shall prevail.

- 1. AGENCY: Ohio Department of Transportation.
- 2. AUTHORIZED DISTRIBUTOR: The bidder/vendor who maintains written legal agreements with manufacturers/producers to act as their agent and provide supplies, materials, equipment or services listed in the bid/contract. The authorized distributor must maintain active and sufficient facilities necessary to perform the awarded contract, own title to the goods inventoried within these facilities and maintain a true stock of these goods on a continuing basis and in sufficient quantity to provide uninterrupted service to ordering agencies.
- 3. BIDDER: The company and/or authorized representative of the company who has signed and is submitting a bid response and who will be responsible to ensure proper performance of the contract awarded pursuant to the bid. The term bidder, proposer, contractor, or vendor may be used interchangeably in this document.
- 4. DEPARTMENT: Ohio Department of Transportation
- 5. EQUIPMENT: Items, implements and machinery with a predetermined and considerable usage life.
- F.O.B. PLACE OF DESTINATION: meaning the Vendor pays, and includes the cost of such in their bid, and bears the risk for the transportation/delivery of goods delivered to the specified locations provided by the Purchaser.
- 7. PROCUREMENT/CONTRACT: All documents, whether attached or incorporated by reference, utilized for soliciting bids. Upon completion of the evaluation and award of the bidder's response, the procurement then becomes the contract between ODOT and the successful bidder, both governed by the laws of the State of Ohio.
- 8. INVOICE: An itemized listing showing delivery of the commodity or performance of the service described in the order, and the date of the purchase or rendering of the service, or an itemization of the things done, material supplied, or labor furnished, and the sum due pursuant to the contract or obligation.
- 9. LOWEST RESPONSIVE\RESPONSIBLE BIDDER: A bidder who offers the lowest cost for the goods or services listed in the bid; and whose proposal responds to bid specifications in all material respects and contains no irregularities or deviations from the specifications which would affect the amount of the bid or otherwise give him a competitive advantage; and whose experience, financial condition, conduct and performance on previous contracts, facilities, management skills evidences their ability to execute the contract properly.
- 10. MINORITY BUSINESS ENTERPRISE (MBE): means an individual, partnership, corporation or joint venture of any kind that is owned and controlled by U. S. Citizens and residents of Ohio, who are and have held themselves out as members of the following socially and economically disadvantaged groups. Only businesses certified by the State of Ohio Equal Opportunity Division in accordance with Section 123.151 of the Ohio Revised Code shall be recognized as being MBE certified within the purpose of this invitation.
- 11. MATERIALS: Items or substance of an expendable or non-expendable nature from which something can be made, improved or repaired.
- 12. PURCHASE: To buy, purchase, installment purchase, rent, lease, lease purchase or otherwise acquire equipment, materials, supplies or services. "Purchase" also includes all functions that pertain to obtaining

of equipment, materials, supplies or services, including description of requirements, selection and solicitation of sources, preparation and award of contracts, and all phases of contract administration.

- 13. SERVICES: The furnishing of labor, time or effort by a person, not involving the delivery of a specific end product other than a report which, if provided, is merely incidental to the required performance. "Services" does not include services furnished pursuant to employment agreements or collective bargaining agreements.
- 14. SPECIFICATION: Any description of the physical or functional characteristics or of the nature of supplies, equipment, service, or insurance. It may include a description of any requirements for inspecting, testing, or preparing supplies, equipment, services, or insurance.
- 15. SUPPLIES: Provisions and items normally considered expendable or consumable.
- 16. UNBALANCED: Any unit price contained in the bid schedule which is obviously unbalanced either above or below reasonable cost analysis and or unreasonably disproportionate to current market prices as determined by the Director of ODOT, or if such unbalanced prices are contrary to the interest of the department.
- 17. VENDOR: The bidder who, upon awarding of a contract, then becomes a Vendor who is considered to be a primary source for providing the goods and/or services included in the awarded contract and the party to whom payment will be made upon delivery of the goods and/or completion of the contract.
- 18. SUBVENDOR/SUBCONTRACTOR: An individual, firm or corporation to whom the Vendor sublets part of the contract to be performed.

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State of Ohio, Department of Transportation (ODOT) Office of Contract Sales, Purchasing Services

STANDARD CONTRACT TERMS AND CONDITIONS

(Last Revised 11/8/23)

- 1. **HEADINGS**: The headings used in this Contract are for convenience only and shall not be used to affect the interpretation of any of the Contract terms and conditions.
- 2. **ENTIRE CONTRACT**: This Contract consists of the complete procurement, including the Instructions, Terms and Conditions for Bidding, these Standard Contract Terms and Conditions, the Special Contract Terms and Conditions, ODOT Cooperative Purchasing Program Requirements, mutually executed Signature Page, Specifications and Requirements, awarded unit bid pricing, and any written addenda to the procurement; the completed competitive sealed bid, including proper modifications, clarifications and samples; and applicable, valid State of Ohio purchase orders or other ordering documents ("Contract").
- 3. APPROPRIATION OF FUNDS. Pursuant to the Constitution of the State of Ohio, Article II Section 22, ODOT's funds are contingent upon the availability of lawful appropriations by the Ohio General Assembly. If the Ohio General Assembly fails at any time to continue funding for the payments or obligations due hereunder, the Work under this Contract that is affected by the lack of funding will terminate and ODOT will have no further obligation to make any payments and will be released from its obligations on the date funding expires.

The current Ohio General Assembly cannot commit a future Ohio General Assembly to a future expenditure. If the term of this Contract extends beyond a biennium, the Contract will expire at the end of a current biennium and the State may renew this Contract in the next biennium by issuing written notice to the Vendor no later than July 1 of the new biennium. The operating biennium expires June 30th of each odd-numbered calendar year.

- 4. **OBM CERTIFICATION**: None of the rights, duties, or obligations in this Contract will be binding on the Department, and the Vendor will not begin its performance, until all of the following conditions have been met:
 - 1. All statutory provisions under the O.R.C., including Section 126.07, have been met; and
 - 2. All necessary funds are made available by the Ohio Office of Budget and Management; or
 - 3. If ODOT is relying on Federal or third-party funds for this Contract the ODOT gives the Vendor written notice that such funds have been made available.
- 5. **CONTRACT MODIFICATIONS**: Amendments or modifications to this Contract must be executed in writing between the parties and signed by the Director of ODOT. Amendments or modifications to this Contract made between the Vendor and other Department personnel shall be void and unenforceable.
- 6. **CONTRACT CONSTRUCTION**: Any general rule of construction to the contrary notwithstanding this Contract shall be liberally construed in favor of the effect the purpose of this Contract and the policy and purposes of the Department. If any provisions in this Contract are found to be ambiguous, an interpretation consistent with the purpose of this Contract that would render the provision valid shall be favored over any interpretation that would render it invalid.
- 7. **GOVERNING LAW / SEVERABILITY**: This Contract shall be governed by the laws of the State of Ohio, and the venue for any disputes will be exclusively with the appropriate court in Franklin County, Ohio. If any provision of the Contract or the application of any provision is held by that court to be contrary to law, the remaining provisions of the Contract will remain in full force and effect.
- 8. **ASSIGNMENT / DELEGATION**: The Vendor will not assign any of its rights nor delegate any of its duties under this Contract without the written consent of the Director of ODOT. Any assignment or delegation not consented to may be deemed void by the Department.
- 9. **PLACEMENT OF ORDERS/METHODS OF PAYMENT**: The Department shall use either State of Ohio Purchase Order or State of Ohio Payment Card (i.e. credit card) to authorize performance under this Contract and to issue payments for supplies, products, and/or services acquired. Vendors are required to accept both

forms of payment. For Department purchases over \$2,500.00, an official State of Ohio purchase order must be generated and obtain approvals from the Office of Budget and Management, the Department of Administrative Services, and the Director of Transportation prior to its effectiveness. An approved State of Ohio purchase order will be sent to the Vendor and the Vendor will provide the goods and/or services listed on the ordering documents and in accordance with the Contract's terms and conditions. Any order placed not using an approved ODOT purchase order or against a State payment card, shall not be considered a valid order and may result in denial of payment and/or return of goods at the Vendor's expense.

- 10. ACCEPTANCE OF ORDERS: The Vendor must accept orders placed by the Department pursuant to this Contract up through the last day of the Contract's effectiveness, inclusive of any contract extensions exercised or agreed-upon between the Parties.
- 11. **BLANKET PURCHASE ORDERS**: The Department utilizes blanket purchase orders to pre-authorize funding for use on Contracts containing bid items that, due to the urgent nature of maintaining the Department's highways and facilities, are critical to the Department executing its mission and objectives. The generation of blanket purchase orders are not used by the Department to place a specific order, rather as a means to make funding more readily available for use when Contract items are needed. The Vendor shall keep all blanket purchase orders on file and make them readily available for use by Department personnel to place orders against. When placing orders against a blanket purchase order, the Department will telephone or email orders referencing the blanket purchase order and its associated ODOT purchase order number. All of the Contract's terms and conditions shall apply to the Department's orders referencing a blanket purchase order.

For all blanket purchase orders, quantities and amounts to be purchased from these purchase orders is unknown by the Department and Vendors must not construe these purchase orders as a commitment to purchase a specific amount of goods and/or services. Accordingly, the Department reserves the right to increase or decrease the available funding on these blanket purchase orders at its discretion.

- 12. **DELIVERY INSPECTION AND ACCEPTANCE**: Upon pick-up or delivery of any supplies, products, and/or services, ODOT retains the right to inspect the product/service prior to final acceptance and/or payment for the product/service. ODOT shall have sufficient and reasonable time to fully inspect supplies and/or services for compliance. The purpose of the inspection process is to ensure that the product/service is in compliance with the specifications set forth in the awarded contract. In the event that the product/service does not meet the specifications, ODOT shall notify the Vendor for removal/replacement of the product and/or service at the Vendor's expense. ODOT shall retain all rights and remedies as described herein. Wherein products ordered by ODOT are delivered to a facility, which is not owned by ODOT and where ODOT has contracted with this facility to take delivery of products ordered by ODOT, acceptance will occur when the products have been inspected and accepted by ODOT within a reasonable amount of time after delivery to the facility. ODOT shall not be responsible for any storage costs incurred prior to the inspection and acceptance.
- 13. **RETURN GOODS POLICY**: The Department will apply the following Return Goods Policy on all purchases made under the Contract:
 - (A) Return goods, when due to Vendor debar (i.e. over-shipment, defective merchandise, unapproved substitution, etc.) shall be returned to the Vendor, at the Vendor's expense. The Vendor shall make arrangements to remove the return goods from the Department's premises within five (5) calendar days after notification. The Vendor shall not apply any restocking or other charges to the Department. At the option of the Department, replacement items may be accepted and will be shipped within five (5) calendar days of notification. Failure of the Vendor to arrange for return of the items within the specified time will result in the items being deemed as abandoned property and the Department will dispose of accordingly.

- (B) For orders of custom manufactured items, the Vendor will provide a production sample of the item to the Department for acceptance. The production sample will be identical to the item to be provided. The Department will provide written acceptance of the item prior to the Vendor continuing with production. Once delivery and acceptance has been completed and the Department determines for any reason that any remaining quantities will not be used, the agency may request the return of the custom manufactured items. Acceptance of the return of custom manufactured items will be at the option of the Vendor. If the Vendor agrees to the return of these items, the Department will be responsible for all costs associated with packaging, shipment and transportation, to include the original shipment to the Department and subsequent return of goods to the location designated by the Vendor. The Vendor may assess restocking fees that are equivalent to restocking fees that are normally assessed to other customers or as published by the Vendor. Failure of the Vendor to provide a production sample and obtain written approval from the Department will result in the Vendor bearing all responsibility and costs associated with the return of these goods.
- (C) Return goods of regular catalog stock merchandise, when due to Department error (i.e. over purchase, discontinued use, inventory reduction, etc.) will be accepted by the Vendor if notice is given by the Department within six (6) months of delivery and acceptance. All items to be returned must be unused and in their original containers and in suitable condition for resale. The Department will be responsible for all transportation costs associated with both the original shipment of items to the agency and the subsequent return of the items to the location designated by the Vendor. The Vendor may assess a restocking fee (not to exceed 10%) associated with the return of the items to the location designated by the Vendor. Return of regular stock catalog merchandise, when delivery and acceptance exceed six (6) months will be at the option of the Vendor.
- 14. **PRODUCT RECALLS**: In the event product delivered has been recalled, seized, or embargoed and/or has been determined to be misbranded, adulterated, or found to be unfit for human consumption by the packer, processor, manufacturer or by any Department or Federal regulatory agency, the Vendor shall be responsible to notify the ODOT Office of Contract Sales, Purchasing Services section and all other ordering agencies/entities within two business days after notice has been given. Vendor shall, at the option of the Department, either reimburse the purchase price or provide an equivalent replacement product at no additional cost. Vendor shall be responsible for removal and/or replacement of the affected product within a reasonable time as determined by the ordering agency. At the option of the ordering agency, Vendor may be required to reimburse storage and/or handling fees to be calculated from time of delivery and acceptance to actual removal. Vendor will bear all costs associated with the removal and proper disposal of the affected product. Failure to reimburse the purchase price or provide equivalent replacement product will be considered a default.
- 15. **PRODUCT SUBSTITUTION**: In the event a specified product listed in the Contract becomes unavailable or cannot be supplied by the Vendor for any reason (except as provided for in the Force Majeure clause), a product deemed in writing by the Department to be equal to or better than the specified product must be substituted by the Vendor at no additional cost or expense to the Department. Unless otherwise specified, any substitution of product prior to the Department's written approval may be cause for termination of Contract.

The Department reserves the right to deny any substitution request that it is deemed to not be in the best interest of the Department. In these instances, the Department may seek substitute products from another supplier and assess the difference in cost, if any, as damages against the Vendor for their material breach.

16. **INVOICE REQUIREMENTS**: The Vendor must submit an original, proper invoice to the office designated on the purchase order as the "bill to" address. To be a proper invoice, the invoice must include the following information: 1. The ODOT purchase order number authorizing the delivery of products or services. 2. A description of what the Vendor delivered, including, as applicable, the time period, serial number, unit price, quantity, and total price of the products and services. 3. The Contract number pursuant to the deliverable.

- 17. **DEFECTIVE INVOICES**: In the event the Department is in receipt of defective or improper invoices, the Department shall postpone payment pursuant to Section 126.30 of the Ohio Revised Code. Invoices shall be returned to the Vendor noting areas for correction. If such notification of defect is sent, the required payment date shall be thirty (30) calendar days after receipt of the corrected invoice.
- 18. **PAYMENT DUE DATE**: Payments under this Contract will be due on the 30th calendar day after the date of actual receipt of a proper invoice in the office designated to receive the invoice, or the date the service is delivered and accepted in accordance with the terms of this Contract. The date of the warrant issued in payment will be considered the date payment is made. Interest on late payments will be paid in accordance with O.R.C. Section 126.30.
- 19. **INSURANCE POLICIES**: By way of provision in this Contract to maintain specific minimum levels of insurance coverage(s) (e.g. Commercial General liability, Auto liability, Public liability, Property Damage, etc.), the Vendor shall provide to Department upon request evidence of such insurance required to be carried by these provisions, including any endorsement affecting the additional insured status, is in full force and effect and that premiums therefore have been paid. Such evidence shall be furnished by the Vendor within two (2) business days and on the insurance industry's standard ACORD Form (Certificate of Insurance) or a certified copy of the original policy. The Certificate of Insurance or certified copy of the policy must contain an endorsement naming the State of Ohio, Department of Transportation, its officers, agents, employees, and servants as additionally insured, but only with respect to Work performed for the Department under this Contract, at no cost to Department. Vendor shall notify the Department within ten (10) calendar days of receipt of a notice of cancellation, expiration, or any reduction in coverage, or if the insurer commences proceedings or has proceedings commenced against it, indicating the insurer is insolvent. Vendor shall provide to the Department evidence of a replacement policy at least five (5) calendar days prior to the effective date of such cancellation, expiration, or reduction in coverage.

All required insurance policies shall be maintained at Vendor's sole expense and in full force for the complete term of the Contract, including any warranty periods. Reference 107.12 the Construction & Materials Specification handbook.

- 20. **TAXATION**: ODOT is exempt from federal excise taxes and all Department and local taxes, unless otherwise provided herein. ODOT does not agree to pay any taxes on commodities, goods, or services acquired from any Vendor.
- 21. **CONTRACT TERMINATION**: If a Vendor fails to perform any one of its obligations under this Contract, it will be in breach of contract and the Department may terminate this Contract in accordance with this section. Notices of contract termination shall be made in writing. The termination will be effective on the date delineated by the Department.
 - a. **Termination for Breach**. If Vendor's breach is unable to be cured in a reasonable time, the Department may terminate the Contract by written notice to the Vendor.
 - b. **Termination for Un-remedied Breach**. If Vendor's breach may be cured within a reasonable time, the Department will provide written notice to Vendor specifying the breach and the time within which Vendor must correct the breach. If Vendor fails to cure the specified breach within the time required, the Department may terminate the Contract. If the Department does not give timely notice of breach to Vendor, the Department has not waived any of the Department's rights or remedies concerning the breach.
 - c. **Termination for Persistent Breach**. The Department may terminate this Contract by written notice to Vendor for defaults that are cured, but persistent. "Persistent" means three or more breaches. After the Department has notified Vendor of its third breach, the Department may terminate this Contract without providing Vendor with an opportunity to cure. The three or more breaches are not required to be related to each other in any way.
 - d. **Termination for Endangered Performance**. The Department may terminate this Contract by written notice to the Vendor if the Department determines that the performance of the Contract is endangered through no fault of the Department.
 - e. **Termination for Financial Instability**. The Department may terminate this Contract by written notice to the Vendor if a petition in bankruptcy or a Federal or State tax lien has been filed by or against the Vendor.

- f. **Termination for Delinquency, Violation of Law**. The Department may terminate this Contract by written notice, if it determines that Vendor is delinquent in its payment of federal, Department or local taxes, workers' compensation, insurance premiums, unemployment compensation contributions, child support, court costs or any other obligation owed to a Department agency or political subdivision. The Department also may cancel this Contract, if it determines that Vendor has violated any law during the performance of this Contract. However, the Department may not terminate this Contract if the Vendor has entered into a repayment agreement with which the Vendor is current.
- g. **Termination for Subcontractor Breach**. The Department may terminate this Contract for the breach of the Vendor or any of its subcontractors. The Vendor will be solely responsible for satisfying any claims of its subcontractors for any suspension or termination and will indemnify the Department for any liability to them. Subcontractors will hold the Department harmless for any damage caused to them from a suspension or termination. The subcontractors will look solely to the Vendor for any compensation to which they may be entitled.
- h. **Termination for Vendor's Failure to Pay Material Suppliers**. Pursuant to Section 4113.61 of the Ohio Revised Code, Vendors shall promptly pay material suppliers, within ten (10) calendar days of receipt of payment from the State of Ohio, for materials ordered and delivered as a result of this contract. A Vendor unable to furnish bid items because of non-payment issues related to a material supplier shall constitute grounds for the Director of ODOT to terminate this contract immediately. A Vendor may, at the discretion of the Department, be given an amount of time, amount shall be specified by the Department in writing, to furnish past due payment to the material supplier before termination shall occur.
- j. **Failure to Maintain MBE Certification.** Pursuant to O.R.C. Section 125.081, the State may set aside a bid for supplies or services for participation only by minority business enterprises (MBE's) certified by the State of Ohio, Equal Opportunity Coordinator. After award of the Contract, it is the responsibility of the MBE Vendor to maintain certification as a MBE. If the Vendor fails to renew its certification and/or is decertified by the State of Ohio, Equal Opportunity Coordinator, the State may immediately cancel the Contract.
- k. **Failure to Maintain Licensure**. The Vendor's failure to maintain the proper license(s) to perform the services or provide the goods prescribed by this Contract shall be grounds to terminate this Contract without prior notice.
- I. Qualified Products Listing and Approved Products Listing. Any products or supplies removed from a specific qualified products listing/approved product listing, by either the Department, government, or governing body throughout the duration of the Contract shall be removed from the Contract effective on the date of removal from the respective listing.
- 22. **NOTICE OF BREACH**: Each party of this Contract has an obligation to provide written notice when it is determined by one party that the other party is in default of this Contract. A notice of ODOT's default of this Contract must be sent to the Procurement Manager of the ODOT Office of Contract Sales.
- 23. **CONTRACT SUSPENSION**: A Vendor who fails to perform any one of its obligations under this Contract will be in breach. In these instances, ODOT may choose to suspend the Vendor from the contract rather than terminate the Contract.

In the case of a suspension for ODOT's convenience, the amount of compensation due the Vendor for work performed before the suspension will be determined in the same manner as provided in this section for termination for ODOT's convenience or the Vendor may be entitled to compensation for work performed before the suspension, less any damage to ODOT resulting from the Vendor's breach of this Contract or other fault.

The notice of suspension, whether with or without cause, will be effective immediately on the Vendor's receipt of the notice. The Vendor will immediately prepare a report and deliver it to ODOT which will include a detailed description of work completed, percentage of project completion, estimated time for delivery of all orders received to date, and costs incurred by the Vendor.

- 24. **Termination for Convenience.** The Contracting Agency may terminate this Contract, or an Ordering Agency may terminate an order placed under this Contract, for its convenience after issuing written notice to the Contractor. The Contractor will be entitled to the pro-rated price for any Deliverable or portion of a Deliverable that the Contractor has delivered and the Ordering Agency or the State has accepted before the termination. Total payments will not exceed the amount payable to the Contractor as if the Contract or order had been fully performed. This will be the Contractor's exclusive remedy in the case of termination for convenience and is available to the Contractor only after the Vendor has submitted an invoice that complies with Section 16 of these Standard Contract Terms and Conditions.
- 25. **CONTRACT DAMAGES**: The Department may assess, at a minimum but not limited to, the following damages against a Vendor:
 - A. **ACTUAL DAMAGES**: Vendor is liable to the State of Ohio for all actual and direct damages caused by Vendor's breach. The Department may substitute supplies or services, from a third party, for those that were to be provided by Vendor. In accordance with Ohio Revised Code §5513.05(c), the Department may recover the costs associated with acquiring substitute supplies or services, less any expenses or costs saved by Vendor's breach, from Vendor.
 - B. **LIQUIDATED DAMAGES**: If actual and direct damages are uncertain or difficult to determine, the Department may recover liquidated damages in the amount of 1% of the value of the order, deliverable or milestone that is the subject of the breach for every day that the breach is not cured by the Vendor. If Delay of the cure is caused by ODOT, the delivery date shall be extended accordingly to offset such delays. Approval to extend any scheduled delivery date(s) shall be at the sole discretion of ODOT.
 - C. **DEDUCTION OF DAMAGES FROM CONTRACT PRICE**: The Department may deduct all or any part of the damages resulting from Vendor's breach from any part of the price still due on the contract, upon prior written notice issued to the Vendor by the Department.
 - D. INCIDENTAL/CONSEQUENTIAL DAMAGES: Pursuant to Section 5513.05 of the Ohio Revised Code, the Department may recover from a Vendor who fails to promptly provide conforming articles, any incidental or consequential damages as defined in Section 1302.89 of the Ohio Revised Code, incurred by the Department in promptly obtaining the conforming articles.
- 26. **CONTRACT TERM EXTENSIONS:** ODOT reserves the right to unilaterally extend this Contract up to one (1) calendar month beyond the original contract expiration date at the original unit bid prices awarded. Contract extensions beyond one (1) calendar month shall be executed by means of written, mutual agreement with the Contract Vendor, but in no instance with the Contract be extended beyond the biennium unless it is procured as a multi-year contract stating an option for biennial extension.
- 27. **FIRM, FIXED PRICE CONTRACT**: Unless otherwise specified in the bidding documents, this Contract is a Firm, Fixed-Price Contract. The Vendor will be required to provide to the Department with the materials, supplies, equipment and/or services at the awarded bid price(s) for the entire duration of the contract, and any extensions thereto.
- 28. **FORCE MAJEURE**: If the Department or Vendor is unable to perform any part of its obligations under this Contract by reason of force majeure, the party will be excused from its obligations, to the extent that its performance is prevented by force majeure, for the duration of the event. The party must remedy with all reasonable dispatch the cause preventing it from carrying out its obligations under this Contract. The term "force majeure" means without limitation: acts of God; such as epidemics; lightning; earthquakes; fires; storms; hurricanes; tornadoes; floods; washouts; droughts; any other severe weather; explosions; restraint of government and people; war; labor strikes; and other like events.
- 29. **EQUAL EMPLOYMENT OPPORTUNITY**: The Vendor will comply with all state and federal laws regarding equal employment opportunity, including O.R.C. Section 125.111 and all related Executive Orders.
- 30. ANTITRUST ASSIGNMENT TO THE DEPARTMENT: Vendor assigns to the State of Ohio, through the Department of Transportation, all of its rights to any claims and causes of action the Vendor now has or may acquire under Department or federal antitrust laws if the claims or causes of action relate to the supplies or

services provided under this Contract. Additionally, the State of Ohio will not pay excess charges resulting from antitrust violations by Vendor's suppliers and subcontractors.

31. **CONFIDENTIALITY**: The Vendor may learn of information, documents, data, records, or other material that is confidential in the performance of this Contract. The Vendor may not disclose any information obtained by it as a result of this Contract, without the written permission of the Department. The Vendor must assume that all Department information, documents, data, records or other material is confidential.

The Vendor's obligation to maintain the confidentiality of the information will not apply where it: (1) was already in the Vendor's possession before disclosure by the Department, and it was received by the Vendor without the obligation of confidence; (2) is independently developed by the Vendor; (3) is or becomes publicly available without breach of this Contract; (4) is rightfully received by the Vendor from a third party without an obligation of confidence; (5) is disclosed by the Vendor with the written consent of the Department; or (6) is released in accordance with a valid order of a court or governmental agency, provided that the Vendor (a) notifies the Department of such order immediately upon receipt of the order and (b) makes a reasonable effort to obtain a protective order from the issuing court or agency limiting disclosure and use of the confidential information solely for the purposes intended to be serviced by the original order of production. The Vendor will return all originals of any information and destroy any copies it has made on termination or expiration of this Contract.

The Vendor will be liable for the disclosure of any confidential information. The parties agree that the disclosure of confidential information of the Department's may cause the Department irreparable damage for which remedies other than injunctive relief may be inadequate, and the Vendor agrees that in the event of a breach of the obligations hereunder, the Department shall be entitled to temporary and permanent injunctive relief to enforce this provision without the necessity of providing actual damages. This provision shall not, however, diminish or alter any right to claim and recover.

- 32. **DRUG-FREE WORKPLACE**: The Vendor agrees to comply with all applicable Department and federal laws regarding drug-free workplace and shall make a good faith effort to ensure that all its employees, while working on Department property, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.
- 33. **WORKERS' COMPENSATION**: Workers' compensation insurance, as required by Ohio law or the laws of any other Department where work under this Contract will be done. The Vendor will also maintain employer's liability insurance with at least a \$1,000,000.00 limit.
- 34. **OHIO ETHICS LAW**: Vendor agrees that it is currently in compliance and will continue to adhere to the requirements of Ohio Ethics law as provided by Section 102.03 and 102.04 of the Ohio Revised Code.

VENDOR RESPONSIBILITIES:

All vendors who are actively doing business with or seeking to do business with the State and/or with ODOT are expected to perform their business activities in a professional manner and avoid any "perceptions of impropriety." Vendors will be responsible to review and become familiar with the ethics laws of the state of Ohio. Any vendor who violates Ohio's ethics laws or any executive order or ODOT policy will be subject to legal penalties up to and including debarment.

ODOT utilizes a variety of methods for establishing contracts for supplies and services which include: competitive sealed bidding, competitive sealed proposals, direct purchases, reverse auction, multiple award contracts and request for quotes. Processes for implementing these methods have been developed to ensure fair and equal treatment of all vendors participating in the purchasing activity. Any vendor that attempts to influence the evaluation and/or award of a contract either directly or through an outside agent or representative will be disqualified and will not be able to participate in the purchasing activity. In addition, a vendor who attempts to influence an evaluation or award will be subject to penalties set forth by law up to and including debarment from doing business with ODOT and/or the state of Ohio.

SUSPECTED VIOLATION OF ETHICS LAWS:

Suspected violations of ODOT purchasing statutes, rules, policies, or guidelines, or of Ohio's ethics laws, executive orders by any employee of the State or a vendor are to be reported to the Agency Procurement Officer(s) or APO. The APO will advise the Chief Legal Counsel who may take appropriate action. If necessary or appropriate, the matter may be referred to the Inspector General, the Ohio Attorney General and/or the Ohio Ethics Commission for resolution.

- 35. **PUBLICITY**: The Vendor will not advertise that it is doing business with the Department or use this Contract as a marketing or sales tool without prior, written consent of the Department. This provision includes marketing or sales tools related to the ODOT Cooperative Purchasing Program.
- 36. **STRICT PERFORMANCE**: The failure of either party, at any time to demand strict performance by the other party of any of the terms of this Contract, will not be construed as a waiver of any such term and either party may at any time demand strict and complete performance by the other party.
- 37. **SUBCONTRACTING**. The Department recognizes that it may be necessary for the Vendor to use subcontractors to perform portions of the work under the Contract. In those circumstances, the Vendor shall submit a list identifying its subcontractors or joint venture partners performing portions of the work under the Contract. If any changes occur during the term of the Contract, the Vendor shall supplement its list of subcontractors or joint venture business partners. In addition, all subcontractors or joint venture business partners agree to be bound by all of the Terms and Conditions and specifications of the Contract. The Department reserves the right to reject any subcontractor submitted by the Vendor. All subcontracts will be at the sole expense of the Vendor and the Vendor will be solely responsible for payment of its subcontractors. The Vendor assumes responsibility for all sub-contracting and third party manufacturer work performed under the Contract. In addition, Vendor will cause all subcontractors to be bound by all of the Terms and Conditions and specifications of the Contract. The Vendor will be the sole point of contact with regard to all contractual matters.
- 38. **SURVIVORSHIP**: All sections herein relating to payment, confidentiality, license and ownership, indemnification, publicity, construction warranties, limitations of warranties and limitations on damages shall survive the termination of this Contract.
- 39. **GENERAL REPRESENTATIONS AND WARRANTIES**: The Vendor warrants that the recommendations, guidance, and performance of the Vendor under this Contract will:
 - 1. Be in accordance with the sound professional standards and the requirements of this Contract and without any material defect.
 - 2. No services, products or supplies will infringe on the intellectual property rights of any third party.
 - 3. All warranties are in accordance with Vendor's standard business practices attached.
 - 4. That the products or supplies hereunder are merchantable and fit for the particular purpose described in this contract. Additionally, with respect to the Vendor's activities under this Contract, the Vendor warrants that:
 - 5. The Vendor has the right to enter into this Contract.
 - 6. The Vendor has not entered into any other contracts or employment relationships that restrict the Vendor's ability to perform under this Contract.
 - 7. The Vendor will observe and abide by all applicable laws and regulations, including those of the Department regarding conduct on any premises under the Department's control.
 - 8. The Vendor has good and marketable title to any products or supplies delivered under this Contract and which title passes to the Department.
 - 9. The Vendor has the right and ability to grant the license granted in products or supplies in which title does not pass to the Department. If any services of the Vendor or any products or supplies fails

to comply with these warranties, and the Vendor is so notified in writing, the Vendor will correct such failure with all due speed or will refund the amount of the compensation paid for the services, products or supplies. The Vendor will also indemnify the Department for any direct damages and claims by third parties based on breach of these warranties.

- 40. **VENDOR'S WARRANTY AGAINST AN UNRESOLVED FINDING FOR RECOVERY**: Vendor warrants that it is not subject to an unresolved finding for recovery under O.R.C. Section 9.24. If the warranty was false on the date the parties signed this Contract, the Contract is void ab initio.
- 41. **LIMITATION OF LIABILITY**: Notwithstanding any limitation provisions contained in the documents and materials incorporated by reference into this contract, the Vendor agrees that the Vendor shall be liable for all direct damages due to the fault or negligence of the Vendor.
- 42. **INDEMNITY**: The Vendor will indemnify the Department for any and all claims, damages, lawsuits, costs, judgments, expenses, and any other liabilities resulting from bodily injury to any person (including injury resulting in death) or damage to property that may arise out of or are related to Vendor's performance under this Contract, providing such bodily injury or property damage is due to the negligence of the Vendor, its employees, agents, or subcontractors. Reference 107.12 the Construction & Materials Specification handbook, if applicable for this product or service.

The Vendor will also indemnify the Department against any claim of infringement of a copyright, patent, trade secret, or similar intellectual property rights based on the Department's proper use of any products or supplies under this Contract. This obligation of indemnification will not apply where the Department has modified or misused the products or supplies and the claim of infringement, is based on the modification or misuse. The Department agrees to give the Vendor notice of any such claim as soon as reasonably practicable and to give the Vendor the authority to settle or otherwise defend any such claim upon consultation with and approval by the Office of the Department Attorney General. If a successful claim of infringement is made, or if the Vendor reasonably believes that an infringement claim that is pending may actually succeed, the Vendor will take one (1) of the following four (4) actions:

- 1. Modify the products or supplies so that is no longer infringing;
- 2. Replace products or supplies with an equivalent or better item;
- 3. Acquire the right for the Department to use the infringing products or supplies as it was intended for the Department to use under this Contract; or
- 4. Remove the products or supplies and refund the fee the Department paid for the products or supplies and the fee for any other products or supplies that required the availability of the infringing products or supplies for it to be useful to the Department.
- 43. AUDITS: The Vendor must keep all financial records in a manner consistent with generally accepted accounting principles. Additionally, the Vendor must keep separate business records for this Contract, including records of disbursements and obligations incurred that must be supported by contracts, invoices. vouchers and other data as appropriate. During the period covered by this Contract and until the expiration of three (3) years after final payment under this Contract, the Vendor agrees to provide the Department, its duly authorized representatives or any person, agency or instrumentality providing financial support to the work undertaken hereunder, with access to and the right to examine any books, documents, papers and records of the Vendor involving transactions related to this Contract. The Vendor shall, for each subcontract in excess of two thousand five hundred (\$2,500), require its subcontractor to agree to the same provisions of this Article. The Vendor may not artificially divide contracts with its subcontractors to avoid requiring subcontractors to agree to this provision. The Vendor must provide access to the requested records no later than (5) five business days after the request by the Department or any party with audit rights. If an audit reveals any material deviation from the Contract requirements, and misrepresentations or any overcharge to the Department or any other provider of funds for the Contract, the Department or other party will be entitled to recover damages, as well as the cost of the audit.
- 44. **INDEPENDENT CONTRACTOR ACKNOWLEDGEMENT**: It is fully understood and agreed that Vendor is an independent contractor and is not an agent, servant, or employee of the State of Ohio or the Ohio Department of Transportation. Vendor declares that it is engaged as an independent business and has complied with all applicable federal, state, and local laws regarding business permits and licenses of any kind, including but not limited to any insurance coverage, workers' compensation, or unemployment compensation that is required in the normal course of business and will assume all responsibility for any federal, state, municipal or other tax liabilities. Additionally, Vendor understands that as an independent

contractor, it is not a public employee and is not entitled to contributions from the State to any public employee retirement system.

TRADE: Pursuant to R.C. 9.76(B), Vendor warrants that Vendor is not boycotting any jurisdiction with whom the State of Ohio can enjoy open trade, including Israel, and will not do so during the term of this Contract.

45. **EXECUTIVE ORDER 2019-12D**: The Vendor affirms to have read and understands Executive Order 2019-12D issued by Ohio Governor Mike DeWine and shall abide by those requirements in the performance of this Contract, shall sign and require its subcontractors (if any) to sign the attached "Standard Affirmation and Disclosure Form," and shall perform no services required under this Contract outside of the United Departments. The Executive Order is incorporated by reference and also is available at the following website: (https://procure.ohio.gov/pdf/EO2019-12D/Executive Order 2019 12WEB.pdf

The Vendor also affirms, understands, and agrees to immediately notify the Department of any change or shift in the location(s) of services performed by the Vendor or its subcontractors under this Contract, and no services shall be changed or shifted to a location(s) that are outside of the United Departments.

46. NON-DISCRIMINATION/COMPLIANCE WITH APPLICABLE LAWS:

Vendor agrees that Vendor, any subcontractor, and any person acting on behalf of Vendor or a subcontractor, shall not discriminate, by reason of race, color, religion, sex (including pregnancy, gender identification and sexual orientation), age (40 years or older), disability, military status, national origin, or ancestry against any citizen of this state in the employment of any person qualified and available to perform the Work. Vendor further agrees that Vendor, any subcontractor, and any person acting on behalf of Vendor or a subcontractor shall not, in any manner, discriminate against, intimidate, or retaliate against any employee hired for the performance of the Work on account of race, color, religion, sex (including pregnancy, gender identification and sexual orientation), age, disability, military status, national origin, or ancestry.

During the performance of this Contract, the Vendor, for itself, its assignees, and successors in interest agrees to comply with the Federal Requirements as follows:

- 1. Vendor will ensure that applicants are hired and that employees are treated during employment without regard to their race, religion, color, sex (including pregnancy, gender identification and sexual orientation), national origin (ancestry), disability, genetic information, age (40 years or older), or military status (past, present, or future). Such action shall include, but not be limited to, the following: Employment, Upgrading, Demotion, or Transfer; Recruitment or Recruitment Advertising; Layoff or Termination; Rates of Pay or other forms of Compensation; and Selection for Training including Apprenticeship.
- Vendor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. Vendor will, in all solicitations or advertisements for employees placed by or on behalf of Vendor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex (including pregnancy, gender identification and sexual orientation), national origin (ancestry), disability, genetic information, age (40 years or older), or military status (past, present, or future).
- 3. Vendor agrees to fully comply with Title VI of the Civil Rights Act of 1964, 42 USC Sec. 2000. Vendor shall not discriminate on the basis of race, color, national origin, sex (including pregnancy, gender identification and sexual orientation), age, disability, low-income status, or limited English proficiency in its programs or activities. The Director of Transportation may monitor the Vendor's compliance with Title VI.
- 4. Compliance with Regulations: The Vendor (hereinafter includes consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 5. Nondiscrimination: The Vendor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (ancestry), sex (including

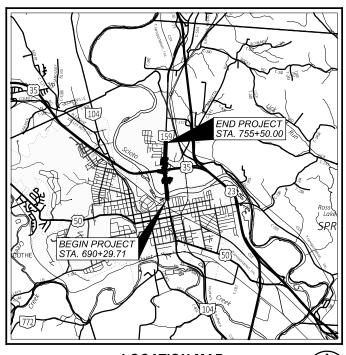
pregnancy, gender identification and sexual orientation), age (40 years or older), disability, low-income status, or limited English proficiency in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Vendor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations as set forth in section 10. below, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

- 6. Solicitations for Subcontractors, including procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Vendor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Vendor of the Vendor's obligations under this contract and the Acts and the Regulations relative to nondiscrimination on the grounds of race, color, national origin (ancestry), sex (including pregnancy, gender identification and sexual orientation), age (40 years or older), disability, low-income status, or limited English proficiency.
- 7. Information and Reports: The Vendor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Ohio Department of Transportation (hereinafter "ODOT") or FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Vendor is in the exclusive possession of another who fails or refuses to furnish this information, the Vendor will so certify to ODOT or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
- 8. Sanctions for Noncompliance: In the event of the Vendor's noncompliance with the nondiscrimination provisions of this contract, ODOT will impose such contract sanctions as it or FHWA may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the Vendor under the contract until the Vendor complies, and/or
 - b. Cancellation, termination or suspension of the contract, in whole or in part.
- 9. Incorporation of Provisions: The Vendor will include the provisions of sections 1. through 9. in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Vendor will take action with respect to any subcontract or procurement as ODOT or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Vendor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Vendor may request ODOT to enter into any litigation to protect the interests of ODOT. In addition, the Vendor may request the United States to enter into the litigation to protect the interests of the United States.
- 10. During the performance of this contact, the Vendor, for itself, its assignees, and successors in interest, consultants and sub-contractors, agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. §
 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because
 of Federal or Federal-Aid programs and projects)
- Federal-Aid Highway Act of 1973 (23 U.S.C. § 324 et seq.) (prohibits discrimination on the basis of sex)
- Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), as amended (prohibits discrimination on the basis of disability) and 49 CFR Part 27
- The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 et seq.) (prohibits discrimination on the basis of age)
- Airport and Airway Improvement Act of 1982 (49 U.S.C. § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex)

- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of Federal-Aid recipients, sub-recipients, and contractors, whether such programs or activities are Federally funded or not)
- Titles II and III of the Americans with Disabilities Act (42 U.S.C. §§ 12131-12189), as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38 (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities)
- The Federal Aviation Administration's Non-Discrimination Statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations)
- Executive Order 13166, Improving Access to Services for People with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100)
- Title VIII of the Civil Rights Act of 1968 (Fair Housing Act), as amended (prohibits discrimination in the sale, rental, and financing of dwellings on the basis of race, color, religion, sex, national origin, disability, or familial status (presence of child under the age of 18 and pregnant women)
- Title IX of the Education Amendments Act of 1972, as amended (20 U.S.C. 1681 et seq.) (prohibits discrimination on the basis of sex in education programs or activities)
- Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA 38 U.S.C. 4301-4335) (prohibits discrimination on the basis of present, past or future military service)
- Genetic Information Nondiscrimination Act (GINA) (29 CFR Part 1635, 42 U.S.C. 2000ff)



LOCATION MAP

LATITUDE: 39°20'55" LONGITUDE: 82°58'36"

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER BOARS

DESIGN DESIGNATION

NONE REQUIRED

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig
OHIO 811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764 (Non members must be called directly)

PLAN PREPARED BY: BURGESS & NIPLE, INC. 330 RUSH ALLEY, SUITE 700 COLUMBUS, OH 43215

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

ROS-159-0.41

TRAFFIC SIGNAL AND LIGHT POLE -MATERIAL ONLY CONTRACT

ROSS COUNTY SCIOTO TOWNSHIP

INDEX OF SHEETS:

TITLE SHEET **GENERAL NOTES** TRAFFIC SIGNALS 3 - 16

FEDERAL PROJECT NUMBER

E200947

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

IMPROVEMENTS TO S.R. 159 (BRIDGE STREET) & U.S. 35 EB RAMP TO ADDRESS CRASH PATTERNS AND CONGESTION. IMPROVEMENTS INCLUDE UPGRADING TRAFFIC SIGNALS AT SEVEN INTERSECTIONS TO IMPROVE SIGNAL LEVEL OS SERVICE AND REDUCE CONGESTION. PEDESTRIAN FACILITIES WILL BE ADDED ALONG THE CORRIDOR. HIGHWAY LIGHTING WILL ALSO BE IMPROVED ALONG

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

		ST	ANDARD	CONSTRUCTION	DRAWINGS	SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
TC-21.21	1/20/23	HL-10.11	7/21/23			800	
TC-81.11	1/19/24	HL-10.12	7/21/23			809 10/20/23	
TC-81.22	7/21/23	HL-10.13	1/20/23			913 4/16/21	
TC-83.20	1/19/24	HL-10.31	7/15/22			916 7/21/23	
TC-85.20	4/21/23	HL-20.11	7/21/23				
		HL-20.21	1/15/21				



RML JTP 7-5-24

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ITEM 632 COMBINATION SIGNAL SUPPORT, BY TYPE AND SIZE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 632, 632.15, AND 732.11, THE SIGNAL SUPPORT SHALL HAVE A FACTORY-APPLIED BLACK FINISH MATCHING THE TRAFFIC SIGNAL CABINETS, SIGNAL PEDESTALS AND LUMINAIRES. MAST ARMS SHALL BE A CURVED MONOARM/HAUNCHED DESIGN.

ITEM 632 SIGNAL SUPPORT, (BY TYPE), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 632, 632.15, AND 732.11, THE SIGNAL SUPPORT SHALL HAVE A FACTORY-APPLIED BLACK FINISH MATCHING THE TRAFFIC SIGNAL CABINETS, SIGNAL PEDESTALS AND LUMINAIRES. MAST ARMS SHALL BE A CURVED MONOARM/HAUNCHED DESIGN.

ITEM 632 PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN

IN ADDITION TO THE REQUIREMERNTS OF C&MS 632, 632,19, AND 732.15, THE PEDESTALS AND TRANSFORMER BASES SHALL HAVE A FACTORY-APPLIED BLACK FINISH MATCHING THE TRAFFIC SIGNAL CABINETS, SIGNAL SUPPORTS AND LUMINAIRES.

625, TRANSFORMER BASE, TYPE AT-A, AS PER PLAN

ALL TRANSFORMER BASE ITEMS REQUIRED BY THE CMS ITEM 625.09 SHALL BE INCLUDED AS PART OF THIS ITEM. THE FOLLOWING ITEMS SHALL APPLY TO THE MATERIAL AND INSTALLATION OF THE TRANSFORMER BASES:

ONLY TRANSFORMER BASES WITH A FACTORY-APPLIED BLACK FINISH TO MATCH SIGNAL POLES, SIGNAL SUPPORTS, LUMINAIRES, LIGHT POLES, ETC. SHALL BE INSTALLED.

625, LIGHT POLE, CONVENTIONAL (35' MTG HT), AS PER PLAN

ALL LIGHT POLE ITEMS REQUIRED BY THE CMS ITEM 625.09 SHALL BE INCLUDED AS PART OF THIS ITEM. THE FOLLOWING ITEMS SHALL APPLY TO THE MATERIAL AND INSTALLATION OF THE LIGHT POLE AND FOLLOMATION

ONLY LIGHT POLES WITH A FACTORY-APPLIED BLACK FINISH TO MATCH SIGNAL POLES, SIGNAL SUPPORTS, LUMINAIRES, LIGHT BRACKET ARMS, ETC. SHALL BE INSTALLED.

625, LIGHT POLE, MISC. (SUP LIGHT POLE, 15' MTG HT), AS PER PLAN

ALL LIGHT POLE ITEMS REQUIRED BY THE CMS ITEM 625.09 SHALL BE INCLUDED AS PART OF THIS ITEM. THE FOLLOWING ITEMS SHALL APPLY TO THE MATERIAL AND INSTALLATION OF THE LIGHT POLE AND FOUNDATION.

LIGHT POLE SHALL BE HOLOPHONE "WADSWORTH" TYPE DECORATIVE POLE WITH ACCOMPANYING BASE OR EQUAL AS APPROVED BY THE ENGINEER. ONLY LIGHT POLES WITH A FACTORY-APPLIED BLACK FINISH TO MATCH SIGNAL POLES, SIGNAL SUPPORTS, LUMINAIRES, LIGHT BRACKET ARMS, ETC. SHALL BE INSTALLED.

625, LIGHT POLE, MISC. (BRIDGE POLE REPLACEMENTS), AS PER PLAN

ALL LIGHT POLE ITEMS REQUIRED BY THE CMS ITEM 625.09 SHALL BE INCLUDED AS PART OF THIS ITEM. THE FOLLOWING ITEMS SHALL APPLY TO THE MATERIAL AND INSTALLATION OF THE LIGHT POLE AND FOUNDATION.

LIGHT POLE SHALL BE HOLOPHONE "WADSWORTH" TYPE DECORATIVE POLE WITH ACCOMPANYING BASE OR EQUAL AS APPROVED BY THE ENGINEER. POLE BASE SHALL BE ORDERED TO FIT BOLT PATTERN ON EXISTING BRIDGE PILASTERS. LIGHT POLE SHALL BE 15' IN HEIGHT, WHICH WHEN ERECTED ON BRIDGE PILSTARS WILL GIVE OVERALL FIXTURE MOUNTING HEIGHT OF 18'. ONLY LIGHT POLES WITH A FACTORY-APPLIED BLACK FINISH TO MATCH SIGNAL POLES, SIGNAL SUPPORTS, LUMINAIRES, LIGHT BRACKET ARMS, ETC. SHALL BE INSTALLED.

625, BRACKET ARM, (MULTIPLE SIZES), AS PER PLAN

ALL BRACKET ARM ITEMS REQUIRED BY THE CMS ITEM 625.09 SHALL BE INCLUDED AS PART OF THIS ITEM. THE FOLLOWING ITEMS SHALL APPLY TO THE MATERIAL AND INSTALLATION OF THE LUMINAIRE BRACKET ARMS:

ONLY BRACKET ARMS WITH A FACTORY-APPLIED BLACK FINISH TO MATCH SIGNAL POLES, SIGNAL SUPPORTS, LUMINAIRES, LIGHT POLES,

	ITEM	GRAND		
ITEM	EXT	TOTAL	UNIT	DESCRIPTION
				TRAFFIC SIGNALS
632	72101	1	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 2, AS PER PLAN
632	79101	4	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 2, AS PER PLAN
632	79111	6	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 4, AS PER PLAN
632	79131	6	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN
632	79141	8	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13, AS PER PLAN
632	79151	2	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 14, AS PER PLAN
632	89901	32	EACH	PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN
				LIGHTING
625	2501	61	EACH	TRANSFORMER BASE, TYPE AT-A, AS PER PLAN
625	10491	61	EACH	LIGHT POLE, CONVENTIONAL, (35' MTG HT), AS PER PLAN
625	10501	6	EACH	LIGHT POLE, MISC. (SUP LIGHT POLE, 15' MTG HT), AS PER PLAN
625	10501	32	EACH	LIGHT POLE, MISC. (BRIDGE POLE REPLACEMENTS), AS PER PLAN
625	17901	22	EACH	BRACKET ARM, 4', AS PER PLAN
625	17961	28	EACH	BRACKET ARM, 8', AS PER PLAN
625	18101	37	EACH	BRACKET ARM, 12', AS PER PLAN

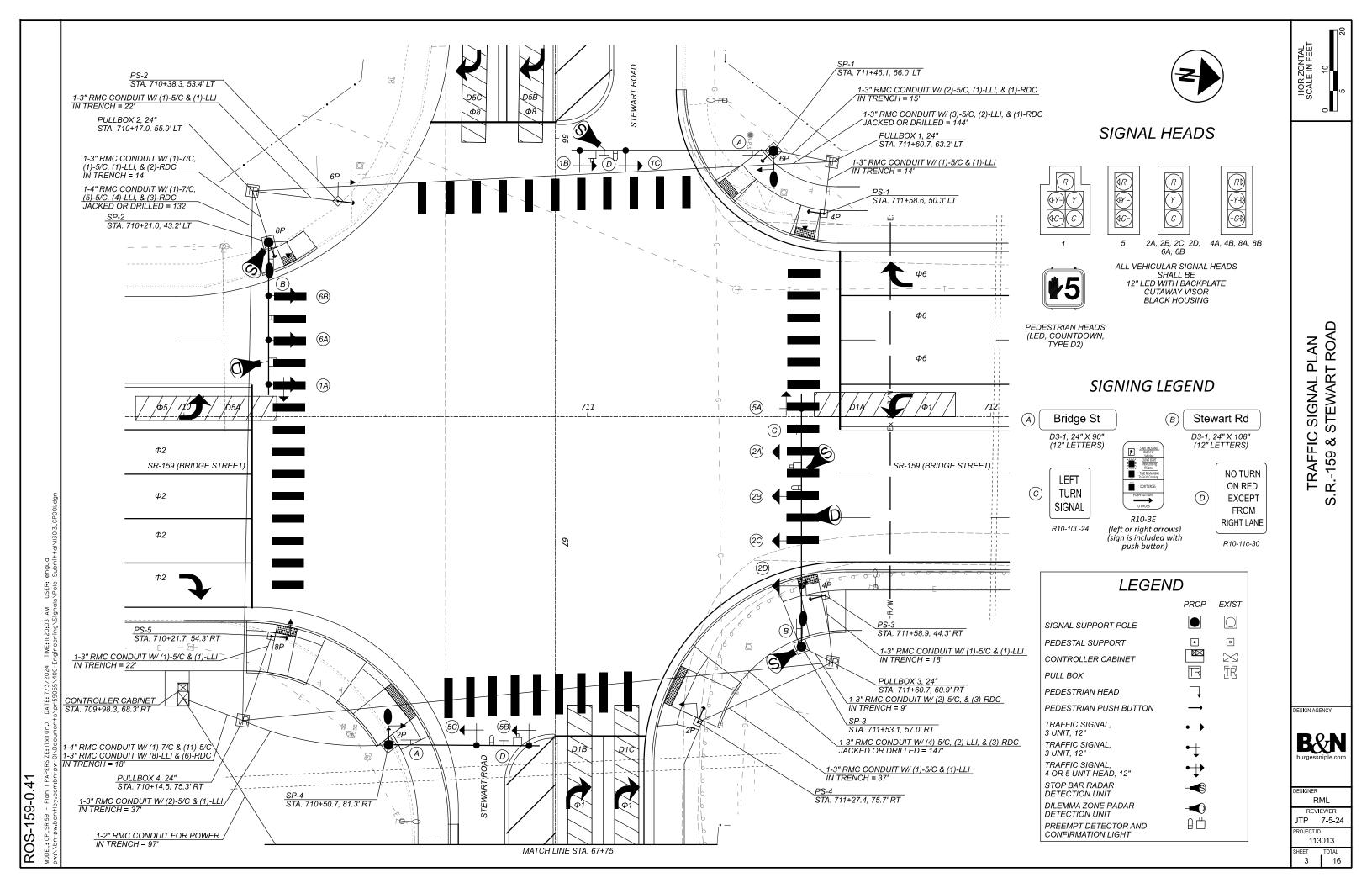
DESIGN AGENCY



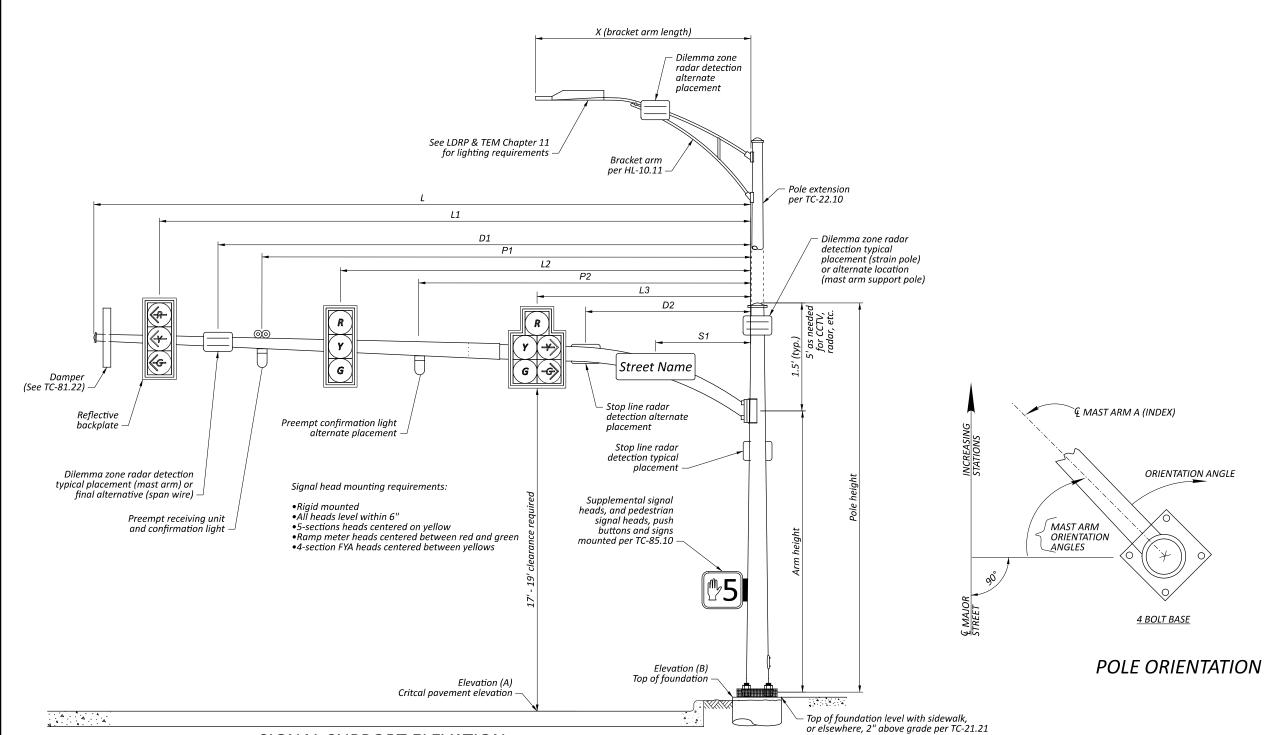
DESIGNER RML

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SIGNAL SUPPORT ELEVATION

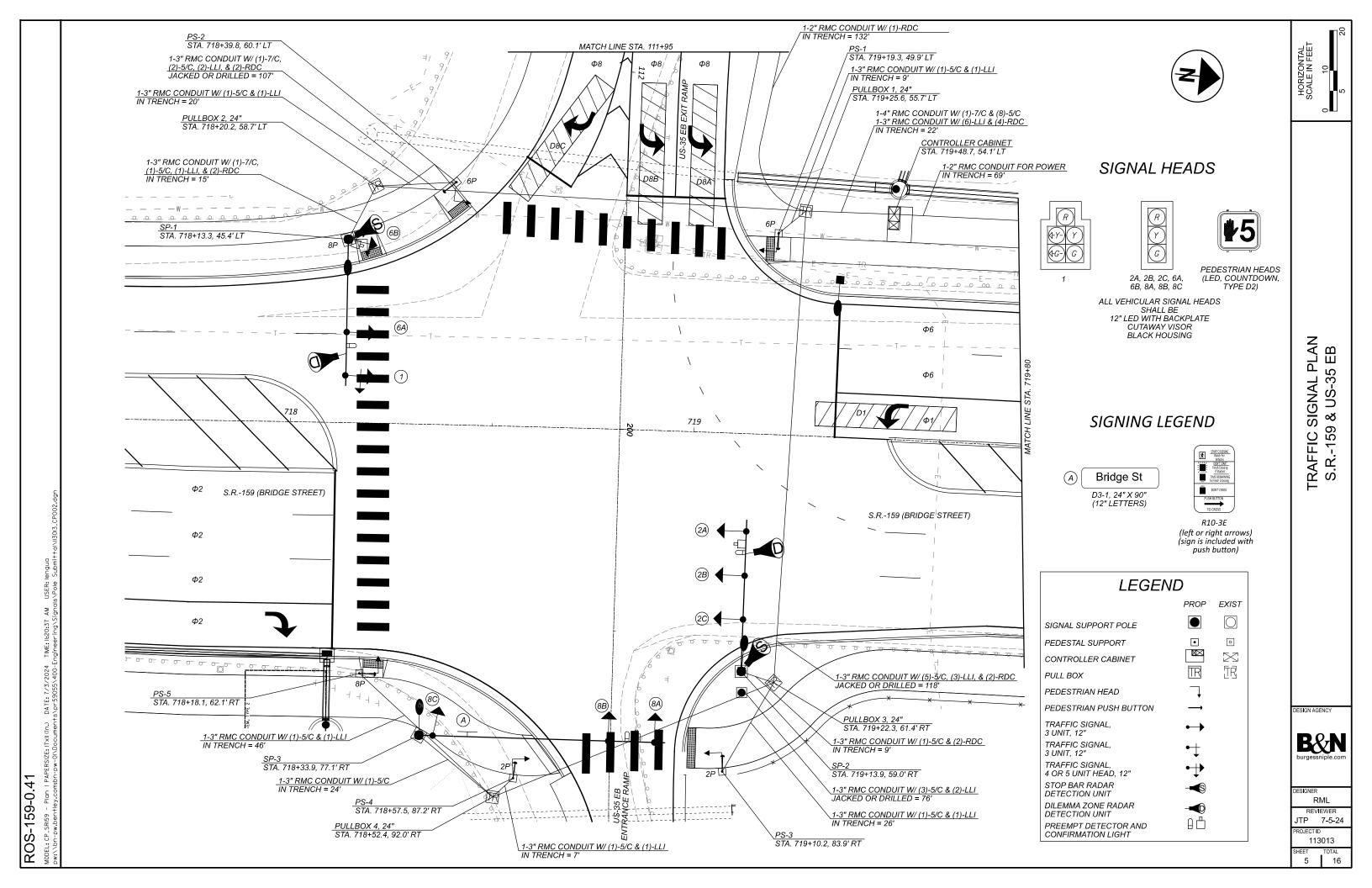
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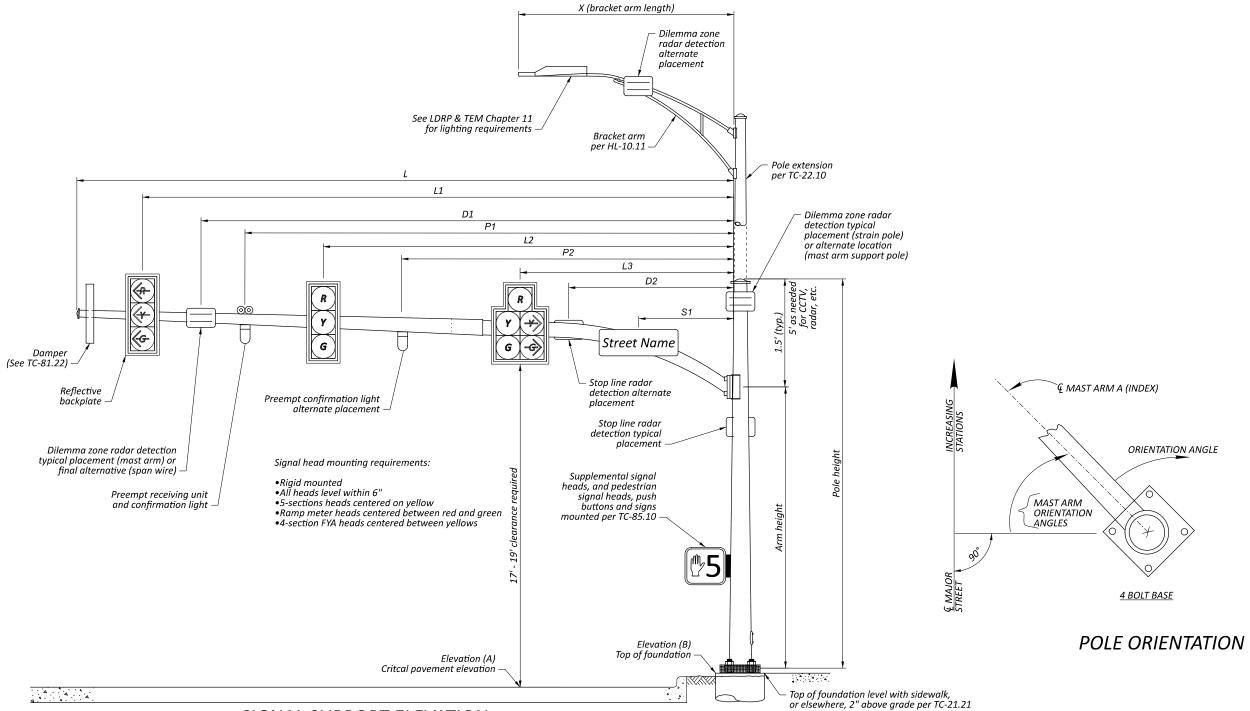
MAST ARM TABLE

			ELEV	ATION								SI	GNAL SUPP	ORT DETA	LS									ORIENTAT	ION ANGL	ES FROM M	AST ARM	
SUPPORT NO.	STATION	OFFSET	(PAVT. ELEV.)	TOP OF FOUND.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	٦	L1	L2	L3	L4	L5	S 1	S 2	P1	P2	D1	D2	D3	X	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE
				B (FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG
SP-1	711+46.1	66.0' LT	623.65	623.20	TC-81.22	13	36.0	21	51	48	36.5	-	-	-	42	5.5	45	39	41.5	-	-	12	90	-	270	315	270	180
SP-2	710+21.0	43.2' LT	625.30	625.50	TC-81.22	4	36.0	21	38	35.5	24.5	13	-	-	4	-	29.5	18.5	29.5	0	-	12	0	-	270	335	0	90
SP-3	711+53.3	57.2' RT	623.50	622.40	TC-81.22	14	36.5	21.5	62	59	48.5	37.5	26.5	15.5	54.5	4.5	45	39.5	42.5	32	0	12	0	-		-	0	90
SP-4	710+50.7	81.3' RT	623.60	623.50	TC-81.22	4	36.0	21	38	35	22	-	-	-	28.5	5.5	32	25.5	-	-	-	12	90	-	270	270	270	180

B&N

RML JTP 7-5-24 113013





SIGNAL SUPPORT ELEVATION

RSIZE: 17x11 (in.)

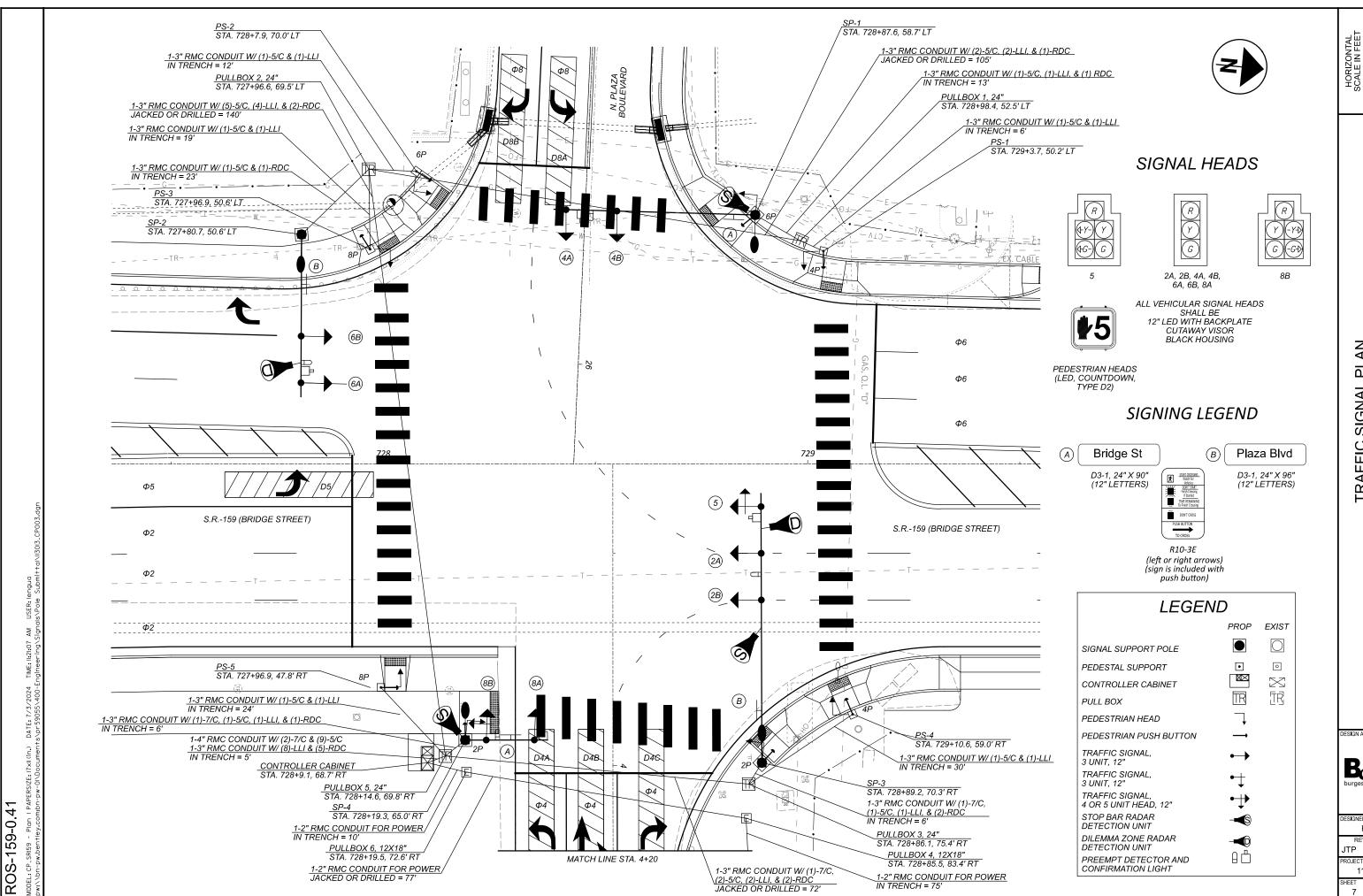
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MAST ARM TABLE

			ELEVA	ATION		SIGNAL SUPPORT DETAILS														ORIENTATION ANGLES FROM MAST ARM							
SUPPORT NO.	STATION	OFFSET	A (PAVT. ELEV.)	B (TOP OF FOUND.)	ESIGN TYPE	DESIGN NO.	РОСЕ НЕІСНТ	ARM HEIGHT	L	L1	L2	L3	S 1	P1	P2	D1	D2	x	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE			
							FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG			
SP-1	718+13.3	45.4' LT	623.20	623.30	TC-81.22	4.0	36.0	21	37	34	23	0	-	31	26.5	28.5	0	12	0	-	270	250	0	180			
SP-2	719+13.9	59.0' RT	621.23	619.77	TC-81.22	4.0	37.5	22.5	38	35	24	13	-	31.5	-	29.5	0	12	0	-	-	-	0	180			
SP-3	718+33.9	77.1' RT	620.60	619.87	TC-81.22	13.0	36.5	21.5	60	59	47.5	12.5	4	54	-	-	-	12	90	-	-	-	270	180			



RML JTP 7-5-24 113013



R.-159 & N. PLAZA BOULEVARD TRAFFIC SIGNAL PLAN Ś

B&N

RML JTP 7-5-24

ROJECT ID 113013

€ MAST ARM A (INDEX)

MAST ARM ORIENTATION ANGLES

ORIENTATION ANGLE

4 BOLT BASE

POLE ORIENTATION



SIGNAL SUPPORT ELEVATION

 $oldsymbol{G}$

Preempt confirmation light

Signal head mounting requirements:

Rigid mounted
All heads level within 6"
5-sections heads centered on yellow
Ramp meter heads centered between red and green
4-section FYA heads centered between yellows

MAST ARM TABLE

Elevation (B)

X (bracket arm length)

Bracket arm per HL-10.11

L3

D2

Street Name

– Stop line radar detection alternate

Stop line radar detection typical

placement

Supplemental signal heads, and pedestrian signal heads, push

buttons and signs mounted per TC-85.10

See LDRP & TEM Chapter 11 for lighting requirements -

D1

Elevation (A)

Critcal pavement elevation

L2

Y + G -G P2

L1

· Dilemma zone radar detection alternate

- Pole extension per TC-22.10

Dilemma zone radar

detection typical placement (strain pole) or alternate location (mast arm support pole)

Top of foundation level with sidewalk, or elsewhere, 2" above grade per TC-21.21

INCREASING STATIONS

	STATION		ELEVA	ATION		SIGNAL SUPPORT DETAILS														ORIENTATION ANGLES FROM MAST ARM							
SUPPORT NO.		OFFSET	(PAVT. ELEV.)	B (TOP OF FOUND.)	ESIGN TYPE	DESIGN NO.	РОСЕ НЕІСНТ	ARM HEIGHT	L	L1	L2	L3	S1	P1	P2	D1	D2	x	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE			
			∢			_	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG			
SP-1	728+87.6	58.7' LT	622.85	624.20	TC-81.22	13	35.0	20	50	47	33	-	5	41	-	0	-	12	90	-	90	320	270	180			
SP-2	727+80.7	50.6' LT	623.20	621.90	TC-81.22	4	37.0	22	38	35	24	-	12	32	-	30.5	-	12	0	-	-	-	0	90			
SP-3	728+89.2	70.2' RT	624.07	623.50	TC-81.22	14	36.0	21	63	60.5	49.5	38.5	12.5	58	44.5	55	32	12	0	-	5	45	0	180			
SP-4	728+19.3	65.0' RT	623.00	622.90	TC-81.22	2	36.0	21	19	16.5	10.5	-	5	18	7	0	-	12	90	-	270	270	270	90			

DATE: 7/3/2024 TIME: 11:21:21 AM USER: lengua .00-Engineering/Signals/Pole Submittal/113013 CD0 RSIZE: 17x11 (in.)

(/

Preempt receiving unit and confirmation light

Damper (See TC-81.22)

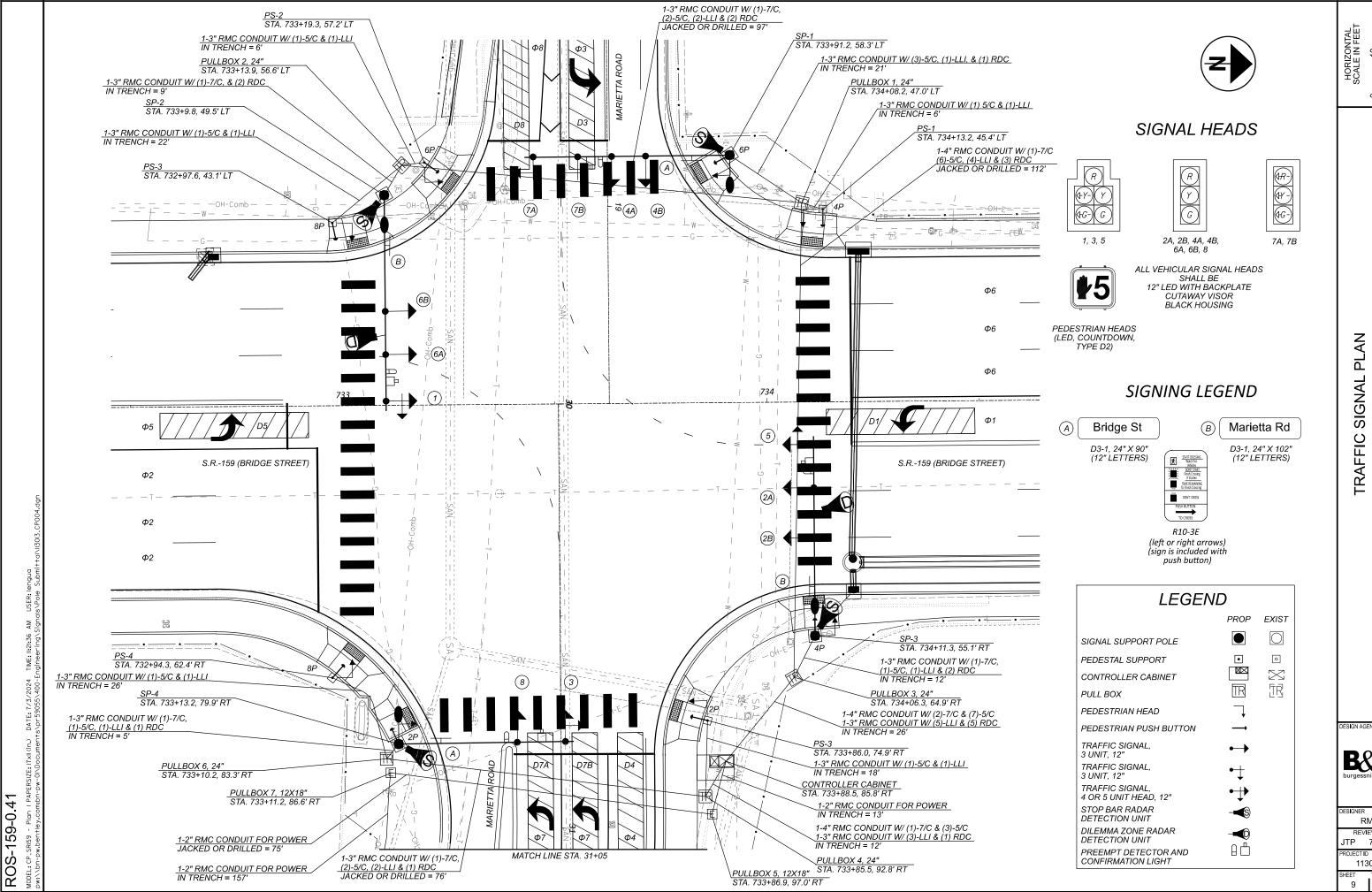
backplate

Dilemma zone radar detection typical placement (mast arm) or final alternative (span wire) –

ROS-159-0.41



RML JTP 7-5-24 113013

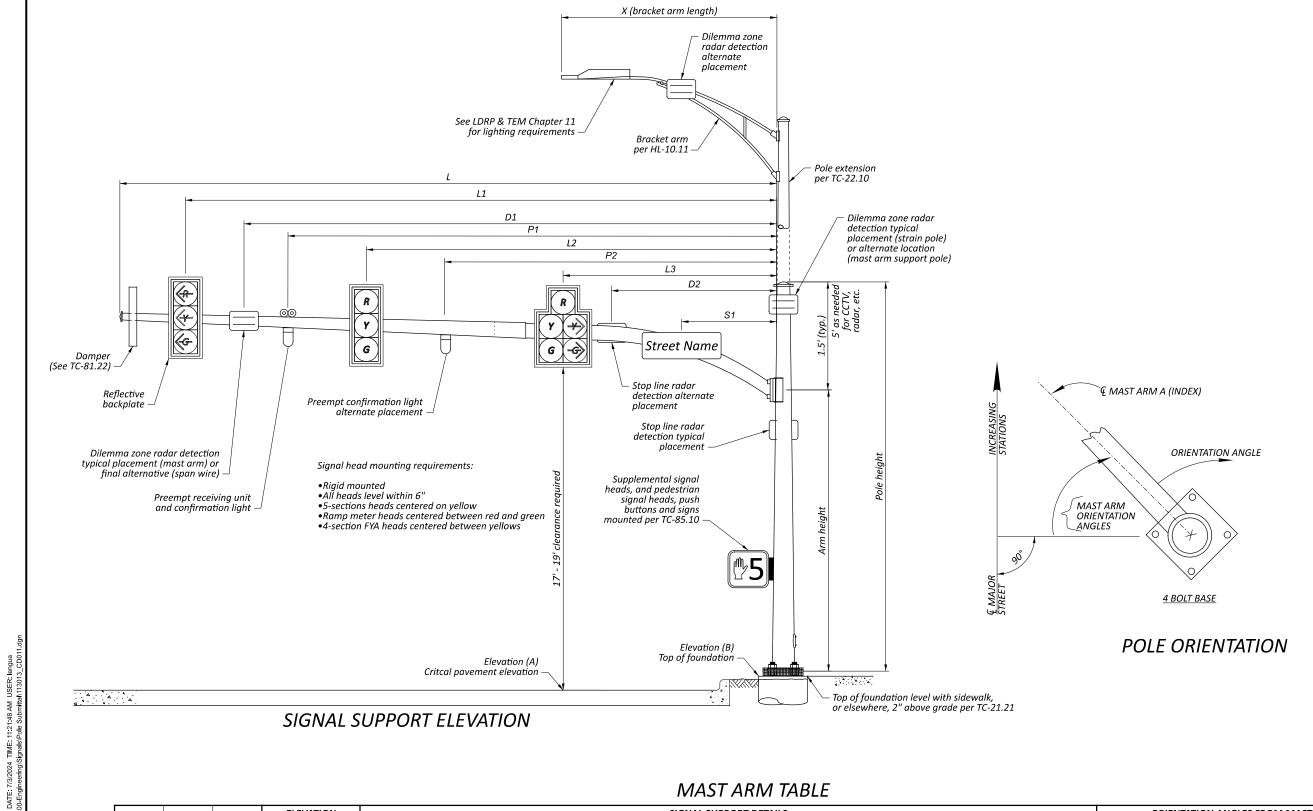


TRAFFIC SIGNAL PLAN .R.-159 & MARIETTA ROAD ഗ



RML JTP 7-5-24

113013



SIGNAL SUPPORT ELEVATION

SR159 - Plan 1 PAPERSIZE: 17x11 (in.)

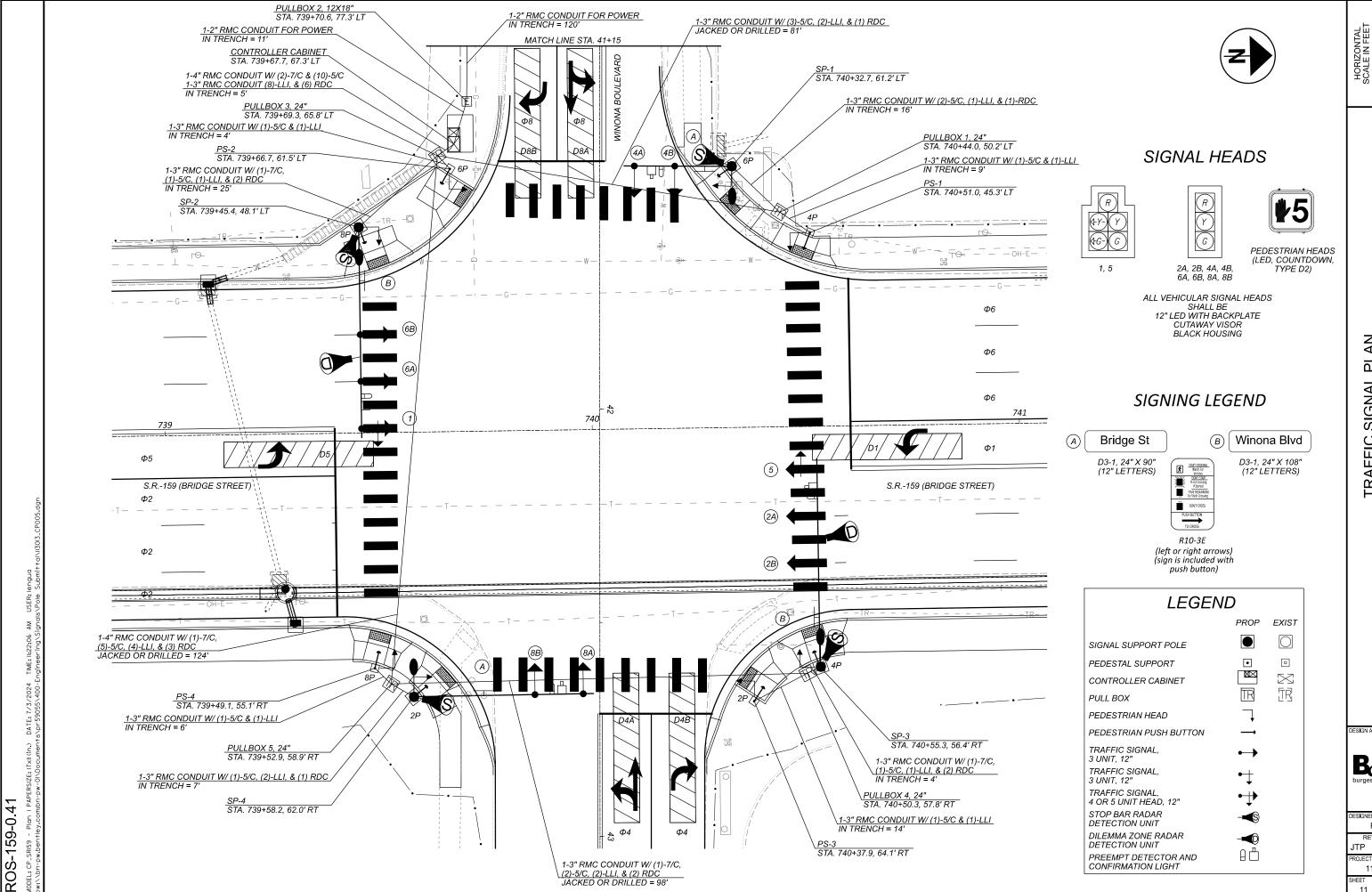
ROS-159-0.41

MAST ARM TABLE

				ELEVA	ATION							SIGNAL	SUPPORT	DETAILS							ORIENTATION ANGLES FROM MAST ARM						
CM FGCGGIIA	SOFFOR NO.	STATION	OFFSET	(PAVT. ELEV.)	B (TOP OF FOUND.)	ESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	L4	S 1	P1	P2	D1	D2	x	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE	
				A				FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG	
SF	P-1	733+91.2	58.3' LT	627.35	628.10	TC-81.22	13	35.0	20	49	46.5	36	28	20	9	33	-	0	-	12	90	-	270	335	270	180	
SF	P-2	733+09.8	49.5' LT	627.63	627.20	TC-81.22	13	36.0	21	51	48.5	37.5	27.5	-	12	44	-	33	0	12	0	-	-	-	0	180	
SF	P-3	734+11.3	55.1' RT	627.80	628.30	TC-81.22	12	36.0	21	48	45	35	23.5	-	11.5	41	-	30	0	12	0	-	90	0	0	180	
SF	P-4	733+13.2	79.9' RT	626.85	627.20	TC-81.22	12	36.0	21	42	39.5	28	-	-	10	34	25.5	-	-	12	90	-	270	245	270	90	



RML JTP 7-5-24 113013 10 TOTAL

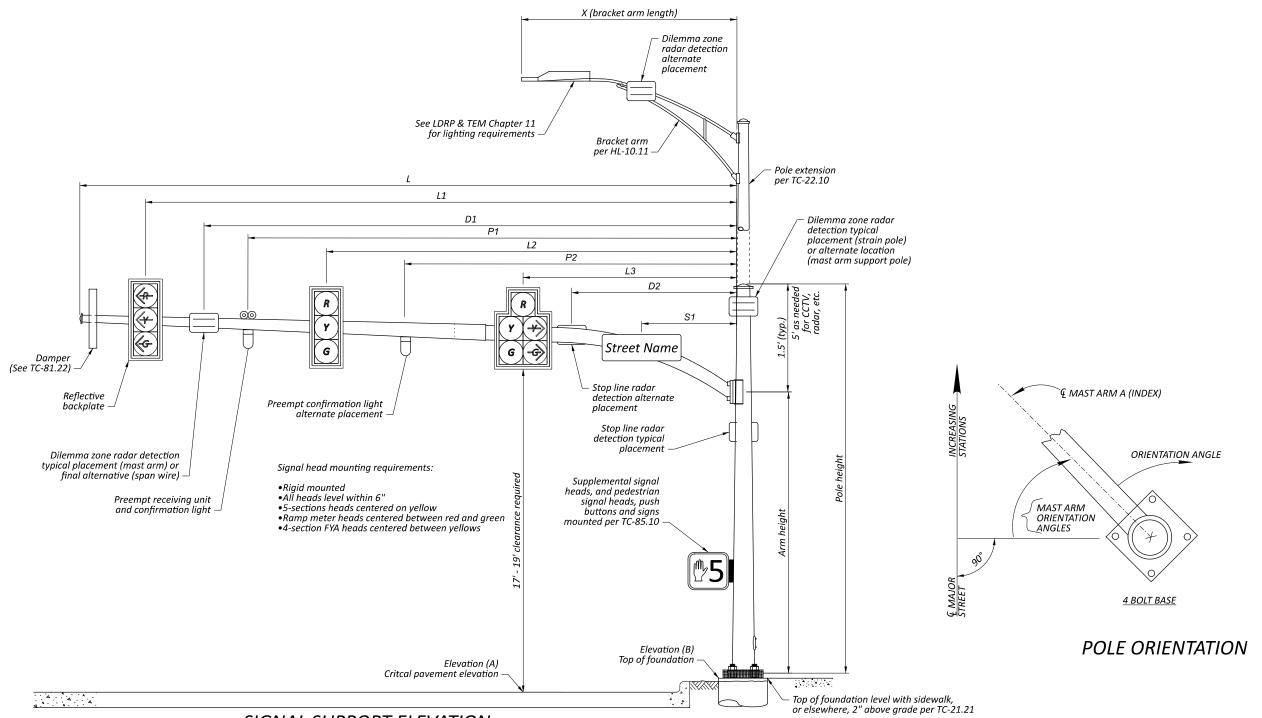


TRAFFIC SIGNAL PLAN S.R.-159 & WINONA BOULEVARD

B&N

RML JTP 7-5-24

113013 11 16



SIGNAL SUPPORT ELEVATION

SR159 - Plan 1 PAPERSIZE: 17x11 (in.)

ROS-159-0.41

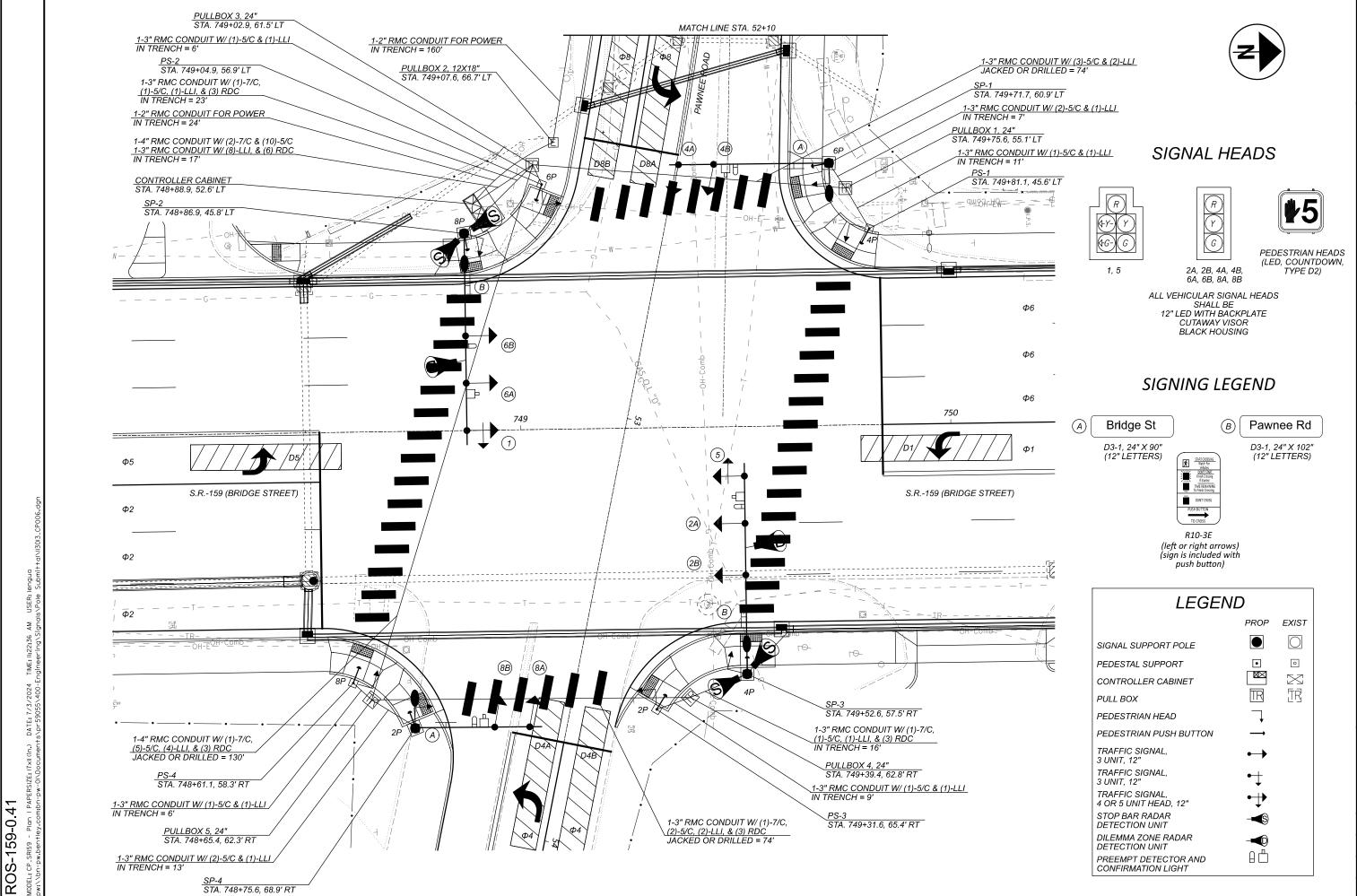
MAST ARM TABLE

			ELEVA	ATION						SIGNAL	SUPPORT	DETAILS							ORIENTAT	ION ANGL	ES FROM N	IAST ARM	
SUPPORT NO.	STATION	OFFSET	(PAVT. ELEV.)	TOP OF FOUND.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	S1	P1	D1	D2	x	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE
			⋖	.) B			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG
SP-1	740+32.7	61.2' LT	625.75	626,20	TC-81.22	2.0	36.0	21	29	27	17.5	-	6.5	19	0	-	12	90	-	270	325	270	180
SP-2	739+45.4	48.1' LT	627.03	627.60	TC-81.22	13.0	36.0	21	50	47.5	36.5	25.5	12.5	42	30.5	0	12	0	-	270	340	0	180
SP-3	740+55.3	56.4' RT	626.47	623.90	TC-81.22	13.0	38.0	23	49	46.5	35.5	24.5	11.5	42	30	0	12	0	-	270	340	0	90
SP-4	739+58.2	62.0' RT	626.15	625.10	TC-81.22	12.0	36.0	21	42	40	28.5	-	3.5	35	0	-	12	90	-	270	325	270	180

DESIGN AGEN



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JTP 7-5-24
PROJECT ID
113013
SHEET TOTAL
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TRAFFIC SIGNAL PLAN .R.-159 & PAWNEE ROAD

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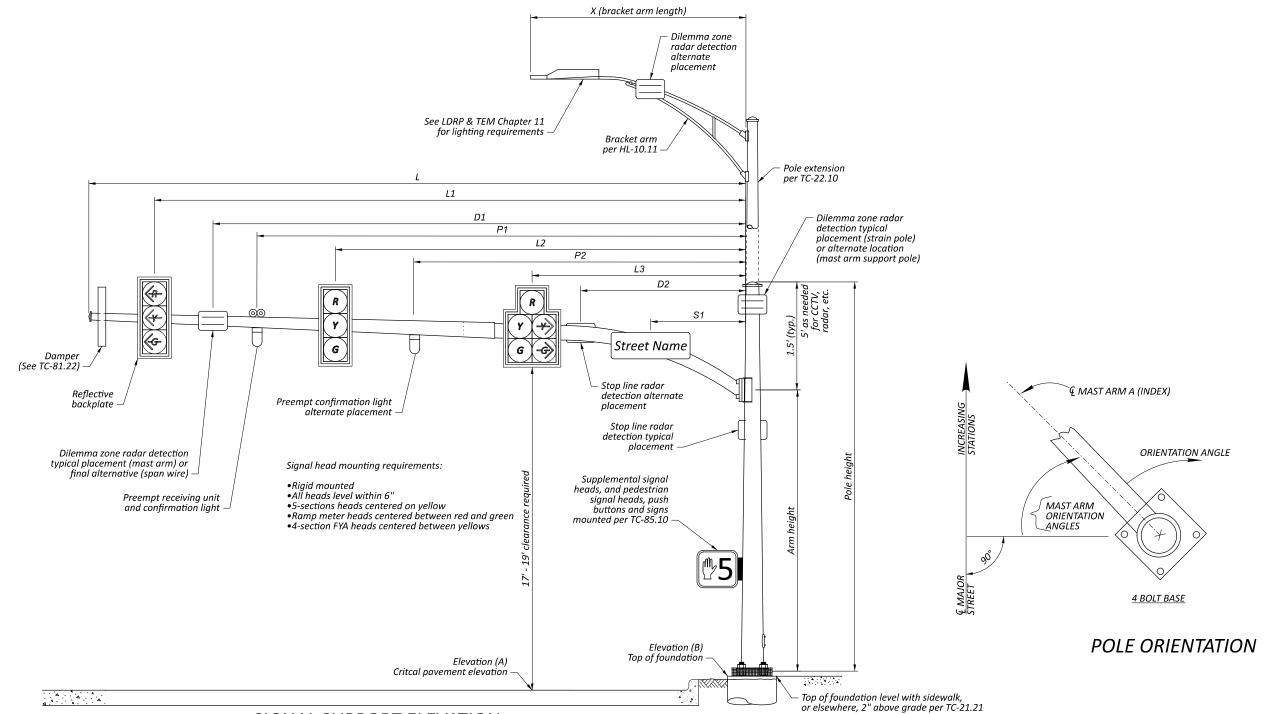
HORIZONTAL SCALE IN FEET

B&Nburgessniple.com

RML
REVIEWER

JTP 7-5-24
PROJECT ID

113013 SHEET TOTAL 13 16



SIGNAL SUPPORT ELEVATION

SR159 - Plan 1 PAPERSIZE: 17x11 (in.)

ROS-159-0.41

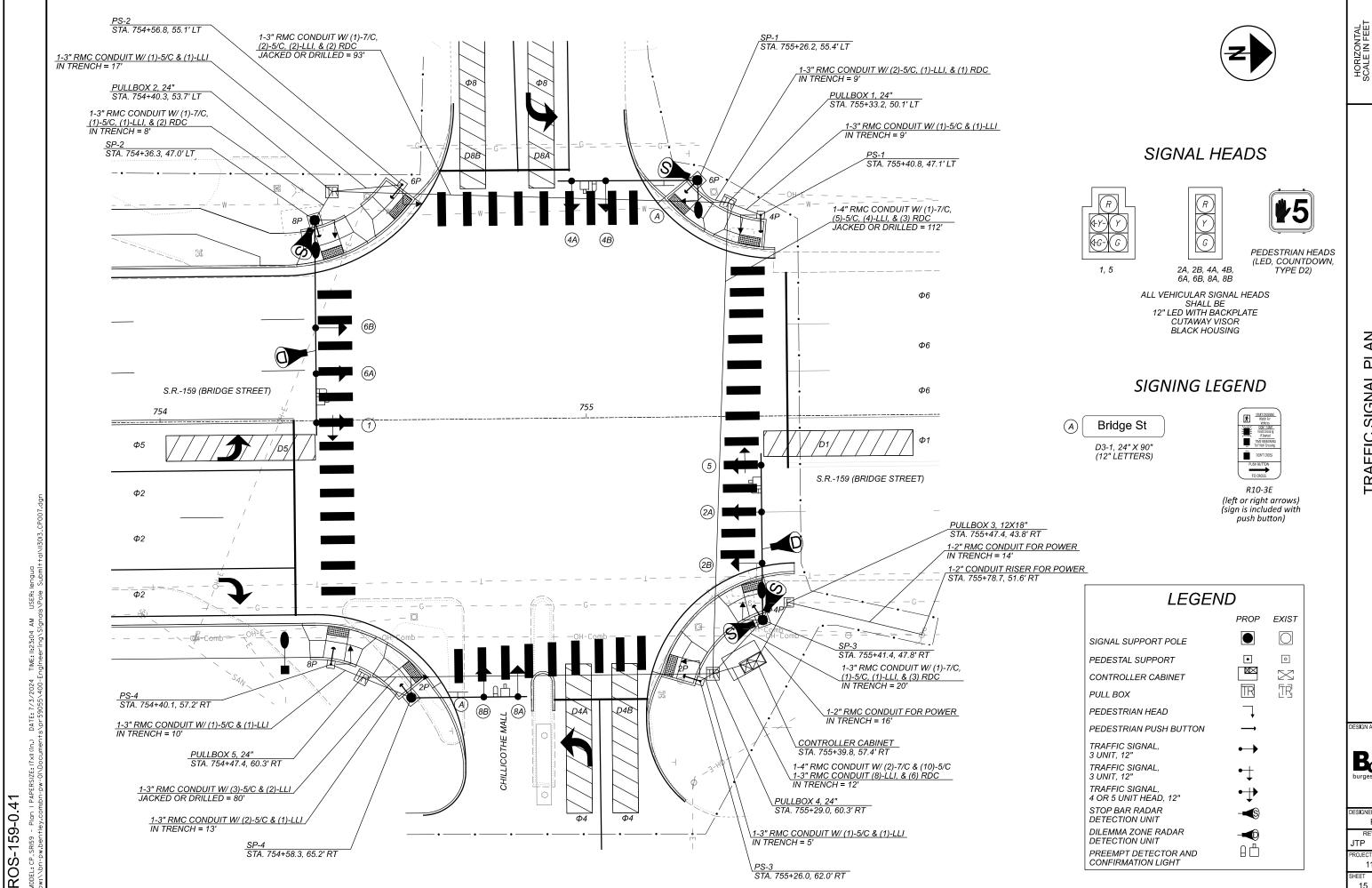
MAST ARM TABLE

			ELEV	ATION						SI	GNAL SUPF	ORT DETA	ILS							ORIENTAT	ION ANGLI	ES FROM M	AST ARM	
SUPPORT NO.	STATION	OFFSET	.(PAVT. ELEV.)	TOP OF FOUND.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	S1	P1	P2	D1	D2	X	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE
			٧) B			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG
SP-1	749+71.9	60.9' LT	624,25	624.40	TC-81.22	4	36.0	21	38	35	27	-	8	24	-	-	-	12	90	-	270	350	270	90
SP-2	748+86.9	45.8' LT	625.03	625.50	TC-81.22	12	36.0	21	48	46	36.5	24	12	37.5	26	29.5	0	12	0	-	290	350	0	90
SP-3	749+52.6	57.5' RT	624.67	623.50	TC-81.22	12	37.0	22	48	46	35	24	13.5	41	-	29.5	0	12	0	-	285	0	0	90
SP-4	748+75.6	68.9' RT	622.90	622.80	TC-81.22	2	36.0	21	29	26.5	18.5	-	7	16	-	-	-	12	90	-	270	250	270	180

DESIGN AGENCY



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REVIEWER
JTP 7-5-24
PROJECT ID
113013
SHEET TOTAL
14 16



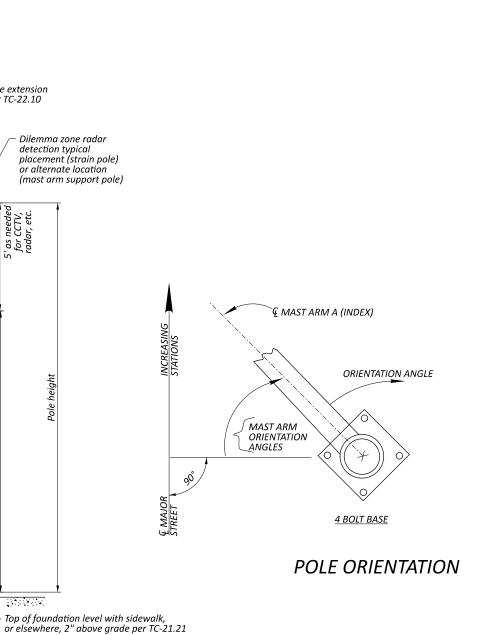
TRAFFIC SIGNAL PLAN .R.-159 & CHILLICOTHE MALL Ś

B&N

RML JTP 7-5-24

113013

15 | 16



SIGNAL SUPPORT ELEVATION

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Preempt confirmation light

Signal head mounting requirements:

Rigid mounted
All heads level within 6"
5-sections heads centered on yellow
Ramp meter heads centered between red and green
4-section FYA heads centered between yellows

MAST ARM TABLE

Elevation (B)

X (bracket arm length)

Bracket arm per HL-10.11

L3

D2

Street Name

– Stop line radar detection alternate

Stop line radar detection typical

placement

Supplemental signal heads, and pedestrian

buttons and signs mounted per TC-85.10

signal heads, push

See LDRP & TEM Chapter 11 for lighting requirements -

D1

Elevation (A)

Critcal pavement elevation

L2

Y + G -G P2

L1

· Dilemma zone radar detection alternate

- Pole extension per TC-22.10

Dilemma zone radar

			ELEV	ATION						SIGNAL	SUPPORT	DETAILS							ORIENTAT	ION ANGL	ES FROM M	AST ARM	
SUPPORT NO.	STATION	OFFSET	(PAVT. ELEV.)	TOP OF FOUND.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	S1	P1	D1	D2	x	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	BRACKET ARM	HANDHOLE
			٧	B ()			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG
SP-1	755+26.2	55.4' LT	626.90	625.30	TC-81.22	2	37.0	22	32	30	22	-	8	26.5	0	-	12	90	-	270	315	270	90
SP-2	754+36.3	47.0' LT	627.73	626.70	TC-81.22	13	37.0	22	50	47.5	36.5	25.5	-	42	30.5	0	12	0	-	270	345	0	90
SP-3	755+47.4	43.8' RT	627.80	626.70	TC-81.22	12	37.0	22	39	36.5	25.5	13.5	-	32	19.5	0	12	0	-	270	330	0	180
SP-4	754+58.3	65.2' RT	626.25	626.40	TC-81.22	2	23.0	21	27	25	17	-	11	21	-	-	-	90	-	270	235	-	90



RML JTP 7-5-24 113013

SR159 - Plan 1 PAPERSIZE: 17x11 (in.) ROS-159-0.41

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Preempt receiving unit and confirmation light

Damper (See TC-81.22)

backplate

Dilemma zone radar detection typical placement (mast arm) or final alternative (span wire) –

426-25 SIGNAL POLE AND PEDESTAL PRICING

Vendor Name:

Bidders are required to fill out the unit bid price and lead time for the supports ordered.

ODOT Traffic Engineering Manual for reference.

ODOT Signal Design Reference Packet for reference.

									Itan	n 632	Signa	al Pal	e and	Нап	nchec	l Mac	t Arn	n Det	aile												
									11011		M Fig. 49								ans					TE	M Fig. 498	3-38: Dlan	Details fo	or Signal 1	Supports	- Maet Ari	m Orientation
			I							1	W 1 1g. 430	3-37. Flai		AL SUPP			Lenguis	'						1.5	-IWI F 1g. 450			NGLES FR			II Offeritation
Unit Bid Price (ea	Lead time (wks.)	Quantity (ea.)	Finish (none= Galv. Stee	Intersection	SUPPORT NO.	DESIGN TYPE	DESIGN NO.	д Росе неіснт	T ARM HEIGHT	L	L1	L2	L3	L4	L5	S1	S2	P1	P2	D1	D2 FT	D3	X	MAST ARM A ANGLE	MAST ARM B ANGLE	PEDESTRIAN SIGNAL	D PEDESTRIAN O PUSHBUTTON	POWER SERVICE	SIGNAL	BRACKET D ARM	HANDHOLE CABLE CABLE CABLE TOP TOP
		1	Gloss black	SR159 & Stewart Rd	SP-1	TC-81.22	13	36	21	51	48	36.5	-	-	-	42	5.5	45	39	41.5	-	-	12	90	-	270	315		-	270	180 -
		1	Gloss black	SR159 & Stewart Rd	SP-2	TC-81.22	4	36	21	38	35.5	24.5	13	-	-	4	-	29.5	18.5	29.5	0	-	12	0	_	270	335	_	_	0	90 -
		1	Gloss black	SR159 & Stewart Rd	SP-3	TC-81.22	14	36.5	21.5	62	59	48.5	37.5	26.5	15.5	54.5	4.5	45	39.5	42.5	32	0	12	0	_	-	-	_		0	90 -
		1	Gloss black	SR159 & Stewart Rd	SP-4	TC-81.22	4	36	21	38	35	22	-	-	-	28.5	5.5	32	25.5	-	-	-	12	90	_	270	270	-	-	270	180
		1	Gloss black	SR159 & US35 EB	SP-1	TC-81.22	4	36	21	37	34	23	0	-	-	-	-	31	26.5	28.5	0	-	12	0	_	270	250	-	-	0	180 -
		1	Gloss black	SR159 & US35 EB	SP-2	TC-81.22	4	37.5	22.5	38	35	24	13	-	-	-	-	31.5	-	29.5	0	-	12	0	_	-	-	-	-	0	180 -
		1	Gloss black	SR159 & US35 EB	SP-3	TC-81.22	13	36.5	21.5	60	59	47.5	12.5	-	-	4	-	54	-	-	-	-	12	90	-	-	-	-	-	270	180 -
		1	Gloss black	SR159 & Plaza Blvd	SP-1	TC-81.22	13	35	20	50	47	33	-	-	-	5	-	41	-	0	-	-	12	90	-	90	320	-	-	270	180 -
		1	Gloss black	SR159 & Plaza Blvd	SP-2	TC-81.22	4	37	22	38	35	24	-	-	-	12	-	32	-	30.5	-	-	12	0	-	-	-	-	-	0	90 -
		1	Gloss black	SR159 & Plaza Blvd	SP-3	TC-81.22	14	36	21	63	60.5	49.5	38.5	-	-	12.5	-	58	44.5	55	32	-	12	0	-	5	45	-	-	0	180 -
		1	Gloss black	SR159 & Plaza Blvd	SP-4	TC-81.22	2	36	21	19	16.5	10.5	-	-	-	5	-	18	7	0	-	-	12	90	-	270	270	-	-	270	90 -
		1	Gloss black	SR159 & Marietta Rd	SP-1	TC-81.22	13	35	20	49	46.5	36	28	20	-	9	-	33	-	0	-		12	90	-	270	335	-	-	270	180 -
		1	Gloss black	SR159 & Marietta Rd	SP-2	TC-81.22	13	36	21	51	48.5	37.5	27.5	-	-	12	-	44	-	33	0	-	12	0	-	-	-	-	-	0	180 -
		1	Gloss black	SR159 & Marietta Rd	SP-3	TC-81.22	12	36	21	48	45	35	23.5	-	-	11.5	-	41	-	30	0	-	12	0	-	90	0	-	-	0	180 -
		1	Gloss black	SR159 & Marietta Rd	SP-4	TC-81.22	12	36	21	42	39.5	28	-	-	-	10	-	34	26.5	-	-	-	12	90	-	270	245	-	-	270	90 -
		1	Gloss black	SR159 & Winona Blvd	SP-1	TC-81.22	2	36	21	29	27	17.5	-	-	-	6.5	-	19	-	0	-	-	12	90		270	325	-	-	270	180 -
		1	Gloss black	SR159 & Winona Blvd	SP-2	TC-81.22	13	36	21	50	47.5	36.5	25.5	-	-	12.5	-	42	-	30.5	0	-	12	0	-	270	340	-	-	0	180 -
		1	Gloss black	SR159 & Winona Blvd	SP-3	TC-81.22	13	38	23	49	46.5	35.5	24.5	-	-	11.5	-	42	-	30	0	-	12	0	-	270	340	-	-	0	90 -
		1	Gloss black	SR159 & Winona Blvd	SP-4	TC-81.22	12	36	21	42	40	28.5	-	-	-	3.5	-	35	-	0	-	-	12	90	-	270	325	-	-	270	180 -
		1	Gloss black	SR159 & Pawnee Rd	SP-1	TC-81.22	4	36	21	38	35	27	-	-	-	8	-	24	-	-	-	-	12	90	-	270	350	-	-	270	90 -
		1	Gloss black	SR159 & Pawnee Rd	SP-2	TC-81.22	12	36	21	48	46	36.5	24	-	-	12	-	37.5	26	29.5	0	-	12	0	-	290	350	-	-	0	90 -
		1	Gloss black	SR159 & Pawnee Rd	SP-3	TC-81.22	12	37	22	48	46	35	24	-	-	13.5	-	41	-	29.5	0	-	12	0	-	285	0	-	-	0	90 -
		1	Gloss black	SR159 & Pawnee Rd	SP-4	TC-81.22	2	36	21	29	26.5	18.5	-	-	-	7	-	16	-	-	-	-	12	90	-	270	250	-	-	270	180 -
		1	Gloss black	SR159 & Chillicothe Mall	SP-1	TC-81.22	2	37	22	32	30	22	-	-		8	-	26.5	-	0		-	12	90	-	270	315	-	-	270	90 -
		1	Gloss black	SR159 & Chillicothe Mall	SP-2	TC-81.22	13	37	22	50	47.5	36.5	25.5	-	-	-	-	42	-	30.5	0	-	12	0	-	270	345	-	-	0	90 -
		1	Gloss black	SR159 & Chillicothe Mall	SP-3	TC-81.22	12	37	22	39	36.5	25.5	13.5	-	-	-	-	32	-	19.5	0	-	12	0	-	270	330	-	_	0	180 -
		1	Gloss black	SR159 & Chillicothe Mall	SP-4	TC-81.22	2	23	21	27	25	17	-	-	-	11	-	21	-	-	-	-	-	90	-	270	235	-	-	-	90 -

		Item	632 Ped	estrian Pedestals
Unit Bid Price (ea.)	Lead time (wks.)	QUANTITY	Finish	DESCRIPTION
		32	Gloss black	PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN

Notes:

1. The gloss black finish on all signal supprts, combination signal supports, poles, pedestals and haunched mast arms shall comply with ODOT Supplemental Specification 916, July 21, 2023.

2. Refer to Sheet 2 of Attachment A for the ODOT Item and Item Extension number for each bid item.

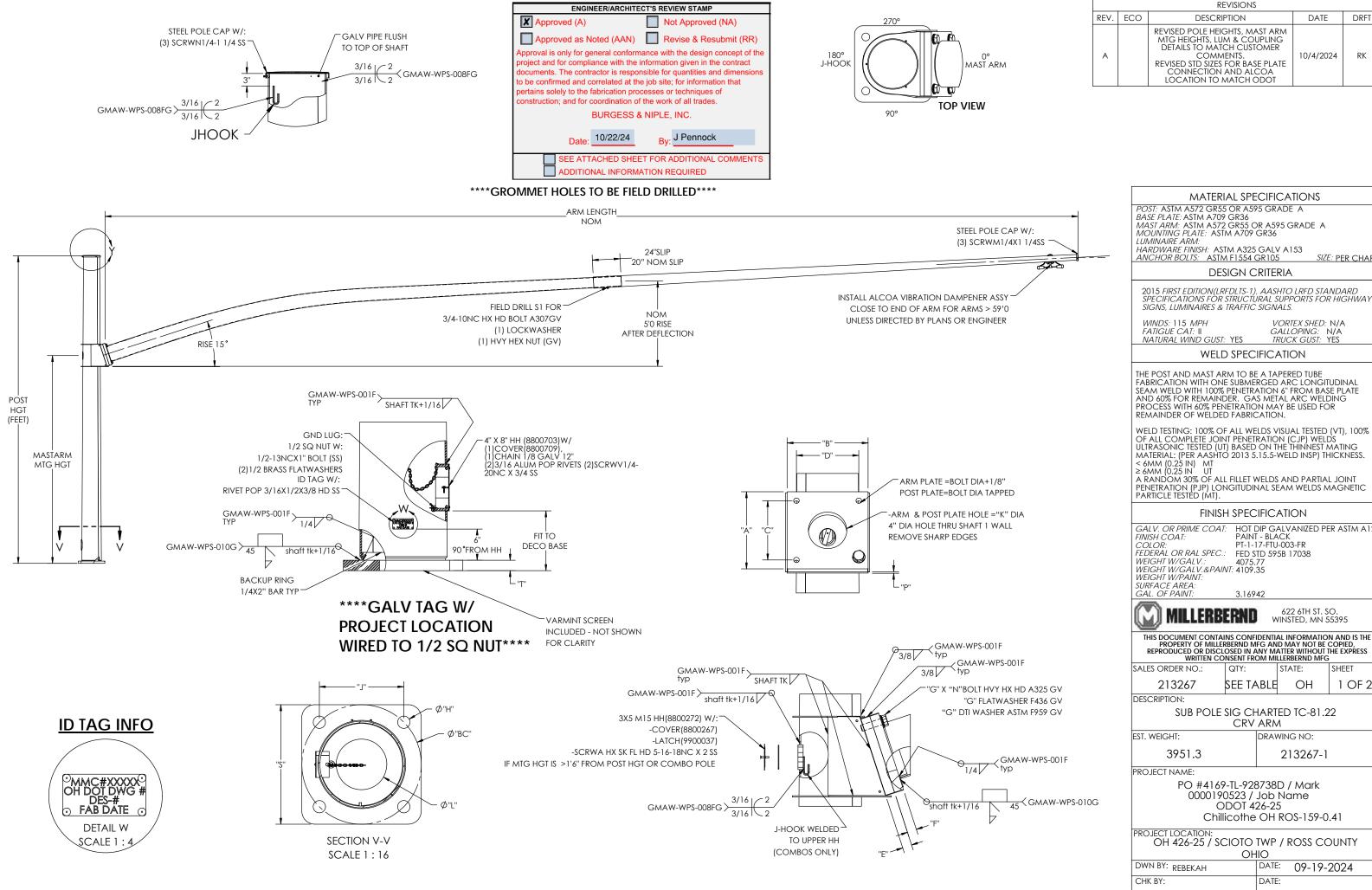
3. Refer to Attachment A for other details and specifications to comply with.

	426-25 Light Pole Pricing													
Vendor Name	:													
			Item (625 Light Poles										
ITEM	QUANTITY	Finish	DESCRIPTION	MANUFACTURER	Lead Time (weeks)	Unit Price	Extension	Delivery Address	Delivery Contact and info					
1	61	Gloss black	TRANSFORMER BASE, TYPE AT-A, AS PER PLAN											
2	61	Gloss black	LIGHT POLE, CONVENTIONAL, (35' MTG HT), AS PER PLAN]						
3	6	Gloss black	LIGHT POLE, MISC. (SUP LIGHT POLE, 15' MTG HT), AS PER PLAN					Chillicothe, OH 45601 (exact						
4	32	Gloss black	LIGHT POLE, MISC. (BRIDGE POLE REPLACEMENTS), AS PER PLAN					location in Chillicothe to be provided by Highway	740-774-8980 zachary.schaaf@					
5	22	Gloss black	BRACKET ARM, 4', AS PER PLAN					Contractor)	dot.ohio.gov					
6	28	Gloss black	BRACKET ARM, 8', AS PER PLAN											
7	37		BRACKET ARM, 12', AS PER PLAN											
						Grand Total		-						

- Notes:
 1. The gloss black finish on all light poles, transformer bases, and bracket arms shall comply with ODOT Supplemental Specification 916, July 21, 2023.
 2. Refer to Sheet 2 of Attachment A for the ODOT Item and Item Extension number for each bid item.
 3. Refer to Attachment A for other details and specifications to comply with.

Shop Drawings

Please note that no luminaires are provided with this Signal and Light Supports Material Only contract. The luminaires cut sheets are provided herein as Reference only.



		REVISIONS		
REV.	ECO	DESCRIPTION	DATE	DRFT
A		REVISED POLE HEIGHTS, MAST ARM MTG HEIGHTS, LUM & COUPLING DETAILS TO MATCH CUSTOMER COMMENTS. REVISED STD SIZES FOR BASE PLATE CONNECTION AND ALCOA LOCATION TO MATCH ODOT	10/4/2024	RK

MATERIAL SPECIFICATIONS

MAST ARM: ASTM A572 GR55 OR A595 GRADE A MOUNTING PLATE: ASTM A709 GR36

SIZE: PER CHART

VORTEX SHED: N/A

GALLOPING: N/A TRUCK GUST: YES

WELD SPECIFICATION

THE POST AND MAST ARM TO BE A TAPERED TUBE FABRICATION WITH ONE SUBMERGED ARC LONGITUDINAL SEAM WELD WITH 100% PENETRATION 6" FROM BASE PLATE AND 60% FOR REMAINDER. GAS METAL ARC WELDING PROCESS WITH 60% PENETRATION MAY BE USED FOR BEALANDER OF WELDED E ABBICATION. REMAINDER OF WELDED FABRICATION.

WELD TESTING: 100% OF ALL WELDS VISUAL TESTED (VT), 100% OF ALL COMPLETE JOINT PENETRATION (CJP) WELDS ULTRASONIC TESTED (UT) BASED ON THE THINNEST MATING MATERIAL: (PER AASHTO 2013 5.15.5-WELD INSP) THICKNESS.

PENETRATION (PJP) LONGITUDINAL SEAM WELDS MAGNETIC PARTICLE TESTED (MT).

FINISH SPECIFICATION

HOT DIP GALVANIZED PER ASTM A 123 PAINT - BLACK PT-1-17-FTU-003-FR FEDERAL OR RAL SPEC.: FED STD 595B 17038

622 6TH ST. SO. WINSTED, MN 55395

1 OF 2

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ОН

DRAWING NO:

213267-1

0000190523 / Job Name ODOT 426-25 Chillicothe OH ROS-159-0.41

OH 426-25 / SCIOTO TWP / ROSS COUNTY

09-19-2024

DESIGN	MAX DESIGN	DESIGN DISTANCE	Р	OLE			MASTA	RM			AR	M ATTA	CHMEN	IT		M' HARD	TG WARE			BOLT CIRCLE			BAS	SE DETAI	L	
NO	AREA SQ.FT.	FROM CL(FT)	WALL TK	SHAFT BASE DIA	WALL TK	SHAFT BASE DIA	SINGLE MASTARM MAX 50'0	MAX LENGTH	2 PIECE MAST ARM >50'0	"A" IN	"B" IN	"C" IN CTRS	"D" IN CTRS	"E" IN TK	"F" IN	"G" IN	"N" IN LGTH	"K" IN	"P" IN TK	"BC" IN	"S" IN	"J" IN CTRS	"T" IN TK	"H" IN DIA.	"L" IN	A.B SIZE
2	25	31.5	1/4	13.0	3/16	8.0		32'0	-	16 1/2	14 1/2	12 1/2	9 1/2	2"	2"	1 1/4	4 1/2	7	3/8	15"	15 5/8	10 5/8	2"	2 1/8	9 1/2	1 3/4X58" 9900347
4	42	37.5	1/4	14.0	1/4	10.32	MMC WILL SUPPLY ONE PIECE SHAFT TO 38'0	38'0	-	16 1/2	14 1/2	12 1/2	9 1/2	2"	2"	1 1/2	4 1/2	8 3/4	3/8	18"	18 1/2	12 3/4	2"	2 3/8	11 1/8	2"x58" 9900349
12	42	47.5	5/16	14.0	5/16	11.0	MMC WILL SUPPLY ONE PIECE SHAFT TO 48'0	48'0	-	16 1/2	14 1/2	12 1/2	9 1/2	2"	2"	1 1/2	4 1/2	8 3/4	3/8	20"	20 1/2	14 1/8	2"	2 3/8	8 3/4	2"x58" 9900349
13	40	59.5	5/16	16.0	5/16	13.0	MMC WILL SUPPLY ONE PIECE SHAFT TO 50'0	60'0	(\$1)5/16X13.0X8.8X30'0 (\$2)1/4X9.83X?	19 1/2	16 1/2	15"	12"	2"	2"	1 1/2	4 1/2	8 1/4	3/8	22"	23"	15 5/8	2"	2 3/8	9 1/2	2"x58" 9900349
14	38	69.5	5/16	17.0	5/16	14.0	MMC WILL SUPPLY ONE PIECE SHAFT TO 50'0	70'0	(\$1)5/16X14.0X8.82X37'0 (\$2)1/4X9.85X?	19 1/2	19 1/2	15"	15"	2 1/4	2 1/4	1 1/2	5 1/2	9 1/4	3/8	22"	23"	15 5/8	2"	2 3/8	9 3/4	2"x58" 9900349

					LOWER HH		MASTARM				LUMINAIR	E ARM			PE	D SIGNA	L	PU	SH BUTT	ΓΟN	РО	WER SER	VICE	CABI	.E ENTRA	ANCE
DESIGN NO	QTY.	STRUCTURE NO	STRUCTURE LOCATION	POST HGT (FEET)	ORIENTATION FROM MASTARM	MTG HGT	LENGTH (FEET)	RISE	LENGTH	MTG PL STYLE (A-D)	MTG HGT FROM TOP	RISE	LUM ORIENTATION FROM ARM	VIBE DAMPNR	CPLG SIZE	MTG HGT FROM BASE	(DEG) FROM ARM									
							•			•	SR 159 & S	TEWART F	ROAD				·							•		
13	1	SP-1	STA 711+46.1 66.0' LT	30'	180	16'	51'	5'	12'	В	1'6	6'6	270				270			315						
4	1	SP-2	STA 710+21.0 43.2' LT	30'	90	16'	38'	5'	12'	В	1'6	6'6	0				270			335						
14	1	SP-3	STA 711+53.3 57.2' RT	30'	90	16'6	62'	5'	12'	В	1'6	6'6	0	YES												
4	1	SP-4	STA 710+50.7 81.3' RT	30'	180	16'	38'	5'	12'	В	1'6	6'6	270				270			270						
											SR 159	& US 36 E	В													
4	1	SP-1	STA 718+13.3 45.4' LT	30'	180	16'	37'	5'	12'	В	1'6	6'6	0				270			250						
4	1	SP-2	STA 719+13.9 59.0' RT	30'	180	17'6	38'	5'	12'	В	1'6	6'6	0													
13	1	SP-3	STA 718+33.9 77.1' RT	30'	180	16'6	60'	5'	12'	В	1'6	6'6	270	YES												
			7711 111								SR 159 8	. PLAZA BI	LVD													
13	1	SP-1	STA 728+87.6 58.7' LT	30'	180	15'	50'	5'	12'	В	1'6	6'6	270				90			320						
4	1	SP-2	STA 727+80.7 50.6' LT	30'	90	17'	38'	5'	12'	В	1'6	6'6	0										-			
14	1	SP-3	STA 728+89.2 70.2' RT	30'	180	16'	63'	5'	12'	В	1'6	6'6	0	YES			5			45						
2	1	SP-4	STA 728+19.3 65.0' RT	30'	90	16	19'	5'	12'	В	1'6	6'6	270				270			270						
			65.0 KI								SR 159 &	MARIETTA	A RD													
13	1	SP-1	STA 733+91.2 58.3' LT	30'	180	15'	49'	5'	12'	В	1'6	6'6	270				270			335						
13	1	SP-2	STA 733+09.8 49.5' LT	30'	180	16'	51'	5'	12'	В	1'6	6'6	0													
12	1	SP-3	STA 734+11.3	30'	180	16'	48'	5'	12'	В	1'6	6'6	0				90			0						
12	1	SP-4	55.1' RT STA 733+13.2 79.9' RT	30'	90	16'	42'	5'	12'	В	1'6	6'6	270				270			245						
			/9.9 KI								SR 159 &	L WINONA	BLVD													
2	1	SP-1	STA 740+32.7 61.2' LT	30'	180	16'	29'	5'	12'	В	1'6	6'6	270				270			325						
13	1	SP-2	STA 739+45.4	30'	180	16'	50'	5'	12'	В	1'6	6'6	0				270			340						
13	1	SP-3	48.1' LT STA 740+55.3	30'	90	18'	49'	5'	12'	В	1'6	6'6	0				270			340						
12	1	SP-4	56.4' RT STA 739+58.2 62.0' RT	30'	180	16'	42'	5'	12'	В	1'6	6'6	270				270			325						
			02.U KI								SR 159 8	L PAWNEE														
4	1	SP-1	STA 749+71.9 60.9' LT	30'	90	16'	38'	5'	12'	В	1'6	6'6	270				270			350						
12	1	SP-2	STA 748+86.9	30'	90	16'	48'	5'	12'	В	1'6	6'6	0				290			350						
12	1	SP-3	45.8' LT STA 749+52.6	30'	90	17'	48'	5'	12'	В	1'6	6'6	0				285			0						
2	1	SP-4	57.5' RT STA 748+75.6	30'	180	16'	29'	5'	12'	В	1'6	6'6	270				270			250						
			68.9' RT	1			1		1	S	R 159 & CI															-
2	1	SP-1	STA 755+26.2 55.4' LT	30'	90	17'	32'	5'	12'	В	1'6	6'6	270				270			315						
13	1	SP-2	STA 754+36.3 47.0' LT	30'	90	17'	50'	5'	12'	В	1'6	6'6	0				270			345						
12	1	SP-3	STA 755+47.4 43.8' RT	30'	180	17'	39'	5'	12'	В	1'6	6'6	0				270			330			-			
2	1	SP-4	STA 754+58.3 65.2' RT	20'	90	16'	27'										270			235						

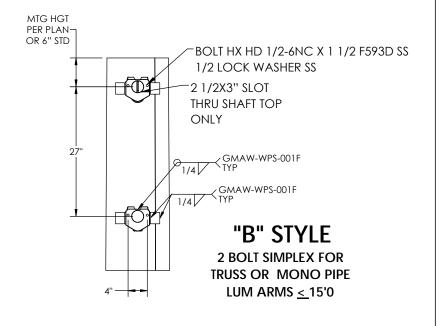
PED SIGNAL & PUSH BUTTON COUPINGS TO BE FIELD DRILLED - ORIENTATION SHOWN AS REF ONLY

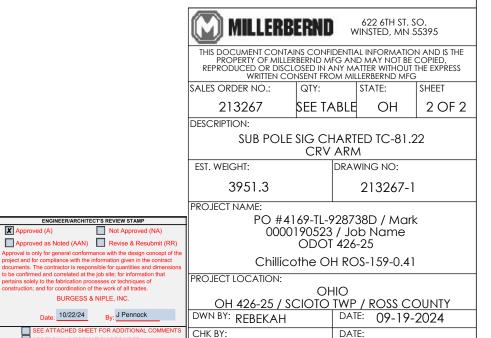
NOTES:

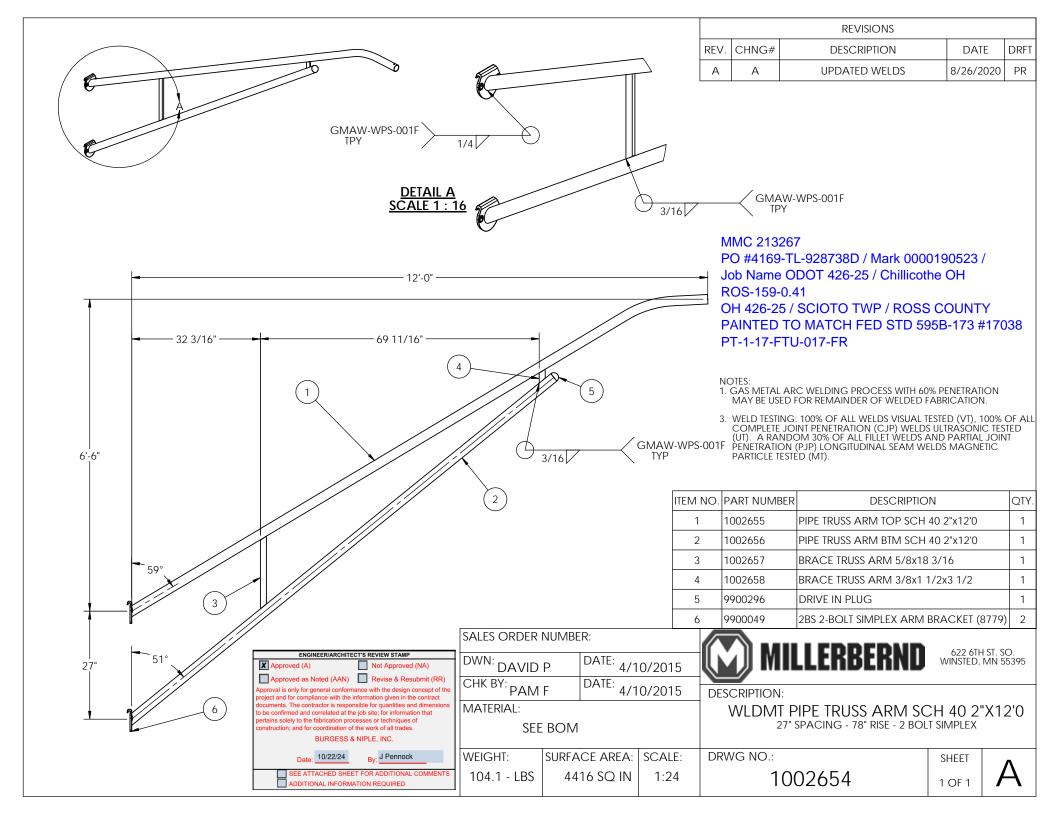
- 1) MMC STANDARD:
- SHAFT LENGTHS AT 6" INCREMENTS.
- IF SHAFTS ARE DESIGNATED IN FEET/INCHES. MMC WILL INCREASE LENGTH TO NEXT 6" INCREMENT. CUSTOMER TO SPECIFY IF ROADWAY IS AFFECTED BY INCREASE.
- 2) HARDWARE C&MS 730.08 REQMTS:
- -STEEL HARDWARE BOLTS 5/8 DIA OR LARGER ASTM A325(A325M) -BOLTS & SCREW LESS THAN 5/8" DIA SAEJ429 GR5.
- -ALL NUTS (EXCLUDES ANCHOR & LEVELING NUTS) SAEJ995 GR2,
- ASTM A563 GR DH OR A194 GR 2H
- -FLATWASHER ANSIB18.22.1 & ASTM F436
- -LOCKWASHER ASME B18.21.1
- -UBOLTS ASTMA307.

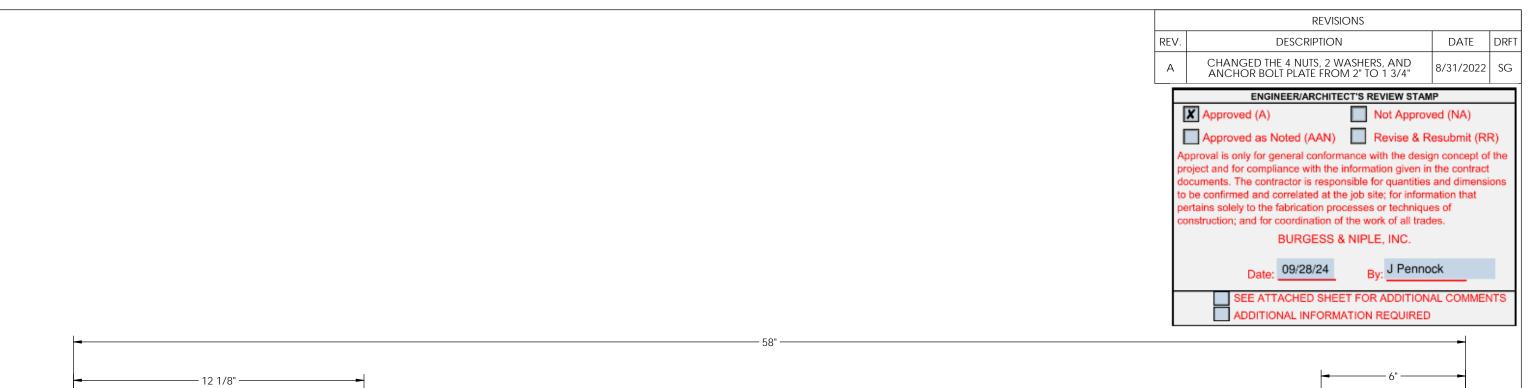
Date: 10/22/24 By: J Pennock

- -HOT DIPPED GALV HARDWWARE ASTMA153 OR MECHANICALLY GALV ASTMB695 CLASS 50
- 3) ANCHOR BOLTS C&MS 632,711.02,730.02 AND 732.11 REQMTS:
- -SHALL BE GALV TO THE FULL LENGTH OF THE ANCHOR BOLTS WITH A TAPPED STEEL PLATE WASHER
- 4) ANCHOR BOLT NUTS ASTM A563 GR DH OR A194 GR 2H
- 5) ANCHOR BOLT WASHERS ASTM F436 TYPE 1 HOT DIP GALV TO ASTM
- 6)ALCOA DAMPER B5431 ASSY- CHAIN ADDED PER SPECIFICATION AS REQUIRED AND DIRECTED BY ODOT
- 7) RISE 3" MIN-12" MAX AFTER ERECTION OF SIGNS. NEGATIVE ARM END SLOPE IS ACCEPTABLE TO ACHIEVE RISE REQUIREMENT.









QTY 20

- Ø1.61 MMC 213267 PO #4169-TL-928738D / Mark 0000190523 / Job Name ODOT 426-25 / Chillicothe OH ROS-159-0.41 OH 426-25 / SCIOTO TWP / ROSS COUNTY

NOTE: **SUPPLIED BY FSA**

- 1. HIGH STRENGTH STEEL ANCHOR BOLT PER ASTM F1554 GRADE 105 MATERIAL - QUENCHED AND TEMPERED COLD DRAWN STRESS-RELIEVED (SAE 4140) ROD WITH 105,000 PSI MIN YIELD AND 125,000 - 150,000 PSI TENSILE STRENGTH. 15% MIN ELONGATION AND 45% MIN REDUCTION OF AREA
- 2. HOT DIP FULLY GALVANIZE PER ASTM A153.
- 3. THREAD TO BE CLASS 2A PER AMERICAN STD. B 1.1 .030 OVER SIZE AFTER GALVANIZING
- 4. ALL BOLTS ROLLED THREAD
- 5. HEAVY HEX NUTS PER ASTM A563 GR DH (.030 OVER SIZE) OR (A194 2H EQUIVALENT)
- 6. NO WELDING IS ALLOWED ON ANCHOR BOLTS
- 7. GALVANIZED FLATWASHER PER ASTM F436
- 8. THE END OF ANCHOR BOLT TO PROJECT FROM CONCRETE PAINTED RED

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	9900346	ANCHOR BOLT 1 3/4" X 58" LG GR 105	1
2	NUTHVYHX1-3/4- 5A563DHGV	NUT HVY HX 1-3-4-5NC A563 GV(DH)	4
3	WASHFLAT1-3/4GV	WASHER FLAT 1-3/4 GV	2
4	460B1406	ANCHOR BOLT PLATE 1"X4" FOR 1 3/4 A.B.	1

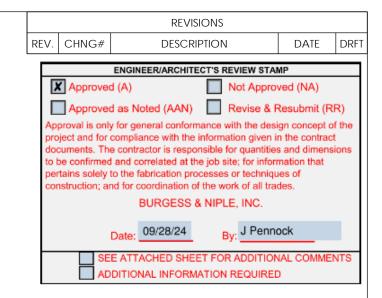
SALES ORDER NUMBE	R:	
DWN: PAM F.	DATE: 4/4/2018	
CHK BY:	DATE:	DESCRI
MATERIAL:		AN
SEE BON	./	

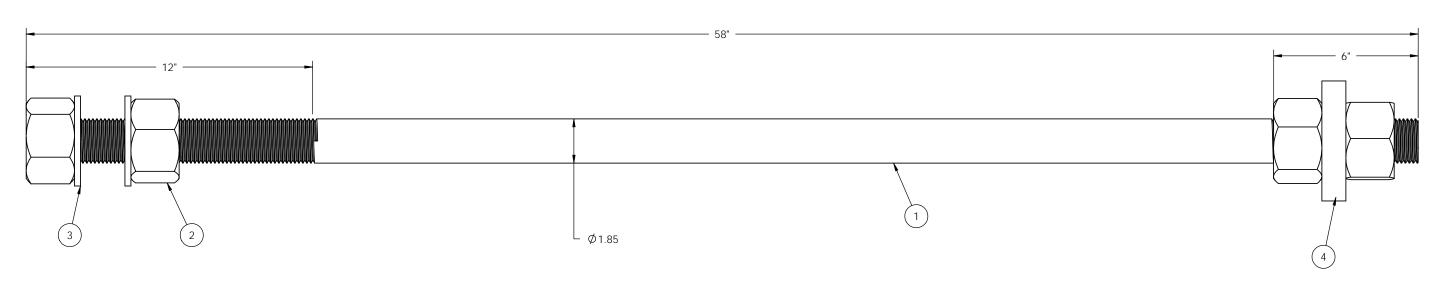
MILLERBERND WINSTED, MN 55395

IPTION:

NCHOR BOLT 1 3/4" X 58" LG GR 105 W/4 NUTS 2 FLATWASHER

WEIGHT: SURFACE AREA: SCALE: DRWG NO.: SHEET 45.1 550.2 1:12 9900347 1 OF 1 LBS. SQ IN





NOTE: SUPPLIED BY FSA

- 1. HIGH STRENGTH STEEL ANCHOR BOLT PER ASTM F1554 GRADE 105 MATERIAL - QUENCHED AND TEMPERED COLD DRAWN STRESS-RELIEVED (SAE 4140) ROD WITH 105,000 PSI MIN YIELD AND 125,000 - 150,000 PSI TENSILE STRENGTH. 15% MIN ELONGATION AND 45% MIN REDUCTION OF AREA
- 2. HOT DIP FULLY GALVANIZE PER ASTM A153.
- 3. THREAD TO BE CLASS 2A PER AMERICAN STD. B 1.1 .030 OVER SIZE AFTER GALVANIZING
- 4. ALL BOLTS ROLLED THREAD
- 5. HEAVY HEX NUTS PER ASTM A563 GR DH (.030 OVER SIZE) OR (A194 2H EQUIVALENT)
- 6. NO WELDING IS ALLOWED ON ANCHOR BOLTS
- 7. GALVANIZED FLATWASHER PER ASTM F436
- 8. THE END OF ANCHOR BOLT TO PROJECT FROM CONCRETE PAINTED RED

MMC 213267
PO #4169-TL-928738D / Mark 0000190523 /
Job Name ODOT 426-25 / Chillicothe OH
ROS-159-0.41
OH 426-25 / SCIOTO TWP / ROSS COUNTY
QTY 88

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	9900348	ANCHOR BOLT 2" X 58" LG GR 105	1
2	NUTHVYHX2-4-1-2A563GV	NUT HVY HX 2-4-1-2 A563 GV(DH)	4
3	WASHFLAT2"GV	Washer flat 2" sae astm f436 gv 3 3/4" od	2
4	460B1424	ANCHOR BOLT PLATE 1"X5" FOR 2 1/2" A.B.	1

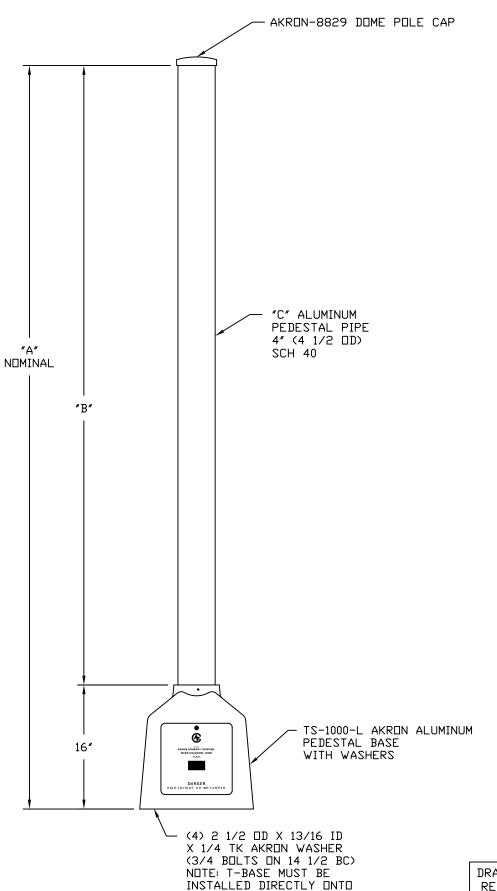
·			
SALES C	RDER NUMBI	ER:	
DWN:	PAM F.	DATE: 5/27/2020	
CHK BY:		DATE:	DESCRIP
MATERIA	AL:		Α
	SEE BOI	M	

MILLERBERND 622 6TH ST. SO. WINSTED, MN 55395

В

DESCRIPTION:

ANCHOR BOLT 2" X 58" LG GR 105 W/4 NUTS 2 FLATWASHER



FOUNDATION FOR AASHTO APPROVAL, USE (4) 500A103 GALVANIZED 14GA U-SHAPED Approved (A)

Approved (A)

Approved (AN)

Revise & Resubmit (RR)

Approval is only for general conformance with the design concept of the project and for compliance with the information given in the contract documents. The contractor is responsible for quantities and dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or techniques of construction; and for coordination of the work of all trades.

BURGESS & NIPLE, INC.

Date:

09/28/24

By: J Pennock

SEE ATTACHED SHEET FOR ADDITIONAL COMMENTS

ADDITIONAL INFORMATION REQUIRED

MDTE:

- 1. MATERIAL: ALUMINUM PIPE ALLOY 6061-T6
- 2. T-BASE FINISH- BARE CAST FINISH PAINTED TO MATCH PIPE
- 3. THREADS WILL HAVE A PLASTIC PROTECTOR.
- 4. PIPE WILL BE HAND STAMPED ABOVE THE THREAD WITH ALLOY NUMBER 6061-T6
- 5. PIPE WILL HAVE A COMPLETE CARDBOARD PROTECTOR SLEEVE FOR EACH LENGTH PIPE (DO NOT GET CARDBOARD WET)
- 6. PLASTIC WRAPPING MUST BE REMOVED UPON RECEIPT OF MATERIAL. FAILURE TO COMPLY MAY VOID THE FINISH WARRANTY.
- 7. THE PIPE, T-BASE W/WASHERS & THE FOLLOWING PARTS ARE SHIPPED UNASSEMBLED:
 (4) 500A103 SHIM
 (1) AKRON-8829 DOME CAP

**PAINTED TO MATCH FED STD 595B-173 # 17038 PT-1-17-FTU-017-FR

MMC 213269
PO # 0000190523
Job Name ODOT 426-25 / Chillicothe OH ROS-159-0.41
OH 426-25 / SCIOTO TWP / ROSS COUNTY

DRAWING REF NO	ו עון	"A"	"B"	"C" ALUMINUM PEDESTAL PIPE	PART NO
-2		3′-0″	2′-0″	AKRON-PIPEX2	3SRPB45030-DC-001
-3		4'-0"	3′-0″	AKRON-PIPEX3	3SRPB45040-DC-001
-4		5′-0 ″	4'-0"	AKRON-PIPEX4	3SRPB45050-DC-001
-5		6′-0″	5′-0 ″	AKRON-PIPEX5	3SRPB45060-DC-001
-6		7′-0″	6′-0″	AKRON-PIPEX6	3SRPB45070-DC-001
7		8′ 8″	7′ 0″	AKREN PIPEX7	3SRPD45000 DC 001
-8	32	9'-0"	8'-0"	AKRON-PIPEX8	3SRPB45090-DC-001
-9		10'-0"	9'-0"	AKRON-PIPEX9	33RPB45100-DC-001
-10		11'-0"	10'-0"	AKRON-PIPEX10	3SRPB45110-DC-001
-11		12′-0″	11'-0"	AKRON-PIPEX11	3SRPB45120-DC-001
-12		13′-0″	12'-0"	AKRON-PIPEX12	3SRPB45130-DC-001
-13		14'-0"	13′-0″	AKRON-PIPEX13	3SRPB45140-DC-001
-14		15′-0 ″	14'-0"	AKRON-PIPEX14	3SRPB45150-DC-001
-15		16′-0″	15′-0 ″	AKRON-PIPEX15	3SRPB45160-DC-001
-16		17′-0″	16'-0"	AKRON-PIPEX16	3SRPB45170-DC-001
-17		18′-0″	17′-0″	AKRON-PIPEX17	3SRPB45180-DC-001
-18		19′-0″	18'-0"	AKRON-PIPEX18	3SRPB45190-DC-001
-20		21′-0″	20'-0"	AKRON-PIPEX20	3SRPB45210-DC-001
-42		54″	42"	AKRON-PIPEX42	3SRPB45046-DC-001

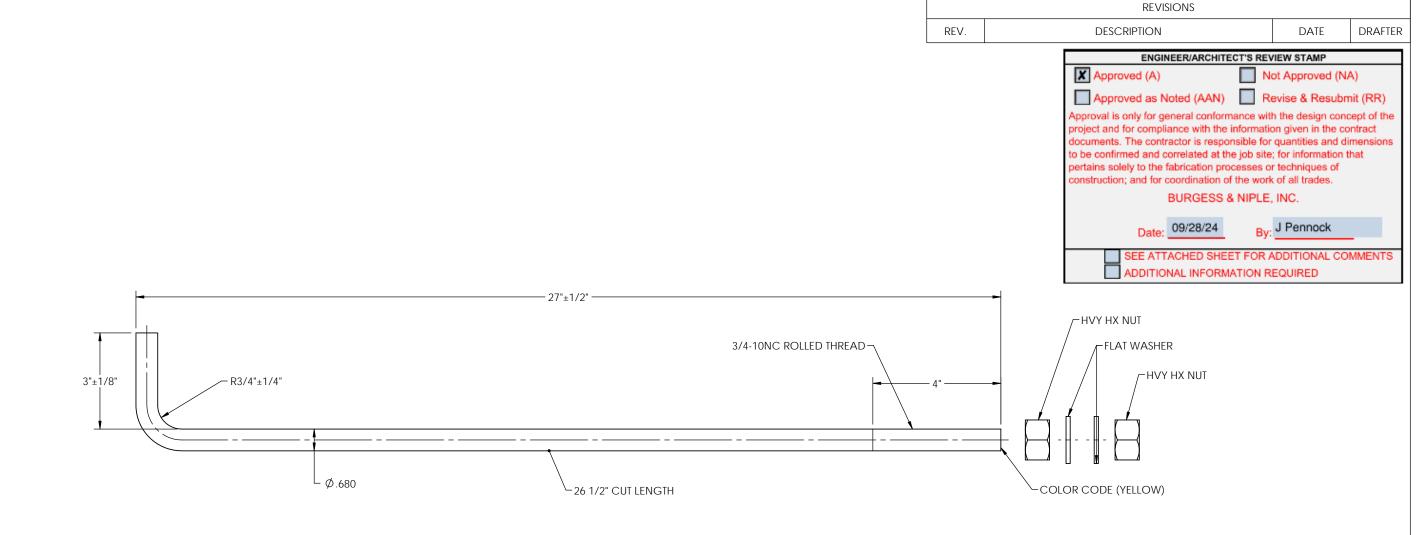
DWN: JASON D
DATE: 07-27-15

3SRPB45(030-210)-DC-001
ALUMINUM TRAFFIC SIGNAL BREAKAWAY PEDESTAL POLE WITH DOME CAP FOR 3/4 ANCHOR BOLTS ON 12"-14 1/2 BC

scale: NTS Millerbernd

MANUFACTURING CO. WINSTED, MN

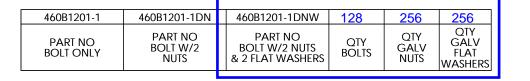
740B109

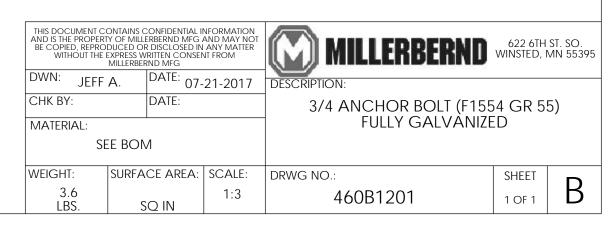


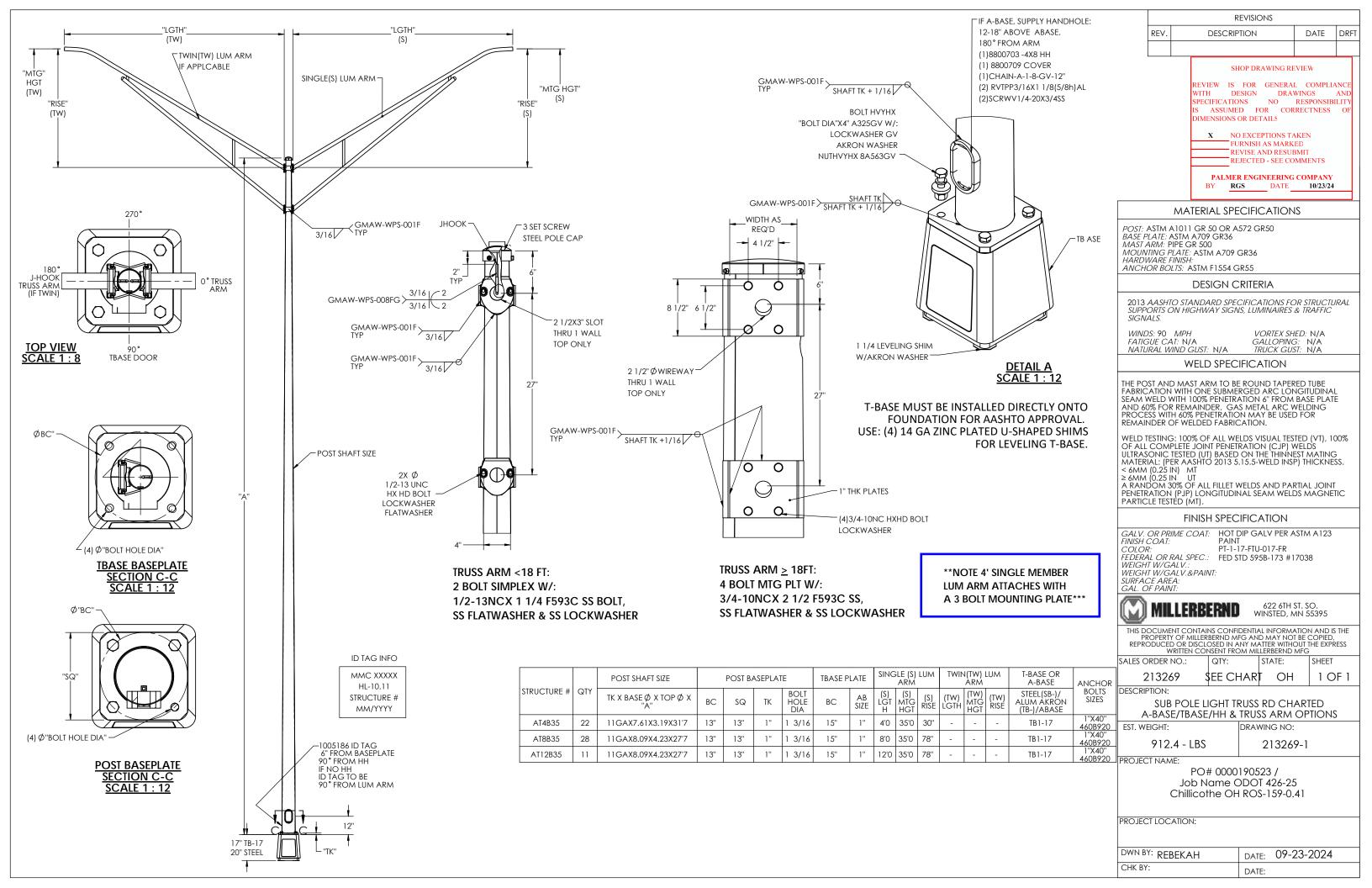
NOTES: SUPPLIED BY FSA

- 1. ANCHOR BOLT PER ASTM F1554 GRADE 55 YIELD STRENGTH = 55,000 PSI MIN YIELD TENSILE STRENGTH = 75,000-95,000 PSI
- 2. HOT DIP FULLY GALVANIZE PER ASTM A153.
- 3. THREAD TO BE CLASS 2A PER AMERICAN STD. B 1.1 .030 OVER SIZE AFTER GALVANIZING
- 4. ALL BOLTS ROLLED THREAD
- 5. GALVANIZED HEAVY HEX NUTS (A563GV) PER ASTM A563 GR DH (.030 OVER SIZE) OR (A194 2H EQUIVALENT)
- 6. NO WELDING IS ALLOWED ON ANCHOR BOLTS
- 7. GALVANIZED FLAT WASHERS PER ASTM F436.

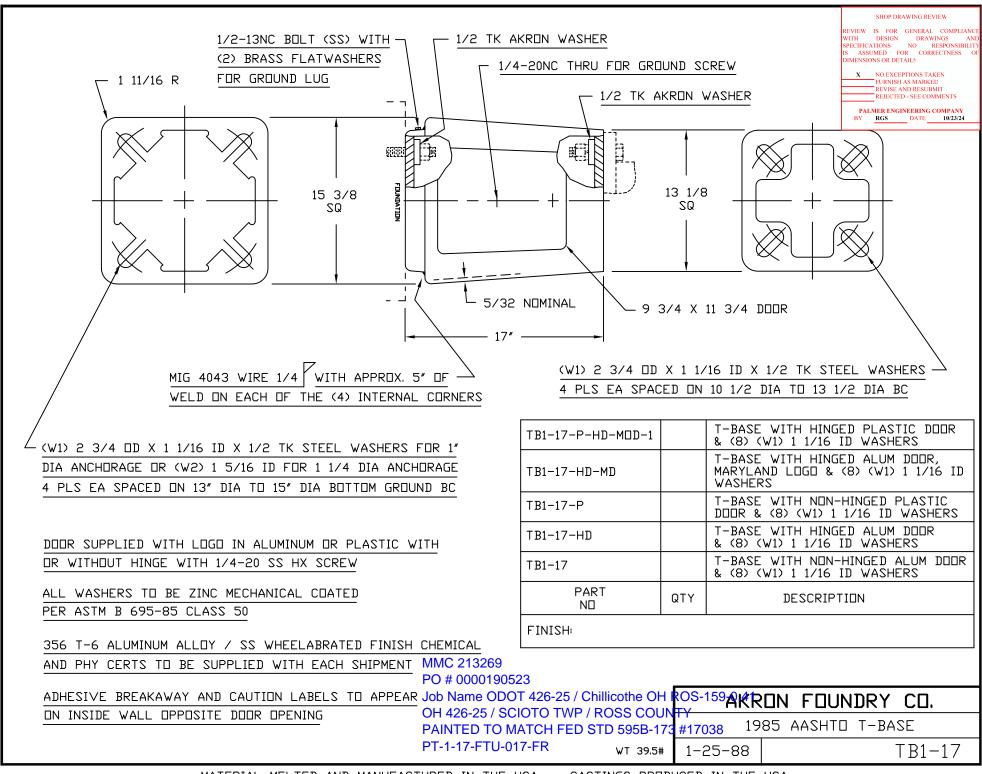
MMC 213269 PO # 0000190523 Job Name ODOT 426-25 / Chillicothe OH ROS-159-0.41 OH 426-25 / SCIOTO TWP / ROSS COUNTY

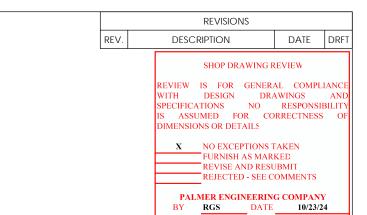


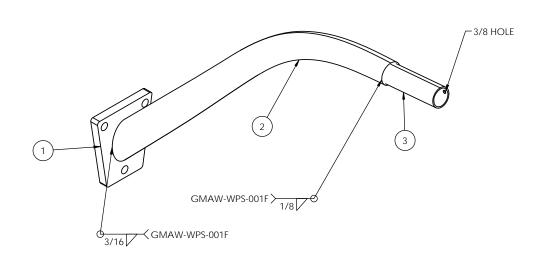


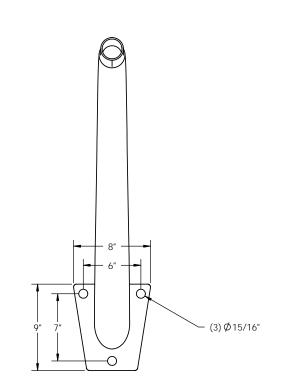


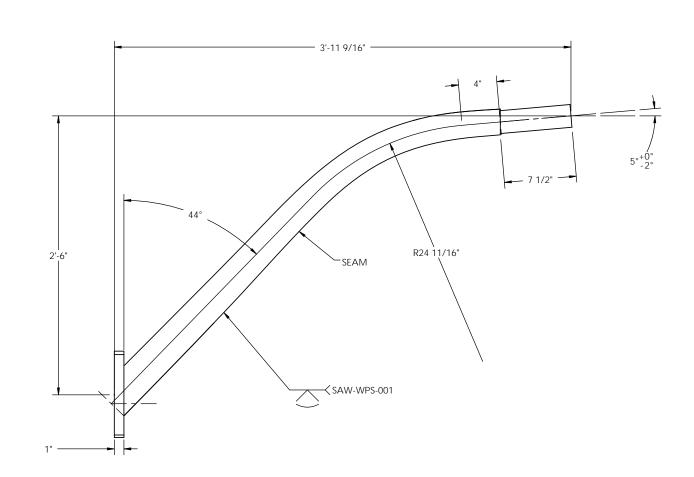
TB1-17 "BUY AMERICAN"











MMC 213269 PO # 0000190523 Job Name ODOT 426-25 / Chillicothe OH ROS-159-0.41 OH 426-25 / SCIOTO TWP / ROSS COUNTY PAINTED TO MATCH FED STD 595B-173 #17038 PT-1-17-FTU-017-FR

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1042848	MTG PLT ARM 3BOLT 1"X8X9 15/16 BOLT HOLES	1
2	1035462	SHAFT SCKT RD 11GA X 3.3 X 2.70 X 4'-4""LG	1
3	1026074	PIPE 2" (2 3/8 OD)X 8" W/ HOLF	1

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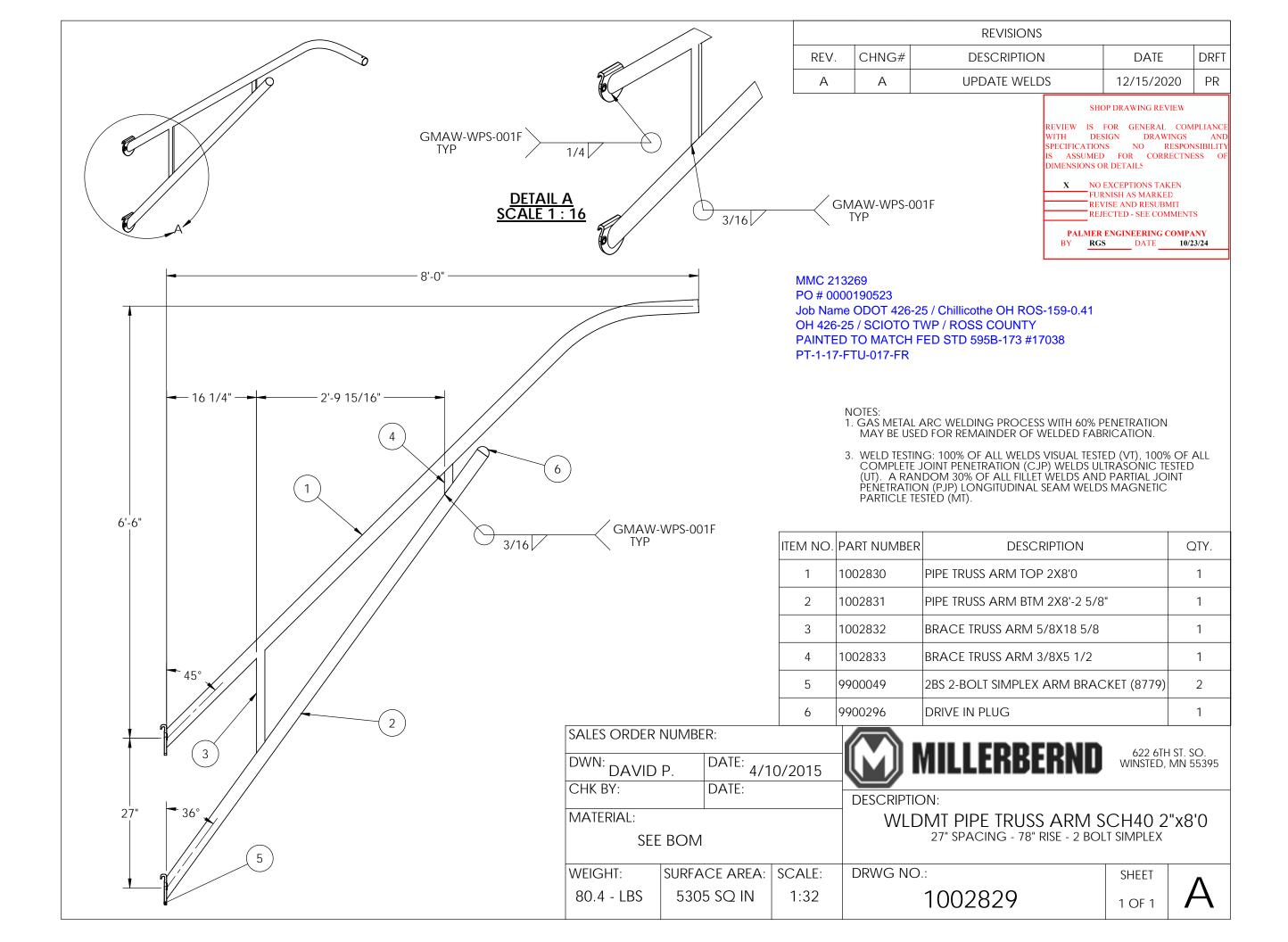
MILLERBERND 622 6TH ST. SO. WINSTED, MN 55395

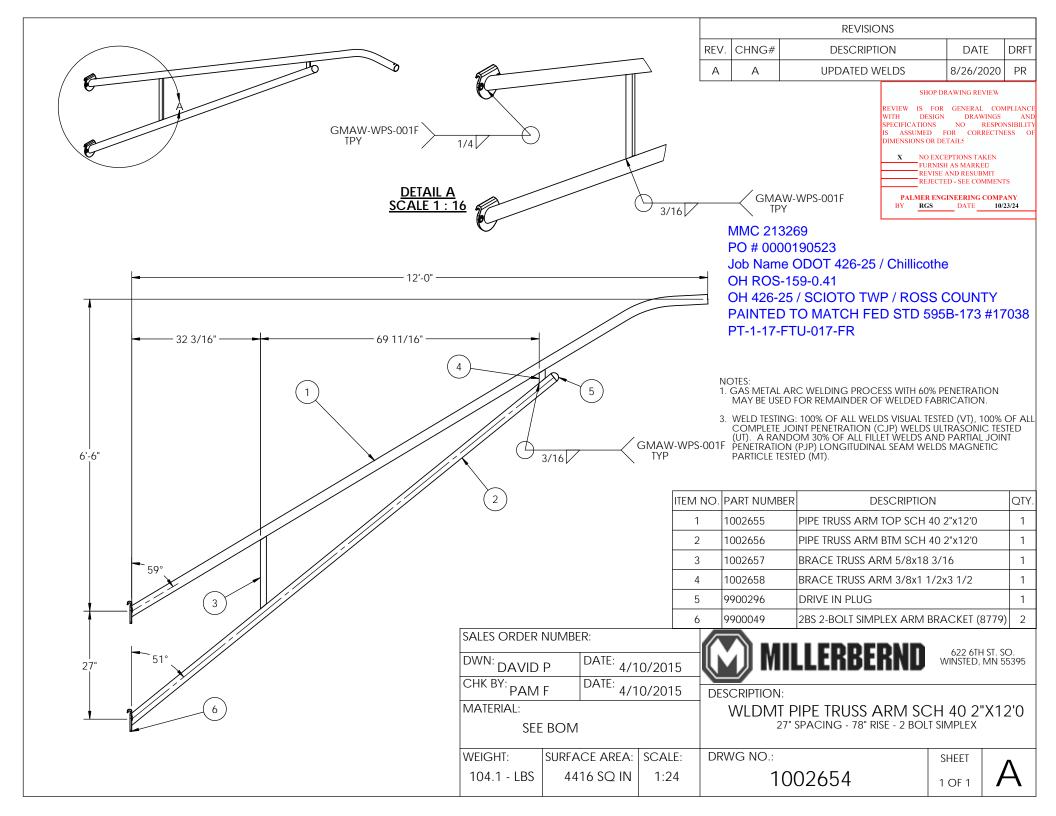
DWN: PAM F.	DATE: 1/8/2020	DES
СНК ВҮ:	DATE:	
ΛΛΛΤΕΡΙΛΙ:		

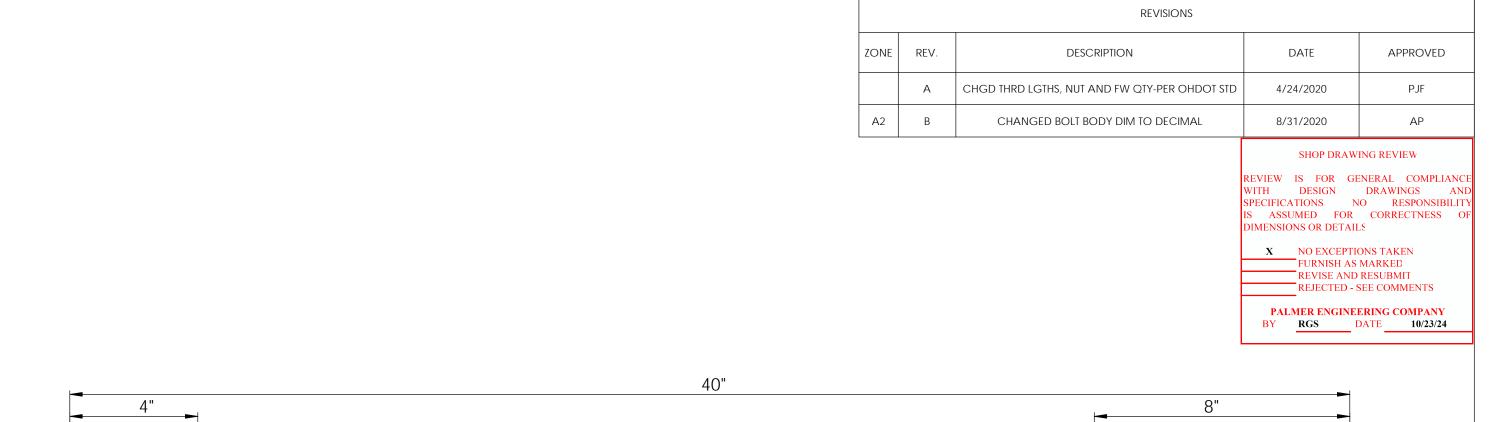
SEE BOM

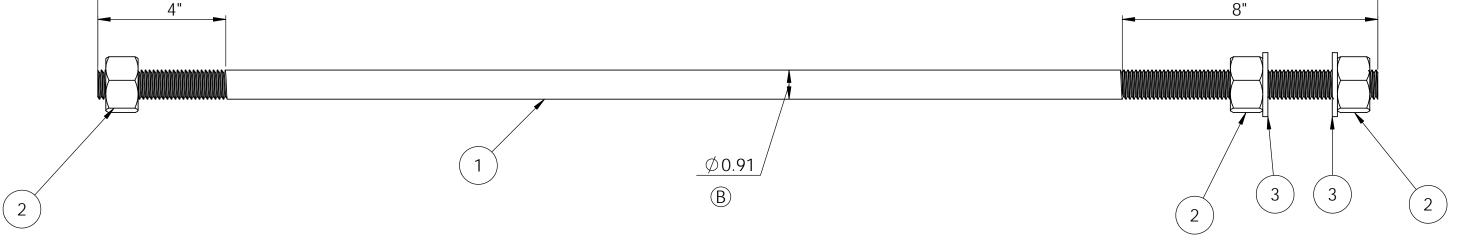
WLDMT ARM LUM 11GAX4'-0 "J" STYLE 11GA X 3.3 X 2.70 X 4'-0"

WEIGHT: SURFACE AREA: SCALE: DRWG NO.: SHEET 42.59 1211.74 1042853 1 OF 1 LBS. SQ IN



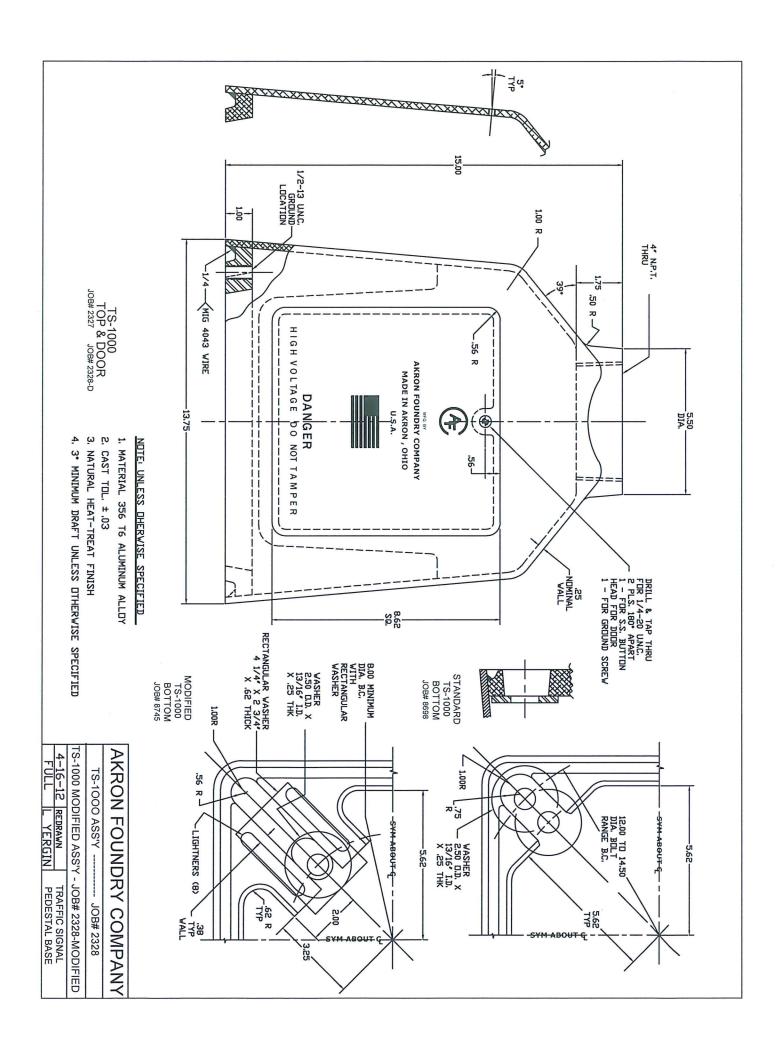


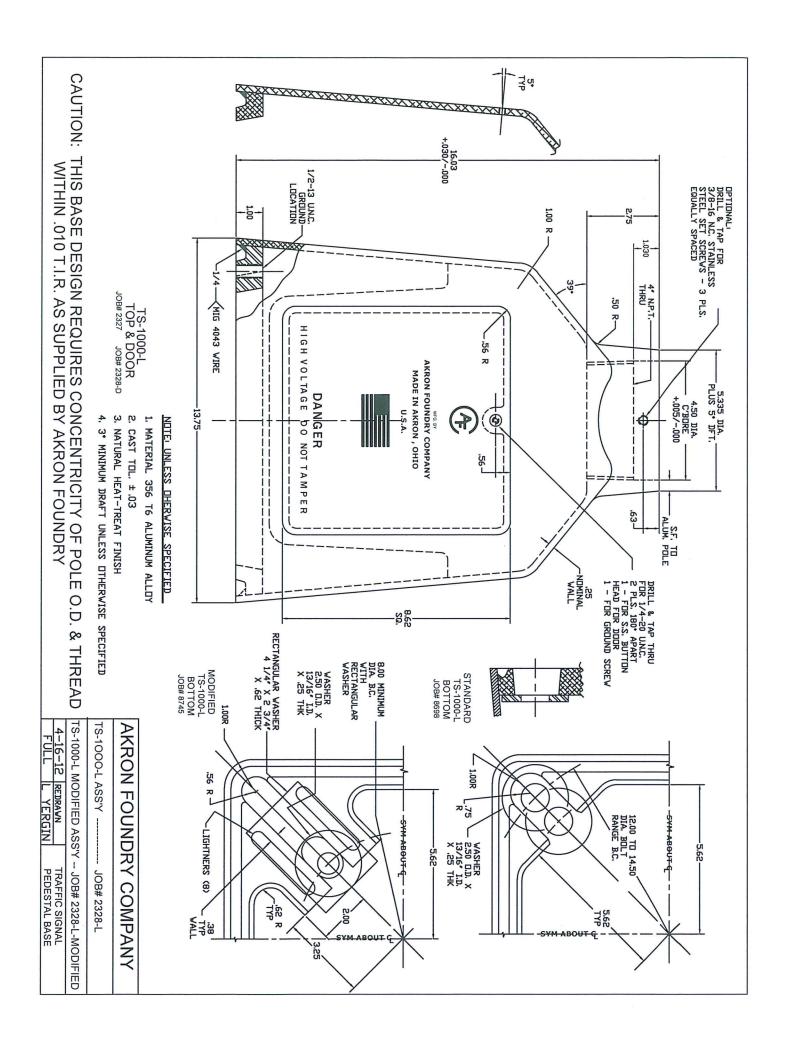


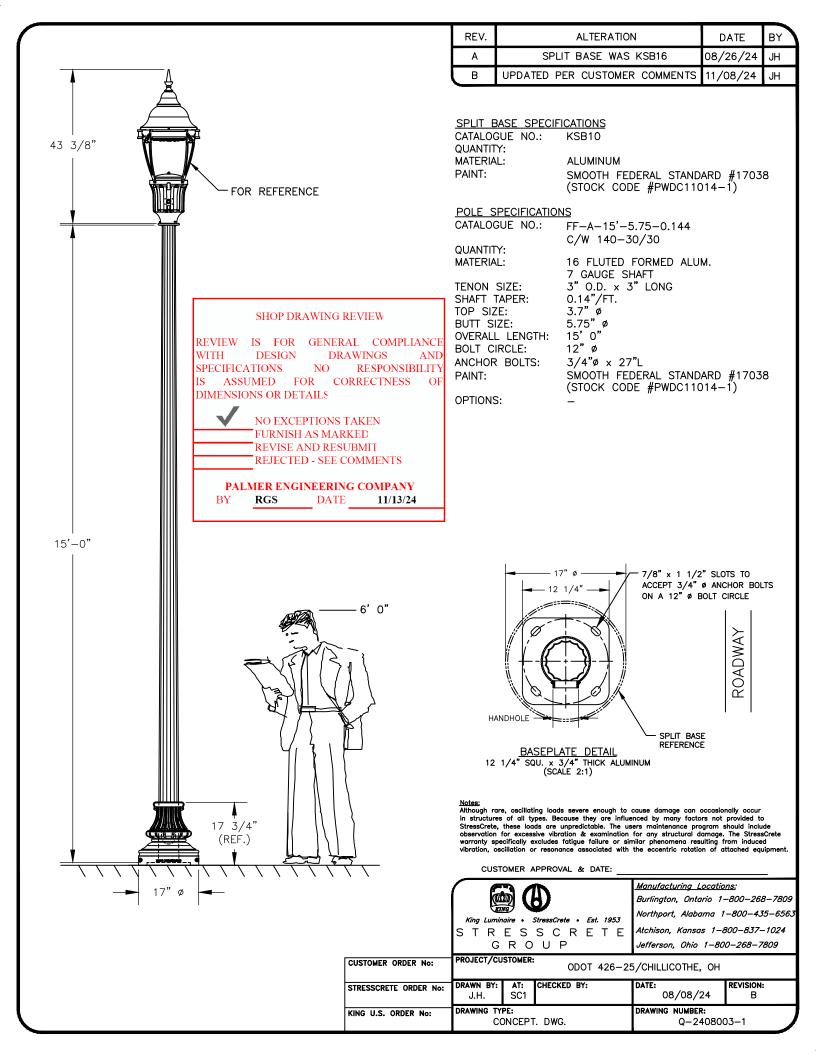


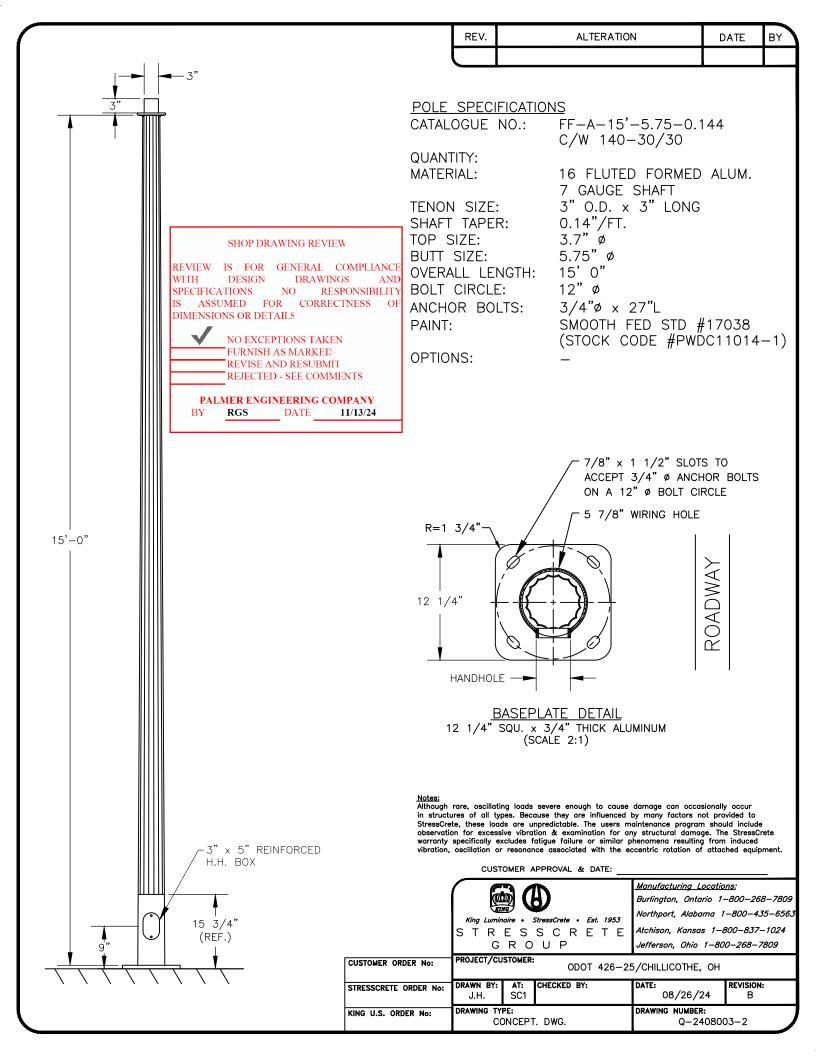
MMC 213269 PO # 0000190523 Job Name ODOT 426-25 / Chillicothe OH ROS-159-0.41 OH 426-25 / SCIOTO TWP / ROSS COUNTY QTY 244

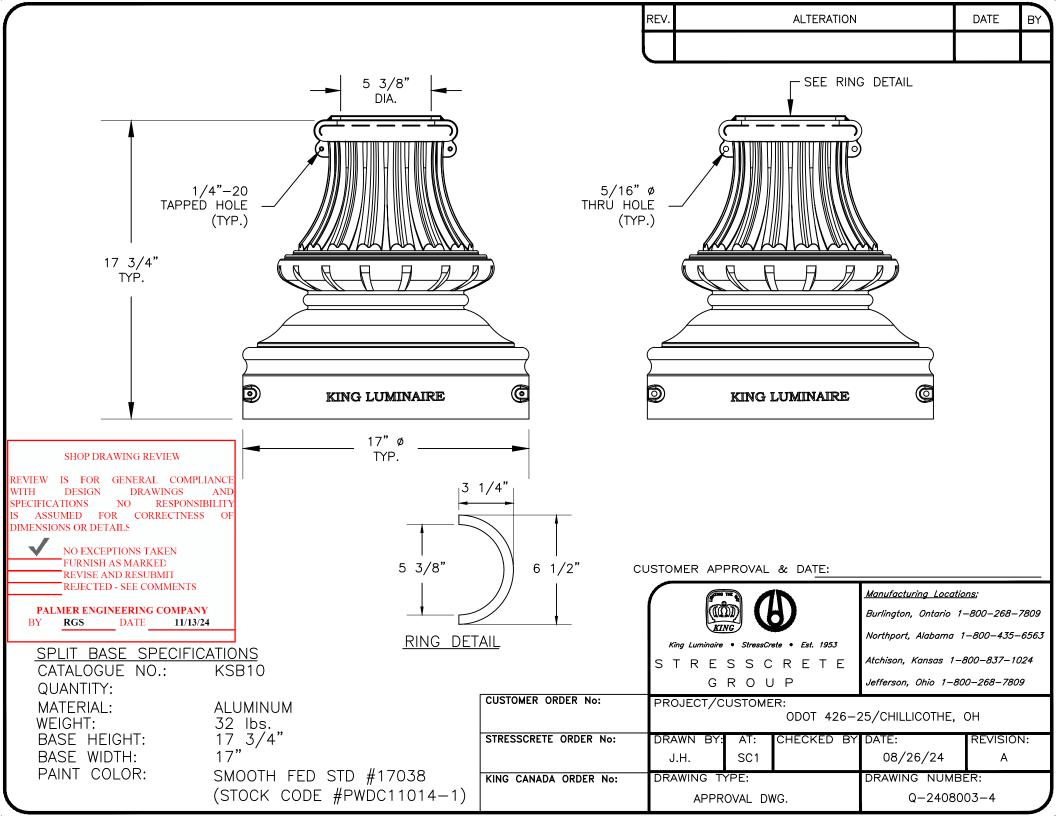
ITEM NO.		PA	rt number	?	DESCRIPTION		QTY.
1			460A921		STRAIGHT ANCHOR BOLT 1"X40"LG W/ 6	5" THD	1
2		NUTHV	YHX1"-8A56	3GV	NUT HVY HX 1"-8 A563 GV (DH)-RC	:P	3
3	A60A921 NUTHVYHX1"-8A563GV WASHFLAT1"GV COCUMENT CONTAINS CONFIDENTIAL INFORM. STHE PROPERTY OF MILLERBERND MFG AND MW WITHOUT THE EXPRESS WRITTEN CONSENT FROM MILLERBERND MFG J: PHILL R DATE: BY: DATE: ERIAL: SEE BOM				WASHFLAT1"GV ASTM F436		2
AND IS THE BE COPIED	PROPERTO PROPERTO PHILL	Y OF MILLI DUCED OF EXPRESS W MILLERBEF	R DISCLOSED IN RITITEN CONSENSE OF THE RITITEN CONSENS	AND MAY NOT ANY MATTER	MILLERBERND DESCRIPTION: ANCHOR BOLT 1"X40" 3N 2F/0 FULLY GALV	622 6TH S WINSTED, M	1N 55395
WEIGHT:		SURFA	CE AREA:	SCALE:	DRWG NO.:	SHEET	<u> </u>
7.4 LBS	-	1	179.0 SQ IN	1:10	460B920	1 OF	₁ B













WFCL3

Utility Washington Series Luminaire Full Cutoff LED3





















WFCL3 P70 30K FC3 CLGL

Notes

Type

Mechanical

- Heavy grade A360 cast aluminum (<1% copper)
- Tool-less access with a spring-loaded latch
- Hidden hinge door allowing the door to swing open and remain open
- Optional internal or external NEMA twist lock photocontrol receptacle. Housing contains a tempered glass window to allow light to reach the cell for internal versions.
- Mount to slip-fitter that will accept 3" high by 2-7/8" to 3-1/8" 0.D. pole tenon
- Decorative top cover contains stainless steel hinge which secures entry the LED optical chamber
- Polyester power coat paint to ensure maximum durability
- Rigorous multi-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5,000 hours exposure to salt fog chamber (operated per ASTM B117) on standard and RAL finish options.
- RAL (RALxxxxSDCR) paint colors are Super Durable Corrosion Resistant, 80% gloss.

Electrical

- Surge protection meets ANSI/IEEE C62.41.2 10kV/10kA.
- Standard SPD meets 20kV/10kA per ANSI C136.2-2015
- Quick disconnect connectors for ease of installation and maintenance.
- Three pole terminal block is standard, with optional prewired leads for ease of installation
- LED electronic 0-10v dimmable driver meets maximum total harmonic distortion (THD) of 20%, >0.90 Power Factor and is ROHS compliant.
- Minimum operating temperature is -40°C.
- Electronic driver has an estimated minimum life of 100,000 hours at 25°C.

Optical

- IP65 rated optical compartment
- LED circuit board located in the top cover
- Asymmetric or Symmetric zero uplight distributions
- 2700K, 3000K and 4000K CCT
- 70CRI Standard

Control Options

- Field Adjustable Output (AO) module Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8
- nLight AirrSBOR6 outdoor fixture-mounted motion and photo-sensor, features a dual radio to communicate wirelessly to other nLight Air devices for group response to motion, on/off control in response to daylight and by switch — RSBOR6
- Long life photocontrol, 20 years PCLL, P34 and P48 with DTL

- 7 pin photocontrol receptacles internally (PR7) or externally (PR7E) mounted in place of the finial
- DTL DIN dedicated bracket with external mounted antenna -DINBRA

Manufacturing

- Manufactured in Crawfordsville, Indiana, ARRA compliant
- 100% electrical testing on all luminaires before shipment
- Ten (10) years minimum experience in manufacturing LED based products

Certification and Standards

- Luminaire shall be UL 1598 Wet Location Safety Listing
- Suitable for operation in an ambient temperature -40°C (40°F) to 40°C (104°F) per UL certification for performance packages P05 thru P100 Type 2, 3 & 5 no glass, P05 thru P90 Type 2, 3, 4 & 5 clear glass and P05 thru P90 Type 3 & 5 frosted glass
- Suitable for operation in an ambient temperature -40°C (40°F) to 35°C (95°F) per UL certification for performance packages P100 Type 45 no glass, P100 Type 2, 3, 4 & 5 clear glass and P100 Type 3 & 5 frosted glass
- LM79 compliant
- DesignLights Consortium® (DLC) qualified product. Not all versions
 of this product may be DLC qualified. Please check the DLC Qualified
 Products List at www.designlights.org/QPL to confirm which
 versions are qualified.

Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA — Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Warranty

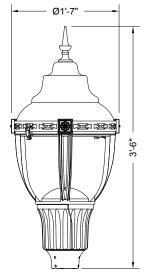
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

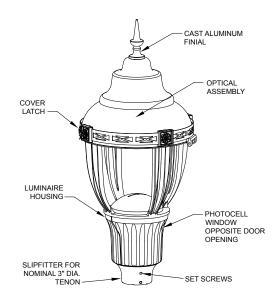
All values are design or typical values, measured under laboratory conditions at 25 $^{\circ}\text{C}.$

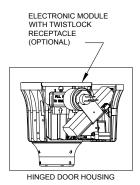
Specifications subject to change without notice.

DIMENSIONAL DATA



Maximum Weight - 53 lbs Maximum Effective Projected Area - 1.72 sq. ft.







ORDERING INFORMATION (refer to page 3 for configurable options)

Example: WFCL3 P20 30K MVOLT FC3 BK NF PR7E

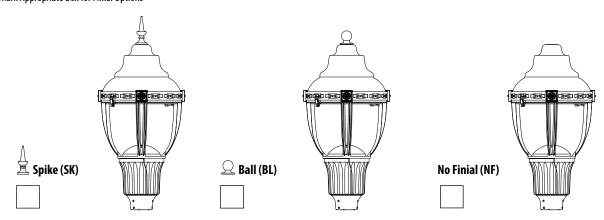
Series	Led performance package	LED Color temperature	Voltage	Optics	Housing Color	Finial
WFCL3 Utility Washington LED FCO	P05 3,200 nominal lumens P10 4,500 nominal lumens P20 5,600 nominal lumens P30 7,000 nominal lumens P40 8,100 nominal lumens P50 9,200 nominal lumens P60 10,200 nominal lumens P70 10,800 nominal lumens P80 11,700 nominal lumens P90 12,700 nominal lumens P100 13,600 nominal lumens	27K 2700K CCT 30K 3000K CCT 40K 4000K CCT	MVOLT Auto-sensing voltage (120 thru 277) 50/60 HZ HVOLT Auto-sensing voltage (347 thru 480) 50/60 HZ XVOLT Auto-sensing voltage (277 thru 480V) with enhanced power quality protection	FC2 Type 2 distribution full cutoff FC3 Type 3 distribution full cutoff FC4 Type 4 distribution full cutoff FC5 Type 5 distribution full cutoff	BK Black GR Gray GH Graphite GN Green PP Prime paint WH White BZ Bronze RALxxxxSDCR RAL Super Durable Corrosion Resistant, 80% Gloss Paint, replace xxxx with RAL number. CMC Custom color match	NF None BL Ball SK Spike

Outions	Ontine Commentalities Matrice and the State				
Options:	Option Compatibility Matrix on page 3 of 4				
CONTROL	S OPTIONS	PREV	/IRED LEAD OPTIONS	OPTIC 0	PTIONS
A0	Field Adjustable Output	L1H	1.5 ft prewired leads	CLGL	Clear tempered glass lens
DINBRA	DTL DIN node bracket with external mounted antenna, DTL DIN node ordered and shipped separately	L03	3 ft prewired leads	FRGL	10% Frosted tempered glass lens
PR7	NEMA twistlock dimming photocontrol receptacle - 7 pin	L10	10 ft prewired leads	HSS	Louvered house side shield
PR7E	NEMA twistlock dimming photocontrol receptacle - 7 Pin (Must use NF Finial Option)	L20	20 ft prewired leads	LEM RE	VEAL COLOR OPTIONS
PCLL	Long Life DTL Twistlock Photocontrol for Solid State, MVOLT	L25	25 ft prewired leads	MHC	LEM Reveal Plate Painted to match Housing Color
P34	Long Life DTL Twistlock Photocontrol for Solid State, 347V	L30	30 ft prewired leads	NEMA L	ABEL OPTIONS
P48	Long Life DTL Twistlock Photocontrol for Solid State, 480V			NL1X1	1" X 1" ANSI Wattage Label
SH	Shorting Cap			NL2X2	2" X 2" ANSI Wattage Label
RSBOR6	nLight Motion Sensing Photocontrols				

accessories:	Order as separate catalog number.			
HOUSE SIDE	SHIELD	SURGE PROT	ECTION KITS	
CLHSSNG25	No glass, Type 2 & Type 5 - Louvered house side shield	SPDPLUGIN	MVOLT-20KV	Replacement for 120-277V 20KV/ 10KA
CLHSSNG34	No glass, Type 3 & Type 4 - Louvered house side shield	SPDPLUGIN	HVOLT-20KV	Replacement for 347-480V 20KV/ 10KA
CLHSSGL25	Glass, Type 2 & Type 5 - Louvered house side shield			
CLHSSGL34	Glass, Type 3 & Type 4 - Louvered house side shield			

FINIAL INFORMATION

Mark Appropriate Box for Finial Options





OPTIONS MATRIX

OI HONSIM						10	D Pack	(200						Voltage		Ĭ	Distril	hution			Finial	_							Opti	ions						
Option M	atrix	DO5	D10	Pan	DSU	P40	_		P70	P80	P90	P100	MVOLT	HVOLT	XVOLT	FC2	FC3	FC4	_	BL	NF	SK	AO	DALI	DINBRA	PR7	PR7E	PCLL	PC34	_	RSB0R6	SH	HSS	мнс	CLGL	FRGL
	P05	103	I N	N N	N	N	N	N	N	N	N	N	Y	N	N	Y	Υ	Υ	Υ	Υ	Υ	Y	γ	RFD	γ	Y	Y	Y	γ	γ (40	ү	Y	Y	Y	Y	Y
	P10	N	IN	I N	N N	N N	N M	N M	N N	N M	N N	N N	Y	Y	N	Y	Y	Υ	Y	Y	γ	Υ	V	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P20	N N	M	IN	I N	. N	N N	N N	N N	N N	. N	N N	Y	Υ	N	Y	Y	Υ	Y	Y	γ	Y	γ	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30	N	N	N	<u>"</u>	l N	N	N	N	N	N	N	Y	Y	N	Y	Y	Y	Y	Υ	Υ	Y	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40	N	N	N	N	ı.	N	N	N	N	N	N	Y	Y	N	Y	γ	Υ	Y	γ	Υ	Υ .	ν	RFD	Y	Y	Υ	Y	Y	Y	Y	Y	Y	Y	Y	Y
LED	P50	N	N	N	N	N		l N	N	N	N	N	Υ	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	RFD	Y	Υ	Y	Y	Y	Y	Y	Y	Υ	Y	Y	Y
Package	P60	N	N	N	N	N	N		N	N	N	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Y
	P70	N	N	N	N	N	N	N		N	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	P80	N	N	N	N	N	N	N	N		N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	P90	N	N	N	N	N	N	N	N	N		N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	P100	N	N	N	N	N	N	N	N	N	N		Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	C
	MVOLT	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ
Voltage	HVOLT	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N		N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	XVOLT	N	N	N	N	N	N	N	Υ	Υ	Υ	Υ	N	N		Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	FC2	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		N	N	N	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
Distributions	FC3	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N		N	N	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Distributions	FC4	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N		N	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
	FC5	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N		Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	BL	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ		N	N	Υ	RFD	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Finials	NF	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	N		N	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	SK	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N		Υ	RFD	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	A0	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		N	N	Υ	Υ	N	N	N	N	Υ	Υ	Υ	Υ	Υ
	DALI	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	N	N	RFD	RFD	RFD	RFD	RFD	RFD	RFD	N		RFD	N	N	N	N	N	N	N	RFD	RFD	RFD	RFD
	DINBRA	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	RFD		N	N	N	N	N	N	Υ	Υ	Υ	Υ	Υ
	PR7	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N		N	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	PR7E	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	N	_	N	N	N		Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	PCLL	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	Υ	Y		N	N	N	Υ	Υ	Y	Υ	Υ
Options	PC34	Υ	Y	Υ	Υ	Υ	Y	Y	Y	Υ	Υ	Y	N	Y	Y	Y	Υ	Υ	Y	Υ	Υ	Υ	N	N	N	Υ	Y	N		N	N 	N	Υ	Υ	Y	Y
	PC48	Υ	Y	Υ	Υ	Υ	Y	Υ	Y	Υ	Υ	Y	N	Y	Υ	Y	Υ	Υ	Y	Υ	Υ	Υ	N	N	N	Υ	Υ	N	N		N	N	Υ	Y	Y	Y
	RSBOR6	_	Y	Y	Y	Υ	Υ	Υ	Y	Υ	Υ	Y	Y	N	N	Y	Υ	Υ	Y	Υ	Y	Y	N	N	N	N	N	N	N	N		N	Y	Y	Y	Υ
	SH	Y	Y	Y	Y	Y	Υ	Y	Y	Υ	Υ	Y	Y	Y	Y	Y	Υ	Y	Y	Y	Υ	Y	Υ	N	Y	Y	Y	N	N	N	N	V	Υ	Y	Y	Y
	HSS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	<u> </u>	Υ	RFD	Y	Y	Y	Y	Y	Y	Y	Y	V	Y	Y	Y
	MHC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ	RFD RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ	ī	N N
	FRGL	Y	Y	Y	Υ	Y	Y	Y	Y	Y	Y	ſ	Y	Υ	Y	N	Υ	Y N	T V	Υ	Υ	Y	Y	RFD	Y	Y	Y	Y	Y	Υ	Y	Y	Y	Y N	N	N
	FKGL	Y	1	ľ	ľ	ľ	Y	Υ	ľ	ľ	Y	(Y	ľ	Y	IN	Y	IN	Y	ĭ	ľ	ľ	ľ	KFD	Y	ľ	ľ	Y	Ť	ľ	Į Ÿ	ľ	Y	N	N	

Y = Combination available / N = Combination not available / RFD = Additional information required, consult factory

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use the factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F)

Ambier	nt Temp.				Lum	en Maintenand	e - LLD (by Per	formance Pacl	kage)			
°C	°F	P05	P10	P20	P30	P40	P50	P60	P70	P80	P90	P100
0	32	1.03	1.03	1.04	1.04	1.04	1.04	1.04	1.04	1.05	1.05	1.05
5	41	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04	1.04	1.04
10	50	1.02	1.02	1.02	1.02	1.02	1.03	1.03	1.03	1.03	1.03	1.03
15	59	1.01	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
20	68	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
25	77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	86	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
35	95	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
40	104	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the platforms noted in 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

	Lumen Maintenance - LLD (by Performance Package)														
Hours	0	25,000	36,000	50,000	60,000	67,500	75,000	100,000							
P05 - P70	1.00	0.94	0.92	0.89	0.87	0.86	0.84	0.79							
P80 - P100	1.00	0.93	0.91	0.87	0.85	0.83	0.81	0.76							





PERFORMANCE DATA

STANDARD OPTIONS: NO GLASS

LED	Classic Control	System		27K (270	00K, 70	CRI)		30K (3000K, 70CRI) G Lumens LPW B U					40K (4000K, 70CRI)					
Package	Glass/Optic	Watts	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	
	FC2		3,054	102	1	0	1	3,105	104	1	0	1	3,317	111	1	0	1	
P05	FC3	20	3,111	104	1	0	1	3,163	105	1	0	1	3,379	113	1	0	1	
PU5	FC4	30	3,068	102	1	0	1	3,119	104	1	0	1	3,332	111	1	0	1	
	FC5		3,334	111	2	0	1	3,389	113	2	0	1	3,621	121	3	0	1	
	FC2		4,294	110	1	0	2	4,365	112	1	0	2	4,663	120	1	0	2	
P10	FC3	39	4,374	112	1	0	1	4,447	114	1	0	1	4,750	122	1	0	1	
	FC4	3,	4,314	111	1	0	2	4,385	112	1	0	2	4,685	120	1	0	2	
	FC5		4,687	120	3	0	1	4,765	122	3	0	1	5,090	131	3	0	1	
	FC2		5,284	110	1	0	2	5,372	112	1	0	2	5,738	120	2	0	2	
P20	FC3	48	5,383	112	1	0	2	5,472	114	1	0	2	5,845	122	1	0	2	
	FC4		5,309	111	1	0	2	5,397	112	1	0	2	5,765	120	1	0	2	
	FC5		5,768	120	3	0	1	5,864	122	3	0	1	6,264	131	3	0	2	
	FC2		6,750	114	2	0	2	6,862	116	2	0	2	7,330	124	2	0	2	
P30	FC3	59	6,649	113	1	0	2	6,759	115	1	0	2	7,221	122	2	0	2	
	FC4		6,413	109	2	0	2	6,520	111	2	0	2	6,965	118	2	0	2	
	FC5		7,386	125	3	0	2	7,509	127	3	0	2	8,021	136	3	0	2	
	FC2 FC3		7,911 7,792	115 113	2	0	2	8,042 7,921	117 115	2	0	2	8,591 8,462	125 123	2	0	2	
P40	FC4	69	7,792	106	2	0	2	7,921	108	2	0	2	7,948	115	2	0	2	
	FC5		8,656	125	4	0	2	8,800	128	4	0	2	9,400	136	4	0	2	
	FC2		8,924	110	2	0	3	9,072	112	2	0	3	9,692	120	2	0	3	
	FC3		8,791	109	2	0	2	8,937	110	2	0	2	9,546	118	2	0	2	
P50	FC4	81	8,378	103	2	0	2	8,517	105	2	0	2	9,098	112	2	0	2	
	FC5		9,766	121	4	0	2	9,928	123	4	0	2	10,605	131	4	0	2	
	FC2		9,944	109	2	0	3	10,109	111	2	0	3	10,799	119	3	0	3	
	FC3		9,795	108	2	0	2	9,957	109	2	0	2	10,637	117	2	0	2	
P60	FC4	91	9,125	100	2	0	2	9,276	102	2	0	2	9,909	109	2	0	3	
	FC5		10,881	120	4	0	2	11,062	122	4	0	2	11,816	130	4	0	2	
	FC2		10,475	107	2	0	3	10,649	109	3	0	3	11,375	116	3	0	3	
	FC3		10,318	105	2	0	2	10,489	107	2	0	2	11,205	114	2	0	2	
P70	FC4	98	9,667	99	2	0	3	9,827	100	2	0	3	10,498	107	2	0	3	
	FC5		11,462	117	4	0	2	11,652	119	4	0	2	12,447	127	4	0	2	
	FC2		11,437	107	3	0	3	11,627	109	3	0	3	12,421	116	3	0	3	
P80	FC3	107	11,266	105	2	0	2	11,453	107	2	0	2	12,235	114	2	0	2	
rou	FC4	107	10,408	97	2	0	3	10,580	99	2	0	3	11,302	106	2	0	3	
	FC5		12,516	117	4	0	2	12,723	119	4	0	2	13,592	127	4	0	3	
	FC2		12,338	105	3	0	3	12,543	107	3	0	3	13,399	115	3	0	3	
P90	FC3	117	12,153	104	2	0	2	12,355	106	2	0	2	13,198	113	2	0	2	
1 70	FC4	11/	11,319	97	2	0	3	11,507	98	2	0	3	12,293	105	2	0	3	
	FC5		13,501	115	4	0	2	13,725	117	4	0	3	14,662	125	4	0	3	
	FC2		13,177	101	3	0	3	13,396	103	3	0	3	14,310	110	3	0	3	
P100	FC3	130	12,980	100	2	0	2	13,195	102	2	0	2	14,096	108	3	0	3	
	FC4		12,110	93	2	0	3	12,311	95	2	0	3	13,152	101	3	0	3	
	FC5		14,419	111	4	0	3	14,658	113	4	0	3	15,659	120	4	0	3	

WFCL3

Utility Washington Series Luminaire Full Cutoff LED3



PERFORMANCE DATA

OPTIONAL: CLEAR GLASS

LED		System		27K (270	00K, 70	CRI)			30K (300	OK, 70	CRI)			40K (40	00K, 70	CRI)	
Package	Glass/Optic	Watts	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
	FC2		2,759	92	1	0	1	2,804	93	1	0	1	2,996	100	1	0	1
Doc	FC3	30	2,803	93	1	0	1	2,850	95	1	0	1	3,044	101	1	0	1
P05	FC4	30	2,681	89	1	0	1	2,726	91	1	0	1	2,912	97	1	0	1
	FC5		2,975	99	2	0	1	3,025	101	2	0	1	3,231	108	2	0	1
	FC2		3,878	99	1	0	1	3,943	101	1	0	1	4,212	108	1	0	1
P10	FC3	39	3,941	101	1	0	1	4,006	103	1	0	1	4,280	110	1	0	1
110	FC4		3,770	97	1	0	1	3,832	98	1	0	1	4,094	105	1	0	1
	FC5		4,183	107	3	0	1	4,252	109	3	0	1	4,543	116	3	0	1
	FC2		4,773	99	1	0	1	4,852	101	1	0	1	5,183	108	1	0	1
P20	FC3	48	4,850	101	1	0	1	4,930	103	1	0	1	5,267	110	1	0	1
120	FC4		4,639	97	1	0	1	4,716	98	1	0	1	5,038	105	1	0	1
	FC5		5,148	107	3	0	1	5,233	109	3	0	1	5,590	116	3	0	1
	FC2		6,050	103	2	0	2	6,150	104	2	0	2	6,570	111	2	0	2
P30	FC3	59	6,052	103	1	0	1	6,152	104	1	0	1	6,572	111	1	0	2
	FC4		5,604	95	1	0	2	5,697	97	1	0	2	6,086	103	1	0	2
	FC5		6,444	109	3	0	1	6,551	111	3	0	1	6,998	119	3	0	1
	FC2		7,090	103	2	0	2	7,208	104	2	0	2	7,699	112	2	0	2
P40	FC3	69	7,092	103	2	0	2	7,210	104	2	0	2	7,702	112	2	0	2
	FC4		6,396	93	2	0	2	6,502	94	2	0	2	6,945	101	2	0	2
	FC5		7,551	109	3	0	2	7,677	111	3	0	2	8,201	119	3	0	2
	FC2		7,999	99	2	0	2	8,131	100	2	0	2	8,686	107	2	0	2
P50	FC3	81	8,001	99	2	0	2	8,134	100	2	0	2	8,689	107	2	0	2
	FC4		7,321	90	2	0	2	7,442	92	2	0	2	7,950	98	2	0	2
	FC5		8,519	105	3	0	2	8,660	107	3	0	2	9,251	114	3	0	2
	FC2		8,912	98 98	2	0	2	9,060	100	2	0	2	9,678	106	2	0	2
P60	FC3 FC4	91	8,915 7,974		2	0	2	9,063	100 89	2	0	2	9,682	106 95	2	0	2
	FC5		9,492	88 104	3	0	2	8,106 9,650	106	3	0	2	8,659 10,308	113	4	0	2
	FC2		9,388	96	2	0	2	9,544	97	2	0	2	10,308	104	2	0	2
	FC3		9,391	96	2	0	2	9,547	97	2	0	2	10,193	104	2	0	2
P70	FC4	98	8,448	86	2	0	2	8,588	88	2	0	2	9,174	94	2	0	2
	FC5	· ·	9,999	102	3	0	2	10,165	104	3	0	2	10,859	111	4	0	2
	FC2		10,251	96	2	0	2	10,421	97	2	0	2	11,132	104	3	0	3
	FC3		10,254	96	2	0	2	10,425	97	2	0	2	11,136	104	2	0	2
P80	FC4	107	9,095	85	2	0	2	9,246	86	2	0	2	9,877	92	2	0	2
	FC5		10,918	102	4	0	2	11,099	104	4	0	2	11,857	111	4	0	2
	FC2		11,058	95	3	0	3	11,241	96	3	0	3	12,009	103	3	0	3
	FG		11,062	95	2	0	2	11,245	96	2	0	2	12,013	103	2	0	2
P90	FC4	117	9,892	85	2	0	2	10,056	86	2	0	2	10,742	92	2	0	2
	FC5		11,778	101	4	0	2	11,973	102	4	0	2	12,790	109	4	0	2
	FC2		11,810	91	3	0	3	12,006	92	3	0	3	12,826	99	3	0	3
	FC3		11,814	91	2	0	2	12,010	92	2	0	2	12,830	99	2	0	2
P100	FC4	130	10,583	81	2	0	2	10,759	83	2	0	2	11,493	88	2	0	2
	FC5		12,579	97	4	0	2	12,787	98	4	0	2	13,660	105	4	0	2

WFCL3

Utility Washington Series Luminaire Full Cutoff LED3



PERFORMANCE DATA

OPTIONAL: FROSTED GLASS

LED	Class/Outin	System		27K (27	000K, 7	OCRI)			30K (30	00K, 70	CRI)			40K (400	OK, 70	CRI)	
Package	Glass/Optic	Watts	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
P05	FC3	30	1,962	65	1	0	1	1,994	66	1	0	1	2,130	71	1	0	1
P05	FC5	30	2,070	69	1	0	1	2,105	70	1	0	1	2,248	75	1	0	1
P10	FC3	39	2,758	71	1	0	1	2,804	72	1	0	1	2,995	77	1	0	1
PIU	FC5	39	2,911	75	1	0	1	2,959	76	1	0	1	3,161	81	1	0	1
P20	FC3	48	3,394	71	2	0	1	3,450	72	2	0	1	3,686	77	2	0	1
P20	FC5	40	3,582	75	2	0	1	3,641	76	2	0	1	3,890	81	2	0	1
P30	FC3	59	4,162	71	2	0	1	4,231	72	2	0	1	4,520	77	2	0	1
P30	FC5	39	4,425	75	2	0	1	4,498	76	2	0	1	4,805	81	2	0	1
P40	FC3	69	4,878	71	2	0	2	4,959	72	2	0	2	5,297	77	2	0	2
P40	FC5	09	5,185	75	2	0	1	5,271	76	2	0	1	5,631	82	2	0	1
P50	FC3	81	5,503	68	2	0	2	5,594	69	2	0	2	5,976	74	2	0	2
F 30	FC5	01	5,850	72	2	0	1	5,947	73	2	0	1	6,353	78	2	0	1
P60	FC3	91	6,131	67	2	0	2	6,233	68	2	0	2	6,659	73	2	0	2
F00	FC5	91	6,518	72	2	0	1	6,626	73	2	0	1	7,078	78	2	0	1
P70	FC3	98	6,459	66	2	0	2	6,566	67	2	0	2	7,014	72	2	0	2
F70	FC5	70	6,866	70	2	0	1	6,980	71	2	0	1	7,456	76	2	0	1
P80	FC3	107	7,052	66	2	0	2	7,169	67	2	0	2	7,659	72	2	0	2
FOU	FC5	107	7,497	70	2	0	1	7,621	71	2	0	2	8,142	76	3	0	2
P90	FC3	117	7,608	65	2	0	2	7,734	66	2	0	2	8,262	71	2	0	2
F 3U	FC5	117	8,087	69	3	0	2	8,221	70	3	0	2	8,783	75	3	0	2
P100	FC3	130	8,125	63	2	0	2	8,260	64	2	0	2	8,824	68	2	0	2
r 100	FC5	130	8,637	66	3	0	2	8,781	68	3	0	2	9,380	72	3	0	2



COMPONENTS & OPTIONS DATA



AOManual field adjustable output dimming device



HSS *Minimize backlight with a louvered house-side-shield. Available as a factory installed*

Performance Package	FAO Position	% Lumen Output	% Wattage
	8	100%	100%
	7	94%	95%
	6	82%	83%
P05-P20	5	70%	72%
P05-P20	4	57%	60%
	3	45%	48%
	2	32%	38%
	1	19%	25%

Performance Package	FAO Position	% Lumen Output	% Wattage
	8	100%	100%
	7	94%	93%
	6	83%	81%
P30-P100	5	71%	69%
P30-P100	4	59%	56%
	3	46%	44%
	2	33%	32%
	1	19%	20%

ACCESSORIES OPTION DATA



CLHSS *Minimize backlight with a louvered house-side-shield, field accessory*





Example: WFCL3 P20 30K MVOLT FC3 BK NF PR7E



The Rapid Ship Pole and Luminaire program provides quick solutions for urgent needs.

The most popular and readily available are available for those urgent projects. Select from the following options to get up to 20 units shipped in 20 working days or less!

ORDERING INFORMATION

Series	Lumen/Wattage Package	Color Temperature	Voltage	Optics	Housing Color	Finial
WFCL3 Utility Washington LED FCO	P05 3,200 nominal lumens P10 4,500 nominal lumens P20 5,600 nominal lumens P30 7,000 nominal lumens P40 8,100 nominal lumens P50 9,200 nominal lumens P60 10,200 nominal lumens P70 10,800 nominal lumens P80 11,700 nominal lumens P90 12,700 nominal lumens P100 13,600 nominal lumens	27K 2700 series CCT 30K 3000 series CCT 40K 4000 series CCT	MVOLT Auto-sensing voltage (120 thru 277) 50/60 HZ HVOLT Auto-sensing voltage (347 thru 480) 50/60 HZ	FC2 Type 2 distribution zero uplight FC3 Type 3 distribution zero uplight FC4 Type 4 distribution zero uplight FC5 Type 5 distribution zero uplight	BK Black GR Gray GH Graphite GN Green WH White BZ Bronze	NF None BL Ball SK Spike

Options: Option Compatibility Matrix on page 3 of 4 PREWIRED LEAD OPTIONS **CONTROLS OPTIONS OPTIC OPTIONS** A0 Field Adjustable Output L1H 1.5 ft. prewired leads CLGL Clear tempered glass lens DTL DIN node bracket with external mounted antenna, DTL DIN node DINBRA L03 3 ft. prewired leads FRGL 10% Frosted tempered glass lens ordered and shipped separately 10 ft. prewired leads House side shield NEMA Twist Lock Dimming photocontrol receptacle - 7 PIN receptacle only. PR7 LEM REVEAL COLOR OPTIONS 20 ft. prewired leads NEMA Twist Lock Photocontrol Receptacle - 7 PIN. Externally mounted, PR7E LEM Reveal Plate Painted to match Housing Color MHC available with NF option **NEMA LABEL OPTIONS** PCLL DTL long life twistlock photocontrol for solid-state MVOLT NL1X1 NEMA Label 1" x 1" SHShorting cap NL2X2 NEMA Label 2" x 2" Accessories: Order as separate catalog number, ships separately & field installed. **HOUSE SIDE SHIELD** CLHSSNG25 No glass, Type 2 & Type 5 - Louvered house side shield CLHSSNG34 No glass, Type 3 & Type 4 - Louvered house side shield

Contractor Added

Options

CLHSSGL25

CLHSSGL34

Glass, Type 2 & Type 5 - Louvered house side shield

Glass, Type 3 & Type 4 - Louvered house side shield



WFCL3

Utility Washington Series Luminaire Full Cutoff LED3





















WFCL3 P30 30K FC2 CLGL

Notes Туре

Mechanical

- Heavy grade A360 cast aluminum (<1% copper)
- Tool-less access with a spring-loaded latch
- Hidden hinge door allowing the door to swing open and remain open
- Optional internal or external NEMA twist lock photocontrol receptacle. Housing contains a tempered glass window to allow light to reach the cell for internal versions.
- Mount to slip-fitter that will accept 3" high by 2-7/8" to 3-1/8" 0.D. pole tenon
- Decorative top cover contains stainless steel hinge which secures entry the LED optical chamber
- Polyester power coat paint to ensure maximum durability
- Rigorous multi-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5,000 hours exposure to salt fog chamber (operated per ASTM B117) on standard and RAL finish options.
- RAL (RALxxxxSDCR) paint colors are Super Durable Corrosion Resistant, 80% gloss.

Electrical

- Surge protection meets ANSI/IEEE C62.41.2 10kV/10kA.
- Standard SPD meets 20kV/10kA per ANSI C136.2-2015
- Quick disconnect connectors for ease of installation and maintenance.
- Three pole terminal block is standard, with optional prewired leads for ease of installation
- LED electronic 0-10v dimmable driver meets maximum total harmonic distortion (THD) of 20%, >0.90 Power Factor and is ROHS compliant.
- Minimum operating temperature is -40°C.
- Electronic driver has an estimated minimum life of 100,000 hours at 25°C.

Optical

- IP65 rated optical compartment
- LED circuit board located in the top cover
- Asymmetric or Symmetric zero uplight distributions
- 2700K, 3000K and 4000K CCT
- 70CRI Standard

Control Options

- Field Adjustable Output (AO) module Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8
- nLight Air rSBOR6 outdoor fixture-mounted motion and photo-sensor, features a dual radio to communicate wirelessly to other nLight Air devices for group response to motion, on/off control in response to daylight and by switch — RSBOR6
- Long life photocontrol, 20 years PCLL, P34 and P48 with DTL

- 7 pin photocontrol receptacles internally (PR7) or externally (PR7E) mounted in place of the finial
- DTL DIN dedicated bracket with external mounted antenna -DINBRA

Manufacturing

- Manufactured in Crawfordsville, Indiana, ARRA compliant
- 100% electrical testing on all luminaires before shipment
- Ten (10) years minimum experience in manufacturing LED based products

Certification and Standards

- Luminaire shall be UL 1598 Wet Location Safety Listing
- Suitable for operation in an ambient temperature -40°C (40°F) to 40°C (104°F) per UL certification for performance packages P05 thru P100 Type 2, 3 & 5 no glass, P05 thru P20 Type 2, 3, 4 & 5 clear glass and P05 thru P90 Type 3 & 5 frosted glass
- Suitable for operation in an ambient temperature -40°C (40°F) to 35°C (95°F) per UL certification for performance packages P100 Type 45 no glass, P100 Type 2, 3, 4 & 5 clear glass and P100 Type 3 & 5 frosted glass
- LM79 compliant
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA — Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Warranty

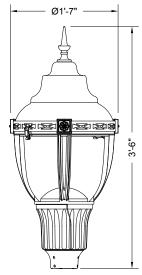
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/ terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

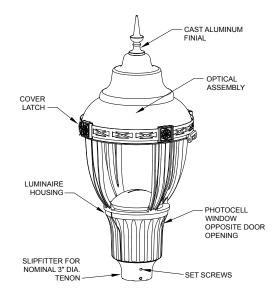
All values are design or typical values, measured under laboratory conditions at 25 °C.

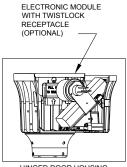
Specifications subject to change without notice.

DIMENSIONAL DATA



Maximum Weight - 53 lbs Maximum Effective Projected Area - 1.72 sq. ft.





HINGED DOOR HOUSING



ORDERING INFORMATION (refer to page 3 for configurable options)

Example: WFCL3 P20 30K MVOLT FC3 BK NF PR7E

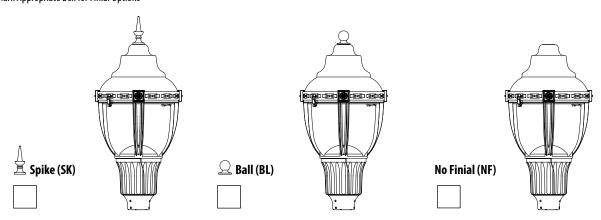
Seri	es	Led performance package	LED Color temperature	Voltage	Optics	Housing Color	Finial
WF	CL3 Utility Washington LED FC0	P05 3,200 nominal lumens P10 4,500 nominal lumens P20 5,600 nominal lumens P30 7,000 nominal lumens P40 8,100 nominal lumens P50 9,200 nominal lumens P60 10,200 nominal lumens P70 10,800 nominal lumens P80 11,700 nominal lumens P90 12,700 nominal lumens P100 13,600 nominal lumens	27K 2700K CCT 30K 3000K CCT 40K 4000K CCT	MVOLT Auto-sensing voltage (120 thru 277) 50/60 HZ HVOLT Auto-sensing voltage (347 thru 480) 50/60 HZ XVOLT Auto-sensing voltage (277 thru 480V) with enhanced power quality protection	FC2 Type 2 distribution full cutoff FC3 Type 3 distribution full cutoff FC4 Type 4 distribution full cutoff FC5 Type 5 distribution full cutoff	BK Black GR Gray GH Graphite GN Green PP Prime paint WH White BZ Bronze RALxxxxSDCR RAL Super Durable Corrosion Resistant, 80% Gloss Paint, replace xxxx with RAL number. CMC Custom color match	NF None BL Ball SK Spike

Options:	Option Compatibility Matrix on page 3 of 4				
CONTRO	LS OPTIONS	PREV	IRED LEAD OPTIONS	OPTIC 0	PTIONS
AO	Field Adjustable Output	L1H	1.5 ft prewired leads	CLGL	Clear tempered glass lens
DINBRA	DTL DIN node bracket with external mounted antenna, DTL DIN node ordered and shipped separately	L03	3 ft prewired leads	FRGL	10% Frosted tempered glass lens
PR7	NEMA twistlock dimming photocontrol receptacle - 7 pin	L10	10 ft prewired leads	HSS	Louvered house side shield
PR7E	NEMA twistlock dimming photocontrol receptacle - 7 Pin (Must use NF Finial Option)	L20	20 ft prewired leads	LEM RE	VEAL COLOR OPTIONS
PCLL	Long Life DTL Twistlock Photocontrol for Solid State, MVOLT	L25	25 ft prewired leads	MHC	LEM Reveal Plate Painted to match Housing Color
P34	Long Life DTL Twistlock Photocontrol for Solid State, 347V	L30	30 ft prewired leads	NEMA L	ABEL OPTIONS
P48	Long Life DTL Twistlock Photocontrol for Solid State, 480V			NL1X1	1" X 1" ANSI Wattage Label
SH	Shorting Cap			NL2X2	2" X 2" ANSI Wattage Label
RSBOR6	nLight Motion Sensing Photocontrols				

Accessories:	Order as separate catalog number.			
HOUSE SIDE	SHIELD	SURGE PROT	ECTION KITS	
CLHSSNG25	No glass, Type 2 & Type 5 - Louvered house side shield	SPDPLUGIN	MVOLT-20KV	Replacement for 120-277V 20KV/ 10KA
CLHSSNG34	No glass, Type 3 & Type 4 - Louvered house side shield	SPDPLUGIN	HVOLT-20KV	Replacement for 347-480V 20KV/ 10KA
CLHSSGL25	Glass, Type 2 & Type 5 - Louvered house side shield			
CLHSSGL34	Glass, Type 3 & Type 4 - Louvered house side shield			

FINIAL INFORMATION

Mark Appropriate Box for Finial Options







OPTIONS MATRIX

OI HONSIM						10	D Pack	(200						Voltage		Ĭ	Distril	hution			Finial	_							Opti	ions						
Option M	atrix	DO5	D10	Pan	DSU	P40	_		P70	P80	P90	P100	MVOLT	HVOLT	XVOLT	FC2	FC3	FC4	_	BL	NF	SK	AO	DALI	DINBRA	PR7	PR7E	PCLL	PC34	_	RSB0R6	SH	HSS	мнс	CLGL	FRGL
	P05	103	I N	N N	N	N	N	N	N	N	N	N	Y	N	N	Y	Υ	Υ	Υ	Υ	Υ	Y	γ	RFD	γ	Y	Y	Y	γ	γ (40	ү	Y	Y	Y	Y	Y
	P10	N	IN	I N	N N	N N	N M	N M	N N	N M	N N	N N	Y	Y	N	Y	Y	Υ	Y	Y	γ	Υ	V	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P20	N N	M	IN	I N	. N	N N	N N	N N	N N	. N	N N	Y	Υ	N	Y	Y	Υ	Y	Y	γ	Y	γ	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30	N	N	N	<u>"</u>	l N	N	N	N	N	N	N	Y	Y	N	Y	Y	Y	Y	Υ	Υ	Y	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40	N	N	N	N	ı.	N	N	N	N	N	N	Y	Y	N	Y	γ	Y	Y	γ	Υ	Υ .	ν	RFD	Y	Y	Υ	Y	Y	Y	Y	Y	Y	Y	Y	Y
LED	P50	N	N	N	N	N		l N	N	N	N	N	Υ	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	RFD	Y	Υ	Y	Y	Y	Y	Y	Y	Υ	Y	Y	Y
Package	P60	N	N	N	N	N	N		N	N	N	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Y
	P70	N	N	N	N	N	N	N		N	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	P80	N	N	N	N	N	N	N	N		N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	P90	N	N	N	N	N	N	N	N	N		N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	P100	N	N	N	N	N	N	N	N	N	N		Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	C
	MVOLT	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ
Voltage	HVOLT	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N		N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	XVOLT	N	N	N	N	N	N	N	Υ	Υ	Υ	Υ	N	N		Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	FC2	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		N	N	N	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
Distributions	FC3	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N		N	N	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Distributions	FC4	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N		N	Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
	FC5	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N		Υ	Υ	Υ	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	BL	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ		N	N	Υ	RFD	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Finials	NF	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	N		N	Υ	RFD	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ
	SK	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N		Υ	RFD	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	A0	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		N	N	Υ	Υ	N	N	N	N	Υ	Υ	Υ	Υ	Υ
	DALI	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	N	N	RFD	RFD	RFD	RFD	RFD	RFD	RFD	N		RFD	N	N	N	N	N	N	N	RFD	RFD	RFD	RFD
	DINBRA	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	RFD		N	N	N	N	N	N	Υ	Υ	Υ	Υ	Υ
	PR7	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N		N	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	PR7E	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	N	_	N	N	N		Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
	PCLL	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	Υ	Y		N	N	N	Υ	Υ	Y	Υ	Υ
Options	PC34	Υ	Y	Υ	Υ	Υ	Y	Y	Y	Υ	Υ	Y	N	Y	Y	Y	Υ	Υ	Y	Υ	Υ	Υ	N	N	N	Υ	Y	N		N	N 	N	Υ	Υ	Y	Y
	PC48	Υ	Y	Υ	Υ	Υ	Y	Υ	Y	Υ	Υ	Y	N	Y	Υ	Y	Υ	Υ	Y	Υ	Υ	Υ	N	N	N	Υ	Υ	N	N		N	N	Υ	Y	Y	Y
	RSBOR6	_	Y	Y	Y	Υ	Υ	Υ	Y	Υ	Υ	Y	Y	N	N	Y	Υ	Υ	Y	Υ	Y	Y	N	N	N	N	N	N	N	N		N	Y	Y	Y	Υ
	SH	Y	Y	Y	Y	Y	Υ	Y	Y	Υ	Υ	Y	Y	Y	Y	Y	Υ	Y	Y	Y	Υ	Y	Υ	N	Y	Y	Y	N	N	N	N	V	Υ	Y	Y	Y
	HSS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	<u> </u>	Υ	RFD	Y	Y	Y	Y	Y	Y	Y	Y	V	Y	Y	Y
	MHC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ	RFD RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ	ī	N N
	FRGL	Y	Y	Y	Υ	Y	Y	Y	Y	Y	Y	ſ	Y	Υ	Y	N	Υ	Y N	T V	Υ	Υ	Y	Y	RFD	Y	Y	Y	Y	Y	Υ	Y	Y	Y	Y N	N	N
	FKGL	Y	1	ľ	ľ	ľ	Y	Υ	ľ	ľ	Y	(Y	ľ	Y	IN	Y	IN	Y	ĭ	ľ	ľ	ľ	KFD	Y	ľ	ľ	Y	ľ	ľ	Į Ÿ	ľ	Y	N	N	

Y = Combination available / N = Combination not available / RFD = Additional information required, consult factory

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use the factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F)

Ambier	nt Temp.				Lum	en Maintenand	e - LLD (by Per	formance Pacl	kage)			
°C	°F	P05	P10	P20	P30	P40	P50	P60	P70	P80	P90	P100
0	32	1.03	1.03	1.04	1.04	1.04	1.04	1.04	1.04	1.05	1.05	1.05
5	41	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04	1.04	1.04
10	50	1.02	1.02	1.02	1.02	1.02	1.03	1.03	1.03	1.03	1.03	1.03
15	59	1.01	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
20	68	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
25	77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	86	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
35	95	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
40	104	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the platforms noted in 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

		Lume	en Maintenand	e - LLD (by Per	formance Pack	kage)		
Hours	0	25,000	36,000	50,000	60,000	67,500	75,000	100,000
P05 - P70	1.00	0.94	0.92	0.89	0.87	0.86	0.84	0.79
P80 - P100	1.00	0.93	0.91	0.87	0.85	0.83	0.81	0.76





PERFORMANCE DATA

STANDARD OPTIONS: NO GLASS

LED	Classic Control	System		27K (270	00K, 70	CRI)			30K (300	0K, 70	CRI)			40K (40	00K, 70	CRI)	
Package	Glass/Optic	Watts	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
	FC2		3,054	102	1	0	1	3,105	104	1	0	1	3,317	111	1	0	1
P05	FC3	20	3,111	104	1	0	1	3,163	105	1	0	1	3,379	113	1	0	1
PU3	FC4	30	3,068	102	1	0	1	3,119	104	1	0	1	3,332	111	1	0	1
	FC5		3,334	111	2	0	1	3,389	113	2	0	1	3,621	121	3	0	1
	FC2		4,294	110	1	0	2	4,365	112	1	0	2	4,663	120	1	0	2
P10	FC3	39	4,374	112	1	0	1	4,447	114	1	0	1	4,750	122	1	0	1
	FC4	3,	4,314	111	1	0	2	4,385	112	1	0	2	4,685	120	1	0	2
	FC5		4,687	120	3	0	1	4,765	122	3	0	1	5,090	131	3	0	1
	FC2		5,284	110	1	0	2	5,372	112	1	0	2	5,738	120	2	0	2
P20	FC3	48	5,383	112	1	0	2	5,472	114	1	0	2	5,845	122	1	0	2
	FC4		5,309	111	1	0	2	5,397	112	1	0	2	5,765	120	1	0	2
	FC5		5,768	120	3	0	1	5,864	122	3	0	1	6,264	131	3	0	2
	FC2		6,750	114	2	0	2	6,862	116	2	0	2	7,330	124	2	0	2
P30	FC3	59	6,649	113	1	0	2	6,759	115	1	0	2	7,221	122	2	0	2
	FC4		6,413	109	2	0	2	6,520	111	2	0	2	6,965	118	2	0	2
	FC5		7,386	125	3	0	2	7,509	127	3	0	2	8,021	136	3	0	2
	FC2 FC3		7,911 7,792	115 113	2	0	2	8,042 7,921	117 115	2	0	2	8,591 8,462	125 123	2	0	2
P40	FC4	69	7,792	106	2	0	2	7,921	108	2	0	2	7,948	115	2	0	2
	FC5		8,656	125	4	0	2	8,800	128	4	0	2	9,400	136	4	0	2
	FC2		8,924	110	2	0	3	9,072	112	2	0	3	9,692	120	2	0	3
	FC3		8,791	109	2	0	2	8,937	110	2	0	2	9,546	118	2	0	2
P50	FC4	81	8,378	103	2	0	2	8,517	105	2	0	2	9,098	112	2	0	2
	FC5		9,766	121	4	0	2	9,928	123	4	0	2	10,605	131	4	0	2
	FC2		9,944	109	2	0	3	10,109	111	2	0	3	10,799	119	3	0	3
	FC3		9,795	108	2	0	2	9,957	109	2	0	2	10,637	117	2	0	2
P60	FC4	91	9,125	100	2	0	2	9,276	102	2	0	2	9,909	109	2	0	3
	FC5		10,881	120	4	0	2	11,062	122	4	0	2	11,816	130	4	0	2
	FC2		10,475	107	2	0	3	10,649	109	3	0	3	11,375	116	3	0	3
	FC3		10,318	105	2	0	2	10,489	107	2	0	2	11,205	114	2	0	2
P70	FC4	98	9,667	99	2	0	3	9,827	100	2	0	3	10,498	107	2	0	3
	FC5		11,462	117	4	0	2	11,652	119	4	0	2	12,447	127	4	0	2
	FC2		11,437	107	3	0	3	11,627	109	3	0	3	12,421	116	3	0	3
P80	FC3	107	11,266	105	2	0	2	11,453	107	2	0	2	12,235	114	2	0	2
rou	FC4	107	10,408	97	2	0	3	10,580	99	2	0	3	11,302	106	2	0	3
	FC5		12,516	117	4	0	2	12,723	119	4	0	2	13,592	127	4	0	3
	FC2		12,338	105	3	0	3	12,543	107	3	0	3	13,399	115	3	0	3
P90	FC3	117	12,153	104	2	0	2	12,355	106	2	0	2	13,198	113	2	0	2
1 70	FC4	11/	11,319	97	2	0	3	11,507	98	2	0	3	12,293	105	2	0	3
	FC5		13,501	115	4	0	2	13,725	117	4	0	3	14,662	125	4	0	3
	FC2		13,177	101	3	0	3	13,396	103	3	0	3	14,310	110	3	0	3
P100	FC3	130	12,980	100	2	0	2	13,195	102	2	0	2	14,096	108	3	0	3
	FC4		12,110	93	2	0	3	12,311	95	2	0	3	13,152	101	3	0	3
	FC5		14,419	111	4	0	3	14,658	113	4	0	3	15,659	120	4	0	3

WFCL3

Utility Washington Series Luminaire Full Cutoff LED3



PERFORMANCE DATA

OPTIONAL: CLEAR GLASS

LED	Glass/Optic	c System Watts	27K (27000K, 70CRI)			30K (3000K, 70CRI)				40K (4000K, 70CRI)							
Package			Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
	FC2		2,759	92	1	0	1	2,804	93	1	0	1	2,996	100	1	0	1
Doc	FC3	30	2,803	93	1	0	1	2,850	95	1	0	1	3,044	101	1	0	1
P05	FC4		2,681	89	1	0	1	2,726	91	1	0	1	2,912	97	1	0	1
	FC5		2,975	99	2	0	1	3,025	101	2	0	1	3,231	108	2	0	1
	FC2	39	3,878	99	1	0	1	3,943	101	1	0	1	4,212	108	1	0	1
P10	FC3		3,941	101	1	0	1	4,006	103	1	0	1	4,280	110	1	0	1
1 10	FC4		3,770	97	1	0	1	3,832	98	1	0	1	4,094	105	1	0	1
	FC5		4,183	107	3	0	1	4,252	109	3	0	1	4,543	116	3	0	1
	FC2		4,773	99	1	0	1	4,852	101	1	0	1	5,183	108	1	0	1
P20	FC3	48	4,850	101	1	0	1	4,930	103	1	0	1	5,267	110	1	0	1
	FC4		4,639	97	1	0	1	4,716	98	1	0	1	5,038	105	1	0	1
	FC5		5,148	107	3	0	1	5,233	109	3	0	1	5,590	116	3	0	1
	FC2		6,050	103	2	0	2	6,150	104	2	0	2	6,570	111	2	0	2
P30	FC3	59	6,052	103	1	0	1	6,152	104	1	0	1	6,572	111	1	0	2
	FC4	ا ا	5,604	95	1	0	2	5,697	97	1	0	2	6,086	103	1	0	2
	FC5		6,444	109	3	0	1	6,551	111	3	0	1	6,998	119	3	0	1
P40	FC2		7,090	103	2	0	2	7,208	104	2	0	2	7,699	112	2	0	2
	FC3	69	7,092	103	2	0	2	7,210	104	2	0	2	7,702	112	2	0	2
	FC4		6,396	93	2	0	2	6,502	94	2	0	2	6,945	101	2	0	2
	FC5		7,551	109	3	0	2	7,677	111	3	0	2	8,201	119	3	0	2
	FC2 FC3		7,999 8,001	99 99	2	0	2	8,131	100	2	0	2	8,686	107	2	0	2
P50	FC4	81	7,321	99	2	0	2	8,134 7,442	100 92	2	0	2	8,689	107 98	2	0	2
	FC5		8,519	105	3	0	2	8,660	107	3	0	2	7,950 9,251	114	3	0	2
	FC2		8,912	98	2	0	2	9,060	107	2	0	2	9,678	106	2	0	2
	FC3		8,915	98	2	0	2	9,063	100	2	0	2	9,682	106	2	0	2
P60	FC4	91	7,974	88	2	0	2	8,106	89	2	0	2	8,659	95	2	0	2
	FC5		9,492	104	3	0	2	9,650	106	3	0	2	10,308	113	4	0	2
	FC2		9,388	96	2	0	2	9,544	97	2	0	2	10,195	104	2	0	2
	FC3		9,391	96	2	0	2	9,547	97	2	0	2	10,199	104	2	0	2
P70	FC4	98	8,448	86	2	0	2	8,588	88	2	0	2	9,174	94	2	0	2
	FC5		9,999	102	3	0	2	10,165	104	3	0	2	10,859	111	4	0	2
	FC2		10,251	96	2	0	2	10,421	97	2	0	2	11,132	104	3	0	3
	FC3		10,254	96	2	0	2	10,425	97	2	0	2	11,136	104	2	0	2
P80	FC4	107	9,095	85	2	0	2	9,246	86	2	0	2	9,877	92	2	0	2
	FC5		10,918	102	4	0	2	11,099	104	4	0	2	11,857	111	4	0	2
	FC2		11,058	95	3	0	3	11,241	96	3	0	3	12,009	103	3	0	3
n	FC3		11,062	95	2	0	2	11,245	96	2	0	2	12,013	103	2	0	2
P90	FC4	117	9,892	85	2	0	2	10,056	86	2	0	2	10,742	92	2	0	2
	FC5		11,778	101	4	0	2	11,973	102	4	0	2	12,790	109	4	0	2
	FC2		11,810	91	3	0	3	12,006	92	3	0	3	12,826	99	3	0	3
D100	FC3	120	11,814	91	2	0	2	12,010	92	2	0	2	12,830	99	2	0	2
P100	FC4	130	10,583	81	2	0	2	10,759	83	2	0	2	11,493	88	2	0	2
	FC5		12,579	97	4	0	2	12,787	98	4	0	2	13,660	105	4	0	2

WFCL3

Utility Washington Series Luminaire Full Cutoff LED3



PERFORMANCE DATA

OPTIONAL: FROSTED GLASS

LED Package	Glass/Optic	tic System Watts		27K (27	000K, 7	OCRI)		30K (3000K, 70CRI)					40K (4000K, 70CRI)				
	diass/optic		Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
P05	FC3	30	1,962	65	1	0	1	1,994	66	1	0	1	2,130	71	1	0	1
	FC5		2,070	69	1	0	1	2,105	70	1	0	1	2,248	75	1	0	1
P10 FC3 FC5	39	2,758	71	1	0	1	2,804	72	1	0	1	2,995	77	1	0	1	
	39	2,911	75	1	0	1	2,959	76	1	0	1	3,161	81	1	0	1	
P20 FC5	3,394	3,394	71	2	0	1	3,450	72	2	0	1	3,686	77	2	0	1	
	FC5	48	3,582	75	2	0	1	3,641	76	2	0	1	3,890	81	2	0	1
P30 FC5	FC3	50	4,162	71	2	0	1	4,231	72	2	0	1	4,520	77	2	0	1
	59	4,425	75	2	0	1	4,498	76	2	0	1	4,805	81	2	0	1	
P40 FC3 FC5	69	4,878	71	2	0	2	4,959	72	2	0	2	5,297	77	2	0	2	
	FC5	5,18	5,185	75	2	0	1	5,271	76	2	0	1	5,631	82	2	0	1
P50	FC3	81	5,503	68	2	0	2	5,594	69	2	0	2	5,976	74	2	0	2
FC5	FC5		5,850	72	2	0	1	5,947	73	2	0	1	6,353	78	2	0	1
P60	FC3	91 6,13	6,131	67	2	0	2	6,233	68	2	0	2	6,659	73	2	0	2
F00	FC5 91	91	6,518	72	2	0	1	6,626	73	2	0	1	7,078	78	2	0	1
P70	FC3	98	6,459	66	2	0	2	6,566	67	2	0	2	7,014	72	2	0	2
F70	FC5	70	6,866	70	2	0	1	6,980	71	2	0	1	7,456	76	2	0	1
Dou	FC3	7,052	7,052	66	2	0	2	7,169	67	2	0	2	7,659	72	2	0	2
P80	FC5	107	7,497	70	2	0	1	7,621	71	2	0	2	8,142	76	3	0	2
P90	FC3	117	7,608	65	2	0	2	7,734	66	2	0	2	8,262	71	2	0	2
P90	FC5	117	8,087	69	3	0	2	8,221	70	3	0	2	8,783	75	3	0	2
P100	FC3	130	8,125	63	2	0	2	8,260	64	2	0	2	8,824	68	2	0	2
F100	FC5	130	8,637	66	3	0	2	8,781	68	3	0	2	9,380	72	3	0	2



COMPONENTS & OPTIONS DATA



AOManual field adjustable output dimming device



HSS *Minimize backlight with a louvered house-side-shield. Available as a factory installed*

Performance Package	FAO Position	% Lumen Output	% Wattage		
	8	100%	100%		
	7	94%	95%		
	6	82%	83%		
P05-P20	5	70%	72%		
P05-P20	4	57%	60%		
	3	45%	48%		
	2	32%	38%		
	1	19%	25%		

Performance Package	FAO Position	% Lumen Output	% Wattage		
	8	100%	100%		
	7	94%	93%		
	6	83%	81%		
P30-P100	5	71%	69%		
P30-P100	4	59%	56%		
	3	46%	44%		
	2	33%	32%		
	1	19%	20%		

ACCESSORIES OPTION DATA



CLHSS *Minimize backlight with a louvered house-side-shield, field accessory*





Example: WFCL3 P20 30K MVOLT FC3 BK NF PR7E



The Rapid Ship Pole and Luminaire program provides quick solutions for urgent needs.

The most popular and readily available are available for those urgent projects. Select from the following options to get up to 20 units shipped in 20 working days or less!

ORDERING INFORMATION

Series	Lumen/Wattage Package	Color Temperature	Voltage	Optics	Housing Color	Finial
WFCL3 Utility Washington LED FCO	P05 3,200 nominal lumens P10 4,500 nominal lumens P20 5,600 nominal lumens P30 7,000 nominal lumens P40 8,100 nominal lumens P50 9,200 nominal lumens P60 10,200 nominal lumens P70 10,800 nominal lumens P80 11,700 nominal lumens P90 12,700 nominal lumens P100 13,600 nominal lumens	27K 2700 series CCT 30K 3000 series CCT 40K 4000 series CCT	MVOLT Auto-sensing voltage (120 thru 277) 50/60 HZ HVOLT Auto-sensing voltage (347 thru 480) 50/60 HZ	FC2 Type 2 distribution zero uplight FC3 Type 3 distribution zero uplight FC4 Type 4 distribution zero uplight FC5 Type 5 distribution zero uplight	BK Black GR Gray GH Graphite GN Green WH White BZ Bronze	NF None BL Ball SK Spike

Options: Option Compatibility Matrix on page 3 of 4 **CONTROLS OPTIONS** PREWIRED LEAD OPTIONS OPTIC OPTIONS A0 Field Adjustable Output 1.5 ft. prewired leads CLGL Clear tempered glass lens DTL DIN node bracket with external mounted antenna, DTL DIN node DINBRA L03 3 ft. prewired leads FRGL 10% Frosted tempered glass lens ordered and shipped separately 10 ft. prewired leads HSS House side shield NEMA Twist Lock Dimming photocontrol receptacle - 7 PIN receptacle only. PR7 LEM REVEAL COLOR OPTIONS L20 20 ft. prewired leads PR7E NEMA Twist Lock Photocontrol Receptacle - 7 PIN. Externally mounted, MHC LEM Reveal Plate Painted to match Housing Color available with NF option NEMA LABEL OPTIONS PCLL DTL long life twistlock photocontrol for solid-state MVOLT NL1X1 NEMA Label 1" x 1" SHShorting cap NL2X2 NEMA Label 2" x 2" Accessories: Order as separate catalog number, ships separately & field installed. **HOUSE SIDE SHIELD**

CLHSSNG25 No glass, Type 2 & Type 5 - Louvered house side shield
CLHSSNG34 No glass, Type 3 & Type 4 - Louvered house side shield
CLHSSGL25 Glass, Type 2 & Type 5 - Louvered house side shield
CLHSSGL34 Glass, Type 3 & Type 4 - Louvered house side shield

Contractor Added Options